



Carpentry 2016

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Introduction

- The aim of the work is to analyze the aggregate performance of companies operating in metal construction for the construction industry (metalwork) over a seven-year period, from 2009 to 2016.
- Companies' performance was analyzed considering four profiles: growth, profitability, productivity and financial structure. An analysis of the sustainability of the companies' business models was conducted by comparing growth, profitability and soundness.
- The work is divided and in two parts:
 1. Analysis of the growth, profitability, productivity and financial structure performance of the aggregate sample;
 2. Focus on larger companies with a turnover in excess of 10 million Euros;

The companies analyzed

- The sample consists of 105 companies with an aggregate turnover of just under 1.6 billion Euros. The smallest company has a turnover of 360,678 Euros, the largest of 425,786,146 Euros.
- The sample includes 32 companies with revenues in excess of ten million euros.
- Overall, the companies employ 5,910 people, with about 56 employees per company.

Sample analyzed

Companies	105
Sample aggregate turnover	1.581.019.773 €
Average turnover	15.057.330 €
Average number of employees	56

Aggregate Performance Analysis

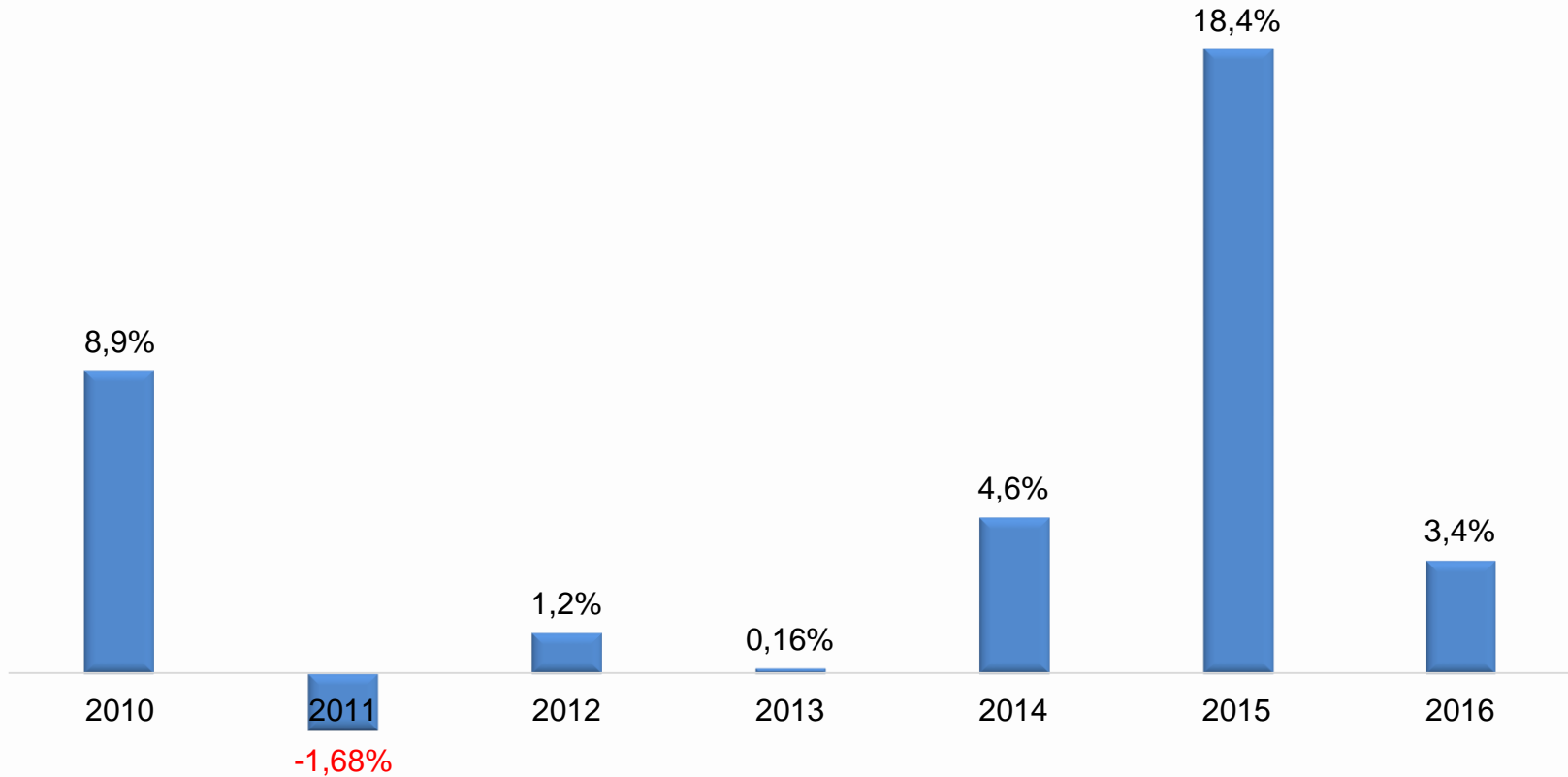
Growth

- In 2016, revenues grew by 3.4%. Over the 2009-2016 period, revenues grew at an average annual rate of 5%. The CAGR for the period is 4.8 with substantial revenue growth in 2015 and 2016.
- The value of production grew at a rate of 1.3% in 2016; a lower value considering the previous two years in which the value of production grew an average of 7%.
- Average employees per firm increased from 47 in 2009 to 56 in 2016. From 2012 to 2014 there is a situation of substantial stability. Since 2015 there has been an increase in average employees with a peak in 2016, the year in which there is the highest number of employees compared to the entire period considered (56).

Growth

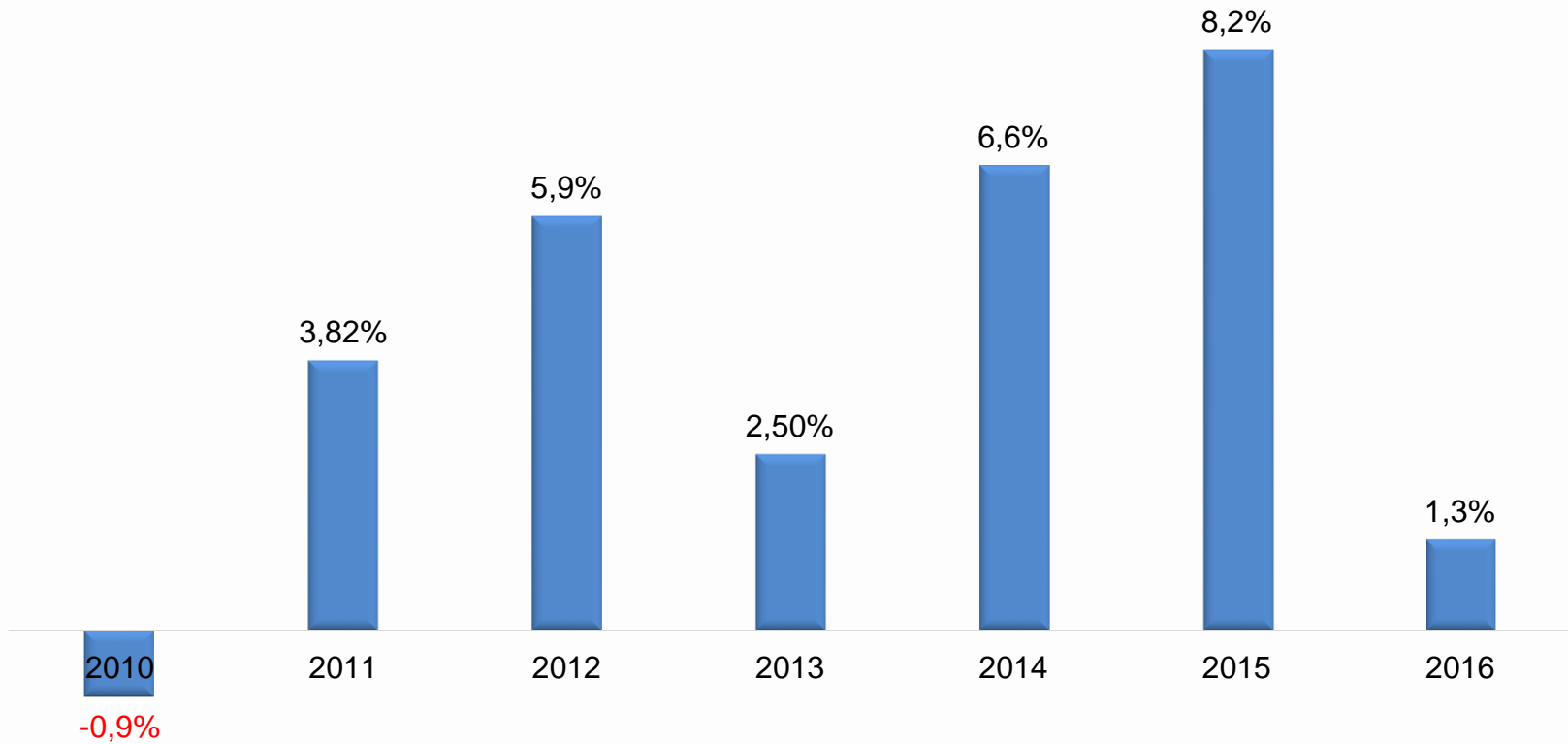
CAGR 2009 - 2016 Revenues: 4.8%.

Rate of change in revenues



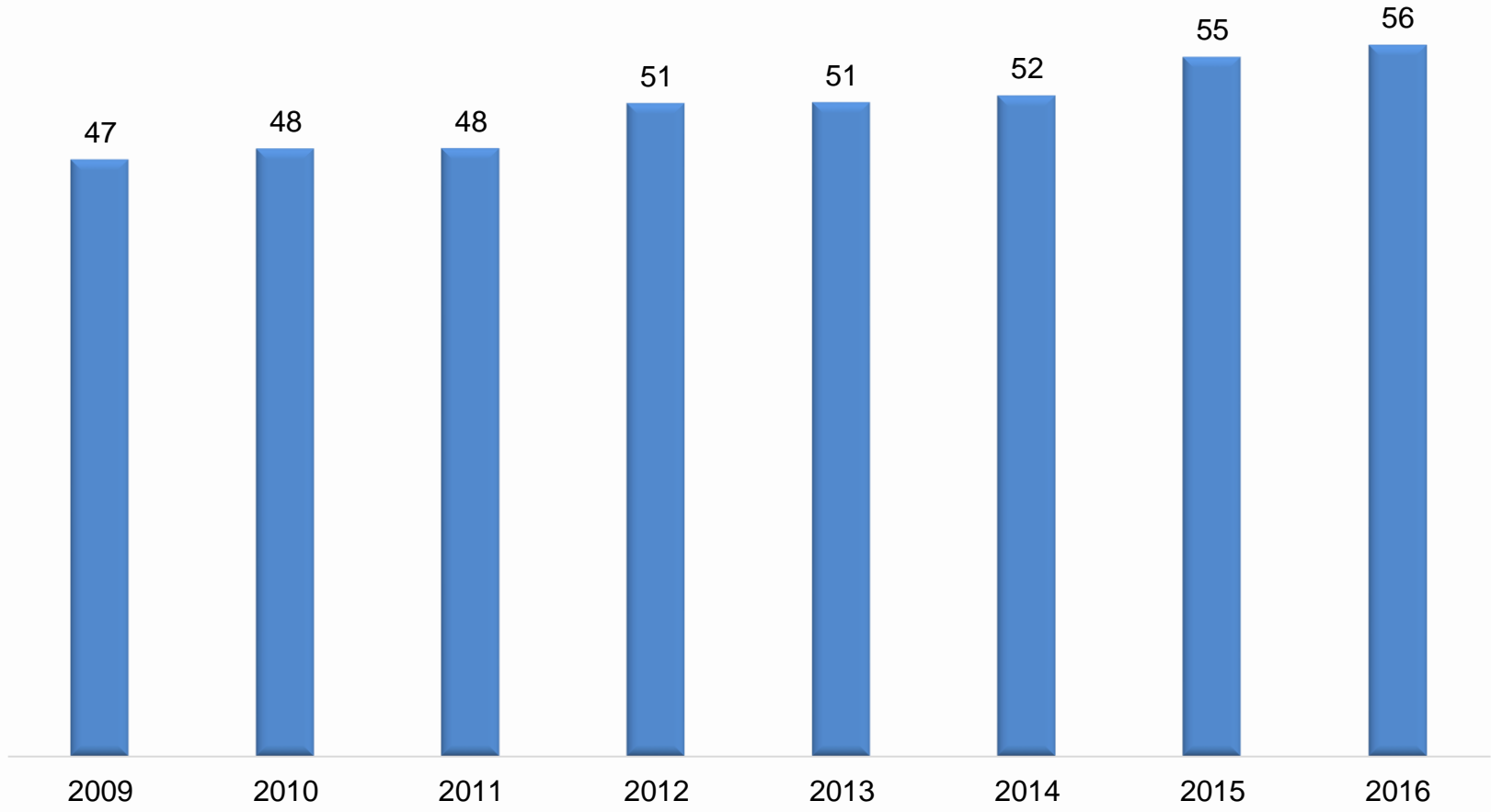
Growth

Rate of change in production value



Growth

Average employees per company

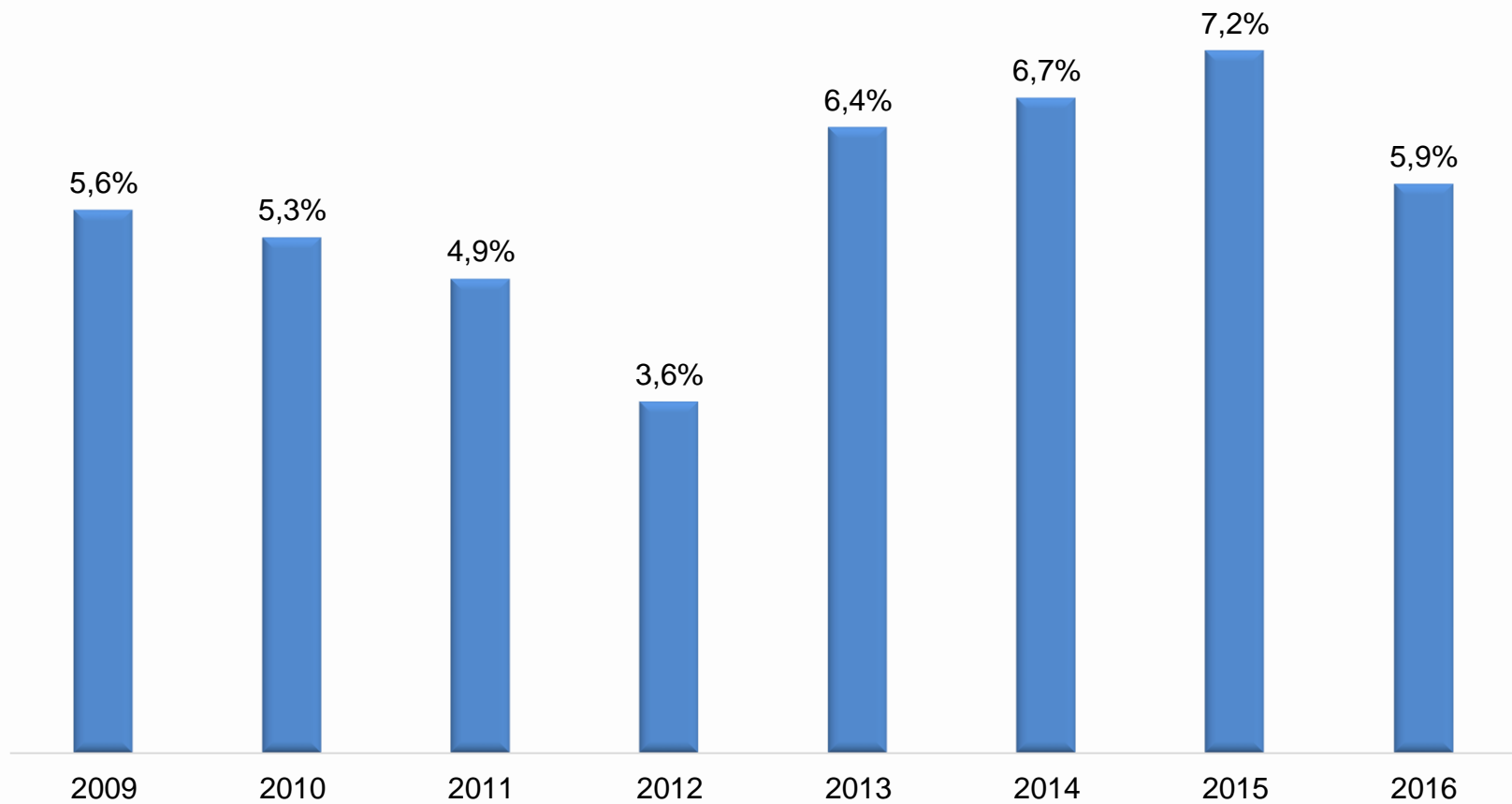


Profitability

- The analysis of profitability shows a drop in the marginality of sales (ROS) from 2009 to 2012 with subsequent recovery in 2013, 2014 and 2015. This figure was influenced by the good results achieved by the larger players on international markets and the exit from the Italian market (due to bankruptcy) of some large players that had pushed prices to a level that severely squeezed the commercial marginality. In 2016 there was a decrease in the trading margin which stood at 5.9%, slightly above the industry average.
- The return on investment follows the same trend as ROS and is stable 2014 to in 2016 with a peak in 2015. The CAGR of ROIC is 0.2% and indicates one that companies were able to maintain a good margin even with the investments made in 2012 and 2013.
- ROE (net return on equity) declined in 2014 due to extraordinary charges and the weight of interest expense of debt companies. From 2015 onwards there is a recovery with values above the industry average (6.9%).

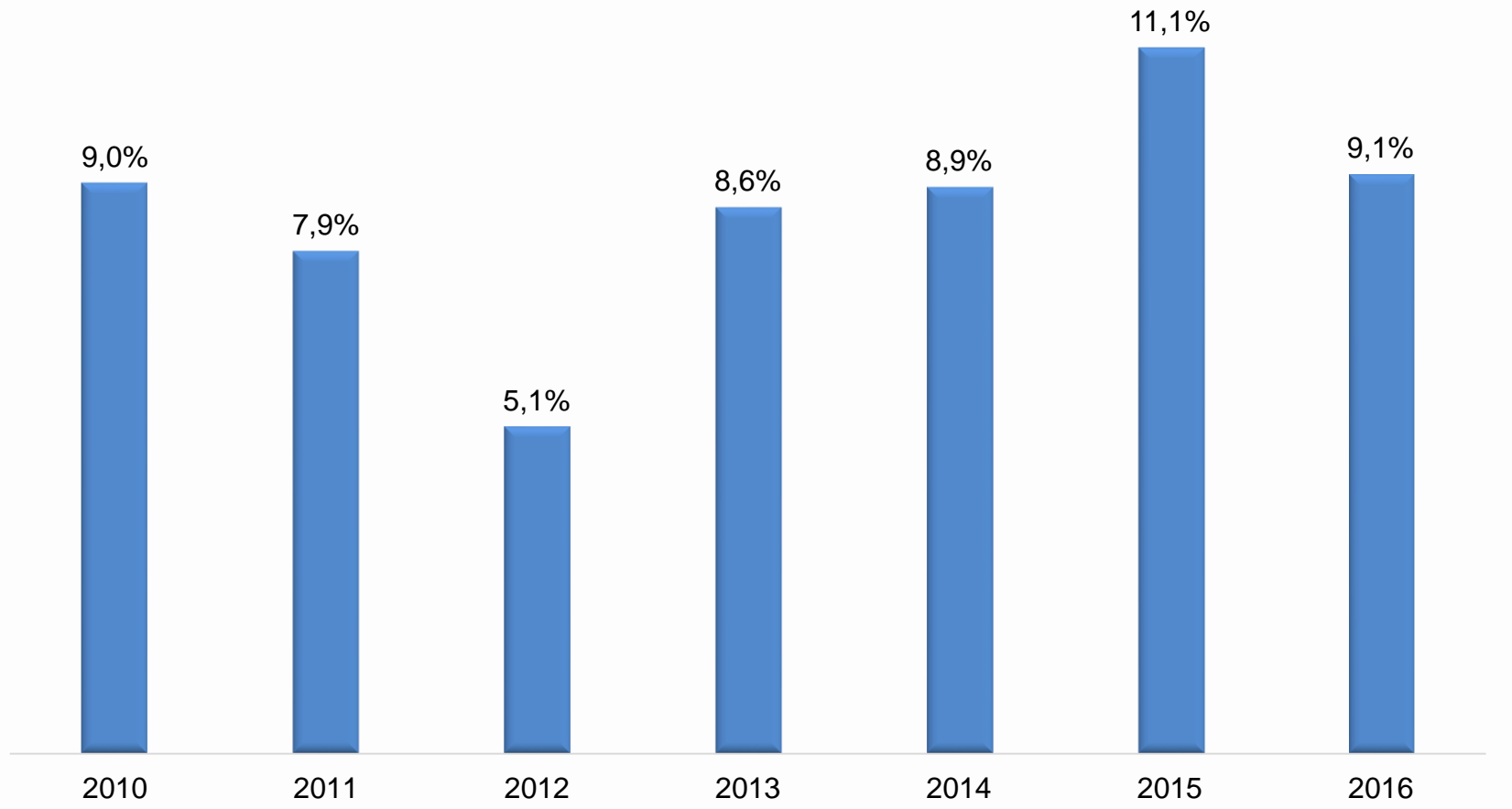
Profitability

ROS



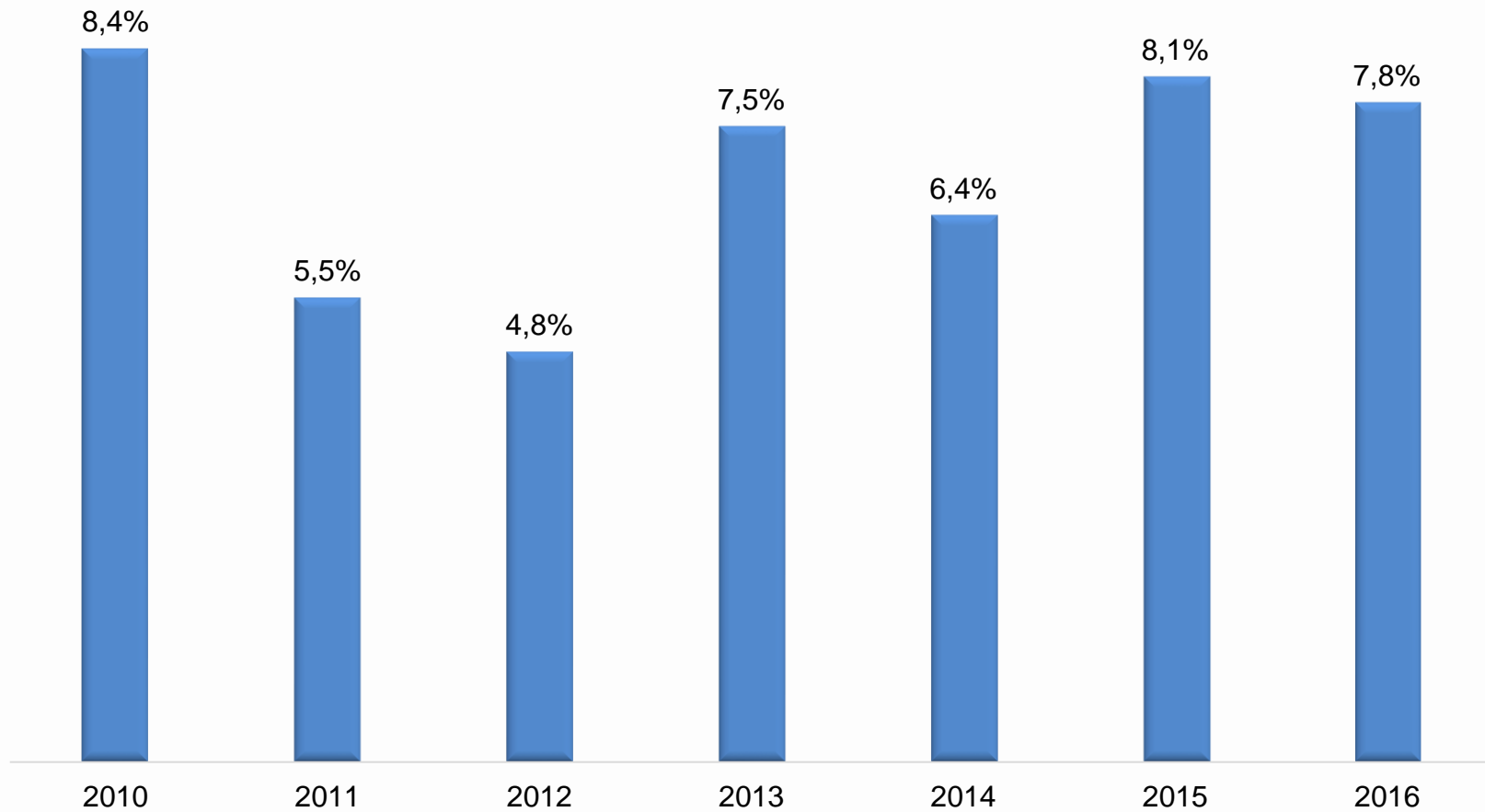
Profitability

ROIC



Profitability

ROE

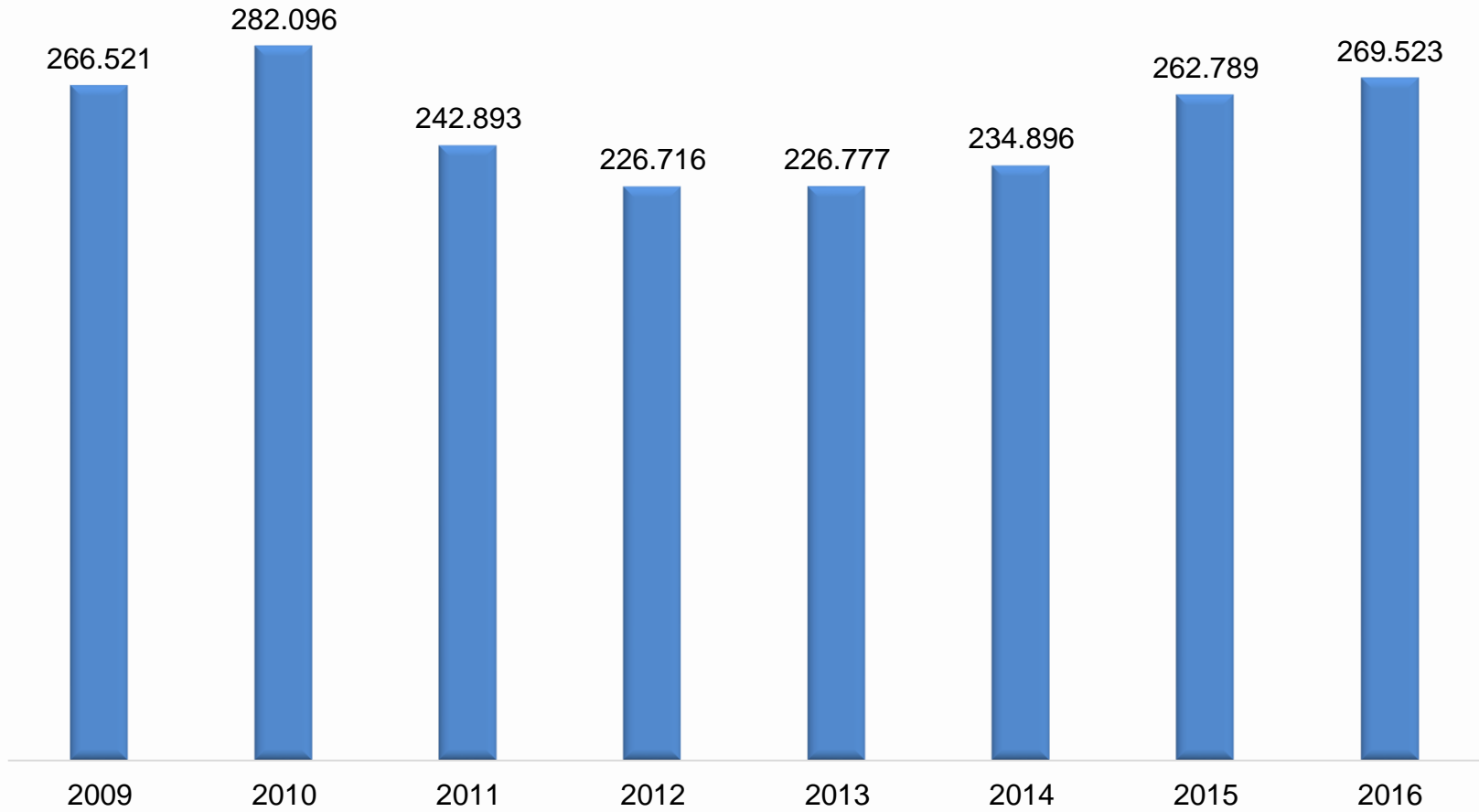


Productivity

- Business productivity remains constant over the period. Revenues per employee remain substantially constant over the long term with decreases in 2012, 2013 and 2014. The CAGR stands at 0.2% indicating the substantial stability of the values over a period of 7 years.
- The productivity of tangible fixed assets is characterized by a slightly increasing trend over the period considered and recorded the highest value in 2016, standing at 3.9.
- Moderate growth in value added per employee is noted from 2013 onward. In 2016, the value stands at 72,047, which is above the industry average.

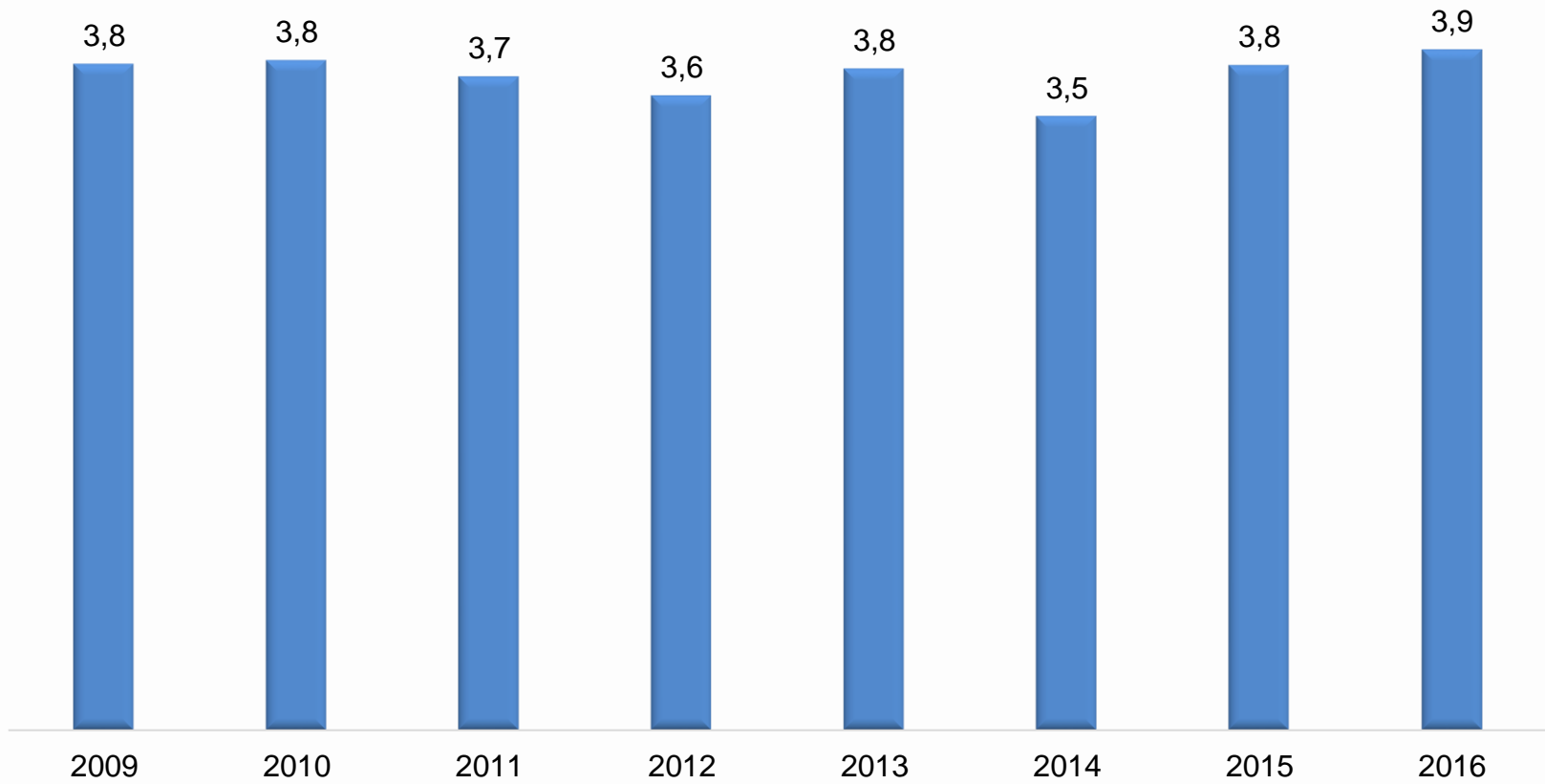
Productivity

Revenues per employee



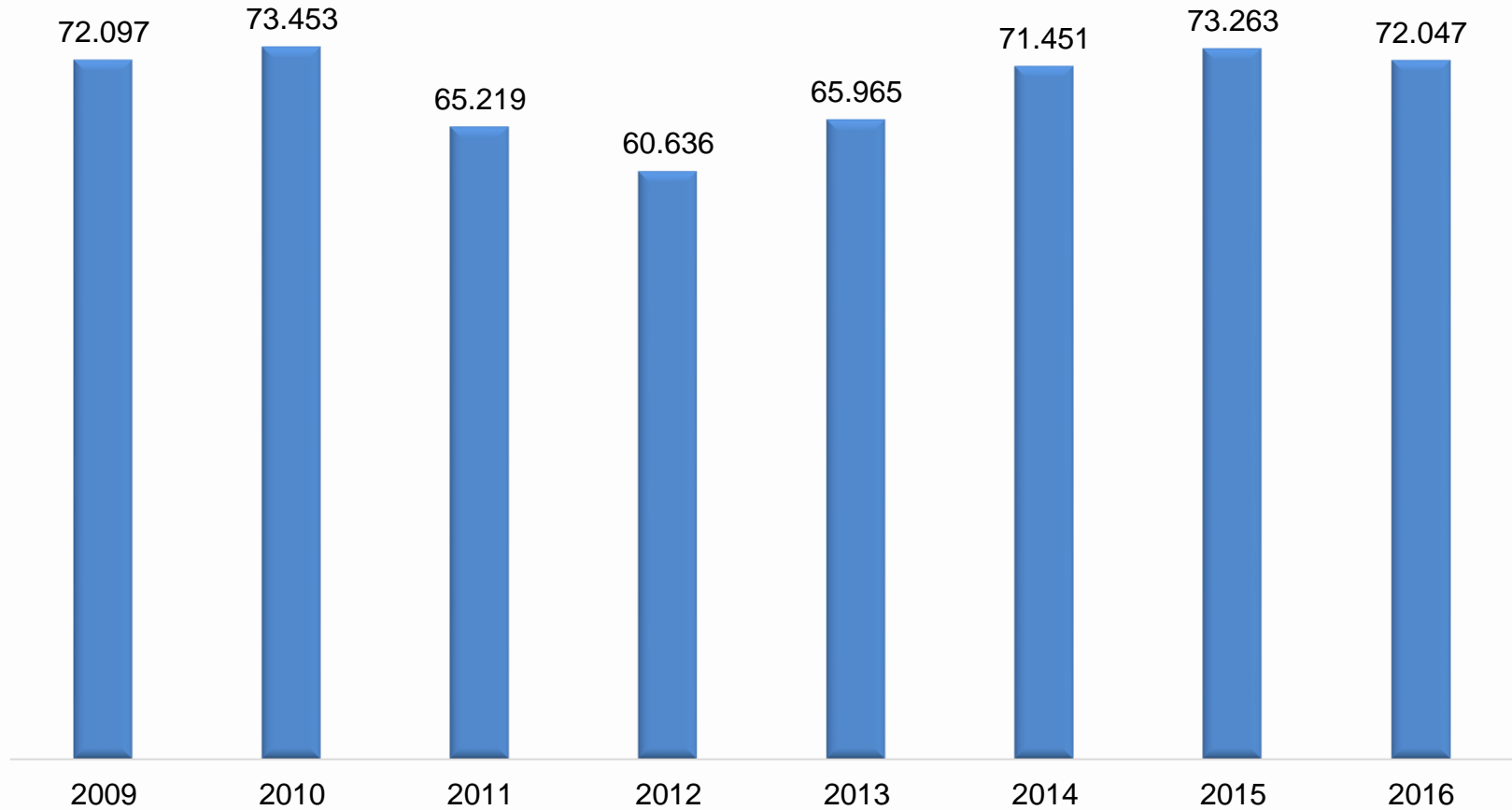
Productivity

Value of Production / Tangible assets



Productivity

Value added per employee

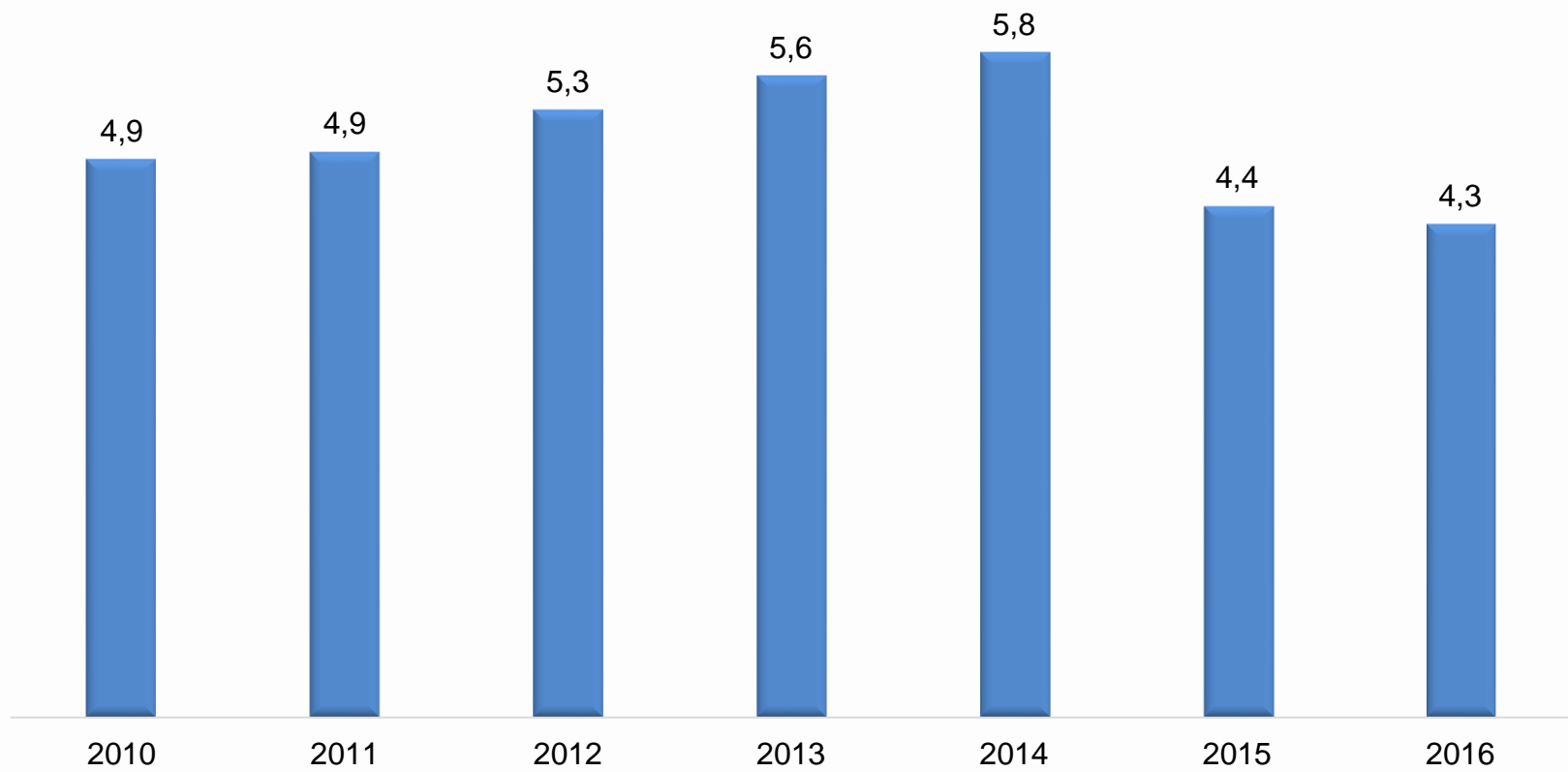


Financial Structure

- The debt rate was affected by an increasing trend until 2014. From 2015 onwards there is a decrease with values below the industry average. In 2016, a value of 4.3 is recorded, which is the lowest value for the period analyzed.
- The NFP/EBITDA was characterized by an increasing trend until 2013 and then decreased in subsequent years. In 2016, the NFP/EBITDA stood at 1.99 below the industry average (2.6).
- The incidence of financial debts on liabilities takes on low values in the last three years considered and in 2016 stood at 42.4%, the lowest value compared to the period considered.

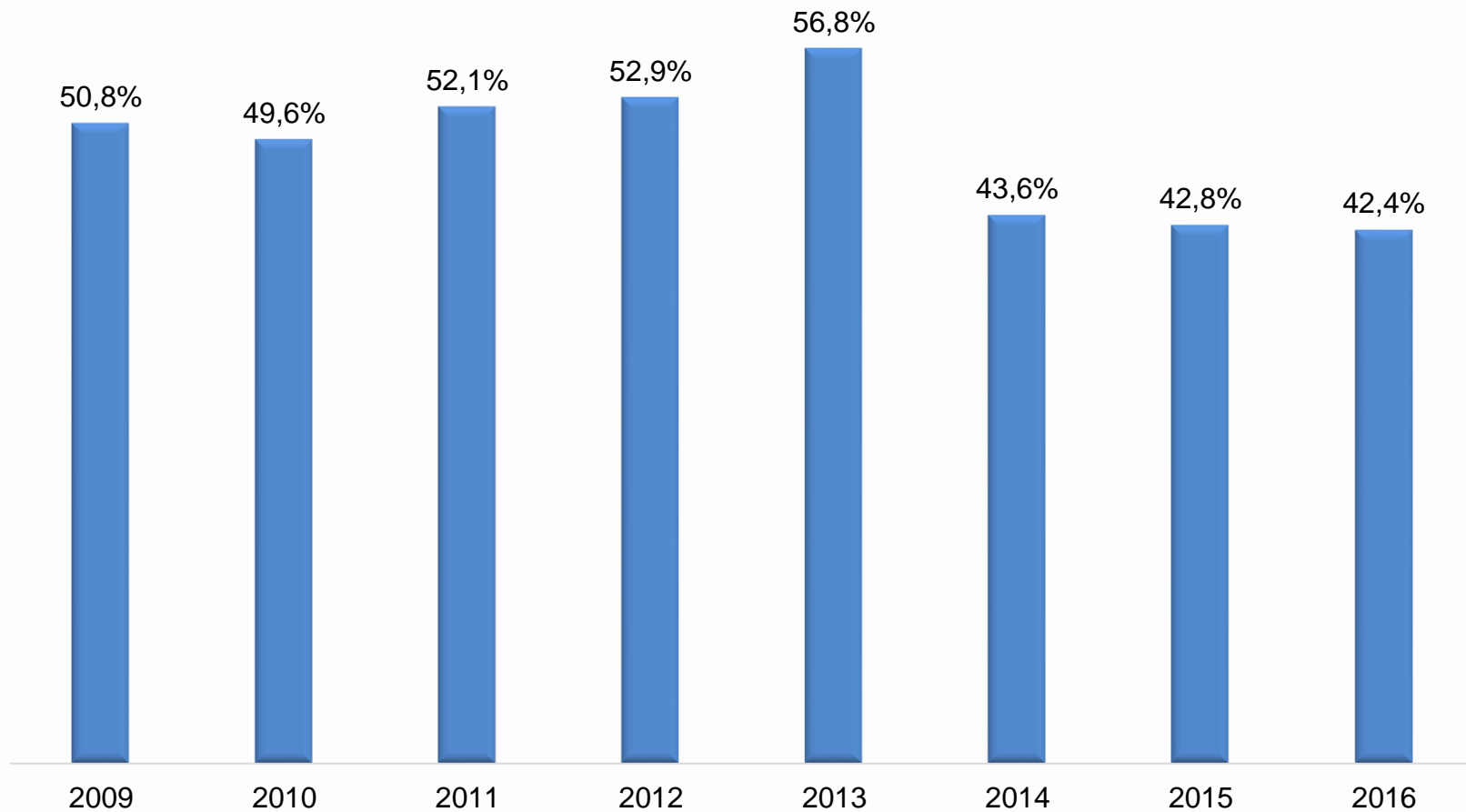
Financial Structure

Debt rate (initial)



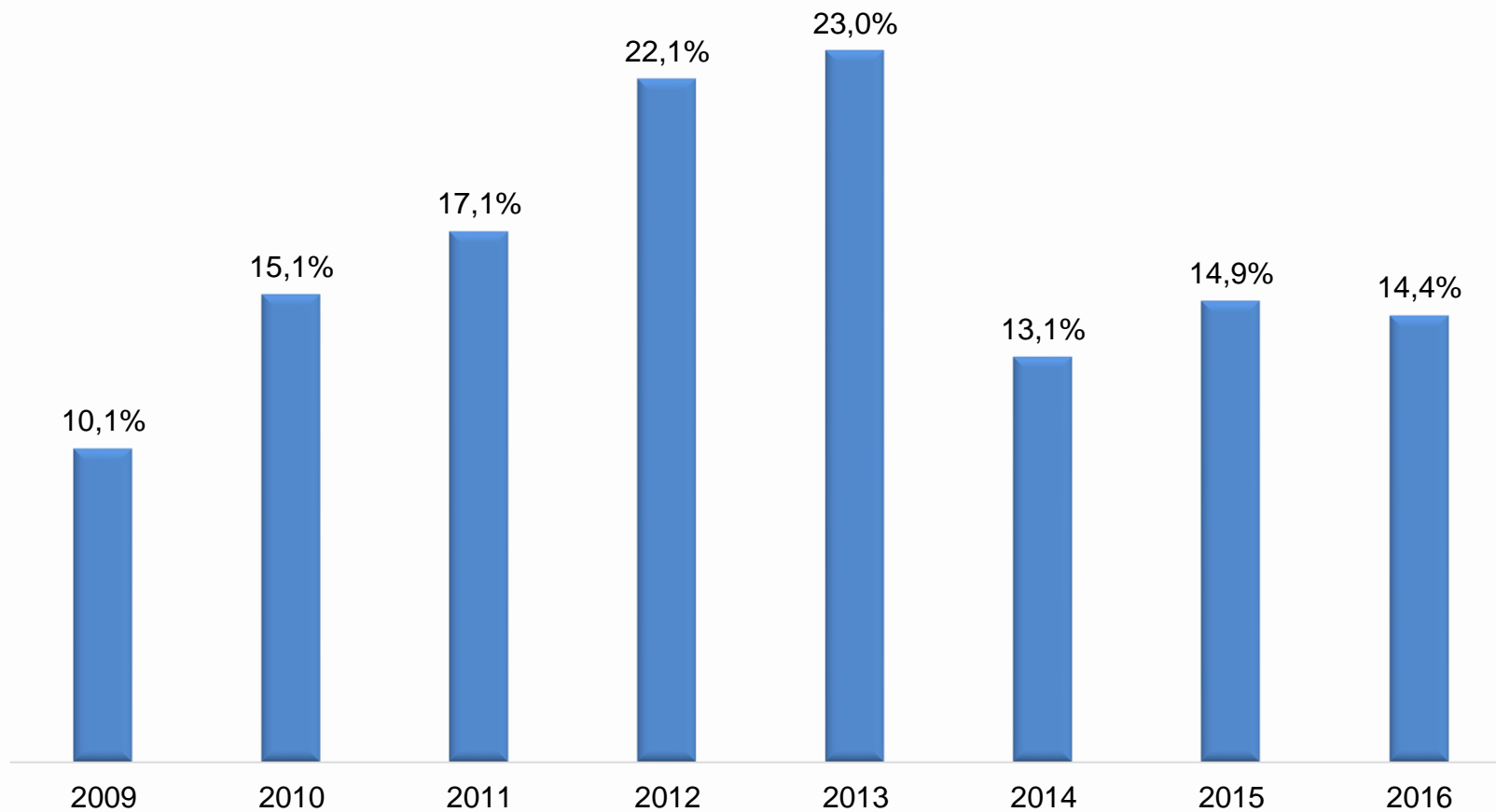
Financial Structure

Short-term debt on total liabilities



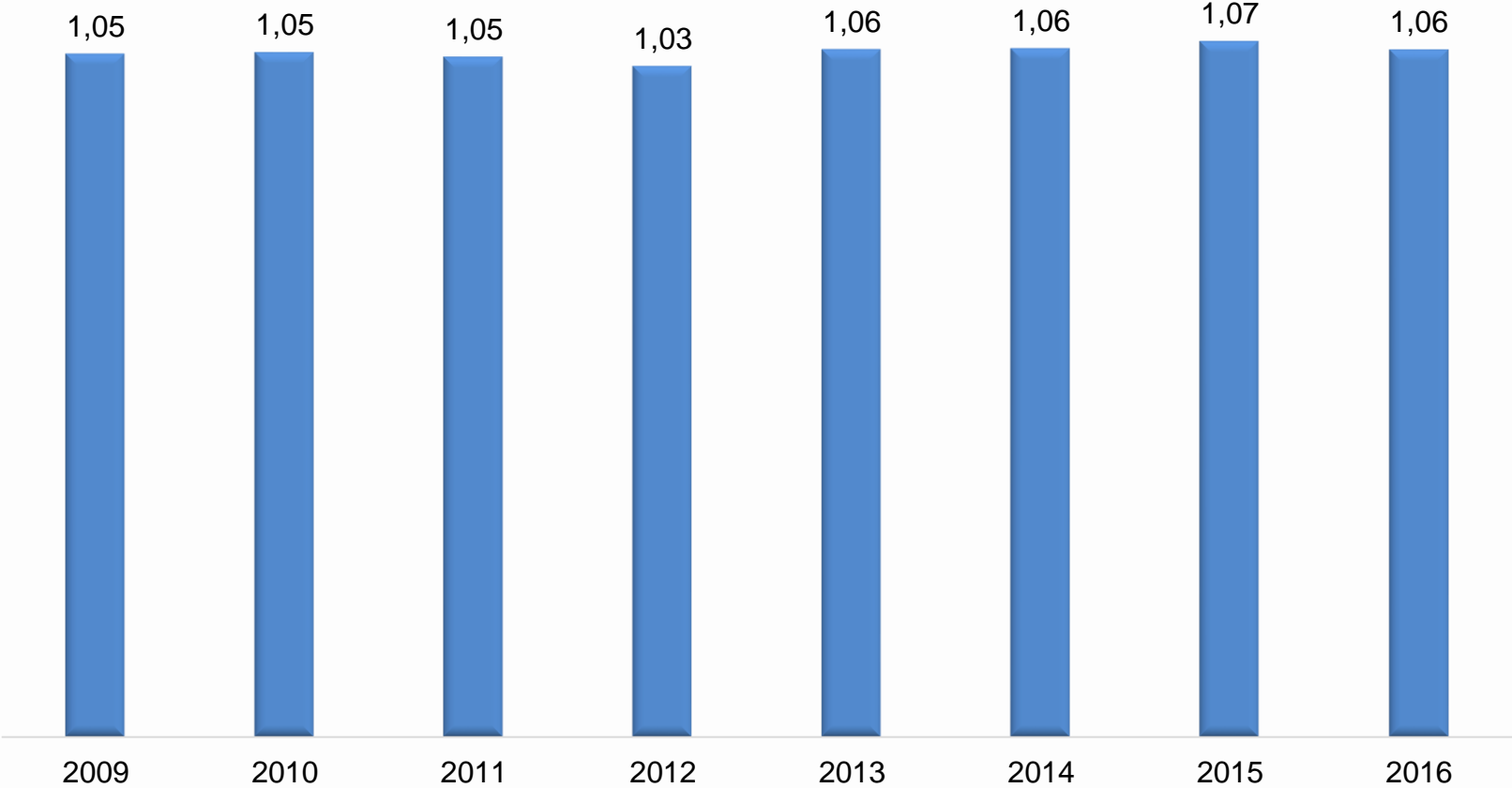
Financial Structure

M/L term liabilities on total liabilities



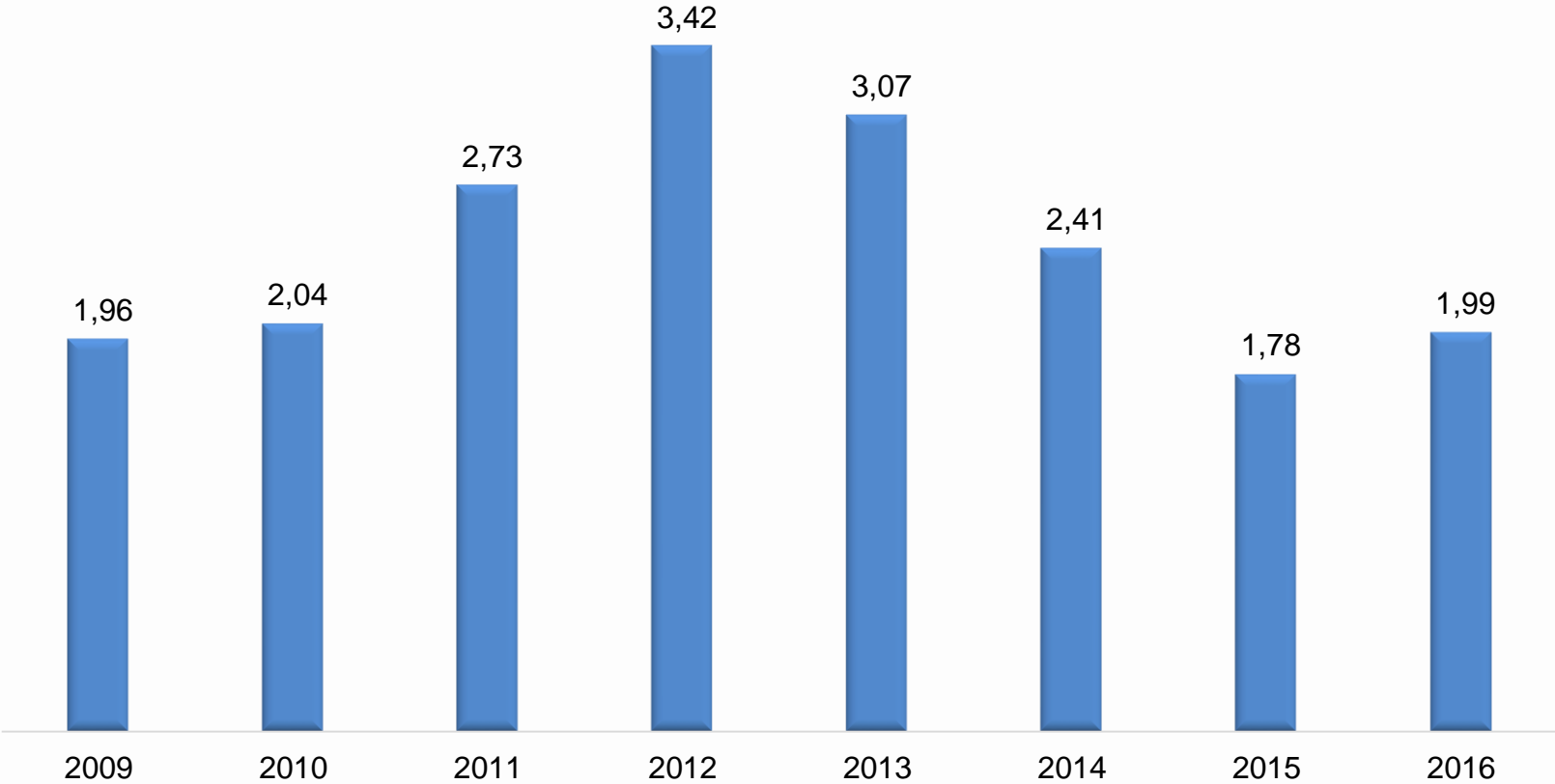
Financial Structure

Value of Production/Total Costs



Financial Structure

NFP/EBITDA



CARPENTRY

BALANCE SHEET

2009 2010 2011 2012 2013 2014 2015 2016

ACTIVE	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
RECEIVABLES FROM SHAREHOLDERS	650.945	589.007	335.000	260.000	260.000	200.000	200.000	300.000
Inventories	749.785.810	769.416.054	845.422.036	961.799.423	1.136.945.611	512.346.208	561.601.887	573.555.521
Credits	595.351.754	665.844.886	759.666.028	823.573.894	799.930.578	837.324.315	812.567.661	848.464.273
Financial assets	14.127.548	17.755.755	17.216.645	18.013.511	17.571.942	18.520.127	15.250.784	23.834.372
Cash and cash equivalents	86.988.738	96.582.284	122.660.840	103.768.805	105.351.909	161.606.711	206.029.280	210.705.200
CURRENT ASSETS	1.446.253.850	1.549.598.979	1.744.965.549	1.907.155.633	2.059.800.040	1.529.797.361	1.595.449.612	1.656.559.366
Intangible fixed assets, of which:	7.988.697	9.082.215	10.449.968	10.869.450	12.737.687	15.079.830	21.662.574	21.287.777
a) Start-up	1.830.663	1.740.718	1.614.529	4.107.846	3.693.041	3.722.283	3.283.843	2.384.875
Tangible fixed assets	340.805.970	335.753.870	357.345.304	389.442.818	382.988.946	439.737.238	439.480.178	435.031.196
Financial fixed assets	34.722.550	34.396.291	48.563.528	49.742.513	76.540.058	49.924.543	56.300.872	75.372.455
FIXED ASSETS	385.347.880	380.973.094	417.973.329	454.162.627	475.959.732	508.463.894	520.727.467	534.076.303
ACCRUALS AND DEFERRALS	17.615.028	14.089.304	15.348.386	15.052.274	13.383.386	13.254.247	12.512.485	12.060.125
TOTAL ASSETS	1.849.867.703	1.945.250.384	2.178.622.264	2.376.630.534	2.549.403.158	2.051.715.502	2.128.889.564	2.202.995.794
LIABILITY								
Total payables, of which:	1.393.776.664	1.474.661.483	1.674.461.086	1.862.198.183	2.017.055.734	1.476.768.528	1.508.132.927	1.594.927.191
a) financial	940.264.103	964.054.071	1.136.038.412	1.256.756.612	1.447.115.129	893.657.646	910.417.019	933.689.549
b) from suppliers	335.441.949	374.900.347	389.735.054	438.878.487	419.995.406	436.007.564	420.969.766	447.027.668
Provisions for risks	27.250.227	25.338.246	40.753.530	36.362.409	37.038.376	56.589.124	64.900.888	47.627.743
Severance pay	38.747.017	40.685.916	42.835.143	43.891.720	45.540.500	47.160.841	47.981.873	46.371.736
EQUITY	381.051.777	395.633.735	412.300.354	425.932.854	440.978.554	461.567.234	496.032.025	504.780.269
Accruals and Deferrals	9.042.018	8.931.004	8.270.351	8.245.367	8.789.994	9.629.775	11.841.851	9.288.855
TOTAL LIABILITIES	1.849.867.703	1.945.250.384	2.178.620.464	2.376.630.533	2.549.403.158	2.051.715.502	2.128.889.564	2.202.995.794

CARPENTRY

**PROFIT AND LOSS
ACCOUNT**

2009 2010 2011 2012 2013 2014 2015 2016

VALUE OF PRODUCTION	1.288.051.255	1.276.088.671	1.324.897.642	1.402.600.876	1.437.624.477	1.532.294.157	1.658.131.167	1.679.496.218
Revenues from sales and services	1.137.246.246	1.238.964.869	1.218.106.890	1.232.882.976	1.234.801.347	1.291.928.350	1.529.694.314	1.581.019.733
Total Variations	127.831.489	15.454.043	66.198.841	111.677.879	165.024.922	201.653.407	88.424.022	37.648.901
PRODUCTION COSTS	1.185.264.604	1.172.026.542	1.223.007.487	1.309.524.079	1.316.587.606	1.395.801.943	1.494.661.243	1.537.504.676
Raw materials and consumption	502.071.920	526.338.338	601.843.356	593.866.255	548.550.343	601.200.297	650.480.582	654.439.663
Services	394.549.757	367.717.665	351.413.178	412.817.019	459.965.537	489.619.150	497.656.406	524.695.365
Use of third party assets	41.952.797	47.587.032	46.236.023	43.974.861	38.729.139	43.765.419	52.093.838	53.552.658
Personnel costs	204.852.731	218.543.724	225.183.067	236.661.506	238.140.713	256.488.435	262.992.972	280.634.853
Variation of materials	23.720.433	-892.313	-15.739.014	2.995.515	17.362.920	-12.924.090	12.023.771	-1.556.538
Other operating expenses	18.116.966	12.732.096	14.070.877	19.208.923	13.838.954	17.652.732	19.413.674	25.738.675
ADDED VALUE	307.639.382	322.605.853	327.073.222	329.738.303	359.177.584	392.980.649	426.462.896	422.626.395
GROSS OPERATING MARGIN	102.786.651	104.062.129	101.890.155	93.076.797	121.036.871	136.492.214	163.469.924	141.991.542
Total amortization, depreciation and write-downs, of which:								
a) depreciation	36.123.539	36.606.219	40.083.846	39.068.495	40.271.952	46.901.964	51.322.721	46.670.615
Provisions for risks and other provisions	32.453.430	33.373.773	32.736.786	34.261.265	34.850.906	39.075.526	38.744.196	40.305.861
	3.144.060	1.774.828	2.391.943	9.436.413	1.311.160	2.545.533	1.641.311	2.768.486
OPERATING RESULT	63.519.052	65.681.082	59.414.366	44.571.889	79.453.759	87.044.717	110.505.892	92.552.441
Financial income and expenses	-10.230.166	-7.028.444	-11.461.413	-1.269.649	-15.648.072	-27.064.412	-47.980.904	-26.589.847
Adjustments to financial assets	-1.164.658	-1.078.549	-1.884.207	-1.526.771	-2.332.364	-3.664.440	-1.737.195	667.919
Extraordinary income/expenses	-1.117.649	72.379	476.474	-455.102	-137.886	2.576.257	3.480.485	0
PRE-TAX RESULT	51.006.579	57.646.468	46.545.220	41.320.367	61.335.437	58.892.122	64.268.278	66.630.513
Current, deferred and prepaid taxes	25.146.350	25.624.589	24.910.076	20.871.932	29.468.802	30.443.993	27.015.752	28.100.365
OPERATING PROFIT/LOSS	25.860.229	32.021.879	21.635.144	20.448.435	31.866.635	28.448.129	37.252.526	38.530.148

Focus on larger companies

The characteristics of the companies

- The analysis of the larger companies was carried out considering 32 carpentries (top players) with a turnover of over 10 million Euros. As can be seen from the data, these are medium and large sized companies that are less dependent on the dynamics of the national market and, as we will see, have a better average performance than the entire sample.

Companies with a turnover exceeding 10 million Euros

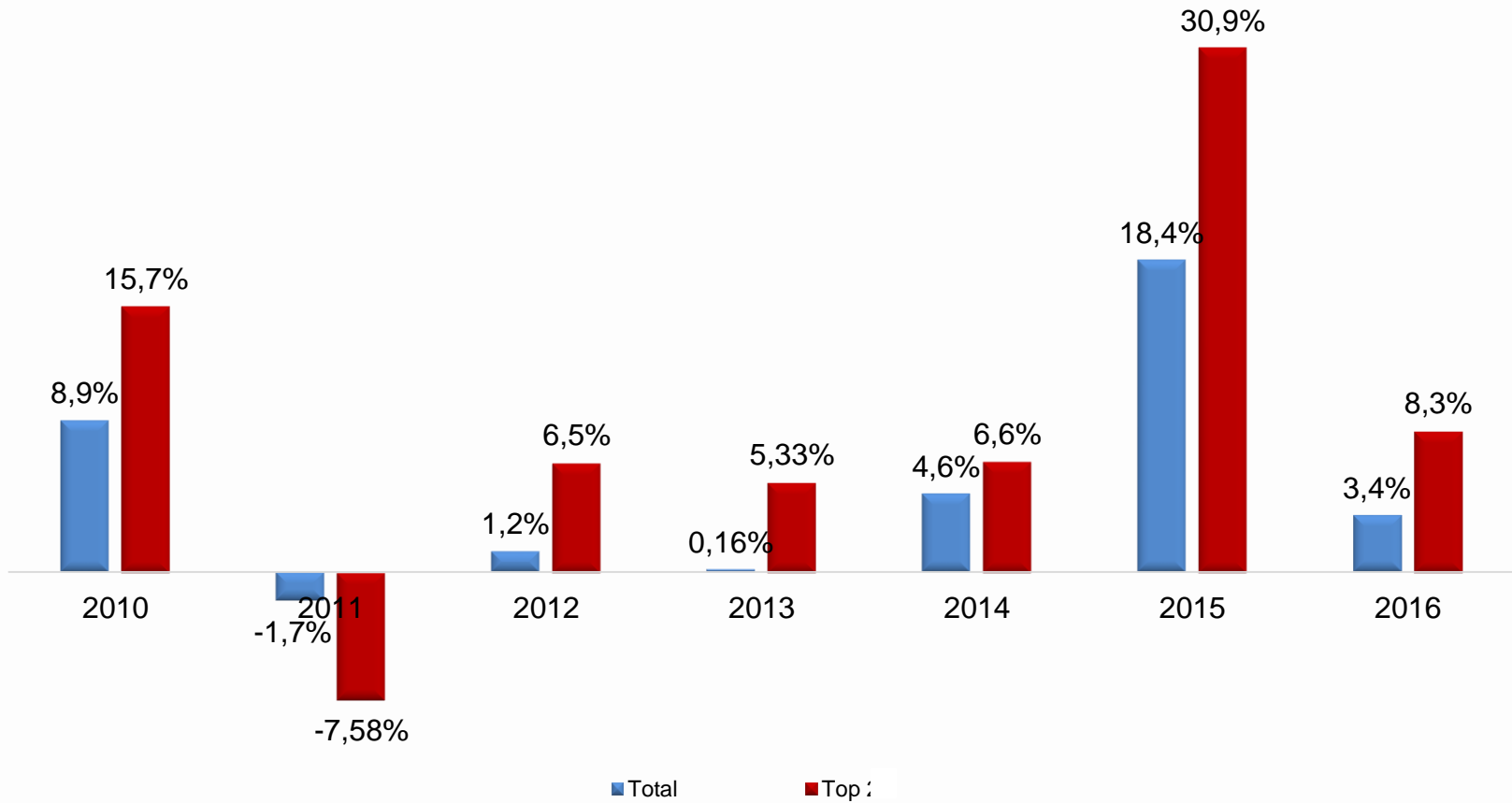
Number of companies	32
Average turnover	39.954.273 €
Average number of employees	128
Aggregate turnover	1.278.536.739 €

Growth

- The growth performance of the larger companies is more satisfactory than that of the entire sample. Both revenues and value of production grew at significantly higher rates throughout the period considered.
- Both dimensions considered have grown in number of employees. The total change is characterized by an increasing trend throughout the period considered. In 2016, however, there is a decrease in the number of employees for large companies.

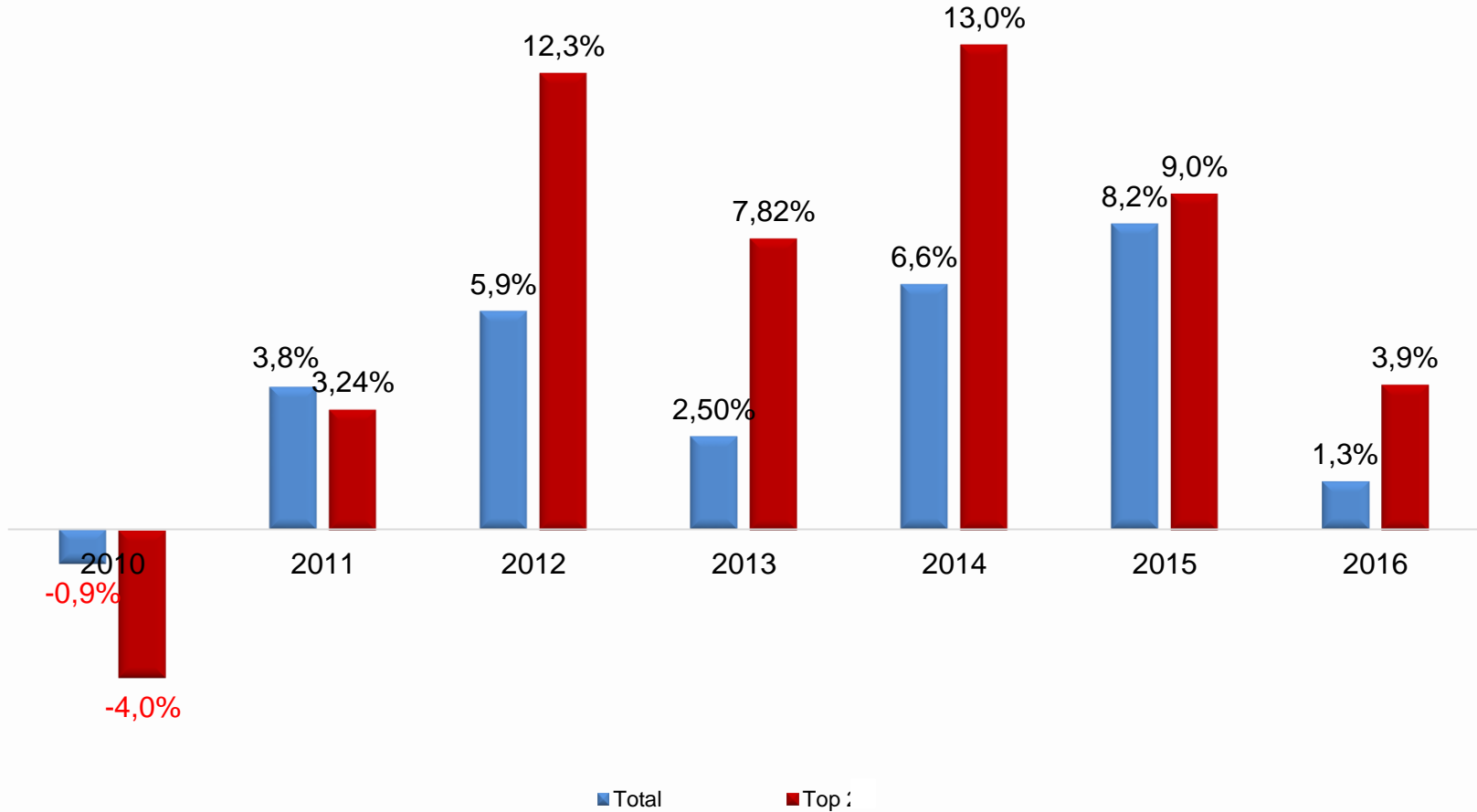
Growth

Rate of change in revenues



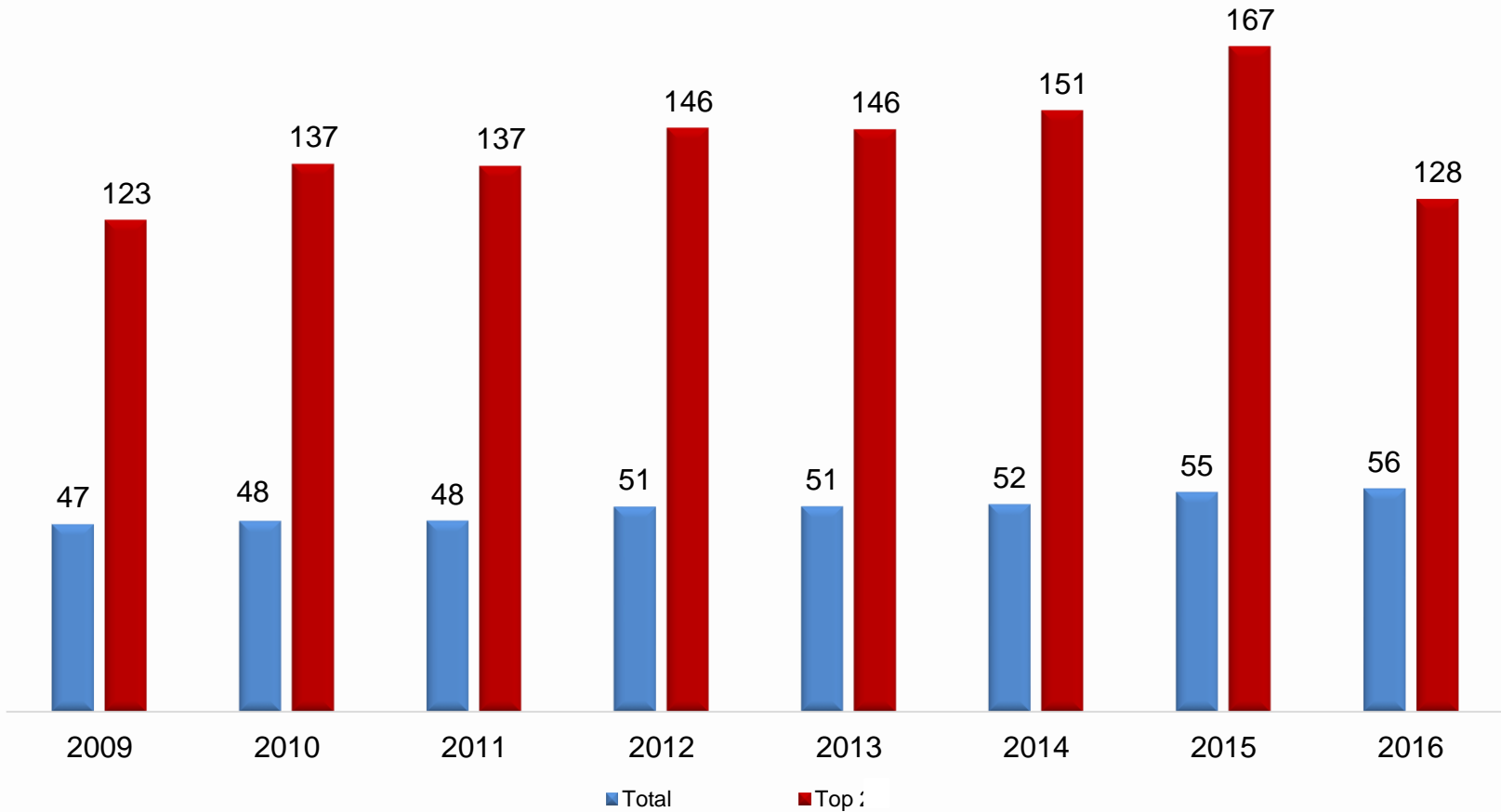
Growth

Rate of change in value of production



Growth

Average employees per company

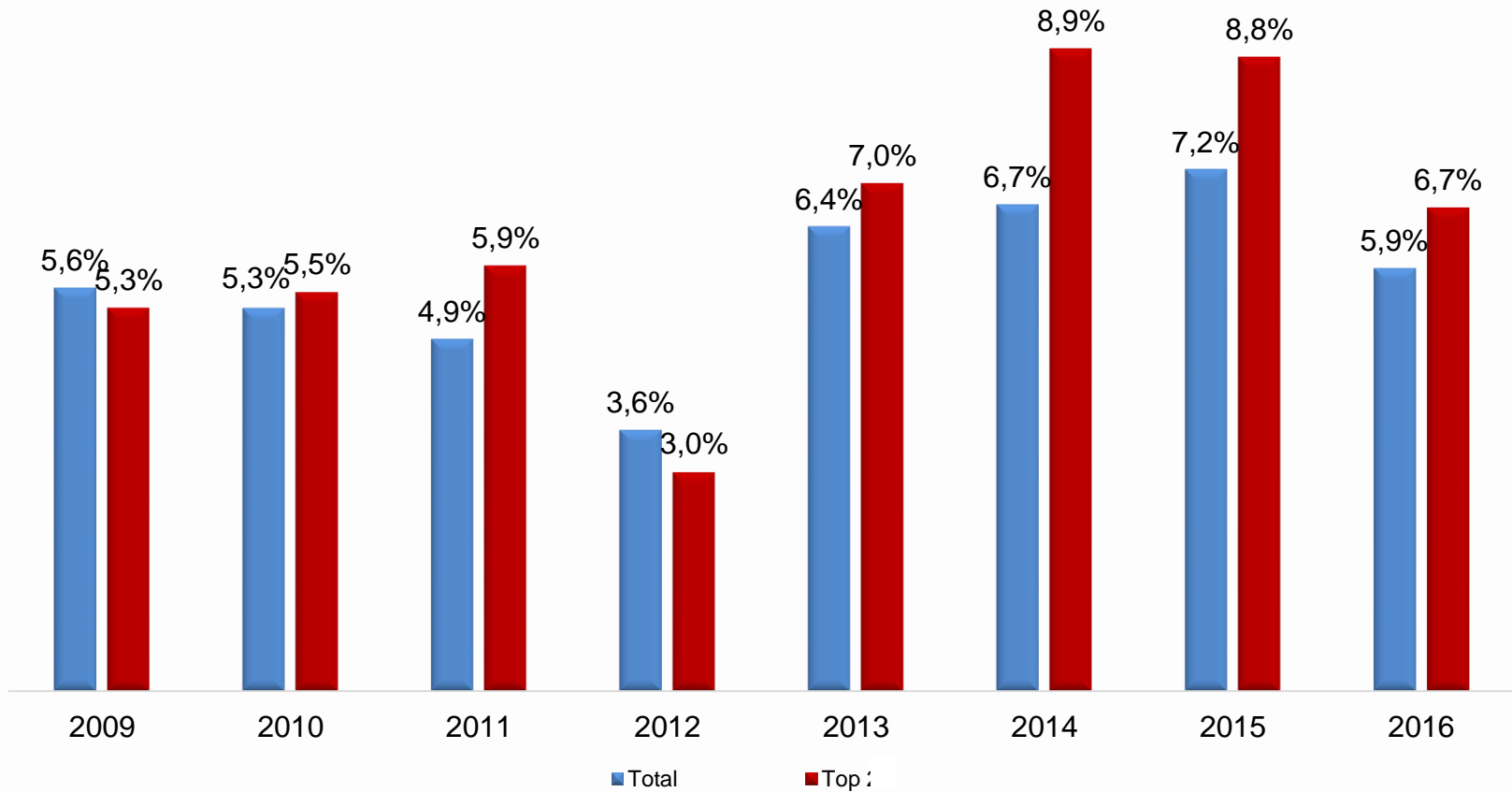


Profitability

- The profitability on sales (ROS) of the largest companies is structurally higher than that of the entire sample. Since 2013, there has been an increase in the gap between the total sample and top companies caused by a decrease in production costs linked to better raw material purchase prices.
- The return on invested capital (ROIC) is stable until 2013 for the top companies in the industry. From 2014 onwards there is an increase in the return on invested capital. The improvement in profitability is noted for both sizes although the gap between large companies and the rest of the sample increases in the last three years considered.

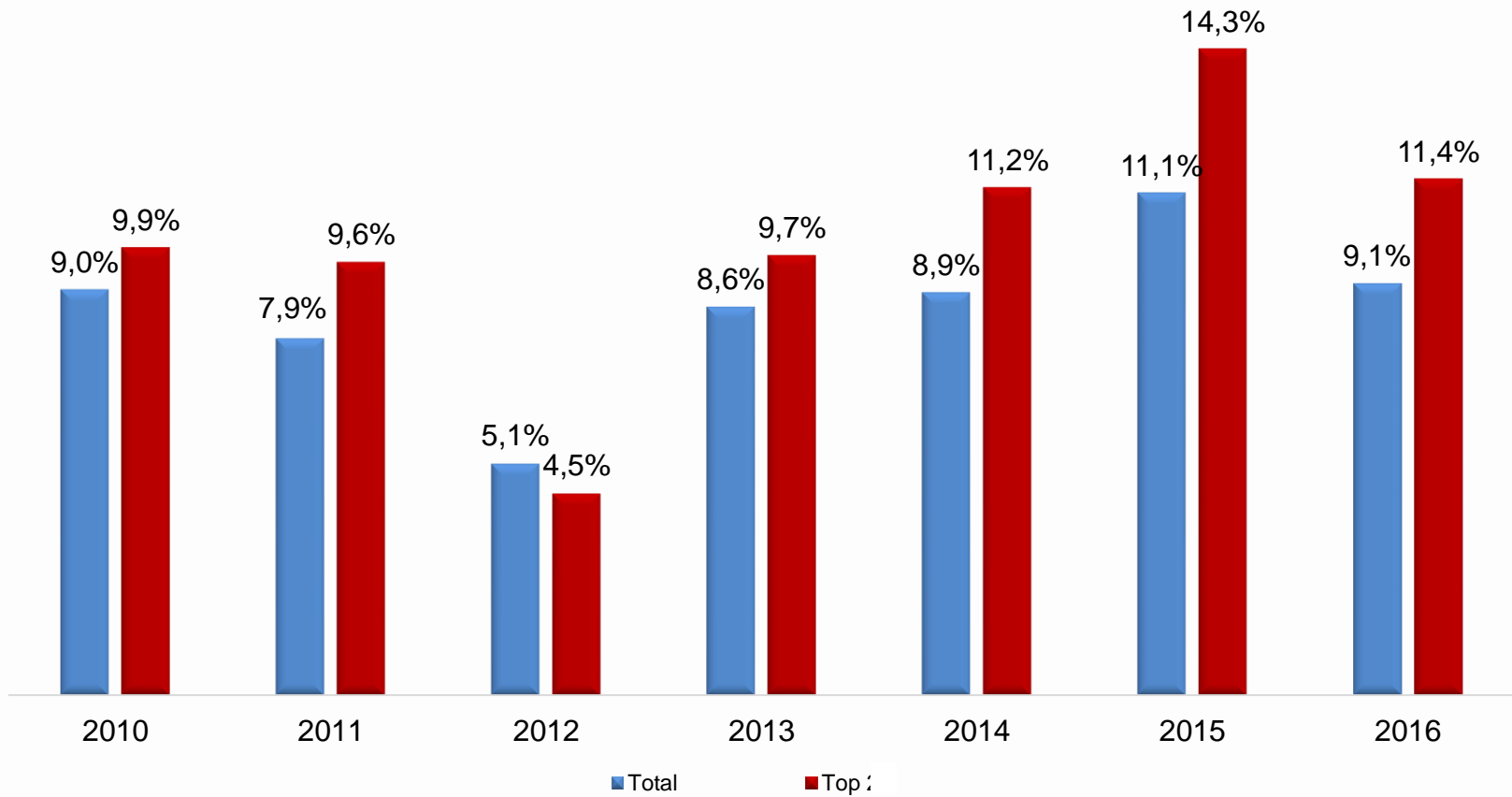
Profitability

ROS



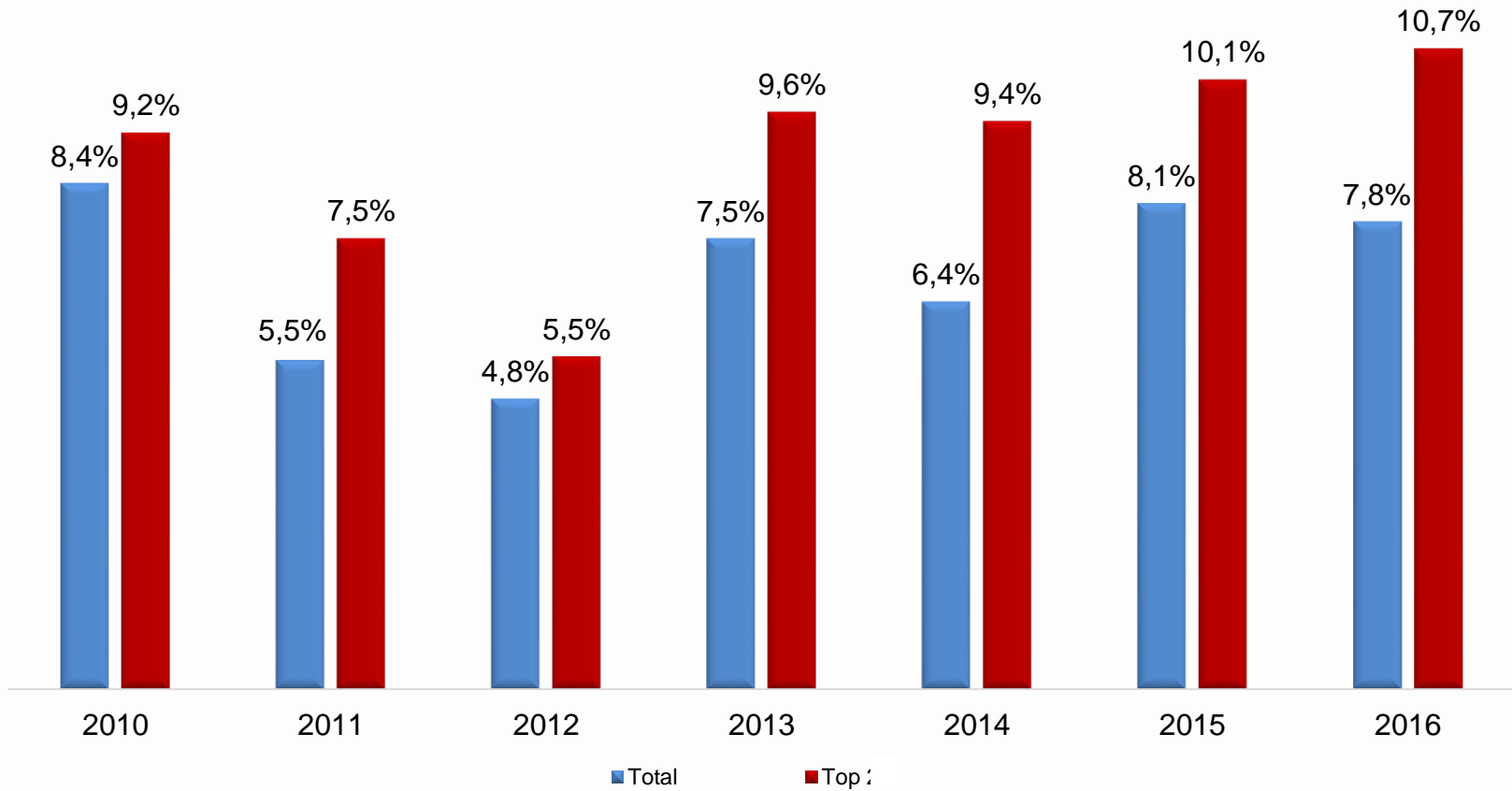
Profitability

ROIC



Profitability

ROE

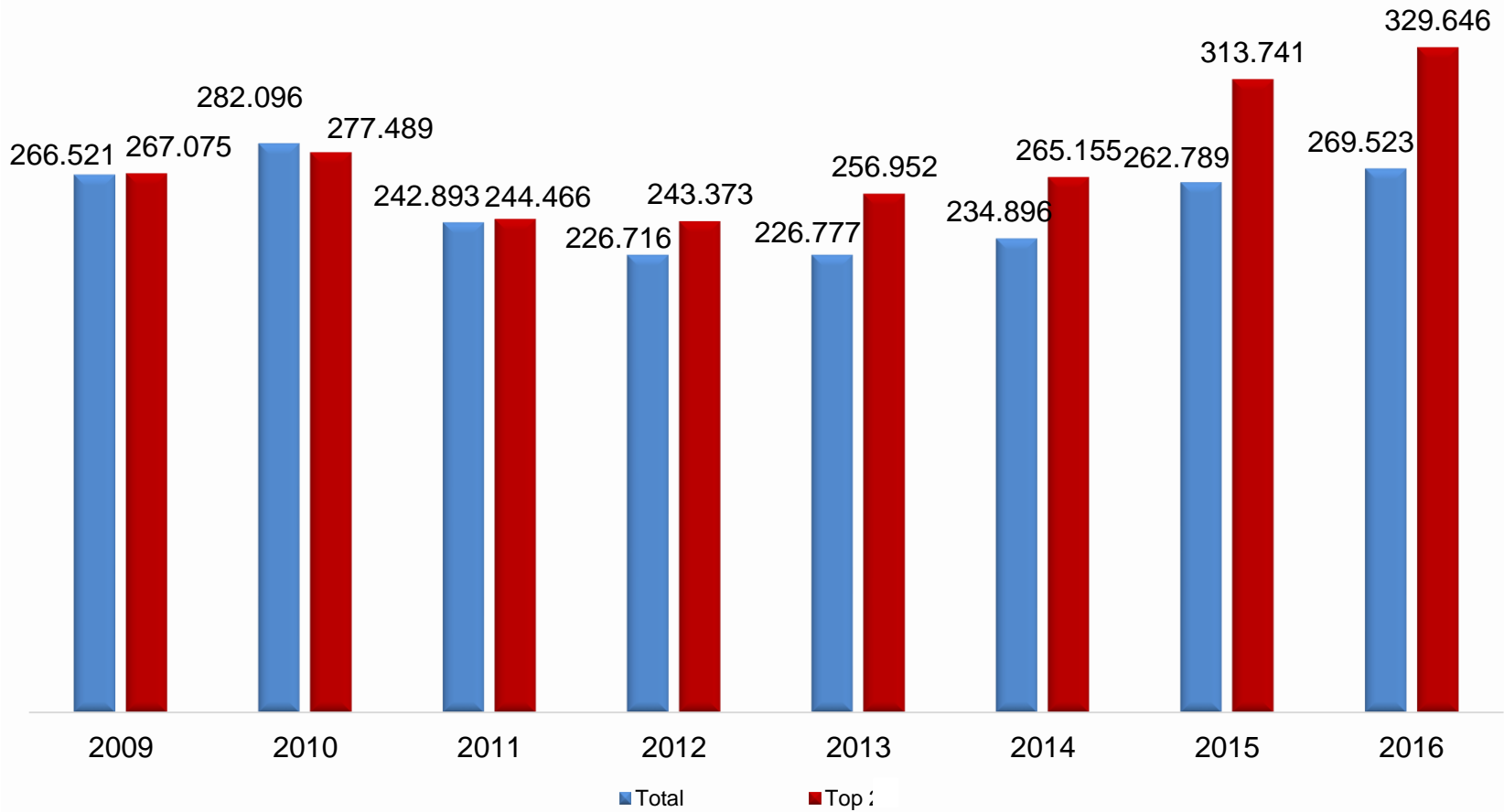


Productivity

- The productivity of larger firms is higher than that of the sample.
- Revenues per employee of top companies were affected by an increasing trend from 2012 to 2016. In the last year, the highest value of the period is recorded, which stands at 329 thousand euros revenue per employee.
- The productivity of tangible assets has an overall positive trend, with a peak in 2013 and a slight decline in 2014. From 2015 onwards there is a further recovery, which in the last year stands at 4.2 for large companies.

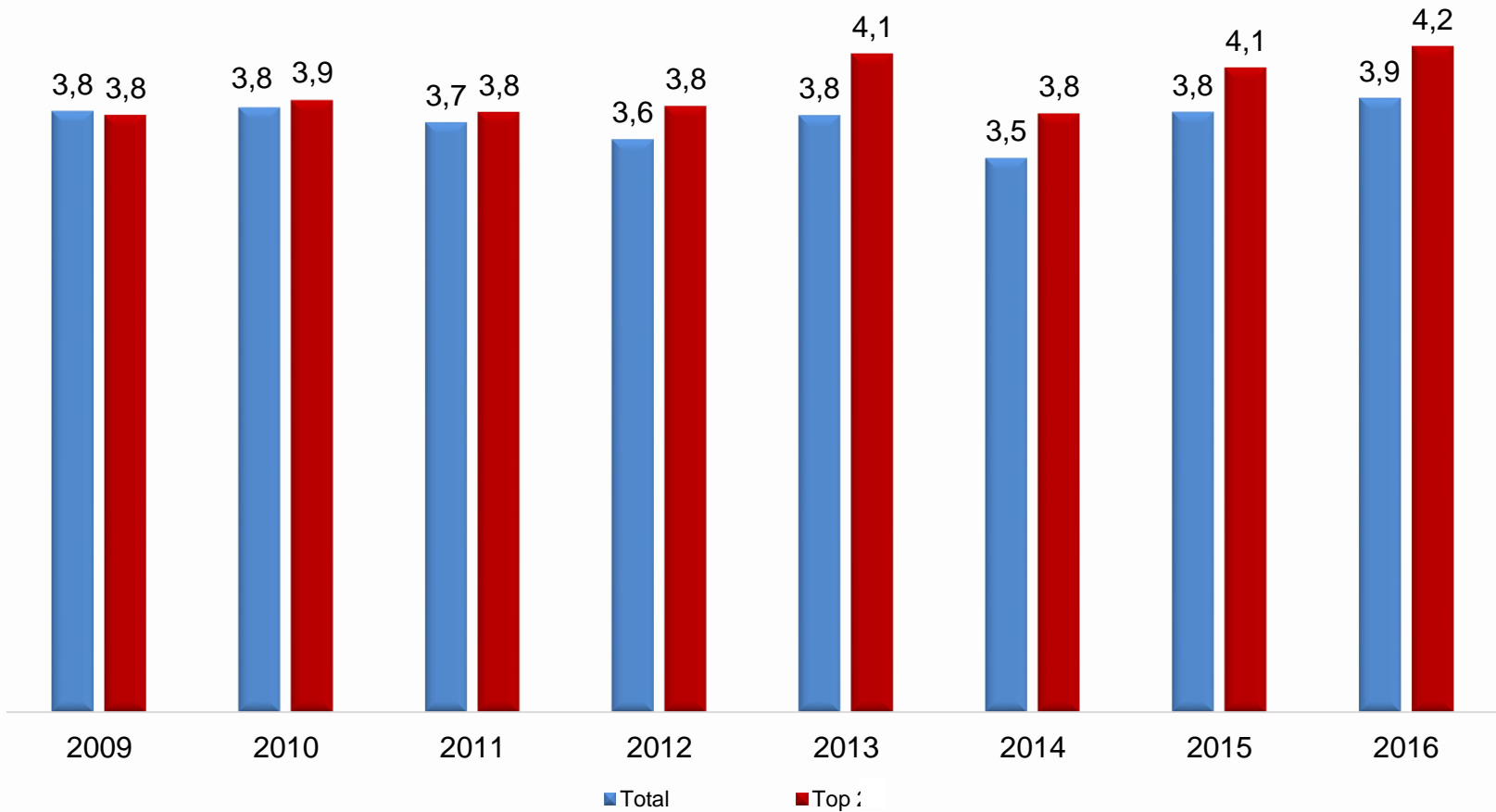
Productivity

Revenues per employee



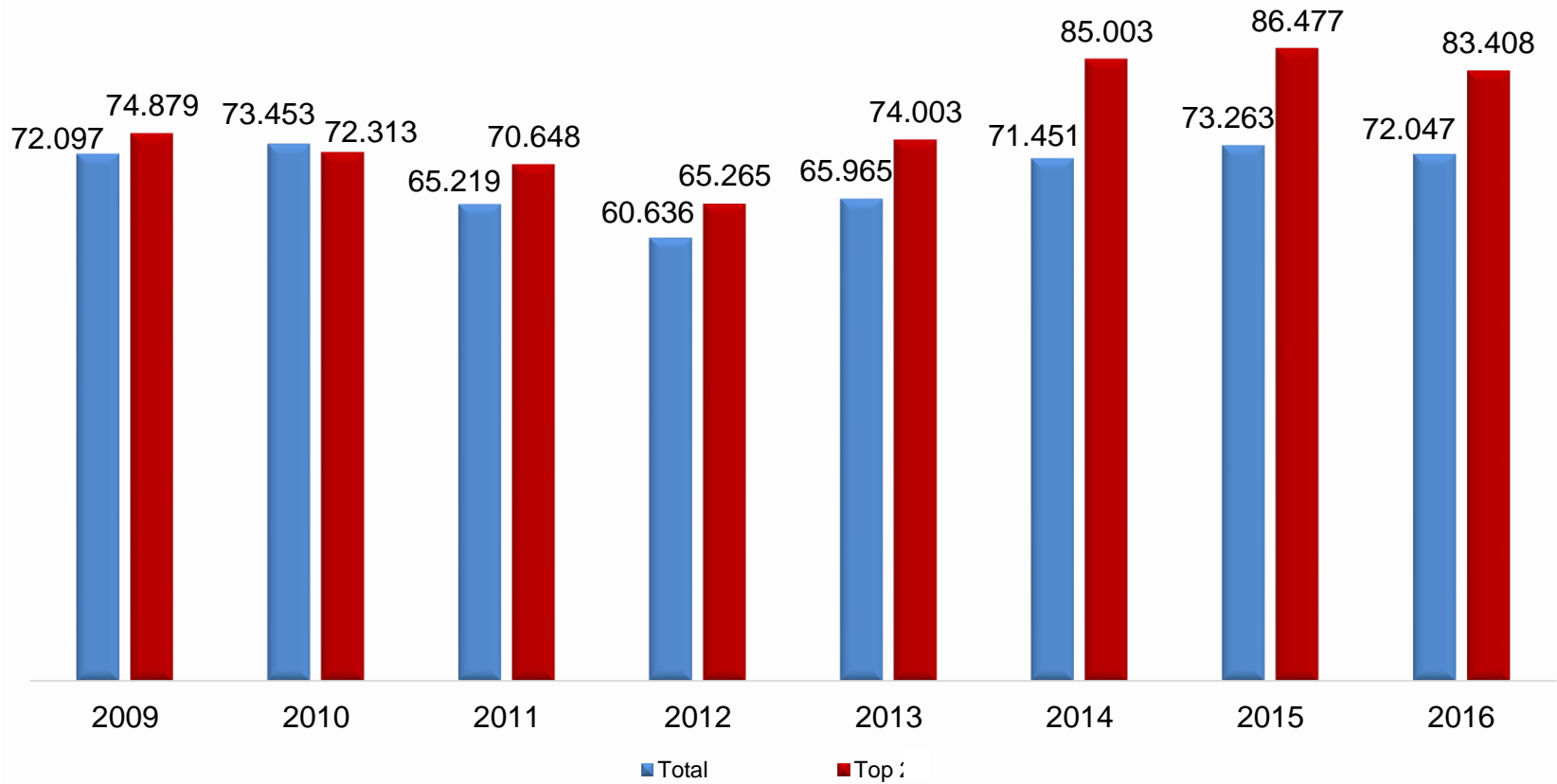
Productivity

Value of Production / Tangible assets



Productivity

Value added per employee

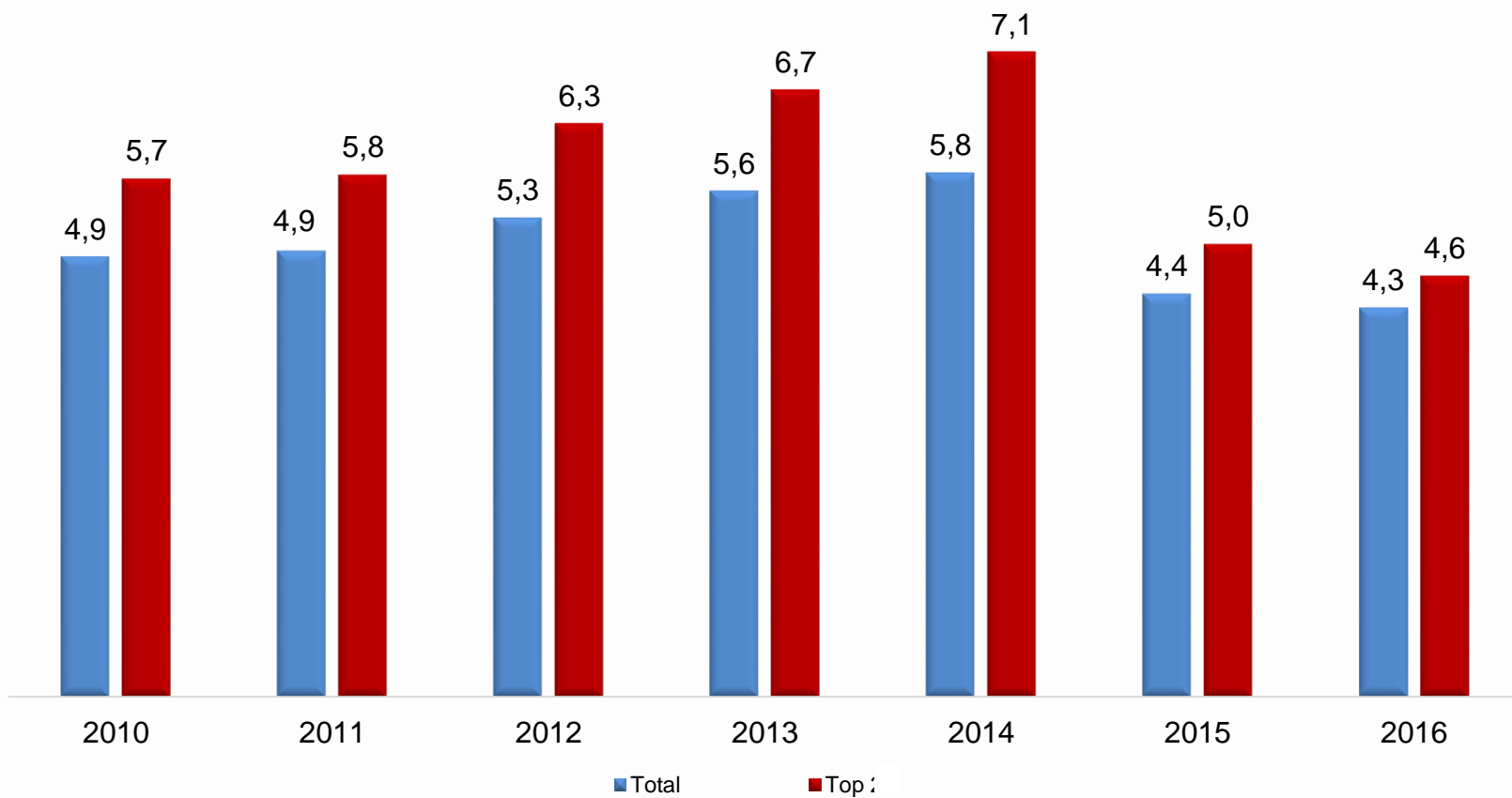


Financial Structure

- The debt rate of the total sample is lower than the top companies in the industry. There is, however, a decrease in the debt rate for both sizes with particular reference to 2015 and 2016.
- The incidence of financial debts is lower for the entire sample. The incidence of financial debts on liabilities has been affected by a decrease in the last three years considered.

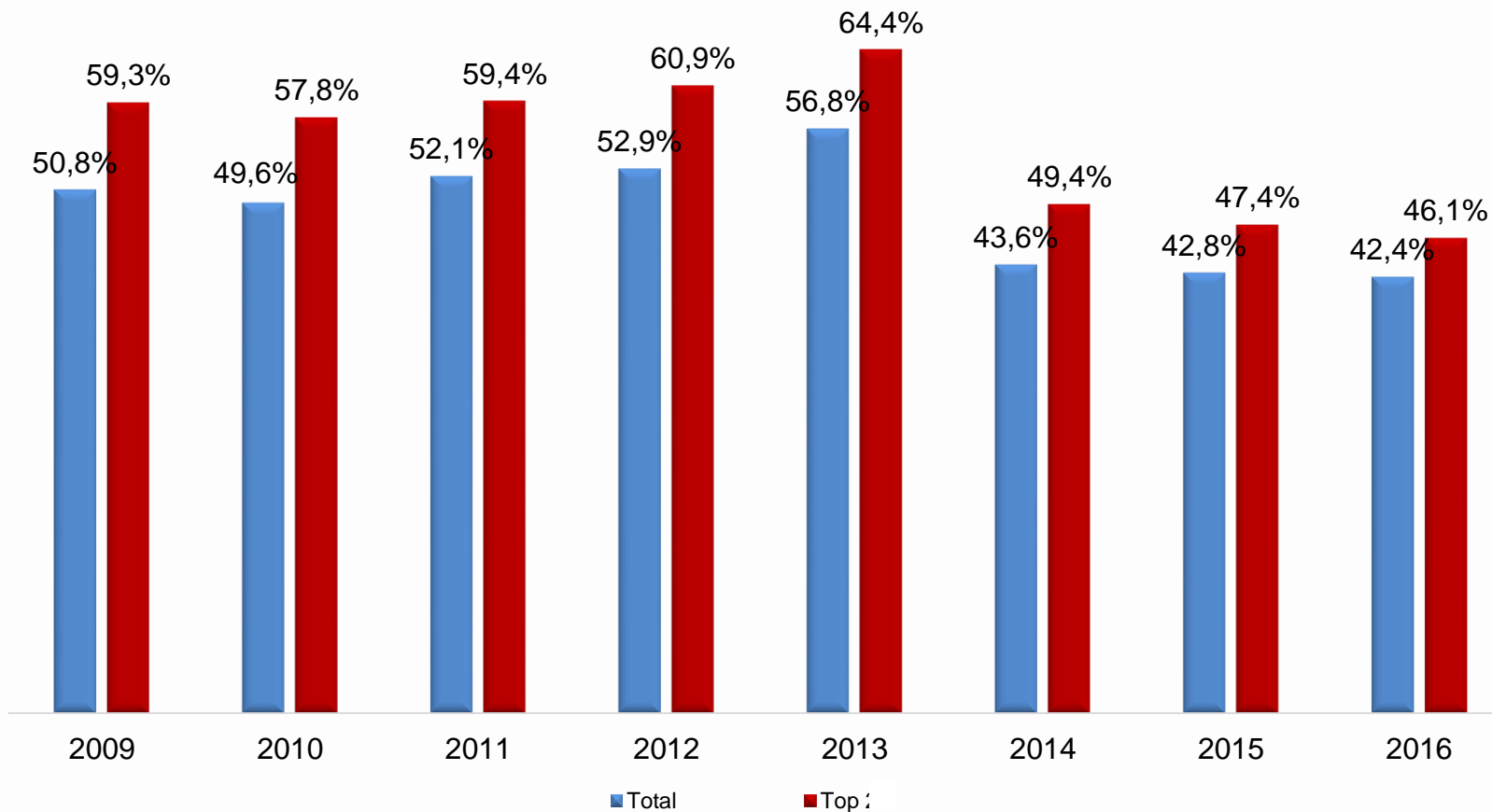
Financial Structure

debt rate (initial)



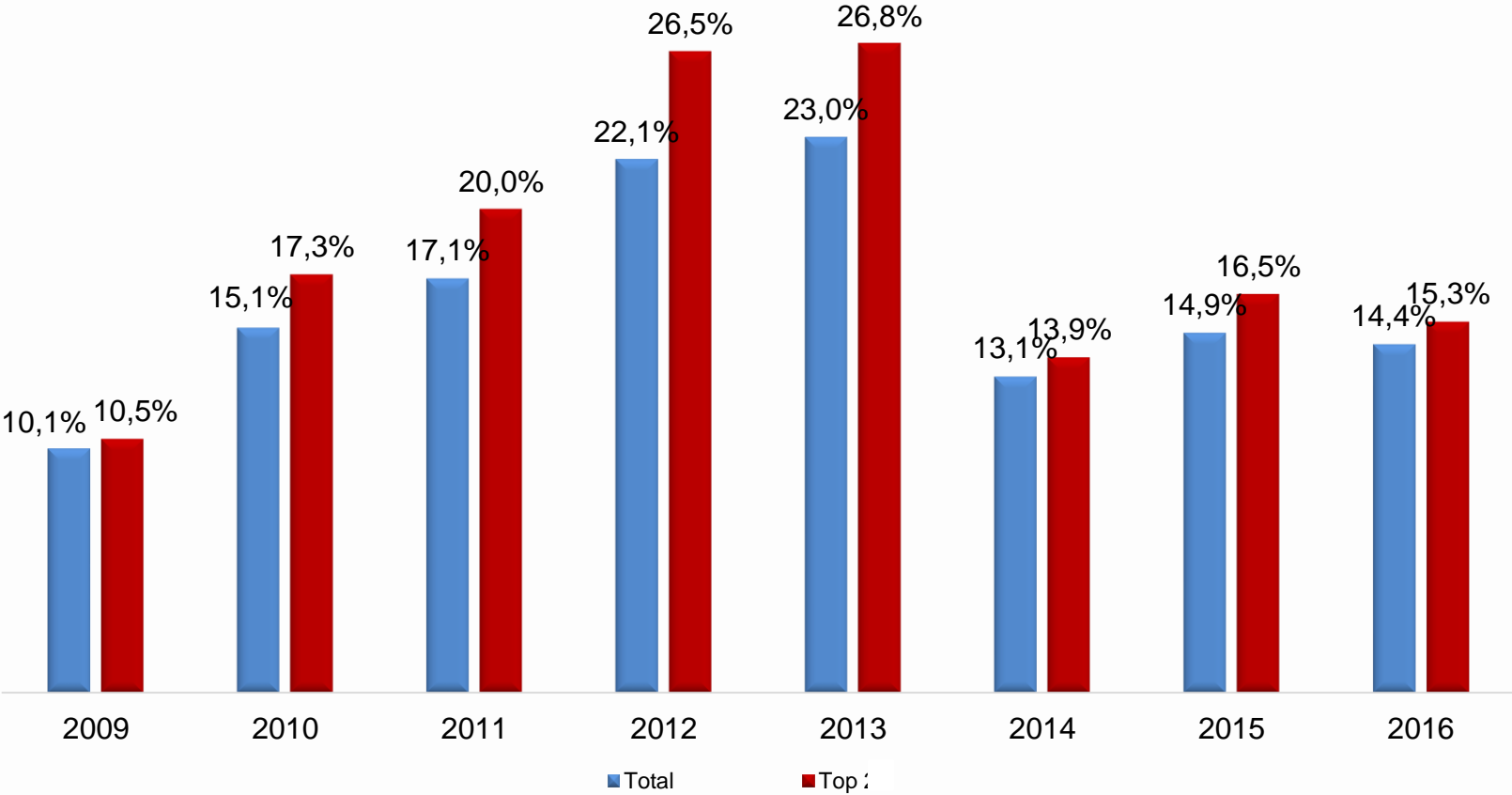
Financial Structure

Short-term financial payables on total liabilities



Financial Structure

Medium/long-term payables on total liabilities



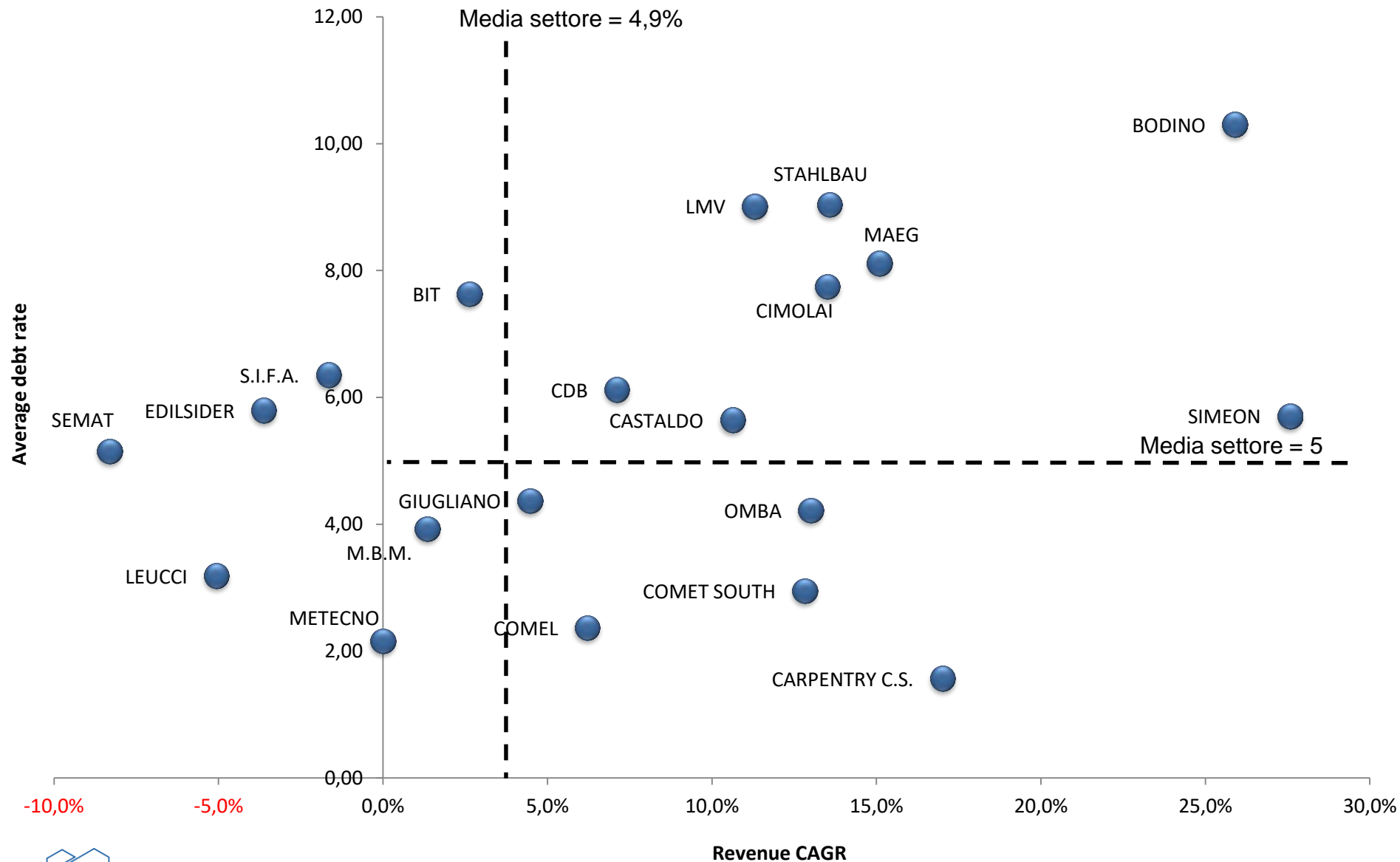
Sustainability of the business model

- The sustainability of the business models adopted by larger companies can be analyzed by jointly considering the indices of development, profitability and financial strength over a period of several years.
- **Debt and Growth Rate (CAGR Revenues).** Five companies are in the virtuous quadrant, that is, they are those companies that have managed to develop above-average growth while maintaining a lower debt rate. Four companies are in the critical quadrant and only one seems to have a compromised situation from the point of view of the debt rate. A significant number of companies have developed above-average growth, but have a debt rate above the industry average; this is a sustainable situation insofar as the income streams from operations will allow them to pay interest expense and meet commitments to creditors.

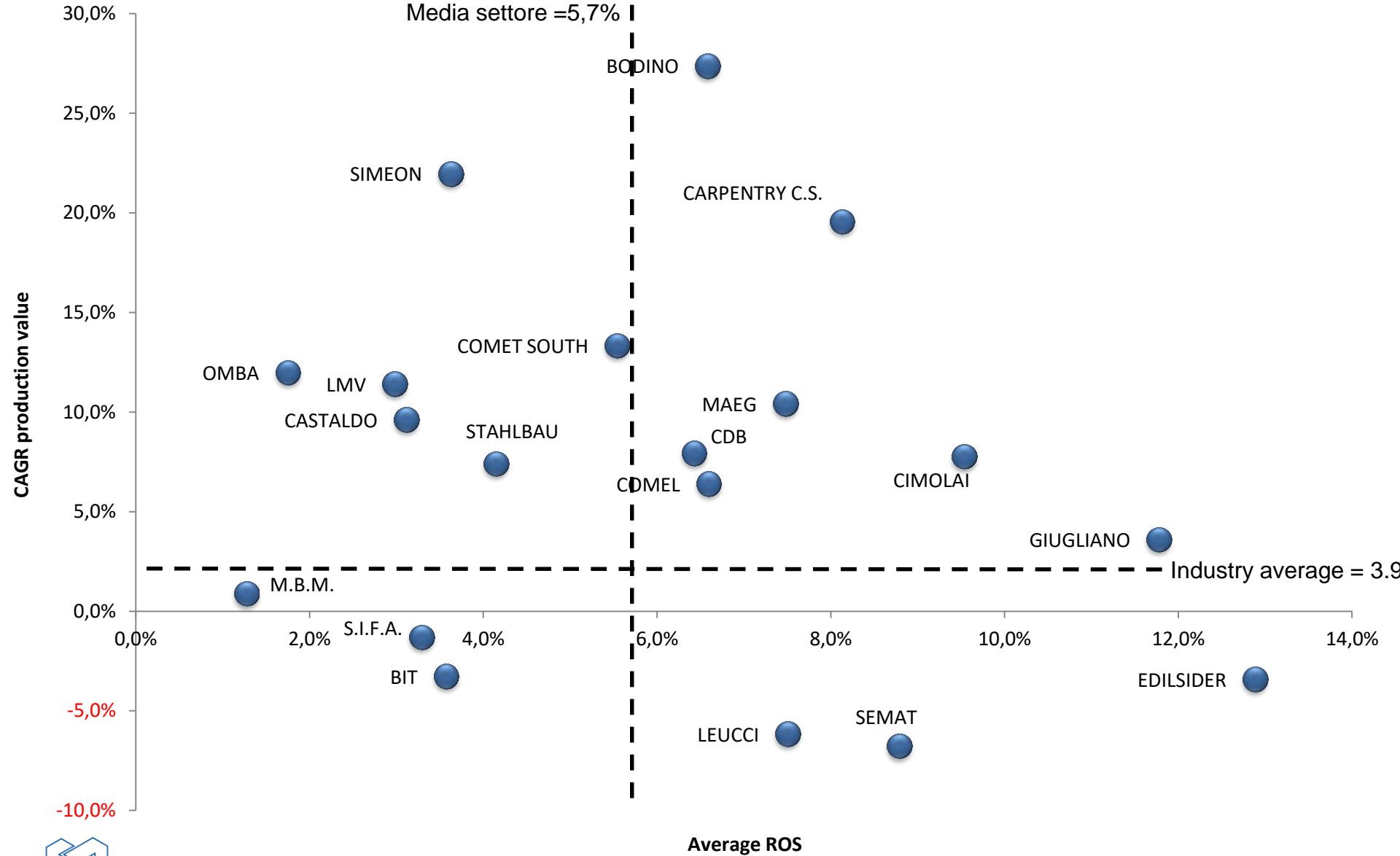
Sustainability of the business model

- **Growth (CAGR Revenues) and commercial profitability (ROS).** Approximately $\frac{1}{4}$ of the companies considered are in the virtuous quadrant and are characterized by revenue growth and sales marginality above the industry average. Four companies are in the critical quadrant, yet maintain a positive sales marginality. The remaining part of the companies are characterized by a satisfactory growth in revenues even if the marginality of sales is below the sector average.
- **Debt Rate and Return on Investment (ROIC).** Three companies are in the critical quadrant and only one has a very high rate of indebtedness associated, however, with a return on invested capital close to the industry average. In the virtuous quadrant are four companies that combine low debt with a high return on invested capital. The majority of companies are characterized by a low rate of debt or, at any rate, close to the average, indicating greater attention by companies to their debt and financial situation rather than to their profitability. In general, there is a polarization of companies close to the industry averages.

Sustainability of the business model

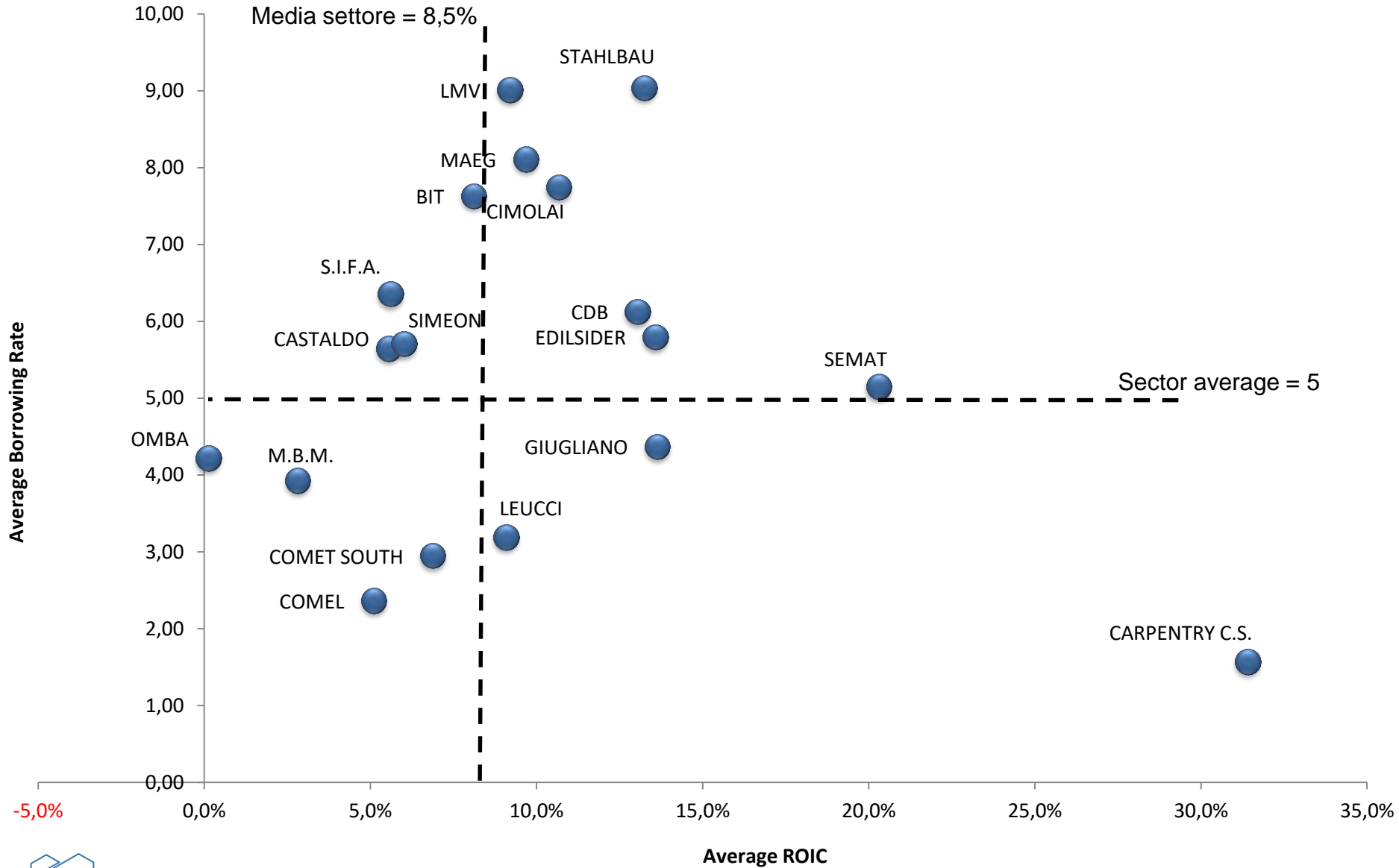


Sustainability of the business model



Eliminated outlier: Metecno.

Sustainability of the business model



Outliers eliminated: Bodino; Metecno.



This report has been prepared by Carmine Garzia on the basis of data compiled by the Economic Studies Office of UNICMI - Unione Nazionale delle Industrie delle Costruzioni Metalliche dell'Involucro e dei Serramenti.

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