Institute for Employment Research

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Up-to-date analyses by IAB

In brief

■ The current crisis has not had a noticeable effect on the number of business start-ups. In 2009, the total rate of new business activities in Germany amounted to 4.1 per cent and was thus not significantly different from previous years.

■ In Germany, there are still not many people who want to become self-employed because of an inner conviction that this is what they wish to do. On the other hand, people who only become self-employed because they do not have other alternatives are not in any way "worse" people setting up their own businesses. Where this motive is coupled to "classic" entrepreneurial aims, the start-up venture is even often particularly successful.

■ Surprisingly few persons starting up their own business seek advice, although experts consider the infrastructure in Germany that provides such advice to be well structured. Only every third person takes advantage of commercial advice and only every fourth, of advice offered – usually free of charge – by public institutions.

■ According to the experts, not enough people in Germany have the necessary know-how to run their own business. In the medium term, this deficit can only be lessened by providing such know-how via schools and universities.

International comparison

Business start-ups in times of crisis

by Udo Brixy, Christian Hundt and Rolf Sternberg

Along with risks, an economic crisis can also provide opportunities – especially for business start-ups. When other companies are closing their doors, this gives new enterprises the chance to get a foothold in the market with innovative business ideas and concepts.

Economic crises accelerate structural change. On the one hand, jobs in unprofitable economic areas are cut back at existing enterprises, but at the same time new jobs materialise – even during a crisis. This dynamic process creates room for innovative ideas and provides new companies with opportunities. In this way new start-up companies can make a contribution to overcoming the present crisis. However companies set up during times of crisis are exposed to a particularly high degree of competition because of the drop in demand and are forced to assert themselves on the market in an exceedingly difficult environment.

A survey within the framework of the "Global Entrepreneurship Monitor" (GEM, see **info box** on page 6) was carried out for the tenth time in Germany in 2009 in order to assess entrepreneurial activities of all kinds. The best-known unit of measurement in the GEM is "total early-stage entrepreneurial activity" (TEA). It represents the sum of so-called "nascent" entrepreneurs and of those who have set up enterprises recently, measured as a percentage of the population aged 18 to 64.

Entrepreneurial activity in Germany 2009

On average, innovation-driven countries (for definition, see **info box** on page 8) like Germany show distinctly lower start-up rates than less-developed countries (see **Figure 1**). The main reasons for these divergences are the differing motivations for starting up a business and the fact that the economic relevance of start-up companies varies between the country groups. This means that the quota for Germany, which may at first sight seem unfavourable, is somewhat relativised.

But, even within 20 similar countries, Germany – with a TEA value of 4.1 per cent – holds the 15th place (for the classification of the reference group, see the **info box** on page 8). According to this, there were statistically significantly less start-ups in Germany in 2009 than in the Netherlands, the United Kingdom and Switzerland.

What is remarkable is that neither the pronounced economic upturn of the years 2006 to 2008, nor the strong recession following it, had a noticeable effect on the level of the TEA quotas. In temporal comparison there is no statistically significant difference between the quota rates of the last three GEM survey years in Germany (2006, 2008, 2009). The current TEA quota is however considerably lower than in the years before 2006 (see **Figure 2**).

Path of the quota of "nascent" entrepreneurs declining

As the TEA quota represents the sum of current "nascent" entrepreneurs and of start-up activities that commenced 3.5 years before at the earliest, it is not really possible to make direct conclusions about the intertemporal differences of start-up ventures that have actually taken place. This *is* however possible if one differentiates between the two TEA components. In 2009 the quota for the first partial component, the "nascent" entrepreneurs, lay at 2.2 per cent in Germany and has dropped to this figure steadily since 2005 (3.1 %). In other words: the share of people in Germany who are planning to set up a business in the near future has dropped continually over the last four years.

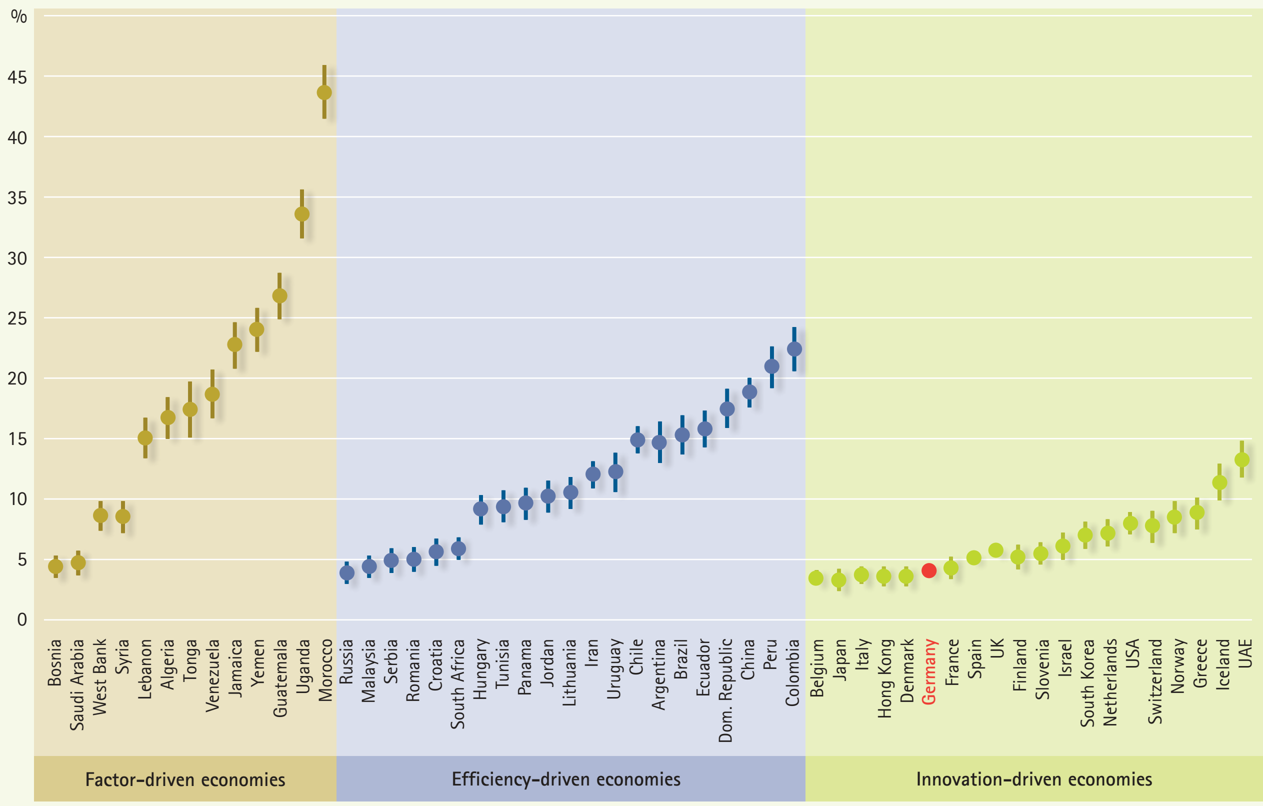
This is a critical finding as an economy is dependent upon the constant renewal of it entrepreneurial basis. Start-ups are not only necessary to implement

Figure 1

Total early-stage entrepreneurial activity (TEA) 2009 by country

Persons who have set up a business in the last 3.5 years and/or are at present setting up a business (TEA)

Share of the population aged 18 to 64 in per cent



The vertical bars mark the area in which the average (dot) of the basic population lies with a probability of 95% (95% confidence interval). The differences between two countries are only statistically significant if their bars do not overlap (that is, if they do not have any y-values in common). This applies for example to Bosnia and Syria; and Russia and Hungary, etc.

Source: GEM Population Survey 2009.

structural change; they are also necessary to spread innovations and to create new jobs. The importance of new entrepreneurial activities is also underlined by the results of the GEM: these show that start-ups in Germany are more innovative than in most other countries of similar standing.

Gender and age of those setting up a business

In almost all countries participating in the GEM, women set up companies significantly less often than men. For that reason it is worthy of note that there have not been any more significant differences between the start-up quotas of the two sexes since 2008. Although the survey shows that men still set up companies more often than women, the differences are nevertheless not statistically relevant. This trend might be seen in a positive light if it meant that women were deciding in favour of self-employment more and more often. This is however not the case, as **Figure 3** shows. Rather this levelling off rests exclusively on the fact that men have been tending to set up less new businesses since 2006 while those of women are remaining for the most part stable. In 2009 the intention to set up a new business on the part of men grew somewhat again, which may be indication of a reversal in trend.

As often emphasised – especially again and again by the German GEM team – an increase in the number of women starting up their own business is a suitable means to increase the number of start-ups in general and should thus continue to be among the goals of the national promotion of start-ups. Seen in absolute terms, the level of the female TEA quota in Germany could be considerably improved: after all, among the innovation-driven countries, six show statistically significantly higher female TEA quotas, such as the Netherlands and Switzerland.

Age-specific differences in the frequency of start-ups are likewise an empirically proven result of the GEM analyses. This also applies in 2009, during which 35- to 44-year-olds founded their own business significantly more often than older age groups and tendentially also more often than 18- to 24-year-olds (see **Figure 4** on page 4). If one relates this result to the age distribution in Germany in general, one would expect to find untapped start-up potential especially in the older and larger age groups – not least because these age groups will become considerably bigger in future because of demographic change.

Figure 2

Development of total early-stage entrepreneurial activity (TEA) in Germany 2004 to 2009

Persons who have set up a business in the last 3.5 years and/or are at present setting up a business
Share of the population aged 18 to 64 in per cent

The vertical bars mark the area in which the average (dot) of the basic population lies with a probability of 95% (95% confidence interval). The differences between two years are only statistically significant if their bars do not overlap (that is, if they do not have any y-values in common).

Source: GEM Population Survey 2004 to 2009. No data are available for 2007 because Germany did not take part in the GEM Survey in that year.

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Figure 3

Development of total early-stage entrepreneurial activity (TEA) in Germany 2004 to 2009, according to gender

Men and women who have set up a business in the last 3.5 years and/or are at present setting up a business
Share of the population aged 18 to 64 in per cent

The vertical bars mark the area in which the average (dot) of the basic population lies with a probability of 95% (95% confidence interval). The differences between two years are only statistically significant if their bars do not overlap (that is, if they do not have any y-values in common). This shows, for instance, that there are no significant differences for the women for all the years.

Source: GEM Population Survey 2004 to 2009. No data are available for 2007 because Germany did not take part in the GEM Survey in that year.

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However a comparison between 2009 and the year 2002, when the start-up quotas in Germany were considerable higher, also offers another conclusion. As **Figure 4** likewise shows, it is only the TEA quotas of the two youngest ages groups that have dropped since 2002 – namely to half the initial figure. It is quite obvious therefore that in both absolute and relative terms young people in Germany are starting up their own business less often than at the beginning of the decade. By international comparison as well, the German figure is unusual: in the average of the 20 innovation-driven countries, 25- to 34-year-olds are the strongest start-up group while here, in Germany, this applies to the age group directly above.

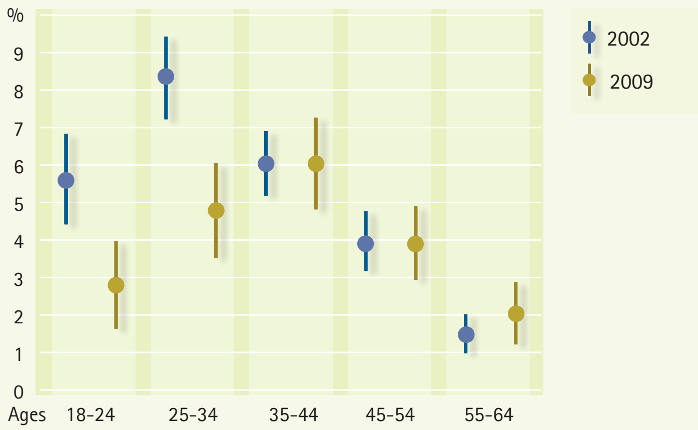
If start-up efforts in general are to be supported, it would therefore seem sensible to target the very young as well as the two oldest groups. The communication of social values and norms – including those concerning self-employment – takes place in young years, for instance, via parents or schools. That is why it makes sense to promote the self-employment of young people. In view of demographic change and the shifts in working lifetimes and in the content of work, however, the entrepreneurial activities of older people will also become an issue that politicians should be prepared for.

Figure 4

Total early-stage entrepreneurial activity (TEA) in Germany 2002 and 2009, according to age

Persons who have set up a business in the last 3.5 years and/or are at present setting up a business

Share of the population aged 18 to 64 in per cent



The vertical bars mark the area in which the average (dot) of the basic population lies with a probability of 95% (95% confidence interval). The differences between two age groups are only statistically significant if their bars do not overlap (that is, if they do not have any y-values in common).

Source: GEM Population Survey 2002 and 2009.

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The motivation of people who start up businesses

An important role in the entrepreneurial activities is played by the motivation for starting up a new business. In Germany, the share of persons who mainly want to start up a business because they do not have any alternative source of income is traditionally very high. At the same time, the share of "classical" start-up entrepreneurs dropped in leaps and bounds in 2006 and has since persisted to remain at a low level (see **Figure 5**).

In principle, few people in Germany wish to set up their own business because they are convinced this is what they want to do – that is, for "classical" reasons. But luckily this does not mean that people who start up a business because the do not have any alternative are the "worse" entrepreneurs. If this latter motive is coupled to "classical" entrepreneurial goals then it turns out to be a particularly favourable combination: persons who see no perspective for themselves as dependent employees but who also feel called to the profession of entrepreneur start up companies particularly often. Hence the only people who are problematical are those who can truly be termed "emergency start-up entrepreneurs", namely those who are exclusively starting up a business because they have no alternative way of earning a living.[1]

Start-up know-how and start-up skills

If a person starting up his or her own business is to be successful in the mid- to long term, certain skills and characteristics are necessary. The actual decision to start up a business depends on how the potential entrepreneur sees these qualities – and not necessarily on whether he/she assesses them correctly. In 2009, 45 per cent of the Germans in the age group 18 to 64 thought that they had the adequate skills and experience to start up a business (rank 13 of the countries in question, see **Figure 6**).

The degree to which Germany lags behind countries like the USA or the United Kingdom, but even the Netherlands, is considerable. There high figures may have something to do with a reflex to more pos-

[1] Brixy, Udo and Jolanda Hessels (2010). Human capital and start-up success of nascent entrepreneurs. EIM Research Reports H201013, EIM Business and Policy Research, Zoetermeer.

itive experience with start-up activities in the said countries in the past. A further reason for Germany lagging behind could also lie in the higher barriers for market entry in many areas. For instance, German trade regulations specify very precisely who can start up a craft enterprise, while other areas are also strongly regulated (e.g., chemists and doctors).

Most "nascent" entrepreneurs manage to realize their start-up aims

Not everybody who wants to start a business actually manages to do so. Up to now little is known about how often the intention to set up a business is actually carried through. Correspondingly little is also known about the reasons why people give up their efforts to start a business prematurely. Moreover not much is known about the length of the phase immediately prior to setting up the business.

Having said that, more exact knowledge about the reasons why planned businesses do not come about is of importance for many reasons. For instance, people who wish to set up a business can profit – in a concrete way – from the mistakes of others and adapt their plans accordingly. Moreover, for political actors as well, it is important to know which barriers cause potential entrepreneurs to fail – not least so that they can improve instruments which support people setting up their own businesses.

To analyse the degree to which the implementation of planned start-up ventures has been successful, the German GEM team has been carrying out repeated surveys since 2006 of persons who were currently setting up a business at the time of the survey, so-called "nascent" entrepreneurs (German: "werdende Gründer"). These are based on the annual population surveys that take place within the framework of the GEM.

Over the last four years, the surveys of 2006 to 2009 have been used to ask nascent entrepreneurs every half year about the current status of their efforts. This resulted in the "German Panel of Nascent Entrepreneurs" (GEPANE) which is now one of the most comprehensive data sets of its type in the world. (For more information, see the current GEM country report, see **info box**, page 6).

Initial findings of this panel show that after one year in Germany 43 per cent of nascent entrepreneurs have become self-employed, that a further 26 per cent are still in the process of doing so, and that 31 per cent have given up their intentions to set up a business completely. With most people, the decision was taken during the first half year: either they became fully self-employed or gave up their start-up intentions once and for all. This implies that it was indeed possible to carry through start-up ven-

Figure 5

Motives of the start-up entrepreneurs in Germany, 2004 to 2009

Share of the "classical" and "necessity-driven" start-up entrepreneurs* of the population aged 18 to 64 in per cent

* "Classical" start-up entrepreneurs state that they want to realize a business idea whereas "necessity-driven" entrepreneurs do not see any other way of earning a living.

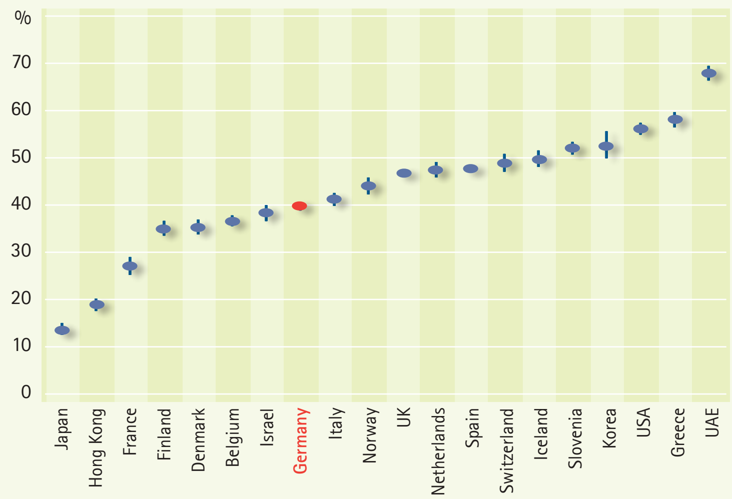
The vertical bars mark the area in which the average (dot) of the basic population lies with a probability of 95% (95% confidence interval). The differences between two years are only statistically significant if their bars do not overlap (that is, if they do not have any y-values in common).

Source: GEM Population Survey 200 to 2009. No data are available for 2007 because Germany did not take part in the GEM Survey in that year.

Figure 6

Start-up know-how and start-up skills, 2009 by international comparison

Share of the population aged 18 to 64 who maintain that they have the necessary know-how to start up a business, in per cent



Source: GEM Expert Questionnaire, 2009.

tures speedily, which in turn suggests that administration and advisory services were efficient. These aspects are viewed by experts asked for their opinion by the GEM as plus-points for Germany.

There are clear differences between "nascent" entrepreneurs with varying levels of qualifications. Those with low qualifications seem especially likely to give up their plans to set up a business. Of them, 58 per cent had decided against starting up a business within a year. Of those with medium or high qualifications the rate was only 30 or 26 per cent, respectively. This is the continuation of a trend that is already visible at the beginning of the process: persons with low levels of education plan to set up a business less often in any case. Those who nevertheless do decide to, realize their plans less often. However, one is justified in asking whether this pre-selection merely prevents companies being set up that would have few chances on the market in any case. People with low qualifications frequently also have lower financial resources and, in the case of insolvency, are in danger of dropping below the poverty line – for, in Germany, the owner tends to be liable for damages with his whole assets.

Good advisory structure too little used

Start-up entrepreneurs that take advice tend to be more successful in becoming self-employed. Nonetheless only about half of all "nascent" entrepreneurs seek advice at all – and that is the case even though advice, here, also includes low-key contacts with one's social environment, such as family, friends or colleagues. Just under half of the persons surveyed asked people around them for advice, every third took advantage of commercial advice, and only every fourth advice from public institutions – even though this was usually free of charge (see **Figure 7**).

This is all the more surprising because according to the start-up experts (see left) the advisory structure in Germany is very well developed.

Expert opinions on the framework conditions for start-ups

Alongside the comprehensive population survey on which the above information rests, a questionnaire for start-up experts is also conducted within the framework of the GEM. This is aimed at assessing the current situation of framework conditions for start-up ventures.

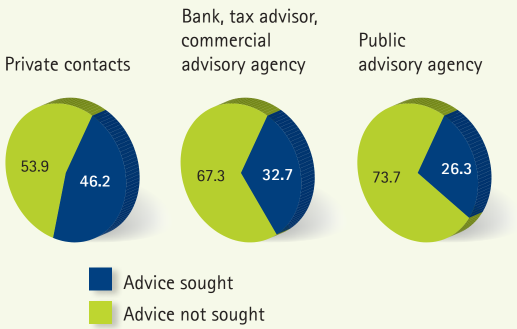
As in all years since 2003, the following framework conditions in Germany were also this time deemed the best: physical infrastructure, public support programmes, intellectual property rights as well as company-related services (see **Figure 8**). A further advantage of the location according to the experts was the high value laid on innovations – both from the perspective of the entrepreneur and of the consumer.

Just like the advantages, many of the disadvantages of Germany as a location seem to have remained very stable over the last ten years of the GEM. Here one should mention training, in particular at schools, as well as the field of "regulation and tax". By way of contrast "financial support for start-

Figure 7

Sources of advice* for "nascent" entrepreneurs in Germany

Share of start-up entrepreneurs in per cent



* One year after initial screening

Source: German Panel of Nascent Entrepreneurs (GEPANE).

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i The "Global Entrepreneurship Monitor" (GEM)

The Global Entrepreneurship Monitor (GEM) is an international research consortium set up in 1998. Its aim is to analyse start-up activities both internationally and intertemporally. The focus is on the comparison between different phases of the start-up activity. To do so, country teams collect data on the adult population (18-64 years) on an annual basis. Written expert questionnaires are carried out to assess framework conditions connected to start-up efforts. In 2009, more than 50 countries took part in the GEM. Apart from 2007, a complete data series for Germany for the annual citizen and expert questionnaires and a German country report have been available since 1999.

All country reports and overall reports providing international comparisons can be downloaded from the official internet site (www.gemconsortium.org). Reynolds et al. (2005) provides an overview of methodical details.

ups" and "social values and norms" receive somewhat better evaluations (see **Figure 8**).

The inadequate insemination of entrepreneurial skills is mirrored in the very low opinion that the population as a whole has of their own entrepreneurial skills. Often the opportunities for starting up a business – which experts think exist – cannot be used because of this.

Conclusions

Up to the middle of 2009 at least, the effects of the economic crisis on the businesses being started up was evidently still slight. A warning signal, however – and one that is independent of the crisis – is the decrease in the share held by "nascent" entrepreneurs since 2006. This is a critical finding because new enterprises are of great significance to the recovery phase after the recent economic crisis.

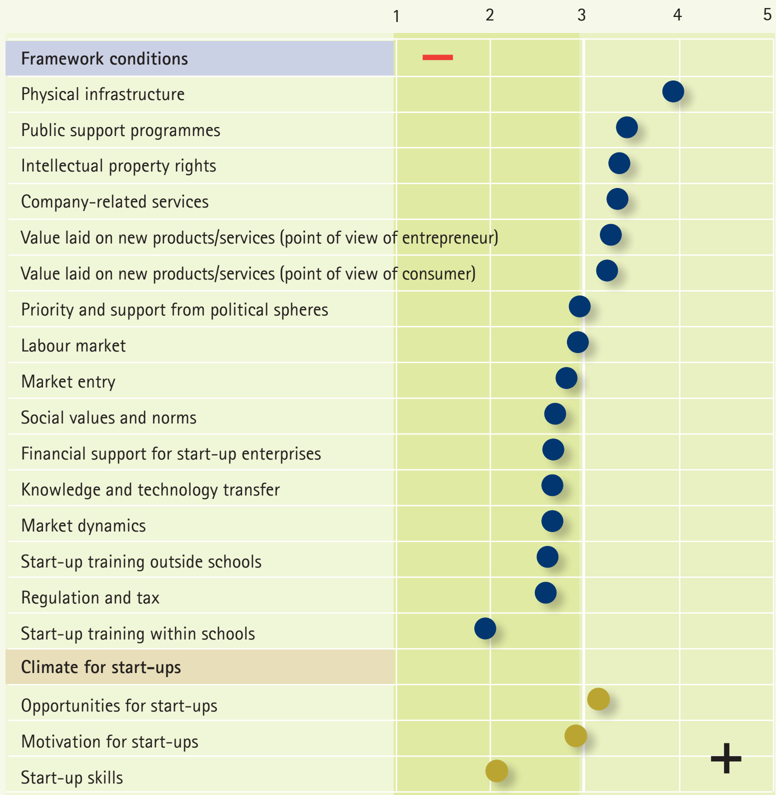
To encourage more people to set up a business in the medium term it is necessary to provide more relevant know-how in schools and universities and to present self-employment as a professional alternative of equal value. That would succeed best if entrepreneurs themselves have their say, as research has been showing for a long time that it is above all successful role models that encourage people to set up their own enterprises.

An urgent problem is that the advisory structure for persons setting up their own business is too little used although experts have a particularly good opinion of it. The diverse advisory possibilities available thus need to be promoted in a considerably more offensive way so that those wanting to set up businesses are more aware of them. This is also in the interest of the potential entrepreneurs themselves because good advice would forestall a start-up venture if it is not yet ready to succeed or improve it so that its chances of success were increased.

Figure 8

Framework conditions and climate for start-ups in Germany, 2009 in Deutschland

Evaluation by experts on a scale from 1 (very poor) to 5 (very good)



Note: The evaluations were based on the average of a series of statements on the relevant framework conditions by experts on a scale from 1 (completely wrong) to 5 (completely right): the higher the value, the higher the assessment of the framework conditions.

Source: GEM Expert Questionnaire, 2009.

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Country comparison: Categorisation of the countries covered by the GEM

54 countries took part in GEM in 2009. They were divided into three groups according to the categorisation of the current "Global Competitiveness Report 2009/2010" (Schwab/Sala-i-Martin, 2009), based on the argumentation of Porter et al. (2002). This is particularly the right way of going about it because the start-up activities in these three groups have very different functions. In other words: the same level of quota for start-ups may have a very different significance in the various groups.

The first group consists of countries with low economic power. Because they largely gain their growth from the increased mobilisation of primary production factors (land, supplies of raw materials, low-skilled workers, etc.) they are termed **"factor-driven economies"**.

The second group covers political economies which have managed to increase their standard of living with the help of foreign direct investment (FDI). As further growth is achieved primarily by increasing efficiency, these countries are termed **"efficiency-driven economies"**. The technologies necessary to do this usually require to be imported as the capacities for the generation of own innovations have not yet been sufficiently developed.

The differentiation to an **"innovation-driven economy"**, the third and last group, is the most difficult according to Porter et al. (2002). Even in efficiency-driven economies, macroeconomic stability and the guaranteed protection of private property (both material and intellectual) are important preconditions for attracting FDI. Additional characteristics for innovation-driven economies are discernible investment activity in the areas of education, research, and development – both by the state and private actors. Like all OECD countries, Germany belongs to the group of innovation-driven economies. Of the 54 economies participating in the GEM 2009, 20 belong to the innovation-driven group. In the current report they form the reference group against which Germany is measured.

Factor-driven economies:
Algeria, Bosnia-Herzegovina, Guatemala, Jamaica, Lebanon, Morocco, Saudi Arabia, Syria, Tonga, Uganda, Venezuela, West Bank & Gaza Strip, Yemen.

Efficiency-driven economies:
Argentina, Brazil, Chile, China, Colombia, Croatia, Dominican Republic, Ecuador, Hungary, Iran, Jordan, Lithuania, Malaysia, Panama, Peru, Romania, Russia, Serbia, South Africa, Tunisia, Uruguay.

Innovation-driven economies:
Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Israel, Italy, Japan, Korea, the Netherlands, Norway, Slovenia, Spain, Switzerland, United Kingdom (UK), United Arab Emirates (UAE), United States (USA).

The authors

Dr Udo Brixy
is a researcher in the "Regional Labour Markets" Research Department at the Institute for Employment Research (IAB).

udo.brixy@iab.de

Christian Hundt
is a researcher at the Institut für Wirtschafts- und Kulturgeographie (Institute for Economic and Cultural Geography) of the Leibniz University in Hannover.

hundt@wigeo.uni-hannover.de

Professor Rolf Sternberg
holds the Chair at the Institut für Wirtschafts- und Kulturgeographie (Institute for Economic and Cultural Geography) of the Leibniz University in Hannover.

sternberg@wigeo.uni-hannover.de

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