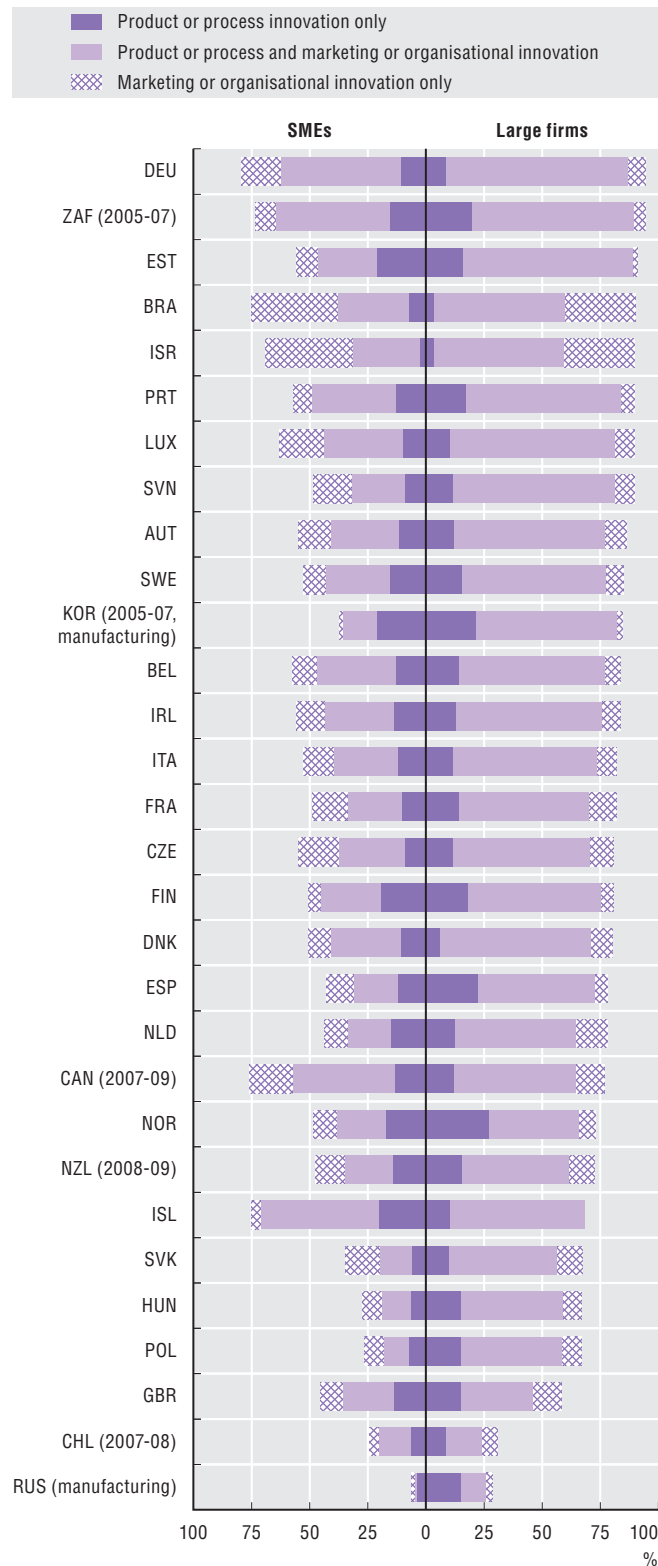


## 5. UNLEASHING INNOVATION IN FIRMS

### 1. Mixed modes of innovation

#### Innovation strategies by firm size, 2006-08

As a percentage of all SMEs and large firms



Source: OECD, based on Eurostat (CIS-2008) and national data sources, June 2011. See chapter notes.

StatLink <http://dx.doi.org/10.1787/888932487058>

Firm-level innovation data reveal complementary strategies. The majority of innovative firms (both large firms and SMEs) introduce product or process innovations, as well as marketing/organisational innovations. This is true for firms in manufacturing and services.

Brazil, Germany and Israel have the largest share of non-technological innovators: more than 85% of large firms and more than two-thirds of all SMEs introduced organisational or marketing innovations in 2006-08. Korea, Hungary, Chile and Poland have the smallest shares with less than 25% of all firms introducing non-technological innovations. In most countries the shares of non-technological innovating firms are relatively similar across manufacturing and services firms. Exceptions are Portugal, with significantly more non-technological innovators in services (54% versus 40%), and Germany, with a share almost 10 percentage points higher in manufacturing.

#### Definitions

The current edition of the *Oslo Manual* identifies four types of innovation:

- **Product innovation:** the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.
- **Process innovation:** the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.
- **Marketing innovation:** the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.
- **Organisational innovation:** the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

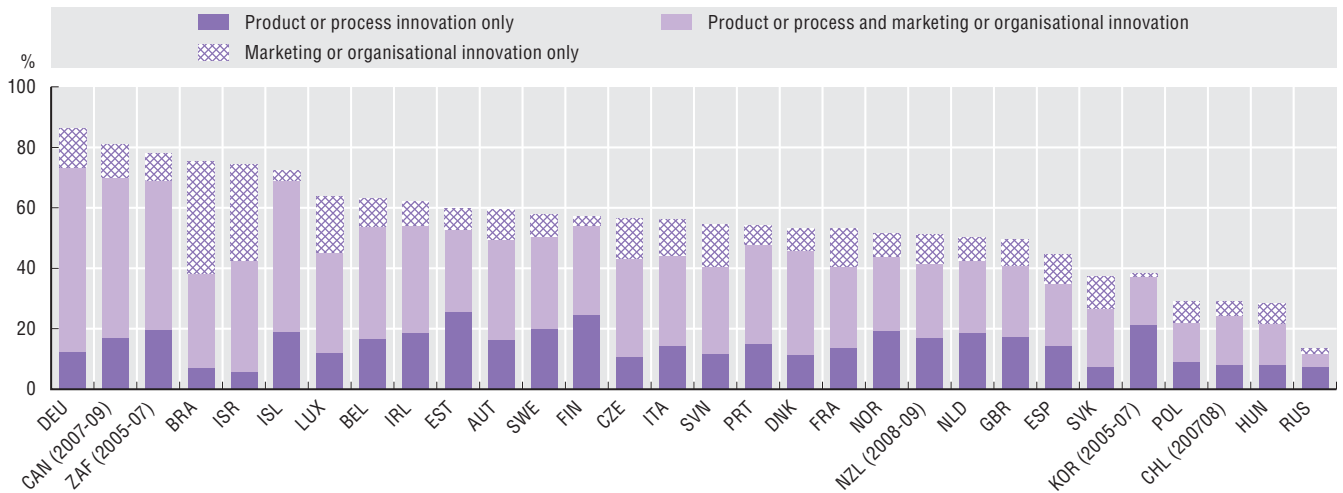
*Complementary innovation strategies* refer to the introduction of both technological and non-technological innovations.

The sectoral coverage is based on the "core" list of industries included in the CIS-2008 (ISIC Rev. 4/NACE Rev. 2):

- **Manufacturing:** C.
- **Services:** G46 (Wholesale trade, except of motor vehicles and motorcycles), H (Transportation and storage), J58 (Publishing activities), J61 (Telecommunications), J62 (Computer programming, consultancy and related activities), J63 (Information service activities), K (Financial and insurance activities), M71 (Architectural and engineering activities; technical testing and analysis).
- **Total = Manufacturing + Services + B (Mining and quarrying) + D (Electricity, gas, steam and air conditioning supply) + E (Water supply; sewerage, waste management and remediation activities).**

### Innovation strategies in the manufacturing sector, 2006-08

As a percentage of all manufacturing firms

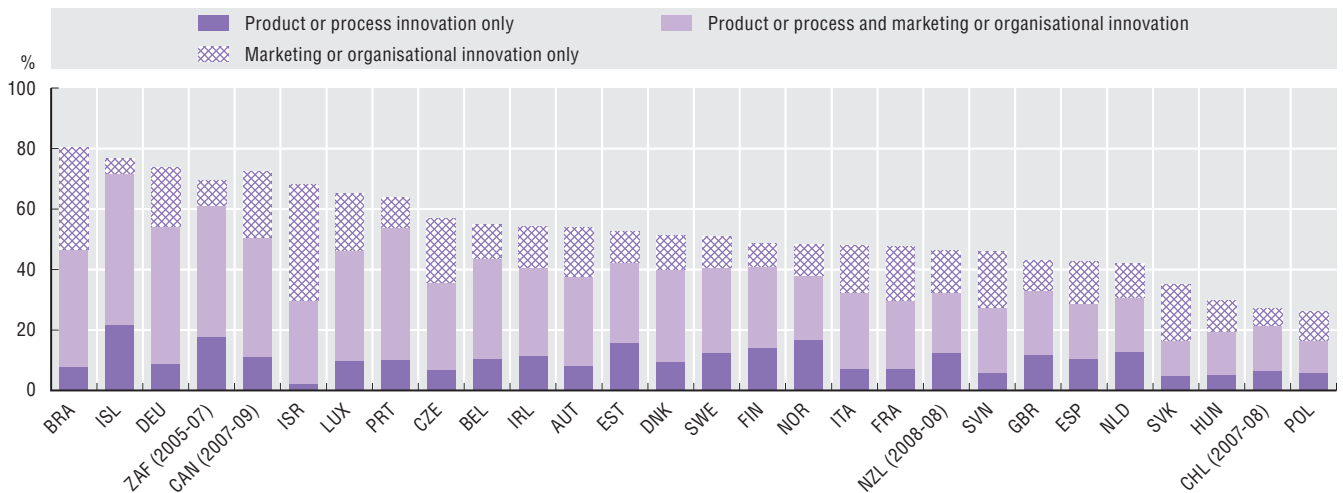


Source: OECD, based on Eurostat (CIS-2008) and national data sources, June 2011. See chapter notes.

StatLink <http://dx.doi.org/10.1787/888932487077>

### Innovation strategies in the services sector, 2006-08

As a percentage of all services firms



Source: OECD, based on Eurostat (CIS-2008) and national data sources, June 2011. See chapter notes.

StatLink <http://dx.doi.org/10.1787/888932487096>

### Measurability

These indicators may be affected by differences in the sectoral coverage of innovation surveys across countries. Although an effort was made to align the data for non-European countries to what is included in the “core” coverage of the Community Innovation Survey (CIS), this is not always possible due to survey and sample design. For example in Korea and the Russian Federation, these data only cover the manufacturing sector. Similarly, differences in the sectoral coverage for Brazil, Canada, Chile, New Zealand and South Africa may have an impact on some indicators.

Some countries do not identify firms with ongoing/abandoned innovation activities, so that (contrary to the CIS data) these are not included in the figures for innovative (or innovation-active) firms.



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