



UNIVERSIDADE CATÓLICA PORTUGUESA

Divestment operations: the strategic, financial and organizational motivations

The case of Mota-Engil

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Católica Porto Business School

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Abstract

Mota-Engil is a multinational company operating in several areas, mainly in construction, counting on a legacy of more than seventy years. Considered market leader in Portugal, and one of Europe's thirty largest construction groups, this company has been intensively engaged in restructuring operations in recent years, namely in divestment activities. The group revealed that these were related with focus increasing purposes, as well as with the objective of optimizing and strengthen capital structure, and of highlighting and give recognition to the management of each divested unit.

Regardless of the great dimension and influence of this construction giant, it has been challenged in recent years by inconvenient economic events, such as the resolution of BES in Portugal, and the severe impact of the world oil prices fall in Africa's and Latin America's economies. These events coupled with the economic financial crisis of 2008, entailed a shock in Mota-Engil's performance. The conjuncture of the overall situation, raised the need to investigate the sense of these operations beyond the market releases, combining three perspectives: financial, strategic and organizational. This case study implies a deep analysis of financial measures, such as EBITDA, ROE, invested capital and pay-out ratio, combined with a strategic and organizational investigation. The merging of these three strands revealed that the divestments were mostly induced by heavy financial constraints and large debt burden of the group, contrarily to the motives outlined by the company. Due to these financial restrictions, Mota-Engil was facing a paradox: it had to decrease invested capital, which implied exiting some intensive capital businesses, although only in more capital-intensive businesses the group could achieve the outlined EBITDA margin goal of 15%.

The conclusion withdrawn from the combination of these three perspectives reveals the divestments were necessary to ease the debt burden and reflect the great management capacity of the group to overcome such unfavourable macroeconomic shocks.

Key-words: Restructuring; Divestment; Crisis; Debt; Invested Capital; ROE; EBITDA; Financial Constraints

Resumo

A Mota-Engil é uma empresa multinacional que opera em diversas áreas, principalmente na construção, contando com um legado de mais de setenta anos. Considerada líder de mercado em Portugal e um dos trinta maiores grupos de construção europeus, esta empresa tem estado intensamente envolvida em operações de reestruturação nos últimos anos, particularmente em atividades de desinvestimento. O grupo revelou que estes estavam na sua maioria relacionados com objetivos de aumento do foco industrial, assim como de otimizar e fortalecer a estrutura de capital, e de destacar e dar reconhecimento à gestão de cada unidade desinvestida.

Apesar da grande dimensão e influência desta gigante da construção, esta tem sido desafiada, nos últimos anos, por inconvenientes macroeconómicos, tais como a resolução do BES, em Portugal, e os severos impactos da queda dos preços mundiais do petróleo nas economias de África e América Latina. Estes eventos, aliados à crise económico-financeira de 2008, provocaram um abalo na performance da Mota-Engil. A conjuntura da situação levou à necessidade de investigar o sentido destas operações, para além dos comunicados da empresa, combinando três perspetivas: financeira, estratégica e organizacional. Este estudo implica uma análise detalhada de medidas financeiras, tais como EBITDA, ROE, capital investido, rácio “pay-out” combinadas com uma investigação estratégica e organizacional. A fusão destas três vertentes revelou que os desinvestimentos foram na sua maioria provocados por motivos de restrições financeiras e elevado endividamento do grupo. Devido a estas restrições financeiras a Mota-Engil enfrentava um paradoxo: era necessário reduzir o capital investido, o que implicava sair de negócios capital intensivos, no entanto, apenas em negócios mais capital intensivos, o grupo poderia atingir o objetivo da margem EBITDA na ordem dos 15%.

A conclusão a retirar da junção destas três perspetivas é que os desinvestimentos foram necessários para aliviar o elevado endividamento e refletem a excelente capacidade da gestão para ultrapassar choques económicos tão desfavoráveis.

Palavras-chave: Reestruturação; Desinvestimento; Crise; Endividamento; Capital Investido; ROE; EBITDA; Restrições Financeiras

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List of Abbreviations

BES	- Banco Espírito Santo
CAGR	- Compound Annual Growth Rate
CAPEX	- Capital Expenditures
EBITDA	- Earnings Before Interest, Taxes, Depreciation and Amortizations
EBIT	- Earnings Before Interest and Taxes
ECB	- European Central Bank
E&C	- Engineering and Construction
E&S	- Environment and Services
EGF	- Environment Global Facilities
GDP	- Gross Domestic Product
GES	- Grupo Espírito Santo
INE	- Instituto nacional de Estatística
IPO	- Initial Public Offering
ME	- Mota-Engil, SGPS
MEEC	- Mota-Engil Engenharia e Construção, S.A.
MEEC-A	- Mota-Engil Engenharia e Construção Africa, S.A.
ME-A	- Mota-Engil Africa, S.A.
OECD	- Organization for the Economic Cooperation and Development
OFS	- Offer for Sale
OI	- Operating Income
P/E	- Price-to-earnings
ROA	- Return on Assets
ROE	- Return on Equity
S.A.	- Sociedade Anónima
SGPS	- Sociedade Gestora de Participações Sociais

Introduction

Mota-Engil is probably one of the most well-known construction companies in Portugal, not only for its dimension but also for the importance and magnitude of the works performed

This company reached a market leader position in Portugal, being considered one of the thirty largest construction groups worldwide. Besides being present in three continents and thirty countries, it also has participations in around 280 companies (Mota-Engil, 2018).

Regardless of the success and growth exhibited in the past years, this company faced, in more recent years, severe macroeconomic conditions. On the one hand, there was the fall in world oil prices in 2014, which deeply affected its African and Latin American businesses. On the other hand, the Banco Espírito Santo (BES), resolution, impacted the Portuguese economy, transmitting its effects to the established companies in Portugal. The economic shocks consequently affected Mota-Engil's overall results.

In this sense, Mota-Engil felt the necessity to improve outcome, increase growth and create value. The management, facing these conditions, pursued restructuring strategies that were disclosed as means to strengthen the financial position of the group and to increase focus, even allowing to separate businesses. Among these strategies were the several disposals performed during the analysis time window, which were mostly made on profitable and mature assets of Mota-Engil.

Nonetheless, the underlying motives for these operations are questioned and investigated throughout this dissertation, with the aim of clarifying the fundamental question: what is the strategic, financial and organizational sense regarding the divestments performed by Mota-Engil?

Although the presented study is not a new subject per se, it exploits a different view on the event, aiming to be a critical reflection of the underlying sense of the strategic choices of Mota-Engil, using for this purpose a qualitative analysis of a case study, which investigates both the strategic, financial and organizational aspects of these operations.

Strategically, the common-sense regarding divestments is that companies should divest those assets which are least profitable (Duhaime & Grant, 1984;

Zuckerman, 2000; Lowe & Veloso, 2005). The fact that a company divests does not necessarily mean that a business unit is non-performing, as a matter-of-fact, sometimes assets with good future growth perspectives are sold. In the presented case, Mota-Engil decides to sell mature assets which had been a target of large investment amounts, and therefore were considered profitable, that is, contrarily to the stigma that one should “sell the bad and keep the good”, confirming the work of Koller, Goedhart and Wessels (2015), regarding the best owner principle.

In order to answer the abovementioned fundamental question, this thesis is organized as follows: chapter one illustrates a summary of the main literature regarding these operations, organized by research areas, this is, finance, strategy and organizational behavior, each enhancing both motives and effects that lead to divestitures; chapter two provides the case study methodology, which includes a synopsis of the company history and current information, a brief macroeconomic conspectus, in order to understand the conditions faced by Mota-Engil, and the description of the main divestment operations; chapter three, for instance, presents the results, for which a detailed analysis of financial information is performed, for the period between 2012 and 2018; lastly, chapter four explains the main conclusions and chapter five enhances the limitations and suggestions for further research.

Chapter 1

1. Divestment operations: literature review

Companies have the constant aim of growing and maximizing shareholder value, always looking for strategies that allow them to achieve these goals, having a necessity of reorganizing the internal structure, in order to protect from competition and overall macroeconomic conditions. (DePamphilis, 2015)

The process through which firms do this is known as corporate restructuring. The latter can be defined as a process of changing property and ownership or economic and financial assets management, normally involving investment, divestment or reorganization operations. Through these, companies achieve several goals, such as generally value creation and increase stakeholders' wealth. (DePamphilis, 2015)

Conventionally, these processes are related with downsizing operations, which correspond to a decreasing of a firm's operations size, comprising the sell or shut down of business units and reduction in costs and in assets investment, through a planned reduction in the workforce (Pacheco, 2019).

Commonly, the triggers of a corporate restructuring operation are markets mutation, the evolution of technology, job market changes, organizational cultures and the pressure of competitors (DePamphilis, 2015).

Restructuring management boards and internal resources, and efficiently allocating all the internal assets is a process that may have a rather long duration.

However, the achievements can be large. Beginning with improvements on revenues, internal re-organization of workstations, re-defining the performance measures, costs reductions, higher flexibility with market changes, internal analysis, profit maximizing, innovation and value creation, these are some of the benefits induced by this type of operations. (DePamphilis, 2015)

Admittedly, the most common restructuring operations are mergers, acquisitions (investments) and divestments, the latter are indeed the pivotal topic of this dissertation. These operations can be perceived for having symmetric motivations of acquisitions.

According to Moschieri and Mair (2008: 399), "divestitures are defined as the parent company's disposal and sale of assets, facilities, product lines, subsidiaries, divisions and business units".

These operations are a central topic of scholars' discussion since there are many aspects within these operations that are yet to be fully explored and properly explained.

Companies pursue long term goals, surpassing the short-term objective of shareholders' wealth maximization. Moschieri and Mair (2008) suggest that in order to study these operations and their process of value creation, it is necessary to include strategic and organizational views in the overall finance perspective. For these authors, divestments "are means, not solely ends, because they affect the long-term evolution of the firm".

A full understanding of these operations is yet to be achieved, since there is not a general consensus whether they are a simple result of the economic cycle, a way of correcting mis thought strategic maneuvers or a proactive decision.

1.1. Research areas on divestments

Research on divestments has tried, over the years, to understand all their processes, antecedents and outcomes. In this sense, the presented literature regarding these operations is divided in three areas: finance, strategy and organizational behavior. Moschieri and Mair (2008: 400) suggest that:

"Since companies pursue objectives that go beyond the maximization of shareholders' wealth, it is also important to include strategic and organizational reasoning and consequences in order to understand the value creating mechanisms of divestitures. Divestitures are more than just financing operations."

1.1.1. Finance literature

Research on Finance focuses on the processes of divesting that allows to create value for shareholders, analyzing mainly the effects of these operations, regarding not only the stock performance of divesting companies before, during and after the announcement date, but also the behavior of stock markets during the periods of these activities.

This area of studies agrees that in most situations there is a positive variation on the mother firm's stock prices in the period following the divestiture announcement, even though there is a lack of consensus on the reasons for this variation.

This literary perspective enhances three main areas of interest: the impact of the operation in the focal firm's performance, the structural organization of the focal firm, after the divestment, and financial antecedents of the same firm, before the disposal. Additionally, this research stream debates about the way economic, corporate and environmental features, type and outcome of divestment, affect these operations.

Concerning the corporate diversification theme, Lang and Stulz (1994) and Berger and Ofek (1995) demonstrated the first interest in this area, claiming that highly diversified conglomerates "trade at discount", in comparison to non-diversified firms, which led to the expression "diversification discount". This hypothesis is related with inefficiency problems. According to the agency theory, the reason why this discount exists in the first place is related with an ineffective apportionment of capital expenditures within conglomerate units. This inefficient investment was tested by Berger and Ofek (1995), Lamont (1997), Shin and Stulz (1998), Scharfstein (1998), Shin and Park (1999), Rajan, Servaes, and Zingales (2000), and Lamont and Polk (2002). On the contrary, Chevalier (2000), Whited (2001), and Sanzhar (2003) state that this inefficiency is actually due to endogeneity problems, errors in measurement and accounting definitions.

Colak and Whited (2004) investigated the impact of divestments on the efficiency of conglomerate investment. These authors' view on the theme is that divesting a conglomerate does not boost efficiency. The latter found that refocusing firms were very distinctive from the rest:

"In particular, they are larger, more diversified, and subject to more serious problems of asymmetric information. Further, they tend to be in fast growing industries with a great deal of IPO and corporate control activity. Finally, they appear to have experienced recent unanticipated shocks to profit." (Colak & Whited, 2004: 3).

Khoroshilov (2002), proved that whenever firms trade at diversification discount, there is a high probability that these will suffer a divestiture. Besides, this author suggests that there is a propensity to divest during economic expansion periods. In this same year, Mansi and Reeb (2002) stated that a possible cause to this discount was the decrease in risk, which was induced by diversification, that ultimately led to a value increase in the firm's debt titles.

¹ Discussed in the following section

Therefore, with a verified increase in debt value, there will be a reallocation of wealth from equity holders to bondholders. According to this perspective, focus-increasing divestitures will reduce bondholders' wealth, conducting this wealth to shareholders, who consequently sees their stock value increasing, since the announcement.

In this sense, the main focus of this literary perspective is examined, this is, the impact of a divestment procedure on the wealth of the parent's shareholders. It was observed that there is an overall consensus regarding the positive outcomes induced by the divulgation of a divestiture on the stock price of the divested unit, on the announcement day. Bourdreaux (1975) and Hearth and Zaima (1984), suggest that a significant amount of those effects in the stock price are mostly seen on the announcement day, however, sometimes are also verified after and before this date. In the opinion of John & Ofek (1995), the main reason for this increase in prices is the reduction of diversity experienced by the parent firm.

Finance research points a few reasons for the increase in firm value, brought by divestments. Namely, the reallocation of wealth between shareholders and bondholders of the parent firm, suggesting that divestments are prejudicial to bondholders' wealth, which was further elaborated and studied in more detail by authors such as, Hite and Owers (1983), Miles and Rosenfeld (1983), Linn and Rozef (1985), Denning and Shastri (1990), Palepu (1990), Parrino (1997), Dittmar (2002), and, lastly, Veld and Veld-Merkoulova (2006). Furthermore, Parrino (1997) recognized a direct reallocation of wealth, brought by divestments, which decreased the collateral on debt and allowed bondholders to have reduced claims on the firm's cash flows. This reallocation results in an increase in the firm's stock price and a reduction in the debt value. This direct effect is also proved by Maxwell and Rao (2003), according to which there are a few factors that contribute to the decreased return of bonds, which include divestment firms' size relationship, level of financial risk, reduced company dimension, market-to-book ratio and positive abnormal stock holders' yields.

Regarding spin-offs, Veld and Veld-Merkoulova (2006) agree that these can result in two different outcomes for bondholders. The latter can gain with the rise in the firm value or lose. The worst-case scenario is discussed further by the bondholder wealth expropriation hypothesis, which claims that both assets and

² These operations are explained in greater detail in page 21

liabilities of a company are arranged in such way that there is a wealth transfer from bondholders to shareholders, at the time of a spin-off.

Following this logic, a possible motive for focus-increasing divestments is to dilute strength of bondholders, reduce leverage and increase the shareholders' remuneration, gaining the contentment and support of the owners, and consequently, protecting against other external maneuvers, such as buyouts, takeovers or MBO's³. According to Veld-Merkoulova (2002), divestitures, under the form of spin-offs, made by highly efficient firms induce a reallocation of value from bondholders to shareholders, while, however, if we consider less efficient firms, this allocation will be verified in the opposite direction.

A further reason for the value increase is the spreading of information before the announcement of the operation (Linn & Rozeff, 1985).

Within the analysis of firm value increase, finance literature also examines which factors are capable of conditioning the stock price variation due to a divestment operation, such as the voluntariness of the operation. A divestment which is enforced by law or judicial motives will induce a negative variation on the share price of the parent firm, in line with Bourdreaux (1975), Hite and Owers (1983), and Hearth and Zaima (1984).

Furthermore, this literature area investigates the divestment types and their financial antecedents and outcome. Divesting can take numerous different forms, depending on the desired parent-subsidiary relationship. Considering the context of this case study, the three main relevant divestment types are carve-outs, sell-offs and spin-offs.

A carve out, is an operation through which a "new independent company is created by detaching part of the parent's businesses and selling the shares of the new company in a public offering. In general, the parent remains in possession of a substantial proportion of the equity of the carved-out company." Moschieri and Mair (2008: 410)

For instance, it tends to occur, in consonance with Allen and McConnell (1998), when the parent either verifies weak performance, need of outside funding, elevated debt levels or when it has restricted capital. Slovin, Sushka and Ferraro (1995), include in the previous enumeration, the situation where external

³ Management-buy-outs, these operations are explained in greater detail in page 22

investors tend to value the post carve-out shares at a higher amount, than managers do.

According to Schipper and Smith (1986), previously to a carve-out operation, a firm generally announces projects with a high NPV¹. This author claims that usually the parent firm is not only interested in re-purchasing the sold shares of the carved-out unit, but also in maintaining both functional synergies and welfares of tax consolidation.

Klein, Rosenfeld and Beranek (1991) and Slovin, Sushka and Ferraro (1995), argue that there is usual knowledge that a carve-out can be a halfway process to other divesting modes.

Downsizing through carve-outs allows a higher number of companies to pursue viable projects, by separating new investments' financing processes, using the carved-out firm (Myers & Majluf, 1984; Allen & McConnell, 1998). Furthermore, Schipper and Smith (1986), affirm that carving-out permits restructuring the organization of asset management, through motivational contracts and the emergence of different responsibilities.

In the case of a spin-off, although similar to previous situation it is rather different, since besides involving the creation of a new independent company, by selling a business unit of the parent firm, this sale is achieved through the allocation of shares of the divested unit to the parent firm's shareholders, (Moschieri & Mair, 2008). Or, according to Veld and Veld-Merkoulova (2006), a spin-off is a divestment operation in which a unit, division or department is separated from the focal company in such way that the shares of the divested company are allocated proportionally among the focal firm's shareholders. In this sense, there still exists an indirect dependency relationship between the parent and the unit. Admittedly, these operations usually bring shareholders' contentment, although markets react differently to these operations depending on the country's tax policy, and law regulations. United States provide favorable conditions for these operations, since there are no tax effects by spin-offs. Despite this, in a few European countries this does not happen, and these constitute barriers to divestitures.

According to John (1993), the reasons behind a spin-off are connected to dissimilarities between expenditures of research and development and intangible assets, considering technologically-strong industries. Linn & Rozeff (1985) claim that firms undertake divestments whenever management considers

that the market is valuing the whole firm inappropriately, conversely, John (1993), adds that divesting is an option when companies intend to decrease agency costs and capture tax benefits.

A different perspective on divesting leads to the concept of MBO's, which "are transactions in which managers, with the support of other investors, replace the public stockholding of the parent company. MBOs are normally financed with large debt issues, and the new stocks tend to be held by incumbent managers and a small group of external investors." (Moschieri and Mair, 2008)

These can be used by a company on any occasion that the managers of the divested unit are willing to buy the division for a higher amount than the price attributed to the respective division by the focal firm. This happens whenever the focal firm intends to maximize its own cash flows resulting from the divisions' sale, and lastly, when the parent is assured that the management team will, after the buy-out process, manage the unit effectively. (Trifts, Sichernman, Roenfeldt & Cossio, 1990; Seth & Easterwood, 1993; Singh, 1993)

Vis-à-vis, the so-called sell-off operations are engaged every time a company aims to cut any business relationship with the sold-off unit.

1.1.2. Literature on strategy

Strategically, divestitures' purpose goes beyond the goal of increase in stock prices, therefore they are considered an instrument of corporate strategy. These operations can be a corrective measure of mis thought diversification strategies and ineffective growth, due to management perception errors, (Jensen, 1989). Porter (1987), agrees that divestitures can be a rectifying gadget for miscalculated strategies. These authors based their statements on the agency theory. Markides (1992a) and Khoroshilov (2002), add that these operations can also be a strategic mean to decrease diversification of the parent firm, focusing on the core business, and with this, increasing economic value or market share.

Decreasing diversification is generally a mean to correct strategical choices, in companies where financial controls are highlighted over strategic ones. This triggers low levels of internally developed innovation and increased risk aversion of decision takers (Hitt, Hoskisson, Johnson & Moesel, 1996; Hoskisson, Johnson & Moesel, 1994). One of the motives to divest, outlined by this literary area, is therefore the opportunity for a parent firm to enter new market segments, (Garvin 1983), allowing the parent to operate in much different technological

environments. Thusly, divesting can be used to increase innovation and penetrate “high-tech” markets. In an article of USA Today, Peter McKelvey, partner at L.E.K. Consulting claims: “Investors have clearly shown unrelated businesses are better off separated (..) What sounds theoretically interesting together...doesn’t live up to the hype”⁴

Furthermore, divesting allows to establish, in the spun-off firm, effective administration and control measures (Seward & Walsh, 1996). Additionally, it permits to decrease debt and compensate shareholders’ returns (Bowman, Singh, Useem, & Bhadury, 1999).

Strategy-based research is grounded upon the environment in which the divestment occurs and it’s social and cultural characteristics. According to Ito (1995) and Eisenhardt & Brown (1999), it is more likely to verify a divestment operation in extremely volatile markets, within highly competitive environments. Regarding the environment’s social and cultural characteristics, that expedite divestments, these can be the homogeneity of society, informality of contracts, stability of shareholders, and absence of outside job markets (Garvin, 1983; Ito, 1995).

Strategy authors such as Harrigan (1981), Garvin (1983), Porter (1987) and Hopkins (1991), focused their investigation around the appeal of the industry and the strategic placement of the parent.

Studies on this stream suggest that extremely profitable industries, with strong research and development, elevated concentration and market parcel, tend to have more divestitures (Hopkins, 1991; Markides, 1992b). However, these operations are obstructed by features such as product unique and similar characteristics, and exit obstacles (Harrigan, 1981). Authors such as Duhaime and Baird (1987), Hoskisson et al. (1994), Zuckerman (2000), and Haynes, Thompson and Wright (2003), defend that companies that divest tend to exhibit weak performance. Besides, Hoskisson et al. (1994) and Haynes et al., (2003) advocated that besides evidencing poor results the divesting companies are usually highly

⁴ “Many spin-offs prove popular with investors”, *USA Today*, June 16, 2005, retrieved from: http://www.usatoday.com/money/markets/us/2005-06-15-spinoffs-usat_x.htm

indebted. On the other hand, these authors suggest that mediocre governance and formulation of strategy encouraged divestment operations. Veld-Merkoulova (2002) stated that both highly pre-divestment leveraged firms and those with riskier assets and higher information asymmetry generally profit further from these operations, whether in terms of bond or stock abnormal yields. Also, this author claims that spin-offs conducted for focus-increasing reasons tend to have higher abnormal returns. Duhaime and Grant (1984), Duhaime and Baird (1987), Zuckerman (2000), and Lowe and Veloso (2005), advocate that, in terms of the business units, these are unlikely to be downsized if they present large profitability margins and if they have good future perspectives on earnings, according to the common-sense regarding divestments, that a business unit is divested if it is not profitable. The work of Koller et al. (2015), proves contrarily, through the so-called best owner principle, which suggests that this theory is the basis of company's restructuring activities, grounded upon the question: is the company the best owner of its own assets?

If other market players value a specific business above the owners own valuation, usually, the best owner principle dictates that this business will be sold, for the former owners' price plus the premium, of the valuation of the bidder. Furthermore, this theory advocates that new owners will be more capacitated to run the business more efficiently, due to several factors, such as new owners' distinctive skills, better governance models, better insight or foresight, different access to resources, among others. (Koller et al., 2015)

Duhaime and Baird (1987), defend a consensus on the curvilinear relationship between the decision to engage in a divestment and the size of the disposed unit. Although the interdependency degree between the firm's units, has generally a negative impact on the decision to divest (Duhaime & Grant, 1984). Be that as it may, in order to avoid relatedness problems, between parent and divested unit, firms can engage in sell-off operations, achieving a total separation, eliminating any business relationship (Rose & Ito 2005). In consideration of the foregoing, Parhankangas & Arenius (2003), claim that there is a limit to the benefit of the relationship between the parent and the divested unit, over which there might be negative consequences.

According to Bruining and Wright (2002), the reason for divested units to improve with divestments, is related with a verified size reduction. Furthermore, Seth and Easterwood (1993), add that firms also expand due to decreased agency

costs, a decline in corporate taxes and higher flexibility. Authors such as Schipper and Smith (1986), additionally refer the capacity of the unit alone to obtain better contracts' conditions. Veld and Veld-Merkoulova (2006) in a subsequent study found that taxable spin-offs were related with inferior profit, also, that spin-offs of unrelated units led to greater abnormal returns.

Divestiture's research on strategy can be subdivided in four fields, agency theory, transaction cost economics, resource-based View and evolutionary theory, according to Moschieri and Mair (2008).

The most protruded stream is agency theory, since it explains not only the outcomes but also the processes and antecedents of divestments. This segment has its foundations on the agency costs, defined as issues between managers, executives and owners, due to different risk positions and business goals. This divergency surfaces because managers, who are elected to act in benefit of the true owners of the company (shareholders), not always pursue this objective. (DePamphilis, 2015). This conflict is thought, by strategy authors, to be the main reason why firms enter in a divestment operation.

Managers prioritize firm size and concern about bankruptcy risk, while shareholders value firm performance. The former might undertake growth strategies that even if they increase firm size, they will probably lead to a decrease in shareholders' wealth. (Amihud & Lev, 1981)

Following this rationale, and according to Bethel and Liebeskind (1993), managers use divestitures as shield against acquisitions or when shareholders put pressure on them.

According to the agency theory, divesting enables reduced agency costs and higher flexibility, since the post-divestment capital structure and new shareholders allow an alignment between the shareholders' motivation and the company's necessities (Seth & Easterwood, 1993; Gopinath & Becker, 2000). Through the separation of the parent and the unit, there is a clearer understanding of the unit performance (Aron, 1991). Chemmanur and Yan (2004) advocate that divesting creates another level of competition, since the unit becomes a rival to the parent, which will be more encouraged to compete and improve management. Usually there is a performance improvement for the unit, after a spin-off, since it becomes independent from the parent, getting its own stock, which it can manage to increase growth, possibly with future acquisitions. When managers own stock, they have incentives to improve management

efficiency, consequently, both parent and divested unit will have improved productivity after a spin-off. These management incentives eventually will solve the agency conflict problems, since managers will then focus on the same issues as owners.

In line with Seth and Easterwood (1993) and Bruining and Wright (2002), further advantages are a diminished gap between measure and execution, simplified organizational structure and a more straightforward relationship between managers and owners.

Transaction cost economics contrasts divestment decisions with further strategic decisions. In consonance with this field, divestments are capable of offsetting costs inherent to different corporate government configurations, achieving an efficient corporate internal labor market and also, creating growth, according to the main capacities of the parent firm (Ito, 1995).

Admittedly, a divestment may be a possible way for the unit to maintain the tie with the parent, since it can become independent, but at the same time, the parent can indirectly retain some control in it. (Ito,1995), thinks of divestitures as means to change a hierarchical transaction to a quasi-market one, having the additional ability to affect market transaction costs and hierarchy associated costs.

Resource-based view theory, on the other hand, suggests that “a company’s competitive advantage depends on its assets and resources”, (Moschieri and Mair, 2008: 401). Accordingly, the reasons for divesting are related with structural problems, after acquisitions, by obtaining similar and coincidental businesses, making the company’s structure superfluous, (McGahan & Villalonga, 2003b).

This theory considers that companies increase efficiency by redeploying the resources, downsizing the assets (Capron, Mitchell & Swaminathan, 2001), and, shifting assets between entities, according to their value, (Kaiser & Stouraitis 1995). Alongside this efficiency boosting measures, companies use the best of the resources incorporated in the new corporate structure, (Ito & Rose 1994). This enabled the eradication of negative synergies of the parent and the unit, by separating them.

Lastly, evolutionary theory supporters, such as Duhaime and Grant (1984), Mitchell (1994), Anand and Singh (1997), and Capron et al. (2001), reflect on divestments’ bases. These can be seen as an ever-changing process of adaption to

the financial environment (Meyer, Brooks & Goes, 1990). Thus, in this stream, choices with a strategic character are perceived as Darwinian tactics to survive, (Garvin, 1983; Mitchell, 1994; Ito, 1995; Capron et al. 2001; Rose & Ito, 2005).

Once a firm is settled in an industry it appears to neglect its “downward vision and mobility”, (Christensen, 1997: 24), and does not modernize or evolve (Markides & Geroski, 2003). According to this stream the main benefit and reason for a divestment is the transference of technology, since by shifting a new project to a reduced unit, the latter can explore new processes, technologies and innovations, with overall decreased risk. Therefore, companies can divest in order to increase and enrich their research and development departments.

1.1.3. Research on organizational behavior

Organizational behavior literature on divestments enhances three topics of discussion, beginning with the debate whether these operations aid firms projecting new governance guidelines, including a revision of corporate incentives, less centralized governance structure, and lastly better authority reorganization. Secondly, it focuses the predecessors of divestment, an in proprietorship and governance configuration. Thirdly, it centers in the degree of managers’ engagement and its impact on the divestments’ results.

Furthermore, literature in this stream can be disaggregated in a few criterions. Moschieri and Mair (2008: 413), choose three metrics “corporate characteristics, management of divestitures (including governance structure, management team and effects on employees), and organizational and governance outcomes”.

When considering the main reason to divest, organizational behavior research is founded on the agency theory’s perspective, from strategy literature, considering agency issues, between owners, managers and board of directors, to be the focal cause (Hoskisson et al. 1994; Markides, 1997).

Bethel & Liebeskind (1993), point features such as ownership changes, elevated concentration of ownership and top management rearrangements, as antecessors of divestments. Besides, these authors point out problems of corporate and internal control, as a motive to divest.

Looking deeper at the management of divestitures, it suggests that each agent of the firm chooses to undertake a divestment for specific motives. Regarding the administration board, divesting is an option when the company experiences a

decay of performance. If not, regularly, managers will trigger a divestment (Johnson, Hoskisson & Hitt, 1993).

Nees (1981), stated that the manager of the unit to be downsized plays a fundamental part in divestments, since this person is not only responsible for transmitting correct information, but also for presenting the firm to possible bidders, enforcing minor decisions, and defending the principles and efficiency of the divested unit. However, when considering an MBO as the downsize operation, the importance and effect of this entity will have a negative connotation.

According to Nees (1981) and Trifts et al. (1990), divesting also captures some issues regarding the managers of the division. There might be asymmetric information problems, between outside investors and these managers, not only because the latter are thought to only concern their self-motives, rather than firm specific interests, but also because investors believe that a divestiture operation may entail information outside the manager's knowledge (Nees 1981).

According to Johnson et al. (1993), only when controls conceived by general managers are ineffective and management structure is not homogenous, the board of administration will be engaged in the divestment operation. Furthermore, Nees (1981) defends that to be prosperous, the involvement of the secondary managers in these operations is crucial.

Presumably, when considering management control instruments, divestments are believed to clarify their effectiveness. Aron (1991) sustains that divesting improves the measurement of firm incentives, regarding the defined objectives and the development of their mechanisms. Once a division is divested, then its stock price volatility will be a more transparent signal of the productivity of the management strategy for the divest unit, detached from the noise of the parent firm activity.

1.2. Combining the three perspectives on divestments

Strategy believers, such as Bowman et al. (1999), state that commonly, divestitures are followed by organizational structure modifications, whether in employee downsizing or in reorganization of divisions. And it is in this area that Organizational Behavior enhanced its focus.

In these operations, not only managers play a fundamental role, but also the employees of the division. Their perception about the process of the divestment will be a key element for its outcome. Namely regarding the dismissals that are commonly inherent to these operations.

According to Nees (1981) generally employees consider that layoffs, as result of a divestiture, are not necessary for the success of the firm. This perception might lead to a distrust and disbelieve feeling towards the parent company. This author, in line with Gopinath and Becker (2000), states that communication between employees and managers is vital for the success of the operation since it enables employees to trust the divested firm, boosting their commitment to the new job.

Finance literature focused instead on other metrics and proved that divesting allows to implement new policies and management choices, such as better control and administrative internal policies, and change the ownership structure (Jensen, 1983 and Seward & Walsh, 1996). Baker, Gibbons and Murphy (1999), followed this rationale and added a little of organizational behavior incite, claiming that strict ownership arrangements influence the credibility and execution of less strict and formal contracts. According to Baker et al. (1999), whenever formal contractual delegation is treasured, and applying informal delegation is impracticable, divestment operations are considered to produce positive outcomes and to be successful.

Agency theory from strategy research, advocates that after a divestment operation, the new owners, new managers and the new capital structure, influence the incentives and main goals of the main claimholders of the company, according to Gopinath and Becker (2000). In line with this theory, divestitures benefit the divested unit, decreasing the time window between the policy definition and its enforcement, easing the organizational structure, and enabling a smoother delegation, agility, and unanimity between top agents, as managers and owners (Seth & Easterwood, 1993). These benefits bring, therefore, two other advantages, improved efficiency and smoother decision-making.

There is a consensus between finance and strategy literature concerning the positive gains for firms undergoing a divestment. Both these streams refer that the returns are contingent to the type and procedure of the operation and the traits of the divested firm. Regarding the divestment type, Bowman and Helfat, (2001) claim that divesting triggered by financial motives, allows the highest

yields. Concerning the process of the operation, management features impact the divestment outcome, as in the announcement mode (Klein, 1986), and the managers' communication abilities with shareholders, regarding financial status of the company and new projects, before the actual announcement of the operation, (Fluck & Lynch 1999). Lastly, there are a few qualities of the divested unit that influence the returns of the operation. The size of the operation in general has a positive proportional relationship with the returns of the divestiture (Miles & Rosenfeld 1983; Hearth & Zaima 1984; Klein 1986). Industry sharing has a negative impact post-divestment, since units that share industry with the focal firm are proven to have worse performance than the parent (Rose & Ito 2005).

Contrarily, Woo, Willard and Daellenbach (1992), suggested there is no meaningful upgrading in the divested unit, before and after the operation. Although the author verified a minor decline in ROA⁵ of the divested unit, after a spin-off. Additionally, market reactions to these downsizing operations have proven to not always be positive, due to poor credibility transmitted at the announcement date.

Literature on divestment operations does not have a full consensus in every aspect comprehended by such operations. There are studies which find positive performance results after such a transaction, and others prove contrariwise. In addition, there is no consensus on the effects of information asymmetry, the wealth transfer between bondholders and shareholders, and lastly, the long-term stock performance of the two companies involved in the divestment. A case study is presented and analyzed in the following sections, in order to understand the reality behind these processes and how they affect a real company, beyond numbers and statistics.

Chapter 2

2. Methodology: the case

This thesis is grounded upon a qualitative methodology. Thus, an explanatory and revealing case study approach is used in order to answer the research

⁵ Return on Assets

question: what is the strategic, financial and organizational sense regarding Mota-Engil's divestments?

"The case study is a research strategy which focuses on understanding the dynamics present within single settings" (Eisenhardt, 1989: 534).

It was decided to implement a case study methodology, focused on contemporary events, namely the divestments of Mota-Engil. Therefore, this dissertation can be divided in a descriptive part of "how?" and an explanatory part "why?". The case study will be described in detail, separated in different events to answer the first part. The second question will be answered in the results analysis, presented in chapter three. The conclusion chapter will combine both answers, to clarify the previous research question.

For this purpose, this chapter starts with an overview of the company Mota-Engil, followed by a brief macroeconomic and industry framework, and ends with a description of its recent divestment decisions.

The choice of Mota-Engil as the target company for the case study of this thesis is related to the fact that it is a standard client of Triple A- Capital & Finance, firm where the curricular internship of six months was performed, during which a restructuring operation process of Mota-Engil was developed. This allowed a prodigious proximity to the company, a deeper analysis of its financial reports, and a more direct contact with this multinational company, enabling to understand its working methods. In addition, Mota-Engil is a firm that has been engaged in a lot of restructuring transactions since its inception.

2.1. Company Background

Mota-Engil is a Portuguese multinational group in the construction industry. Mota & Companhia, founded in 1946 by Manuel António da Mota, started by being a family business. In this same year, a branch was created in Angola, and until 1974 the activities of the company were mainly in this country. (Mota-Engil, 2019a)

In 1952, Fernando José Saraiva and António Lopes de Almeida founded Engil, Sociedade de Engenharia Civil, Lda. In the year of 1969 it was established a contract with the Siemens-Baunton company, by which the Engil company exclusively acquired, to Portugal, the patent to the Siemcrete sliding formwork

system, enabling a significant increase in the number of projects developed. (Mota-Engil, 2019a)

From 1980, Mota & Companhia expanded its operations in Angola, and created, in this year, through a partnership with the Angolan state, the company Paviterra. (Mota-Engil, 2019a)

It was in the year 1987 that Mota & Companhia, a limited liability society, became a public limited company, having a posterior dispersion of 12% of its capital by the public, and it got the admission to the Lisbon's Stock Exchange. The holding Engil SGPS⁶, was formed in this year, in an attempt to face the market changes and to diversify the activities. These changes contributed to the firm's growth, and so did Engil's acquisition of the companies: Sociedade de Empreitadas Adriano, in 1988; Gerco, Electronic Engineering Society, in 1990; and Ferrovias e Construções, in 1991. (Mota-Engil, 2019a)

The family Mota launched an acquisition bid for the whole capital of Engil SGPS, in 1999. This resulted in the Mota-Engil Group, one year after. (Mota-Engil, 2019a)

By the year 2002, the merger between Mota & Companhia, A.S., Engil-Sociedade de Construção Civil, A.S., and Mota-Engil International, resulted in the formation of the largest Portuguese construction company. The following year, the diversification objective got intensified, and four autonomous business areas emerged. (Mota-Engil, 2019a)

The holding company Mota-Engil SGPS added Mota-Engil, Engenharia e Construção, S.A., Mota-Engil, Ambiente e Serviços, SGPS, A.S., MEITS - Mota-Engil, Imobiliário e Turismo, S.A., Mota-Engil, SGPS, S.A., also holding directly the capital of Mota-Engil Serviços Partilhados Administrativos e de Gestão, S. A. (Mota-Engil, 2019a)

In the year of 2006 the group entered in the logistics sector by acquiring the Tertir Group in Portugal and in 2012 the Group proceeded to a restructuring of its organizational model to its geographic business segments. In the following year, an amount of 175 million euros in bonds, medium-term and listed, were issued. In this same period, the group revealed its intention of listing and selling its subsidiary Mota-Engil Africa through a spin-off. In the subsequent year, 2014,

⁶ Sociedade Gestora de Participações Sociais

EGF⁷ unit was acquired. In the next year there was a de-listing of the business in Africa and a capital increase in Mota-Engil SGPS. In 2016 there was the sale of the business regarding the Ports and logistics area, the sale of Indaqua, and a first closing of Ascendi's assets sale to Ardian. (Mota-Engil, 2019a)

The shareholder structure of the group is mostly made up by the Mota family, through FM- Control Company, with a 65% participation. Nowadays the Mota-Engil Group, has presence in three continents, and in 30 countries, which can be divided in four geographical areas, Europe engineering and construction (E&C), Europe environment and services (E&S), Africa and Latin America. Its activity is oriented towards construction and infrastructure management, which is segmented by the areas of Engineering and Construction, Environment and Services, Transports Concessions, Energy, Logistics and Mining. (Mota-Engil, 2019a)

It has gained the position of market leader in Portugal, standing as one of the 30 biggest construction groups. Adding to this dominant market position, the group has also participations in around 280 companies. (Mota-Engil, 2019a)

Mota-Engil SGPS is currently a listed company in Euronext Lisbon, being part of the main index of the Portuguese stock market, PSI-20, and having a registered capital of 237 505 141€. On May 5, 2019, Mota-Engil presented a market capitalization of 533 million euros. (Mota-Engil, 2019a)

The equity attributable percentage is 35%, the designated free float capital, and the remaining 65% is under control of FM- Control Society, SGPS, S.A. The CEO of Mota-Engil is Mr. António Vasconcelos de Mota, and the chairman is Mr. Gonçalo Moura Martins. (Mota-Engil, 2019a)

2.2. Macroeconomic and Industry outlook

This chapter's sub-division intends to make a brief contextualization of the macroeconomic reality experienced by Mota-Engil, during the period of the analysis, which goes from 2012 to 2018.

This study begins with an overview of the construction sector in both Africa and Portugal, due to this two region's importance for Mota-Engil, followed by a description of concrete events which impacted not only the firm but also the

⁷ Environment Global Facilities

global economy. The main adverse situations which had a greater impact in Mota-Engil's results were the crisis of BES and the fall in oil prices. For this reason, these events are described in greater detail.

2.2.1. Construction sector in Africa and Portugal

Construction and industrialization have been hand in hand over the last century. In Europe, the industrial revolution brought a great deal of infrastructure expenditures, which have continued until nowadays, with the increasing demand for habitations, due to the growing global population, but also the expansion of factories and industries, in order to adapt to the new technological environment and highly competitive markets.

Regarding the African continent, according to Africa's Path to Growth (...), (2010), until the end of the 1990s most of the sub-Saharan African countries verified a decrease in the national income per capita. This was due to factors like the oil crisis between 1979 and 1980, and the financial crisis in the subsequent year. This decrease happened despite the strong investment placed in construction sector, and in other tangible capital applications, in the same period. (Lopes, 1998)

Despite the bad news, from the year 1998 to 2007, the African construction sector experienced a growth of 17%, in terms of CAGR*. Moreover, it went from 3 billion dollars to 12 billion dollars in 2008. These values overperformed the construction sector investment of the rest of the world. This development was mostly due to more elevated funding from governments, external to OECD^o. China on its own contributed with 77 per cent of this funding in the year 2007. The expansion environment that Africa has been experiencing has been appealing to several multinational companies, including construction companies. Although lately the growth rates of Africa's economy seem to have slowed down, the construction sector growth tendency in Africa is far from terminated. According to the article "Africa's Construction Industry" (2018, October 5), based entirely on Global Data's reports for the period between 2018 and 2022, it is predicted that Sub-Saharan Africa will exhibit, for the next 5 years, a construction industry that grows at a higher pace than most regions of the world. It is estimated to grow on average by a CAGR* of 6,6% per year. Those

* Compound annual growth rate

* Organization for the economic cooperation and development

reports also stated that in real values, it is forecasted that the total global construction output will increase to from 9,53 trillion euros in 2017 to 11,38 trillion euros in 2022.

Contemplating the Portuguese construction sector, it accounts for over 18% of GDP¹⁰ and about 610 000 jobs (European Construction Sector Observatory, 2018). Since 2001, the sector has experienced a deep and prolonged period of recession, which was further exacerbated by the economic crisis in 2008. In 2012, the segment registered its eleventh consecutive year of production losses, amounting in real terms to a decrease of 50% compared to the value determined in 2001. The impact on employment amounted to a loss of 351 000 jobs in 2012, representing around 23% of the total national unemployment (European Construction Sector Observatory, 2018).

According to INE (2017), the value amount of works carried out by construction companies, that counted with 20 or more employees decreased 3,1%, comparing with the year 2015. This evidences a slowdown of the decreasing path, since the same value amount decreased 6,1% from 2014 to 2015. This was due to a significant increase of 20,4% of works in residential buildings, even though civil engineering works decreased 19,2% in 2014 and 11,8% in 2015.

Table 1. Structure of works by companies

Companies with 20 or more People in Service, by work type, in Portugal, between 2015 and 2016. Values presented in millions of euros (€), or percentage (%).

<i>Type of Work</i>	<i>2015</i>		<i>2016</i>	
	<i>€</i>	<i>%</i>	<i>€</i>	<i>%</i>
Total	9 066,3	100,0	8 787,1	100,0
Buildings	3 692,4	40,7	4 444,4	50,6
<i>Residential Buildings</i>	1 037	11,4	1 292,9	14,7
<i>Non-Residential Buildings</i>	2 655,4	29,3	3 151,4	35,9
Civil Engineering Works	5 374	59,3	4 342,8	49,4
<i>Transports infrastructures, Dams and Irrigation Systems</i>	3 010,2	33,2	2 302,1	26,2
<i>Pipelines, Communication and Energy Transmission Lines</i>	999,8	11,0	902,2	10,3
<i>Installations and Constructions in Industrial Zones</i>	493,1	5,4	407,8	4,6
<i>Other Civil Engineering Works</i>	870,8	9,6	730,7	8,3

Source: INE, Annual Survey to Construction Companies (2017)

¹⁰ Gross domestic product

In exhibit 1, can be observed that the type of civil construction work more affected by a decrease in value was the transport infrastructure, dams and irrigation systems, that registered a 708 million euros value decrease. In the year of 2016 it can be highlighted the increase in the weight of works in buildings, which represented 56% of the total works, and a decrease in the contribution of the works carried out in civil engineering works, to 49%. The works referring to buildings represented 50,6% of the total works carried out in 2016 and were mostly executed on non-residential buildings. The works of civil engineering represented 49,4% of the total of works carried out in 2016. INE (2017).

Overall, by observing a five-year length period (2012-2016), the value of the works executed in buildings registered an increase of 13,6% on its weight, comparing with 2012, which indicates a progressive return to the building's construction investment (INE, 2017).

Besides the evolution of the construction sector in Portugal, it should be analyzed which events impacted the economy, affecting not only this sector, but also the overall sectors of the economy, which are described in the following section.

2.2.2. Banco Espírito Santo crisis

The Group Espírito Santo (GES) was, in its times, the most international of the financial Portuguese groups, betting on the strategical triangle of Africa, Brazil and Spain. It owned businesses in several economic sectors, such as financial, in which it owned the Banco Espírito Santo (BES), tourism, agriculture, energy, and health, among others (BES, 2019a). In Portugal there was a saying that stated: "if it does not belong to the State it belongs to the Holly Spirit". Which translated to Portuguese is a pun between the Christian entity and the name of the one of the most wealthy and powerful families in Portugal.

Signs of conflicts begun to emerge in the end of 2013, when the Espírito Santo family, known, until that date, as a discreet family, started to appear on the news, due to disputes of succession. The origin of these disagreements was related to the rivalry between Ricardo Espírito Santo Salgado, who was leading the group, and his cousin, José Maria Ricciardi, due to the quarrel for the group's presidency. In 2014 the bank revealed in a capital increase prospectus, irregularities in BES accounts, exposed by an external auditory to the group, demanded by the Banco de Portugal, which led to the conclusion that the financial situation was serious. These anomalies were related to hidden debts,

from 2012's reports and accounts. The financial losses amount presented by BES placed it in a situation of technical solvency. (BES, 2019b)

At the end of March 2014, 11% of the bank's portfolio consisted of credit at risk. The area of financing granted to companies had a record of default superior to the one verified in the private financing area. In the same year, Salgado was substituted by the economist Vitor Bento, through a decision of the main shareholders of the group, as well as of the Banco de Portugal. (BES, 2019a; BES, 2019c)

It was announced at July 2014 a financial loss amount of around 3 600 million euros, after the discovery of new contingencies and impairments of about 4 300 million euros. Between January and August 2014, the BES's shares registered a fall of more than 80% of their quotation. (BES, 2019a)

The complicated financial situation of Portugal drew the attention of European countries, as well as of the European banking authority, Central European Bank, which prohibited BES' access to the monetary policy operations, imposing a further payment of the credit to the Euro system, of 10 million euros (BES, 2019a).

At this time, the big merger between Portugal Telecom (PT) and the Brazilian OI, was under negotiation, and it was strongly affected by the bank's financial losses. Furthermore, BES announced it would not be able to pay the millions of euros borrowed from PT. (BES, 2019c)

It was the Banco de Portugal which demanded responsibilities and had the initiative to separate the family from the bank.

These discoveries of criminal evidences unsettled the trust of the Portuguese economy, affecting the whole euro zone through a "cascade" effect. The European stock markets reacted negatively to the BES events.

It was proved that the administration board of BES disobeyed the Banco de Portugal twenty-one times (Cavaleiro & Gago, 2015). There was a ruinous management of the bank. It was in this context that the Banco de Portugal announced, at August 2014, the rescue of BES, in the amount of 4 900 million euros (Banco de Portugal, 2014). This rescue represented the end of BES as a private bank. The assets of BES which were considered non-toxic were transferred to Novo Banco, S.A., an institution financed by the resolution fund of the Banco de Portugal, while the toxic assets remained in BES. The new institution would be sold as fast as possible. With respect to the injured, the

shareholders, as well as holders of subordinated bonds of the former BES, lost all credits. (Banco de Portugal, 2016)

In August 2014, BES was excluded from the main Portuguese stock index, the PSI-20. The ECB prohibited BES from performing any banking activity in 2016, which implied the liquidation of the bank (BES, 2019a).

Novo Banco was capitalized with funds from Troika, resolution fund (from the State and financial sector), and private banks in Portugal, (Banco de Portugal 2016).

It is predicted that the total losses from BES' resolution to the entire Portuguese economy reaches 14% of GDP until 2021, and that the job losses reach 42,8 thousands of work positions. Furthermore, the crisis of BES has caused a separation of the national banking system from companies, representing serious consequences for the Portuguese economy, which will last for many years and will boost the slowdown in economic growth (Esteves & Jesus, 2018).

To Mota-Engil, the deterioration of financial markets conditions was precisely in the most inopportune moment, since the company was preparing the debut of its subsidiary in Africa on the stock market. In this sense, the events triggered by the resolution of BES and the collapse of PT on the stock exchange, led to the interruption of Mota-Engil Africa's capital dispersion on the European stock exchange. On the other hand, BES and Mota-Engil had several long-dated partnerships, established before the crisis. Both of these entities were partners of Ascendi (60% Mota-Engil and 40% BES), as well as of Tertir, in the ports sector, and Martifer. In addition to capital relations, BES was the main financier of the Mota-Engil universe, making the latter one of the fifty major debtors of BES, in 2012. Mota-Engil group presented an exposure of 760 million euros in that year, and only 390 million euros corresponded to repayable debt, which was subsequently reduced by Novo Banco, to 250 million euros, in 2014. The Novo Banco focused on reducing the credit extended to large companies and continues to do so nowadays. It was in this context of great indebtedness of Mota-Engil that the process of alienation of Ascendi happened. (Ferreira, Guerreiro & Rodrigues, 2015)

2.2.3. Oil prices crisis

Regarding oil prices, these have perhaps been one of the most observed trends in economics, during the current century. These values have oscillated between highs and lows. At the time of the global economic-financial recession of 2008,

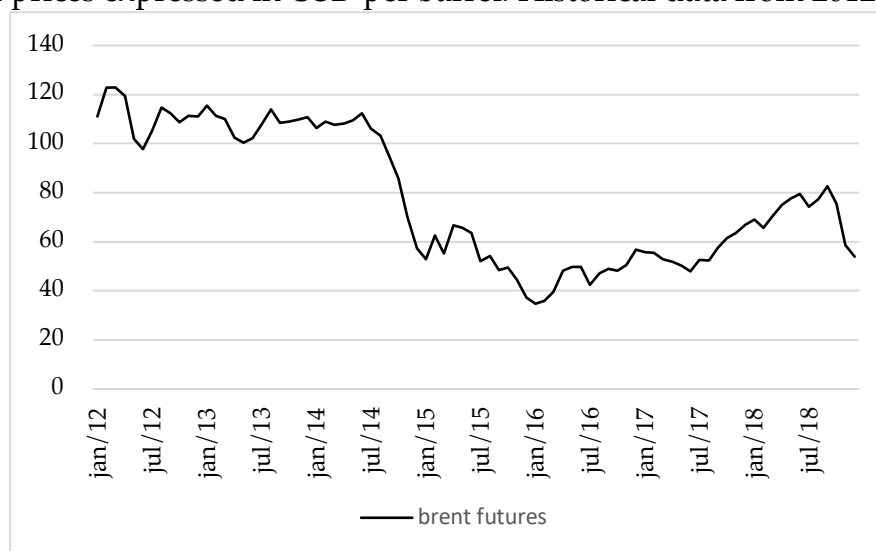
there was a sharp fall in oil prices, which only occurred again in 2014. Several factors contributed to this latest fall in prices. In China, there was a slowdown of the large demand for oil, from 2010, which was until then feeding the rapid growth and expansion of this world power region. Furthermore, other powerful areas such as Brazil, India and Russia have also reduced the growth rhythm at this date, leading to a consequent decrease in demand for oil. The logic was that, the same countries responsible for pushing oil process up, in 2008, were then the ones causing the fall. (Investopedia, 2019a)

The United States and Canada began exploiting the oil industry, extracting this good and contributing to an increase in supply, which further decreased world oil prices. On the other hand, Saudi Arabia's region, which had the largest reserves of oil in the world, benefited from cheap extraction processes, therefore being able to produce and sell at low prices, for a long period of time, without affecting the economy. At the same time that the United States and Canada increased production, Saudi Arabia region decided to continue producing, taking advantage of long-term benefits. (Investopedia, 2019a)

With an increased global supply and slowdown of demand, oil prices kept a falling tendency until 2015. In figure 1 is shown the evolution of Brent oil futures prices from 2012 to 2018, the sharp fall that initiated at July 2014 can be observed in the graphic.

Graphic 1. Brent oil futures prices

Mensual prices expressed in USD per barrel. Historical data from 2012 to 2018.



Source: Investing historical data (2019)

On the other hand, regarding Africa, it has a strongly dependent economy on this commodity, particularly in countries like Angola, Argelia, Libya and Nigeria, which are rich in this resource. Nigeria is for instance the main producer of oil in the African continent, followed by Angola. This region is intensely exposed to variations in oil prices, due to the dependency degree of the oil industry.

The fall in world oil prices in 2014 caused a large shock in the African economy, particularly in countries like Nigeria and Angola. The falling prices scenario led to a decrease in oil revenues, which impacted the Angolan tax revenue. This context led to a further break of 27% in tax expenses, a 32% depreciation of kwanza against the U.S. dollar, an increase in inflation from 7,48% to 14,27% and a drop of 11,53% on international reserves. All of these effects had consequences in the established firms in Africa, as was the case of Mota-Engil, through its subsidiary, Mota-Engil Africa. (Palma, 2016)

Nevertheless, Angola was the country which felt a greater negative impact with the oil crisis, due to the extremely strong dependency to this commodity. Oil exports represented more than 96% of total exports in Angola (Banco Nacional de Angola, 2013). The Angolan government was required to enforce austerity measures to mitigate the downturn of the economy.

Due to the exposure to the African economy, Mota-Engil Africa registered a decrease in turnover, EBITDA and total order book, at a time in which public works were no longer a priority for governments. In this sense, from 2014 until mid 2016, there was a deterioration of the economic-financial conditions in Africa, which were heavily reflected in Mota-Engil's results. For the company, Africa's region represented the largest contribution on turnover and earnings, which made the group extremely vulnerable to the African economy and to the barrel's price quotation, (Palma, 2016).

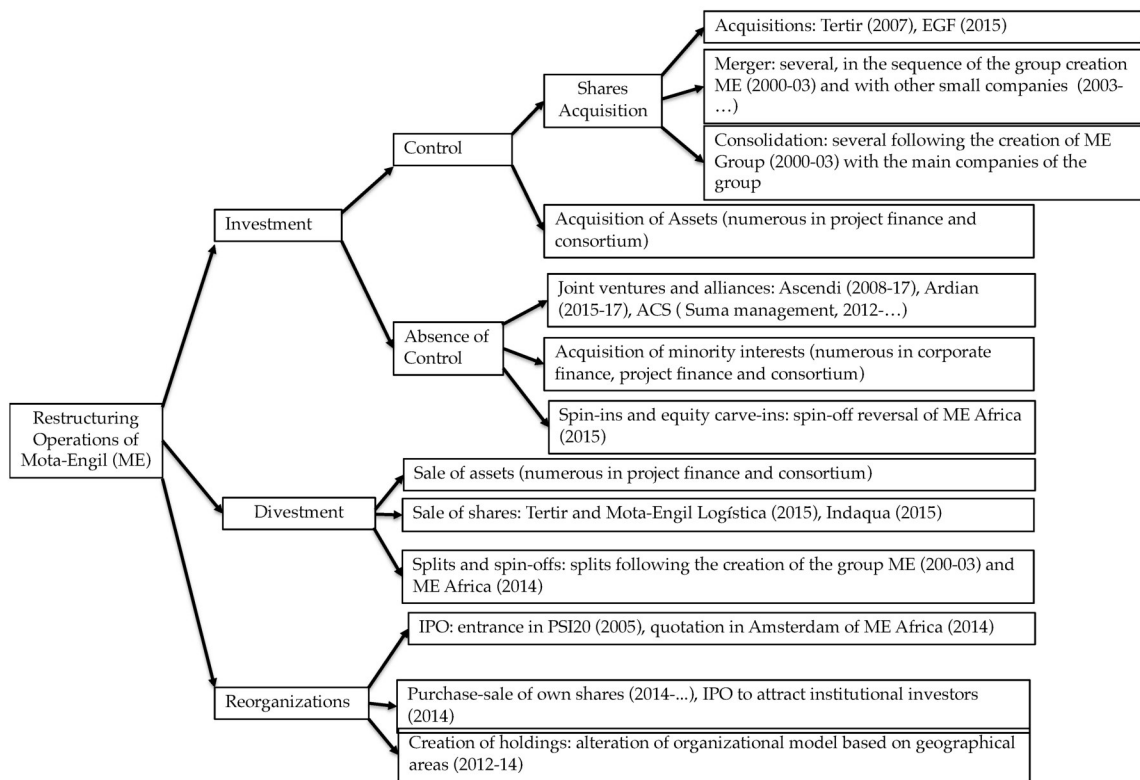
In addition to Africa, Latin America region was also heavily affected by the fall in oil prices. This region counted on Brazil, Colombia, Mexico and Venezuela, as the main producers of oil. The adverse economic context in Africa had the same effects in Latin America, both regarding a decrease in exports, a reduction in government's budget, and a radical cut in the pace of public works spending, due to a tighter budget. These repercussions induced a decrease in turnover, earnings and total backlog of Mota-Engil, through its subsidiary companies in this region.

2.3. Event overview

In terms of restructuring operations performed by Mota-Engil, these can be separated in three types, investments, divestments and reorganizations.

Regarding the investment operations, they can be further subdivided in operations where Mota-Engil gains control of the invested unit, or when there is absence of control. The former may be associated with shares deal or assets deal. In figure 1 can be seen a scheme containing a summary of the main restructuring operations performed by the group.

Figure 1. Restructuring operations of Mota-Engil



Source: Pacheco, (2019)

Tertir and Ternor case is an example of a share deal operation. Focusing for instance on the divestment operations performed by Mota-Engil, it is noteworthy the sale of shares that took place for the companies Tertir, Mota-Engil Logística, Ascendi, Vista Water and Indaqua. In the following sub-sections are presented the restructuring operations considered relevant for the context of the case study.

2.3.1. Tertir and Ternor

Mota-Engil Group announced at October 17, 2006, the intention to acquire the totality of the capital of R.L. SGPS, which eventuated the year after, for 36,9 million euros, plus 8,5 million euros of provisions, through the sub-holding Mota-Engil Ambiente e Serviços SGPS, holding of Mota-Engil SGPS. In turn, R.L. held 67,9% of Tertir- Terminais de Portugal, A. S., holding of Tertir Group, and 96,06% of Ternor- Sociedade de Exploração de Terminais, A.S. (Mota-Engil, 2006; Comissão do Mercado de Valores Mobiliários, 2006)

The Initial Public Offering (IPO) launched by Mota-Engil on the shares representing social capital of Tertir and Ternor, not controlled by RL, consisted on a consideration of 11,73 euros per Tertir's share and 17,83 euros per Ternor's share.

In 2007 a special acquisition offer was made on the Tertir's shares which were not attributable to Mota-Engil, through the IPO, at the same price as before, that is, 11,73 euros per share. The implicit values for 100% of Tertir were 80 million euros of equity value, and an enterprise value of 138 million euros, counting on 6 787 496 shares. This transaction permitted the group to expand its range of activities, focusing on the port sector, railways and logistics infrastructure operations, increasing the company's competitiveness in Iberian and European markets. (Mota-Engil, 2006)

This transaction would allow the Mota-Engil Group to integrate the activities mentioned above, fostering intramodality and complementary services and strengthening its competitive position in the entry of goods into the Iberian and European markets.

At December 14, 2015, nine years after the acquisition, Yildirim, a Turkish group, announced its intentions to acquire Tertir, Terminais de Portugal, A.S., and Mota-Engil Logística, SGPS, through Yilport, holding of Yildirim, responsible for port exploration activities, which in turn is the holding company of Yildirim holding, A.S. This acquiring company did not perform any port

exploration activity in Portugal in that date. However, it had activities in Turkey, Malta, Sweden and Norway.

The operation consisted in the acquisition of exclusive control by the Yildirim holding, through its subsidiary Cosmopotencial, A.S., of 100% of the share capital of both Tertir and ME Logística. Initially the transaction was estimated to have a predicted equity value of 275 million euros. (Mota-Engil, 2015b)

Never, at that time, had the Turkish spent such an amount in a Portuguese firm. However, the value of the business ended up being affected due to the fact that the renegotiation of the Leixões container terminal concession contract could not be concluded. The transaction was done by 30 million euros below the expected, at a value of 245 million euros, at February 19, 2016. (Mota-Engil, 2016c)

Mota-Engil believed that the financial allocation resulting from this transaction would enable the group to optimize and strengthen its capital structure. In addition, the management believed that the opportunity of this transaction emerged from several interest demonstrations verified throughout the years, by several international operators, which recognized the management quality, promoted for almost a decade by Mota-Engil, in the port sector. This divestment was seen as a measure of recognition for Mota-Engil in the ports' management. (Mota-Engil, 2015c)

2.3.2. Mota-Engil Africa

One of the most complex divestment operations performed by the Mota-Engil Group was the alienation of its African subsidiary, which was implemented in several phases.

Mota-Engil Africa was a result of a demerger-merger operation, in 2013, which implied three societies: Mota-Engil Engenharia e Construção, S.A. (MEEC), which would partially demerge; the demerged part of the former firm, Mota-Engil Engenharia e Construção Africa, S.A. (MEEC-A); and the third, the society that held 100% of both the previous firms, Mota-Engil, SGPS. The main objective with this operation was to enable Mota-Engil to have a centralized, strategical and operational management. The new company was Mota-Engil Engenharia e Construção Africa, S.A, (MEEC-A). Mota-Engil, SGPS, then created a sub-holding that held 100% of MEEC-A's shares, designated Mota-Engil Africa. By

the end of the year 2013, this company represented around 44% of turnover¹¹ and 67% of the EBITDA¹² of the Mota-Engil group. (Mota-Engil, 2013)

Nevertheless, on November 21, 2013, Mota-Engil informed about capital operations of its subsidiary, Mota-Engil Africa. The announcement referred that the group had been facing several obstacles in that period, and that it needed to gain more presence in capital markets, in an attempt to establish a more direct relationship with investors. (Mota-Engil, 2013)

The outlined strategy, at the abovementioned date, could be divided in three strands. First, it was mentioned a distribution in kind, to shareholders of Mota-Engil, of representative shares of Mota-Engil Africa's equity capital, which could be alienated or maintained. Secondly, there would be an admission of Mota-Engil Africa's shares to a trade in a regulated European market, accompanied by a capital increase of Mota-Engil Africa, through cash inflows, by Mota-Engil SGSPS' shareholders. Thirdly, the idea was not to cut all relations with the African subsidiary, but indeed to maintain a strong control participation. (Mota-Engil, 2013)

Following an extraordinary shareholders assembly in December 2013, a conditional payment of dividend in kind, under the form of Mota-Engil Africa's shares, or an equivalent cash value, was deliberated.

Regardless of the fact that the word spin-off was never mentioned in any of the communication releases of Mota-Engil or the specialized press, the operation consisted in an obvious spin-off, since it involved the free distribution to shareholders of a conditional right to receive a dividend, on shares of a company other than the one granting the right. Otherwise, the operation would consist in a stock dividend. Furthermore, the expression "conditional", was related with the fact that the entire process was subject to the existence of available reserves to be distributed, plus, net results of 2013 which would be distributed, and lastly, to the admission of the shares on a regulated market, operating in a member State of the European Union. (Mota-Engil, 2013)

In this conditional spin-off, there would be a priority allocation of shares. This conditional right to the dividend in kind would be attributed to investors, holding shares of Mota-Engil until June 14, and registered as shareholders on

¹¹ For detailed analysis of turnover, please refer to Chapter 3.

¹² For detailed analysis of EBITDA, please refer to Chapter 3.

June 20, of 2014, in the ordinary basis: one share was equivalent to one right. These shareholders had the right to subscribe approximately 0,0733 of the new issued shares, for each share held by Mota-Engil. (Mota-Engil, 2014b)

The dividends paid to Mota-Engil's shareholders would then entitle 20% of the capital of the African business. For each dividend in kind were attributed approximately 0,1033 shares of ME Africa. This is, every 100 dividends would correspond to 10,33 shares. However, since the operation was a distribution of dividends in kind, income tax, of 28% withheld at source, would have to be deducted. After taxes withdrawn and after rounding, an investor possessing 100 dividends would receive the equivalent to seven shares, and the remaining 0,44 shares in cash. Alternatively, Mota-Engil, SGPS' shareholders would receive the value of the 10,33¹³ shares of Mota-Engil Africa in cash, deducting taxes calculated at 28%, and still 1% of the amount provided for general charges of the transaction. (Mota-Engil, 2014a)

This conditional spin-off was the initial stage of a wider strategy to make Mota-Engil Africa a listed company, on a stock market, that would allow a great visibility of the company, and capture investors of large dimension. In this context, London stock exchange was the original idea for this operation.

The second stage of this process consisted on an IPO, which was basically an equity-carve out, of Mota-Engil Africa's shares, through a capital increase that would allow a free float, that is, percentage of dispersed shares by investors, of between 25% and 30%. This process enabled to reach the group's main objective of maintaining a control position in Mota-Engil Africa, remaining with voting rights around 70% to 75%. With this free float, besides keeping a control position in the subsidiary, Mota-Engil would benefit from a capital market capable of financing the large growth required by the African business. (Mota-Engil, 2014b)

The administration of Mota-Engil, SGPS decided to increase its free float, supposedly to aid the equity carve-out operation, in order to capture institutional investors and new reference shareholders. For this purpose, it proceeded to a private placement of 34,3 million shares, the correspondent to around 16,8% of Mota-Engil SGPS' capital, 11,1 million shares of which were own shares, and the

¹³ For the detailed values regarding the extraordinary dividend measure, please refer to Appendix A, table A1.

remaining belonged to a personal holding of family Mota. The latter still held a control position of 56,7%, contrasting with the previous 67,8%. (Pacheco, 2019)

However, this increase of dispersed capital made sense, in order to rise the share's liquidity and the free float, while at the same time, improving the balance sheet of a highly indebted company. (Pacheco, 2019)

Concerning the equity carve-out, regarded as a going-public operation, the objective was to place the African subsidiary on the London stock market, which demanded a minimum free float of 25%, (Pedro, 2015).

The acquisition of shares of Mota-Engil, SGPS until June 17, 2014, would allow the participation in the capital increase operation. In this sense, since the beginning of 2014, Mota-Engil's shares had already increase around 45%, against the 10% of the PSI-20, one of the main Portuguese stock indexes. At June 17, the last day to enroll in the capital increase, the Mota-Engil, SGPS share closed at 6,20 euros. This operation led to proceeds of almost 160 million euros, 51,6 million euros of which were allocated to Mota-Engil, SGPS itself, with the sale of its own portfolio's shares. This sale even allowed a capital gain, since the sale's average price of the announced operation had been 4,65 euros per share, against an average buying price of 2,30 euros per share. (Pacheco, 2019)

Furthermore, the administration of Mota-Engil decided to divide the global offer of shares⁴⁴ in two strands: a preferential offer, involving the preferential subscription rights, to Mota-Engil, SGPS shareholders registered at June 20, of 20 million shares, held by the latter company, and, an institutional offer, related to a capital increase by Mota-Engil Africa, of 15 million euros, plus the eventual remains of the preferential offer, directed specifically to institutional investors. (Mota-Engil, 2014b; Mota-Engil, 2014b)

The price per share would be the same on the preferential and the institutional offers, determined by both ME Africa, ME SGPS, and consulting the Standard Bank. The expected proceeds from the share offer can be consulted in table 1 of the appendices section. Concerning, for instance, the intended payout ratio, the CEO of Mota-Engil, Mr. Gonalo Moura Martins, mentioned a goal of between 50% and 70%, adopting a progressive dividend distribution policy. This situation was perceived as a strategy to attract investors and to pressure the choice of

⁴⁴ Consult table A2 of Appendix A, for more information on the expected proceeds from the shares offer.

shareholders, to convert the rights into Mota-Engil Africa's shares. (Mota-Engil, 2014b)

On June 26, 2014, the prospectus regarding the OFS¹⁵ was published, announcing a range for Mota-Engil Africa's shares prices between 11,46 euros and 14,46 euros, implying an equity capital valuation of between 1 317,9 million euros and 1 662,9 million euros. Even without considering the capital increase, these values were superior to the parent firm's own market capitalization, which was, at that date, 1 169 million euros. This discrepancy could be due to good future growth perspectives for Mota-Engil Africa, which would then be free from the financing constraints of the parent firm, and able to access new investors and obtain capital in better conditions. (Pacheco, 2019)

Moreover, banks could decide to sell an additional batch of 5,25 million shares, which would imply a 35% free float of Mota-Engil Africa, and Mota-Engil would then get a decreased position of 65%. This was equivalent to a "greenshoe" operation, included in the prospectus. The subsidiary was predicted to enter the stock market at June 16, 2014. (Mota-Engil Africa, 2014; Pacheco, 2019)

By this time, the GES crisis was escalating fast, impacting the Portuguese economy and therefore, causing a deterioration of financial market's conditions. Due to the bad timing, the IPO of Mota-Engil Africa was interrupted, and the distribution of the conditional dividends in kind was also in stand-by. (Mota-Engil, 2014d)

The impact of this announcement on Mota-Engil's share prices was disastrous, which verified a decline of more than 7,5%. However, regardless of the markets' unhealthiness, the group needed to protect the interests of those investors to whom had been attributed, extraordinary conditional dividends, which would expire at the end of 2014. This situation pressured Mota-Engil to proceed with the operation. (Pacheco, 2019)

On November 14, 2014, Mota-Engil released a communication revealing that the subsidiary's shares would be placed on Amsterdam's stock market, managed by Amsterdam Euronext, N.V. This change of market place happened since the London market demanded a minimum 25% free float, and the parent firm was only placing 20% of the subsidiary's capital. Additionally, the group revealed in this release that only the preferential offer would be performed, placing for trade

¹⁵ Offer for sale

only the shares given under the form of dividends to Mota-Engil, SGPS' shareholders. This implied that investors were left out of the choice to prefer cash instead of dividends. (Mota-Engil, 2014e)

Mota-Engil Africa debuted on the stock market at November 24, with an initial price of 11,50 euros per share, close to the minimum of the interval mentioned previously. This implied that the parent firm would hold 82,08% of the subsidiary's shares. (Mota-Engil, 2014e)

Mota-Engil Africa was going public with a turnover and EBITDA multiples of around 1,15 and 9,13, respectively, which was a rather adequate price, according to analysts (Pacheco, 2019).

Nevertheless, the subsidiary's performance on the stock market was very detractive, given the conditions in which it had debuted. With only 13 thousand shares traded, the price went from 11,5 euros per share to 9,63 euros per share. While, on the same date, the parent's shares fell 1,21%, to 4,154 euros per share, in Lisbon's trade square. There was a clear evidence that there had been an overvaluation of Mota-Engil Africa, comparing to the parent firm: the 82,02% of the shares held by the latter were worth 944 million euros, while the market value of Mota-Engil, SGPS itself was only worth 850 million euros. At December 1, the difference in share prices of both parent and subsidiary was worrisome. The latter registered 9,80 euros per share, while the former exhibited a price per share of 3,2 euros. This illustrated a market price of the shares of Mota-Engil Africa, held by Mota-Engil, SGPS, of around 800 million euros, contrasting with the 654 million euros of Mota-Engil, SGPS. (Pacheco, 2019)

In only 16 sessions of negotiations, the newly listed subsidiary had already lost about 50%. Those investors, who saw their securities' liquidity reduced, could receive the dividends, but instead they would obtain shares, and, the only way to transform their previously named dividends into real money was to sell the owned shares on the stock market. This event led to a heavy pressure, from the sell-side, on the securities. It became a real "hunt" to the dividend's money. (Pedro, 2015)

Since February 2014, Mota-Engil did not detain any share of its own company. In this sense, the company returned to the market to start purchasing its own shares, in September, of the same year. In only three days the company purchased 1 050 000 of its own securities. Moreover, at that time, Mota-Engil Africa's shares were at an historical minimum, worth 3,90 euros each. This

repurchasing of own shares, which strengthened the group's portfolio, helped intensifying the rumors that Mota-Engil was about to withdraw its subsidiary out of Amsterdam's Stock Exchange, through a share exchange offer. (Pedro, 2015)

Facing the lack of liquidity and reduced free float exhibited by Mota-Engil Africa, the management board considered that the firm's shares no longer represented the fair value of the company. In this context, at October 11, 2015, the group releases a communication informing about the intention to withdraw the African subsidiary from the stock exchange, through a self-tender offer, repurchasing its own ordinary shares, requesting Euronext Amsterdam, N.V., the delisting of the company. (Mota-Engil, 2015b)

At October 12, 2015, the shares of ME Africa were trading at 5,876 euros, which was the highest value since the company's debut in the Stock Exchange, in November 2014. Despite this, the value was 4,04% below the repurchase price, offered by ME Africa, which was 6,1235 euros per share. At that date these securities were being traded highly above average. This value was based on the weighted average price of the subsidiary's shares during the six-month period. In what concerns Mota-Engil's aim to remove its African unit from the stock market and repurchase them from shareholders, this operation counted with a premium on the market price, which was seen as a positive factor by analysts. (Mota Engil, 2015a; Mota-Engil, 2015c)

The objective behind this self-tender operation was to offer shareholders of Mota-Engil Africa an exit opportunity, considering the intention to delist the firm from the stock market. In order to finance the withdraw of the African subsidiary out of the Stock Exchange, Mota-Engil proposed to promote a share capital increase, with an amount similar to the one used by ME Africa in the repurchasing of its own shares, which would be excluded from the Amsterdam Stock Exchange. The capital increase would consist on the issuance of new shares, with the predicted minimum subscription price of 2,4814 euros per share, which was 10,28% superior than October's closure, 2,25 euros per share. Highlighting that this value was by far below than the 11,50 euros per share, with which the company started trading in the first session. (Pedro, 2015)

The administration board of Mota-Engil proposed to its shareholders a capital increase of 44,6 million euros, by issuing 44 620 546 new shares, with a nominal value of 1 euro each. The capital increase operation, which implied that every

shareholder of ME Africa accepted to dilute their stake, was already guaranteed, since the Mota family had already opened hand of their shares in Mota-Engil Africa and agreed to use the proceeds to participate in the capital increase. Assuming, for instance, that the capital injection would be made above the prices in force at that date, possibly there would be spare shares, that is, the Mota family would be capable of increasing its company position, which was, at that time, 55%. The reinvestment of Mota family in the capital increase of Mota-Engil group smoothed the expenses with the removal of the subsidiary of the stock market. This withdraw additionally enabled investors to focus on the parent firm, decreasing the visibility and exposure of the African subsidiary's financial problems. (Pedro, 2015)

In December 2015, it was revealed that the capital increase of Mota-Engil, SGPS, consisted in an increase of 32 869 446 euros, to 237 505 141 euros, though the issuance of 32 869 446 shares, with a nominal value of 1 euro each, and an issuance price of approximately 2,48 euros. (Mota-Engil, 2015f)

Following the announcement to the market of a capital increase by Mota-Engil, in order to interrupt the IPO and withdraw ME Africa from the stock market, the shares of the latter reacted strongly and positively, having increased, at that date 55,86%, to a value of approximately 5,88 euros, having achieved a trading maximum of 5,90 euros. The parent company also rose 2,36%, to approximately 2,30 euros, despite announcing its intention to perform a capital increase. (Pedro, 2015)

On the other hand, the parent company also felt the impact of its own announcement regarding the withdrawn of the African unit from the Stock Exchange, which was positive, since, at the same date, Mota-Engil's shares had a daily average value, for the previous 6 months of 823 499 shares. Only in that morning 209 378 shares were negotiated. Regardless of the gaining, Mota-Engil was trading, at that same date, 7,19% below the approximately 2,48 euros per share, which was the minimum value requested by the company to perform the capital increase operation. (Pedro, 2015)

2.3.3. Indaqua

Indaqua is a Portuguese company in the water management industry, which participates in the water supply of seven municipalities, which supplies 600 thousand inhabitants. (Indaqua, 2019)

Previously to 2016 the group Mota-Engil held 50,06% of Indaqua, which in turn had concessions in Fafe, Santo Tirso, Trofa, Feira, Matosinhos, Vila do Conde and São João da Madeira. The German company Talanx was the other shareholder of the company, with a 49,04% stake. In the annual accounts report of 2014, Mota-Engil's participation in Indaqua was registered for a value of 21,9 million euros. (Mota-Engil, 2019a)

In the year 2015, as part of its strategy for the environment segment, Mota-Engil group decides to alienate its position in Indaqua, which was posteriorly sold to the rich Miya Group, a company founded by an Israeli-American business woman Shari Arison, after some proposals and negotiations. The transaction was made for 60 million euros, of equity value, at June 15, 2016. (Mota-Engil, 2016d)

This disposal, through a share deal, made Indaqua held at 100% by foreigners. Mota-Engil motivations for this divestment were mostly to focus its activities in the business of collection and treatment of waste, of services and environment sector. Besides, this would be a tool to reduce the indebtedness felt by the group at that time, since the proceeds with the transaction were estimated to strengthen the capital structure of the construction group. (Group Mya, 2019; Mota-Engil, 2016d)

By the date of the closure of this transaction, Mota-Engil shares were heavily under pressure on the stock market, due to the construction group's exposure to Angola situation and the high indebtedness levels that the company was attempting to alleviate, by selling some assets that were considered as mature by the group, which is the example of Tertir, Mota-Engil Africa, and the case in question, Indaqua.

2.3.4. Ascendi

Following the alienation of Tertir and Logística, and even in the middle of the troubled divestment process of Mota-Engil Africa, in 2015 another mature segment of Mota-Engil Group started being a target for a consecutive divestiture. On this occasion, it was the road sector which was on the table for negotiations, through Ascendi, a partner of Novo Banco. Ascendi Group, SGPS, A.S., had the second largest highway network in Portugal, after Brisa, counting on more than 850 km along seven ported roads, which employed at that time, 500 people. Ascendi was held 60% by Mota-Engil, and, 40% by Novo Banco. (Ascendi, 2019; Mota-Engil, 2019b)

In May 2015, Mota-Engil informs about an agreement between Ascendi and Ardian Infrastructures, to establish a partnership to develop part of the highway network managed by Ascendi in Portugal. (Mota-Engil, 2015a)

For this result Ascendi and Ardian would constitute a company, held 50% by each, that would detain the participations of Ascendi, that is, between 66% to 88% of the five concessions¹⁶. Ardian group would invest 300 million euros in the partnership, whose accomplishment would depend on obtaining several authorizations from grantors and financiers. (Mota-Engil, 2016a)

In the following year, 2016, it was announced on August 3, that Ardian would then purchase eight highway concessionaires¹⁷ from Ascendi.

Besides, this operation included old Scut¹⁸, but also highways with tolls and sub concessions. The operation was predicted to generate 600 million euros, to which could be added further 53 million euros, depending on whether a variable price mechanism was applied. (Mota-Engil, 2016c)

The alienation of Ascendi's concessions was made in two phases. The initial one involved the first five concessions of the eight mentioned above. Moreover, the business agreed in this initial stage included the sale of 75% of Ascendi-Advisory Services, Management and Operation, and 20% of Via Verde Portugal-Management of Electronic Collection Systems, a company led by Brisa. The financial liquidation referent to the first phase of this transaction consisted on an amount of 384 million euros. The second stage involved the participations of Ascendi Group, SGPS, A.S., in the three remaining concessionaires of the former list, that were not included in the initial negotiation since their concretization depended on a set of conditions and authorizations. This later stage consisted on an amount of 220 million euros. (Mota-Engil, 2017a)

Nevertheless, the participations of Mota-Engil in the road motorway concessions were excluded from this negotiation, namely the Portuguese

¹⁶ Highways of Greater Lisbon; Highways of Greater Oporto; Highways of the North; Highways of Costa da Prata; Highways of Beira Litoral and Beira Alta

¹⁷ Ascendi Norte- Auto-Estradas do Norte, A.S.; Ascendi Beiras Litoral e Alta- Auto-Estradas das Beiras Litoral e Alta, A.S.; Ascendi Costa de Prata- Auto-Estradas da Costa de Prata, A.S.; Ascendi Grande Porto- Auto-Estradas do Grande Porto, A.S.; Ascendi Grande Lisboa- Auto-Estradas da grande Lisboa, A.S.; Ascendi Pinhal Interior- Estradas do Pinhal Interior, A.S.; Ascendi Douro- Estradas do Douro Interior, A.S.; Autovia de Los Viñedos, Sociedad Anonima; Concesionaria de La Junta de Comunidades de Castilla- La Mancha

¹⁸ Scut is a Portuguese toll system.

concessionaires Scutvias and Taugus crossings¹⁹, and foreign concessionaires, in four external markets, Spain, Mexico, Mozambique and Brazil. Concerning the purpose of this asset alienation, it is in line with the ones of previous operations. A share of the sale proceeds would be used to amortize Ascendi's own debt and the remaining would be distributed to the two shareholders, Mota-Engil and Novo Banco. For the latter, the operation would have a strong positive impact on the capital ratio Common Equity Tier I and represented an additional step in the divestment process of non-strategic assets. (Mota-Engil, 2016c; Mota-Engil, 2016e)

Similarly to the previously described divestments, Ascendi's case also integrates the strategy outlined by the parent company, of selling those assets, considered mature, which were once targets of investment spending, by the parent. This transaction would strengthen the group's capital structure, creating cornerstones that enabled the group's growth and sustainability, in the following strategic cycle. Nevertheless, this company's sale represented a partial elimination of exposure to the debt owed to former BES. (Mota-Engil, 2016c)

The concessions involved in the transaction were targets of a renegotiation with the Portuguese State, aiming to decrease public charges and payments to concessionaires. By the time the partnership announcement was made, it required 300 million euros, as an investment in the concessionaire Ascendi. That is, at that date, it was predicted a purchase of a shareholder position in the concessionaires controlled by the latter. In the following year the picture changed, and the purchase was referent to the totality of the participations in almost all road concessions controlled by Mota-Engil. (Mota-Engil, 2017a)

Chapter 3

3. Results

The main intent of this chapter is to understand the sense of the divestment operations of Mota-Engil, in order to answer the question "why?", through a strategic, financial and organizational analysis, using for this effect a set of financial performance measures.

¹⁹ Lusoponte, which included 25 of April bridge and Vasco da Gama bridge.

Table 2. General analysis of Group Mota-Engil: business areas

All currencies expressed in euros. Values are all expressed in millions of euros or percentage (%). In the headings relating to the order book, only the signed contracts and secured and completed financing are included. These do not include the large order of Cameroon in Africa, of 3500 million dollars.

This table represents a summary of the main performance indicators of Mota-Engil group. The full tables can be consulted in the Appendix B, from table B1 to B4.

	2012	2013	2014	2015	2016	2017	2018
Turnover							
Turnover	2 243	2 314	2 368	2 434	2 210	2 597	2 802
Internal market	790	613	597	645	583	583	613
External market	1 453	1 701	1 772	1 789	1 627	2 014	2 189
Weight by regions (turnover)							
Europe E&C	41%	25%	25%	25%	23%	18%	19%
Europe E&S	14%	14%	14%	16%	15%	11%	11%
Africa	33%	44%	41%	34%	32%	33%	32%
Latin America	12%	17%	20%	25%	30%	37%	38%
Order book	3 357	3 870	4 413	4 087	4 422	5 138	5 465
Weight by regions (order book)							
Europe E&C	21%	15%	17%	17%	13%	17%	20%
Europe E&S	9%	8%	6%	5%	5%	4%	3%
Africa	44%	42%	32%	30%	39%	51%	50%
Latin America	26%	35%	45%	48%	43%	28%	27%
EBITDA analysis							
EBITDA	287	363	409	367	338	405	407
Weight by regions							
Europe E&C	23%	7%	9%	11%	2%	9%	-2%
Europe E&S	20%	16%	14%	22%	31%	24%	21%
Africa	46%	67%	67%	48%	54%	40%	46%
Latin America	12%	10%	9%	19%	13%	27%	35%
Investment	145	166	220	146	67	148	287

Source: Mota-Engil Consolidated Accounts and Reports, 2014-2018

3.1 Analysis of turnover, external market and order book

The group is organized by geographical areas: Europe E&C, Europe E&S, Africa and Latin America. For the context of the investigation it was considered relevant the development of both an overall analysis, and one focused on business areas, in order to understand the impact of each region in the general results. Engineering and construction segment (E&C) corresponds to the construction sector and the environment and services segment (E&S) focuses on logistics, waste, water, energy and maintenance activities. Europe's region includes Portugal and Poland, while Africa comprehends Angola, Mozambique, Malawi, Rwanda, Zambia, Uganda, Zimbabwe, Kenya, Gabon, Cameroon, San Tome and Principe and Cape Verde. While Latin America region comprises Brazil, Colombia, Mexico and Peru.

As seen in exhibit 2²⁰, overall turnover in 2014 registered an increase of about 2%, compared with the previous year, reaching 2368 million euros. This was mainly a result of the acceleration of the business in Latin America, which registered an increase of 19% in turnover, corresponding to a value of 467 million euros, in the same year.

Regarding Africa, it represented throughout the years the majority of Mota-Engil orders, assuming almost half of the total backlog until 2013. Nevertheless, in 2014 there was a sharp fall in oil prices. This situation impacted firms established in Africa. For Mota-Engil's African businesses this meant a decrease in order book, placing Latin America ahead of Africa in terms of total backlog, and consequently, reduced business activity. This oil downturn also impacted the turnover of Africa's area, which had a negative growth of 4,4%, whose tendency persisted in the following years. The African turnover declined from 1 009 million euros, in 2013, to 965 million euros, in 2014, and to 835 million euros in 2015. Latin America and Africa together represented 60% of total sales and services rendered in 2014, which comparing with the 59% value in the previous year, indicates a weak growth in 2014. In this same year, Mota-Engil had 1772 million euros of external activity, corresponding to 74,8% of turnover, which shows the weight and dependence of the external market in the company's total activity. In Europe, for instance, the Logistics segment, from E&S sector, had a

²⁰ For the detailed tables regarding the above showed indicators, please refer to Appendix B.

growth of 4%, corresponding to 207 million euros, which positively impacted Europe's turnover. The waste segment remained stable in this year, regarding turnover. Although in Latin America, sales and services rendered registered an improvement of 19%, reaching 537 million euros in 2014, of which 297 million euros were from Mexico and Brazil. (Mota-Engil, 2019b)

Regardless of the African situation, in 2015 the global turnover of Mota-Engil was 2434 million euros, corresponding to a 3% growth comparing with 2014. The activities in Europe and Latin America offset Africa's weak performance. This was mostly due to the investment in EGF, a Portuguese company in charge of waste recovery and treatment, belonging to the E&S sector. In this year there was a more balanced turnover between regions, and the external activities reached a weight of 73,5%, corresponding to a decrease of 1,3%. (Mota-Engil, 2019c)

In the following year, 2016, it can be observed a slight improvement in terms of performance in Latin America and Europe, within the E&S sector. However, this improvement was not enough to compensate the poor performance of Africa and E&C sector in Europe, regardless of the changes induced by the consolidation of EGF and the disposal of port and logistics sector. In this year, the total turnover was 2210 million euros, corresponding to a -9% decrease, contrasting with the previous year. From 2015 to 2016 it is noteworthy that the situation in Africa was still decaying, in terms of turnover, reaching a negative growth of 15% in the latter year. This situation was induced by adverse economic conditions, which led to the unsuccessful IPO of Mota-Engil Africa, and the state of execution of some projects in this region. Besides, in this year there was also the sale of Tertir, Mota-Engil Logística and Indaqua, which is translated into the decrease of 4 p.p.²¹, to 13%, of the weight of the E&S sector in total backlog. Latin America, for instance, presented the best growth rates of all four business areas. Regarding backlog, this region had a weight of 43% on the group's total order book, compared with 2015, due to new contracts in Mexico, Brazil and Colombia. (Mota-Engil, 2019d)

There was a recovery in performance in 2017, with the global turnover reaching 2597 million euros, implying a growth of 17,5%. This was the largest improvement in turnover since 2012, for which contributed the consolidation of the ports and logistics business, and Latin America and Africa, with a verified

²¹ Percentage points

growth in turnover of 45,3% and 21,5%, respectively. Africa's business was recovering from the reversed spin-off, and the oil prices shock, presenting a significantly improved backlog. Latin America, particularly in Brazil, Colombia and Mexico, had a marked increase in backlog. This was translated into a recovery of turnover mentioned above, and offset the poor performance of business in Europe, which had a negative growth of 7,7%, mainly due to the E&C sector. (Mota-Engil, 2019e)

In 2018 the growth tendency continued, although in a smaller rhythm, reaching 2802 million euros of total turnover, translating into an 8% improvement. All four geographical areas contributed for this growth. Europe, in particular, showed an improvement in turnover of 48 million euros, comparing with 2017, mainly due to the E&C sector, as a result of the growth in the Polish market, in terms of backlog. Africa exhibited the largest weight in total order book, and Latin America the largest weight in total turnover, this is, 50% and 38%, respectively. From 2015 to 2018 the weight of external activities increased, reaching a weight of 78% in the latter year, which indicates, on the one hand, the importance of the external market for the operating activities of Mota-Engil, and on the other hand, a more diversified profile of countries in the business. The decrease in turnover generated in Portugal verified in these years was a result of adverse macroeconomic conditions, which affected the E&C sector, but was also a consequence of the restructuring strategies pursued by Mota-Engil, such as the acquisition of EGF and the sale of the logistic businesses in 2016 and the delisting of ME Africa in 2015. (Mota-Engil, 2019f)

3.2. Decomposition of EBITDA

Mota-Engil's strategy regarding its EBITDA, outlined in the group's strategic plan, is that every year this indicator reaches a margin superior to 15%.

According to the summarized results exposed in exhibit 2²², the group revealed the best operating profitability in 2014, which decreased from 2015 until 2016, showing a recovery from 2017 to 2018. In 2012 the group's EBITDA margin was below the target of 15%, however, in 2013 and 2014, this margin was already above the goal.

²² To consult the detailed table of EBITDA decomposition, please refer to Appendix B, table B3.

Conducting this analysis by business areas, Africa repeatedly accomplished the EBITDA goals, while Europe, namely the E&C sector, and Latin America did not reach the 15% target, from 2012 to 2018. In other words, Africa was the geographical region which had the best operating performance.

In 2014, EBITDA reached 409 million euros, with a corresponding increase of 13%, compared with the previous year, and 43% when compared with 2012. In Europe, the EBITDA margin reached 10,4%, in 2014, contrasting with the 9,3% in 2013. This slight increase was influenced by the good performance of the E&C sector, although the Logistics sub sector, from E&S segment had a decrease in its operating performance, mainly due to the instability of the sector, especially in the port of Lisbon. Africa's region expressed the best values in terms of EBITDA performance, with a margin of 29%, contrasting with 24% in the previous year. Latin America, for instance, had a slight decrease in EBITDA margin in the same year, reaching 8%, comparing with the 7% of 2013 (Mota-Engil, 2019b).

In the following year, 2015, there was a decay of overall operating performance, reaching 10,3%, to 367 million euros, comparing with 409 million euros in the year before, and a margin of 15%, contrasting with 17%, in 2014. This was mostly a result of a decrease of Africa's contribution to the group's EBITDA, that went from 67% in 2014 to 48% in 2015, since this business area was struggling for more than one year with the oil prices fall effects on the economy. In Europe there was a significant improvement in the E&S sector, within the waste segment, in the amount of 34 million euros, highly induced by the investment in EGF companies, which involved the acquisition and consolidation in the group's accounts, in July 2015. Besides, the logistics subsector had a decrease in EBITDA, due to reduced exports to Angola and the occurrence of several strikes, which diminished the profitability of some ports. Latin America, on the other hand, showed a great improvement in both the EBITDA, of 90%, comparing with 2014, as a result of better performance in all countries that constitute this geographical area, specially Mexico and Brazil. (Mota-Engil, 2019c)

This decrease tendency in EBITDA persisted in 2016, reaching in this year 338 million euros, corresponding to an 8% decrease. Regardless of the negative growth, the margin remained sustained at 15%. Besides, the disposals of the port and logistics business, and Indaquia, represented gains of around 102 million euros. In Africa, the EBITDA's margin improvement from 21% to 26%, despite the worsening of the macroeconomic conditions and the fall in turnover, reflected

a persevering profitability. In Latin America there was a decrease in the EBITDA margin, from 12% in 2015 to 7% in 2016, which reveals the market behavior, particularly of Mexico and Peru, and the early stage of execution of some projects, which negatively impacted profitability. (Mota-Engil, 2019d)

It was in the year of 2017 that the fall tendency of EBITDA ceased. This path reversed, and the operating performance registered a growth of 20%, compared with 2016, in which the EBITDA margin reached 15%: 1 p.p. more than the year before. The improvements in the operating profitability were mainly due to Europe and Latin America, which exhibited improvements of 19% and 143%, respectively. On the other hand, the African EBITDA had a negative growth of 10%. In this region, there were improvements in the macroeconomic conditions which favored the turnover and backlog, nevertheless, Angola was identified in this year as a hyperinflationary economy which had adverse effects on the EBITDA margin. In Latin America, there was a large growth in EBITDA, which was a consequence of the accelerated rhythm of some project's conclusion in this region, particularly in Mexico, in the Grand Canal, and the increase in energy production, in Fénix. (Mota-Engil, 2019e)

The following year, in 2018 the operating profitability increased two million euros, to 407 million euros, contrasting with 2017. In this year, the EBITDA margin was slightly below the profitability levels defined by the group, with a 14,5% margin, although they continued to have a margin higher than most of the larger companies in this sector. The 0,5% improvement was influenced by the positive results of Africa and Latin America, while Europe registered a negative growth in EBITDA of 41%, comparing with 2017, and a margin of 9%, 6 p.p. below the target level of 15%. This suggests a poor operating performance of Europe in this year. These weak results were induced by the weak performance of the E&C sector, due to a strong recession period felt in this segment. In Africa, EBITDA reached 189 million euros, in this same year, representing a growth of 16%, 25,6 p.p. above comparing with the year before, while the margin attained 21%, surpassing the target strategy. These results show the positive profitability path. Angola was again in this year considered a hyperinflationary economy, which adversely impacted the group's EBITDA in around 7 million euros. Latin America was the largest contributor to the group's EBITDA in 2018, with a weight of 35%. This region reached an EBITDA of 140 million euros, with a corresponding improvement of 28%, comparing with 2017, and a margin of 13%.

This region's operating profitability was positively influenced by an accelerated rhythm of execution of projects, in Mexico, by the increase in electric energy production, and by the good performance of both Colombia and Aruba markets. (Mota-Engil, 2019f)

3.3. CAPEX review

Regarding the evolution of the investment²³ of Mota-Engil, Africa was the largest contributor to the investment of Mota-Engil, since 2012 until 2017, year from which the E&S sector registered the largest weight in overall investment. Until the year 2014, the growth in investment was positive, although, with the intensification of divesting activities by the group this rate decreased significantly, even presenting, in some years, a negative growth. Although from 2017 to 2018 the increase in investment expenses is perceptible.

In 2014, Africa and Latin America together contributed with 83% to the total investment, due to the intensification of activities in these regions. In the maintenance sector, the investment reached 107 million euros, of which 66% were placed in Africa. These values were mainly due to the necessity of replacing the equipment stock, in the context of accelerated activity in this region. Regarding Europe, it reached 34 million euros, of which 13 million euros were channeled to the E&S sector, mainly for maintenance businesses. Africa by itself represented 59% of total investment, this being, 128 million euros, which were mainly allocated to Angola, Malawi and Zambia. More than half of the investment in Africa was placed in the maintenance sector. For instance, in Latin America the investment reached 55 million euros, and around 83% of this value was directed towards expansion strategies. (Mota-Engil, 2019b)

In the following year, 2015, investment attained a total of 146 million euros, as shown in exhibit 2. Africa and Latin America together represented 81% of the group's investment, since these two regions, which registered an increase in backlog, had to strengthen and renew equipment, in order to ensure the execution of the demanded projects. Regarding Europe, in this year the investment attained 24 million euros, of which 27 million euros were invested in the E&S sector. (Mota-Engil, 2019c)

²³ To confer the detailed tables of CAPEX of Mota-Engil group, please refer to Appendix B, table B4.

One year after, there was a fall in investment of 79 million euros, achieving in this year 67 million euros. Europe accounted with 43 million euros of the capital invested, namely in the E&S sector. Regarding Latin America, CAPEX²⁴ reached 15 million euros, comparing with the 23 million euros in the year before, which translates the execution delay in some of the projects, but also the intense outsourcing in this region. Concerning Africa, the investment allocated to this business area was also considerably below the previous' year, reaching in this year 9 million euros, comparing with the 95 million euros in 2015, which was a result of the activity slowdown in 2016, and the reallocation of assets, to achieve an optimization of the assets portfolio. (Mota-Engil, 2019d)

In the year 2017 investment displayed a significant increase, attaining 148 million euros, contrasting with the 67 million euros in 2016, which represented an improvement of 121%, comparing with the -54% verified in the year before. Most of the capital expenditures were placed in the region of Africa, which showed an intensification of activities in this year, with the increase of major projects, thus requiring new equipment. Africa represented in this period 55% of the total CAPEX. Additionally, Europe also displayed a noteworthy amount of investment in this year, and 50 million euros were placed in the E&S segment, being the majority allocated to the concessionaire companies of EGF, Vista Waste and Fénix, which increased turnover and profitability in this business region. (Mota-Engil 2019e)

In the last period of this analysis, 2018, Africa was still the main representative of the group's CAPEX, weighing 65% in the total investment, reaching 186 million euros, of which 101 million euros were allocated to long- and medium-term mining contracts. On the other hand, in this year, around 104 million euros were allocated to EGF concessionaire companies, similar to the previous year context, and to Vista Waste and Eco Eburnie (in Ivory Coast). Moreover, 150 million euros of the abovementioned investment was financed through leasing contracts. The maintenance investment in this year reached 4% of turnover. (Mota-Engil, 2019f)

²⁴ Capital expenditures or investment in capital goods.

3.4. Balance sheet and income statement analysis

Table 3. Overall analysis of Mota-Engil, SGPS: performance measures

Values expressed in million euros and percentage. This table represents a summary of the important indicators considered fundamental for this analysis. The detailed values can be consulted in Appendix C, from table C1 to C4.

	2012	2013	2014	2015	2016	2017	2018	Avg
Adjusted Balance sheet								
Total Equity	436	559	578	693	571	596	447	
Debt	1 502	1 600	1 837	2 174	1 865	2 084	1 986	
Invested capital	1 938	2 159	2 415	2 867	2 436	2 680	2 432	
Net debt	1 410	1 478	1 704	1 916	1 646	1 648	1 738	
Income Statement								
EBITDA		352	403	336	273	399	345	
Operating Income (OI)		242	273	168	37	204	161	
EBIT		239	230	234	179	192	267	
Net income (NI)		88	83	54	68	62	93	
Compared balance sheet- item breakdown								
Non-operating asset	25,6%	22,0%	18,4%	40,3%	34,3%	31,4%	31,8%	31,2%
Net income	3,8%	4,1%	3,4%	1,9%	2,8%	2,3%	3,8%	2,8%
Total equity	22,5%	25,9%	23,9%	24,2%	23,4%	22,2%	18,4%	22,4%
Debt	77,5%	74,1%	76,1%	75,8%	76,6%	77,8%	81,6%	77,6%
Net debt	72,7%	68,5%	70,5%	66,8%	67,6%	61,5%	71,5%	67,6%
Compared income statement – item breakdown								
EBITDA		15,2%	17,0%	13,8%	12,4%	15,4%	12,3%	13,5%
Operating income (OI)		10,5%	11,5%	6,9%	1,7%	7,9%	5,7%	5,5%
Non-operating income		-0,1%	-1,8%	2,7%	6,4%	-0,5%	3,8%	3,1%
EBIT		10,3%	9,7%	9,6%	8,1%	7,4%	9,5%	8,7%
Net income (NI)		3,8%	3,5%	2,2%	3,1%	2,4%	3,3%	2,7%

Source: Pacheco, 2019

The table above²⁵ enhances the economic and financial position of Mota-Engil SGPS. It is important to highlight that exhibit 2 contained information regarding the Group Mota-Engil and exhibit 3 to 5 refer to Mota-Engil SGPS, being

²⁵ The bases for the construction of this financial statements are present in the financial information to investors chapter of the group, available at the website.

convenient, for the context of the analysis, to separate what is the group from the actual company, since the former does not include minority interests, and for this reason would affect the reliability of results.

Analyzing exhibit 3²⁶, the non-operating assets line in the adjusted balance sheet of Mota-Engil, SGPS, increased during the seven years of the study, which was due to the intensification of investment and disposal activity. Namely in 2015, the value reached the maximum of 1154 million euros, which was mostly due to the acquisition of EGF companies in this year.

Concerning total equity, the proportion of equity to debt is extremely unbalanced, during the seven-year period of the analysis. Debt has represented an average of 3,4 times the equity capital, calculated through the debt-to-equity ratio²⁷. This elevated average debt-to-equity ratio can represent a sign of financial deterioration of the company, which becomes more indebted every year, enhancing the instability of the business (Pacheco, 2019).

However, it should be noted that using more debt allows the company to take advantage of debt benefits such as tax shields and lower financing costs. This ratio's large value also indicates that the company is financing most of its growth through debt, meaning that in a hypothetical business downturn, shareholder's equity would not be able to cover all the outstanding debt. (Pinto, 2019)

Regarding for instance net debt²⁸, which can be defined as the ability of a company to repay its debts if all of the latter were due at the present moment, it helps to understand if the firm is under or over leveraged. It is important to enhance that if a firm has a large amount of debt, but also has cash and cash equivalents, this is, liquidity power, the company is in a good position to face adverse conditions (Alves, Fonseca & Monaco, 2019). In this sense, by observing the adjusted balance sheet, it can be inferred that net debt is positive every year, meaning that Mota-Engil SGPS has more debt on its balance sheet than liquid assets. Moreover, the difference between net debt and cash and cash equivalents is positive and large, for every year in the analysis.

²⁶ To observe the full values regarding the indicators presented in exhibit 3, please refer to Appendix C, from tables C1 to C4.

²⁷ The computation can be consulted in the formula's glossary, Appendix D.

²⁸ The computation can be consulted in the formula's glossary, Appendix D.

In 2014, net debt was 1704 million euros, which was 226 million euros above the previous year's, besides, gross debt was at 1837 million euros in this year, representing a 15% increase compared with 2013. In this year the spin-off of the African subsidiary contributed to offset the indebtedness of the group induced mostly by the African situation of the oil prices crisis. Despite the better operating performance in this year, net debt increased as a result of investment in working capital and fixed assets. The former was mostly due to the E&C's business activity. (Mota-Engil, 2019b). Besides, of the total investment amount, 341 million euros were allocated to investments in consolidated companies of the group, and to non-strategic assets. In this same year, namely at December 31, 74,5% of gross debt of the group was denominated in euros, enhancing the weight of Europe's business area in the indebtedness of the group. Besides, the group's strategy regarding debt maturity every year is to increase this average life of debt, to a level that enables the best generation of cash flows, guaranteeing the benefit of Europe's low interest rates, and the potential re-pricing of debt and cost of new debt issuances. (Mota-Engil, 2019b)

In the following year net debt reached 1 916 million euros, which represented an increase of 212 million euros. This metric exhibited a growing pace since 2012, and the increase in this year was mostly induced by the consolidation of EGF companies, and the investment allocated to the E&C sector. Nevertheless, the macroeconomic adverse conditions, such as the 2014 oil crisis effects, need to be considered. The gross debt, for instance, amounted to 2174 million euros in this year, corresponding to a 337 million euros increase, contrasting with the previous year. Besides, total equity was 693 million euros, which opposing to gross debt, still exhibited a large discrepancy. Moreover, in this year, the group's average cost of debt decreased, despite the larger load of debt contracted in Africa and Latin America, and the group's average debt maturity decreased 0,1 years, which is not in accordance with the outlined objectives. Taking into consideration the disposal of port and logistic businesses, in the same year, it represented an inflow of 245 million euros, which assured the repayment of short-term debt.

One year after, in 2016, there was a decrease of 270 million euros in net debt, reaching 1646 million euros, and also a reduction in gross debt of 309 million euros, to 1865 million euros. These significant declines in the indebtedness levels were mainly due to the disposal's strategy of the group, concerning the port and logistics business and Indaqua. On the other hand, around 101 million euros of

total net debt, was considered non-recourse debt, entirely associated to EGF companies, (Mota-Engil, 2019d). In this same year, the group's average cost of debt decreased 0,2 p.p. to 5,6%, despite the larger debt amount contracted in Africa and Latin America, as was the case in the year before. However, the average life of debt increased 0,04 years, to 2,52 years, in 2016, just as the group intended.

Notwithstanding, in 2017 net debt of Mota-Engil, SGPS, only registered a slight increase of 2 million euros, which was not a significant amount, reflecting mostly the good management decisions of the group, namely the acquisitions and divestments performed in previous years, which enabled a reduction in working capital. Meanwhile, gross debt registered an increase of 219 million euros, whose growth followed the tendency verified in the previous periods. Furthermore, in this year, around 10% of the group's net debt was non-recourse debt, fully related to the acquisition of EGF group, and the APP Coatzacoalco-Villahermosa consortium operation, a contract awarded to Mota-Engil, amounting to 228 million euros, in Latin America's region (Mota-Engil, 2019e). The group's average cost of debt decreased again in this year, even with the higher debt contracted by Africa and Latin America. The maturity of loans decreased 0,1 years in 2017, contrarily to what the group had outlined. At December 31, 2017, 60% of the group's gross debt corresponded to unused credit lines (Mota-Engil, 2019e).

On the last year of the analysis, net debt of Mota-Engil, SGPS, reached 1738 million euros, revealing an increase of 90 million euros, while gross debt had a decrease of 98 million euros, enlightening the decrease in cash and cash equivalents, this is, liquid assets. Furthermore, the increase in net debt was mainly due to a rise in the investment amount. Moreover, there was an intensification in long- and medium-term mining contracts, which, among other factors, increased the group's contracted leasing operations. The group's cost of debt registered another decrease in this year, of 0,6 p.p., additionally, the average debt maturity also decreased 0,1 years, not accomplishing again the group's outlined strategy. Additionally, in this year, 51% of the group's net debt corresponded to unused credit.

Considering for instance the invested capital²⁹, of Mota-Engil SGPS, it focuses on the capital that firms invest in assets, and the cash flows that these investments generate (Damodaran, 2007). More precisely, it is the money that firms have to issue, whether through equity or bond issuances, in order to invest in assets that will generate cash flow and therefore provide profit for the company. However, before a company makes profit, it should exceed the invested capital, plus the money needed to service the latter. (Investopedia, 2019b)

The consecutive divestment strategies pursued by the group throughout the years should impact negatively the invested capital, however, besides the elevated indebtedness of the company, the disposals are not yet fully visible in the time window of the analysis. From 2015 to 2016 the decrease in this metric is an evidence of the impact of the port and logistics businesses divestments. Despite these disposals, Mota-Engil also engaged in a few acquisitions in the analysis time window, such as purchase of EGF, which partially offset the alienations' effects.

Proceeding to the analysis of the adjusted income statement³⁰ of Mota-Engil SGPS, from 2013 to 2018, it enhances how the results were achieved in each year, in terms of income and expenses. Particularly concerning the EBITDA metric, it is visible that comparing the values for both the group and Mota-Engil, SGPS, the group's overall EBITDA is below the values for Mota-Engil, SGPS, for each corresponding year. When the analysis is conducted over Mota-Engil SGPS, there are signs of deterioration of EBITDA, namely from 2014 to 2015, 2015 to 2016 and 2017 to 2018. In reality, the EBITDA of Mota-Engil was specifically aggravated from 2017 to 2018, indicating the higher indebtedness of the company, which consecutively presented more operating expenses than income, a synonym of weak operating performance.

Regarding the operating income³¹ (OI), which admittedly measures the firm's operating efficiency, this metric enables to verify that the operating performance of the company decreased throughout the time window of the analysis, particularly from 2014 to 2015, which was the most affected period most by the oil prices crisis, in Africa and Latin America, and the resolution of BES in

²⁹ To confer the formula of invested capital please refer to the Glossary of formulas, Appendix D.

³⁰ For the detailed adjusted income statement of Mota-Engil, SGPS, please consult Appendix C, table C2.

³¹ Operating profit formula can be conferred in the formulas' glossary, Appendix D.

Portugal. From 2015 to 2016 the operating income dropped drastically, due to both the effects of the adverse macroeconomic contexts and the increase in depreciations and amortizations and non-monetary expenses, showing that the firm decreased its capacity to turn revenues into profit over the years, becoming gradually less profitable.

Concerning for instance EBIT³², despite the adverse macroeconomic context from 2014 to 2015, and contrarily to EBITDA and OI, EBIT increased during this period in 4 million euros, demonstrating the positive impact of non-operating and non-recurrent results, specifically the increase in income and gains, which compensated the expenses and losses. In the following years of the analysis there was a decrease of EBIT, due to a drastic fall in OI, although it recovered until 2018, reaching in this year 267 million euros. This was 28 million euros higher than the value in 2013.

Lastly, examining net income, which should measure the profit generated by a firm, after deducting all operating expenses from income (Alves et al., 2019), it can be seen that it declines significantly from 88 million euros in 2013 to 62 million euros in 2017, exhibiting a recovery in 2018, to 93 million euros. This can be interpreted as a sign that management strategies outlined for the period of the study were well planned, such as the disposals and acquisitions, which mainly intended to exit the businesses with lower EBITDA margins and enter areas where this indicator would be higher. Mota-Engil recovered its profitability in 2018, despite the BES conflicts and the oil crisis situation, which negatively impacted the firm's profitability, between 2014 and 2017. In 2015 the acquisition and consolidation of EGF companies increased the non-operating and non-recurrent result and therefore improved net income. Besides, in the same year, the classification of Ascendi as a non-current asset held for sale, resulted in a smaller contribution to net income.

In 2018 there was an increase in gains and losses in the disposal of subsidiaries, compared with 2017, which exhibited fewer restructuring operations.

³² EBIT formula is demonstrated in the formulas' glossary, Appendix D.

3.5. Analysis of compared balance sheet and income statement

Exhibit 2 expresses, in the bottom lines, the compared balance sheet and income statement³³ of Mota-Engil, SGPS, exposing the breakdown of each item: in the case of the balance sheet the analysis it is done in terms of adjusted assets, while considering the income statement, the breakdown is regarding turnover, reason why in both cases the values are presented as percentages. Furthermore, an average is computed for each separate item and for each year of the investigation.

Observing equity capital, which represents the shareholder equity ratio, it presents an average of 22,4%, from 2012 to 2018, meaning that 22,4% of the assets are funded through equity shares, while, observing the debt heading, 77,6% of operating and non-operating assets, which include restructuring strategies, are funded through debt, meaning that to finance the investments or divestment strategies, Mota-Engil is using mostly debt (Pinto, 2019). Another way to say this is that 22,4% of the assets are unlevered while the remaining are levered. (Pinto, 2019). In this case is possible to conclude that Mota-Engil SGPS is a highly leveraged firm. In the event of a liquidation of all assets to pay off debt, shareholders would retain 22,4% of the operating and non-operating resources, which is not much. Besides, by observing net debt to adjusted assets, it is visible that it had an average of 67,7% during the seven years, which again shows evidence of a very indebted company.

Fundamentally exhibit 3 enables to assess how assets were financed, considering not only operating but also non-operating assets, which are mostly related to the successive restructuring strategies pursued by Mota-Engil throughout the years.

The compared income statement of Mota-Engil SGPS, provides a weight of each item in turnover of the company, computed as the division of each heading by the corresponding turnover of each year.

³³ For the detailed tables of compared balance sheet and income statement, please refer to Appendix C, tables C3 and C4, respectively.

Examining gross margin, which had an average of 57,9% from 2012 to 2018, it is possible to see that this subtraction's weight on revenue remained rather stable throughout the years, indicating a good gross profit, from turnover revenues.

Regarding the EBITDA margin of Mota-Engil SGPS and considering the management goal strategy of surpassing a minimum of 15%, each year, can be verified that in 2015, 2016 and 2018 this objective was not reached, contrarily to the predisposed in the group's financial information, according to which, only in 2012 and 2018 this goal was not achieved. This information enhances that the company was not demonstrating a good operating efficiency since 2014, and in 2018 the EBITDA margin reached 12,3%: the lowest value of all 6 years of the analysis. On average, this indicator was 13,5% during the 6 years, 1,5 p.p. below the goal. It is verified a decay in the operating performance, due not only to internal factors, but also to macroeconomic adverse conditions such as the BES crisis and the fall in oil prices of 2014, deeply affecting the African business.

The average operating margin was 5,5% over the 6 years of the study, meaning that 5,5% of sales revenue was returned to the company as net profit. The maximum operating margin achieved was 11,5% in 2014, falling to 1,7% in 2016. This large discrepancy indicates some business risk, and since the average amount is not large it evidences weak efficiency, meaning that the core business was not significantly profitable.

Regarding for instance the non-operating margin, it evidenced an average of 3,1%, which indicates that 3,1% of sales' revenues covered non-operating costs. In half of the years of the analysis' period, the non-operating and non-recurrent result was negative, indicating that expenses and losses of these type of activities were larger than income and gains (Pinto, 2019). For this reason, there is a negative margin in 3 of the 6 years of the examination time window. For example, in 2014, the non-operating margin was -1,8%, this is, 1,8% of non-operating costs were not covered by turnover revenues.

Concerning the EBIT margin, which demonstrates the profitability of the company, accounting for both operating and non-operating gains and losses (Alves et al., 2019) it had an average value of 8,7% during these 6 years, and in each year the values did not differ significantly. This is, 8,7% of sales revenues covered both operating and non-operating income.

Lastly, the average net income margin during the 6 years was 2,7%, which can be considered low. This margin admittedly shows how well the firm can make

revenues become profit, and therefore, remunerate shareholders. This margin tended to decrease over the years, and since the turnover amount does seem to have lowered, it was more likely due to the higher indebtedness of the company, which affected profit indirectly, through interest expenses.

The year 2016 seems to have been the worst in almost all financial indicators, except for non-operating results, which was mainly due to the beforementioned acquisition and consolidation effects of EGF companies, and the disposals of port and logistics business and Indaqua.

3.6. Profitability analysis

Table 4. Main contributors to ROE

All values in this table are expressed in percentage (%).

	2013	2014	2015	2016	2017	2018	Avg
Profitability analysis							
Operating business profitability	14,4%	13,8%	9,8%	2,3%	11,1%	9,7%	8,2%
Profitability of invested capital	11,1%	9,5%	8,2%	7,4%	7,2%	11,0%	8,4%
Financial leverage effect	217,9%	223,5%	176,6%	183,2%	211,0%	275,8%	211,6%
Financial leverage effect	13,1%	11,7%	6,3%	6,1%	7,9%	19,3%	9,9%
Return on equity	15,8%	14,4%	7,8%	11,8%	10,3%	20,9%	12,7%

Source: Pacheco, 2019

In exhibit 4³⁴ it is presented a summary of the main DuPont profitability analysis' metrics for Mota-Engil SGPS, which aims to verify the performance of the company. It is based on the decomposition of return on equity, ROE, the indicator that measures the return of owners, in order to understand the main drives of the variation of the latter. ROE divides net income over shareholder's equity, which allows to understand how efficiently the firm uses the shareholder's capital. The computation of this financial ratio accounts for dividends paid to preferred shareholders and interest to lenders, although does not include dividends paid to common shareholders, (Investopedia, 2019c).

There are three main metrics that affect ROE, according to the DuPont analysis, namely asset use efficiency, operating profitability, and financial leverage effect. The decomposition of ROE can be observed in formulas glossary.

³⁴ For the detailed DuPont profitability analysis please refer to Appendix C, table C5.

Beginning with the examination of the operating business profitability, which indicates not only the profitability of generating turnover but also the operating assets use efficiency (Investopedia, 2019c), it registered an average of 8,2% from 2013 to 2018, which was mostly due to the management's efficiency in using assets. The latter can be measured by the degree of assets turnover, which had an average of 147,6% during the same period. Once again this presents evidence of management quality and capacity.

Regarding for instance the return on invested capital³⁵, this indicator exhibited an average of 8,4% during the 6 years of the analysis, mostly driven by the non-operating effect, translating the importance of the restructuring activities for Mota-Engil's profitability. This non-operating effect had an average of 144,2% in the same period, being 2016 the year with the largest contribution, due to the inflows from the disposals of port and logistics business and Indaqua.

Concerning the financial leverage effect³⁶, which can quantify the sensibility of net income to operating income, providing a measure of the operating risk, this indicator registered an average of 211,6% during the six-year period. This large value can be a sign of high interest burden and elevated indebtedness of the company. The use of debt as a financing source is only beneficial to a point until which the firm is not under financial stress. Issuing debt can decrease net income due to an increase in interest payments, although it also allows to hold tax benefits (Pinto, 2019). Furthermore, calculating this effect as the difference between the return on investment and financing and return on invested capital, which, in some cases, eases the analysis of this indicator³⁷, the average goes to 9,9 p.p. The multiplication of the three main components, accounting for tax effects, generates the ROE. Mota-Engil exhibited an average return on equity of 12,7%, from 2013 to 2018, being 2018 the year with the greatest remuneration of shareholder's equity, besides, in this year dividends re-started being paid to owners.

³⁵ To confer the formula used for the computation of return on invested capital, please consult the Glossary of formulas, Appendix D.

³⁶ To confer the formula used for the computation of the financial leverage effect, please consult the Glossary of formulas, Appendix D.

³⁷ To confer the second formula used for the computation of the financial leverage effect, please consult the Glossary of formulas Appendix D.

According to Damodaran (2019) database, the average ROE³⁸ for western European companies in the construction supplies industry, was 4,59% (unadjusted), which indicates that Mota-Engil seemed to be performing better than its peers. Moreover, the analysis does not include any benchmark comparison since no comparable companies to Mota-Engil were found. Despite this, ACA group, although having a relatively smaller size, is the closest benchmark, and it demonstrated an average ROE of 0,23% between 2015 and 2017, which is considerably below the Mota-Engil's ROE (ACA, 2019). In this sense, the profitability of the equity capital of Mota-Engil seemed to be healthy.

From 2014 to 2015 the ROE decreased 6,6 p.p., which was the period of the failed IPO and spin-off of the African subsidiary, the crisis in BES and the fall in world oil prices. The recovery felt in 2018 demonstrates the success of Mota-Engil's management policies.

Lastly, the indicator that greatly contributed to ROE was the financial leverage effect, which evidences the main problem of the company: excessive indebtedness.

3.7. Examination of other indicators

Exhibit 5³⁹, presented below, presents a summary of the main indicators, divided as an investigation of three different categories, namely: growth rates, asset management efficiency and rates of indebtedness.

Beginning by analyzing growth, it is possible to perceive that the turnover of Mota-Engil, SGPS, exhibited an average growth rate of 4,7% between 2013 and 2018, nevertheless, this indicator showed a large instability throughout the years. For example, in 2016 turnover had a negative growth of 9,2% and in 2017 there was a great recovery to a positive turnover growth of 17,5%. This growth instability demonstrates the unsteadiness of the business, and translates the macroeconomic conditions faced by the company during this period, and the restructuring strategies pursued to mitigate these effects.

³⁸ The evolution of the ROE can be consulted in Appendix C, table C6, and the decomposition formula in Appendix D.

³⁹ For the detailed tables of other important indicators, please refer to Appendix C, tables C7.

The oil crisis and the resolution of BES implied a substantial decrease in turnover, which was further recovered in 2017. Besides, the overall earnings were also affected. The behavior of this rates coincides with the impact of the macroeconomic events outlined.

Table 5. Summary of other important indicators

Values are expressed in percentage (%) or number of days.

	2013	2014	2015	2016	2017	2018	Avg
Other indicators							
Growth							
Turnover	3,1%	2,4%	2,8%	-9,2%	17,5%	7,9%	4,7%
EBITDA		14,4%	-16,5%	-18,7%	45,8%	-13,4%	-0,7%
Debt							
Total equity/invested capital	25,9%	23,9%	24,2%	23,4%	22,2%	18,4%	22,0%
EBIT/ interest expenses	2,3	2,1	1,7	1,8	1,9	2,0	1,9
ST debt/total debt	46,2%	39,3%	50,8%	39,2%	49,4%	49,2%	47,1%
Multiple of EBITDA of debt	4,5	4,6	6,5	6,8	5,2	5,7	6,1
Average cost of debt	6,5%	5,8%	6,2%	5,5%	4,9%	6,6%	5,8%
Market indicators							
Share price	4,32	2,66	1,93	1,61	3,66	1,61	
Market capitalization	837	544	454	377	857	373	
Payout ratio	50,0%	48,5%	62,5%	61,5%	0,0%	74,4%	49,6%
Debt weight at market prices	65,7%	77,1%	82,7%	83,2%	70,9%	84,2%	80,2%
EBITDA multiple	6,9	5,9	7,8	8,2	7,4	6,8	7,6

Source: Pacheco, 2019

In the year of 2016, in which the divestment of ports and logistics business and Indaqua took place, there was a break in turnover, which impacted the growth of this indicator.

Regarding the EBITDA, it demonstrates a negative and alarming growth rate of 0,7% from 2014 to 2018. This rate exhibited a great discrepancy of values throughout the analysis period, similar to the turnover growth behavior. Despite the fact that most years displayed consecutive decreases in EBITDA, the year of 2017 had an exponential growth of 45,8%, which was a result of an intensification of turnover, evidencing once again a recovery from the BES resolution effects and the oil crisis events.

In terms of assets' management, Mota-Engil appears to be efficient in asset usage. The average asset turnover was 96,4% during the six years, while the average operating assets turnover was 146,6%, in the same period, which illustrates a better management regarding operating assets when compared with overall assets. Besides, Mota-Engil receives from clients in a shorter period than it pays suppliers.

Focusing on the analysis of debt, Mota-Engil exhibits an average financial autonomy degree of 22%, over the six-year period. This degree did not exhibit a large instability throughout the years, although it can be stated that only 22% of the company's applications were covered by capital detained by Mota-Engil itself, this is, equity capital, which does not appear to be a good independency degree. Since this financial autonomy degree percentage is small, it indicates that Mota-Engil, SGPS, is more dependent on external capital. On the other hand, considering the coverage ability of financing expenses, Mota-Engil displayed an average of 1,9, during the analysis period, which demonstrates the reduced ability to cover its debt and financial obligations. Although this indicator decreased from 2013 to 2015, there was a slight recovery from 2016 to 2018, resulting from the strategies pursued to manage the large indebtedness, coinciding with the recovery period of the macroeconomic events, in the sense that, as this indicator increased, the better the company could manage and pay its debt.

Regarding the short-term debt weight on total debt, Mota-Engil demonstrated an average weight of 47,1% during the analysis years, indicating that in this period, 47% of total debt corresponded to short-term debt. Usually the latter implies shorter maturities and is admittedly most suitable for situations such as working capital needs and other operational expenses, reflecting the firm inability to finance short-term expenses. Generally, this debt is contracted at floating rates, which leads to higher exposure of the firm to interest rate risk. This weight was larger in 2015, year in which the effects of the oil prices crisis and BES case registered higher impacts on the global economy. Nevertheless, it should be highlighted that this average weight remained relatively stable throughout the analysis period.

Observing the EBITDA multiple of debt, which can be regarded as the weight of debt in EBITDA, it provides a measure of the amount of profit that is generated and that remains available to meet debt obligations, before the payment of

interest, taxes, depreciations and amortizations. The higher the value of this ratio, the heavier the company's debt load, meaning that, the harder it will be to pay the debt (Alves et al., 2019). Examining this EBITDA multiple, it is possible to perceive that it increased, namely in 2014, 2015, 2016 and 2018, due to higher debt load, implying that, in those years, Mota-Engil was decreasing earnings and not paying-off debt. This was once more a sign of the increased debt burden of Mota-Engil.

Looking at the average cost of debt, computed as the division of the financing expenses (interest) by overall debt, is perceived that Mota-Engil SGPS, displayed, during those six years, an average cost of debt of 5,8%. It is important to highlight that the strategy outlined by the group for this indicator is to achieve a reduction each year, additionally, the group aims to extend the debt maturity in every period. The average cost of debt increased in 2015 and 2016, although it decreased in the remaining years, which might also be regarded as a decrease of firm risk, since riskier companies usually exhibit larger cost of debt. In this sense, despite the heavy indebtedness of Mota-Engil, this firm was not perceived as highly risky, and cost of debt decreased in most years, despite the higher debt contracted each year, (Mota-Engil, 2019e; Mota-Engil, 2019f).

In the bottom lines of exhibit 5 are presented the main market indicators^o of Mota-Engil, SGPS, which were specifically chosen to suit the context of this case study.

Commencing the analysis with the end of year share prices, it is possible to verify that from 2013 to 2018 there was a deterioration of stock performance. The firm's shares exhibited a significant decline in prices during this period, which started with a quotation of 4,32 euros per share in 2013, falling to 1,61 euros per share in 2018, revealing the impact of the economic-financial conditions endured by the company, on the capital market.

Consequently, the market capitalization of Mota-Engil also registered a sharp reduction, going from 837 million euros in 2013, to 373 million euros in 2018, regardless of the increase in number of shares. This decrease reflected the financial markets' situation, mostly due to the liquidation of BES and the large debt load of Mota-Engil. On average, the firm's stock prices exhibited a 6,9%

^o For the detailed tables of the detailed market indicators, please refer to Appendix C, table C8.

variation during this period, although there was a large value discrepancy throughout the years.

In 2015 the dividend yield was at its lowest value, although it recovered in the following year. This was assumedly due to the restructuring strategies, namely the disposals and acquisitions performed by the firm, in order to turnaround the adverse situation it was experiencing at the time. These disposals and also the consolidation of EGF companies, implied inflows for the company, enabling to reduce debt and ease investors' expectations.

Considering the historical minimum of stock prices in 2016, and the aggravated situation of Mota-Engil, in 2017 no dividends were paid, which is reflected on the dividend per share, dividend yield and payout ratio. This represented a loss for owners, who had no remuneration on invested capital in this year.

Even though dividends were again paid in 2018, the dividend remuneration measures presented extremely low values, with an average dividend yield of 3,9%, and dividend per share of 0,06, during this period. This context translated the company's difficulty to thrive in the deteriorated financial markets.

In terms of payout ratio, this is, the amount of earnings paid as dividends, excluding the year of 2017, when no dividends were paid, this indicator displayed successive improvements, representing an average of 49,6%, during the analysis period, which demonstrated that the company, despite the financial context, tried to compensate its shareholders. In 2018, this ratio reached a peak of 74%, which meant that 74% of earnings were paid to shareholders as dividends, which might have been a sign that Mota-Engil was attempting to compensate shareholders for the lack of dividends in the previous year.

Concerning for instance the price-to-earnings ratio, which enhances if a stock is over or under valued, it is possible to perceive that from 2013 to 2016 this ratio exhibited low values, which could presumably be a sign that stock prices were low relatively to earnings. The year of 2016 was the year which reflected the lowest P/E ratio, this is, in this year, investors were willing to pay 7,5 euros for each euro earnings, reflecting the market's lack of expectations of good future perspectives. (Alves et al., 2019)

Nevertheless, in 2017, this same ratio registered an exponential increase, which presumably was due to investor's improved expectations on larger growth

in the future, although it could also indicate an overvaluation of stock prices, since in the following year this ratio had a significant decrease.

Additionally, in 2017, there was an increase of the stock quotation of 128%, driven by the overall economic recovery and the management turnaround strategies.

The price-to-earnings ratio registered an average of 146,7 euros during this period, regardless of the large value discrepancies.

Regarding for instance the price-to-book ratio, which can measure the market players' perception of the firm's equity, contrasting with the book value of the same equity, it can be stated that this ratio did not present large differences in values, throughout the years. The average P/B value for the six years was 181,4%, meaning that the market price is valued at 1,814 times its book value. (Alves et al., 2019)

The year of 2016 was once again the year with the lowest P/B ratio, and 2017 the year that it reached its maximum.

Contrasting the evolution of the P/B ratio with the ROE, there is some contradictory evidence, since these two indicators should evolve in the same direction each year, although in fact, these ratios exhibited an inverse and non-proportional relationship in most of the analysis years, which could be a sign of overvalued growth stock.

Observing for instance the enterprise value⁴¹, it can be perceived that 2017 was the year with the largest amount which is again a sign of recovery, driven by an increase in market capitalization, and debt, which in turn was induced by a rise in stock prices. Investors had in this year, expectations for future growth, due to financial gains, induced by a recovery of the overall economy from the adverse contexts in previous years, related to the BES resolution and oil prices fall. This translated a recovery for Mota-Engil, which had already outlined and performed strategies to reduce debt and increase inflows. Nevertheless, the average enterprise value for the six-year period was 2542 million euros, which was not a weak value, considering the financial conditions endured by Mota-Engil, during these years.

⁴¹ Computation of enterprise value can be consulted in the Glossary of formulas, Appendix D; the importance of including debt in the formula is related to a most reliable value that an investor would pay for firm in case of a takeover.

On the other hand, the weight of debt on firm value, regarded at market prices, registered an average of 80%, during the analysis period, illustrating the heavy debt burden of the company, in this period, meaning that, 80% of the enterprise value was constituted by debt. The year of 2018 was the one with the largest debt load, reaching 84% of enterprise value.

Additionally, this weight of debt increased from 2013 to 2016, and from 2017 to 2018, registering a break in 2017, demonstrating once again, each year, the aggravated debt situation.

Focusing for instance on the EBITDA multiple⁴², it is possible to observe that the average multiple for the six years of the study was 7,6, meaning that, the enterprise value represented 7,6 times the EBITDA, which presumably can be considered a healthy ratio.

From 2013 to 2016, there was a total average of 237,5 million shares, which corresponded to an increase of 32,9 million shares from the first period to the last. Moreover, 3,7 million of the total shares corresponded to own shares and 233,8 million were dilution shares⁴³.

⁴² Computation of EBITDA multiple can be consulted in the Glossary of formulas, Appendix D.

⁴³ For values regarding number of shares, please refer to Appendix C, table C9.

Chapter 4

4. Conclusions and Limitations

4.1 Conclusions

The main objective of this thesis is to understand the strategic, financial and organizational sense regarding the divestment strategies pursued by Mota-Engil, as well as investigating how these operations impacted this company.

In order to have a better comprehension of the operations, a case study methodology is used, beginning with the presentation of the macroeconomic context endured by Mota-Engil in the analysis period, and continuing with a detailed description of the several divestment operations performed between 2012 and 2018. Hereupon, a comprehensive analysis of Mota-Engil's performance is done, in order to perceive the strategic, financial and organizational sense of the operations. The vast financial information presented, which was treated to better fit the purpose of the investigation, indicates mainly a large indebtedness of Mota-Engil, and severe financial constraints, which have several implications in the performance results of the company.

It was concluded that the region that contributed most to overall turnover was Africa, while Latin America and Africa shared the role of largest contributors to total backlog, throughout the years. Observing the group's overall EBITDA, Africa was also the largest contributor for this indicator in all years, followed by Europe E&S segment. The EBITDA growth did not show significantly good results. Furthermore, the group's EBITDA margin was above the 15% goal in almost every year of the analysis, while observing the same indicator of Mota-Engil SGPS, the results were much different, being that, in almost every year of the analysis period, the EBITDA margin did not reach or surpass the 15% goal.

There was a clear discrepancy between equity and debt, during the six-year period. The latter represented an average of 3,4 times the equity capital of Mota-Engil, illustrating signs of a largely indebted company, which are corroborated by the debt ratio. The latter revealed that, on average, 77,6% of assets were funded through debt, during the same period.

The results of the ROE ratio demonstrate that the average return on equity was 12,7% from 2013 to 2018, which comparing with the industry ROE's average from 2012 to 2016 seemed to exhibit a good performance.

The average degree of financial autonomy of Mota-Engil was considerably low during the six years of the analysis. Regarding the stock performance, of Mota-Engil, SGPS, there was a drastic fall in stock quotations from 2013 to 2018, and in 2017 no dividends were actually paid to investors.

For instance, considering the EBITDA debt multiple, it was shown that debt represented 6,1 times the EBITDA.

The year which registered a weaker performance in almost all indicators was 2016, due to the fall of oil prices and the crisis in BES. However, the year of 2018 was the one which registered a recovery in almost all indicators, namely in ROE, EBITDA, turnover, CAPEX, mostly due to the disposal strategies and the management capacity to turnaround the adverse situation it was facing. Furthermore, in 2018 and 2019 new large divestments are being prepared and outlined, which indicates the continuity of the restructuring process in order to balance the company's numbers.

The observed financial issues primarily began as a consequence of a deterioration of financial and economic markets induced by the oil crisis, in 2014, and the resolution of BES in Portugal, in 2016.

The impact of the losses on the financial market arising from the BES crisis led Mota-Engil, which had long-term established partnerships with this bank, to interrupt the process of capital dispersion of its African subsidiary on the Amsterdam stock exchange. On the other hand, after the bank's resolution, Mota-Engil initiated the sale process of several subsidiaries, which were held in partnership with the new institution, such as Tertir and Ascendi. This represented a large portion of debt of Mota-Engil that had exposure to GES, considering the large debtor position of Mota-Engil in relation to BES following the constitution of Novo Banco.

Moreover, it can be concluded that the fall of world oil prices which impacted both African and Latin America regions, led to severe repercussions on Mota-Engil.

The group depended heavily on the African economy, since this geographical area represented its larger source of turnover, EBITDA and order book, making

it extremely exposed and fragile to the adverse economic context that Africa was facing, leading to a fall in its results.

The same oil-related situation occurred in Latin America, whose oil-producing countries such as Brazil, Mexico, Colombia and Venezuela, presented fragile and dependent economies to this commodity. In this sense, there was a decrease in turnover, earnings and total backlog for this region as well. Latin America's effects combined with the African situation led to a severe deterioration of Mota-Engil's results.

This financial analysis led to the same conclusion: Mota-Engil was highly indebted, facing not only internal issues, but also an economic adverse context, and had the urge to outline a turnaround strategy, in order to change some of these bad numbers.

The company's strategy was based on the several divestments and acquisitions that it performed in recent years. As it is mentioned in the literature, divesting enables to decrease debt and increase funding capacity. Regardless of the financial stress faced by the company in these years, Mota-Engil announced that the execution of the several disposals was part of a strategy to sell those assets considered mature and therefore profitable, and to strengthen its capital structure. There was no disclosure regarding the necessity to reduce debt and fund growth.

Contrarily to Khoroshilov (2002), from finance literature, Mota-Engil's divestments occurred mostly as a reaction to macroeconomic adverse shocks. This company's fundamental necessity was to decrease debt and, according to Parrino (1997), divesting induces a reallocation of wealth that reduces bondholders' claims on the firm's cash flows, leading to a stock price increase, and a reduction of debt. In this sense, this case study's perspective corroborates that divesting is prejudicial to bondholders, which is the fundamental reason why Mota-Engil performed these operations. (Hite & Owers, 1983; Miles & Rosenfeld, 1983; Linn & Rozef, 1985; Denning & Shastri, 1990, Palepu, 1990, Parrino, 1997; Dittmar, 2002; Veld & Veld-Merkoulova, 2006).

Examining, for instance, the divestment motives arising from strategy literature, the agency theory, which is also backgrounded by organizational behavior stream, is not applicable in this case study, contrarily to Seth and Easterwood (1993), Gopinath and Becker (2000). The reason why there is no agency conflicts in the Mota-Engil case is because this company is largely

indebted. This situation results in an alignment of interests between managers, who concern about the firm's size and risk of bankruptcy, and owners, which value firm performance, aiming to obtain the best dividend remuneration as possible. Such interests are generally the reduction of the debt burden and growth increase. (Amihud & Lev, 1981).

Furthermore, contrarily to Duhaime and Grant (1984), Duhaime and Baird (1987), Zuckerman (2000) and Lowe and Veloso (2005), the divested units in this case study were profitable and had good future earnings perspectives, considering the example of Mota-Engil Africa, which systematically represented the largest weight in the overall EBITDA. This case validates the best owner principle (Koller et al., 2015). Divesting does not strictly apply to non-performing businesses, sometimes profitable units are sold, due to several motives, but particularly if market agents value the unit above the value perceived by its owners. Conversely, this case study confirms one motive for divestments supported by strategy literature, which is that divesting was part of a strategy to correct ineffective growth (Jensen, 1989).

At the organizational level, from the beginning of the analysis period, 2013, the group outlined a diversification strategy allied to a balance of the geographical distribution of businesses, and an allocation of resources to markets with the best value creation potential (Mota-Engil, 2019b). In this sense, Mota-Engil aimed to diversify activities between regions, keeping at the same time the long-term sustainable growth perspectives, which contradicts the focusing motives announced for the divestments. Furthermore, this literature stream supports that whenever a company experiences a decay of performance, divesting is an option (Hoskison, Johnson & Hitt, 1993), which was indeed the situation and context of Mota-Engil. No other organizational motives from organizational behavior research fit this investigation.

The main conclusions to infer regarding Mota-Engil's case study are that, contrarily to the press releases of Mota-Engil group, the divesting strategies were mostly driven by financial constraints motives and by the urge to reduce the debt burden of the company.

The group aimed at reducing the invested capital, due to its large financial constraints. In this context, Mota-Engil had to alienate capital-intensive businesses, as was the case of the port and logistics businesses, Indaqua and Ascendi, among others. Nevertheless, on Mota-Engil's strategic plan is defined

the objective of surpassing a 15% EBITDA margin each year. This situation raises a paradox, since this goal margin, in this company's case, is only attainable in few geographical areas, namely Africa, and in more capital-intensive businesses. For this reason, besides trying to decrease invested capital, Mota-Engil attempted to enter in some new capital-intensive businesses, with consortiums with local partners, in order to detain within the portfolio, businesses with an EBITDA margin above 15%, as is the case of the electricity business in Mexico.

In the prospectus and market releases disclosed by the group, for the case of Mota-Engil Africa, the word "spin-off" does not appear one single time, although it was effectively a conditional spin-off that was performed, through the distribution of conditional dividends, on shares of a company other than the one granting the right. This translates the management capacity to turnaround such complex situations. The idea all along was never to completely leave the African business, but indeed, to decrease the indebtedness induced by the African economy, and then revert the equity carve-out.

Mota-Engil communicated to the market that the several divestments aimed at increasing focus, as was the case of Indaqua, in the E&S business, particularly in the waste collection activities and waste treatment and recovery segments, but also to highlight management quality of each divested subsidiary. Besides, divesting in the port, logistics and road businesses was presented as an opportunity to optimize and strengthen capital structure. Even the IPO of the African subsidiary was announced as a strategy to finance the growth in Africa.

Not once was mentioned the large indebtedness and the intent to relief this burden, through the value creation induced by divestments, which is supported by finance literature, namely and Parrino, (1997) and Maxwell and Rao, (2003).

Furthermore, the divestment activity raised firm value, as predicted by finance literature, specifically by authors such as Miles and Rosenfeld (1983), Hite and Owers (1983), Linn and Rozef (1985), Denning and Shastri (1990), and, lastly, Palepu (1990).

The investigation regarding the sense of Mota-Engil's divestment strategies becomes more reliable when combining the financial, strategic and organizational perspectives on these operations. The conclusions to be drawn arise from the merging of these three strands. In this sense, it is possible to conclude that the disposals of Mota-Engil were necessary and reflect the management capacity to focus, enabling the striving of the group, the

overcoming of adverse macroeconomic conditions and a significant reduction of the debt load. The group has exhibited great management discipline which has allowed to surpass the most adverse contexts.

4.2 Limitations and guidelines for future research

The main limitations of this case study are related to the fact that no comparable companies to Mota-Engil group were found, both in terms of dimension, turnover, external market and order book. The existence of eligible peers would allow a comparative analysis, including a compared review of financial indicators, so as to interpret the results with more reliability. The group that presented the most resemblances to Mota-Engil was the ACA group, although there is a large discrepancy between the two groups, and for this reason it was decided not to use ACA group as a benchmark, in order to avoid bias in results. Nevertheless, in the analysis of ROE ratio it was included a brief comparison with ACA's ROE, having however outlined the different dimensions of the two companies.

This case study was useful considering that it enabled a critical reflection on the context of Mota-Engil's divestments, as well as applying the literary presuppositions to a real case, allowing to verify that the foundations of the literature are not always verified in practical terms, and that, in fact, the reasons for divestitures cannot be examined only through a financial or strategical outlook. In order to have a better comprehension of these operations it is necessary to combine the financial, strategic and organizational perspectives, allowing a final conclusion withdrawn from the junction of these three angles.

In the future it should be interesting to pursue this case study investigation since Mota-Engil group continues to carry out these divesting strategies, with disposals of extremely profitable companies, with good future growth perspectives. The objective would be to understand the long-term context reached with these operations, considering that divestitures, besides being restructuring, take time to demonstrate effects. In this sense it will be possible to understand the long-term effects that the management's current strategy will create.

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Appendices

Appendix A. Mota-Engil Africa case

Table A1. Extraordinary dividend measure

Measure for an investor possessing 100 shares of Mota-Engil, SGPS on January 17, 2014. The value in euros is computed based on the technical price of 11,5 euros.

	Shares/rights	Value in euros
Number of rights held	100	
Assignment factor	≅0,10	
Number of shares to be allocated	≅10,33	118,84
Taxation (applicable regime)	28%	
Amount of tax to be withheld	≅2,89	33,28
Amount of shares net of tax	≅7,44	85,57
Number of shares to be delivered	≅7,00	80,50
Rounding in cash to be delivered	≅0,44	5,06

Source: Pacheco, 2016

Table A2. Interval of the expected proceeds from the share offer

Values expressed in euros.

	Number of shares	Proceeds range		Investors	Proceeds destination
		minimum	maximum		
Sale of Mota-Engil SGPS shares	20 M	229 M	289 M	Shareholders of ME, SGPS	ME, SGPS
Capital increase of Mota-Engil Africa	15 M	172 M	217 M	Institutional	ME Africa
Greenshoe option	5,25 M	60 M	76 M	Institutional	ME Africa
Implicit valuation of Mota-Engil Africa					
w / greenshoe	115 M	1 318 M	1 669 M		
w/o greenshoe	120,25 M	1 378 M	1 739 M		

Source: Pacheco (2016)

Appendix B. Exhibits of Group Mota-Engil

Table B1. Analysis of turnover

The data was collected from the consolidated report and accounts of Mota-Engil, from 2013 to 2018, particularly from the business segments notes. All currencies are expressed in euros. Values are all expressed in millions of euros or percentage (%). In the headings relating to the order book, only the signed contracts and secured and completed financing are included. These do not include the large order of Cameroon in Africa, of 3500 million dollars.

	2012	2013	2014	2015	2016	2017	2018
Turnover	2 243	2 314	2 368	2 434	2 210	2 597	2 802
Growth	3,0%	3,2%	2,3%	2,8%	-9,2%	17,5%	7,9%
Internal market	790	613	597	645	583	583	613
Weight internal market	35,2%	26,5%	25,2%	26,5%	26,4%	22,4%	21,9%
Crescimento	-11,7%	-22,4%	-2,6%	8,0%	-9,6%	0,0%	5,1%
External market	1 453	1 701	1 772	1 789	1 627	2 014	2 189
Weight external market	64,8%	73,5%	74,8%	73,5%	73,6%	77,6%	78,1%
Growth	13,3%	17,1%	4,2%	1,0%	-9,1%	23,8%	8,7%
Weight by regions (turnover)							

Europe E&C	41%	25%	25%	25%	23%	18%	19%
Europe E&S	14%	14%	14%	16%	15%	11%	11%
Africa	33%	44%	41%	34%	32%	33%	32%
Latin America	12%	17%	20%	25%	30%	37%	38%
Order book	3 357	3 870	4 413	4 087	4 422	5 138	5 465
Weight by regions (order book)							
Europe E&C	21%	15%	17%	17%	13%	17%	20%
Europe E&S	9%	8%	6%	5%	5%	4%	3%
Africa	44%	42%	32%	30%	39%	51%	50%
Latin America	26%	35%	45%	48%	43%	28%	27%

Source: Mota-Engil Consolidated Accounts and Reports, 2014-2018

Table B2. Analysis by Business Segment

The data was collected from the consolidated report and accounts of Mota-Engil, from 2013 to 2018, particularly from the business segments notes. All currencies are expressed euros. Values are all expressed in millions of euros or percentage (%). The external market comprehends all activity outside Portugal, and the internal market embraces all activity inside Portugal. Ascendi group was not included, which was a jointly controlled participation.

	2012	2013	2014	2015	2016	2017	2018
Europe							
Turnover	1 238	911	936	999	841	777	825
Growth	-7,5%	-26,4%	2,7%	6,7%	-15,8%	-7,7%	6,2%
EBITDA	121	85	97	121	111	132	78
Growth	-6,2%	-29,8%	14,1%	24,7%	-8,3%	18,7%	-41,0%
EBITDA margin	9,8%	9,3%	10,4%	12,1%	13,2%	17,0%	9,4%
Turnover							
Europe E&C	927	588	599	602	514	480	527
Europe E&S	311	323	337	397	327	296	298
EBITDA							
Europe E&C	66	26	38	40	7	35	-6
Europe E&S	56	59	58	81	104	97	84
EBITDA margin							
Europe E&C	7,1%	4,4%	6,3%	6,6%	1,4%	7,3%	-1,2%
Europe E&S	18,0%	18,3%	17,2%	20,4%	31,8%	32,7%	28,1%
Africa							
Turnover	729	1 009	965	835	708	860	908
Growth	19,3%	38,4%	-4,4%	-13,5%	-15,2%	21,5%	5,6%
EBITDA	133	243	275	176	182	164	189
Growth	4,1%	82,3%	13,4%	-36,0%	3,4%	-10,1%	15,5%
EBITDA margin	18,2%	24,0%	28,5%	21,1%	25,7%	19,0%	20,8%
América Latina							

Turnover	276	394	467	600	661	960	1 069
Growth	69,3%	42,8%	18,5%	28,5%	10,2%	45,3%	11,2%
EBITDA	33	36	37	70	45	109	140
Growth	50,5%	6,3%	4,2%	89,2%	-35,7%	143,1%	28,4%
EBITDA margin	12,1%	9,0%	7,9%	11,7%	6,8%	11,4%	13,1%

Source: Mota-Engil Consolidated Accounts and Reports, 2014-2018

Table B3. EBITDA analysis

The data was collected from the consolidated report and accounts of Mota-Engil, from 2013 to 2018, particularly from the business segments notes. All currencies are expressed euros. Values are all expressed in millions of euros or percentage (%).

	2012	2013	2014	2015	2016	2017	2018
EBITDA	287	363	409	367	338	405	407
Growth	3,5%	26,5%	12,7%	-10,3%	-7,9%	19,8%	0,5%
EBITDA margin	12,8%	15,7%	17,3%	15,1%	15,3%	15,6%	14,5%
Weight by areas							
Europe E&C	23%	7%	9%	11%	2%	9%	-2%
Europe E&S	20%	16%	14%	22%	31%	24%	21%
Africa	46%	67%	67%	48%	54%	40%	46%
Latin America	12%	10%	9%	19%	13%	27%	35%

Source: Mota-Engil Consolidated Accounts and Reports, 2014-2018

Table B4. CAPEX review

The data was collected from the consolidated report and accounts of Mota-Engil, from 2013 to 2018, particularly from the business segments notes. All currencies are expressed euros. Values are all expressed in millions of euros or percentage (%).

	2012	2013	2014	2015	2016	2017	2018
Investment	145	166	220	146	67	148	287
Growth	8,2%	14,5%	32,5%	-33,6%	-54,1%	120,9%	93,9%
Weight by regions							
Europe E&C	21%	18%	6%	5%	20%	6%	5%
Europe E&S	14%	10%	10%	11%	44%	19%	22%
Africa	52%	60%	59%	65%	14%	55%	65%
Latin America	13%	12%	25%	16%	22%	20%	8%

Source: Mota-Engil Consolidated Accounts and Reports, 2014-2018

Appendix C. Exhibits of Mota-Engil, SGPS

Table C1. Adjusted Balance sheet of Mota-Engil SGPS

The presented values are expressed in millions of euros and percentage (%).

	2012	2013	2014	2015	2016	2017	2018
Operating asset							
Fixed tangible assets	613	691	772	782	693	712	740
Financial assets	252	267	264	708	581	551	555
Other non-current assets	225	319	357	225	201	395	302
Non-current liabilities (other than debt)	422	319	328	765	578	463	535
Net fixed assets	668	957	1 065	950	897	1 195	1 062
Inventories	269	311	301	285	305	345	334
Accounts receivable	925	979	976	939	775	867	1 003
Other accounts receivable	640	548	658	827	653	639	637
Accounts payable	466	438	395	405	380	490	802
Other payables	773	858	825	1 078	828	923	800
Cash and cash equivalents	179	185	189	195	177	208	224
Working capital, cash and cash equivalents	774	727	905	762	703	645	597
Operating assets	1 442	1 684	1 970	1 713	1 600	1 840	1 659
Non-operating assets							
Financial fixed assets	285	274	231	116	198	244	435
Assets held for sale	118	80	81	780	418	160	90
Marketable securities	92	121	134	258	219	436	248
Non-operating assets	496	475	445	1 154	835	841	773
Adjusted assets	1 938	2 159	2 415	2 867	2 435	2 680	2 432
Invested capital (equity and debt)							
Share Capital	205	205	205	234	232	234	231
Reserves	157	266	290	405	271	301	122
Net income	74	89	83	54	68	61	93
Total equity	436	559	578	693	571	596	447
Long-term debt	617	860	1 115	1 070	1 135	1 055	1 009
Short-term debt	885	740	723	1 103	730	1 029	976
Total debt	1 502	1 600	1 837	2 174	1 865	2 084	1 986
Invested capital	1 938	2 159	2 415	2 867	2 436	2 680	2 432
Dividends from previous year	23	23	25	25	12	31	0
Net debt	1 410	1 478	1 704	1 916	1 646	1 648	1 738

Source: Pacheco, 2019

Table C2. Adjusted income statement

The presented values are expressed in millions of euros.

	2013	2014	2015	2016	2017	2018
Turnover	2 314	2 368	2 434	2 210	2 597	2 802
Cost of goods sold	1 064	1 053	1 030	832	1 093	1 302
Gross margin	1 250	1 315	1 404	1 378	1 504	1 500
Other operating revenues	63	17	43	38	77	84
Third-party supplies and services	502	431	528	546	540	590
Personnel expenses	447	466	506	524	537	542
Non-monetary expenses of working capital and business	10	6	30	21	24	22
Other operating expenses	1	26	46	52	81	85
EBITDA	352	403	336	273	399	345
Depreciation and amortization expenses	103	129	152	191	181	183
Other non-monetary expenses	7	1	17	46	14	2
Operating income (OI)	242	273	168	37	204	161
Non-operating revenues	69	23	111	119	42	71
Other non-recurrent revenues	132	7	28	50	32	113
Non-operating expenses	37	19	48	2	41	66
Other non-recurrent expenses	166	55	25	26	46	12
Non-operating (non-recurrent) income	-3	-43	67	142	-13	106
(EBIT)	239	230	234	179	192	267
Financing expenses (interest)	104	107	134	102	102	132
Profit before income tax (IBT)	135	123	100	77	90	135
Income tax expense	47	40	46	9	28	42
Net income (NI)	88	83	54	68	62	93
Recurrent operating result	260	280	215	104	242	185
Net recurrent result	109	134	34	-8	112	11

Source: Pacheco, 2019

Table C3. Balance sheets – item breakdown (Adjusted assets)

All values in this table are expressed in percentage (%).

	2012	2013	2014	2015	2016	2017	2018	Avg
Operating Assets								
Fixed tangible assets	31,7%	32,0%	32,0%	27,3%	28,5%	26,6%	30,4%	28,9%
Financial assets	13,0%	12,4%	10,9%	24,7%	23,9%	20,5%	22,8%	20,6%
Other non-current-assets	11,6%	14,8%	14,8%	7,9%	8,2%	14,7%	12,4%	11,6%
Non-current liabilities (other than debt)	21,8%	14,8%	13,6%	26,7%	23,7%	17,3%	22,0%	20,7%

Net fixed operating assets	34,5%	44,3%	44,1%	33,1%	36,9%	44,6%	43,7%	40,5%
Inventories	13,9%	14,4%	12,5%	9,9%	12,5%	12,9%	13,7%	12,3%
Accounts receivable	47,7%	45,3%	40,4%	32,8%	31,8%	32,3%	41,2%	35,7%
Other receivables	33,0%	25,4%	27,2%	28,8%	26,8%	23,8%	26,2%	26,6%
Accounts payable	24,0%	20,3%	16,4%	14,1%	15,6%	18,3%	33,0%	19,5%
Other payables	39,9%	39,7%	34,1%	37,6%	34,0%	34,5%	32,9%	34,6%
Cash and cash equivalents	9,3%	8,6%	7,8%	6,8%	7,3%	7,8%	9,2%	7,8%
Working capital, cash and cash equivalents	39,9%	33,7%	37,5%	26,6%	28,8%	24,1%	24,5%	28,3%
Operating assets	74,4%	78,0%	81,6%	59,7%	65,7%	68,6%	68,2%	68,8%
Non-operating assets								
Financial fixed assets	14,7%	12,7%	9,6%	4,1%	8,1%	9,1%	17,9%	9,7%
Assets held for sale	6,1%	3,7%	3,4%	27,2%	17,2%	6,0%	3,7%	11,5%
Marketable securities	4,8%	5,6%	5,5%	9,0%	9,0%	16,3%	10,2%	10,0%
Non-operating assets	25,6%	22,0%	18,4%	40,3%	34,3%	31,4%	31,8%	31,2%
Adjusted asset	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Invested capital								
Share Capital	10,6%	9,5%	8,5%	8,2%	9,5%	8,7%	9,5%	8,9%
Reserves	8,1%	12,3%	12,0%	14,1%	11,1%	11,2%	5,0%	10,7%
Net income	3,8%	4,1%	3,4%	1,9%	2,8%	2,3%	3,8%	2,8%
Total equity	22,5%	25,9%	23,9%	24,2%	23,4%	22,2%	18,4%	22,4%
Debt								
Long-term debt	31,8%	39,8%	46,2%	37,3%	46,6%	39,4%	41,5%	42,2%
Short-term debt	45,7%	34,3%	29,9%	38,5%	30,0%	38,4%	40,1%	35,4%
Total debt	77,5%	74,1%	76,1%	75,8%	76,6%	77,8%	81,6%	77,6%
Equity and debt								
Invested capital	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Dividends								
Dividends from the previous year	1,2%	1,0%	1,0%	0,9%	0,5%	1,2%	0,0%	0,7%
Assets								
Gross operating asset	113,2%	116,8%	120,9%	117,2%	137,3%	157,6%	168,1%	140,2%
Gross adjusted asset	138,8%	138,8%	139,4%	157,5%	171,6%	188,9%	199,9%	171,5%
Net debt	72,7%	68,5%	70,5%	66,8%	67,6%	61,5%	71,5%	67,6%

Source: Pacheco, 2019

Table C4. Compared Income Statement- item breakdown (turnover)

All values in this table are expressed in percentage (%).

	2013	2014	2015	2016	2017	2018	Avg
Turnover	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Cost of goods sold	46,0%	44,5%	42,3%	37,6%	42,1%	46,5%	42,1%
Gross margin	54,0%	55,5%	57,7%	62,4%	57,9%	53,5%	57,9%
Other operating revenues	2,7%	0,7%	1,8%	1,7%	3,0%	3,0%	2,4%
Third-party supplies and services	21,7%	18,2%	21,7%	24,7%	20,8%	21,1%	22,1%
Personnel expenses	19,3%	19,7%	20,8%	23,7%	20,7%	19,4%	21,1%
Non-monetary expenses of working capital and business	0,4%	0,3%	1,2%	0,9%	0,9%	0,8%	1,0%
Other operating expenses and loss	0,1%	1,1%	1,9%	2,3%	3,1%	3,0%	2,6%
EBITDA	15,2%	17,0%	13,8%	12,4%	15,4%	12,3%	13,5%
Depreciation and amortization expenses	4,4%	5,5%	6,2%	8,6%	7,0%	6,5%	7,1%
Other non-monetary expenses	0,3%	0,0%	0,7%	2,1%	0,5%	0,1%	0,8%
Operating income (OI)	10,5%	11,5%	6,9%	1,7%	7,9%	5,7%	5,5%
Non-operating revenue	3,0%	1,0%	4,6%	5,4%	1,6%	2,5%	3,5%
Other non-recurrent revenue	5,7%	0,3%	1,2%	2,3%	1,2%	4,0%	2,2%
Non-operating expenses	1,6%	0,8%	2,0%	0,1%	1,6%	2,4%	1,5%
Other non-recurrent expenses	7,2%	2,3%	1,0%	1,2%	1,8%	0,4%	1,1%
Non-operating (non-recurrent) income	-0,1%	-1,8%	2,7%	6,4%	-0,5%	3,8%	3,1%
EBIT	10,3%	9,7%	9,6%	8,1%	7,4%	9,5%	8,7%
Financing expenses (interest)	4,5%	4,5%	5,5%	4,6%	3,9%	4,7%	4,7%
Profit before taxes (IBT)	5,8%	5,2%	4,1%	3,5%	3,5%	4,8%	4,0%
Income tax expense	2,0%	1,7%	1,9%	0,4%	1,1%	1,5%	1,2%
Net income	3,8%	3,5%	2,2%	3,1%	2,4%	3,3%	2,7%
Recurrent operating result	11,2%	11,8%	8,8%	4,7%	9,3%	6,6%	7,4%
Net recurrent result	4,7%	5,6%	1,4%	-0,4%	4,3%	0,4%	1,4%

Source: Pacheco, 2019

Table C5. Integrated analysis of profitability: DuPont analysis

All values in this table are expressed in percentage (%).

	2013	2014	2015	2016	2017	2018	Avg
Gross margin (% of turnover)	54,0%	55,5%	57,7%	62,4%	57,9%	53,5%	57,9%
Cost control effect	19,4%	20,7%	12,0%	2,7%	13,6%	10,7%	9,7%
Operating profitability of turnover	10,5%	11,5%	6,9%	1,7%	7,9%	5,7%	5,5%
Asset turnover	137,4%	120,2%	142,1%	138,1%	141,2%	168,9%	147,6%

Operating business profitability	14,4%	13,8%	9,8%	2,3%	11,1%	9,7%	8,2%
Non-operating asset effect	78,0%	81,6%	59,7%	65,7%	68,6%	68,2%	65,6%
Non-operating and non-recurring result effect	98,8%	84,2%	139,7%	480,4%	93,8%	166,2%	220,0%
Non-operating effect	77,1%	68,6%	83,4%	315,6%	64,4%	113,4%	144,2%
Return on assets (ROA)	11,1%	9,5%	8,2%	7,4%	7,2%	11,0%	8,4%
Financial expense effect	56,4%	53,5%	42,7%	42,9%	46,9%	50,6%	45,8%
Multiplier effect of debt	386,0%	418,0%	413,6%	426,8%	449,8%	544,6%	458,7%
Financial leverage effect	217,9%	223,5%	176,6%	183,2%	211,0%	275,8%	211,6%
(FLE)	13,1%	11,7%	6,3%	6,1%	7,9%	19,3%	9,9%
Operating and financial return	24,2%	21,2%	14,4%	13,5%	15,1%	30,3%	18,3%
Tax effect	65,4%	67,7%	53,8%	87,8%	68,4%	69,1%	69,8%
Return on equity	15,8%	14,4%	7,8%	11,8%	10,3%	20,9%	12,7%
Control	15,8%	14,4%	7,8%	11,8%	10,3%	20,9%	12,7%

Source: Pacheco, 2019

Table C6. Average Return on Equity

The following percentages correspond to the average return on equity ratio, of Western Europe companies in the construction industry, from 2012 to 2016.

	2012	2013	2014	2015	2016	Average
ROE	1,61%	2,86%	4,79%	7,01%	6,68%	4,59%

Source: Damodaran, 2019

Table C7. Other indicators of Mota-Engil, SGPS

Values are expressed in percentage (%) or number of days.

	2013	2014	2015	2016	2017	2018	Avg
Growth							
Turnover	3,1%	2,4%	2,8%	-9,2%	17,5%	7,9%	4,7%
EBITDA		14,4%	-16,5%	-18,7%	45,8%	-13,4%	-0,7%
Operating income		12,5%	-38,5%	-77,8%	448,0%	-21,4%	77,6%
Net income		-6,0%	-35,2%	25,3%	-8,8%	51,8%	8,3%
Net non-current operating asset	43,3%	11,3%	-10,8%	-5,6%	33,1%	-11,1%	1,4%
Working capital, cash and cash equivalents	-6,0%	24,4%	-15,7%	-7,9%	-8,2%	-7,4%	-9,8%
Operating asset	16,8%	16,9%	-13,1%	-6,6%	15,0%	-9,8%	-3,6%
Non-operating asset	-4,3%	-6,2%	159,2%	-27,6%	0,6%	-8,0%	31,0%
Adjusted asset	11,4%	11,9%	18,7%	-15,1%	10,1%	-9,3%	1,1%
Sustainable growth rate (economic)	15,1%	10,3%	5,1%	8,0%	5,4%	15,7%	8,5%
Sustainable growth rate (financial)	51,0%	1,9%	58,9%	50,7%	49,5%	54,8%	53,5%
Asset management							
Asset turnover	107,2%	98,1%	84,9%	90,7%	96,9%	115,2%	96,9%
Operating asset turnover	137,4%	120,2%	142,1%	138,1%	141,2%	168,9%	147,6%
Inventory average maturity (days)	107	104	101	134	115	94	111
Receivables average maturity (days)	154	150	141	128	122	131	130
Payables average maturity (days)	150	137	144	167	164	225	175
Cash cycle (days)	111	118	98	95	73	0	67
Weight of working capital, cash on turnover	31,4%	38,2%	31,3%	31,8%	24,8%	21,3%	27,3%

Weight of economic fixed assets on turnover	41,4%	43,8%	61,2%	57,7%	48,6%	46,2%	53,4%
Weight of fixed assets investment in economic fixed assets	20,3%	20,1%	40,6%	-2,0%	13,4%	16,6%	17,2%
Weight of economic fixed asset investment on turnover	8,4%	8,8%	24,9%	-1,1%	6,5%	7,7%	9,5%
Weight of economic fixed assets on A&D	189,5%	160,8%	399,6%	-13,2%	93,7%	117,9%	149,5%
Weight of A&D on economic fixed asset	10,7%	12,5%	10,2%	15,0%	14,3%	14,1%	13,4%
Debt							
Degree of financial autonomy	25,9%	23,9%	24,2%	23,4%	22,2%	18,4%	22,0%
Coverage degree of financing expenses	2,3	2,1	1,7	1,8	1,9	2,0	1,9
Weight of current debt	46,2%	39,3%	50,8%	39,2%	49,4%	49,2%	47,1%
Multiple of EBITDA of debt	4,5	4,6	6,5	6,8	5,2	5,7	6,1
Average cost of debt	6,5%	5,8%	6,2%	5,5%	4,9%	6,6%	5,8%
Average spread of ROIC against cost of debt	4,6%	3,7%	2,0%	1,9%	2,3%	4,3%	2,6%
Weight of economic fixed assets in shareholder's equity	171,2%	179,3%	215,0%	223,3%	212,0%	290,1%	235,1%

Source: Pacheco, 2019

Table C8. Market indicators of Mota-Engil, SGPS

Values are expressed in percentage (%) or millions of euros.

	2013	2014	2015	2016	2017	2018	Avg
Market indicators							
End of year share price	4,32	2,66	1,93	1,61	3,66	1,61	
Number of shares (million)	193,5	204,6	235,9	233,9	233,9	231,4	
Market capitalization (milhões de euros)	837	544	454	377	857	373	
Change in share price	47,6%	-38,5%	-27,6%	-16,4%	127,5%	-56,0%	6,9%
Dividend yield	3,0%	4,5%	2,6%	8,2%	0,0%	4,7%	3,9%
Dividend per share	0,13	0,12	0,05	0,13	0,00	0,08	0,06
Result per share (group)	0,26	0,25	0,08	0,21	0,01	0,10	0,10
Pay-out ratio	50,0%	48,5%	62,5%	61,5%	0,0%	74,4%	49,6%
Price-to-earnings	16,6	10,8	23,9	7,5	539,4	15,8	146,7
Price-to-book value (equity capital)	234%	173,6%	122,7%	114,2%	278,9%	209,8%	181,4%
Enterprise value (debt + market capitalization)	2 436	2 382	2 628	2 242	2 941	2 358	2 542
Debt weight at market prices	65,7%	77,1%	82,7%	83,2%	70,9%	84,2%	80,2%
EBITDA multiple	6,9	5,9	7,8	8,2	7,4	6,8	7,6

Source: Pacheco, 2019

Table C9. Number of shares

Values are expressed in percentage (%) or millions of euros.

	2013	2014	2015	2016	2017	2018	Avg
Total	204,6	204,6	237,5	237,5	237,5	237,5	237,5
Own shares	11,1	0,0	1,6	3,6	3,6	6,1	3,7
Number of outstanding shares	193,5	204,6	235,9	233,9	233,9	231,4	233,8
Potential dilution (ESOPs, warrants and others)	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Number of shares with dilution	193,5	204,6	235,9	233,9	233,9	231,4	233,8

Source: Pacheco, 2019

Appendix D. Glossary of formulas

- I. $Net\ debt = (Short - term\ debt + long - term\ debt) - cash\&cash\ equivalents$
- II. $Invested\ capital = equity + debt$
- III. $OI = EBITDA - depreciations\ and\ amortizations - other\ non\ monetary\ expenses$
- IV. $EBIT = Non - operating\ and\ non\ recurrent\ result + operating\ income$
- V. $ROE = Return\ on\ investment\ and\ financing \times tax\ effect$
 $= (financial\ leverage\ effect * return\ on\ invested\ capital) \times tax\ effect$
 $= [(financing\ expenses * indebtedness\ multiplier)$
 $\quad \times (extra\ business\ effect \times operating\ business\ profitability)]$
 $\quad \times tax\ effect$
 $= [(financing\ expenses \times indebtedness\ multiplier) \times (non$
 $\quad - operating\ effect \times (operating\ profitability\ of\ turnover$
 $\quad \times assets\ turnover)] \times tax\ effect$
- VI. $ROIC = Operating\ business\ profitability \times non - operating\ business\ effect$
- VII. $FLE = Financing\ expenses\ effect \times multiplier\ indebtedness\ effect$
- VIII. $FLE = Return\ on\ investment\ and\ financing - return\ on\ invested\ capital$
- IX. $Enterprise\ value = market\ capitalization + debt$
- X. $EBITDA\ multiple = \frac{enterprise\ value}{EBITDA}$
- XI. $\frac{D}{E} = Debt/equit$