

PIRAEUS BANK



## Rating of sectoral performance 2007-2012: *BIC Rating System*

Economic Analysis & Markets

July 2014

Ilias Lekkos  
Paraskevi Vlachou  
Irina Staggel

Lekkosi@piraeusbank.gr  
Vlachoupar@piraeusbank.gr  
Staggelir@piraeusbank.gr

researchdivision@piraeusbank.gr

Bloomberg Page: <PBGR>

Piraeus Bank

4, Amerikis St., GR-105 64, Athens, Greece

Tel: (+30) 210 328 8187, Fax: (+30) 210 328 8605



# Contents of study

---

1. Purpose of the study – key findings
2. Macroeconomic background of study
3. Calculation and dimensions of BIC Index
4. Presentation of BIC Index results
5. BIC Rating System
6. Appendices



# 1. Purpose of the study – key findings



# Purpose of the study

---

The purpose of this study is:

- to update the BIC Index, in order to assess the sectoral performance, *regarding Small and Medium Enterprises (SMEs)* for 2012.
- to develop a twelve grade rating system – the BIC Rating System – (from “a +” to “d-”), with the aim of producing a longitudinal study of *upgrades and downgrades of sectoral performance* during 2007-2012.



# Best in Class Index (BIC Index)

---

The BIC Index is the main analytical tool used to carry out analysis and ranking of business sectors.

Initially, the performance of each sector of economic activity is evaluated along three axes, which summarize the key dimensions of measuring entrepreneurial activity, namely liquidity, efficiency and capital structure. In this year's presentation, we have modified the index, by eliminating the dimension of momentum.

Thereafter – in order to facilitate the drawing of robust conclusions- these three axes are used to compile an overall sectoral performance index which we call the Best in Class (BIC) Index.

Based on the score of each sector in the BIC Index, we are able to assess and rank the performance of the 50 most essential sectors of the Greek economy from 2007 to 2012.



# BIC Rating System

---

The BIC Index allows us to rank the performance of sectors of economic activity from the strongest to the weakest separately for each year from 2007 to 2012.

In order to move on to a longitudinal analysis of the development of sectoral performance throughout the period 2007-2012, we have developed a rating system of sectoral performance – the BIC Rating System.

According to this system (based on the empirical distribution of the BIC Index for 50 sectors over a period of 6 years, namely a total of 300 observations), each sector is ranked on a 12-grade rating scale. Any improvement or decline in the BIC score of each sector from year to year is reflected by a corresponding upgrade or downgrade of the specific sector.



## BIC 2012: Sectors with the best performance

The sectors with the strongest performance, 2012

E	Water supply; sewerage, waste management and remediation activities
33	Repair and installation of machinery and equipment
62+63	Computer programming, consultancy and related activities. Information service activities
27	Manufacture of electrical equipment
P	Human health and social work activities
11	Manufacture of beverages
50	Water transport
O	Education
61	Telecommunications
B	Mining and quarrying

For yet another year the defensive sectors, utility services such as water, waste management (E), health (P), education (O) and telecommunications (61) remain at the top with regards to sectoral performance.

Simultaneously, sectors which are associated with shipyard activity (33), as well as the manufacture of cables / wiring and electrical lighting equipment (27) proved to be highly resilient.



## BIC 2012: Sectors with the poorest performance

### The sectors with the weakest performance, 2012

16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
59+60	Motion picture, video and television programme production, sound recording and music publishing activities. Programming and broadcasting activities
R	Arts, entertainment and recreation
26	Manufacture of computer, electronic and optical products
29	Manufacture of motor vehicles, trailers and semi-trailers
24	Manufacture of basic metals
45	Wholesale and retail trade and repair of motor vehicles and motorcycles
31	Manufacture of furniture
23	Manufacture of other non-metallic mineral products
13	Manufacture of textiles

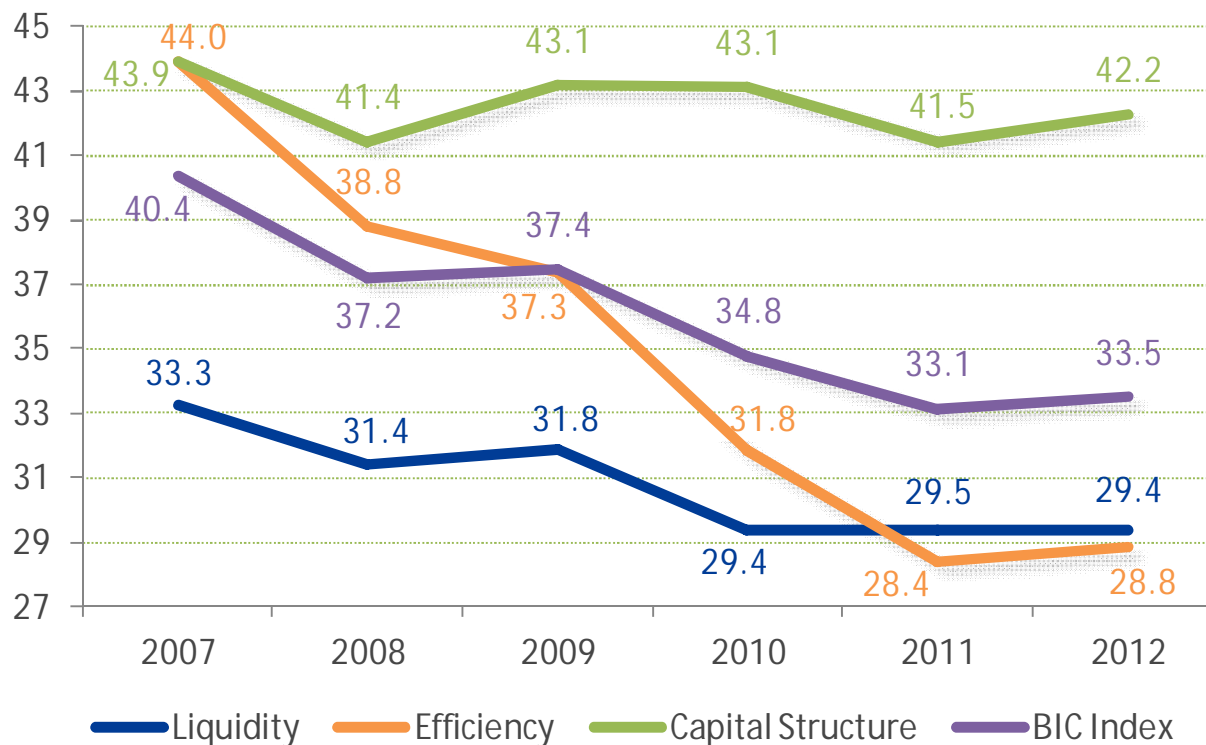
Amongst the sectors with the poorest performance are sectors based on consumption expenditure of households [entertainment (R), media (59+60), trade of vehicles (45), furniture (31) and wood (16)], as well as sectors associated with construction (23), (non-metallic mineral products such as cement, tiles, building materials).

A notable case is the sector of basic metals (24) (iron, steel, aluminum), which is influenced both by the decline in construction activity (public and private) and the high cost of energy.



## BIC 2012: Stabilization after 4 years of decline

The Greek economic recession still has an obvious impact on the domestic entrepreneurial activity. After four years of decline, however, the situation appears to have stabilized, albeit at low levels.





# BIC Rating System 2007-2012: Continuous deterioration of the average rating due to the recession

The average rating of the 50 sectors has fallen from "a-" in 2007 to "c" in 2012.

Sector	BIC Rate					
	2007	2008	2009	2010	2011	2012
E	a+	a	a	a	a	a
33	a-	a-	a-	a-	a-	a-
62+63	a-	a-	a-	b-	b+	a-
27	a-	a-	a-	a-	a-	a-
P	a-	a-	a-	a-	b+	a-
11	a-	b+	b	b-	b-	a-
50	c	d	c+	d+	c	a-
O	a-	a-	a-	a-	b+	a-
61	d	d	d+	d+	b+	a-
B	a-	a-	c+	d+	c-	a-
32	a-	a-	a-	a-	a-	b+
25	b	b	b	b	c+	b+
56	a-	b+	a-	b	b-	b
21	b	b	b	c	d+	b
D	a-	a-	b-	a-	b	b
47	a-	b+	b	c+	b-	b
M	a	a-	a-	a-	b	b-
14	a-	b+	b+	c	c-	b-
46	b	b-	b-	c	c	b-
20	b+	b	b	b	c	b-
10	c+	b-	b-	b-	c+	b-
12	d	d+	b	c-	d+	c+
28	a-	b	b	c	b	c+
68	a+	a-	a	a-	a-	c+
N-79	b-	b	b	b-	c	c+
49	a-	b	b	b	b-	c+
22	a-	b	b+	b-	c	c
19	c-	d+	c+	c	d+	c
S	a-	c+	a-	d+	c	c
ST	a-	b+	b+	c+	d+	c-
18	b+	b	b	d+	d+	c-
52+53	a-	a-	a-	a-	d+	c-
30	b-	b	c	c+	c-	d+
79	c	d+	d+	d+	d+	d+
51	c	d	d+	d+	b+	d+
A	d+	d	d+	c	c-	d+
55	b	c	d+	d+	d+	d+
58	a-	a-	a-	b	d+	d+
17	d+	d+	d+	d+	d+	d+
15	c	d+	d+	d+	d+	d+
13	b+	c	c-	d+	d+	d+
23	a-	b	b-	c+	d+	d+
31	a-	b	b-	d+	d+	d
45	d+	d+	d+	d+	d+	d
24	a-	b-	d+	c+	c-	d
29	a-	b	b-	b	d+	d
26	b+	b+	a-	d+	d+	d
R	b	c+	c	d+	d	d
59+60	d+	d+	d+	d-	d	d-
16	c+	c-	c	d+	d	d-
Average	a-	b	b	c	c	c

\* Ranking of sectors based on 2012

Source: ICAP DATA, Piraeus Bank Research



## BIC Rating System 2007-2012: Key findings

---

- The average rating of the 50 sectors of the Greek economy has fallen from "a-" in 2007 to "c" in 2012.
- The average rating stabilized in 2010, 2011 and 2012 at the very low level of "c".
- The upgrades in 2012 that are of particular interest are:
  - i. the sector of water transport (50) from "c" to "a-";
  - ii. the sector of tobacco products (12) from "d+" to "c+";
  - iii. the sector of metal products (25) from "c+" to "b+"; and
  - iv. the sector of pharmaceutical products (21) from "d+" to "b".



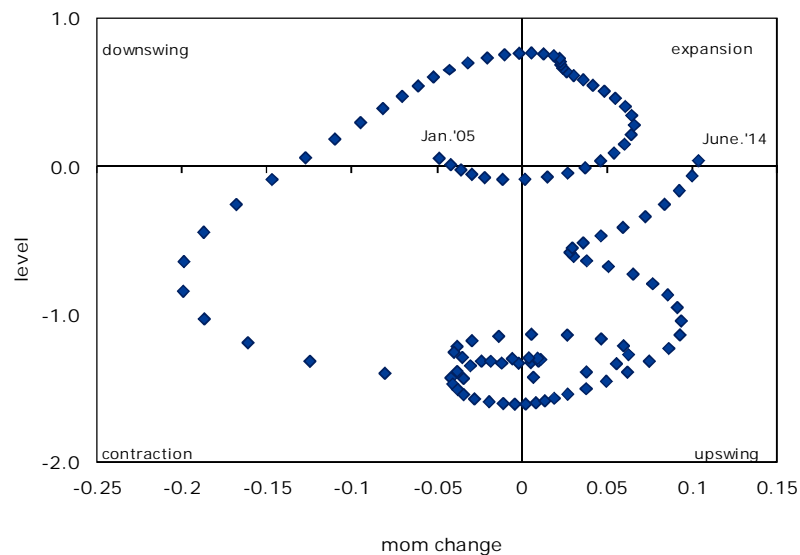
## 2. Macroeconomic background of study



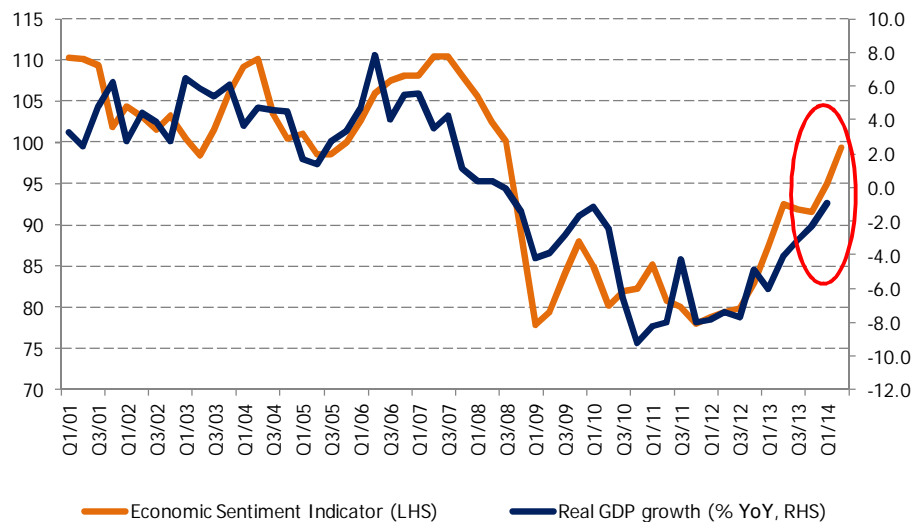
## Expansion phase of the economic cycle

According to our mapping of the business cycle, the Greek economy seems to be entering the expansion phase. Since mid-2012, both the ESI and economic activity have been on an upward trend. Based on the close relationship between the ESI and real GDP, we expect that the improvement in the ESI bodes well for the stabilization of the economy as a first step and its recovery towards the end of the year.

### Economic Climate Tracer



### Economic Sentiment Indicator (ESI) vs real GDP growth rate



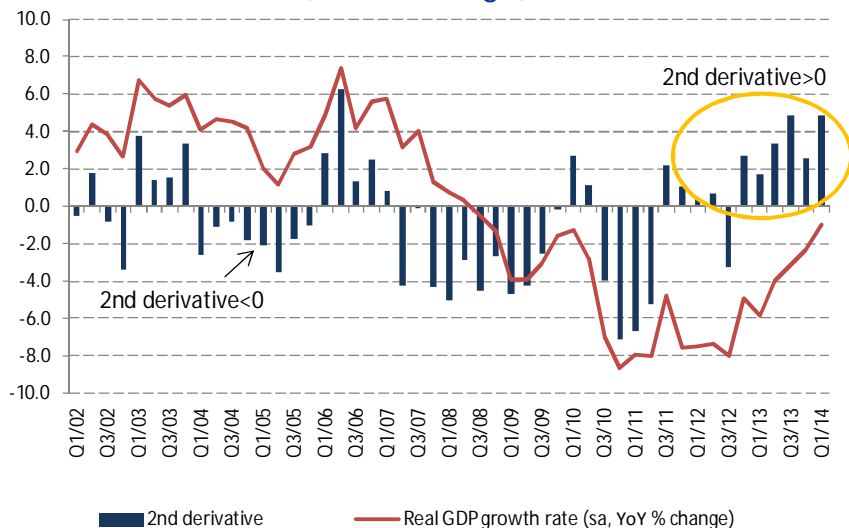
Source: ELSTAT, European Commission DG ECFIN, Piraeus Bank Research



# Stabilisation of economic activity

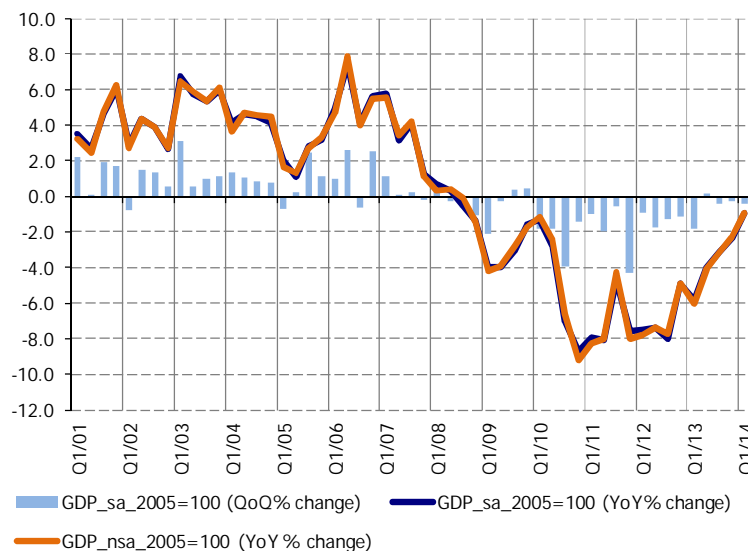
An intuitive way to identify the real turning point is when the rate of change of the growth rate switches over from a negative to a positive value (in other words when the second derivative changes sign). Despite the fact that the GDP continues to decrease, the 2nd derivative switched over to a positive sign in the 4th quarter of 2012, reflecting Greece's progress towards stabilization and the change to a period of continuing containment of the economic recession.

Real GDP  
(sa, % change)



Note: Seasonally adjusted data according to PrB estimates

Real GDP  
(constant prices 2005)



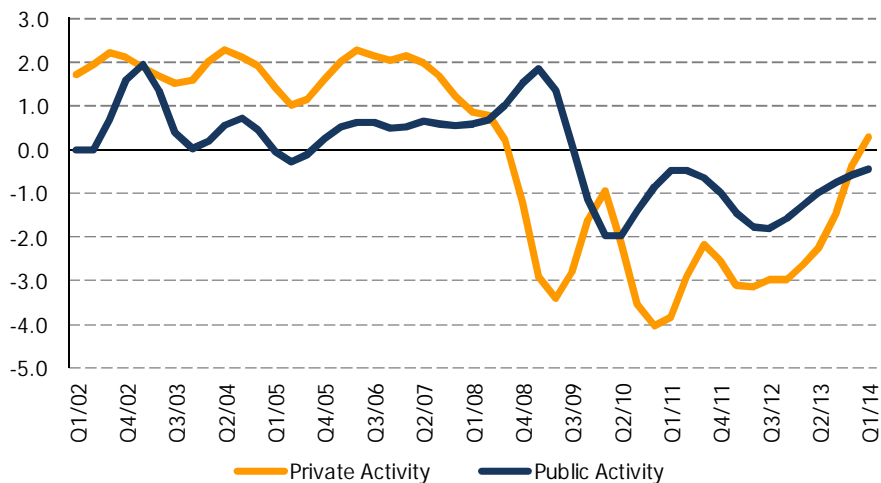
Note: Seasonally adjusted data according to PrB estimates



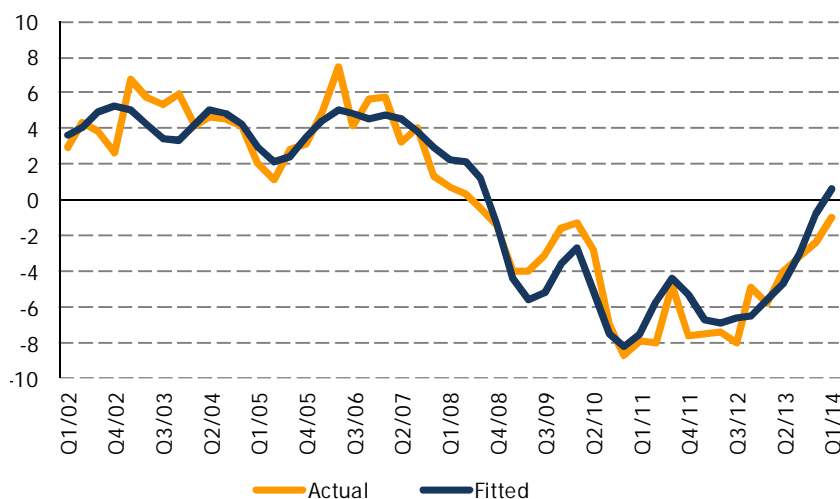
# Improvement of the Economic Activity Indicators

The Private Economic Activity Index moved back into positive territory after a period of five years, while the Public Activity Index, although still in negative territory, has been on an improving trend since mid-2012.

## Economic Activity Indicators



## GDP estimate based on Economic Activity Indicators



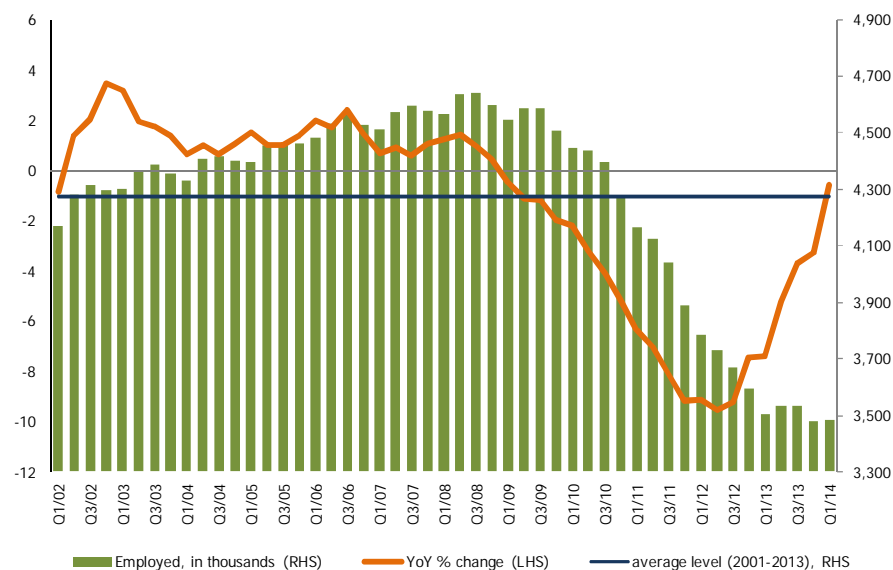
Note: The indicators of economic activity contribute to the analysis of GDP changes in the individual sectors.



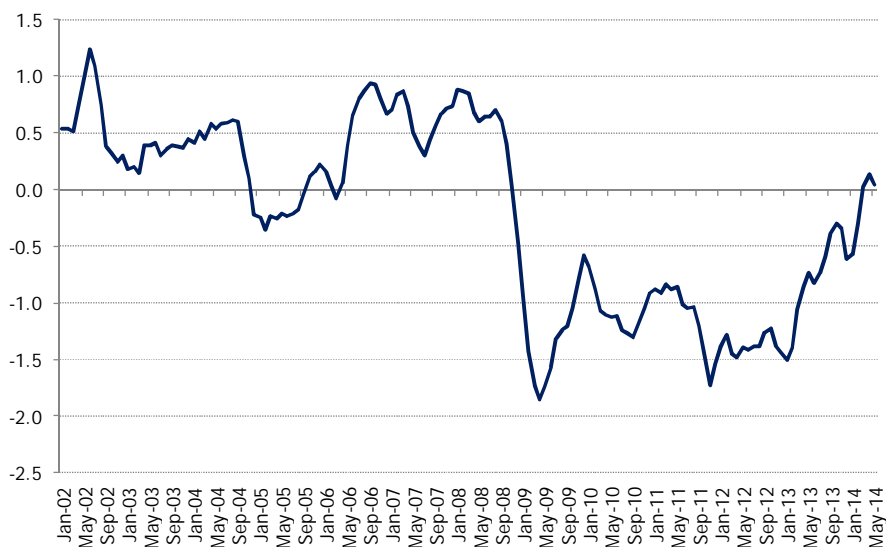
# Employment at low levels. Gradual de-escalation of the reduction rate of persons employed

The number of employed persons has declined significantly during the economic crisis. However, by the end of 2012, some signs of de-escalation of the strongly declining trend began to emerge. This direction is also supported by the relevant indicator, which reflects the hiring intentions from a business perspective.

Employment  
(YoY % change & level)



Hiring Intentions  
(normalised data, sa, 3m moving average)



Note: The indicator is based on the results of questions relating to employment which are asked in the framework of the Business and Consumer Surveys to enterprises.

Source: ELSTAT, European Commission DG ECFIN, Piraeus Bank Research



### 3. Calculation and dimensions of BIC Index



# Motivation for BIC Index

---

The basic rationale upon which the construction of the BIC Index is based on is:

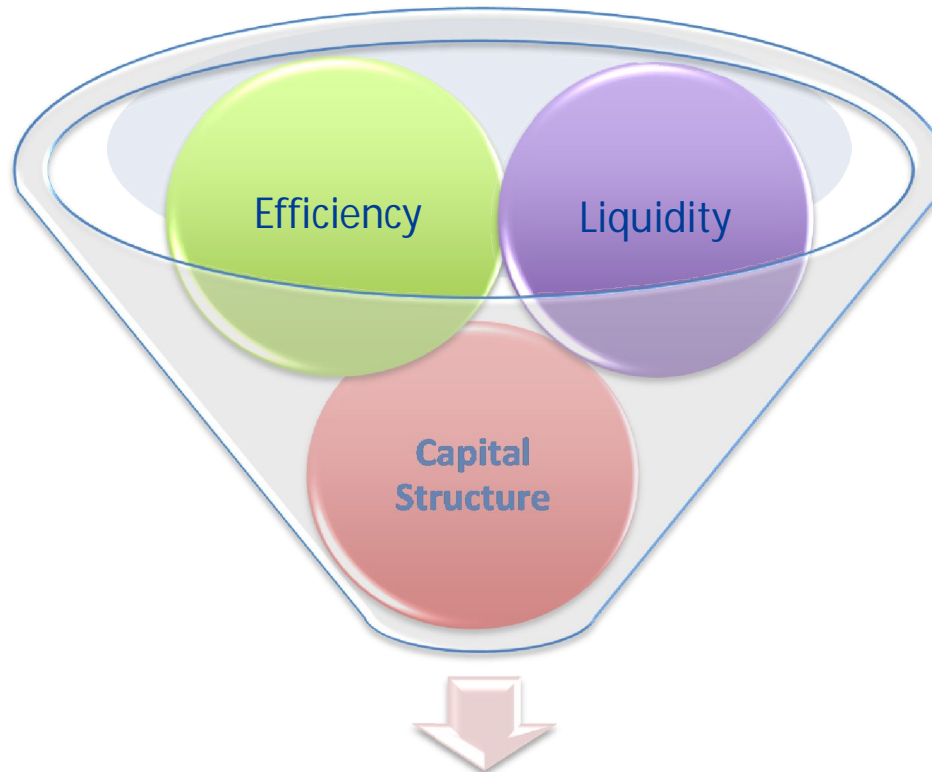
1. the identification of key indicators which reflect the business activity evaluation of the sectors.
2. the integration of these indicators in 3 key dimensions:
  - Liquidity
  - Efficiency
  - Capital structure
3. the synthesis of these dimensions into a single index (BIC Index), where based on the scores recorded by each sector, it will be possible to compare and assess all sectors of the Greek economy.



# Description of the methodology to calculate the BIC Index

- The objective of the BIC Index: to monitor the sectors of the Greek economy with the best performance, with special emphasis on the outlook for SMEs.

## Basic Dimensions of BIC Index

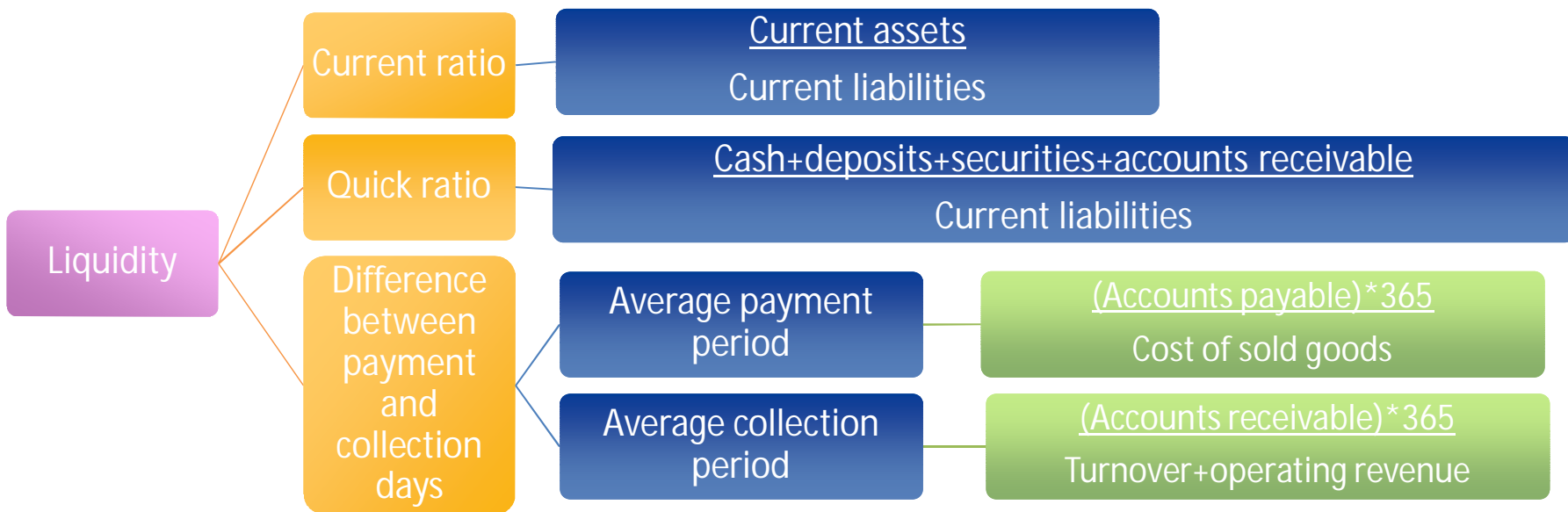


**BIC Index**



# Dimension of Liquidity

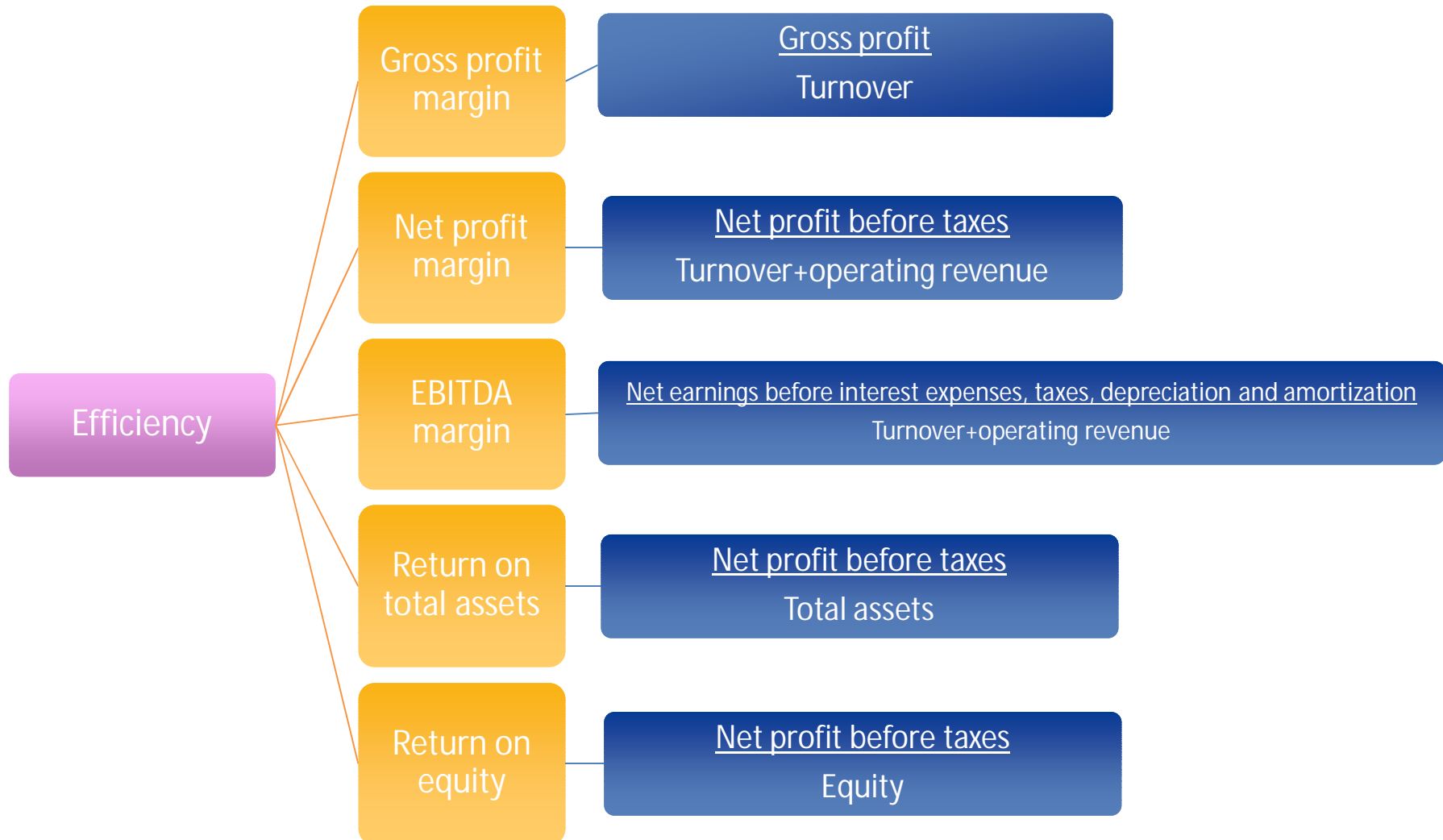
Total Liquidity of SMEs of each sector is reflected in the following ratios:





# Dimension of Efficiency

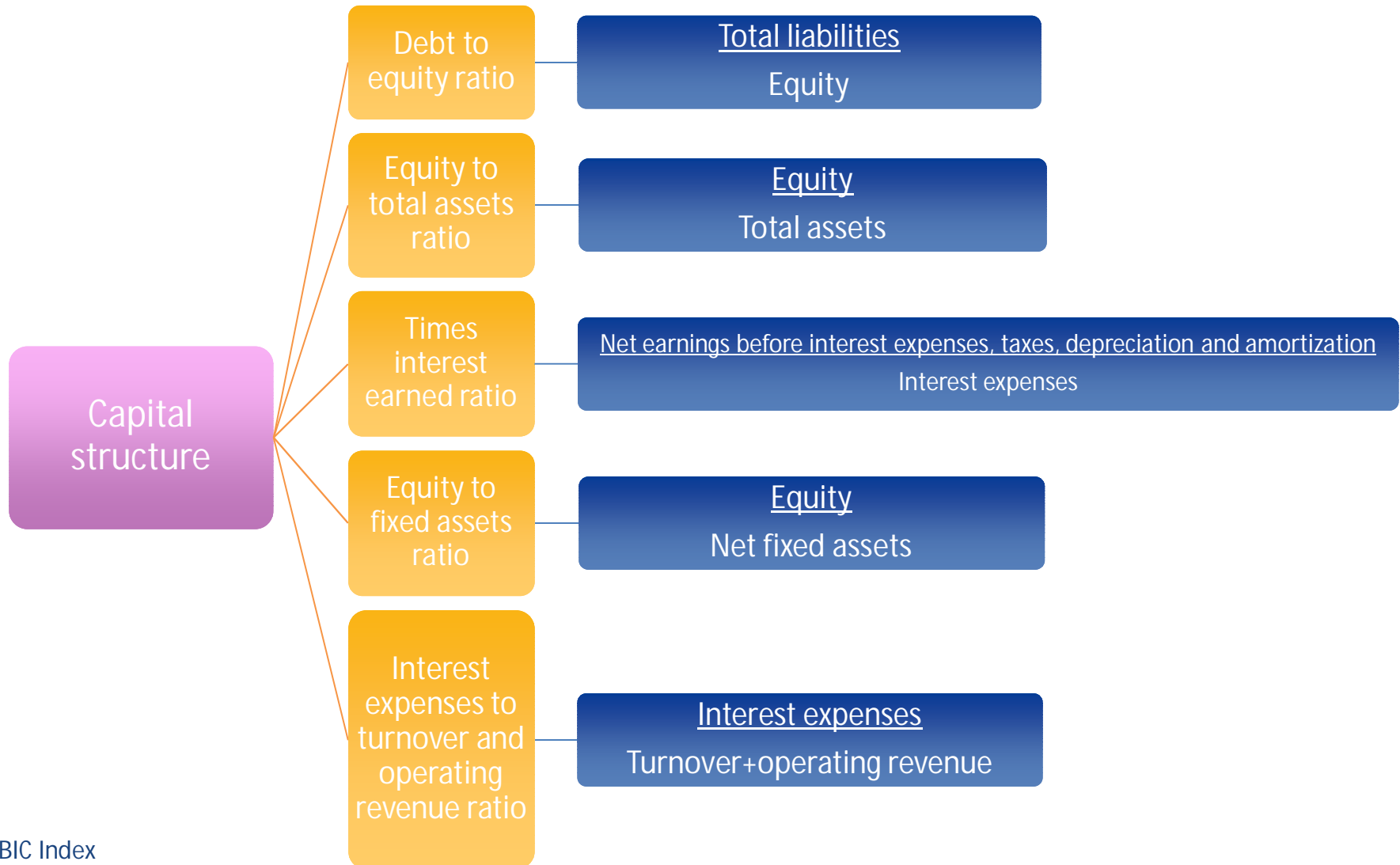
The overall image of the Efficiency of each sector is given by:





# Dimension of Capital Structure

The basic Capital Structure ratios we use are the following:





# Transformation of variable values of the BIC Index

---

Each of these variables has a different range, as well as different units of measurement; e.g. some variables count the number of days, others are expressed as percentages and others in units.

In order to be able to initially compare and synthesize these variables, among the three key dimensions of liquidity, efficiency and capital structure and then the BIC Index, all variables should be converted into a common base.



# Calculation of the BIC Index scores

## Standardization of variables examined:

When the rise of a variable value is a positive development, the standardization formula is:

$$p_i = \frac{I_i - I_{min}}{I_{max} - I_{min}} \times 100$$

Where,  $p_i$ : the variable value of sector  $i$  after the standardization;

$I_i$ : the variable value of sector  $i$  before the standardization;

$I_{min}$ : the variable value of the sector with the weakest performance of all examined sectors;

$I_{max}$ : the variable value of the sector with the strongest performance of all examined sectors.

When the decline of a variable value is a positive development, the standardization formula is:

$$p_i = \frac{I_{max} - I_i}{I_{max} - I_{min}} \times 100 \quad \rightarrow$$

The common range of variables is: 0-100.



## Calculation of the BIC Index scores

---

Crucial to the construction of the index is the choice of the base period, namely the period used to calculate the maximum ( $I_{\max}$ ) and minimum ( $I_{\min}$ ) value.

- Financial ratios: min-max standardisation: 2006
- Source of financial data: ICAP DATA.

Overall, we examine 50 sectors and the number of the sample of SAs and LTDs ranges from 18.5 thousand to 23.5 thousand during 2007-2012.



## Weights of examined ratios and variables per dimension for the calculation of the BIC Index

The final BIC Index is calculated as follows:

<b>Liquidity</b> (33,3%)	<ul style="list-style-type: none"> <li>• Current ratio.....33,3%</li> <li>• Quick ratio.....33,3%</li> <li>• Difference between payment and collection days.....33,3%</li> </ul>
<b>Efficiency</b> (33,3%)	<ul style="list-style-type: none"> <li>• Gross profit margin.....20%</li> <li>• Net profit margin.....20%</li> <li>• EBITDA margin.....20%</li> <li>• Return on total assets.....20%</li> <li>• Return on equity.....20%</li> </ul>
<b>Capital structure</b> (33,3%)	<ul style="list-style-type: none"> <li>• Debt to equity ratio.....20%</li> <li>• Equity to total assets ratio.....20%</li> <li>• Equity to fixed assets.....20%</li> <li>• Times interest earned ratio.....20%</li> <li>• Interest expenses to turnover and operating revenue ratio.....20%</li> </ul>



## Description of BIC Index methodology: Selection of enterprise sample

- Source of data: ICAP DATA.
- *Processing of enterprise sample*: we excluded enterprises that:
  - had no available financial data;
  - reported negative equity;
  - had no data available on the number of personnel;
  - showed no turnover;
  - had no available data for the cost of goods sold.
- Given the emphasis on SMEs\*, we selected the enterprises that met the following criteria:
  - the number of employees does not exceed 250 persons; while
  - their turnover does not exceed €50 million.



# Description of the BIC Index methodology: Financial criteria

---

- We examine all sectors of economic activity, according to the STAKOD'08 classification, except for the following:
  - **K**: Financial and insurance activities
  - **X**: Public administration and defense; compulsory social security
  - **T**: Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use
  - **Y**: Activities of extraterritorial organizations and bodies



## The examined sectors of the domestic economy and presentation of the samples of SMEs, 2007-2012 (a)

Codes	STAKOD'08 (=NACE rev. 2)	2007	2008	2009	2010	2011	2012
A	Agriculture, forestry and fishing	249	289	280	254	261	223
B	Mining and quarrying	89	111	108	94	85	73
10	Manufacture of food products	1,014	1,044	1,035	984	991	931
11	Manufacture of beverages	177	180	180	168	165	160
12	Manufacture of tobacco products	12	9	10	9	10	9
13	Manufacture of textiles	166	166	165	157	138	120
14	Manufacture of wearing apparel	301	297	284	261	248	213
15	Manufacture of leather and related products	49	49	43	42	43	37
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	121	123	121	103	92	80
17	Manufacture of paper and paper products	140	144	144	141	142	138
18	Printing and reproduction of recorded media	218	226	214	196	182	156
19	Manufacture of coke and refined petroleum products	28	26	26	28	26	27
20	Manufacture of chemicals and chemical products	221	223	231	224	224	213
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	51	52	51	49	56	48
22	Manufacture of rubber and plastic products	276	275	279	264	243	226
23	Manufacture of other non-metallic mineral products	478	473	464	415	387	334
24	Manufacture of basic metals	69	71	69	67	65	58
25	Manufacture of fabricated metal products, except machinery and equipment	535	537	521	481	463	417
26	Manufacture of computer, electronic and optical products	63	63	62	61	59	53
27	Manufacture of electrical equipment	141	142	147	137	130	122
28	Manufacture of machinery and equipment n.e.c.	220	222	218	208	193	196
29	Manufacture of motor vehicles, trailers and semi-trailers	35	35	37	35	30	25
30	Manufacture of other transport equipment	31	30	30	27	29	23
31	Manufacture of furniture	225	213	213	189	159	131
32	Other manufacturing	148	147	150	138	135	122
33	Repair and installation of machinery and equipment	58	58	52	42	57	50



## The examined sectors of the domestic economy and presentation of the samples of SMEs, 2007-2012 (b)

Code	STAKOD'08 (=NACE rev. 2)	2007	2008	2009	2010	2011	2012
D	Electricity, gas, steam and air conditioning supply	110	121	150	168	208	205
E	Water supply; sewerage, waste management and remediation activities	68	83	89	84	87	94
ST	Construction	1,664	1,706	1,693	1,496	1,398	1,091
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	835	825	801	705	683	583
46	Wholesale trade, except of motor vehicles and motorcycles	5,281	5,380	5,344	4,908	5,135	4,605
47	Retail trade, except of motor vehicles and motorcycles	1,350	1,348	1,328	1,158	1,194	1,044
49	Land transport and transport via pipelines	198	198	192	182	194	207
50	Water transport	24	25	21	17	20	18
51	Air transport	13	13	17	17	13	13
52+53	Warehousing and postal and courier activities	464	464	456	435	465	410
55	Accommodation	2,985	2,989	3,012	2,763	2,579	2,187
56	Food and beverage service activities	542	551	534	480	461	324
58	Publishing activities	226	244	237	197	202	166
59+60	Motion picture, video and television programme production, sound recording and music publishing activities. Programming and broadcasting activities	226	221	218	188	184	135
61	Telecommunications	39	43	46	39	37	37
62+63	Computer programming, consultancy and related activities. Information service activities	470	490	488	451	476	426
68	Real estate activities	596	612	609	574	574	394
M	Professional, scientific and technical activities	1,275	1,323	1,334	1,219	1,308	1,098
N-79	Administrative and support service activities except of travel agency, tour operator and other reservation service and related activities	467	482	453	402	420	385
79	Travel agency, tour operator and other reservation service and related activities	366	365	339	295	313	280
O	Education	199	202	206	185	193	186
P	Human health and social work activities	349	385	399	386	433	353
R	Arts, entertainment and recreation	103	114	116	106	93	57
S*	Other service activities	79	79	73	62	84	72
Total		23,044	23,468	23,289	21,291	21,367	18,555

\* excluding sector 94 (Activities of membership organizations) – no available data from ICAP DATA.



## 4. Presentation of BIC Index results



# BIC Index: ranking and scores, 2012



\*In brackets the ranking of sectors and in the histograms their scores

Source: ICAP DATA, Piraeus Bank Research



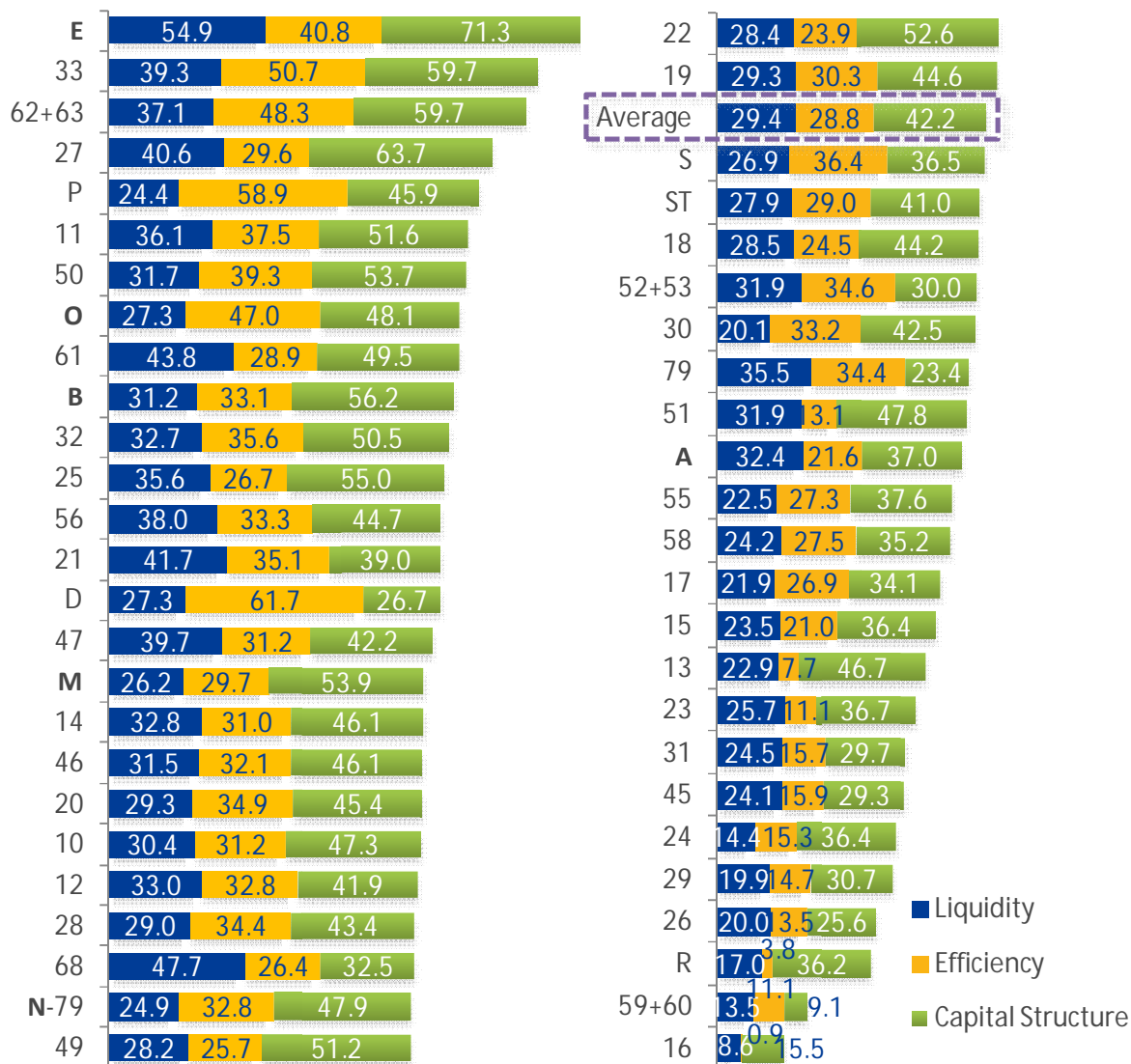
# BIC Index: examination of the scores and rankings of the individual dimensions, 2012

Sector 2012	Total		Liquidity		Efficiency		Capital Structure		Sector 2012	Total		Liquidity		Efficiency		Capital Structure	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank		Score	Rank	Score	Rank	Score	Rank	Score	Rank
E	55.7	1	↑ 54.9	1	↑ 40.8	6	↑ 71.3	1	49	35.0	26	↓ 28.2	28	↓ 25.7	35	↑ 51.2	11
33	49.9	2	↑ 39.3	7	↑ 50.7	3	↑ 59.7	3	22	35.0	27	↓ 28.4	27	↓ 23.9	37	↑ 52.6	9
62+63	48.4	3	↑ 37.1	9	↑ 48.3	4	↑ 59.7	4	19	34.7	28	↓ 29.3	24	↓ 30.3	25	↓ 44.6	24
27	44.6	4	↑ 40.6	5	↓ 29.6	27	↑ 63.7	2	S	33.2	29	↓ 26.9	32	↑ 36.4	9	↓ 36.5	35
P	43.1	5	↓ 24.4	37	↑ 58.9	2	↓ 45.9	21	ST	32.6	30	↓ 27.9	29	↓ 29.0	28	↓ 41.0	30
11	41.7	6	↑ 36.1	10	↑ 37.5	8	↑ 51.6	10	18	32.4	31	↓ 28.5	26	↓ 24.5	36	↓ 44.2	25
50	41.6	7	↓ 31.7	19	↑ 39.3	7	↑ 53.7	8	52+53	32.1	32	↓ 31.9	17	↑ 34.6	13	↓ 30.0	43
O	40.8	8	↓ 27.3	30	↑ 47.0	5	↓ 48.1	14	30	31.9	33	↓ 20.1	44	↓ 33.2	17	↓ 42.5	27
61	40.7	9	↑ 43.8	3	↓ 28.9	29	↑ 49.5	13	79	31.1	34	↑ 35.5	12	↓ 34.4	15	↓ 23.4	48
B	40.1	10	↓ 31.2	21	↓ 33.1	18	↑ 56.2	5	51	30.9	35	↓ 31.9	18	↓ 13.1	45	↓ 47.8	16
32	39.6	11	↓ 32.7	15	↑ 35.6	10	↑ 50.5	12	A	30.3	36	↓ 32.4	16	↓ 21.6	38	↓ 37.0	33
25	39.1	12	↑ 35.6	11	↓ 26.7	33	↑ 55.0	6	55	29.2	37	↓ 22.5	42	↓ 27.3	31	↓ 37.6	32
56	38.7	13	↑ 38.0	8	↓ 33.3	16	↓ 44.7	23	58	29.0	38	↓ 24.2	38	↓ 27.5	30	↓ 35.2	39
21	38.6	14	↑ 41.7	4	↑ 35.1	11	↓ 39.0	31	17	27.6	39	↓ 21.9	43	↓ 26.9	32	↓ 34.1	40
D	38.6	15	↓ 27.3	31	↑ 61.7	1	↓ 26.7	46	15	27.0	40	↓ 23.5	40	↓ 21.0	39	↓ 36.4	37
47	37.7	16	↑ 39.7	6	↓ 31.2	23	↓ 42.2	28	13	25.8	41	↓ 22.9	41	↓ 7.7	48	↓ 46.7	18
M	36.6	17	↓ 26.2	33	↓ 29.7	26	↑ 53.9	7	23	24.5	42	↓ 25.7	34	↓ 11.1	46	↓ 36.7	34
14	36.6	18	↓ 32.8	14	↓ 31.0	24	↓ 46.1	20	31	23.3	43	↓ 24.5	36	↓ 15.7	41	↓ 29.7	44
46	36.6	19	↓ 31.5	20	↓ 32.1	21	↓ 46.1	19	45	23.1	44	↓ 24.1	39	↓ 15.9	40	↓ 29.3	45
20	36.5	20	↓ 29.3	23	↑ 34.9	12	↓ 45.4	22	24	22.1	45	↓ 14.4	48	↓ 15.3	42	↓ 36.4	36
10	36.3	21	↓ 30.4	22	↓ 31.2	22	↓ 47.3	17	29	21.8	46	↓ 19.9	46	↓ 14.7	43	↓ 30.7	42
12	35.9	22	↑ 33.0	13	↓ 32.8	20	↓ 41.9	29	26	19.7	47	↓ 20.0	45	↓ 13.5	44	↓ 25.6	47
28	35.6	23	↓ 29.0	25	↓ 34.4	14	↓ 43.4	26	R	19.0	48	↓ 17.0	47	↓ 3.8	49	↓ 36.2	38
68	35.5	24	↑ 47.7	2	↓ 26.4	34	↓ 32.5	41	59+60	11.2	49	↓ 13.5	49	↓ 11.1	47	↓ 9.1	50
N-79	35.2	25	↓ 24.9	35	↓ 32.8	19	↓ 47.9	15	16	8.3	50	↓ 8.6	50	↓ 0.9	50	↓ 15.5	49

- The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.
- The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.
- ↑ score ≥ 75% of score range
- ↓ 50% ≤ score < 75%
- ↓ 25% ≤ score < 50%
- ↓ score < 25%



## BIC Index: Structure of the final score per sector, 2012



\*The BIC Index is the average result of the scores of each dimension



## BIC Index: the 10 sectors with the best performance, 2012

The sectors with the strongest performance, 2012

E	Water supply; sewerage, waste management and remediation activities
33	Repair and installation of machinery and equipment
62+63	Computer programming, consultancy and related activities. Information service activities
27	Manufacture of electrical equipment
P	Human health and social work activities
11	Manufacture of beverages
50	Water transport
O	Education
61	Telecommunications
B	Mining and quarrying

For yet another year the defensive sectors, utility services such as water, waste management (E), health (P), education (O) and telecommunications (61) remain at the top with regards to sectoral performance.

Simultaneously, sectors which are associated with shipyard activity (33), as well as the manufacture of cables / wiring and electrical lighting equipment (27) proved to be highly resilient.



## BIC Index: the 10 sectors with the poorest performance, 2012

### The sectors with the weakest performance, 2012

16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
59+60	Motion picture, video and television programme production, sound recording and music publishing activities. Programming and broadcasting activities
R	Arts, entertainment and recreation
26	Manufacture of computer, electronic and optical products
29	Manufacture of motor vehicles, trailers and semi-trailers
24	Manufacture of basic metals
45	Wholesale and retail trade and repair of motor vehicles and motorcycles
31	Manufacture of furniture
23	Manufacture of other non-metallic mineral products
13	Manufacture of textiles

Amongst with the poorest performance are sectors based on consumption expenditure of households [entertainment (R), media (59+60), trade of vehicles (45), furniture (31) and wood (16)], as well as sectors associated with construction (23), (non-metallic mineral products such as cement, tiles, building materials).

A notable case is the sector of basic metals (24) (iron, steel, aluminum), which is influenced both by the decline in construction activity (public and private) and the high cost of energy.



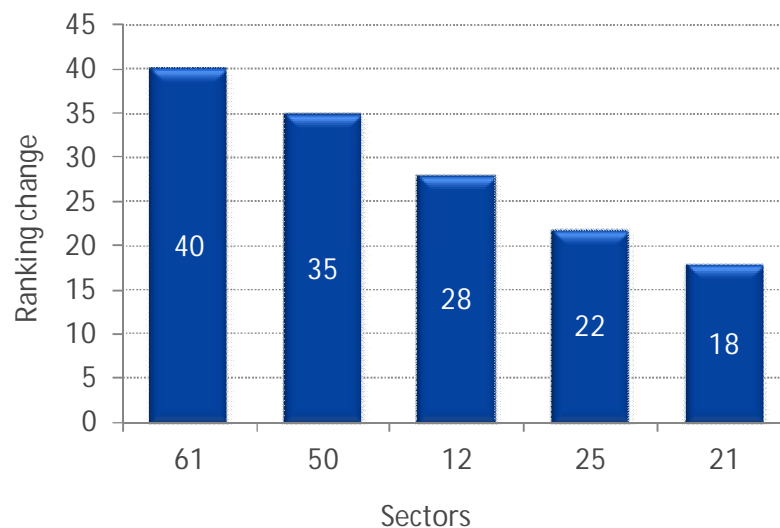
## BIC Index: sectors with the highest dynamic evolution 2007-2012

### Rising sectors

The sectors with the highest dynamic development include telecommunications (61), which shows high liquidity, while notable is the positive movement of water transport (50).

Significantly improved is the image of the sector of tobacco products (12), and the performance of the pharmaceutical industry (21) seems to have recovered to pre-crisis levels.

### Sectors with the 5 highest cumulative changes in the ranking of BIC Index, 2007-2012



61	Telecommunications
50	Water transport
12	Manufacture of tobacco products
25	Manufacture of fabricated metal products, except machinery and equipment
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations



## BIC Index: sectors with the strongest decline 2007-2012

### Declining sectors

The declining sectors are related either to heavy industry e.g. machinery construction (29), and production of basic metals (24), or to private consumption, e.g. publications (58). The economic recession has had a significant negative impact on the performance of real estate (68), one of the more dynamic sectors in the recent past.

Sectors with the 5 lowest cumulative changes in the ranking of BIC Index, 2007-2012

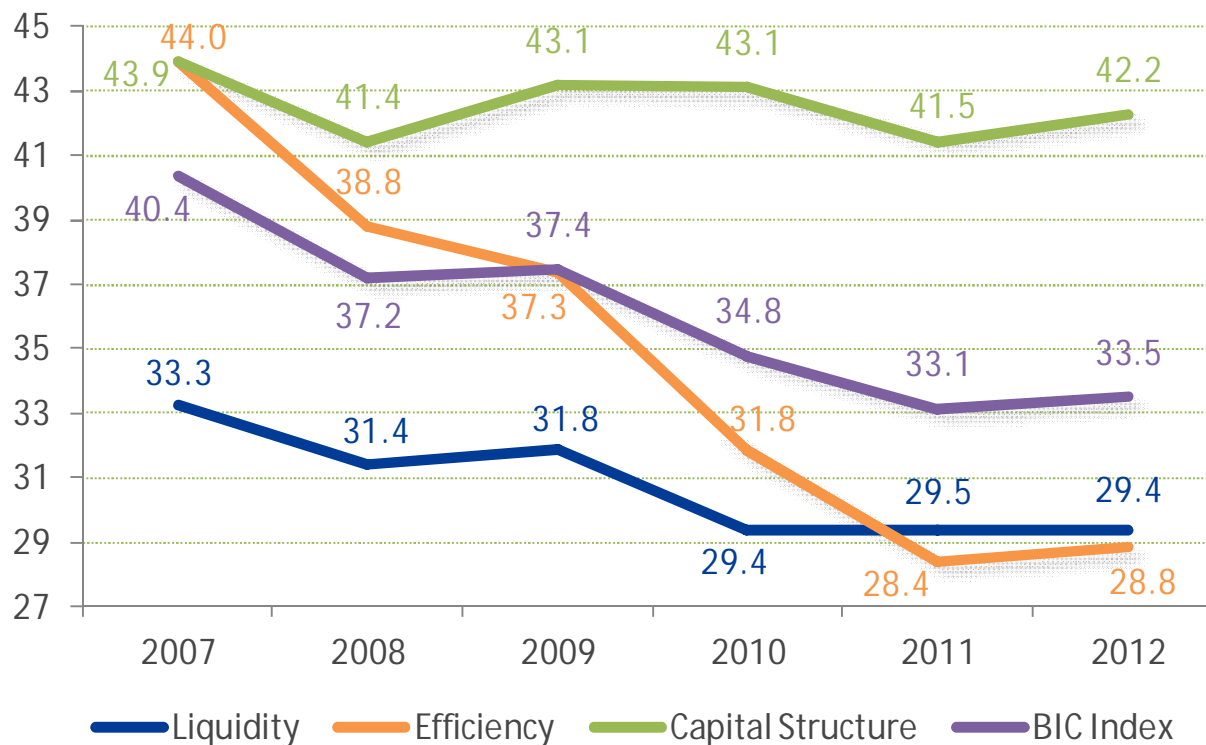


58	Publishing activities
29	Manufacture of motor vehicles, trailers and semi-trailers
24	Manufacture of basic metals
68	Real estate activities
23	Manufacture of other non-metallic mineral products



## BIC 2012: Stabilization after 4 years of decline

The Greek economic recession still has an obvious impact on the domestic entrepreneurial activity. After four years of decline, however, the situation appears to have stabilized, albeit at low levels.





## 5. BIC Rating System



## Motivation for BIC Rating System

---

The BIC Index, as we have already mentioned, allows us to assess the performance of a sector in relation to the other sectors of the Greek economy. In order to take our analysis a step further, it is interesting to review in total the performance of all sectors of domestic economic activity throughout the period 2007-2012.

Our goal is to create a rating system\*, which we call the BIC Rating System. This will allow us to evaluate the evolution of the performance of a sector both at a cross-sectoral level and a time level through a fixed frame of reference. Therefore, we refer to 300 observations which constitute the total number of BIC Index scores of the 50 sectors examined for a period of 6 years.

\* The methodology adopted is based on a similar methodology presented by από Khramov V. and Lee J.R. (2013), The Economic Performance Index (EPI): an Intuitive Indicator for Assessing a Country's Economic Performance Dynamics in an Historical Perspective, IMF Working Paper WP/13/214, October 2013.



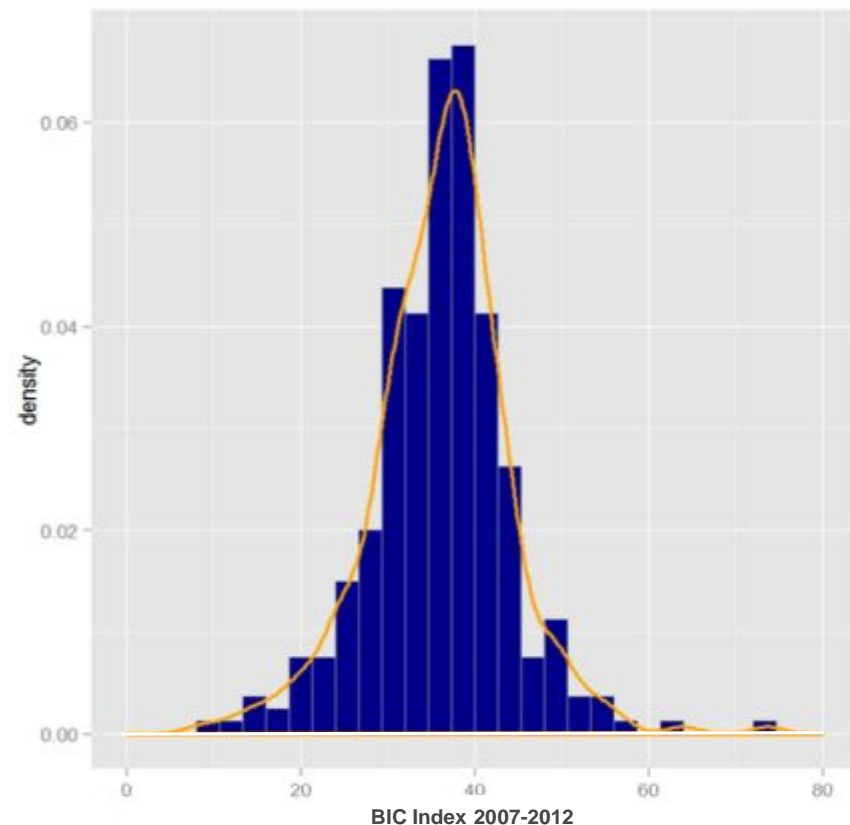
# BIC Rating System: distribution characteristics of all scores of the BIC Index

As shown in the histogram, the distribution of all scores of the BIC Index (50 sectors, 2007-2012) is almost symmetric, it has an average of 36.07, a median of 36.52, a standard deviation of 8.04, while the maximum value is 73.66 and the minimum is 8.34 units.

Descriptive statistics of the BIC Index scores of 50 sectors for 2007-2012

Descriptive Statistics	
N	300
mean	36.069
median	36.522
maximum	73.664
minimum	8.342
Std. deviation	8.035
Skewness	0.074
Kurtosis	2.364

Histogram and kernel distribution of the scores of BIC Index of 50 sectors for 2007-2012





## BIC Rating System: threshold setting

In our approach, we divide the distribution into four (4) groups (quartiles) and create a rating system, where the implemented score thresholds are close to the distribution of the BIC Index scores.

	Percentile		BIC Index Score	Implemented score threshold
Top 25%	>75	above	40.401	40
Next 25%	50	above	36.499	36
Next 25%	25	above	31.643	32
Bottom 25%	<25	all below		



## Structure of the BIC Rating System

In accordance with the implemented thresholds for the BIC Index scores we have created three (3) individual categories for each quartile, the intervals of which are symmetric to the median. Therefore, based on this approach, we present the following rating system.

BIC Rating System

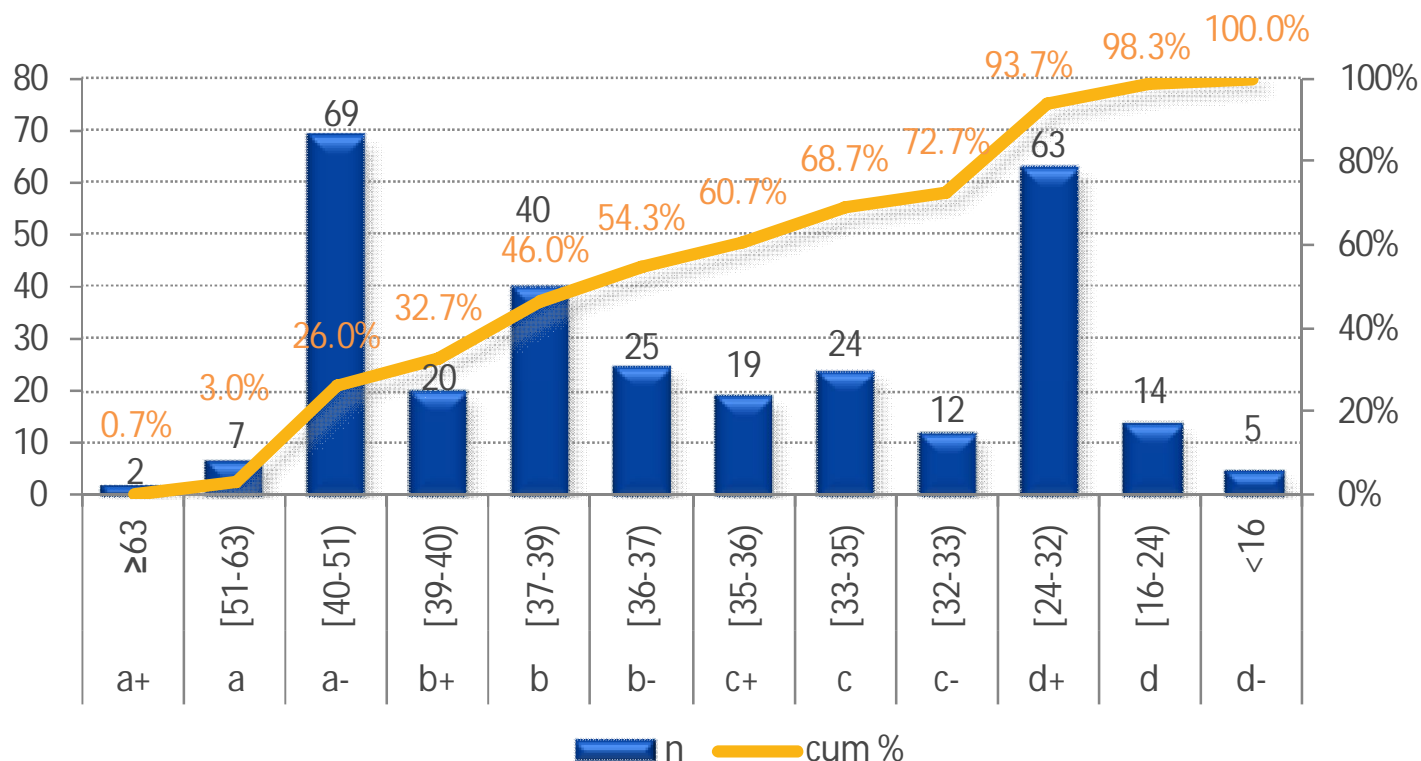
Score range	Score	Rate	BIC Index Performance
≥40	≥63	a+	outperformers
	[51-63)	a	
	[40-51)	a-	
36-40	[39-40)	b+	good performers
	[37-39)	b	
	[36-37)	b-	
32-36	[35-36)	c+	medium performers
	[33-35)	c	
	[32-33)	c-	
<32	[24-32)	d+	underperformers
	[16-24)	d	
	<16	d-	



# Distribution of the BIC Index scores based on the BIC Rating System

From the adoption of the BIC Rating System, the following distribution of 50 sectors for the period 2007-2012 has emerged, according to the scores of the BIC Index.

Distribution of BIC Index scores and the cumulative percentages of 50 sectors, 2007-2012 based on the BIC Rating System





# Classification of sectors per year based on the BIC Rating System

rate	2007			2008			2009			2010			2011			2012		
a+	E	68																
a	M			E			E	68		E			E			E		
a-	B	P	62+63	M	62+63	68	P	62+63	M	68	M	27	68	33	27	33	62+63	27
	56	58	O	P	B	27	32	O	33	D	33	32	32			P	11	50
	D	32	27	O	58	32	27	S	56	P	O	52+53				O	61	B
	11	ST	47	52+53	D	33	58	52+53	26									
	52+53	29	33															
	24	14	23															
	49	28	S															
b+	20	18	26	14	26	47	22	ST	14				61	62+63	51	32	25	
	13			ST	11	56							O	P				
b	46	21	55	21	25	49	25	47	49	49	56	25	M	D	28	56	21	D
	25	R		30	31	N-79	11	20	12	29	20	58				47		
				20	28	29	28	21	18									
				22	23	18	N-79											
b-	N-79	30		24	46	10	D	29	31	62+63	N-79	22	56	47	11	M	14	46
c+							10	23	46	10	11		49			20	10	
	10	16		S	R		B	50	19	23	47	24	10	25		12	28	68
c										30	ST					N-79	49	
	79	15	50	55	13		R	30	16	14	21	46	46	N-79	50	22	19	S
c-	51									19	28	A	20	22	S			
	19			16			13			12			14	A	24	ST	18	52+53
d+													B	30				
	A	45	59+60	15	79	45	55	17	24	18	B	17	15	31	ST	30	79	51
	17			17	59+60	19	A	79	51	51	S	16	18	21	52+53	A	55	58
				12			45	15	61	79	13	31	12	55	19	17	15	13
							59+60			15	55	26	79	23	17	23		
										45	50	R	29	58	13			
d										61			45					
	61	12		50	A	51							16	R		31	45	24
d-				61												29	26	R
										59+60			59+60	26		59+60	16	



# Mapping of the performance of sectors per year based on the BIC Rating System

Sector	BIC Index Score						BIC Rate					
	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2012
E	73.7	54.1	53.1	56.9	54.1	55.7	a+	a	a	a	a	a
33	41.9	40.8	43.1	42.6	42.2	49.9	a-	a-	a-	a-	a-	a-
62+63	49.1	48.6	44.6	36.9	39.7	48.4	a-	a-	a-	b-	b+	a-
27	44.0	45.1	43.0	44.3	42.2	44.6	a-	a-	a-	a-	a-	a-
P	49.4	46.0	47.5	42.0	39.1	43.1	a-	a-	a-	a-	b+	a-
11	43.6	39.5	38.5	36.4	36.2	41.7	a-	b+	b	b-	b-	a-
50	33.9	23.6	35.1	25.3	33.5	41.6	c	d	c+	d+	c	a-
O	46.2	44.2	43.3	41.0	39.1	40.8	a-	a-	a-	a-	b+	a-
61	20.8	18.9	25.4	24.7	39.9	40.7	d	d	d+	d+	b+	a-
B	49.9	45.2	35.3	30.0	32.5	40.1	a-	a-	c+	d+	c-	a-
32	44.3	42.9	43.5	42.4	40.5	39.6	a-	a-	a-	a-	a-	b+
25	37.8	38.9	38.8	38.2	35.4	39.1	b	b	b	b	c+	b+
56	47.6	39.0	41.9	38.3	36.9	38.7	a-	b+	a-	b	b-	b
21	38.4	38.9	37.7	34.6	31.3	38.6	b	b	b	c	d+	b
D	44.9	41.2	37.0	44.2	38.7	38.6	a-	a-	b-	a-	b	b
47	42.6	39.8	38.7	35.6	36.9	37.7	a-	b+	b	c+	b-	b
M	51.7	48.8	43.9	44.9	38.8	36.6	a	a-	a-	a-	b	b-
14	41.5	39.9	39.2	34.9	32.9	36.6	a-	b+	b+	c	c-	b-
46	38.9	36.5	36.1	33.9	34.4	36.6	b	b-	b-	c	c	b-
20	39.7	38.3	38.5	37.3	33.4	36.5	b+	b	b	b	c	b-
10	36.0	36.2	36.2	36.4	35.7	36.3	c+	b-	b-	b-	c+	b-
12	17.3	26.9	38.2	32.4	30.9	35.9	d	d+	b	c-	d+	c+
28	41.3	38.1	37.8	33.7	37.1	35.6	a-	b	b	c	b	c+
68	63.9	46.1	51.8	50.2	49.5	35.5	a+	a-	a	a-	a-	c+
N-79	36.4	38.4	37.0	36.9	33.6	35.2	b-	b	b	b-	c	c+
49	41.5	38.8	38.5	38.7	36.1	35.0	a-	b	b	b	b-	c+
22	40.7	38.1	39.5	36.5	33.3	35.0	a-	b	b+	b-	c	c
19	32.2	27.8	35.0	33.9	30.4	34.7	c-	d+	c+	c	d+	c
S	41.0	35.4	42.6	29.5	33.1	33.2	a-	c+	a-	d+	c	c
ST	42.9	39.7	39.3	35.1	31.6	32.6	a-	b+	b+	c+	d+	c-
18	39.2	37.7	37.1	31.5	31.5	32.4	b+	b	b	d+	d+	c-
52+53	42.1	42.3	40.4	40.8	31.0	32.1	a-	a-	a-	a-	d+	c-
30	36.1	38.8	33.9	35.2	32.0	31.9	b-	b	c	c+	c-	d+
79	34.4	31.5	30.2	29.4	30.4	31.1	c	d+	d+	d+	d+	d+
51	33.0	20.5	30.2	29.7	39.1	30.9	c	d	d+	d+	b+	d+
A	32.0	23.4	30.2	33.1	32.9	30.3	d+	d	d+	c	c-	d+
55	38.0	33.9	32.0	28.0	30.5	29.2	b	c	d+	d+	d+	d+
58	47.3	44.0	41.9	37.2	24.8	29.0	a-	a-	a-	b	d+	d+
17	30.1	29.0	31.9	30.0	28.6	27.6	d+	d+	d+	d+	d+	d+
15	34.3	31.8	28.2	28.2	31.7	27.0	c	d+	d+	d+	d+	d+
13	39.0	33.4	32.6	28.8	24.4	25.8	b+	c	c-	d+	d+	d+
23	41.5	37.9	36.2	35.7	29.8	24.5	a-	b	b-	c+	d+	d+
31	40.7	38.8	36.6	28.5	31.6	23.3	a-	b	b-	d+	d+	d
45	31.8	29.6	28.9	25.8	24.1	23.1	d+	d+	d+	d+	d+	d
24	41.9	37.0	31.4	35.5	32.6	22.1	a-	b-	d+	c+	c-	d
29	42.1	38.1	36.8	38.1	27.4	21.8	a-	b	b-	b	d+	d
26	39.0	39.8	40.1	26.0	13.7	19.7	b+	b+	a-	d+	d-	d
R	37.1	35.4	34.5	25.0	17.1	19.0	b	c+	c	d+	d	d
59+60	30.3	27.8	24.9	15.6	14.2	11.2	d+	c-	d+	d-	d-	d-
16	35.6	32.9	33.0	29.4	20.6	8.3	c+	c-	c	d+	d	d-
Average	40.4	37.2	37.4	34.8	33.1	33.5	a-	b	b	c	c	c

\*Ranking of sectors based on 2012

Source: ICAP DATA, Piraeus Bank Research



## 6. Appendices

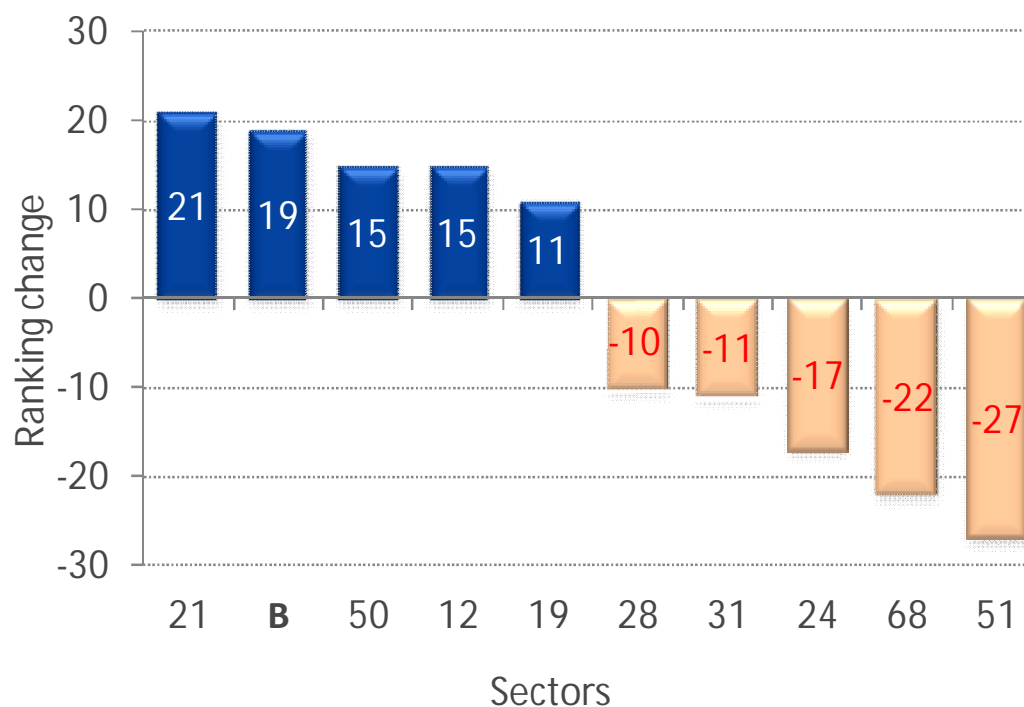


## 6a. Additional presentation of results, 2012



## BIC Index: further examination of performance of sectors, 2012

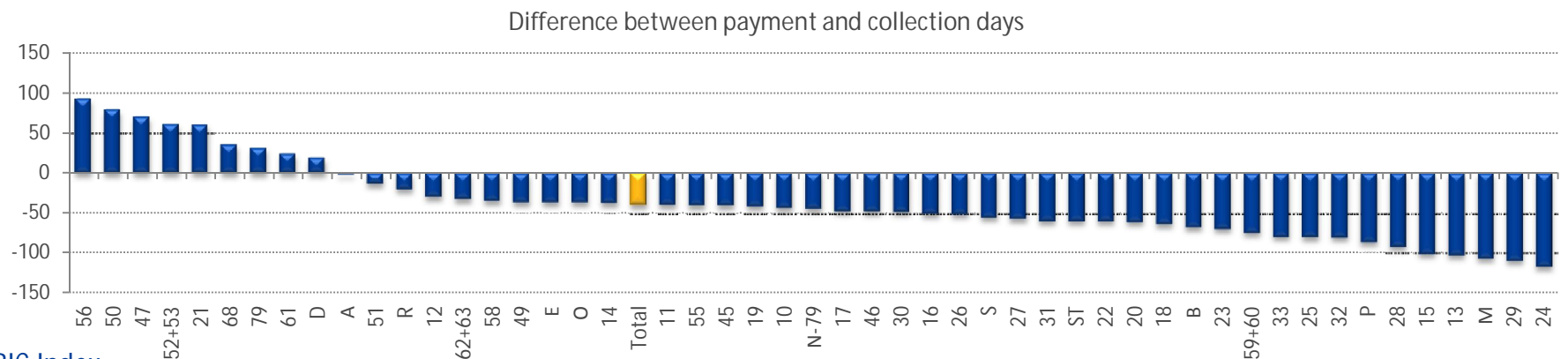
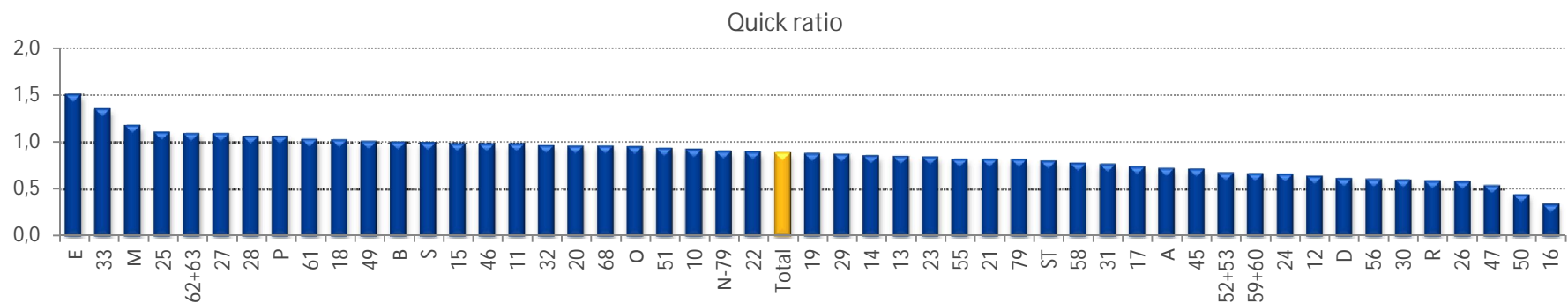
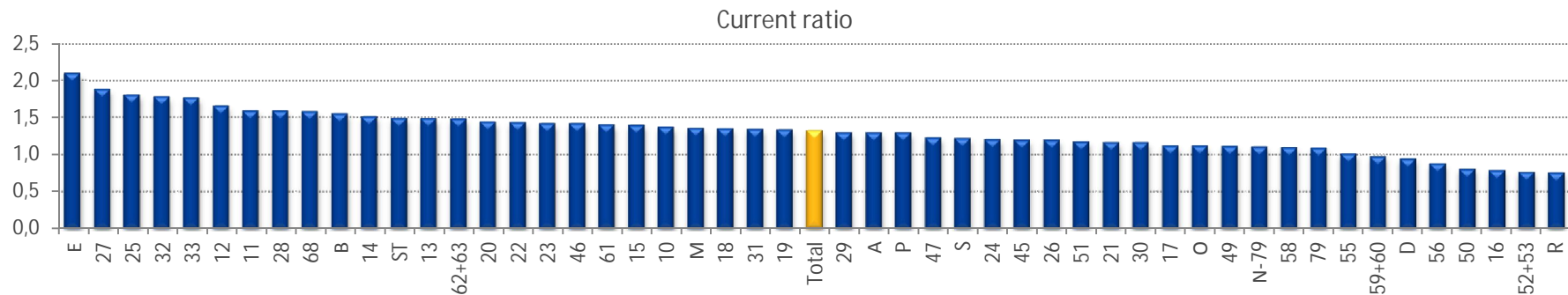
The sectors with the 5 largest positive and negative changes in the ranking of the BIC Index, 2012





# Liquidity, 2012

## Performance of examined ratios per sector





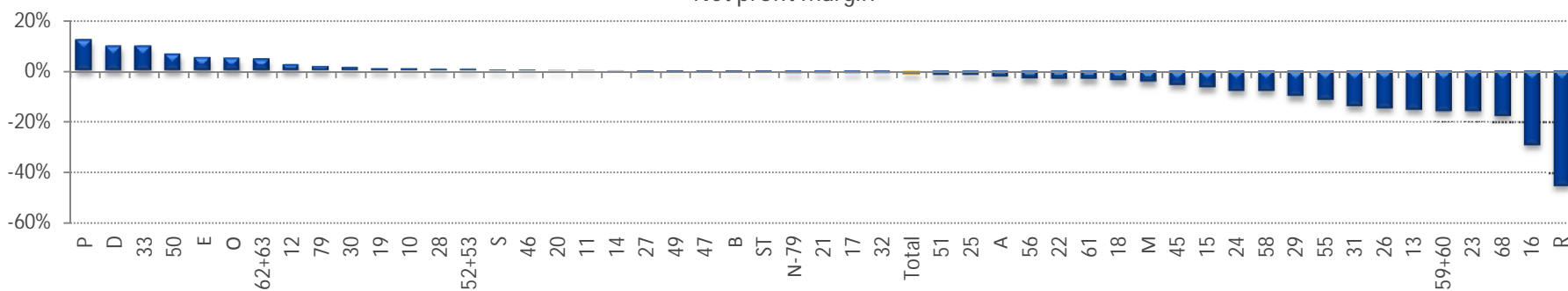
# Efficiency, 2012

## Performance of examined ratios per sector (a)

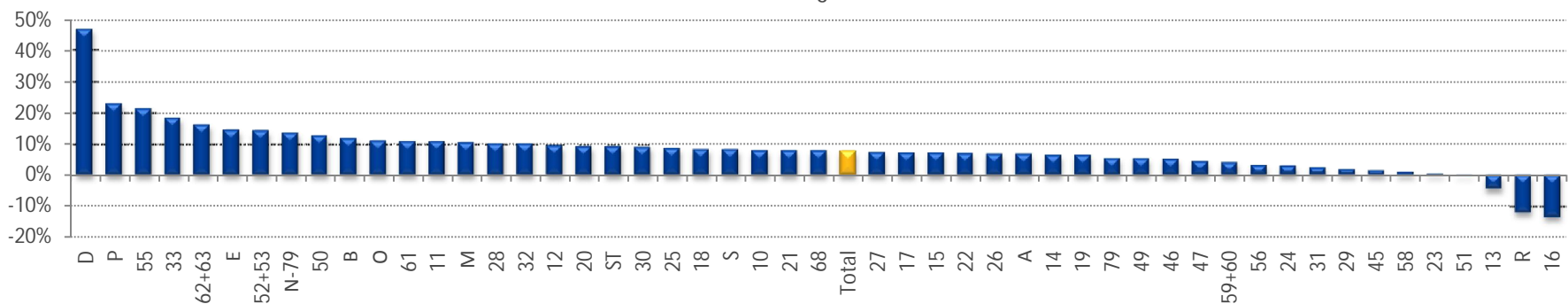
Gross profit margin



Net profit margin



EBITDA margin

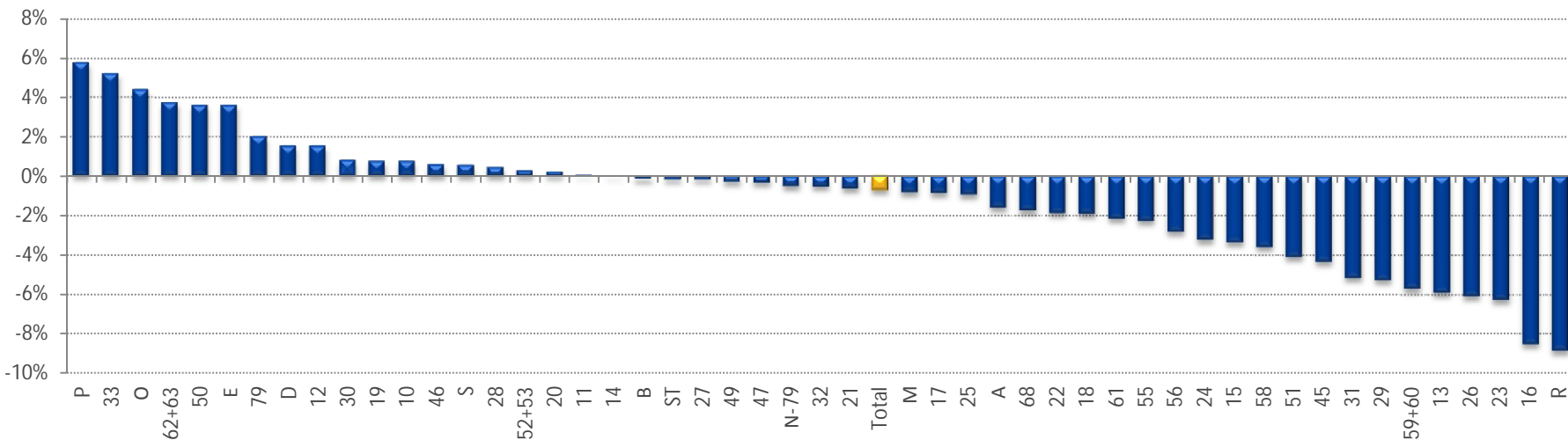




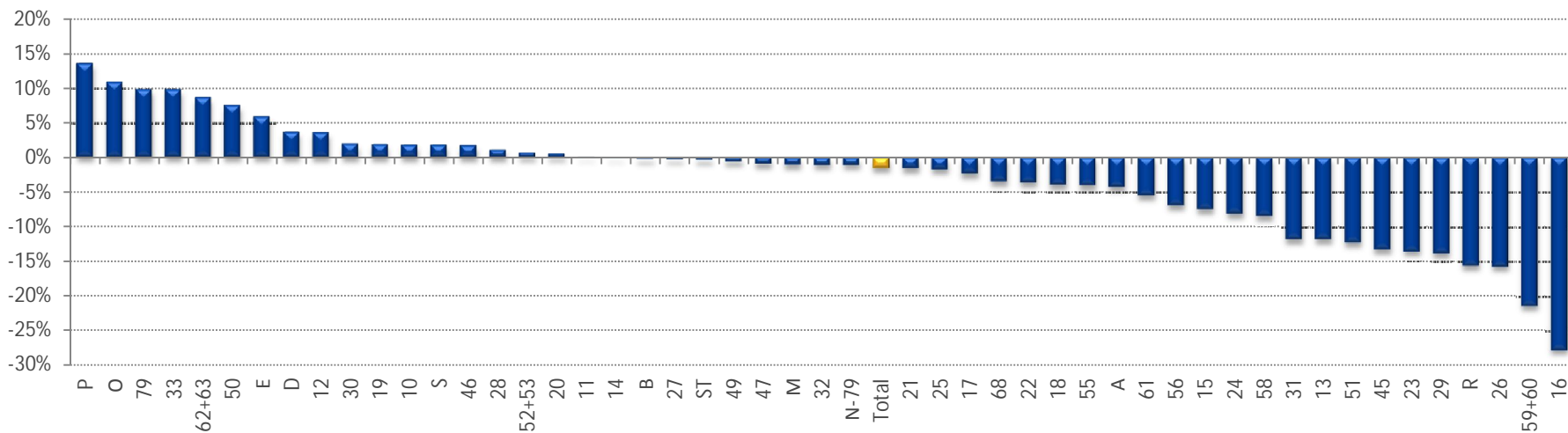
# Efficiency, 2012

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity

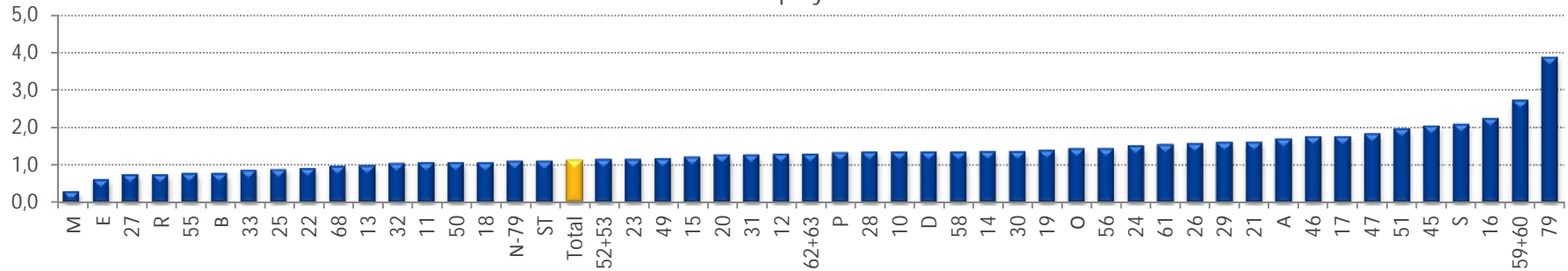




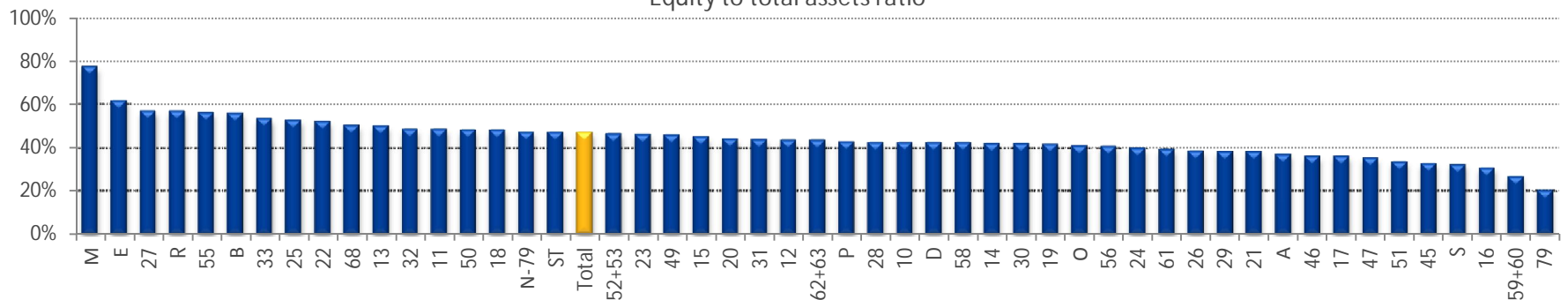
# Capital structure, 2012

## Performance of examined ratios per sector (a)

Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

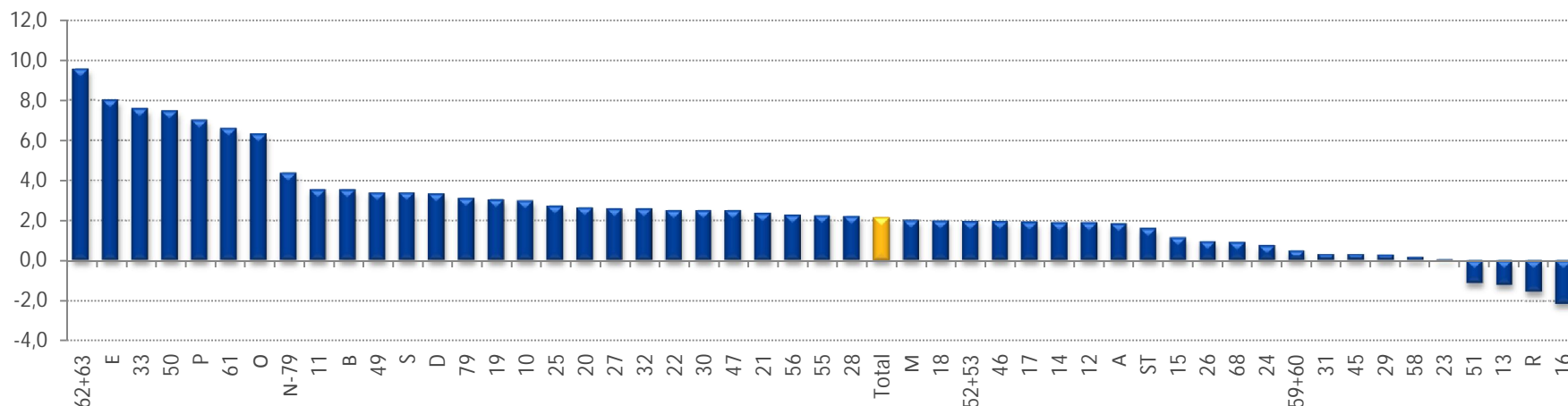




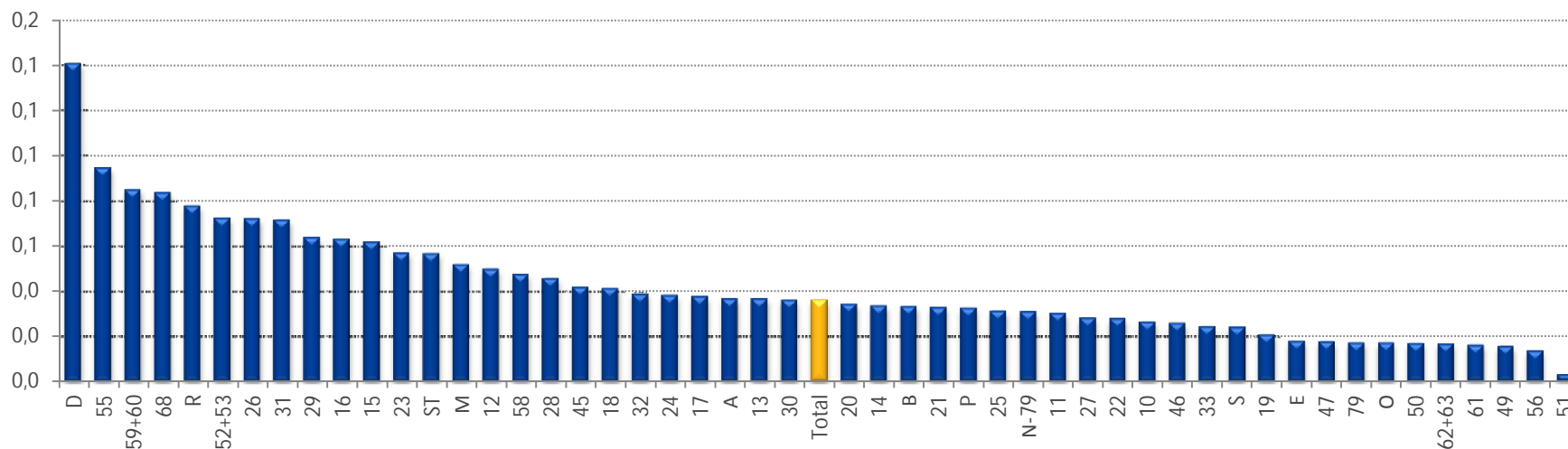
# Capital structure, 2012

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio

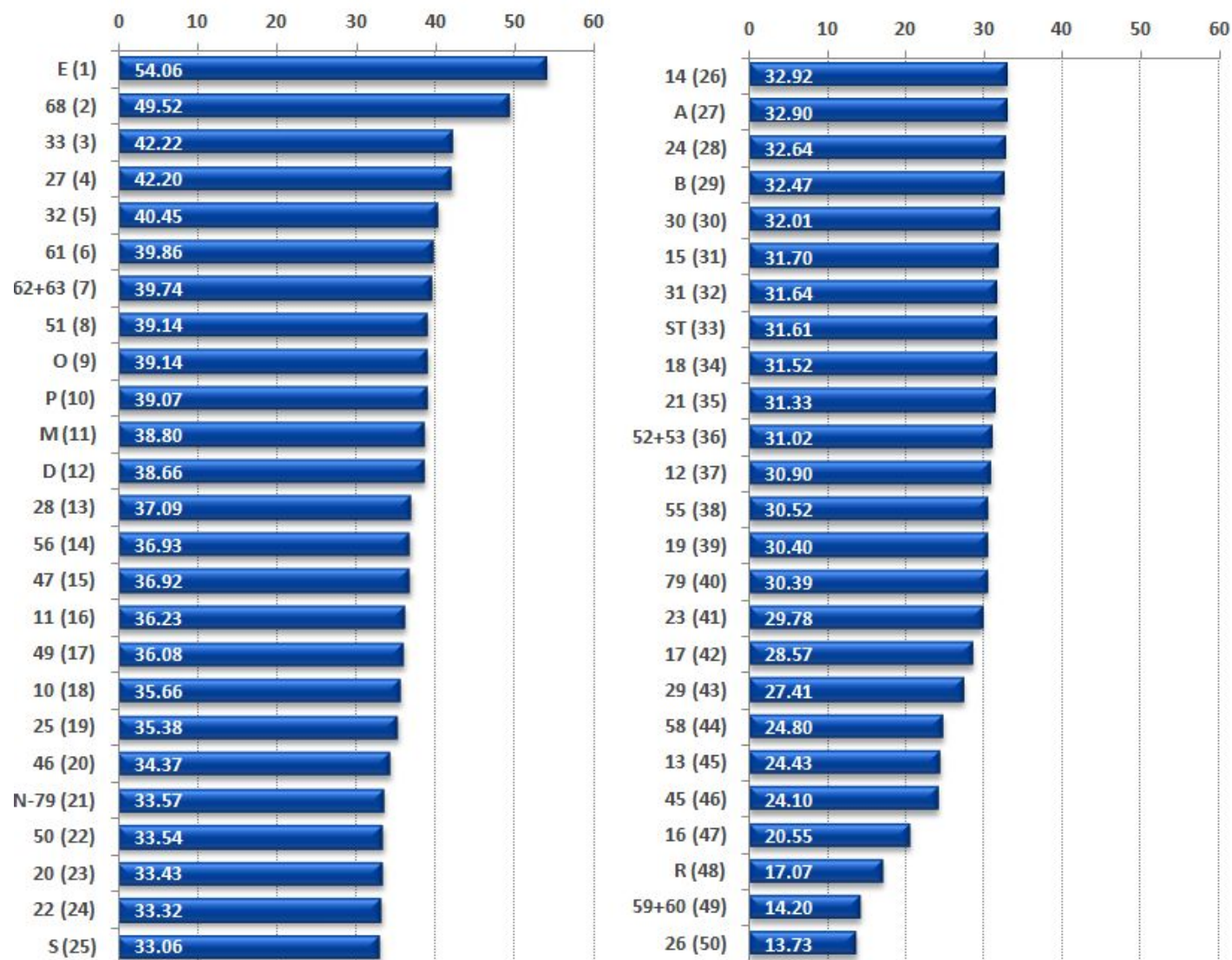




## 6b. Presentation of results, 2011



# BIC Index: ranking and scores, 2011



\*In brackets the ranking of sectors and in the histograms their scores



# BIC Index: examination of the scores and rankings of the individual dimensions, 2011

Sector 2011	Total		Liquidity		Efficiency		Capital Structure		Sector 2011	Total		Liquidity		Efficiency		Capital Structure	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank		Score	Rank	Score	Rank	Score	Rank	Score	Rank
E	54.1	1	↑ 52.9	2	↑ 36.5	9	↑ 72.8	1	14	32.9	26	↗ 30.9	17	↓ 21.8	41	↗ 46.1	14
68	49.5	2	↑ 68.5	1	↑ 40.8	5	↘ 39.3	31	A	32.9	27	↗ 32.0	15	↘ 28.2	30	↘ 38.5	35
33	42.2	3	↘ 32.3	14	↑ 43.2	4	↑ 51.3	6	24	32.6	28	↘ 25.7	35	↓ 24.2	39	↑ 48.0	12
27	42.2	4	↑ 35.8	5	↑ 35.7	12	↑ 55.0	4	B	32.5	29	↘ 27.6	32	↘ 25.9	34	↗ 43.9	18
32	40.5	5	↑ 34.7	7	↑ 37.3	8	↑ 49.4	10	30	32.0	30	↓ 25.2	38	↗ 31.1	20	↘ 39.7	30
61	39.9	6	↑ 36.4	4	↗ 30.8	22	↑ 52.4	5	15	31.7	31	↓ 25.0	39	↗ 31.1	21	↘ 38.9	34
62+63	39.7	7	↗ 30.4	20	↑ 39.1	6	↑ 49.7	9	31	31.6	32	↗ 30.7	19	↘ 25.1	37	↘ 39.1	32
51	39.1	8	↑ 34.0	10	↓ 18.6	42	↑ 64.8	2	ST	31.6	33	↘ 28.7	26	↘ 26.2	33	↘ 39.9	28
O	39.1	9	↘ 27.9	28	↑ 46.5	2	↗ 43.0	23	18	31.5	34	↓ 24.7	40	↓ 22.8	40	↑ 47.0	13
P	39.1	10	↘ 27.9	29	↑ 45.6	3	↗ 43.7	19	21	31.3	35	↑ 34.3	8	↘ 25.8	35	↓ 33.9	42
M	38.8	11	↘ 27.8	31	↗ 29.8	25	↑ 58.8	3	52+53	31.0	36	↑ 34.1	9	↘ 29.7	26	↓ 29.3	45
D	38.7	12	↑ 35.6	6	↑ 48.0	1	↓ 32.4	44	12	30.9	37	↘ 28.7	27	↗ 30.3	23	↓ 33.7	43
28	37.1	13	↗ 31.1	16	↑ 36.0	11	↗ 44.1	17	55	30.5	38	↘ 25.8	34	↗ 30.1	24	↓ 35.6	39
56	36.9	14	↑ 33.1	13	↑ 37.5	7	↘ 40.2	26	19	30.4	39	↓ 23.1	42	↘ 29.0	27	↘ 39.0	33
47	36.9	15	↑ 38.4	3	↗ 31.9	18	↗ 40.5	25	79	30.4	40	↑ 33.5	12	↗ 32.9	17	↓ 24.8	48
11	36.2	16	↗ 29.9	23	↑ 35.1	13	↗ 43.7	20	23	29.8	41	↘ 27.8	30	↓ 18.4	43	↗ 43.1	22
49	36.1	17	↗ 29.1	24	↘ 28.2	29	↑ 51.0	7	17	28.6	42	↓ 23.5	41	↘ 26.9	32	↓ 35.3	40
10	35.7	18	↗ 30.0	22	↗ 31.2	19	↑ 45.8	15	29	27.4	43	↓ 19.2	48	↘ 28.3	28	↓ 34.7	41
25	35.4	19	↗ 30.8	18	↓ 24.5	38	↑ 50.8	8	58	24.8	44	↓ 20.8	46	↓ 16.6	45	↘ 37.0	36
46	34.4	20	↗ 30.1	21	↗ 32.9	16	↘ 40.0	27	13	24.4	45	↓ 21.1	45	↓ 7.1	47	↗ 45.0	16
N-79	33.6	21	↓ 21.5	43	↑ 36.0	10	↗ 43.2	21	45	24.1	46	↘ 26.9	33	↓ 16.6	44	↓ 28.8	46
50	33.5	22	↑ 33.5	11	↘ 27.4	31	↘ 39.7	29	16	20.6	47	↓ 20.0	47	↓ 5.7	48	↓ 36.0	38
20	33.4	23	↘ 25.2	37	↗ 34.2	14	↗ 40.9	24	R	17.1	48	↓ 21.2	44	↓ 4.4	49	↓ 25.6	47
22	33.3	24	↘ 25.3	36	↘ 25.6	36	↑ 49.1	11	59+60	14.2	49	↓ 12.3	50	↓ 14.0	46	↓ 16.3	50
S	33.1	25	↗ 29.0	25	↗ 33.9	15	↘ 36.3	37	26	13.7	50	↓ 18.8	49	↓ 2.7	50	↓ 19.7	49

• The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.

• The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.

• ↑ score ≥ 75% of score range

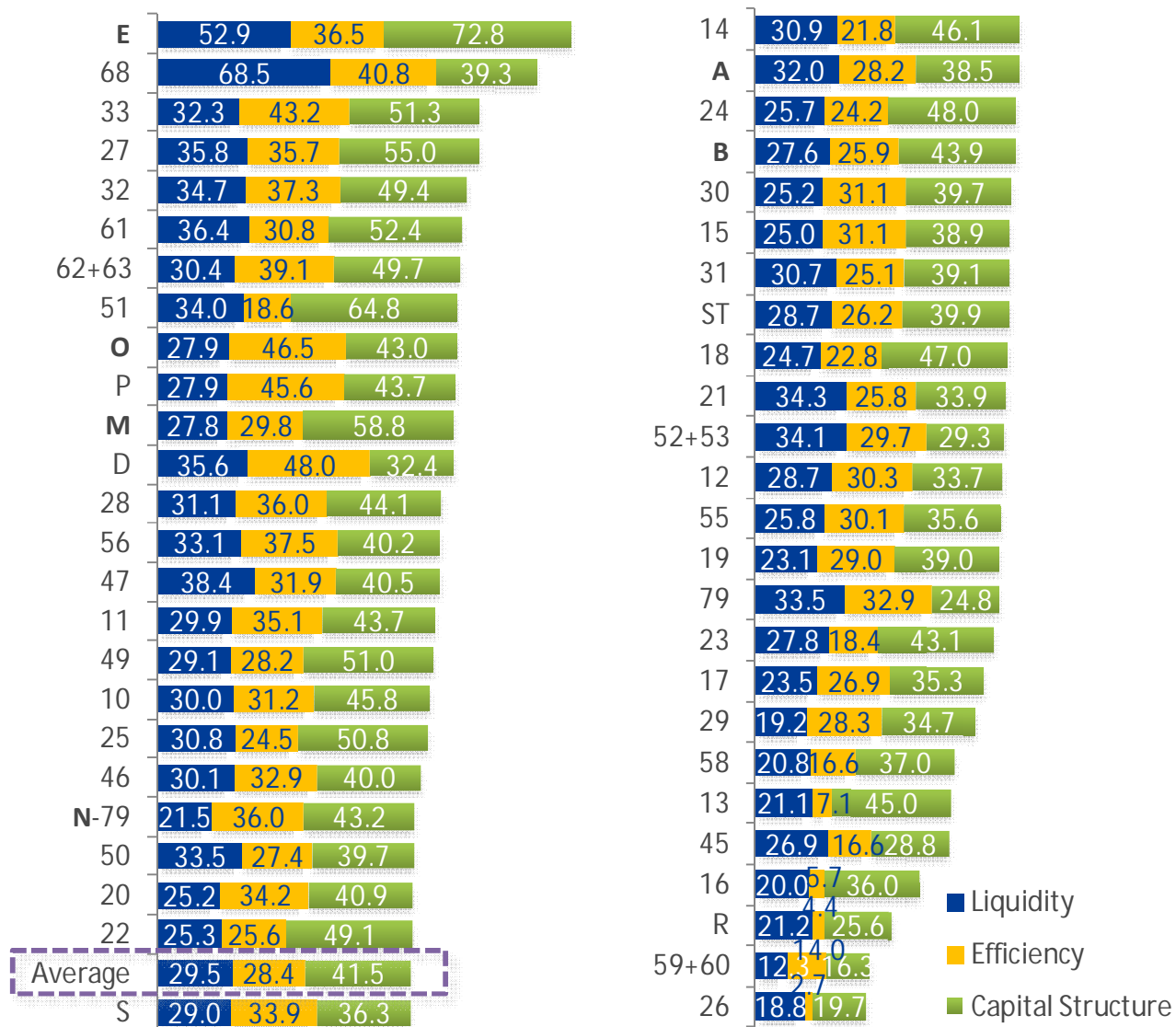
• ↗ 50% ≤ score < 75%

• ↘ 25% ≤ score < 50%

• ↓ score < 25%



## BIC Index: Structure of the final score per sector, 2011



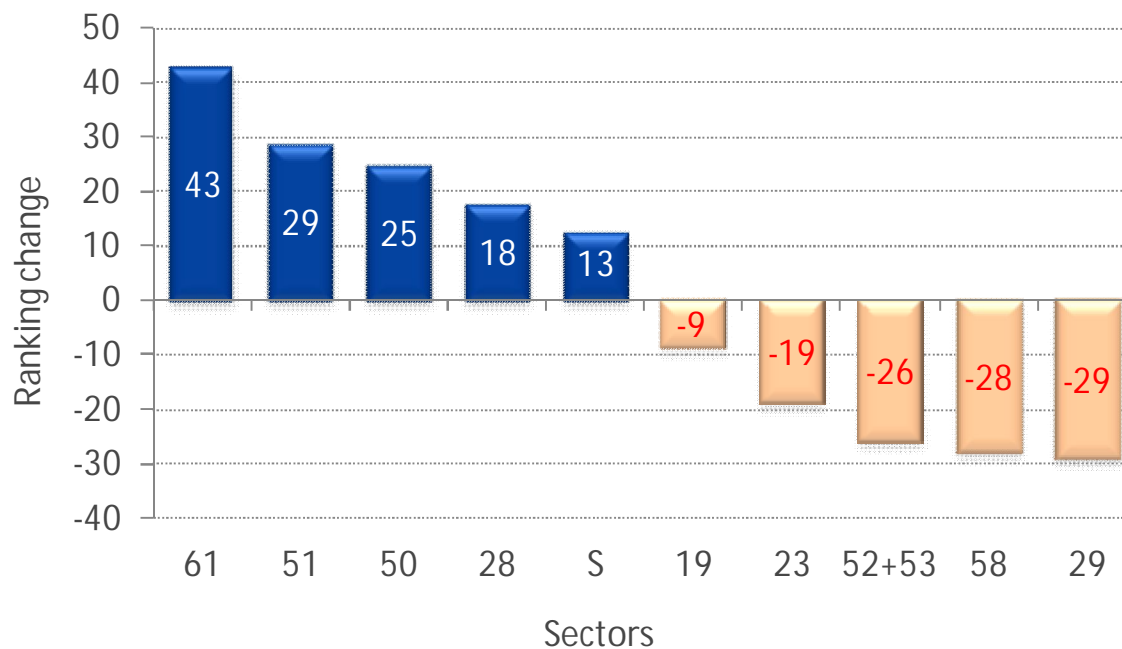
\*The BIC Index is the average result of the scores of each dimension

Source: ICAP DATA, Piraeus Bank Research



## BIC Index: further examination of performance of sectors, 2011

The sectors with the 5 largest positive and negative changes in the ranking of the BIC Index, 2011

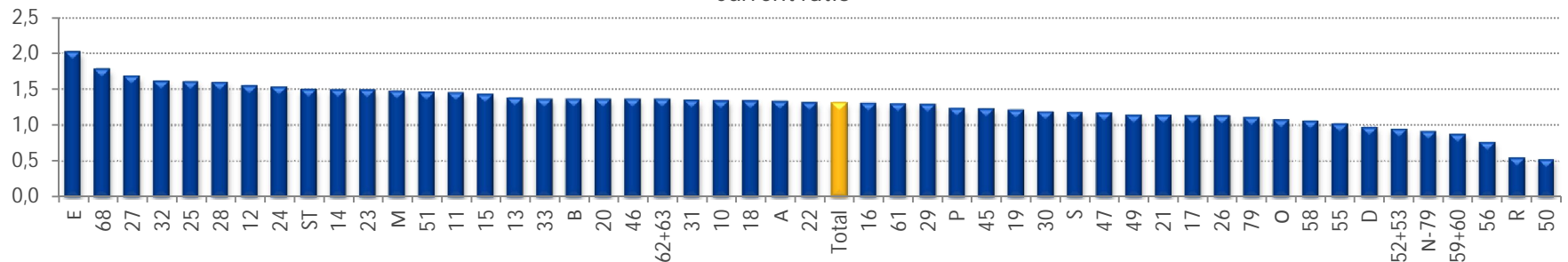




# Liquidity, 2011

## Performance of examined ratios per sector

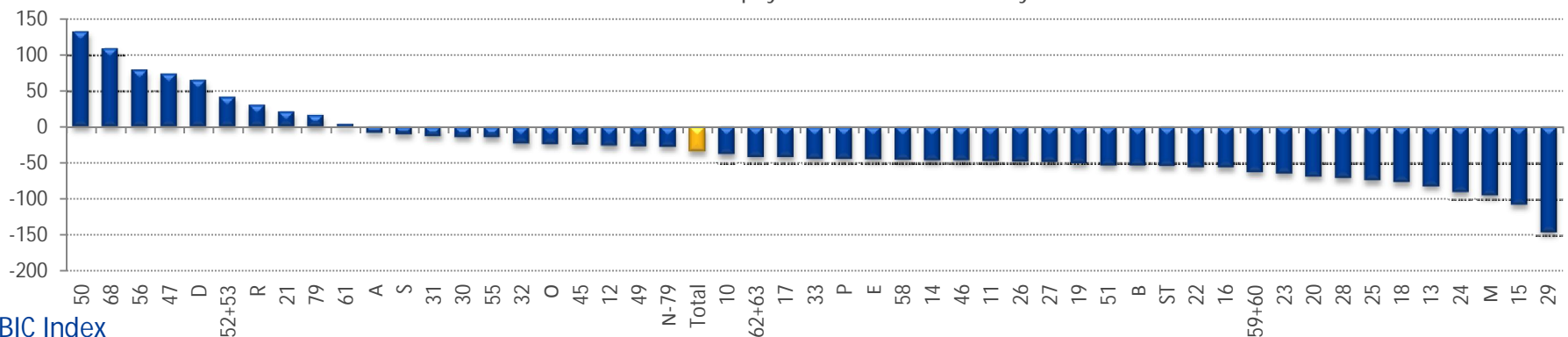
Current ratio



Quick ratio



Difference between payment and collection days





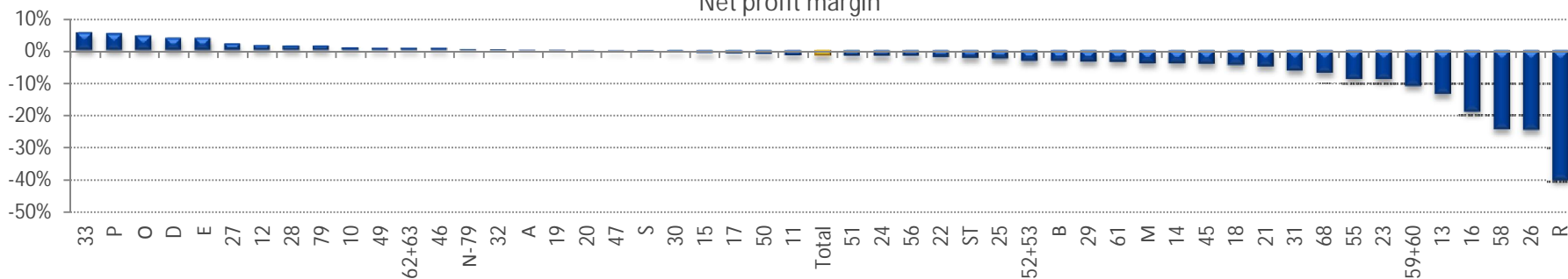
# Efficiency, 2011

## Performance of examined ratios per sector (a)

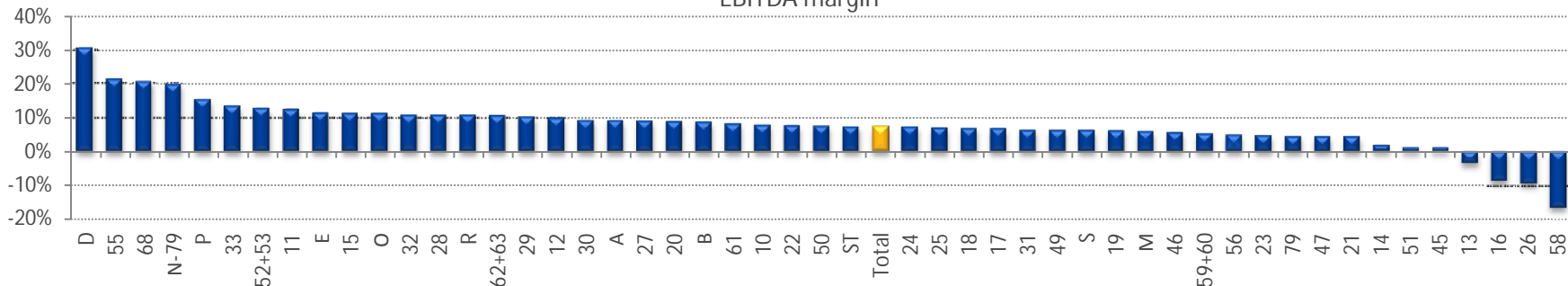
Gross profit margin



Net profit margin



EBITDA margin

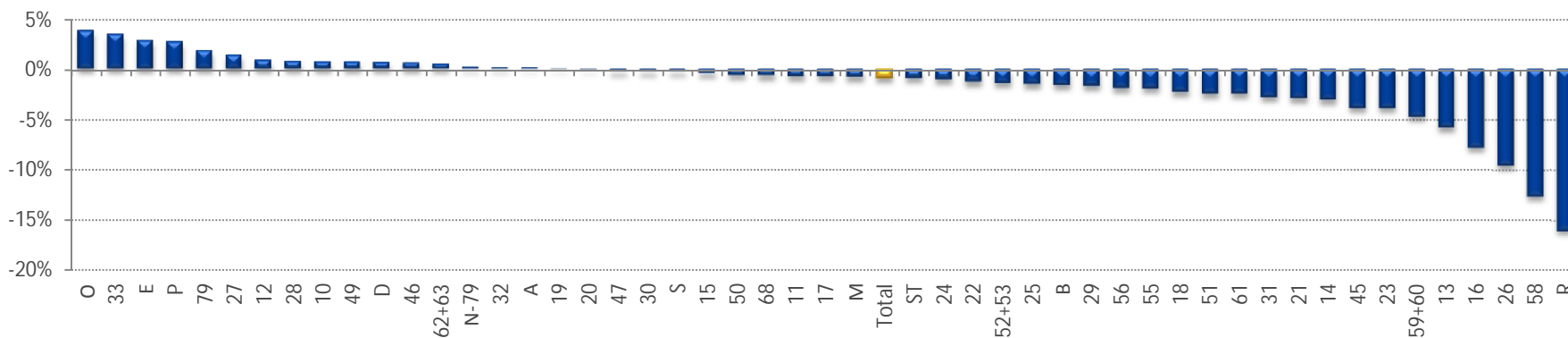




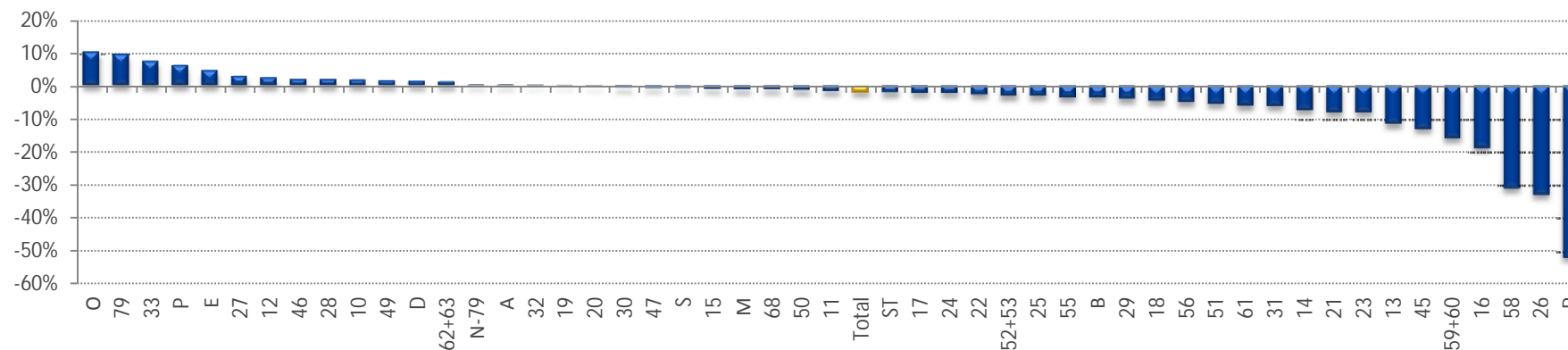
# Efficiency, 2011

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity





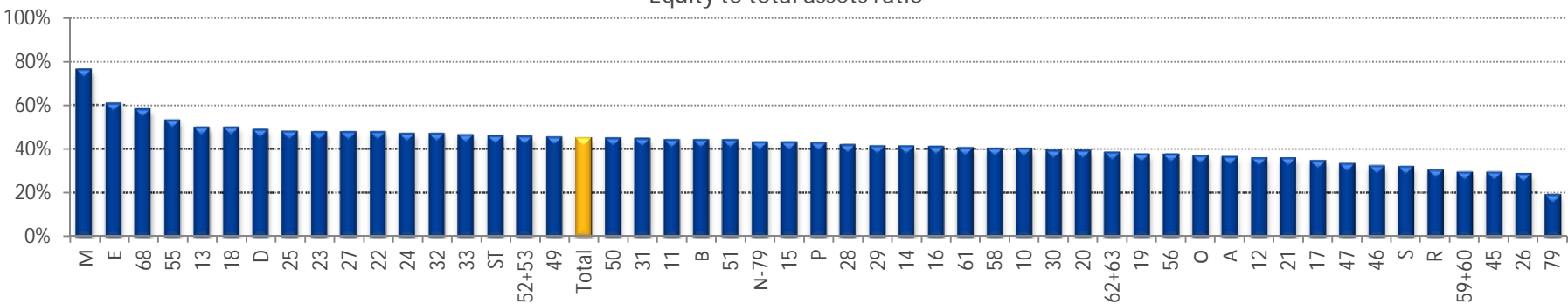
# Capital structure, 2011

## Performance of examined ratios per sector (a)

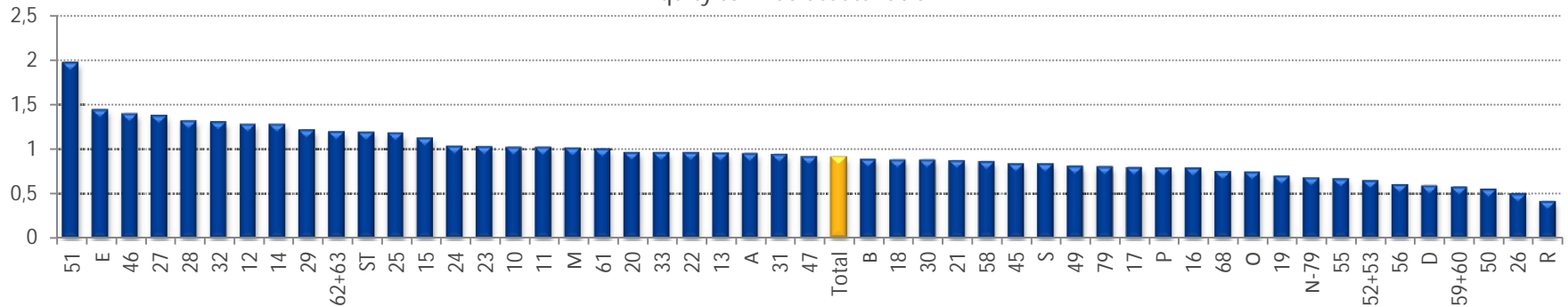
Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

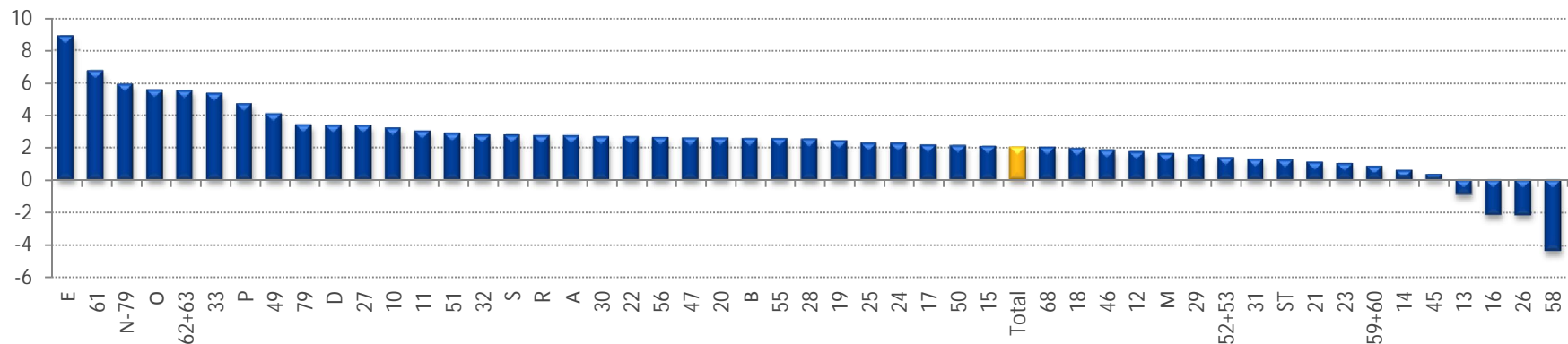




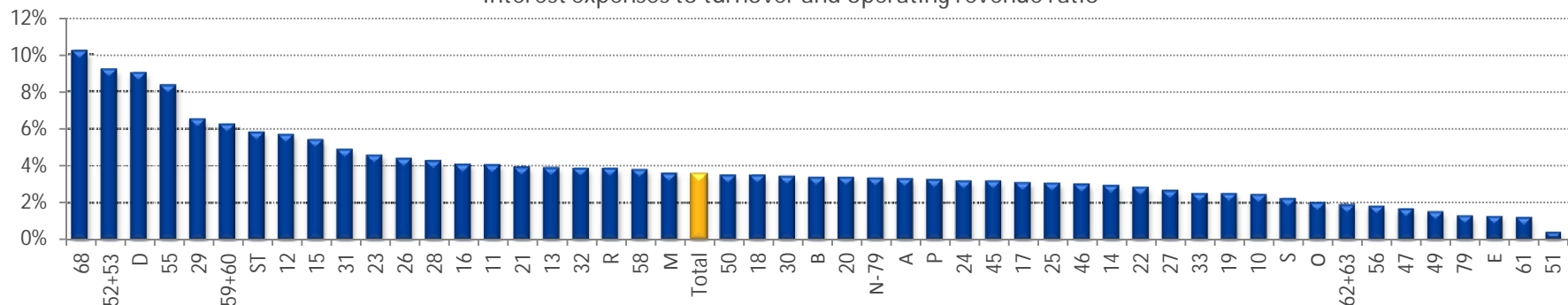
# Capital structure, 2011

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio





## 6c. Presentation of results, 2010



# BIC Index: ranking and scores, 2010



\*In brackets the ranking of sectors and in the histograms their scores

Source: ICAP DATA, Piraeus Bank Research



# BIC Index: examination of the scores and rankings of the individual dimensions, 2010

Sector 2010	Total		Liquidity		Efficiency		Capital Structure		Sector 2010	Total		Liquidity		Efficiency		Capital Structure	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank		Score	Rank	Score	Rank	Score	Rank	Score	Rank
E	56.9	1	↑ 49.6	2	↑ 42.4	9	↑ 78.7	1	ST	35.1	26	↗ 31.5	14	↘ 30.8	28	↘ 43.0	26
68	50.2	2	↑ 64.0	1	↑ 49.8	3	↓ 36.9	38	14	34.9	27	↗ 31.0	17	↓ 26.3	38	↗ 47.3	16
M	44.9	3	↑ 38.2	4	↗ 32.8	21	↑ 63.5	2	21	34.6	28	↗ 29.9	22	↗ 32.7	23	↘ 41.2	29
27	44.3	4	↑ 34.7	9	↑ 40.8	10	↑ 57.3	3	46	33.9	29	↘ 28.0	27	↗ 36.7	17	↘ 37.2	36
D	44.2	5	↑ 40.3	3	↑ 59.5	1	↓ 32.8	46	19	33.9	30	↓ 23.1	43	↗ 38.0	15	↘ 40.7	31
33	42.6	6	↘ 26.8	31	↑ 48.2	4	↑ 52.7	5	28	33.7	31	↘ 25.3	36	↗ 34.7	19	↘ 41.1	30
32	42.4	7	↑ 36.1	7	↗ 38.8	14	↑ 52.3	6	A	33.1	32	↘ 28.8	26	↘ 31.5	26	↘ 39.2	33
P	42.0	8	↘ 26.7	33	↑ 53.5	2	↗ 45.9	19	12	32.4	33	↘ 26.6	34	↗ 31.7	25	↘ 39.0	34
O	41.0	9	↘ 30.9	18	↑ 48.1	5	↘ 43.9	25	18	31.5	34	↘ 24.8	37	↘ 27.3	36	↘ 42.4	28
52+53	40.8	10	↑ 35.7	8	↑ 39.0	12	↑ 47.9	12	B	30.0	35	↓ 23.0	44	↓ 22.1	42	↗ 45.1	20
49	38.7	11	↑ 32.9	10	↘ 29.9	32	↑ 53.2	4	17	30.0	36	↓ 23.9	40	↘ 29.7	33	↓ 36.4	40
56	38.3	12	↑ 37.0	6	↑ 43.1	8	↓ 34.7	42	51	29.7	37	↑ 32.8	11	↓ 8.4	49	↑ 47.8	13
25	38.2	13	↘ 30.1	21	↘ 33.4	20	↑ 51.3	10	S	29.5	38	↓ 22.8	45	↘ 31.5	27	↓ 34.3	44
29	38.1	14	↓ 19.2	49	↑ 47.8	6	↘ 47.3	15	16	29.4	39	↓ 22.2	46	↓ 23.3	41	↓ 42.7	27
20	37.3	15	↓ 23.7	41	↑ 43.2	7	↘ 44.9	22	79	29.4	40	↑ 32.3	12	↘ 30.8	29	↓ 25.0	49
58	37.2	16	↘ 30.1	20	↘ 36.7	16	↘ 44.7	24	13	28.8	41	↓ 22.1	47	↓ 12.8	46	↑ 51.6	8
62+63	36.9	17	↘ 28.9	24	↘ 35.6	18	↘ 46.3	17	31	28.5	42	↘ 31.2	16	↓ 16.5	45	↘ 37.8	35
N-79	36.9	18	↘ 26.7	32	↑ 39.1	11	↘ 44.9	21	15	28.2	43	↓ 24.3	39	↓ 26.2	39	↓ 34.1	45
22	36.5	19	↘ 27.6	28	↘ 30.5	30	↑ 51.4	9	55	28.0	44	↓ 24.4	38	↓ 25.1	40	↓ 34.6	43
10	36.4	20	↘ 30.2	19	↘ 32.8	22	↘ 46.3	18	26	26.0	45	↓ 19.6	48	↘ 28.1	34	↓ 30.2	47
11	36.4	21	↘ 25.6	35	↑ 38.9	13	↘ 44.7	23	45	25.8	46	↘ 27.1	29	↓ 20.7	43	↓ 29.7	48
23	35.7	22	↘ 28.9	23	↘ 30.1	31	↑ 48.3	11	50	25.3	47	↑ 31.6	13	↓ 7.8	50	↓ 36.5	39
47	35.6	23	↑ 37.4	5	↘ 32.4	24	↘ 37.1	37	R	25.0	48	↘ 28.8	25	↓ 11.2	47	↓ 35.1	41
24	35.5	24	↘ 26.9	30	↘ 27.6	35	↑ 52.1	7	61	24.7	49	↓ 23.6	42	↓ 9.9	48	↘ 40.6	32
30	35.2	25	↘ 31.4	15	↘ 26.7	37	↘ 47.4	14	59+60	15.6	50	↓ 14.3	50	↓ 17.2	44	↓ 15.5	50

•The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.

•The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.

•↑ score ≥ 75% of score range

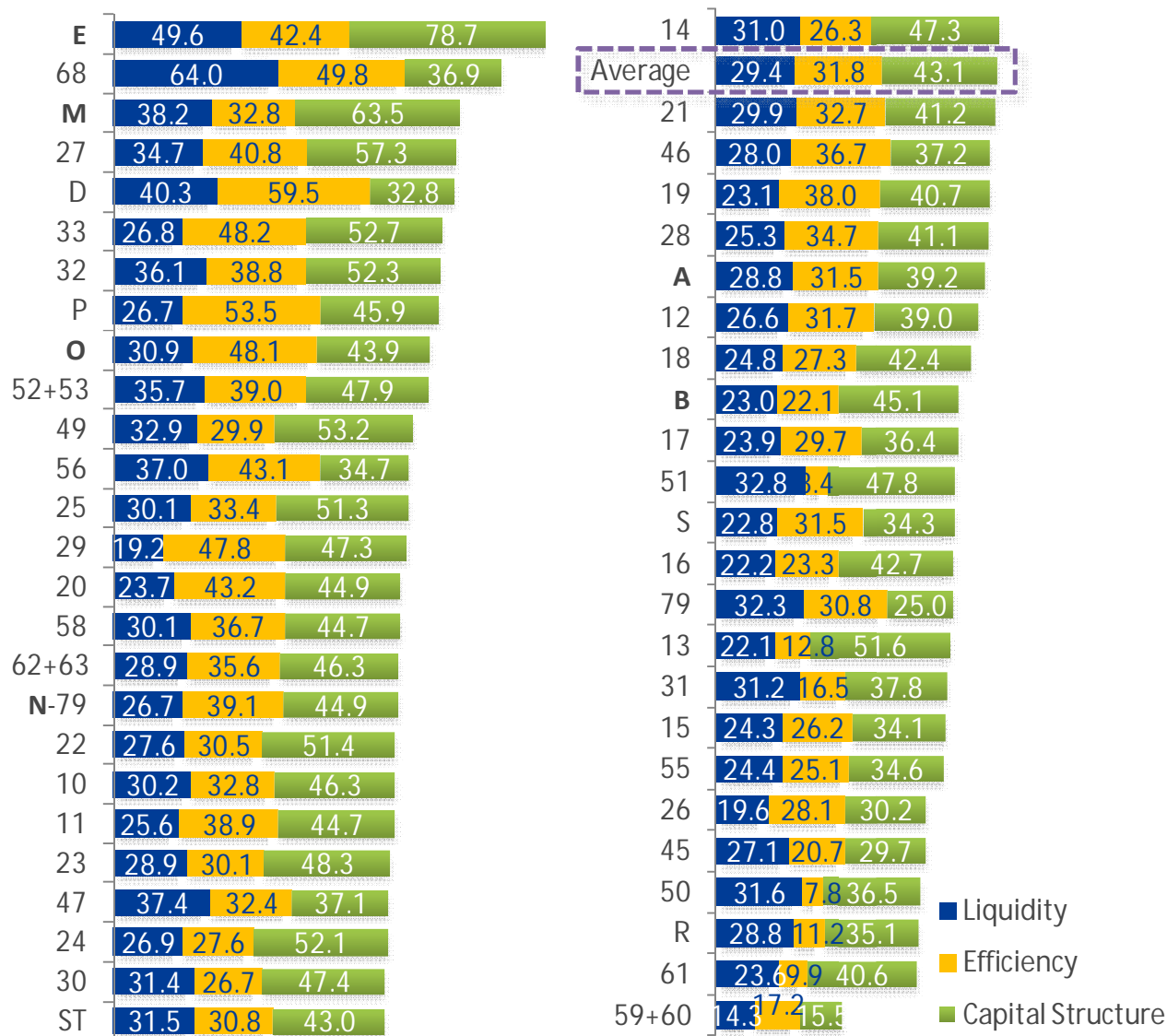
•↗ 50% ≤ score < 75%

•↘ 25% ≤ score < 50%

•↓ score < 25%



## BIC Index: Structure of the final score per sector, 2010



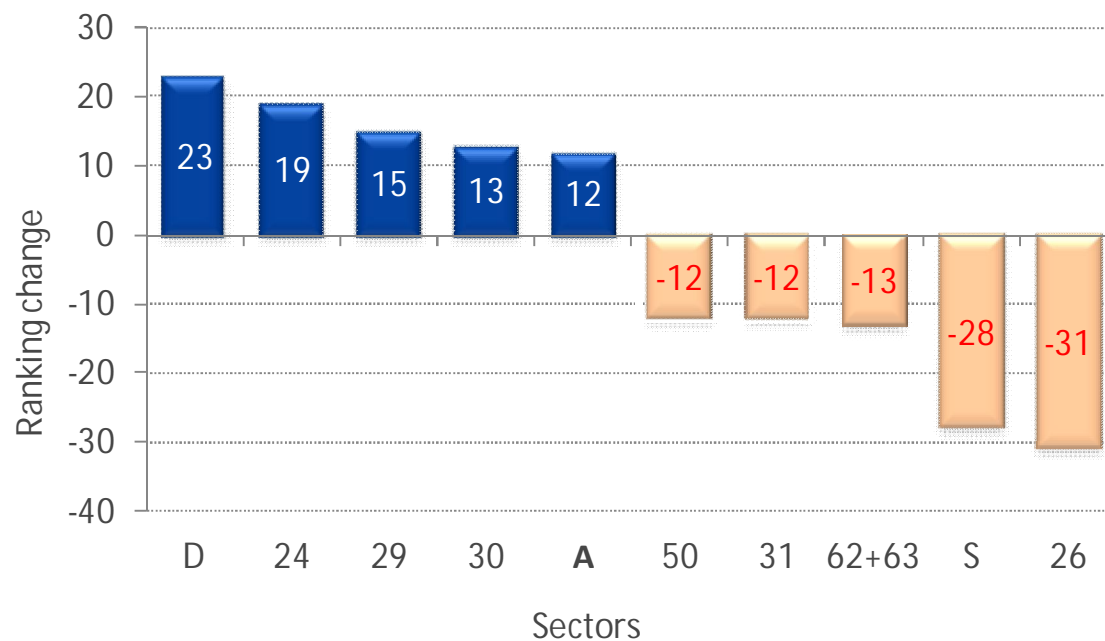
\*The BIC Index is the average result of the scores of each dimension

Source: ICAP DATA, Piraeus Bank Research



## BIC Index: further examination of performance of sectors, 2010

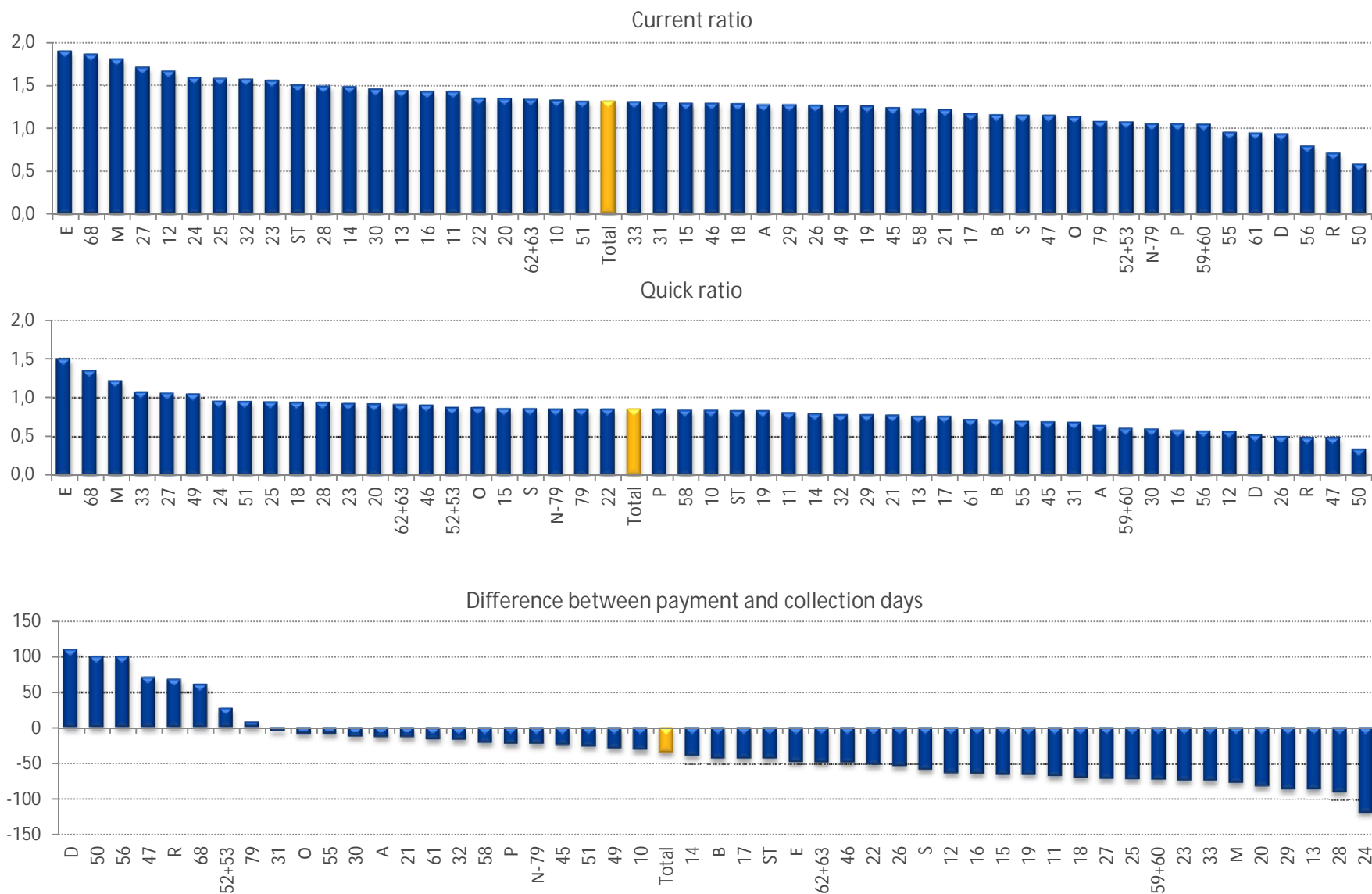
The sectors with the 5 largest positive and negative changes in the ranking of the BIC Index, 2010





# Liquidity, 2010

## Performance of examined ratios per sector

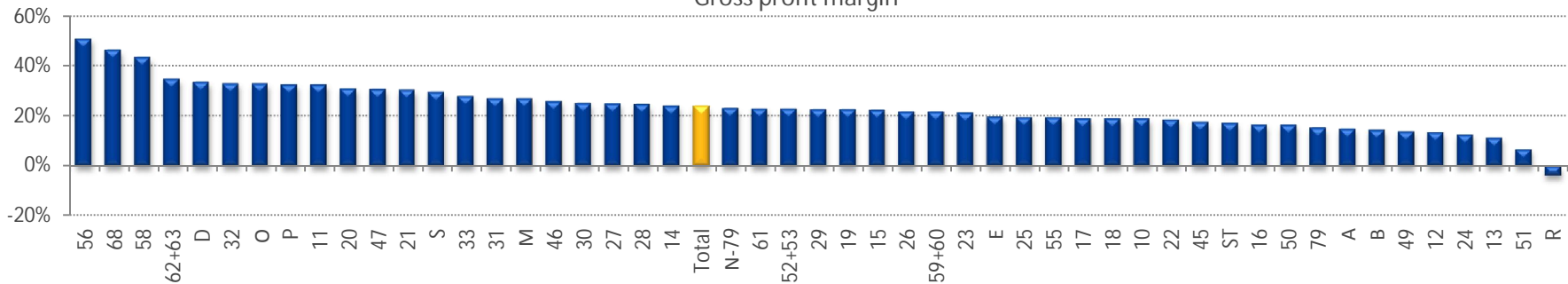




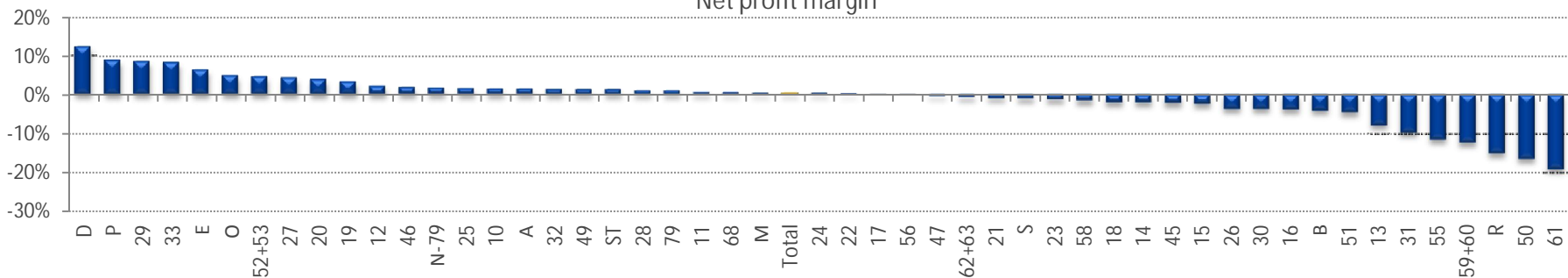
# Efficiency, 2010

## Performance of examined ratios per sector (a)

Gross profit margin



Net profit margin



EBITDA margin

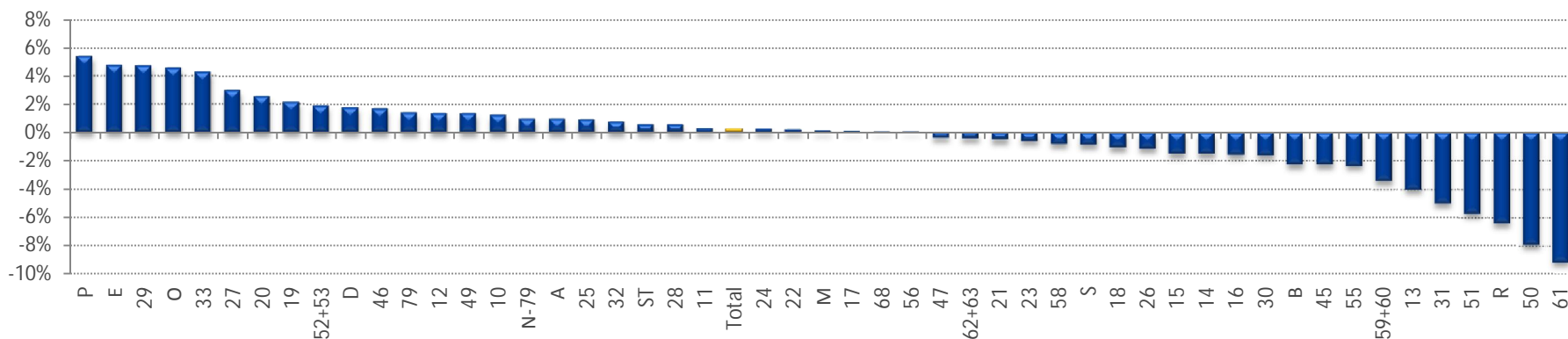




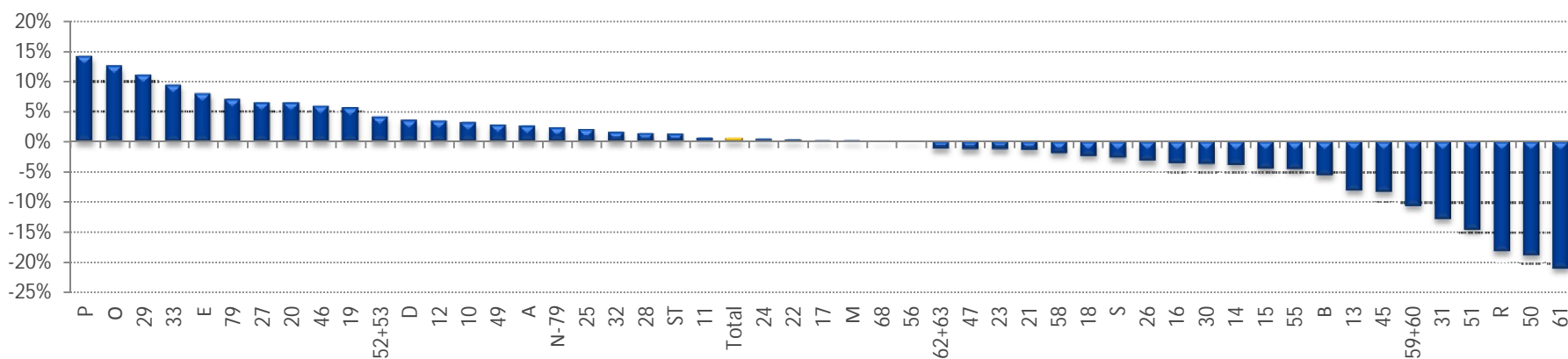
# Efficiency, 2010

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity

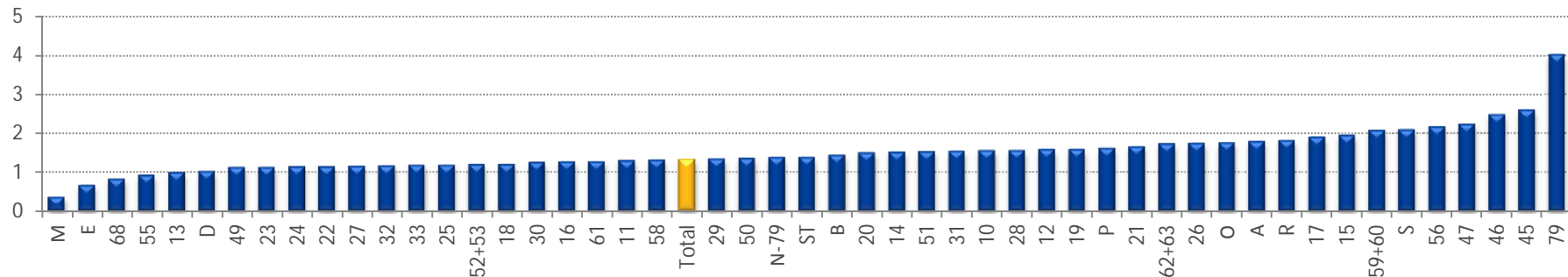




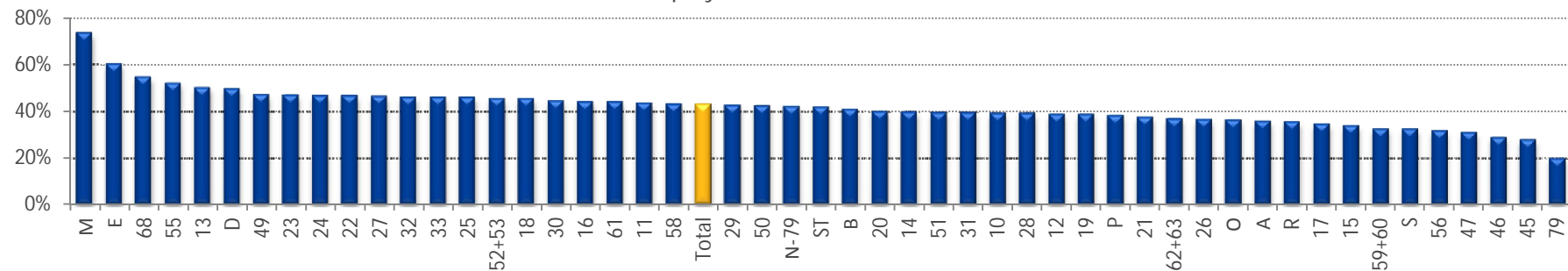
# Capital structure, 2010

## Performance of examined ratios per sector (a)

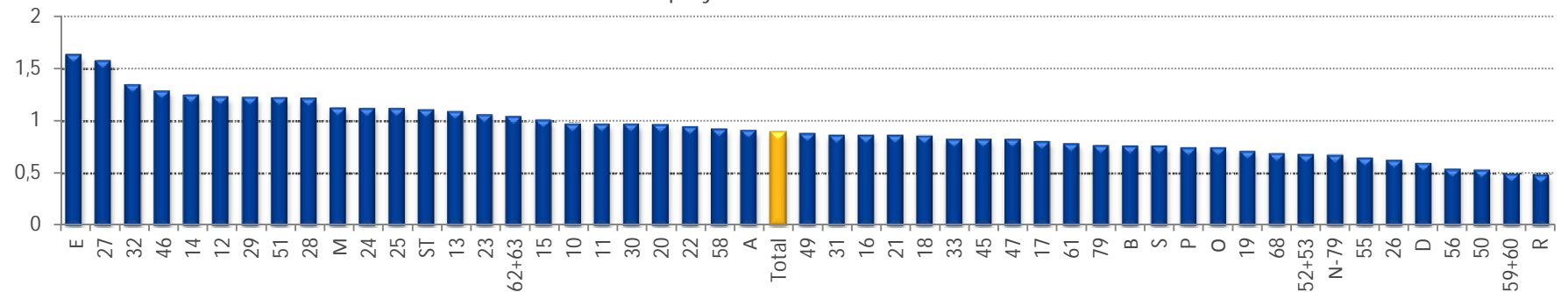
Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

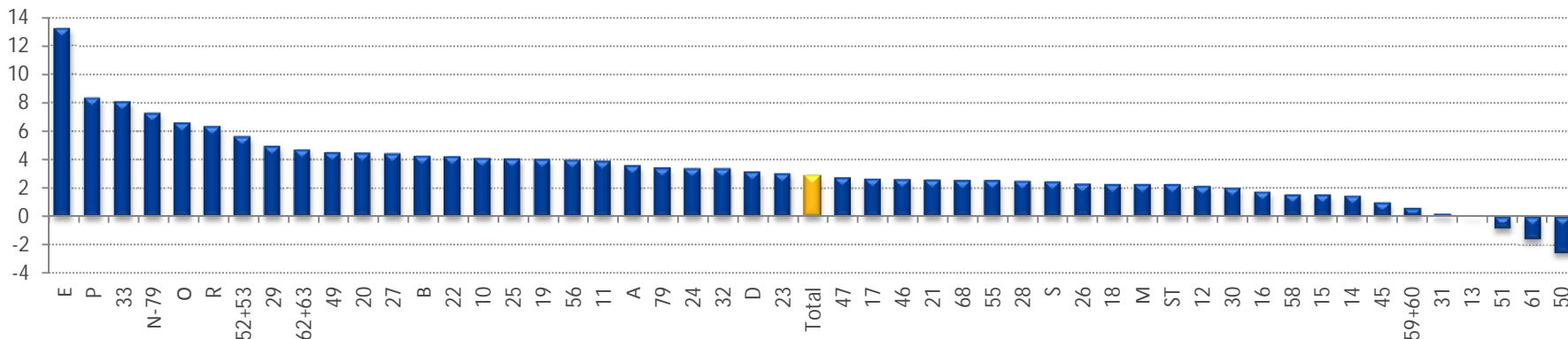




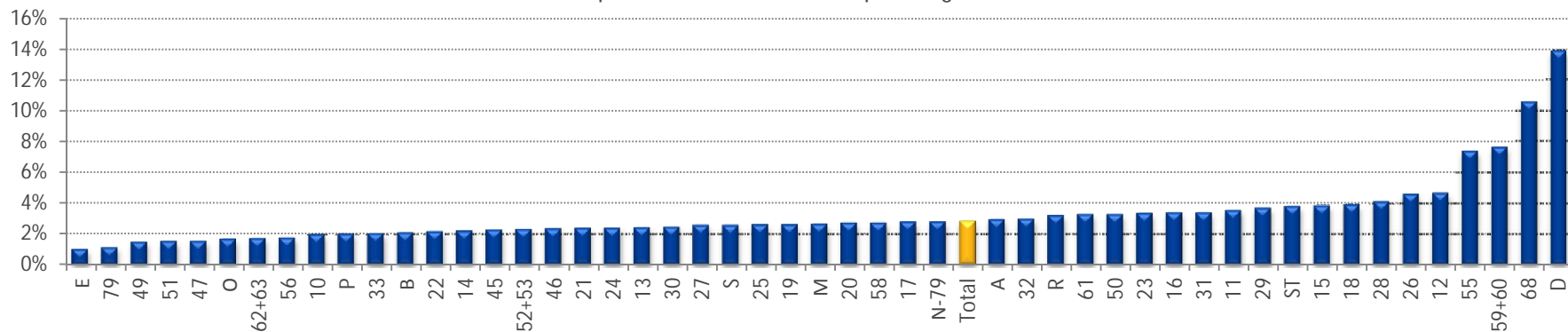
# Capital structure, 2010

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio





## 6d. Presentation of results, 2009



# BIC Index: ranking and scores, 2009



\*In brackets the ranking of sectors and in the histograms their scores

Source: ICAP DATA, Piraeus Bank Research



# BIC Index: examination of the scores and rankings of the individual dimensions, 2009

Sector 2009	Total Score	Total Rank	Liquidity Score	Liquidity Rank	Efficiency Score	Efficiency Rank	Capital Structure Score	Capital Structure Rank	Sector 2009	Total Score	Total Rank	Liquidity Score	Liquidity Rank	Efficiency Score	Efficiency Rank	Capital Structure Score	Capital Structure Rank
E	53.1	1	↑ 52.9	1	↓ 29.3	42	↑ 77.1	1	18	37.1	26	↓ 26.8	40	↑ 38.8	23	↑ 45.7	17
68	51.8	2	↑ 51.7	2	↑ 69.9	1	↓ 33.9	45	N-79	37.0	27	↓ 26.6	41	↑ 44.6	11	↓ 39.9	33
P	47.5	3	↑ 32.6	21	↑ 62.5	2	↑ 47.4	13	D	37.0	28	↓ 30.2	26	↑ 50.9	4	↓ 29.8	46
62+63	44.6	4	↑ 32.9	20	↑ 47.6	8	↑ 53.4	4	29	36.8	29	↓ 25.3	44	↑ 42.5	15	↓ 42.6	29
M	43.9	5	↓ 29.4	29	↑ 38.4	25	↑ 63.9	2	31	36.6	30	↑ 31.7	24	↓ 34.1	32	↑ 44.1	23
32	43.5	6	↑ 34.7	12	↑ 46.2	9	↑ 49.5	10	10	36.2	31	↓ 29.2	31	↓ 34.1	31	↑ 45.3	19
O	43.3	7	↑ 32.2	22	↑ 53.9	3	↑ 43.8	25	23	36.2	32	↓ 27.6	37	↓ 34.9	28	↑ 46.2	16
33	43.1	8	↑ 33.0	19	↑ 49.7	6	↑ 46.6	15	46	36.1	33	↓ 27.1	38	↑ 43.6	13	↓ 37.6	40
27	43.0	9	↑ 34.9	11	↑ 40.7	21	↑ 53.6	3	B	35.3	34	↓ 25.4	43	↓ 31.8	36	↑ 48.6	11
S	42.6	10	↑ 47.7	3	↑ 41.4	17	↓ 38.9	35	50	35.1	35	↑ 34.4	14	↓ 28.3	44	↓ 42.6	28
56	41.9	11	↑ 37.8	8	↑ 50.2	5	↓ 37.8	38	19	35.0	36	↓ 24.5	46	↑ 43.0	14	↓ 37.6	39
58	41.9	12	↑ 36.1	9	↑ 44.9	10	↑ 44.6	21	R	34.5	37	↑ 44.7	4	↓ 20.9	46	↓ 38.1	37
52+53	40.4	13	↑ 38.9	7	↓ 32.7	34	↑ 49.6	8	30	33.9	38	↑ 34.5	13	↓ 25.3	45	↓ 42.0	31
26	40.1	14	↑ 35.3	10	↑ 44.6	12	↓ 40.3	32	16	33.0	39	↓ 25.0	45	↓ 30.7	40	↑ 43.5	26
22	39.5	15	↓ 29.3	30	↑ 38.7	24	↑ 50.4	7	13	32.6	40	↓ 28.3	35	↓ 16.3	48	↑ 53.2	5
ST	39.3	16	↑ 33.1	16	↑ 39.7	22	↑ 45.2	20	55	32.0	41	↓ 29.5	28	↓ 31.8	37	↓ 34.6	44
14	39.2	17	↑ 33.0	17	↓ 36.8	27	↑ 47.8	12	17	31.9	42	↓ 23.7	47	↓ 34.7	29	↓ 37.4	41
25	38.8	18	↓ 29.7	27	↓ 37.2	26	↑ 49.5	9	24	31.4	43	↓ 28.8	32	↓ 18.6	47	↑ 46.8	14
47	38.7	19	↑ 40.6	6	↑ 40.7	20	↓ 34.9	43	A	30.2	44	↓ 25.5	42	↓ 28.5	43	↓ 36.7	42
49	38.5	20	↑ 31.5	25	↓ 31.8	35	↑ 52.2	6	79	30.2	45	↑ 33.0	18	↓ 31.6	39	↓ 26.0	49
11	38.5	21	↓ 28.5	34	↑ 41.2	18	↑ 45.7	18	51	30.2	46	↑ 31.9	23	↓ 14.2	49	↑ 44.5	22
20	38.5	22	↓ 23.6	48	↑ 47.8	7	↑ 44.0	24	45	28.9	47	↓ 27.8	36	↓ 29.5	41	↓ 29.4	47
12	38.2	23	↑ 40.8	5	↓ 31.8	38	↓ 42.1	30	15	28.2	48	↓ 23.1	49	↓ 33.3	33	↓ 28.2	48
28	37.8	24	↓ 28.6	33	↑ 41.6	16	↓ 43.2	27	61	25.4	49	↓ 27.1	39	↓ 10.1	50	↓ 39.2	34
21	37.7	25	↑ 33.4	15	↑ 40.9	19	↓ 38.9	36	59+60	24.9	50	↓ 17.1	50	↓ 34.7	30	↓ 23.0	50

•The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.

•The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.

•↑ score ≥ 75% of score range

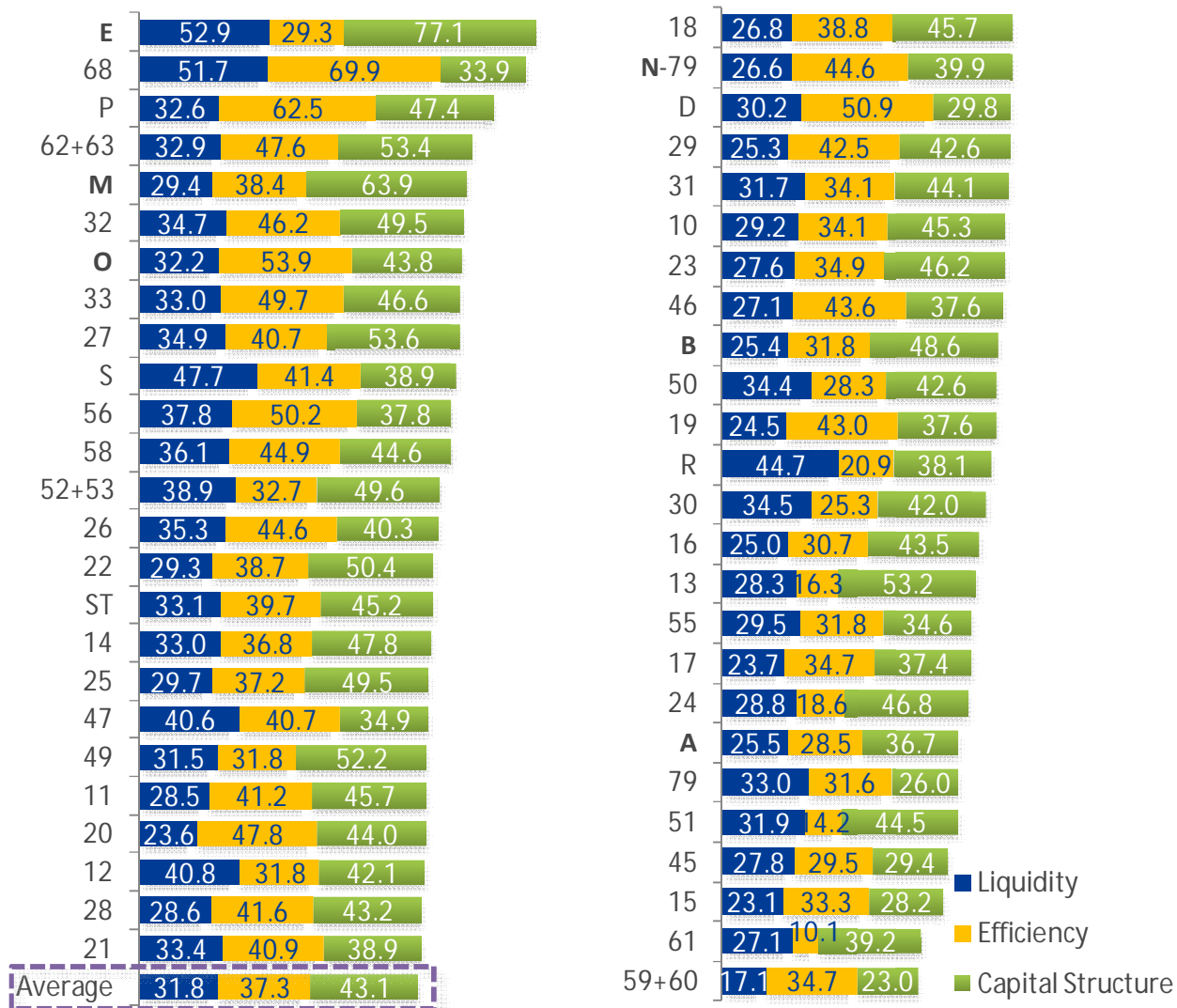
•↗ 50% ≤ score < 75%

•↘ 25% ≤ score < 50%

•↓ score < 25%



## BIC Index: Structure of the final score per sector, 2009



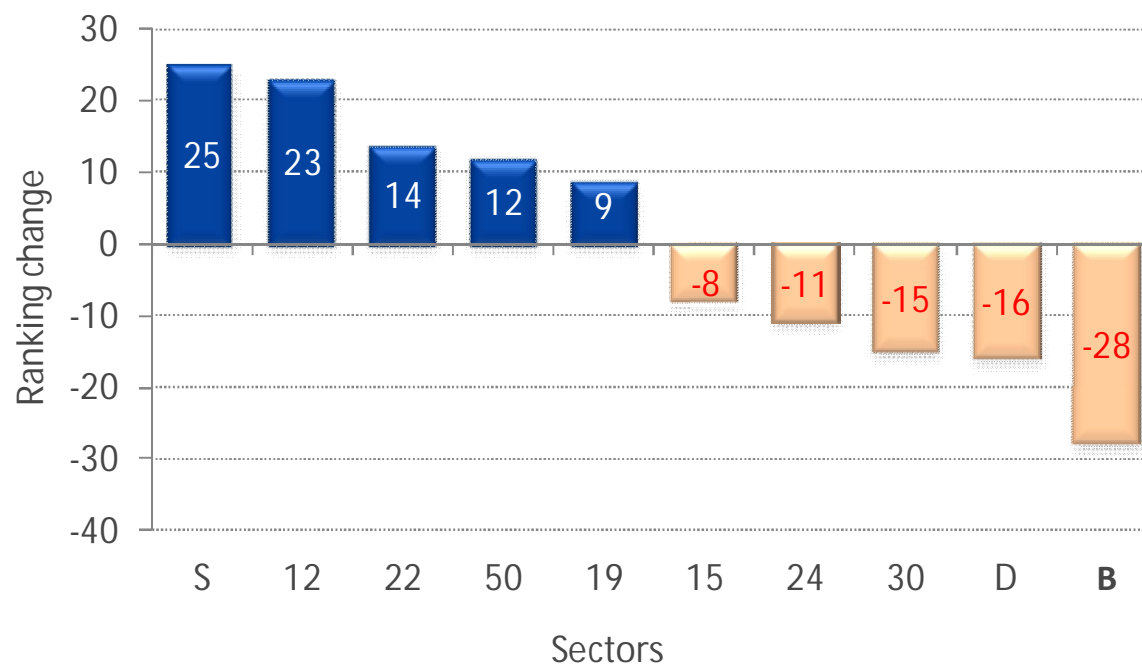
\*The BIC Index is the average result of the scores of each dimension

Source: ICAP DATA, Piraeus Bank Research



## BIC Index: further examination of performance of sectors, 2009

The sectors with the 5 largest positive and negative changes in the ranking of the BIC Index, 2009





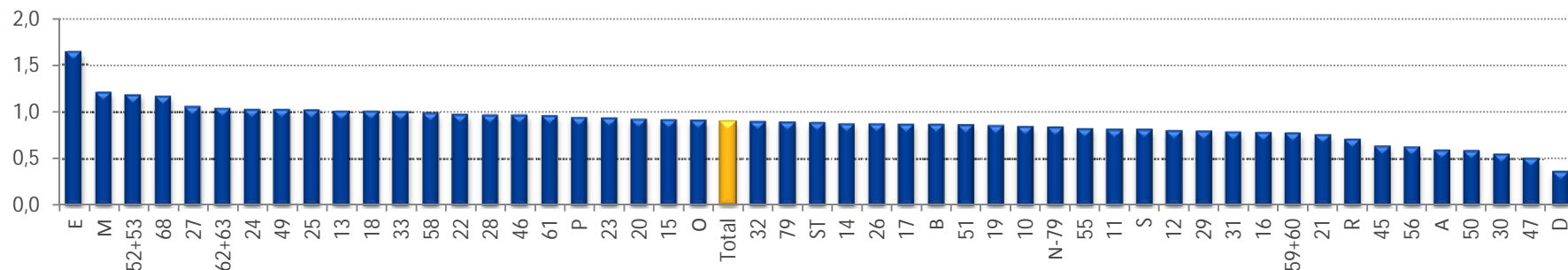
# Liquidity, 2009

## Performance of examined ratios per sector

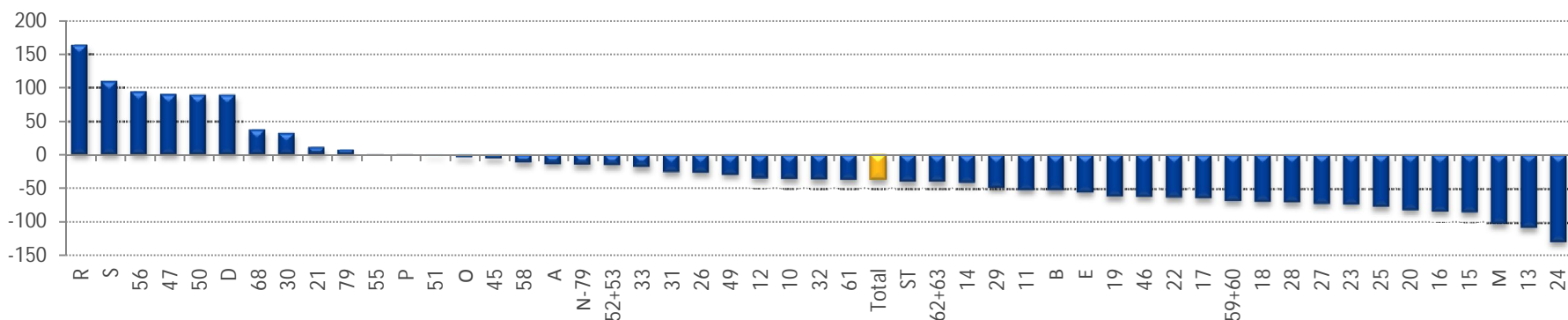
Current ratio



Quick ratio



Difference between payment and collection days

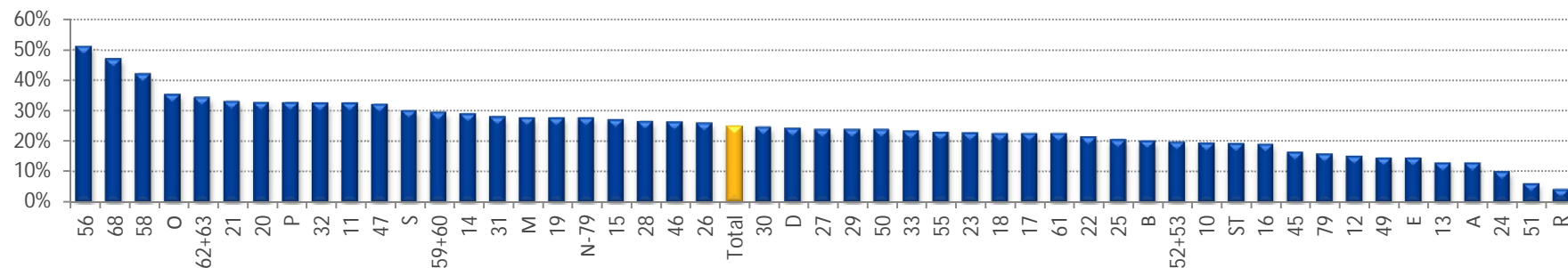




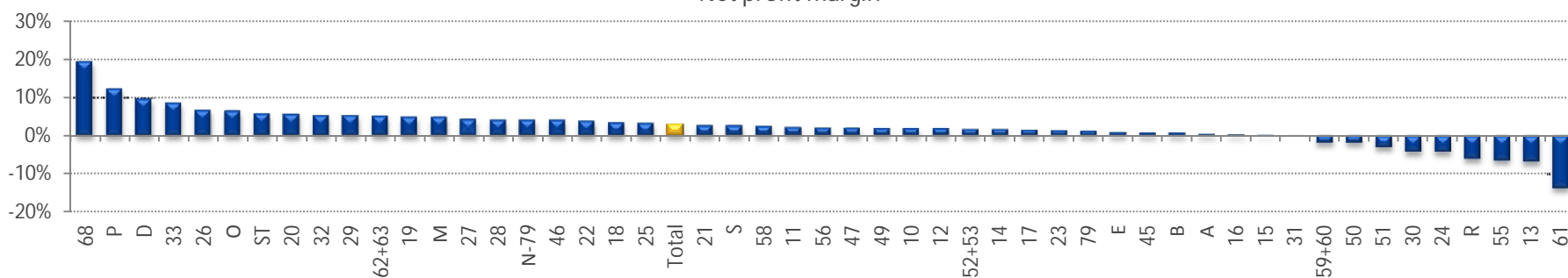
# Efficiency, 2009

## Performance of examined ratios per sector (a)

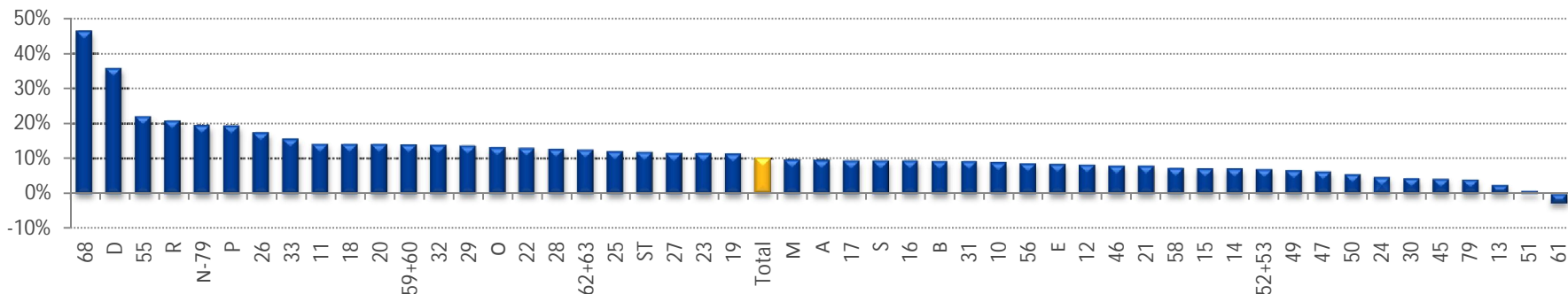
Gross profit margin



Net profit margin



EBITDA margin

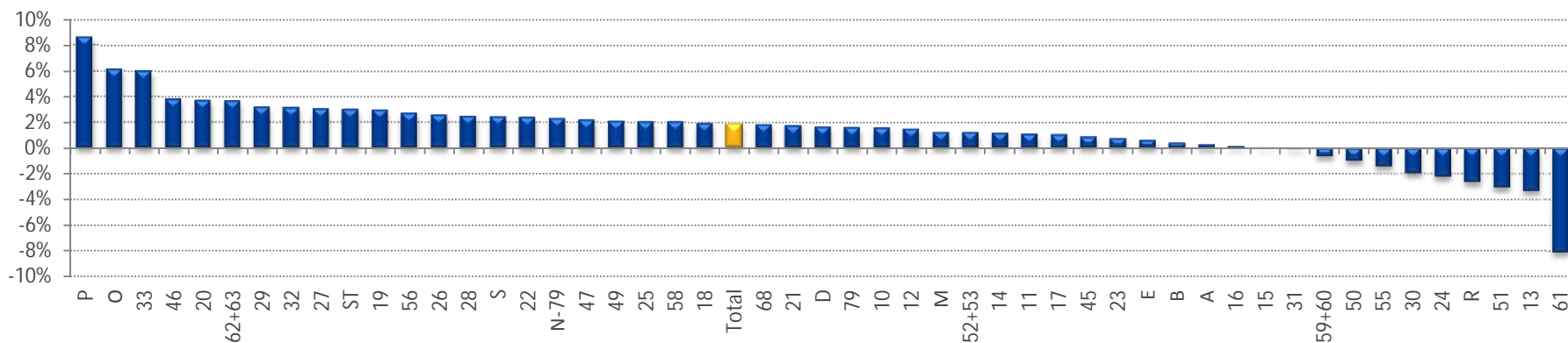




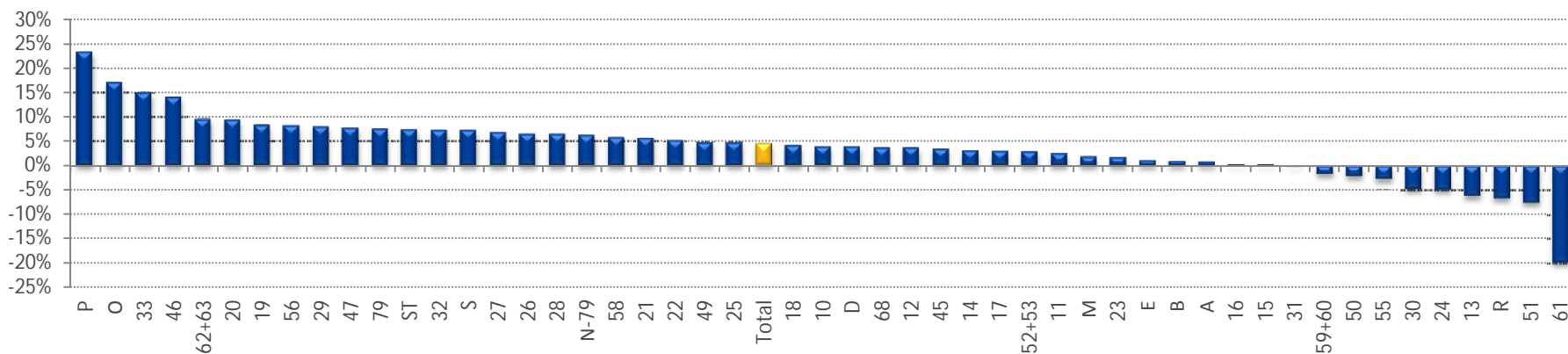
# Efficiency, 2009

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity





# Capital structure, 2009

## Performance of examined ratios per sector (a)

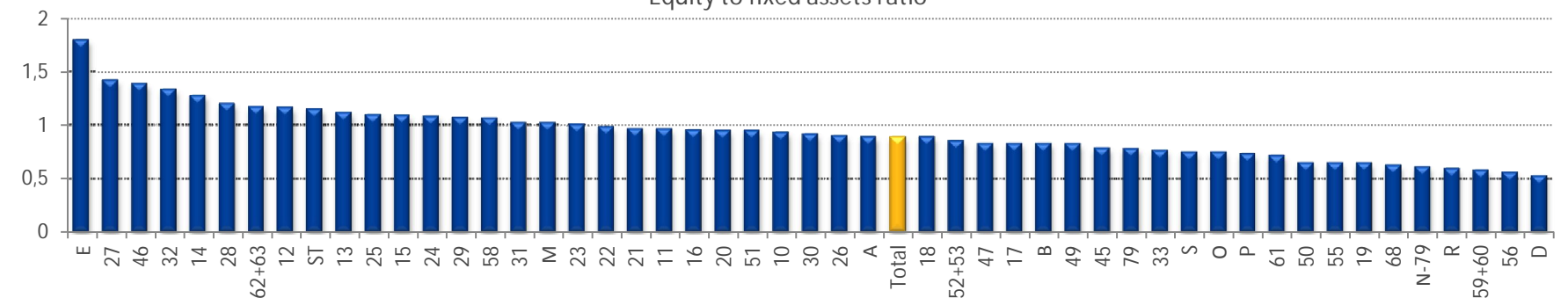
Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

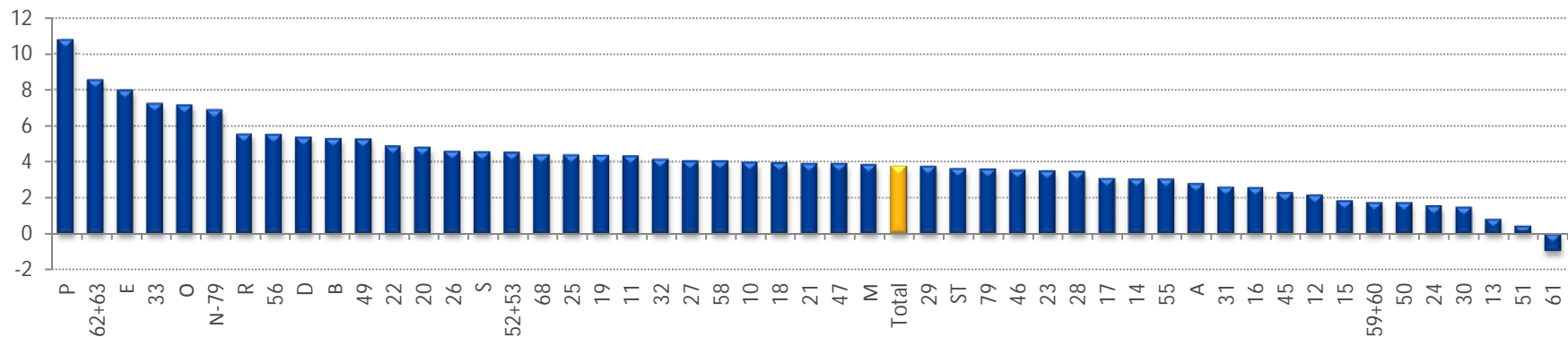




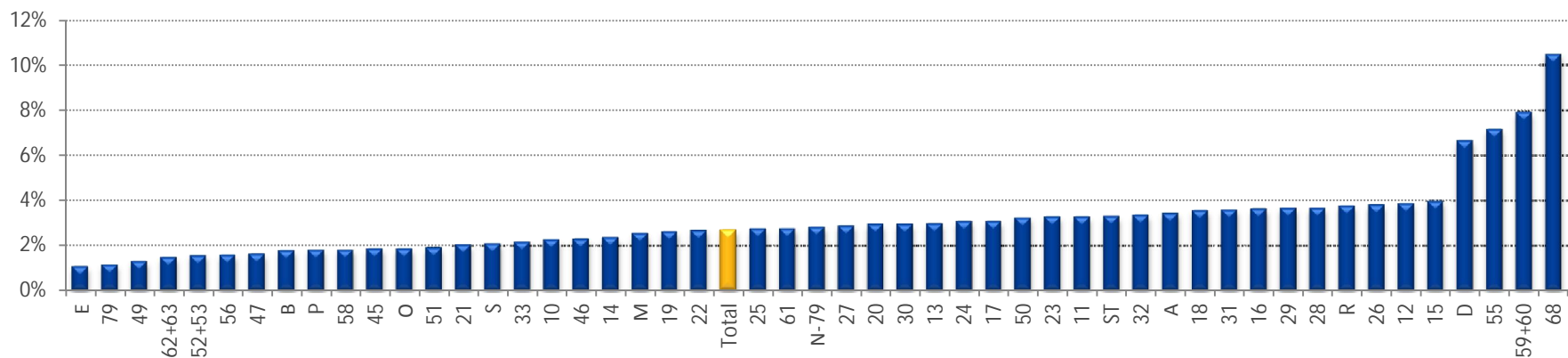
# Capital structure, 2009

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio

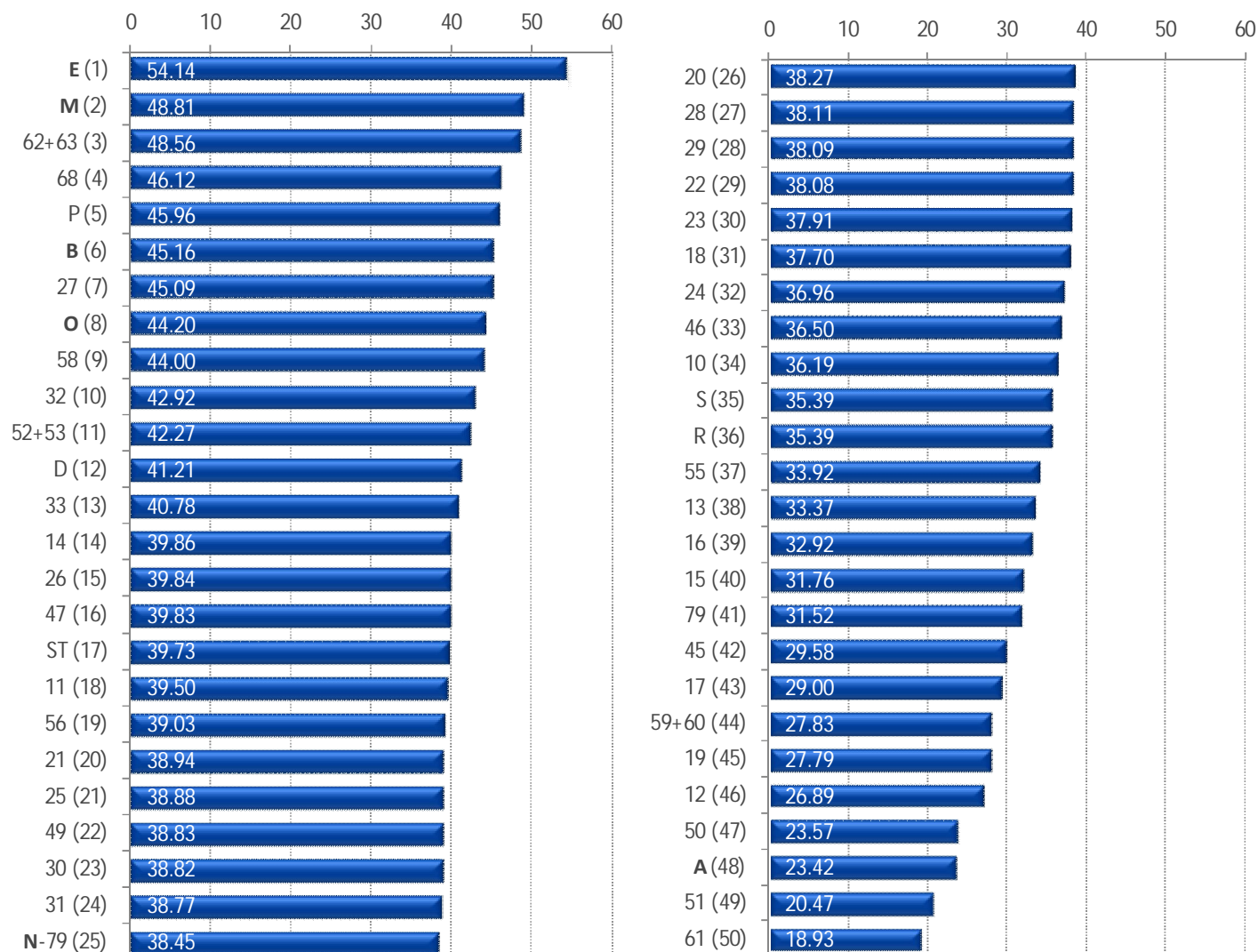




## 6e. Presentation of results, 2008



# BIC Index: ranking and scores, 2008



\*In brackets the ranking of sectors and in the histograms their scores



# BIC Index: examination of the scores and rankings of the individual dimensions, 2008

Sector 2008	Total		Liquidity		Efficiency		Capital Structure		Sector 2008	Total		Liquidity		Efficiency		Capital Structure	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank		Score	Rank	Score	Rank	Score	Rank	Score	Rank
E	54.1	1	↑ 53.9	1	↓ 33.3	38	↑ 75.1	1	20	38.3	26	↓ 26.4	43	↑ 46.1	11	↑ 42.3	23
M	48.8	2	↑ 36.6	7	↑ 42.0	22	↑ 67.8	2	28	38.1	27	↓ 28.0	38	↑ 45.1	16	↑ 41.2	26
62+63	48.6	3	↑ 33.6	16	↑ 59.0	4	↑ 53.1	4	29	38.1	28	↑ 29.0	31	↑ 43.2	20	↑ 42.1	24
68	46.1	4	↑ 43.3	2	↑ 61.9	1	↓ 33.2	41	22	38.1	29	↑ 30.3	27	↑ 38.1	31	↑ 45.9	16
P	46.0	5	↑ 32.7	20	↑ 60.6	3	↑ 44.6	19	23	37.9	30	↑ 28.0	37	↑ 39.4	30	↑ 46.4	15
B	45.2	6	↑ 35.4	9	↑ 45.5	15	↑ 54.6	3	18	37.7	31	↑ 28.4	36	↑ 41.7	25	↑ 43.0	21
27	45.1	7	↑ 33.8	15	↑ 48.6	10	↑ 52.9	5	24	37.0	32	↑ 28.5	34	↑ 34.0	37	↑ 48.5	11
O	44.2	8	↑ 32.8	18	↑ 53.0	6	↑ 46.7	13	46	36.5	33	↓ 27.7	40	↑ 45.9	12	↑ 35.9	36
58	44.0	9	↑ 37.0	5	↑ 49.6	8	↑ 45.4	17	10	36.2	34	↑ 30.2	28	↑ 35.2	35	↑ 43.2	20
32	42.9	10	↑ 34.2	11	↑ 49.3	9	↑ 45.3	18	S	35.4	35	↑ 29.3	30	↑ 40.5	27	↑ 36.4	35
52+53	42.3	11	↑ 33.9	14	↑ 43.8	19	↑ 49.2	8	R	35.4	36	↑ 36.7	6	↓ 33.0	39	↑ 36.5	34
D	41.2	12	↓ 27.1	41	↑ 61.4	2	↓ 35.1	38	55	33.9	37	↑ 31.2	24	↑ 35.4	34	↓ 35.1	39
33	40.8	13	↓ 26.8	42	↑ 54.7	5	↑ 40.8	28	13	33.4	38	↓ 27.9	39	↓ 22.0	45	↑ 50.2	7
14	39.9	14	↑ 34.1	12	↑ 36.9	32	↑ 48.5	10	16	32.9	39	↓ 24.2	47	↑ 34.7	36	↑ 39.8	29
26	39.8	15	↑ 30.8	25	↑ 50.5	7	↑ 38.2	32	15	31.8	40	↓ 23.9	48	↑ 40.9	26	↓ 30.5	44
47	39.8	16	↑ 40.4	3	↑ 44.6	17	↓ 34.4	40	79	31.5	41	↑ 33.2	17	↑ 35.6	33	↓ 25.8	48
ST	39.7	17	↑ 32.5	21	↑ 44.3	18	↑ 42.4	22	45	29.6	42	↑ 28.4	35	↓ 31.2	43	↓ 29.1	46
11	39.5	18	↑ 29.8	29	↑ 41.9	23	↑ 46.8	12	17	29.0	43	↓ 23.2	49	↓ 31.8	42	↓ 32.0	43
56	39.0	19	↑ 39.0	4	↑ 39.7	28	↑ 38.4	31	59+60	27.8	44	↓ 21.6	50	↑ 39.4	29	↓ 22.4	50
21	38.9	20	↑ 33.9	13	↑ 45.9	13	↑ 37.0	33	19	27.8	45	↓ 24.6	46	↓ 25.8	44	↓ 33.0	42
25	38.9	21	↑ 28.5	33	↑ 41.8	24	↑ 46.4	14	12	26.9	46	↑ 35.7	8	↓ 9.6	47	↑ 35.4	37
49	38.8	22	↑ 32.8	19	↓ 32.2	41	↑ 51.6	6	50	23.6	47	↑ 30.5	26	↓ 1.6	49	↑ 38.6	30
30	38.8	23	↑ 34.6	10	↓ 32.9	40	↑ 49.0	9	A	23.4	48	↓ 26.4	44	↓ 17.4	46	↓ 26.4	47
31	38.8	24	↑ 31.6	22	↑ 42.7	21	↑ 42.0	25	51	20.5	49	↑ 31.3	23	↓ 0.0	50	↓ 30.1	45
N-79	38.4	25	↑ 29.0	32	↑ 45.5	14	↑ 40.8	27	61	18.9	50	↓ 25.1	45	↓ 9.2	48	↓ 22.6	49

•The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.

•The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.

•↑ score ≥ 75% of score range

•↗ 50% ≤ score < 75%

•↘ 25% ≤ score < 50%

•↓ score < 25%



## BIC Index: Structure of the final score per sector, 2008



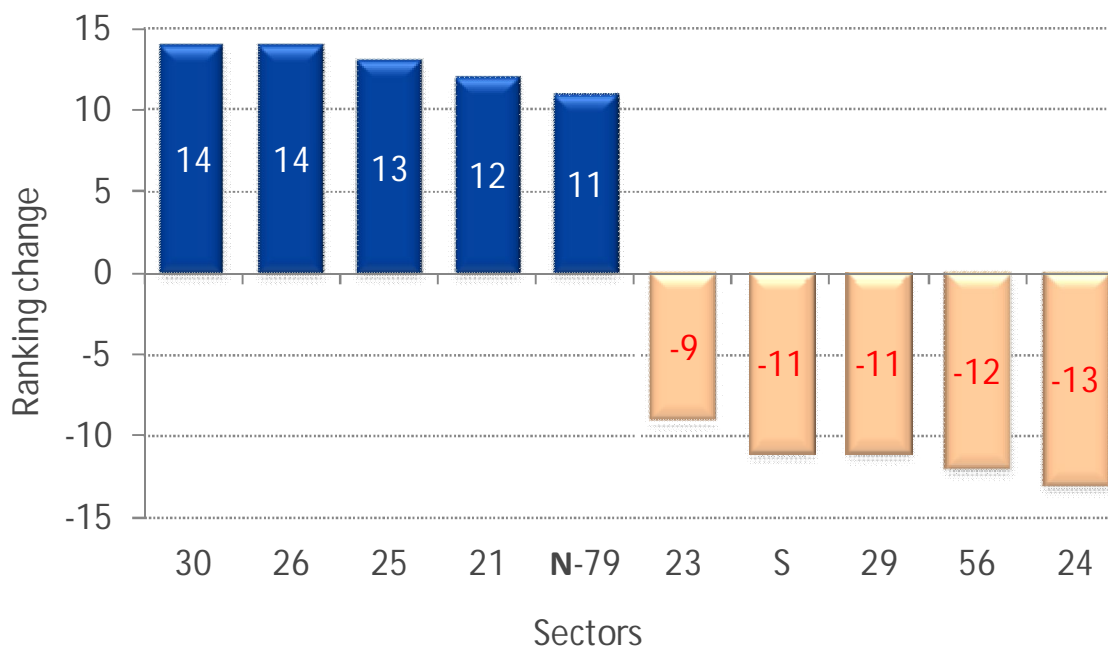
\*The BIC Index is the average result of the scores of each dimension

Source: ICAP DATA, Piraeus Bank Research



## BIC Index: further examination of performance of sectors, 2008

The sectors with the 5 largest positive and negative changes in the ranking of the BIC Index, 2008

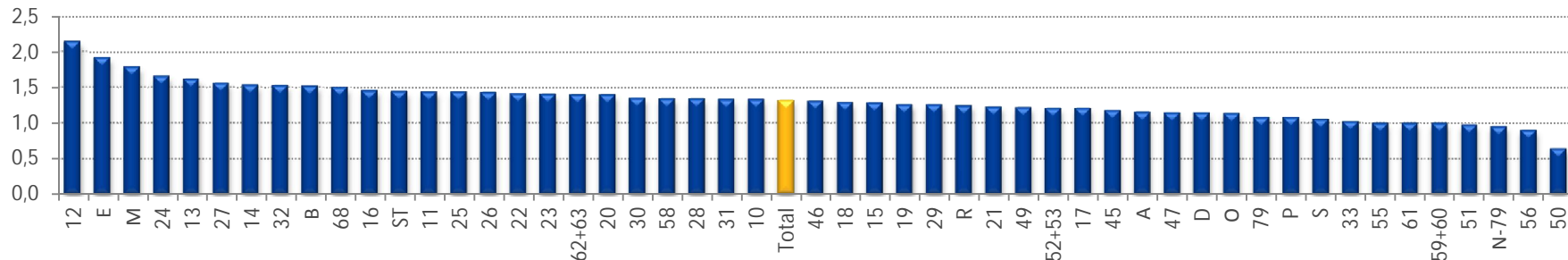




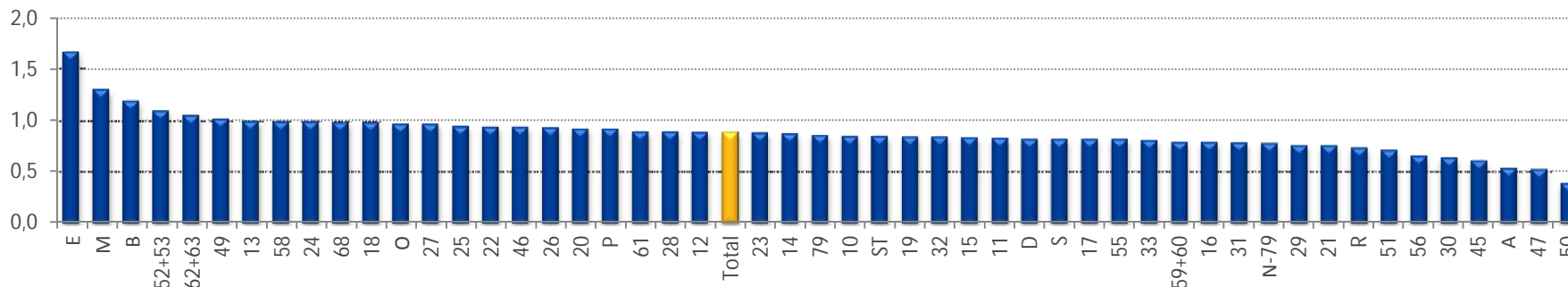
# Liquidity, 2008

## Performance of examined ratios per sector

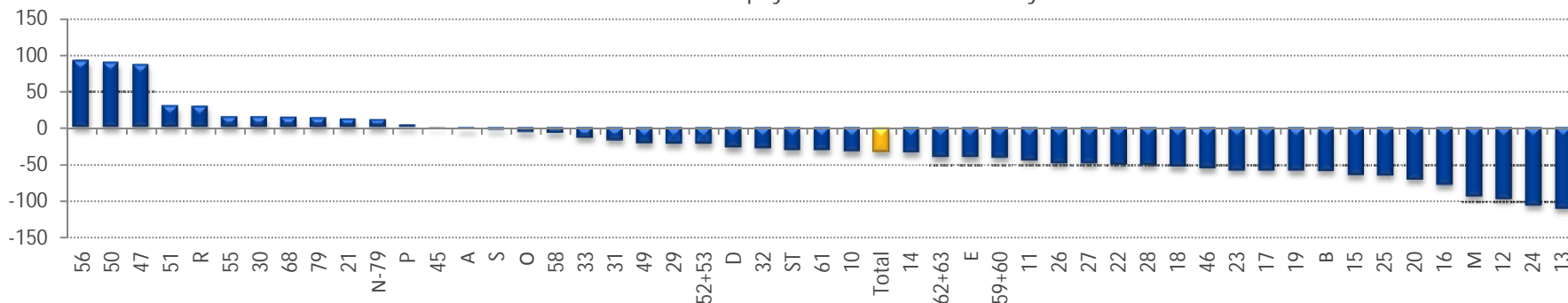
Current ratio



Quick ratio



Difference between payment and collection days

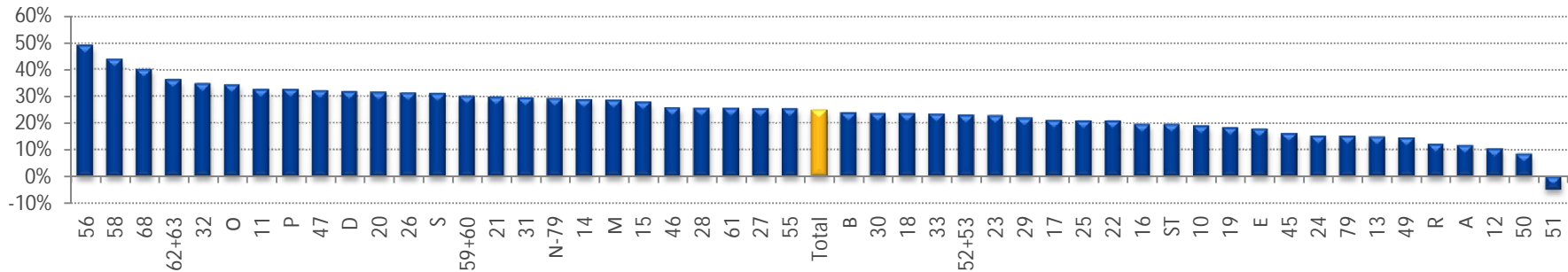




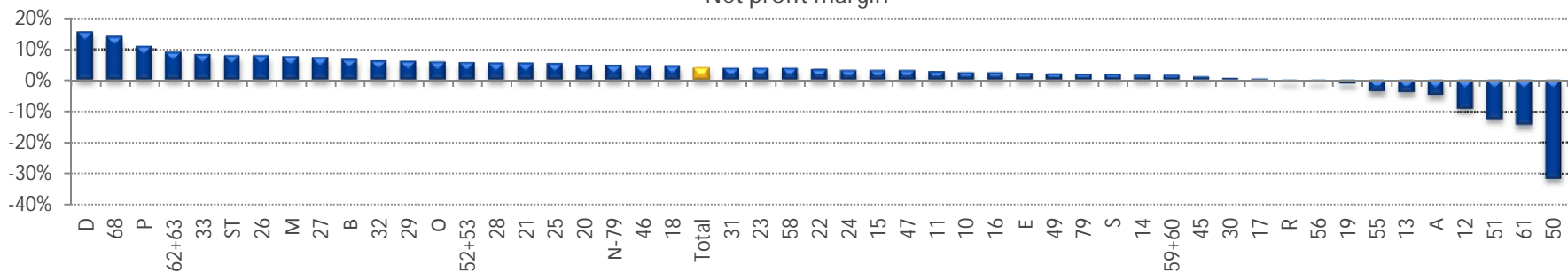
# Efficiency, 2008

## Performance of examined ratios per sector (a)

Gross profit margin



Net profit margin



EBITDA margin

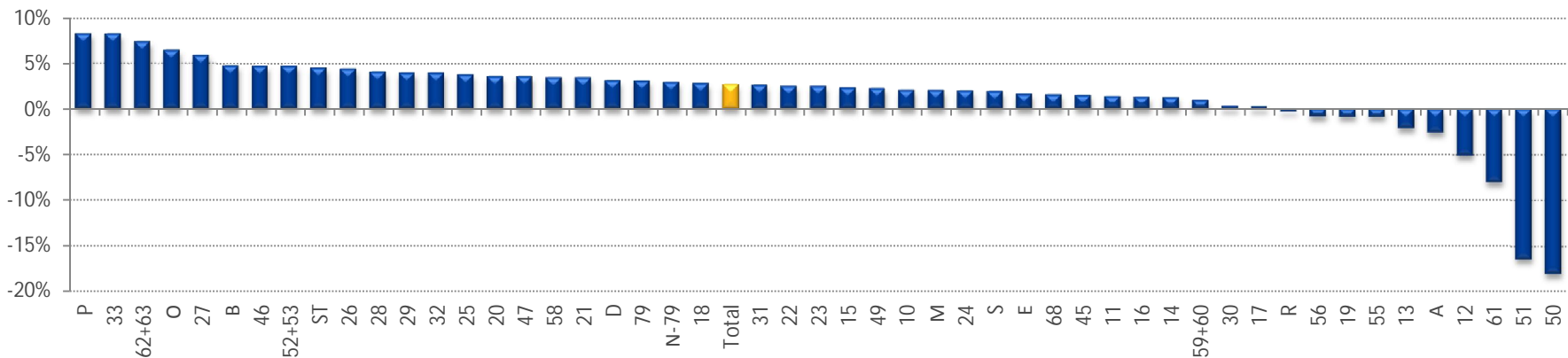




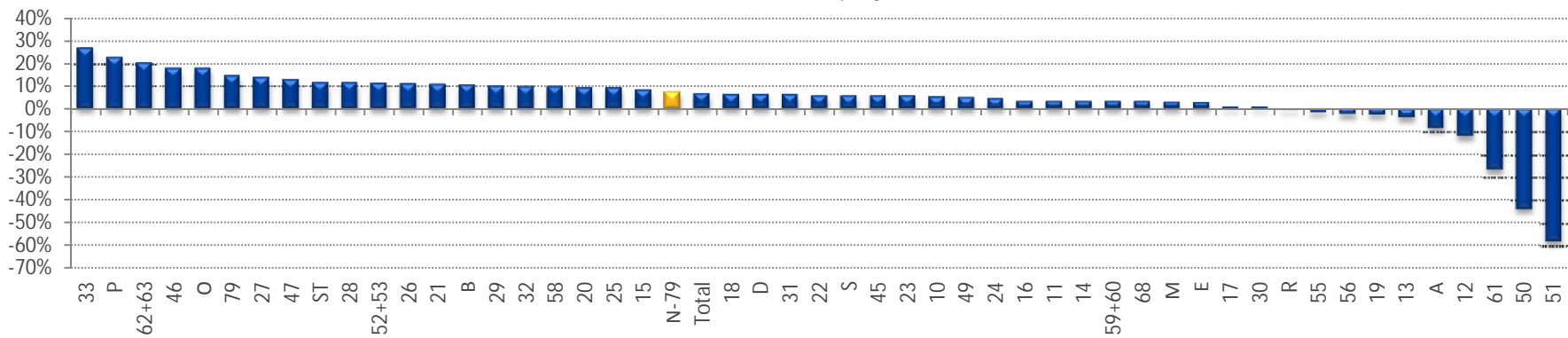
# Efficiency, 2008

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity





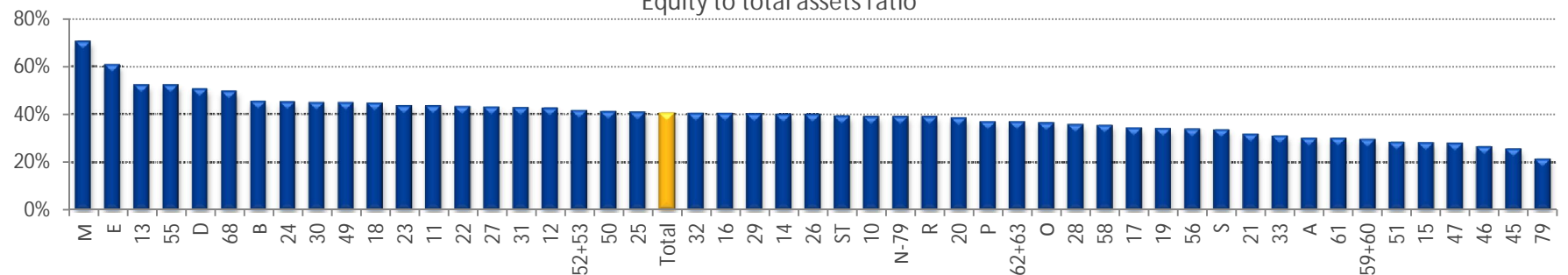
# Capital structure, 2008

## Performance of examined ratios per sector (a)

Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

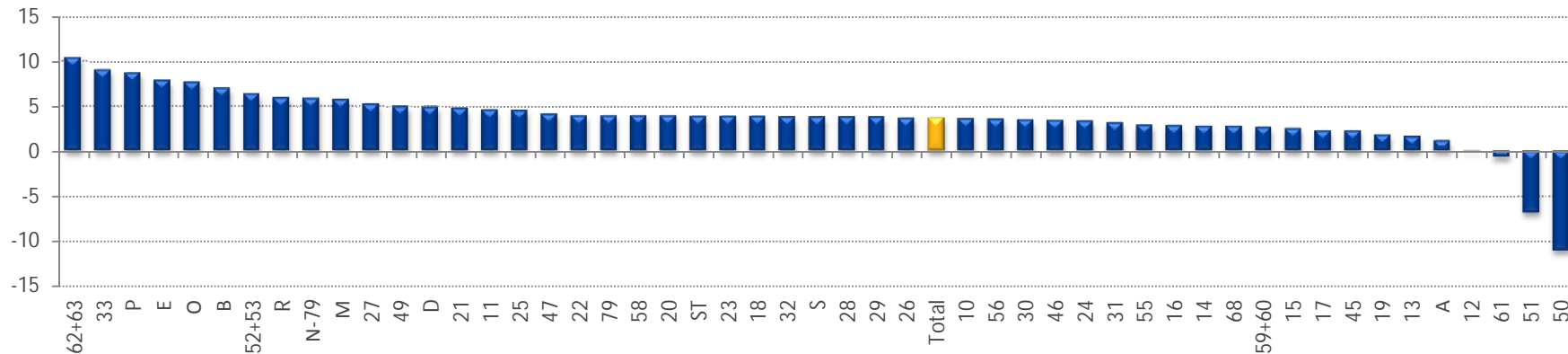




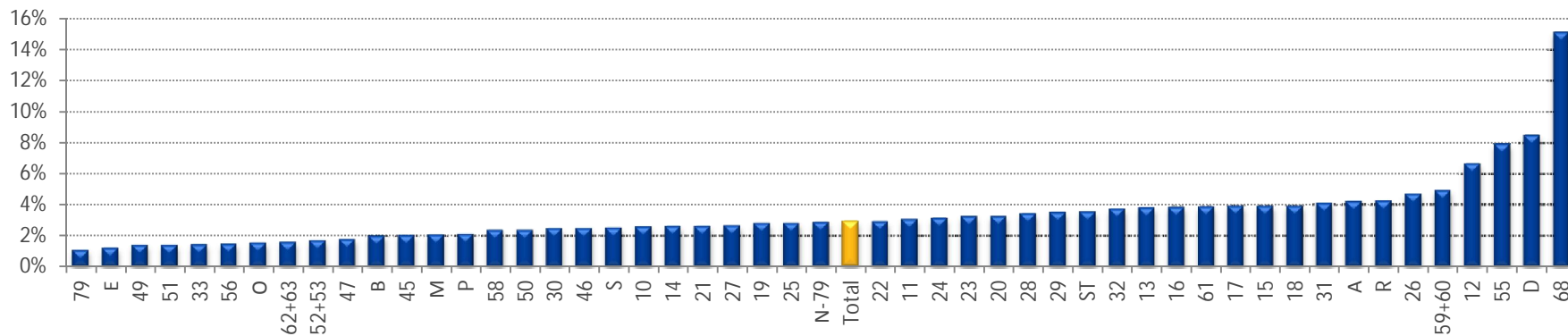
# Capital structure, 2008

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio

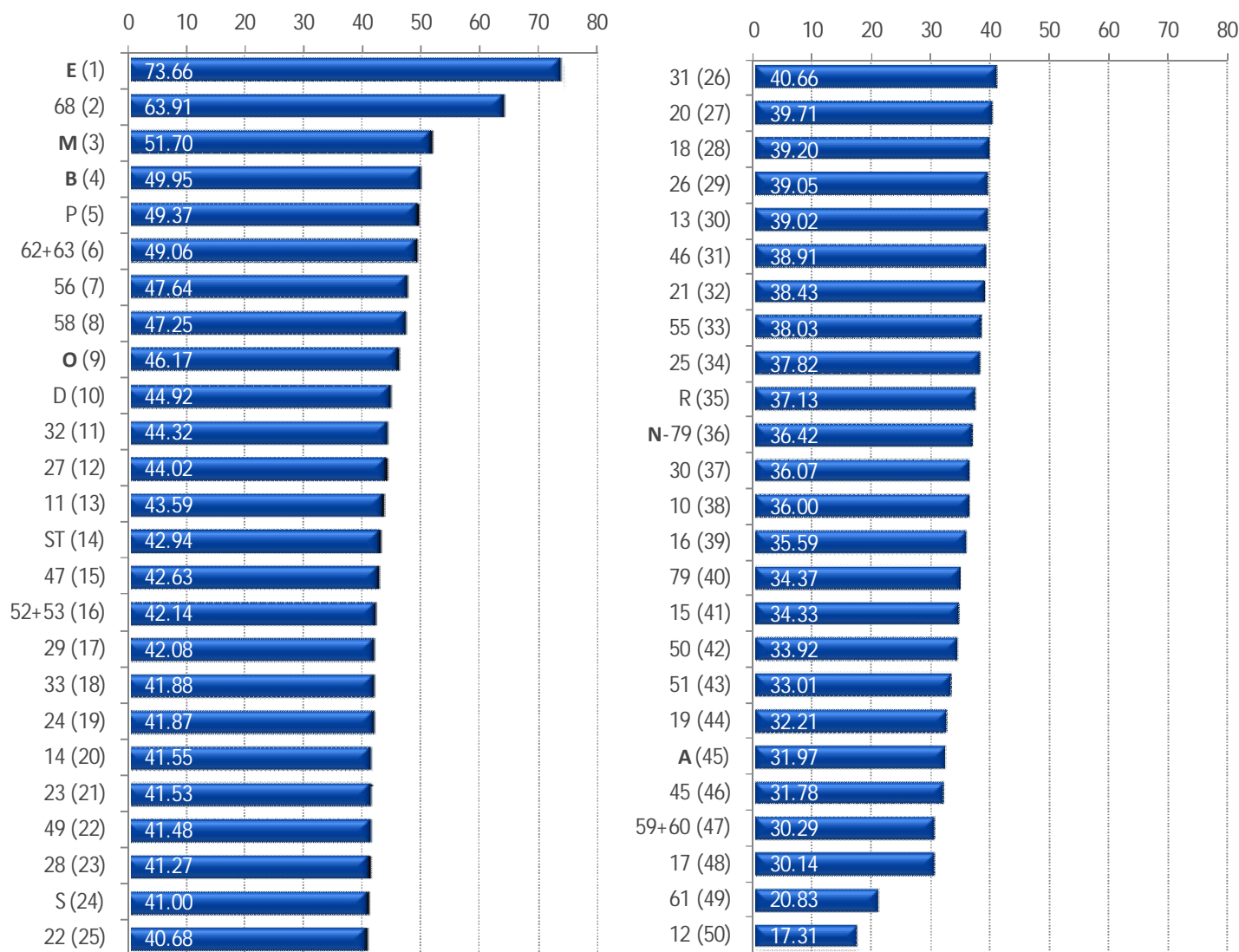




## 6f. Presentation of results, 2007



# BIC Index: ranking and scores, 2007



\*In brackets the ranking of sectors and in the histograms their scores



# BIC Index: examination of the scores and rankings of the individual dimensions, 2007

Sector 2007	Total		Liquidity		Efficiency		Capital Structure		Sector 2007	Total		Liquidity		Efficiency		Capital Structure	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank		Score	Rank	Score	Rank	Score	Rank	Score	Rank
E	73.7	1	↑ 64.8	2	↑ 63.1	3	↑ 93.1	1	31	40.7	26	↘ 34.6	14	↘ 41.7	32	↘ 45.7	24
68	63.9	2	↑ 78.4	1	↑ 75.1	1	↘ 38.3	36	20	39.7	27	↓ 27.6	42	↘ 47.3	20	↘ 44.2	27
M	51.7	3	↑ 40.4	6	↘ 42.7	29	↑ 72.1	2	18	39.2	28	↓ 25.5	46	↘ 44.9	24	↘ 47.2	19
B	49.9	4	↘ 33.2	22	↑ 59.3	5	↑ 57.3	3	26	39.0	29	↓ 25.0	47	↘ 45.9	22	↘ 46.3	22
P	49.4	5	↘ 33.7	18	↑ 65.8	2	↘ 48.6	14	13	39.0	30	↘ 31.1	28	↓ 31.3	44	↑ 54.7	5
62+63	49.1	6	↘ 29.2	32	↑ 62.5	4	↑ 55.5	4	46	38.9	31	↘ 29.0	34	↘ 49.3	17	↘ 38.4	35
56	47.6	7	↑ 41.6	4	↑ 55.2	9	↘ 46.1	23	21	38.4	32	↘ 34.3	16	↘ 49.6	15	↓ 31.4	44
58	47.3	8	↑ 39.3	9	↑ 55.4	8	↘ 47.0	20	55	38.0	33	↘ 34.6	15	↘ 41.8	31	↘ 37.7	37
O	46.2	9	↘ 33.4	20	↑ 56.7	7	↘ 48.4	16	25	37.8	34	↓ 27.9	40	↘ 41.1	35	↘ 44.5	26
D	44.9	10	↑ 40.9	5	↑ 52.6	12	↘ 41.3	32	R	37.1	35	↑ 39.5	8	↘ 46.0	21	↓ 25.9	48
32	44.3	11	↘ 32.5	27	↑ 53.0	11	↘ 47.5	18	N-79	36.4	36	↓ 28.2	38	↘ 44.6	25	↓ 36.4	39
27	44.0	12	↘ 32.8	26	↘ 47.6	19	↑ 51.7	9	30	36.1	37	↘ 33.1	24	↓ 31.6	43	↘ 43.5	29
11	43.6	13	↘ 33.4	21	↘ 48.7	18	↑ 48.7	13	10	36.0	38	↘ 29.0	35	↓ 35.5	39	↘ 43.5	28
ST	42.9	14	↑ 37.1	10	↘ 45.4	23	↘ 46.4	21	16	35.6	39	↓ 26.3	44	↘ 39.2	37	↘ 41.3	31
47	42.6	15	↑ 41.8	3	↘ 50.0	14	↓ 36.1	40	79	34.4	40	↘ 33.0	25	↘ 41.5	33	↓ 28.6	46
52+53	42.1	16	↑ 34.8	13	↘ 42.5	30	↑ 49.1	11	15	34.3	41	↓ 27.9	41	↘ 41.4	34	↓ 33.8	42
29	42.1	17	↓ 26.2	45	↑ 52.1	13	↘ 48.0	17	50	33.9	42	↓ 27.5	43	↓ 19.9	47	↑ 54.3	6
33	41.9	18	↓ 28.2	39	↑ 58.1	6	↘ 39.4	33	51	33.0	43	↑ 39.5	7	↓ 17.8	49	↘ 41.7	30
24	41.9	19	↘ 33.1	23	↓ 39.1	38	↑ 53.3	8	19	32.2	44	↘ 28.8	37	↓ 30.2	45	↓ 37.6	38
14	41.5	20	↘ 33.4	19	↘ 42.7	28	↘ 48.5	15	A	32.0	45	↘ 34.1	17	↓ 26.4	46	↓ 35.5	41
23	41.5	21	↘ 30.5	29	↘ 43.3	27	↑ 50.8	10	45	31.8	46	↘ 29.8	31	↓ 35.1	40	↓ 30.5	45
49	41.5	22	↑ 35.6	11	↓ 34.8	41	↑ 54.1	7	59+60	30.3	47	↓ 22.6	49	↘ 40.4	36	↓ 27.9	47
28	41.3	23	↘ 28.8	36	↘ 49.6	16	↘ 45.4	25	17	30.1	48	↓ 23.3	48	↓ 34.5	42	↓ 32.6	43
S	41.0	24	↘ 30.1	30	↑ 54.0	10	↘ 38.9	34	61	20.8	49	↑ 35.1	12	↓ 8.1	50	↓ 19.2	50
22	40.7	25	↘ 29.1	33	↘ 44.2	26	↑ 48.7	12	12	17.3	50	↓ 13.1	50	↓ 19.5	48	↓ 19.3	49

•The green color refers to the cases of sectors whose scores are above the median score of every dimension among the sectors, in contrast with the red color referring to scores below the median score.

•The arrow indicates the intensity of the direction of each sector for the configuration of the median score of the corresponding dimension.

•↑ score ≥ 75% of score range

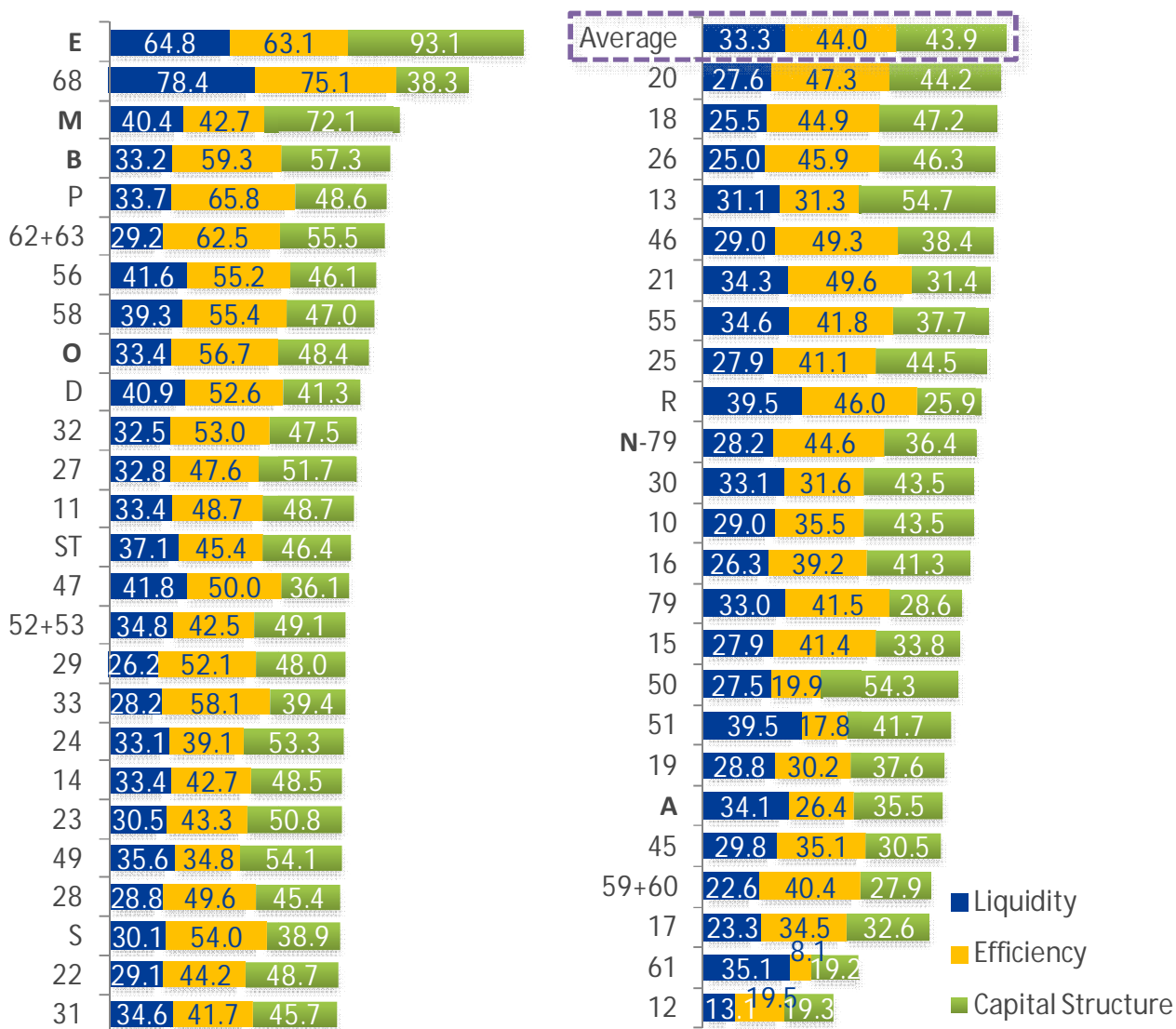
•↘ 50% ≤ score < 75%

•↘ 25% ≤ score < 50%

•↓ score < 25%



## BIC Index: Structure of the final score per sector, 2007



\*The BIC Index is the average result of the scores of each dimension

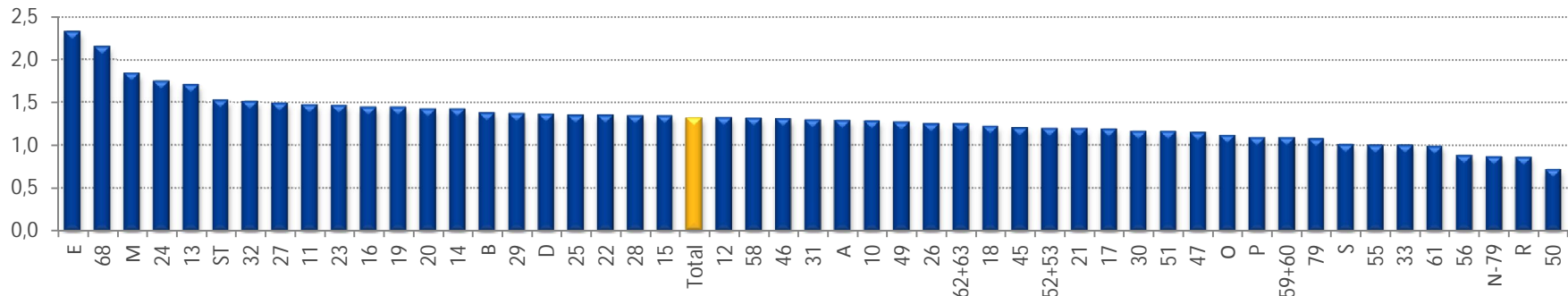
Source: ICAP DATA, Piraeus Bank Research



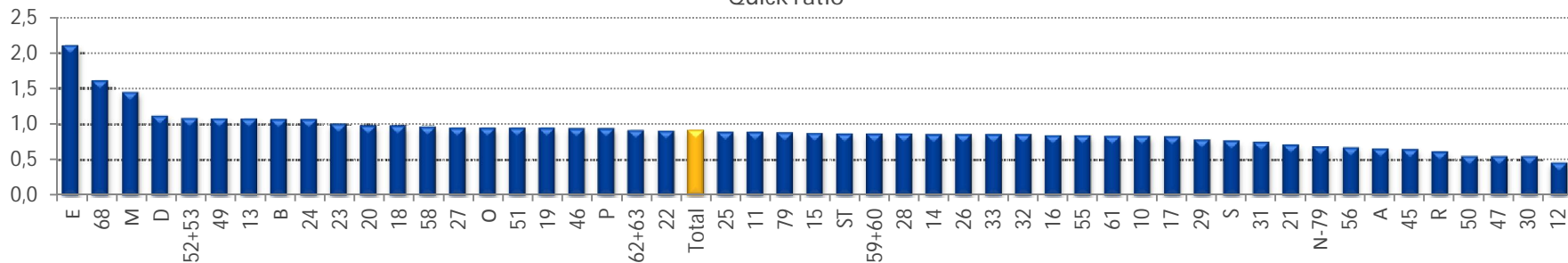
# Liquidity, 2007

## Performance of examined ratios per sector

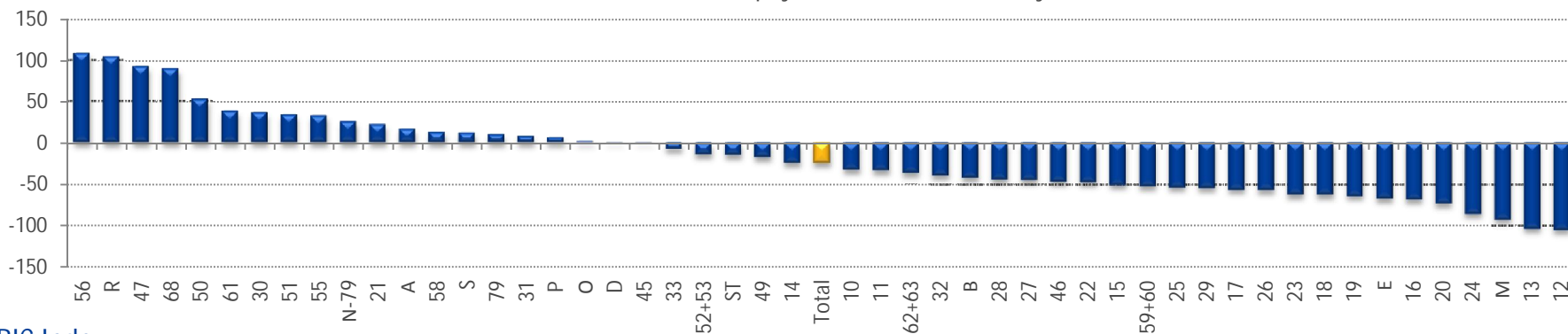
Current ratio



Quick ratio



Difference between payment and collection days

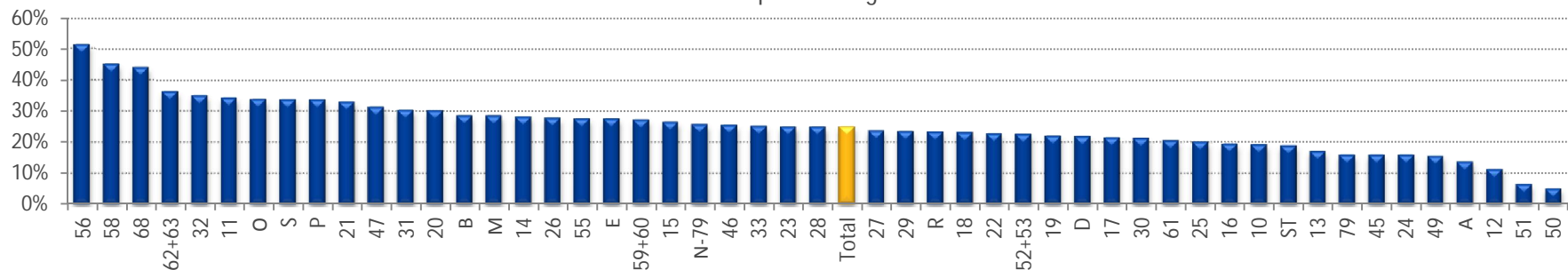




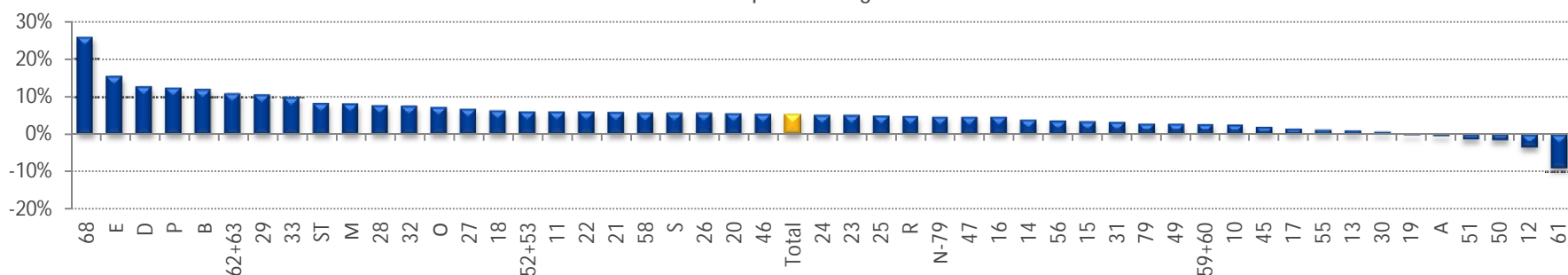
# Efficiency, 2007

## Performance of examined ratios per sector (a)

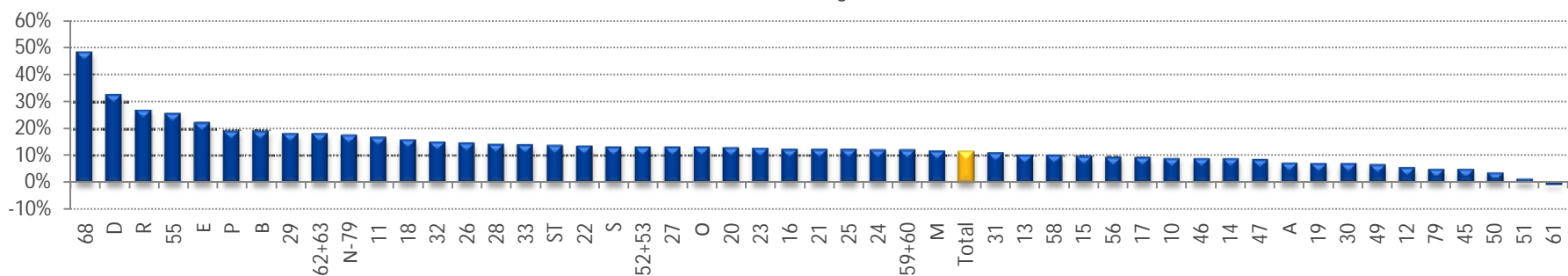
Gross profit margin



Net profit margin



EBITDA margin

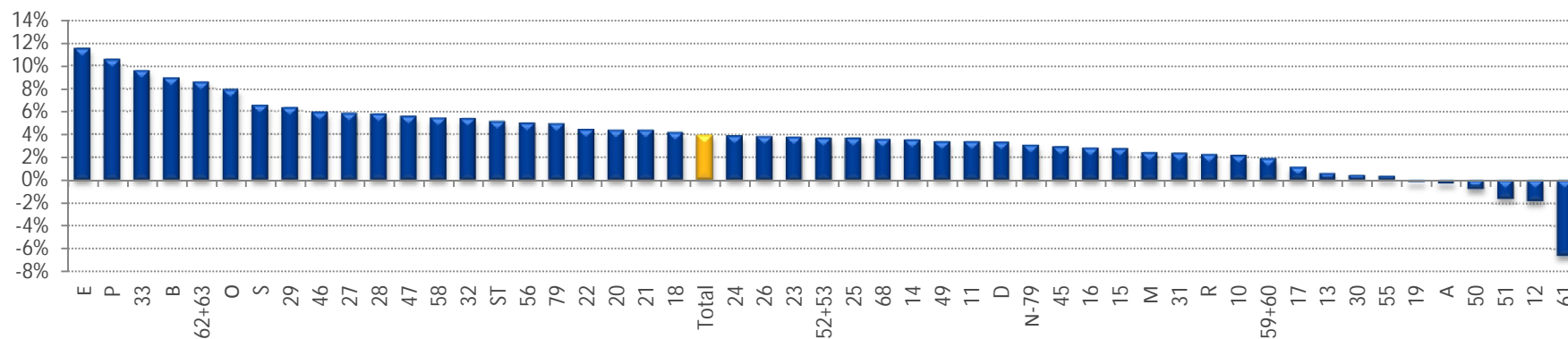




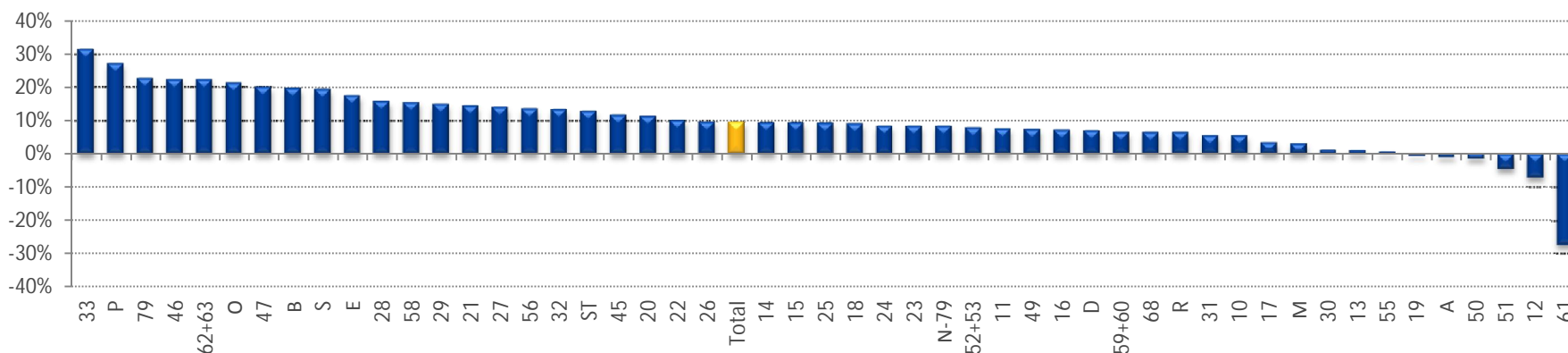
# Efficiency, 2007

## Performance of examined ratios per sector (b)

Return on total assets



Return on equity

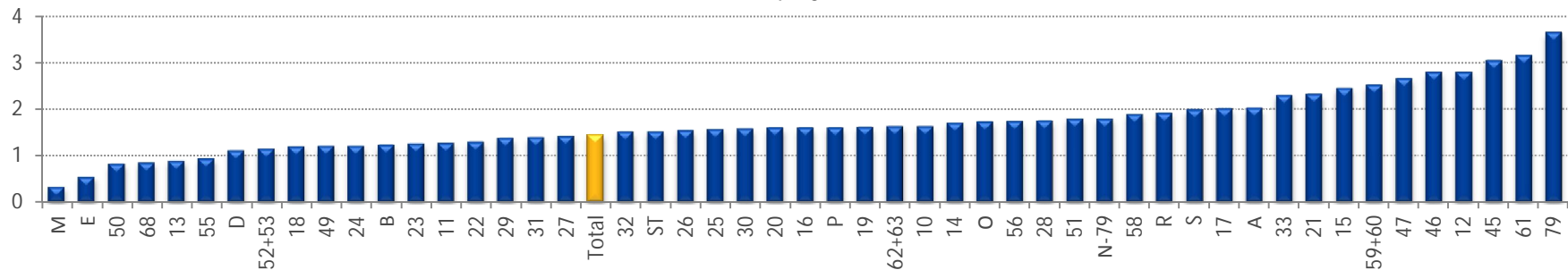




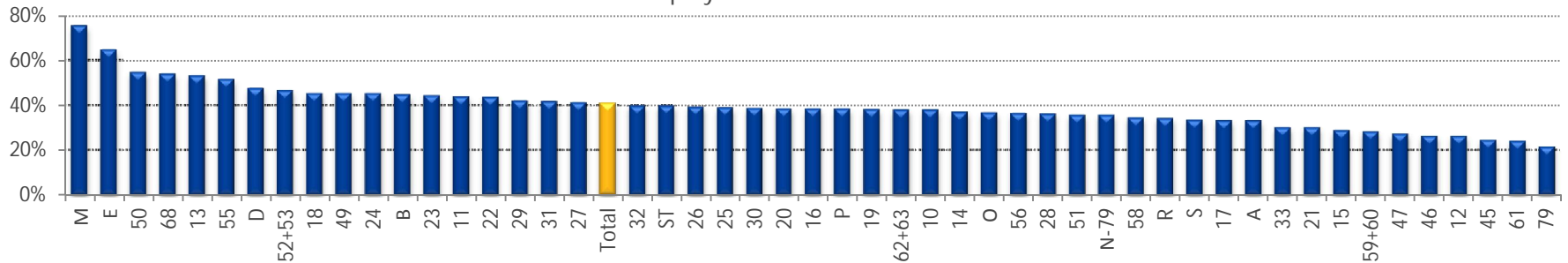
# Capital structure, 2007

## Performance of examined ratios per sector (a)

Debt to equity ratio



Equity to total assets ratio



Equity to fixed assets ratio

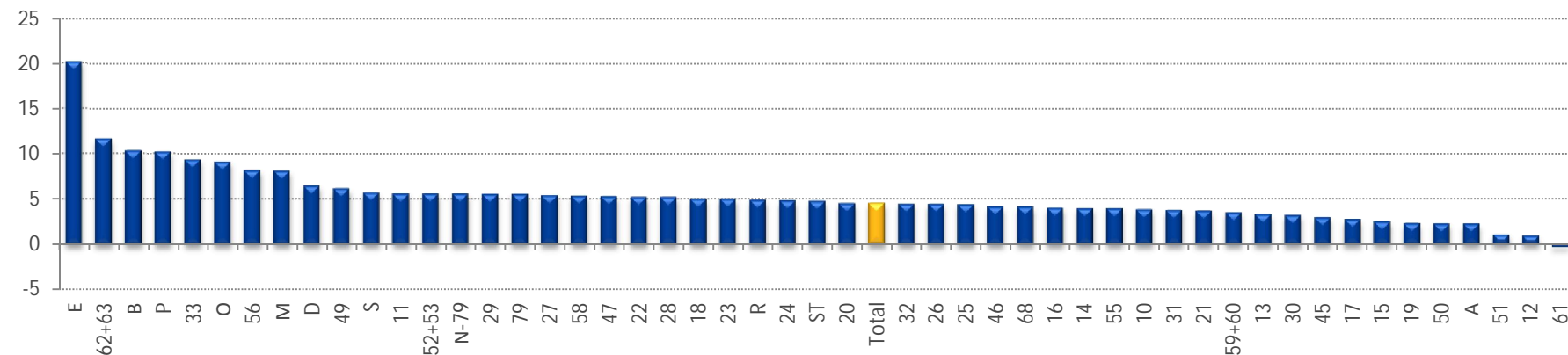




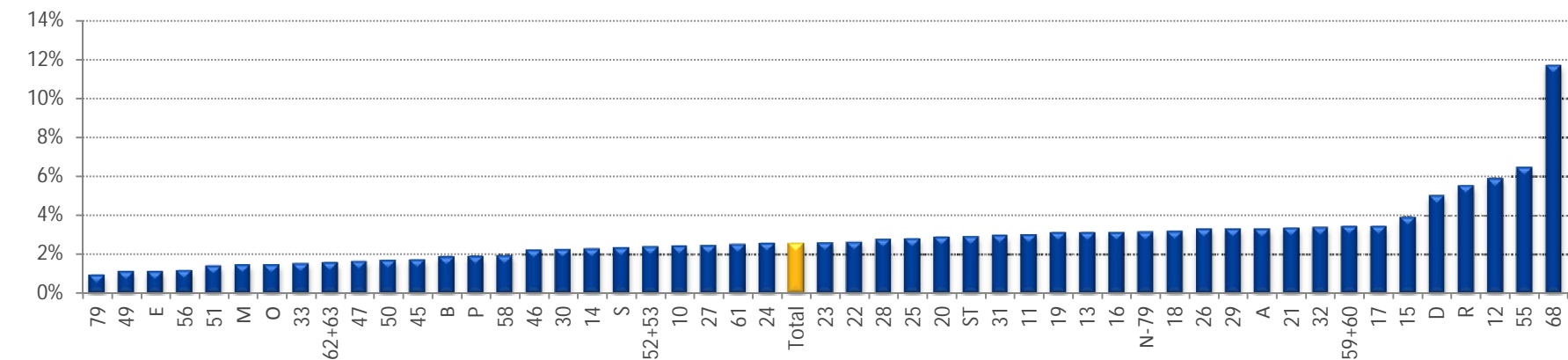
# Capital structure, 2007

## Performance of examined ratios per sector (b)

Times interest earned ratio



Interest expenses to turnover and operating revenue ratio





Disclaimer: This note constitute an investment advertisement, is intended solely for information purposes and it cannot in any way be considered investment advice, offer or recommendation to enter into any transaction. The information included in this note may not be construed as suitable investment for the holder, nor may it be considered as an instrument to accomplish specific investment goals or relevant financial needs of the holder and may neither be reckoned as a substitute to relevant contractual agreements between the Bank and the holder. Before entering into any transaction each individual investor should evaluate the information contained in this note and not base his/her decision solely on the information provided. This note cannot be considered investment research and consequently it was not compiled by Piraeus Bank according to the requirements of the law that are intended to ensure independence in the sector of investment research. Information comprised in this note is based on publicly available sources that are considered to be reliable. Piraeus Bank cannot be held accountable for the accuracy or completeness of the information contained in this note. Views and estimates brought forward in this note represent domestic and international market trends on the date indicated in the note and they are subject to alteration without previous warning. Piraeus Bank may also include in this note investment research done by third parties. This information is not modified in any way, consequently the Bank cannot be held accountable for the content. The Piraeus Bank Group is an organization with a considerable domestic and international presence, and provides a great variety of investment services. In cases where conflicts of interest issues should arise while Piraeus Bank or the rest of the companies of the group provide investment services in relation to the information provided in this note, Piraeus Bank and the companies of the Group should be underlined that (the list is not exhaustive): a) No restrictions apply in dealing for own account, or with regards to trading in relation to portfolios managed by Piraeus Bank or companies of its group before the publication of this note, or with regards to trading before an initial public offer. b) It is possible that investment or additional services are provided to the issuers included in this note against a fee. c) It is possible that Bank or any of its subsidiaries participate in the share capital of any of the issuers included in this note or may attract other interests financial or not from them. d) The Bank or any of its subsidiaries may act a market maker or an underwriter for any of the issuers included in the note. e) Piraeus Bank may have issued similar notes with different or incompatible content with the content of this note. It should be explicitly noted that: a) Figures refer to past performances and past performances do not constitute a safe indication for future performances. b) Figures constitute simulation of past performances and they are not a safe indication of future performances. c) Any projections or other estimates are not safe indications for future performances. d) Taxation treatment of information provided in this note may differ according to the rules that govern each individual investor. Therefore the holder should seek independent advice in relation to taxation rules that may affect him/her. e) Piraeus Bank is not under any obligation to keep data and information provided herein updated.