ITALY’S GOT TALENT. HOW ITALIAN LEADING COMPANIES IN CONFECTIONERY INDUSTRY OVERCAME THE CRISIS

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Abstract
The crisis that spread worldwide since 2007 started from the financial sector and ended to affect also real economy. This process has attracted the attention of many scholars seeking to study its causes and impacts. Notwithstanding many works on this topic, the impact of the crisis on specific industries is still rather unexplored. The present work seeks to address this issue by analyzing the confectionery industry, with particular emphasis for Italian market leaders, Ferrero S.p.A. and Perfetti Van Melle S.r.l.. The aim of the study is to assess if they have been successful in tackling the crisis, keeping a satisfactory level of profitability associated to a good financial health notwithstanding ongoing difficulties. Moreover, we seek to analyze the strategies the companies employed to survive the crisis. The concern of the paper is both quantitative and qualitative. Thus, we calculated a complete set of indicators using a specific methodology for financial statement analysis which has been conceived especially for studying Italian firms; these data have been integrated with other information retrieved from the annual reports of the companies (especially the notes to the accounts and the directors’ report). The analysis highlights that both the firms benefit from a good financial health, with Perfetti Van Melle presenting a large amount of liquidity. On the contrary, liquidity should be the main concern of Ferrero because of an excessive reliance on current liabilities. Both the firms have a good level of profitability, even if Perfetti Van Melle’s one is decreasing. The key-strategies for the success of these firms are ongoing investments in state-of-the-art plant and machinery, an increasing use of equity as the main source of funding, along with huge investments in research and advertising.

Keywords: Crisis, Confectionery Industry, Ferrero and Perfetti Van Melle, Financial Statement Analysis
Introduction

The crisis that spread worldwide since 2007 can be regarded as the most serious one since the Great Depression. It rose within the financial sphere but ended to affect also real economy, after financial institutions collapsed (or were bailed out by governments), this causing a freeze of credit market (Erkens, Hung and Matos, 2012) which, along with macroeconomic factors (Taylor 2009), caused many defaults in all sectors of economies. Thus, the crisis has been the target of several studies, with many authors concerned in understanding its causes and impacts on economy. In particular, great attention was paid to how the crisis rose and how it spread worldwide, and also to the role of accounting in this process (especially the effects of “marking to market”). Many authors sought to investigate the impacts of the crisis in specific countries, while other focused on the analysis of particular sectors, with the financial one representing the most studied. However, less attention was paid to other sectors.

The present work seeks to tackle this issue analyzing a specific industry, confectionery, which has not still attracted a significant level of interest in literature. Confectionery, being part of the food sector, has been affected by the crisis in that the decrease of people’s purchasing power resulted in a reduction of foodstuffs consumption both in quantity and quality. However, thanks to the particular nature of its products, which can be regarded as an affordable luxury that brings pleasure and joy to people, especially in hard times, confectionery market continued to grow even during the crisis, although at a lower rate. The study focuses on Italian confectionery market, analyzing the Italian leaders (Datamonitor, 2013b): Ferrero S.p.A. and Perfetti Van Melle S.r.l. (hereafter Ferrero and Perfetti van Melle), with the aim of assessing if they have been successful in tackling the crisis, keeping a satisfactory level of profitability associated to a good financial health notwithstanding ongoing difficulties. Moreover, we sought to analyze the strategies the companies employed to survive the crisis.

To achieve this target, a quantitative and qualitative approach has been used. We employed a specific methodology for financial statement analysis which has been conceived especially for studying Italian firms (Cramiello, Di Lazzaro and Fiori, 2003); through this methodology a complete set of indicators has been calculated. Moreover, other data retrieved from the annual reports of the companies have been analyzed (especially the notes to the accounts and the director’s report).

The paper is organized as follows. After a review of the literature focusing on the crisis, the methodology we used for achieving the goals of the work is presented. Then, after a study of the Italian economic context, with a focus on confectionery industry, the results of the analysis of Ferrero and Perfetti Van Melle are shown, highlighting if the firms were successful.
in overcoming the crisis and which strategies they employed in achieving this aim. The paper ends with some concluding remarks.

**Literature review**

Since the beginning of the financial crisis in 2007 many authors tried to study its causes, impacts on economy and possible solutions from different perspectives. A significant work has been done in analyzing the causes that led to current situation. Thus, Acharya and Richardson (2009) studied how the housing bubble led to the crisis of the entire financial system through the evasion by banks of regulatory capital requirements, with the reduction of the capital held against assets that ended to render them insolvent when the bubble popped. Lo Re (2011), after describing the sub-prime mortgage crisis in the USA in August 2007 analyzed its spreading in Europe, noting that this process has been caused by the vulnerability of its banking system, State’s independence in regulating financial and banking sector and different economic fundamentals between the States, with countries characterized by high government debt at threat. European Union has been the target of many studies, such as the work by Panico and Purificato (2013), who contended that conflicting national interests within the governing bodies of the European Central Bank and tensions between the States and European authorities prevented a common answer against the crisis, exposing the Euro area to speculative attacks. The authors call for a reform in the organization of the area to improve its functioning and secure a better cooperation between the States to face common threats. Cukurçayır and Keramettin (2012) specifically analyzed the cases of Greece, Italy, Ireland, Portugal and Spain (PIIGS) and the ineffectiveness of their policies to tackle the crisis, with ongoing concern for the future of the Economic and Monetary Union. The authors suggest the governments of these countries to implement policies of fiscal discipline, reduce the debt burdening on them and lower the labor cost.

Another perspective on the analysis of the crisis and its causes comes from authors studying the role of accounting and accountants in times of recession. Some authors (Wallison, 2008) criticized the use of fair value accounting in times of crisis, highlighting its role in causing losses and defaults of many banks, suggesting a more prudent valuation of financial instruments, while others (Laux and Leuz, 2009) note how legitimate concerns about marking to market do not fully apply to fair value accounting as it has been stipulated by IFRS or US GAAP; moreover, historical cost accounting is surely more prudent, but it is unlikely to be the remedy, as it could bring larger problems than fair value accounting has brought. Thus, the main cause of the crisis is not fair value accounting (Veron, 2008) but rather bad investment decisions made by bankers (André et al., 2009), with
amendments to IAS 39 led by G20 and European Commission damaging the independence of IASB and its international credibility. The politicization of the IASB has been criticized also by Bengtsson (2011), who noted how EU overcame the IASB’s resistance to political influence, as regaining control over accounting standards was seen as pivotal to tackling the crisis by the former. This could lead to future power struggles and efforts to cope with changes in the institutional environment. The role of auditors in the crisis has been analyzed, especially after many enterprises sought State support after receiving bad audit opinions. While auditors could play a key role in providing high quality advice in times of crisis, recent research (Sikka, 2009) shows concerns about the value of company audits and the knowledge base of auditors.

The effects of the crisis have been also studied considering the case of single countries, often with a focus on the banking sector, such as Germany and France, with Ardie and Howarth (2009) studying the increasing trading of risk in their banking systems, discovering how German banks suffered much higher losses than French ones. The authors analyze the policies of German and French banks and governments to tackle the crisis and try to assess if these responses could limit future “financialization”. UK’s banking system has also been studied, with the aim of understanding how the sub-prime mortgage crisis that affected the banking system of many countries was transmitted to real economy (Aiyar, 2011). UK is also the target of Hodson and Mabbet’s paper, who analyze the shift in economic policy of the United Kingdom after 2007-2008 contending that, notwithstanding the crisis, economic ideas underpinning UK economic policy seem to last. The striking example of Greek financial crisis, with the falsification of public accounts, has provided the means to analyze contemporary state management, with discursive activity favoring the emergence of a collective interpretation of the crisis that reinforces neoliberalism (Morales, Genrond and Guénin-Paracini, 2013), while another country facing financial stress, Portugal, has been studied to assess the impact of the crisis on industrial relations and collective bargaining (Dias and Cedeira, 2011). The impact of the crisis on transition economies has also been investigated, with Taušer, Sroka and Žamberský (2013) again considering the banking sector and analyzing how Czech and Slovak banks followed the strategic directives given by their parent companies to cope with the recession. Reduction of the GDP resulted in an increase of risk and in a decline in net income, highlighting how the macroeconomic environment affects banks’ performance. Žnidaršič, Bernik and Marič’s (2011) focused on youth unemployment in Slovenia, which has dramatically increased after most of the companies implemented measures to adapt to new market conditions, along with State’s policies to tackle the phenomenon.
Exports between Poland and EU countries during the crisis have been analyzed by Szymanic (2012), who used indicators like Revealed Comparative Advantage and Intra-Industry Trade to note an increase of competitiveness in Polish exports notwithstanding the period of recession and the low degree of processing of industrial goods. Poland, and the Silesian region in particular, is also the target of Błach, Wiczezrek-Kosmala and Gorcezyńska’s work (2012) on the effects of the crisis on companies’ liquidity. Using a self-developed set of indicators, called Corporate Financial Situation Watch, the authors highlighted a significant decrease of financial liquidity in Polish companies located in the Silesian region, with a worse situation in comparison with the national level. Weaknesses and strengths of Romanian economy during the recession have been assessed, with Constantinescu et al. (2011) analyzing positive effects of foreign investments in the country: Romanian economy benefitted from an incredible increase in its attractiveness (from -59% in 2005 to 66% in 2008) that resulted in an increase of technological absorption capacity. Stoian and Negotei (2011) focused on the gaps in the Romanian economic system and its ineffective reliance on (and use of) EU non-repayable funding as the main policy against the crisis, providing suggestions for increasing the availability of financial means for the Romanian economy. Countries in the area of former Yugoslavia have also been analyzed, with Bozic Miljikovic (2013) focusing on Serbia and studying the complex transition from socialism to market economy. Events like the war and subsequent sanctions by international organizations, hyperinflation, unemployment and gray economy explosion caused the transition to last long. These difficulties have been sharpened by the financial crisis, which did not directly hit Serbia but slowed its economic development anyhow, calling for the government to adopt policies to sustain growth. The financial system of Montenegro is the target of Cerović, Drobnjak and Lajovic’s paper (2013), which shows its actual situation during the years of the crisis and provide insights on its changes to meet the requirements to access EU, along with recommendations for its future development in order to create a strong system that can play a key role in sustaining the manufacturing sector in this transition economy. An overall picture of the impact of the crisis on the countries in the Balkan region is taken by Kripa (2010), who notes a slowdown in their development, with a heavy decrease in import and a growing unemployment rate. Albania is especially experiencing devastating unemployment and a reduction of remittances on which many people rely. Thus, even low-income countries such as Albania are not immune from the crisis, even if its impact on this country was less severe because of a weak financial integration with other States and small trade openness (Madhi, 2012; Liko and Kola, 2012). Also low-income economies in the Eurasian region experienced the negative
effects of the crisis, with a reduction of the private-sector credit growth; Yilmaz and Selçuk (2011) analyze this situation and suggest a number of measures to revive credit growth, ranging from financial aid to banks to de-dollarization and development of local debt markets.

Besides works focusing the impact of the crisis on whole countries or on the most affected sector, banking, there is another field of study, which is relevant for the aim of this paper even if it is less developed, that analyzes the effects of the recession on specific sectors or typologies of companies. Thus, Kilvits (2009) focuses on Estonian manufacturing sector, seeing in the crisis a means to find a solution to the shortage of workforce that prevented entrepreneurs from implementing new business plans and increasing production and thus export, which is the main source of economic growth in Estonia. The crisis affected also the retailing system, as it has been demonstrated by Horváth (2012), who noted a reduction in sales growth and in the numbers of stores in Hungarian retailing sector, due to the decrease of people’s buying power. Thus, independent retailers are trying to tackle the situation changing their procurement logistics, reducing the number of suppliers and focusing on those offering cheaper products or better payment conditions, seeking cooperation with the latter, reducing the length of their supply chain and shifting into a pull strategy. The construction sector, with particular emphasis for the Albanian city of Elbasan, has been analyzed by Shqau and Kacollja (2011). The sector has experienced a strong decrease in sales and in workforce, due to the reduction of people’s purchasing power, inflation and banking sector crisis, which resulted in difficulties for companies to get funding and growing interest rates. The decrease of people’s income is also the main cause of European insurance sector’s slowdown (Crăciuneanu, 2013). European insurance industry, notwithstanding the relevance of its investments and workforce, is suffering from the effects of the crisis, with consumers prudently investing in short-term savings, especially those offered by banks. Notwithstanding five world’s top destination are EU member States and the ability of attracting half billion tourists every year, tourism in Europe is affected by the crisis (Casado García-Hirschfeld and Ruiz Gómez, 2011). Even if tourism benefitted from the development of cheaper means of transport, such as low-cost airlines, and the rise of e-tourism, the current economic downturn heavily affected international tourism, business travel, hotel industry and air transport alike and resulted in people travelling for shorter periods. A different perspective on crisis has been adopted by Kutnjak, Radovič and Miljenović (2013), who studied the impact of the crisis on small business in Europe, with particular attention for Croatia. The economic relevance of these companies has been recognized in Croatia only since 2002 and today,
even if they are considered a “basic necessity” of every society, they are experiencing financial constraints more than big ones.

The crisis has thus been studied from different perspectives but, notwithstanding the abundance of empirical evidence on its causes and impacts, there is scope for further research. In particular, the impact of the crisis on specific sectors is still under researched. At the same time, the strategies followed by successful international companies to overcome the crisis have not been widely investigated. Thus, in the following sections the paper focuses on the confectionery industry, which has not attracted the attention of scholars yet, analyzing how the Italian leaders in this sector, Ferrero and Perfetti Van Melle, sought to successfully survive the crisis.

**Methodological issues**

In order to pursue the goals of the work, a case study research has been carried out (Yin, 1984), analyzing the financial statements of the two leading companies in Italian confectionery industry, Ferrero and Perfetti Van Melle. The concern of the paper is both quantitative and qualitative, in that we employed a quantitative examination of a set of indicators that has been integrated by a qualitative analysis of the annual reports of the companies. A specific methodology for financial statement analysis (Facchinetti, 2008; Fazzini, 2011), which is widespread in the Italian context (Caramiello, Di Lazzaro and Fiori, 2003) and tailored on Italian firms, has been used.

The research went through five methodological phases (Mella, 1996; Caramiello, Di Lazzaro and Fiori, 2003). First of all, a study of the economic context in which selected companies operate has been done, in order to understand opportunities and threats of the competitive setting and to contextualize their performance. Thus, the situation of Italian economy, with particular emphasis on confectionery industry, has been analyzed. Second, annual reports of Ferrero and Perfetti Van Melle have been collected form the archive of Ferrara’s Chamber of Commerce, in order to have a first picture of their form and content. We analyzed annual reports from 2006 to 2012 (being 2012 the last available report to date) to understand the situation of the companies short before and during the crisis, studying their performance and strategies that have been employed to improve it. It must be noted that both Ferrero and Perfetti Van Melle follow the rules of Italian civil law and Italian GAAPs to draw up their financial statements. Thus, even though the use of the same set of principles made the comparison more reliable, a third phase was necessary, the reclassification of both balance sheets and income statements to overcome the limits of financial statements (Sostero and Ferrarese, 2000) drew up according to Italian rules (e.g. there is not a clear distinction between current and non current assets or liabilities in the balance sheet, while the income statement lacks important margins such
as value added). Thus, the entries of the balance sheet have been reclassified in non current and current assets, and in equity, non current and current liabilities, while costs and revenues have been divided according to their source, being it the company’s core business, finance, other non-operating activities and discontinued operations. The results of all these areas have been calculated. Particular attentions has been paid to the company’s core business, with operating revenues and costs used to highlight key margins such as value added, earnings before interest, taxes, depreciation and amortization or operating profit. Reclassified balance sheets and income statements represented the sources of data for calculating financial indicators. We focused on a set of indicators that can provide valuable information about companies’ financial health and profitability: these indicators provide reliable information without requiring large amounts of time and resources to calculate them. Thus, on the fourth phase we used indicators in the form of ratios, in order to easily compare companies of different sizes (as Ferrero is much larger than Perfetti Van Melle), for both a vertical and horizontal analysis of the balance sheet. Vertical analysis allowed us to understand the formation of company’s assets and equity and liabilities, comparing each category to its total. On the assets’ side, we used two ratios, the rigidity ratio (computed as non current assets to total assets) and the elasticity ratio (computed as current assets to total assets). Thus the higher the rigidity ratio (and the lower the elasticity ratio), the greater the risk associated to the difficulty of changing firm’s productive structure when required by market fluctuations. On the equity and liabilities side, we focused on four ratios that highlight how the company tackled the funding problem. The financing autonomy ratio (computed as equity to total equity and liabilities) and the financing dependence ratio (computed as liabilities to total equity and liabilities) show if the company is autonomous in its financing decisions, in that it opts for self-financing or relies on debt, thus depending on banks or other companies to finance its assets. A better assessment of debts requires understanding when they have to be paid off: the long-term liabilities ratio (computed as non current liabilities to total equity and liabilities) and the short-term liabilities ratio (computed as current liabilities to total equity and liabilities) highlight the part of company’s debt that has to be paid beyond or within a year; thus, the highest the short-term liabilities ratio the greatest the need of liquidity to timely pay off debts. Horizontal analysis aimed at assessing companies’ solidity, solvency and liquidity. Solidity is evaluated through equity to fixed assets ratio and equity plus non current liabilities to fixed assets ratio, which show if equity or equity plus non current liabilities can finance fixed assets, thus securing long-term stability to the firm. Solvency is assessed through current ratio (computed as current assets to current liabilities), which highlights if
the company has enough resources to pay off its debts over the next year. However, a current ratio with a value higher than one is not enough to avoid possible financial stress, because it considers inventories: their conversion in cash in the short run cannot be taken for granted. Thus, to have a clearer picture of the ability of the company to meet its short-term obligations, we used *quick ratio* (computed as current assets less inventories to current liabilities), considering just liquid or near cash assets. During the fourth phase an analysis of companies’ profitability has been carried out too. We focused on four key indicators, the first being *return on investment* (ROI, computed as operating profit to total assets\textsuperscript{106}), assessing the efficiency and profitability of investments in the company’s core business. *Return on sales* (ROS, computed as operating profit to net sales) and *assets productivity ratio* (computed as net sales to total assets) are used to understand the sales strategy of the firm, assessing if it tries to achieve a big differential between revenues and cost of production (for example, thanks to high prices) or a large amount of sales (which might require low prices) to increase its operating profit. Lastly, *return on equity* (computed as net income after taxes to equity) has been used to understand if the firm used its equity in an efficient way and if it is profitable for its owners.

The fifth phase has been the assessment of the financial health and profitability of Ferrero and Perfetti Van Melle, analyzing the set of indicators and qualitative information drawn from annual reports (notes to the accounts, directors’ report) from a comparative perspective and focusing on the strategies they employed to tackle the crisis.

**Crisis and confectionery industry in Italy**

Italy has been heavily hit by the crisis, as it has been clearly shown by the Italian National Institute of Statistics in its 2013 report (Istituto nazionale di statistica, 2013). During the first years of the harshest phase of the crisis, Italian GDP decreased significantly (-1.2% in 2008, -5.5% in 2009); after a slight recovery in 2010 and 2011 (+1.7% and +0.4% respectively), growth returned to be negative in 2012 (-2.4%). This trend has been led by the fall of domestic demand, with people’s purchasing power which started decreasing from 2008 and reached its nadir in 2012 (-4.8%), when its reduction was even worse than GDP’s. The whole Italian industry has been affected by the reduction of domestic consumption, on which the rise of taxes had a significant influence. The state of financial stress of many banks, which led to credit crunch, have also had an important negative

\textsuperscript{106} Due to methodology for balance sheet reclassification we used we were able to highlight both assets employed for company’s core business and for other side activities, thus we actually computed in the denominator just the former, in order to assess the profit generated by company’s core business.
impact on Italian industry. Thus, after that between 2008 and 2009 25% of Italian industrial production was lost, the slight increase recorded between 2010 and 2012 has been balanced by another fall in 2012. This resulted in a worse performance for Italian firms, with a 4.2% decrease of gross profit and an 8% reduction of investments (which reached 10.6% for machinery and equipment), with many companies collapsing. Unavoidable consequence of this situation was the increase of unemployment, with unemployment rate reaching 10.7% in 2012.

As noted before, reduction of people’s purchasing power affected all Italian industry, and thus also food industry: this led to a shift in domestic consumption which resulted in a decrease of foodstuffs purchases both in quantity and in quality. Confectionery industry, notwithstanding ongoing difficulties, experienced a slight growth, even if it has been lower than the European average. In fact, European confectionery market between 2008 and 2012 grew by 2.9% in value (which reached 71.8 billion $) and 2.6% in volume\(^\text{107}\) (reaching a total of 6.52 billion kg), while Italian confectionery market grew by 1.3% in volume (total revenues were 4.8 billion $) and 1.2% in volume\(^\text{108}\) (reaching a total of 363.7 million kg), with market performance forecasted to follow a similar pattern in next five years. The growth of confectionery market is due to the pleasure and joy people find in eating it, especially in times of crisis: it symbolizes gaiety, festivity and good will and is felt as an affordable luxury (Webber, 2009) and thus can play a significant role in society (James, 1990). Confectionery market is characterized by the presence of large multinational companies, such as Mars Inc., Kraft Foods Inc. or Nestlé S.A., which hold a significant market share, although there are also smaller manufacturers which produce smaller quantities and focus on quality (such as Lindt & Sprüngli A.G.). According to CAOBISCO, the organization of confectionery trade associations within EU, confectionery market can be divided into sugar confectionery, chocolate confectionery and fine bakery wares, with the latter representing the most relevant sector both for production and consumption (followed by chocolate confectionery). Chocolate was the only sector that continued to drive its growth in Europe, while the others remained more or less stable both in production and consumption\(^\text{109}\). Italy is the third largest producing country within EU (after Germany and UK), and Ferrero and Perfetti Van Melle are the Italian leaders of domestic market (Datamonitor, 2013b). Ferrero was established in 1942 in Alba, in the region of Piedmont, and is the fourth largest group in


confectionery worldwide. It operates in all the sectors of which
confectionery market is made: chocolate (with pralines such as Ferrero
Rocher or chocolate bars such as Kinder Cioccolato), sugar confectionery
(Tic Tac) and fine bakery wares (Kinder Delice, Kinder Brioss among the
others). Perfetti Van Melle was established in 1946 in Lainate, in the region
of Lombardy. It focuses on sugar confectionery, being the third largest group
in sugar confectionery worldwide, with a wide range of products such as
gums (Brookling, Vigorsol, Daygum…) and candies (Chupa Chups, Mentos,
Alpenliebe…).

**Ferrero S.p.A. and the crisis**

Ferrero, as shown by Figure 1, from 2006 to 2012 experienced an
increase in its assets that resulted in an increase of the rigidity ratio (from
47.7% to 54.9%) and in a decrease of the elasticity ratio. Actually, both non
current and current assets grew, but the former’s increase was higher than the
latter’s. Although this might be regarded as a first signal of crisis, with the
company experiencing difficulties in selling products, collecting credits and
thus converting assets into cash, it must be noted that this is a clear strategy
for Ferrero. In fact, during the seven years we analyzed, Ferrero constantly
invested increasing amounts of money in improving its plant and machinery.
The aim is clear: to get state-of-the-art plant and machinery to cut
inefficiencies and increase productivity. It is pertinent to note that most of
these new tangible assets have been manufactured within the Ferrero Group,
first by a specific firm, Ferrero Ingegneria S.p.A., and from 2009 directly by
Ferrero S.p.A., after the former has been merged in the latter. This strategy
allows Ferrero to timely get new machinery that is tailored on its specific
manufacturing needs without incurring in high purchasing costs. Thus,
Ferrero reinforced its production lines both in the main manufacturing plant
in Alba and in the peripheral one in Balvano, and both for new products,
such as the Kinder Frutti, and for traditional ones, such as Nutella or Ferrero
Rocher.
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<th>2006</th>
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<td>50.9%</td>
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<td>52.3%</td>
<td>49.1%</td>
<td>49.4%</td>
<td>41.7%</td>
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<td>16.2%</td>
<td>19.9%</td>
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<td>Financing dependence ratio</td>
<td>81.7%</td>
<td>83.8%</td>
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<td>71.1%</td>
<td>59.8%</td>
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<td>Equity to fixed assets ratio</td>
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<td>0.39</td>
<td>0.56</td>
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<td>Current ratio</td>
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<td>12.5%</td>
<td>9.8%</td>
<td>12.4%</td>
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<td>ROS</td>
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<td>7.4%</td>
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<td>9.4%</td>
<td>9.5%</td>
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<td>Assets productivity ratio</td>
<td>1.8</td>
<td>1.7</td>
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<td>ROE</td>
<td>35.0%</td>
<td>39.1%</td>
<td>33.1%</td>
<td>20.3%</td>
<td>23.1%</td>
<td>15.0%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Moreover, important investments have been made in alternative energy sources, in order to improve the company’s reputation and reduce energy costs, which in Italy are particularly high. Thus, Ferrero invested in photovoltaic systems and combined heat and power systems fuelled by vegetable oil. The strategy seems to be very successful, as tangible assets increased by 124% from 2006 to 2012 (plant and machinery grew by 183%), with Ferrero constantly developing its manufacturing capacity and reducing energy costs. Investments in renewable energy along with the popularity of its products led Ferrero to be awarded as the best reputable company in the world in 2010\textsuperscript{111}. The increase in rigidity is also due to the growing weight of financial assets, which serve the strategic aims of the firm. In 2007 a new investment in Energe S.p.A., whose aim is to produce energy from renewable and conventional sources has been made to support the energy cost-cutting strategy. Moreover, new companies has been established in developing countries (such as Egypt, Cameroon, India), the so-called “Ferrero’s social enterprises”, which aim at sustaining local people’s income and manufacturing Ferrero’s products following country-specific requirements, a further step towards internationalization. Nevertheless, the financial crisis affected Ferrero’s financial investments, with the value of

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\textsuperscript{110} Source: authors’ own elaboration from Ferrero’s financial statements for the years 2006-2012 retrieved from Ferrara’s Chamber of Commerce.

\textsuperscript{111} Source: http://www.reputationinstitute.com.
Mediobanca, one of the most important Italian banks (which testifies the strong interrelation between firms and banks that characterizes Italy), constantly decreasing from 2006 to 2012 (-58%). Intangible assets increased by 30%, being mostly made up of patents and brands, with no capitalization of R&D costs: research activity for the whole group is carried out by Soremartec Italia S.r.l., so its cost is expensed through the income statement as a service cost. Lastly, an increase in long-term investments that are not directly linked to Ferrero’s core business must be observed, with the firm purchasing AAA rated bonds issued by supranational bodies (such as the world bank) and held to maturity.

As noted earlier, current assets are increasing, but not as much as non current ones. Inventories play a pivotal role, as Ferrero needs a large stock of supplies to fuel its increasing production and to meet orders. The increasing value of inventories is also linked to the fluctuations of the prices of many raw materials, which heavily depend on climate conditions or political situation of exporting countries\textsuperscript{112}. In 2012 a great increase in inventories resulted from capital work in progress related to the construction of machinery for parent companies. The good financial health of Ferrero is testified by increasing trade receivables, with a rise of 70% from 2006 to 2012, and growing operations among companies of the Ferrero group that led to an increase of intercompany credits. Lastly, a decrease of cash and cash equivalent has to be registered, with the company reducing the amount of bank deposits to increase investments.

As Figure 1 clearly shows, Ferrero increased its autonomy from 2006 to 2012, with an incredible rise in equity of 322% that is not due to an increase in paid-up capital, but to the accumulation of profits. In the beginning of the crisis, Ferrero usually distributed profits to its shareholders, given its good financial health. However, when the financial crisis reached its nadir in 2008 (the year of Lehman Brothers default), it prudentially started to allocate profits to reserves or retained earnings, thus reducing the reliance on external funding. After 2007, just in 2010 profit has been partially distributed to shareholders, while in 2011 and 2012 it has been entirely allocated to reserves or retained earnings. This strategy led to a decrease of both long-term and short-term liabilities ratio. The decrease in non current liabilities has been particularly high, with Ferrero reducing the amount of long-term loans taken from banks: in 2012 non current liabilities are mostly made up of long-term provisions for risk and charges and

\textsuperscript{112} For example, the price of cocoa is often influenced by political tensions in Western Africa, while in 2012 the price of hazelnuts increased by 45% because of a scarce harvest in Turkey due to bad climate. Raw materials prices are also linked to energy costs, with Libyan warfare and Fukushima nuclear disaster causing in 2011 an increase in oil prices which resulted in a general price rise.
employees benefits. Notwithstanding a decrease in current liabilities ratio, current liabilities increased (even if less than equity). Ferrero has always heavily relied on current account overdraft to fund its production, with the former reaching a value of 500,000,000 € in 2008. Since then Ferrero tried to reduce the dependence on current account overdraft using intercompany loans in 2010 and most notably in 2012, when it has been heavily reduced, returning on same value it had in 2006. Thus, Ferrero tried to reduce its dependence on external funding through its own profit and funding coming from parent companies, with a decrease in borrowing costs. Trade payables are another important constituent of current liabilities, with an increase of 10% from 2006 to 2012 which testifies, along with the rise of trade receivables, the growth of production and sales.

The changes in assets and equity and liability can be used also to assess Ferrero’s solidity, solvency and liquidity. Ferrero’s solidity benefitted from the growth of company’s equity, with an increase in both equity to fixed assets ratio and equity plus non current liabilities to fixed assets ratio. However, due to the large amount (and rise) of fixed assets, long-term funds are not enough to sustain Ferrero’s investments. Even solvency is under question, with a remarkable increase in current ratio due to the rise of non current assets which is not enough to cover current liabilities, which remain very high. However, thanks to the shift in the sources of external funding (from banks to parent companies) the risk of default significantly decreased. Moreover, part of the 2012 current liabilities is made up of advances paid by parent companies for under construction machinery, thus they will not lead to any cash outflows. Liquidity is maybe the most serious problem of Ferrero; given the relevance of inventories, current assets less inventories account only for 50% of current liabilities. Nevertheless, this seems to be a structural feature of the company: even if this ratio has always been rather low, Ferrero had never experienced financial stress, thanks to a good planning of cash inflows and outflows, but also probably incurring debt to pay off other debt.

Ferrero’s profitability is more than satisfying, especially in times of crisis. ROI remains around 12%, but with a constant increase of operating income (apart from a slight reduction from 2006 to 2007), even in 2012, which can be regarded as the darkest year for Italian economy since the beginning of the crisis. However, the rise of operating income has been balanced by an increase in assets that prevents ROI to grow further. Sales revenues increased in the period we analyzed, thanks to traditional evergreen products (above all Nutella) but also to constant innovation, with new products such as ice-cream (Grand Soleil), pralines (Raffaello or Rondonoir), pastries (Kinder Frutti) and other. Other income comes from services to parent companies (most of all transports and consultancy), this further
showing the links among the companies in Ferrero Group. Italy is the most important market for Ferrero, but an increasing share of revenues comes from export (27.8% in 2006, 32.5% in 2012). Domestic sales are now slightly decreasing in volume (-0,1%) and in value (-0,8%) because of the reduction of people’s purchasing power, while international sales are strongly increasing (+8,4% in volume and +12,5% in value), thanks to exports to Europe, but also to USA, Middle-Eastern countries and China. Inventories of finished goods constantly decreased (apart from 2008 and 2010). Costs, especially for raw materials, services and personnel increased, even if less than revenues. Raw materials are the most relevant costs for Ferrero (nearly 50% of total operating costs) and also the most unpredictables, as it has previously noted. However, thanks to ongoing investments in state-of-the-art plant and machinery, Ferrero managed to process raw materials more efficiently. Cost of services is important for Ferrero too, even if the company tried to reduce it notwithstanding an increasing production, due to the crisis that heavily affected its most relevant market. Notwithstanding a reduction between 2011 and 2012, advertising costs, which are never capitalized and always expensed through income statement, play a pivotal role, as they account for 28% of the whole cost of services: Ferrero especially uses TV to publicize its products. Expenses for research and development (performed by Soremartec Italia S.r.l.) are relevant, as well as transportation costs (one of the few service costs that increased from 2011 to 2012, due to the increase in export). Energy cost started to decrease since 2010 (even if with a slight increase in 2012), thanks to the investments in renewable energy. Employee benefit expenses constantly increased from 2006 to 2012 as they grew by 110.000.000 €: even if Italian economy has been characterized by a growing unemployment rate during the crisis, Ferrero’s employees went from 5.572 in 2006 to 6.095 in 2012, this further testifying the will to increase production. Ferrero’s ROI, especially during the last years, seems to rely more on ROS than on assets turnover productivity. However, thanks to a wide range of new and traditional products, the company can act on prices of most popular products to balance a decrease in the volume of sales. Ferrero’s ROE is constantly decreasing, but this trend is mostly due to the increase of equity rather than to a decrease in net profit. The latter grew from 2006 to 2010, while decreased during last two years. The cause of this deterioration, notwithstanding increasing operating income, are growing financial costs, especially in 2012. In 2011 and 2012 Ferrero had to pay high interests on short-term debt, and the situation was even worsened by losses due to the market value of Mediobanca that felt below its carrying amount. Lastly, net income has been reduced by debilitating taxes that are one of the key features of Italian market. However, in the future net profit could benefit
from extra-income granted by investments in bonds and lower interest thanks to the shift in external funding sources, even if the weight of taxes will remain relevant.

**Perfetti Van Melle S.r.l. and the crisis**

As Ferrero, though to a lesser extent, Perfetti Van Melle from 2006 to 2012 invested in state-of-the-art plant and machinery to make its manufacturing process more efficient, with fixed non current assets rising by 19%. Thus, Perfetti Van Melle grew in dimension during the seven years we analyzed, but far less than Ferrero. Perfetti Van Melle’s non current assets are mostly made up of fixed tangible assets (95,2%). Intangible assets constantly increased from 2006 to 2012 due to purchases of laboratory apparatuses (even though R&D expenses are non capitalized), showing a tension towards product innovation. The most relevant investments have been made since 2010, when the company decided to invest in a new informative system, SAP; however, intangible assets still represent a small share of total non current assets (just 1,9%). Financial assets became slightly relevant just in 2012 because of long-term credits from the controlling entity due to tax refunds; it is pertinent to note that, unlike Ferrero, Perfetti Van Melle does not hold any shares of other companies and invests only in its core business.

Inventories are relevant, but not as in Ferrero: they represent 6,4% of current assets, and are mostly made up of finished goods, in order to timely meet orders. Raw materials are less relevant than it happened in Ferrero, because of a fewer number and range of products: Perfetti Van Melle can use the same raw materials to manufacture different kinds of gums or candies changing just a few ingredients. Current assets are mostly made up of trade receivables (87,2%), showing a very good financial health and the ability to generate large amounts of cash. Trade receivables constantly increased from 2006 to 2012 (they grew by 90,2%), and the majority of these receivables are from the controlling company because of the cash pooling policy adopted by the group. This policy has proven to be extremely efficient, as receivables from the controlling company grew by 310% from 2006 to 2012, with a reduction of trade receivables from clients of 21%.
The presence of a centralized treasury allows the group to effectively tackle problems arising from dispersed bank accounts at different banks, in different currencies and even in different time zones, funding cash deficits within the group, thus reducing the need for external funding and cost of borrowings, and investing surpluses in the money market (Polák and Klusáček, 2010). The relevance of intercompany operations in Perfetti Van Melle Group is also testified by a loan distributed by the company to a parent entity (60.000.000 €) that is monthly renewable. Cash and cash equivalent are as relevant as inventories, they increased by 68,9% in the period, especially since 2011: this further testifies how Perfetti Van Melle benefits from a great level of liquidity.

Equity is the most relevant source of funding for Perfetti Van Melle, as the financing autonomy ratio is very high (86,5%) and constantly increasing from 2006 to 2012. Autonomy is a key value for Perfetti Van Melle, with the company continuously investing profits in its core business, generating the cash to purchase raw materials, services or even new machinery or the new informative system, neutralizing the risk of losing control over its affairs. Self-financing, which is rather uncommon in large

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113 Source: authors’ own elaboration from Perfetti Van Melle’s financial statements for the years 2006-2012 retrieved from Ferrara’s Chamber of Commerce.
companies\textsuperscript{114}, is achieved by constantly allocating profit to retained earnings: in the seven years we analyzed, Perfetti Van Melle did not distribute any dividends. Thanks to this policy, equity rose by 108%. On the contrary, Liabilities significantly decreased, especially since 2010. Non current liabilities are exclusively made up of long-term provisions for risk and charges and employees benefits. Current liabilities, which decreased by 23% from 2006 to 2012, are mostly made up of trade payables (which in turn significantly decreased in the last year to the value they had in 2006). The most relevant change in current liabilities is the disappearance of current account overdraft, the only financial liability that is present in Perfetti Van Melle’s balance sheet: it decreased from 22,000,000 € to just 171 € in seven years (when 2012 total equity and liabilities amounts to 900,000,000 €). This is fully consistent with the self-financing strategy adopted by the company, which almost totally stopped incurring debt. Lastly, part of Perfetti Van Melle’s short-term debts, such as for competitions, are linked to its very developed merchandising, whose costs are the most relevant part of service cost.

Unlike Ferrero, which could experience some problems, especially in liquidity, Perfetti Van Melle has a very good financial health. All ratios we used for horizontal analysis are increasing, especially in the last year. Thus, the company is extremely solid, with increases in non current assets relatively low compared to the rise of equity, while non current liabilities are slightly decreasing: equity covers nearly 10 times the value of fixed assets, nearly a feat without parallel in Italy, where most firms suffer from low capitalization. Solvency is excellent thanks to the notable amount of trade receivables and cash and cash equivalents, with current assets growing more than current liabilities. The weight of inventories is unremarkable, as shown by quick ratio, with increases in receivables and cash and cash equivalents and the decrease in current account overdraft providing the company with a large amount of liquidity, which is mostly managed by the centralized treasury to avoid over-liquidity problems, with cash being left in unproductive capacities rather than usefully invested.

Profitability should be Perfetti Van Melle’s first concern; if the crisis did not undermine company’s financial health, the same could not be said about its performance. ROI decreased to 1/3 the value it had in 2006, and that is the effect of two combined causes: the decrease in operating income which occurred since 2010, and the ongoing rise of total assets. Revenues

\textsuperscript{114} A notable exception in confectionery industry is the market leader, Mars Inc: one of its key values is “freedom”, which is achieved through family ownership and reinvesting a substantial portion of profits. Source: http://www.mars.com/global/assets/documents/433657mars_the_five_principles_of_mars_without_signatures_V2.pdf
increased from 2006 to 2009, while started to decrease since 2010, with a
significant fall in 2012, the worst year for Italian economy during the crisis,
when the reduction of purchasing power along with the growth of
unemployment led people to cut unnecessary expenses, such as gums or
candies. The effects of these problems on Ferrero have been less severe,
probably because many of its products are part of the traditional Italian
breakfast (especially pastries which are well-appreciated by children), are
very popular (such as Nutella) and thus are perceived as irreplaceable, or can
be used as traditional and well-accepted gifts (for example pralines such as
Mon Cheri, Pocket Coffee or Ferrero Rocher). Another hint of the
difficulties encountered by Perfetti van Melle in 2012 is the rise of
inventories of finished goods, after many years of decrease, which can be
regarded as a sign of a slowdown in sales. Notwithstanding this slowdown in
sales, Perfetti Van Melle is still very focused in launching new products,
with the latters generating more than 10% on average of total revenues. Non
cash revenues are also fuelled by work in progress, related to both tangible
and non tangible fixed assets, even though their weight on total revenues is
limited. Raw materials are not the main costs for the company, as it
happened to Ferrero: once again, the relatively limited variety of products
enables Perfetti Van Melle to purchase the same raw materials to
manufacture several kinds of goods. However, the cost or raw materials
followed the same trend of revenues: Perfetti Van Melle probably tried to
reduce the amount of purchased raw materials in correspondence to
decreasing sales. Notwithstanding investments in new machinery, the
company managed to reduce the cost of raw materials by 4%, while total
revenues reduction was 9% from 2006 to 2012, also because of an increase
in prices. The most relevant cost for Perfetti Van Melle is related to services.
The great majority of services cost, which rose by 2% from 2006 to 2012,
but with a significant decrease in 2011 and 2012, is linked to the promotion
and commercialization of products, with advertising and commercial costs
(including the cost of commercial agents) accounting for 86% of the total
sum. TV is the most important channel, but the relevance of internet is
increasing, due to its minor cost and the possibility to gather the attention of
Perfetti Van Melle’s main targets, that are young people. High commercial
costs are mainly linked to the necessity of a well-developed network of
commercial agents who are entrusted with the duty of selling Perfetti Van
Melle’s products to retailers, being them supermarkets, but also small shops
or even bars and tobacconists. Energy costs are also increasing, as it
happened to Ferrero; however, Ferrero is increasing its production, unlike
Perfetti Van Melle. The cost of personnel significantly rising (25%) from
2006 to 2012, with the number of employees that rose by 4% (from 625 to
651), even though it is decreasing since 2010, with rising costs linked to salary increases imposed by new national contracts.

The decrease of ROI is due both to a fall of ROS and assets productivity ratio. In particular, the reduction of sales in volume has not been balanced by increases in prices, which could have resulted in further reduction of sales due to loss of people’s purchasing power.

The reduction of ROE does not come as a surprise, as net profit is tightly tied to operating profit, non-operating areas have an unremarkable weight on it. However, it must be noted that, consistently with Perfetti Van Melle’s self-financing strategy, the company does not have to face interests for borrowings (in 2012 interests paid on debt were just 906 €). Moreover, the company benefits from interests arising from cash deposited in the centralized treasury. Lastly, it is worth noting that the reduction of ROE is also linked to the constant rise of equity.

**Discussion and conclusion**

The crisis has been the target of several studies, most of them tried to understand its causes or its impact in specific countries. Although some works focused on specific industries, this field of study remains rather unexplored. The present study sought to address this issue by analyzing the confectionery industry, with particular emphasis on Italy and Italian market leaders, Ferrero and Perfetti Van Melle. Informed by an approach which has been both quantitative and qualitative, thanks to the analysis of firms’ balance sheets and income statements for the years 2006-2012, integrated by other relevant data retrieved from their annual reports, the paper sought to understand if Ferrero and Perfetti Van Melle managed to survive the crisis and which strategies they employed in achieving this goal.

The analysis highlighted that both firms are successfully overcoming the crisis, presenting a good financial health and a satisfactory level of profitability. However, while Perfetti Van Melle benefits from a very high level of liquidity and thus of elasticity, Ferrero is more rigid and could suffer from liquidity problem, even though its good planning of cash inflows and outflows, along with the ability of harvesting funds with no problems. On the other side, while Ferrero’s profitability is stable, and its operating income is constantly increasing (along with its production), Perfetti Van Melle is experiencing a slowdown in sales which forced the firm to cut costs. However, the firm’s ROI and ROE are still satisfactory.

Both the companies invested in state-the-art plant and machinery to improve their manufacturing process, most notably Ferrero, which also invested in alternative energy sources to cut energy cost. Ferrero and Perfetti Van Melle both are increasingly relying on self-financing to cut financial costs: if this is has been a traditional feature of the latter, in the last year also
the former is prudentially allocating profit to reserves. Moreover, in order to reduce dangerous short-term liabilities such as current account overdraft, Ferrero is increasingly relying on intercompany borrowings. Centralized treasury provides Perfetti Van Melle with low cost funding, this further enhancing its autonomy. Ferrero is increasing its production (especially for export) and its revenues, while Perfetti Van Melle is more concerned in cutting cost. Both the companies understand the necessity to constantly product new goods, besides traditional and very popular products, to attract the attention of the consumer. Thus, they firmly invest in research, but also in advertising.

The present study adds the literature on crisis analyzing a specific industry which has not attracted a significant level of interest yet. Moreover, it focuses on successful firms in order to highlight effective strategies that could be used by other companies operating in the confectionery market. It must be noted that the methodology we used has the potential to provide useful information to assess the financial health and profitability of a company without requiring complex and time consuming calculations, but some limitations are to be admitted, as it unavoidably relies on the experience and competence of the external analyst, who can just count on official data provided by the company (Teodori, 2000). Bearing this in mind, there is scope for future research, which could analyze other successful firms in confectionery market or in other sectors.

References:


Laux C., Leuz C. (2009), The crisis of fair-value accounting: making sense of the recent debate, *Accounting, Organizations and Society*, vol. 34, n. 6-7: 826-834.


