

Innovation's Vital Role in Germany

Germany is a forward-thinking nation with the largest GDP in Europe. Germany is also one out of only four innovation leaders in the top performance group of all EU27 Member States. Their private and public sector R&D funding is on the rise in the midst of a global economic crisis and they enjoy growing economic ties with China. So what is Germany doing right?

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The German Chancellor Angel Merkel's visit to China after the Chinese New Year of Dragon has put Germany even more under the spotlight and raised high expectations for further discussions with China amid the debt-stricken euro zone. What did she highlight during her visit and discussions with China's leaders? There are various and different interpretations about her visit. Observers predicated that her major task was to lobby for more contracts of German firms to settle in China as some 800 Chinese companies are already in Germany. However, for us, we feel that Germany and China, the world's top two export nations, not only enjoy vibrant trade relations and political ties even though there is a big difference between these two countries in terms of culture, history and ideology. It is interesting to note that a Chinese worker earns on average only one tenth of a German wage. However, the German and Chinese economies are becoming increasingly intertwined and interrelated as well as to share something in common, which is referred as "global manufacturing and technological innovation".

Looking ahead in 2012, the debt crises still threatens the very future of the Euro, the economic situation in many countries in Europe is getting worse, going alongside the downgrading of credit ratings of many countries, such as, Greece, Italy, Portugal, Spain, France, and even the UK. However, the German economy is still strong and the pocket is still deep, like a stone pillar in the sea. This is quite remarkable.

Germany's unique position in Europe

Even in times of doubt whether the global economic crisis has already been overcome and the debt crisis threatens the future of the European Union, the German economy is regarded as stable, in particular compared to other European countries. Also from the political perspective Germany has never been in such a strong position in Europe as in the current situation. The German government is a driving force behind the social conscience in Europe and aiming to confine the demands of international financial markets at the expense of the working class.

The economic stability can mainly be exemplified by the diversity of the German national economy which is the largest measured by Gross Domestic Product (GDP) in Europe. World market leading companies of all sectors are based in Germany but the backbone of the German economy are small and medium-sized enterprises (SMEs) which do generate a great number of jobs in the country on the one hand, and on the other hand guarantee high quality, efficiency and continuing improvement. The ongoing integration of SMEs into the value-added chain of German world market leaders within the last decade has been mutually beneficial, for example in creating great progress in product and process innovation.

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About a decade ago, Germany wasn't in a position to claim to be a role model of a successful European Union member. Significant problems in labour markets, education and the social security system occurred. However, these problems were recognized by the government and it was the beginning of ongoing changes. The labour market regulations were changed to more flexible work schemes and created a work environment to adapt today's technological possibilities and innovation capacities. The attendance time clock is out of fashion, the normal nine-to-five workplace has become flexible to a large extent, particularly for high-profile professionals with families, or single-parent households. Also the invention of mini-jobs with limited working-hours was highly beneficial as it enabled people to keep "a foot in the door" of the German labour market, often leading to better-paid jobs or full-time positions. Also, the SMEs don't have to follow the same dismissal regulations as medium or large-sized organizations, it enables the SMEs to be flexible on peaks and lows with project-related

contracts. Last but not least, an educational reform started in 2001 to strengthen the skills of German students in subjects like languages, history, math, physics, technology and computing.

All these factors and many more have enabled the “export champion Germany” to recover quite fast from the decrease in exports during the global economic crisis and to grow further as the recessionary trend globally retains.

The significance of innovation in Germany

Recently the European Commission (Enterprise and Industry) has identified Germany as one out of only four innovation leaders in the top performance group of all EU27 Member States. Relative strengths of Germany are in intellectual assets, innovators, branding and reputation, and outputs (knowledge-intensive services / innovation exports).

The continuing support of SMEs by the government and its political reforms (labour, funding, tax) as well as the greater integration into the value-added chain of the German industry within the last decade has been a success story, for example in creating progress in product and process innovation, competence-enhance innovation and competence-destroy innovation. These SMEs are often highlighted as the “job machines” in the German economy.

Innovation and technological progress have been monitored for almost three decades now and put into context by benchmarking with world-leading economies in the US, Japan and China. This has always been central to the political agenda as well as the private organizations. Consequently, German universities have focused for many years on educating and training high-profile young professionals in engineering and technology so as to enable them to become full-fledged global competitors.

Innovation ambitions and challenges

Germany wants to persist and expand its pre-eminent position in technology development and innovation as a global technological leader. For the first time ever, a governmental initiative called “High-Tech Strategy 2020” has been put on the top agenda of the government. In 2006, the German government announced a comprehensive national strategy with the aim of putting the country at the top of the world’s ranks in tomorrow’s most important markets. All political sectors that affect research and development will be geared to a clearly defined goal: global excellence. This strategy puts innovation policy front and central in governmental activities. Logistics, security and health care are examples of areas where this could be done within a short-time, all other areas covered by this innovation policy will have a clear timetable that takes into account both research funding as well as prevailing conditions.

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Freedom for new ideas means first and foremost creating latitude, so that innovative ideas and approaches can become strategies, technologies, products, processes and services. New ideas should not only be created and developed in the country but also be achieved and implemented in Germany. For this to happen, the road from development to market entry must become shorter and faster.

The most important challenge for Germany is to remain the current strong position in the global economy. The competition for and access to so called “rare earth elements” used in manufacturing of many electronics components is of vital importance for Germany.

Chinese purchase of German goods (“export champion”) – Asia in general – have kept the German economy re-stabilizing again and growing faster than that of other European countries. Germany’s creative industry, technological innovation and industrial guidance on the other hand have contributed to manufacturing and innovation in China. This fruitful bilateral economic collaboration needs to be secured and continued, if possible further expanded in the near future.

The role and activities of innovation in Germany

Germany as the so called “export champion” – almost 47% of the German GDP are on account of exports – regards itself as a technologically forward thinking nation and so do the organizations as well. Innovation plays a central role, to politicians as well as practitioners, it is a crucial building block of Germany’s economic wealth and prosperity, and becomes even more important with regard to the future. It can be seen as the key to the German economic success in the past, present and future.

Innovation also plays an important role within politics. Annette Schavan, German Minister of Education and Research, discussed innovation in Germany recently: “Germany is a land of ideas. The German government’s High-Tech Strategy shows how Germany can continue to be a land of ideas in the future as well: By putting ideas into action, by igniting ideas!” There is a wealth of good ideas in Germany just waiting to be translated into strategies, technologies, processes, products and services. There is a wealth of patents that have been developed in Germany but go into production through commercialization in other countries, such as Meglivi Railway running from Longyanggang to Shanghai Pudong International Airport. There is a wealth of talents waiting to be discovered so that the knowledge and expertise Germany already has can be put to full use and implementation. High-Tech Strategy for Germany means that Germany is and will “indeed” remain a land of ideas and innovation!

In the past 5 years, even in times of the global economic crisis, in the private sector as well as the public Research & Development spending and funding increased to large extent (about 15%). A new governmental-lead university initiative (excellence cluster) supports innovation in all subject areas – in teaching as well as in financing start-up organizations. A first evaluation of the High tech strategy is to be expected in mid 2012 and the Ministry will announce a new initiative based on the evaluation results.

Germany has identified the legal perspective on macro-level with China as a key topic for enhanced improvement and expansion on micro-level collaborations. A team of legal advisors supports initiatives in China to establish a legal framework with regard to Intellectual Property Rights (IPR).

Germany’s strategic role in Euro’s crises

Politically Germany has been put in the spotlight at the moment primarily by some of its European partners and has been asked to take a kind of a leadership role in Europe – but this is only half of the story. There is no way that one country alone can lead the European Union out of the current debt crisis and it seems more due to its economic stability and its truth to principles that Germany is being pushed into such a role. Europe needs not only a debt solving strategy, it is in need of a consistent growth strategy to solve the debt crisis. However, Germany clearly takes over responsibilities and wants to play an important role in future European politics but only in close cooperation with its partners. This role should not be misunderstood as a stand-alone mission of Germany.

In the currently debated fiscal pact (criticized as “Europe on the verge of fiscal transfer union”) for Greece, Germany has always supported a solution where Greece could remain a member of the Euro-zone and proclaim greater integration and commitment of all member states on the economical level. Germany has no doubt been convincing that it would contribute all that is feasible to save the Euro from collapse. The German chancellor Merkel outlined that Europe is in danger of becoming progressively intro-perspective with its economic problems, therefore she recalled on European strengths in global competition. Germany as a country has shown how to meet its fiscal Maastricht mandate e.g. by reorganizing public and governmental institutions towards more process- and cost-efficiency.

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