

Weak Corporate Investment Requires Immediate Action

By Marcel Fratzscher, Martin Gornig and Alexander Schiersch

Although the federal government has been taking steps to strengthen investment in Germany, it remains considerably low. This includes private investment, on which the present study focuses. German companies are barely investing more than they did before the crisis, but this is not the case elsewhere: in the US, for example, the level of investment is nearly 14 percent higher than it was in 2007. One year ago, the Experts Commission "Strengthening Investment in Germany," presented a plan comprising concrete recommendations for mitigating or even eliminating Germany's investment weakness. The report contained proposals for increasing public investment, as well as measures for strengthening private investment. Since then, however, far too little progress has been made in the four primary fields of action for private investment identified by the Experts Commission (digital networks, energy infrastructure, innovations, and young enterprises). The need for action remains high; among other measures, tax incentives for investment could help.

For several years now, the weak aggregate investment in Europe—and in Germany, specifically—has been under increased observation. The European Investment Bank published the first analysis of the situation in 2013.¹ That same year, DIW Berlin studied the period between 1999 and 2012 and identified a macroeconomic investment gap in Germany amounting to nearly three percent of the economic output for each year, which is equivalent to approximately 75 billion euro.²

Since then, a number of studies dealing with Germany's lack of investment have been published. Due to a change in definitions, spending for research and development (R&D) has been being treated as "investment" in national accounts since 2014. Nevertheless, this has had little effect on the findings regarding Germany's lack of investment: the Organisation for Economic Cooperation and Development (OECD),³ the International Monetary Fund (IMF),⁴ and the EU Commission⁵ as well as an additional study conducted by DIW Berlin in 2014⁶ confirm that macroeconomic investment in Germany remains markedly weak in an international comparison.

In Germany, the debate centers on a differentiation between private and public investment. The study results are so far largely unified with regard to investment deficits

¹ European Investment Bank, "Investment and Investment Finance in Europe", Luxemburg (2013).

² S. Bach et al., "More Growth through Higher Investment," DIW Economic Bulletin 8 (2013): 5-16.

³ C. Lewis et al., "Investment Gaps after the Crisis," OECD Economics Department Working Papers 1168 (2014); OECD, "Strengthening investment performance," forthcoming (2016).

⁴ B. Barkbu et al., "Investment in the Euro Area: Why Has It Been Weak?," IMF Working Paper 15/32 (2015); International Monetary Fund, "World Economic Outlook," April, Chapter 4 (2015).

⁵ European Commission, "Macro-economic Imbalances Germany 2014," Occasional Paper No. 174 (2014); European Commission, "Winter Forecast," (2015): Box 1.1.

⁶ F. Fichtner et al., "An Investment Agenda for Europe," DIW Economic Bulletin 7 (2014): 3-6.

within the public sector,⁷ particularly among municipalities. According to DIW Berlin's calculations, the gap associated with the negative net investment in this instance has increased to at least 46 billion euros since 2003⁸—and based on 2015 community surveys, KfW actually puts this figure at 132 billion euros.⁹

The assessments of the situation regarding private investment vary, however. The German Council of Economic Experts sees no evidence of a “pathological lack of investment”¹⁰ within the business economy, while the Institute of Economic Research (IW Köln) maintains that corporate investment has been more restrained since the financial crisis.¹¹ The Federation of German Industries (BDI) sees weaknesses primarily in domestic construction investment. As well, companies are increasingly moving their investment abroad.¹²

Using figures for the period between 2007 and 2013, this report illustrates how investment—especially within the business economy—has developed in recent years. The Expert Commission “Strengthening Investment in Germany” presented concrete recommendations for strengthening investment in April 2015;¹³ this weekly report draws up an interim balance exactly one year later.

Private investment in Germany remains weak

Discussions on how private investment should be assessed have indicated that calculating “optimal” or “correct” levels of investment is hampered by many obstacles.¹⁴ To compensate for this, we compare the development of private investment in Germany since 2007—the year before the global crisis—to that of other economies. The housing sector is excluded here, since real estate markets have very location-specific developments that can lead to distortions.

⁷ Deutsche Bank Research, “Ausblick Deutschland: Ice bucket challenge und strukturelle Investitionslücke,” 9 (2014): 6 ff.; BMWi, “Schlaglichter der Wirtschaftspolitik,” Monatsbericht 11 (2014): 20 ff.

⁸ M. Fratzscher et al., “Overcoming Weaknesses in Municipal Investment,” DIW Economic Bulletin, 42/43 (2015): 557–559.

⁹ KfW Research, “KfW-Kommunalpanel 2015,” KfW Bankengruppe (2015).

¹⁰ Sachverständigenrat, “Mehr Vertrauen in Marktprozesse,” Jahrgutachten (2014): 8, 237.

¹¹ H. Bardt et al., “Schwache Unternehmensinvestitionen in Deutschland? Diagnose und Therapie,” IW policy paper 4 (2015).

¹² BDI, “Innovationen und Internationalisierung, Zum Strukturwandel der industriellen Investitionen,” (2016).

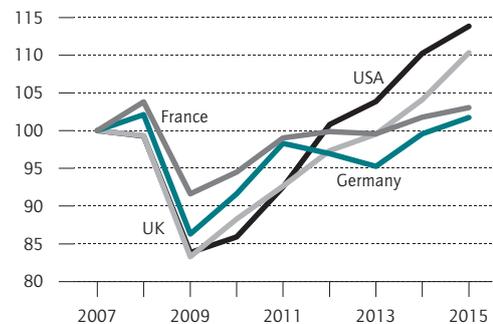
¹³ M. Fratzscher et al., “Abschlussbericht der Expertenkommission zur Stärkung von Investitionen in Deutschland. Bericht der Expertenkommission im Auftrag des Bundesministers für Wirtschaft und Energie,” (2015).

¹⁴ Federal Ministry of Finance, “Investitionsschwäche in Deutschland?,” Monatsbericht 3 (2014); S. Cassel and T. Thomas, “Investitionsbedingungen verbessern,” Econwatsch Policy Brief 11 (2015).

Figure 1

Private non-residential gross fixed capital formation

Volume, 2007 = 100



Source: OECD Economic Outlook 98 Database, Main Economic Indicator database, own calculations.

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Investments dropped significantly in the financial and economic crisis, but have recovered dynamically in the UK and the USA after 2009.

It turns out that real private gross fixed capital investment declined in all countries in the wake of the crisis (Figure 1). In both the US and the UK as well as in Germany, the investment volume dropped by about 15 percent, while in France it dropped by 8 percent. From 2010 onward, an overall recovery began. It was particularly dynamic in the UK and the US, and by 2013, the investment volume in both countries was ten to nearly 14 percent higher than in it was in 2007. But in Germany as well as France, the volume only reached or slightly exceeded pre-crisis levels, despite the fact that economic growth in Germany was developing well and real GDP exceeded pre-crisis levels by 2011.

With regard to competitiveness, the manufacturing industry is of central importance for Germany. Local companies within this sector are especially successful not only in terms of sales and production, but also in terms of employment.¹⁵ The development of real net capital stocks within the manufacturing sector since 2007 will therefore serve as the focus of the following analyses.¹⁶

Changes in net capital stock result from the difference between the gross investment and depreciation—that is,

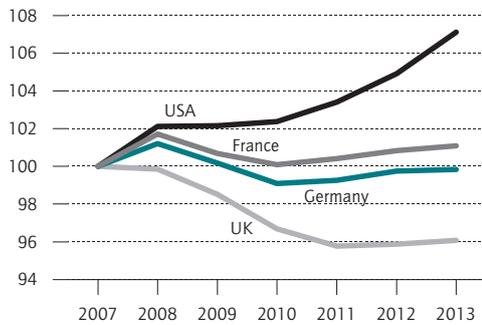
¹⁵ M. Gornig and A. Schiersch, “Investitionsschwäche gefährdet Europa als Industriestandort,” Wirtschaftspolitische Blätter, 1 (2016).

¹⁶ According to the national account system's new definition, “capital” includes both material components (especially real estate and machinery) as well as parts of intangible assets (especially R&D). M. Gornig and A. Schiersch, “Perspektiven der Industrie in Deutschland,” Vierteljahrshefte zur Wirtschaftsforschung 1 (2015): 37–54.

Figure 2

Real net capital stock in manufacturing

Volume, 2007 = 100



Source: German Federal statistic office; BEA; ONS; INSEE; own calculations.

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Real net capital stock in the German manufacturing sector recovered to its pre-crisis level in 2013.

the imputed depreciation of capital stock. The calculation of the depreciation itself is carried out based on internationally agreed upon assumptions regarding service life and depreciation functions.¹⁷ Although net capital stocks do not necessarily reflect production potential and are also subject to strong cyclical influences,¹⁸ conclusions can be drawn on the relative degree of modernity through an international comparison.¹⁹

The increase in the net capital stock was particularly high in the US's manufacturing sector: in the years between 2007 and 2013, it grew in real terms by more than seven percent (Figure 2). This is surprising, given that the real gross value added declined by almost four percent over the same period. In the large EU countries, however, the real net capital stock has been shrinking since 2008. This is especially true for the UK, and shows that the dynamic growth of private gross fixed investment described above—despite the difficulty of comparing it with the real net capital stocks—cannot be attributed to the British manufacturing industry. In France, manufacturing's real net capital stock was about one percent higher

than it was before the crisis. In the case of Germany, it should be noted that capital stock in manufacturing has shrunk by nearly 1.5 percent since 2008, while the industrial value added rose by about five percent between 2008 and 2013—which means Germany's weak investment dynamic can also be found in this sector.

Due to the difficulty in determining an "optimal" level of investment, no conclusions can be drawn at this juncture as to whether Germany's weak investment dynamic poses a serious problem.²⁰ But it may indicate that investments that determine future competitiveness turn out to be weaker in Germany than in key competitor countries. To counter this trend and ensure a sustainable growth process, economic policy should aim to improve the framework conditions for private investment in Germany.

Overcoming weak investment

A proposal containing central starting points for strengthening private investment was prepared by the independent Expert Commission, which had been appointed by Federal Minister Sigmar Gabriel.²¹ According to the proposal, overcoming the public investment backlog could provide a major incentive for corporate investment. Strong public investment leads to increased domestic sales opportunities and improved local conditions—for example, with infrastructure. Additional incentives for private investment demand can be created by increasing the pace of growth in Europe, just as the "Juncker Plan" is aiming to do.²²

Apart from these recommendations for creating more indirect incentives for private investment in Germany, the Expert Commission also makes suggestions for improving the conditions for business investment in Germany. These recommendations for action are initially aimed at improving general growth conditions, focusing on measures to counteract expected skill shortages resulting from demographic developments. These measures include strengthening science and technology-oriented subjects in the school system, developing childcare and all-day schools to increase parents' labor market participation, and facilitating the immigration of skilled workers.

In addition, the Expert Commission has identified four areas of activity that will play a key role in strengthening Germany's corporate investment, and for which concrete

¹⁷ G. Ziebarth, "Abschreibungen im Spiegel der Volkswirtschaftlichen Gesamtrechnungen," Statistisches Bundesamt, *Wirtschaft und Statistik* 12 (2002): 1119–1127; O. Schmalwasser and N. Weber, "Revision der Anlagevermögensrechnung für den Zeitraum 1991 bis 2011," Statistisches Bundesamt, *Wirtschaft und Statistik* 11 (2012): 933–947.

¹⁸ Ministry of Finance, "Die Aussagekraft von Nettoinvestitionen in der wirtschaftspolitischen Diskussion," *Monatsbericht* 6 (2015).

¹⁹ BDI, "Innovationen und Internationalisierung," (2016).

²⁰ A special examination is needed regarding whether there are indications that Germany is capable of making more productive use of long-term capital than other developed economies are.

²¹ M. Fratzscher et al. (2015), *Loc. cit.*

²² European Commission, "An Investment Plan for Europe," Communication from the Commission, 903 (2014).

action options are presented. Among these four areas of activity are digital networks and energy supply. Without a fast and efficient development of broadband Internet and a cost-effective transition to renewable energy sources, Germany cannot develop as a production and thus investment location. As well, innovations and young companies create critical investment incentives. Again, it is not primarily the investment effects directly connected with innovations and startups that play an important role, but mainly the investment incentives resulting from technological change and increased competition.

In order to expand digital infrastructure efficiently, the Expert Commission recommends improving the regulatory framework for investment in broadband networks. Possibilities include the allocation of concessions with regulatory requirements and, if necessary, additional government subsidies. To incite network providers themselves to invest more, an innovation-friendly definition of net neutrality should be considered. As well, the state could promote the development of new applications and the implementation of pilot projects: for example, smart grids or the acceleration of industry 4.0.

With an eye to network expansion and the addition of new electricity generation capacities, the expansion of energy infrastructure should be more strongly oriented toward system-friendliness. The incentives for the generator construction and site selection would also need to work in the medium term for renewables, whose market integration needs to be pursued. In addition, regulatory uncertainties should be reduced. Framework conditions that come as close as possible to the goal of economic efficiency and harmonize well with European requirements are likely to be met with greater acceptance. To be able to adopt suitable measures, key players' subjective perceptions of regulatory risks should be taken into account.

According to the Expert Commission, a major challenge for successful innovation policy is recognizing and addressing critical future issues at an early stage. In order to do this, Germany needs an innovation policy that is much more active. A better systematic evaluation of innovation policy measures is also necessary to ensure the policy's effectiveness and make the best possible use of public funds. Accordingly, there should be an examination of the extent to which Germany's (currently non-existent) tax support for R&D could strengthen its position in the international innovation competition without major deadweight effects.

Having access to external financing is particularly important for young companies. For tech startups in particular, the procurement of equity plays a major role. The Expert Commission is thus in favor of a capital taxation in which debt financing and self-financing are not

given priority over equity financing. A possible starting point would be the tax deduction of an imputed equity yield rate as part of a revenue-neutral tax reform. Moreover, given the declining numbers of startups, the Expert Commission also sees an urgent need for action with regard to the framework conditions for young companies in general.²³ Fewer administrative barriers for startups and lower regulatory requirements for young and mostly very small businesses are necessary.

A slow implementation process

The federal government has taken a number of initiatives to strengthen investment activity in response to the Expert Commission's findings.²⁴ So far, the focus has been on increasing public investment in infrastructure. Initiatives for improving conditions for private investment, however, have been scarce.

For example, hardly any progress has been made regarding a better usage of investment potential for energy production and distribution. In particular, no steps have been taken toward an investment-friendly design of the regulatory framework—and European comparative studies suggest that a competition policy in the energy sector that is oriented toward increasing competitive pressure will lead to noticeably higher investment.²⁵

Significantly more activity, however, can be found in digital networks. For example, a law was drafted for high-speed networks that regulates the use of existing infrastructure for the expansion of digital networks. In addition, the federal government has made 2.7 billion euros available in the form of grants for network expansion. Nevertheless, there remains much to be done if businesses are to be provided with a high-quality—by international standards—network infrastructure.²⁶ The goal is to enable the highest possible level of regional coverage with the most powerful new technology while ensuring a high level of competition among network providers within Germany. The current plans to upgrade copper cables through signal bundling (vectoring) must be viewed critically, since the associated and planned mixed calculations would mean that a faster connection in one region entails the obstruction of the fiber-optic network expansion in another region.²⁷ If such a bridging technology is applied in low-density regions,

²³ Ifm Bonn, "Gründungen und Liquidationen im gewerblichen Bereich," www.ifm-bonn.org/statistiken/gruendungen-und-unternehmensschliessungen/ (2016).

²⁴ These initiatives are documented by the federal government in response to a request from the Green Party Faction. BT-Drucksache 18/7853, 14.03.2016.

²⁵ T. Duso et al., "EU competition policy supports investment in the energy sector," DIW Economic Bulletin 15 (2016).

²⁶ BMWi, "Digitale Strategie 2025," (2016).

²⁷ Monopolkommission, "Telekommunikation 2015: Märkte im Wandel," Sondergutachten 73 (2015).

network operations should not be compensated through the granting of monopolies in high-density regions, but rather through direct subsidies.

The Expert Commission has also advocated for an active innovation policy. In this case, it should be noted that the federal government is aiming for an expansion of existing programs. These include, among others, the “Central Innovation Programme for SMEs” (*Zentral Innovationsprogramm Mittelstand*, ZIM) and “Industrial Community Research” (*Industrielle Gemeinschaftsforschung*, IGF). A number of additional initiatives and funding programs geared especially toward strengthening R&D in the field of digitization are being planned or already underway.²⁸ These measures and programs, some of which are still in the planning or testing phase, should be swiftly implemented. It is also necessary to continue and, if needed, to bulk up the support measures in they prove to be successful.

The Expert Commission’s recommendations also focus on facilitating access to external financing for innovations. This goes hand in hand with supporting innovative startups and reducing financing barriers for launching a company. The federal government is also active in this field with a series of measures. For example, a 400 million-euro expansion of the “EXIT” program has been planned. Furthermore, the financing of high-growth technology companies should be stabilized with the help of the now 300 million-euro “High-Tech Gründerfonds III.” Another example is the expansion of the “INVEST” program, which subsidizes investment in venture capital through private persons and allows a tax refund on capital gains of INVEST shares.²⁹

²⁸ Examples of programs and measures dealing with the issue of digitization: the tech program “Autonomik,” the BMWi technical program “New vehicle and system technologies” (*Neue Fahrzeug- und Systemtechnologien*), the “Industry 4.0” dialogue platform, the program “Industrie-4.0-Technologien: Anwendungen im industriellen Mittelstand,” the pilot project “go-digital,” the innovation management of the program “go-Inno,” “Trusted Cloud,” “Dialogplattform Einzelhandel,” “Smart-Data-Forum,” the tech program “Smart Service Welt,” the tech program “Digitale Technologien für die Wirtschaft,” the funding project “Smart Home” and the funding program “Mikroelektronik.”

²⁹ BMWi, “Digitale Strategie 2025,” (2016).

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Conclusion and outlook

As important and necessary as the initiatives for the development of digital infrastructure and the improvement R&D policy are, it remains unclear whether they can sufficiently rectify the overall weakness in private investment. Additional investment incentives could be achieved through changes in tax incentives, and thus improving fiscal conditions should be seen as another option.

One of the issues that has become important in the public debate is the introduction of fiscal R&D support. As international comparisons show, there is the risk that the efficiency of the support, on average, would decrease.³⁰ This may also be the case if the R&D tax funding is limited to small and medium-sized enterprises (SMEs), which are currently making good use of the project funding. Another advantage of this direct project funding: since it often involves cooperation projects, companies will share their technological know-how, which can boost an entire industry’s level of innovation.

A noticeable boost in investment activity, however, can be expected with an across-the-board implementation of shortened amortization periods.³¹ This applies primarily to digital equipment, but also to investment as a whole, in order to account for the higher technical as well as economic risk. Shortfalls in public budgets could be compensated for by higher profit taxation. As a supplement for young companies, the Expert Commission recommends that policy should aim for the equal tax treatment of debt finance and equity finance.³²

³⁰ H. Belitz, “Support for Private Research and Development in OECD Countries on the Rise but Increasingly Inefficient,” *DIW Economic Bulletin* 8 (2016): 106-114.

³¹ DIW Berlin and Handelsblatt Research Institute, “Private Investitionen in Deutschland. Studie im Auftrag des Gemeinschaftsausschusses der Deutschen Gewerblichen Wirtschaft,” (2014).

³² Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, “Stabile Architektur für Europa – Handlungsbedarf im Inland,” *Jahresgutachten 2012/13* (2012): 220.

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