

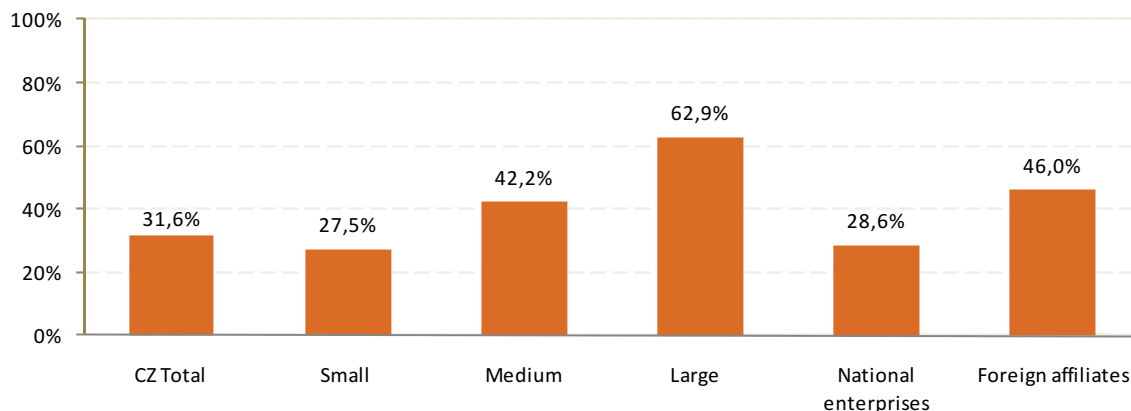
2.2 Enterprises with technological innovation

In years 2006 – 2008, the proportion of enterprises that implemented technological innovation was 31.6 % of all economically active enterprises in the Czech Republic. These enterprises are considered to be key innovators in implementing innovation.

The largest proportion of technologically innovative enterprises was among the group of large enterprises with more than 250 employees (62.9%). In the group of medium-sized enterprises, 42.2 % were found technologically innovative. The smallest proportion of technological innovation was found among small enterprises (27.5%).

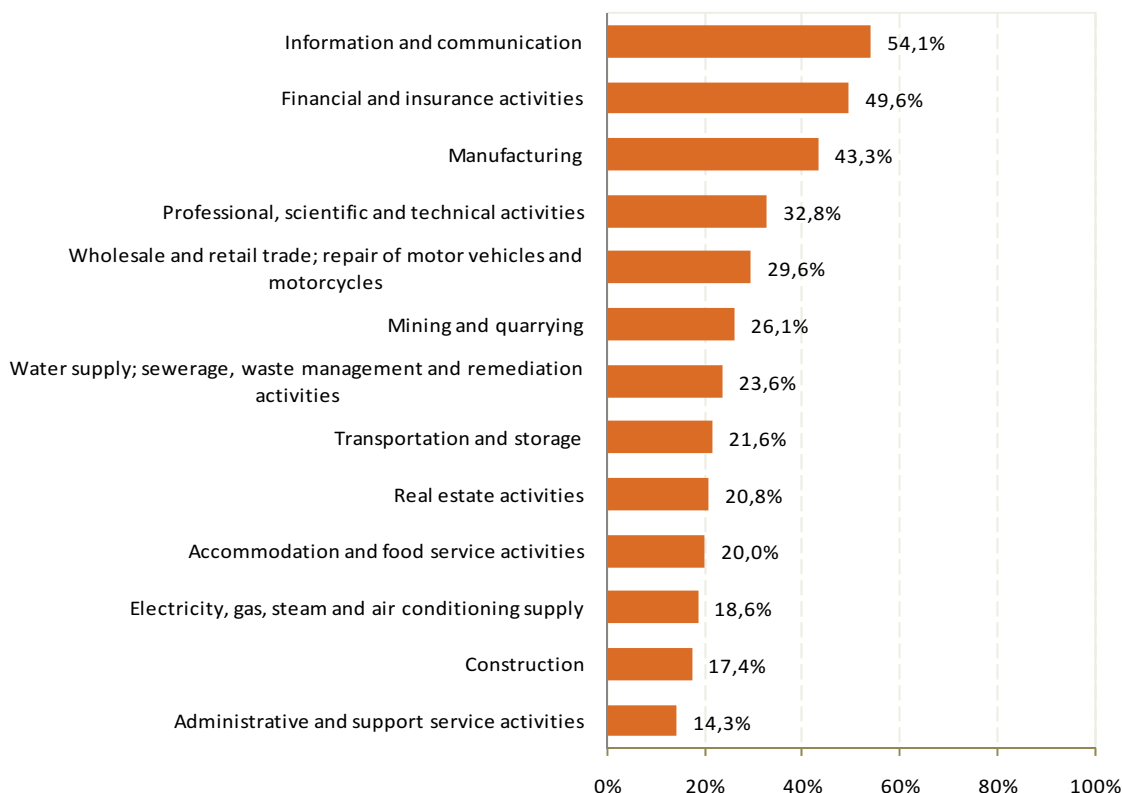
In terms of enterprise ownership, enterprises under foreign control were found more technologically innovative (46 %) than national enterprises (28.6 %).

Figure 2.5: Enterprises with technological innovation by size-class and ownership (as a percentage of all enterprises); 2006–2008



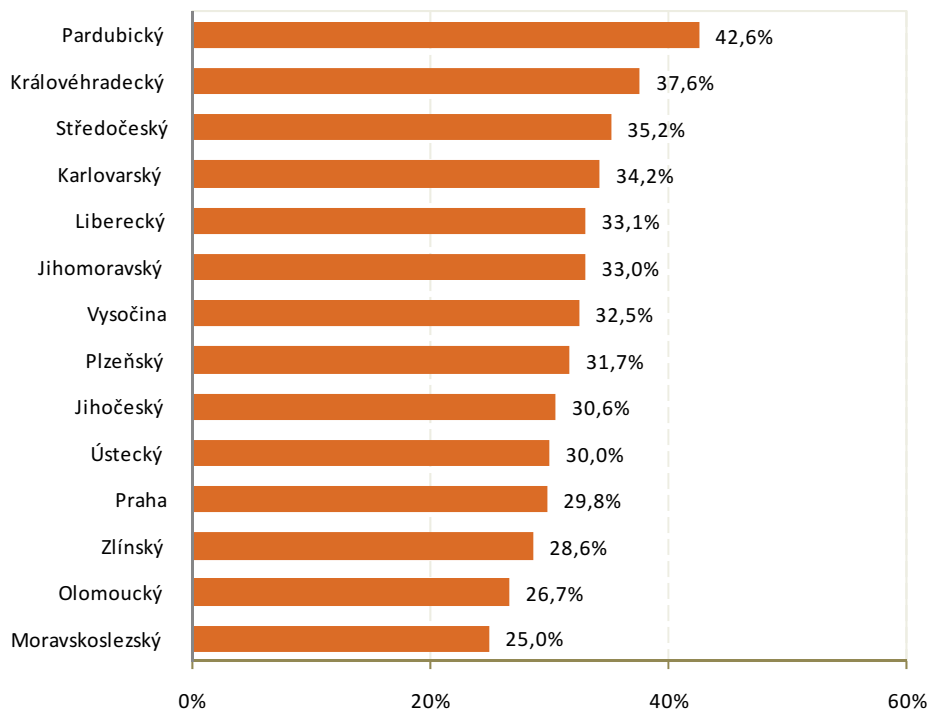
The sector of “information and communication” had the largest proportion of enterprises with technological innovation (54.1%), which was followed by enterprises in “financial and insurance activities” (49.6%). The third most important industry, “manufacturing”, was the key industry as far as the proportion of innovative enterprises is concerned, with the share of 43.3%. Enterprises with the smallest proportions of technological innovation were found in “administrative and support service activities” (14.3 %) and “construction” (17.4 %).

Figure 2.6: Enterprises with technological innovation by NACE (as a percentage of all enterprises); 2006–2008



The Pardubický region was the most technologically innovative of all regions (42.6 % of all enterprises), followed by the Královéhradecký region (37.6 %) and the Středočeský region (35.2 %). Prague ranked in the second half of the scale with the proportion of 29.8 % of enterprises with technological innovation. Enterprises where technological innovation was the least frequent were found in the Moravskoslezský region (25 %) and the Olomoucký region (26.7 %).

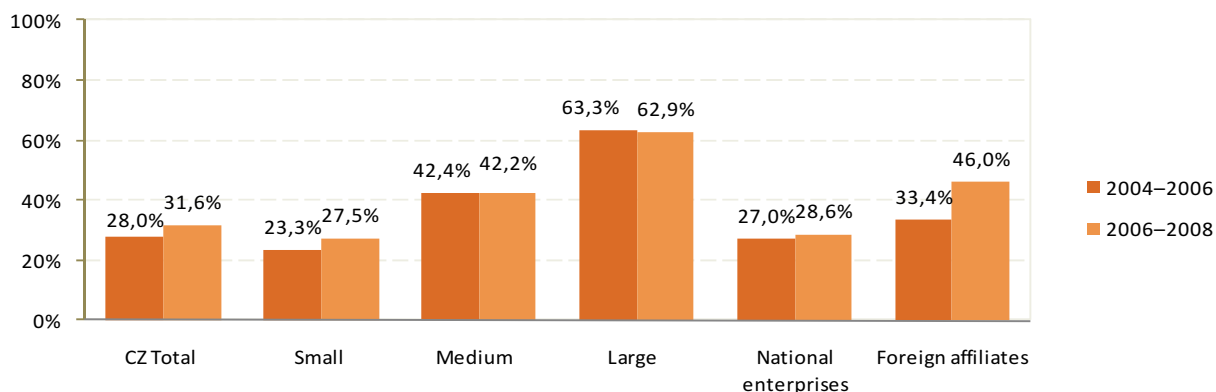
Figure 2.7: Enterprises with technological innovation by region (as a percentage of all enterprises); 2006–2008



When we compare the periods of 2004–2006 and 2006–2008, the proportion of enterprises with technological innovation rose (from 28 % to 31.6 %). The biggest increase in the proportion of enterprises with technological innovation was seen among small enterprises, where the proportion grew from 23.3 % in 2004–2006 to 27.5 % in 2006–2008. Among medium-sized enterprises, there was a slight decrease by 0.2 % between the two periods. Similarly, we can see a slight decline in the proportion of large enterprises with technological innovation, from 63.3 % in 2004–2006 to 62.9 % in 2006–2008.

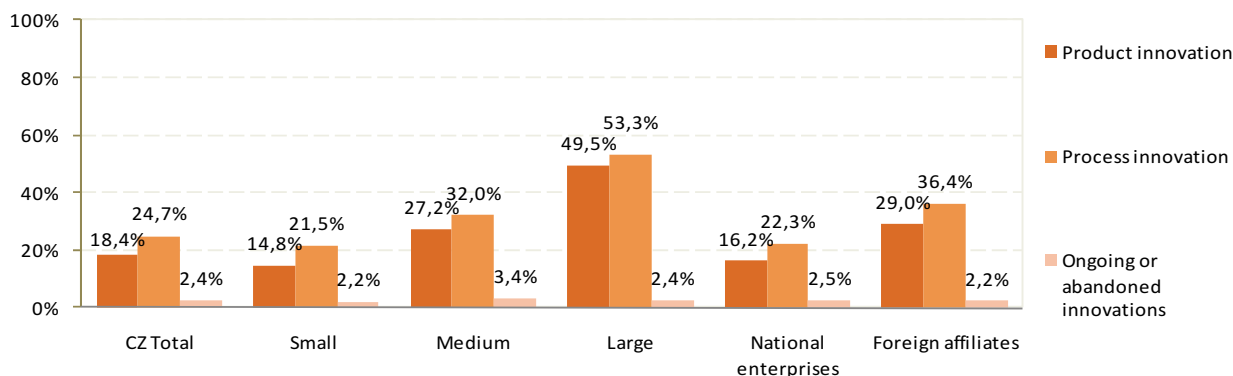
The proportion of national enterprises which implemented technological innovation increased by 1.6 % between the two periods. Enterprises under foreign control experienced a more significant increase in innovative activities associated with products and processes; the proportion grew from 33.4 % in 2004–2006 to 46 % in 2006–2008.

Figure 2.8: Enterprises with technological innovation by size-class and ownership (as a percentage of all enterprises); 2004–2006 and 2006–2008



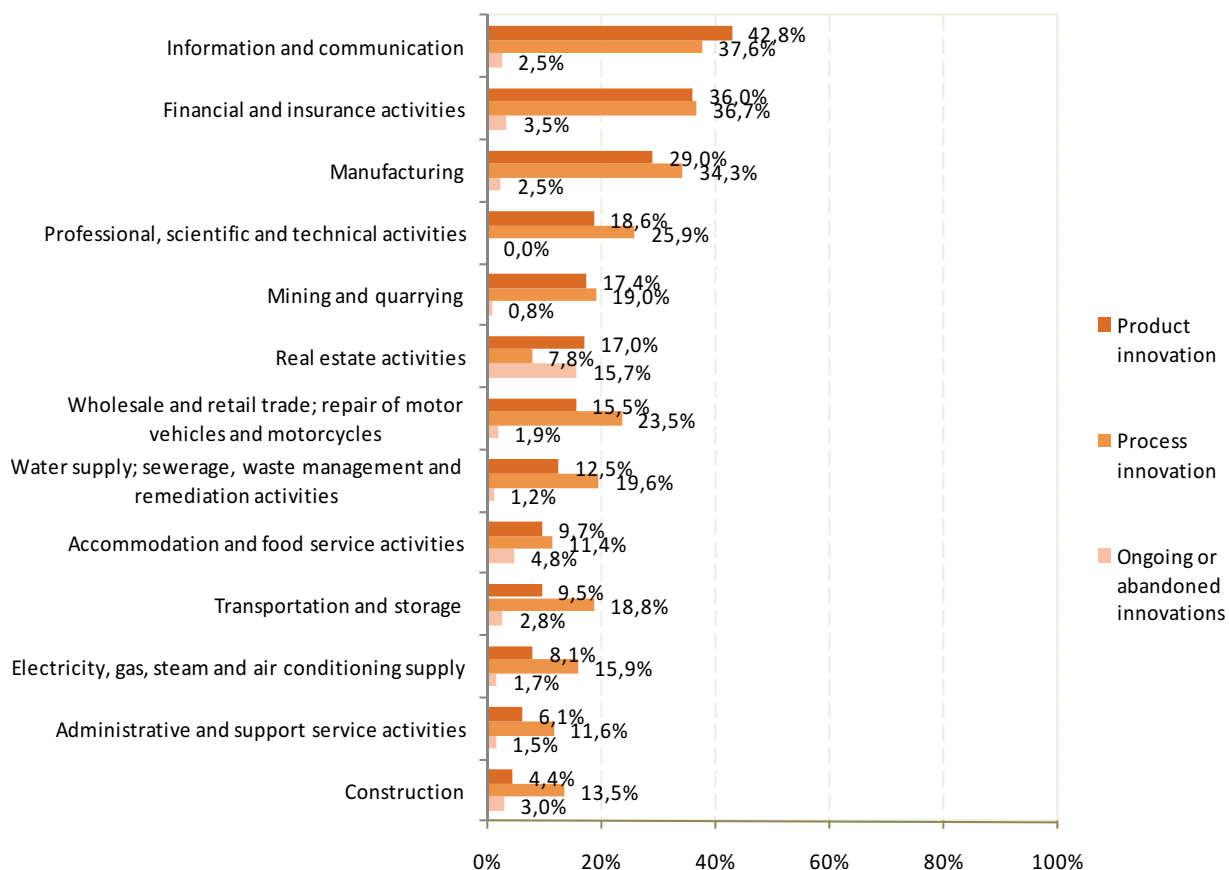
The breakdown by type of innovation shows that process innovation was implemented with 24.7 % of enterprises with technological innovation, while the proportion of enterprises that introduced product innovation was 18.4 % of all enterprises in 2006–2008. Only 2.4 % of all enterprises had ongoing or abandoned innovative activities. Process innovation prevails over product innovation in all size-classes. The difference in proportions of these two types of innovation is about 5 percentage points. For large enterprises that implemented process innovation, the proportion was more than 50 % of all enterprises. Foreign affiliates innovated more than national enterprises, with the proportion of process innovation up to 36.4 % and the proportion of product innovation up to 29.0 %.

Figure 2.9: Enterprises with technological innovation by type of technological innovation, size-class and ownership (as a percentage of all enterprises); 2006–2008



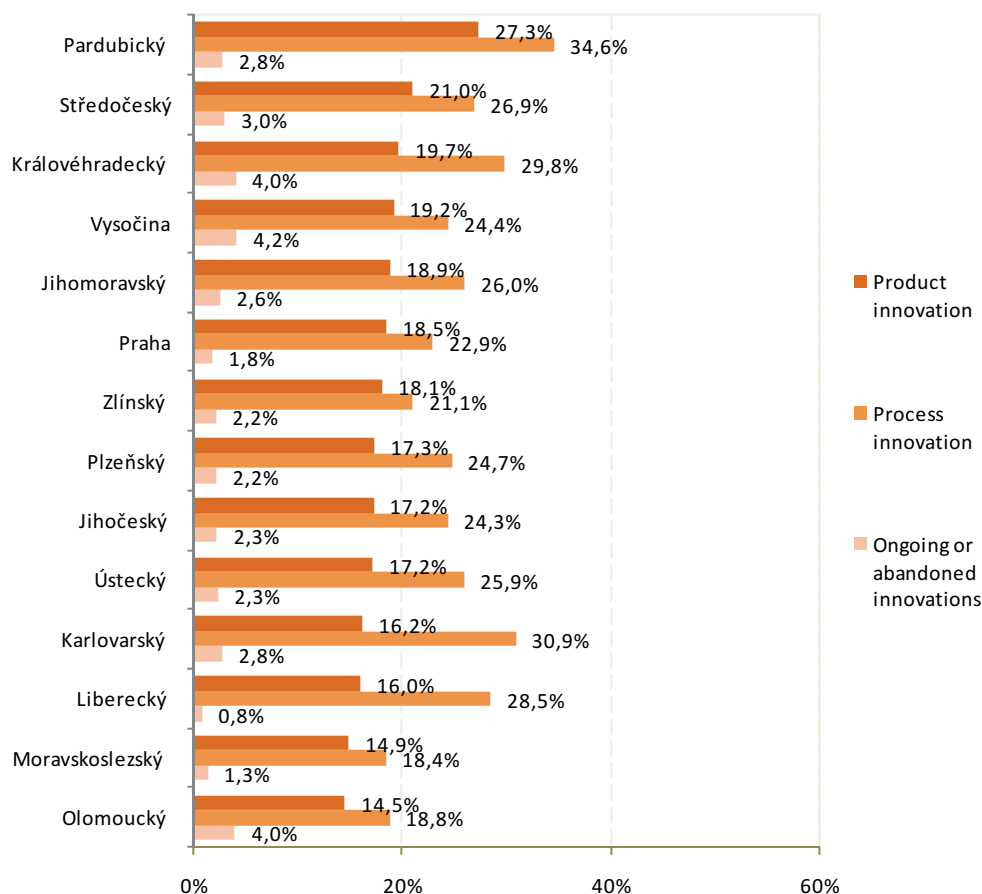
The biggest proportion of enterprises that introduced product innovation was found in “information and communication” (42.8 %). The same pattern can be observed with enterprises that introduced process innovation – the proportion was the biggest (37.6 %) in “information and communication”. The highest percentage of enterprises that had ongoing or abandoned innovations was found in the sector of “real estate activities”.

Figure 2.10: Enterprises with technological innovation by type of technological innovation and NACE (as a percentage of all enterprises); 2006–2008



On the regional level, most product innovators were found in the Pardubický region (the proportion of 27.3 % of all enterprises). Enterprises in the Olomoucký region innovated their products the least (15.4 %). The highest proportions of enterprises with process innovation were found in the Pardubický region (34.6 %), Karlovarský region (30.9 %) and Liberecký region (28.5 %). Again, enterprises in the Olomoucký region had the smallest proportion of process innovation (18.8 %). The highest percentage of enterprises with ongoing or abandoned innovation activities can be found in the Vysočina region (4.2 %), the smallest percentage in the Liberecký region (0.8 %).

Figure 2.11: Enterprises with technological innovation by type of technological innovation and region (as a percentage of all enterprises); 2006–2008



If we look at the product innovation between the periods of 2004–2006 and 2006–2008, the proportions of enterprises that introduced product innovation remained more or less the same; that is 18.4 %. The same development occurred among large enterprises. Product innovation decreased more significantly among medium-sized enterprises, when the proportion fell from 30.7 % in 2004–2006 to 27.2 % in 2006–2008. The proportion of national product innovators decreased by 1.3 %, while the proportion of foreign affiliates with product innovation increased by 5 %.

The proportion of enterprises that introduced process innovation rose from 21.9 % in the period of 2004–2006 to 24.7 % in the period of 2006–2008. Such a rise was brought about mainly by small enterprises, which increased their proportion of implemented process innovations by 3.8 %. On the contrary, there was a percentage fall in the proportion of large and medium-sized enterprises with process innovation. Both national enterprises and foreign affiliates saw an increase in the proportion of enterprises that introduced process innovation between the two periods. The increase was, however, more considerable among the latter.

For more details, see Figure 2.12 on the next page.

Figure 2.12: Enterprises with technological innovation by type of technological innovation, size-class and ownership (as a percentage of all enterprises); 2004–2006 and 2006–2008

