



Business Investment in EU & Denmark since 2007/08

Technology, monopolies, basic research, bank and credit

September 2017

Steen Jakobsen, Chief Investment Officer

QE, 80/20 rule & Game Theory

The Economic Bermuda Triangle



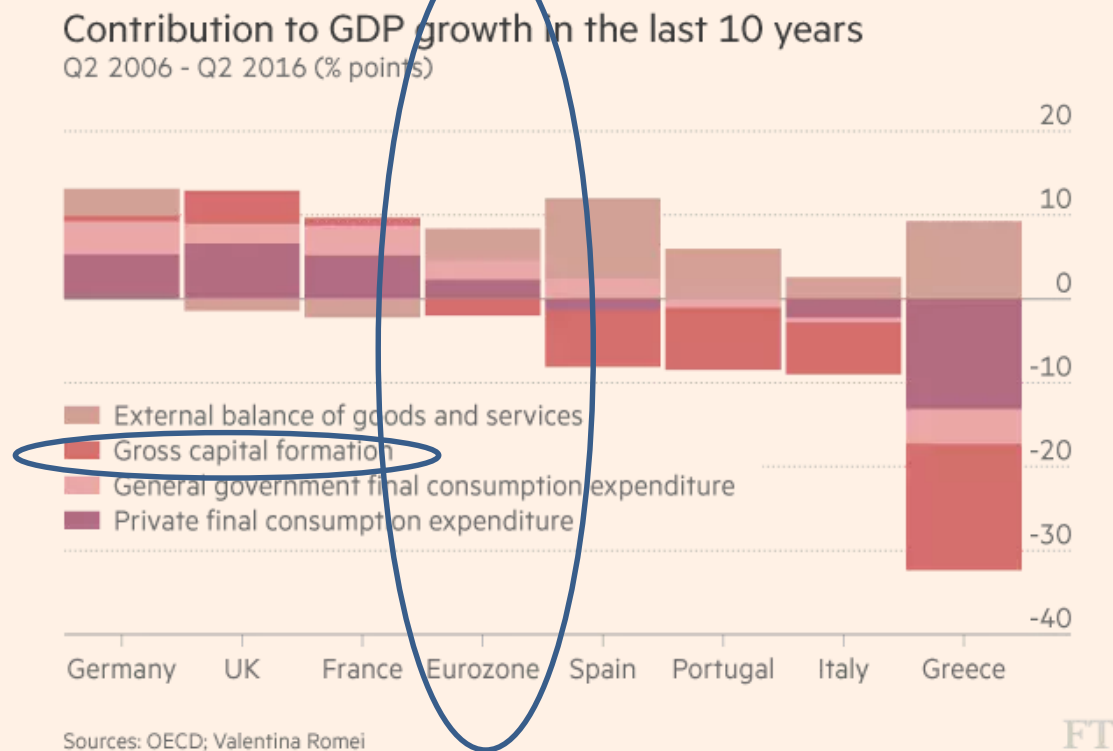
We have all become 'entitlement receivers' – resisting change

The classic why and how

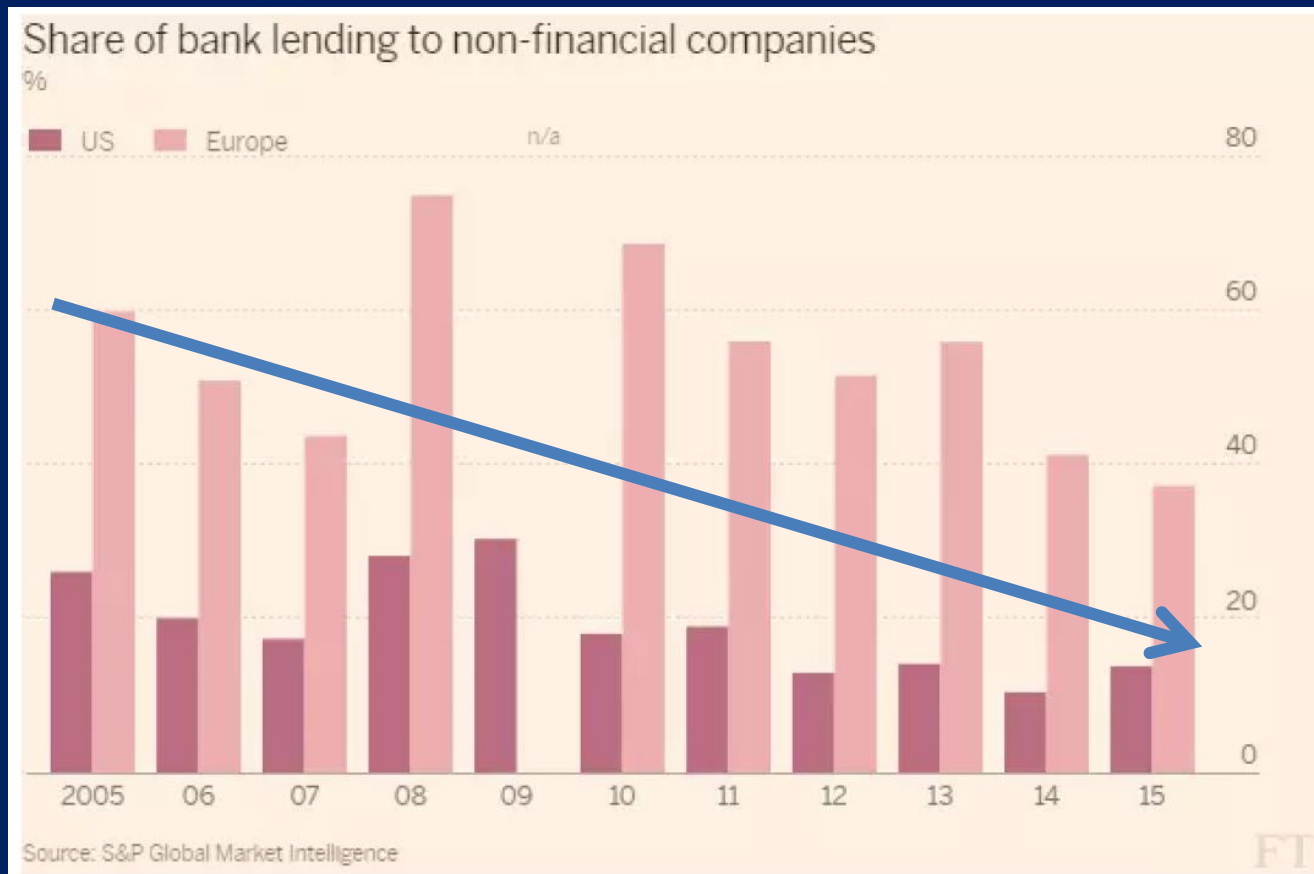
- ✓ Collapse in housing bubble
 - ✓ Technology
 - ✓ Less to invest when growth sluggish
 - ✓ Debt mountain – velocity of money – net lending demand
 - ✓ NPL
 - ✓ Regulation (countercyclical)
 - ✓ Uncertainty
 - ✓ Confidence
 - ✓ Tax mis-incentives
 - ✓ CAPEX vs. OPEX
-
- ✓ Labour & product reforms
 - ✓ Internal devaluations
 - ✓ Tax incentives
 - ✓ Alternative credit facilitators
 - ✓ Reform fiscal rule (excl net investments)
 - ✓ EU 2020 3% target – R&D
 - ✓ Anti-Monopoly

How bad is it?

It's pretty serious. The Eurozone economy is now about six per cent larger than it was ten years ago, but the real value of investments is still six per cent below its 2006 levels. When compared to the pre-crisis peak in the first quarter of 2008 the drop is even larger, about twelve per cent.



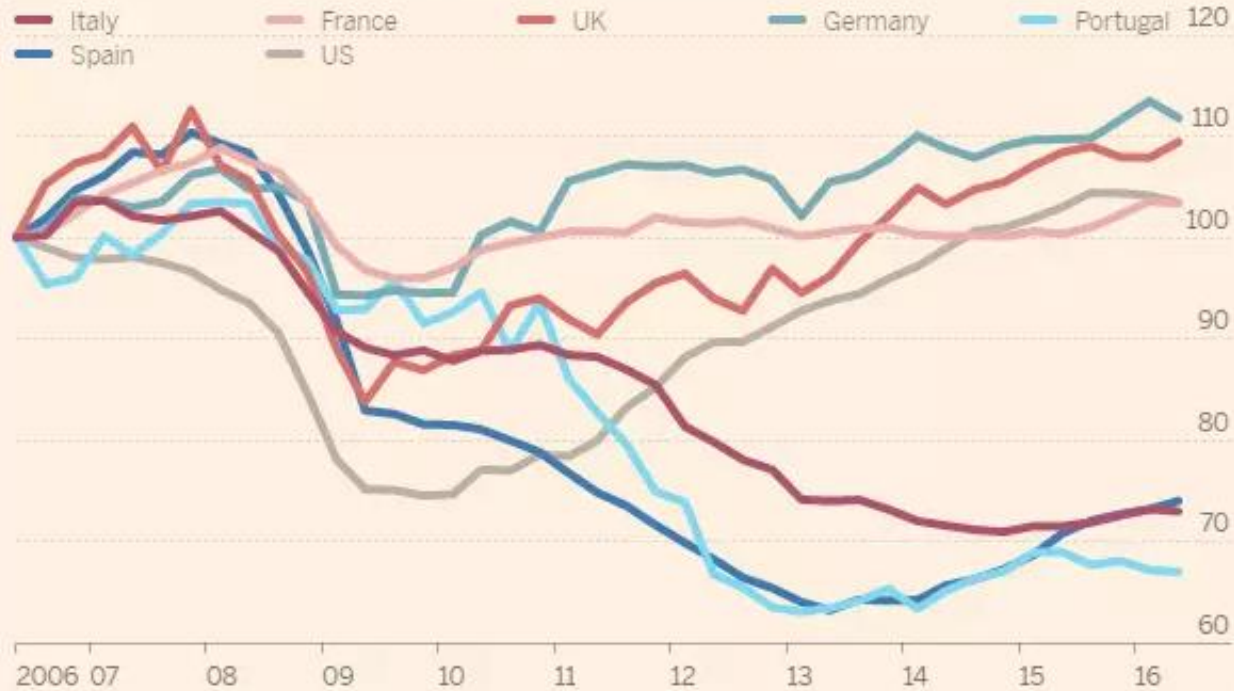
Banking & Lending vs. Real economy



North vs. South

Investments

Real gross fixed capital formation, rebased



Source: Thomson Reuters Datastream

FT

Old vs new industries

Can you feel the change....

- **Maersk** CAPEX last 12 month 4.8 bln. USD vs. Market value of 38 bln. USD (8%)
- **MarketAxess** CAPEX last 12 month 8 mio. USD vs. Market value 7 bln. USD (0.1%)



GE 128 years old > 300.000 employees - Edison

Facebook 13 years old < 12.000 employees - Zuckerberg

Old vs new industries
10 years ago....



Endogenous Growth Banking system vs. R&D

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Endogenous growth and lack of recovery from the Global Crisis

Maarten de Ridder, Coen Teulings 13 July 2017

Around the world, growth has yet to recover to its pre-Global Crisis trend. This column uses the crisis as a quasi-natural experiment to test the endogenous growth hypothesis, which suggests that output has not recovered because the crisis affected the rate of technological progress. Firms that preferred a bank that was more severely affected by the crisis experienced a large fall in R&D investment and a persistent fall in output in subsequent years. This suggests a direct link between R&D and future productivity, as predicted by endogenous growth models.

Market Concentration

Declining Competition and Investment in the U.S



NBER Working Paper No. w23583

74 Pages • Posted: 17 Jul 2017

German Gutierrez Gallardo

New York University (NYU) - Leonard N. Stern School of Business

Thomas Philippon

New York University (NYU) - Department of Finance; National Bureau of Economic Research (NBER)

Date Written: July 2017

Abstract

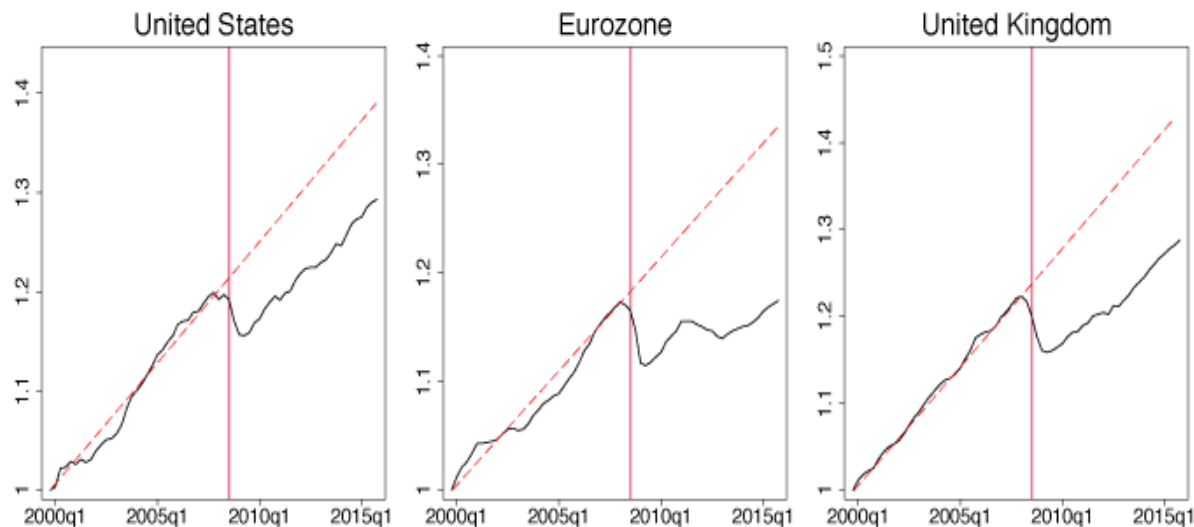
The U.S. business sector has under-invested relative to Tobin's Q since the early 2000's. We argue that declining competition is partly responsible for this phenomenon. We use a combination of natural experiments and instrumental variables to establish a causal relationship between competition and investment. Within manufacturing, we show that industry leaders invest and innovate more in response to exogenous changes in Chinese competition. Beyond manufacturing we show that excess entry in the late 1990's, which is orthogonal to demand shocks in the 2000's, predicts higher industry investment given Q . Finally, we provide some evidence that the increase in concentration can be explained by increasing regulations.

Endogenous growth

Maartin de Ridder & Coen Tuelings, July 2017:

Hypothesis: Suggest that output has not recovered because the crisis affected the rate of technological progress or banks connection dictating potential new R&D

Figure 1. Developments in output compared to trend



Source: OECD

Endogenous growth

Figure 3. Effect of one standard deviation drop in bank's 2007 asset quality on R&D and intangible investments



Note: Effect of bank's asset quality on firm's intensity of R&D investments; 90% confidence bounds in green.

Market Concentration

Concentrating too hard

United States, companies

Industries' entry and exit rates, %



Sources: "Declining Competition and Investment in the US", by G. Gutiérrez and T. Philippon, 2017; Census Bureau

Market concentration

1=monopoly



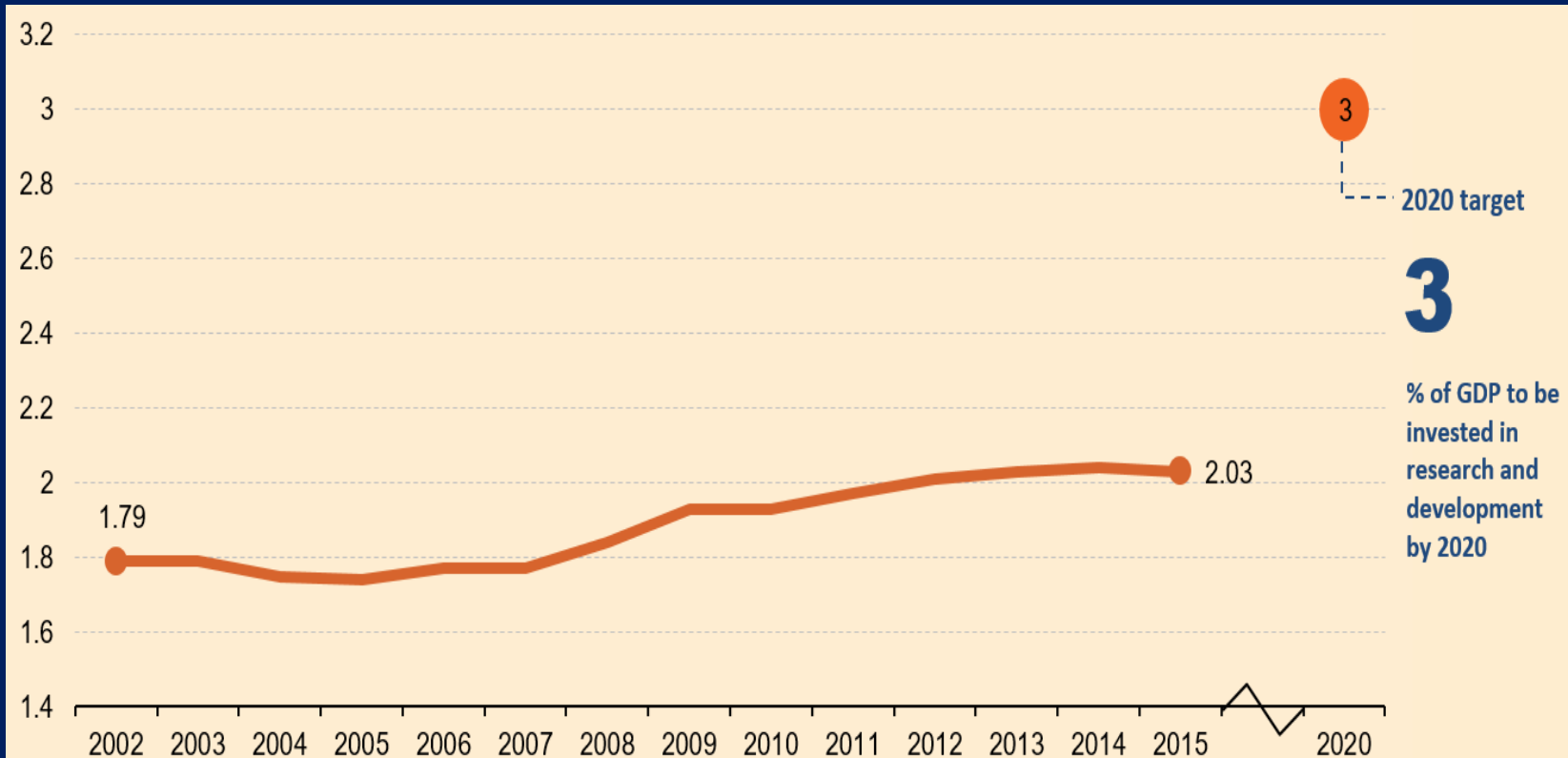
*The index is the sum of the squared market shares of companies in each industry. The line is the average for all industries

Economist.com

6 Conclusion

We argue that declining competition is (partly) responsible for the low rate of investment in the US. Our argument is based on the idea that firms that do not face the threat of entry do not have a strong urge to invest and innovate. We use Chinese import exposure as a natural experiment to test this idea. We find that industries most affected by Chinese competition saw a decline in the number of domestic firms, but at the same time, leaders in these industries increased investment the most. We also show that firms in industries with higher excess entry in the 1990s invested more in the 2000s, after controlling for firm fundamentals. We also study potential drivers of rising concentration; and find support for two hypotheses: increasing regulation, and superstar firms.

Europe 2020 – R&D and Innovation



Note: Data for 2002 are estimates, 2015 data are provisional.

Europe 2020 – R&D and Innovation



Note: Provisional data for business enterprise and private non-profit sector; SI, BG, BE, AT, UK, FR, DK, IT, CZ, LU, MT, PT, EE, EL, and CY: Data are estimates and/or provisional; DE, NL, LV and NO: Data for business enterprise, government and higher education sector are provisional and/or estimates; DE, NL, HR and US: Definition differs for private non-profit sector; IE, TU, ME, RS, KR, JO, CN: 2014 data for business enterprise sector.; IE: Data for higher education sector are estimates; HU and US: Definition differs for business enterprise sectors.; HU, DE, NL, HR, SK, CH and ME: Definition differs for government sector; LT: Data for business enterprise sector are provisional; CH, TU, ME, RS, KR, JO and CN: 2014 data for higher education sector; CH: 2012 data for private non-profit sector; ME, RS, KR, JO: 2014 data for private non-profit sector; TU, ME, RS, KR, JO and CN: 2014 data for government sector; HU, ME and US: Definition differs for higher education sector; US: 2013 data for all sectors.

Global Credit Impulse

Saxo Bank Sep-2017 update

