

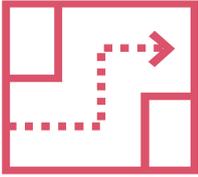
10 years of crisis

Smaller but unreformed
corporate economy

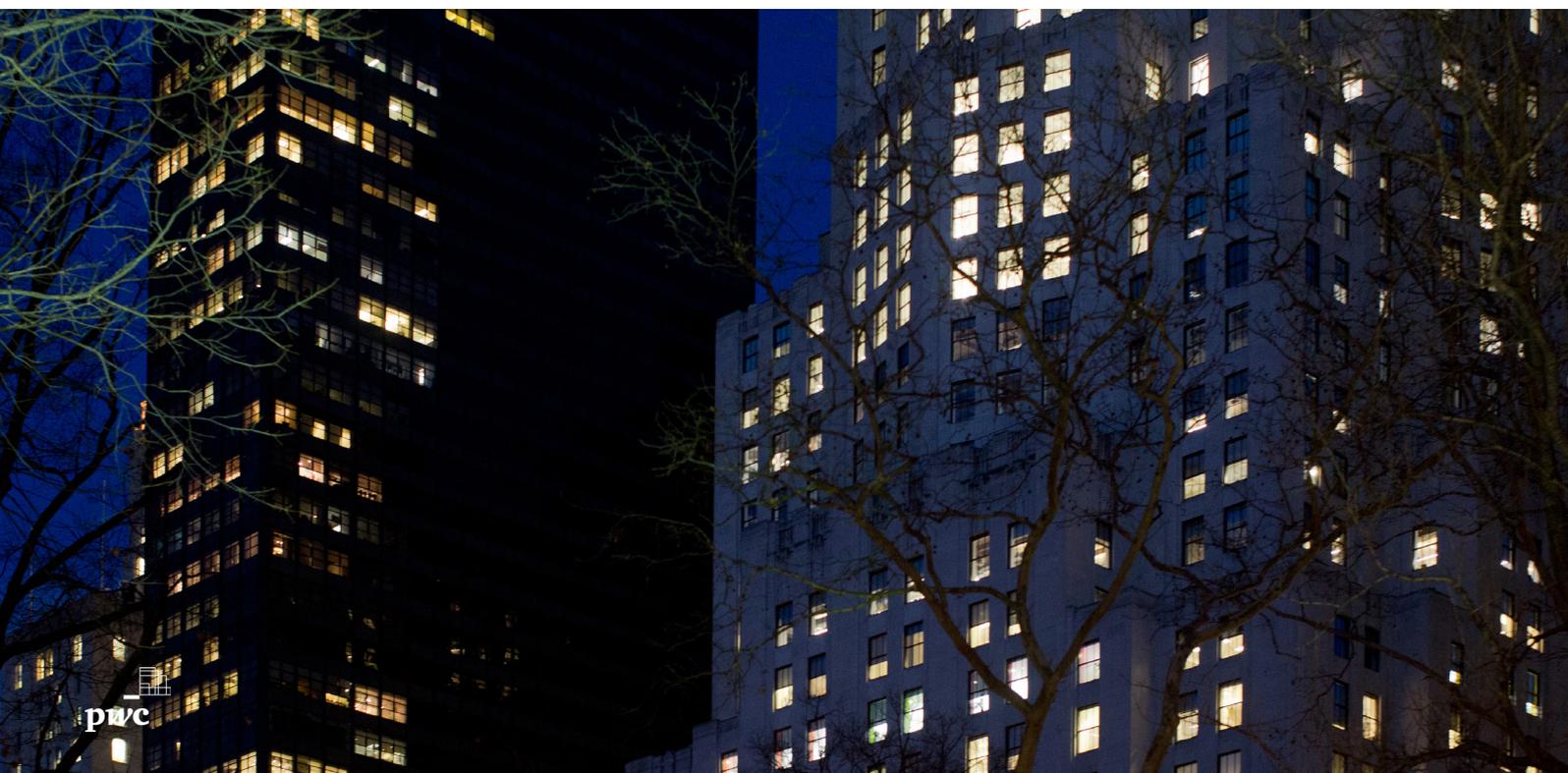
April 2019



Executive summary

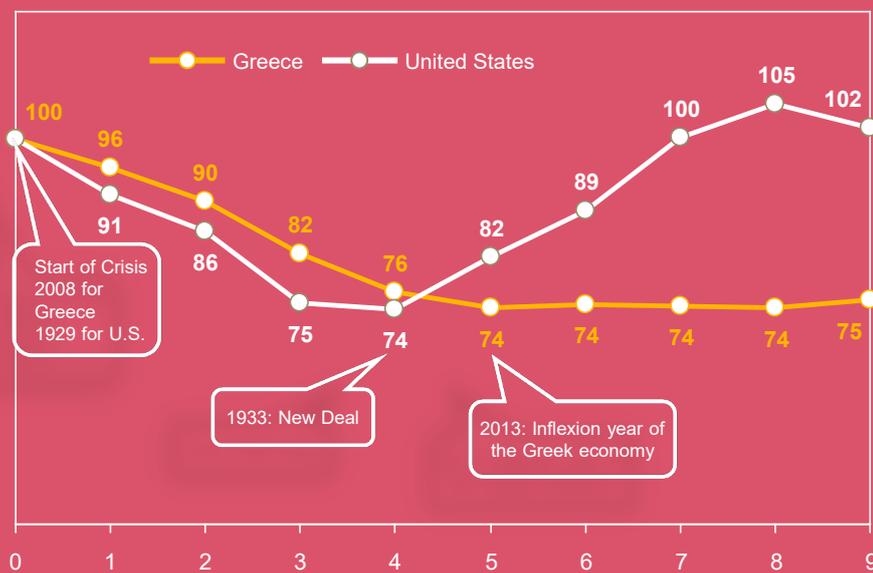


- The onslaught of the crisis in 2008 increased sovereign and consequently corporate risk to levels inhibiting investment and trading. Firms became smaller and weaker in capital terms. The production base of the economy shifted away from services towards industry and towards lower value added
- Despite the strengthening of the funding capacity of the firms, the institutional funding of the corporate economy weakened and was partly substituted by trade funding
- The investment process has been dislodged creating a huge gap between corporate investment needs, in order to maintain and enhance market position and competitiveness, and the ability and willingness to fund them
- A disproportionate number of Zombies continue to trade undermining market equilibrium. The targeted elimination of all Zombies would result in a 13% increase in the revenue of all other companies
- Nonetheless, coming out of the crisis there are about 2,100 investible companies, with total annual revenues of about € 110bn, with their own growth strategies



The longest and the deepest crisis in recent history in the western world left its marks on Greece...

Greek vs U.S. GDP evolution during crisis years (normalised)

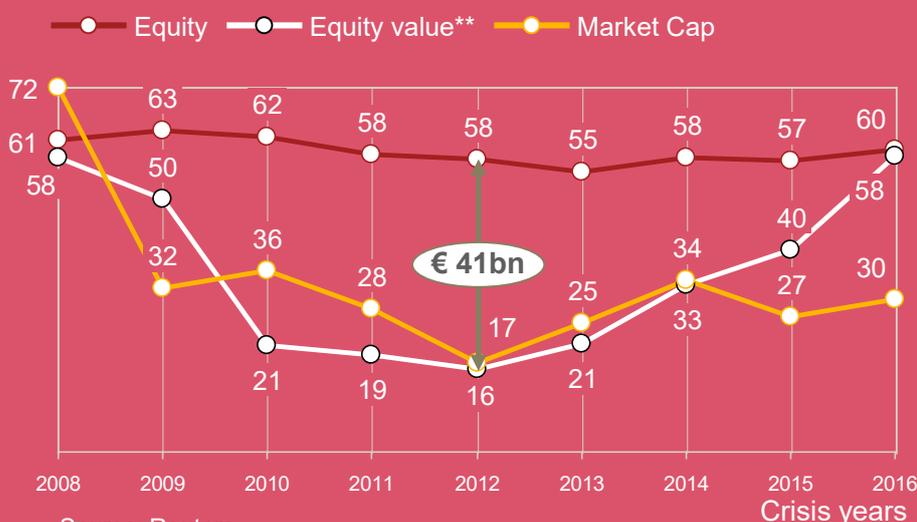


In 2018 Greece officially exited the longest and deepest crisis that has been recorded in the Western world. Eight years of constant drop of economic activity, one could imagine that the productive fabric of the country has been destroyed.

There was a huge value loss in the corporate economy, as company valuations recorded a 72% decline, but after 2012 **recovered**

Source: Ameco, U.S. Bureau of Economic Analysis

Value loss in € bn



Source: Reuters

Equity value=EBITDA sectoral multiple – Net Debt
Market capitalisation (ASE) excluding financial institutions

... however, nothing much has changed in the corporate economy



The Top 10 in terms of revenue non financial sector companies remained almost the same during the crisis

2009			2016		
Rank	Company name	Revenues (in € bn)	Company name	Revenues (in € bn)	2009 Rank
1	HELPE	6,76	HELPE	6,61	1
2	CCHBC Group	6,54	Motor Oil Group	6,36	6
3	PPC Group	6,03	CCHBC Group	6,22	2
4	OTE Group	5,96	PPC Group	5,17	3
5	OPAP Group	5,44	OPAP Group	4,23	5
6	Motor Oil Group	3,94	OTE Group	3,91	4
7	Viohalco Group	2,30	Viohalco Group	3,11	7
8	Ellaktor Group	2,27	Alfa-Beta Vassilopoulos S.A.	2,18	10
9	Marinopoulos S.A.	1,93	Ellaktor Group	1,94	8
10	Alfa-Beta Vassilopoulos S.A.	1,39	Titan Group	1,51	11

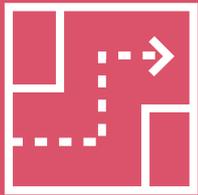
Entry

Exit



Few things changed in the structure of the economy as a result of the crisis. Even though the top companies in all sectors shrank in size, most of them remained in the same position while there were no new market share contenders.

The impact of the crisis on firms



swift cost adjustment

Costs swiftly reduced by 11% and average EBIDTA margin returned to pre-crisis levels (9.7%)



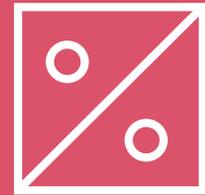
a marked change in funding

Debt decreased by €10bn
The cost of funding increased and remained at high levels
Overall funding became shorter term



less complexity and value added

Revenue value added shrunk by 7pps
Exports rose during the crisis, but their relative value added dropped (-11pps)



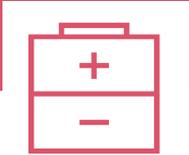
lack of investment

No replacement of assets
No new technologies
No R&D
Productivity continued to go down

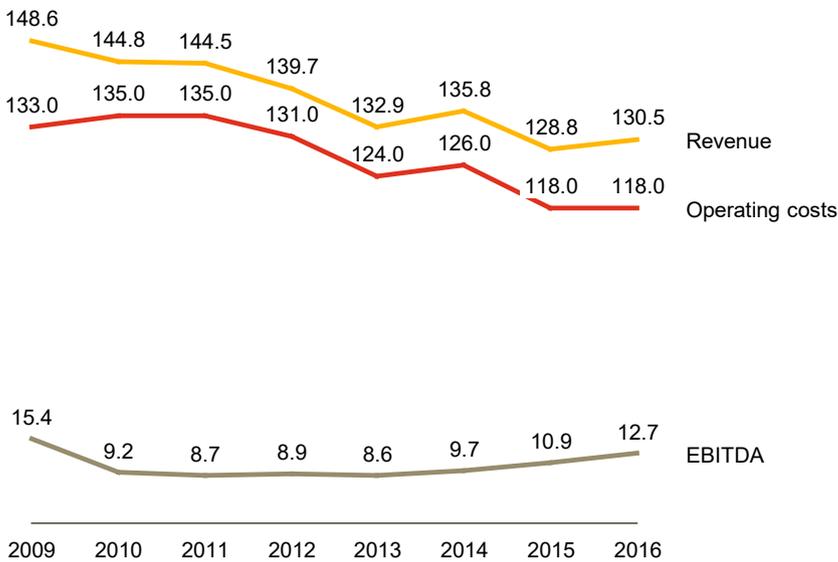
The economic model of Greece, the way it has been developed during the crisis, is incompatible with systematic growth. It is not driven by consumption, as exports cannot be financed. Not driven by investment either, with companies not willing to invest or unable to integrate innovation. Not supported by the state, which does not invest, does not facilitate private economy and consumes more resources than it should.

The economy did not transform as a result of the economic shock. Instead, it mostly retained its structure, resisted change, drained from investment, its technological base weakened and lost value added.

Companies swiftly compressed operating costs to adjust to the drop of demand



Demand shrunk, profits dropped and then recovered by suppressing their operating costs

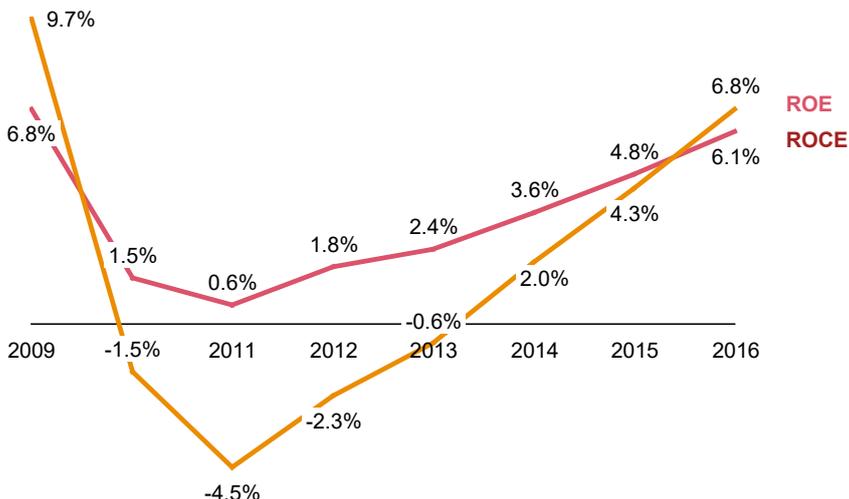


What has really happened?

The crisis caused losses in the demand within the Greek economy, reaching a 12% decline compared to 2009. Under this pressure, Greek companies contained their operating costs by 11% and focused on operating profitability to counterbalance the loss

As a result, their profitability, in terms of Return on Equity and Capital Employed, crumbled in the first years of crisis, but later recovered to almost before-crisis levels

Profitability initially collapsed, but rebounded as a result of cost cutting

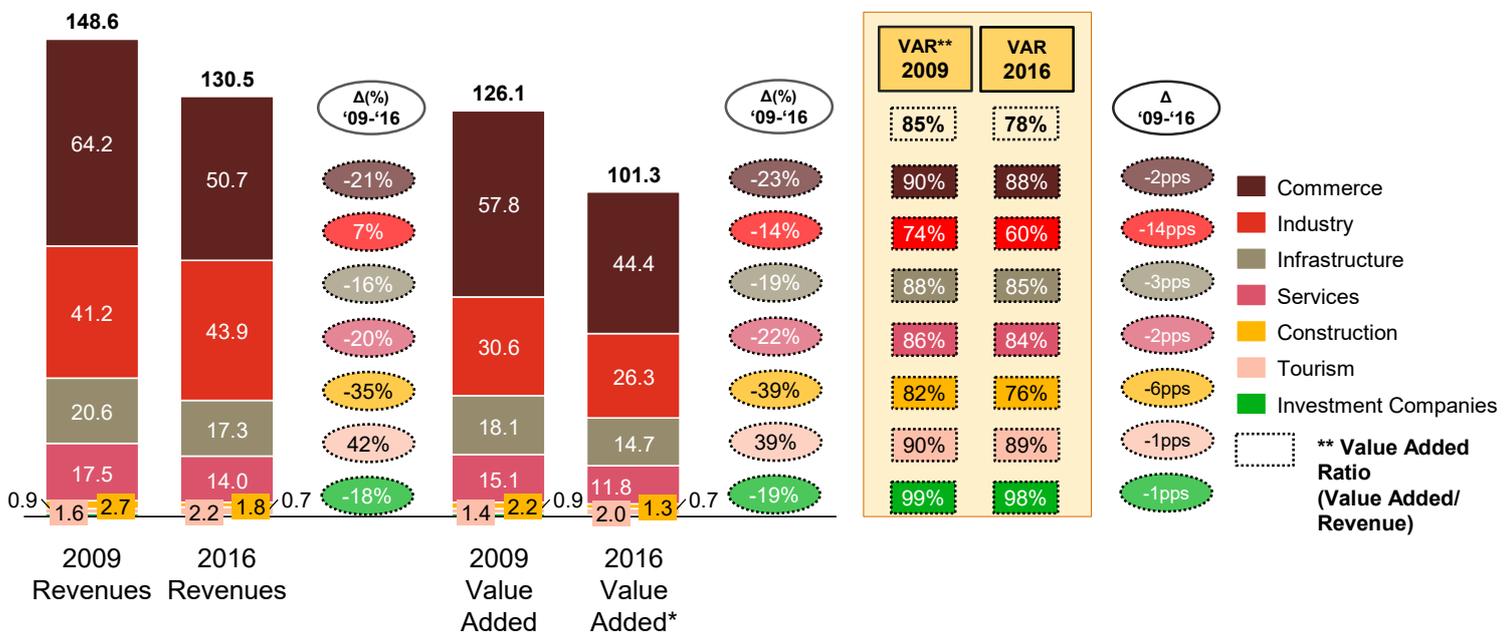


The production base of the economy shifted away from services towards industry and towards lower value added



Revenues dropped by 12%, but value added recorded a decline of 21%

Revenues and value added (in € bn)



Source: OECD, PwC Analysis
 *2015 added value coefficients used



Economic activity moved from **services and construction** towards **industry and tourism**, and thus to **lower added value** and **less embedded technology**

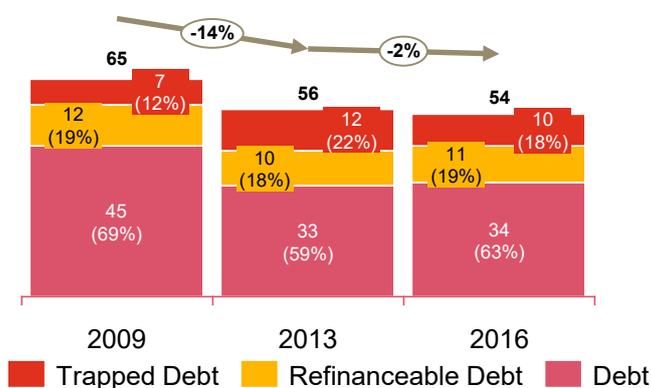
Export volumes rose during the crisis by €12bn, trying to balance the loss of domestic demand, but value added, as a proportion of exports declined by 11pps. The expansion to new markets was largely based on low-value products

Systematic deleveraging and the elimination of working capital led gradually to the accumulation of cash



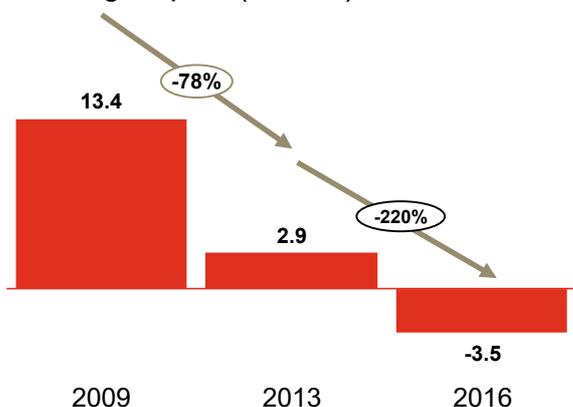
Systematic deleveraging

Gross Debt (in € bn)



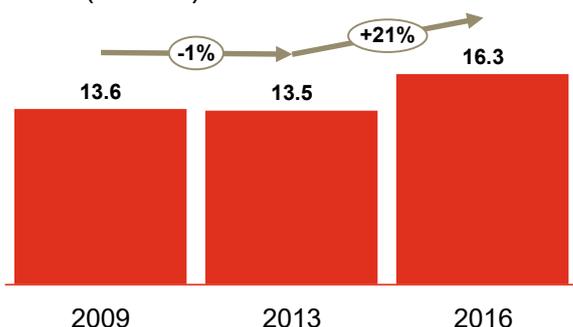
Working Capital evaporated

Working Capital (in € bn)



Corporates during the crisis accumulated cash in their balance sheet

Cash (in € bn)



How did business respond to the crisis?

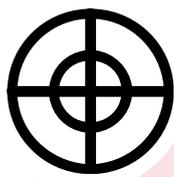
Corporates cut down their credit exposure, contained their working capital needs, and accumulated cash by € 3bn during the crisis.

Corporate debt has been reduced by € 11bn since the beginning of the crisis (€ 54bn in 2016), of which 30% was unsustainable. Despite this deleveraging, unsustainable debt remained almost stable.

About € 8.7bn of debt is trapped in Zombie companies

Working capital turned negative as receivables and stocks followed the drop in demand, but payables did not decline

The survival of the Zombies has contributed to the maintenance of high capital costs and has distorted the market due to unfair competition



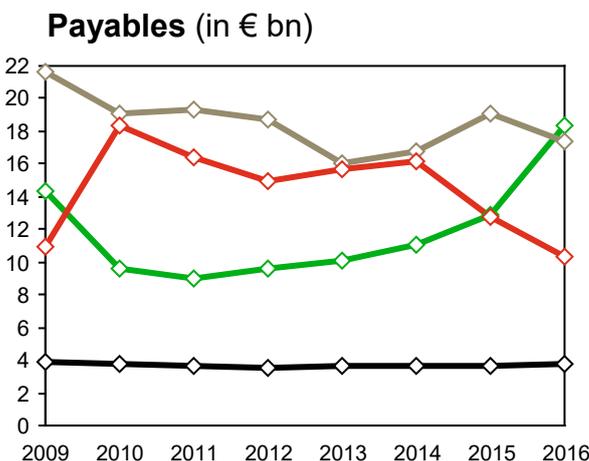
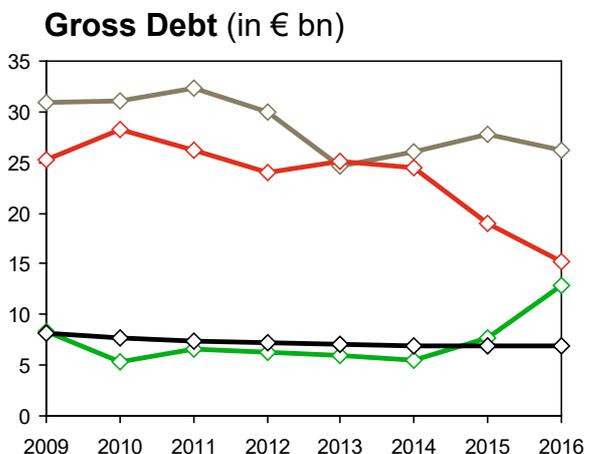
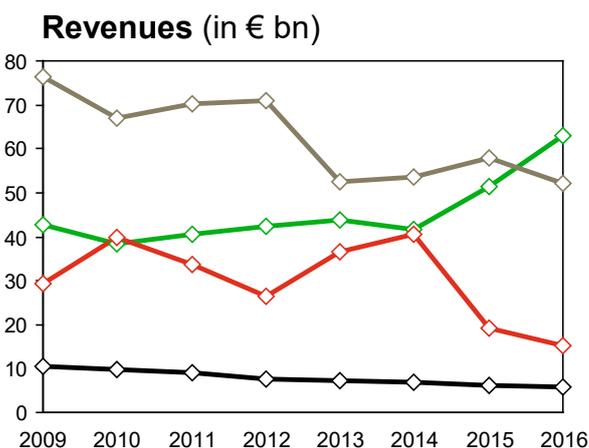
Persisting Zombies

There were in total 905 Zombies/Almost Zombies in 2009 and 745 in 2016. Out of them 312 companies were Zombies/Almost Zombies in 2009 and in 2016

Zombie & Almost Zombie companies account for 26% of the total and "survived" with around € 15bn of loans trapped in their balance sheet and an additional € 10bn owed to third parties

Receivables and payables reflected difficult trading conditions, as well as the resilience of Zombies

Since the beginning of the crisis 312 companies, deemed to be Zombies, remained in the same position. "Persisting Zombies" generated roughly the same revenues and owed the same amount of debt and payables to their suppliers. Their presence distorts the market due to the unfair competition and drains liquidity

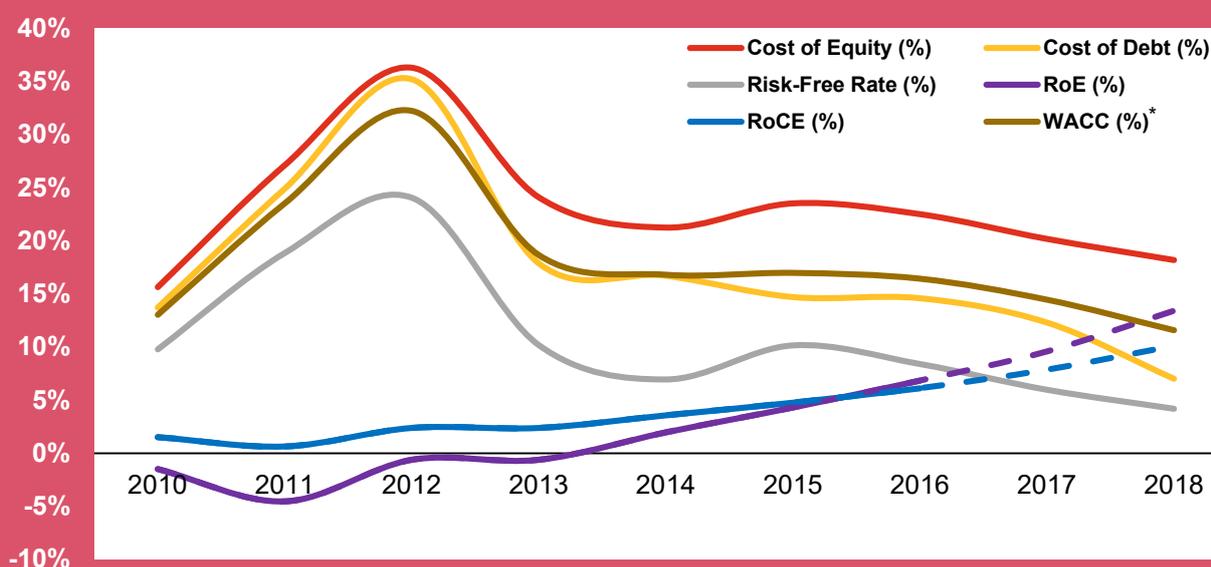


◆ Stars and Almost Stars ◆ Zombies and Almost Zombies
◆ Greys ◆ Persisting Zombies

The crisis led to a substantial and permanent increase in the cost of capital for the firms...



Cost of Capital



Source: Thomson Reuters, Damodaran Database (NYU), OECD, PwC Analysis

* Weighted Average Cost of Capital

Liquidity plays an important role for a company to grow and to implement its strategic plans. During the crisis in Greece, corporates faced a climate of increased cost of funding.

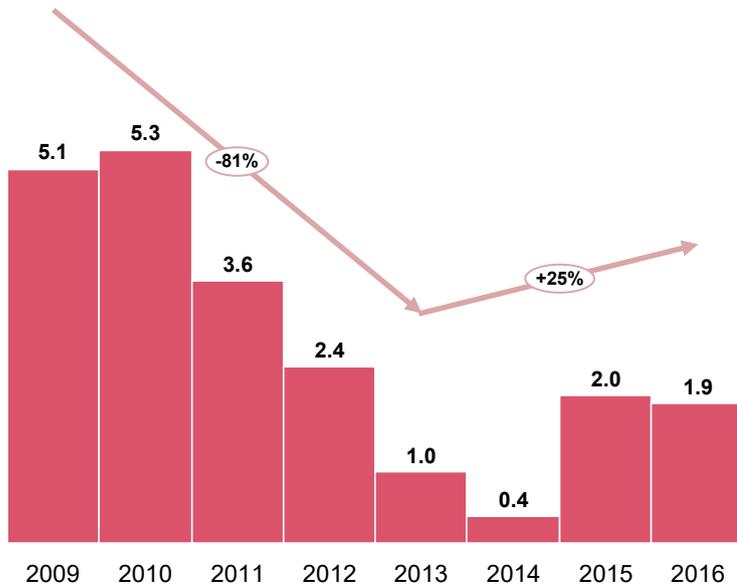
The state's **inefficiency to finance** itself and the banks' inadequacies pushed capital costs to unsustainable levels

The return on capital employed is systematically and considerably below the corresponding cost of capital creating a huge obstacle for companies to make large and long term investments

... leading to low investment, despite the fact that the funding capacity of the companies seems to have recovered

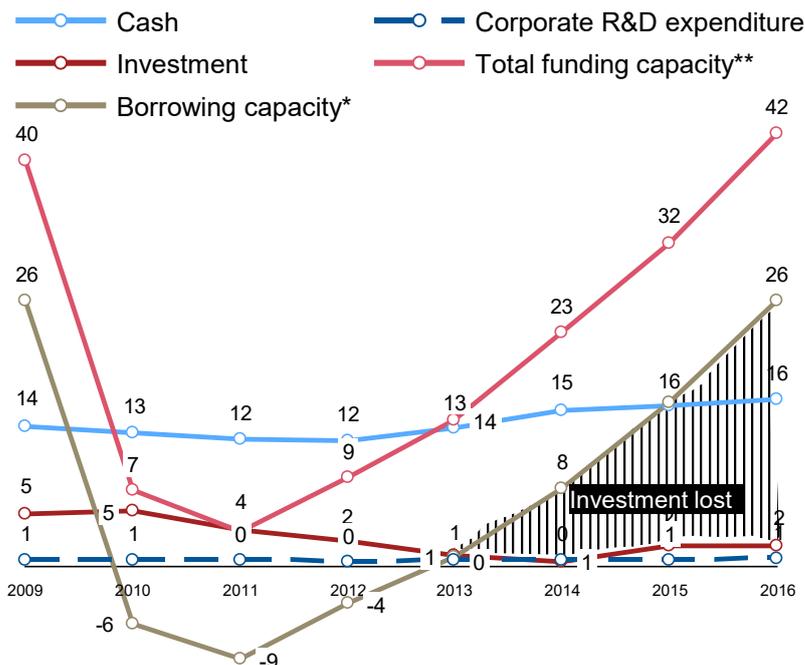
Investment collapsed

Investment (in € bn)



Investment loop

Funding/Borrowing capacity (in € bn)



Source: Eurostat, PwC analysis

*Borrowing capacity=5*EBITDA – Net Debt

**Total funding capacity=Cash + Borrowing capacity



Investment loop

The reduction in investment during the crisis has been dramatic with a direct negative impact on technology integration and undermining the potential for expansion with new products and new markets

It is estimated that around €45bn of extra investments could have been funded by the Greek companies in the period 2013-2016, but they did not materialise

This distortion is now systemic and while 74% of the companies can attract capital, having increased their debt service capabilities at pre-crisis levels, the investment rate is at 45% of the 2009 levels

There are two value creation strategies for companies coming out of the crisis

1

Accelerate
Growth

2

Improve
Operating
Margins

Improve Debt sustainability



What matters most and for whom?

The crisis prompted many corporates to restrain their long term plans to accumulate cash, trim costs, and become cautious to large investments. Coming out of the crisis, Greek corporates should decide which strategy to follow, in order to increase value for their shareholders.

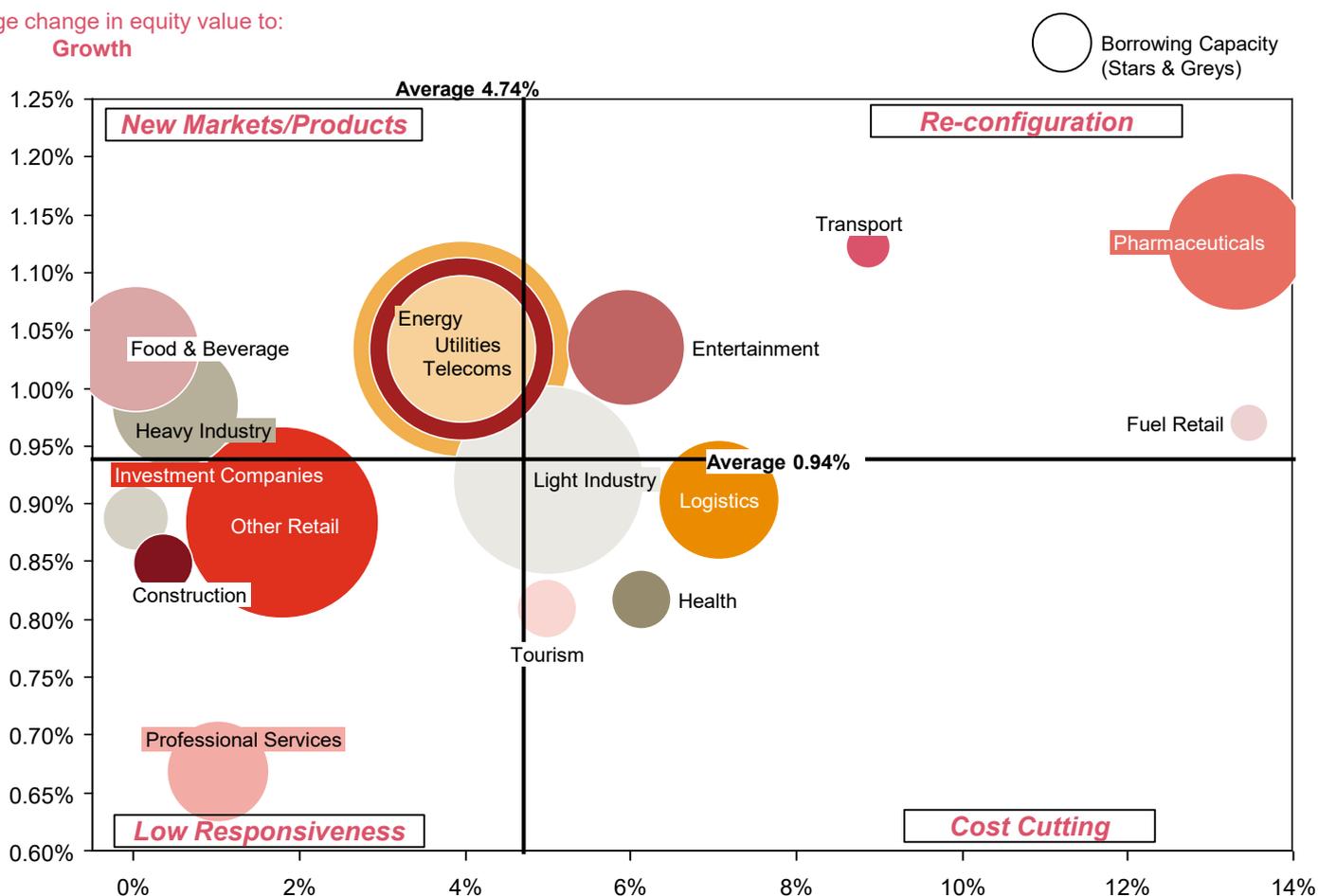
We have statistically analysed 2,817 companies in 17 sectors to examine the sensitivity of equity value:

- ✓ an increase of 1% in revenue leads to 0.7-1.1% increase in equity value. Revenue growth drives equity value consistently, across sectors
- ✓ long term EBITDA margin increases of 1% generate between 0% and 13.5% more equity value. The effect of operating profitability on equity value changed during the crisis in a non homogeneous manner with some sectors being highly driven by profitability
- ✓ a reduction in Net Debt/EBITDA ratio of 1%, adds no equity value when the company can service debt but it can provide an extra 0.1-0.2% if it is stretched

The cost of capital plays an important role in deciding a strategy. When capital costs are high, strategies that expand margins outweigh those that accelerate growth. Debt sustainability adds little or no value to the company according to our findings. Each company faces a different trade-off between growth and profitability. In some industries, like Food & Beverage and Constructions, focusing on boosting growth will generate higher returns than improving margins. Other industries, like Tourism or health, should mainly focus on cutting costs before adopting growth strategies

To set in motion and fund growth, corporates need to identify projects with returns in excess of the long term cost of equity

Percentage change in equity value to:
Growth



Percentage change in equity value to:
Profitability

Strategies

Cost cutting €16.9bn / 423 / €40mn/ €11.1bn	<i>21% of the companies, the smaller ones</i>	Could keep tightening costs, improving processes and re-optimising operations making very little investment
New markets/products €47.8bn / 533 / €90mn/ € 27.2bn	<i>26% of the companies, the largest in size</i>	May focus on expanding market share in existing market or turning into new ones with a sizeable investment potential
Re-configuration € 13.1bn / 222 / € 59mn/ €5.3bn	<i>13% of the companies, large ones</i>	Could expand by acquiring less strong competitors and by reconfiguring themselves, depending on external funding, but this amounts to little investment
Low responsiveness €30.1bn / 739 / €41mn/ €13.8bn	<i>39% of the companies typically of medium size</i>	Slow to respond, particularly if they have no access to funding, with no significant investment in sight

Total Revenue / No. of Stars & Greys / Average Firm Size/ Funding Capacity

Without a policy shock, the dynamics of the economy will not change

Unaided individual corporate strategies are unlikely to set in motion high and sustainable growth across the economy

Three broad policies must be implemented simultaneously aiming at reinstating conditions which are conducive to longer term planning and investment and to the mobilization of resources across economy

- **First**, the corporate landscape must be **cleared of Zombies** at a fast pace. Comprehensive liquidation processes are instrumental to transferring demand to Star and Grey companies, to releasing assets back to the productive economy, whilst improving trading liquidity. At the same time, the banking system must be **cleared from NPLs**, which absorb regulatory capital, so as to resume lending to the economy
- **Second**, a well orchestrated **trust building effort** with a clear and convincing plan for the future has to be initiated. This will help reduce sovereign risk and will bring in international strategic investors to consider Greek corporates, which not only survived the worst crisis, but also improved their own competitiveness
- **Third**, as a result of investment, **the economy will be rebalanced** to higher value added services and products and expand into new markets. Coherent sectoral public policies promoting size, concessionary funding towards last stage R&D, demand and supply aggregation and clustering are necessary in facilitating this shift

The legacy of the crisis is heavy, but well hidden, and gradually is forming Greece into a more primitive physical production base with less services output, fed with little investment and starved of innovation



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