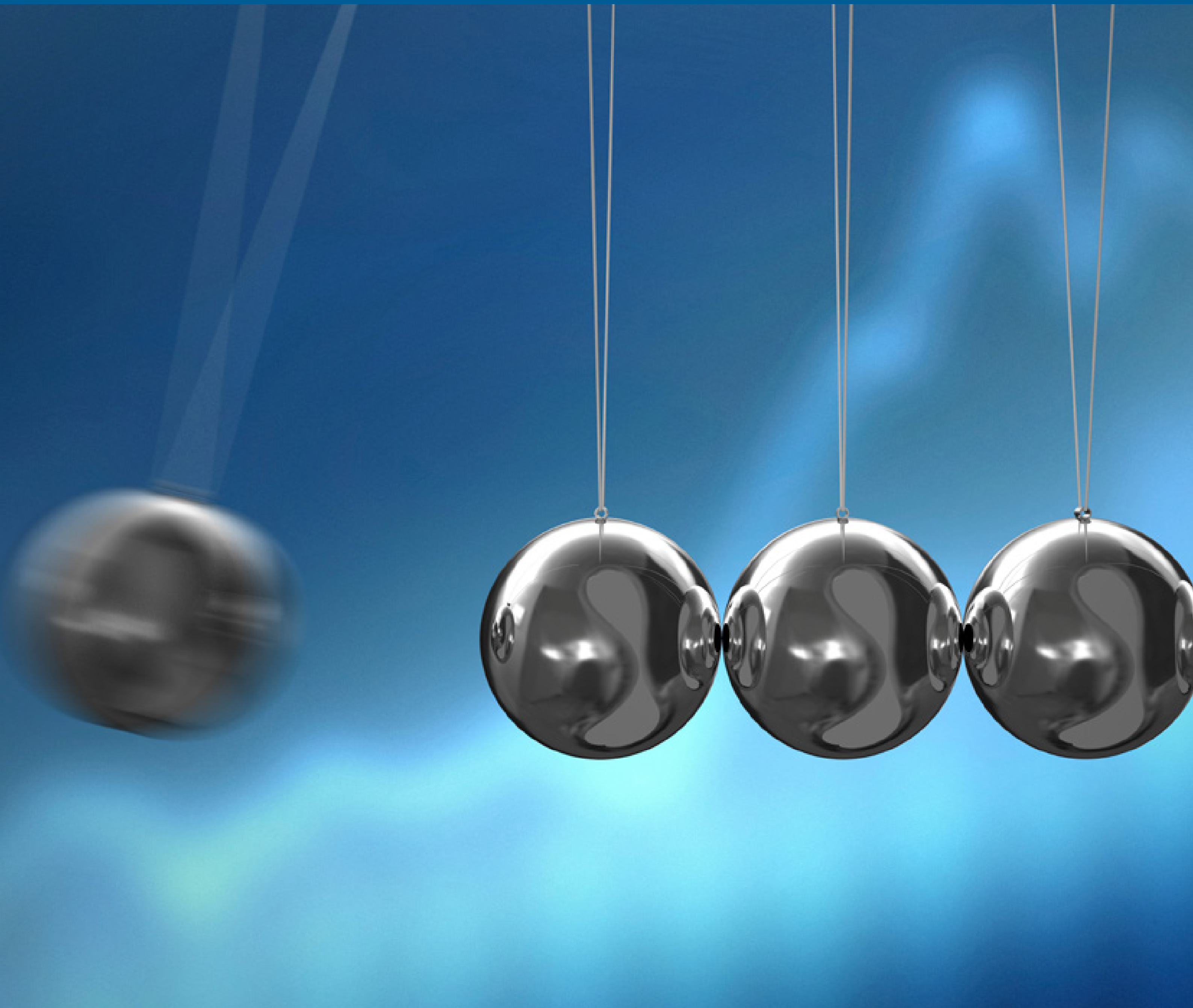
INCREASING INVESTMENT IN GERMANY



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SUMMARY

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Foreword

The independent Expert Commission was appointed by Federal Minister for Economic Affairs and Energy Sigmar Gabriel in August 2014 to draw up recommendations for action to increase private and public investment in Germany. The 21 members of the Expert Commission represent broad sections of German industry, society and academia. The Commission has the task of examining German society and industry from an overall perspective. An efficient, forward-looking public infrastructure and conditions that make Germany highly attractive to domestic and foreign investment as a location for business and industry are fundamental prerequisites for safeguarding prosperity in Germany on a long-term basis.

The Expert Commission's final report focuses on the question of how incentives for more private investment that will ensure growth and jobs in Germany over the long term can be created through public investment activity and the establishment of a better investment environment. It is our aim not only to map out from a critical standpoint the strengths and weaknesses of the current conditions for investment in Germany but also, and particularly, to provide policy makers in Germany recommendations for concrete action.

The Expert Commission's key strengths are the broad expertise and range of perspectives its members offer. The recommendations in this report express the consensus of the Commission members. This does not mean that each member subscribes to every sentence in this report, but rather that all members of the Expert Commission support the vast majority of the findings and recommendations for action that are outlined in it. In some cases where the Commission members were not agreed or they identified a need for further study, the report points out different options which can be used to improve the status quo.

Despite this strong consensus, different opinions do exist within the Commission regarding the fundamental causes of weak investment in Germany:

Some Commission members are of the opinion that the weak investment performance observed in Germany is largely a reflection of the consolidation pressure and tax cuts of the last ten years that have reduced the leeway for public spending. These members maintain that this has led, on the one hand, to the public infrastructure being neglected and, on the other hand, to a weakening of aggregate demand, with negative consequences for private investment. These members favour increasing public investments on a tax-financed basis, along with using the leeway available under the "debt brake". Even though this is not recommended in the Commission's report, some members deem it important to avoid a misinterpretation here and to stress that a shift in budgetary responsibility from the Federal Government to Germany's state and local governments should not take place. The supplementary and deviating opinions of the five union members are presented in a separate section following the summary.

Other Commission members see the key to improving Germany's infrastructure in increased and more efficient public investment. These members reject tax increases and new borrowing for financing increased investment spending. Instead, some of them advocate restructuring expenditure, reducing the taxation of property and systematically mobilising additional private capital in order to increase the scope available for investment.

Some of these members emphasise that the enormous backlog of investments to maintain and expand public infrastructure clearly shows that the government cannot meet this challenge on its own. This group contends that solutions to this problem must therefore go beyond just reorganising government activity. Public-private partnerships (PPPs) could make an important contribution to closing the investment gap, they say. Other countries have shown that it is possible to use PPPs to deploy private savings in targeted and efficient ways to finance public infrastructure, this group notes. The political sector must aim to inject more objectivity into the debate on PPPs – which is conducted largely on an emotional level in Germany – and to invite tenders for considerably more infrastructure projects on a basis that allows PPP participation. Otherwise, these members state, there is the risk that existing financial resources will be invested exclusively or in very large part outside of Germany.

At the same time however, all the members of the Expert Commission agree that making the following report an arena for an economic policy debate would contradict the Expert Commission's mandate. The analysis and recommendations for action contained in this report therefore concentrate on the question of how investment in Germany can be increased without having to resort to changes in the fiscal, tax, energy or European frameworks that would be controversial or difficult to implement at political level.

The submission of the report on 21 April 2015 should not be the end of the Expert Commission's work. The Commission's members are very interested in providing flanking support for its recommendations and the actions taken in the economic policy field in Germany. The Expert Commission has therefore set itself the goal of evaluating the implementation of the recommendations made in this report and other measures to increase investment in Germany and publishing the results of this evaluation yet in this legislative period.

This report is the result of very intensive work that the Commission has conducted since August 2014. It was drafted in the course of six meetings and numerous teleconferences. Not only the 21 members of the Commission but also many others made important contributions. This latter group includes first and foremost the alternates of the Commission members who were not always able to attend the meetings, plus a number of external experts. Special thanks go to Prof. Dr Thorsten Posselt (Fraunhofer MOEZ), Prof. Torsten B. Böger (VIFG, Verkehrsinfrastrukturfinanzierungsgesellschaft mbH) and Franz Nauschnigg (OENB) for their contributions, and also to the representatives from several institutions such as the Federal Ministry of Finance and the Federal Ministry of Transport and Digital Infrastructure.

The Federal Ministry for Economic Affairs and Energy was not only responsible for the logistical coordination and organisation of the meetings, it also worked intensively together with the Commission on preparing the report. Sincere thanks go to Dr Jeromin Zettelmeyer and his team which supported Dr Martin Meurers, Dr Raphael L'Hoest and Dr Bastian Alm. Special thanks go to the team from DIW Berlin (German Institute for Economic Research) – Prof. Dr Martin Gornig, Dr Claus Michelsen, Dr Beatrice Pagel, Dr Alexander Schiersch, Eva Tamim and Sabine Fiedler – for their outstanding work and support.

Summary

1. Weak investment in Germany: Background

Investment is the foundation for economic growth and employment. A modern capital stock is the basis for technological progress, ensures a country's competitive strength, forms the basis for business success and the sustained development of highly skilled employment, and makes an intact and valuable community possible. The investments needed for tomorrow must be undertaken today so that Germany as a location for business and industry can continue to offer prosperity and jobs for coming generations as well.

Germany's investment performance in both the public and the private sector is currently quite weak. In the Coalition Agreement, the Federal Government set itself the goal of closing the gap between Germany's investment level and the OECD average. This gap was three percentage points of GDP in 2013. The Commission considers it urgently necessary to increase investment in the coming years. The government has the task of ensuring through public investment the preservation and development of not only the technical but also the social infrastructure in Germany, meeting societal needs and establishing adequate conditions for private investment and economic growth. The demographic trend will also present Germany with enormous challenges in the coming decades. The declining number of gainfully active persons will not only require an adjustment in the capital stock, it will also necessitate specific, extensive investment in order to deal with the changing realities of Germany's ageing society.

A central weakness in Germany is the insufficient maintenance of public infrastructure over the past years and decades. Cities and municipalities with few economic resources have particularly reduced their investment budgets substantially in recent years. As a result, a growing need for investment in areas such as transport, education, and social infrastructure is emerging at the local level. One of the key reasons for this is the fact that many municipalities are inadequately funded. Consequently, remedying weak investment in the public sector will require new impetus to help municipalities develop new means for action.

Private investment activity in Germany has also been sluggish in the past years. Net private investment in fixed assets declined sharply between 1990 and 2005 and has since remained at a low level of approximately two per cent of Germany's gross domestic product (GDP). Compared to other major economies, Germany's capital stock is not very modern and must be upgraded.

Overcoming this investment gap will require a broad approach. This report concentrates first of all on analysis and recommendations for action in the area of public infrastructure investments, particularly at municipal level, and in the area of federal trunk roads. Moreover, it is the task of the state to establish adequate conditions for private investment. The objectives in this connection must be to ensure that the markets function and to improve the way they function. The Expert Commission stresses that public investment and private investment are highly complementary. Employment, economic growth and prosperity depend on a dynamic, innovative economy which in turn requires an efficient public infrastructure and a corresponding environment.

These conditions include strong and stable domestic demand, adequate regulation and incentive structures for domestic and foreign companies in Germany. More specifically, this would involve, for example, improvements in the general regulatory framework in the energy sector or in the area of digital networks. A more efficient tax system that is compatible with incentives is also important for increasing the amount of private investment in Germany. What counts here is not only markedly greater investment in tangible fixed assets but most importantly in "minds" and in an intact and productive community. Innovative capacity is of vital importance in order for Germany to be able to assert itself as a location for business and investment and its global leadership in many areas in the coming years and decades.

Weak investment is not a purely German phenomenon by far. The current level of public and private investment is too low in many other countries in Europe as well. In light of this, strategies for boosting investment in Germany should be integrated into a pan-European investment initiative such as the "Juncker plan".

2. Mechanisms for ensuring sustainable public investment

In past decades many regional and local government bodies have seen their debt ratios rise and experienced a marked shift from public investment to higher public consumption expenditure. The introduction of a limit on public borrowing ("debt brake") in 2009 and the fiscal target of balancing the federal budget while not taking on any new debt ("black zero") aim to stem the trend toward growing public debt and in turn counter the shifting of these burdens to future generations. Since government transfer payments are often given higher priority but are not available – at least in the short term, the resultant pressure to consolidate has a disproportionate impact on public investment. This will place a heavy burden on future generations because of, for example, the failure to undertake the necessary maintenance investments. In light of this, the Expert Commission recommends more voluntary binding commitments on the part of public authorities to ensure sustained investment. This can be accomplished with the following measures:

- → Examination of the establishment of a budgetary commitment to undertake public investments in an amount that would at least offset the depreciation of public property. A budgetary rule of this kind would require the recording of property and depreciations which would in turn necessitate the introduction of double-entry bookkeeping. The majority of Germany's municipalities has already established the use of double-entry bookkeeping. Germany's Federal Government and many of its state governments have not yet introduced double-entry bookkeeping but should do so without delay.

- → A budgetary stipulation at federal level that unexpected budget surpluses are, as a priority, to be used for increased public investment. This would restore the symmetrical treatment of public investments: Since unexpectedly low receipts under the constitutional limit on government debt ("debt brake") often lead to a decline in investment, an unexpectedly good budget situation should first and foremost benefit investment.

- → The creation of specialised institutions that can support regional and local authorities in connection with new investment and maintenance in specific categories of infrastructure. These institutions should have reliable, long-term funding that cannot be reversed on a short-term basis or can be reversed only with difficulty. An example of this would be a public infrastructure company for federal trunk roads (as proposed in section 3B).

3. Provision of public infrastructure

A. Ways to strengthen local infrastructure

From an economic policy standpoint, increasing the amount of investment in Germany's cities, municipalities and districts is of key importance. However, local governments in Germany have developed enormous investment backlogs in recent years. In numbers, the net fixed assets of the municipalities in Germany declined by €46 billion between 2003 and 2013. Estimates from the KfW Municipal Panel indicate that the municipal investment backlog currently totals €118 billion.

It is therefore crucially important that the amount of municipal investment be increased. When making investment decisions consideration should be given to societal requirements and economic viability/efficiency as set out in the state constitutions and stated by the Federal Ministry of Finance. At the same time, investments are to be financed cost-effectively, carried out efficiently and in high quality, and possible risks are to be taken into account and minimised: An appropriate balance must be struck between financing, efficiency and risk. The Expert Commission underscores that in the presently good economic climate the German government has sufficient financial leeway to reduce the investment gap in the public sector at federal, state and municipal level. This also applies to financially strapped municipalities when they receive sufficient assistance from the federal government and their respective state government. In fact, the challenge here lies in the high degree of heterogeneity among German municipalities: Many municipalities have sufficient financial leeway, others do not. Financially strapped municipalities want to make efforts and take charge of public investment. However they need assistance – in the form of increased equity for investments and logistical support – in order to put their limited resources to efficient use.

To increase municipalities' financial scope, the Expert Commission proposes the following measures:

- → Creation of a **National Investment Pact for Municipalities** to enable an increase in municipal investment by at least the amount of the computed municipal asset erosion of the last three years (€15 billion) over the next three years. In addition to the €3.5 billion special fund recently announced by the Federal Government for certain investment purposes, the National Investment Pact for Municipalities should include a second instrument that is open-ended and can be used on a more flexible basis – for example, for maintaining or expanding local transport infrastructure. Municipalities meriting assistance could be identified with the help of the successful Joint Federal/State Scheme for the Improvement of Regional Economic Structures. In order to include fast-growing municipalities as well, the areas that are fundamentally eligible for assistance should at the same time be expanded so that they cover a larger segment of the German population. The municipalities' share should be noticeable but small (10 to 30 per cent).

- Strengthening the municipalities' capacities so that projects can be planned and implemented as economically and efficiently as possible. When municipalities are no longer able to plan and implement projects in this way, sufficient capacity should be (re-)established. In addition, the creation of an **"infrastructure company for municipalities"** or, alternatively, several different regional and infrastructure companies for specific types of infrastructure should be examined. Such companies would be funded by the Federal Government and state governments. An infrastructure company of this type would have the task of helping municipalities choose the best and most economical variant for their particular needs from the different project and procurement variants available and of strengthening the planning and implementation process. In this connection, the respective municipalities should retain their decision-making authority. All municipalities, regardless of their financial capability, size or capacities, should have access to this municipal infrastructure company.

- Examination and, if appropriate, the progressive development of **"public collaborations"**– procurement models where public undertakings and collaboration between municipalities take centre stage. Such models could be a useful alternative or complement to existing procurement methods which offer certain advantages over conventional approaches or public-private partnerships. The economic feasibility of this variant should of course also be examined before a municipal government decides to use it. Existing public collaborations should also be evaluated in order to determine whether they could be useful as a supplement to conventional procurement methods.

The Expert Commission stresses that these elements – the municipal investment pact, the municipal infrastructure companies and the progressive development of project and procurement variants – can act and function independently of one another. The aim of these elements is to put municipalities in a position to be able to undertake necessary investments and to do this efficiently and sustainably and nonetheless in a way that is less costly for the tax payer and for the individual municipality.

B. Transport infrastructure at federal level

Roads as a mode of transport are and will remain of paramount importance for freight traffic and passenger transport. Which is why maintaining and expanding national roads in particular is of vital importance to ensuring the German transport system's capacity and proper functioning. A particular challenge in this connection is the pent-up need that has developed in recent years for investments necessary to maintain existing infrastructure. As a long-term solution for ensuring investment in federal trunk roads, the Commission proposes examining the possibility of establishing a public **infrastructure company for federal trunk roads** (transport infrastructure company) that would offer the following:

- Construction, maintenance and management of federal roads "from a single source" following the life cycle approach.

- Financing primarily or exclusively from usage charges without leading to any additional burdens for car users.

- Capacity to borrow without government guarantees so that a clear demarcation to the public sector is ensured; preservation of public oversight. This particularly means no "privatisation" of Germany's federal trunk roads in any form whatsoever.

The structure of a company of this kind should be the subject of a thorough examination by the Federal Government. Of fundamental importance is the decision regarding the ownership of the infrastructure company, which provides the basis for determining the company's tasks and responsibilities in the context of the general conditions. The Expert Commission is in agreement that the public sector should hold at least a majority stake in this infrastructure company; some members even recommend that the infrastructure company should be wholly state-owned. The Expert Commission recommends that the experience other countries – such as Austria, France and Switzerland – have gathered in connection with different organisational structures be drawn upon when working out the concrete terms and details of such a company.

C. Mobilisation of additional private infrastructure financing

At present, the vast majority of infrastructure projects in Germany are realised using "conventional" methods so that the planning, construction and operation of projects is in part awarded or rendered by public contracting authorities and are paid using own resources, bank credits or fixed-rate bonds. However, with this procurement model, the public sector bears nearly all the risks. This can pose enormous financial difficulties for smaller municipalities in particular and limit their ability to act. Alternatively, projects are realised through public-private partnerships, where private investors are to provide financing and subsequently be liable for mistakes during construction or operation and for other risks. The contracting authority in the public sector must however pay for this risk transfer through higher financing costs. Furthermore, the transfer of risk does not succeed in all cases.

The Expert Commission proposes examining further procurement and financing structures. More specifically, it recommends examining the following two models.

- A public **infrastructure fund** administered by Germany's Federal Government and state governments. The tasks of this fund would be similar to those of a private infrastructure fund. Private institutional investors would have the opportunity to invest in this fund at their own risk. This would at the same time ensure that only projects would be financed that offer advantages over conventional procurement methods and where risk is appropriately shared. In addition, by bundling several projects, risk would be spread and the efficiency gains arising from this would be split between the public contracting authority and the investors. The business models of existing development banks could possibly be expanded in this direction.

- A **"citizens' fund"** as a collection point for infrastructure financing provided by individual savers, set up to promote citizen participation. This type of fund would offer people a new type of investment that would enable better returns – with an acceptable level of risk – than other investments such as savings deposits, demand deposits or government bonds and could additionally make a contribution to society.

Investments on the part of individuals should be promoted pursuant to the Capital Accumulation Act (bonus on employee saving schemes). To increase people's identification with the investments they are financing, special transparency and information requirements for the different forms of investment in infrastructure should be laid down in the Investor Protection Act and elsewhere that will ensure that individuals can, for example, obtain information about a project's progress or key figures on the use of the infrastructure.

4. Framework conditions for private investment

A. Horizontal measures

A key reason for the German economy's competitive strength is its unusual mix of large corporations, a large number of micro-businesses and self-employed persons, and a broad segment consisting of small and medium-sized enterprises. However the amounts that German enterprises are investing in Germany have declined noticeably over the past decades. They are too low to preserve a modern capital stock or ensure Germany's long-term competitiveness and attractiveness as a location for business and industry. Weak private investment in Germany is the result of inadequate framework conditions in many areas.

The Expert Commission sees an urgent need for action in a number of areas. Particularly in view of the current demographic trend and economic structural change, the political sector must invest much more in training and qualification than it has in the past and ensure that qualified skilled workers are available. It must reduce the large number of people who have no school-leaving qualification or vocational qualification, enable them in general to obtain a higher level of qualification, continue and expand the Alliance for Initial and Further Training, and establish a quality assurance system for vocational upgrading training. The fact that Germany's domestic workforce potential alone is not enough to meet the demand for skilled labour makes the immigration of foreign skilled workers significantly more important as a means of securing a supply of skilled labour.

Policy makers should give higher priority to improving women's labour market participation and increasing their chances of being employed. Family-policy measures that counteract this aim should consequently be closely scrutinised. Measures that support this aim must be strengthened and expanded. In addition to the need-based provision of child care places, investment in expanding all-day schools must be stepped up significantly. This expansion ought to be completed by the year 2020.

A possible instrument for fostering investment is the avoidance of unnecessary bureaucracy. As important as clear government regulations may be for legal certainty, it is equally important to have an appropriate balance that takes the compliance costs for companies into account. Improved legal certainty, tax law that is less complex and more practicable, and efficient government are matters of priority for Germany as a location for innovation.

A further factor is the long-term financing of private investments. The experience gathered during the financial crisis has led to stricter regulation of the financial markets. A closer coordination of the regulation of the financial system with the concerns of the real economy in future would be desirable.

Demand from abroad – alongside stable domestic demand – plays an important role for investment by the private sector. For this reason, maintaining open markets and strengthening trade relations are of key importance for Germany's export-driven economy.

In this day of global value chains, trade agreements and specific investment agreements are ever-larger factors in determining how attractive a particular location is when making investment decisions. For this reason, the European Commission is taking the right approach in principle when, in view of the lack of progress within the WTO framework, it negotiates more bilateral trade agreements with strategically important partners. The establishment of general trade rules and agreements to promote sustainable trade (e.g. through both sides working toward the implementation of international conventions on occupational safety, environmental protection and climate protection) help establish a level playing field and increase the level of planning security of investment decisions in other countries as well. Foreign investment does not take the place of domestic investment or innovation; in fact, in many cases it supplements them. In addition, trade policy should be based on high ecological and social standards, preserve the authority of the respective parliaments, ensure local self-government and the discharge of duties, and boost transparency in global value chains.

B. General conditions for innovation

An important prerequisite for private and public-sector innovation in Germany is an innovation policy that is successful in the international competition over researchers and investments undertaken by research-intensive companies. In addition, a sustainable innovation policy should design effective support measures and subsequently conduct an adequate evaluation of them. Society's openness to and acceptance of risk – which is part and parcel of entrepreneurial activities and innovation processes – are a major determinant in how innovation-friendly the general conditions for innovation are. In order to catch up on a long-term basis with those nations that lead the innovation field, Germany should not target the three-per cent goal in future, but rather gear itself to the research and development (R&D) intensity of the world's frontrunners and strive for a more ambitious goal of spending 3.5 per cent of its gross domestic product on R&D.

The Expert Commission recommends significantly improving the general conditions for innovation in four areas:

- → Firstly, access to external financing and particularly to equity financing must be significantly improved in Germany. The Expert Commission therefore recommends a system of taxing capital in a way that does not give preferential treatment to outside capital or self-financing over equity financing. A possible starting point for this would be tax deductions for the calculated return on equity as part of a revenue-neutral tax reform. Furthermore, capital-market and regulatory conditions should also be made more attractive so that potential institutional investors are not unduly restricted by regulations.

- → Secondly, a shortage of skilled labour must be prevented, particularly by promoting subjects in the fields of mathematics, information technology, natural sciences and technology ("MINT" subjects) at an early stage in the school system. The number of women and immigrants in the innovation system should be increased.

- → Thirdly, innovation policy should be oriented more to facilitating foreign investments in research and development (R&D) in Germany and preventing a "know-how drain". The introduction of a tax incentive to promote R&D should be given consideration as a means of establishing internationally competitive conditions for the R&D activities pursued by companies. The aim here should be to ensure that the subsequent added value be generated in Germany.

→ Fourthly, a systematic evaluation of innovation policy-based funding measures in Germany should be developed and implemented. The establishment of modern evaluation procedures, particularly for innovation policy-based funding measures, is urgently needed in order to ensure the efficacy of such measures and to effectively organise the allocation of public funds.

A major challenge for a successful innovation policy is to identify and take up issues that are of vital importance for the future. An attractive innovation policy is needed in order to drive innovation in areas that will be important to future development – such as in connection with the digital economy and the digital society – and in order for Germany to remain internationally competitive as a location for innovation. In this connection, innovation policy must be formulated so that it complements competition policy and promotes innovation.

5. Private infrastructure

A. Digital infrastructure

In order to remain competitive, Germany must invest in its digital infrastructure. “Digital infrastructure” here refers to broadband networks, digital services (such as in the areas of healthcare, education, energy, government) and the resulting innovations. Priority must be given to making major investments at broadband network level because the availability and capacity of these networks in Germany are below average compared to international standards and this *digital gap* between Germany and the competition is growing.

The Expert Commission therefore recommends improving the regulatory framework for investment in broadband networks. One possible option here would be to issue concessions coupled with regulatory requirements and, if necessary, additional government subsidies.

The Expert Commission would welcome an in-depth discussion of the subject of network neutrality and its impact on the investment incentives for network and service providers. In order to increase the investment incentives at network provider level, an innovation-friendly definition of network neutrality, as proposed by the Council of the European Union, should be examined. Such a construction must however be combined with a clear framework that unambiguously limits the network providers’ leeway in connection with price and quality differentiation. This framework should include measures to establish a minimum standard for Best Effort Internet and also lay down clear requirements for traffic management.

Government funding measures for the development of new applications and the implementation of pilot projects such as in connection with smart grids or to step up Industry 4.0 will increase the willingness of companies to invest. This also applies to application-oriented research in these areas. The positive effects on investment in new networks should be taken into account as additional instruments for fostering infrastructure development.

B. Energy

Germany’s new energy strategy and the deepening of the internal energy market will require enormous investments – an estimated total of €31 billion to €38 billion a year until 2020 – in order to achieve the energy policy goals of energy security, cost effectiveness, environmental sustainability and public acceptance. Investment is needed in nearly all areas of the energy system: network infrastructure, the generation of energy from renewable sources, conventional generation, energy efficiency, combined heat and power systems, load management and storage technologies. Part of these investments will come from public budgets. The overwhelming part must however be undertaken by the private sector. For the most part, the investment incentives can only be indirectly influenced, namely, by creating a positive legal and political environment and by providing incentives or through targeted funding programmes.

For policy makers, the Expert Commission has identified a number of priorities for increasing investment activity in the energy sector and steering it in the right direction:

→ *Gear investments in grids and power generation more strongly to serving to the system.* The framework conditions should ensure that the expansion of the grid and the increase in power generation are efficiently coordinated with one another. The resulting incentives for power producers to undertake construction or choose a particular site should also take effect for renewable energy as well in the medium term. This will require decisively pushing ahead the market integration of energy from renewable sources.

- *Increase investment in energy efficiency.* The development of new financing instruments should be examined in order to lower the individual's information and transaction costs by bundling comparable projects and to reduce the individual implementation costs through synergies.

- *Reduce regulatory uncertainty.* Framework conditions that correspond most closely to the aim of cost-effectiveness and harmonise well with the European framework promise a higher level of acceptance and have a longer half-life. As a result, they reduce regulatory risk – one of the main investment disincentives to investment at the present time. It is urged that the key players' subjective perception of the regulatory risk be ascertained, with for example the help of a suitable index, so that appropriate measures can be taken.

- *Increase the level of acceptance.* The aims "cost-effectiveness" and "energy security" – in addition to environmental compatibility and local acceptance – must be a clear focus. Keeping energy prices and costs low while achieving the objectives of Germany's energy reforms is a prerequisite for acceptance among the public and in industry, and preserves Germany's competitiveness as a location for industry. The pros and cons of the various measures should be communicated and discussed in transparent processes with an eye to ensuring acceptance.

- *Make the achievement of defined objectives quantifiable.* Steps should be taken to make it possible to measure cost-effectiveness in order to enable a clear orientation towards this objective. This will require the provision of suitable data which will make it possible to approximate with the help of models the efficiency gains achieved through energy policy measures. External experts should be brought on board to evaluate the different approaches and identify a suitable approach.

C. Young companies

The general conditions for and support of young companies are important tasks for economic policy because it is these companies that make an important contribution to German industry's competitiveness and capacity for innovation. Start-ups, particularly in the area of advanced technology and knowledge-intensive services, exhibit an above-average propensity to innovate. However the number of start-ups is low by international standards and has continued to decline in past years. For this reason, the creation of conditions that are conducive to start-ups is not only important for employment policy, it also constitutes an important prerequisite for a successful innovation policy.

The Expert Commission particularly underscores the following recommendations for improving the general conditions and supporting young companies in Germany:

- *Improve the general conditions for start-ups:* This will require dismantling bureaucratic hurdles for business start-ups and lowering the regulatory requirements for business founders and young companies.

- *Dismantle barriers to financing:* To achieve this, tax obstacles for private investment in equity capital should be dismantled. The introduction of a European stock exchange segment for young companies could counter the lack of follow-up financing and foster private venture capital investments.

- *Improve the cross-linking and sharing of information regarding intellectual property rights.* The Commission welcomes the introduction of the European patent with uniform protection in all EU Member States and the establishment of a European patents court. These two steps have the potential to reduce the costs for applying for and enforcing international patents and thus facilitating patent exploitation for small and medium-sized enterprises.

6. Europe: Germany's contribution to Europe's investment agenda

Europe still finds itself in a severe economic and financial crisis. Many countries in Europe already have a lost decade to deal with. The risk of further years of stagnation and high unemployment is enormous. Just like Germany, Europe also has weak public and private investment. The level of investment in Europe today is €430 billion less than in 2007 and is considerably less than during the past 20 years. This has an adverse effect on the economy, job creation, and on Europe's long-term growth and competitiveness.

Many crisis-ridden states must implement necessary reforms. However, many countries in crisis also need support in order to become competitive, have a solid foundation for the future, return to a stable growth path and organise their economies to be socially equitable. The key to a sustainable recovery in Europe lies in faster growth that must be bolstered first and foremost through a joint investment and modernisation campaign. Reforms that focus solely on austerity measures cannot succeed.

The Expert Commission welcomes the "Juncker plan" for involving private capital in investments aimed at ensuring future development. It recommends examining the establishment of the Juncker plan for Europe on a permanent basis should it prove to be successful. In order to do this, funding for the European Fund for Strategic Investments (EFSI) on which the plan is based must be increased and a mechanism must be created for recapitalising or expanding the Fund in future, should this become necessary. This however requires a decision-making structure that would protect the EFSI's capital and ensure that the possibility of a future recapitalisation does not lead to imprudent handling of current funds. The EFSI governance structure should be able to fund economically useful projects and, as a result of its assumption of greater risk, mobilise private investment. Steps should be taken to ensure that EFSI guarantees are provided on a straightforward basis with a minimum of bureaucracy.

The investment fields proposed in the Juncker plan are of strategic importance for Europe's future. This type of investment plan for Europe will improve collaboration between the countries of Europe because the enormous challenges involved in shaping the future and in crisis management can be met only on a joint basis. In view of this, strategic investments in broadband networks, a switch to sustainable energy in Europe, education, inclusion, SMEs and mid-cap enterprises should especially be fostered.

Supplemental and divergent positions of the trade unions (IGM, ver.di, IG BCE, IG BAU and DGB) represented in the Commission

Germany has been suffering from a massive investment backlog for years. Most notably public, particularly municipal investments have been cut back in the past. The reason: Tax cuts in previous years have caused tax shortfalls of 45 billion euros a year at the federal, state and local level. In addition, fiscal consolidation within the framework of the debt brake and the “black zero” has led to prioritizing debt reduction over investments. The result is devastating: Public spending has been slashed. Many public services fell victim to the red pen or were privatised, charges have been raised and user fees were introduced. Many public services have become unaffordable for low-income earners. In short: Germany has switched from investment to savings mode. The debt break followed a de facto investment brake. That needs to change in the interests of the future of our country. Therefore, Germany must invest in its future again and for a competitive, innovative economy and for a sound, social and green community. Today’s investments are the jobs and prosperity of tomorrow. Their financing must be equitable and cheap in an historic low interest rate environment in order to leave both behind to future generations: A modern and sound economy, infrastructure and society that at the same time however does not take a heavy toll on the public budgets in the long term. Therefore to strengthen investments in Germany, we propose a “Pact for Equitable Financing and Implementation of Public Investments,” which represents a differing position on the following points:

A pact for equitable financing of public investments should include this prioritisation:

- Public investment must be financed primarily from taxpayer money. To fairly distribute the burden, the previous tax privileges for very high assets, incomes and inheritances should be rescinded again and the additional revenue gained from this should allocated for public investments.

- Furthermore in light of an unprecedented low interest rate environment of only 0.2 per cent for long-term federal debt, credit financing – especially in the interests of future generations – could be a cheaper way to modernise the infrastructure. In 2014 alone, the state could have exploited the leeway for debt of approximately 35 billion euros without violating the legal requirements of the debt brake. For 2015, it will be an estimated 18.6, for 2016 17.8 and for 2017 13.1 billion euros (source: BMF, Monthly Report March 2015). In addition, it makes sense to implement the Expert Commission’s (SVR) proposal and to exclude public investment into the infrastructure from the debt brake.

- Additionally and only when all of these financing options have been exhausted should the new financing instruments proposed in this report be examined such as a public infrastructure fund for local authorities or a citizens’ fund. Even then the following applies: Private financing may not be significantly more expensive than direct borrowing by the state. Private financing is always more expensive compared to the above alternatives. To minimize this disadvantage, we propose: The infrastructure financing fund or a citizens’ fund should remain fully publicly owned and be furnished with sufficient equity capital, a government guarantee and its own income. The fund can issue bonds that can be placed on the market via auctions and purchased by institutional investors like banks and insurance companies as well as by private households and small savers. The refinancing of loans can take place either through future revenues from the planned financial transaction tax or from budgetary resources and user fees such as a toll for example.

- To ensure a targeted use of budgetary resources for infrastructure investments, it would be useful to examine the establishment of a budgetary commitment to public investment at a certain amount that at least compensates for the depreciation of public sector assets. Such a commitment of public funds must not come at the expense of employees, public employment, government functions or other public spending.

Provision of Public Infrastructure (Sections 3A and 3B)

In order to increase financial leeway for local authorities, the Expert Commission (Section 3A) proposes the creation of an "Infrastructure Company for Local Authorities” (IfK) financed by the federal and state governments, or alternatively several regional or infrastructure-specific companies.

On the one hand, this helps the local authorities to determine the most cost-effective procurement method (either conventional or PPP) and to assist them in implementing the projects. We have a differing view of PPP than in the report that it is not an efficient and more cost-effective alternative to conventional procurement for the following reasons:

→ As a rule, PPP projects are not realised because the public sector wants to hedge against investment risks, but because it sees PPP as a stop-gap solution for missing budgetary resources at the local authority level. Additionally, safeguards against construction risks can also be put into place within the framework of conventional procurement. PPP projects are subject to particularly large contractual risks because of the long durations.

→ The view that PPP projects are characterised by better economic efficiency, schedule adherence or an improved risk analysis in comparison to conventional procurement, is not in line with present economic theory and empirical findings.[1] Even in Great Britain, the country with the most extensive experience in the application of the PPP approach, PPP projects can result more in cost increases, according to the results of an investigation commission of the British House of Commons.[2] Before the implementation of PPP projects, realised economic feasibility studies have not been carried out objectively as a rule up until now and have been distorted to the benefit of PPPs.

→ The reports from the Bundesrechnungshof and state audit offices confirm that PPPs involve higher costs and also often come with higher risks.[3]

→ The introduction of a mandatory efficiency examination like the report recommends is not necessary, because the existing requirements are sufficient and common practice (cf. § 7 BHO, the instructions of the BMF from 12.01.2011, the advisory opinion of the Federal Delegate in matters of Administrative Efficiency from 2013 or the German states' corresponding guidelines).

→ The trade unions do not share the representations of conventional procurement formulated in this report (Section 3A, Problem Analysis, b. Efficiency Problems, p. 41ff.). Therein, defective or missing economic feasibility studies related to local construction investment projects with cost increases and/or schedule delays of over 50 percent, defective or missing risk analyses and an often ascertainable distortion of expenditure patterns at the expense of maintenance investments, are ascribed to local authorities.

→ In addition to this, the report recommends the founding of infrastructure companies (IfKs) that are connected with mandatory economic feasibility studies for projects of a certain size. The IfKs, as an optional service provider that all local authorities can turn to, should be equipped with far-reaching responsibilities such as project management, calculation of demand, profitability analysis, tendering and negotiating with contractors. For the trade unions, it is crucial that the personnel and institutional capacities of local authorities be strengthened again regardless of a possible formation of infrastructure companies, so that pre-planning, the building contractor function and project steering can be executed locally and this with the involvement of the local handicraft, construction and financial sector. That would be a paradigm shift away from the years of sustained depletion of know-how and personnel at the local level. The decision-making and implementation powers have to remain within the local administrative and policy-making context during all of the considerations. That is already commanded by the imperative of local self-government as a basic principle of democracy, which enjoys constitutional status by the guarantee of self-administrating in Art. 28 par. 2 of the Basic Law for the Federal Republic of Germany. If IFKs are established,

1 Beckers, T./Wagemann, F./Ryndin, A./Klatt, J. P. (2014): Eine (institutionen) ökonomische Analyse der Kalkulation von Lebenszykluskosten und der Erstellung von Wirtschaftlichkeitsuntersuchungen bei PPP-Vorhaben; Volume I (Main Volume) of the final report on the project "Ermittlung von Lebenszykluskosten und Vergleich verschiedener Beschaffungsvarianten im Hochbau unter Berücksichtigung institutionenökonomischer Erkenntnisse (LV-bau)," Hodge, G., Greve, C., 2009, PPPs: The passage of time permits a sober reflection, Economic Affairs [P], vol 29, issue 1, Wiley-Blackwell, UK, pp. 33-39.

2 House of Commons. Treasury Committee – Private Finance Initiative, Seventeenth Report of Session 2010-12. Vol. 1: Report, together with formal minutes, oral and written evidence.

3 Rechnungshöfe des Bundes und der Länder (Federal and state audit offices, 2011), Gemeinsamer Erfahrungsbericht der Rechnungshöfe des Bundes und der Länder zur Wirtschaftlichkeit von ÖPP-Projekten, Bundesrechnungshof (2014): Bericht an den Haushaltsausschuss des Deutschen Bundestages nach § 88 Abs. 2 BHO über Öffentlich Private Partnerschaften (ÖPP) als Beschaffungsvariante im Bundesfernstraßenbau.

special attention needs to be paid to their neutral alignment, and in this context – particularly against the backdrop of the national and international IfKs that in practice have been exposed to have comprehensive (misguided) incentives and are not acting neutrally – public law organisational structures are to be chosen. Central guidelines for the implementation of profitability analyses that purposefully and improperly favour the PPP approach are to be rejected. Interventions in the decision-making sovereignty of the German states and local self-government should be rejected.

In the Commission's report (section 3B), an infrastructure company for federal trunk roads (transport infrastructure company) is proposed similar to that for local authority infrastructure company. For this purpose, we consider the following construct to be target-oriented, which should be examined by the Federal Government:

- An infrastructure company for the federal trunk roads (transport infrastructure company) could be formed based on the regionalised ASFINAG model and must remain wholly owned by the Federal Government in order firstly to avoid conflicting objectives between financing and completion and secondly to keep public control of the federal trunk roads completely in the public interest. Private capital can be used in the financing of transport infrastructure investment through the purchasing of bonds and securities. Alongside this, it would also be useful to test the Swiss model of financing for transport infrastructure to see whether individual elements of it can be used in Germany. Construction, maintenance and operation of the federal trunk roads "from one hand", whereby existing state administration and road construction companies will be retained and used as the project-executing agency.

- The planning will continue to be based on the Federal Transport Infrastructure Plan and the Federal Government's requirement plan.

- The company needs its own borrowing capacity. Whether with or without a state guarantee, whether within or outside of the budgetary framework, this should legally be checked; this also pertains to the legal form of the company. Trade unions prefer the variant within the budgetary framework with a government guarantee and in the form of an institution under public law (thus it is also possible for a withdrawal from the area covered by the debt brake according to 115 GG).

- Furthermore, the transport infrastructure company could also act as a level of function between the federal ministry and state administration, and take over the tasks within the framework of a central knowledge management. These include data collection, steering and controlling systems, standardisation and cost management, and where possible coordination for large-scale projects.

- The financing comes from user fees without necessitating an additional burden on car drivers, and from binding, sustainable subsidies from the federal budget. Moreover, a long-term financing with priority funding channels should be considered (for example: debottlenecking).

- To eliminate "privatisation" of federal trunk roads in any form in the future, it must be prohibited by law.

- It makes sense to evaluate the potential distribution and transport policy effects of switching to user funding by tolls.

- The previous infrastructure companies (DEGES and VIFG) are to be evaluated.

Tax policy proposals

We do not share the bulk of the tax policy proposals contained in the report and see no significant correlation between the current lack of private investment and tax legislation. The lack of private investment in Germany is fundamentally attributable to relatively weak aggregate demand and also partly to uncertain profit expectations due to unclear economic policy guidelines, for example in energy policy. Also, the applicable tax law structurally weakens the financial basis of the public sector and relieves the already tax-incentivised factor of capital at the expense of the factor of employment.

- In contrast to the report, we see that the task of tax policy is rather to abolish the tax privilege resulting from the 25 per cent withholding tax and not to extend this further to a portion of company profits. The proposal (in the figure: "Financing Innovative Enterprises: Implementation Possibilities") aims to be able to split up corporate profits into an imputed return on equity and the remaining profits. The return on equity should be exempt from corporation tax, trade tax or income tax in the case of non-corporate businesses and self-employed persons, and taxed similarly to borrowed capital. This would imply that this portion that is exempt from corporate tax would only be covered by the 25 per cent withholding tax. On the other hand, we are calling for abolishment of the withholding tax and taxation for all forms of income at the personal income tax rate.

- Also not supported are the demands for the expansion or utilization of loss carryovers, the reintroduction of declining balance depreciation, the constraint of the additions in business tax and the tax breaks for financing funds.

- Overall, the tax proposals contained in the report would have resulted in sensitive tax shortfalls if the tax revenue neutrality required in the report had not been financed by other tax revenues. That would then weaken the financial basis of the public sector and massively compromise the financing of public investments. However, the report contains no proposals for a fairer taxation on all forms of income, especially income from assets, in order to strengthen the financial basis of the public sector.

- The financing conditions for enterprises are extremely favourable at present and for the foreseeable future. In this way, the capital base of enterprises has improved significantly in recent years. On the other hand, interest rates for companies that rely on borrowed capital are at a low. Also, it is important to note that sales revenues after tax are at a very high level. Therefore, there is no need for additional tax relief.

Conclusion: The trade unions always reject tax proposals that would generally result in a shift of the already unequal tax burden of labour and capital at the expense of not only labour but also the public sector.