

ANALYSIS OF THREE COMPANIES OF THE CERAMIC SECTOR. COMPARISON WITH THE SPANISH ECONOMY FROM 2008 TO 2018



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1. INTRODUCTION

This bachelor dissertation aims at the economic-financial analysis of the three companies with the highest sales in the ceramic regions of the province of Castellón and the analysis of these indicators in comparison with the evolution of the Spanish economy in the period from 2008 to 2018. Being these companies Pamesa Cerámica S.L., Argenta Cerámica S.L. and Porcelanosa S.A. with a turnover of €454,739,000, €188,768,026, and €170,199,832, respectively in 2018.

The aim is to observe how the crisis and economic recession suffered by Spain after the 2008 economic crash has affected these companies, in comparison to the Spanish economy. To do this analysis, data from 2008 to 2018 will be used. These data will be compared with three main indicators of the Spanish economy, such as the evolution of the Spanish gross domestic product (GDP), the consumer price index (CPI) in inflationary percentage terms and the national and regional unemployment rate.

As a result of this study, we have verified that no correlation has been found between the profitability of the three companies, the evolution of the employees or the procurement cost with the evolution of the chosen macroeconomic indicators, these being GDP, inflation and unemployment rate.

Given that these three companies are the ones with the highest sales volume, there have been no significant consequences caused by the financial crisis. But, according to INE, the data is not so favorable for more modest companies, which have been forced to merge or be acquired by international funds.

2. METHODOLOGY

The methodology used for this study focuses on the use of the Iberian Balance Analysis System (SABI) database or the National Statistics Institute (INE), as well as books specialized in the ceramic sector, reports published with data from this sector, and web pages that contain information on this topic. We have also used statistical and calculation programs such as EXCEL.

The indices chosen for these comparisons are, the unemployment rate, which will be compared with the evolution of the number of employees in the companies This will be done in order to see if there really is a relationship between the variation in the unemployment rate and the destruction, or creation, of employment in these companies. On the other hand, we have also chosen the consumer price index that will be compared

with the net amount of the turnover, to check whether inflation affects sales volume. And finally, the gross domestic product will be compared with the result of the exercise of each company, in order to observe the evolution of the companies respect to the economy.

The data used on the GDP have been extracted from the INE database, the inflation data from the CPI have been extracted from *Worldwide Inflation Data* website, and the unemployment data, from the labour force surveys carried out by the INE.

2.1. CERAMIC SECTOR

2.1.1. HISTORY OF THE CERAMIC SECTOR IN THE VALENCIAN COMMUNITY

As reported by Spanish association of ceramic tile and flooring manufactures, (ASCER - El Sector - Descripción, 2019), ASCER from now on, ceramics in the Valencian Community arose during the XIV and XV centuries, because Christian pressure during the XV century moved the important production center from Malaga to Manises. The Valencian Community became an exporter to Venice, Egypt, Syria, and Turkey. In addition to becoming a supplier of flooring for the papacy in Italy, decorating their rooms during that century.

During the XVI century, due to the expansion of technical innovations in polychromic and the ornamental repertoires typical of the Renaissance, by Italian itinerant ceramists, the medieval Manises tilework characterized by monochrome collapsed. The pieces ended up being manufactured in the city of Valencia in factories set up by Andalusians and Talaverans, thus giving birth to the baroque, rococo, and classicist tiles of Valencia, lasting until the mid-19th century. A sample of this ceramic can be found in palaces, pavements, balconies, kitchens, etc.

The sector was consolidated in this area at the end of the 19th century. This process was further accentuated at the beginning of the 20th century when production was centered between the populations of Manises and Onda, cities that had training centers since 1916 and 1925, respectively.

In 1981 one of the most important technological changes in the sector took place due to the arrival of gas in factories. Thanks to this, the factories obtain cleaner combustion gases. This improvement, along with new systems for transporting the material in the kiln, were key to increasing quality, reducing cooking times and saving energy and increasing production. On the other hand, larger formats were introduced, the first

cogeneration plants were born, and the enamel industry achieved great weight worldwide. The cluster consolidated and undertook exponential growth, becoming the leading European producer and the second largest globally, leading along with Italy in the design, quality, and trade in ceramic tiles.

2.1.2. THE CURRENT SECTOR IN NUMBERS

The ceramic or tile sector has become one of the most dynamic and efficient in the Spanish economy when it comes to undergoing the necessary changes to incorporate the detected market needs, innovation, and positioning in an increasingly market. globalized, becoming, according to KPMG, (KPMG, 2019), one of the world leaders in exports globally with a market share of 14.8%, behind China.

According to ASCER, the sector has maintained a growing trend in production, reaching levels of 530 million square meters in 2018, that is, total sales that reached almost 3,600 million euros, exporting close to 80%, which in figures translates into some 2,727 million euros. The remaining 20% is what remains in the national market, thus becoming the third industry that contributes the greatest surplus to Spain's trade balance.

In total, the ceramic sector in Spain employs approximately 15,400 people, most of whom belong to small and medium-sized companies.

All this makes this sector vital for the province of Castellón, since approximately 95% of these companies are concentrated in this area, forming a cluster, that brings together approximately 94% of national tile production. Of the 167 companies that make up the sector, around 162 are in this province.

According to reports from the KPMG consultancy in 2019, (KPMG, 2019), based on 2018 data, 38% of companies in the sector have fewer than 250 employees. Another 48% of companies have between 250 and 500 employees, and only 14% have staff with between 500 and 1,000 workers. This means that most of the sector is concentrated in small and medium-sized companies.

On the other hand, as we have seen previously, this sector generates a large volume of business, therefore, we must also take into account the indirect jobs that it generates, such as: suppliers of raw materials, enamels and frits, transport services, machinery and its corresponding maintenance, advice and consultancies, insurance, communication and marketing companies, hotels, fairs, etc. becoming a source of wealth in the region due to its high geographic concentration.

3. OBJECT OF STUDY

In this section we will analyze the three companies individually through the analysis of their annual accounts and through the calculation of the most relevant ratios for them, breaking this last part into an analysis of profitability, a financial analysis, an analysis of liquidity and a solvency and risk analysis.

Regarding the analysis of profitability, we will consider the economic profitability (ROA), which measures the relationship between the benefits achieved at a given moment and the total assets of the company, the financial profitability (ROE), which measures the profitability obtained by the company on its own funds. And finally, a comparison of both will be obtained.

ROA depends on margin on sales and on asset turnover. In the following equation we can visualize what the calculation would be. We understand t as the tax rate actually paid in the year. On the other hand, ROE depends mainly on net income and total assets

Equation 1: Return on Assets

$$ROA = \frac{\text{Result} + \text{Financial expenses} (1 - t)}{\text{Average assets}}$$

Equation 2: Return on Equity

$$ROE = ROA + \frac{\text{Average Liabilities}}{\text{Average Net Equity}} \times (ROA - FE)$$

On the other hand, the financial analysis will be focused on the debt ratio, we understand debt as a debt ratio that serves to measure financial leverage. It indicates how much debt the company uses to finance its assets in relation to equity. This ratio can be distinguished between short and long term, substituting current or non-current liabilities, respectively, in the equation.

Equation 3: Debt Ratio

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Net Equity}}$$

As well as stock storage terms, customer payment terms, supplier payment deadlines, and average periods of economic maturity (APEM) and financial maturity (APFM). The APEM measures the time from when you invest a euro in the acquisition of raw materials until that euro is recovered through its collection for the sale of the product.

Equation 4: Average Period of Economic Maturity

$$\text{Average Period of Economic Maturity} = \text{Storage} + \text{Period of Clients}$$

In contrast, the APFM measures the time it takes the company to get back the money invested when raw materials are bought.

Equation 5: Average Period of Financial Maturity

$$\text{Average Period of Financial Maturity} = \text{APEM} + \text{Payment Suppliers}$$

As for the liquidity analysis, the working capital indicates the part of the current assets of a company that are financed by long-term resources.

Equation 6: Working Capital

$$\text{Working capital} = \text{Current Assets} - \text{Current liabilities}$$

The current ratio measures the liquidity of the company, that is, it measures the company's ability to meet the payment of its debts with short maturities.

Equation 7: Current Ratio

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

We will also use the quick ratio, which helps us understand if the company is solvent in the short term.

Ecuación 8: Quick Ratio

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{stocks}}{\text{Current liabilities}}$$

The immediate liquidity ratio measures the relationship between the resources available with the payment obligations in the short term. For this, it is desirable that the result is positive and greater than unit.

Equation 9: Immediate Liquidity

$$\text{Immediate Liquidity} = \frac{\text{Cash}}{\text{Current liabilities}}$$

Finally, the risk analysis will focus on the z-score ratio, which measures the probability of bankruptcy of the company. Considering that our companies are not publicly traded, Altman's studies classified the probability of bankruptcy according to the interval to which the result belonged. If the result is less than 1.21, the company is considered to have a high probability of bankruptcy, if the result is between 1.21 and 2.9, Altman considered

that the result was inconclusive, and, if the result is greater than 2.9, the probability of bankruptcy is very low.

Equation 10: Z - Score Ratio

$$Z - score = 0.7 x \frac{Working\ Capital}{Assets} + 0.85 x \frac{Net\ Equity}{Assets} + 3.1 x \frac{Operating\ Income}{Assets} + 0.4 x \frac{Assets}{Liabilities} + 1 x \frac{Net\ Sales}{Assets}$$

Finally, we will carry out several comparisons with macroeconomic indicators with some ratios in order to find out how the 2008 crisis has affected these companies in particular, and if so, to see in which aspects they have been most affected.

We will compare the gross domestic product, with data extracted from the national statistical institute, with economic profitability, because GDP measures the sum of the goods and services produced by a country, and economic profitability measures the economic performance obtained from the company's assets.

Secondly, we will analyze the comparison of the national unemployment rate with the average annual workforce of the company to find out if there has been destruction or job creation. And, finally, we will compare the CPI in inflationary terms, which measures the general and sustained increase in prices, it is one of the indicators that affects the entire economy, with the number of supplies in order to know how the cost structure has been affected.

4. OBTAINING RESULTS

4.1. PAMESA CERÁMICA

In this section both, the income statement and the balance sheet will be analyzed. In order to carry it out in greater depth the analysis of the balance sheet will be divided in two parts. The economic structure corresponding to the balance sheet and the financial structure, corresponding to the liabilities and net. We will also carry out an analysis of its main returns, its liquidity, its solvency, and risk.

4.1.1. DESCRIPTIVE ANALYSIS OF THE INCOME STATEMENT

Table 1: Income Statement of Pamesa

CUENTA DE PÉRDIDAS Y GANANCIAS	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
MILES DE EUROS											
IMPORTE NETO DE LA CIFRA DE NEGOCIOS	454.739	414.170	336.705	293.004	272.395	219.169	183.659	163.123	132.430	108.987	137.808
VARIACIÓN DE EXISTENC DE PROD TERMIN Y EN CURSO	3.870	19.121	683	-8.819	-6.132	9.029	1.555	-1.050	-2.977	-3.160	1.969
TRABAJOS REALIZADOS POR LA EMPRESA PARA SU ACTI	0	0	0	0	0	0	0	0	0	0	0
APROVISIONAMIENTOS	-351.252	-319.200	-239.540	-196.462	-187.779	-155.671	-121.439	-102.629	-74.054	-57.438	-76.695
OTROS INGRESOS DE EXPLOTACIÓN	2.665	2.426	2.709	2.734	1.960	1.581	1.683	1.828	1.358	1.347	1.955
GASTOS DE PERSONAL	-23.356	-24.302	-21.482	-22.686	-20.714	-19.790	-18.888	-18.304	-17.078	-17.275	-20.287
OTROS GASTOS DE EXPLOTACIÓN	-50.763	-45.736	-44.916	-46.274	-38.369	-39.637	-33.614	-29.883	-28.256	-26.554	-35.531
AMORTIZACIÓN DEL INMOVILIZADO	-9.705	-10.442	-8.568	-7.821	-7.226	-7.872	-5.482	-5.216	-4.588	-4.399	-4.588
IMPUTACIÓN DE SUBVENC DE INMOVILIZADO NO FINAN	403	352	498	413	352	529	512	770	253	732	1.104
EXCESOS DE PROVISIONES	0	0	0	0	0	0	0	0	0	0	487
DETERIORO Y RESULTADO POR ENAJENAC DEL INMOVILIZ	558	-106	-795	4.869	-106	-666	-480	-935	-799	-77	19
DIFERENCIA NEGATIVA DE COMBINACIONES DE NEGOCIO	0	0	0	0	0	0	0	0	0	0	0
OTROS RESULTADOS	1.848	-5.767	-187	776	-721	0	0	0	0	0	0
RESULTADO DE LA EXPLOTACIÓN	29.007	30.516	25.107	19.734	13.660	6.672	7.506	7.705	6.288	2.163	6.244
INGRESOS FINANCIEROS	416	555	930	915	1.119	1.099	1.897	3.529	2.153	2.307	3.983
GASTOS FINANCIEROS	-1.689	-1.682	-1.745	-1.981	-3.062	-3.758	-5.258	-6.651	-4.917	-5.126	-6.761
VARIACIÓN DE VALOR RAZONABLE EN INSTR FINANCIEROS	0	0	0	0	0	0	0	-39	0	0	0
DIFERENCIAS DE CAMBIO	418	-194	-131	-274	-219	-30	-78	8	103	221	
DETERIORO Y RESULTADO POR ENAJENAC DE INST FINAN	0	0	0	0	0	1.343	-3.000	-1.948	-68	-418	-26
OTROS INGRESOS Y GASTOS DE CARÁCTER FINANCIERO	0	0	0	0	0	0	0	0	0	0	0
RESULTADO FINANCIERO	-855	-1.321	-946	-1.340	-2.162	-1.346	-6.439	-5.204	-2.824	-3.134	-2.583
RESULTADO ANTES DE IMPUESTOS	28.152	29.195	24.161	18.394	11.498	5.326	1.067	2.501	3.464	-971	3.661
IMPUESTO SOBRE BENEFICIOS	-7.896	-7.745	-3.630	-4.894	-3.019	-709	360	-801	-853	137	204
RESULTADO	20.256	21.450	20.531	13.500	8.479	4.617	1.427	1.700	2.611	-833	3.865

Source: Sistema de Análisis de Balances Ibéricos

Through the profit and loss account, we can see that, at the end of 2018, Pamesa obtained a turnover of 454,739 thousand euros, which represents an increase of 10% compared to 2017.

The most significant expenses that Pamesa has had, are supplies, which represent 77% of the net amount of the turnover, followed by other operating expenses with a less relevant percentage of 11%. On the other hand, when we look at the operating result for 2018, we see that it is 29,007 thousand euros, 5% less than the previous year, although in general, the trend of this item is increasing, especially from 2013 onwards.

As for the result of the year, we can see, in the following graph that, like the rest of the items in the income statement, it follows a growing line, except for the year 2009, where it made losses due to a decrease in the net amount from the turnover, we can then deduce, that this negative result is a consequence of the financial crisis of 2008. The latter is an isolated case, given that, except for 2012, where there was also a decrease in the result compared to the previous year, the general trend has been increasing.

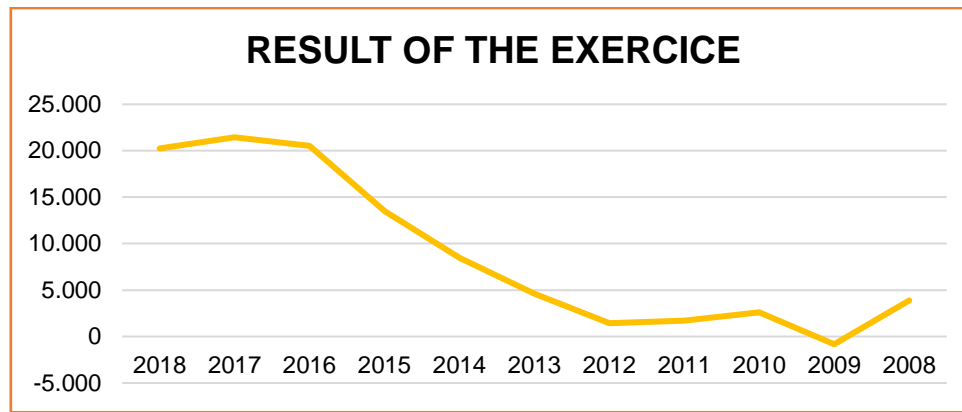


Figure 1: Result of exercise of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.1.2. DESCRIPTIVE ANALYSIS OF THE BALANCE SHEET

ECONOMIC STRUCTURE

Table 2: Balance sheet of Pamesa

BALANCE	PAMESA CERAMICS SL										
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
MILES DE EUROS											
A) ACTIVO NO CORRIENTE	93.995	79.689	80.347	73.366	66.697	79.235	68.550	90.248	84.235	57.404	60.919
INMOVILIZADO INTANGIBLE	160	143	136	548	366	566	560	1.012	804	409	869
INMOVILIZADO MATERIAL	88.463	75.746	76.681	69.125	62.030	66.938	59.570	59.700	59.925	46.416	45.292
INVERSIONES INMOBILIARIAS	0	0	0	0	0	0	0	0	0	0	0
INV. EMPRESAS GRUPO Y ASOC. A L.P.	64	64	64	64	58	1.063	114	114	114	3.060	3.375
INVERSIONES FINANCIERAS A L.P.	706	704	1.510	1.600	1.607	8.502	6.059	28.121	21.585	4.670	8.327
ACTIVOS POR IMPUESTO DIFERIDO	4.602	3.032	1.956	2.029	2.636	2.166	2.247	1.301	1.807	2.849	3.055
DEUDORES COMERCIALES NO CORRIENTES	0	0	0	0	0	0	0	0	0	0	0
B) ACTIVO CORRIENTE	240.460	227.256	178.370	144.360	142.188	106.301	129.971	107.098	101.227	117.728	126.734
ACTIVO NO CORRIENTE MANTENIDO PARA LA VENTA	0	0	0	0	0	0	0	0	0	0	0
EXISTENCIAS	165.610	139.611	97.375	75.447	74.159	49.190	40.380	34.953	34.192	32.427	34.600
DEUDORES COMERCIALES Y OTRAS CTAS COBRAR	39.339	45.805	43.070	41.931	42.253	42.601	70.426	41.714	37.876	39.143	48.665
Clientes (normales y del grupo)	38.785	44.210	42.803	41.039	42.034	36.990	64.547	40.546	36.746	38.746	47.952
Otros deudores comerciales	554	1.595	267	892	219	5.611	5.879	1.168	1.130	397	714
INVERSIONES EMP GRUPO Y ASOC. A CP	0	0	0	1	176	1	0	0	0	10.121	4.786
INVERSIONES FINANCIERAS A CP	12.802	13.357	10.791	7.593	11.075	11.541	17.159	29.542	28.478	35.160	37.203
PERIODIFICACIONES A CP	163	137	147	112	501	566	478	419	345	309	371
EFECTIVO Y OTROS ACTIVOS LIQUIDOS EQ.	22.546	28.346	26.987	19.276	14.024	2.402	1.528	471	336	568	1.110
TOTAL ACTIVO	334.455	306.945	258.717	217.726	208.885	185.536	198.521	197.346	185.462	175.133	187.653

Source: Sistema de Análisis de Balances Ibéricos

As we can see, the evolution of the balance sheet has been increasing year after year exponentially. As seen in the table above, all games have held a generally constant uptrend. The most important variations were found in 2013 in long-term investments in the group, where the year-on-year variation represented an increase of 832% compared to 2012. And in 2014, where a short-term investment in group companies caused an increase 17,500% compared to 2013, the date that corresponds to the acquisition by the group of the company Navarti.

At the end of 2018, Pamesa presented a total assets of 334,455 thousand euros, of which 72% belongs to current assets. This amount is maintained with an increasing trend during the study period, where items such as inventories stand out, representing 69% of

current assets, which have increased due to the stock accumulated by the sector during the years after the crisis. The remaining percentage of current assets corresponds mostly to customer debts

Likewise, regarding the global vision of assets, it should be noted that, although between 2008 and 2013 it remains constant, from this year onwards, the trend experiences an increasing push, mainly caused by the increase in inventories.

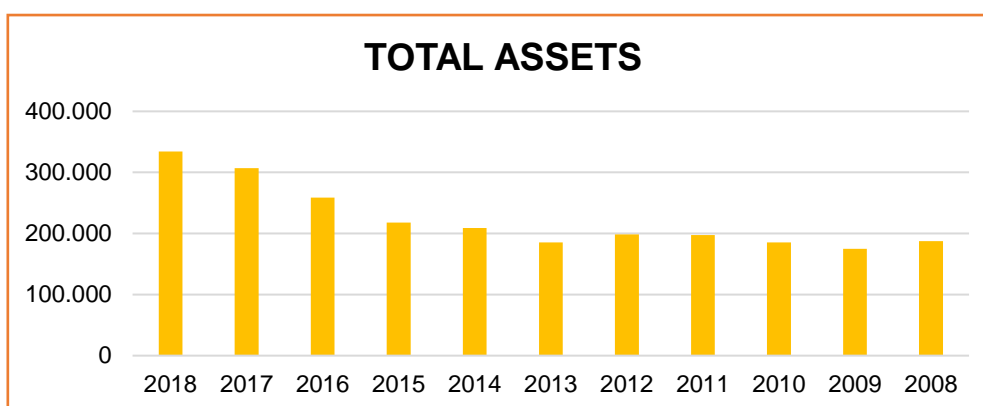


Figure 2: Total Assets of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

FINANCIAL STRUCTURE

Regarding liabilities and net, in the following table we can see the evolution of these items.

Table 3: Balance sheet of Pamesa

A) PATRIMONIO NETO	142.459	122.239	100.838	80.393	66.947	62.833	49.852	50.915	49.046	45.920	46.736
FONDOS PROPIOS	142.361	122.105	100.655	80.124	66.624	62.427	49.259	50.156	48.456	45.845	46.678
AJUSTES POR CAMBIOS DE VALOR	0	0	0	0	0	0	0	0	0	0	0
SUBVENCIONES, DONACIONES Y LEGADOS REC.	98	134	183	269	323	406	593	759	590	76	58
B) PASIVO NO CORRIENTE	98.041	65.118	59.370	41.444	41.875	29.682	19.503	24.880	34.078	15.216	9.062
PROVISIONES A LARGO PLAZO	2.000	2.300	0	0	1.194	48	55	0	172	172	172
DEUDAS A LARGO PLAZO	18.944	11.637	15.107	16.384	19.167	17.248	19.104	24.553	33.654	15.012	8.864
DEUDAS EMPRESAS GRUPO Y ASOC. A LP	71.108	47.864	43.887	24.534	20.845	12.137	0	0	0	0	0
PASIVOS POR IMPUESTO DIFERIDO	5.989	3.317	376	526	669	249	344	328	253	32	27
PERIODIFICACIONES A LP	0	0	0	0	0	0	0	0	0	0	0
ACREEDORES COMERCIALES NO CORRIENTES	0	0	0	0	0	0	0	0	0	0	0
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
C) PASIVO CORRIENTE	93.955	119.588	98.509	95.889	100.063	93.021	129.166	121.550	106.729	113.996	131.855
PASIVOS VINC. CON ACTIVOS N.C. MANT. VTA	0	0	0	0	0	0	0	0	0	0	0
PROVISIONES A CORTO PLAZO	994	408	505	362	289	372	105	324	252	243	731
DEUDAS A CORTO PLAZO	42.998	62.001	49.263	50.887	65.849	60.693	72.797	78.587	80.178	91.205	105.474
DEUDAS EMPRESA GRUPO Y ASOC. A CP	2.020	2.243	3.299	3.727	1.060	9	190	12.693	9	892	3.924
ACREEDORES COMERCIALES Y OTRAS C. PAGAR	47.943	54.936	45.442	40.913	32.865	31.947	56.074	29.947	26.291	21.657	20.917
Proveedores (normales y grupo)	43.074	50.422	41.299	35.684	28.306	27.688	52.358	26.216	23.524	18.655	17.281
Acreedores varios	4.869	4.514	4.143	5.229	4.559	4.259	3.716	3.731	2.767	3.002	3.636
PERIODIFICACIONES A CORTO PLAZO	0	0	0	0	0	0	0	0	0	0	808
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
TOTAL PATRIMONIO NETO Y PASIVO	334.455	306.945	258.717	217.726	208.885	185.536	198.521	197.346	189.853	175.133	187.653

Source: Sistema de Análisis de Balances Ibéricos

When observing the financial structure of the company, it appears that, in terms of net worth, they are almost entirely made up of own funds, leaving the number of subsidies, donations and legacies in the background.

Regarding non-current liabilities, that is, long-term financing, the company has chosen to reduce the company's external financing, and resort to self-financing through group companies, as we can see in the following graph. Certain variations in the period studied have also been significant, especially in 2014, when there was a significant increase in the items of provisions and investments in a group company, coinciding with the group's purchase of Navarti.

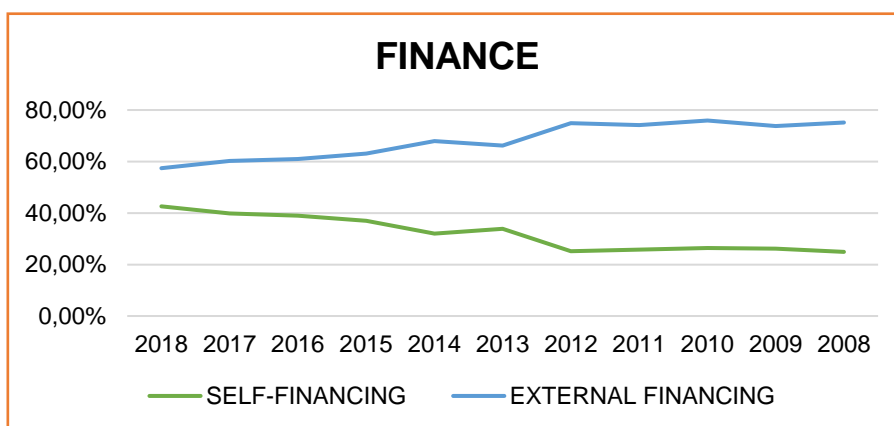


Figure 3: Finance of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

In the case of short-term financing, we see that the most significant item is debts with suppliers, and short-term debts with credit institutions, adding together about 97% of total current liabilities.

If we analyze the following graph, as of 2018, we can see that the net worth that has the greatest weight on the balance sheet is current asset, since it represents 72% of assets.

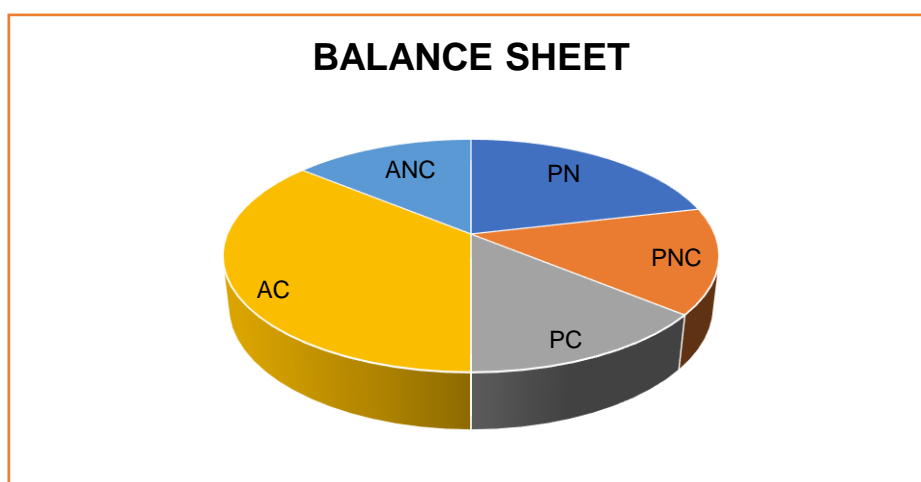


Figure 4: Distribution of Pamesa's balance sheet

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As we can analyze in the following graph, at the end of 2018, the working capital is positive, reaching a value of 146,505€. As we can see, non-current assets are fully financed with permanent resources and, in addition, they finance part of current assets, only a part of it is working capital, therefore, we can consider that Pamesa is in a situation of financial equilibrium. We calculate it with a difference between current assets and current liabilities.

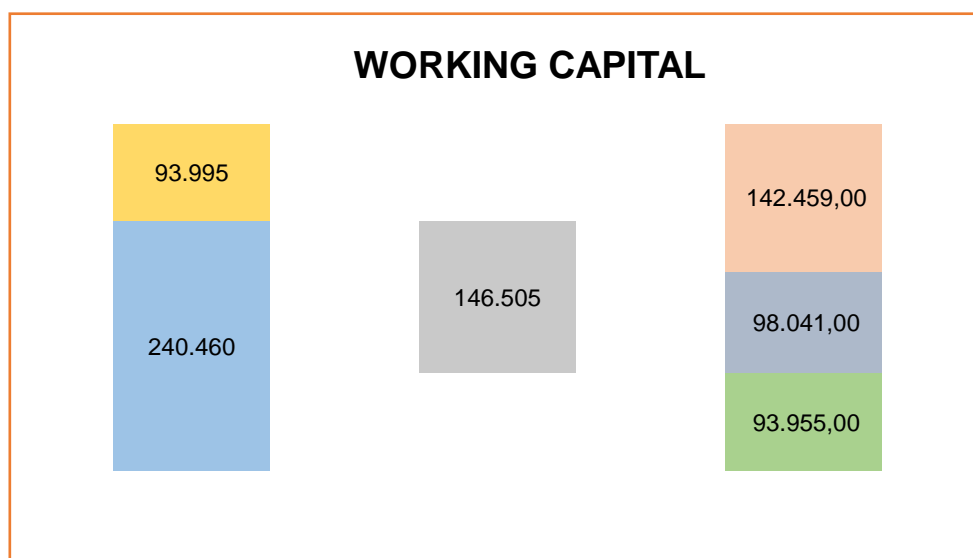


Figure 5: Working capital of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.1.3. ANALYSIS OF PROFITABILITY

As we have previously described, in this section ROA and ROE will be analyzed to clarify the evolution of the company through the following figure.

The ROA maintains a growing trend until reaching 2016, taking a value of 9.24%, the year from which it experiences a yield setback of about 3 percentage points, reaching 6.70% at the end of 2018. This means that, at the end of 2018, Pamesa was able to get a 6.7% return on each euro invested.

When observing an increase in the net amount of the turnover, it would be expected that the ROA would also increase, since in the first instance it makes us expect an increase in sales, but in this case, ROA is negatively affected, reducing its value. This reduction may have been due to an increase in costs, everything seems to indicate that it is due to a reduction in both the margin and the rotation.

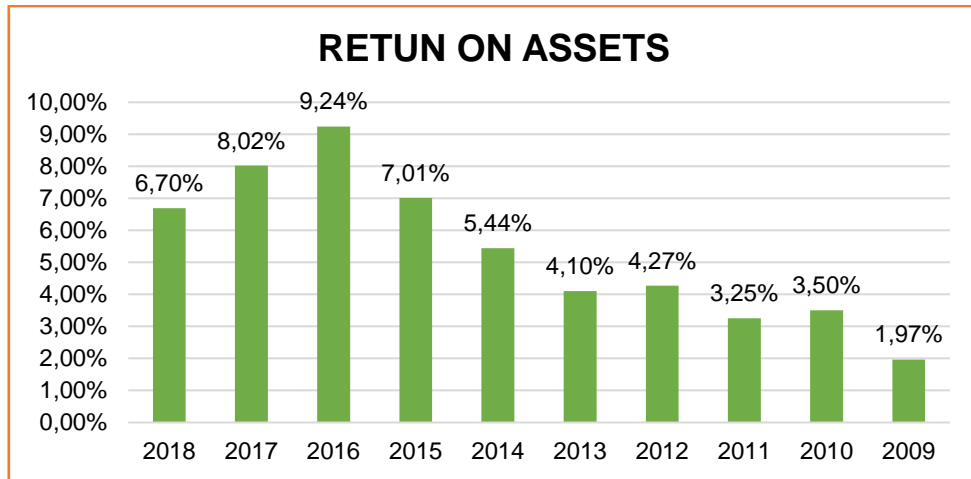


Figure 6: Return on Assets of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

On the contrary, in the case of ROE, we can see that it does not coincide with ROA since the company has debts. As a result, it will always be higher due to the leverage effect since we will not need as much assets to carry out the activity of the company. The financial return depends on the result of the year and the net equity

As we can see in the following graph, ROE follows the same trend as ROA, obtaining its highest result in 2016 with 22.66%, decreasing the figure to 15.30% at the end of 2018.

In this case, it is necessary to be very careful with these results, given that, as we mentioned earlier, leverage causes an increase in ROE compared to ROA, it is for this reason that in 2013 an upward trend began as it coincided with the first investments in the group.

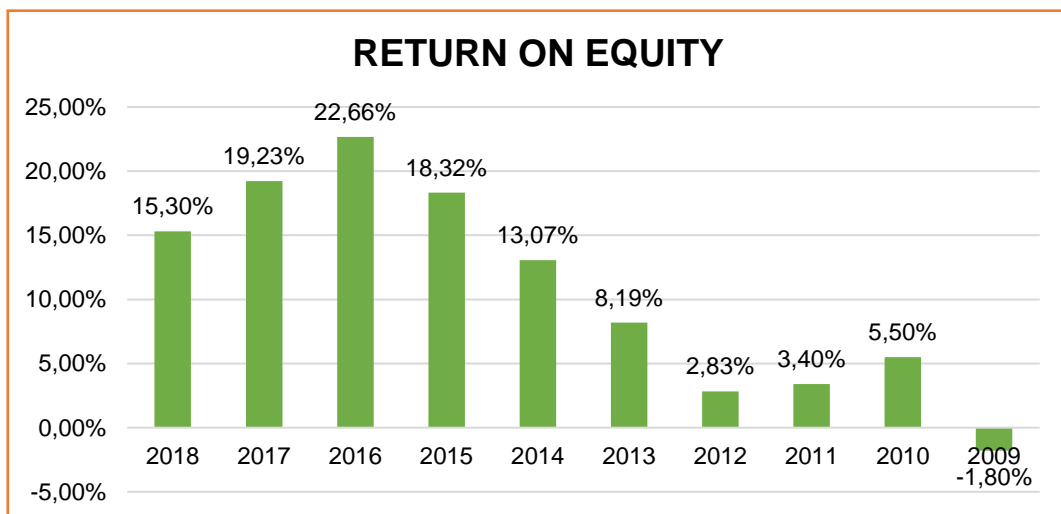


Figure 7: Return on Equity of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As ROE is higher than ROA, this means that the leverage margin is positive, and that the company has incentives to borrow because the return on assets is higher than the cost of financing.

The profitability threshold represents the amount of operating income from which fixed and variable operating expenses have been covered, and therefore a positive operating result has begun to be obtained.

In the case of Pamesa, the profitability threshold, as we can see in the following graph, the general trend line is increasing, especially in operating income, whose increase is around 100%. On the other hand, the case of financial expenses suffers a slight increase, but we could consider that their values are stable.

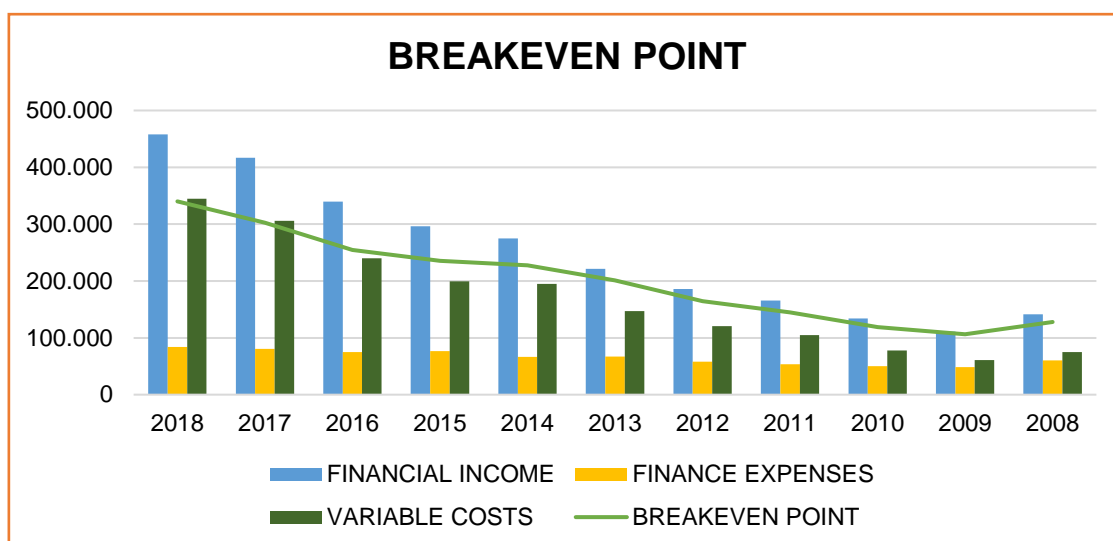


Figure 8: Breakeven point of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.1.4. FINANCIAL ANALYSIS

In the following graph we can see a comparison of this ratio in the short and long term, as the general trend of it. At first glance we can see how indebtedness has decreased significantly, especially from 2012. This has been caused by an exponential reduction of 200% during the period studied, compared to a less significant increase in liabilities of 36%. This increase in net worth is due to a greater extent to the reinvestment of the results for the year and, to a lesser extent, to the provision of voluntary reserves. Although the increase in reserves remains constant over time, in the case of the result for the year, the most significant increases are experienced from 2015, when the trend line is more pronounced, as we see in the graph.

In the specific case between 2012 and 2013, there is a reduction of almost 100% of this indebtedness caused by a decrease in liabilities of 17% and an increase in net equity of 26%.

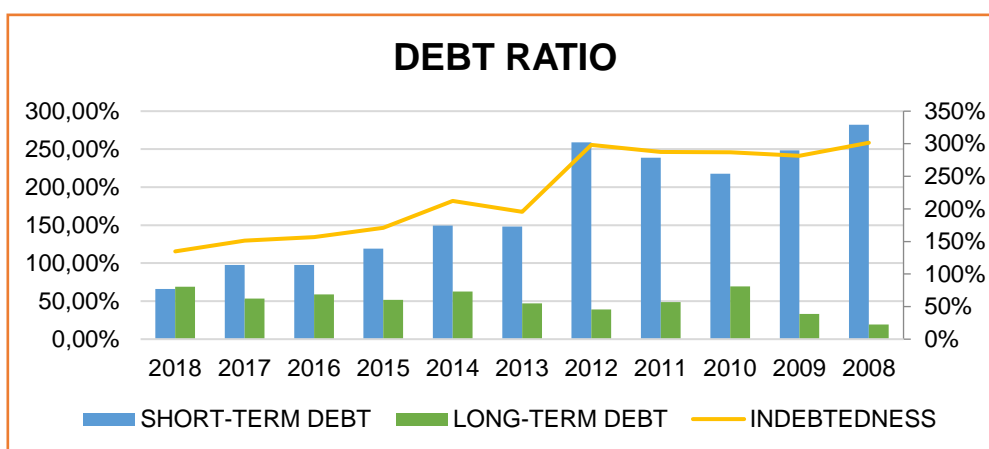


Figure 9: Debt ratio of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

On the other hand, we are going to analyze the storage period, which measures the number of days that our stocks remain in the warehouse until they are sold. We will also analyze the deadlines for collection from customers and payment to suppliers in days.

Pamesa presents some terms in which it is observed that with respect to the beginning of the study period, the storage period has been reduced, but later it has remained stable over time. Regarding payment and collection terms, we can see that the general trend has remained constant. At times when the payment term was longer than the payment term, the company was in an over-financing situation, otherwise, it was its suppliers that financed themselves with their operations, that is, the company was underfunded.

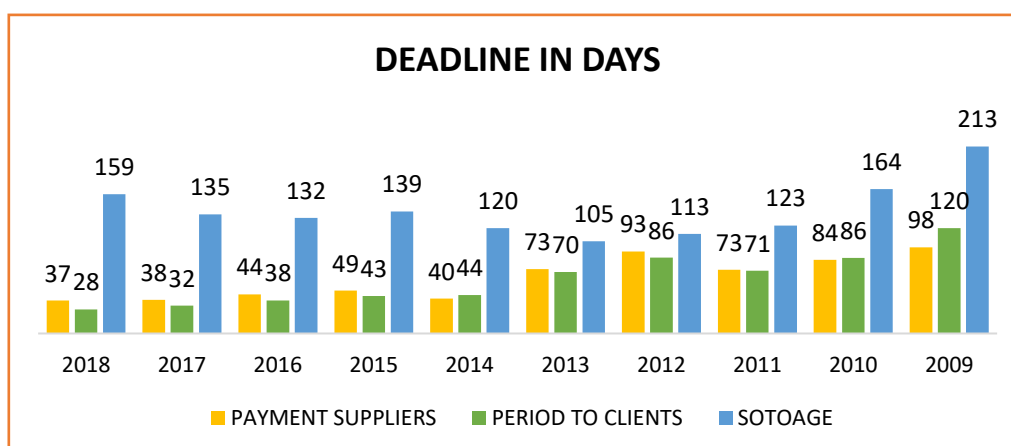


Figure 10: Deadline in days of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

Regarding the average maturity periods, both economic and financial, we can see that the trends are common, and that, at the end of 2018, the time elapsed since Pamesa invests one euro in the acquisition of raw materials until that euro is recovered through their payment for the sale of the product takes 186 days, while the time it takes for the company to recover the money invested when we buy the raw materials is 149 days.

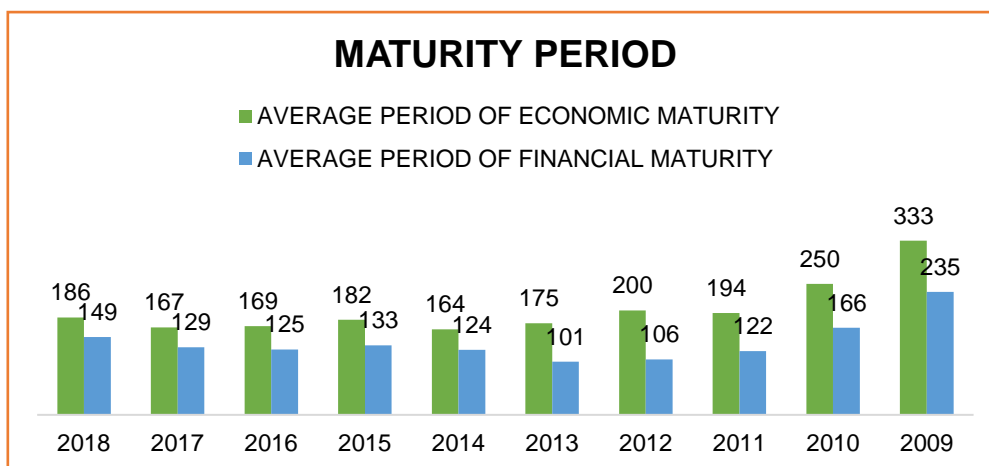


Figure 11: Maturity period of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As the APEM is longer than the payment term to suppliers, the company must finance the difference, for this, it seems that it has done so through a loan with group companies and for this reason, by increasing financial expenses, economic profitability has been negatively affected.

4.1.5. LIQUIDITY ANALYSIS

To carry out this analysis, first, we look at the current ratio, secondly, the quick ratio and finally the immediate liquidity.

In the case of Pamesa, we see how the quick ratio remains constant throughout the period studied, but it is still less than unit if we consider it as one, which means that the current liabilities are excessive and that the company should sell a portion of its stock to easily handle short-term debt.

Looking at the current ratio, it is chasing an upward trend as we go. Until 2014, the ratio was below 150%, this means that the company spent a good part of the period studied in a dangerous situation, as it was likely that there had been a suspension of payments to its creditors and suppliers. On the other hand, in the period from 2015 to 2017 we considered that the ratio was at an optimal level. On the contrary, in the year of closing its value exceeds 250%, which implies that the company has idle current assets,

meaning that these assets, mostly stocks, are unemployed without producing benefits, causing a loss of short-term profitability.

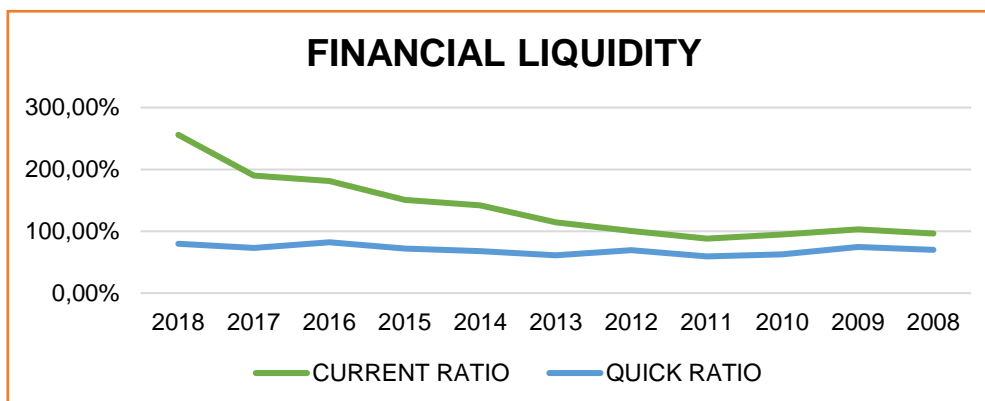


Figure 12: Financial liquidity of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

In the case of the immediate liquidity ratio, we measure the ability of the company's cash to cover short-term debts. As we can see in the following graph, and we have commented previously, during the first years studied, liquidity was very low, perhaps, because of the first effects of the 2008 economic crisis. This situation improved until stabilizing around 24% in these last two years.

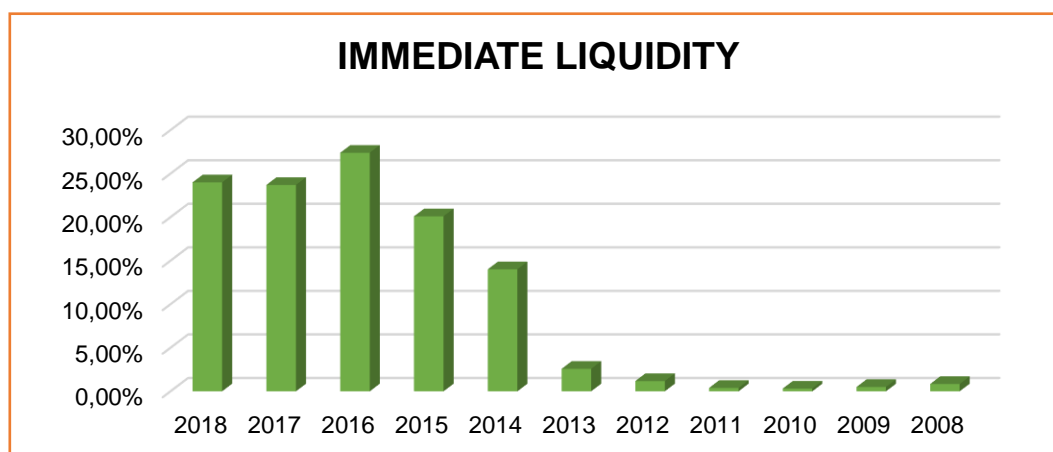


Figure 13: Immediate liquidity of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.1.6. RISK ANALYSIS

In this section, we will focus on the analysis of the z-score indicator. This indicator measures the probability of bankruptcy of the company, differentiating in its calculations whether it is publicly traded or not.

In the following graph we can see the evolution of this indicator throughout the period of our study.

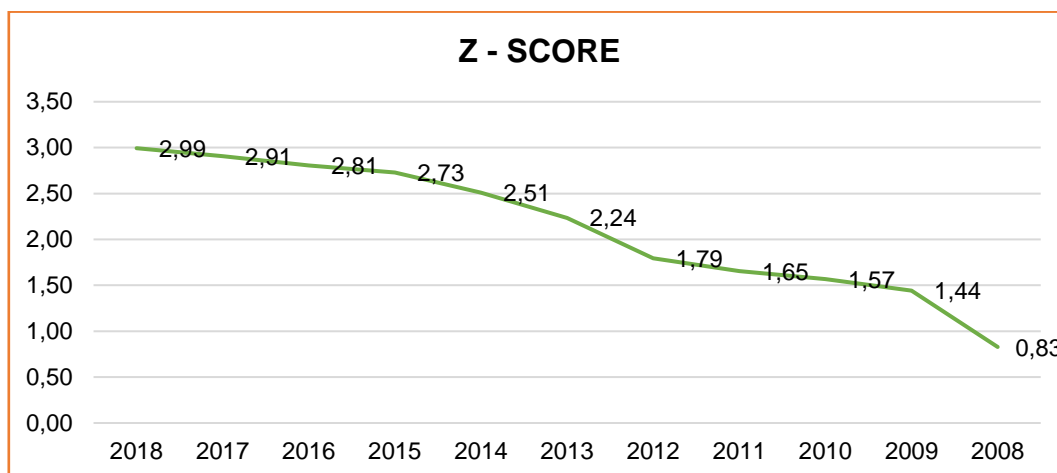


Figure 14: Z - Score of Pamesa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As in the previous indicators, we see how the probability of bankruptcy decreases as the z-score result increases. Only in the first year of our study can we consider that Pamesa was in a probable bankruptcy situation. From the results it is deduced that between 2009 and 2016 the result of this index was not conclusive, although the trend indicates that this probability was lower and lower. Finally, in the last two years of our study, we can consider that the company does not suffer from the probability of bankruptcy.

4.2. ARGENTA CERÁMICA

In this section both, the income statement and the balance sheet will be analysed. In order to carry it out in greater depth the analysis of the balance sheet will be divided in two parts. The economic structure corresponding to the balance sheet and the financial structure, corresponding to the liabilities and net. We will also carry out an analysis of its main returns, its liquidity, its solvency, and risk.

4.2.1. DESCRIPTIVE ANALYSIS OF THE INCOME STATEMENT

Tabla 4: Income Statement of Argenta

CUENTA DE PÉRDIDAS Y GANANCIAS											
EUROS	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
IMPORTE NETO DE LA CIFRA DE NEGOCIOS	188.788.026	179.149.095	164.377.599	150.010.849	106.544.728	100.800.343	98.009.769	86.640.351	67.019.101	51.074.898	50.895.608
VARIACIÓN DE EXISTENC DE PROD TERMIN Y EN CURSO	6.068.612	10.254.218	2.185.466	989.503	1.965.916	4.626.018	-1.196.870	5.093.913	586.050	-463.468	2.344.767
TRABAJOS REALIZADOS POR LA EMPRESA PARA SU ACTIVO	0	0	0	0	0	0	0	0	0	0	0
APROVISIONAMIENTOS	-112.787.399	-110.488.893	-95.995.156	-87.295.236	-63.093.772	-55.026.265	-55.998.168	-54.511.542	-39.495.278	-26.929.633	-29.586.687
OTROS INGRESOS DE EXPLOTACIÓN	1.274.934	404.722	288.740	46.600	127.202	52.797	34.159	141.237	118.614	38.334	378.590
GASTOS DE PERSONAL	-22.591.584	-16.828.746	-12.782.495	-12.185.801	-10.456.658	-10.282.443	-8.791.235	-9.034.983	-7.319.264	-6.729.920	-6.662.380
OTROS GASTOS DE EXPLOTACIÓN	-44.630.783	-39.782.531	-35.542.391	-35.893.469	-26.035.165	-28.782.301	-22.972.449	-18.044.036	-12.234.341	-10.081.571	-11.145.085
AMORTIZACIÓN DEL INMOVILIZADO	-8.253.392	-6.440.359	-5.418.340	-5.179.199	-5.390.662	-5.384.532	-4.243.385	-3.595.246	-3.011.423	-2.755.477	-2.663.734
IMPUTACIÓN DE SUBVENC DE INMOVILIZADO NO FINANC	2.011.975	771.530	544.364	529.442	433.495	324.365	31.758	31.758	31.758	31.758	31.758
EXCESOS DE PROVISIONES	0	84.066	0	0	0	0	0	0	0	0	0
DETERIORO Y RESULTADO POR ENAJENAC DEL INMOVILIZ	108.596	1.501.805	35.219	96.221	-77.515	48.061	-780	-4.073	0	9.528	6.010
DIFERENCIA NEGATIVA DE COMBINACIONES DE NEGOCIO	0	0	0	0	0	0	0	0	0	0	0
OTROS RESULTADOS	697.457	-1.396.918	263.619	391.846	247.348	155.684	81.225	54.212	29.693	12.727	0
RESULTADO DE LA EXPLOTACIÓN	10.666.523	17.227.990	18.036.625	11.510.755	4.264.909	6.611.728	4.954.024	6.861.592	5.724.911	4.207.175	3.598.847
INGRESOS FINANCIEROS	71.499	56.179	27.145	2.026	1.830	3.184	31.305	30.976	18.809	48.909	30.111
GASTOS FINANCIEROS	-2.144.558	-1.970.357	-2.019.010	-2.229.064	-2.506.495	-2.352.936	-2.331.973	-2.281.622	-1.473.556	-1.974.498	-2.130.840
VARIACIÓN DE VALOR RAZONABLE EN INSTR FINANCIEROS	0	57.580	-158.008	0	0	0	-8.274	-5.105	0	0	0
DIFERENCIAS DE CAMBIO	-56.371	-184.397	-76.960	62.691	9.452	-53.938	13.841	-38.429	24.159	-19.758	-31.090
DETERIORO Y RESULTADO POR ENAJENAC DE INST FINANC	-48.310	-666.251	-250.034	-66.131	0	-98.097	-29.495	-336.747	-16.134	n.d.	6.362
OTROS INGRESOS Y GASTOS DE CARÁCTER FINANCIERO	0	0	0	0	0	0	0	0	0	0	0
RESULTADO FINANCIERO	-2.177.741	-2.707.246	-2.476.867	-2.230.478	-2.495.214	-2.501.786	-2.324.596	-2.630.927	-1.446.722	-1.945.348	-2.125.457
RESULTADO ANTES DE IMPUESTOS	8.488.782	14.520.744	15.559.759	9.280.277	1.769.695	4.109.941	2.629.428	4.230.665	4.278.189	2.261.827	1.473.390
IMPUESTO SOBRE BENEFICIOS	-1.897.692	-3.363.789	-3.761.086	-2.398.388	-521.044	-829.665	-784.630	-1.269.200	-1.276.524	-647.271	-401.156
RESULTADO	6.591.091	11.156.955	11.798.672	6.881.889	1.248.651	3.280.276	1.844.798	2.961.466	3.001.665	1.614.555	1.072.235

Source: Sistema de Análisis de Balances Ibéricos.

Through the previous table of the profit and loss account, we can see that, at the end of 2018, Argenta obtained a turnover of 6.591.091 euros, which represents a reduction of 41% compared to the previous year.

The most significant expenses observed in the accounts of Argenta, during all the periods of our study, correspond to supplies and other operating expenses, representing around 60% and 23%, respectively, during the 10 years studied. If we look at the operating result, we see how it has maintained a growing trend until 2018, where it has decreased by 38%.

Regarding the result for the year, as we can see in the following graph how, although it has not suffered losses in any year, the result has suffered several fluctuations, remaining relatively stable until 2014, from when there is exponential growth, close to 850%, during the following two years, suffering a house reduction of up to half in 2018 compared to 2016.

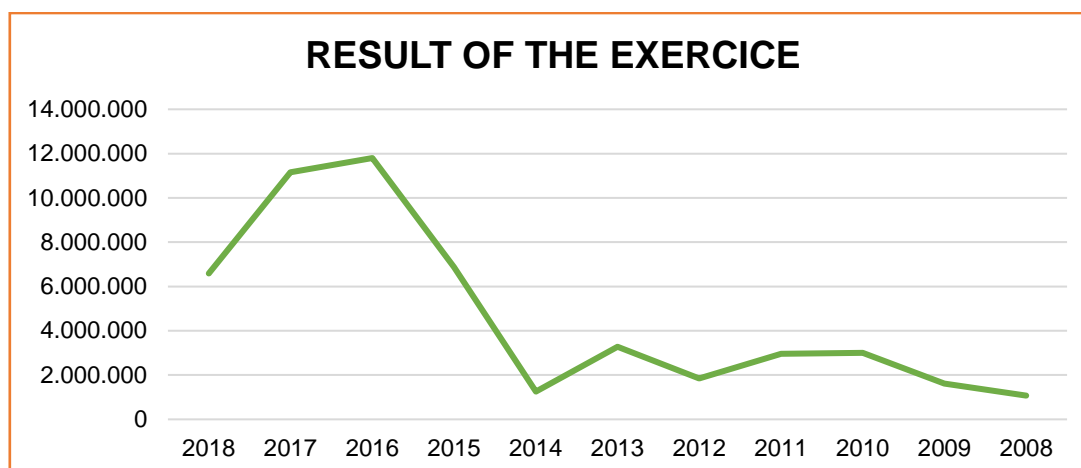


Figure 15: Result of the exercise of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.2.2. DESCRIPTIVE ANALYSIS OF THE BALANCE SHEET

ECONOMIC STRUCTURE

Table 5: Balance sheet of Argenta

BALANCE	ARGENTA CERAMICA SL										
	EUROS	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
A) ACTIVO NO CORRIENTE	87.539.468	73.985.349	48.680.177	40.351.946	38.970.844	41.119.112	35.343.920	29.939.541	30.107.123	22.999.912	25.374.624
INMOVILIZADO INTANGIBLE	128.453	78.002	49.213	631.060	444.750	324.899	54.581	96.239	32.170	34.174	10.502
INMOVILIZADO MATERIAL	85.005.150	71.798.993	46.728.984	38.859.456	37.494.527	39.587.799	33.831.870	29.276.410	28.949.864	21.145.870	23.321.653
INVERSIONES INMOBILIARIAS	151.941	0	0	0	0	0	0	0	0	0	0
INV. EMPRESAS GRUPO Y ASOC. A L.P.	1.677.693	905.900	50.000	126.000	50.000	0	0	309.336	352.678	343.766	0
INVERSIONES FINANCIERAS A L.P.	226.774	794.755	1.386.039	211.246	282.654	829.528	1.457.469	257.555	772.411	1.413.679	1.929.324
ACTIVOS POR IMPUESTO DIFERIDO	349.456	407.699	465.942	524.184	698.912	376.886	0	0	0	62.423	113.146
DEUDORES COMERCIALES NO CORRIENTES	0	0	0	0	0	0	0	0	0	0	0
B) ACTIVO CORRIENTE	160.835.878	149.452.784	115.150.351	88.153.142	73.916.322	67.867.394	61.491.406	63.698.408	45.870.375	36.158.161	36.083.370
ACTIVO NO CORRIENTE MANTENIDO PARA LA VENTA	0	0	0	0	0	0	0	0	0	0	0
EXISTENCIAS	49.711.088	44.712.943	33.017.032	28.751.127	29.285.630	23.757.512	17.529.771	20.581.018	15.824.754	12.313.837	11.848.202
DEUDORES COMERCIALES Y OTRAS CTAS COBRAR	81.338.972	78.259.764	67.076.113	54.097.739	42.012.048	41.364.611	38.948.677	41.900.410	28.641.344	22.825.264	23.413.564
Clientes (normales y del grupo)	76.663.707	74.959.467	63.708.971	52.127.968	40.482.341	37.883.069	36.797.401	40.342.407	27.836.146	22.323.162	23.350.716
Otros deudores comerciales	4.675.264	3.300.297	3.367.142	1.969.771	1.529.707	3.481.542	2.151.276	1.558.004	885.197	502.101	62.847
INVERSIONES EMP GRUPO Y ASOC. A CP	0	0	0	0	0	0	848.873	0	0	0	0
INVERSIONES FINANCIERAS A CP	2.394	3.515	0	47.326	614.734	69.234	72.561	290.448	610.302	729.179	460.091
PERIODIFICACIONES A CP	336.379	182.164	398.861	567.715	583.172	636.356	156.418	24.238	7.332	21.498	8.920
EFECTIVO Y OTROS ACTIVOS LIQUIDOS EQ.	29.447.045	26.294.399	14.658.345	4.689.236	1.420.738	2.039.682	3.935.104	902.293	786.644	268.383	352.594
TOTAL ACTIVO	248.375.346	223.438.134	163.830.528	128.505.089	112.887.165	108.986.505	96.835.326	93.637.948	75.977.498	59.158.073	61.457.995

Source: Sistema de Análisis de Balances Ibéricos.

As we can see, the evolution of the asset has been increasing throughout the period studied. As observed in the previous table, in the case of non-current assets, it is observed that the item of property, plant and equipment is practically all of it, representing more than 90% during the period studied, and kept growing throughout the period.

On the other hand, current assets also kept growing throughout the period, although the greatest variation occurred between 2010 and 2011, where the interannual variation was 39%. The items that have the most impact on current assets are collection rights from customers, representing between 50-60%, and inventories, representing around 30% throughout the period.

Another item that has suffered an exponential increase is short-term accruals, which have increased by 3671% between 2008 and 2018.

At the end of 2018, Argenta presented a total asset of 248.375.356 euros, of this amount, 65% corresponds to current assets, and 35% to non-current assets. These percentages have varied during the period, downwards in the case of non-current assets, and upwards in the case of current assets.

Moreover, regarding the global vision of assets, it should be noted that, although in 2009 there was a reduction in assets, the general trend is increasing, but it was from 2014 onwards that it began to grow exponentially.

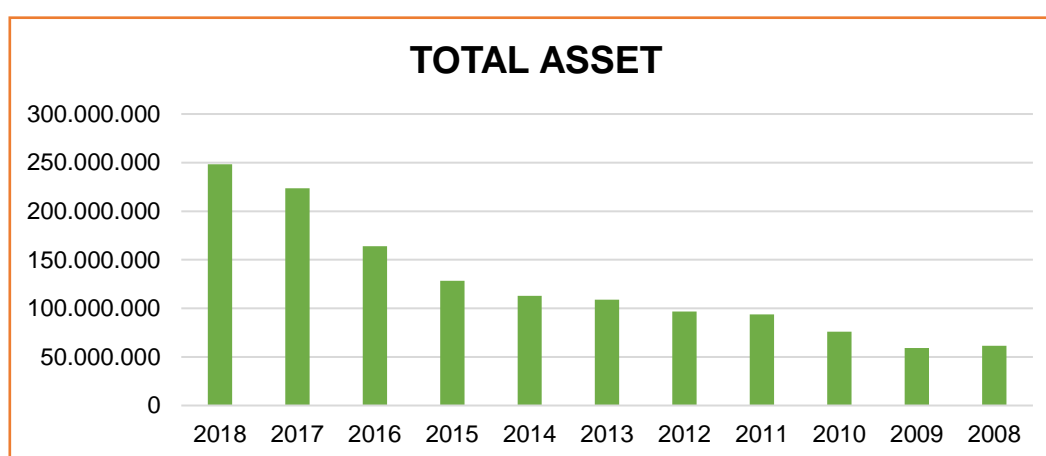


Figure 16: Total asset of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

FINANCIAL STRUCTURE

In the following table the evolution of the items that refer to the liabilities and net of the company can be observed.

Table 6: Balance sheet of Argenta

A) PATRIMONIO NETO	60.047.539	54.156.605	44.059.965	33.079.825	26.119.033	24.870.381	21.601.220	17.259.971	14.320.736	11.341.302	9.748.977
FONDOS PROPIOS	60.047.539	54.156.605	43.999.594	33.000.922	26.119.033	24.870.381	21.590.105	17.226.626	14.265.160	11.263.496	9.648.940
AJUSTES POR CAMBIOS DE VALOR	0	0	0	0	0	0	0	0	0	0	0
SUBVENCIONES, DONACIONES Y LEGADOS REC.	0	0	60.371	78.904	0	0	11.115	33.345	55.576	77.806	100.037
B) PASIVO NO CORRIENTE	58.441.451	59.912.594	27.379.537	19.140.962	17.745.498	21.175.745	18.676.851	19.548.066	16.822.121	11.137.591	12.535.137
PROVISIONES A LARGO PLAZO	0	1.440.547	461.066	0	0	175.186	175.186	325.186	0	0	0
DEUDAS A LARGO PLAZO	57.417.135	57.382.808	25.773.208	16.718.885	14.005.290	16.935.317	14.092.913	13.194.295	8.210.236	9.391.875	11.943.232
DEUDAS EMPRESAS GRUPO Y ASOC. A LP	0	0	0	1.175.000	1.975.000	1.975.000	1.975.000	3.375.000	7.106.250	975.000	0
PASIVOS POR IMPUESTO DIFERIDO	1.024.316	1.089.239	1.145.263	1.247.077	1.765.208	2.090.242	2.433.752	2.653.585	1.505.636	770.716	591.905
PERIODIFICACIONES A LP	0	0	0	0	0	0	0	0	0	0	0
ACREEDORES COMERCIALES NO CORRIENTES	0	0	0	0	0	0	0	0	0	0	0
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
C) PASIVO CORRIENTE	129.886.356	109.368.935	92.391.026	76.284.302	69.022.635	62.940.379	56.557.256	56.829.911	44.834.641	36.679.180	39.173.880
PASIVOS VINC. CON ACTIVOS N.C. MANT. VTA	0	0	0	0	0	0	0	0	0	0	0
PROVISIONES A CORTO PLAZO	2.013.554	774.025	544.364	529.442	433.495	308.487	0	0	0	0	0
DEUDAS A CORTO PLAZO	61.001.736	52.041.477	36.433.233	33.397.545	30.957.229	25.141.373	23.147.794	24.825.042	22.053.767	20.207.451	23.097.954
DEUDAS EMPRESA GRUPO Y ASOC. A CP	0	0	0	0	0	0	0	0	0	0	0
ACREEDORES COMERCIALES Y OTRAS C. PAGAR	66.071.066	55.753.432	55.413.429	42.357.315	37.631.911	37.490.519	33.409.462	32.004.868	22.780.873	16.471.730	16.075.926
Proveedores (normales y grupo)	44.543.633	41.244.025	33.718.321	23.518.423	22.982.888	22.982.625	20.060.894	22.057.435	15.775.189	12.231.838	10.811.281
Acreedores varios	21.527.433	14.509.407	21.695.108	18.838.892	14.649.023	14.507.894	13.348.568	9.947.433	7.005.684	4.239.891	5.264.645
PERIODIFICACIONES A CORTO PLAZO	0	0	0	0	0	0	0	0	0	0	0
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
TOTAL PATRIMONIO NETO Y PASIVO	248.375.345	223.438.133	163.830.528	128.505.089	112.887.165	108.986.506	96.835.326	93.637.948	75.977.498	59.158.073	61.457.995

When we look at Argenta's financial structure, it follows that, in terms of net worth, it is made up entirely of equity in most of the periods of our study, leaving the item of subsidies, donations and legacies in a background. These own funds item is mainly made up of voluntary reserves that Argenta has been increasing year after year.

On the other hand, regarding long-term financing, the company has maintained both self-financing and external financing constant over time, slightly increasing the latter throughout the period.

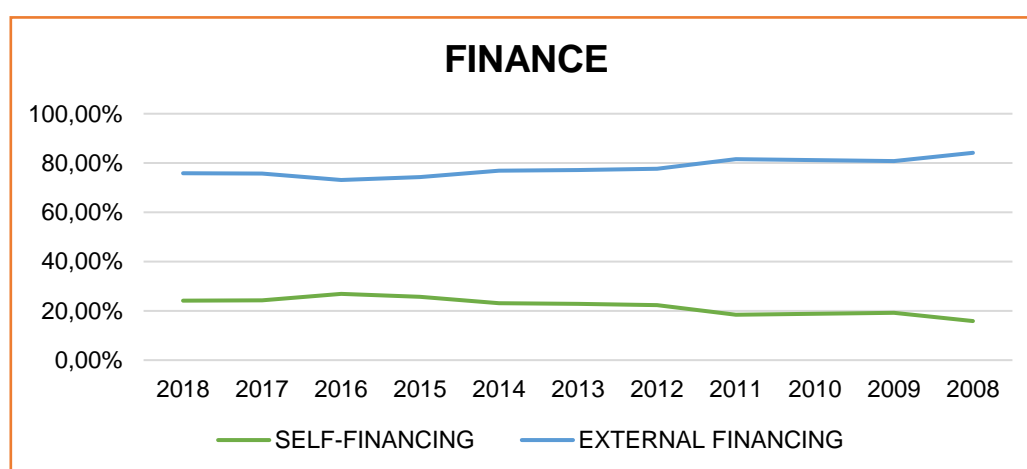


Figure 17: Finance of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

In the case of short-term financing, we see that the most significant loss is debts with credit institutions and debts with our suppliers, adding together between 75% and 99%, depending on the period.

If we analyze the following graph, as of 2018, we can see that the net worth that has the greatest weight on the balance sheet is current assets, representing 65% of total assets. Although it should be noted that, although to a lesser extent, current liabilities also constitute 52% of liabilities and net.

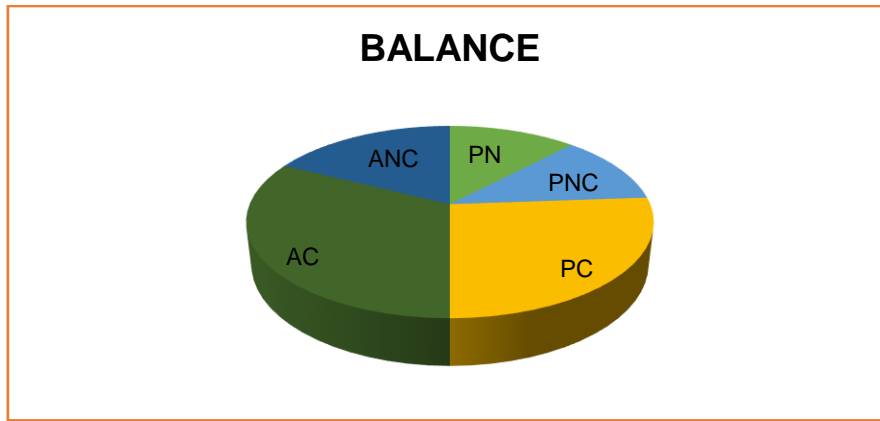


Figure 18: Balance sheet of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As seen in the following figure, at the end of 2018 the working capital is positive, reaching a value of 30,949,521 euros, as we can see, non-current assets are fully financed by permanent resources, and although the fund maneuver is not very high, we can say that Argenta is in a situation of financial balance. We calculate it as the difference between current assets and current liabilities.

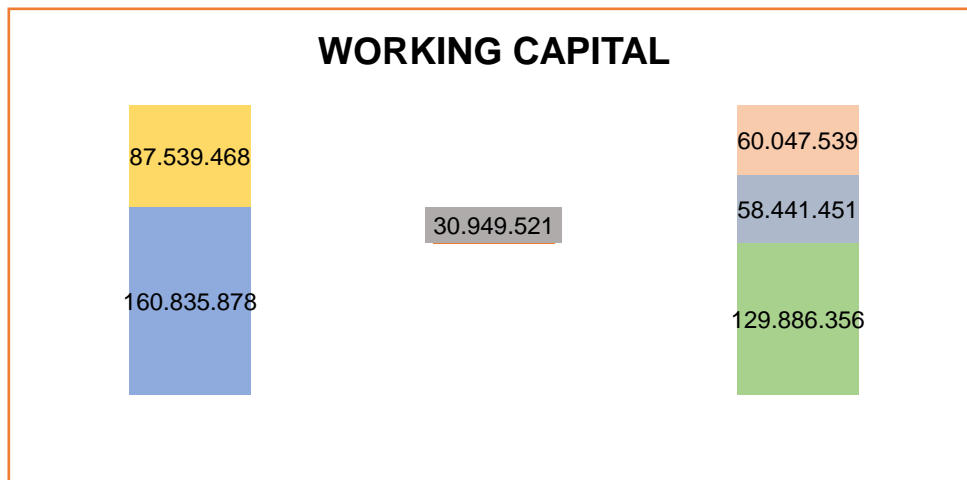


Figure 19: Working capital of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.2.3. ANALYSIS OF PROFITABILITY

As we have previously described, in this section ROA and ROE will be analyzed, to observe the evolution of the company through the following figure.

ROA maintains a slightly increasing trend globally but remains highly volatile throughout the period studied. Taking as maximum value for the period 9.12% in 2016 and as minimum value 2.72% in 2014. It should be noted that until 2013 it had remained

relatively constant with values, mainly around 5%. Observing the annual accounts, we can deduce that these variations are due to the fluctuations of the operating result, since the financial result remains around € 2.000.000 and € 2.500.000 throughout the period studied.

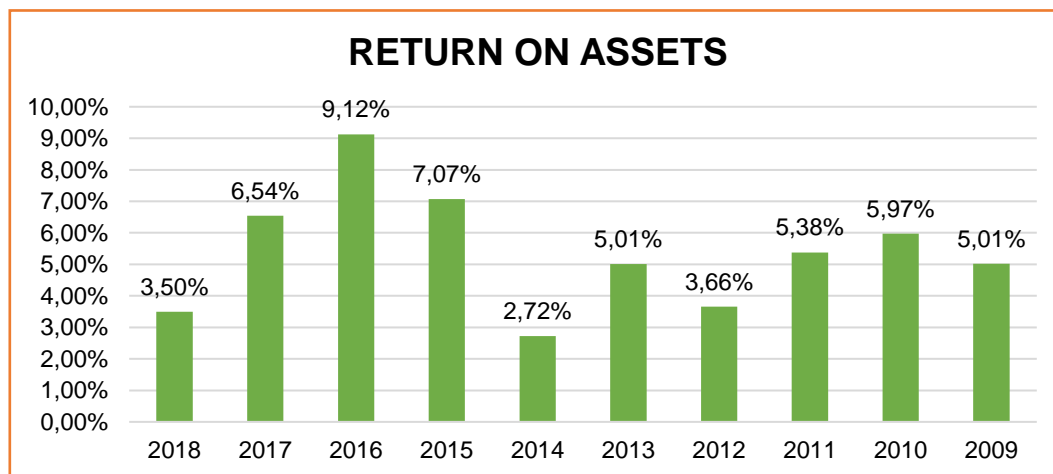


Figure 20: Return on assets of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

By contrast, in the case of ROE, we can see that it does not coincide with the ROA results since the company has debts, in addition, the result will always be higher due to the leverage effect, given that to carry out the usual activity of the company, we do not need as much assets.

As we can see in the following figure, ROE follows the same evolution as ROA, but with higher values. Reaching its peak in 2016 with a 30.59% return and decreasing to 11.54% at the end of 2018.

As in the case of Pamesa, with Argenta we must also be cautious with the data, as leverage increases the value of ROE. The annual accounts show that these fluctuations are mainly explained by the variations in the result for the year, since in the case of the average net worth it keeps increasing during all the periods.

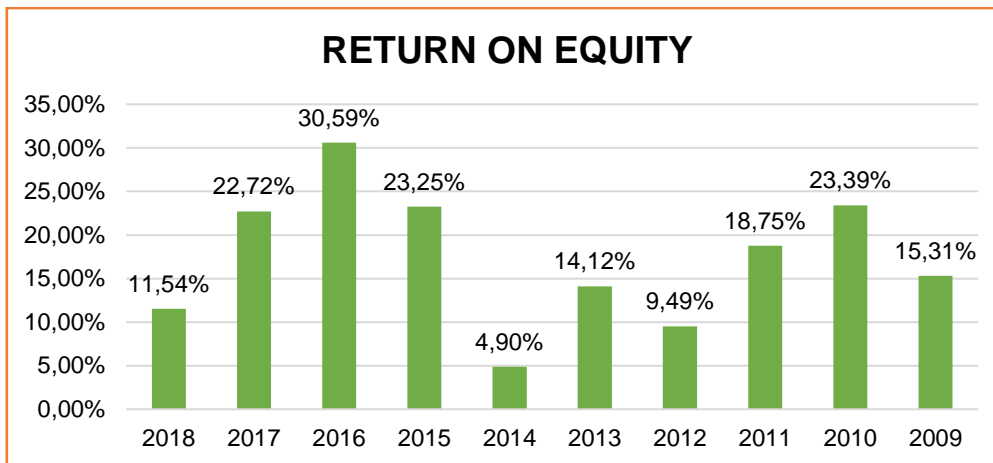


Figure 21: Return on equity of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

Since ROE is higher than ROA, it means that leverage is positive, and that the company has incentives to borrow since the return on assets is higher than the cost of financing.

In the case of Argenta, as we can see in the following graph, the general trend line is increasing throughout the period for the profitability threshold, especially in the case of operating income, whose increase is greater than 100. The rest of the magnitudes, although to a lesser extent all are increasing.

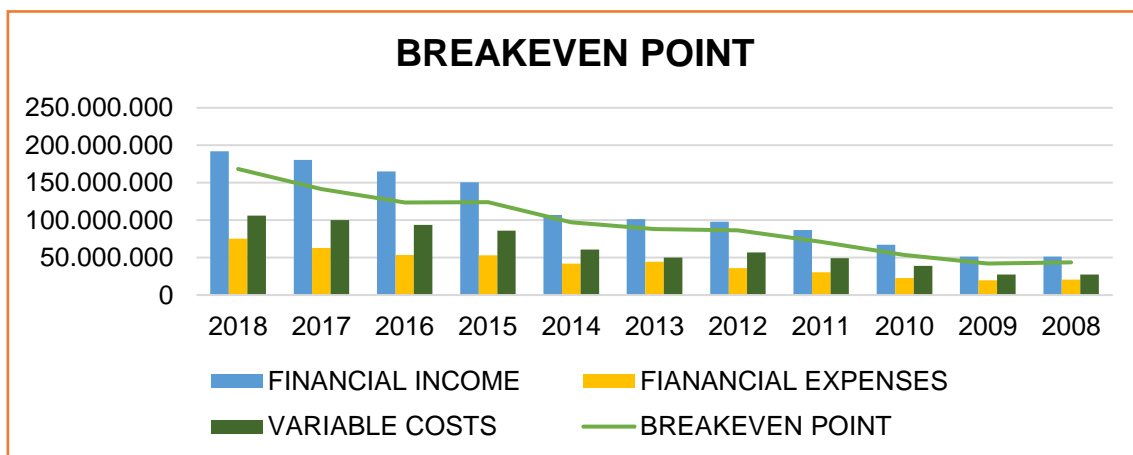


Figure 22: Breakeven point of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.2.4. FINANCIAL ANALYSIS

The following graph shows a comparison of this ratio in the short and long term, as well as the general trend. In the case of Argenta, at first glance we can see how debt, although it continues to rise, has been reduced significantly. Although this reduction in indebtedness is an illusion, since both short and long-term debts have been increasing

during the period studied, but the increase in own funds in a systematic way by the company has offset this ratio.

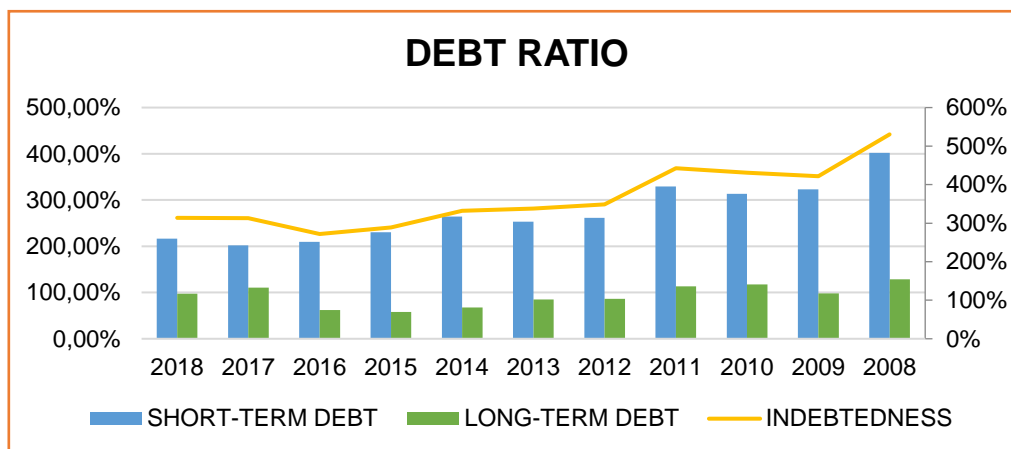


Figure 23: Debt ratio of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

On the other hand, regarding Argenta's terms, in the following graph we can see the payment, collection and storage terms.

Argenta presents some terms in which it is observed that all the magnitudes have remained relatively constant during the period studied. When analyzing the payment and collection terms, we can see that the general trend has also been constant. Given that in most of the periods the payment period has been longer than the collection period, it means that the company must finance the difference if it wants to pay its suppliers on time, except in 2012 when it was Argenta that financed itself at the expense of its suppliers.

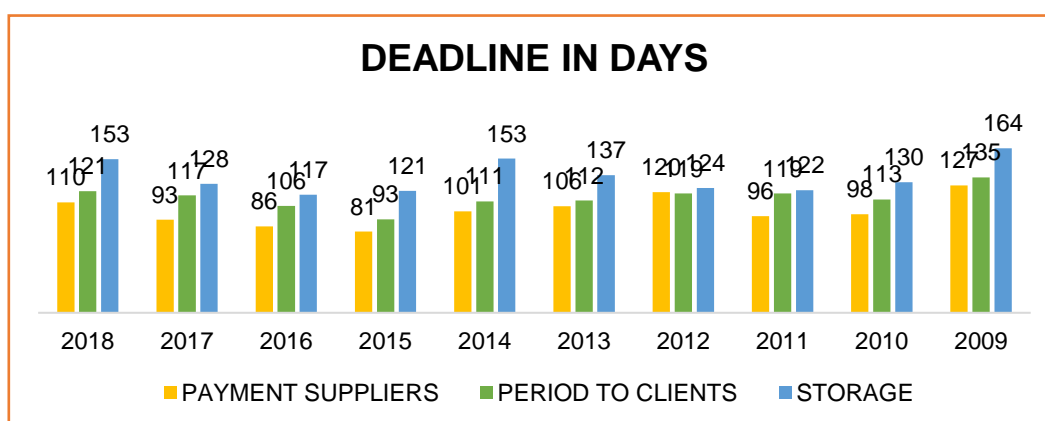


Figure 24: Deadline in days of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

On the other hand, regarding the average maturation periods, we can see that the trend of both magnitudes is constant during the period studied. As we can see in the following graph, from the time Argenta invests a euro in the acquisition of raw materials until it recovers that euro through its sale, it takes 274 days, while the time it takes for the company to recover the money invested when we buy raw materials is 164 days.

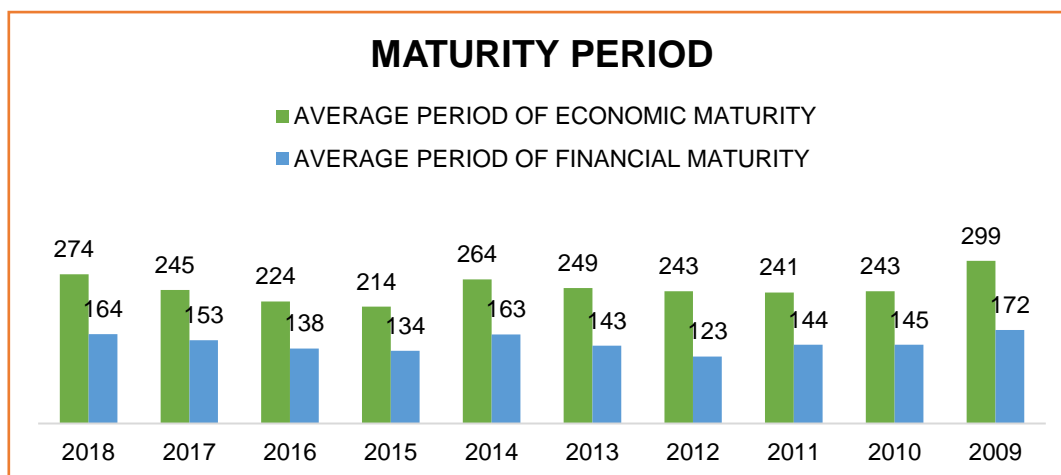


Figure 25: Maturity period of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

If we compare the average period of economic maturity with the term of payment to suppliers, since the payment term is much shorter, the company will have to finance the 164 days apart, that is, it will have liquidity needs. This fact could be one of the reasons why the company has high levels of indebtedness.

4.2.5. LIQUIDITY ANALYSIS

First, we will analyze the current ratio, secondly, the quick test and finally the immediate liquidity.

In the case of the quick test, we see that it remains constant throughout the period studied, but even so it is still less than 100%, that means that the current assets are excessive and that the company should sell a part of its stocks to support smooth short-term debts.

When observing the current ratio, we see that it remains constant below 150%, which means that the company is in a dangerous situation throughout the period studied, as it is likely to incur a suspension of payment to its creditors and suppliers. This would be justified by the results obtained with the average period of economic maturity, since the difference with the payment term is significant.

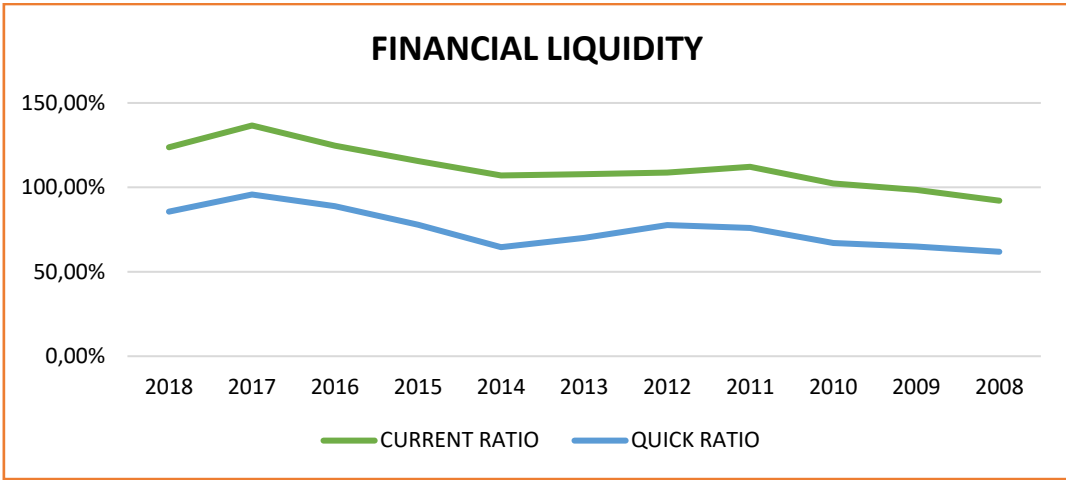


Figure 26: Financial liquidity of Argentina

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

In the case of immediate liquidity, we can see in the following graph, that during the first year's liquidity was very low, perhaps, because of the first effects of the 2008 economic crisis. This situation was improved when from 2015 onwards, it experienced an exponential increase, reaching its peak in 2017 with just over 24%.

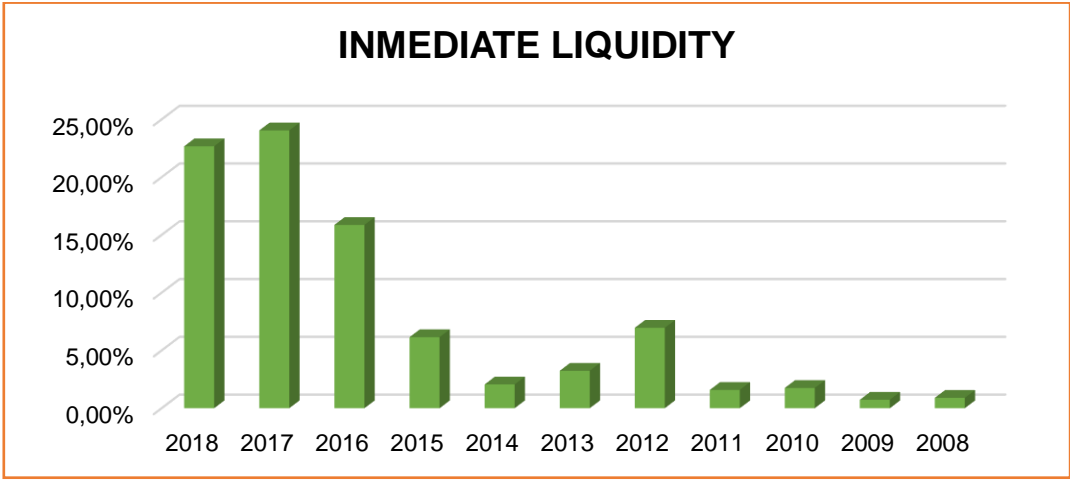


Figure 27: Immediate liquidity of Argentina

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.2.6. RISK ANALYSIS

In the following figure we can see how the probability of bankruptcy of Argentina has evolved according to the Z-score.

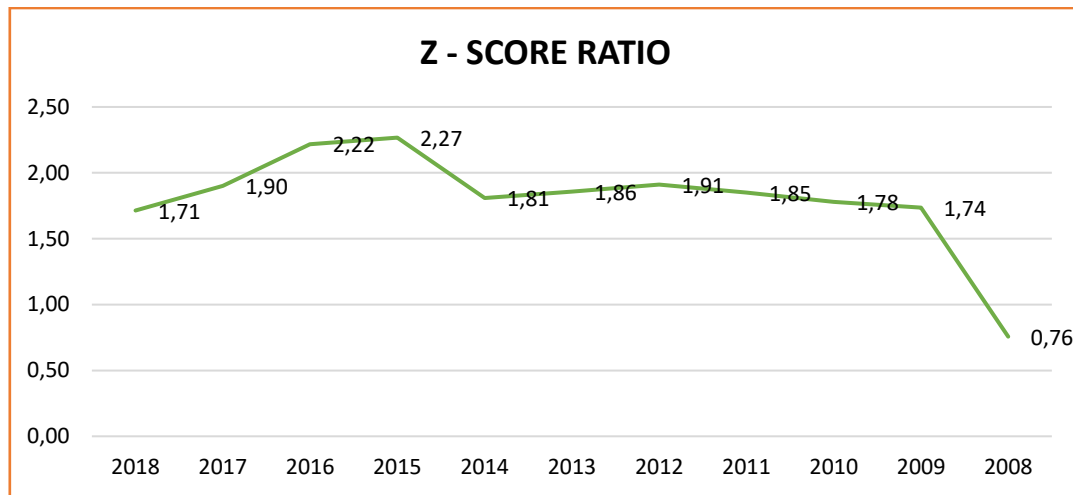


Figure 28: Z - Score ratio of Argenta

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As this company is not listed on the stock market, according to Altman's studies, we can highlight that the only year in which it had the probability of bankruptcy was in 2008, the following years according to the result obtained, and the results previously seen, the result of this ratio \neq would not be conclusive.

4.3. PORCELANOSA

In this section both, the income statement and the balance sheet will be analyzed. In order to carry it out in greater depth, the analysis of the balance sheet will be divided in two parts. The economic structure corresponding to the balance sheet and the financial structure, corresponding to the liabilities and net. We will also carry out an analysis of its main returns, its liquidity, its solvency, and risk.

4.3.1. DESCRIPTIVE ANALYSIS OF THE INCOME STATEMENT

Table 7: Income statement of Porcelanosa

CUENTA DE PÉRDIDAS Y GANANCIAS	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
EUROS											
IMPORTE NETO DE LA CIFRA DE NEGOCIOS	170.199.832	175.541.598	175.905.470	170.149.476	156.534.785	151.048.752	144.735.000	130.242.963	138.553.905	126.627.181	179.898.879
VARIACIÓN DE EXISTENC DE PROD TERMIN Y EN CURSO	2.674.862	2.525.378	-371.211	-814.420	-485.109	1.380.665	-3.103.112	1.140.555	-5.258.856	-2.592.130	9.122.927
TRABAJOS REALIZADOS POR LA EMPRESA PARA SU ACTIVO	986.522	781.694	297.723	342.292	241.296	173.364	287.386	116.241	304.376	390.597	605.158
APROVISIONAMIENTOS	-48.315.034	-38.627.719	-33.061.646	-34.290.139	-35.702.102	-35.334.537	-30.668.437	-27.239.312	-27.622.222	-25.001.752	-40.203.390
OTROS INGRESOS DE EXPLOTACIÓN	3.765.858	2.989.695	3.133.242	3.865.018	3.710.670	4.435.376	4.478.249	4.156.668	4.226.093	4.894.339	6.711.830
GASTOS DE PERSONAL	-33.749.395	-33.682.261	-32.454.322	-32.829.688	-32.574.484	-31.981.100	-32.149.989	-32.920.403	-33.723.992	-36.626.686	-41.884.733
OTROS GASTOS DE EXPLOTACIÓN	-56.749.307	-54.679.130	-55.681.902	-58.137.850	-52.427.690	-35.948.576	-36.733.579	-36.526.738	-37.625.636	-39.918.418	-52.896.255
AMORTIZACIÓN DEL INMOVILIZADO	-10.864.175	-10.560.489	-10.862.625	-11.049.828	-9.427.384	-10.369.594	-8.198.485	-9.286.112	-10.162.074	-13.104.373	-16.452.414
IMPUTACIÓN DE SUBVENC DE INMOVILIZADO NO FINANC	478.274	370.386	408.665	540.012	336.071	41.582	47.925	1.122	1.251	0	0
EXCESOS DE PROVISIONES	0	0	0	0	0	0	0	0	0	0	0
DETERIORO Y RESULTADO POR ENAJENAC DEL INMOVILIZ	-82.522	-586.354	-2.616.219	55.307	801.723	-17.432	-48.346	-424.508	91.967	-96.578	130.448
DIFERENCIA NEGATIVA DE COMBINACIONES DE NEGOCIO	0	0	0	0	0	0	0	0	0	0	0
OTROS RESULTADOS	-78.548	-846.338	-72.736	-113.031	-108.669	163.220	-225.784	224.802	315.397	814.365	-218.844
RESULTADO DE LA EXPLOTACIÓN	28.265.567	43.218.461	43.424.440	37.717.227	30.899.108	43.591.659	38.420.768	29.484.678	29.100.208	14.506.546	43.927.678
INGRESOS FINANCIEROS	178.700	701.000	878.133	1.158.331	107.376	34.501	86.731	147.584	139.370	36.236	216.150
GASTOS FINANCIEROS	-67.415	-182.455	-152.752	-826.701	-1.794.118	-2.242.713	-2.929.931	-2.695.388	-1.656.632	-2.596.879	-5.057.065
VARIACIÓN DE VALOR RAZONABLE EN INSTR FINANCIEROS	0	134.798	-180.015	0	491.469	118.933	-426.796	-315.601	130.955	-461.823	-676.238
DIFERENCIAS DE CAMBIO	126.879	-845.537	-577.859	816.060	888.289	-213.544	-106.705	314.481	193.190	-54.019	-360.271
DETERIORO Y RESULTADO POR ENAJENAC DE INSTR FINANCIEROS	-3.057.897	2.322.024	-1.810.050	6.542.281	-686.891	-14.301.416	-18.869.878	-16.925.248	-17.268.496	-8.759.782	-20.697.312
OTROS INGRESOS Y GASTOS DE CARÁCTER FINANCIERO	0	0	0	0	0	0	0	0	0	0	0
RESULTADO FINANCIERO	-2.818.933	2.129.830	-1.842.543	7.689.971	-993.875	-16.604.239	-22.246.578	-19.474.172	-18.461.612	-11.836.266	-26.574.736
RESULTADO ANTES DE IMPUESTOS	25.446.634	45.348.291	41.581.897	45.407.198	29.905.233	26.987.419	16.174.190	10.010.506	10.638.596	2.670.280	17.352.942
IMPUESTO SOBRE BENEFICIOS	-9.178.539	-12.955.318	-12.560.132	-10.350.328	-9.477.505	-11.243.791	-4.809.122	-2.478.048	-2.994.713	-256.155	-4.797.500
RESULTADO	16.268.095	32.392.973	29.021.766	35.056.870	20.427.727	15.743.628	11.365.068	7.532.457	7.643.882	2.414.125	12.555.361

Source: Sistema de Análisis de Balances Ibéricos

If we look at the table above, we can see that, at the end of 2018, Porcelanosa obtained a turnover of 179.199.832 euros, which is 3% less than the previous year.

The most significant expenses observed throughout the period studied in Porcelanosa's accounts correspond to other operating expenses, representing close to 30% of the net amount of the turnover, followed by the costs of provisioning, representing between 25% and 30% during the study period.

If we analyze the result for the year, as we can see in the following graph, there is a drop in the results between 2008 and 2009, probably due to the burst of the real estate bubble of 2008. Then, there is a season of expansion until 2015, during these years the result increased by just over 30 million euros. Starting in 2015, a downward trend continues, reducing the result at the end of 2018 by nearly 20 million.

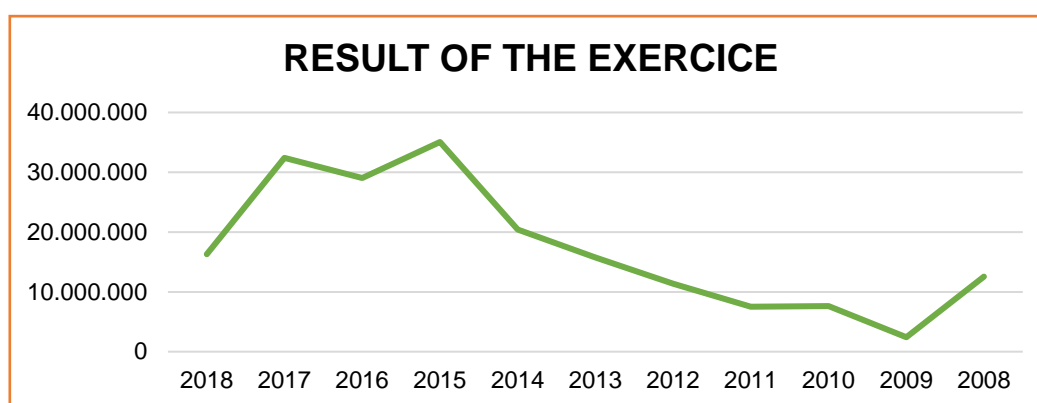


Figure 29: Result of the exercise of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.3.2. DESCRIPTIVE ANALYSIS OF THE BALANCE SHEET

ECONOMIC STRUCTURE

Table 8: Balance sheet of Porcelanosa

BALANCE	POCELANOSA SA										
	EUROS	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
A) ACTIVO NO CORRIENTE	357.212.300	313.424.096	289.275.969	297.522.202	286.016.277	271.992.195	270.617.356	266.376.750	256.647.668	260.376.356	273.277.289
INMOVILIZADO INTANGIBLE	755.360	269.310	479.482	1.769.592	1.046.695	847.707	1.037.585	1.301.797	2.018.525	2.254.359	2.318.046
INMOVILIZADO MATERIAL	162.174.491	121.876.031	105.120.538	106.221.495	106.627.581	105.704.716	109.899.514	112.472.682	116.189.101	122.887.687	131.915.971
INVERSIONES INMOBILIARIAS	2.967.988	544.248	548.363	551.455	553.512	555.570	557.627	559.684	561.742	563.799	576.932
INV. EMPRESAS GRUPO Y ASOC. A L.P.	188.721.404	188.025.912	180.220.229	181.780.402	169.929.357	157.862.642	149.381.324	143.158.654	128.044.625	128.479.239	132.030.240
INVERSIONES FINANCIERAS A L.P.	2.219.999	2.201.959	2.201.959	2.220.034	2.221.959	2.220.429	2.197.413	3.866.372	4.129.742	2.648.703	2.562.105
ACTIVOS POR IMPUESTO DIFERIDO	373.059	506.636	705.398	4.979.224	5.637.174	4.801.132	7.543.894	5.017.562	5.703.933	3.542.568	3.873.996
DEUDORES COMERCIALES NO CORRIENTES	0	0	0	0	0	0	0	0	0	0	0
B) ACTIVO CORRIENTE	77.866.285	86.554.665	77.727.346	69.446.116	91.869.585	88.211.730	68.753.681	68.621.768	66.776.003	69.361.775	90.384.129
ACTIVO NO CORRIENTE MANTENIDO PARA LA VENTA	755.000	0	75.684	756.840	0	0	0	0	0	0	0
EXISTENCIAS	37.737.869	34.797.278	30.854.976	30.561.258	31.966.897	32.478.969	32.448.535	34.905.915	32.805.988	37.548.857	40.179.803
DEUDORES COMERCIALES Y OTRAS CTAS COBRAR	38.953.293	41.697.311	37.218.393	37.570.351	39.100.624	35.098.613	36.227.329	31.720.604	33.333.977	31.652.896	43.828.278
Clientes (normales y del grupo)	32.225.743	36.103.557	33.147.801	33.652.838	34.115.398	32.964.006	33.709.787	31.043.365	32.973.307	31.152.161	42.857.562
Otros deudores comerciales	6.727.551	5.593.754	4.070.592	3.917.513	5.065.226	2.134.607	2.517.543	677.239	360.670	500.735	970.716
INVERSIONES EMP GRUPO Y ASOC. A CP	84.689	59.658	56.138	98.213	0	0	10.573	103	103	235	132
INVERSIONES FINANCIERAS A CP	165.874	9.837.825	9.358.290	277.747	20.612.660	20.232.843	42.487	1.972.382	602.403	132.841	6.356.888
PERIODIFICACIONES A CP	0	0	0	22.311	0	2.498	0	0	5.862	3.000	1.358
EFECTIVO Y OTROS ACTIVOS LIQUIDOS EQ.	169.479	162.593	163.865	159.395	109.404	398.808	24.756	22.764	27.671	23.946	17.671
TOTAL ACTIVO	435.078.585	399.978.761	367.003.315	366.968.317	377.885.863	360.203.925	339.371.037	334.998.519	323.423.671	329.738.130	363.661.418

Source: Sistema de Análisis de Balances Ibéricos

If we look at Porcelanosa's assets, we can see how its global tenure has been increasing throughout our study. Upon closer analysis of non-current assets, we see that it represents slightly more than 80% of total assets, and that the most relevant item is long-term investments in the group, which represent slightly more than 50% of this item, thus remaining the entire period. The second item with more weight is property, plant, and equipment, mainly land and buildings, maintaining its levels around 40% in all periods.

On the other hand, if we look at current assets, we see that their weight within assets is practically derisory, since it does not reach 20%. If we look carefully at the distribution of weights among this patrimonial mass, we see that it is mainly made up of stocks and collection rights against clients.

If we focus on the horizontal variations of the items, we see that the most significant ones have occurred in the short-term investments in group investments, being very varied at the beginning, but stabilizing in the last years of our study. Secondly, we find short-term real estate investments and cash, with variations of 47,521% in 2013 due to an increase of 20 million euros compared to 2012. And, thirdly, we find a variation of 1,511% in the cash item in 2013, with an increase of more than 370 thousand euros compared to 2012.

If we look at the following figure, we obtain a global vision of the evolution of Porcelanosa's total assets, where we deduce that its trend is increasing, although it should be noted that it remains relatively stable during the period.

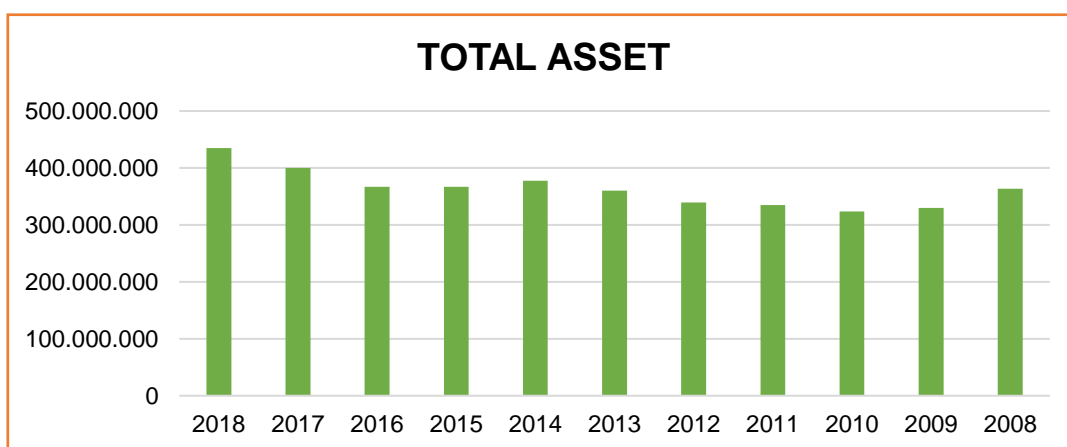


Figure 30: Total asset of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

FINANCIAL STRUCTURE

Table 9: Balance sheet of Porcelanosa

A) PATRIMONIO NETO	365.456.954	356.660.727	331.581.423	309.647.962	278.578.464	260.638.105	251.353.136	242.254.666	237.945.939	232.721.592	232.704.783
FONDOS PROPIOS	364.602.924	355.896.629	330.907.161	309.143.544	278.119.634	260.212.507	250.662.683	241.818.216	237.620.259	232.503.176	232.615.851
AJUSTES POR CAMBIOS DE VALOR	0	0	0	0	0	0	0	0	0	0	0
SUBVENCIONES, DONACIONES Y LEGADOS REC.	854.030	764.097	674.262	504.418	458.830	425.598	690.452	436.450	325.681	218.416	88.932
B) PASIVO NO CORRIENTE	16.612.518	3.575.310	3.135.421	24.853.609	48.775.725	66.943.150	59.949.332	71.187.457	61.215.067	74.260.478	98.344.576
PROVISIONES A LARGO PLAZO	0	0	0	0	0	0	0	0	0	0	0
DEUDAS A LARGO PLAZO	14.987.883	1.802.512	1.970.294	23.550.388	46.967.236	64.975.921	57.464.247	70.574.222	60.497.321	73.631.545	83.951.521
DEUDAS EMPRESAS GRUPO Y ASOC. A LP	0	0	0	0	0	0	0	0	0	0	0
PASIVOS POR IMPUESTO DIFERIDO	825.223	973.386	1.165.126	1.303.222	1.808.489	1.967.229	2.371.833	487.762	445.585	404.909	354.711
PERIODIFICACIONES A LP	0	0	0	0	0	0	0	0	0	0	0
ACREEDORES COMERCIALES NO CORRIENTES	799.412	799.412	0	0	0	0	0	0	0	0	0
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
C) PASIVO CORRIENTE	53.009.033	39.742.724	32.286.471	32.466.746	50.531.673	32.622.670	28.068.569	21.556.396	24.262.665	22.756.060	32.612.059
PASIVOS VINC. CON ACTIVOS N.C. MANT. VTA	0	0	0	0	0	0	0	0	0	0	0
PROVISIONES A CORTO PLAZO	441.671	478.677	378.455	516.021	294.490	293.836	0	0	0	0	0
DEUDAS A CORTO PLAZO	12.376.411	3.752.441	2.738.744	3.361.686	6.309.123	3.609.609	4.207.485	3.728.170	3.664.574	2.770.822	6.031.915
DEUDAS EMPRESA GRUPO Y ASOC. A CP	165.704	23.562	241.444	0	627.315	3.922.752	0	0	0	0	0
ACREEDORES COMERCIALES Y OTRAS C. PAGAR	40.025.247	35.488.044	28.927.827	28.589.039	43.300.745	24.796.472	23.861.084	17.828.226	20.598.091	19.985.238	26.580.144
Proveedores (normales y grupo)	11.950.641	10.360.275	6.936.174	7.525.549	9.168.727	9.023.379	7.954.282	5.125.957	5.434.407	6.346.466	7.528.716
Acreedores varios	28.074.607	25.127.769	21.991.653	21.063.489	34.132.018	15.773.093	15.906.803	12.702.269	15.163.684	13.638.772	19.051.428
PERIODIFICACIONES A CORTO PLAZO	0	0	0	0	0	0	0	0	0	0	0
DEUDA CON CARACT. ESPECIALES A LP	0	0	0	0	0	0	0	0	0	0	0
TOTAL PATRIMONIO NETO Y PASIVO	435.078.505	399.978.761	367.003.315	366.968.317	377.885.863	360.203.925	339.371.037	334.998.519	323.423.671	329.738.130	363.661.418

Source: Sistema de Análisis de Balances Ibéricos

When analyzing Porcelanosa's financial structure, the first thing we observe is that net equity represents 84% of total liabilities and net, while non-current liabilities represent 4%, and current liabilities 12%.

We will first analyze net worth. We note that it is made up entirely of own funds, since the amount corresponding to the subsidies is irrelevant. Own funds are mainly made up of voluntary reserves that are increasing every year.

On the other hand, if we analyze current and non-current liabilities, we see that except in 2018, the trend in financing, both short and long, has been decreasing. But, if we analyze the self-financing and external financing ratios, we see how on the one hand both remain constant until 2014. From that year, self-financing increases, and external financing decreases, until reaching 2018, where Porcelanosa closes the year with 84% self-financing and 16% financing by third parties.

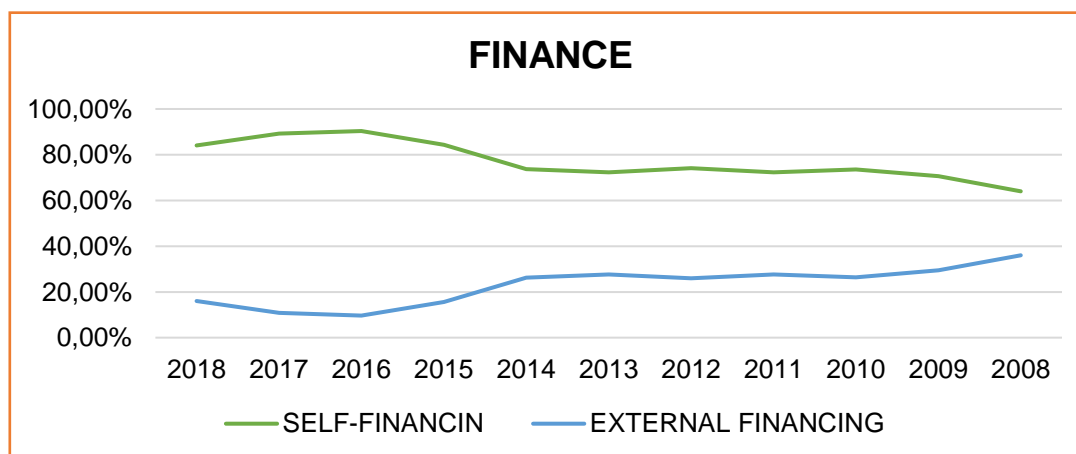


Figure 31: Finance of Porcelanosa

If we focus on the debts that Porcelanosa has in the short term, we observe that they are mainly debts with suppliers and debts with credit institutions, representing 76% and 23% respectively.

If we analyze the following pie chart about the distribution of the balance sheet, we can more easily see that the most significant items with net equity and non-current assets, leave the rest of the items in the background, especially non-current liabilities.

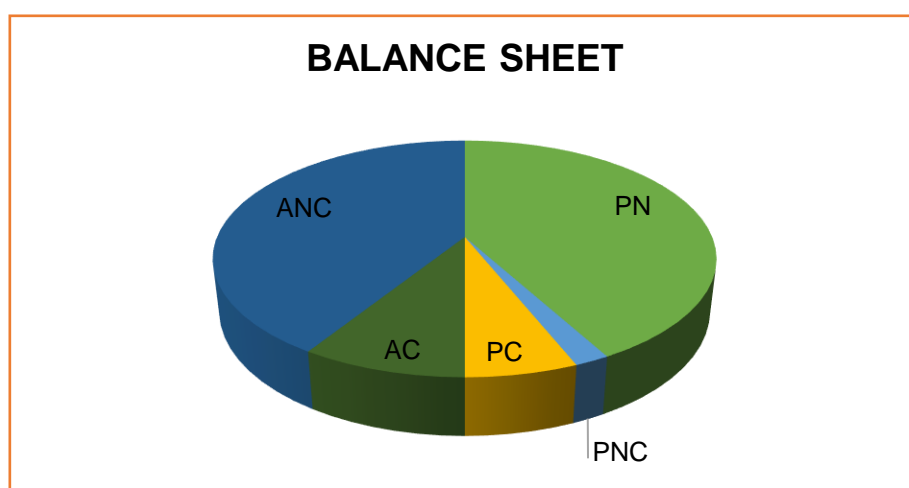


Figure 32: Balance sheet of Porcelanosa

As for the working capital, as we can see in the following figure, at the end of 2018 Porcelanosa's working capital was positive with a value of 24.857.172 euros. As we can see, non-current assets are financed entirely by own funds and a very small part by non-current liabilities. Although the working capital is not a very high value, with respect to the figures presented by the company, we could deduce that Porcelanosa is in a situation of financial equilibrium. It should also be noted that the entire total amount of the liabilities could be covered by current assets.

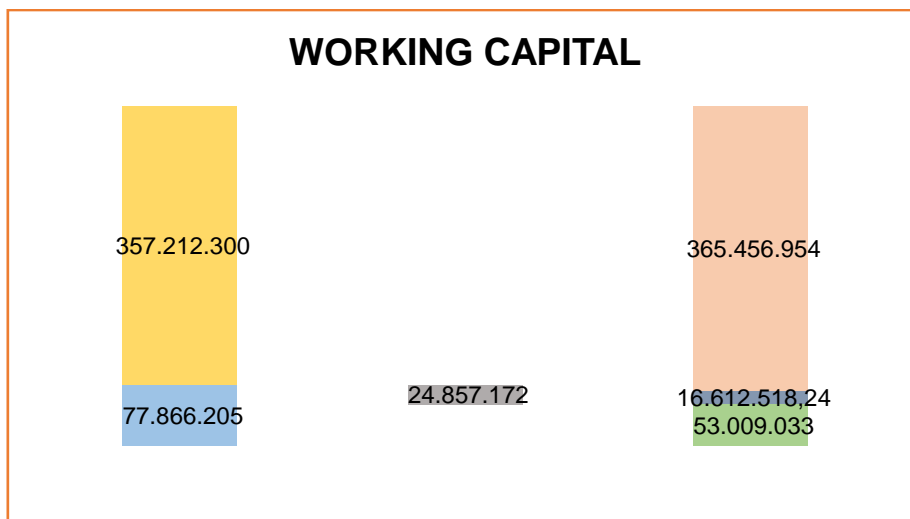


Figure 33: Working capital of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.3.3. ANALYSIS OF PROFITABILITY

As previously described, in this section we will analyze ROA and ROE, to have a clearer view of the evolution of this company through the following charts.

As we can see with the naked eye, the trend of this ratio is increasing during most of our study until 2015 where a profitability of 9.58% is reached. Following a stabilization period of around 8% until 2017, suffering a decrease of 54%, and closing 2018 with a 3.91% economic return. If we analyze the annual accounts carefully, we can deduce that the fluctuations come directly as a consequence of the fluctuations of the result of the year, which, in turn, is a consequence of the increase in the costs of supplies and a decrease in the net amount of the turnover that affect the operating result.

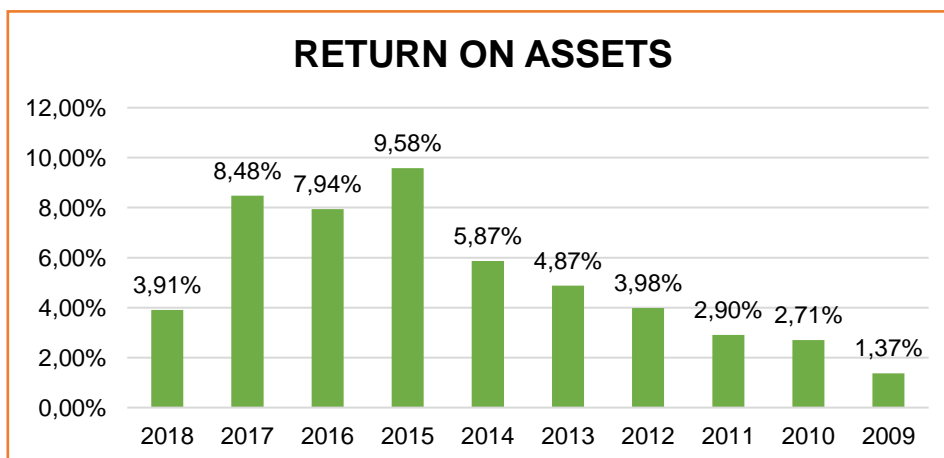


Figure 34: Return on assets of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As in the previous cases, we see that ROA and ROE do not coincide because of the company's indebtedness. But, unlike the other two companies analyzed, in this case, the difference is not significant, since Porcelanosa's level of indebtedness, as we have seen previously, is lower

As we can see in the graph, ROE follows the same evolution and trend as ROA, but with slightly higher values, reaching its maximum value in 2015 with 11.92%, and decreasing the following year to 9.05%.

In the case of Porcelanosa, it is not necessary to be as careful as before since the level of indebtedness is minimal in this company. From the annual accounts, it appears that these variations are a consequence of the variations in the result for the year since the average net worth follows an increasing trend throughout the study.

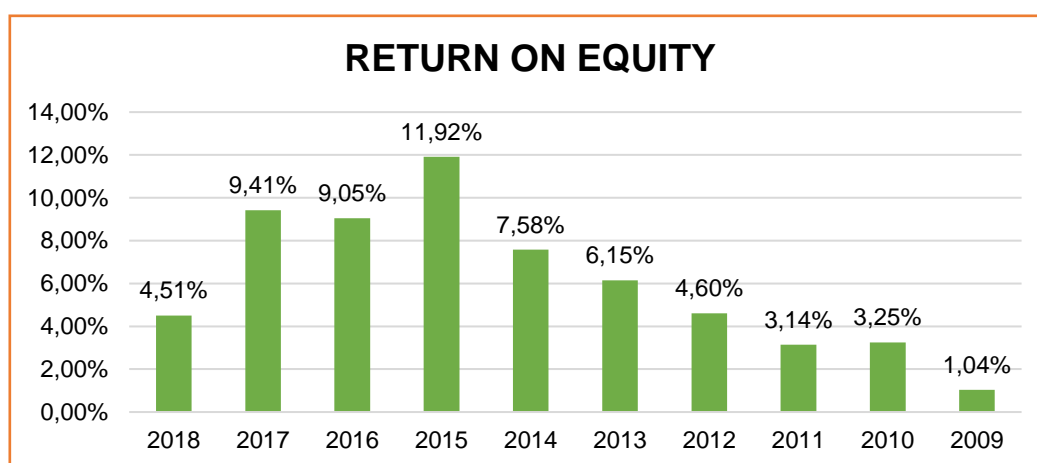


Figure 35: Return on equity of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

As ROE is higher than ROA, this indicates that leverage is positive, since the company has incentives to borrow, given that the return on assets is higher than the cost of financing.

In the case of Porcelanosa, in the following graph we can see that the profitability threshold remains practically stable throughout the period, ranging between 100 million and 150 million. If we look at costs, we can see that they also remain stable and that the only amount with the greatest fluctuation is financial income, which in 2009 fell by 80 million euros, showing a rapid recovery in the following years.

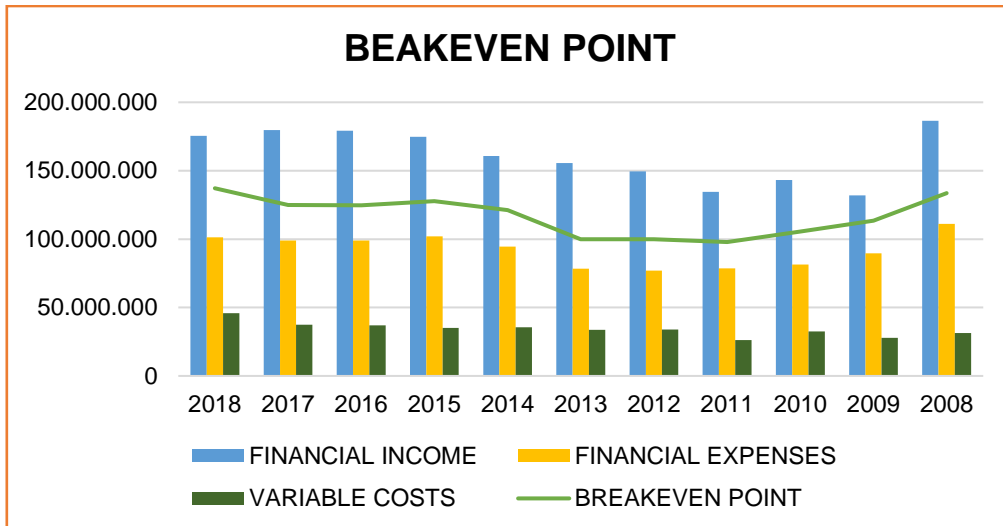


Figure 36: Breakeven point of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.3.4. FINANCIAL ANALYSIS

In the following figure we can see how the debt ratios have evolved in the short and long term. In the case of Porcelanosa, at first glance we can see how indebtedness has remained constant until 2014, to continue with a decreasing trend until 2017, where it increases slightly until closing in 2018 with short-term indebtedness of 4.55%, and indebtedness at 14.5% long. If we compare these data with the previous companies analyzed, we see that the level of indebtedness of Porcelanosa is negligible with respect to Argenta or Pamesa.

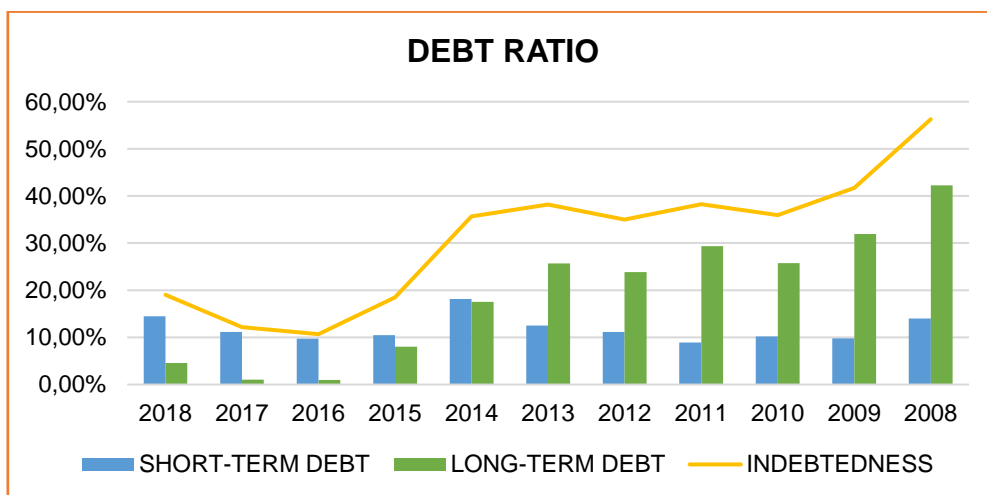


Figure 37: Debt ratio of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

On the other hand, regarding the terms of Porcelanosa's terms, in the following graph we can analyze the terms of payment, collection and storage.

Porcelanosa has very stable payment and collection terms, although with a decreasing trend during the period studied, while the storage term does have a more significant decreasing trend. First, we will analyze the payment to suppliers that goes from (being) 90 days in 2009 to 66 days in 2018. Regarding the collection period, we see that it goes from 88 days in 2009 to 61 days in 2018. Given that the payment term of Porcelanosa is longer than the payment term, we deduce that the company is over-financed during the entire period studied, since it charges before facing payments with its suppliers. Regarding the storage period, we observe how it is systematically reduced over time, this translates into a greater stock rotation, that is, fewer and fewer days pass from the time Porcelanosa stores its stocks until it sells them.

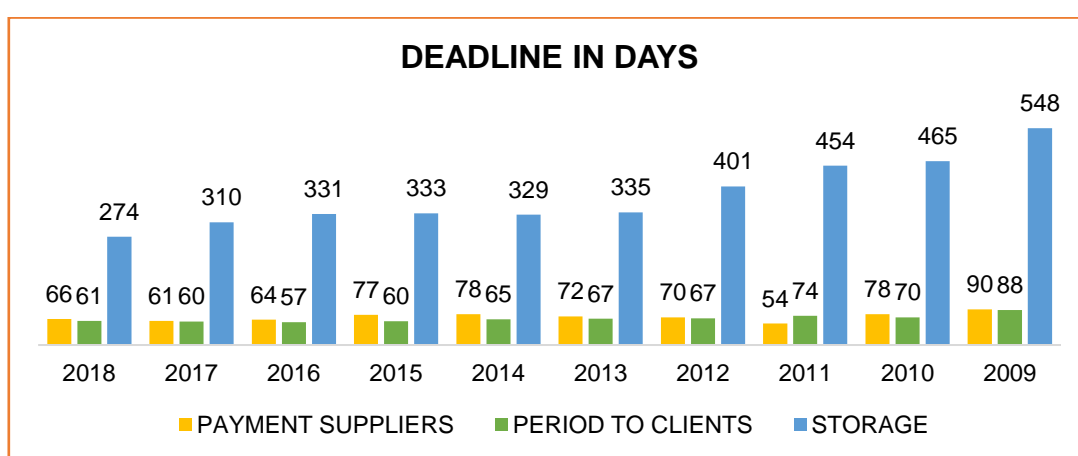


Figure 38: Deadline in days of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

Next, we will analyze the average periods of economic and financial maturation. If we analyze the following graph, we observe that the trend of both ratios is decreasing during the period studied. We deduce that from the time Porcelanosa invests a euro in the acquisition of raw materials until it recovers that euro through its sale, it takes 335 days, practically a whole year. While the time it takes for the company to recover the money invested when buying raw materials is 269 days.

If we compare the average period of economic maturity with the payment term to suppliers, since the payment term is significantly less, the company will have to finance the 269 days apart, this translates into liquidity needs.

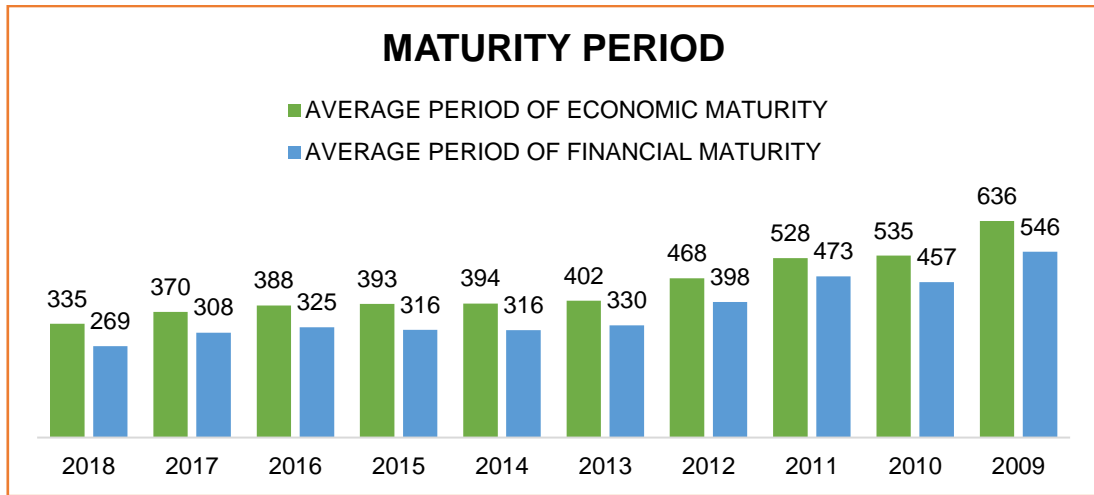


Figure 39: Maturity period of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.3.5. LIQUIDITY ANALYSIS

In this section we will analyze the current ratio, the quick ratio, and the immediate liquidity, respectively.

When analyzing the quick ratio, we see how its trend is slightly decreasing, although only in the last period it is below 100%, which means that, at the end of 2018, the company has idle circulating assets on its balance sheet, for therefore, you should sell stocks to avoid problems with short-term debt.

Regarding the current ratio, we see that it follows the same trend as the acid test, but always standing above 150%, except in the last period, standing at 146%, this means that until 2018 the company had no problems facing its payment obligations, but it has begun to experience difficulties, although for now, it seems that they are not significant.

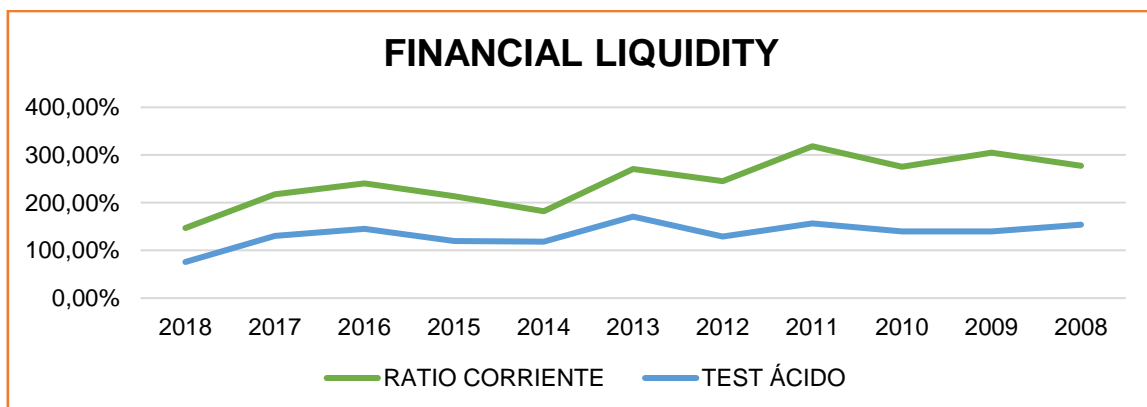


Figure 40: Financial liquidity of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

In the case of immediate liquidity, what strikes us the most, are the low values that emerge, as well as the 2013 peak, where it reached a value of 1.22%, which, although still low, is much higher than the rest of the periods, which range between 0.5% and 0.55%. These results are because, as we have already analyzed in Porcelanosa's economic structure, the current assets where the cash and collection rights are located represent a tiny part of total assets.

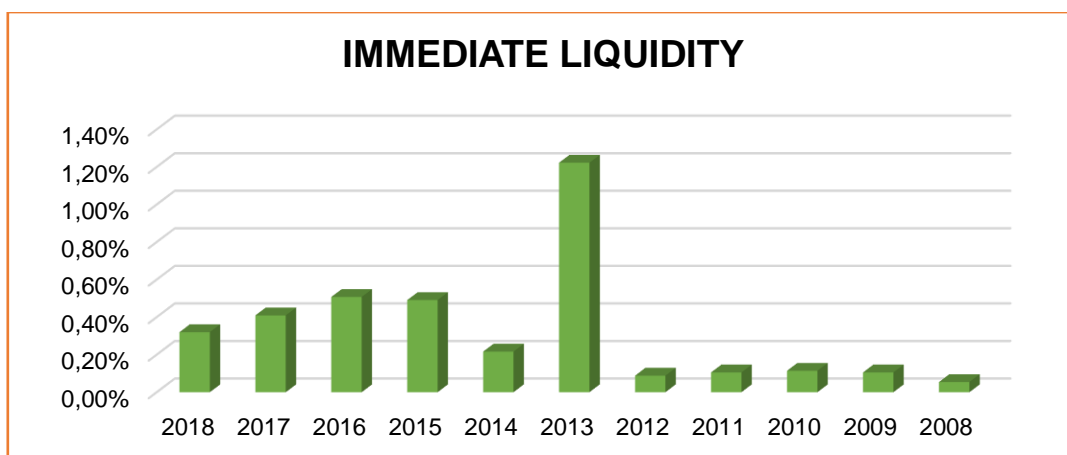


Figure 41: Immediate liquidity of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

4.3.6. RISK ANALYSIS

In this section we will analyze the bankruptcy risk of Porcelanosa focusing on the Z - score ratio

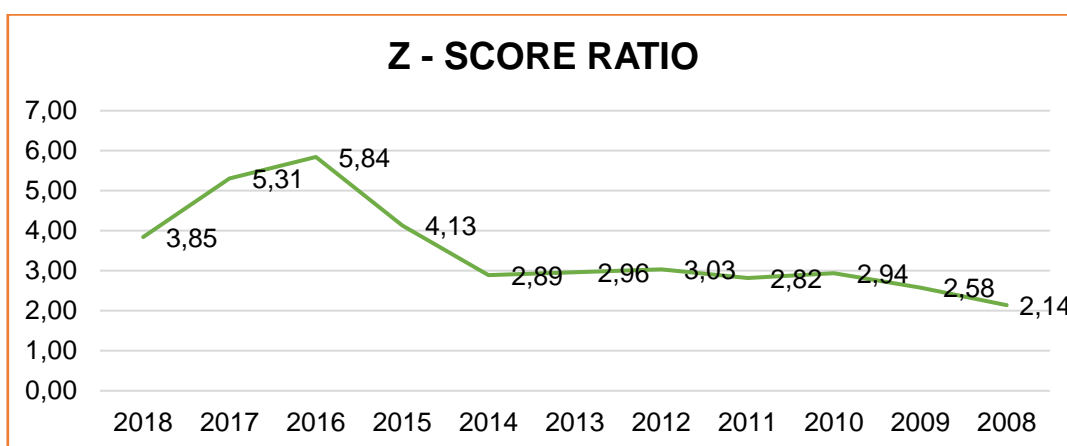


Figure 42: Z - Score ratio of Porcelanosa

Source: Sistema de Análisis de Balances Ibéricos, own elaboration

Given that Porcelanosa is not listed on the stock exchange, according to Altman's studies, we could say that until 2014, the company obtained inconclusive results, given that in four of these six years, the indicator was below 2.9. Although from that year

onwards, the company experienced a rebound well above the limit of 2.9, translating into a very low probability of bankruptcy.

5. COMPARISON WITH GENERAL ECONOMIC INDICATORS

In this section we will analyze the comparison, at the individual level of each company, with the evolution of the Spanish economy during the years after the bursting of the real estate bubble in 2008. To do this, we are going to compare indices such as the Spanish GDP, the CPI in inflationary terms and the unemployment rate, from 2008 to 2018.

First, we are going to compare the evolution of the gross domestic product with the result of the year to see how the company has evolved with respect to the country's economy. The acronym GDP is known as the gross domestic product of a country, which measures the sum of the goods and services produced in a territory, both by national and foreign companies, during a period, generally one year. ROA is known as economic profitability, that is, the profitability we obtain from assets.

Next, we will compare the unemployment rate with the number of workers in the company, in order to see if there is a similar trend between the two indicators, and to check whether the companies in our study have created or destroyed employment.

Finally, we will compare the CPI in inflationary terms with the costs of supplies, in order to see to what extent inflation has affected the cost structure of raw materials. Inflation measures the increase in the prices of goods and services in a country over a period of time, the objective of comparing it with the number of supplies is to find out if these fluctuations have affected the production costs of the company.

5.1. PAMESA CERÁMICA

COMPARISON OF THE SPANISH GDP AND RETURN ON ASSETS

As we can see in the following comparison, the evolution between the GDP of Spain and the results obtained by Pamesa, we see that, although in both cases the trend is increasing, in the case of Pamesa, it is much more pronounced, given that in the GDP case has more “u” shape. GDP having this form is somewhat predictable since the decreasing part corresponds to the first years of the crisis, with a subsequent stage of recession between 2012 and 2014, and exponential growth of the economy from that date characteristic of an Economic recovery.

If we focus on the trend of Pamesa's economic profitability, as we have analyzed in more detail in the previous sections, we see how the trend is unequivocally positive, and

contrary to the evolution of GDP during the first years, this leads us to deduce that there is not a correlation between the fluctuations of the GDP and the economic profitability of this company.

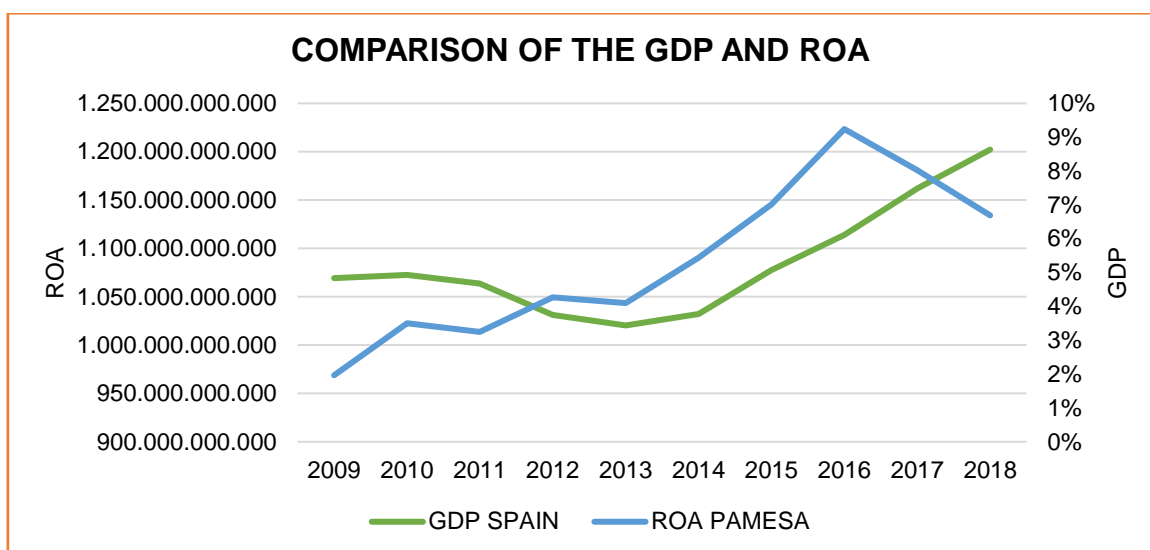


Figure 43: Comparison of the GDP and ROA of Pamesa

Source INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON UNEMPLOYMENT RATE AND EMPLOYEES

Next, we will analyze the comparison of the unemployment rate and the number of workers in the company, to check whether the company was affected in this way. As we can see with the naked eye, Pamesa's workforce remains practically stable throughout the period studied, ranging between 400 and 500 workers, while the unemployment rate fluctuates between 11% in 2008, reaching its peak in 2013 with 26% unemployment, down to 15% in our last year of study.

The stability in this indicator may be due to a constant increase in the company's sales volume, explained by the growth in economic profitability analyzed above.

Therefore, during the years after the crisis, Pamesa has not destroyed employment, as well as other companies in other sectors, but in addition to maintaining them, it has slightly increased the number of its staff, so we can deduce that, in this aspect the financial crisis has not made a dent in the company either.

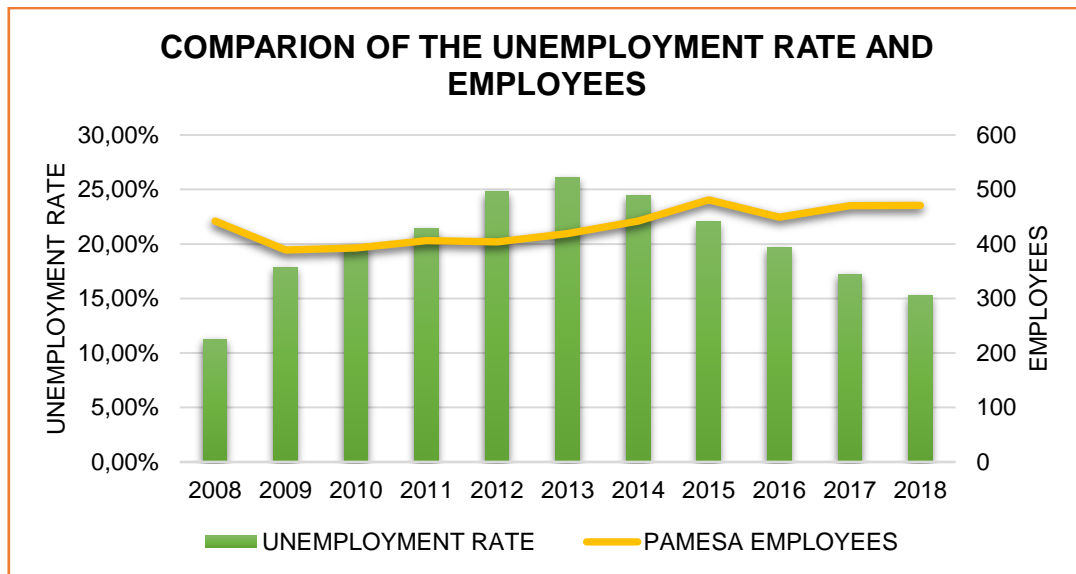


Figure 44: Comparison of the unemployment rate and Pamesa employees

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON SPANISH INFLATION AND PROCUREMENT COST

In the following figure we can see the comparison between inflation in prices with the cost of provisioning. A priori, we did not observe that there is a clear relationship between the two figures, given that the increase in supply costs is probably due to a constant increase in the company's sales volume.

Another justification for this phenomenon is that, over the last few years, the Pamesa group has been acquiring different companies in the sector, but with diverse activities in order to, through a horizontal integration strategy, be able to control all the production system, from obtaining raw materials to marketing tiles. Thanks to this strategy, Pamesa manages to reduce its costs and, to a certain extent, avoid part of the effects of inflation.

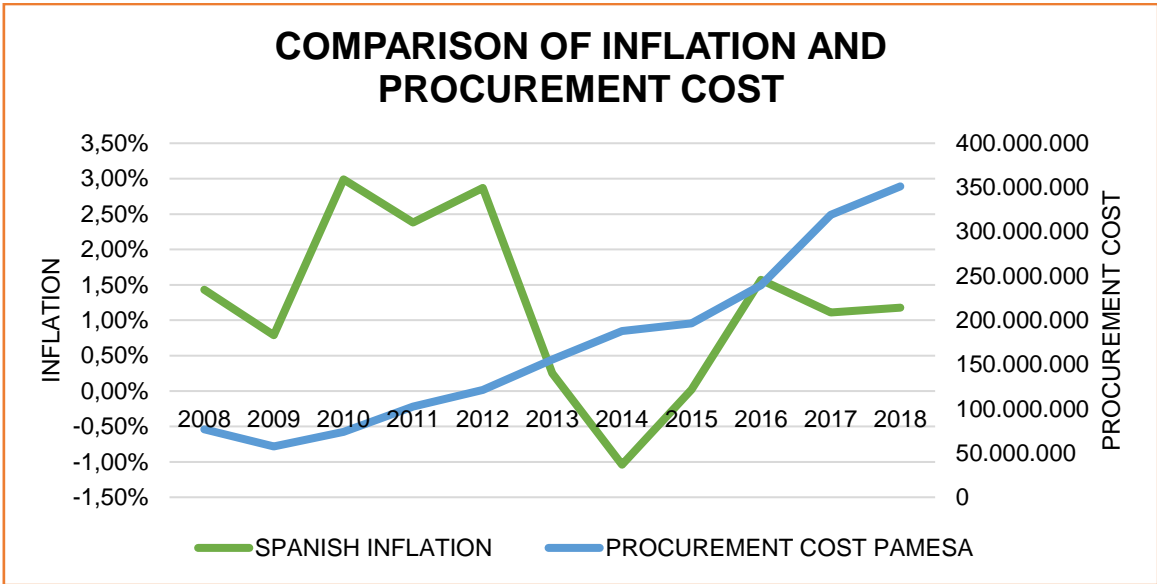


Figure 45: Comparison of national inflation and Pamesa's procurement cost

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

5.2. ARGENTA CERÁMICA

COMPARISON OF THE SPANISH GDP AND RETURN ON ASSETS

As we can see in the following graph, the evolution of the GDP in Spain and the economic profitability of the company are far from its evolution. Although it should be noted that from 2009 to 2012 and from 2014 to 2016 the trend in GDP and ROA was the same. The period of greatest growth of Argenta also coincides with the highest Spanish growth rate until 2016, when Argenta suffers an exponential drop in its profitability of close to 6%.

If we focus on the trend of Argenta, as we have commented in the previous sections, we find that it is very volatile, and, although the general trend is slightly positive, in this comparison we can see how the evolution of the Spanish economy and the 2008 financial crisis did have an effect on this company.

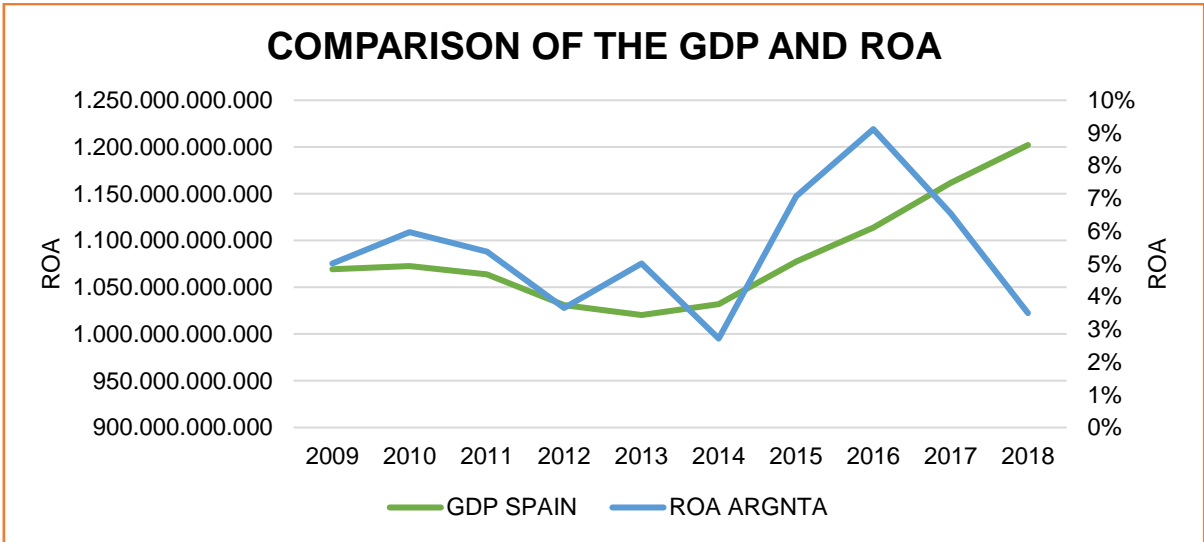


Figure 46: Comparison of the GDP and Argenta's ROA

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON UNEMPLOYMENT RATE AND EMPLOYEES

In the following figure we will analyze the comparison between the unemployment rate and the number of workers in the company, to see if it has created or destroyed employment during the period studied.

As we can see with the naked eye, in this aspect, the crisis has not affected this company, since the increase in the workforce is evident. Going from close to 200 workers in 2008 to more than 500 in 2018. Meanwhile, the evolution of the unemployment rate is completely the opposite, as it grows systematically during the first years of the crisis, reaching its maximum in 2013 with a 26 % of unemployment, and reducing this rate to 15% in 2018, the year in which Argenta has its maximum workforce of workers with 512 employees. This is mainly because the sales volume has been increasing slightly every year.

Therefore, given that the trend is increasing throughout the period, it follows that Argenta has created employment in the region in the years after the crisis instead of destroying it like other sectors.

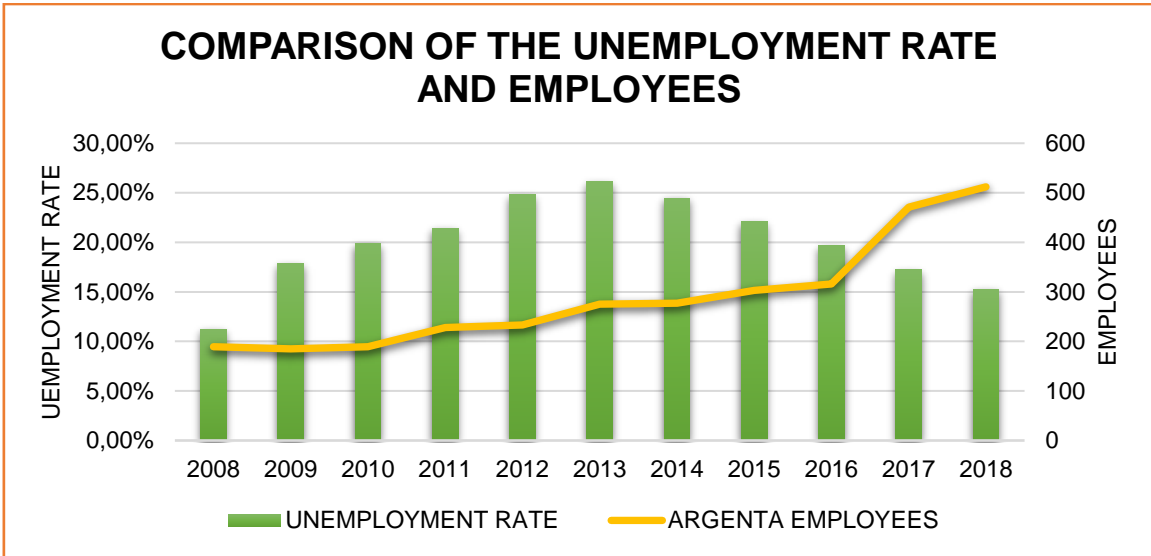


Figure 47: Comparison of the unemployment rate and Argenta's employees

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON SPANISH INFLATION AND PROCUREMENT COST

In the following figure shows the comparison between inflation in prices and the cost of provisioning. At first glance we can deduce that there is no clear correlation between these figures since the increase in this item probably corresponds to an increase in sales volume.

This may be because Argenta has four factories with which it has achieved vertical integration, from obtaining raw materials to marketing the final product, which has given it a strategic advantage in terms of supply costs. Therefore, we deduce with this information that the fluctuations in inflation suffered by the Spanish economy have not affected Argenta's cost structure.

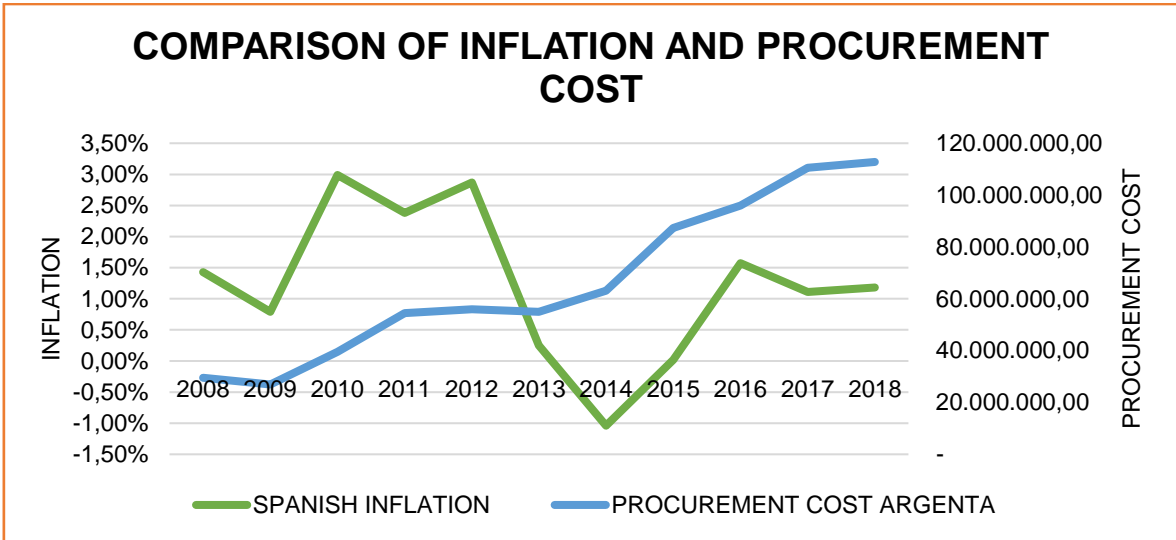


Figure 48: Comparison of inflation and procurement cost of Argentina

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

5.3. PORCELANOSA

COMPARISON OF THE SPANISH GDP AND RETURN ON ASSETS

As we can see with the following graph, the evolution of the Spanish GDP and the results obtained by Porcelanosa, although in both cases it is increasing, in the case of Porcelanosa the slope is steeper, resembling the results obtained by Pamesa.

If we focus on the trend of Pamesa's profitability, as we have described previously, the trend is increasing and at times contrary to GDP, given that, at the end of 2018, GDP was following an upward trend while Porcelanosa's profitability was plummeting. From these results we deduce that there is no correlation between the fluctuations of the GDP and the profitability of the company.

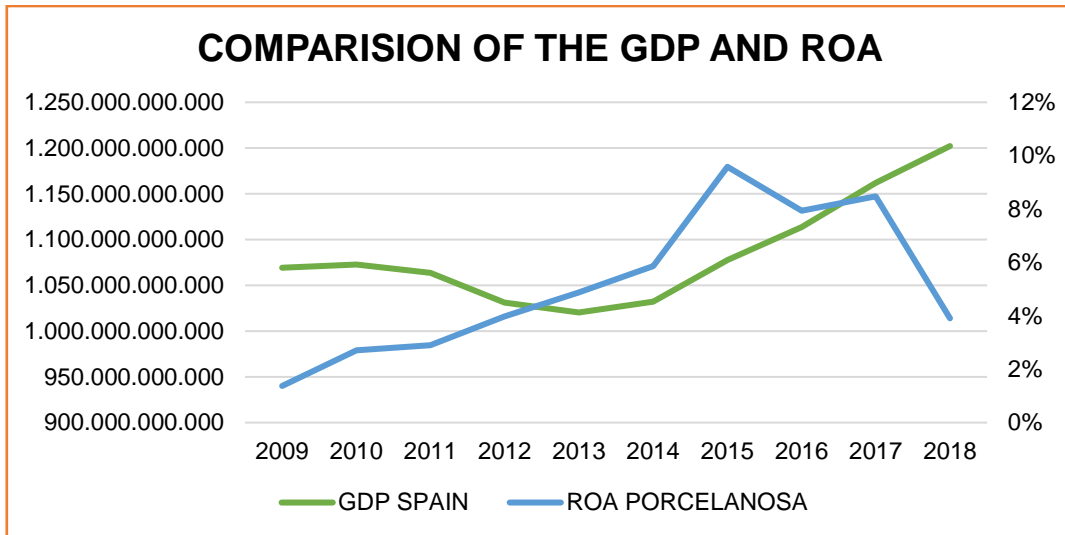


Figure 49: Comparison of the GDP and de Porcelanosa's ROA

Source INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON UNEMPLOYMENT RATE AND EMPLOYEES

In this section we will analyze to what extent the fluctuations in the Spanish unemployment rate are related to the variations in Porcelanosa's workforce.

As seen with the naked eye in the adjacent graph, we see that the workforce of this company maintains a decreasing trend throughout the period, ranging from 860 in 2009 to 760 workers at the end of 2018. But it should be noted that the biggest drop of this was between 2008 and 2009, where the reduction was 25%, going from a workforce of 1,028 to 864 workers, because of the 29% year-on-year reduction in sales.

This stability may be motivated by a constant increase in sales volume, translated into a constant increase in economic profitability.

Therefore, the only moment where we can find a correlation with the unemployment rate is in 2008, when the greatest increase in the unemployment rate corresponds to the moment of greatest destruction of company employment. Although subsequently we did not find the continuity of this correlation, therefore, in general terms, we can deduce that the fluctuations in the labor market have not had a greater incidence in Porcelanosa than the one mentioned in 2008.

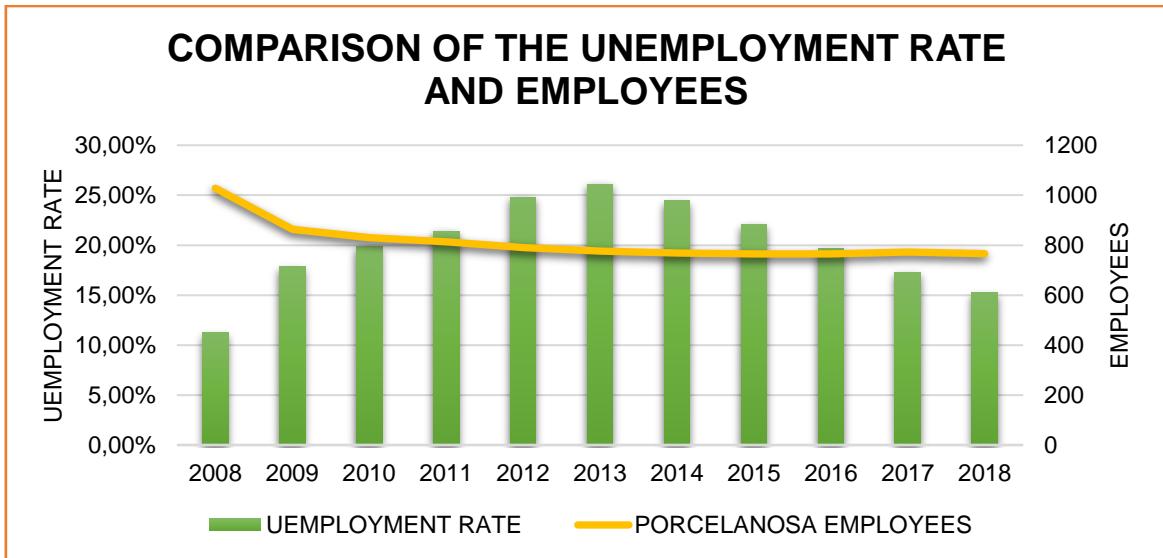


Figure 50: Comparison of the unemployment rate and Porcelanosa's employees

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

COMPARISON SPANISH INFLATION AND PROCUREMENT COST

In the following graph we can see the comparison between inflation in prices compared to the cost of supplies. A priori, we cannot affirm that there is a correlation between both magnitudes, given that the cost of supplies follows a slightly increasing trend, which corresponds to the continuous increase in sales volume.

On the other hand, between 2008 and 2009 there was a significant reduction in the cost of supplies, which coincides with a negative variation in inflation, but after the data analyzed, we deduce that this reduction in costs is due to the 29% reduction in amount of turnover, that is, of sales.

Therefore, we can deduce that Porcelanosa has not been affected by inflation in the economy. Another reason for this would be the vertical integration strategy that the group has maintained by becoming its own suppliers of raw materials and allowing them to reduce these costs.

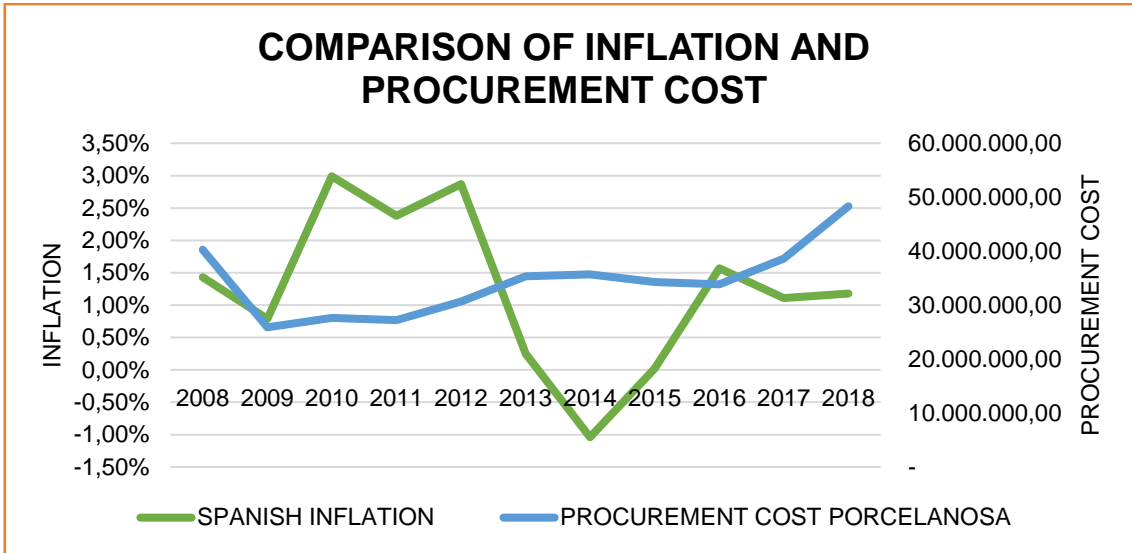


Figure 51: Comparison of inflation and Porcelanosa's procurement cost

Source: INE, Sistema de Análisis de Balances Ibéricos, own elaboration

6. CONCLUSIONS

After the pertinent analysis of the three companies individually and the comparison with the Spanish macroeconomic indicators, we can conclude several things, in their order of analysis.

First, we will discuss the results of Pamesa Cerámica. Regarding the income statement and the economic-financial structure, an increasing trend has been obtained and maintained the profit throughout the period studied, given that the volume of sales has increased. In the case of financing, it is evident how financing with the group has increased and external financing has decreased, which gives Pamesa flexibility in dealing with its debts. In the case of profitability, we see that the company is certainly leveraged, but, at the moment, it does not suppose a risk to the company since, as we have seen, the bankruptcy ratio is higher than 2.9 in the last years studied, reason why we deduce that its evolution will follow this trend, since the latest news that we have obtained from Pamesa is that it is billing more now than in the years before the crisis.

If we focus on the comparison of Pamesa with the economic indicators, we can deduce that, while the crisis has taken its toll in many sectors, it has not done so in the case of Pamesa, since the growth of ROA is more than evident, distancing itself from the evolution of Spanish GDP. In the case of the workforce, we can also see that, in general terms, Pamesa has maintained its workforce during these years of recession, increasing this slight figure. As for supplies, it is more than evident that inflation has not affected production costs, since thanks to its integration strategy it has managed to control the entire production and marketing system.

Secondly, we are going to discuss Argenta Cerámica. Regarding the income statement, there has been an increase in profits from the middle of the period, mainly due to the increase in sales. In the case of the balance sheet we see how the company maintains the levels of external and internal financing, and how the distribution of assets is correct, thereby obtaining a positive working capital, which translates into financial balance for the company. Economic profitability has fluctuated throughout the period, as has financial profitability, the latter obtaining very high results due to the leverage caused by high levels of indebtedness. The terms are not desirable enough, since Argenta pays its suppliers before their clients pay them, for which reason it forces the company to continue borrowing. Given that the current ratio is below 150% throughout the period, Argenta is likely to experience problems in dealing with its payments. If we look at the probability of bankruptcy of the company, we see that the result obtained is not conclusive, but in recent years it has followed a decreasing trend, therefore, we deduce

that so far, the company has not experienced an improvement. For all these reasons, it is not surprising that at the beginning of 2020 Pamesa acquired 50% of this company, integrating it into the group.

In the case of the evolution of workers, we can see that Argenta is, of the three companies analyzed, the one that has created the most jobs in this period, maintaining a constant growing trend, very different from the evolution of the unemployment rate. And as for the cost structure, as we have seen, the integration strategy followed has benefited it in favor of a lower cost of supplies, since it allows it greater flexibility. For all this, in general terms, the crisis has not affected Argenta, or, based on the data analyzed, we cannot deduce that there is a correlation between its sale and the consequences of the financial crisis.

Finally, we will comment on the results obtained by Porcelanosa. From the income statement we obtain that the company has followed a mainly growing line except in the last two years of the study, mainly due to an increase in supplies and stock in the warehouse, and in property, plant and equipment. Although in the case of Porcelanosa it is the company that, although it also has a positive working capital, is the only one in which non-current assets and net equity are the most relevant. In the case of financing, Porcelanosa has also opted for a few years for group self-financing. The most noteworthy aspect of our analysis is the level of indebtedness which, compared to Pamesa and Argenta, is derisory, reaching just 20% at the end of 2018. This is why, although, having a higher ROE, it resembles the results of ROA. The terms are correct, since Porcelanosa meets its payment obligations days after the payment of its clients. Regarding the current ratio, as we have obtained results above 150%, so the company would have no problem meeting its short-term payment obligations. On the other hand, there is no probability of bankruptcy during the period studied, although it continues a decreasing trend during the last years analyzed. Therefore, it is not surprising that a regrouping of the group was carried out in 2020 under the name of *Porcelanosa Corporación S.A.* to carry out an internal restructuring.

Regarding the comparison with the economic indicators, we see, in the first place, that the evolution of ROA is completely different from the evolution of GDP, since this first follows an exponentially increasing trend until it reached 2016 where it begins to decrease considerably. Regarding the average number of workers, we saw previously that Porcelanosa had only destroyed employment in its early years, continuing with a constant trend of around 800 workers, an evolution that is far from the evolution of the Spanish unemployment rate. Finally, in the case of the cost of supplies, we see how the

cost of supplies maintains an increasing general trend due to the increase in turnover, leaving aside inflationary fluctuations. For all these reasons, we deduce that there is no correlation between the ravages of the crisis in the Spanish economy with the evolution of Porcelanosa.

It is clear to us that these three companies, the ones that bring together the largest volume of sales in the sector, have not suffered significant consequences due to the financial crisis. But, the other side of the sector does not leave us with such optimistic results, since, according to INE data, about 10% of the companies in the sector in the province of Castellón have had to merge, or they have been acquired by international funds.

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