

## Core Findings

### Start-up activity in the districts of the German Chambers of Industry and Commerce (IHK)

- » In congested areas and IHK districts with high population density, technology-oriented service providers, in particular in the software sector, have a high start-up activity.

*Apparently, highly populated areas offer a large number of potential customers and a better infrastructure to technology-oriented service providers than rural IHK districts. The technology-oriented service providers show high start-up activities in congested areas like Hamburg, Berlin, Munich or Stuttgart. High start-up activity can also be found in the highly populated IHK districts along the Rhine.*

- » Only eight out of 80 IHK districts increased the number of start-ups in technology-oriented services by more than five percent between the periods 2002-2005 and 2006-2009.

*The number of firm foundations in technology-oriented services particularly increased in rural areas with a low percentage of start-up activity in the previous period.*

- » Start-up intensity in research-intensive industries often is above average in areas surrounding highly populated IHK districts.

*Companies in research-intensive industries are more capital-intensive compared to other firms in high-tech sectors. IHK districts surrounding congested areas offer sites which allow the firms to expand. Moreover, the costs for industrial real estate and the financing costs are lower in such regions.*

- » In almost 50 percent of the IHK districts, start-up intensity in research-intensive industries increased by more than five percent between the periods 2002-2005 and 2006-2009.

*Research-intensive industries are the only high-tech sectors in which the start-up intensity increased in many regions. However, the level of start-up intensity remains low. In the past decade, the level of start-up intensity only reached 65 percent of the 1995 level.*

- » The IHK districts with the lowest start-up activity in all economic sectors are mainly located in East Germany.

*The start-up intensity in the IHK districts in Mecklenburg-Western Pomerania and Middle German was very low in the period 2006-2009. Compared to the previous period (2002-2005), the decline in the start-up intensity was particularly strong in IHK districts in East Germany. The only exceptions are the research-intensive industries. These sectors exhibit high start-up intensity and a positive trend.*

- » In Bavarian IHK districts, the start-up activity in the software sector remains high.

*In the period 2005-2009, the start-up activity in the software sector decreased by five percent or more in some IHK districts in Bavaria compared to the period 2002-2005. However, the level of start-up activity is still high in these compared to other IHK districts in Germany.*

## Convergence of regional start-up activities

- » In high-tech sectors, the differences in regional growth rates of start-up intensities depend on the starting conditions.

*Areas with low start-up intensity between 1998 and 2001 show a higher growth rate in the periods of 1998-2001 and 2005-2008 than areas with a high starting level of start-up intensity. Moreover, the growth rates of regional start-up intensities in highly populated areas are lower and are positively affected by the regional GDP.*

- » There is evidence for convergence of regional start-up activities in the software sector only. The differences of start-up intensities remain in research-intensive industries and for technology-intensive service providers.

*Even though districts with a low starting level of start-up intensities show a higher growth rate than areas with a high starting level, this does not mean that the start-up intensities will level up. The only exception is the software sector, in which the spread of start-up intensities decreased between 1998-2001 and 2006-2009.*

## Infrastructure and start-up activity

- » Regional availability of high-speed internet access has a positive impact on start-up activities in technology-oriented services, in particular in the software sector.

*High-speed internet access is particularly important for young firms as they use the internet to sell their products, exchange knowledge and experiences, offer online services, as well as acquire new clients and communicate with customers.*

- » Knowledge infrastructure increases start-up intensities in high-tech sectors. Districts with a large number of highly qualified persons in fields such as mathematics, computer sciences, natural sciences and technology show a high level of start-up intensity.

*Knowledge-intensive high-tech firms are in great demand for skilled persons. First, the potential of entrepreneurs is larger in districts with a large number of highly qualified persons. Second, regional labour market also offers a larger number of qualified staff in those regions.*