



Performance analysis of carpentry manufacturers

Budgets 2017

UNICMI Economic Studies Office

Milan, November 2018

Introduction

- The aim of the work is to analyze the aggregate performance of companies operating in metal constructions for the construction industry (metal carpentry) in the period 2009 -2017.
- Companies' performance was analyzed considering four profiles: growth, profitability, productivity and financial structure. An analysis of the sustainability of companies' business models was conducted by comparing growth, profitability and financial strength.
- 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 the twenty (top 20) largest companies (in terms of revenue).

The companies analyzed

- The sample is made up of 101 companies with an aggregate turnover of 1.5 billion Euros. The smallest company has a turnover of 441 thousand Euros, the largest of 341 million Euros.
- The total number of employees is 5,803 in 2017, which corresponds to 57 average employees per company.

Sample analyzed

Companies	101
Sample aggregate turnover	1.513.811.384 €
Average turnover	14.988.232 €
Average number of employees	57

Aggregate Performance Analysis

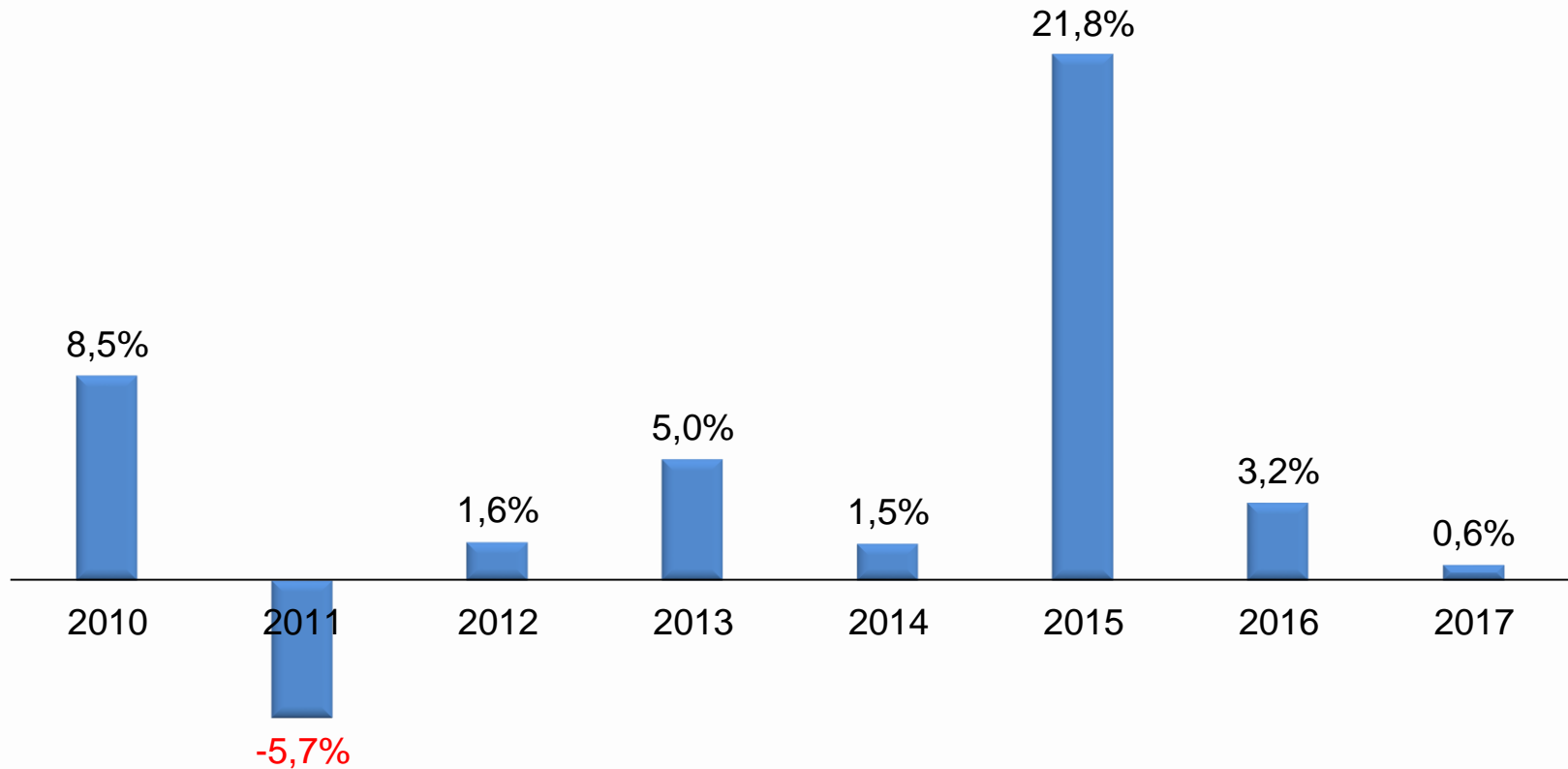
Growth

- In 2017, revenues grew by 0.6%, a lower growth rate than the previous two years. Over the past eight years, revenues have grown at a CAGR of 4.3%. Consider that the 2015 result is largely driven by work related to the EXPO in Milan, so it should be considered an extraordinary event that does not show a structural recovery.
- The rate of change in value added shows positive performance from 2013 onwards. In the last year under consideration, value added grew by 4.2% in line with the average for the period under consideration.
- Average employees per firm increased from 46 in 2009 to 57 in 2017. The largest increase in employment is recorded in 2015. From 2016 onwards, there is a situation of substantial stability in the average number of employees per company.

Growth

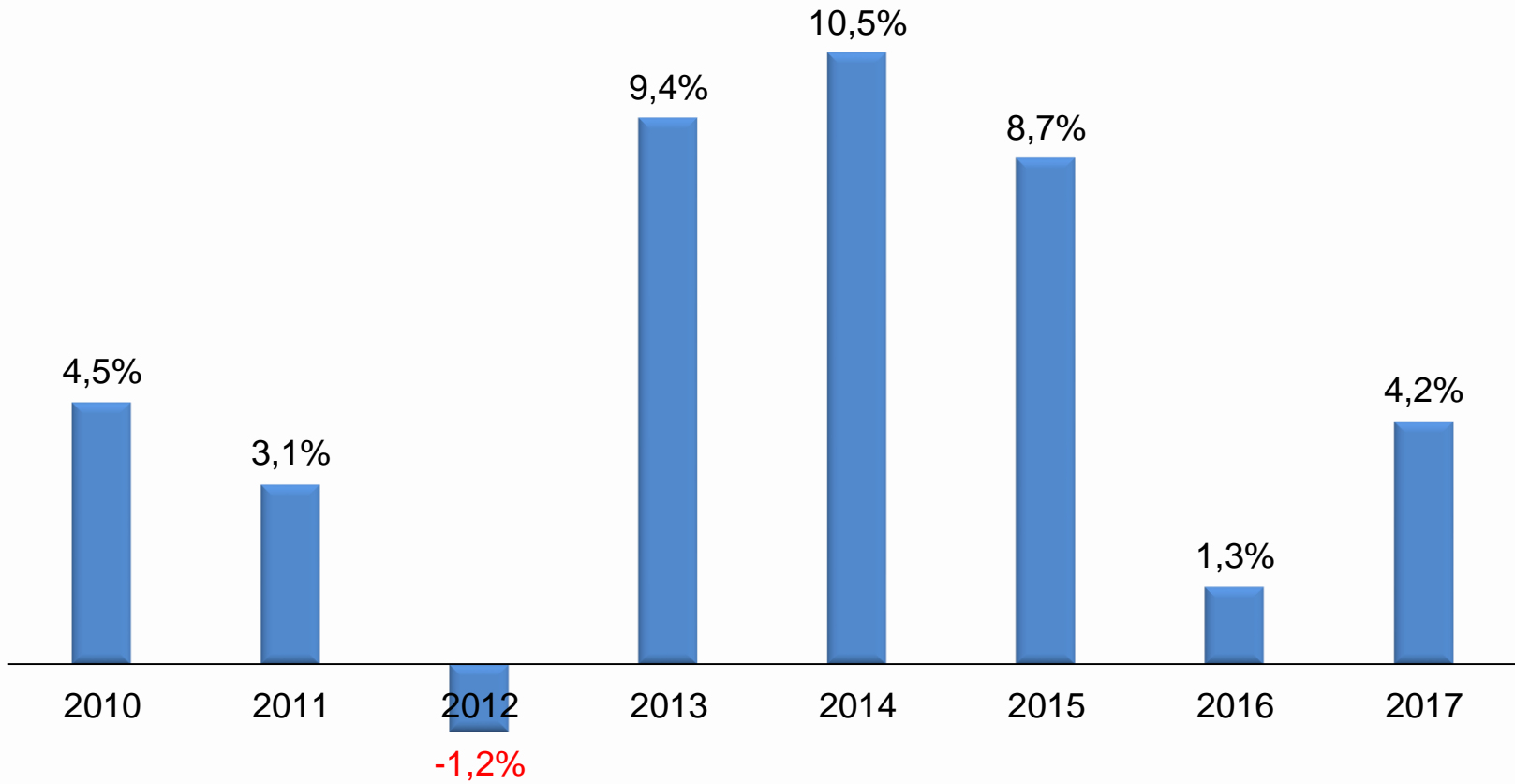
CAGR 2009 - 2017 Revenues: 4.2%.

Rate of change in revenues



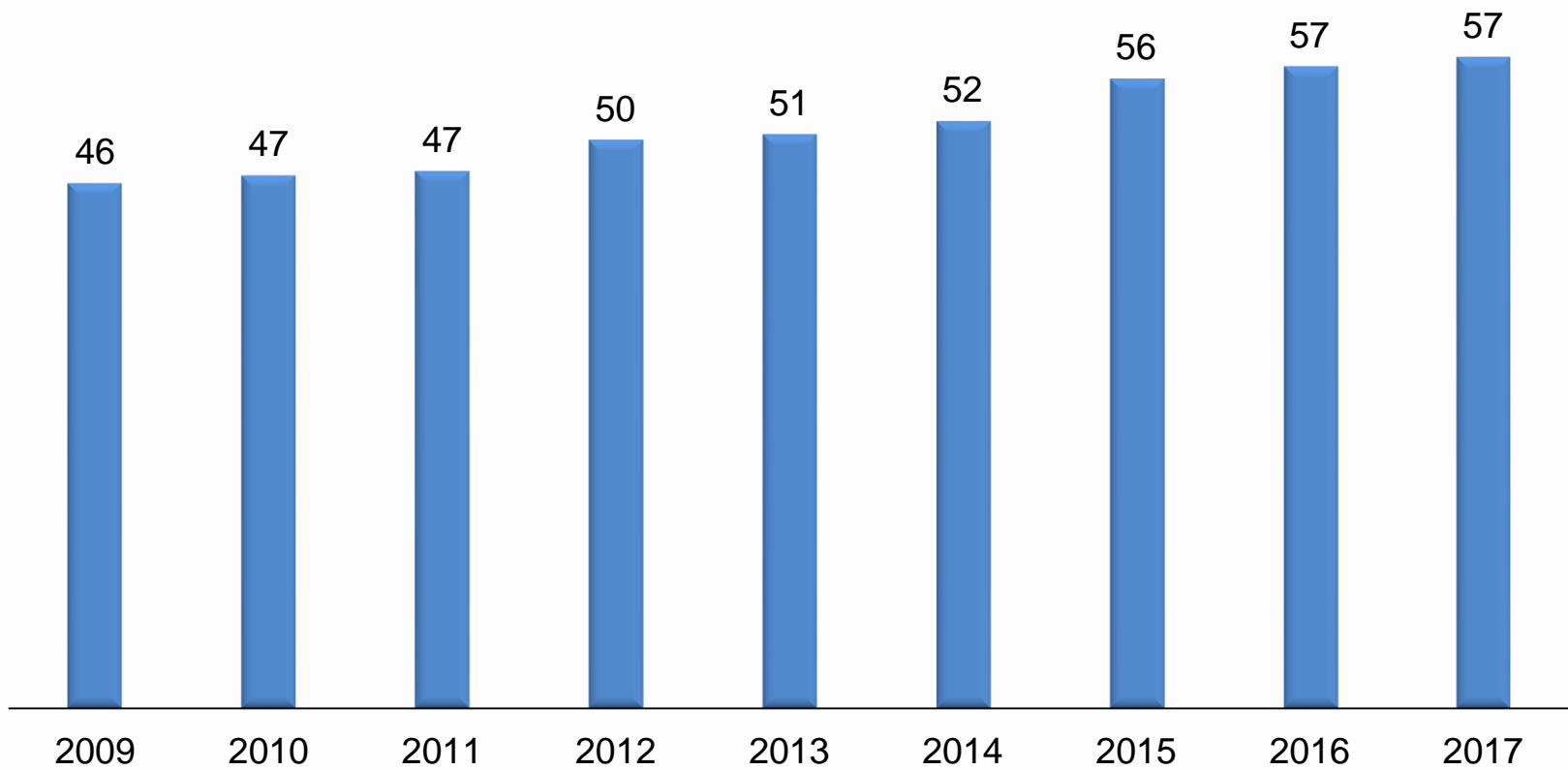
Growth

Rate of change in value added



Growth

Average employees per company

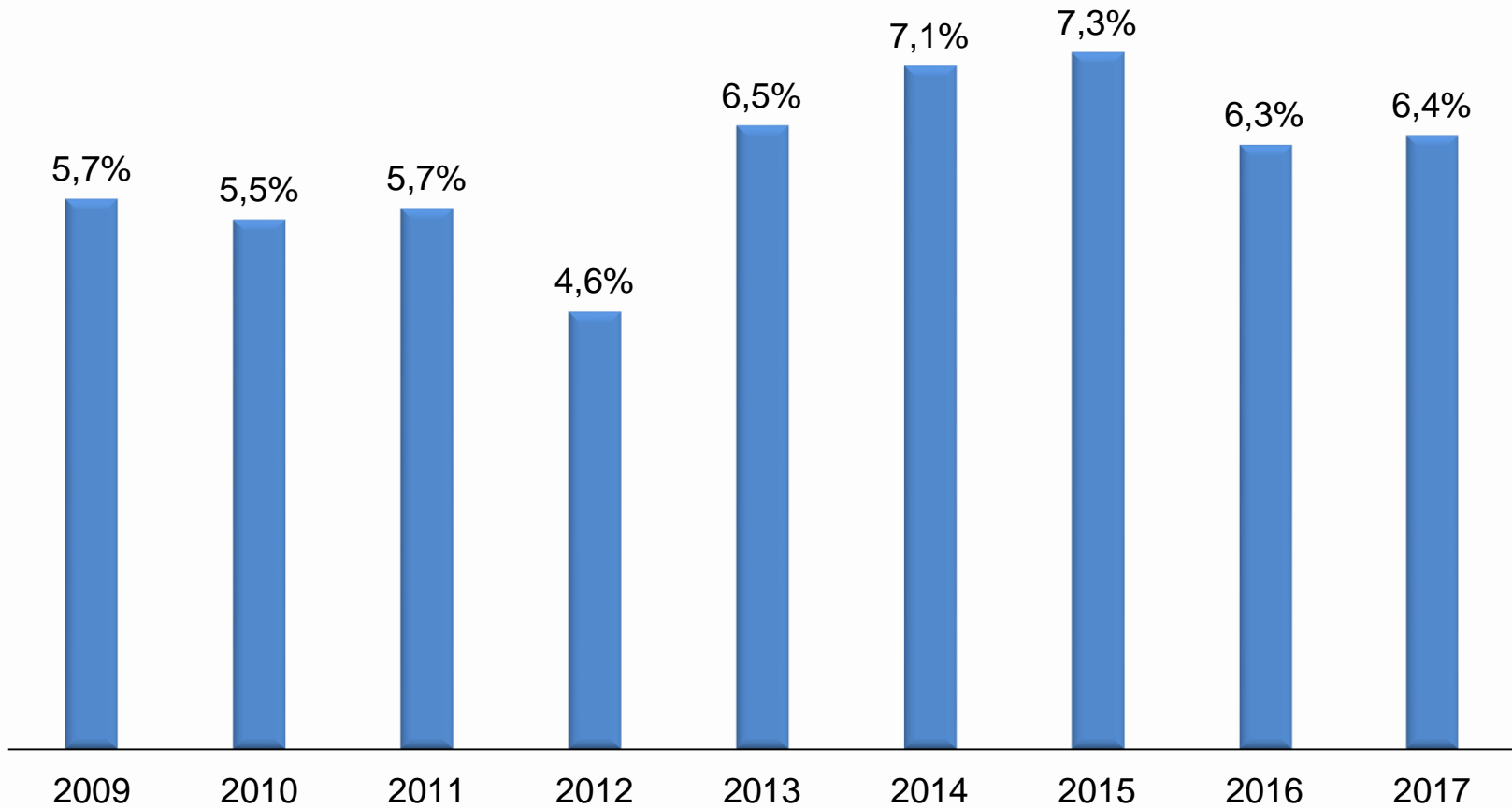


Profitability

- The analysis of profitability shows an improving performance from 2013 to 2015. The last two years analyzed show a settlement of the marginality of sales at 6.4%, a value slightly higher than the average of the period considered (6.1%).
- Return on investment follows the same trend as ROS and has remained stable since 2016 at just over 10%.
- ROE (net return on equity) has been characterized by increasing performance since 2014. In 2017, ROE recorded the highest value for the entire period (10.1%). The improved performance is due to an improvement in operating profitability and a reduction in debt costs and extraordinary expenses.

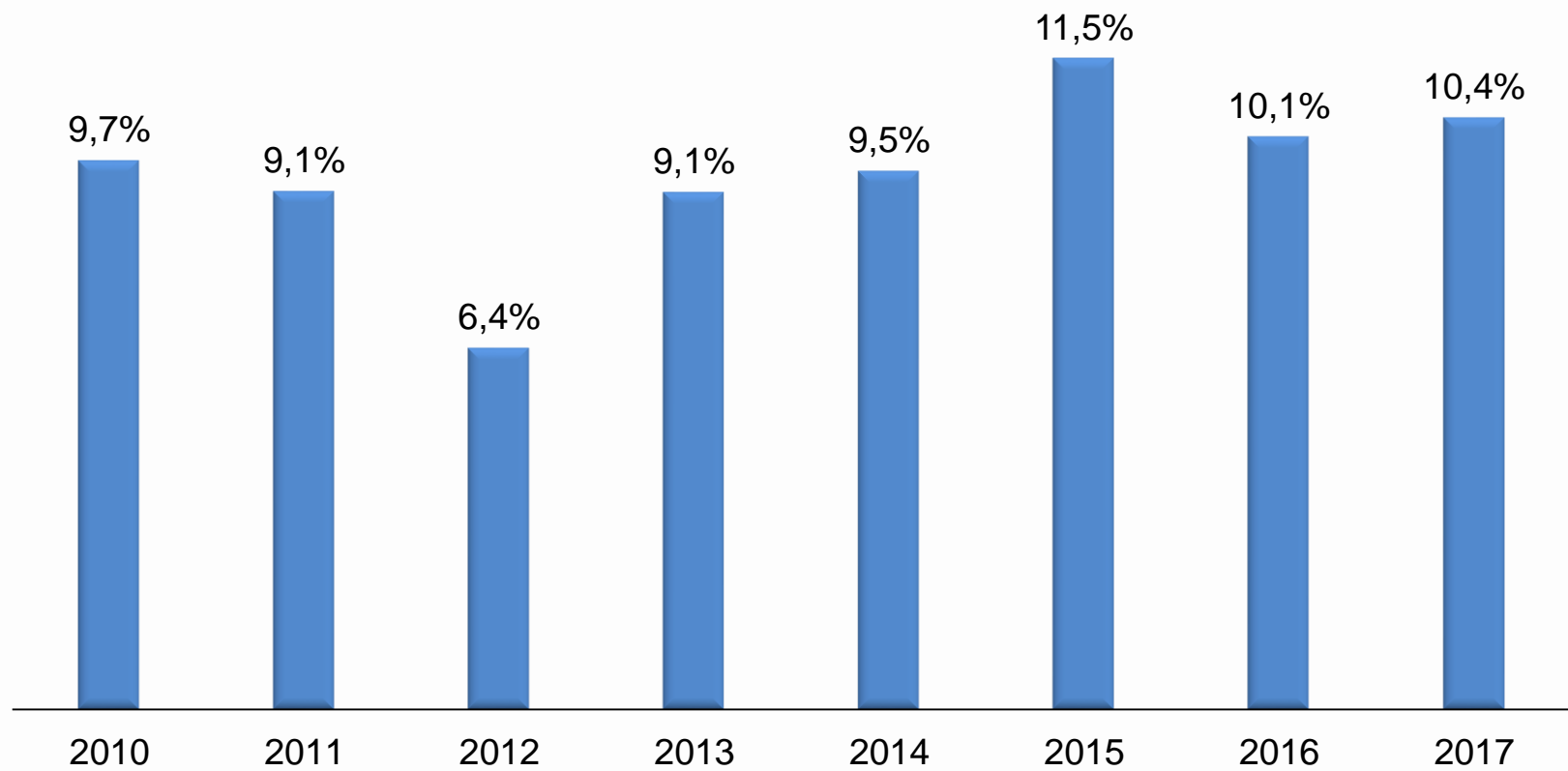
Profitability

ROS



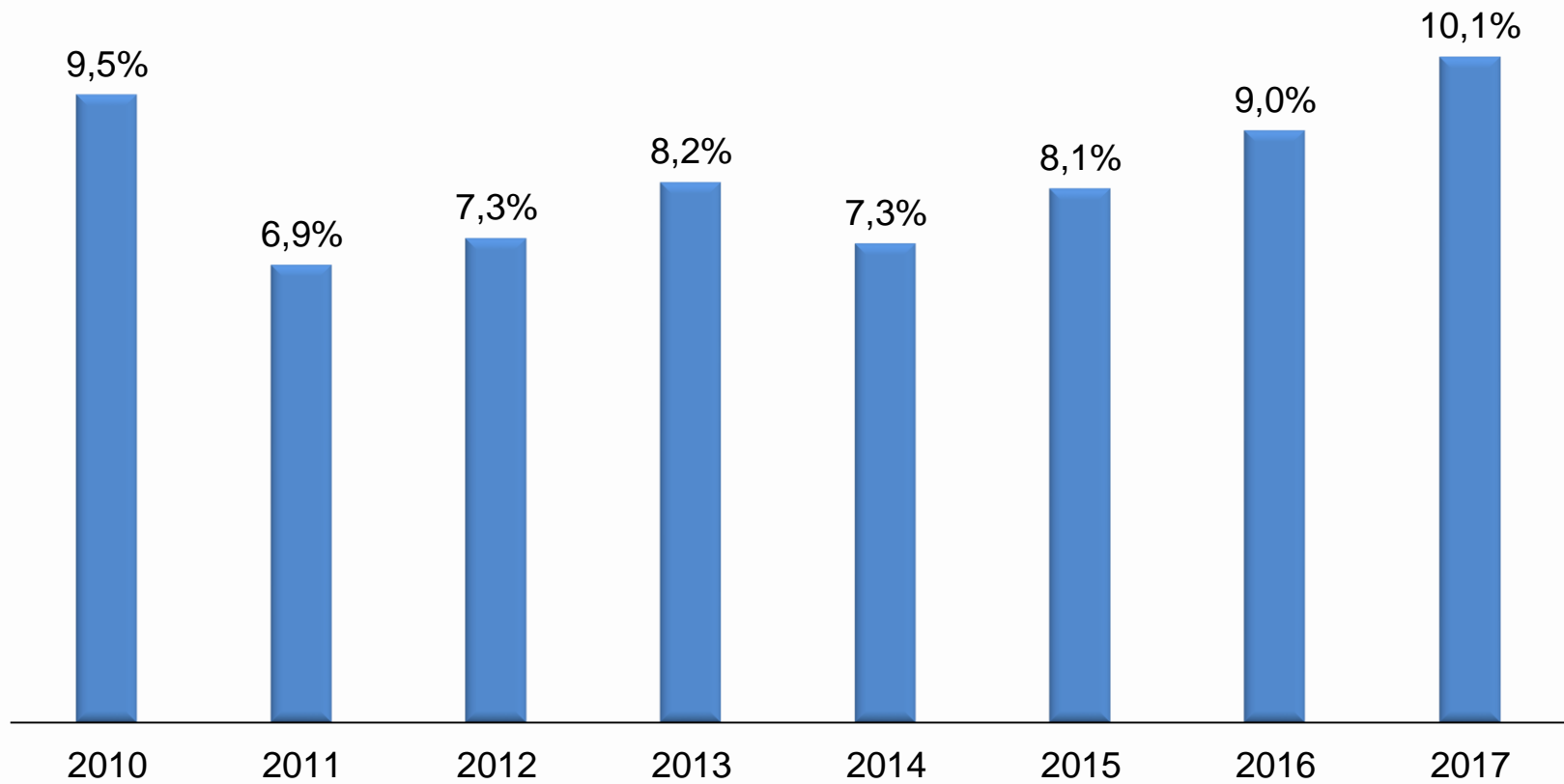
Profitability

ROIC



Profitability

ROE

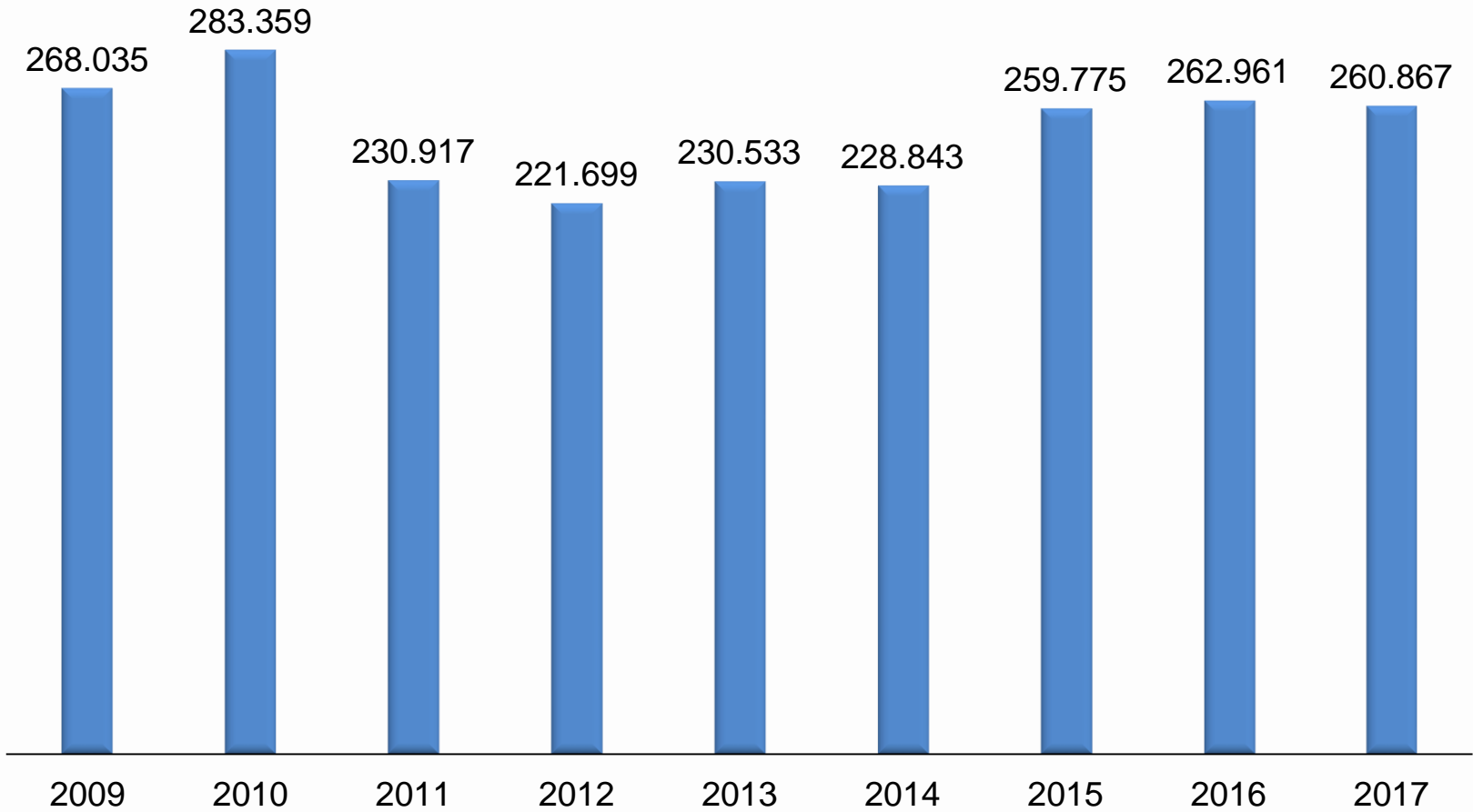


Productivity

- The productivity of employees, characterized by a decline in the period 2011-2014, has returned to values in line with the average of the period considered. In 2017, the value is 260,867 € of net revenue per employee.
- The productivity of property, plant and equipment was characterized by an increasing trend until 2016. A slight decline in productivity is observed in the last year.
- The performance of value added per employee is characterized by an upward trend throughout the period considered. In 2017, the best performance was recorded with a value of €74,169 per employee.

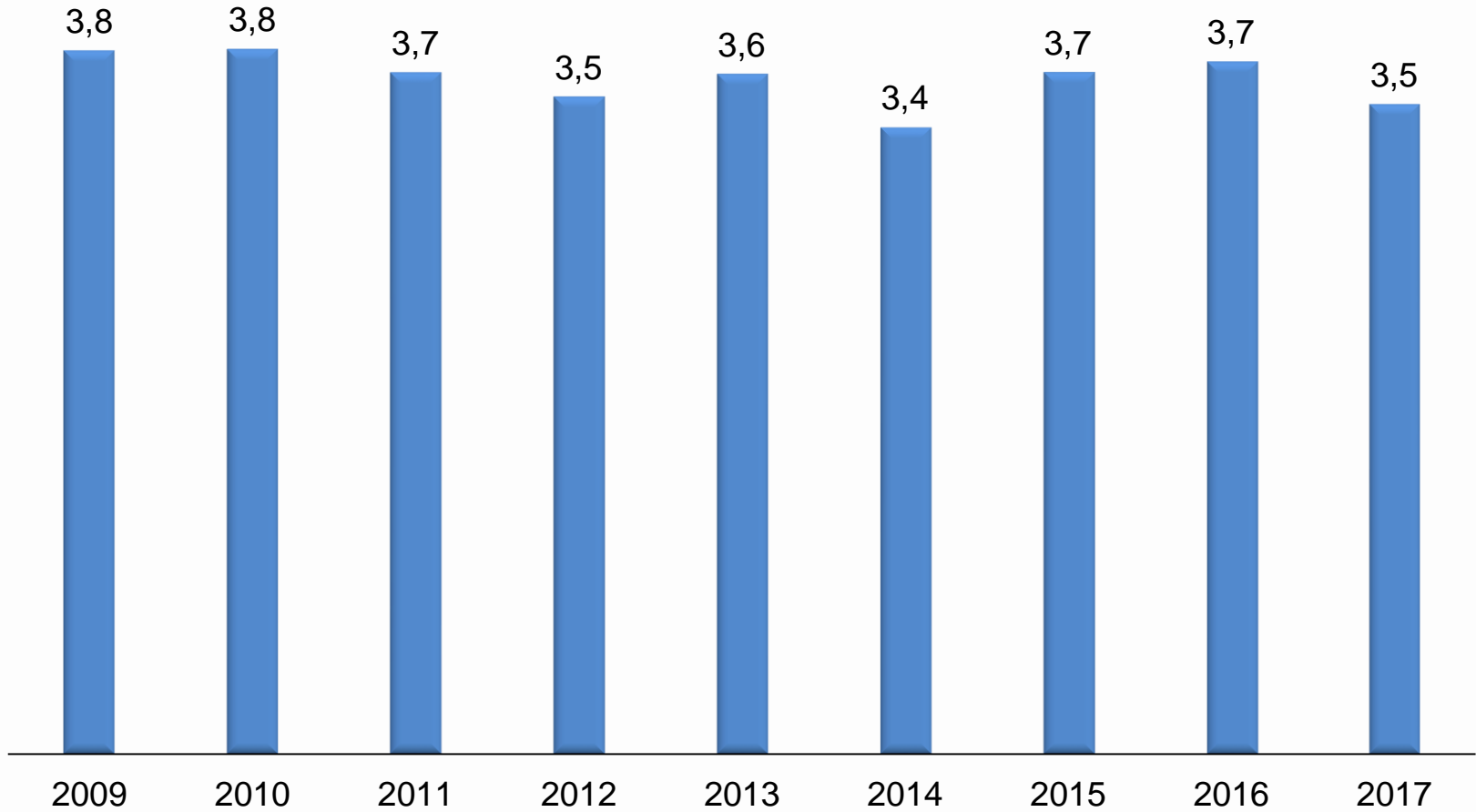
Productivity

Revenues per employee



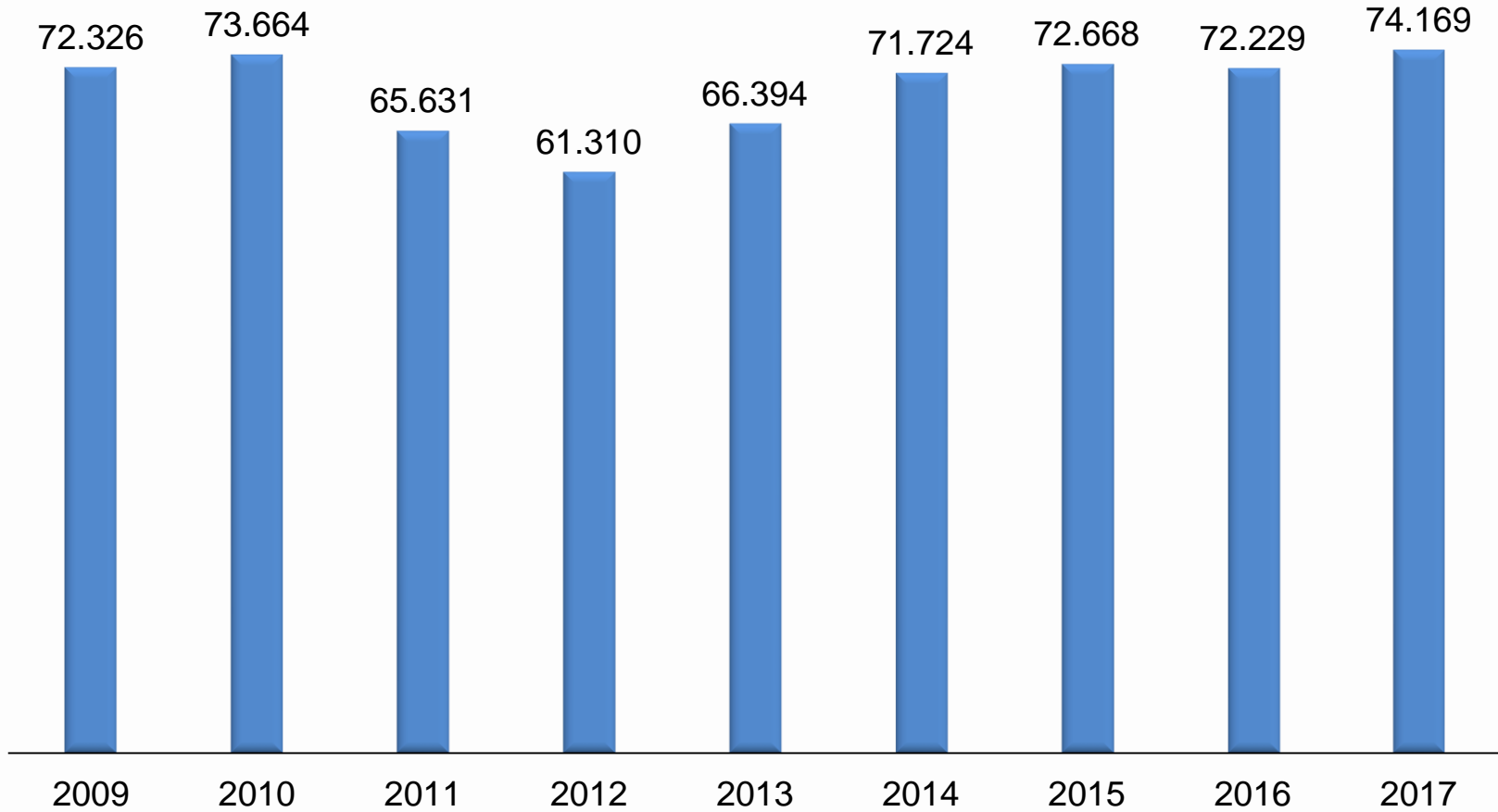
Productivity

Value of Production / Tangible assets



Productivity

Value added per employee

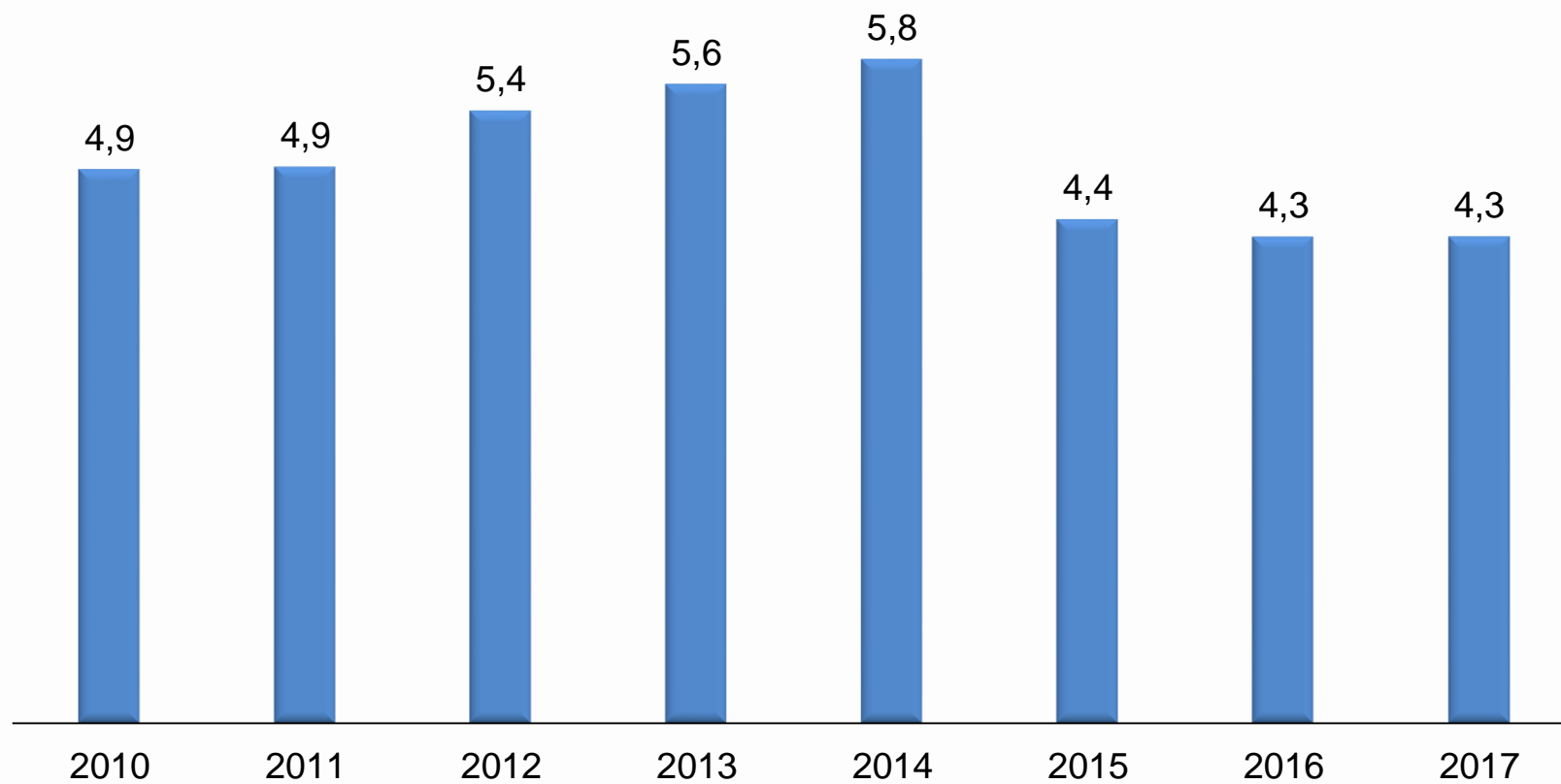


Financial Structure

- The debt rate was affected by an increasing trend until 2014. From 2015 onwards a decrease is detected. From 2016 onwards, stabilization is detected around values slightly above 4.
- The incidence of accounts payable as a percentage of total liabilities has decreased since 2014. 2017 is a substantially positive year with a debt ratio of 42.3%, the lowest value recorded during the period under review.
- With reference to long-term debts, there is a decrease in the incidence in the last 4 years considered. In 2017, the lowest value for the period was recorded, at 13.2%.
- NFP/EBITDA increased in 2017 to 2.2 in line with the industry average.

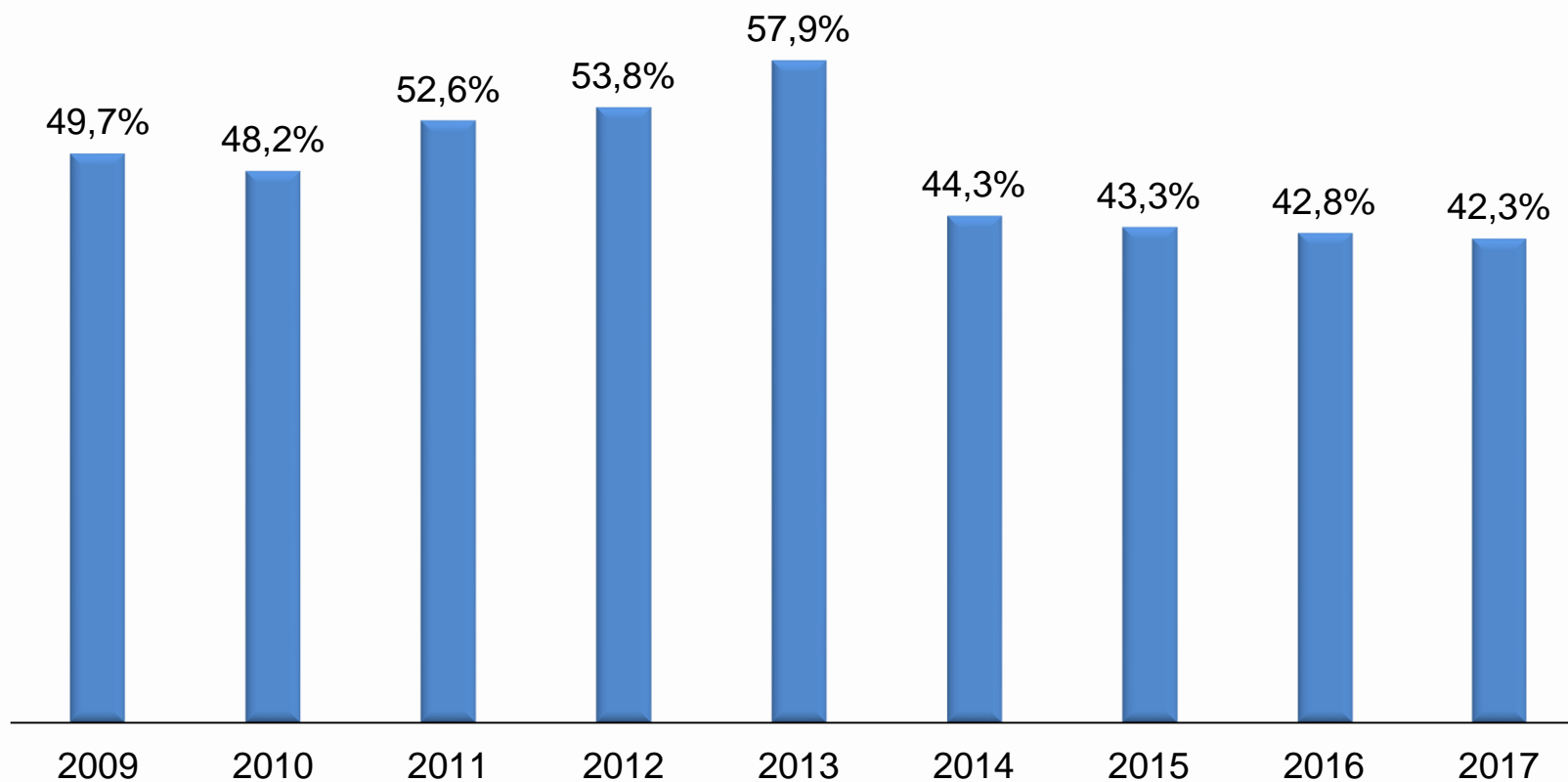
Financial Structure

Debt rate (initial)



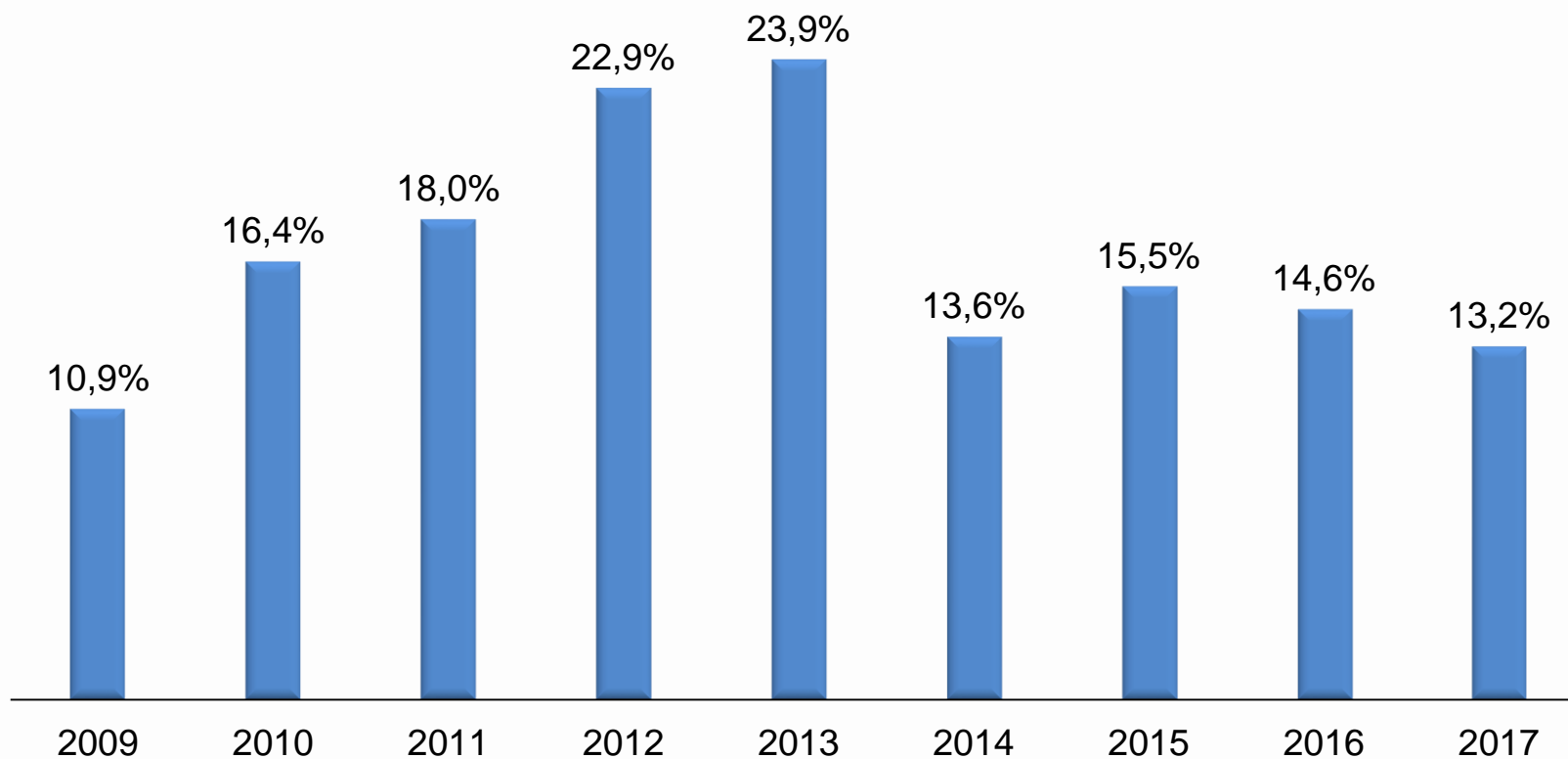
Financial Structure

Short-term debt on total liabilities



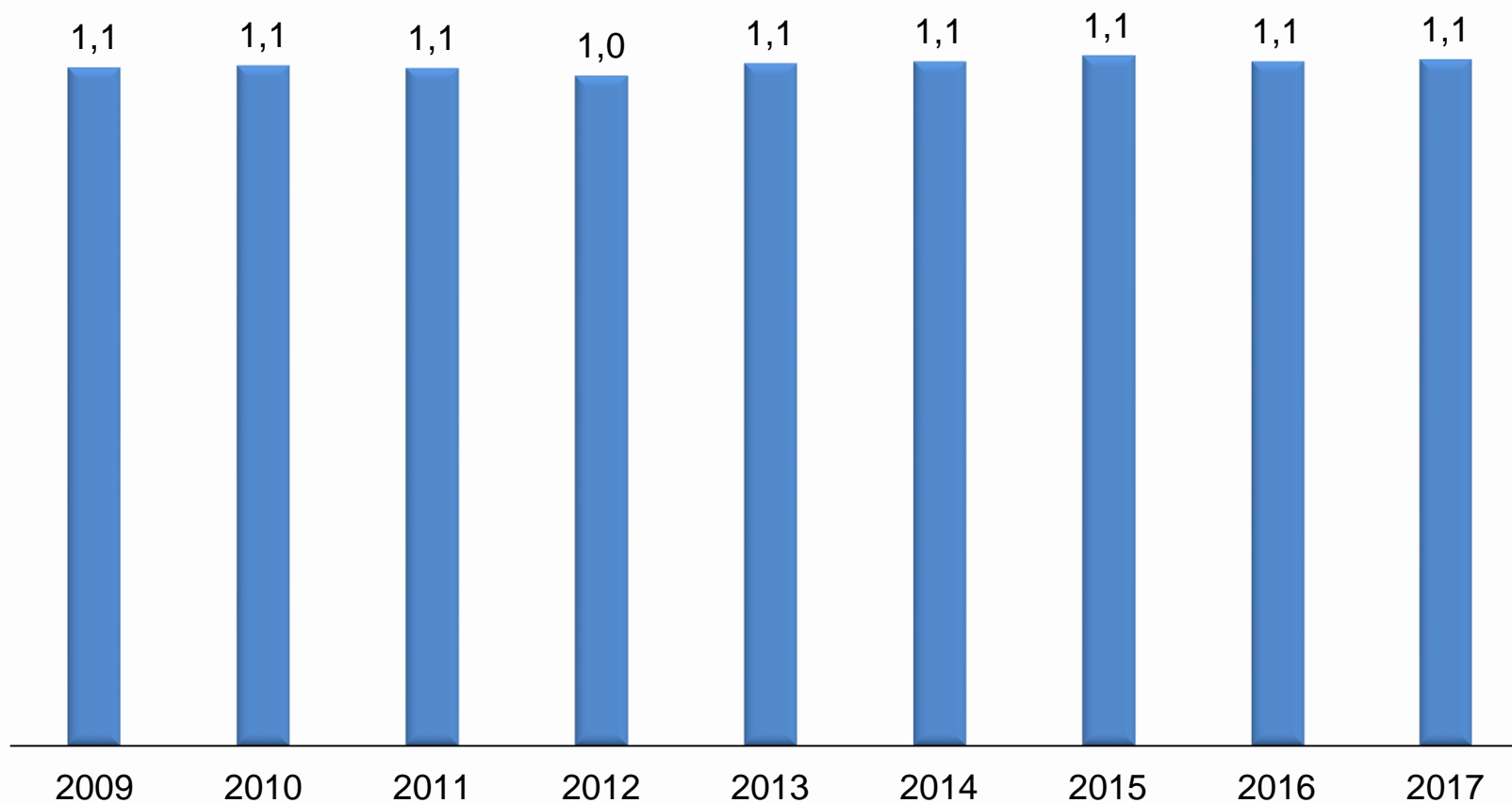
Financial Structure

Medium-/long-term payables on total liabilities



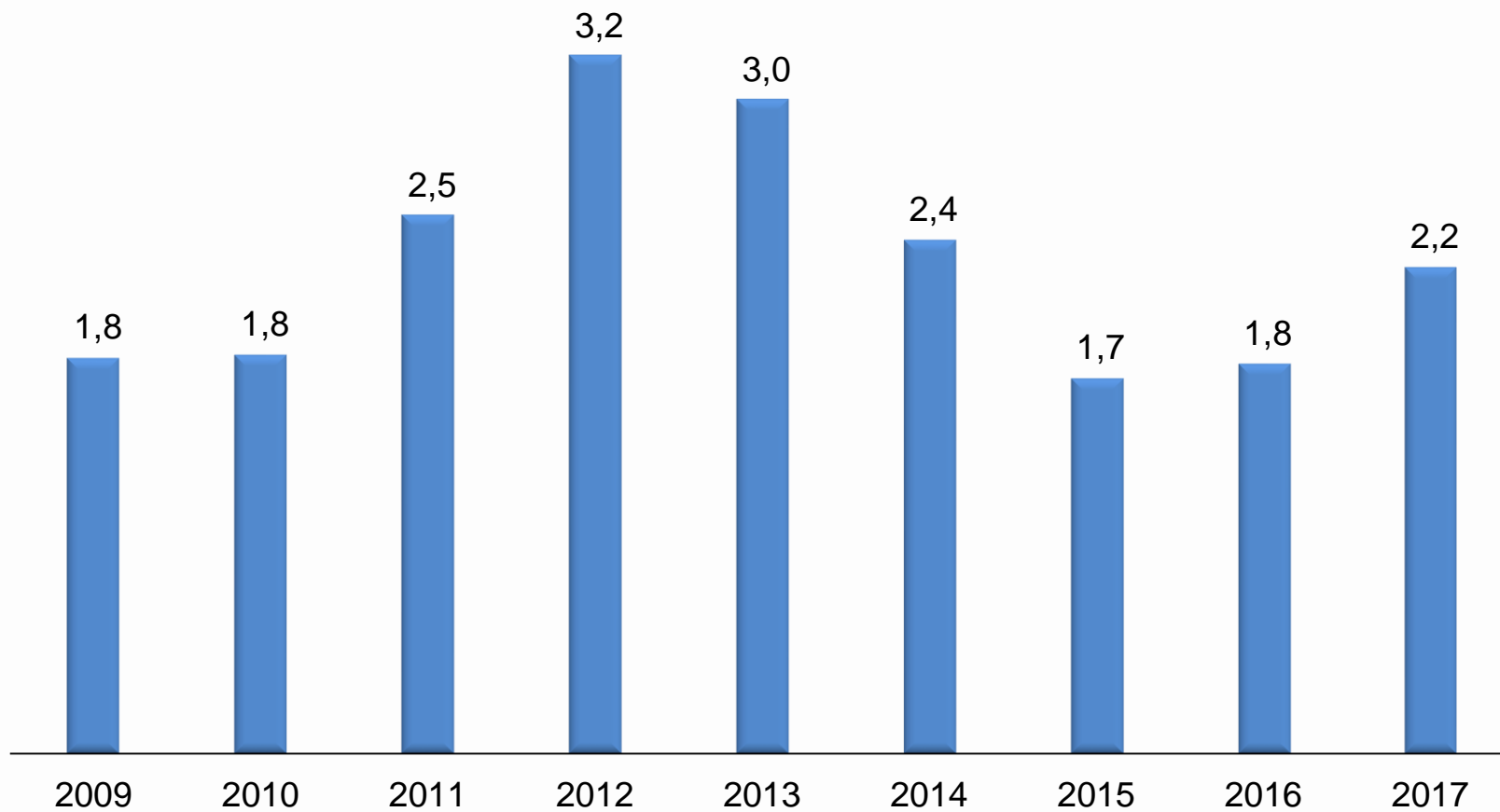
Financial Structure

Value of Production/Total Costs



Financial Structure

NFP/EBITDA



Focus on top 20 companies

The characteristics of the companies

- The analysis of the largest companies was carried out considering the top 20 companies operating in the metal carpentry sector by net revenue. The aggregate turnover of the companies considered is just over one billion Euros. The average turnover is about 51.8 million Euros. Compared to the total aggregate sample, the average number of employees per company is higher and stands at 161.

Top 20 Companies

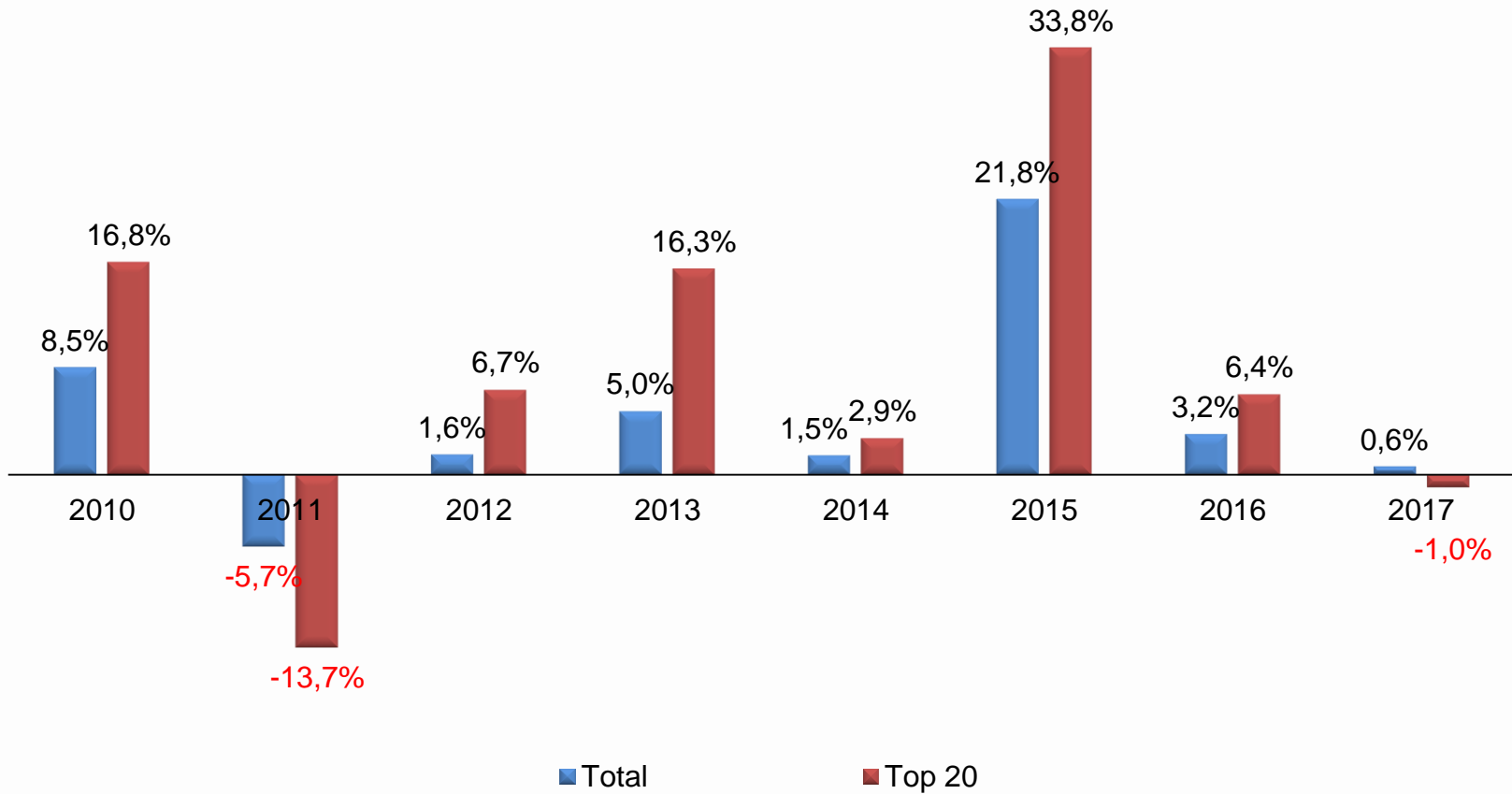
Number of companies	20
Average turnover	51.872.548 €
Average number of employees	161
Aggregate turnover	1.037.450.952 €

Growth

- Until 2016, the growth performance of larger companies was higher than the sample total. In 2017, there is a reversal of this trend, with a -1% reduction in revenues for larger companies that were most affected by the slowdown in growth.
- Both sizes considered grew by number of employees throughout the period considered. In 2017, there is a slight increase for larger companies.

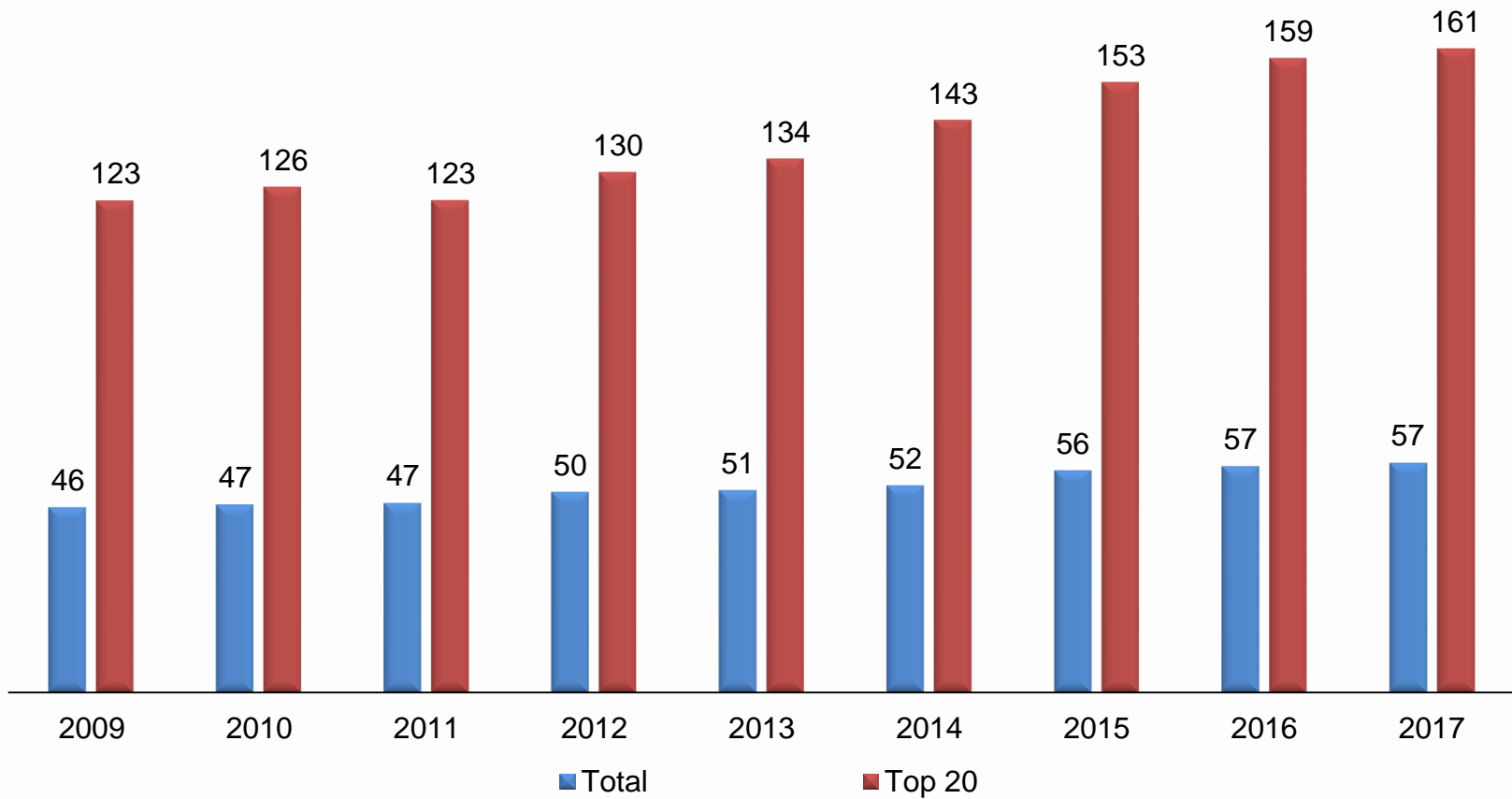
Growth

Rate of change in revenues



Growth

Average employees per company

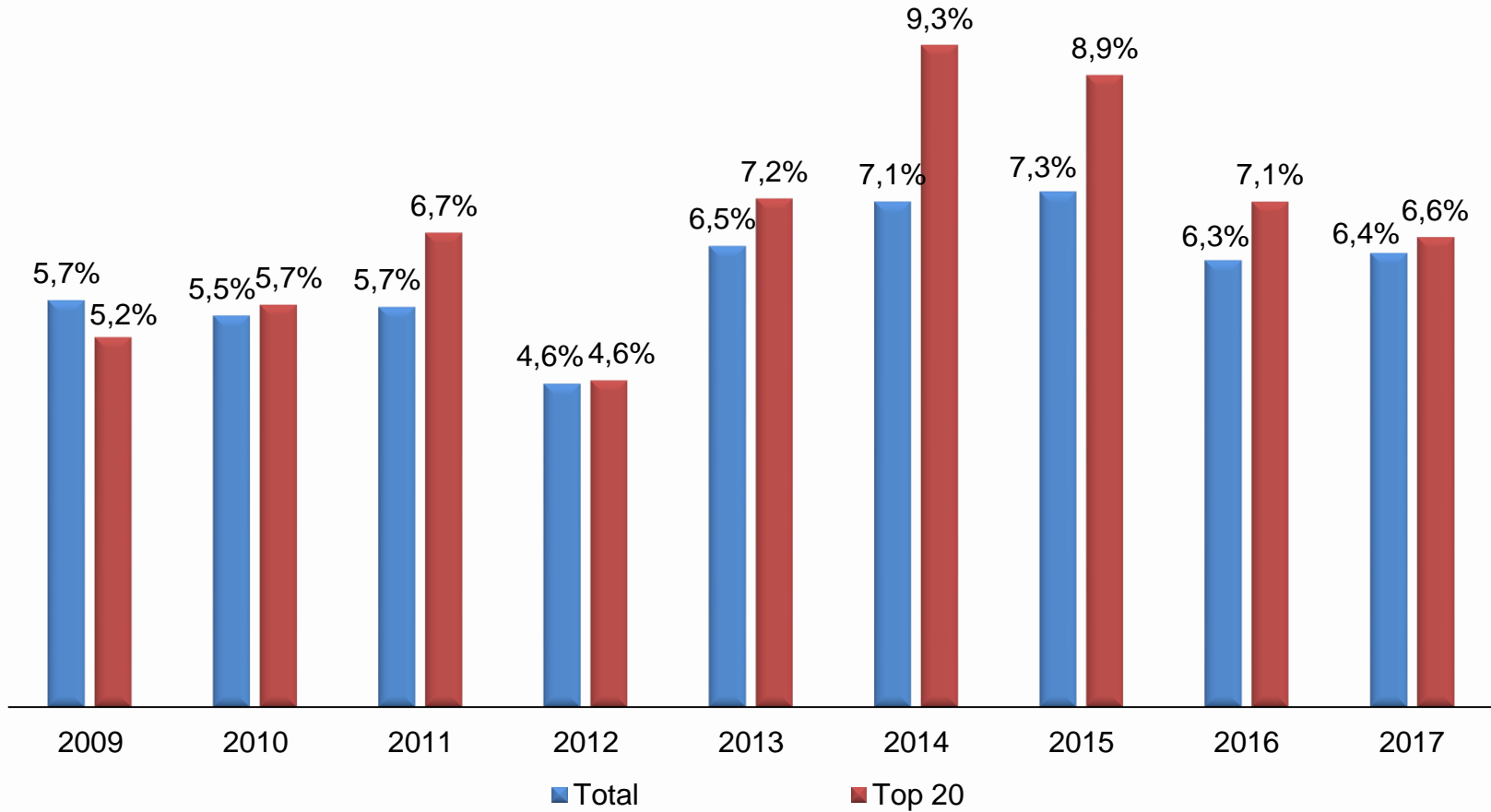


Profitability

- Until 2015, the profitability of sales (ROS) is higher for large companies. In 2016 and 2017, the profitability differential for large companies compared to the industry as a whole narrows.
- The return on invested capital (ROIC) is stable until 2013 for large companies. From 2014 to 2015 there is a general improvement in profitability, with better performance for large companies. 2016 and 2017 represent two relatively negative years during which there is a settling of industry profitability and a decrease in ROIC for large companies.

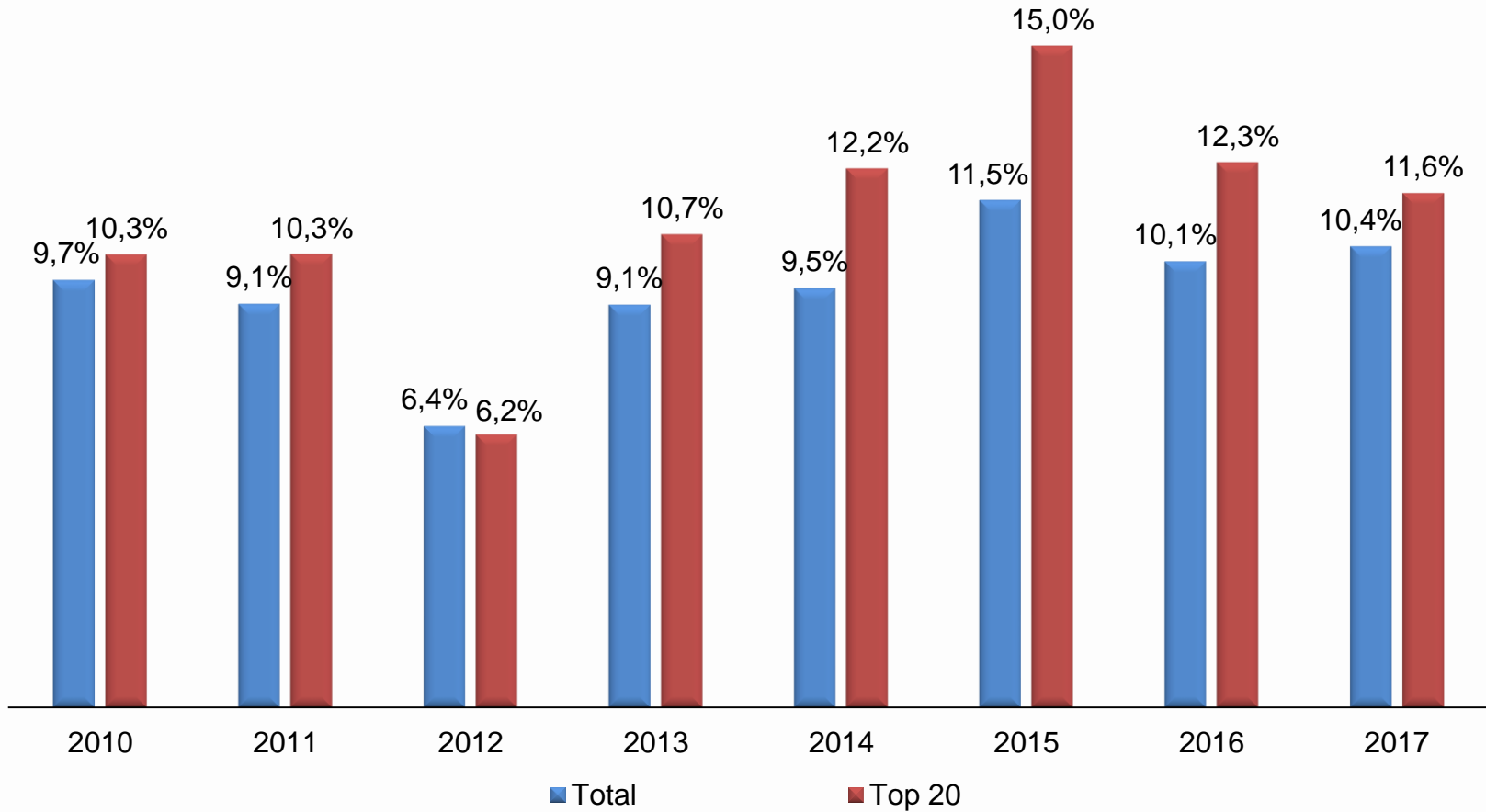
Profitability

ROS



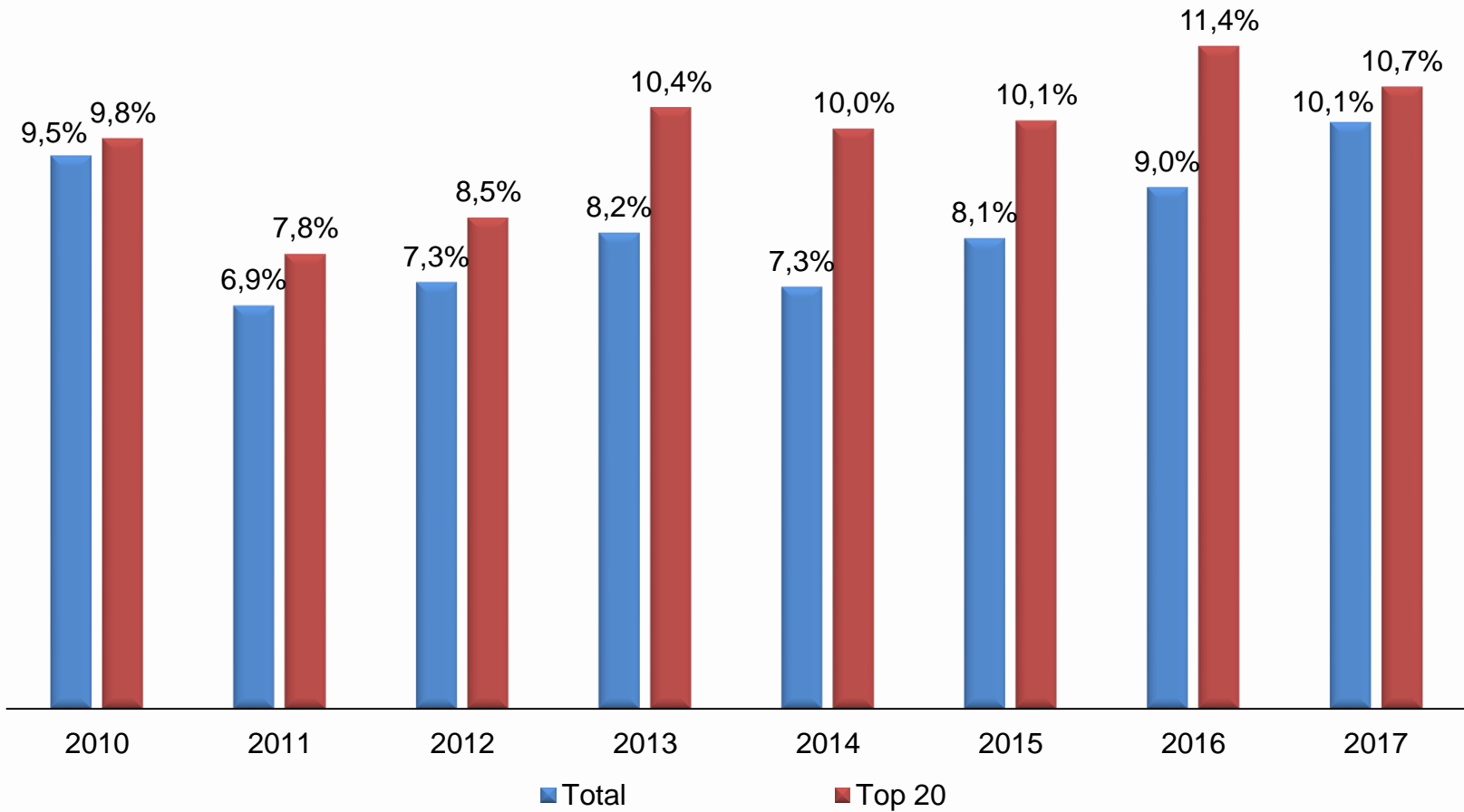
Profitability

ROIC



Profitability

ROE

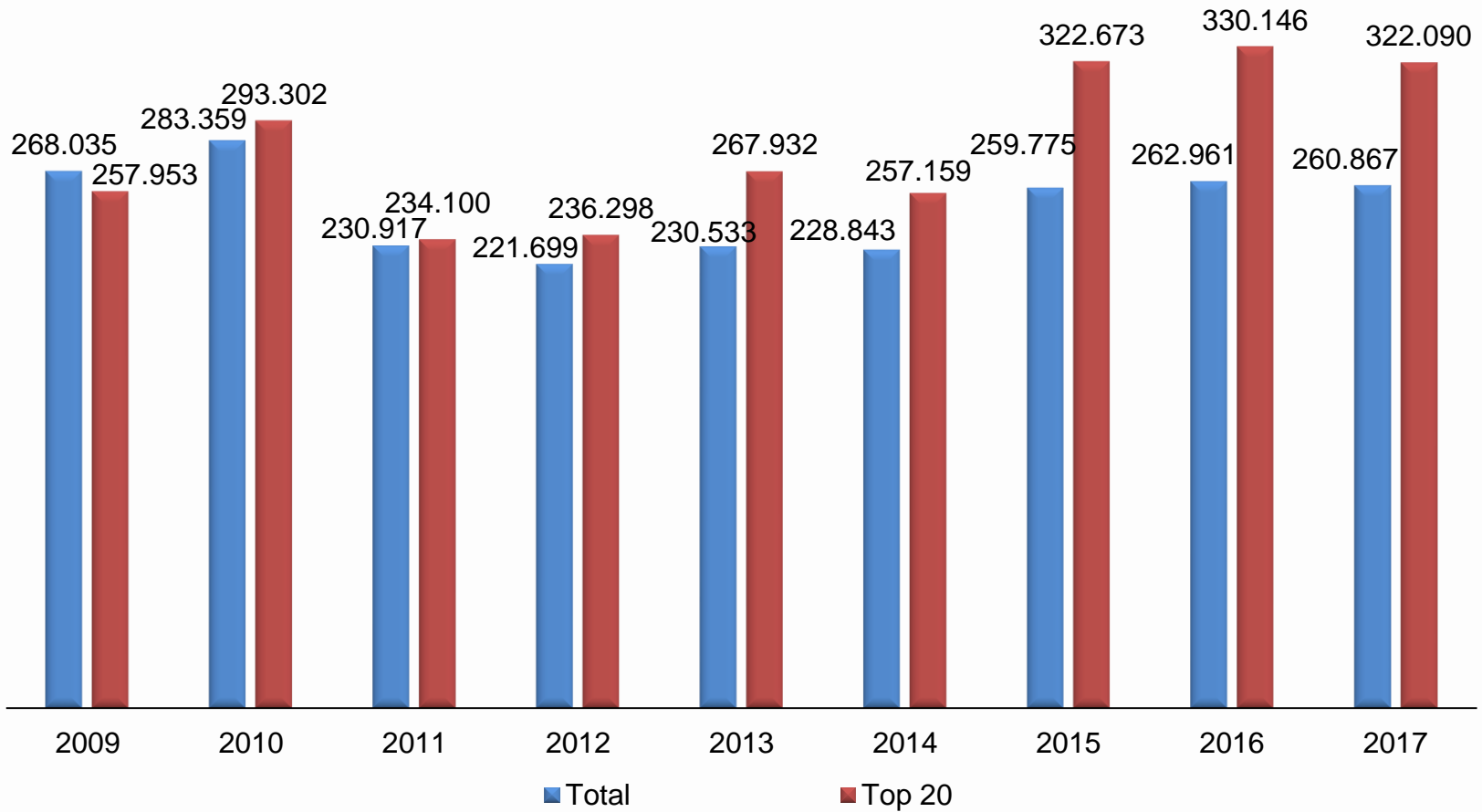


Productivity

- Productivity of larger firms is higher than that of the total sample. From 2015 to 2017, there is an increase in the productivity of larger firms with values above the industry average.
- Revenues per employee of large companies were affected by an increasing trend from 2012 to 2016. In the last year, the highest value of the period is recorded, which is 329 thousand euros of revenue per employee. The value added per employee is also structurally higher for large companies.
- The productivity of tangible assets has an overall positive trend from 2013 onwards, due to the growth in revenues of large companies. In the last year, the indicator is affected by a decline due to the reduction in revenues that affected larger companies.

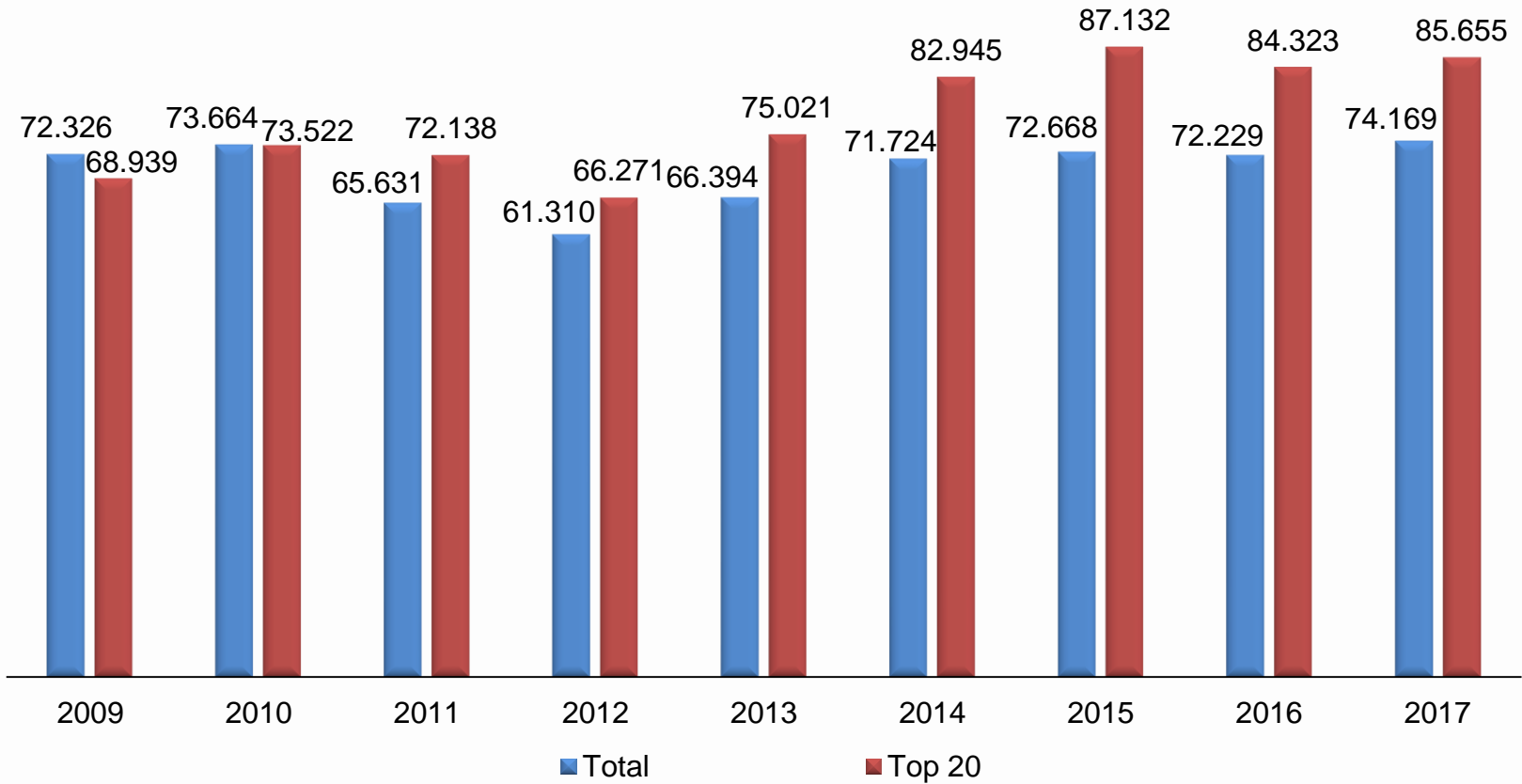
Productivity

Revenues per employee



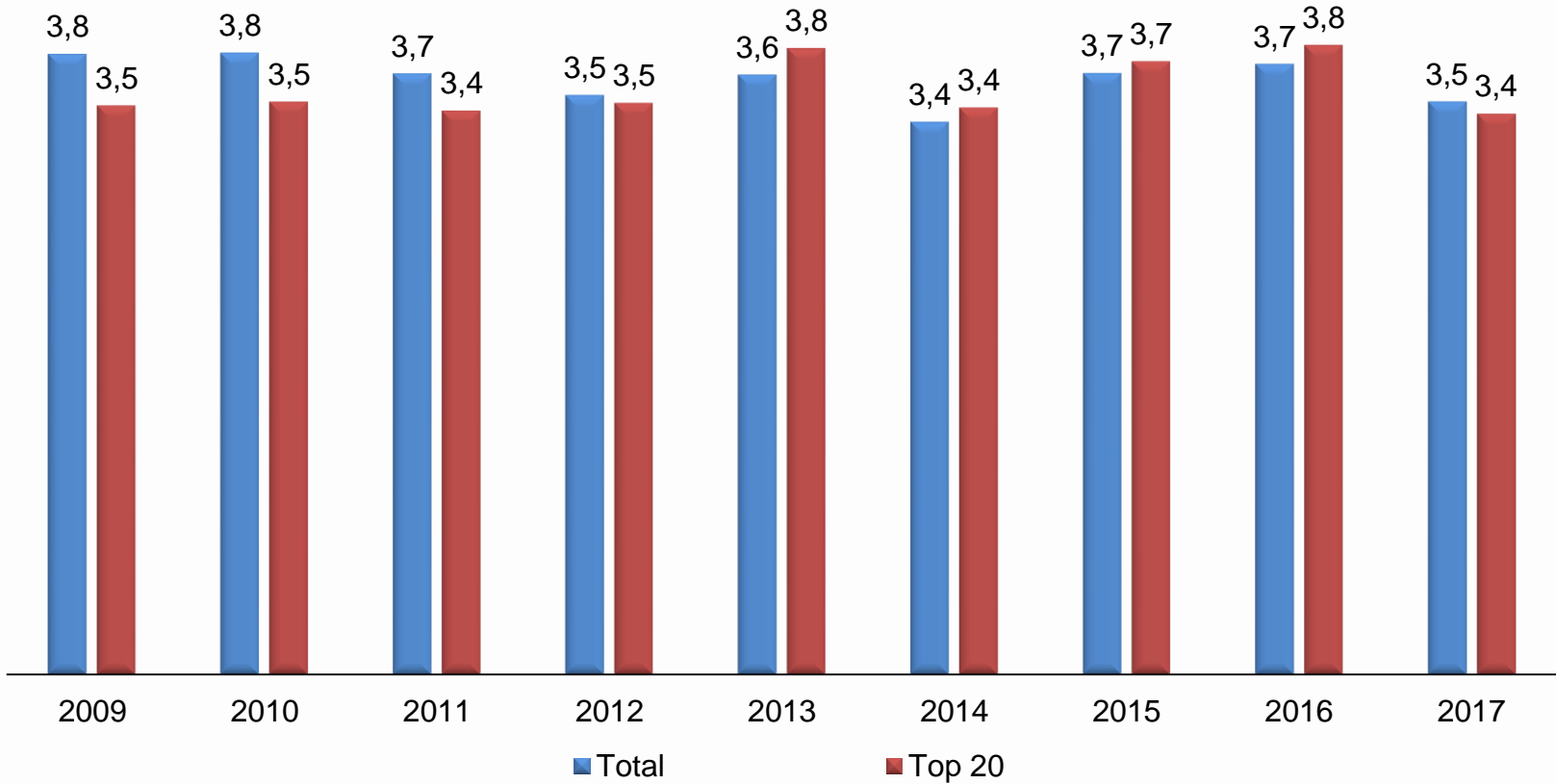
Productivity

Value added per employee



Productivity

Value of Production / Tangible assets

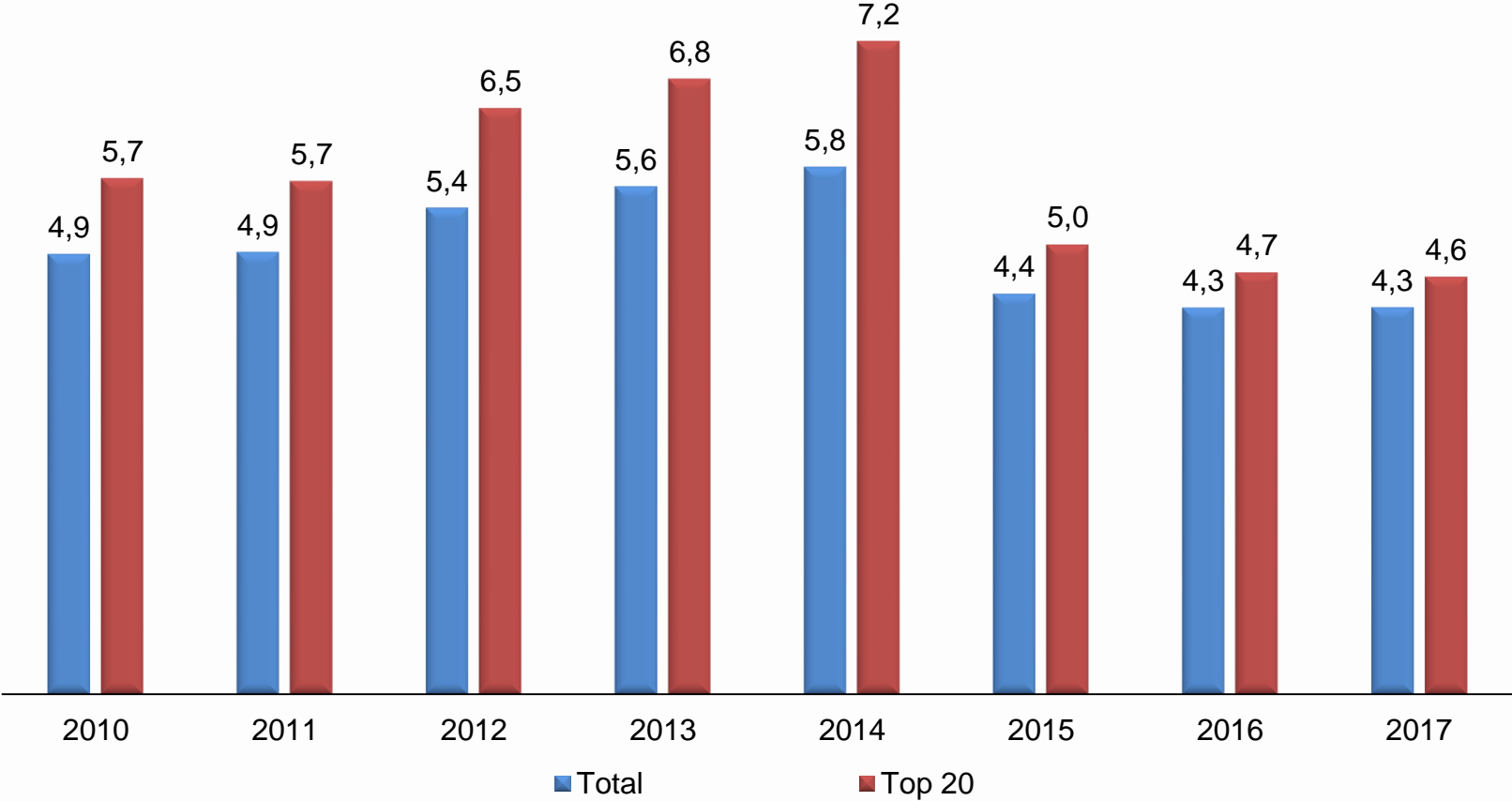


Financial Structure

- There is a decrease in the debt rate in the 2015 to 2017 segment. Large companies are structurally characterized by higher debt than the total sample due to the size of the jobs that involve higher cash absorption driven by inventories (work in progress) and long payment times from customers.
- For both groups analyzed, there is a decrease in the incidence of financial debt and long-term debt as a percentage of total liabilities, however, large companies are more indebted to both short-term and MLT.

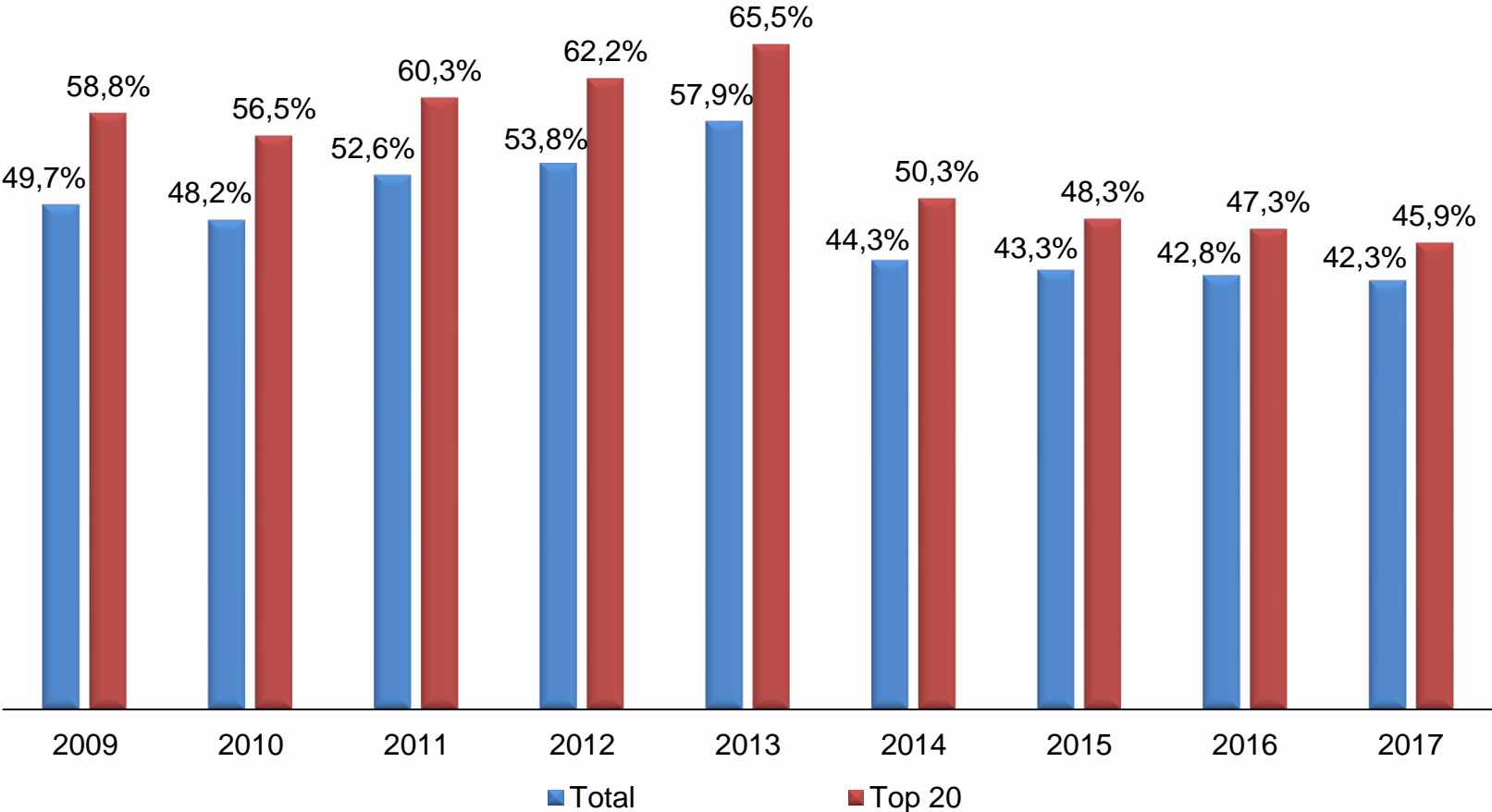
Financial Structure

Debt rate (initial)



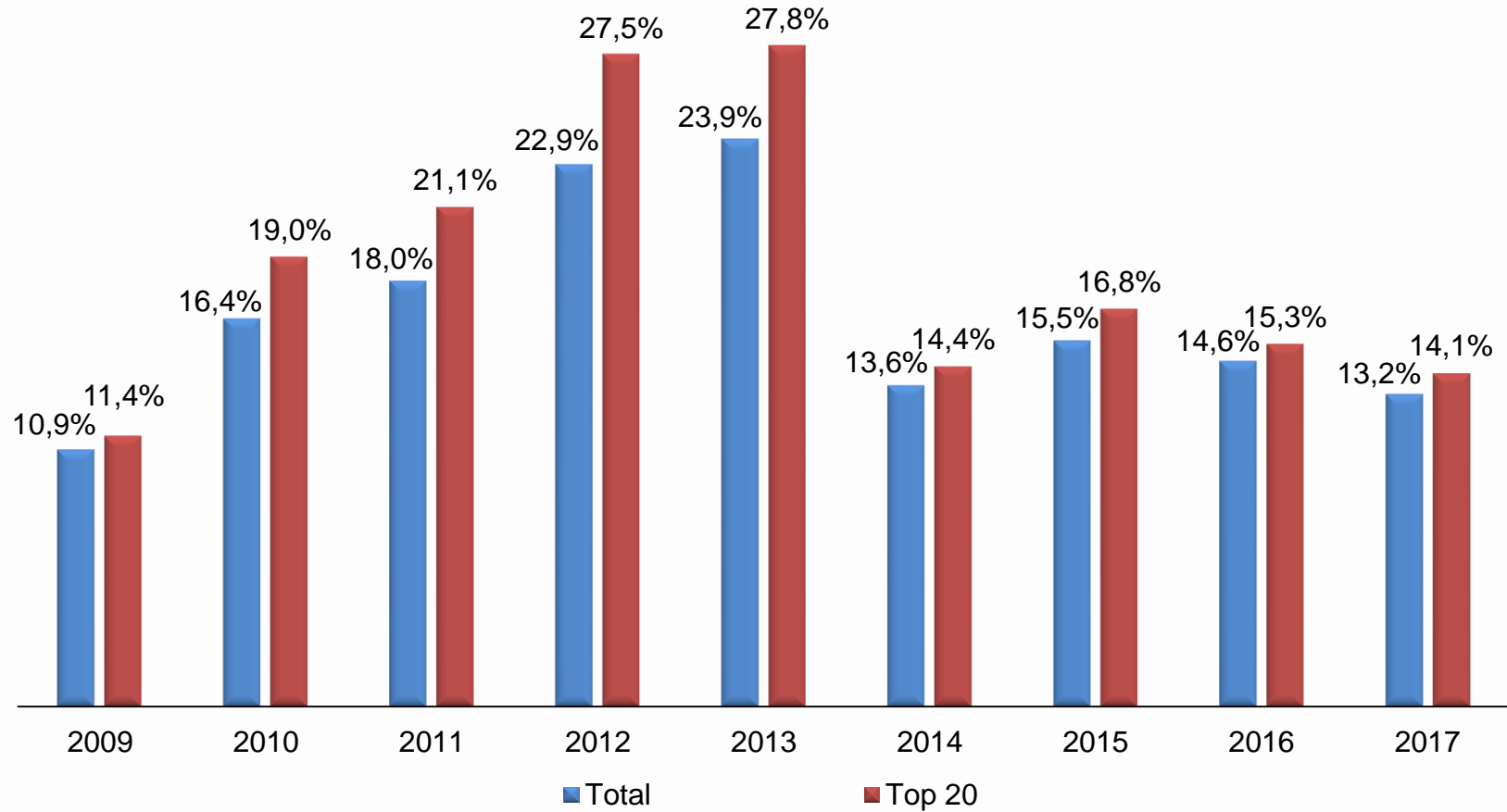
Financial Structure

Short-term financial payables on total liabilities



Financial Structure

Medium/long-term payables on total liabilities



Sustainability of the business model

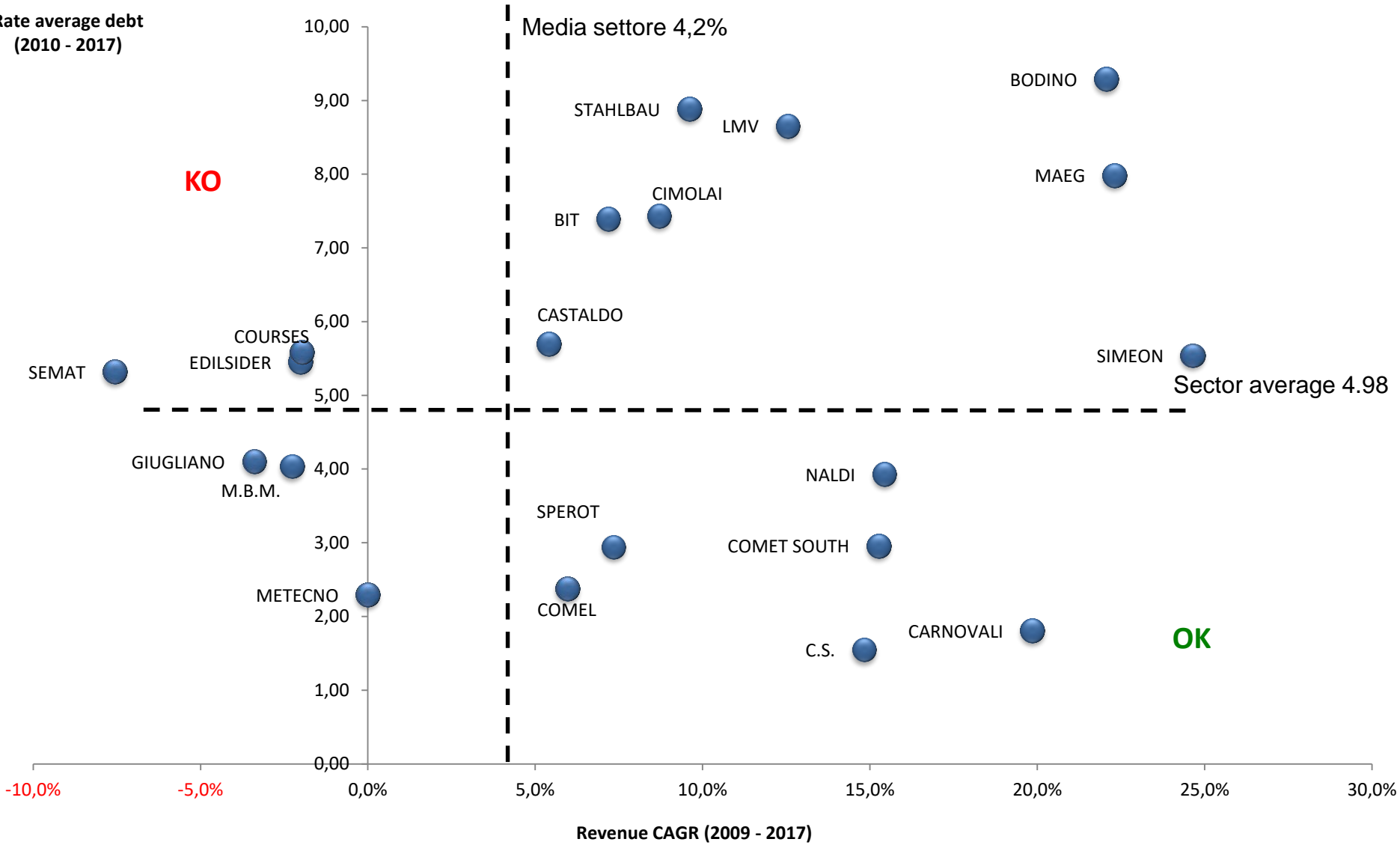
- A further analysis of the top 20 companies in the sector was devoted to the sustainability of business models. The analysis was carried out by jointly considering the indices of development, profitability and financial soundness over a multi-year time frame (from 2009 to 2017).
- **Debt and Growth Rate (CAGR Revenues).** Compared to the previous year, there has been an improvement in the performance of companies in the sector. Six companies are in the virtuous quadrant and have therefore succeeded in growing while maintaining their debt.
- Three companies are in the critical quadrant and are therefore characterized by negative growth and high debt.
- The majority of companies have achieved satisfactory results in terms of growth, but have not managed to contain their debt. only one seems to have a compromised situation in terms of the debt ratio.
- Three companies had negative growth performance but managed to maintain a low debt rate.

Sustainability of the business model

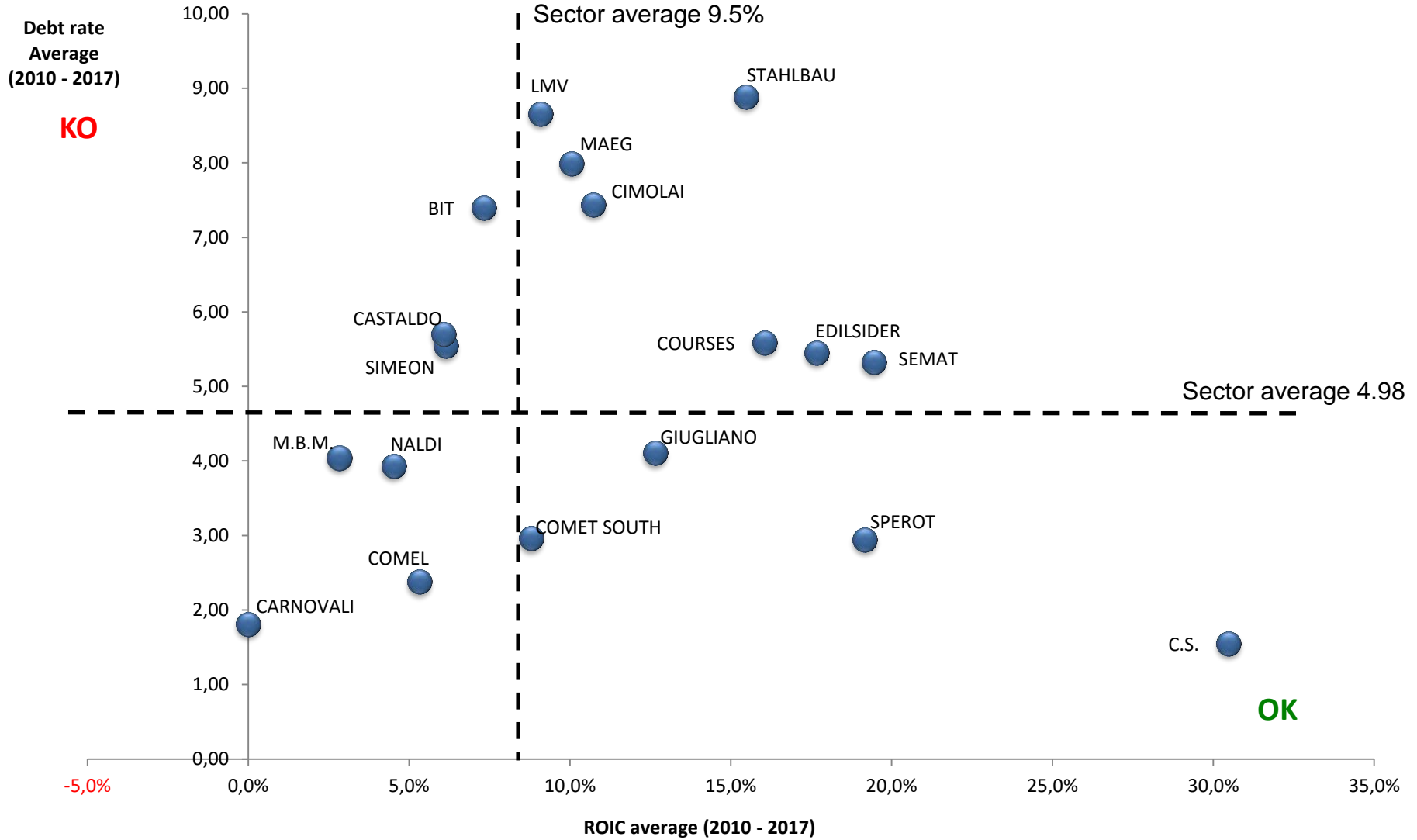
- **Growth (CAGR Revenues) and Sales Profitability (ROS).** Eight companies out of the total are in the virtuous quadrant with high levels of growth and sales profitability. Only three companies are in the critical quadrant. The remaining nine companies are in the intermediate quadrants, six have achieved satisfactory growth performance but low margins, while three have maintained margins on sales to the detriment of revenue growth.
- **Rate of debt and return on invested capital (ROIC).** Four companies are in the virtuous quadrant. Only three companies are characterized by a high debt rate and poor profitability performance.
- Most companies have achieved satisfactory performance in terms of return on investment while maintaining high levels of debt.
- Only four companies, although characterized by poor profitability performance, recorded debt rates below the industry average.

Sustainability of the business model

Rate average debt
(2010 - 2017)

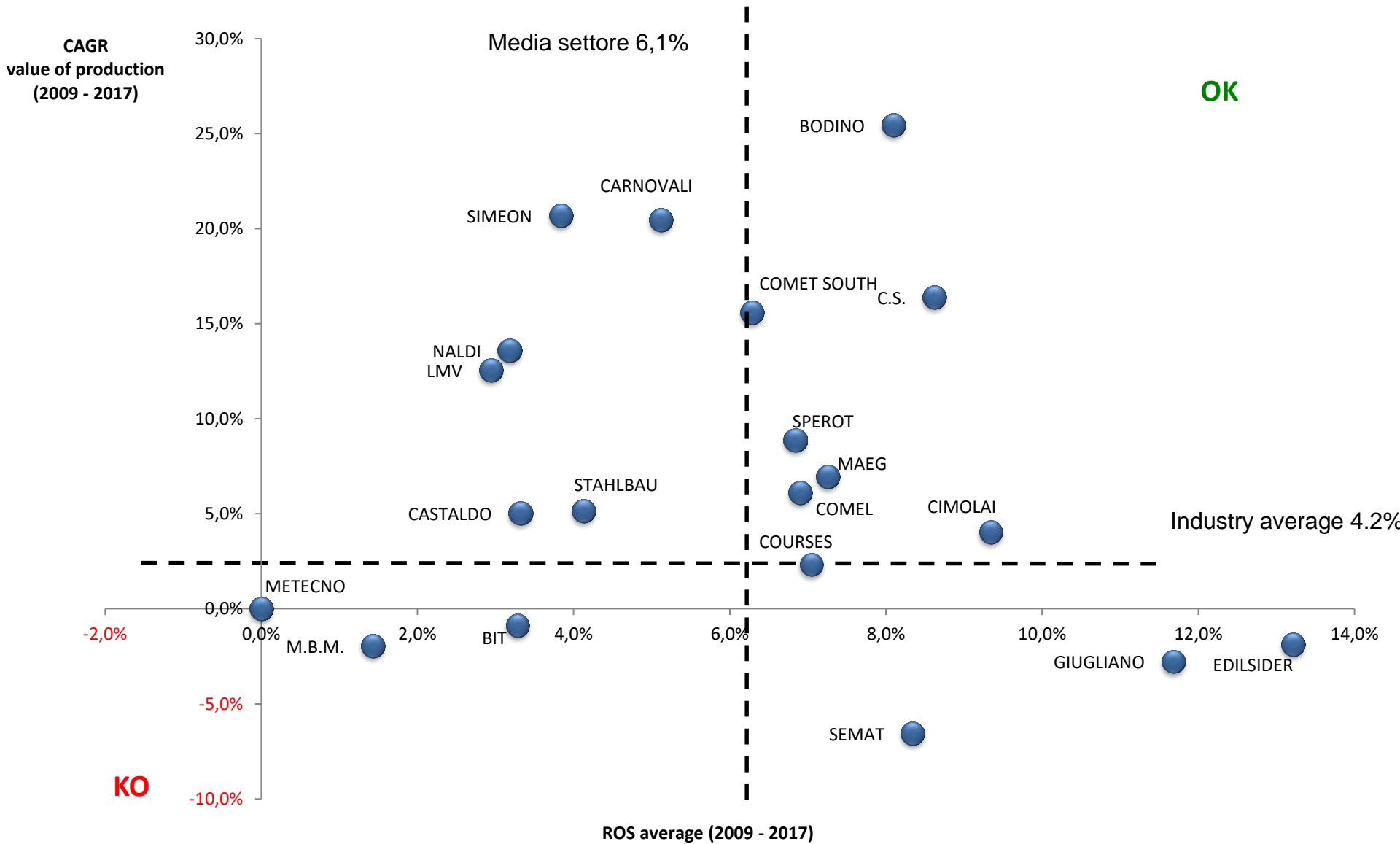


Sustainability of the business model



Outliers eliminated: Bodino, Metecno.

Sustainability of the business model





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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