KfW Investment Barometer Germany: September 2014

Gross fixed capital formation: new figures – old problems

- R&D expenditure now officially counts as investment. The investment rates of companies and the government are higher and slightly more stable for recent years as a result.
- We expect corporate investment to grow by 2½% in real terms in 2014 and 2015. Companies are not ready for more at present. This is expected to be too low to boost growth in productivity in Germany.
- Public investment is still too low. The total net investment in infrastructure since 2003 is EUR -55 billion.

Components of gross fixed capital formation

New statistics reveal higher investment rate

Germany is investing more than previously thought – or at least that is what is suggested by the new figures published by the Federal Statistical Office at the start of September. The German investment rate of 19.7% of the gross domestic product (GDP) for 2013 is 2.5 percentage points higher than previously calculated (17.2%). According to the new statistics, companies and the government in particular are spending considerably more on expanding and maintaining the capital stock than indicated by the old figures. Corporate investment is now 11.7% of GDP (previously 9.9%) while the public investment rate has increased by 0.6 percentage points to 2.2%, which is remarkable considering the low level. This is the result of the revision of the statistical concept of investment, which now classifies more expenditure as investment than before. This reform has been harmonised at an
international level, and will also lead to higher reported investment rates in most other
countries too.

**Research and development now classed as investment – and of growing importance**

At the start of September, statisticians implemented the guidelines from the new version of
the European System of National Accounts adopted in 2010 (ESA2010). This forms the
binding, EU-wide basis for macroeconomic statistics from now on, and replaces the old
version from 1995 (ESA1995). Such major conceptual revisions are made every 15 to
25 years in order to adapt the statistics to new developments in theory and in practice. This
means that users always have access to meaningful data that can be compared over time
and internationally.\(^1\) However, after the adjustment the users must then re-evaluate the past
in light of the current figures.

The extended notion of investment is the central component of the concept reform that has
now been implemented. Research and development (R&D) expenditure now also officially
counts as investment – a ruling that is extremely welcome in our knowledge-based society,
since investments in "immaterial" factors are just as important nowadays as investments in
machinery and concrete. The level-increasing effect on the overall rate of investment
stemming from R&D is rising over time. The lowest effect was 1.4 percentage points in 1994.
In 2013, the most recent full year of the statistic, it reached its highest level thus far. Classing
R&D as investment causes the overall investment rate for 2013 to rise by a good
2 percentage points. The incorporation of new underlying statistical information (i. e. not
concept-related changes) as well as the remaining concept-related revisions are responsible
for the remaining half a percentage point of the overall revision-related increase of
2.5 percentage points.

**Residential construction rate remained substantially the same**

The dominating role of R&D in the investment rate increase explains why the residential
construction rate remains virtually unchanged by this (see central figure). The residential
construction rate even decreases slightly (by 0.1 percentage points on average from 1991 to
2013), as the GDP and thus the denominator of the rate increases, driven by the
conceptually higher level of investment. On the other hand, R&D has a significant level effect
on corporate investment and public investment. In terms of public investment, another
conceptual reform – the recognition of military weapons systems as investment – increases
the level further still.\(^2\)

\(^1\) The basic conceptual outline of the national accounts is coordinated globally under the auspices of
the United Nations so that the figures can be compared internationally. The ESA itself is the
concretisation of the United Nations’ System of National Accounts in the version of 2008 (SNA2008,
the guidelines of which were already implemented in the US in 2013) that has been adapted to the
specific European requirements (including budget monitoring and allocation of funds).

\(^2\) It is also important for the statistical notion of government that there are now stricter conditions for
the consolidation of publicly owned institutional units outside the government sector. Thus, a public
company (including its investments), for example, now also belongs to the government when it is in
fact classified as a market producer (this was previously sufficient for being affiliated to the corporate
sector) but generates its turnover exclusively with units of the government sector. In practice, this
reintegration should affect municipal companies in particular and thus the local level of government.
Unfortunately this effect cannot be isolated on the basis of the published data. Similarly, the level-
Net corporate investments unchanged and just as low

As a result of the one-off upward revision of the investment rates, a reassessment of the investment trends in Germany is not required for government investments or corporate investments. Similarly to the old figures, in terms of corporate investments there is a clear downward trend over time (accompanied by strong economic fluctuations, as shown in the figure on the left). At 11.7% of GDP, the rate of corporate investment for 2013 is now identical to the previous low from the crisis year of 2009. According to the old figures for the previous year, it was 0.3 percentage points below.

Hence, the development of investment in companies was slightly more stable overall in recent years, according to the revised figures. R&D expenditure is becoming increasingly important and is rising over time, which is also positive. This is encouraging. Nevertheless, the investment dynamic is and remains at an unsatisfactory low level from a long-term perspective. This is particularly evident from the net investment rate of companies. The actual efforts to maintain, modernise and expand the capital stock only become visible once the consumption of fixed capital, i. e. depreciation, is subtracted. The net investment rate of companies has hardly been affected by the revision: similarly to the old figures, it amounts to just 0.5% of GDP for 2013 and reaches its third-lowest figure after 2009, the year of the most severe recession of the post-war period, and 2010. The deviations for all previous years since 1991 are also negligible. The now higher capital stock, after taking into account the R&D expenditure, must also be written off to a greater extent and therefore requires the new higher level of gross investment, as demonstrated by the new statistic, for an economically comparable preservation of capital.

Besides the net perspective, the outlook for the future above all counts for the evaluation of investment activity. In all realistic scenarios that take into account the development of the population over the next few decades, satisfactory per-capita growth can only be achieved with more productive capital stock. This requires greater investment. The private residential construction investments that provided for the overstatement in many countries do not play a role in this evaluation. Nor are the reunification-related additional public investments during the 1990s considered in the results.

Real corporate investment in 2015 not yet at pre-crisis level again

The current economic recovery that we are seeing for 2014 and 2015 should be enough to stabilise the gross corporate investment over the next two years at just under 12% of GDP. We base this on the assumption of an increase (adjusted for price and calendar effects) in corporate investment of around 2¾% in the current and coming year, which in light of the fragile situation in Europe and the numerous geopolitical uncertainties in the world, is indeed considerably uncertain. However, even if our forecast becomes reality, the real corporate investments in 2015 – i. e. after seven years – will still be more than one percent lower than the pre-crisis level of 2008. We are therefore still a long way from comprehensively overcoming the investment weaknesses in the corporate sector.

increasing contribution from the weapons systems (these are only shown as part of machinery and equipment) and the sector contribution from R&D (only published for the whole economy, but not separately for the government and the private sectors) cannot be determined in isolation.
Public investment at the current edge is somewhat more stable

The data revision considerably increases the level of public investment and generates a more favourable development profile (see figure on the right). Thus, above all, the period of extremely weak public investment between 2003 and 2008 appears to have been overcome. Even net public investment is no longer consistently negative since 2003, as indicated by the old figures, but rather rose slightly over the zero line between 2009 and 2011 thanks to the stimulus programmes. At 2.2% of GDP in 2013, the gross public investment rate is currently as high as it was at the turn of the millennium. It is expected to remain at this level in 2014 and 2015. According to the old figures, it appeared however as though the public investment rate would probably remain behind the level at the turn of the millennium even longer. Similarly to the corporate investments, the revision reveals a somewhat more stable development at the current edge.

Infrastructure continues to be neglected

Nevertheless: A close look at the details reveals, as before, that the government is doing far too little to maintain and expand infrastructure. In the case of non-residential construction – a good indicator for public infrastructure – net investment has been consistently negative since 2003 and the government has been wearing out the infrastructure for at least a decade. Net public investment in non-residential construction in 2013 reached a nominal EUR -6.8 billion, the second-lowest value after 2012 (EUR -7.2 billion). Since 2003, cumulative net investment in this area has amounted to EUR -55 billion. This is an obstacle for long-term growth as public investment in infrastructure not only increases the capital stock itself but also in many cases is a prerequisite for further private investment.

Conclusion

The now official classification of R&D expenditure as investment is a huge step forward, as immaterial growth drivers are becoming increasingly important in our global, digitally-networked knowledge-based society. Their inclusion demonstrates that the investment development over recent years was somewhat more stable than indicated by the old data. However, it is important that we are not blinded by higher investment rates since the old problems still remain. Corporate net investment in capital stock in Germany is scarce, and the government – through many years of negative net investment in infrastructure – is neglecting one of its key economic responsibilities. A reversal of this trend is required in order to secure prosperity and growth in the long term.

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About the **KfW Investment Barometer**. The KfW Investment Barometer is a quarterly reporting format relating to the three main components of gross fixed capital formation: corporate investment, public investment and private residential construction. This breakdown is not part of the standard programme for the national accounts prepared by the German Federal Statistical Office, but rather KfW uses a separate classification system that is consistent with the national accounts. Corporate investment comprises all investment carried out by the private sector in machinery, commercial construction and other assets (including intellectual property such as research and development as well as software). All investment in the public sector is summarised in its own grouping, as is private residential construction. The KfW Investment Barometer looks in detail at the three components for three of the issues and the fourth issue is reserved for the overall synopsis.