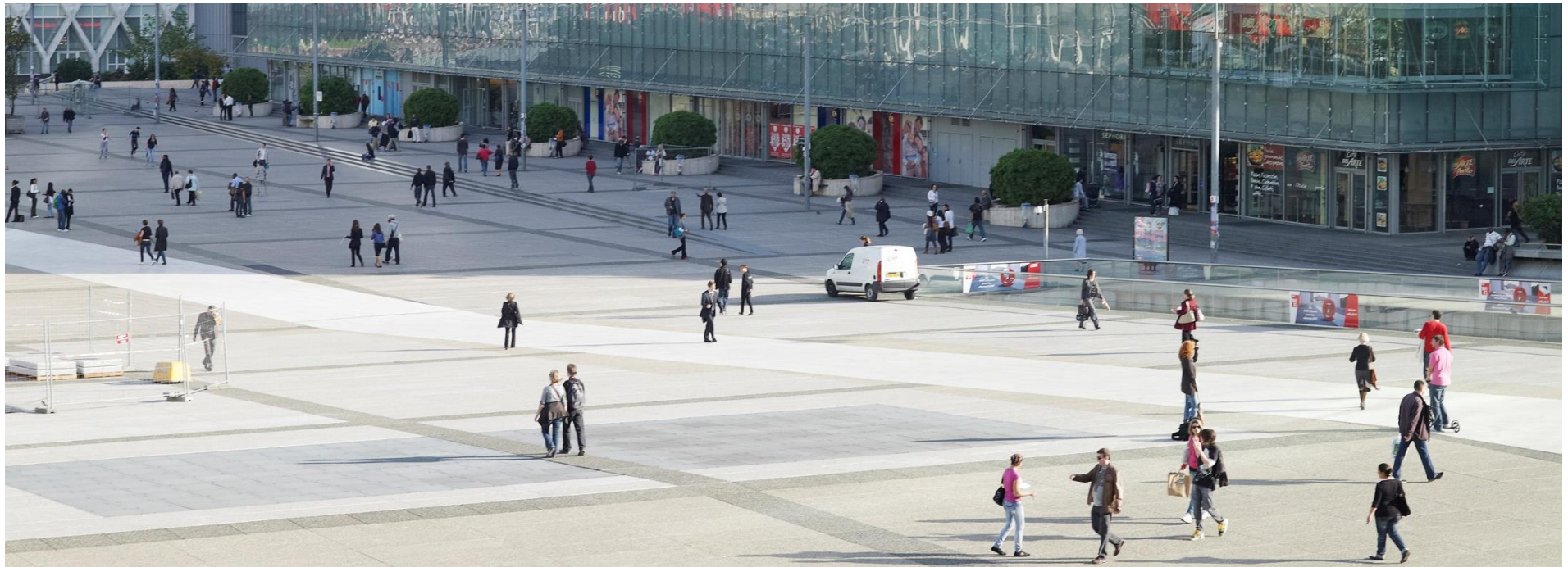


Stars and Zombies

Greek corporates coming out of the crisis

Executive summary

June 2014



Growth for Greece

- For the Greek economy to restart and return to growth, incremental investments are needed amounting for about 7% of the GDP annually
- Fund attraction will be facilitated by :
 - a simpler and robust regulatory framework
 - a stable tax system
 - quick and effective public administration
- The broader areas infrastructure and tourism can mobilize significant capital in a rather short period of time
- The high multipliers of these two areas will lead other sectors to growth

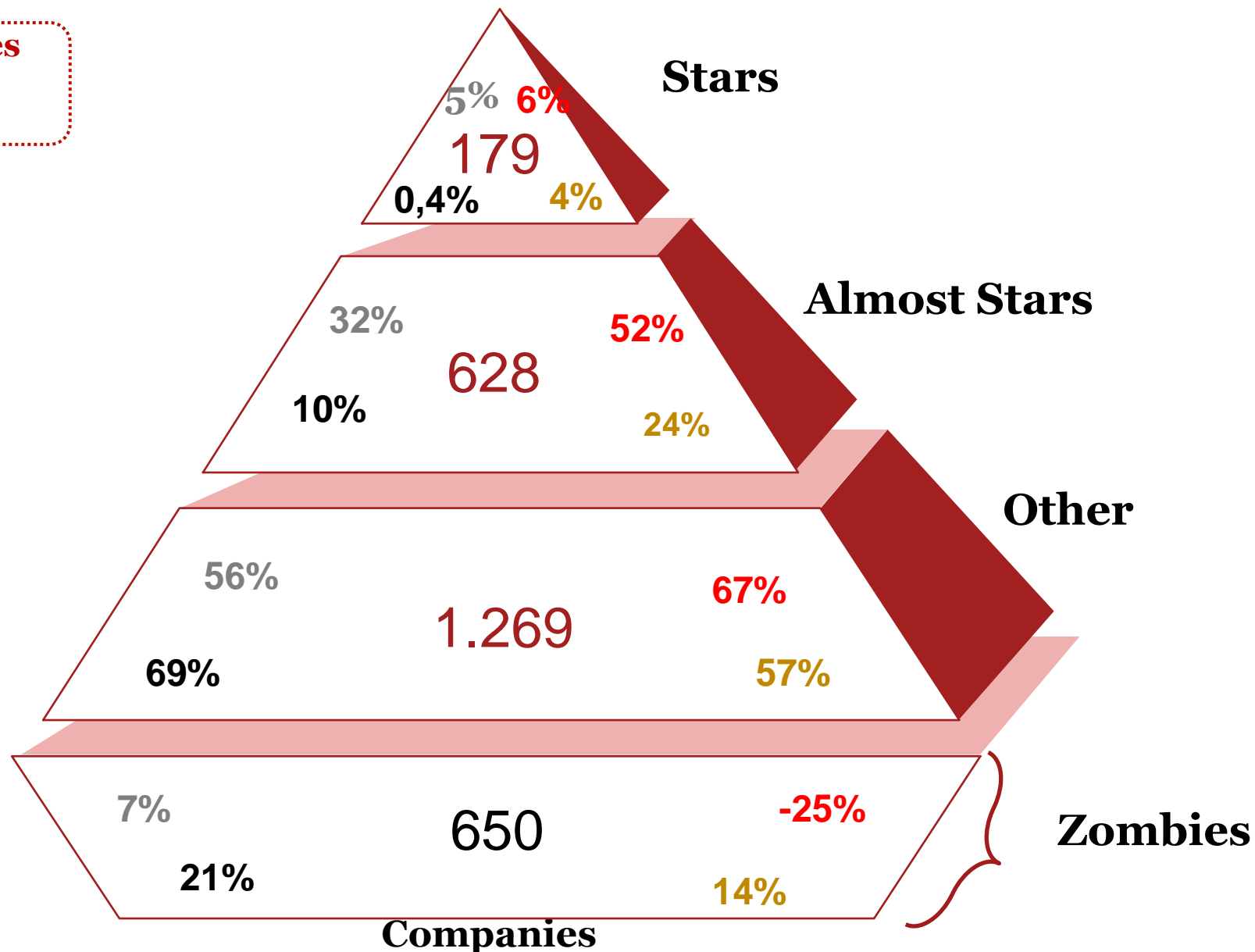
Over 2.000 investing opportunities

The value pyramid of the Greek corporate economy

3.000 companies
with revenues
>€10m.

~ 25% of GDP

~ 500.000
employees



Methodology (1/3)

- The Greek active limited liability companies are in total 23,376. A sample of 3,153 (13.5%) companies that had **annual revenues of more than €10 mn** in any given year during the period 2008-2012 was selected
- The data used for the period 2008-2012 were extracted from the published financial statements of the companies. For 197 companies whose financial statements were not available for 2012 we estimated their financial data based on that of previous years
- For 12 Groups of companies, which were centrally financed, consolidated figures were used instead of individual company figures
- The companies whose debt is guaranteed by the Greek state have been excluded from the sample
- 203 companies were excluded from the sample for a number of reasons, ending up with **2,950** companies
- These 2,950 companies represent 85% of revenues and 67% of Fixed Assets of the total corporate economy

Methodology (2/3)

- The companies were classified in terms of **Growth, Profitability** and **Debt Sustainability**
- The criteria chosen for the classification of the companies were the Compound Annual Growth Rate of Revenue (2008-2012), Return on Capital Employed (ROCE) and the Net Debt / EBITDA

Criteria	Star	Grey	Zombie
CAGR Revenue (2008-2012)	Greater than 5%	Between -5% and 5%	Less than -5%
ROCE	Greater than 15%	Between 0% and 15%	Less than 0% or Capital Employed <0
Net debt/ EBITDA	Less than 1.5 or Net Debt <0	Between 1.5 and 5	Greater than 5 or EBITDA <0

Methodology (3/3)

- By combining the three financial variables 27 different classes of companies were created
- According to the ranking against each of the criteria, the classes formed are combinations such as for example SGZ (Star, Grey, Zombie)
- Classes with similar characteristics were merged into 10 Groups in order to facilitate statistical analysis

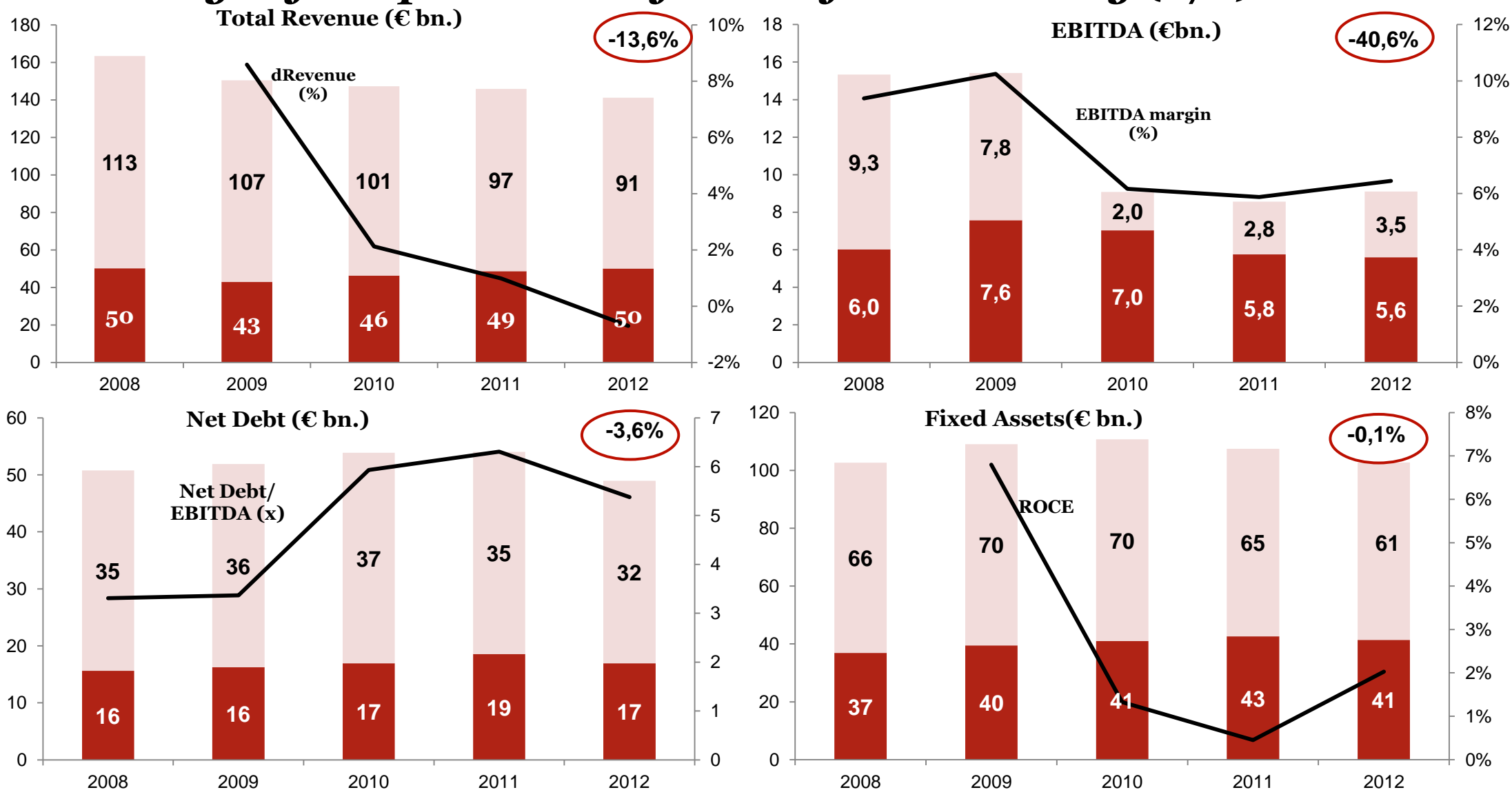
No	Groups	Classes	Designation	Groupings
1	Group 5*	SSS	Stars	Stars
2	Group 4*	SSG+SGS+GSS	Almost Stars	Almost Stars
3	Group 3*	SGG+GSG+GGS	Aspiring Stars	
4	Group 2*	SSZ+SZS+ZSS	Stars with Zombie aspects	
5	Group 1*	GGG	Good	Grey
6	Group -1*	GSZ+SGZ+ZGS+GZS+SZG+ZSG	Mixed Bags	
7	Group -2*	ZGG+GZG+GGZ	Departing Good	Almost Zombies
8	Group -3*	ZZS+ZSZ+SZZ	Zombies with Star aspects	
9	Group -4*	ZZG+ZGZ+GZZ	Almost Zombies	
10	Group -5*	ZZZ	Zombies	Zombies

- 76 companies which have applied for restructuring under Article 99 of law 3588/07 have been classified as Zombies (-5*)
- The groups were further consolidated into three groupings (Stars: 5*/4*/3*/2*, Grey: 1*/-1*, Zombies: -2*/-3*/-4*/-5*) in order to facilitate the understanding of the dynamics

Significant decline of economic activity, yet no extensive damage of the production fabric of the economy (1/2)

- The sample had in 2012 revenues of almost €141bn, €120bn capital employed, €61bn debt and approximately 470k employees during the period 2008-2012
- Almost 1/3 of the sample's revenue derives from 12 Groups of companies
- Aggregate sample revenue decreased 13.6% between 2008-2012, with total assets going down by 5.1 % and fixed assets remaining almost constant
- Profitability, in terms of EBITDA, decreased by 40.6% while Earnings Before Taxes collapsed from €6bn in 2008 to - €1bn in 2012. In addition, during the same period capital employed was under remunerated
- Capital employed dropped by only 6.8%, debt by 5.9% and shareholders' equity by 7.9% over the period 2008-2012 , suggesting that the production fabric of the economy remained active
- Financing shrank by 8% leading to a 24.3% contraction of working capital through increases in short term liabilities
- Debt sustainability of the sample deteriorated substantially between 2008 and 2012, with loans representing in 2012 about 52% of capital employed
- In summary, despite the fact that the capital structure of the sample did not change significantly, the decrease in revenue and the shrinkage of profitability had a major impact on debt servicing for a significant number of companies

Significant decline of economic activity, yet no extensive damage of the production fabric of the economy (2/2)



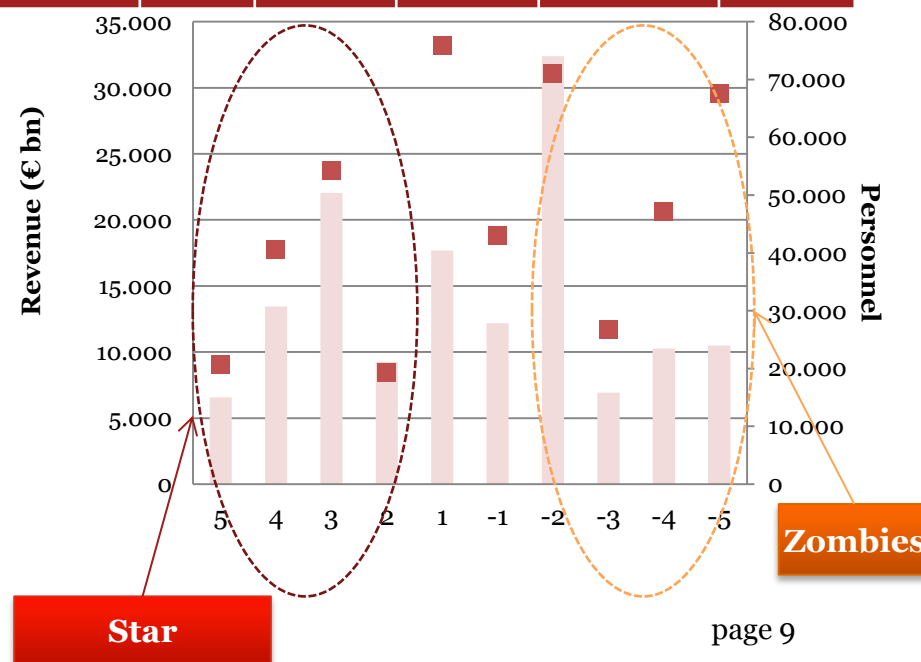
Debt servicing difficulties increase exponentially from Group 5 to Group -5

* in € millions

No	Group	# Companies	% Companies	Personnel	Revenue*	CAGR Revenue '08-'12	EBITDA*	EBITDA Margin	ROCE	Fixed Assets*	Net Debt*	Capital Employed*	Net Debt / EBITDA
1	5*	179	7%	20,672	6,570	24%	513	8%	34%	729	-187	1,430	N/A
2	4*	230	8%	40,585	13,437	8%	1,406	10%	14%	6,564	286	7,979	0.2
3	3*	253	9%	54,194	22,031	10%	1,583	7%	9%	8,201	3,411	10,642	2.2
4	2*	145	5%	19,272	9,260	-9%	1,767	19%	53%	2,357	-500	3,155	N/A
5	1*	107	4%	75,904	17,680	0%	2,210	13%	5%	21,223	8,194	19,766	3.7
6	-1*	342	13%	42,941	12,176	-3%	806	7%	4%	7,665	2,564	10,095	3.2
7	-2*	275	10%	71,063	32,392	-3%	3,363	10%	6%	24,062	12,294	27,831	3.7
8	-3*	210	8%	26,630	6,926	-1%	-19	0%	-11%	6,885	2,661	6,449	N/A
9	-4*	335	12%	47,196	10,270	-9%	-228	-2%	-5%	10,271	8,518	13,235	N/A
10	-5*	650	24%	67,471	10,476	-21%	-2,295	-22%	-16%	14,798	11,701	17,091	N/A
Total		2,726		465,928	141,217	-3%	9,105	6%	2%	102,756	48,942	117,673	5.4

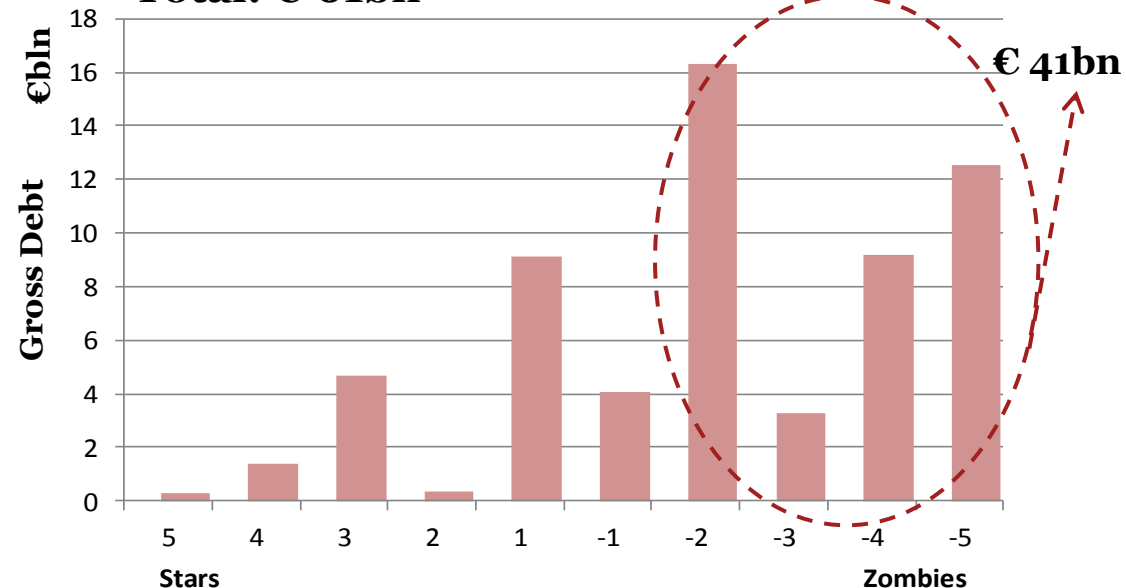
Stars
Grey
Zombies

- 7% of the companies are Stars (Group 5*) versus 24% which are Zombies (Group -5*). Almost 30% belong to the Star groups and 54% to the Zombie groups
- Only Star companies show growth while Zombies' profitability is negative
- The Zombie groups accounts for 43% of total revenue, 55% of capital employed and 72% of net debt
- Zombie groups has almost 213 thousand employees, approximately 46% of the total
- 36% of revenue originates from the Star groups and 42% from the Zombie groups

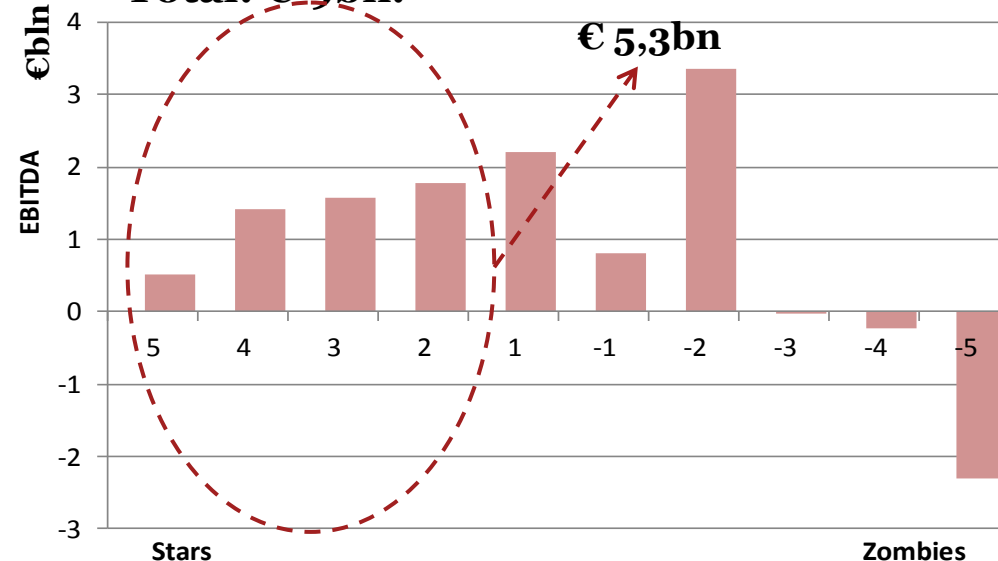


Corporate debt is concentrated in Zombies; profit and growth in Stars

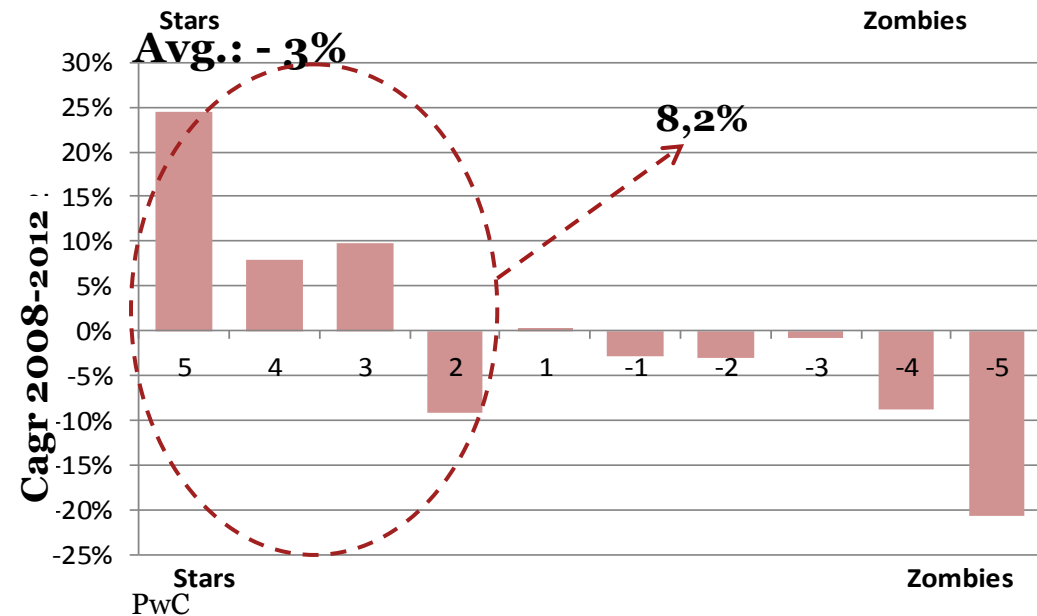
Total: € 61bn



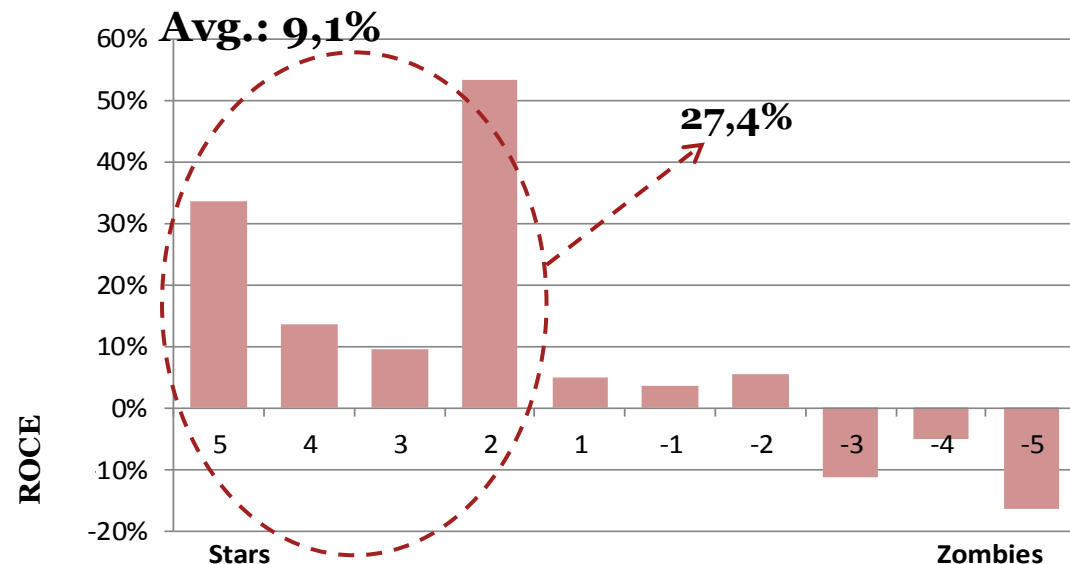
Total: € 9bn.



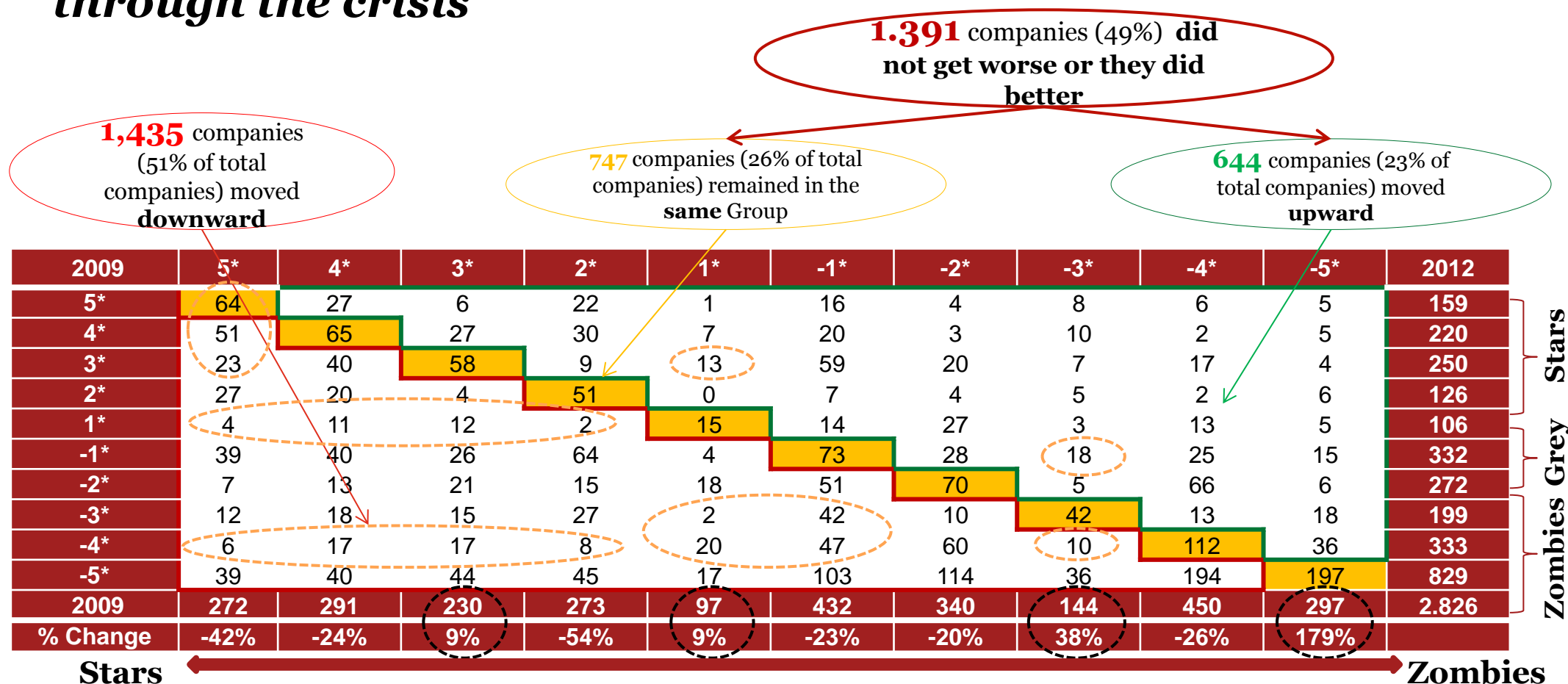
Stars
Avg.: - 3%



Avg.: 9,1%



The Greek corporate economy retained some of its dynamism through the crisis



- Out of the total sample, 1,435 companies moved downward (51% of total), while 1,391 companies did not worsen or they did better (49% of total)
- Since 2009, 632 companies turned into Zombies (-5*) in 2012, while 95 companies became Stars (5*)
- 66% of Zombies (-5*) failed to move upward, while only 24% of Stars (5*) of 2009 remained there

* 220 companies were classified directly as Zombies in 2012 (144 due to ceasing publishing financial statements from 2009 onwards)

Capital employed decreased by €11bn between 2009-2012, almost exclusively due to Zombies

	Equity			Total Debt			Cash			Capital Employed		
	2009	2012	Δ	2009	2012	Δ	2009	2012	Δ	2009	2012	Δ
5*	0.6	1.2	0.5	0.3	0.3	0.0	0.2	0.5	0.3	0.9	1.4	0.5
4*	4.9	6.6	1.7	1.5	1.4	0.0	1.1	1.1	0.0	6.3	8.0	1.7
3*	5.1	6.0	0.9	3.9	4.7	0.8	0.9	1.2	0.3	9.0	10.6	1.6
2*	1.9	2.8	0.9	0.3	0.3	0.1	1.6	0.8	-0.7	2.1	3.2	1.0
1*	10.8	10.7	-0.1	9.0	9.1	0.1	1.1	0.9	-0.2	19.8	19.8	0.0
-1*	5.8	6.0	0.2	4.4	4.1	-0.3	1.7	1.5	-0.2	10.2	10.1	-0.1
-2*	11.1	11.5	0.4	16.4	16.3	-0.1	3.3	4.0	0.7	27.5	27.8	0.3
-3*	3.4	3.2	-0.3	3.8	3.3	-0.5	0.7	0.6	-0.1	7.2	6.4	-0.8
-4*	5.7	4.1	-1.7	9.1	9.2	0.1	0.9	0.7	-0.2	14.8	13.2	-1.6
-5*	13.8	4.5	-9.3	16.9	12.6	-4.3	2.1	0.9	-1.3	30.7	17.1	-13.6
Total	63.18	56.48	-6.70	65.53	61.20	-4.33	13.64	12.26	-1.38	128.70	117.67	-11.03

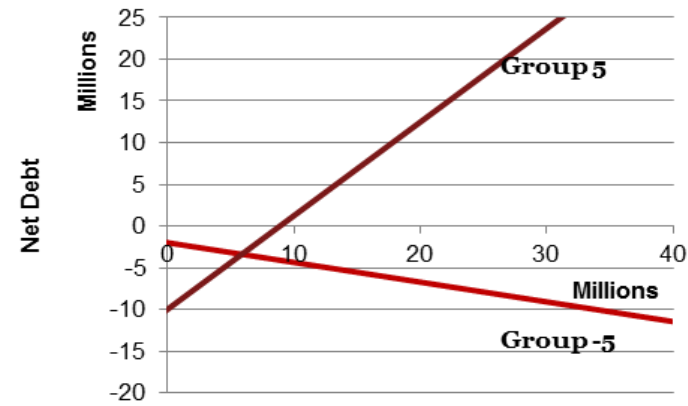
- Between 2009 and 2012 in the overall sample capital outflow of €11bn was took place. Equity decreased by €6.7bn while total debt by €4.3 bn. This reduction is almost exclusively due to the Zombie groups. The majority of companies in other groups raised both equity and cash levels within the period of crisis
- A significant reduction of equity due to losses is observed in the Zombie group. There is an inflow of equity in the majority of the remaining groups
- Total debt decreased in the Zombie groups, with the greatest reduction taking place in the last Zombie group (-5*)

Capital use differs significantly between Groups (1/2)

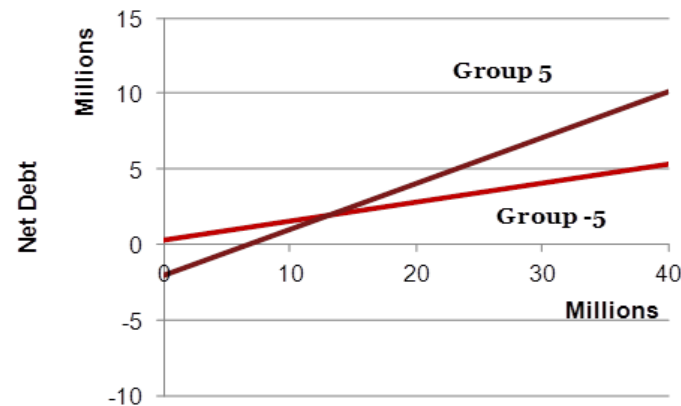
$\Delta \text{ Net Debt} = a_1 \text{EBITDA} + a_2 \text{CapEx} + a_3 \text{Interest} + a_4 \Delta \text{Share Capital} + a_5 \Delta \text{CA} + a_6 \Delta \text{CL}$							
	EBITDA	Capital Exp.	Interest	Share Capital	$\Delta \text{ Current Assets}$	$\Delta \text{ Current Liabilities}$	
	α_1	α_2	α_3	α_4	α_5	α_6	R^2
Total	-0.12	0.56	-0.56	-0.32	0.34	-0.39	0.70
Group 5*	-0.30	0.88	-0.75	-1.13	0.41	-0.52	0.97
Group 4*	-0.13	0.48	-0.27	-0.31	0.04	-0.38	0.70
Group 3*	-0.15	0.13	-1.61	-0.16	0.24	-0.30	0.71
Group 2*	0.27	-0.27	-0.39	-0.46	-0.11	0.46	0.79
Group 1*	-0.02	0.80	0.14	-0.56	0.89	-0.54	0.93
Group -1*	-0.58	0.89	-1.15	-0.57	0.71	-1.19	0.87
Group -2*	-0.23	0.84	0.60	-0.43	0.65	-0.41	0.89
Group -3*	-0.05	0.74	-0.85	-0.30	0.51	-0.70	0.97
Group -4*	-0.45	0.51	-1.20	-0.38	0.81	-0.84	0.91
Group -5*	-0.43	0.32	-0.88	-0.24	0.68	-0.45	0.63

- About **50% of EBITDA** has been used for **Debt repayment** from Zombies
- **Investment** is being funded to more than **50%** by debt, apart from the zombies
- **Interest payments** in the Zombie categories are funded **90% through new debt**
- **Share capital increases** are **50%** used by Zombies for **Debt repayment**
- Additional **working capital requirements** are not financed through debt, but from **trading partners**

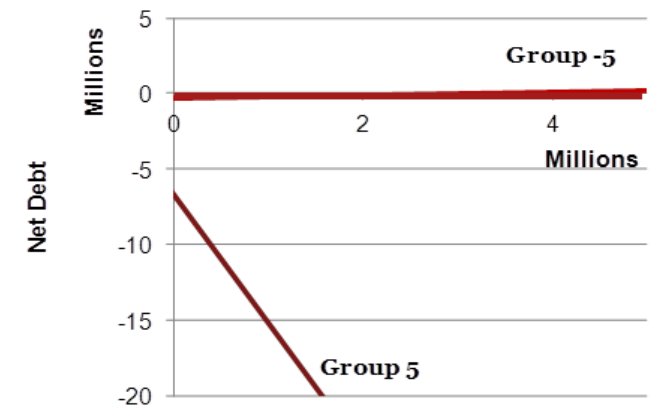
Capital use differs significantly between Groups (2/2)



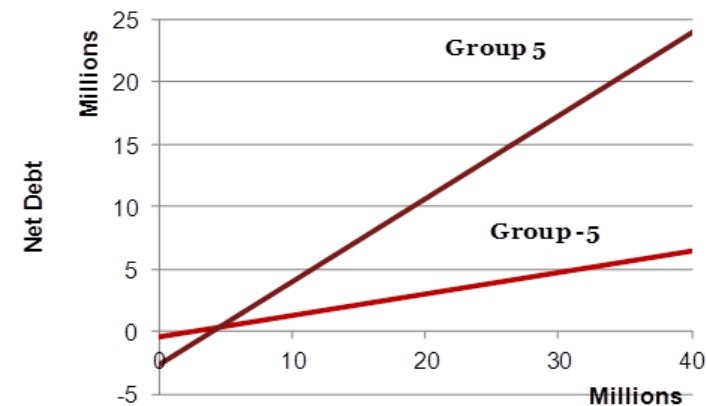
EBITDA



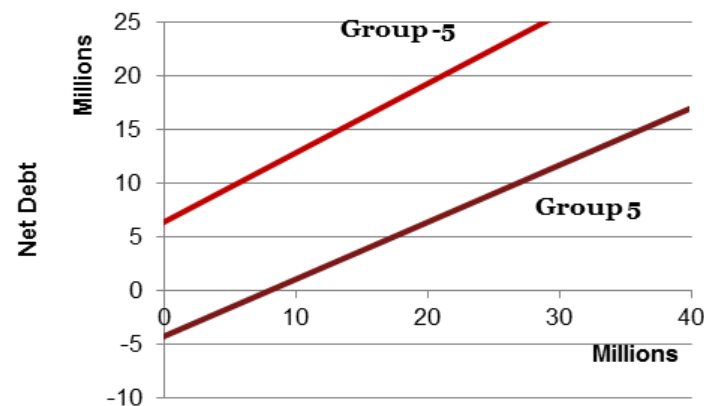
CapEx



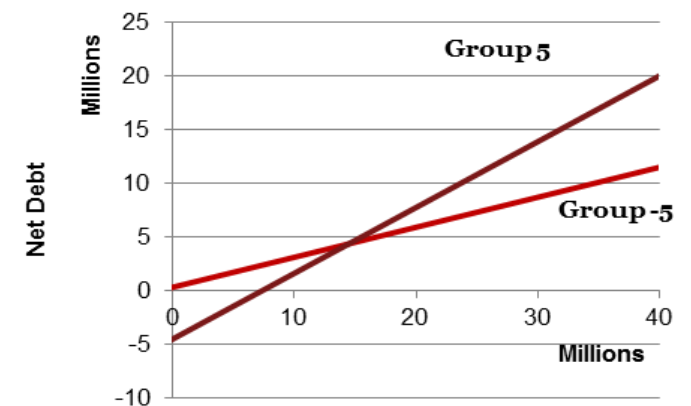
Interest



Share Capital



Current Assets



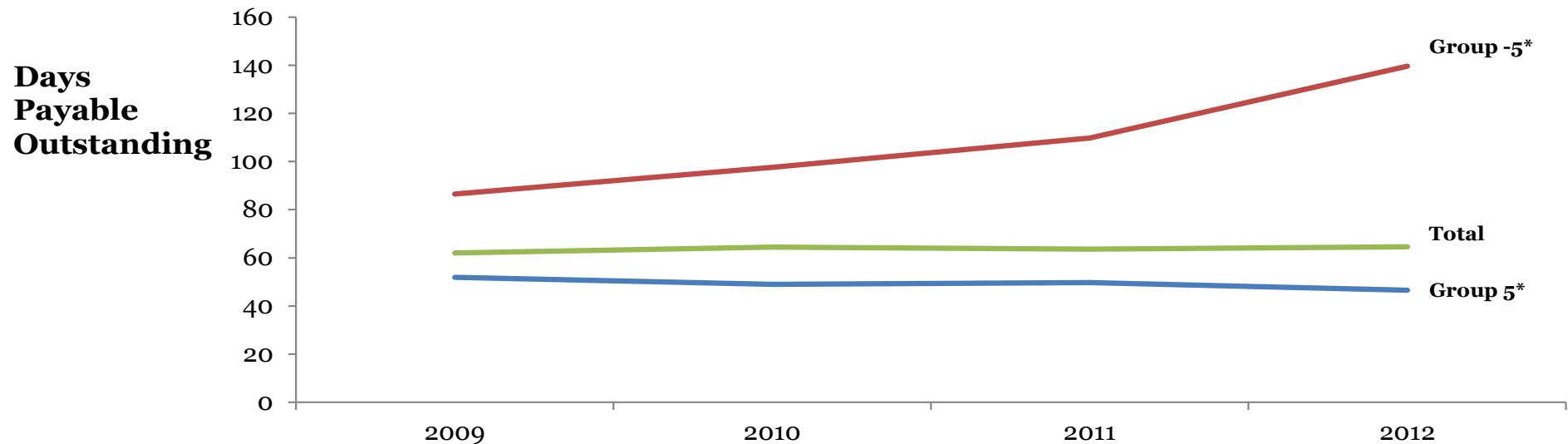
Current Liabilities

Zombies' return on capital employed decreased by 17 percentage points during the period 2009-2012

	Capital Employed			ROCE		
€ bn	2009	2012	Δ %	2009	2012	Δ (pps)
5*	0.90	1.43	58%	20%	34%	14.0
4*	6.33	7.98	26%	12%	14%	1.5
3*	9.01	10.64	18%	9%	9%	0.5
2*	2.14	3.16	47%	67%	53%	-13.8
1*	19.79	19.77	0%	11%	5%	-6.3
-1*	10.22	10.09	-1%	7%	4%	-3.6
-2*	27.54	27.83	1%	9%	6%	-3.2
-3*	7.25	6.45	-11%	-4%	-11%	-7.9
-4*	14.83	13.24	-11%	2%	-5%	-6.7
-5*	30.69	17.09	-44%	0%	-16%	-16.8
Total	128.70	117.67	-9%	7%	2%	-4.77

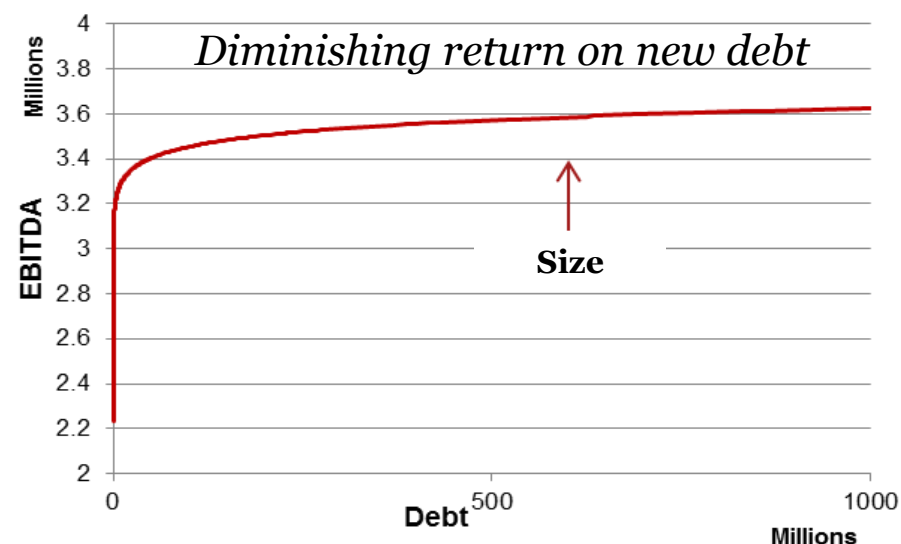
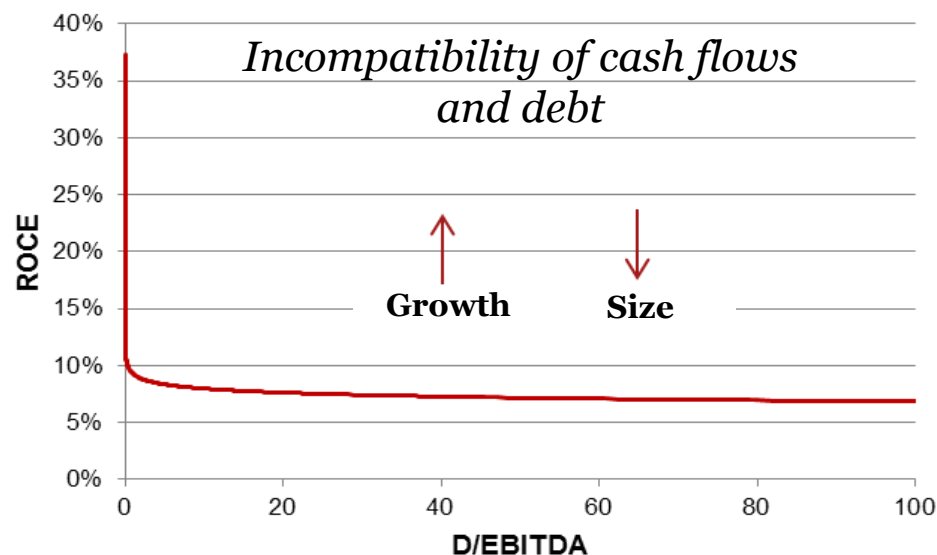
- In total, during the period 2009-2012 capital employed decreased by 9%; however, this decrease did not compensate for the shrinking EBITDA
- Capital employed due the Star groups increased almost by €5bn while in the Zombie groups it decreased by €15.7bn, with €13.6bn to Zombies (-5*)
- Star companies have positive and high returns on capital employed
- Return on capital employed increased in the Star groups (5*,4*), decreased significantly in the groups 2*,1* and collapsed in the Zombie groups with the last three groups consuming a great part of capital employed

Zombies have a negative effect on the cash flows of all other companies



- During the period 2009-2012 the Zombie companies showed a constantly increasing number of Days Payable Outstanding compared to the total of companies, causing cash flow problems to the counterparties
- Zombie companies delay their payments 53 days more than they did in 2009
- In 2012, the average Zombie company delayed its payments to its suppliers 75 days more than the average company of the sample. The average Star company paid its suppliers 18 days earlier than the average company of the sample
- The growing delays in payments of Zombie companies increases the financing needs in the rest of the groups

High levels of debt reduce ROCE whilst fresh debt beyond a point does not lead to EBITDA increase



$$\ln(\text{ROCE}) = \alpha_1 \ln R + \alpha_2 \ln(D/\text{EBITDA}) + \alpha_3 \ln(\Delta R/R_{2008-2012})$$

	α_1	α_2	α_3	R^2
Total	-0.14	-0.08	0.02	0.78
Group 5*	-0.08	-0.07	0.02	0.52
Group 4*	-0.12	-0.04	-0.02	0.73
Group 3*	-0.15	0.02	0.00	0.93
Group 2*	2.34	0.00	-2.10	0.55
Group 1*	-0.11	-0.65	0.01	0.94
Group -1*	-0.18	-0.04	0.00	0.88
Group -2*	-0.09	-0.75	0.01	0.95
Group -3*	-	-	-	-
Group -4*	-	-	-	-
Group -5*	-	-	-	-

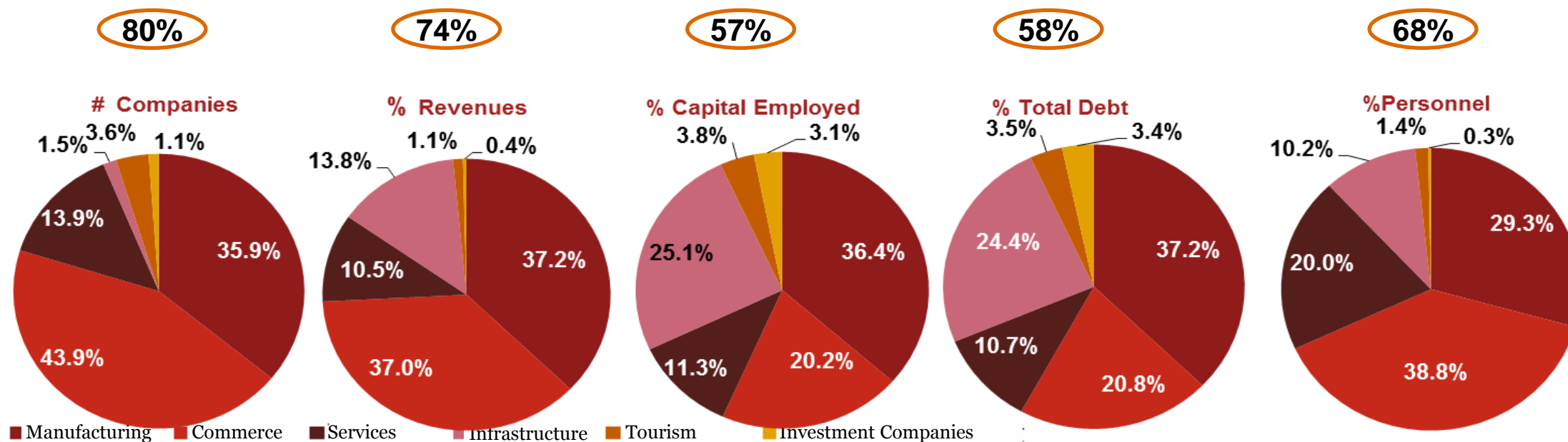
$$\ln(\text{EBITDA}) = \alpha_1 \ln R + \alpha_2 \ln D$$

	α_1	α_2	R^2
Total	0.81	0.02	0.99
Group 5*	0.82	0.04	0.98
Group 4*	0.83	0.02	0.99
Group 3*	0.81	0.04	0.99
Group 2*	0.84	0.03	0.98
Group 1*	-0.10	1.02	0.99
Group -1*	0.81	0.03	0.98
Group -2*	0.11	0.76	0.99
Group -3*	0.77	0.03	0.96
Group -4*	0.12	0.72	0.99
Group -5*	0.75	0.02	0.98

General Categories

- The companies were classified into sectors by the type of their economic activity. The ICAP classification of sectors was used as a basis, which were then grouped into six hyper-sectors
- The **Manufacturing** hyper-sector includes most of the Greek companies engaged in light and heavy manufacturing industry
- The hyper-sector of **Commerce** accounts for a good part of the tertiary sector in the Greek economy
- The hyper-sector of **Services** also represents a share of tertiary production
- The **Tourism** hyper-sector includes hotels and companies which offer tourism related services
- The hyper-sector of **Investment Companies** includes all whose operating model is based on capital investment outside the financial sector
- The **Infrastructure** hyper-sector includes companies which build and operate the country's infrastructure such as public utilities, telecommunications and main roads

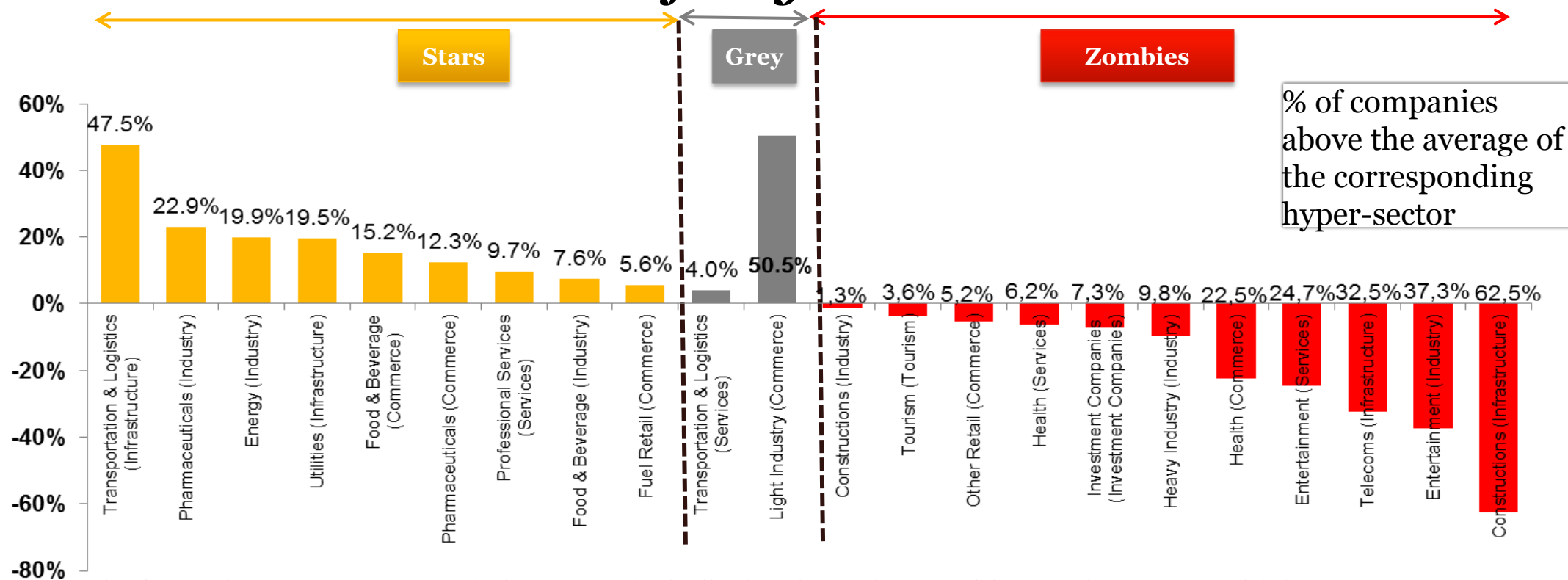
Manufacturing, commerce and services represent...



No	Sectors	Companies	Income*	EBITDA*	Earnings before Taxes*	Capital Employed*	Total Debt*	Personnel
1	Manufacturing	979	52.522	2.160	-1.074	42.825	22.787	136.692
2	Commerce	1.197	52.287	1.646	-408	23.818	12.735	180.909
3	Services	380	14.790	1.593	457	13.276	6.550	93.067
4	Infrastructure	40	19.453	4.105	816	29.569	14.904	47.387
5	Tourism	99	1.588	113	-168	4.527	2.152	6.567
6	Investment Companies	31	578	-512	-691	3.657	2.070	1.306
Total		2.726	141.217	9.105	-1.068	117.673	61.198	465.928

*€ millions

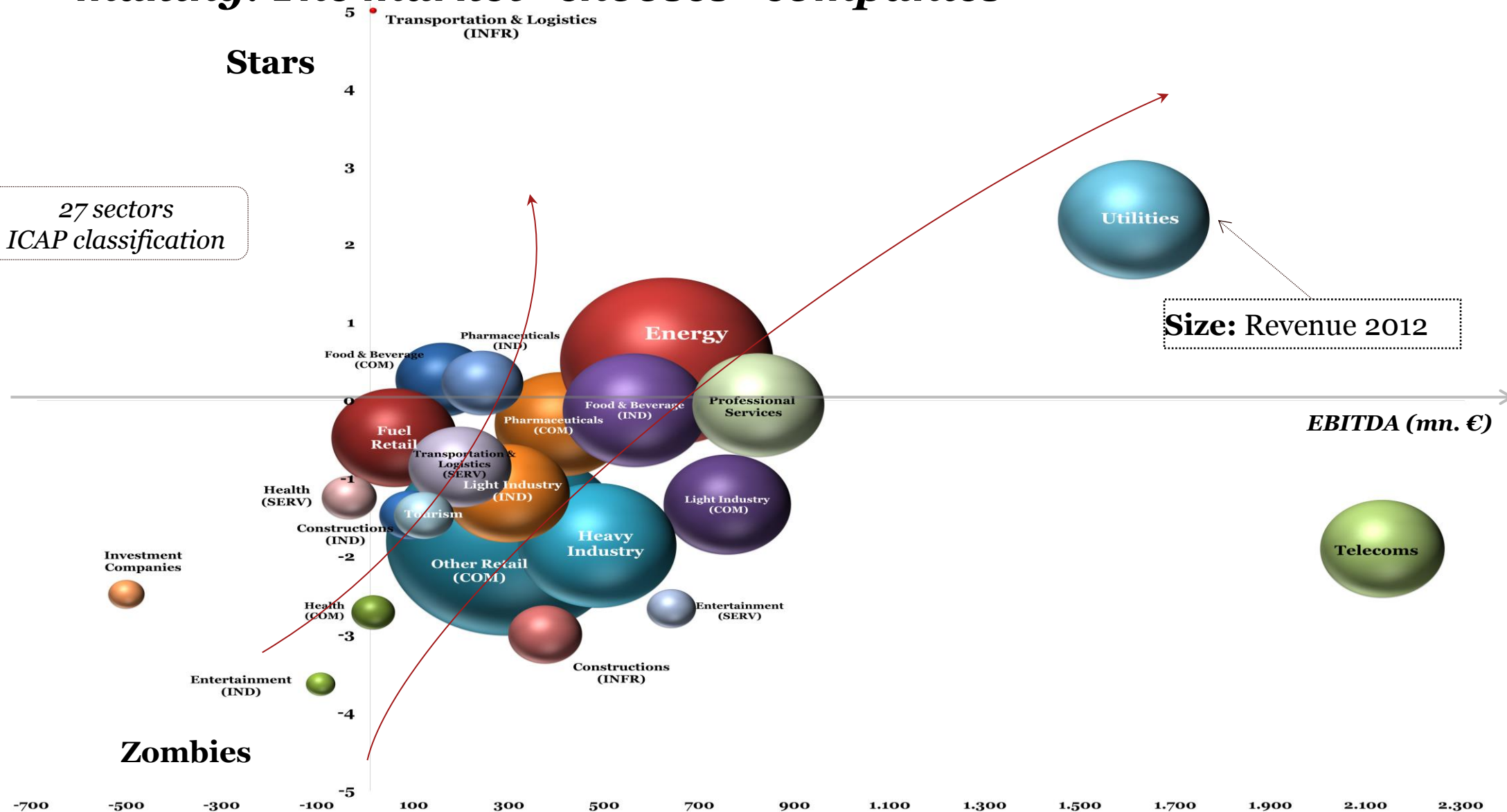
Sectors with a relative majority in Stars or Zombies



- The food & beverage, energy and pharmaceuticals display signs of competitiveness in contrast with heavy industry, entertainment and construction
- Food & beverage (commerce), fuel retail and pharmaceutical commerce stand out in terms of Star characteristics while health commerce has a strong Zombie contingent
- The Infrastructure sector, except for telecoms and construction, has a large population of Stars
- In the Services sector, professional services stand out for their number of Stars and entertainment for their number of Zombies

27 sectors ICAP classification

Sectors approaches lack the clarity to become a base for policy making. The market “chooses” companies



Main drivers of the corporate economy

The main assumptions regarding the companies' economic behaviour :

- the size of the company affects adversely returns on capital
- indebtedness affects negatively the return on capital employed
- growth is positively correlated with returns on capital employed
- profit in terms of EBITDA is positively affected by size and debt

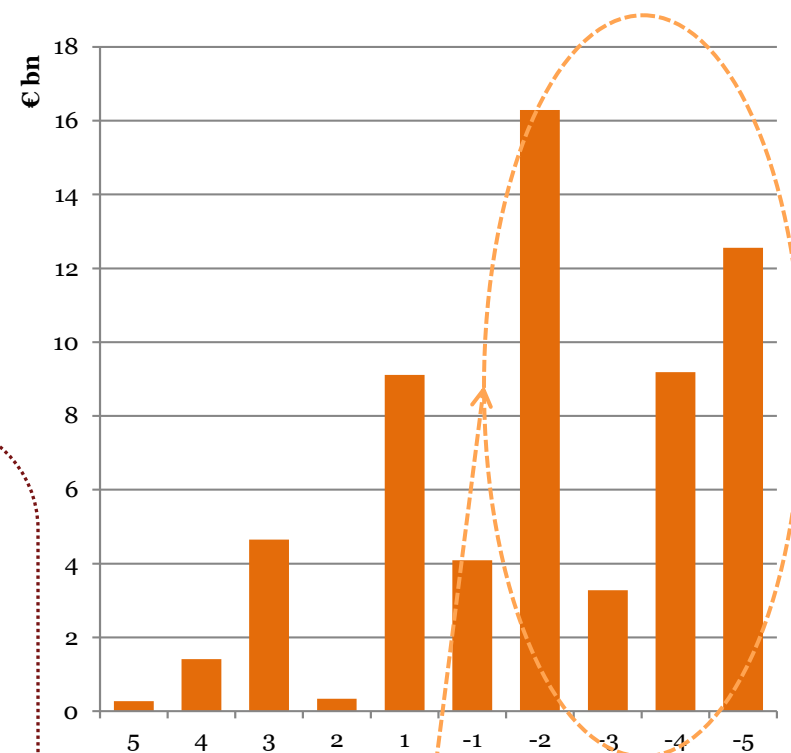
The above mentioned assumptions were tested with the use of regression models applied both on the total sample and the individual groups, and led to the following conclusions:

- The greatest shrinkage on their capital base was suffered by Zombies
- Debt is recycled to a great extent, preserving mostly Zombie companies
- Zombies disseminate economic pressure on the rest of the groups (viral)
- Indebtedness inhibits profits and growth
- Size increases profit, but leads to diminishing returns on capital

The sample's total debt (€61bn) is concentrated mostly in the Zombie groups

- The analysis highlights that a part of the sample's total debt (approximately €41bn) cannot be repaid normally
- The question is **how much is the amount of debt that needs to be restructured or refinanced in order for debt to be sustainable in the sampled companies**
- The exercise was carried at the company level according to the approach below :

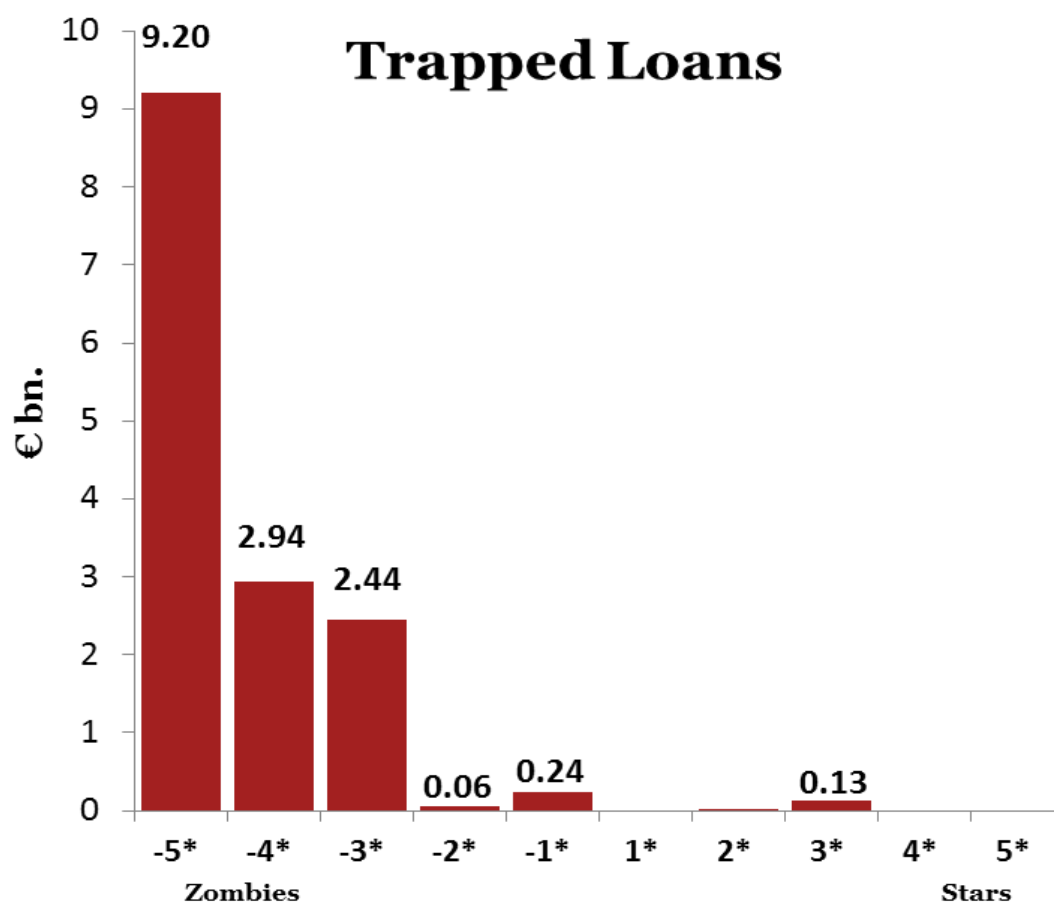
1. Net Debt/ EBITDA was set equal to 5, as the maximum acceptable limit for the debt sustainability
2. The average EBITDA over years 2010, 2011 and 2012 was used in the calculation
3. For every company with negative EBITDA, it was assumed that the debt committed will not be repaid ("Trapped Debt")
4. For every company with positive EBITDA, the debt level that requires refinancing ("Refinanceable Debt") was calculated using the debt sustainability ratio of Net Debt/ EBITDA=5
5. "Trapped Debt" as well as "Refinanceable Debt" were aggregated by group and by sector



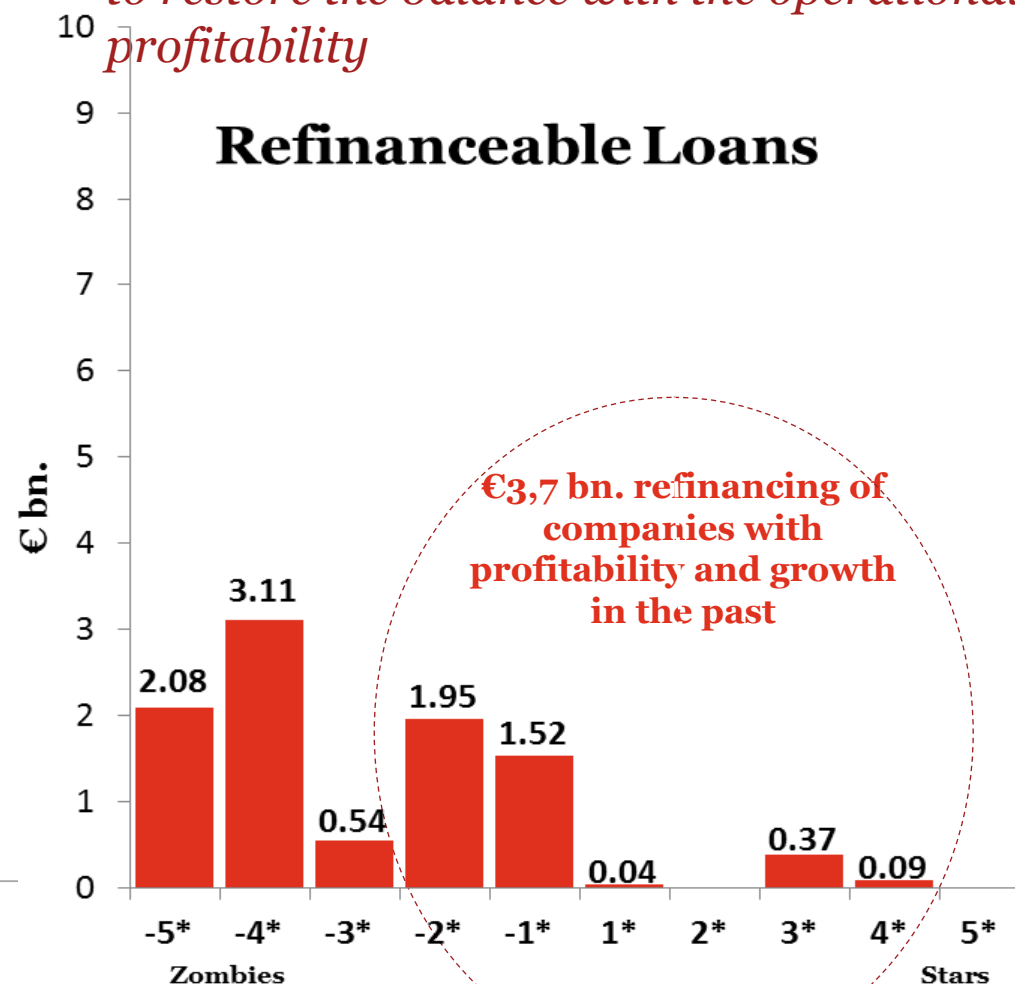
Total debt for the groups -5* to -2* amounts to € 41bn, part of which is reflected at the corporate NPLs of the Greek banks

For the refinancing of the corporate economy, over a reasonable time horizon, banks may:

...restructure about €15 bn. (25% of loans) to release assets, mostly by Zombies



... refinance about €10 bn. (15% of loans) to restore the balance with the operational profitability



In total, up to about €9.7bn (15% of loans) should be refinanced and up to €15bn (25% of loans) should be restructured in the Zombie groups

Trapped Debt	-5*	-4*	-3*	-2*	-1*	1*	2*	3*	4*	5*	Total
Commerce	2.47	0.52	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19
Manufacturing	3.95	1.45	0.78	0.05	0.15	0.00	0.00	0.01	0.00	0.00	6.39
Infrastructure	0.00	0.06	0.72	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89
Investment Companies	0.69	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
Services	1.86	0.26	0.53	0.00	0.02	0.00	0.00	0.01	0.00	0.00	2.69
Tourism	0.22	0.00	0.22	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.50
Total	9.20	2.94	2.44	0.06	0.24	0.00	0.00	0.13	0.00	0.00	15.00

Refinanceable Debt	-5*	-4*	-3*	-2*	-1*	1*	2*	3*	4*	5*	Total
Commerce	0.61	1.01	0.01	0.34	0.55	0.01	0.00	0.24	0.08	0.00	2.83
Manufacturing	0.88	1.06	0.13	1.10	0.44	0.03	0.00	0.02	0.01	0.00	3.66
Infrastructure	0.00	0.26	0.01	0.27	0.08	0.00	0.00	0.01	0.00	0.00	0.64
Investment Companies	0.05	0.14	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.24
Services	0.23	0.32	0.29	0.07	0.32	0.00	0.00	0.10	0.00	0.00	1.35
Tourism	0.32	0.32	0.09	0.17	0.08	0.00	0.00	0.00	0.00	0.00	0.98
Total	2.08	3.11	0.54	1.95	1.52	0.04	0.00	0.37	0.09	0.00	9.71

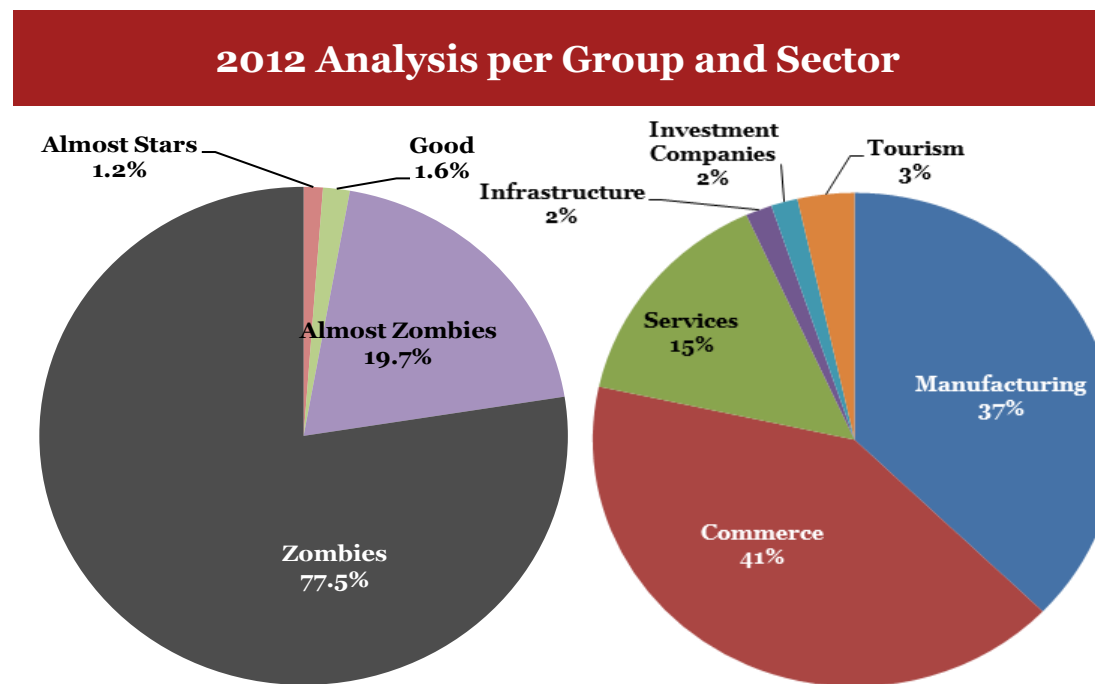
Grand Total	11.29	6.04	2.98	2.01	1.76	0.04	0.00	0.50	0.09	0.00	24.71
Total Debt	12.56	9.18	3.28	16.28	4.09	9.11	0.34	4.65	1.41	0.27	61.20
% over Total Debt	90%	66%	91%	12%	43%	0.4%	1%	11%	6%	0%	40%

€ bn

97% of companies with trapped debt belong to the Zombie groups

- This class consists of 427 companies which account for **8% of revenue, 15% of the sample's capital and 25% of debt**
- Most of the companies (331) belong to Zombies (-5*), while 84 companies belong to Almost Zombies
- 78% of the companies are in **Commerce** and **Manufacturing** (41% and 37% respectively)

€ bn	Class data	Total Sample	%
Revenue	11.1	141	8%
CAGR	-12%	-5%	-7.2
EBITDA	-2.7	9.1	N/A
Net Debt	14.2	48.9	29%
Total Debt	15.0	61.2	25%
Capital Employed	18.1	117.7	15%



Changes in the Debt Sustainability level (Net Debt/ EBITDA) utilized have a relatively small impact ($\pm \approx 4$ bn) on restructured and refinanceable debt

ND/E =5

€ bn Total figures	Refinanceable Debt		Trapped Debt		Initial Debt Level	Post Restructuring	% of Restructuring
	Number of companies	Debt Level	Number of companies	Debt Level			
Commerce	295	2.83	176	3.19	12.73	6.71	47%
Manufacturing	291	3.66	159	6.39	22.79	12.74	44%
Infrastructure	7	0.64	7	0.89	14.90	13.37	10%
Investment Companies	6	0.24	7	1.34	2.07	0.49	76%
Services	66	1.35	63	2.69	6.55	2.52	62%
Tourism	38	0.98	15	0.50	2.15	0.66	69%
Total	703	9.71	427	15.00	61.20	36.5	40%
Total Restructuring	24.70 bn / 1130 Companies						

ND/E =8

€ bn Total figures	Refinanceable Debt		Trapped Debt		Initial Debt Level	Post Restructuring	% of Restructuring
	Number of companies	Debt Level	Number of companies	Debt Level			
Commerce	182	1.83	176	3.19	12.73	7.71	39%
Manufacturing	188	2.04	159	6.39	22.79	14.36	37%
Infrastructure	3	0.05	7	0.89	14.90	13.96	6%
Investment Companies	4	0.18	7	1.34	2.07	0.55	73%
Services	39	1.03	63	2.69	6.55	2.83	57%
Tourism	29	0.73	15	0.50	2.15	0.91	58%
Total	445	5.86	427	15.00	61.20	40.3	34%
Total Restructuring	20.86 bn / 872 Companies						

ND/E =4

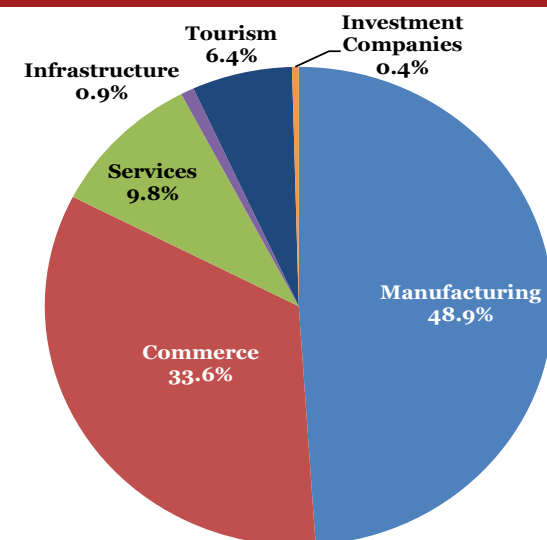
€ bn Total figures	Refinanceable Debt		Trapped Debt		Initial Debt Level	Post Restructuring	% of Restructuring
	Number of companies	Debt Level	Number of companies	Debt Level			
Commerce	337	3.31	176	3.19	12.73	6.23	51%
Manufacturing	340	4.71	159	6.39	22.79	11.69	49%
Infrastructure	10	1.51	7	0.89	14.90	12.50	16%
Investment Companies	6	0.26	7	1.34	2.07	0.47	78%
Services	76	1.49	63	2.69	6.55	2.37	64%
Tourism	41	1.08	15	0.50	2.15	0.57	73%
Total	810	12.36	427	15.00	61.20	33.8	45%
Total Restructuring	27.36 bn / 1237 Companies						

For the refinancing of over-indebted companies, which are profitable and have been growing in the past, about €3.7bn are required

€ bn	Trapped Debt		Refinanceable Debt	
Group	Number of companies	Debt Level	Number of companies	Debt Level
GGZ	2	0.05	137	1.94
SGZ	4	0.21	66	1.51
Σύνολο	6	0.26	203	3.45

€ bn	Over-indebted companies	Total Sample	%
Revenue	27.9	141.2	20%
EBITDA	1.3	9.1	15%
Net Debt	10.4	48.9	21%
Capital Employed	19.6	117.7	17%
ROCE	3.35%	2.03%	
Net Debt/ EBITDA	7.9	5.3	

2012 Sectorial Analysis



Creating the necessary conditions for the appearance of more Stars should be the main policy premise for the facilitation of resource allocation in the economy

2012	Total				2012	Typical Companies			
	Stars	Almost Stars	Other	Zombies		Stars	Almost Stars	Other	Zombies
Revenue*	6.570	44.727	79.444	10.476	Revenue*	36,7	71,2	62,6	16,1
Fixed Assets*	729	17.122	70.107	14.798	Fixed Assets*	4,1	27,3	55,2	22,8
Total Assets*	3.185	35.870	113.105	25.442	Total Assets*	17,8	57,1	89,1	39,1
Number of employees	20.672	114.051	263.734	67.471	Number of employees	115	182	208	104
EBITDA	513	4.755	6.131	-2.295	EBITDA	2,9	7,6	4,8	-3,5
EBITDA margin	7,8%	10,6%	7,7%	-21,90%	EBITDA margin	7,8%	10,6%	7,7%	-21,9%
EBT	410	3.174	-904	-3.748	EBT	2,3	5,1	-0,7	-5,8
EBT margin	6,23%	7,10%	-1,14%	-35,78%	EBT margin	7,8%	10,6%	7,7%	-21,9%
ROCE	33,6%	17,2%	1,9%	-16,4%	ROCE	33,6%	17,2%	1,9%	N/A
ROE	40,3%	22,1%	-2,5%	-63,1%	ROE	40,3%	22,1%	-2,5%	N/A
Capital Employed*	1430	21.776	77.376	17.091	Capital Employed*	8,0	34,7	61,0	26,3
Total Debt*	273	6.409	41.959	12.557	Total Debt*	1,5	10,2	33,1	19,3
Net Debt*	-187	3.196	34.231	11.701	Net Debt*	N/A	5,1	27,0	18,0
Shareholder Equity*	1.156	15.368	35.417	4.534	Shareholder Equity*	6,5	24,5	27,9	7,0
Net Debt/EBITDA	N/A	0,67	5,58	-5,10	Net Debt/EBITDA	N/A	0,67	5,58	-5,10
Net Debt/ Revenue	N/A	0,07	0,43	1,12	Net Debt/ Revenue	N/A	0,07	0,43	1,12
Net Debt/ Capital emp.	N/A	0,15	0,44	0,68	Net Debt/ Capital emp.	N/A	0,15	0,44	0,68
EBITDA/Financial Res.	18,13	10,80	2,58	-3,40	EBITDA/Financial Res.	18,13	10,80	2,58	-3,40

More and bigger Stars are necessary for sustained growth

The overall picture

- The sampled companies have loans of €61.2bn, versus almost €116bn total corporate loans in the economy
- Out of the 2,726 companies, 427 (15% of total companies) are completely unable to repay loans up to **€15bn (25% of sample loans)**
- Moreover, 703 companies (24% of total companies) could possibly repay loans of **€9.7bn (16% of total loans)** in the future if they were refinanced using the right type of financing
- About 97% of trapped debt is in the Zombie categories
- Changing the debt sustainability criterion, leads to a 15% shift in the debt to be restructured / refinanced
- Companies with good past performance (growth /profitability) need to restructure about € 3.7 bn
- Except for Infrastructure, every other hyper - sector needs to restructure more than 20% of their loans. Tourism, Services and Commerce need refinancing of more than 20% of their loans
- The sector of Infrastructure has minimal needs while Investment Companies have “lost” 76% of their debt capital

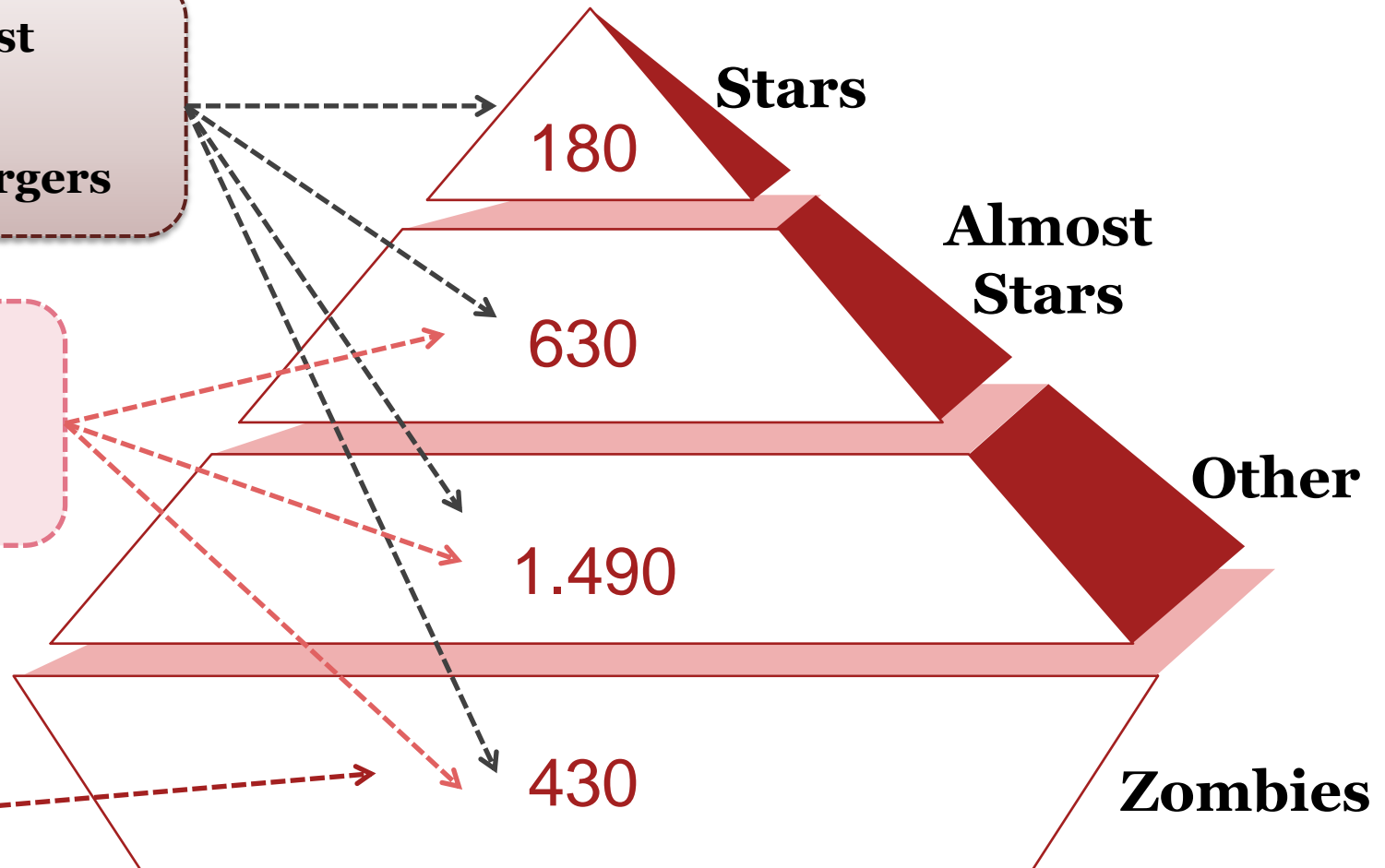
The dynamics of forthcoming growth

- Investment to boost capacity

- Acquisitions / Mergers

- Restructuring of debt and fresh equity

- Liquidation to release assets



About 800 companies drive the Greek economy and another 1,500 could make a vital contribution

- The Greek corporate economy seems to be led by 180 Star companies (group 5*) which represent 6% of EBITDA, 5% of revenues, 1% of fixed assets and 4% of the employees in the sample
- These companies have an annual growth rate of 24%, ROCE of 34% and loans of only €273mn in 2012
- At a second level, Almost Stars (groups 4*, 3*, 2*) comprise 630 companies with quite good characteristics, which are the backbone of corporate economic activity in the country and represent 52% of EBITDA, 32% of revenue, 18% of fixed assets and 24% of the employees in the sample
- These companies show a lower annual growth rate (4%) with ROCE however reaching 17% in 2012 and total debt of only €6.4bn
- 1,490 companies (groups 1*, -1*, -2*, -3*, -4*) represent the largest part of economic activity (56% revenues, 65% fixed assets, 55% employees) and produce 71% of total EBITDA. These corporates show significant diversity in performance and suffer from excessive debt
- 430 companies with trapped debt represent 8% of total revenue, 18% of fixed assets, 16% of employees and contribute negatively to the produced EBITDA (-29%). In addition, they exhibit a significant shrinkage and negative ROCE
- The strategy for the recovery of the corporate economy should have three dimensions: **funding and promoting the two leading groups, restructuring of debt and refinancing the third group** and the **fast liquidation of the last group**

Growth Financing and Corporate Debt Management Policies

No	Policy	#	Total Debt	Effect on the companies	Effect on the Banks	Third Party Investment
1	Financing of companies with systematically good performance in the past	~800	€6,7 bn	<ul style="list-style-type: none"> ✓ New Capital Employed ✓ Revenue increase ✓ EBITDA and EBIT increase 	✓ €5bn new financing	✓ € 3bn share capital increases
1a	Companies with average performance in the past with no need for refinancing	~800	€20 bn.			
2	Debt restructuring for companies with good performance in the past	~200	€8,5 bn.	<ul style="list-style-type: none"> ✓ Revenue Increase ✓ EBITDA and EBT improvement 	<ul style="list-style-type: none"> ✓ Up to €4 bn restructuring/ refinancing ✓ Improvement of profitability on NPLs and reversal of provisions 	✓ € 2bn share capital increases
3	Debt restructuring for companies with “non-negative” outlook	~500	€11 bn.	<ul style="list-style-type: none"> ✓ Revenue Increase ✓ EBITDA and EBT improvement 	<ul style="list-style-type: none"> ✓ Up to €6 bn restructuring/ refinancing ✓ Improvement of profitability on NPLs and reversal of provisions 	✓ € 2bn share capital increases
4	Rapid liquidation of companies with systemically negative cash flows	~430	€15 bn.	<ul style="list-style-type: none"> ✓ Liquidation / Administration 	✓ Up to €15bn of losses	✓ € 2bn for purchase of assets
Total Outcome				<ul style="list-style-type: none"> ✓ Improvement of profitability and growth 	<ul style="list-style-type: none"> ✓ € 15bn restructuring ✓ € 9.7bn refinancing ✓ € 5bn new financing 	✓ € 7bn third party investments

Addressing corporate indebtedness

- Regarding **companies with trapped debt**, the bankruptcy law should be amended extensively to allow for the rapid liquidation of effectively insolvent companies and the swift re-utilisation of their fixed assets within the economy (potential targets for Star companies or new investors)
- Companies facing **debt servicing issues**, but with otherwise a non-negative economic outlook should be the target of a major debt restructuring exercise.
- Given that in the majority of cases the debt of any given company is held by many banks, **a systemic inter-banking approach** should be adopted to facilitate debt restructuring.
 - **Prioritisation** : Eligible companies for a systemic approach should be identified and prioritised through a mechanism jointly agreed among all participating banks, combining total exposure and economic outlook
 - **Bundling**: Eligible companies for restructuring, outside the systemic, should be bundled either in sectoral or linked groups to be looked at simultaneously or in an unconnected groupings, and the groups will be prioritised
 - **Evaluation**: Each company in a selected group should be evaluated and the participating banks should produce a bespoke financial solution to refinance its debt and attract new funds
 - **Agreement**: Proposed financial solutions should be agreed among the banks and each company with all required covenants as necessary, and implemented within 4 months from the start of the evaluation exercise

Incentives and disincentives for the fast and effective handling of restructurings should be instituted, as for example:

- should the banks **fail to agree on a restructuring solution within the prescribed time**, then the full outstanding debt will need to be written off in a regulatory capital term
- upon agreement, **a tax credit** equal to part or the whole of the restructured debt could be issued proportionately to the banks.

Economic growth requires investments and there are many investment opportunities in Greece

- The Greek corporate economy needs to be significantly **relieved from debt**, in order to start growing again attracting new funds in the way
- **Assets trapped** in the banks' and the corporate balance sheets must be **released back** into the economy to increase production capacity
- **There is no strong case for sectoral policies.** The market “decides” at the level of the corporates
- The objective is to create more stars. Policy and resource allocation should focus on **the competitiveness of individual companies**:
 - systematic growth
 - high profitability
 - reasonable debt consistent with the company's cash flows
- By restructuring **€15bn** of debt and refinancing another **€10bn** through higher risk instruments, further **€7bn** could be mobilized in the form of equity or quasi-equity and about €2bn of assets to re-enter
- The restructuring and refinancing of the corporate economy will create opportunities for **Mergers and Acquisitions**
- The consistent implementation by all involved parties (banks, corporates, BoG, the state) of such an approach to facilitate growth will boost the Greek economy by adding **0,7%-1% to GDP** annually up to 2020



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