



# The German puzzle: Success without investment?

Martin Gornig  
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# Current Performance

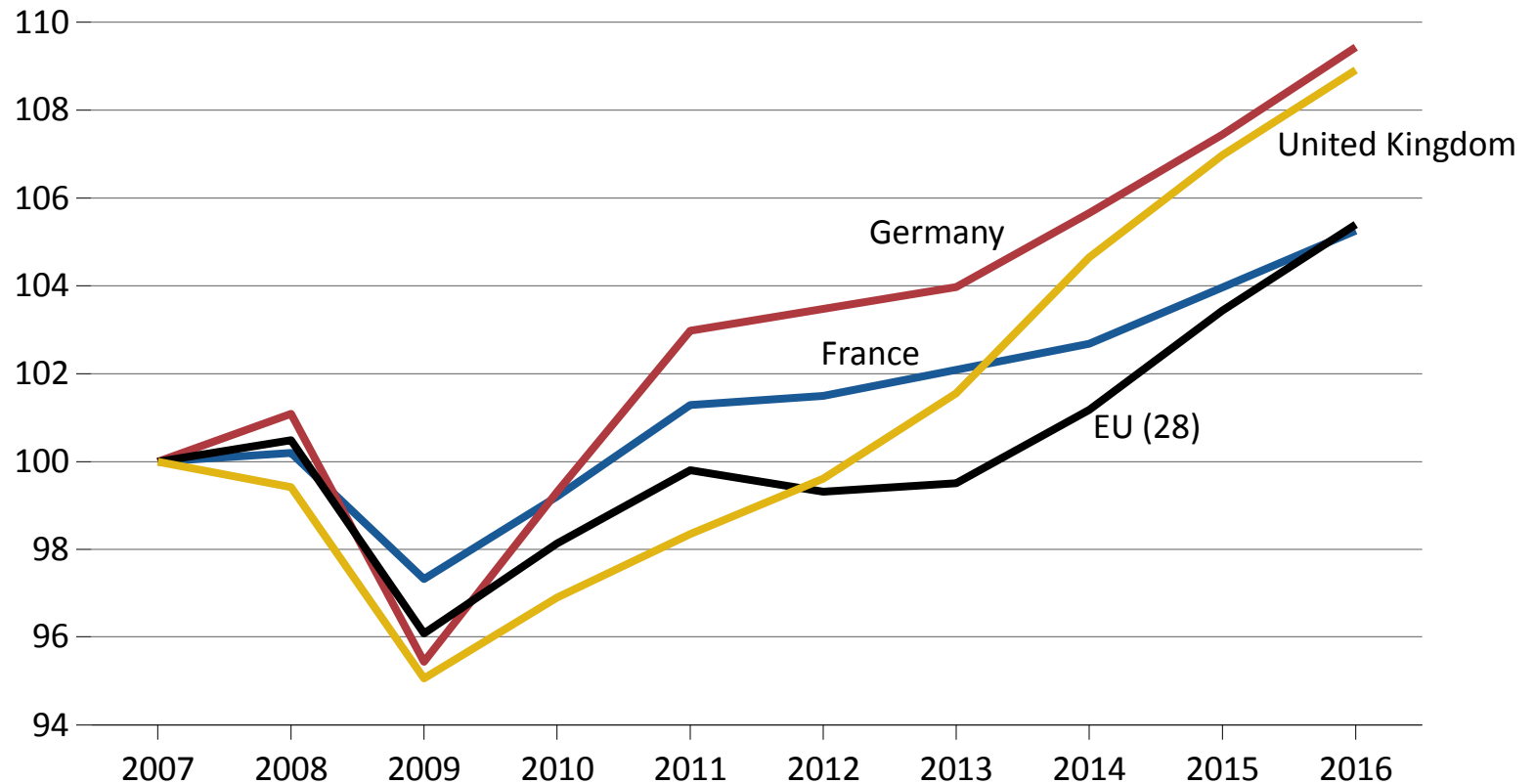
The German puzzle “success without investment”, as an example for the relationship between good data and well policy advice.

If it is a puzzle or not, you can decide at the end of my presentation.

If we look in the statistics Germany currently perform very well:

# Current Performance

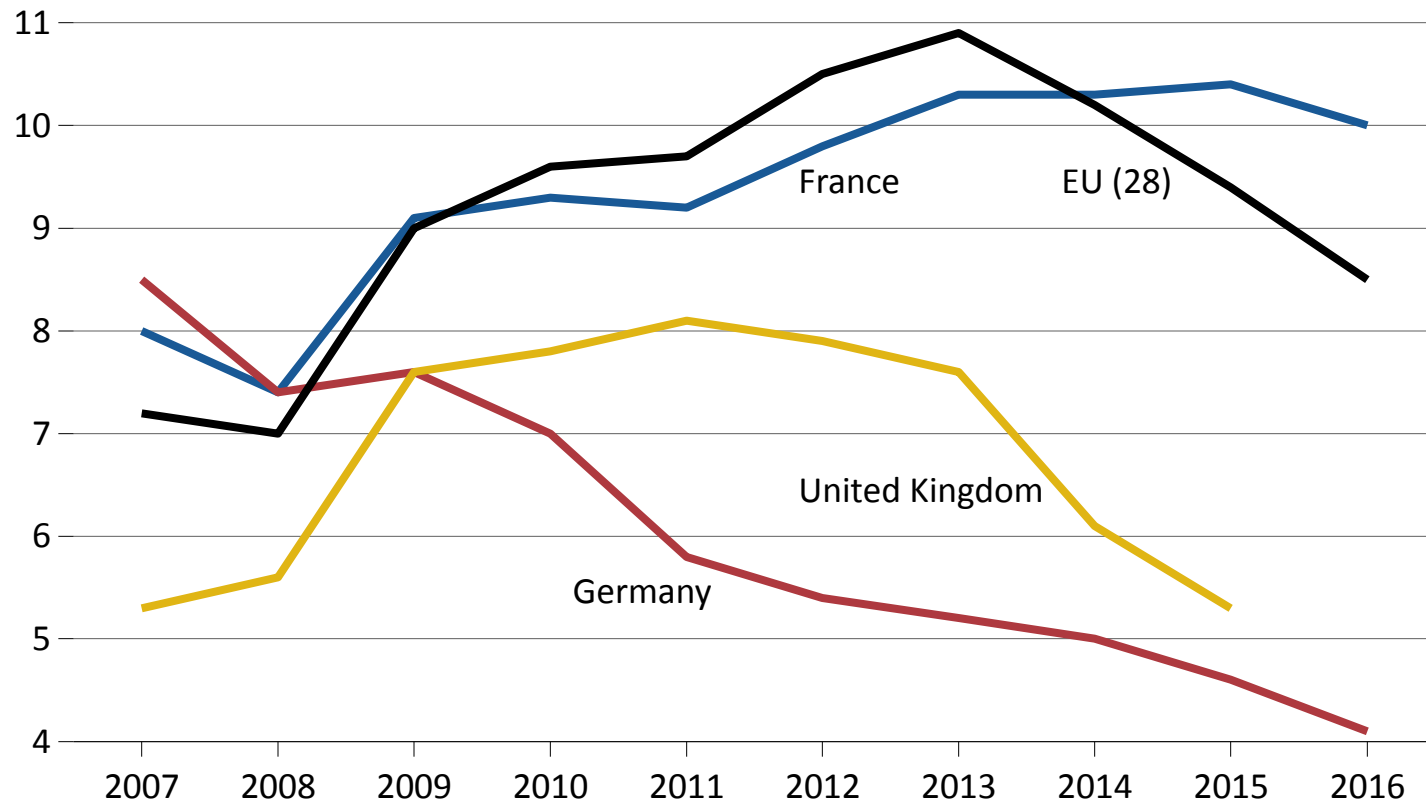
## Real Gross Domestic Product, Index 2007=100



Source: EUROSTAT; own calculations

# Current Performance

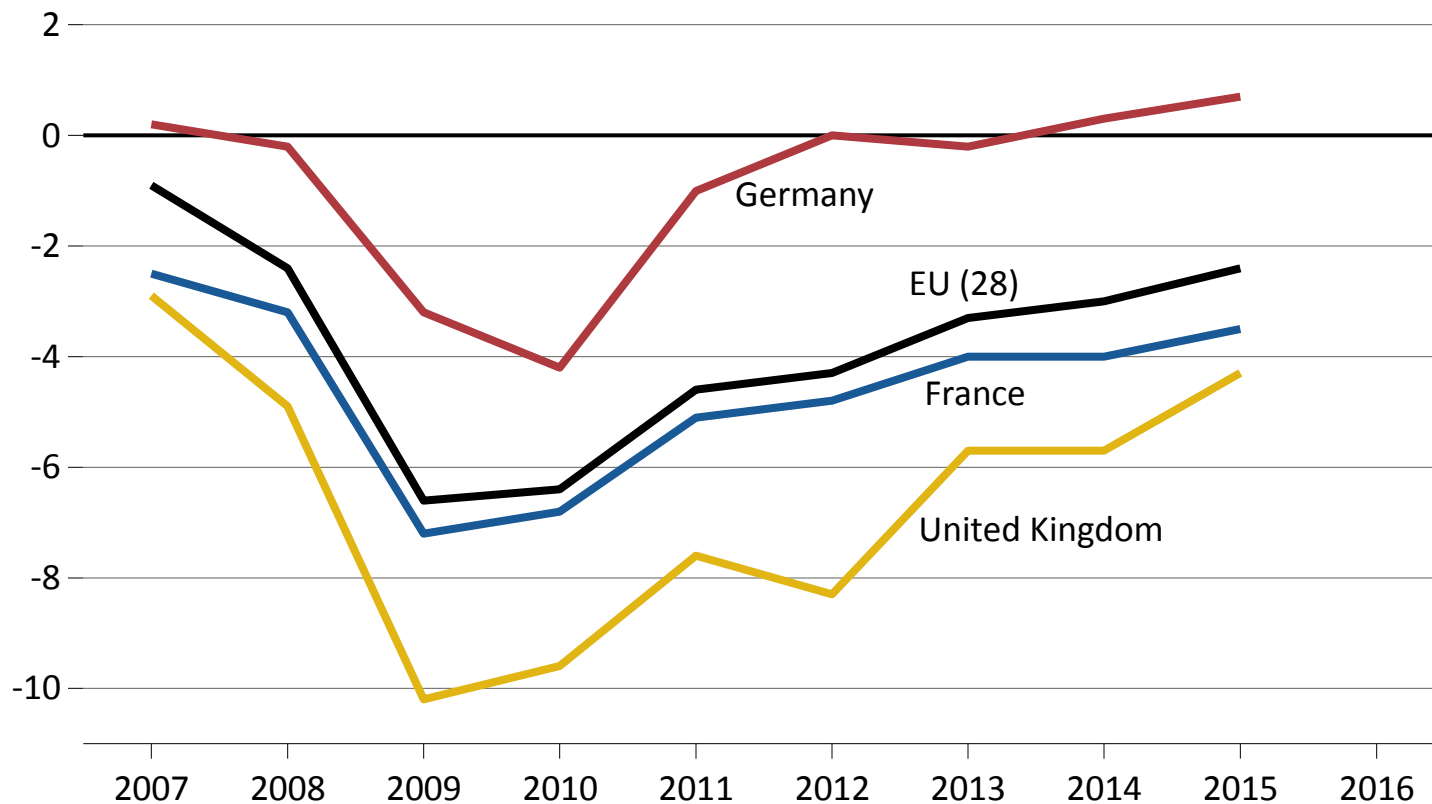
## Unemployment rate in percent of employed persons



Source: EUROSTAT; own calculations

# Current Performance

## State budget, deficit/surplus in percent of GDP



Source: EUROSTAT; own calculations

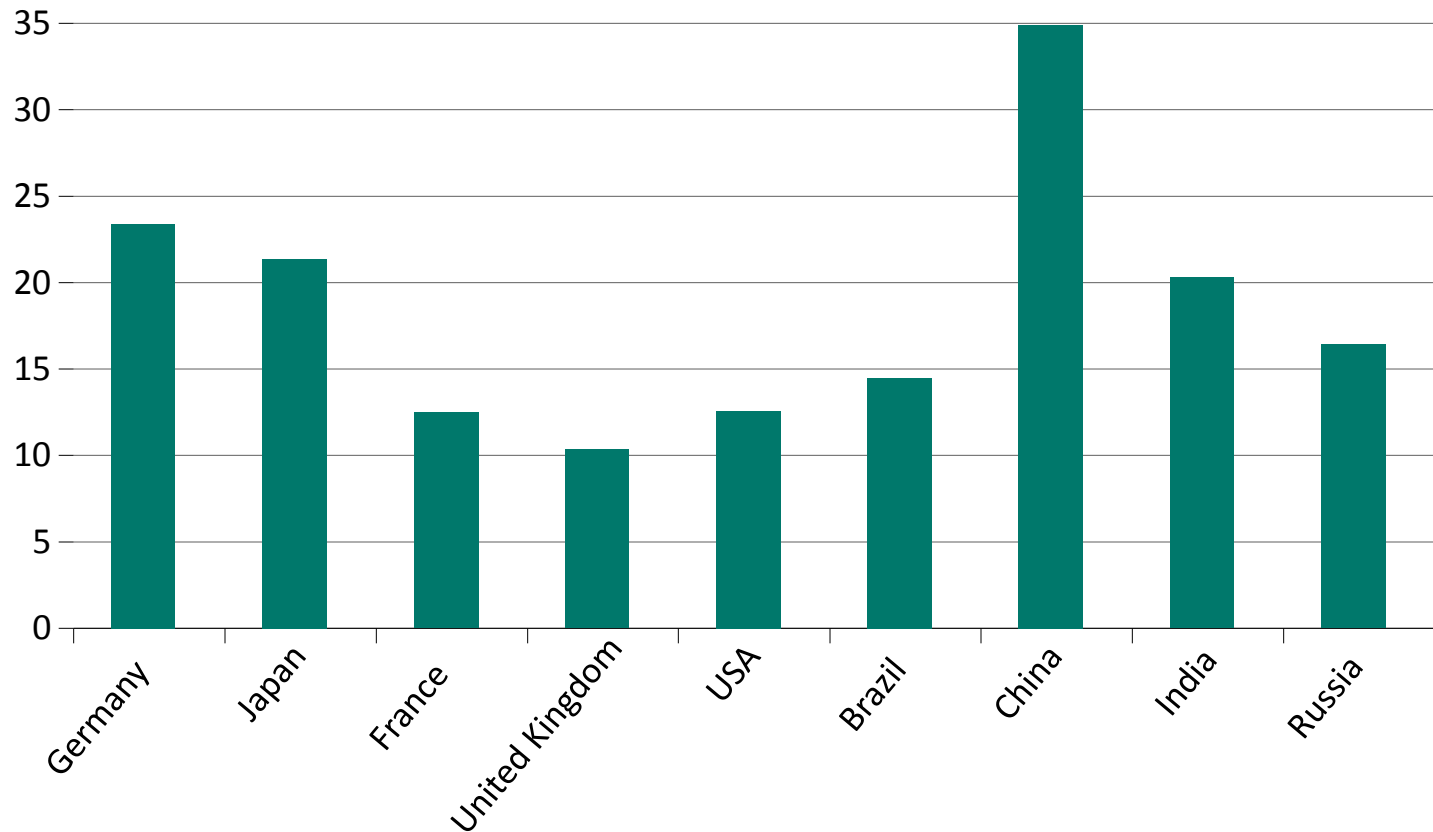
# Current Performance

Because of the good position in all the key factors, many people and the most politicians in Germany think that the economic success is stable and there is no need for action.

To test this view, we should have a closer look in the economic structure.

Germany is an industrialized country. Unlike other developed countries it is not only a historical fact it is part of the presence.

## Share of manufacturing in the gross value added <sup>a)</sup> of selected countries 2014, in percent



a) In US dollars, adjusted for price changes.

Sources: United Nations Statistics Division (UNSD); own calculations.

# Current Performance

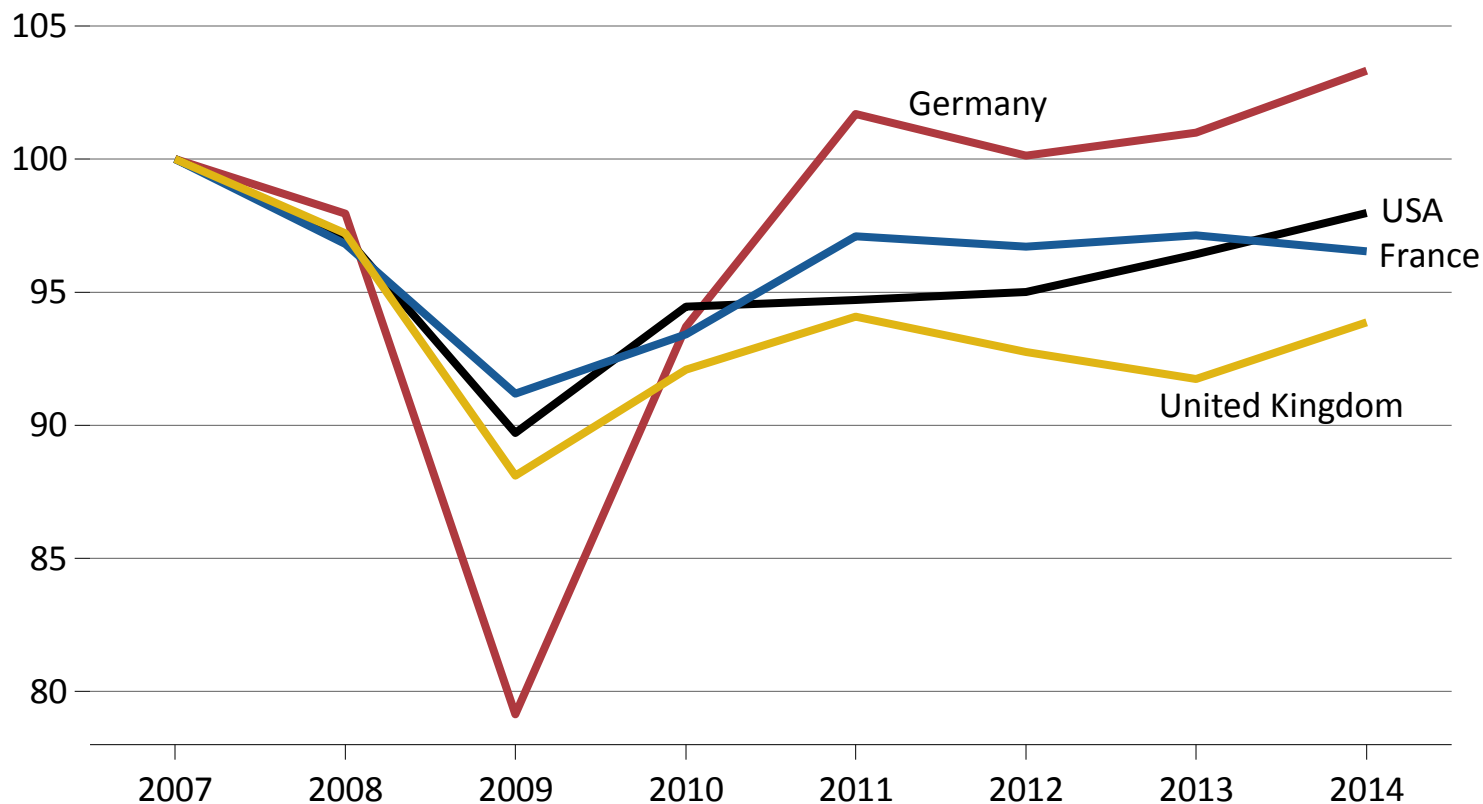
The success of Germany is the success of German manufacturing industries

For example look at the recovery of the industrial production after the crisis 2008.



# Current Performance

## Development of the gross value added <sup>a)</sup> in the manufacturing sectors of selected countries, Index 2007=100

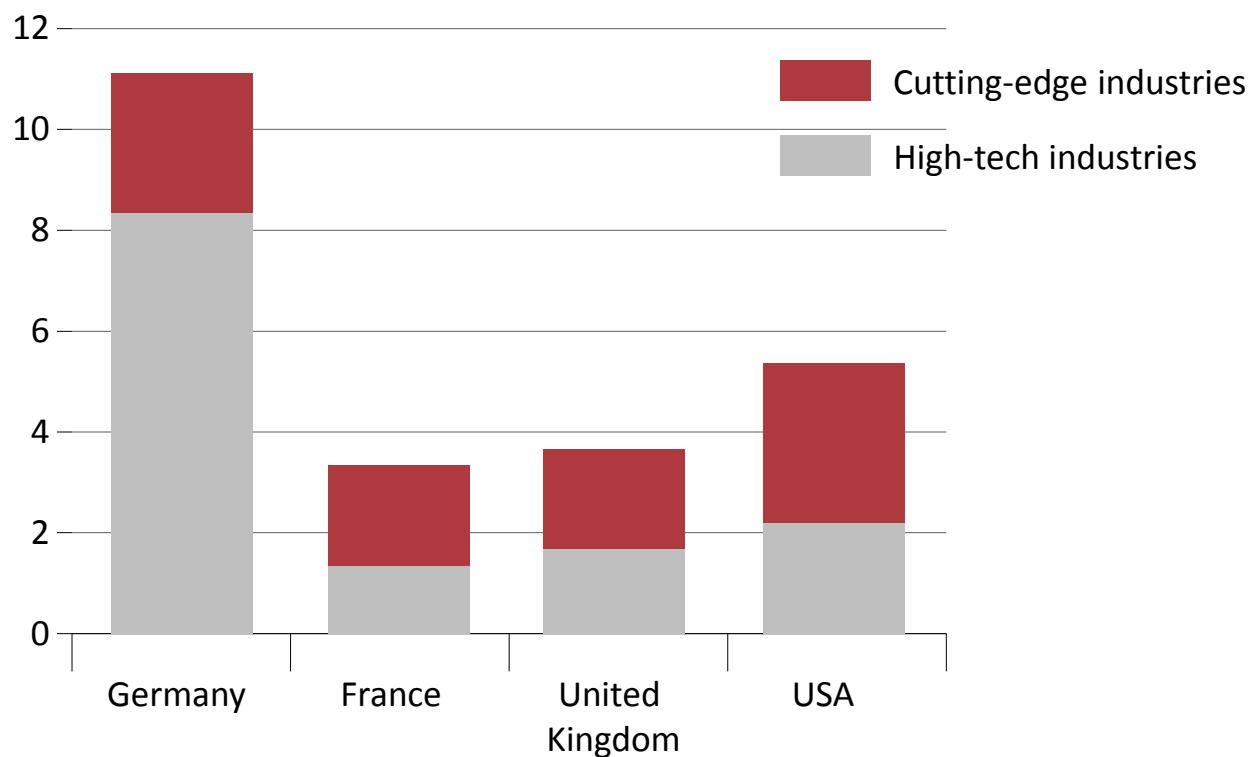


a) In US dollars, adjusted for price changes.

Sources: United Nations Statistics Division (UNSD); own calculations.

# Current Performance

## Share of R&D-intensive industries in the value added of selected countries 2013 – in percent



Sources: OECD-STAN, EUROSTAT, BEA,BOK; own calculations.

# Outlook and investment

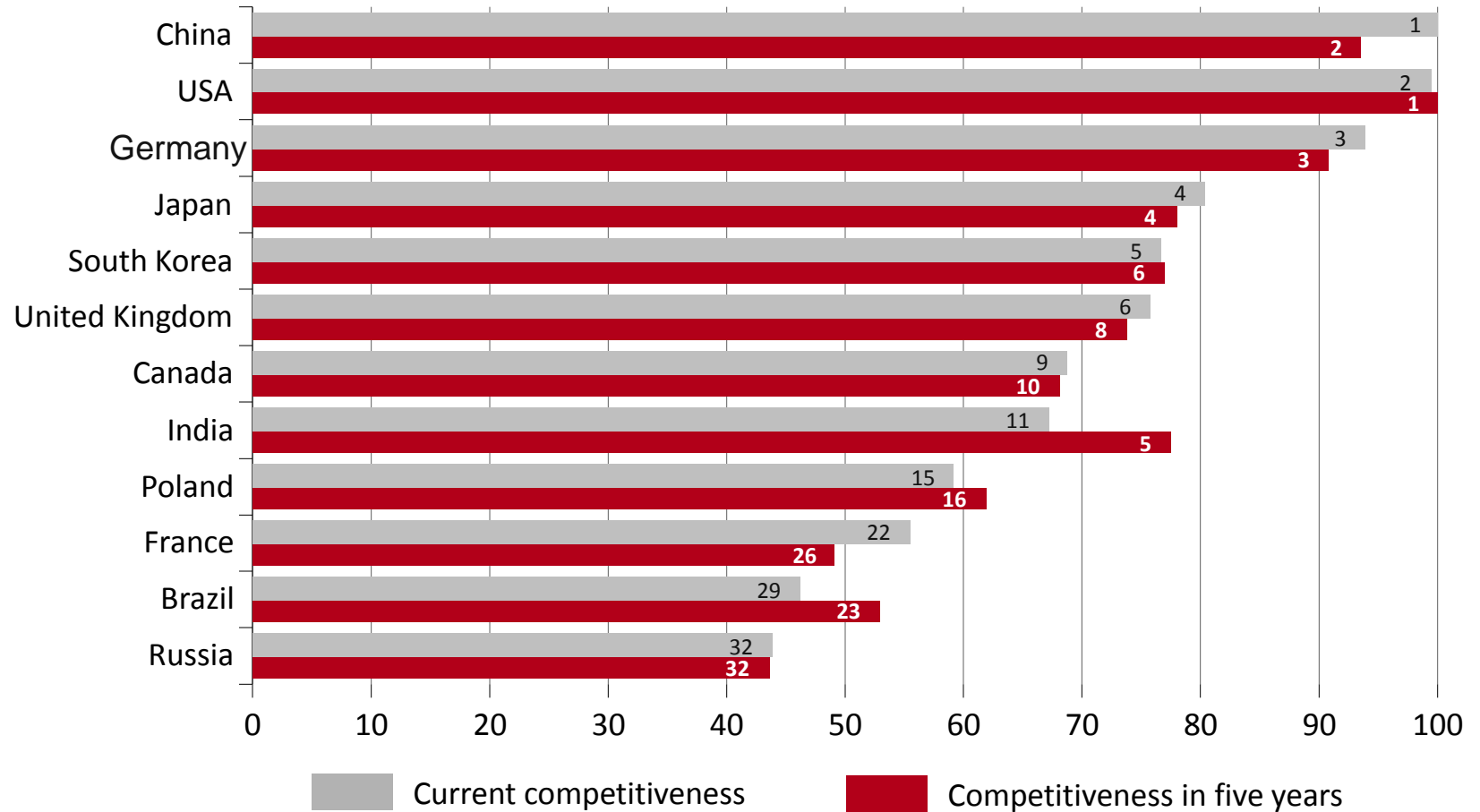
But success of yesterday does not mean success of tomorrow.

Look at the estimates of top managers it seem that there is no problem for the industrial location Germany.

The Deloitte Global CEO Survey show that the majority of managers expect only little change in the ranking of competitiveness.

# Outlook and investment

## Global CEO Survey: 2016 Country manufacturing competitiveness index



Source: Deloitte, 2016 Global Manufacturing Competitiveness Index.

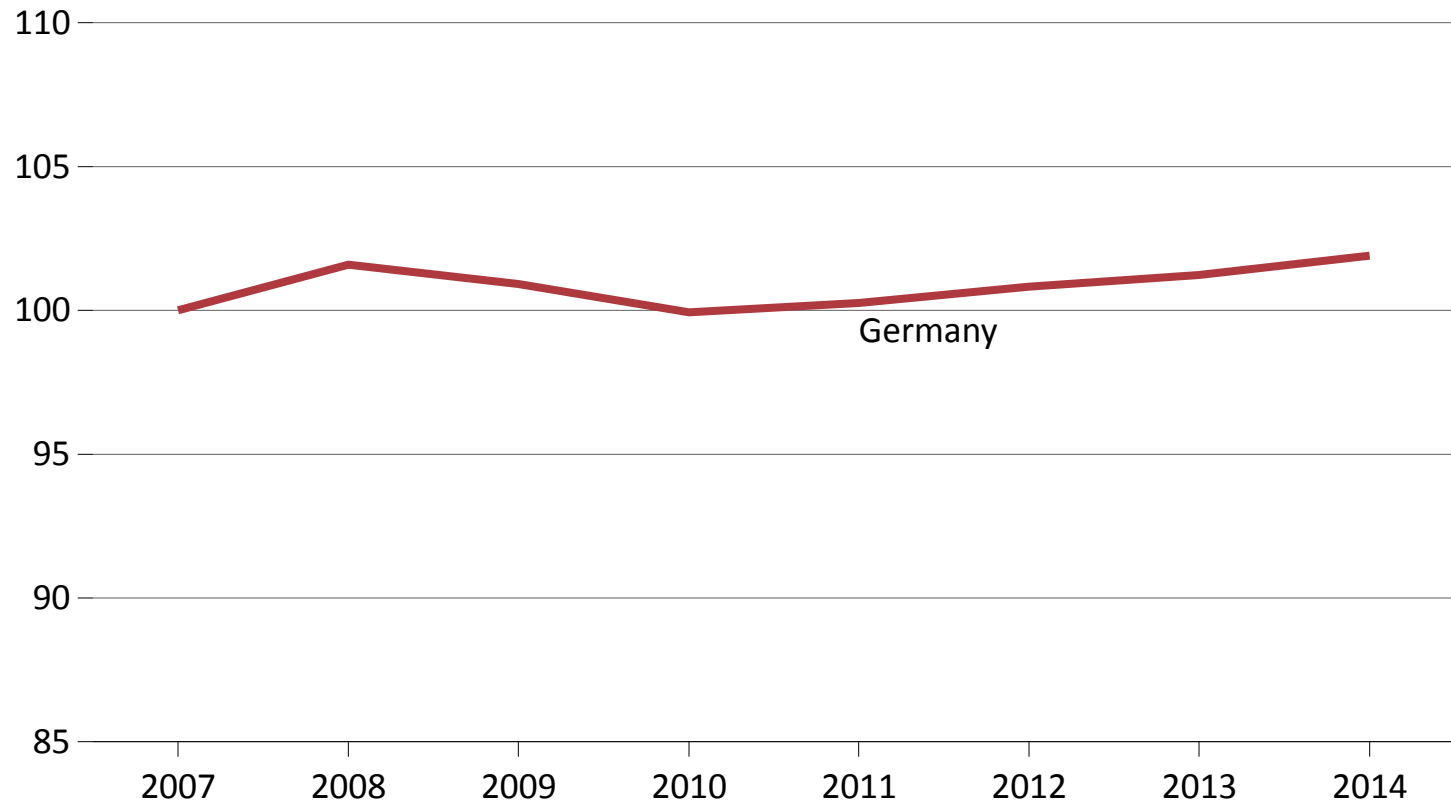
**But, do we also find some empirical facts in our data for this positive perspective?**

A key factor of the competitiveness of tomorrow are the investment activities

- Development of production capacity
- Changing technological performance

# Outlook and investment

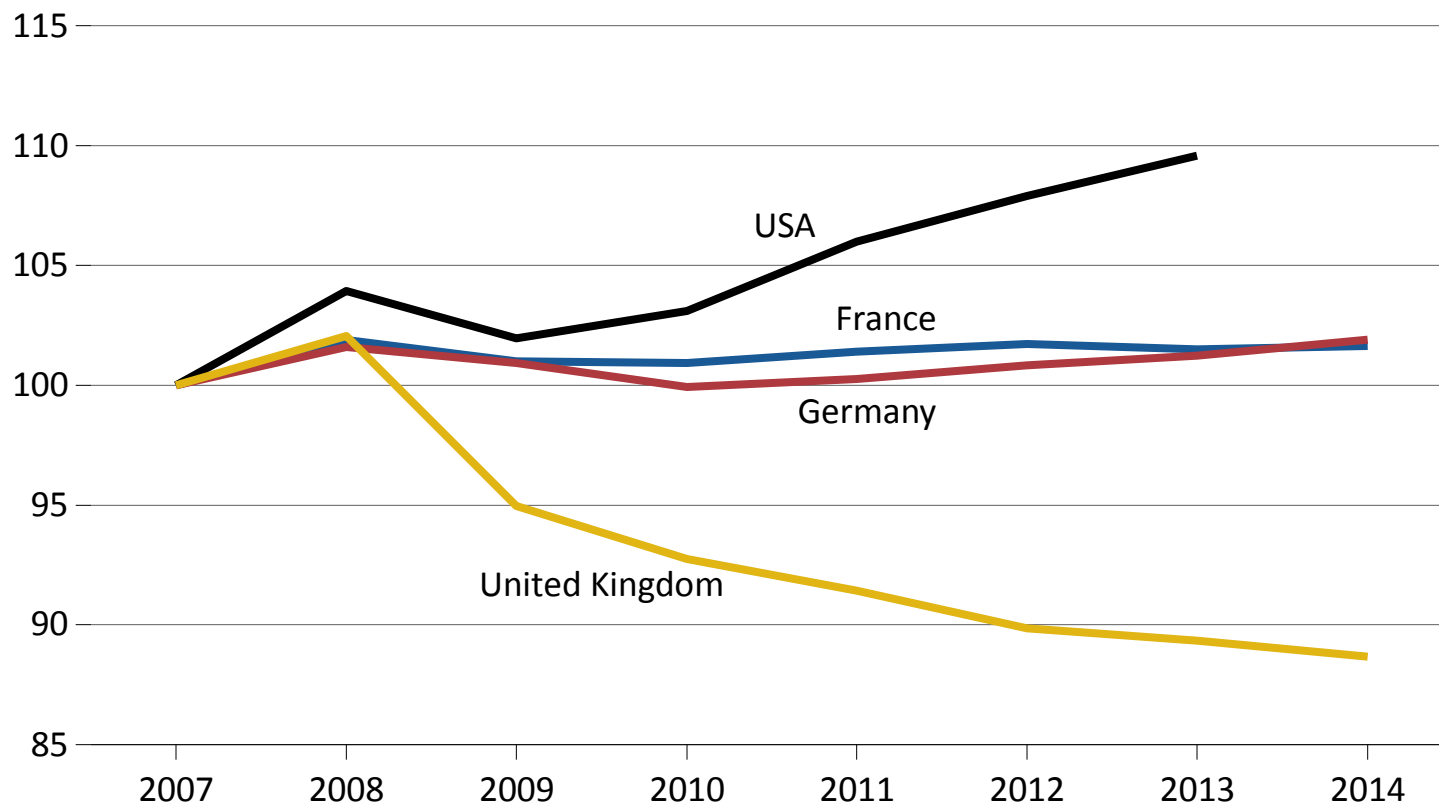
## Development of real capital stock of manufacturing, Index 2007=100



Sources: EUKLEMS, BEA; own calculations.

# Outlook and investment

## Development of real capital stock of manufacturing, Index 2007=100



Sources: EUKLEMS, BEA; own calculations.

## **Conclusion:**

The German industry has managed in recent years something that in fact seems impossible: success and growth without investment.



## How could the puzzle be solved?

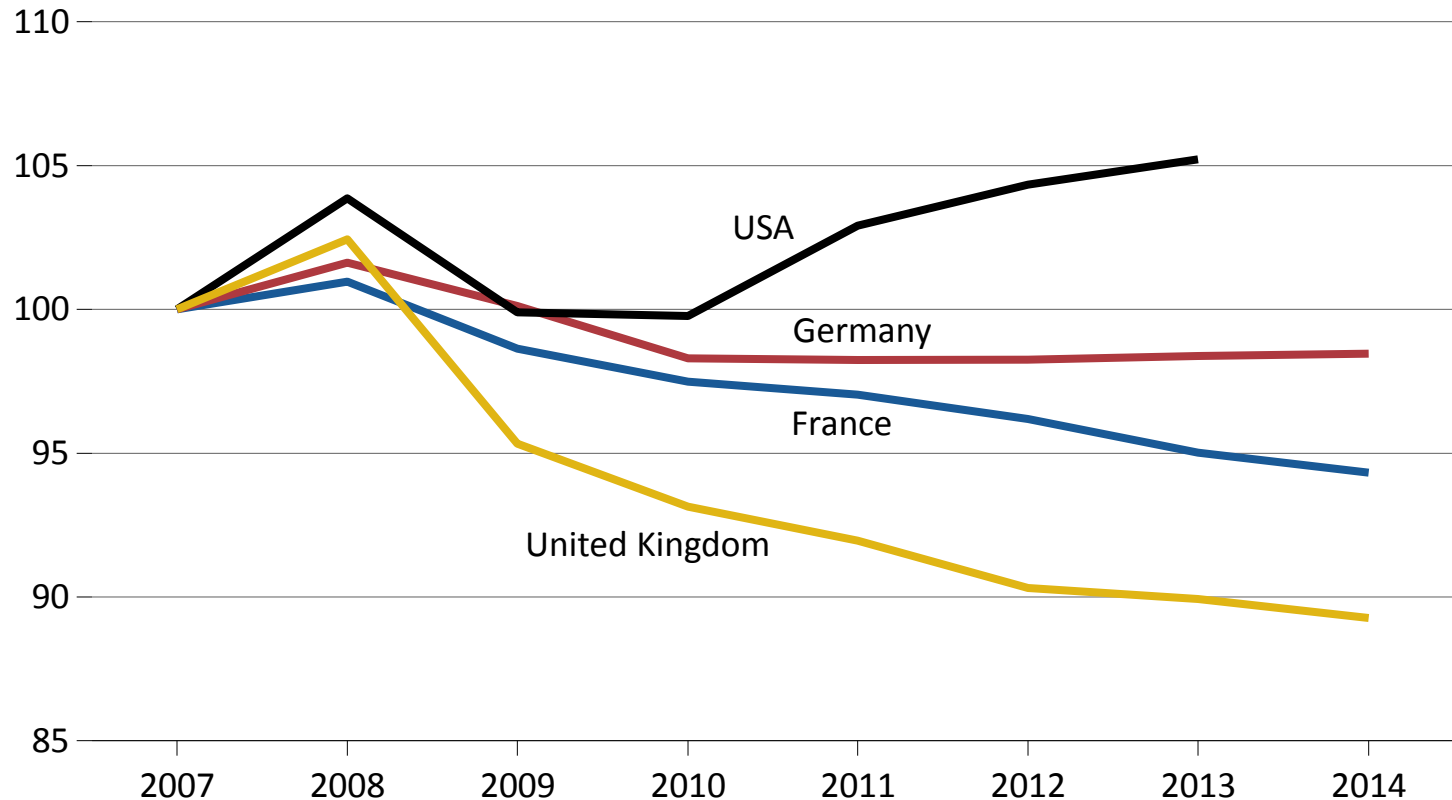
**One** solution of the puzzle could be the shifting between tangible and intangible capital.

German manufacturing industries have their focus on R&D-intensive goods. So they need more and more investment in heads and not in steel and concrete.

But in the data we find this substitution more in the French industry than in the German industry.

# Outlook and investment

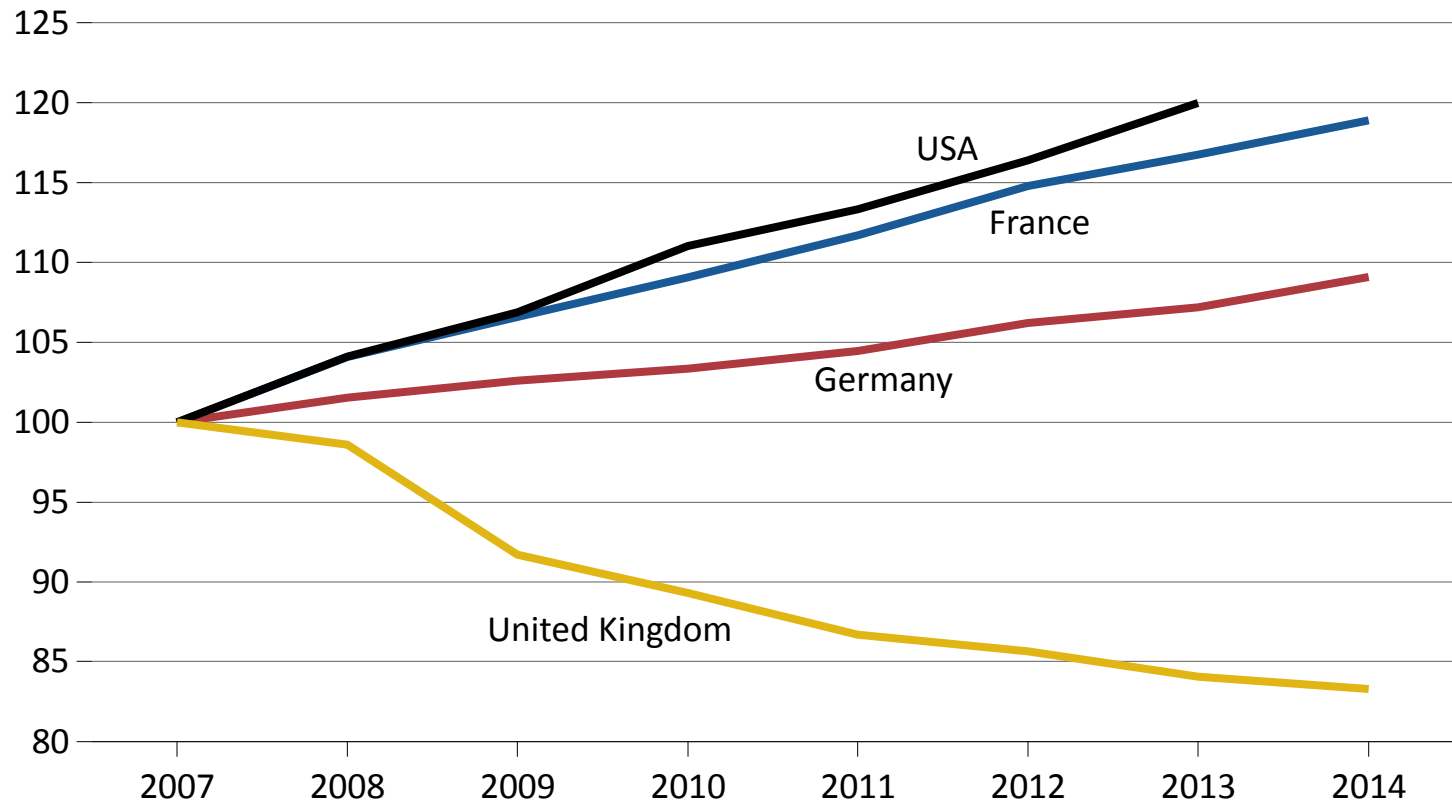
## Development of real tangible capital stock of manufacturing, Index 2007=100



Sources: EUKLEMS, BEA; own calculations.

# Outlook and investment

## Development of real R&D capital stock of manufacturing, Index 2007=100



Sources: EUKLEMS, BEA; own calculations.

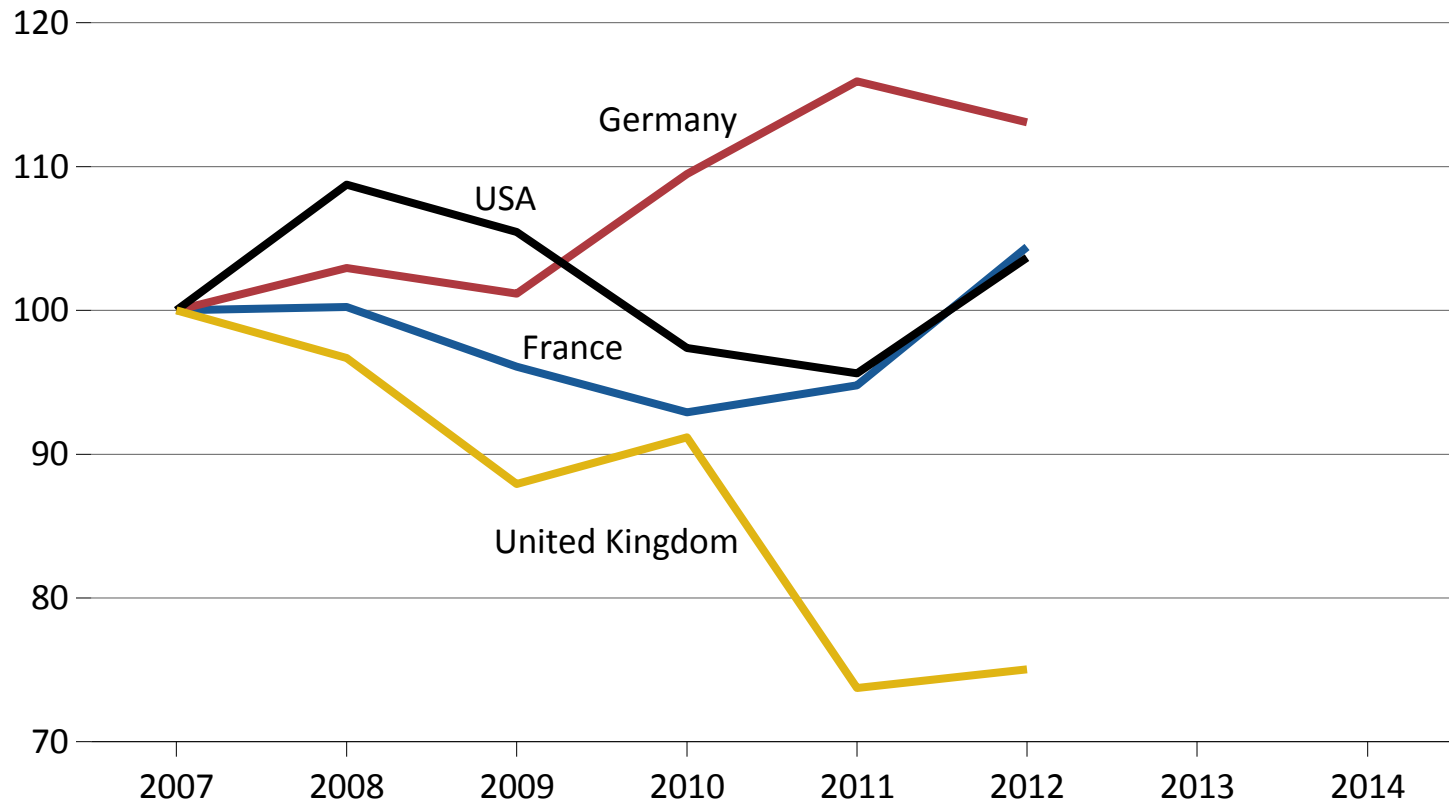
# Outlook and investment

But the data of the official statistics cover not the whole field of intangible capital. Important parts of the intangible capital are also investments in marketing, in advertising, in training and in organizational capital.

Estimations from the SPINTAN consortium indicates that the stock of organizational capital grew very fast in German manufacturing industries.

# Outlook and investment

## Development of Investment in Organizational Capital in manufacturing, Index 2007=100



Sources: SPINTAN; own calculations.

## How could the puzzle be solved?

A **second** answer could be the substitution of private capital by public capital.

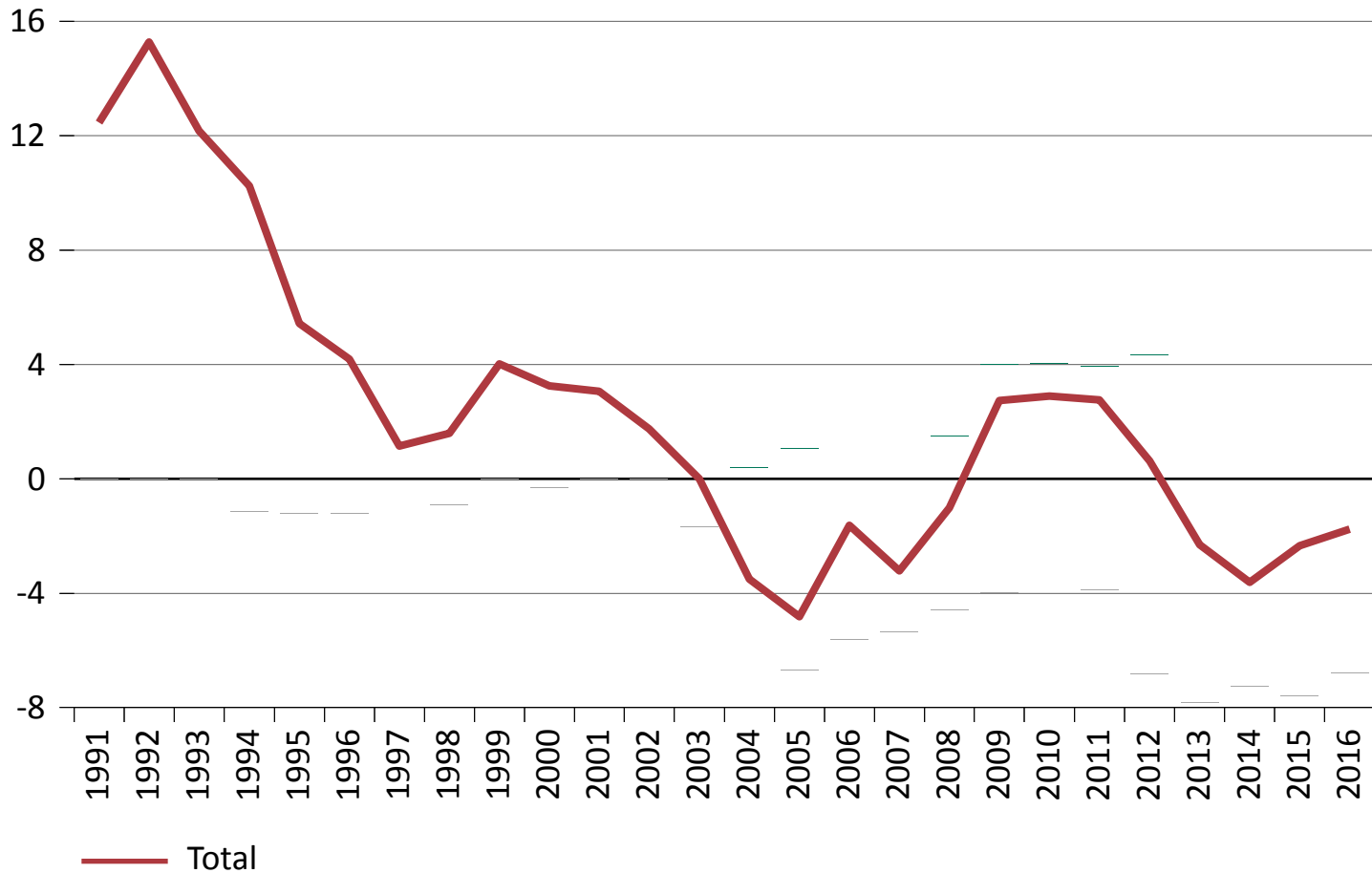
The German manufacturing industries use the high quality public infrastructure in Germany. Public investment make the private capital more productive.

But if we take a look on the public investment we see the opposite. Public net capital stock decrease.

# Outlook and investment

## Net fixed capital formation in German public sector

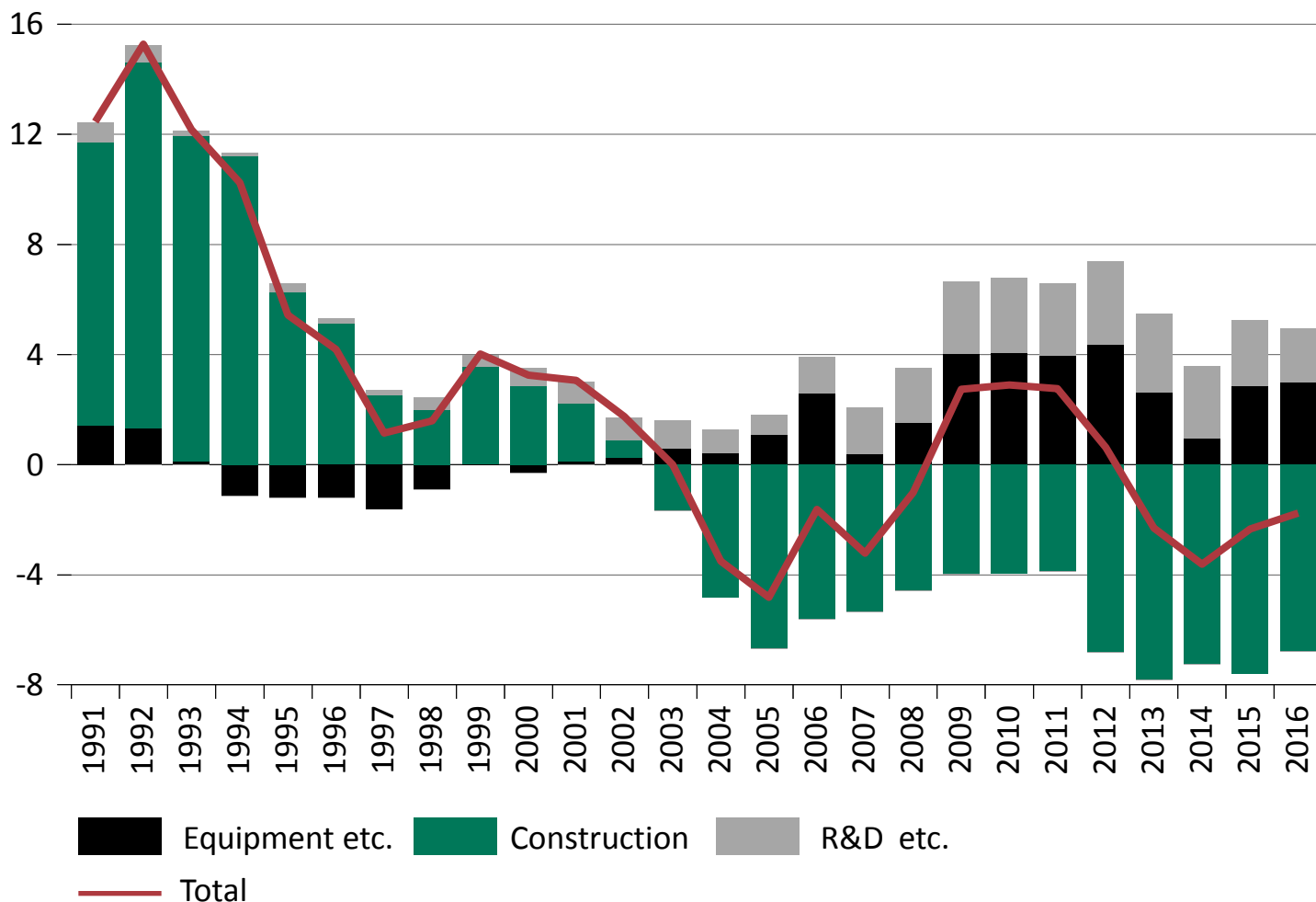
In Billion Euro, current prices



# Outlook and investment

## Net fixed capital formation in German public sector by asset types

In Billion Euro, current prices





# Outlook and investment

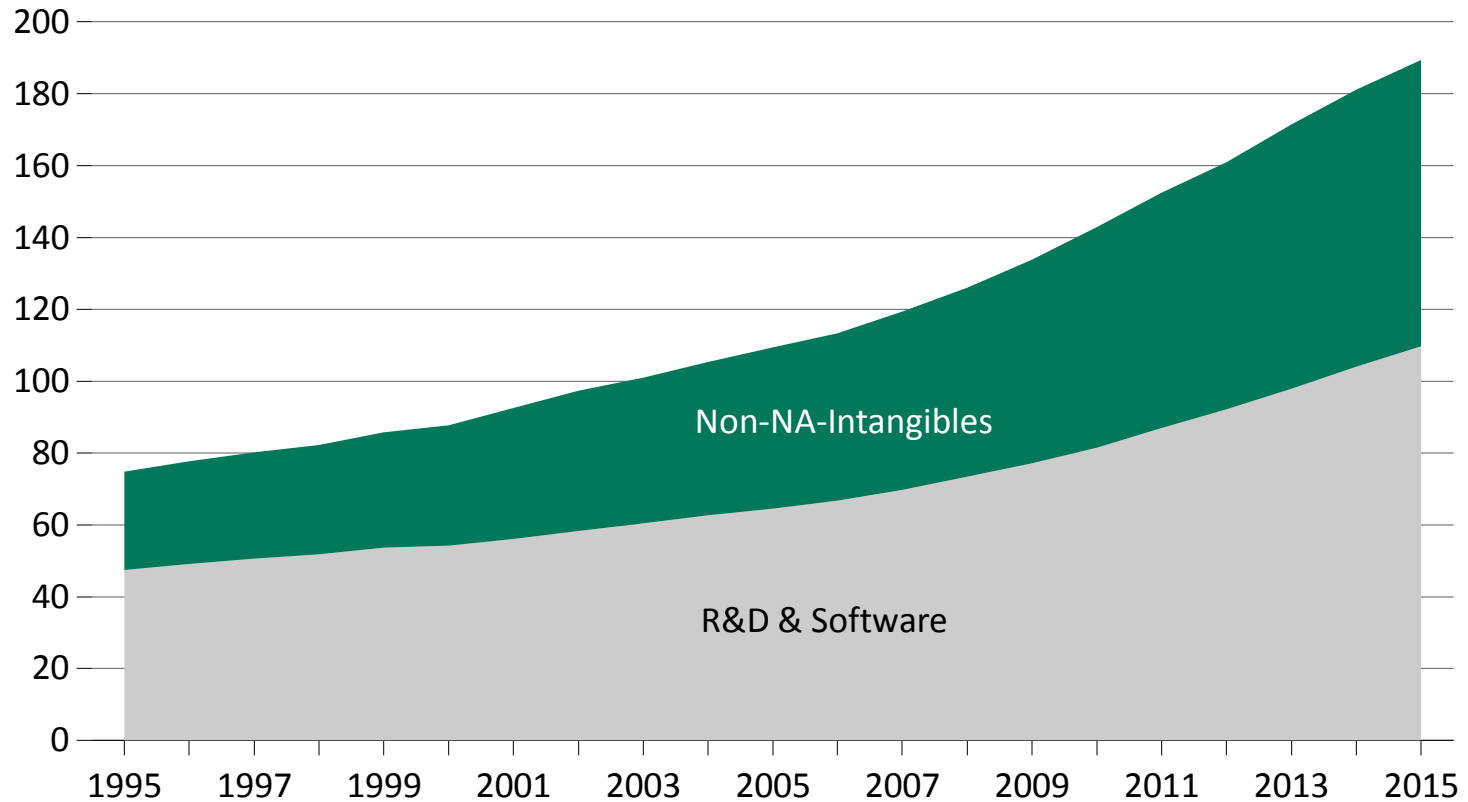
Moreover the public intangible capital stock increases much faster in the non national account intangibles, like training and organizational capital.

This shows the results of the SPINTAN project.

# Outlook and investment

## Intangible Capital Stock in German public sectors

at current replacement costs (billion euros)



Sources: SPINTAN; own calculations.

## How could the puzzle be solved?

A **third** solution of the puzzle could be the shift in the location of the investment.

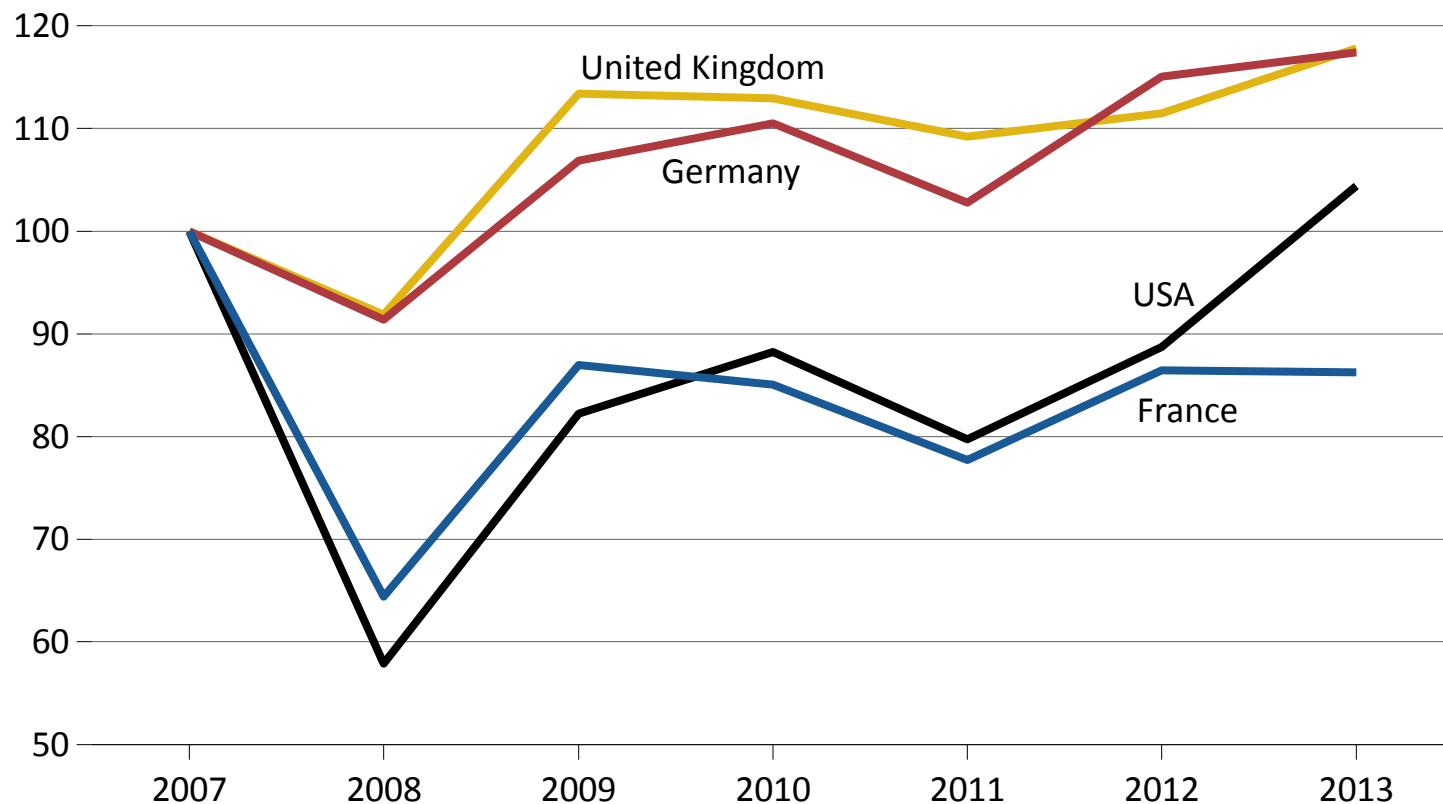
Many German manufacturing firms invest abroad, especially in China and the US.

See in general, the level of Foreign Direct Investment of German firms in relation to the GDP is still rising.

# Outlook and investment

## Level of Foreign Direct Investment in relation to GDP

Index 2007 = 100



Source: UNCTAD; own calculations.

## Outlook and investment

In combination with the FDI the German manufacturing firms have succeeded use the existing domestic capital stock.

How long this strategy still leads to success for Germany, is at least questionable.

In the long run the technological competitiveness of the German capital stock falls more and more.

In the end the modern factories (also from German firms) stand in China and in the US and not in Germany.

**In contrast to the first impression, detailed data on investment activity show a high demand for economic policy in Germany.**

## References

Martin Gornig, Alexander Schiersch: Weak Investment Poses a Threat to Industry in Europe, *Intereconomics* 51 (2016), 5, p. 272-277

Marcel Fratzscher, Martin Gornig, Alexander Schiersch: Weak Corporate Investment Requires Immediate Action, *DIW Economic Bulletin* (2016), 15, p. 167-171

Martin Gornig, Claus Michelsen, Kristina van Deuverden: Local Public Infrastructure Showing Signs of Wear and Tear, *DIW Economic Bulletin* (2015), 42/43, p. 561-567