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“Investment and investment finance in Europe”
Speech by Klaas Knot at the EIB’s Annual Economics Conference: ‘Investment and Investment Finance’, Luxembourg, 23 November 2017

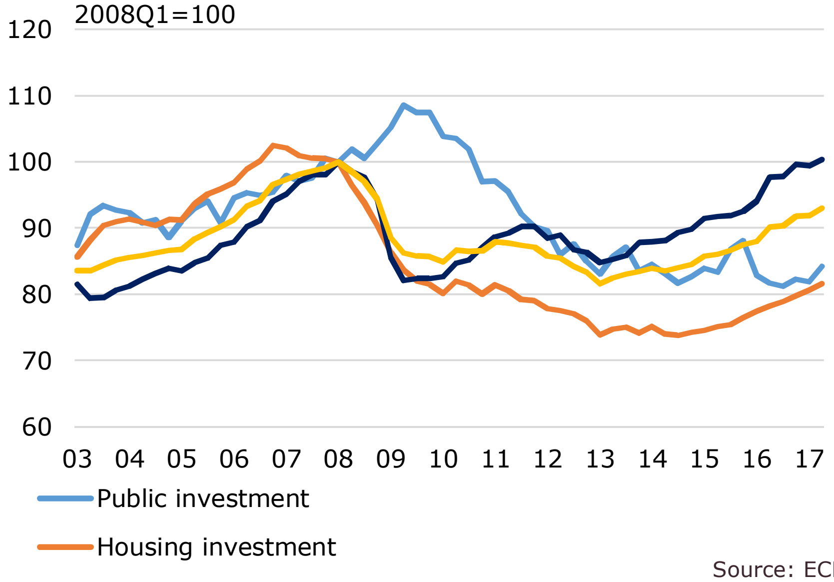
Investment is a key driver of future economic growth, and is therefore vital to the continuing expansion of the European economy. Important challenges like investment in human capital and climate change call for substantial private and public investment.

I would like to start by thanking the organizers for inviting me to speak at this year’s Annual Economics Conference. I’m also glad I have the opportunity to discuss such an important subject with you.
After all, investment is a key driver of future economic growth, and is therefore vital to the continuing recovery of the European economy.

Today, I’ll share my thoughts as a central banker on investment in the euro area. I’ll do so by addressing **three main questions**: First, is euro area investment currently too low? Secondly, I’ll focus on business investment, and examine what its drivers are. Lastly I’ll give my view on how public investment can be tailored to contribute to sustainable economic growth.

Question1: is euro area investment too low?
Let’s start with the first question: Is euro area investment too low? Looking at Figure 1, we see the development of real investment and its components in the euro area. The yellow line represents the level of real total investment. As you can see, total investment started to recover in early 2013. This was after a period of substantial contraction during the financial crisis and its aftermath. However, it has not yet recovered to pre-crisis levels, despite the unprecedentedly favorable financing conditions.

figure 1: Business, residential and public investment in the euro area



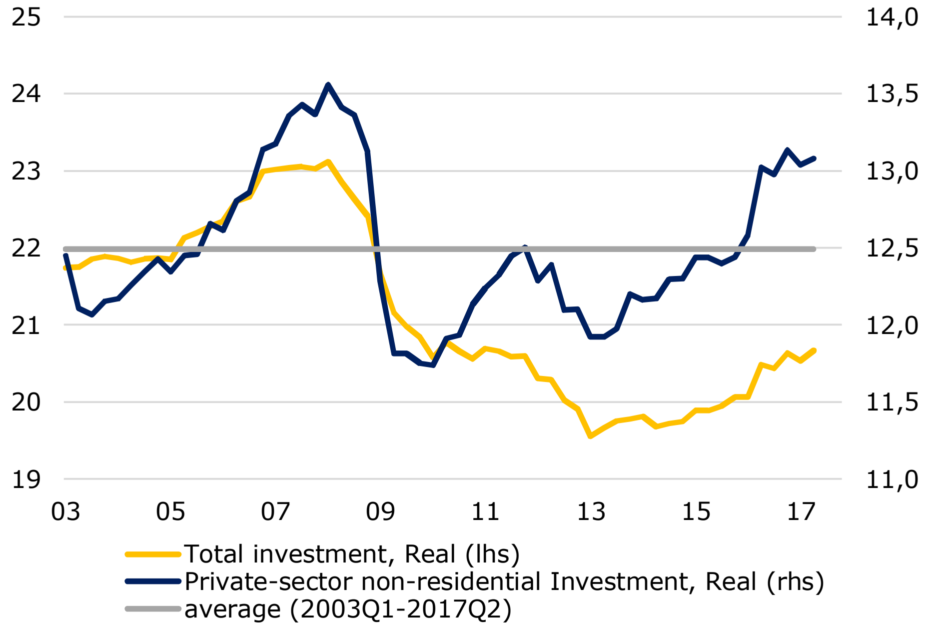
Source: ECB

Does that mean euro area real investment is too low? That depends on the type of investment we consider. It also depends on the benchmark used for comparison. I'll elaborate both these points.
Firstly, total investment growth masks the heterogeneous development of its individual components. These have different implications for the future growth potential of an economy.

Figure 1 shows that although total investment is still clearly below pre-crisis levels, this is not true for non-residential private investment, which I'll simply call business investment. As shown by the dark blue line, real business investment in the euro area has recently approached pre-crisis levels, exceeding both public and residential investment. The latter only started to recover in late 2014 and currently stands at around 20% below its pre-crisis peak. Public investment seems to have stabilized at a somewhat lower level with respect to pre-crisis years, after having declined by over 20% between 2009 and 2016. The distinction between various investment components is important. It is primarily business investment and public investment that is relevant for the long-run productive capacity of an economy. So I'll leave residential investment for the time being, and just focus on business investment and public investment.

Secondly, the diagnosis of whether investment has been low, also depends on the benchmark used. Usual benchmarks include comparisons with past investment growth rates, pre-crisis investment levels, or developments of other macro-economic variables such as GDP.

Figure 2: Business investment ratio in the euro area
Ratio to GDP; investment and GDP are both in real terms



Source: ECB

Although it is not a priori clear which benchmark to use, in Figure 2 we compare the development of business investment to that of GDP. The dark blue line on the right-hand-side shows the ratio of euro area real business investment to real GDP. This has now surpassed the average observed since the early 2000s, represented by the grey line. However, it is still clearly below its pre-crisis peak. The recovery of the real total investment to real GDP ratio, shown by the yellow line on the left-hand-side, has clearly been more protracted.

When discussing the dynamics of investment, we also have to consider the measurement issues around investment. The structure of the euro area economy has been shifting towards the services sector. Consequently, the nature of investment has been changing, with a notable increase in expenditure on intangibles such as design, patents, branding, and employee-training. This has implications for measuring investment, as intangible assets are only partially included in the official statistics.

For example, in last year's winter forecast report, the European Commission showed that the inclusion of intangibles not currently classified as investment, would more than double the share of intangible investment in business sector gross value added.

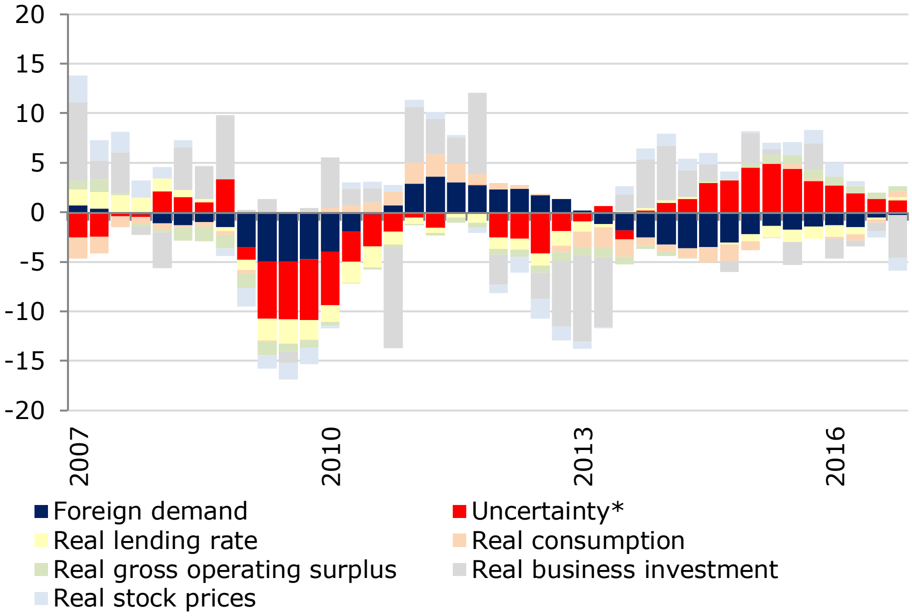
So what's the diagnosis based on this data? Is the glass half full or half empty? Figures 1 and 2 suggest the glass is half full, as business investment has been recovering and reached pre-crisis levels. But we should also be wary of signals that suggest the glass might be half empty. Given the ample cash holdings of non-financial corporations, and very favorable financing conditions, one would expect investment growth to have accelerated even further. To understand why investment growth has thus been weaker, I'll turn to the second question.

Question 2: What has been driving the observed developments in euro area business investment (or why is investment growth not accelerating?)

Before we look at the empirical evidence, I'd like to briefly discuss the two hypotheses that have gained currency: the secular stagnation hypothesis and the financial cycle hypothesis. According to the secular stagnation hypothesis posited by Summers, the global economy faces a structural aggregate demand deficiency. And this is also likely to persist in the future. Investment is not therefore accelerating because demand is structurally low. According to the financial cycle hypothesis, maintained by the Bank of International Settlements, the global economy is currently struggling with the adverse consequences of a financial slump. Investment recovery has been suppressed because households, firms and governments have been deleveraging.

The two hypotheses differ based on the length of the decline in investment. Whereas the financial cycle hypothesis argues that investment is temporarily low, the secular stagnation hypothesis predicts permanently low investment. Despite their differences, both hypotheses have a common denominator: demand. In particular, uncertain future global demand is seen as a key factor weighing on business investment growth.

Figure 3: Historical shock decomposition of real business investment growth
Percentage points



*Average over various uncertainty indices (consensus, policy, macro, financial, Jurado et al.)

Source: DNB

Let's look at Figure 3. It shows a historical shock decomposition for the Netherlands based on a Vector Auto Regression analysis, or VAR. We can see that business investment growth was largely driven by uncertainty shocks and foreign demand shocks, represented by the red and the blue bars, respectively. Uncertainty is measured here as an average of various uncertainty indices. It has had a positive impact on business investment since 2013. Foreign demand has had a negative impact on real business investment over that same period. These results therefore suggest foreign demand is the main factor still weighing on investment growth.

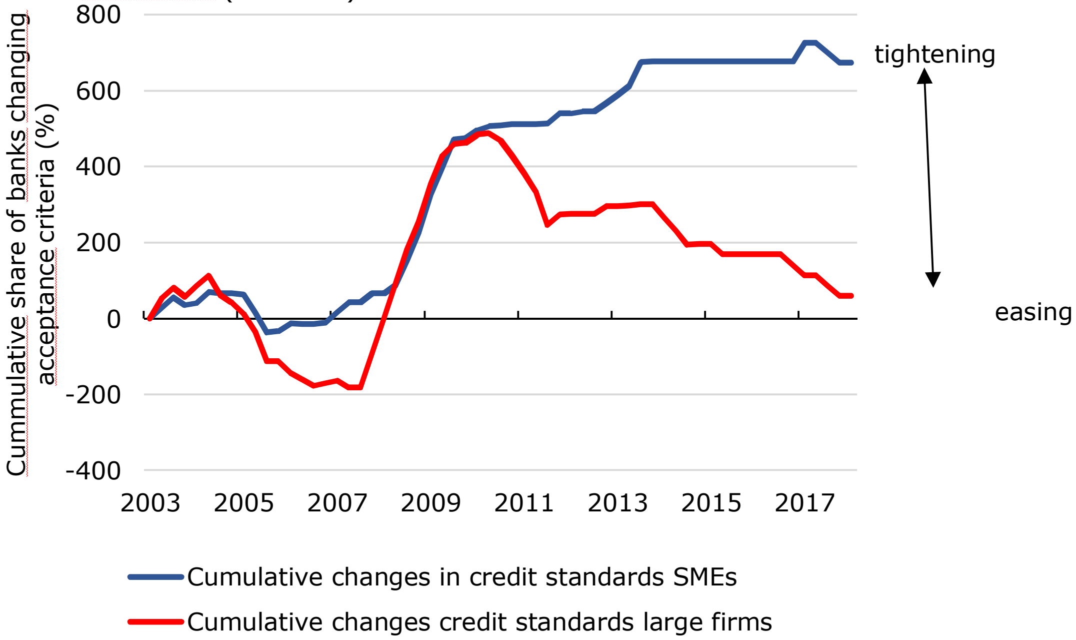
However, this probably doesn't reveal the whole picture. That's because macro-data hide important heterogeneity across firms. I'd like to illustrate this by referring to a recent DNB study, based on Dutch firm-level data. The study offers two important insights.

First, firm leverage is a key determinant of business investment; highly-leveraged businesses invest less, which is particularly true in the period after the financial crisis. This suggests, in line with the financial cycle hypothesis, that balance sheet constraints matter. This could partly be because external lenders have become more risk averse, and have started paying closer attention to balance sheet health when providing credit.

Second, it appears that SMEs in particular have become more financially constrained, and have reduced investment since the crisis. The ratio of investment over fixed assets of large Dutch firms was eight percentage points higher than that of SMEs after the financial crisis.

Figure 4: Cumulative changes in credit standards (by MFIs in NL)

Data normalized (2003 = 0)



Source: BLS, own calculations

Figure 4 shows how credit standards already started to ease in 2010 for large firms in the Netherlands, while they continued to tighten for SMEs until 2014 and remained tight thereafter. A 2017 study by Gopinath and others reveals that reallocating funds towards large firms may have unintended consequences. The study shows that large firms attract more funding because they have higher net worth, but are not necessarily more productive. Based on data from Spain, this study explains a significant fraction of the observed decline in total factor productivity, relative to its efficient level in the run up to the crisis.

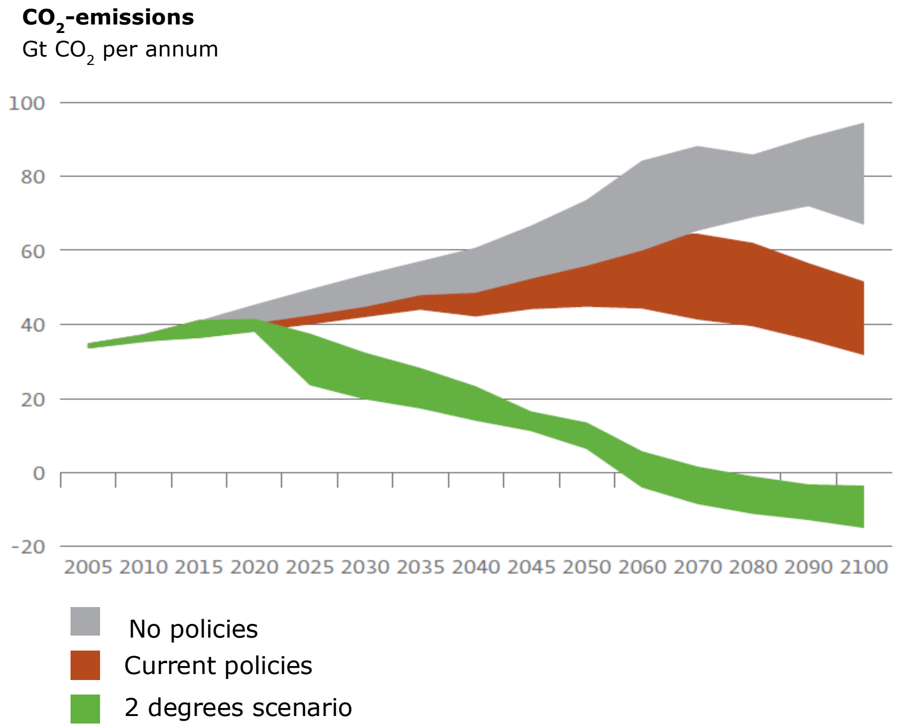
So, while I can't really offer any definite answer to the question of why investment growth has been subdued, the evidence we've seen points at two issues in my opinion: foreign demand and weak balance sheets. While weak balance sheets underline the financial cycle view, it's still unclear why foreign demand is low. It would be interesting to hear your thoughts on this during the panel discussion.

Question 3: contribution of public investment?

The last question I want to address is how public investment can contribute to sustainable growth. The decline in public investment and current low interest rate environment, have prompted calls to increase public investment as a way to raise potential output. In my view, public investment should be considered when there is a positive social cost-benefit analysis and when private actors fail to achieve desired outcomes. Furthermore, public debt levels are still high in the aftermath of the sovereign debt crisis. The first priority of governments should therefore be to build buffers. A more growth-friendly mix of government expenditures will thus be even more important for countries currently in this situation.

Having said that, I would like to discuss two areas I think meet the criteria for government action: human capital accumulation and mitigating climate change. To begin with, investment in human capital is essential for future growth. As unfavorable demographic trends will have a negative impact on the growth of labor supply, future growth will be more dependent on productivity. Research shows that human capital is a key driver for productivity growth. Public investment is required, because of credit restrictions, which for example prevent access to education for disadvantaged groups, and externalities associated with investment in human capital. Moreover, according to the EIB report, firms are already citing the shortage of skilled labor as a pressing problem. Accordingly, surveyed firms cite professional training and higher education as their first priority for public investment, underlining once more the need for policy action.

Figure 5: Radical transition towards a CO_2-neutral economy is necessary



Source: PBL & ECN

Secondly, investment in climate change mitigation technologies is necessary to meet the Paris climate goals. Figure 5 illustrates how limiting global warming to a maximum of 2 degrees requires a substantial reduction in global carbon emissions. In this light, the evidence from the EIB report that investment in climate change mitigation in the EU has actually declined since 2012, is concerning. Public investment will, for instance, be needed in basic research and development. It is likely that markets underinvest in basic research due to positive externalities, which mean that private actors do not capture the full gains.

Meeting the Paris climate goals will also require substantial private investment. Governments should therefore not only make investments themselves, but also pave the way for necessary conditions for private investment. An important step would be to introduce more adequate carbon pricing. This would provide better financial incentives for sustainable private investments. This also calls for pursuing a credible path towards a carbon-neutral economy that allows private actors to gradually adjust their investments. And finally, providing necessary conditions also includes ensuring financial regulation does not lead to unwanted side-effects. The FSB is currently looking into whether financial regulations are hampering private sustainable investments.

Conclusion

Ladies and gentlemen, allow me to conclude. There are important challenges ahead, which I believe call for substantial private and public investment. I've mentioned human capital and climate change, but there are certainly more. I would be curious to hear your views.

So I look forward to fruitful and constructive discussions today. I trust the knowledge we share will help improve our understanding of recent investment dynamics in Europe. And that it will help shape our response to these challenges we face.