NEW ENTERPRISES C 4

Overview

Start-ups support technological structural change by providing new business ideas that expand and modernise the existing range of products and services – and, thus, challenge existing companies to respond. Start-ups in research-intensive and knowledge-intensive sectors are especially important in this regard. In new technology fields, in connection with new trends in demand and in early phases of translation of scientific findings into new products and processes, young companies open up market niches and enable good innovative ideas, often ideas ignored by large corporations, to succeed.

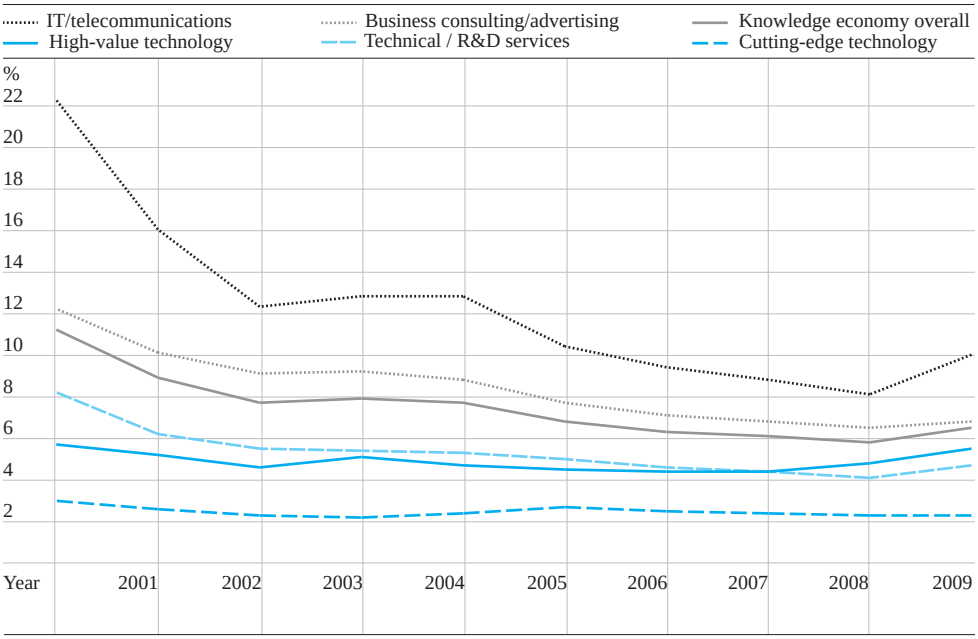
The results presented in C 4–1 through C 4–3, on company trends in the knowledge economy, are based on analysis, carried out by the Centre for European Economic Research (ZEW), of the Mannheim Enterprise Panel (MUP).[357] The MUP, which now includes the former ZEW Start-up Panel, is a panel data set of the ZEW relative to companies in Germany. It is prepared in co-operation with Creditreform, the largest German credit reporting agency. The "enterprise" definition used in the MUP covers only economically active companies. Only truly new start-ups are included as start-ups. To qualify as such a start-up, its founder(s) must be engaging in entrepreneurial activity that they previously were not involved in, and at least one person must be using the start-up as his or her main source of income. A company closure is said to have occurred when the relevant company no longer carries out economic activity and no longer offers any goods on the market. For the current report year, the sectoral evaluations relative to company trends were prepared, for the first time, on the basis of the new WZ 2008 statistical classification of economic sectors[358]. In addition, the method used for identifying company shut-downs, and the method used for extrapolation, were changed considerably, to enable better surveys and statistical description of shut-down events. What is more, for purposes of differentiation of R&D-intensive industry, the revised list of research-intensive industrial sectors was used.[359]

In C 4–4 and C 4–5, findings of the Global Entrepreneurship Monitor (GEM) are presented[360]. In 2009, the GEM, a project in progress since the end of the 1990s, compared start-up activity in 54 countries, with regard to scope, trends, framework conditions and motives. The data for the GEM is obtained via interviews with a cross-section of citizens and with experts.

Indicators studied

– Start-up rates in Germany's knowledge economy
– Closure rates in Germany's knowledge economy
– Company dynamics in Germany according to sector groups
– Nacent entrepreneurs
– Opportunity entrepreneurs

C 4–1 START-UP RATES IN GERMANY'S KNOWLEDGE ECONOMY



Values for 2009 are provisional.
Source: Mannheim Enterprise Panel. Calculations of the ZEW.

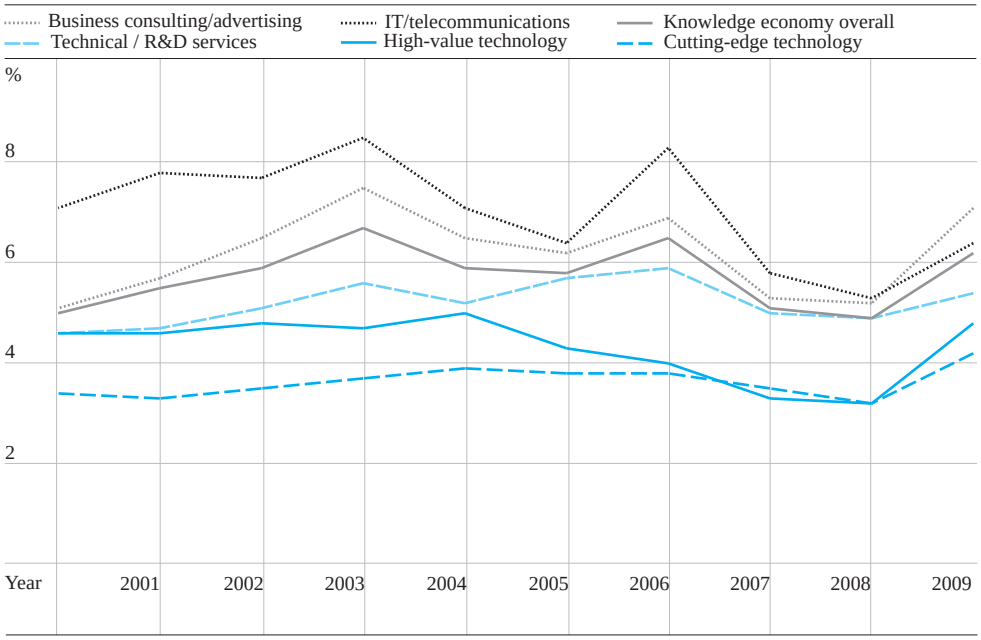
Start-up rate in the IT and telecommunications sector considerably higher again

Closure rates increase during the economic and financial crisis

In 2009, a total of 205,000 economically active companies were founded in Germany. Of those companies, 25,500 were knowledge-economy companies – i.e. companies in the areas of R&D-intensive industry and knowledge-intensive services. In 2009, the start-up rate, which measures the extent to which the total group of existing companies is being rejuvenated via new market entries, was 7.2 percent for the economy as a whole and 6.5 percent for the knowledge economy. Start-up rates increased in all sectors of the knowledge economy in 2009, except for the area of cutting-edge technology. The largest increase, at 2 percent, occurred in the IT and telecommunications sectors. The overall start-up rate in those sectors, at 10.0 percent, was higher than in any of the other sectors considered. The IT and telecommunications sectors enjoy low market-entry barriers and have high expectations regarding sales and growth in demand. The lowest start-up rates in 2009, at 2.3 and 4.7 percent, were seen in cutting-edge technology and in technical and R&D services, respectively. The low rate seen in cutting-edge technology is due primarily to high financing requirements for capital equipment and development of new products, as well as to high requirements with regard to the skills and the specific market knowledge of relevant companies' workforces. For technical and R&D services, regulation of market entry is likely to be responsible for low start-up rates. In addition, the construction sector's weakness over the past ten years is holding the rates down, since many technical-services providers work in the area of structural engineering and architecture.

CLOSURE RATES IN GERMANY'S KNOWLEDGE ECONOMY

C 4–2



All values are provisional.
Source: Mannheim Enterprise Panel. Calculations of the ZEW.

Closure rate: Number of companies shut down during the course of a year, as a percentage of all companies.

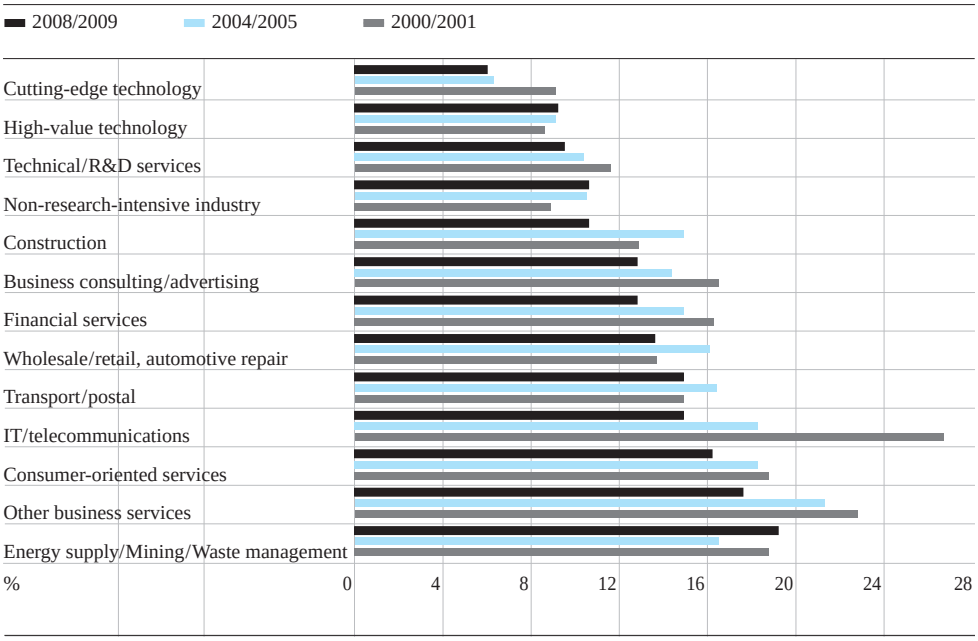
Closure rates increase during the economic and financial crisis

Market entries by start-ups are offset by market departures via shut-downs. Shut-downs include both voluntary closures of companies and forced closures via insolvency.

According to estimates of the ZEW, a total of 217,000 companies left the market in 2009. That figure is 29 percent higher than last year's figure. A total of 24,000 shut-downs took place in knowledge-economy sectors, with the number of market departures increasing by 27 percent with respect to the 2008 level. Knowledge-economy sectors thus account for 11 percent of all shut-downs. That value is slightly below those sectors' share of all start-ups (12.5 percent).

The closure rate in knowledge-economy sectors in 2009 was 6.2 percent, or less than the corresponding figure determined for the economy as a whole (7.6 percent). The shut-down figure was particularly low in cutting-edge technology (4.2 percent), in high-value technology (4.8 percent) and in technical and R&D services (5.4 percent), all areas in which the start-up rate was also relatively low. The closure rate was disproportionately high in the area of business consulting and advertising (7.1 percent) and in the IT and telecommunications sectors (6.4 percent). In comparison to the corresponding figures for 2008, the closure rate increased in all sectors in 2009.

C 4–3 COMPANY DYNAMICS IN GERMANY ACCORDING TO SECTOR GROUPS



Average for the years 2000 and 2001, 2004 and 2005, and 2008 and 2009. All values are provisional.
Source: Mannheim Enterprise Panel. Calculations of the ZEW.

Company dynamics: Number of start-ups, plus number of company closures, as a percentage of total number of companies at mid-year.

Continuous decrease in company dynamics in cutting-edge technology and in technical and R&D services

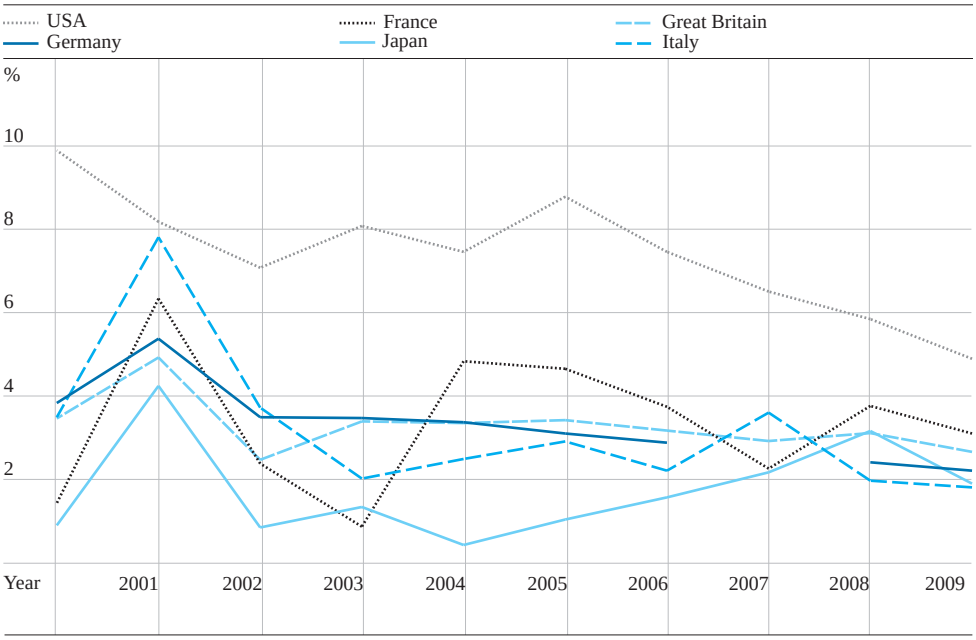
In an intersectoral comparison, the company-dynamics figure gives an indication of the intensity of competition within the various sectors, as well as of how high the barriers to market entry and to market departure are. A comparison over time shows how the company-dynamics figure is shaped by changes in the economic framework and by incentives for start-ups and company closures.

The intersectoral comparison shows that in the 2008/09 period, the area of energy supply, mining and waste management was the sector with the highest level of company dynamics. Among knowledge-economy sectors, the highest figure was seen in IT and telecommunications, while cutting-edge technology had the lowest company dynamics level. In the 2008/09 period, a total of 94 percent of the cutting-edge-technology companies in existence at the end of the year had been active in the market at the beginning of the year. In high-value technology, the company fluctuations level was only slightly higher. In that area, 91 percent of the companies active at the end of the year had been active at the beginning of the year.

In cutting-edge technology, and in technical and R&D services, company dynamics have continuously decreased. In high-value technology, they remained at about the same level. Since the market-entry and market-departure barriers have not changed fundamentally, that result gives pause in that a high level of company dynamics is indicative of strong innovation competition.

PERCENTAGE OF NASCENT ENTREPRENEURS

C 4–4



Germany did not participate in the GEM in 2007.
Source: Global Entrepreneurship Monitor. Adult Population Surveys 2000–2009.

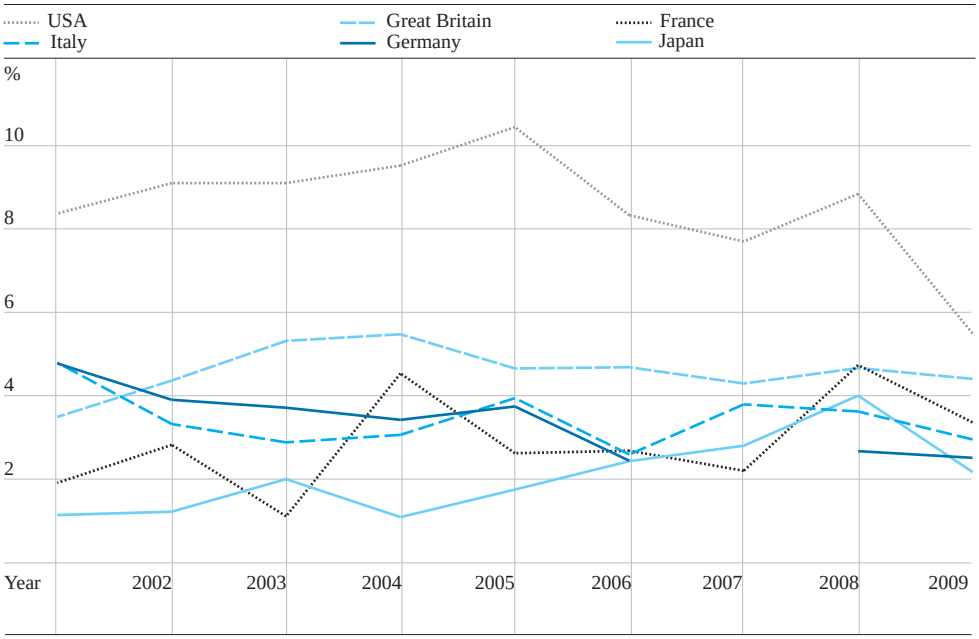
Percentage of nascent entrepreneurs: Number of persons between the ages of 18 and 64 who actively take part in the founding of a new company[361], who wish to be the company's owner or a shareholder/partner and who, during the past three months prior to the survey, did not pay any wages or salaries, as a percentage of all persons between the ages of 18 and 64, for the country in question.

Numbers of nascent entrepreneurs have been at a consistently low level in Germany for years

Not only do start-ups expand the range of products and services in the market, they also create growth and employment. And yet not many potential entrepreneurs in Germany actually go into business for themselves. In 2009, only 2.2 percent of the German population between the ages of 18 and 64 were in the process of founding a company. And the rate has been dropping continuously since 2002 (3.5 percent). It thus may be concluded that neither the extensive economic upswing of the years 2006 through 2008, nor the economic crisis of 2009, significantly influenced the number of nascent entrepreneurs.

In general, highly developed economies have lower rates of start-up aspiration than do economies that are less highly developed. For example, the numbers of nascent entrepreneurs in the U.S. are relatively low. Nonetheless, the relevant rate there in 2009, at 4.9 percent, was much higher than the rate for Germany (2.2 percent). As this shows, Germany has a low rate of start-ups in comparison to other leading industrialised countries. This is an area in which Germany clearly has a low ranking. Only the reference countries Japan and Italy had lower figures – statistically significant ones – for numbers of nascent entrepreneurs.

C 4–5 OPPORTUNITY ENTREPRENEURS



Germany did not participate in the GEM in 2007.
Source: Global Entrepreneurship Monitor. Adult Population Surveys 2000–2009.

Opportunity entrepreneurship: Number of persons between the ages of 18 and 64 who are nascent entrepreneurs (cf. C 4 – 4) and who wish to go into business for themselves in order to exploit a business idea, as a percentage of all persons between the ages of 18 and 64, in the relevant country.

Persisting reluctance to start-up companies in order to implement business ideas

People start-up companies for many different key reasons.[362] In 2009, 2.5 percent of all start-up entrepreneurs in Germany founded companies in order to take advantage of a market opportunity. The numbers of persons in this category, which have remained low, and nearly constant, since 2006, indicate that few of Germany's start-ups of recent years were founded with the aim of implementing a business idea. In a comparison of the above-listed industrialised countries, Germany had the second-lowest rate in this category. Only in Japan did even smaller numbers of persons found companies with the aim of placing a new product on the market. The companies that ranked higher included France, the UK and, especially the U.S., where start-up entrepreneurs are much more likely to study the market for chances of success.

In Germany, would-be entrepreneurs have rarely seen adequate market opportunities for their products. Traditionally, Germany's start-ups tend to be founded for reasons of economic need and a lack of employment alternatives.[363] And yet it is the start-ups that are based on innovative ideas that often create high-quality jobs and thus spur economic growth. In the long term, a lack of innovative start-up entrepreneurs could be an hindrance for development toward an actively entrepreneurial society.