A CURRENT DEVELOPMENTS AND CHALLENGES

A 1 FINANCIAL AND ECONOMIC CRISIS

The global financial and economic crisis had a highly negative impact on Germany's economy in 2009.[1] As the Expert Commission had expected, German economy was forced to curtail its innovation activities considerably.[2] In 2009, innovation budgets in industry and in knowledge-intensive services were cut by a total of twelve percent. Business enterprises showed restraint especially in the area of investments in new systems and equipment for product and process innovations. On the other hand, pertinent cutbacks in research and development remained remarkably modest.[3] Private sector's R&D expenditures decreased by only 2.4 percent in 2009, with respect to 2008. Germany's overall economic R&D intensity surpassing that of the U.S. for the first time since 1989 has to be considered a success of both private and public efforts. In 2010, the German economy made an unexpectedly marked recovery. German exports benefited from increased international demand,[4] with the result that Germany's gross domestic product grew by 3.6 percent in 2010.[5] The economic recovery also has had a positive impact on the employment market. Total unemployment was considerably lower than it had been a year earlier; as of the end of 2010, it amounted to only slightly more than three million.[6] For Germany, it is now important that this trend continue, so that the economic level achieved in 2007 can be quickly re-achieved and then surpassed. In keeping with the positive economic development in 2010, and in contrast to the situation seen in 2009, German economy's research and innovation (R&I) activities have reintensified. This conclusion is supported by companies' planning data from last spring and summer. Internal R&D expenditures were expected to grow by 4.6 percent.[7] Furthermore, industry's and knowledge-intensive services' budget allocations for innovation expenditures were slated to grow by 5.4 percent.[8]

Continue support for the recovery

Business enterprises have indicated they have high expectations for the economy's development over the coming months of this year.[9] Nonetheless, there are global factors that could again slow down economic growth in Germany. The German Council of Economic Experts sees risks with regard to: economic trends for important trading partners; the strict, in some respects, consolidation policies being pursued in the UK and in some Euro-region countries; the possibility of a further unexpected shock in financial markets; tensions in international currency relationships; and U.S. monetary policy.[10] Furthermore, the cutbacks planned for Germany's public sector will tend to slow the economy. It is true that budgetary consolidation is needed, and that such consolidation is now mandated by the debt brake built into Germany's Basic Law and by provisions under the European Stability and Growth Pact. At the same time, such consolidation could slow down the economic recovery. It thus makes sense to provide state support for the private sector, with a view to stabilising growth.

In 2009, the Federal Government established the German Business Fund (*Wirtschaftsfonds*)[11] aimed at supporting companies in Germany in dealing with crisis-related financing problems. The Expert Commission recommends that the term of that fund be extended until at least the end of 2011.[12] The *Wirtschaftsfonds* industry fund has helped reduce pressures from demand for loans, during the recession – in spite of a considerable decrease in new lending business. It thus has played an important role in assuring financing for business enterprises, which of course is indispensable for continuation of research and innovation. In September 2010, the KfW Bank Group found that the situation in the German credit market had eased considerably.[13] Nonetheless, small and medium-sized enterprises (SMEs) that lack first-class credit ratings continue to face problems in obtaining loans from commercial banks.[14] Such difficulties affect innovation projects, as the capital goods required for such projects are often financed via loans.

What is more, the availability of equity plays a key role in financing of research and innovation activities in companies.[15] Banks and savings banks are already taking measures designed to assist SMEs in closing gaps in their financing, with a view to ensuring that SMEs are able to exploit the recovery. Initially, companies showed hesitancy in drawing on funding from equity funds that were made available. Relevant demand developed positively through the end of 2010, however.[16]

Support R&D in companies via tax-based incentives

As the Expert Commission has repeatedly emphasised in the past, introduction of tax-based R&D support would provide important incentives for expansion of R&D in business enterprises. The tax-based R&D support announced by the governing coalition has not yet actually been implemented, however. This is unfortunate, and it is hindering the development of the German innovation system. Necessary cutbacks must not be permitted to have impacts on research and innovation, which would reduce potential for future growth. German tax policy also runs counter to innovation in a further respect. The current limitation on tax deductibility of losses in connection with share transfers amounting to more than 25 percent (Art. 8c Corporation Tax Act (KStG)) urgently needs to be eliminated. In particular, it tends to hinder initial financing of young, innovative companies by venture-capital providers. Venture-capital providers provide capital for start-ups, often for limited periods of time, oriented to companies' establishment and initial-growth phases. Losses incurred by companies in such development phases cannot be deducted from later profits if the relevant venture-capital providers later sell their pertinent shares. That, in turn, tends to hinder the establishment and development of new companies, especially in capital-intensive sectors of cutting-edge technologies. Most other European countries do not impose such limitations.

Young biotechnology companies tend to be especially strongly affected by limitations on use of losses carried forward, since such companies tend to incur high initial losses. While research and innovation policy seeks to promote the establishment and growth of such companies, the tax system tends to hinder such development systematically. As this clearly indicates, tax policy is always also innovation policy.

VENTURE-CAPITAL MARKET A 2

Provide incentives for use of venture capital

Germany's economic recovery in 2010 has also made itself apparent in the venture-capital market. In 2010, after a period in which the investment volume in this area had declined enormously as a result of the financial crisis, investments of capital investment companies began growing again.[17]

At the same time, the current figures for this area should not blind us to the fact that the German venture-capital market, notwithstanding its current recovery, has low rates of investment in light of relevant international rates. The German risk-capital market continues to be plagued by a structural problem. In 2009, for example, venture-capital investments in Sweden amounted to 0.07 percent of that country's gross domestic product, while such investments in the UK reached 0.05 percent of GDP. The corresponding figure for Germany was just less than 0.03 percent.[18] Another problem, apart from such low investments by international standards, is that Germany's market for early-phase venture-capital financing is clearly underdeveloped. That conclusion is supported by a recent study. As the study shows, in early phases of business enterprises, private investments are decreasing, in relative terms, in