
The impact of growth strategies on the performance of large food and beverage companies



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Abstract

While the majority of the researches that study growth strategies focus on the impact of external growth, little attention has been paid to the simultaneous and differential impact that internal growth has within large companies. Furthermore, no prior single industry study has focused on the Food & Beverage industry. For these reasons, this research aims to (1) analyse the impact of growth strategies on the long-term performance and (2) investigate specific F&B firms' growth strategies. We reach this aim by using a database comprising of 28 large listed F&B Western companies in the period 2007-2015. We use EBITA Ratio as accounting measure for performance, and we execute a literature study to dive into the specific F&B industry characteristics that influence growth strategies' choice. We find with strong evidence that internal growth has a positive differential impact on performance. On the other hand, no significant correlation between external growth and performance occurs, while acquisition experience has a small but significant effect. It appears that most of the internal growth comes from emerging markets, while firms focus on acquisitions within mature economies, to seize market trends and unlock future growth. Our contribution lies in adding evidence to the limited amount of studies that analyse the differential impact of growth strategies. Further, we bring new and relevant evidence on the F&B industry by focusing on a single industry.

Keywords: Growth; growth strategies; impact; performance; food industry; internal growth; external growth.

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Key terms and definitions

M&A - Mergers and Acquisitions.

Merger - Voluntary amalgamation of two firms on roughly equal terms into one new legal entity.

Acquisition - Taking control of a firm by purchasing 51 percent (or more) of its voting shares.

F&B – Food and beverage industry.

Food and beverage industry - Defined as including companies that have SIC codes form 2000 to 2099.

R&D – Research and development.

Large food companies – Companies having more than \$4 billion in revenue.

CAGR – Compound Annual Growth Rate.

1 Introduction

In the pursuit of continuous growth, external growth strategies (i.e. involving external resources) represent important growth means for large food companies. As a matter of fact, 2014 has been a record year for M&A (Merger and Acquisition) activity in the food industry in terms of deal values, after a continuous rise after the financial crisis in 2008. The merger between H.J. Heinz Co. and Kraft Foods Group Inc. (2015), and the joint venture between D.E Master Blenders and Mondelez International (2015) are some of the most recent and evident examples of major external growth strategies (Jachim et al., 2014; Fusaro, 2016; Bureau van Dijk, 2017). However, these last strategies are not always successful. Although they provide fast growth in sales and market share, most of the M&A fail to deliver shareholder value and profitability in the long run. Hence, because of their controversial impact, external strategies capture the attention of scholars, leaving out what it seems to be a less proportionally relevant way of growing in large corporations, i.e. internal growth (Lamont, 2002; Häkkinen, 2005; Achtenhagen et al., 2017). Internal growth is the natural way for companies to grow. It relies on the resources owned and within the company and it includes those strategies that consist of developing and exploiting internal resources and capabilities (e.g. launching new products, entering new markets, etc.). Internal growth arises from marketing and sales activities but also from other core business processes such as R&D and Supply Chain Management (McCann, 1991; Srivastava et al., 1999; Penrose, 1959). Nevertheless, internal growth strategies require more time, investment and risk compared to the external ones. (Kemppi et al., 2012; Aktas et al, 2008). In brief, both have advantages and disadvantages regarding the way they affect organisational performance. However, since “growing” is necessary, especially for public companies, firms pursue different strategies to achieve underlying growth and profit goals. It is generally known why companies choose external or internal growth strategies, but what is the effect of these strategies on performance? Do external strategies provide better performance than the internal ones? Or is it the opposite? To answer these questions, this research aims to investigate the impact of different growth strategies on the accounting performance by taking in consideration large Food and Beverage companies.

1.1 Conceptual research design

Conceptual research design focuses on clarifying what this topic consists of and why this research will be done. First, paragraph 1.1.1 describes the context of the topic, which is based on the literature on firms’ growth strategies. Second, paragraph 1.1.2 describes the problem analysis and research objective to isolate a manageable issue from the context. Third, paragraph 1.1.3 describes the steps that are needed to realise the research objective by providing the research framework. Finally, in paragraph 1.1.4 the theoretical framework provides the main and sub-research questions.

1.1.1 Research context

Most of the articles on firms' growth strategies refer to the Penrose's growth theory, which for the first time distinguishes between internal and external growth. Internal growth means growing from internal sources such as R&D, marketing, and core business processes. It relies on existing resources that can be increased by employing and training new staff, and it is especially characterising of young ventures relying solely on it (McCann, 1991; Lockett, 2011; Penrose, 1959; Srivastava et al., 1999).

External growth, on the other hand, involves a firm achieving growth from external resources through partnership or acquisition of companies in related or unrelated business areas. External growth strategies allow a firm to exploit growth opportunities by creating synergies between resources that already are present in the firm with complementary resources from external entities. External strategies include M&A, alliances, joint ventures, financial investments, minority stakes, and partnership (McCann, 1991; Chen, 2009; Lynch, 2006; Harrison et al., 1991, 2001).

Strategic management literature studies these two main strategies separately in almost all cases. Besides, it is mainly oriented to study the motives and the effects of external strategies, with a focus on large companies and their consequent financial performance. Studies on internal growth strategies, on the other hand, are much less common. Recently, some studies are going beyond the dichotomy between internal and external growth strategies, recognising how companies the so-called hybrid strategies, meaning different combinations of these two different growth modes (Achtenhagen et al., 2017; Delmar, 2003).

To conclude, growth strategies have so far been classified into two main categories in literature: internal and external. Although there is research on the so-called hybrid strategies, this is mainly qualitative and does not have to deal with disentangling the effects of mixed strategies. Therefore using a different classification would make quantitative studies unapproachable and difficult to conduct. Furthermore, questions regarding the impact on the performance of the two most important growth strategies still need to be fully answered.

1.1.2 Problem Analysis

The choice between internal and external growth strategies is an important decision for a company. However, the response from the literature regarding their effect seems to be mixed with both advantages and disadvantages, and without a clear explanation on their differential impact on performance (Aktas et al., 2008).

External growth strategies, in particular acquisitions, are undoubtedly popular among large companies. The reason is that they allow achieving a better position in the market faster, controlling competition by buying out competitors, and creating synergies between the combined companies (Kemppi et al., 2012; Lynch, 2006; Capron et al. 1998; Wilson, 1980). Nevertheless, while M&A often fail to achieve those synergies, there is empirical research

showing that these strategies might be value-destroying corporate decisions in the long term ((Häkkinen, 2005; Loughran and Vijh, 1997; Rau and Vermaelen, 1998; Agrawal and Jaffe, 2000). Internal growth strategies allow a company to have better knowledge of their assets and therefore to make more efficient and better-planned investments (Kazanijan et al., 2006). Another advantage is that internal growth encourages internal entrepreneurship and creates a sustainable competitive advantage (Aktas et al., 2008; Barney, 1988; Dalton and Dalton, 2006). The disadvantages are mainly represented by a slower growth process and by more difficulty to adopt organic growth in mature industries like the food one (Kemppi et al., 2012; Penrose, 1959; Jachim et al., 2014).

In brief, adopting one growth strategy over another present both advantages and disadvantages. Different growth strategies require different managerial skills and organisational structures and will have a direct impact on performance (Penrose, 1959; Delmar, 2003; Dalton and Dalton, 2006; McKelvie et al., 2006). Nevertheless, academic studies largely overlook the analysis and comparison of these two main growth strategies (Delmar, 2003).

Hence, this research tackles two main issues: (1) what the growth strategies adopted by large food companies are and (2) what impact these strategies have on the company's performance. The aim is therefore to contribute and to increase the strategic management literature regarding growth strategies with a focus on large food companies. To our knowledge, only a few studies compare the impact of internal vs. external growth strategies. For this reason, this research contributes to the literature by:

- 1) Investigating growth strategies focusing on a single industry by restricting the field of interest to the F&B industry. Every industry possesses its characteristics and unique market forces affecting the development of a firm in a given context. Therefore, only by focusing on one single industry one can provide insights and comprehend its growth patterns.
- 2) Analysing the impact of both growth strategies on performance, simultaneously.

From this analysis, we derive the following objective for this research:

“To contribute to the strategic management literature, by investigating the growth strategies and expansion formats adopted by large food & beverage companies, and to assess their impact on the long-term performance.”

1.1.3 Research Framework

In order to reach the research objective, this study needs to first (1) recognise the growth strategies and the expansion modes according to how literature classifies them. In addition, it has to be investigated how the literature in this field measures and assesses the impact of these growth strategies on performance. (2) In the empirical research, data will be gathered regarding both the strategies and formats adopted, as well as on the performance obtained. (3) Based on the analysis of the data collected during the empirical research and the study of the literature (4) conclusions and managerial implications will be provided.

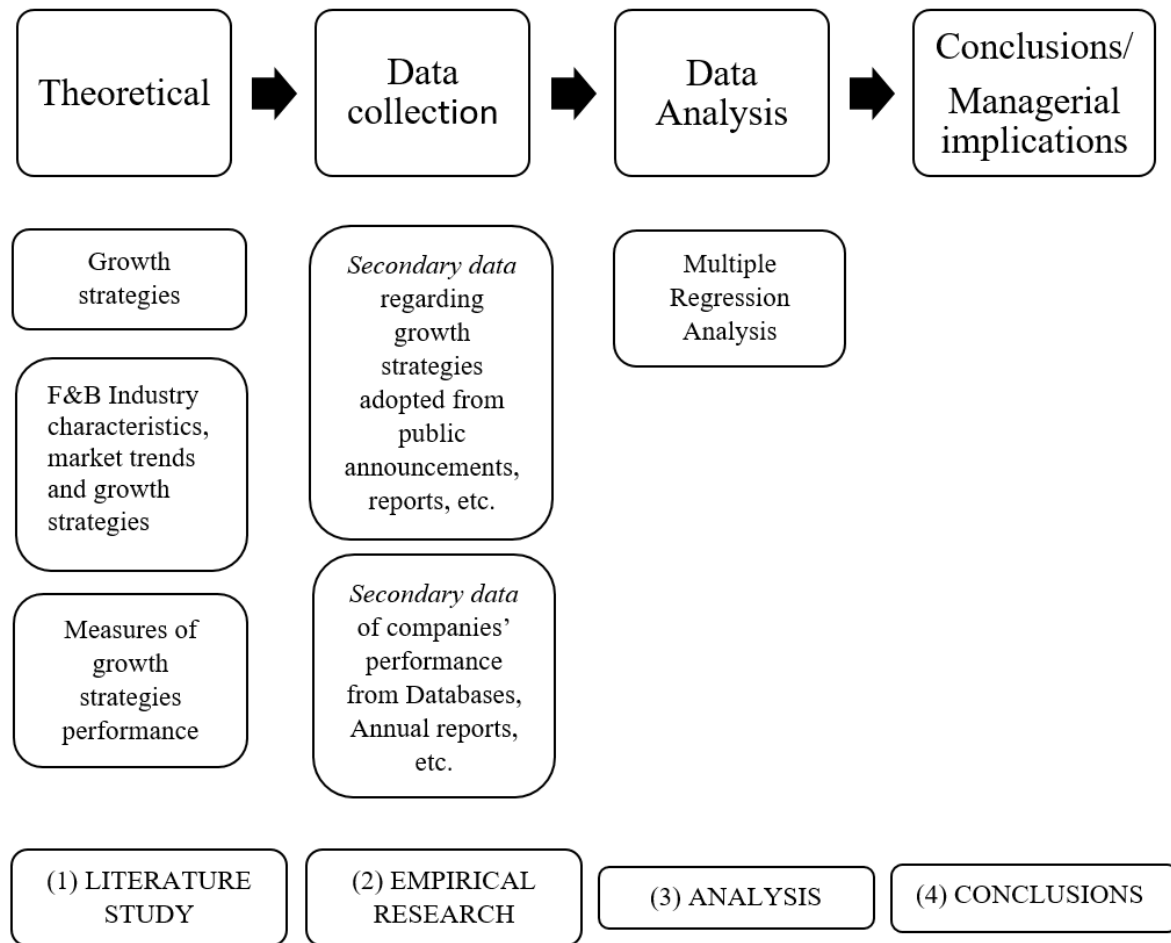


Figure 1. Research framework 'Growth strategies of large food companies'

1.1.4 Research questions

Main research question

What are the growth strategies adopted by the western large food companies and what is the impact of these strategies on their performance?

Sub-questions

1. What are the academic approaches and insights regarding growth strategies studied in economics and management literature? Moreover, what are advantages and disadvantages of internal and external growth strategy? *This SRQ will be answered in section in 2.1*
2. What are the characteristics of the Food and Beverage industry and what are the industry specific growth strategies and rationales behind these? *This SRQ will be answered in section 2.2.4*
3. What are the suited indicators to measure firm growth and firm performance with regard to growth strategies? *This SRQ will be answered in section 2.3*
4. What are the differences in performance of large food companies based on their growth strategies/formats? *In order to answer to this SRQ we will firstly formulate our hypothesis according to the literature in 2.4, and test the hypothesis with the empirical collected data in ch.4*

Together the sub-questions will answer the main research question (MRQ), which is to be found in chapter 5.

1.2 Technical Research Design

This second part of the technical research design will be described and explained. It is composed of two paragraphs: Paragraph 1.2.1 explains the strategy, while paragraph 1.2.2 describes what material and what sources will be used in order to answer to the main research question.

1.2.1 Research Strategy

The most important decision a researcher has to make in his technical design is the strategy to follow, i.e., the way in which the research will be carried out (Verschuren and Doorewaard, 2010). The first strategic decision taken for this study is the choice between either breadth or depth. This study opts for a large-scale approach taking into consideration not a particular F&B company, but the entire industry. Therefore, it can be considered as following a breadth approach. Because this approach is chosen, it will not be possible to study these companies

qualitatively. Hence a quantitative methodology will be adopted. More importantly, to evaluate the impact of a specific strategy based on the effect on the performance, a quantitative study is more suitable.

Since this research will mainly consist of rearranging, analysing and interpreting existing data produced by others, this study can be considered as an empirical research of secondary data. This type of strategy research falls into the category of desk research with the variant of secondary research. The other variant, literature survey, consists instead on basing the research on knowledge produced by other, i.e., existing specialist literature.

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1.2.2 Research Material

Research Questions	Research Material
1. What are the academic approaches and insights regarding growth strategies studied in economics and management literature? Moreover, what are advantages and disadvantages of internal and external growth strategy?	Scientific literature on growth strategies
2. What are the characteristics of the Food and Beverage industry and what are the industry specific growth strategies and rationales behind these?	Scientific and professional literature on growth strategies in the F&B industry
3. What is the suited approach and what are the suited indicators to measure firm growth and firm performance with regard to growth strategies?	Scientific literature and books on performance measurement.
4. What are the differences in performance of large food companies based on their growth strategies/formats?	Financial data from Annual reports (available on companies' websites) and <i>Orbis</i> database. M&A data from Thomson One database.

Figure 2. Research material for the research

2 Literature Review

This section of the thesis entails the most relevant literature concerning growth strategies and their impact on performance.

In order or sequence, paragraph 2.1 consists of an overview on the main academic approaches regarding growth strategies. Subsequently, in sub-section section 2.1.1 and 2.1.2 respectively, the internal and external growth strategies are analysed more in detail. The focus is on motives, advantages and disadvantages of choosing one strategy. In this section the question to be answered is: *What are the academic approaches and insights regarding growth strategies studied in economics and management literature? Moreover, what are advantages and disadvantages of internal and external growth strategy?*

Paragraph 2.2 aims to continue the discussion about growth strategies by focusing the attention on the food and beverage (F&B) industry. Sub-paragraphs 2.2.1, 2.2.2 and 2.2.3 outline characteristics, market trends, M&A activity and private equity influence on the strategies and expansion formats adopted by large F&B companies. This chapter will answer the question: *What are the characteristics of the F&B industry and what are the industry specific growth strategies and rationales behind these?* Paragraph 2.3 of the literature review discusses the topic of measurement indicators for growth and performance: sub-section 2.3.1 examines firm growth indicators, sub-section 2.3.2 deals with the measures of performance regarding the financial domain, and subsection 2.3.3 discusses the chosen accounting-based measures. By selecting the most suited indicator of performance for this research in this paragraph, we will answer the following question: *What is the suited approach and what are the suited indicators to measure firm growth and firm performance with regard to growth strategies?*

Finally, paragraph 2.4 elaborates on the studies that analyse simultaneously the impact of growth strategies on performance. The aim of this paragraph is to review the three prior studies to formulate the hypothesis to be tested in the empirical section. A conceptual model connecting hypothesis and theoretical framework will be provided. We will address the question: *What are the differences in performance of large food companies based on their growth strategies/formats?*

2.1 Growth Strategies

The vast majority of the academic literature differentiates between two modes of growth of growth, suggesting that companies can either grow internally or through the employment of external (acquisitive) strategies (Lockett et al., 2011; Penrose, 1959). Studies on internal growth mainly refer to small businesses and new ventures. They focus on researching determinants, drivers and factors that affect this kind of growth. On the other hand, studies on external strategies (i.e. M&A), refer to large and listed companies (Achtenhagen et al., 2017). A potential reason why studies do not focus their attention on the internal growth of large companies is that academics find that these companies display little or none of it. In support of this view, a study from McKelvie et al. (2006) shows that companies with more than 2500 employees do not grow from internal development. On the contrary, after subtracting the

external growth, the number of employees decreases significantly, suggesting that the growth obtained is only in absolute terms and not from “real” growth. However, the fact that large companies display little internal growth may be dependent on the size itself. In support of this hypothesis, Davidsson and Delmar (1998) found that firms change growth modes according to their size: the larger the size of a firm, the higher the percentage of growth due to acquisitions and the lower the growth due to internal growth (Delmar et al., 2003; McKelvie et al., 2006).

Interestingly, while these studies show that large companies grow mainly due to external growth, the literature is almost unanimous in stating that acquisitions fail to improve acquirers’ performance, leaving then doubts if this is the only or best way for firms to expand (Kling et al., 2009). Furthermore, academics and professionals have mixed opinions on which growth path is more rewarding for large companies and should be adopted.

In the next two paragraphs, the literature review will focus on each growth strategy separately to understand advantages and disadvantages of each and to review further evidence that relates to the purpose of this study.

2.1.1 Internal Growth

The aim of this paragraph consists in concluding on the definition of internal growth, and in presenting two main advantages and disadvantages of it.

Internal (or organic) growth can be defined in the organisation’s growth rate excluding any increase from merger and acquisition as well as currency effects (Penrose, 1959; Dalton and Dalton, 2006; Kling, 2009). Contrary to external (or acquisitive) growth, internal growth is not an event, but rather a lengthy process, which originates from the enhancement of all operational activities and can results in an increase in sales, employees and/or assets in general (Kling, 2009; Srivastava et al., 1999).

The literature focuses on new ventures and small firms, seeming not to give a particular relevance to the performance implications of internal growth for large companies (Aktas et al., 2008). Despite this lack of attention on internal growth, academic (and a part of the professional) literature suggests that large companies should not let external growth strategies have priority over the slower but more rewarding pathway of internal growth (Favaro et al., 2012; Dalton and Dalton, 2006; McKinsey, 2017; Kling, 2009).

The first reason why also large companies should maintain a high proportion of internal growth is the positive impact of internal growth on shareholder value (Dalton and Dalton, 2006; Barney, 1988). Internal growth enhances shareholder value, while acquiring firms display negative or – in the best scenario – insignificant abnormal returns after the takeover (Kling et al., 2009),

Second, investing internally instead of through acquisitions brings a higher return on capital invested, because it avoids paying not only the value of the standalone business but also the takeover premium (McKinsey, 2017). Typically, the often optimistically calculated synergetic added value of an acquisition is, especially in a M&A fight, given away to the old shareholders, making it difficult for the new owner to make a proper return. See 2.1.2.

Internal growth also holds two main disadvantages. First, it is a time consuming process. Internal growth is more suited for small companies that have more potential to grow their customer base and less financial access, or, for example, for companies in the high-tech industry that possess high growth opportunities (McKelvie, 2006). It may be less suited in markets with already optimized companies. Second, the lack of growth opportunities typical for mature industries, with established position, makes it is harder to grow organically. In these industries, mergers and acquisitions are faster options to increase sales and market share (Penrose, 1959).

To summarise, academic studies do not particularly emphasise performance implication of organic growth. Nevertheless, there are compelling advantages like positive impact on shareholder's value and higher returns on capital invested. These benefits are more difficult to realise in mature industries, especially by large companies, which is one of the reasons why they recur to acquisitive growth.

2.1.2 External Growth

This paragraph defines what external growth is and what strategies include according to literature. By excluding a part of the external growth strategies due to methodological challenges, this section elaborates on M&A, on the motives and the effect of M&A on performance.

External (or acquisitive) growth involves a firm achieving growth from external resources through partnership or acquisition of companies in related or unrelated business areas. Thus, in its broadest definition, external growth involves not only M&A strategies, but also joint ventures, strategic alliances, licensing, franchising, and investments (McCann et al., 1991; Chen et al., 2009; Penrose, 1959). However, despite their relative importance, strategic alliances, licensing, franchising and investments are almost all cases not included in studies that measure external growth performance. This omission is due to quantitative challenges to measuring these strategies, as well as to the lack of clear objective data. For alliances, for example, it is problematic to disentangle their effects on performance, because there is no objective, specific data published: the data on alliances have to be extrapolated from financial statements (Killing, 1983). For this reason, in this study, we only consider M&As and Joint Ventures as means for external firm's growth, although we will dive mainly into M&A because of its most prominent impact in the F&B industry (Lynch, 2006). The acronym of M&A stands for Merger and Acquisition. A merger occurs when two businesses combine into one company. An acquisition takes place when a company, the acquirer, takes control over another company's assets or management. This happens by owning the majority of the shares of that company (Kishore, et al., 2009; Mallikarjunappa et al., 2007).

Some of the primary strategic motives encountered in literature for companies to choose M&A are diversification, synergies and market power. The rationale behind diversification as a method of growth is that M&A represent a means for businesses to obtain new resources and knowledge to expand themselves in a new field. In the case of expansion within a new area, acquiring an already established firm can reduce costs, risks and expertise required. It follows that for the diversification motive, M&A is a more valuable option compared to internal growth for a company that wants to diversify (Penrose 1959; Yip, 1982). Other often-mentioned reasons for M&As are the creation of synergies and gains in market power. Synergies consist

mainly in the more efficient use of assets, economies of scale and scope, more efficient management resulting from the combination of two businesses. According to Jachim (2014), the creation of synergies is the primary motivation for large F&B companies to acquire, as these synergies potentially provide cost savings to improve profitability. On the other hand, the market power motive is aimed to control competition by limiting firms in the same or other markets, avoid potential entry threats in the market and cross-subsidise products, meaning that profits from the position in one market can be transferred to support a market share fight in another one (Trautwein, 1990; Haleblan et al., 2009).

Although all of these motives have as aim to enhance shareholder value, studies show that acquisitions influenced by these motivations often fail to deliver the expected results. An extensive amount of empirical studies shows that M&A does not deliver shareholder gains for the acquiring firm, but only for the targeted one (Bradley et al., 1988; Porter, 1987; Young, 1981). More specifically, acquisitions have – in the best case – a neutral impact on performance in the short term. In the long run, however, they translate into negative returns for shareholder value of the acquiring firm. The mixed evidence stands when using operating performance as an indicator the measurement method adopted for this study (Tuch, 2007; Healy et al., 1992).

To summarise, M&A represent the most widely means to grow externally. Companies decide to acquire or merge mainly due to diversification opportunities, potential synergies, and gains in market power. However, in general, these potential benefits do not translate into positive results for the acquiring company; on average, these acquiring companies do not profit from an increase in shareholder value.

2.1.3 Conclusion

This section of the thesis elaborated on the sub-research question: *What are the academic approaches and insights regarding growth strategies studied in economics and management literature? Moreover, what are advantages and disadvantages of internal and external growth strategy?*

The primary learnings we derive from this first section of the literature is that large companies, due to their size, grow mainly due to acquisitions. Interestingly, academic evidence supports the advantages of internal growth as having a positive impact on shareholder value and return on capital invested. However, since growing by internal development would require more time and risk, external growth strategies become valuable options. Particularly, M&A may be attractive if the acquirer can seize opportunities such as realising cost synergies by increasing the scale of the business, quickly enhance their market power by buying out a competitor (or future potential), or adsorbing the know-how needed to go in another market. As attractive and straight-forward as these advantages may sound, academic results show that these compelling benefits do not always translate into a benefit for the shareholder and the bottom line of the company, leaving the question. If external growth strategies are not beneficial, why is that large, and especially F&B companies recur to M&A to grow? Has this to do with the environment in which these companies operate? In the next chapter, we will dive into the characteristics of the F&B industry, market and industry trends that influence corporate growth decisions.

2.2 Research setting: The Food and Beverage industry

Having a single industry study on the growth strategies and its performance implication in the food and beverage (hereafter F&B) industry is necessary for three main reasons.

Firstly, as the *industrial organizational* (I-O) theory explains, companies grow accordingly to their industry structure. Therefore, the choice between organic or acquisitive growth and the subsequent outcome largely depends on the characteristics of the industry and on how the company positions itself in it (Scherer 1980; Bharadwaj & Varadarajan, 2004).

Secondly, since 2008 there has been a rising M&A activity in the F&B industry. After a stop due to the recession in 2008-09 that ended the previous M&A wave, the number and the value of deals have increased at a rate of 2% and 8% annually (Orbis, 2017). Thus, to fully understand the performance impact, it is necessary to comprehend the industry-specific motives and trends that drive these acquisitive strategies.

Thirdly, the F&B industry has many characteristics that differentiates it from other mature industries. Studies from other mature industries or aggregate industries can provide little insights to understand why companies decide to merge or to acquire. For instance, the shift in consumer preferences towards healthier eating habits is a unique and intrinsic characteristic of the F&B industry (Adams et al., 1997; Burt et al., 2016;).

For the reasons mentioned above, the next three paragraphs will examine respectively characteristics, market trends and factors influencing F&B companies' strategic growth paths. Finally, we will identify what are the growth strategies adopted by F&B companies to cope with these industry trends.

2.2.1 Characteristics

Like steel, paper and car manufacturing, the F&B industry is generally described as a mature and highly competitive business sector. Furthermore, it shows a particularly high concentration of companies that grow at a slow rate, and have low R&D investments (Lynch, 2006; Jachim, 2014; Costa and Jongen). These mentioned characteristics will be examined in the following paragraphs.

Low R&D

Innovation is a fundamental process within companies. It generates knowledge, new products, organic growth and delivers better performance (Geroski, 1989; Stremersch and Tellis, 2004). However, F&B companies display significantly lower investments in R&D than in other industries. The first reason is that compared to the pharmaceutical industry, which develops high-added value products, highly innovative food products have lower chances to earn back the investments. Secondly, as the time needed by competitors to imitate products is rather short, innovation is an expensive and risky activity to pursue. Finally, in combination with economic motives, also legal and food safety regulations contribute to the complexity of the innovation process and therefore to the relatively low R&D activity in the F&B industry (Sarkar and Costa, 2008; Senker and Managematin, 2008; Charlebois, 2011).

High concentration

Concentration in the F&B industry has increased over the last decades due to the growth of the largest companies fuelled by the M&A activity (Sexton, 2000; Wijnands and Verhoog, 2016; Adelaja, 1999). According to a study of *food and drink Europe* using Eurostat data, in 2012 EU large companies (0.9%) accounted for 50% of the turnover in the whole European Food and Beverage industry. The top 5 F&B European companies have 66% of the turnover (Wijnands and Verhoog, 2016; Foodanddrinkeurope, 2015). Data are similar in other mature economies like in the USA. The sub-industries that show the highest levels of concentration, both in the USA and in EU, are baby food, canned soup, pet food, ice cream and chocolate manufacture (OECD, 2013; Sexton, 2000).

Low growth

In the context of western economies, the national markets of F&B companies display significantly low growth rates (Lynch, 2006). Between 2008 and 2012 the GNP in Europe and USA, where most of the large F&B companies are based, grow respectively 1.5 and 6.7 %, compared to a 13.6% of Brazil. This is the reason why companies like PepsiCo and Nestlé, have for a long time engaged in international expansion towards more emerging markets (Lynch, 2006; Wijnands and Verhoog, 2016).

2.2.2 Market trends, M&A activity and private equity influence

Within mature economies, industry-specific market trends continue to challenge and limit western F&B large companies' growth in their home markets. Besides the stagnant volume sales, the most significant market trend was the change in consumers' core values and preferences towards more organic, fresh and functional products. Moreover, also the economic recession of 2007-09 had an impact on consumption patterns, for example, by making consumers drift to high-value products at lower prices, like private labels (Pwc, 2015; Burt et al., 2016). Meanwhile, at industry level, M&A activity was also stimulated by other economic factors, such as low interest environment and private equity activity (Jachim, 2014). Both market and industry trends will be analysed in the next paragraphs.

Market trends

The increasing consumer's awareness of how food is sourced, processed and of the health implications of it, is leading to a reduction in consumption of the "traditional processed foods" in exchange for healthier, more sustainable and cheaper solutions (Burt et al., 2016; Pwc, 2015; Jachim, 2014). Data in support of these consumption changes are the growth of segments such as Functional foods (7% CAGR), Private Label (5% CAGR), Fresh (12% CAGR) that in the US in 2015 grew at the expense of the traditional processed brands (Burt et al., 2016).

Because of these trends, large F&B companies are struggling to grow, while smaller competitors are taking advantage of them by focusing on meeting consumer demands. The market share of the 25 top F&B companies in the USA has decreased from 66 % in 2012 to 63 in 2015. In those three years, the CAGR for the top 25 has been of 1.8% against an increase 3.4% of the overall market, which was mainly led by small and medium companies (Burt et al.,

2016). Small and medium food companies can compete effectively with large manufacturers by outsourcing operations and establish relationships with large retailers that prefer them over the larger firms (Pwc, 2015).

Together with the demand for fresher and healthier products, snacking is another important trend that has grown along the changing consumer patterns. The change in eating habits towards a faster paced lifestyle have made this segment grow significantly due the Millennials, who are snacking more than any generation before. As this segment is expected to continue growing in mature and emerging markets, large players are focusing their attention on it. Kellogg's for example has seen its snack portfolio growing from 20% in 2000 to almost 50% of its total business, and even soft drink companies like PepsiCo and Coca-Cola are diversifying to take advantage of this trend (Nielsen, 2014; M&A Worldwide, 2016).

To summarise, current consumers' core values can be translated into the increasing demand for fresher, healthier and on the way food products. Small companies have taken advantage of these changes at the expense of top large F&B, by adapting quicker to market changes and by establishing a close relationship with retailers. To respond to these market changes some of the large F&B companies are adjusting their product portfolio accordingly. As it will discussed in the next paragraph, these market trends have been one of the reasons to spur M&A activity.

M&A activity

Triggered by markets forces and macro factors (technological, economic, political, and social forces) the F&B industry has witnessed to a remarkable M&A activity in the last decade. This activity has led to two major waves, one ending in coincidence with the recession in 2007-08, and another one starting from 2009 (Auster and Sirower, 2002; Cretin et al, 2015).

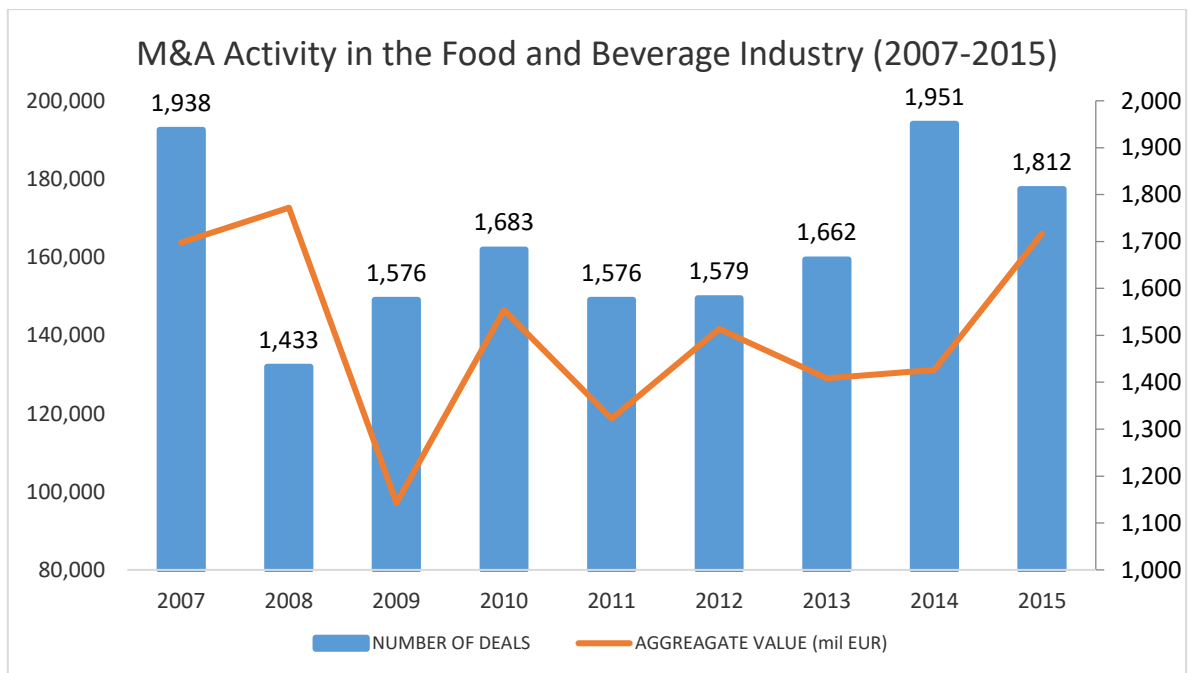


Figure 3. M&A activity in the Food and Beverage Industry. *Source:* Orbis, Bureau van Dijk database (2017)

According to data from the Orbis database, after the financial crisis 2008-09 that ended the previous M&A wave, M&A activity in the F&B industry has accelerated to reach the pre-crisis levels of 2007. In 2014 the number of deals in the F&B industry reached a peak with 1,951 of M&A (see Figure n.3), while in 2015 another peak occurred in terms of deals values with 166 billion. Furthermore, from 2011 there was an Compound Annual Growth Rate (CAGR) of 2% in the number of deals and 8% CAGR with regards to the value of the deals. These percentages indicate the significant M&A activity that has involved the F&B industry stopping only during the recession period. Amongst other factors, one of the major roles was the private equity firms' involvement in the deal financing.

Private Equity

Private equity firms are become major actors in the Food and Beverage M&A activity. The most compelling evidence of this involvement is 3G, a Brazilian private equity company that has been responsible for some of the greatest deals in the F&B industry. After merging the owned AmBev with Interbrew in 2004, 3G fuelled the mergers with Anheuser-Busch for \$52 billion in 2008, the purchase of SABMiller for \$107 billion in 2015 (FT, 2016; CbInsights, 2016).

However, 3G's M&A activity did not limit to the beer industry, but it extended on the processed food. By partnering with Berkshire Hathaway, 3G first acquired H.J. Heinz for \$23 billion, and two years later merged Heinz with Kraft for \$46 billion, creating the Kraft-Heinz company (FT, 2016). Besides this significant example, the influence of private equity firms in the M&A activity is noteworthy. Until 2010, private equity firms were responsible for 63% of all consumer goods companies mergers and acquisitions (which includes F&B companies). Although from 2011 the positions reversed, with companies being responsible for 71% of the transactions, private equity firms have continued to be very involved in the consumer goods companies, and in the F&B in particular. Private equity firms are attracted by low but continuous growth of the F&B industry, and from its relative stability from economic fluctuations, relatively unaffected compared to other industries (Maddy, 2013; CbInsights, 2016).

2.2.3 F&B growth strategies

Growth strategies in the F&B industry mainly consist of a choice between the acquisition of rival or complementary businesses or, to more rarely, to organic growth. In the case of acquisitions, these strategies are primarily meant to support the existing portfolio by consolidating or strengthen their nutritional offering. While for organic growth, these consist in the expansion into new markets and or, through a lower extent, in the launch of new products (Lynch, 2006). The next two sub paragraphs will elaborate on outlining specific acquisitive and organic growth strategies followed by F&B companies.

2.2.3.1 Internal growth strategies

Compared to external strategies, internal growth strategies are less evident and definable. The reason is that they do not originate from the conclusion of a deal (acquisition, investment or alliance), but from the improvement of all business processes (core and support) and marketing in particular. Therefore, entangling and classifying internal growth into a specific set of strategies is an unresolved challenge by the academic literature (Srivastava et al. 1999; Hess, 2006; Kling, 2009). However, as marketing plays one of the major roles as a driver of internal growth, we look at internal growth strategies from a marketing perspective. The focus is on product and market development as main and more defined internal strategies pursued by F&B companies (Lynch, 2006; Kling, 2009).

Market development

To achieve substantial organic growth F&B companies focus on expanding their presence in emerging markets through internal development. For instance, in 2011 Nestlé achieved a 13% internal growth in emerging markets like China, India, Mexico and Africa compared to a 4.3% in the developed ones. Similarly, Coca-Cola has been looking to emerging markets for its long-term growth plans, and it invested through 2020 \$3 billion in India to grasp opportunities in one of the fastest growing countries (Foodprocessing, 2011).

New product development

New product development is an expensive, complex and high-risk growth strategy for F&B companies, as 60 to 80 % of food products introduced in the market fail. However, companies must innovate in order to meet costumer-changing demand and increase their profitability (Grunert and Valli, 2002; Costa & Sarkar, 2008) In this direction, recent technological advances in biotechnology, nanotechnology and preservation technology offer companies opportunities to meet new consumer expectations and desires by adding value on products and differentiating on the market (Juriaanse, 2006). Modern consumers want guilt-free convenience food, unique tastes and healthy products that respond to their needs and preferences (Costa et al., 2001; Costa et al., 2007). In the last decades, these preferences have led to the emerging of the so-called “health and wellness” market segment, which in the US has reached a value of \$625 billion in 2012. Within this segment, that also includes organic foods, “better for you” food and beverages, functional foods represent the major focus for new product developments for F&B companies (Khan et al., 2013).

2.2.3.2 External growth strategies

Amongst external growth strategies, M&A have been the main growth vehicles by which F&B companies have gained and maintained customers in the last decades (Lynch, 2006). The typologies of M&A in which F&B companies engage can be classified into five main categories according to the rationale that 1) Product or category adjacency; 2) Geographic proximity; 3) Consolidation; 4) Innovation acquisition; 5) Accessing capabilities (see Table n.1) (Pwc, 2015). In this paragraph, we will next examine how these strategies are applied within the F&B industry.

Table n.1 M&A motives for food and beverage companies. Pwc (2015)

<i>Motive</i>	<i>Description</i>
Product or category adjacency	Acquisition of a product, brand or service that is related but not identical to one the already owned business categories.
Geographic proximity	Extra-national expansion into a new market.
Consolidation	Aimed to increase synergies and economies of scale with companies in similar businesses.
Innovation acquisition	Large F&B companies acquire established start-ups with proven innovation to realise benefits quickly.
Accessing capabilities	Acquisition of a company that benefits from the parent capabilities or that builds those on its own. It can also sell a unit of the business that does not take advantage of these capabilities.

Product or category adjacency

F&B companies are trying to strengthen their portfolio by improving their nutritional offering (Pepsico, 2017; Jachim, 2014). In most cases, this attempt implies for F&B companies a related diversification into the health and wellness segment that has high growing potential (e.g. acquisition of smoothies company Innocent by Coca-Cola). For instance, the shift in consumer preferences towards healthier eating habits made small and organic companies very attractive on the market (e.g. Annie's acquired by General Mills in 2014; Applegate farms by Hormel in 2015). The demand for organic products is one of the fastest growing segments, and the organic food industry niche is estimated to grow by 14% (CAGR – Compound annual growth rate) from 2013 to 2018. In brief, buying these small-medium but potentially high-growth potential companies means to “take advantage of consumer trends with a lower entry cost” (Burt et al., 2016).

Geographic proximity

When expanding internationally, companies can enter a market either organically or through acquisition. In the last decades, large F&B companies have used acquisitions as the main method. Acquisitions, more than any other strategy, allow a company to fully exploit scale and economic benefits and meet customer demands in new markets (Kapferer, 1997; Levitt, 1983; Yip, 1982; Lynch, 2006)

Consolidation

Consolidation has been one of the most prominent trends within the F&B industry in the last decade. This trend has been fuelled by the search for economies of scale, revenue growth and margin improvement. The mergers between Kraft and Heinz (2015 - \$46 billion), as well as the merger between Anheuser-Busch and In Bev (2008 - \$52 billion), are some of the greatest examples of this M&A strategy. Furthermore, since shareholders and capital markets are putting pressure on these companies, M&A caused by these motives are expected to further

grow in the next years, especially for slow growth brands and categories (FT, 2016; Jachim, 2014).

Innovation acquisition

Large F&B companies are also looking for innovative firms and start-ups to increase their product innovation (M&A Worldwide, 2016; Plante Moran, 2013). Coca-Cola, for example, acquired a stake in an innovative organic juice maker in 2015, while Unilever has bought two ice cream brands in the last years to put next to their core brands. For these large companies, it is important to acquire companies once they are established and possess innovation that can be realised immediately. This kind of innovation strategy gives top F&B manufacturers the possibility to access missing knowledge while reducing costs and respond quickly to new market demands. Furthermore, although more difficult in the F&B industry, M&A has the potential to spur future radical innovation within the company in the long-term (Wubben et al., 2015; Pisano, 1990).

Accessing (or focusing on capabilities)

Another reasoning for F&B companies to acquire is to access capabilities. When in 2012 Nestlé acquired Pfizer Nutrition, one of the major motives of the takeover was to expand itself into the infant nutrition segment. Since infant nutrition is a high-value, science-led category where Pfizer was a leader, the goal of Nestlé to expand its capabilities in this segment was in line with the expectations to benefit from this acquisition by leveraging the ones already owned. However, the focus on capabilities can also result from divestments rather than acquisitions. Especially of business units that do not take advantage of core capabilities. Indeed, Nestlé and Unilever have undergone a series of divestments in the last decade that has had the goal to refocus on core brands and core capabilities. The recent sales of PowerBar and Musahi for Nestlé and the sales of brands like Skippy, Findus Italy, Bertolli for Unilever are examples of these strategic motives (Nestlé SA, 2012; Jachim et al., 2014). In brief, large F&B companies acquire to access new, strategic capabilities to be able to step into a new market or segment, where high expertise is required. Sometimes, however, the opposite occurs. F&B companies divest in those areas where they been expanding to refocus on the core capabilities.

To summarise, there are five main reasons for F&B companies to acquire or merge with other companies. First in order, is the 'product and category adjacency rationale.' Large and established in the traditional food processing, F&B companies are shifting their business towards one of the fastest growing segments by acquiring small and organic companies (Pepsico, 2017; Jachim, 2014). Secondly, whenever internal capabilities are not deemed sufficient, the 'geographic proximity rationale' allows F&B companies to exploit scale and economics benefits while meeting customer demands in new markets (Kapferer, 1997; Levitt, 1983; Yip, 1982; Lynch, 2006). Thirdly, almost overlapping the second rationale, acquiring to consolidate is responsible for some of the largest mergers in the industry (i.e., Kraft-Heinz), since the objective, in this case, is to rationalise costs and improve profitability (FT, 2016; Jachim, 2014). Fourthly, large firms look at small companies and start-ups for their entrepreneurial ability to innovate. The aim of 'innovation acquisitions' is to seek proven innovation that can contribute to the company's knowledge and to the possibility to spur future

radical innovation (M&A Worldwide, 2016; Wubben et al., 2015). Finally, acquire to ‘access (strategic) capabilities’ are another reason to acquire for F&B companies, especially when moving into a new market field. However, this can often result in divestments in the long-term when these acquisitions are not coherent or drifting the focus away from the core businesses (Nestlé SA, 2012; Jachim et al., 2014).

2.2.4 Conclusion

This section of the thesis on the following sub-research question: *What are the characteristics of the Food and Beverage industry and what are the industry specific growth strategies and rationales behind these?*

The F&B sector is a mature industry with a high concentration of companies that grow at a slow rate, and with low R&D investments. The latter one in particular mostly depends on the complexity that innovation that food sector, with legal and safety regulations, relative easiness of competitors to imitate those and low chances to earn back the investment. The industry-specific growth strategies see on one side internal strategies mainly relying on market development in emerging countries, and to a lesser extent, product development. On the other side, the quicker and more responsive external growth strategies with acquisitions firstly take place to strengthen the nutritional offering in response to the changing consumer demands of more healthy food. Secondly, acquisitions are often aimed to consolidate, i.e., improving cost synergies and therefore margins. To conclude, the bottom line is that large Western F&B companies ‘buy their present and future growth’ in mature markets while exploiting their internal growth potential in emerging countries.

After having outlined what growth strategies are, how large companies pursue them in the F&B industry, the next section of the literature review will deal with the measures and indicators used to measure growth and performance linked to it.

2.3 Measures of growth and performance

Until now, the literature has focused on enrolling the motives and performance expected from growth strategies. This section aims to review the literature that focuses on the measuring such strategies. First, paragraph 2.3.1 selects the suitable measure to detect the growth of a firm. Second, paragraph 2.3.2 reviews the measures of firm performance. Finally, paragraph 2.3.3 aims to review the accounting-based measures of M&A performance and to choose the dependent variable for performance.

2.3.1 Measures of firm growth

Organisation growth can be achieved in several ways. For this reason, different studies referring to firms with different age, size and industry will have diverse measures (Delmar et al., 2003). The list of possible growth indicators cited in the literature generally comprehends the followings: employment, assets, physical output, market share, profits and sales (Delmar et al., 2003; Delmar, 1997; Ardishvili). However, no perfect or superior growth measure exists. Firms have different growth patterns according to their characteristics and measures may vary

according to the aims of the research. Thus, recognising the heterogeneity concerning the growth of the firm means accepting that any standalone measure is an imperfect one (Delmar et al., 2003). Because there is not such a perfect measure, we aim to choose the measure that fits best with the aim of this thesis and the sample characteristics. When looking at the literature, we find that the reasonable choice for a study on manufacturing firms is assets growth, since they tend to be capital intensive (Weinzimmer et al., 1998). Because firms in the F&B industry are considered as manufactures, we therefore choose assets growth as the appropriate measure for growth.

2.3.2 Measures of firm performance

“The definition of firm performance and its measurement continues to challenge scholars due to its complexity” (Santos, 2012). In strategic management literature, there is still an extensive heterogeneity concerning the measurement adopted when measuring firm performance (Moini, 2012; Zollo, 2004). For this reason, the paragraph outlines possible measures and justifies which of them suits this research best. Since performance studies mainly address M&A (i.e. acquisitive strategies), we will focus on the indicators scholars use for M&A to derive a suitable indicator applicable also for internal growth. In the literature there are many classifications schemes, the most suitable found in the literature for this research is the classification scheme of Meglio & Risberg (2011), according to which there are two performance domains: financial and non-financial (see Figure 4).

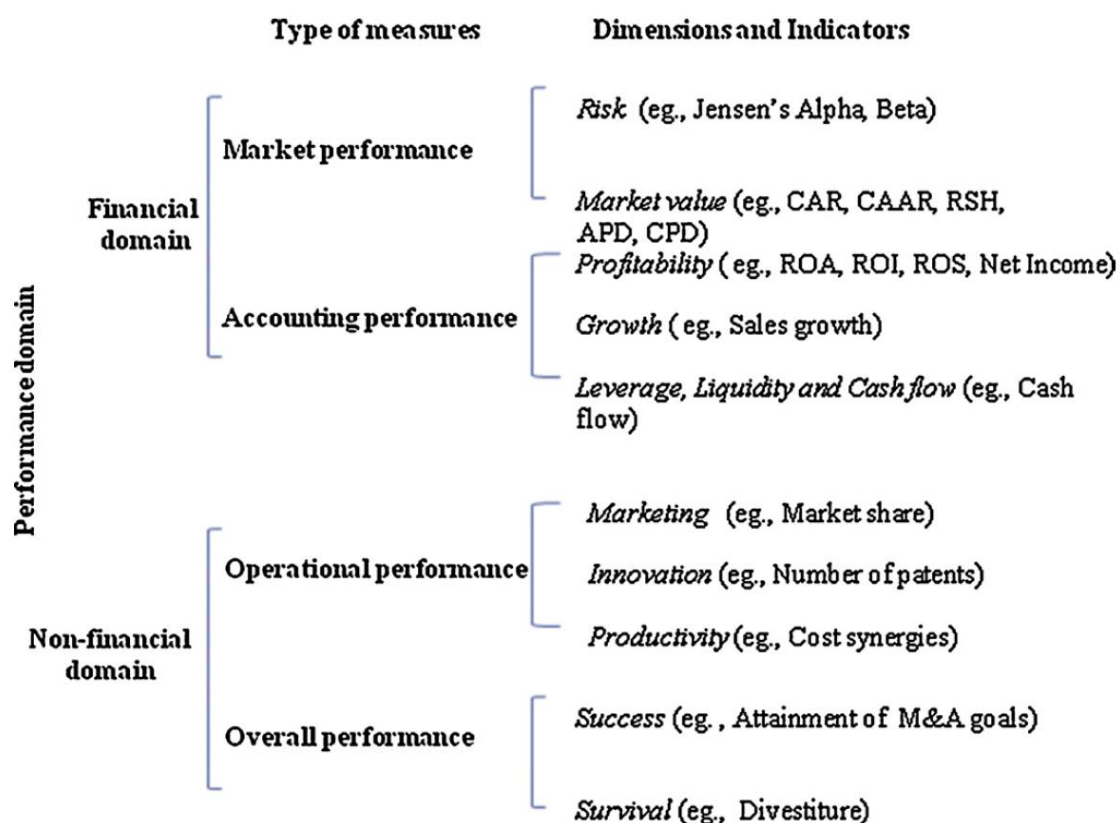


Figure 4. A classificatory scheme of M&A performance measures. *Source:* Meglio & Risberg (2011)

The financial domain consists of market measures and accounting measures. Market measures are available only for listed companies and can be divided – on one hand – into the dimensions of the market value of a company at the announcement or the closing of a deal (e.g. CAR – cumulative abnormal returns) and – on the other hand – into measures that reflect the systematic risk associated with the firm (e.g. Beta coefficient). Accounting measures reflect financial performance in the form of percentages, values or ratios derived from the company's financial statements. Measures within the financial domain are largely predominant within M&A performance studies. Nonetheless, M&A can also be measured outside the financial domain through operational and overall performance measures. Operational performance includes three dimensions: marketing (e.g. market share), innovation (e.g. patents launched) and productivity (e.g. cost synergies). The overall performance reflects success based on the degree to which the goal is reached and survival by divestitures (Meglio and Risberg, 2011). Having outlined what the measures are, a common mistake would be to compare the different measures in order to find the best one in absolute terms. However, different measures explain different aspects of M&A performance and therefore, the most appropriate measure is the one that fits with the research question (Meglio and Risberg, 2011; Moini et al., 2012).

Having outlined the possible domains, measures and indicators, we will now provide three main reasons why we choose accounting measures above market-based measures. First, accounting measures are “the most common and readily available mean of measuring organisational performance” (Richard, 2009). Since a researcher needs to consider data availability and accessibility, accounting measures are the ones that answer better to this need, as there is often a lack of clean financial market data (Zollo, 2004; Meglio and Risberg, 2011). Second, accounting based measures are more suitable for longitudinal studies. A historical measure performance such as the return on assets (ROA), matches our research question better than market measures such as CAR, which is a forecast of possible future results (Meglio and Risberg, 2011). Finally, from a managerial point of view, since one of the ultimate goals for a company is to earn a profitable return on capital, (McGee, Thomas and Wilson, 2005) the use of accounting measures can provide the management with practical information for aligning their expansion strategy with long-term profit goals.

In light of these points, we conclude that accounting measures are best suited for this research compared to market, operational and overall performance measures. In the next paragraph, the accounting indicators will be examined.

2.3.3 Accounting-based measures of performance

This section reports on the most relevant articles that use accounting measures to assess M&A strategies. As outlined in the previous paragraph, accounting measures can include indicators of profitability (ROI, ROS, ROA, and Net income), growth (sales growth), and leverage, liquidity and cash-flow (e.g. cash-flow).

One of the most widely used indicators to measure acquirers' performance in the M&A literature is ROA (Moini et al., 2012). The first use of accounting data to measure M&A can be traced back to Meeks (1977). Here, the acquirers' performance measured using ROA found that acquisitions increase profitability only in the year of the takeover, but decrease profitability

in the following five. Meeks (1981) also concluded that amongst all the accounting indicators, ROA is the most suitable one for measuring M&A.

More recently, studies on post-acquisition accounting performance use ‘pre-tax operating cash flow’ as indicator (Ghosh, 2001; Martynova et al, 2006). These studies, which elaborate on the work of Healy et al. (1992), use a cash-flow measure to deal with measurement issues of post-mergers performance such as accounting method used to calculate depreciation and non-operating activities (taxes and interest). As such, Healy et al. (1992) use Pre-tax Operating Cash-flow Returns on Assets to eliminate the effect of financing (cash, debt, or equity) and accounting (pooling or purchase) methods for the merger. At the same time, unlike the mere ROA commonly used, this measure controls for the effect of depreciation, goodwill, interest expense and income, as well as taxes.

Furthermore, the use of Cash-flow Returns on Assets is also effective in avoiding earnings manipulations after events such as M&A (Barber and Lyon, 1996). In the study of Barber and Lyon (1996), they evaluate accounting-based measures used in event studies such as Return on Assets (ROA), Cash-flow ROA, Return on Sales (ROS), Return on Market Value of Assets, and Return on Cash-adjusted Assets. Interestingly, they found that although a cash based measure like the Cash-flow ROA is statistically less powerful than the accrual based ones, it is more able to recognise whether an erosion in performance after an event (e.g. an Acquisition) “is the result of an erosion in operating performance or the reversal of pre-event accruals”.

Finally, using an accounting-based measure like cash-flow can also avoid the bias related to the payment method, since the change in performance is largely significant when the acquiring firm uses cash as a payment method instead of debt (Lynn and Switzer (2001).

Table 2. Accounting indicators of M&A performance

Authors	Accounting measures
Meeks (1977; 1981)	Return on Assets (ROA)
Healy et al. (1992)	Pre-tax Operating Cash-flow Returns on Assets
Barber & Lyon (1994)	Return on Assets (ROA), Cash-flow ROA, Return on Sales (ROS), Return on Market Value of Assets, and Return on Cash-adjusted Assets
Lynn and Switzer (2001)	Pre-tax cash flow return

2.3.4 Conclusion

In section 2.3 we have elaborated on the literature to answer the following sub-research question: *What are the suited indicators to measure firm growth and firm performance with regard to growth strategies?*

Since the F&B industry is a capital intensive, assets growth is a more comprehensive measure compared to sales growth, market share or employment measure. With regards to firm performance, we presented ROA and ‘pre-tax operating cash flow’ as commonly used indicators. However, ‘pre-tax operating cash flow’ has two main advantages compared to ROA: it diminishes the effect of the payment method as well as the effect of the accounting method of the transaction (Lynn and Switzer, 2001; Healy et al., 1992). At the same time, by deflating the operating cash flow by the total assets, it creates a measure that can be compared across time and countries (Aktas et al., 2008). Thus, we can conclude that based on the above-reviewed literature and considerations, we identify as the suitable indicator for performance the following formula:

$$Performance = \frac{Pretax\ Operating\ Cash\ Flow}{Total\ Assets}$$

2.4 Growth strategies and firm performance

The focused and dualistic approach in the business growth literature has neglected the fact that companies, especially large ones, simultaneously use these two strategies (Aktas et al., 2008). As a matter of fact, only three studies were found that compare the two types of growth and their impact on performance. This paragraph will explore more in detail the limited amount of studies that have engaged in examining the differential impact of growth strategies on performance and develop the hypothesis to be tested.

When both growth strategies are analysed simultaneously, internal growth is found to have a strong positive effect on performance. The first study that attempts in this direction uses, however, the Tobin’s q, which is a market-based indicator (Xia, 2006). On the other hand, acquisitive growth had a negative or null effect. Thus, compared to external growth, internal growth was found to be a stronger predictor of increased market evaluation when using Tobin’s q as a dependent variable.

Differently, by using operational performance indicators such a ‘pre-tax operating cash-flow’ results vary in relation to length of the time window. Considering the immediate/short-term, both internal and external growth correlate negatively with performance, since they imply some extent of cash-flow use to finance investments. Instead, when taking in consideration the long-term, only organic growth has a positive and significant impact on the long term.

Adopting the same accounting measure domain, the study conducted by Kemppi et al. (2012) shows that organically grown firms are more profitable than companies that follow acquisitive ones. Focusing on the mature pulp and paper industry (PPI), their conclusion is that acquisitions have a negative effect on performance (in this case, the Return on invested capital (ROIC)) on the long-term.

Table 3. Growth strategies' impact on performance

	Market-based Measures	Accounting-based measures	Internal growth Long - term impact on performance	External growth Long - term impact on performance
Xia (2006)	Tobin's q		+	-
Aktas et al. (2008)	Fama-French factor model	Pre-tax Operating Cash-flow Returns on Assets	+	(+)
Kemppi et al. (2012)		Return on invested capital (ROIC)	+	-

To summarise, three studies research the impact of internal and external growth strategies. Based on these papers, the outcomes showed in all three that internal growth is positively correlated with two measures of accounting performance and one market based. On the other hand, external growth correlates negatively with performance in two of the three cases. However, in Aktas et al. (2006) external growth is positive but not significant. These studies use different measures (market-based and accounting based), and only one focuses on a single industry (different from the food industry). Therefore, based on this limited evidence, we formulated the following two hypotheses:

H1a *Internal growth is positively associated with the performance of large food companies in the long-term.*

H1b *External growth is negatively associated with the performance of large food companies in the long-term.*

The aforementioned hypotheses led us to the following conceptual model:

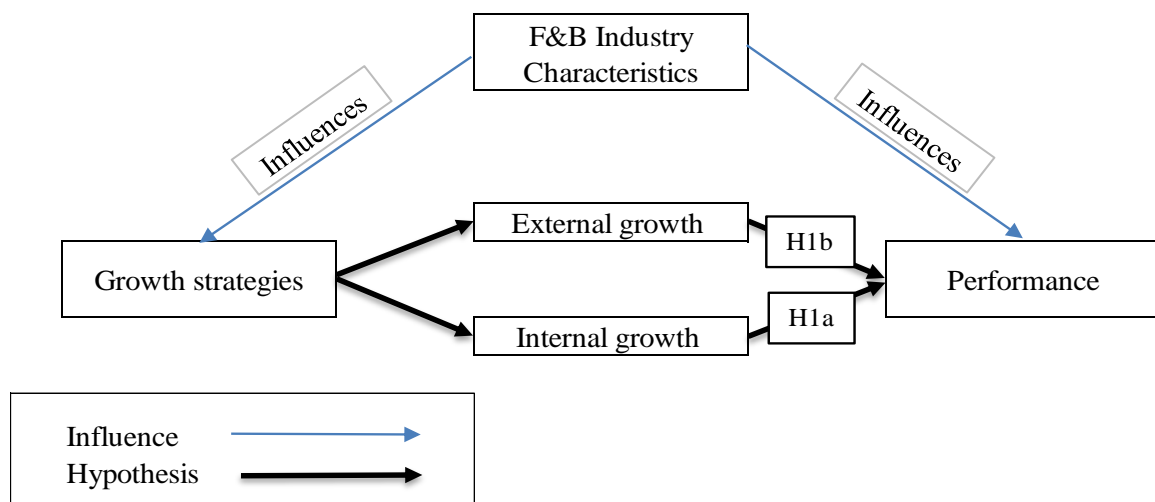


Figure 5. Conceptual model

In figure 5, the hypothesis that will be tested in the empirical part are represented in relation to the theoretical framework in a conceptual model. In the next chapter we will elaborate on the related methodology.

3 Methodology

This chapter discusses the methodology adopted to answer the research questions of this study. The structure of this section is composed as follow: paragraph 3.1 describes the sample in consideration and the data used. Paragraph 3.2 defines the variables for the empirical model. Finally, paragraph 3.3 elaborates on the equation model for the regression analysis.

3.1 Sample and data

The sample used for this study includes the largest, listed food companies, for which quantitative data are available from years 2007 to 2015 on Orbis and Thomson One.

The main reason for the choice of this time window is that prior to 2007 there is a lack of accessible financial data on Orbis. The same applies for the year 2016, for which at the time of the data collection (first months of 2017) not all financial statements were available. A time window of 9 years allows to perform a longitudinal analysis on companies and it addresses the purposes of the research questions. The data for this research are composed of M&A deals and accounting data contained in companies' financial statements. For the accounting data, we use the database Orbis (Bureau Van Dijk 2017), while to gather information about the completed M&A deals we employ the database Thomson One (Thomson Reuters). Private companies are excluded from the sample since it is not possible to find all the information needed.

The sample only includes Western Companies¹, meaning that companies located in e.g. Japan, China, are excluded from the sample for two reasons. First, for these companies it is more difficult to find available data regarding M&A. Second, retrieving accounting data from Japanese companies is problematic because most of them are in form of conglomerates, with the food sales representing only a small fraction of the total turnover. This can introduce some biases in the research when looking at the total assets which are not differentiated by economic activity. Starting from sampling the top 50 largest food companies, the data availability and the geographical restriction yields to a final number of 28 companies (see the complete list in Appendix 1).

3.2 Variables for the empirical model

In this section the variables used in the regression analysis will be defined. In paragraph 3.2.1 the growth measures for acquisitive and organic growth will be defined and explained. In addition, the same paragraph will contain sub-sections concerning validation of the organic growth measure and the creation of the three-years sub-periods for the panel regression.

¹ We define Western Companies through a sociological/cultural approach, meaning that all countries that have been directly influenced by European cultures are part of the Western Society. The complete list can be found in Appendix 2.

3.2.1 Dependent variable

In paragraph 2.3.3, we identified the (performance) dependent variable from the literature in the *pre-tax operating cash flow*. *Pre-tax operating cash flow* is defined by Healy et al. (1992) as sales, minus cost of goods sold and selling and administrative expenses, plus depreciation and goodwill expenses. The cash flows are then deflated by the market value of assets.

However, reproducing this measure is problematic for two reasons. First, Healy et al. (1992) use COMPUSTAT², while for this study we use Orbis. This means that category voices vary and therefore Selling and Administrative Expenses is not present under this category name. Second, Healy et al. (1992) is not clear on defining Goodwill Expenses, and what we interpreted in the Goodwill amortisation, is no longer available since 2001 under U.S. GAAP (FAS 142)³. Hence, to reproduce the original measure we apply the following adjustments: (1) Instead of the missing Selling and Administrative Expenses, we employ the category name Other Operating Expenses from ORBIS, which refers to the same operating costs. (2) In the *Pre-tax operating cash flow* Goodwill expenses was meant as amortisation. However, since it is no longer required for companies to amortise the goodwill, it is not possible to include it in the formula. In addition, we apply one further adjustment: (3) we employ the book value of assets values instead of the market value. The reason for this change lies in the systematic reduction in the market value of assets during post-acquisition years, which is likely to introduce a bias in the cash flow ratio (Ghosh 2001; Agrawal et al., 1992). Moreover, market values are not available on the databases employed. Therefore, after the above-mentioned adjustments we rename this measure **EBITA ratio (returns on assets)**, defined as Sales *minus* Cost of goods sold and other Operating expenses *plus* Depreciation, deflated by the total book value of assets (see formula n.1).

$$EBITA\ Ratio = \frac{EBITA}{Total\ Assets} \quad (1)$$

3.2.2 Independent variables

This paragraph introduces the independent variables included in the model.

Growth variables

In order to be able to separate acquisitive growth from organic growth, we use a yearly measure of the two strategies based on the decomposition of the company's total assets. This procedure is first developed by Xia (2006), and then followed by Aktas et al. (2008). The total assets growth rate in a given fiscal year is defined as TA_t , with TA being the total assets of a firm owned at the end of a fiscal year t . Thus, the total growth rate $Ga(t)$ in a given fiscal year is

² Compustat comprises only North American companies.

³ "Goodwill is no longer amortized under U.S. GAAP (FAS 142). FAS 142 was issued in June 2001. Companies objected to the removal of the option to use pooling-of-interests, so amortization was removed by Financial Accounting Standards Board as a concession."

defined as $[(TA_t / TA_{t-1}) - 1]$. If there is no merger or acquisition, then $Ga(t)$ is due only to the organic growth rate $Gi(t)$, hence $Ga(t) = Gi(t)$. In the case the firm performs a business combination (merger, acquisition or joint venture) during that time window, the final assets $Ga(t)$ will result from three processes (Xia, 2006). First, organic growth of the original assets TA_{t-1} ; Second, the addition of the acquired target's assets, $ta^{4\ 5}$, which is added at instant $(1-\tau)$, $\tau \leq 1$ (the assumption is that the entire fiscal year⁶ is considered as length 1 in time); Third, the organic growth. This is showed in base form equation (1), where by solving for $Gi(t)$, we find the organic growth rate.

$$TA_t = [1 + Gi(t)]TA_{t-1} + [1 + Gi(t)]^\tau ta \quad (2)$$

Having calculated the organic growth rate, then it becomes straightforward to calculate the acquisitive growth rate, by subtracting the organic assets' growth from the total.

$$Gx(t) = Ga(t) - Gi(t) \quad (3)$$

In the case of multiple acquisitions and mergers, and divestures, the complete formula becomes:

$$TA_t = [1 + Gi(t)]TA_{t-1} + \sum_j [1 + Gi(t)]_j^\tau ta_j - \sum_k [1 + Gi(t)]_k^\tau ta_k \quad (4)$$

where j stands for the number of mergers and acquisitions⁷ or joint ventures⁸, and k for the divestments, referring at any given t fiscal year (Xia, 2006).

Acquisition experience

The performance of a merger or an acquisition may also be influenced by the experience of the acquiring company. By learning from past acquisitions, both related and unrelated, companies can enhance future performance (Muehlfeld et al., 2012; Halebian & Finkelstein, 1999). While experience per se does not necessarily bring positive results, scholars find that acquisition experience is a necessary condition for the acquiring company learning and success (Hayward, 2002; Halebian & Finkelstein, 1999). Therefore, we create a variable named Acquisition Experience (AE) that measures the acquirer's experience consisting in the sum of the acquisitions made in the prior 5 years.

⁴ Because in Thomson One most of the target's assets values are missing, in accordance with Aktas et al. (2008) we use the proxy *deal value/percentage acquired* to represent them. Furthermore, because since 2001 all business combinations are accounted using the purchase method, every difference between purchase price and assets acquired is recorded as goodwill.

⁵ In case of deals higher than one billion (\$), the deal values and the combination between assets and goodwill are checked in the annual reports. This is due to the difference that may incur in the recorded goodwill (revaluation) in the annual reports.

⁶ In some cases, the matching of the years and their mergers or acquisitions needed to be accounted according to the beginning and end of the company's specific fiscal year.

⁷ Deals without % acquired as deals without deal value are not included in the dataset of M&A.

⁸ Only joint ventures that have a deal value higher than 10\$ mil are included in the sample.

3-years panel sub-periods

To measure the impact of growth strategies on performance in the long-term, we create 3-years panel sub-periods. These consist in the average values of the firm performance, internal growth, external growth and acquisition experience taking into consideration 3 years as a time window. The average allows to flatten values fluctuations from one year to another, therefore to evaluate better the impact of the main variables of interest, external and internal growth, in the long-term in case of anomalous years. We divide the entire time frame of nine years is divided into 7 sub-periods (2007-2009; 2008-2010; ... 2013-2015) that move from year to year overlapping each other. The reason for the choice of a 3 year time window for the sub-periods, is that in the case of M&A (but also internal investments), 3 years are judged to be sufficient for the integration process to be executed and, therefore a suitable time scale for performance measurement (Zollo, 2004).

Control variables

With the aim to control for group differences within the sample and to report accordingly, the non-numerical control variables are used. These control variables refer to the categories of:

- (1) *Sub-Industry*. 0 is the code for a firm that operates in the food processing industry, 1 for the beverage industry, 2 for the dairy industry and 3 for the meat industry.
- (2) *Business type*. 0 is the code for a firm that sells its products “business-to-consumer” (B2C), 1 for a firm that sells “business-to-business” (B2B).
- (3) *Region*. 0 is the code for a firm with headquarter in Europe, 1 America.⁹

We did not include acquirer’s size amongst the independent variables since we do not expect, based on the literature, that a difference in size will influence performance. In the next paragraph, the empirical model containing the variables above introduced will be specified.

3.3 Empirical model equation

The model to be tested in order to address *hypothesis 2* is specified as follow:

$$PE_{it} = \beta_0 + \beta_1 GI_{it} + \beta_2 GX_{it} + \beta_3 IN_{it} + \beta_4 BT_{it} + \beta_5 RG_{it} + \varepsilon_{it} \quad (5)$$

In this equation, PE_{it} is the dependent variable representing the performance value of company $i = 1, 2, \dots, 28$ at time $t = 1, 2, 3$. β_0 is the intercept, β_i $i = 1, 2, \dots, 6$ the regression coefficients, GI is the independent variable standing for internal growth, GX for acquisitive growth, IN for industry, BT for business type, RG for region, and ultimately ε_{it} represents the error term for the unobservable characteristics for company i at time t .

⁹ Two companies Grupo Bimbo and Fonterra are included in the group America since they are the only countries representing their region of Latin America and Oceania respectively.

Table 4. Equation model variables

Variable		Type	Specification	Source
Performance	(PE)	Scale	EBITA/Total Assets	Orbis
<i>Growth strategy variables</i>				
Internal growth	(Gi)	Scale	$TA_t = [1 + Gi(t)]TA_{t-1} + \sum_j [1 + Gi(t)]_j^r ta_j - \sum_j [1 + Gi(t)]_k^r ta_k$	Orbis
External growth	(Gx)	Scale	$Gx(t) = Ga(t) - Gi(t)$	Orbis
<i>Acquisition variables</i>				
Acquisition Experience	(AE)	Scale	M&A made in the previous 5 years	Thomson One
<i>Control variables</i>				
Sub-industry	(IN)	Nominal	0= Food processing, 1= Beverages; 2= Dairy 3= Meat	Thomson One
Business type	(BT)	Nominal	0=B2C; 1= B2B	Thomson One
Region	(RG)	Nominal	0=America; 1= Europe	Thomson One

3.4 Empirical model explanation

In this paragraph, we focus on the identification of the statistical technique to be used for the regression, by running the Hausman and the Lagrange Multiplier tests.

Panel data, or cross-sectional time series, is a dataset which contains repeated observations on the same units over time. The units (individuals, countries, etc.) are in this case F&B companies. Hence, the use of panel data models allow to study variables that change over time but not across entities. To this end, two main models that can be used: Fixed effects (FE) and Random effects (RE) (Verbeek, 2015; Torres-Reyna, 2007).

In order to run the model, we first need to establish which model is more suitable: fixed-effects (FE), random-effects (RE) or ordinary least squares (OLS). This is accomplished by performing an Hausman-test (H) that determines whether the error terms are correlated (Torres-Reyna, 2007). If correlation exists, meaning there is no systematic difference between the regressors, random effects will be used. In the other case, where there is a systematic difference, the FE effects model will be adopted. OLS is used when variance across entities is zero, i.e. there is no panel effect, which will be tested with a Lagrange multiplier test (LM test).

For the FE model, the first assumption is that the time invariant variables are unique and should not be correlated with other variables representing other individual characteristics. The second assumption is that the error terms are independent and identically distributed over units and time. If that is not the case, then RE are more suitable as we will see with the Hausman test. In addition, in the FE model any change in the dependent variable is due to influences from the fixed characteristics (Stock and Watson, 2003).

Contrarily to the FE model, the assumption in the RE model is that variation across units is random and uncorrelated with the independent variables. This means that if there is reason to believe that differences across entities (i.e. companies) have influence on the dependent variable (i.e. performance), then RE are preferred. Moreover, with the RE model there is the advantage

that it is possible to include time-invariant variables (i.e. in this case Region, Sub-industry and business type) (Torres-Reyna, 2007).

To test whether we should use a FE or RE model we perform the Hausman-test. The Hausman-test tells us whether there is correlation between entity's error term (u_i) and the regressors (assumption of the FE model). The null hypothesis is that the difference in coefficients is not systematic. From running the test we fail to reject the null hypothesis, $H = 0.15$, $p > 0.05$ (0.6966), thus we conclude that there is not a systematic difference between the regressors. Therefore, we derive that the RE model is more suitable than the FE model.

Since we verified that RE is preferred over the FE, we now need to choose whether to use a RE model or a simple Ordinary Least Squares (OLS) regression. To do this, we perform the Lagrange multiplier test (LM test). The null hypothesis in this test is that variances across entities is zero, i.e. no panel effect. Since the outcome of the test is $LM = 289.18$, $p < 0.01$, we reject the null hypothesis and conclude that there is a strong and significant difference in the distribution. Therefore, we confirm that there is a panel effect, thus we need to use the RE model. In the next sub-paragraph, we examine the presence of multicollinearity between independent variables and dependent variable.

Model Control

To investigate the presence of multicollinearity the correlations between variables are examined by using variance inflation factors (VIF) and tolerance statistics (TOL).. VIF and its reciprocal $TOL = 1/VIF$, indicate whether an independent variable has strong linear relationship with other independent variable(s). The values which problems of multicollinearity arise are when $VIF > 10$, or $TOL < 0.10$ (Field, 2012). As it can be seen from table 9, all the independent variables have low VIFs, ranging from 1.09 to 3.20, and high TOLs, from 0.312 to 0.921, far from values of 10 and 0.10 respectively. Therefore, we can conclude that the estimates are not affected by the existence of multicollinearity. Having explained and chosen the appropriate regression model for the panel dataset and checked for multicollinearity, the results will be outlined in the next chapter.

Table 5. Vif and Tol values for Multicollinearity

Variable	VIF	TOL
Gi	1.22	0.817
Gx	1.09	0.921
AE	1.28	0.784
IN_1	2.70	0.370
IN_2	3.20	0.312
IN_3	1.80	0.555
BT_1	1.41	0.710
RG_1	1.92	0.520

4 Results

This chapter of the thesis aims to address answer the research question: ‘*What are the differences in performance of large F&B companies based on their growth strategy/formats?*’. In paragraph 4.1 the descriptive statistics for the variables used are depicted, while paragraph 4.2 reports the results from the panel regression analysis.

4.1 Descriptive Statistics

This study focuses on 28 F&B companies, of which 15 (54%) are in the processing food industry, 7 (24%) in the beverage industry (alcoholic and not), 3 (11%) in the dairy industry and 3 (11%) in the meat industry (see table 7). From the companies included in the sample, only 3 (11%) operate Business-to-Business (B2B), while all the other 25 (89%) are Business to Consumer (B2C).

Table 6. Summary Statistics

F&B Firms	Frequency	Percent	Dummy Code
<i>Sub-Industry</i>			
Processed Food	15	54%	0
Beverages	7	25%	1
Dairy	3	11%	2
Meat	3	11%	3
<i>Business type</i>			
Business to Consumer (B2C)	25	89%	0
Business to Business (B2B)	3	11%	1
<i>Region</i>			
America	18	64%	0
Europe	10	36%	1

As explained in section 3.1, this thesis focuses on Western Companies. Therefore, companies of the sample are categorised according to their head quarter location in 18 (64%) companies in America¹⁰ and 10 (36%) in Europe (see table 6). As it can be derived from Descriptive Statistics Table 7, each variable has 196 observations. Having 196 observations means that all of our variables have all data for all the companies in all periods, and we, therefore, obtain a strongly balanced panel dataset. Since control variables do not represent continuous variables, they are not depicted in Table 7.

The variables for the regression analysis represented in table 7 consist in the 3-year average values of the yearly measures of performance, internal growth, external growth and acquisition experience (see paragraph 3.2.2). The 3 years panel sub-periods are moving and overlapping of one year, meaning that the first subgroup (Panel A) consists in the average measures values from 2007 to 2009, the second one (Panel B) from 2008 to 2010, and so on until the 7th subgroup (Panel G) from 2013 to 2015.

¹⁰ Fonterra, a New Zealand firm, has been included in the cluster of American companies to avoid creating a dummy only with one company.

Table 7. Descriptive Statistics

Panel A (2007-09); Panel B (2008-10); ... Panel G (2013-15)

Variable		Obs	Mean	Std. Dev.	Min	Max
Performance	(PE)	196	0.118859	0.550008	-0.46258	0.258805
Internal Growth	(Gi)	196	0.268778	0.578372	-0.20947	0.201819
External Growth	(Gx)	196	0.061086	0.116452	-0.09298	0.570348
Acquisitions experience	(AE)	196	12.40816	8.976707	0	42

By taking a closer look at the descriptive statistics values in Table 7, it can be seen that the mean of Gi shows a higher mean value compared to the Gx. This difference is due to the absence of external growth for companies in some years. Not all companies have performed an M&A or a joint venture in every year, while internal growth has a lower but steadier pattern. Furthermore, significant divestments periods and large acquisitions have affected growth mean values as it can be noticed from looking at the standard deviation being double the mean value of Gi and Gx, and from the min-max values having a large interval. Finally, Acquisitions Experience reports three years mean value referring to the prior five years of 12.4 M&As for each company, with a min value of 0 and max of 42 M&As. This high interval confirms that not all companies have performed an acquisition in a three years period, while also the opposite occurs in the case of the 42 M&As during the same time span.

After elaborating on the descriptive statistics of the sample, we report the panel regression results in the next paragraph.

4.2 Panel regression results

Table 8 represents the coefficients and the significance levels of the RE panel regression of equation 5. The aim of this regression is to test hypothesis 1, which proposes that (1a) Internal growth is positively associated with performance in the long-term, while (1b) proposes that External growth is negatively associated with performance in the long-term.

Table 8. RE panel regression analysis on firms' performance

Dependent variable: performance (2007/11-2013/15)				
	Coef.	Std. Err.	P > z	Sig.
Internal Growth	0.1563	0.4035	0.000	***
External Growth	-0.0101	0.0190	0.595	
Acquisition experience	0.0009	0.0004	0.011	**
Sub-Industry_1	0.0154	0.0285	0.589	
Sub-Industry_2	0.0152	0.0358	0.671	
Sub-Industry_3	-0.0095	0.0335	0.777	
Business type_1	0.0751	0.0316	0.017	**
Region_1	-0.0452	0.0243	0.063	*
n. observations	196			
n. groups	28			
R-squared	0.2885			
rho	0.7833952			
Hausman test	0.15	(Prob > chi2 = 0.697)		
LM test	289.18	(Prob > chi2 = 0.000)		

* p < 0.10; ** p < 0.05; *** p < 0.01

According to the results in Table 8, we can support what had been hypothesised in proposition 1a. With a positive coefficient ($r = 0.156$) and a 1% level of confidence ($p < 0.01$) we can conclude that Internal growth has a moderate positive effect on the performance of large F&B companies. Again, this effect refers to a 3 years period, meaning that the averaged positive outcomes of internal growth on performance appear after a couple of years from the investment.

On the other hand, although External Growth has as expected a negative coefficient ($r = -0.010$), the non-significant p-value ($p > 0.05$) cannot make us draw any conclusion regarding its effects on performance. Hence, we cannot support hypothesis 1b.

Acquisition experience is significant with a small positive impact on firm performance ($r = .001$, $p < 0.05$). With regards to the categorical variables only business type and region have a significant impact on performance, while there is not any significant difference in sub-industry (food processing, meat, dairy etc.) in relation to performance. Interestingly, American companies underperform European ones ($r = -.045$, $p < .10$). By looking at average yearly values in the dataset, we see that European firms outperform American firms through the entire period. Another interesting outcome is that B2B companies outperform B2C companies ($r = .075$, $p < .01$). However, this result must be taken with caution since the sample is composed by 3 B2B companies against 25 B2C.

To summarise and link to the research question, we conclude that Internal growth has a positive impact on long-term performance. However, since External Growth is not significant we cannot derive any conclusions and therefore make any comparison with regards to differential impact of the two growth strategies/formats. Finally, experience has a small but very significant effect on performance.

5 Conclusions

This chapter aims to conclude this thesis by discussing the results and the contribution in paragraph 5.1. Paragraph 5.2 will provide managerial implications for management and finally, paragraph 5.3 will outline the limitations of the study and possible directions for further research.

5.1 Conclusions

The aim of this thesis was to recognise the growth strategies adopted by the top large food & beverage companies and to assess their impact on the long-term performance. Our contribution lied in adding evidence to the scarce amount of studies that analyse the differential impact of internal and external growth strategies on performance. Further, we assessed the impact on performance by focusing on a single industry of interest, which is the food & beverage industry. This specific restriction was not encountered in similar studies, allowing this academic research to bring new and relevant evidence by answering the following main research question:

- *“What are the growth strategies adopted by the western large food companies and what is the impact of these strategies on their performance?”*

To answer this main research question the following sub research questions were formulated:

- *What are the academic approaches and insights regarding growth strategies studied in economics and management literature? Moreover, what are advantages and disadvantages of internal and external growth strategy?*

The academic approach towards growth strategies is a dualistic and separate focus that sees internal growth studies mainly in the context of entrepreneurial studies and small companies. Conversely, studies on external growth strategies, mostly on M&As, evolve around large listed firms. The primary academic insight we derived from the literature is that large companies, due to their size, grow mainly due to acquisitions. The larger their size, the larger their proportion of growth due to acquisitions (Achtenhagen et al., 2017; Delmar, 2003). This external approach assures that the acquirer quickly increases its size potentially realising cost synergies, enhance its market power, and adsorbs knowledge needed to diversify in another market. However, most studies show that these advantages do not correlate to an improvement in performance nor in shareholder value, which is the main limitation often recognised in acquisitive strategies. On the other hand, although slower and riskier, internal growth can provides a potential higher return on capital and shareholder value (Trautwein, 1990; Haleblan et al., 2009; Dalton and Dalton, 2006; McKinsey, 2017).

- *What are the characteristics of the Food and Beverage industry and what are the industry specific growth strategies and rationales behind these?*

The F&B is a highly concentrated, low R&D intensive and low growth industry. These adjectives are often related to an industry been considered as mature, hence having passed the stage of high growth. Together with these structural burdens to growth, the F&B industry faces high competition in Western markets and changing eating preferences towards healthier food (Lynch, 2006; Jachim, 2014; Costa and Jongen). In response to these challenges and market trends, F&B companies seek to strengthen their nutritional offering by acquiring companies with high-growing potential in the health and wellness segment (M&A Worldwide, 2016; Pwc, 2015). On the other hand, growing to consolidate and aiming to boost market share, creating cost synergies and improving margins has been another important reason to acquire, supported by private equity firms investments such as 3G (FT, 2016; Jachim, 2014). In this scenario, slower but more rewarding internal growth is achieved through the expansion into emerging markets and – to a lesser extent and more in a long-term – through the development of new products.

- *What are the suited indicators to measure firm growth and firm performance with regards to growth strategies?*

Since the F&B industry is a capital intensive, assets growth is a more comprehensive measure compared to sales growth, market share or employment measure. Concerning firm performance, ROA and operating performance measures such as ‘pre-tax operating cash flow’ are commonly used in growth strategies studies, in particular the ones that focus on the post-acquisition phase. Market-based measured are also used, but there is often a lack of clean

financial data, while accounting based measures are more easily accessible and suitable for longitudinal studies (Zollo, 2004; Meglio and Risberg, 2011). With regards to accounting measures, we recognised two main advantages of choosing pre-tax operating cash flow' versus ROA: it diminishes the effect of the payment method and the effect of the accounting method of the transaction (Lynn and Switzer, 2001; Healy et al., 1992). At the same time, by deflating the operating cash flow by the total assets, it creates a measure that can be compared across time and countries (Aktas et al., 2008). For these reasons, we measured performance by using a cash-flow based indicator identified in the literature and then modified into the EBITA Ratio in the methodology part to make it more suitable for our study.

- *What are the differences in performance of large food companies based on their growth strategies/formats?*

The empirical results showed with strong evidence that internal growth has a positive differential impact on performance in the long-term. The significant correlation of the internal growth variable with performance is in line with what we expected from the literature and in hypothesis 1a (Kemppi, 2012; Xia, 2006; Aktas et al. 2008; Kling et al., 2008). On the other hand, although not significantly supported, it seems that as stated in hypothesis 1b, external growth correlates negatively to performance in the long-term. Besides, within the context of external growth, acquisition experience has a small but very significant and positive effect on performance. This result is aligned with the literature stating that acquisition experience is a necessary condition for learning and future successes, but it is not per se determinant on performance outcome (Srivastava et al., 1999; Hayward, 2002; Halebian & Finkelstein, 1999).

The results of the panel regression showed that firm performance is not significantly impacted by differences across sub-industries. This might be due to the high level of diversification within companies that operate in different businesses that do not belong only to one main sub-industry (e.g. PepsiCo in beverages and processed food). This was indeed the case for most of the companies in the sample, except for alcoholic beverages companies that operate only in their sub-industry. Amongst the companies in the sample, Business-to-Business firms outperform Business-to-Consumer ones. This result, which may seem surprising at a first look, should be interpreted carefully. Since B2B companies are represented by only 3 companies against 25 of the B2C, they are not representative enough to derive generalisations upon them. Another interesting result is that European companies outperform American ones. A possible reason of this outcome might have been the financial crisis 2008-09, when American firms might have suffered more compared to the European ones. However, by considering the average performance values, we see that firstly, European firms outperform American firms through the entire period (from 2007-15). Secondly, the difference in performance is larger (0.22%) during the three years after the end of the financial crisis in 2010-12, and not in the years 2007-09, where the difference was of 0.11%. Hence, we confirm that amongst the top F&B companies European companies outperform American companies' performance. Moreover, this result is seemingly not due to macroeconomic factors, even though there seem to be a delayed deterioration in performance amongst American firms in the years 2010-12.

To finalise, based on our empirical research we conclude that internal growth has a differential positive impact on the long-term performance. Large Western F&B companies grow mainly externally by acquiring because of limited internal growth opportunities in their respective markets. The main reasons to acquire are to consolidate their position and create synergies, or to invest in high-growing brands in the health and wellness segment with the aim to unlock future internal growth (Jachim, 2014). Considerable and more rewarding internal growth is possible, but principally outside mature economies, in growing markets such as China, India and Brazil (Foodprocessing, 2011; Lynch, 2006).

5.2 Implications for management

Growth is “a must” for large listed companies that face the constant pressure of meeting shareholders’ expectations. However, also profitability needs to be taken into account when planning growth. In fact, there is little evidence that firms become more profitable after having increased their size (Davidsson et al., 2008). In addition, a too rapid growth obtained externally may not only hinder profitability, but also make the company become a target for competitors because of overly stretched finances (see Parmalat failure, and Quaker acquiring Gatorade and then becoming an easy target for PepsiCo) (Lynch, 2006).

Following our and Kling et al. (2008) results, only internal growth and organic revenue growth have a significant effect on accounting performance and shareholder value in the long-term, respectively. Therefore, executives need to evaluate carefully the impact of pursuing external growth strategies. While a rapid growth in terms of assets is expected, growth in sales may not necessarily deliver profitability and shareholder value. If acquisitions might be useful to meet growth objectives and give an immediate boost in market share in the short-term, they can represent a danger in the longer term. Therefore, offsetting profitability for rapid growth might not be the right choice, a right balance between external and internal growth is required in order to grow profitable and sustainably.

5.3 Limitations and further research

Although this research provides meaningful contribution in an area insufficiently explored by scholars, the reader should consider this work in light of some limitations. These limitations may be also important to inspire future studies.

First, our results can be generalizable only to the selected sample. Hence, it is not possible to extend the results to the whole industry. While this can be considered a limitation from an academic perspective, it is important to note that this sample choice is in line the purposes of this study, as the aim was not to investigate the impact of growth strategies across all F&B industry or all large firms.

Secondly, although aligned with the research purposes, the sample choice created some methodological challenges to replicate Aktas et al. (2008) methodology. Compared to Aktas et al. (2008) that use a much larger sample, we do not exclude companies that display negative growth over the three years sub-periods to focus solely on the effects of growth. If on one side this allows us to tackle the topic of growth strategies holistically, on the other hand, not

excluding negative growing firms might have affected the significance level of the external growth variable on the performance.

Thirdly, data availability covering only the last nine years, limited our panel data from having a larger dataset, and therefore stronger significance. A larger dataset would have allowed us to derive even stronger conclusions on our results and clarifying the effect of external growth on performance. Furthermore, since the economic crises might have impacted to the performance and to cash available for M&A, not having data prior to 9 nine years does not allow us to take into our analysis the full Merger wave and economic cycles before and after the financial crisis.

Fourthly, having a small sample meant not having the possibility select companies of which targets had all M&A data. This lack a data created additional challenges since we could not select from the M&A database only those target companies displaying the required information. To offset this problem we used the acquiring company's annual reports. However, this solution had consequences in terms of lengthiness and complexness of the research.

Having outlined the limitations, we suggest that for future studies it might be interesting to widen the scope of the research to all large F&B companies. Taking a larger sample could offset some of the challenges of this research and could allow generalisations to whole population of F&B companies or only on large depending on the aims. A larger dataset could also allow deriving even stronger conclusions on results and clarifying the effect of external growth on performance. Additionally, different sub-classes could be used to see what is the relation between size, growth strategies and performance within large food listed companies. Finally, if possible, future studies should use a longer period of time that could give greater significance.

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Appendix 1 List of the F&B companies

Table n.4 List of public F&B companies ranked by sales.

	Firm	Head Office	Sub-Industry	FoodSales '15 (\$mil)
1.	Nestle	Europe	Processed food	81,160
2.	PepsiCo	America	Processed food	63,056
3.	The Coca-Cola Company	America	Beverages	44,294
4.	Anheuser-Busch InBev	Europe	Beverages	43,604
5.	Tyson Foods	America	Meat	41,373
6.	Archer Daniels Midland	America	Processed food	37,619
7.	Mondelez International	America	Processed food	29,636
8.	Unilever	Europe	Processed food	25,345
9.	Danone	Europe	Processed food	24,655
10.	SABMiller	Europe	Beverages	24,149
11.	Diageo	Europe	Beverages	23,150
12.	Heineken	Europe	Beverages	22,565
13.	CHS	America	Processed food	18,800
14.	General Mills	America	Processed food	17,630
15.	ConAgra Foods	America	Processed food	15,832
16.	Grupo Bimbo	America	Processed food	15,650
17.	Smithfield Foods	America	Meat	13,602
18.	Kellogg Company	America	Processed food	13,525
19.	Fonterra*	America*	Processed food	13,460
20.	Bunge	America	Processed food	11,817
21.	Carlsberg	Europe	Beverages	9,685
22.	Pernod Ricard	Europe	Beverages	9,415
23.	Hormel Foods	America	Meat	9,264
24.	Saputo	America	Processed food	9,160
25.	Associated British Foods	Europe	Processed food	9,050
26.	Dean Foods	America	Processed food	8,122
27.	Campbell Soup	America	Processed food	8,082
28.	The JM Smucker Company	America	Processed food	7,811

*Fonterra is from New Zealand.

Appendix 2 Western Companies

According to the sociological and cultural definition of Western culture, Western countries are those that have been directly influenced by European nations. The following list comprehends the Western countries in which F&B companies are based: Europe (EU member states, EFTA countries, and microstates); America (e.g., Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Panama, Mexico, USA, Uruguay); Africa (South Africa); Oceania (Australia and New Zealand) (Singh et al., 1995).