



How Capital Markets shape the automotive industry

Department of Economics&Finance

Finance major

Professor

Prof. Ugo Zannini

Student

Carlo Ferroni

University code: 211411

A.Y. 2018/2019

Index

Introduction

First Chapter - Capital Markets

- 1.1** *General Overview*
- 1.2** *Analyzing Primary and Secondary Capital Markets*
- 1.3** *Equity or Debt ?*

Second Chapter - Corporate Governance

- 2.1** *Fundamentals of corporate governance*
- 2.2** *Principal-agent issues*
- 2.3** *A Focus on the European Union*

Third Chapter – How automotive companies use capital markets

- 3.1** *Automotive companies decisions on financing*
- 3.2** *The automotive industry ownership structure*
- 3.3** *How corporate governance is affected by capital markets*
- 3.4** *Automotive industry-related agency problems*

Conclusion

References

Introduction

In today's world it is of the utmost importance for corporations to be able to access capital markets. A company's sole financial force is not sufficient anymore to compete in such an environment, hence accessing financial markets and capital is of vital importance. The decision to resort to such measures although has a downside. In order to gain external capital a firm must be willing to give up some of its decisional power. Furthermore, the search for external financing arises agency problems between management and shareholders. The options firms have when facing an external financing decision is whether to issue equity or contract debt in capital markets. As we will see, both sources possess both positive and negative aspects. The different consequences which derive from the decision to choose one source over another will be relevant to both management and shareholders.

The first chapter will concentrate on a description of capital markets and will analyze in depth the differences between primary and secondary markets, as to better understand the mechanisms of how they work. The thesis will then continue by discussing some of the literature supporting the theory that a firm's value is independent of its own financial structure. Since we have a good understanding of capital markets we acknowledge the fact that it can influence firms corporate governance policies in a multitude of ways. Essentially, it is known that ownership structure and the debt over equity ratio can have an effect on a company's governance and furthermore that they can cause agency problems. The principal-agent dilemma and the problems it arises will be further discussed in the second chapter.

Following this discussion will be a European corporate governance system focus. We will mainly concentrate and double down on the Italian, French and German framework as to better understand the environment in which the firms we will be considering later on operate in. The companies that will be analyzed are FCA, Peugeot, Volkswagen and Renault, and we will see how these firms are affected by such problems and what practical consequences they face.

The last chapter will start with a more generic overview of how the automotive sector gains liquidity and how variegated shareholders are in the industry. This will be followed by a discussion on the consequences for firms governance and the related agency problems and will be completed by a final consideration on the four firms. There are two main reasons the author has chosen these

firms. Primarily because they are surely all very relevant players in Europe's automotive market and have been important to the continental economy for decades. Secondly, because they show particular ownership structures which differ from each other. For example, we can see that Volkswagen is now owned by one main shareholder, Porsche AG, while Peugeot and FCA are predominantly family lead firms even if, during the last decade, the percentage of shares held by the parent families has diminished. Finally, Renault is basically owned by the French state, which has historically been very close to the company.

The aim of the thesis is to show how the link between capital markets and governance is not as simple as it might seem. We will see how information asymmetry in the various firm layers brings companies management to different conclusions. Moreover, we would expect that companies with similar debt to equity ratios would be managed and controlled in a homogeneous way, but this will not be the case. To better understand why this happens and the way corporate governance is influenced in different ways by the financial sector in the various corporations we must keep in mind the diverse history these companies have and how their history has affected each shareholder composition and ownership structure. History has created companies that are intrinsically different from each other but, nevertheless, we will see that they face some common problems

First Chapter – Capital Markets

1.1 General Overview

A globalized economy could not be sustainable without the central role of capital markets. The reason such markets exist is to match the desires of who has excess funds with who instead is willing to borrow them at a certain interest rate. This concept is known as the efficient allocation of capital and allows people to buy precious goods or services they need even if currently they do not have sufficient liquidity. We can find many examples in everyday life, such as a mortgage, a loan for educational purposes (famous student loans), or funds necessary for the enlargement of a business or activity. Both individuals and institutions are present on the market and both can be found on either side of the market. We call the participants in this market either **buyers** or **sellers** . We define **buyers** as those whom invest in capital markets. They might do so to obtain a financial return, or to hedge positions against risks of a certain firm. These markets are also seen as a way to protect an investor for macroeconomic surprises and trends which can cause big losses if not properly countered. **Sellers** instead are those whom raise capital. They do so to be able to reinvest such capital in other projects which need funding. When a company goes public it is also on the sellers side of the market.

Now that we have seen the different roles which can be found in capital markets lets analyze the *actors* present in the market. We have entrepreneurs, investors, companies, and governments, which I'll describe in the following paragraphs.

Entrepreneurs generally start by raising capital privately. Hopefully their business activity will expand and they will need extra capital to grow. To finance themselves they generally sell some of their assets on capital markets, or contract debt using the assets as collateral for the loan. An entrepreneur might also sell some assets if he has to pay back or cash out some early investors or founder members. As entrepreneurs seek to find funds, whether it be for new projects or to finally monetize on the activity, they will sell equity or contract debt hence diluting the ownership structure . This also helps the entrepreneur to attach a market value to his enterprise. Entrepreneurs can also be on the buyers side of the market. For example, they could buy stock in some listed companies or buyback their own companies shares in the future.

Investors are considered to be any participant in the market who is there for the sole purpose of making money and are either individuals or institutions. In order to obtain financial returns they sell assets enabling them to exit their investments. Clearly investors prefer to undertake short investments and realize gains as soon as possible. At the same time it is obvious that borrowers desire the opposite. These conflicting interests have been the subject of many researches which have shown that this difference in preferences is the reason why long-term debt is compensated with higher returns. (J. Hicks 1939)

Companies resort to capital markets for a variety of different reasons. These include raising funds, managing portfolio risk, or also selling any unwanted foreign currencies gained throughout their activity. Also, companies might want to hedge against exchange rate risk in order to avoid losing money. Furthermore companies use capital markets as a way to sell and buy shares. This includes both the acquisition of another companies stock or re-buying its own floating shares. Clearly firms can also sell their shares, leading to a new ownership structure and simultaneously raising funds.

Governments are intended as any state organization. These comprehend municipalities, state owned investment funds or firms, central banks and multinational institutions. Governments adopt capital markets in order to raise sufficient liquidity to fund long term projects which will benefit the state. Or, just like the other actors, they could be buyers searching for financial returns.

Capital markets may be accessed in two different ways, indirectly or directly. Indirect methods necessarily presuppose the use of financial intermediaries while direct methods need not be assisted by such entities. We have three different types of financial intermediaries, Depository Institutions, Contractual Saving Institutions and Investment Intermediaries. Financial intermediaries exist to help the parties involved allocate capital in the most efficient way possible and to ease transactions. When a buyer or a seller cannot be found on the market financial intermediaries can participate in the transaction in order to complete it. Hence financial intermediaries will be momentaneous counterparties for the deal. This makes the transactions instantaneous and allows the financial intermediary to search for a potential buyer/seller with whom to conclude the deal. Such activity brings revenue to the institution involved. We will now see what the above mentioned

intermediaries do and how they differ.

Depository Institutions

Commonly known as banks. These intermediaries carry out the basic banking operations. They are funded through deposits and supply loans in order to generate revenue. This category includes commercial banks, credit unions and saving institutions. All these entities do business in a similar way and are hence categorized under the same name.

Contractual Saving Institutions

Contractual saving institutions include various types of insurance companies and pension funds. Insurance firms finance themselves mainly by issuing insurance policies and reinvest the premiums in government or corporate securities and mortgages. Pension funds adopt a similar scheme, they raise funds through employees' contributions and invest them in safe assets. They are also in charge of paying retirement plans when the time is due.

Investment Intermediaries

Investment banks, mutual funds and hedge funds are all types of investment intermediaries. The most famous investment banks include Goldman Sachs, JP Morgan, Bank of America, Morgan Stanley, Citigroup, Barclays, Credit Suisse, Deutsche Bank, Wells Fargo, Jefferies Financial Group, UBS Group and RBC Capital. Investment funds are the most relevant intermediaries for capital markets. These funds provide great advantages for investors as they allow to invest in many securities simultaneously without incurring in all the transaction costs associated with buying stocks individually. Furthermore these funds have an immense variety of different investment opportunities and also guarantee the investor with considerable knowledge in the investment. They manage to provide these benefits as they are collective investments made by investors who maintain control on their portion of shares. So investors need only to decide which fund best suits their taste depending on the funds investment style.

Mutual funds and hedge funds, a particular type of mutual fund, are governed by money managers. Mutual funds are more regulated than hedge funds and are obliged to have an investment portfolio coherent with what is stated on the mutual funds prospectus. They make it possible for investors with a limited amount of capital to invest in a wide array of assets and take advantage of

high quality managerial skills. This is possible as many investors are grouped together hence creating a significant pool of money. Hedge funds, on the other hand, notoriously work in more flexible conditions. The name comes from what these funds main activity used to be, hedge risk. Now these funds tend to pursue a benchmark absolute return irrelevant of market conditions, good or bad. They are entitled to use a broader set of financial instruments and take on a higher amount of risk. In order to achieve superior returns, even in bad market times, they must make use of special instruments such as short selling, derivatives, and futures among the others. They can also pass from one geographical area to another with ease, as they are less regulated then other financial entities. Given all these special permissions these types of mutual funds have, the managers role is of crucial importance. Good or bad performance of the fund is only due to the managers ability rather than general macro and market trends or luck. When deciding on whether to invest in such a fund or not potential investors look at who is managing it and his performance record. These potential investors also have less protection than do other,smaller, investors in other funds. The reason for this is that taking on high risks the participants in such funds have to be deemed qualified enough to enter and are believed to have sufficient knowledge of the investment world to understand what such risks entail. Infact, participants must prove to be wealthy as the minimum investment required is high, the exact number depends on each countries legislation. Furthermore the number of such participants is limited and cannot exceed 99 members. Hedge funds use one of two decisionary models. They can either choose to base their decisions on a systematic computer-based model or, in alternative, elect a discretionary model in which the manager takes the ultimate decision. Also, these funds can choose between a directional strategy approach, which bets on the direction of a specific market, or a market neutral one, which tries to be loosely correlated to the market in order to avoid heavy losses in case of a negative trend in the market. Another common strategy used by hedge funds is known as the “long-short” strategy. It consists in choosing two similar stocks in order to gain from the overpricing of one and underpricing of the other. The manager would choose to go long in the undervalued stock while would short the other valued one. This technique is called in jargon “double alpha”. If all is done correctly this strategy will produce high profits thanks to the leverage involved. Yet another complex strategy implemented by these firms is to try to anticipate important events. These are known as event driven investments and although risky, can be very profitable. These investments consist in betting on important corporate events such as bankruptcies or mergers and investing in the related field. The risk and return on these investments are very high and all comes down to whether the managers intuitions were correct or not, as he is betting on the future of the company.

1.2 Analyzing Primary and Secondary Capital Markets

We divide capital markets into **primary** and **secondary** ones. The role of **primary** markets is to place securities on the market and are moderated by investment banks. It is the place where new securities get issued and placed on the market. The **secondary** markets instead allow investors to trade shares between themselves.

The primary markets include both the issuance of new stocks and of new bonds. When shares of a non publicly traded company are quoted for the first time on the market the process is called Initial Public Offering (IPO). Any company, big or small, can go public if they comply with the minimum standards required by the market. As this process is complicated and risky an underwriting firm is involved in helping the issuing firm decide on timing, price and type of offering. The riskiness derives from the lack of historical data of the firm which means that it is not known how it will react to the market. As IPOs are an event where many different interests are at stake we can observe some anomalous behaviors in them, such as underpricing. The phenomenon of underpricing occurs when the initial price of the security happens to be below the real value of the security in the stock market. It is not uncommon to see huge gains realized in small periods of time when this mispricing happens. Investment bankers are the ones responsible. They find themselves in a complicated situation as they face a trade off when choosing the initial offer price between satisfying issuers and investors. Issuers could deem the price too low and this could scare off future clients for the investment firm, while investors could deem the price too high and be scared off in a similar way. Both situations would have negative effects on the investment firms activity. Even so, the majority of IPOs are underpriced as Ibbotson (1975) prooved. As mentioned, issuing IPOs is risky and no single bank will manage the process alone. A underwriting syndicate will be formed, with one main bank leading operations, in order to spread risk. Participating in an IPO is extremely hard for common investors. Generally IPOs are placed to big investors such as institutional investors. The easiest way for a private investor to access an IPO is through his brokerage firm. The brokerage firm could have succeeded in buying some shares in the IPO and might be willing to share them among its clients.

An IPO necessarily implies a change in the ownership structure of the firm. Mello and Parsons (1998) discussed how IPOs are difficult and long and state that, at the time of the IPO, it is important that the firm already has a clear idea of the path to take and how its ownership structure should look like in the future. It can achieve this by planning future sales of large blocks, also

known as controlling. Zingales (1995) also concluded that IPOs could generate problems with corporate control and that it is best to divide the offering in various stages in order to maximize revenue. He believes that sellers should try to sell to passive investors, as they have a stronger bargaining power on them respect to investors seeking control. So, to maximize the revenue deriving from the IPO, firms should try to sell to passive investors first passing on to control seeking ones only in a second moment.

Secondary markets instead comprehend shares and bonds which have already been issued. National stock exchanges are examples of such markets, as the Borsa Italiana or the New York Stock Exchange. These markets can be divided on the basis of their functioning into auction or dealer markets. Auction markets group all traders in one location where they declare their bid and ask price. This allows for efficient capital allocation as the prices are public and available to everyone. Dealer markets instead generally function through electronic systems. Dealers can both exchange securities between themselves and buy&sell to clients, gaining on the spread charged between the buy and sell price. In these markets competition for clients between dealers ensures that capital is allocated in an efficient way.

Hence, each market plays a specific role in the functioning of capital markets and are vital to a correct allocation of capital.

1,3 Equity or Debt?

It is commonly understood that managers face a tradeoff between equity and debt when deciding on how to finance valuable projects. Each choice has both positive and negative connotations for the firm. We will analyze this tradeoff through a discussion of the numerous literature which has been dedicated to the matter with our intent being to underline the importance of both elements and see how they are useful for companies.

Miller (1988) has faced the problem several times and came to an important conclusion. In his paper, written around 30 years after the renowned Modigliani Miller Theorem, he shows through implication how the capital structure of a firm will affect the companies value. In the Modigliani Miller Theorem we are shown how under a particular group of assumptions the capital structure will not affect a companies value. These assumptions are: being in a perfect economy, with symmetric information, no taxes and no agency costs, Hence in these conditions a firms debt to equity ratio will not change the cost of capital for a firm and investment decisions can be made regardless of the capital structure the company has. As these conditions don't hold in the real world, where clearly economies are not perfect and agency costs and taxes exist, Millers' 1988 paper states that by demonstrating what doesn't matter it is also shown, conversely, what does. As his assumptions in the MM Theory do not hold in real life, similarly the assumption that capital structure does not affect a firms value also does not hold anymore.

Fama and French (2002) proposed there trade off theory between equity and debt analyzing the effects debt has on a firm. It is a fact that firms finance themselves through a combination of both sources, each with a different proportion, depending on the costs and the benefits such proportion brings to the firm. Contracting debt is valuable as it has some financial benefits like tax shields. Essentially, as capital raised in debt is included in the firms liabilities, it is not a taxable element. If instead the firm had chosen to raise the amount required through equity it would have had to pay taxes on that amount. Moreover while interest is generally tax deductible, dividend payments are not. Although it may seem that debt is more advantageous than equity, it is not all that simple. Debt has a decreasing marginal benefits to the firm as the total amount of debt rises. This happens because a high total debt increases the chances of bankruptcy and perceived riskiness of a firm. This does not happen with equity as equity does not imply financial risks like debt. Infact Fama and French state that the value of a firm should be calculated through a formula which considers the riskiness of debt and the financial distress it causes ti a firm. They consider the value of the firm if it

were all equity financed adding the present value of the tax shield and subtracting the cost of financial distress due to debt, considered at present value.

More theories must be taken into consideration when discussing this matter. The Pecking Order Theory for one has a different approach to the subject, stating that there is asymmetric information between investors and managers.. Initially suggested by Donaldson, the theory was redeveloped by Myers and Majluf (1984) and became successful. This theory states that due to asymmetric information on equity value, debt financing should be preferred to equity financing in the order of availability. The Pecking Order Theory locates internal financing at the top of the ladder, with new debt coming after and finally new equity issuance. Furthermore, Rajan and Zingales (1995) identified the four factors that more than any other influence a firms capital structure. These are : market-to-book (higher market-to-book ratios, lower debt ratios) , size (larger firms, lower debt ratios) , profitability (more profitability, less debt ratios) and tangible assets (higher fixed assets ratios, higher debt ratios). A firm should attempt to stay as high as possible in the pecking order in order to preserve some “financial slack”. It is important as it allows firms to be able to invest in good investments when they appear and not have to be obliged to pass on them for financial reasons.

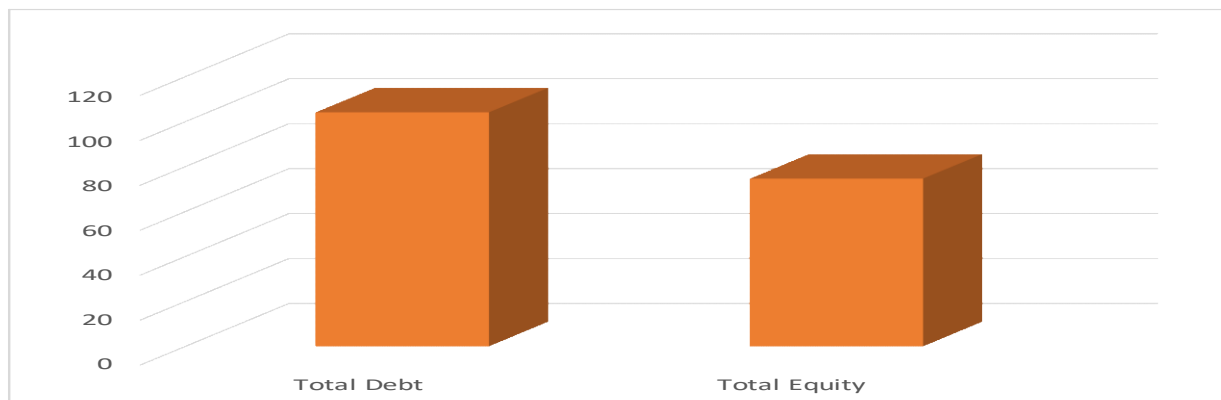
However, Easterbrook (1984) and Jensen (1986) state that managers and security holders interests are not aligned as mostly managers invest free cashflow poorly. Since debt and dividends oblige managers to pay out cash they are useful tools in keeping management under control and being sure cash is not wasted. This will be discussed however later on with agency problems.

Now lets analyze how debt and equity are used among different economies.

As we have seen capital markets can be separated in Equity or stock markets and Debt or bond markets. Equity markets permit trading of firms ownership shares while debt markets enable the issuance and trade of debt contracts, ie, loans. This graph shows the division and value of these sectors, giving us a sense of their value worldwide.

Figure 1.1

Value of Capital Markets worldwide



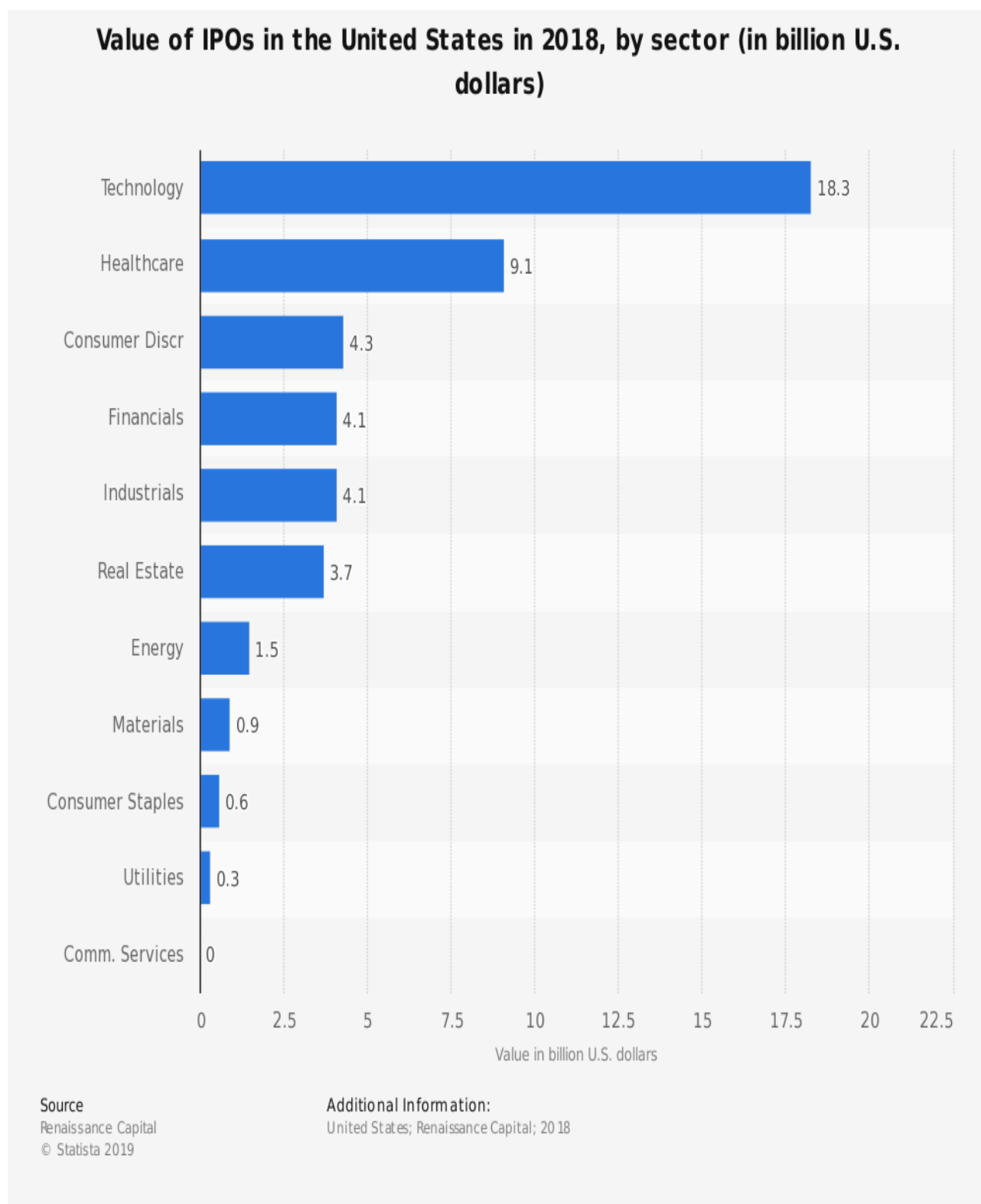
Source : Sifma Capital Markets Factsheet 2019

Equity markets are vital for the correct functioning of a capitalistic society. They allow firms to exchange control for capital thus enabling them to grow. Equity markets are used both by large and established firms but also by start ups which desire to go public in order to grow. In the graph figure 1.2 we can notice the magnitude of the funding start-ups received through IPOs in the USA per sector in 2018.

Two distinct sorts of shares exist on the market, preferred and common. Preferred shares have a greater claim on the firms assets and free cashflows respect to common shareholders. When firms have excess cash to be distributed to shareholders, preferred shareholders are the first to whom dividends are paid out. Similarly, in case a firm files for bankruptcy, common shareholders are the last to receive compensation for the loss of their investment. Furthermore, who owns preferred shares is entitled to sure and safe dividend payments while dividends for common shareholders, on the other hand, are subject to a decision of the Board of Directors and are uncertain in timing and quantity. Although preferred shares are more economically safe than common shares, the former do not grant access to voting rights while the latter do. As we have seen, preferred stocks can be viewed as being a mix between common shares and bonds.

Figure 1.2

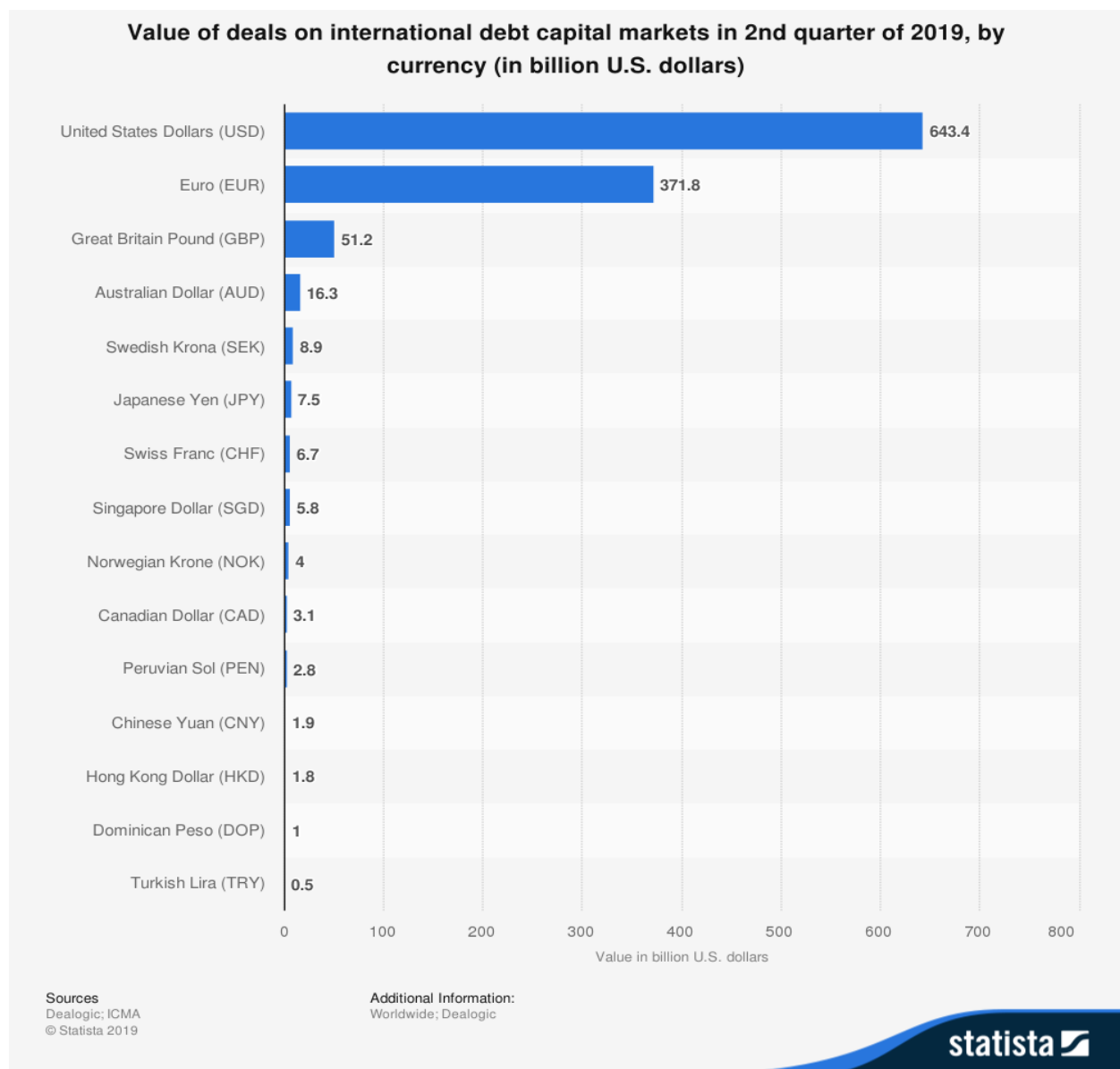
IPO Value by sector in the USA in 2019



Source : Renaissance Capital, Statista 2019

The bond market enables governments, companies and banks to secure liquidity for their projects. The former are the biggest player in this market. Governments resort to debt markets when in need of financing for useful investments for the nation or in order to renew their debt. Moreover, states can also take on the role of lenders. This can happen for instance when, thanks to deals in international trade, states find themselves with an abundance of a foreign currency. When this occurs the state will buy that countries debt so to hedge some risk. As a matter of fact, we have other buyers in the industry too. These include firms, investment funds, individual investors or any entity interested in investing money in this market. The chart below allows us to see the magnitude of debt market worldwide by currency in which it was issued.

Figure 1.3 Value of Debt Market by currency in the 2nd quarter of 2019



Source : Statista, 2019

As in the equity market also in the debt market seniority is relevant. We can distinguish between two types of debt, Senior and Subordinated. Debt with higher seniority is granted the right to be paid first in case of bankruptcy and is so perceived as being more secure. In fact, yields obtained from Senior debt are lower with respect to Subordinated debt, as it is safer. This does not mean that Senior debt is completely risk free. It might occur that, in worst case scenarios, even if they have the right to be paid before anybody else, the amount invested in Senior debt might not be paid back completely.

Second Chapter- Corporate Governance

2.1 Fundamentals of Corporate Governance

As we have previously mentioned, the capital structure of a firm will affect the way it is managed. A firm's debt holders and shareholders alike will affect corporate governance used inside the firm. Each time a company decides to raise capital through the issuance of new debt or selling stocks it loses a bit of its decisional power. The graph below is intended to make clear what role each financial bracket has, both for the firm and for the investor, reflecting the payoff each has and its influence on management decisions and corporate governance.

Figure 2.1

Payoff&Corporate Governance Matrix

Payout	High	Subordinated Debt	
	Low	Senior Debt	Preferred Stock
			Common Stock
		Low	High
		Influence on Corporate Governance	

This graph is although not considering risk. From the companies prospective, subordinated debt is not as dangerous as senior debt since it can be avoided if a negative year occurs in losses for the company. This cannot be done with senior debt as it is mandatory for a firm to pay these investors. As with senior debt, preferred stock is riskier than common stock as they are promised a fix stream of dividend payments which must be met. This leaves us with common stock, which is the least risky option for a firm as the company has no obligatory payments to be made to this category and they are the last ones to receive compensation if the firm were to go bankrupt. Let us now see the pillars of corporate governance.

We define corporate governance as being a certain group of rules and actions to be followed by the firm in order to make sure it operates in a correct and ethical manner. The Board of Directors has the duty to create, maintain and renovate such rules and make sure all stakeholders interests are

protected, while at the same time specifying the obligations and rights each stakeholder has to the firm. Infact, a major duty the Board has is to decide in which way power should be divided among each stakeholder. This is a complicated task as stakeholders are many and with different interests and include ; managers, board of directors, shareholders, employees, suppliers, creditors and customers. A successful corporate governance should aim at preserving each categories interests. However, most of the time the dominant shareholders interests prevail on the rest, even though a correct corporate governance aims at protecting all shareholders rights irrelevant of the amount of shares owned.

Ethical matters are also relevant in corporate governance. These matters can cause a variety of problems for the firm and are crucial for its long term prosperity. The non compliance of ethical standards can bring around profit-related, civil or even legal problems. Transparency is a main focus in corporate governance as it can lead to a higher consideration from investors, which can give the firm competitive advantages, and forge an improved working ambience for employees and stakeholders alike. Even so, it is common that problems arise throughout the life of a company.

2.2 *Principle-Agent Issues*

Principle-agent issues occur due to ownership and control being separate entities. The agent (management), who acts in the name of the principal (owner), and the principal can incur in a divergence of interest and when this happens Principle-agent problems are likely to happen. Hence, if adequate measures are not put in place, the agent will act in his own interest, regardless of what would be best for his principal (owner). Many economists have analyzed this topic and much has been said about such problems. In the following pages we will see how these issues can be addressed by the firm and what measures are put in place in order to try to align in the best way possible the interest of shareholders and managers.

In a particular Jensen and Meckling (1976) publication they depict a company as individuals linked to each other through various contractual agreements. Hence, in their view the best way to reduce agency problems is to contractually incentivize management to take the best actions for the firm as a whole. Shareholders and top management have to recur to third parties for various reasons. For example, it would be impossible for shareholders and top management alone to follow all of the economically convenient projects which everyday present themselves to the firm. Furthermore they would not have sufficient knowledge of the majority of the projects if they were expected to manage all of them contemporaneously, causing poor management activity and incurring in wrong decisions with high probability. Finally, it is presumed that agents have more knowledge on distinct projects than principles, if not it would be useless to hire them as principles could do the job themselves.

Allen, Brealy and Myers (2011) state that the capital budgeting process is where the majority of principle-agent issues are born. This is because, if management is not incentivized correctly, they could act with “reduced effort” in projects, compromising their true value. If management is not motivated correctly it could be reluctant to work in a suitable way and so take careless, wrong or dangerous decisions.

Company benefits can also influence managements' decisions. These benefits are generally known as private benefits and include an array of possible bonuses such as : holidays, private transport, preferential access to clubs, sporting events and the like. Some managers prefer to pursue these bonuses rather than be concerned with ethical business issues, and hence these decisions affect the firm. Even so, these bonuses are not necessarily negative for the company. It might happen that a

manager is granted excellent seats at an exclusive sporting events for the sole purpose of meeting another companies manager who was also granted such a privilege. Seen this way, it could be considered as a good way of creating or strengthening commercial ties important for the corporation which could, ultimately, benefit from such unethical action.

Most likely, a managers compensation and reputation is linked to the size of the corporation he is managing. So, instead of putting shareholders interests and financial health first, managers will make business decisions uniquely based on their interest in amplifying the business. This agency problem is called “empire building “ and is a relatively common problem for firms, which can lose a considerable amount of money on erroneously judged projects.

Yet another common mispractice managers undertake is known as investing in entrenched projects. They go by this name as they require existing managements competencies to be completed, and so “entrench” management. Both “entrenched investments” and “empire building” are caused by a situation of overinvestment, where the company has a lot of free cash but contemporarily little of bad investment options. This is known as the free cashflow problem.

It is also known that managers have a certain propensity to avoid risk. If we consider a world with no bonuses for management it is easy to see why this is. Managers would not be convinced to approve risky projects as, if they were to be successful, they would receive no compensation for it, and contemporarily, if the project were to fail, the manager involved might incur in severe consequences. The totality of the costs related to all of the agency issues previously mentioned plus the costs of monitoring and trying to prevent them amount to what is called agency cost for the firm.

Monitoring management may help in reducing some agency problems related to effort and inappropriate use of bonuses. Hence a firm will be willing to commit part of its budget to monitoring but, as monitoring follows the rule of diminishing marginal returns and is clearly not free, corporations will be willing to spend on monitoring up to the point where the marginal cost of extra monitoring will exceed the costs arising from agency problems. Even so, not all agency issues can be tracked and kept under control. It is not possible for auditors to continuously check that management is not overinvesting or if they are faithfully acting in a correct manner keeping shareholders interests in mind. Furthermore, this issue will become harder to evaluate in the future

as, from August 2019, the Business Roundtable of American CEOs declared that maximizing shareholder value is no longer the only focus management should have. To understand how auditors can only have a limited view in supervising a management let us imagine that a company has just completed a merger deal. Auditors can evaluate the financial situation of the other firm involved in order to establish if, at least financially speaking, the deal is favourable and management acted honestly and in good faith. Even so, there are multiple reasons for which a company might decide to merge and management knows much more than anybody else on the subject. Since these decisions are generally subjective to management the costs of monitoring and evaluating the true value of such an operation by auditors would be extremely high and it is not clear whether the benefits gained from such an operation would exceed the costs.

Monitoring is usually delegated to a Board of Directors whom are supposed to protect shareholders interests. In turn, the Board could hire an unbiased external auditor to make sure that the companies financial statements obey the Generally Accepted Accounting Principles (GAAP) . This is important as, if some misconduct or error in the firms financial accounting is found, the external auditor can request that top managers change the accounting procedure that has been adopted. If the warning is not respected the auditors can issue what is called a qualified opinion on the firm. Both the reputation and trustworthiness of the firm would be damaged by such an event.

Stoughton and Zechner (1998) published a paper expressing there thoughts on the ability of diverse investors to monitor management. In such paper they claim that large institutional investors possess several built-in mechanisms and external ties that small investors do not possess. Also, they claim that if the ownership structure of the firm is run by one major shareholder, monitoring will be easier and more effective. On the contrary, if many little shareholders are present, it is probable that the firm could be affected by what is known as the free-rider problem. This issue arises from the fact that these shareholders own such a small share that it would be inconvenient for them to sustain the costs of monitoring and therefore prefer to devolve this job to other shareholders. This could lead to small investors interest being overlooked. As different principles have diverse priorities and preferences, firms will face what are called coordination costs in order to give specific and defined objectives, which will satisfy all principles, to agents. As the amount of shareholders becomes larger, delegation gains importance and can cause other agency problems. In these cases it is important to avoid that the person in charge of monitoring is not connected to top management in any way, as this could boost unethical behaviour and cause managers to act selfishly. To deal with this problem in 2002 the Sarbanes-Oxley act designed what is known as the Public Company

Oversight Board, a board entrusted to control that auditors act in a correct, ethical and honest manner.

Another possible way of addressing agency issues is by creating an effective management compensation plan. If done correctly, such plans can will incentivize C-suites to pursue the right objectives and enable the firm to draw in talented managers. On this topic T. A. John and K. John (1993) affirm that the amount of equity and debt issued by a firm affect the management compensation. Firms which finance themselves with a combination of risky debt and equity can reduce agency costs related to equity by aligning shareholders and managers interests. This though temporarily causes agency costs related to debt. As a matter of fact, if shareholders are considered as residual claim-holders, and managers concerns are aligned with debt-holders concerns, the company could decrease its agency costs related to debt, and hence equity related ones too. Furthermore, managers paychecks should be divided into three distinct parts; the base, long term incentives, and bonuses for reaching targets and firm objectives. If the base is low and bonuses and incentives high, managers will be pushed to operate in a correct manner. But, if the C-suite is able to affect its own paycheck, new agency issues might be created. This problem can be avoided by enabling shareholders to vote on managements pay.

A managers paycheck should be commensurate to the value he adds to the firm. There are various accounting procedures to measure such performance. The most commonly adopted procedure nowadays was sponsored in 1993 by Tully and is known as Economic Value Added, or EVA. The corporate performance measure is calculated through a simple subtraction, income earned minus income required by a manager. The former is easily found and the latter is calculated as investment multiplied by the cost of capital. Hence, EVA eases the monitoring procedure as it stimulates managers to select projects that will earn more than the amount spent, so avoiding bad investments. Furthermore it enables managers to acknowledge the firms cost of capital. Although these positive aspects, EVA has two big drawbacks. It does not take into consideration present value and advantages shorter term investments. This will, as a consequence, lead managers to favour short term projects which might damage the firm in the long run.

We can conclude that the part of the managers compensation given by incentives is more important than the total amount he receives. The best division of managements salary is the one which best overlaps shareholders and managers concerns. So, as we have discussed, the salary must be linked to the managers performance. Stock options included in a managers salary are often used

for this purpose. By doing so managers will act more cautiously and avoid overinvestment as their salary depends on it. Moreover, stock options oblige managers to keep an eye out on the firm's market value, as clearly a decrease will also affect their own personal wealth.

Although the principal agent problems are the most known ones, there are also less familiar problems related to the diverging interests of shareholders and debt-holders. A paper published by Jerzemowska (2006) stated that the former are concerned about the company's performance, while debt-holders care about getting their money back. Managers who decide to adopt debt policies will find themselves with less free cash flow and reduced power deriving from an increase in pressure from capital markets. But on the other hand as financial leverage increases so does firm market value, supposing management keeps a small probability of bankruptcy.

2.3 *Focusing on the EU environment*

Corporate governance has only become an issue from the start of the new millennium. In the US attention to the matter was brought by the accounting scandals that saw worldwide renowned firms, such as Enron and Worldcom, declared bankrupt. After these notorious events the 2002 Sarbanes-Oxley act, a federal law intended to monitor and improve both accounting and governance principles, was adopted. In the EU instead the the European Commission enforced the Corporate Governance Action Plan in 2003 as a way to deter this type of action. A famous quote from Bolkestein (2004) stated that “as national corporate governance codes converge towards best practice, [it will be] easier to restore confidence in capital markets” . The Corporate Governance Action Plan, newly revised and released by the EU in December 2012, is still in use today and serves as a guide to corporations. It encompasses many issues such as transparency, transmission of information to shareholders and their rights, sustaining growth and competitiveness.

In the EU another major relevant action taken to regulate corporate governance was done in 2006. In this year the European Commission declared that for all listed firms it would be compulsory to report a corporate governance statement. Rather than tackling the issue of business ethics, the EU was more concerned with the financial side of the issue, hence targeted financial services policies. In 2002 a study was carried out by Weil, Gotshal and Mangers (2002) in order to spot the differences between different member countries corporate governance regulations. The study reviled that the governance codes actually converged between them and that a specific and unique EU code would be superfluous. As a matter of fact, the 2002 Report of the High Level Group of Company Law Experts declared that the EU should just provide elementary guidelines so to improve the alignment between different states governance codes, and that each state was required to develop its own specific corporate regulation .

Corporate Social Responsibility (CSR) is also a central topic in EU corporate governance discussions. The main issue is whether CSR should be considered as a dimension of corporate governance or if it should be considered separately and taken into consideration through voluntary approaches. The EU has debated the topic at length, discussing various green papers written on the matter and organizing discussion forums on the problem but, to date, sustains that CSR is excessively different throughout member states and hence there is no need to discipline it. So, the EU promotes the adoption of voluntary approaches to the issue. This does not mean that the EU ignores the topic. As a matter of fact, in March 2019 the EU published a document entitled

Commission Staff Working Document. This document, although non binding, contains several guidelines the EU Commission has published on the matter, such as the ISO 26000 “ Guidance on Social Responsibility” . This paper is a comprehensive document integrating CSR, responsible business conduct and business&human rights. Other than providing guidelines, it also discusses favourable CSR policies have been undertaken throughout the European Union following the initial guidelines published in 2011.

Member states governance regulations are taking time to align themselves for a variety of reasons. The first is the enlargement of the EU to 28 states. Hence, each time a state joins the Union, it has to alter its governance regulation in order to comply with European norms. This process may need a considerable amount of time as each nation has a different history and diverse ethical standards which may be in divergence with the EU basic guidelines. Furthermore, states have different ownership models and prefer different board structures, which can either be one-tier models or two-tier models, or both, as is the case with France. We will see later on how, similarly to states, different automotive firms possess different characteristics.

In France both one-tier and two-tier models of corporate governance are permitted and firms can freely decide on which one to adopt. Also, distinctions are made between SMEs (Petit et Moyenne Entreprises, PME, in French) and large listed firms. In Caroline Webers' words, Middlednext's general director, an association devoted to the protection of SMEs in France, the reason why a different corporate governance code is adopted for these companies is because they face different problems from bigger companies. The code is based on the guidelines stated by Pierre Yves Gomes in a report named “Guidelines for reasonable corporate governance”. We can see how a different code can be useful for smaller corporations if we take into account the problem of managers compensation and committees power. While these are major problems in big companies, they are not as relevant in smaller ones as most of the time the CEO is also the main shareholder of the firm. On the other hand, instead, larger firms abide to the Afep-Medef code. This code, developed by the “ Association Française des Entreprises Privées” (Afep) and the Mouvement des Entreprises de France” (Medef) , is intended for listed corporations but also recommends other sorts of business to follow it. In fact, the Middlednext code is complementary to the Afep-Medef one. As already mentioned before, French companies are entitled to choose either the one-tier or two-tier model. The latter possesses a single governing body accountable for both control and management and is headed by the President Directeur General (essentially the CEO), while the former possesses a supervisory board which selects and supervises the management board.

The German model relies on the terms set out in the German Corporate Governance Code, which disciplines the governance conduct of listed firms and suggests that non-listed firms abide to it as well, even though they are not obliged to do so. Just like all other corporate governance codes, its objective is to amplify transparency and hence generate trust in investors on firms stakeholders alike. Listed German companies adopt the two-tier system. Shareholders cast votes for directors of the supervisory board which are chosen accordingly at the general meeting. In turn, its the supervisory board duty to select and supervise the management board and is actively engaged in important firm decisions. But German firms also have the possibility of adopting the European Company (SE) regulation, enabling them to to use the one-tier system and hence leaving all power to the board of directors. As both supervisory and management boards are continuously interacting it seems to be that the two models are converging. Apart from obligatory rules, enforced by the comply or explain philosophy, other non mandatory suggestions are provide which increase the codes versatility.

Finally, the Italian model is governed by the Italian committee of Corporate Governance through a code known as the “ Codice di Autodisciplina”. As listed companies can decide whether to adopt the code or not, it is visioned as one of the most flexible codes in the European Union. The comply or explain rule is applied throughout the code, so, in other words, firms can bypass the provisions if they explain the reason behind their choice. However, the 1998 “legge Draghi” specifies some rules which must be observed by Italian listed firms. They are as follows :

- New supervisory and intervention powers of Consob (Italian Securities and Investments Board) over the control body
- New position of the control body (collegio sindacale), who overwatches directors’ operations
- Division between auditing (independent auditing firm or auditor) and business control (internal control body)

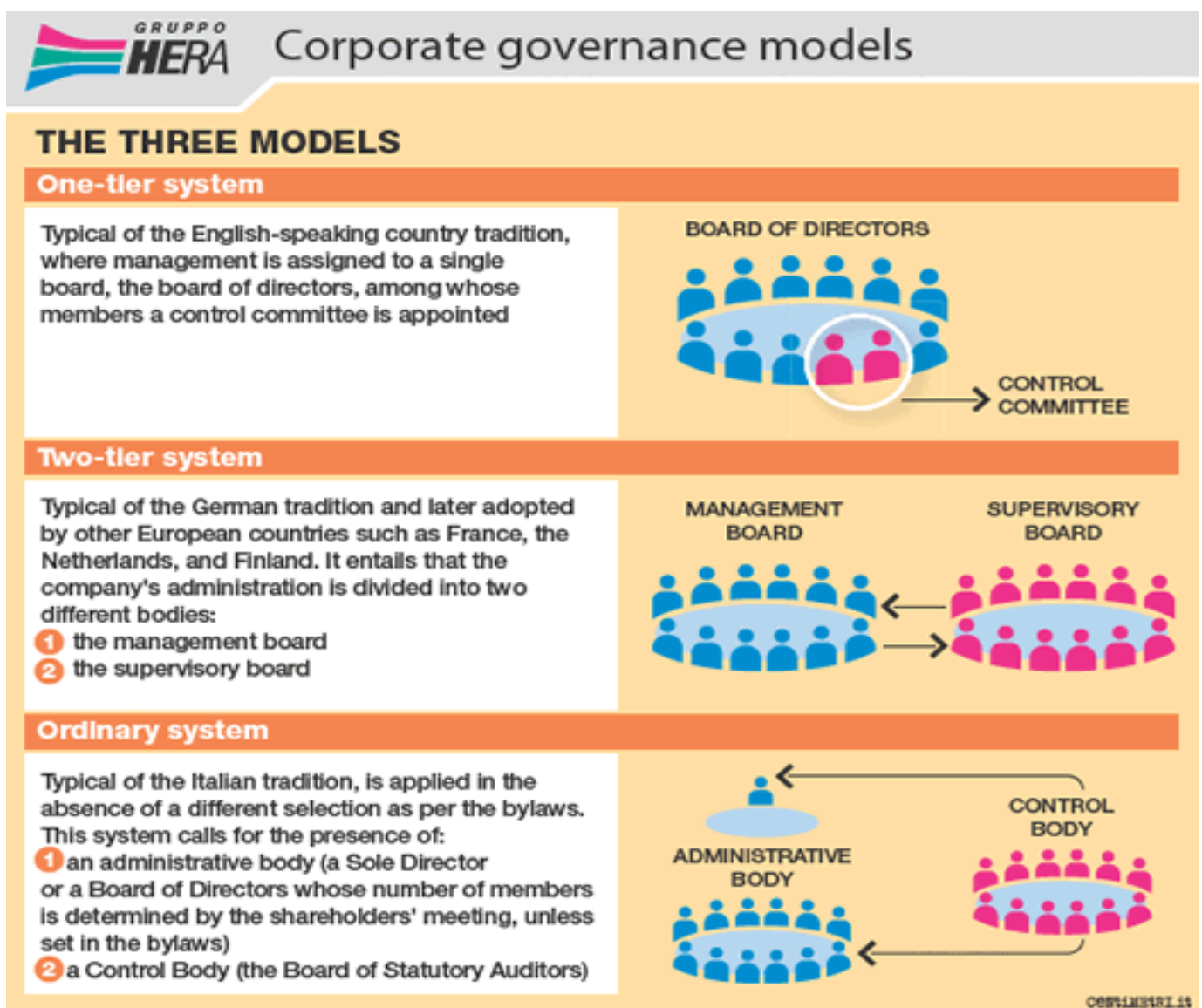
Three distinct systems are available for Italian firms; one-tier, two-tier and traditional. In the latter shareholders have the power to nominate all the controlling and governing bodies and decisions are made by board of directors, and both financial and legal control are left to the board of auditors. The Italian model also permits the use of the one-tier model. If this system is chosen the board of

directors is appointed by the shareholders and of managing the company and selecting the auditing committee. The two-tier model instead works just as the German one, allowing for a supervisory board that selects and supervises the management board. Also, during the shareholders meeting, an external auditor is selected and is entrusted with the firms financial auditing processes.

Figure 2.2 below allows us to visualize the differences between the models and observe how they differ.

Figure 2.2

The models at a glance



Source : Gruppo Hera

Even though various types of corporate governance are observable across Europe they all use the “Principles of Corporate Governance” produced by the OECD as a general basic reference point. A study produced by Ernest and Young in 2012 declared that firms are evermore concerned with having a good international corporate governance structure as globalization is becoming re and more relevant. Weak corporate governance standards have caused much dissent throughout the world as they are considered to be a determinant of the financial crises. Furthermore, they have often allowed top management to walk away from the firm with rich bonuses while leaving it in drastic conditions.

Now that we have discussed the fundamentals of corporate governance and capital markets we will apply the above mentioned themes to real life situations. In the next chapter we will see how these theories relate to the automotive industry and find out possible implications for this sector.

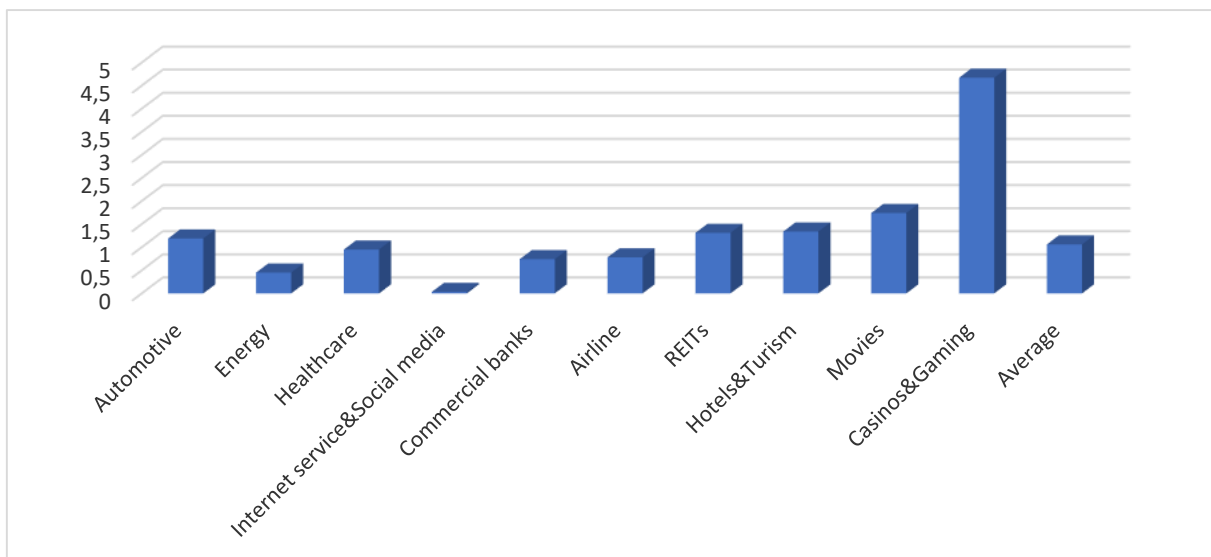
Third Chapter – How automotive companies use capital markets

3.1 Automotive companies decisions on financing

The turnover generated by the automotive sector represents 7 per cent of the EU's total GDP. Since it is a huge economic sector and is highly influenced by globalization, capital markets presence is vital for the evolution of this sector. We have shown how companies can decide whether to finance themselves through debt or equity and we have also discussed how firms capital structures do effectively matter, as they have consequences both on the corporations value and on its corporate governance. Each firm adopts a specific debt to equity ratio, which is highly influenced by the market sector to which they belong. Furthermore, we have also discussed that other factors influence companies capital structures. They are : market to book ratio, size, profitability and tangible assets. In the graph below we can see a sample of some industries, including automotive, debt to equity ratio. A study produced by CSIMarkets on 105 different industry categories, two of which have been excluded for statistical purposes, shows that the average ratio is 1.06, or that, on average, firms possess 1.06 times of equity in debt.

Figure 3.1

Average Debt ratio throughout sectors

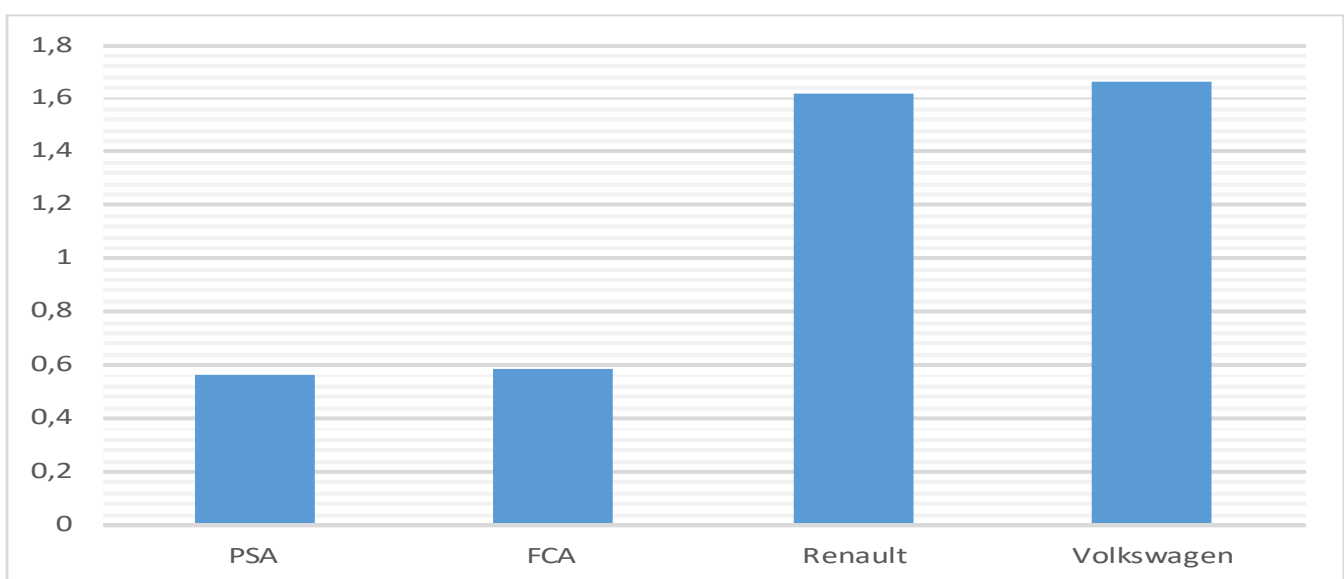


Source : CSIMarkets

This graph contains a sample of the industries surveyed. We can see how the automotive industry is fairly close to average. However, numerous industries lay far from the average. Lets consider, for example, the casino industry with a 4.67 ratio and the internet services and social media with a 0.03 ratio. We can assume that casinos have a high value of long term assets, ranging from buildings to facilities. It would be easy for them to secure debt as these assets can be given as collateral were there to be any case of bankruptcy. Furthermore, this industry is notoriously known for dealing large sums of money on a daily basis, Hence it would be convenient for casinos to finance themselves through debt which can then be paid off thanks to their revenue. On the contrary, internet services and social media do not possess ample tangible assets and hence could find it extremely hard to secure debt. Also, in this industry costs are mainly fixed, hence debt would only be necessary if extraordinary expenses arised. We can understand from this brief analysis that the capital structure of a firm depends on a variety of factors including its own ability to finance itself, the volatility of the industry and the amount of capital needed to keep the business running.

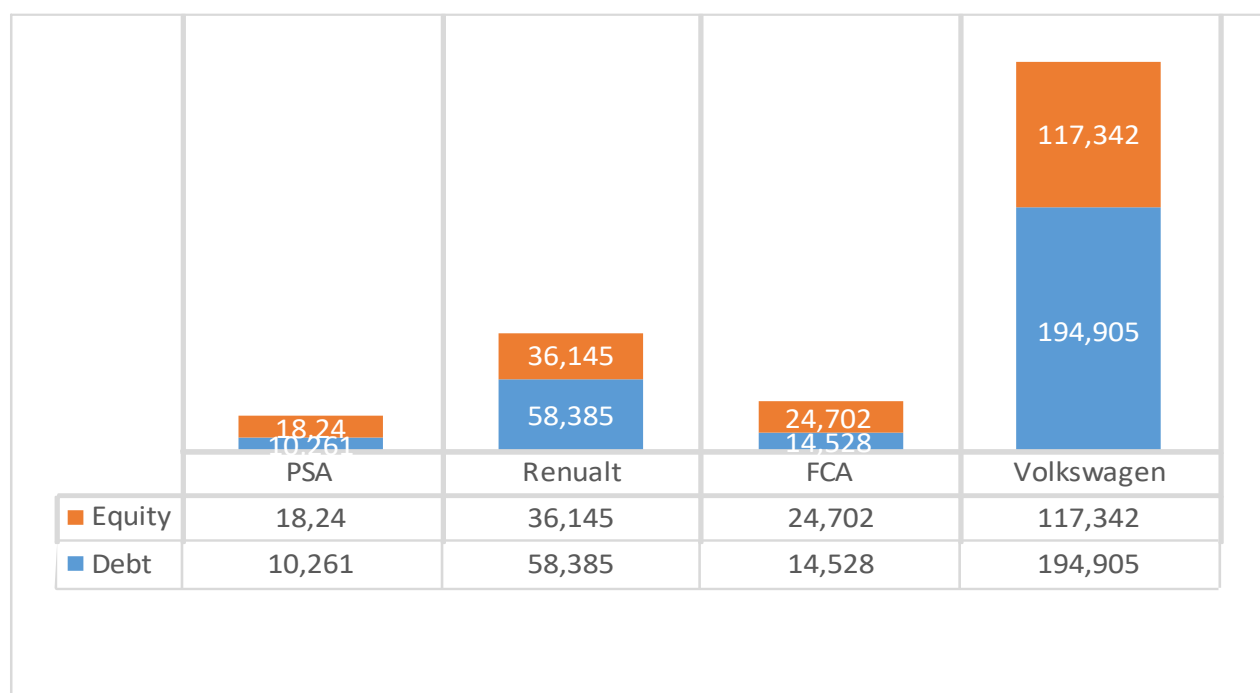
The automotive industry possess a well balanced combination of fixed and variable costs. The sector is characterized by many long term assets, such as factories, warehouses and diverse machinery. Likewise though it also has extremely high costs which are even more acute when new models are being invented and are put on the market for the first time. We will take four European auto producers into consideration, Fiat (FCA), Renault, Volkswagen and Peugeot. We will now proceed to analyze more in depth the financial structure of these firms.

Figure 3.2 The debt ratio of our four firms



Source : Personal elaboration from company statements

Figure 3.3 Total value of debt and equity of our four firms



Source : Personal elaboration from company statements

At a quick glance of these graphs we can see how these firms financial structure and use of financial markets varies. We can notice how Renault and Volkswagen lie above the automotive ratio average and that Peugeot and FCA lie below. Volkswagen is the automotive firm which relies the most on debt financing and through recent years has maintained its debt to equity ratio more or less stable. Moreover, we know that Volkswagen is has both the highest amount of debt and simultaneously the highest number of cars sold throughout the world, totaling 10.83 million units sold in 2018. On the other hand FCA group, the second highest selling company in our analysis with 4.8 million units sold in the same year, has considerably less debt, both in absolute terms and in percentage relative to equity. Nevertheless, Standards and Poors ratings assign a fairly high BBB+ to Volkswagen while only a BB+ to FCA. We can conclude that, at least in the eyes of analysts, Volkswagen is a much more financially stable firm which is able to support such high leverage without particular problems while FCA cannot be considered in the same way. Passing on to Renault and PSA we notice that the numbers of units sold are nearly equal, 3.884 million to 3.877 million. Even so, their capital structures are very different. Even so Standard and Poors has assigned Renault with a slightly higher rating, BBB, against PSA BBB- rating. Standard and Poor declared

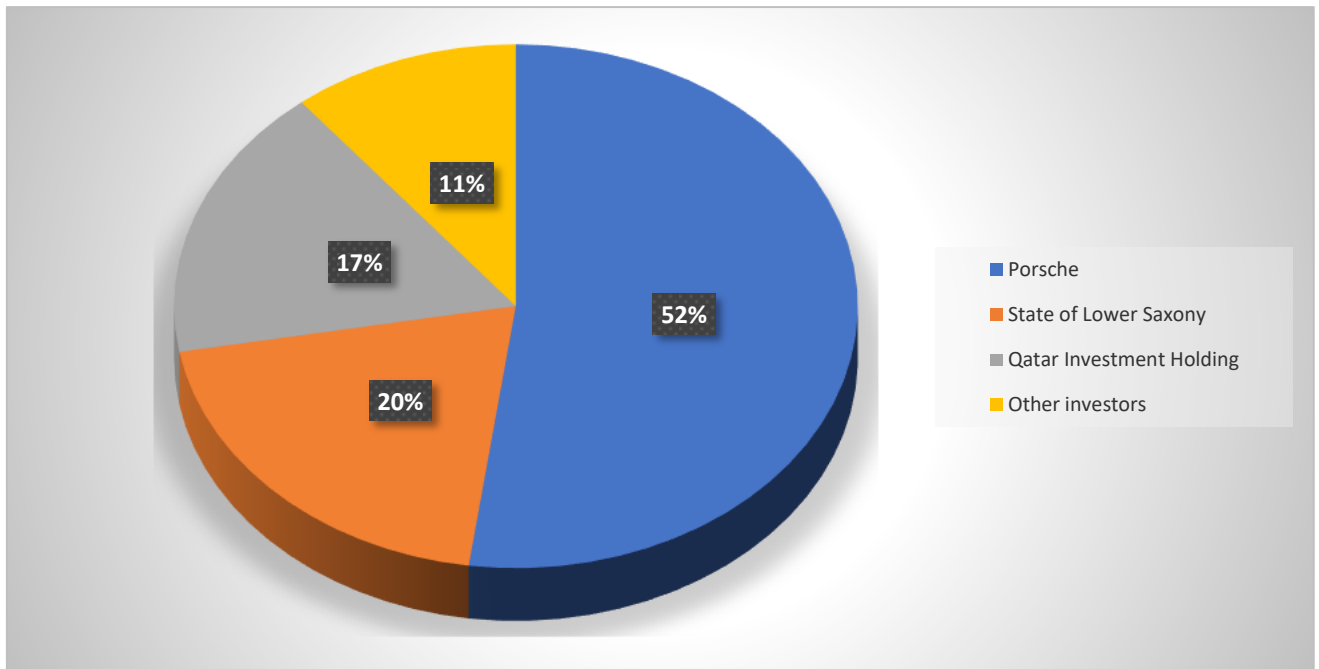
that they had to downgrade Renault and upgrade PSA at the end of 2018 as PSA sales increased slightly while Renaults declined. Furthermore, they assume that these changes happened between the two firms, as the differences were recorded on the mainly on the European market were the two companies are relevant competitors.

These diverse debt to equity ratios and financial evaluations will necessarily bring top management to behave in different ways. The reason why top management will decide to follow a certain type of conduct is likely due to pressure deriving from debt-holders and/or shareholders. On one side, shareholders demand that management persue value creation and pay out dividends when possible. Infact, they essentially ask that management pay debt-holders the bare minimum and increase the firms leverage in order to consequentially increase the companies market value. On the other side, debt-holders solely ask that the company generate the best possible returns in order to avoid the bankruptcy risk, regardless of the movement of and implications for company market value. Hence, let us now see how ownership structure is formed among these different auto producers.

3.2 The automotive industry ownership structure

The Volkswagen Fundamentals

Figure 3.4 The Volkswagen ownership structure



Source : Volkswagen Annual Report 2018

Volkswagens ownership history is a very particular one. Founded in 1937 due to Adolf Hitler's will to produce a "Volks-wagen", meaning "a car for the people", it has since then changed radically. The original task was assigned to Ferdinand Porsche, a German engineer father of the renowned Porsche company. It was born a state corporation but subsequently became a stock company in 1960. In order to regulate the privatization of the firm the German government enforced the "VW-Act", a group of laws which were intended not only to supervise the change in the company's ownership structure but also to protect the interests of the State of Lower Saxony as the main shareholder. In fact, major points in the act were :

- Banks are obliged to receive permission for proxy voting from every shareholder before each general assembly of shareholders
- If a shareholder were to acquire shares in excess of twenty percent these new shares would not

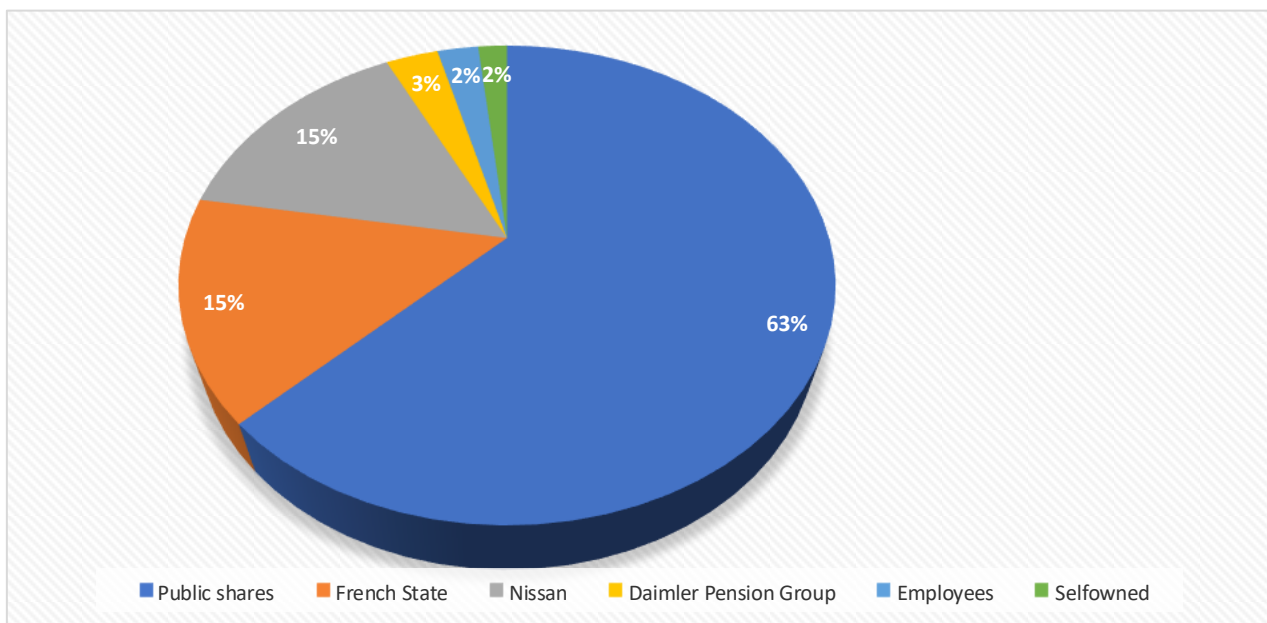
grant further voting rights.

° Two thirds majority is required from the supervisory board in order to relocate or make decisions on existing or new plants.

Although adopted for many years the Act could not last forever as it restricts the free flow of capital. Hence, in 2007 the EU court concluded that the VW-Act was illegal and declared it null. This has allowed Porsche to obtain a majority share of the company, 52.2 percent, leaving the State of Lower Saxony with a relevant, although minority, share of 20 percent.

The Renault Fundamentals

Figure 3.5 Renault ownership structure



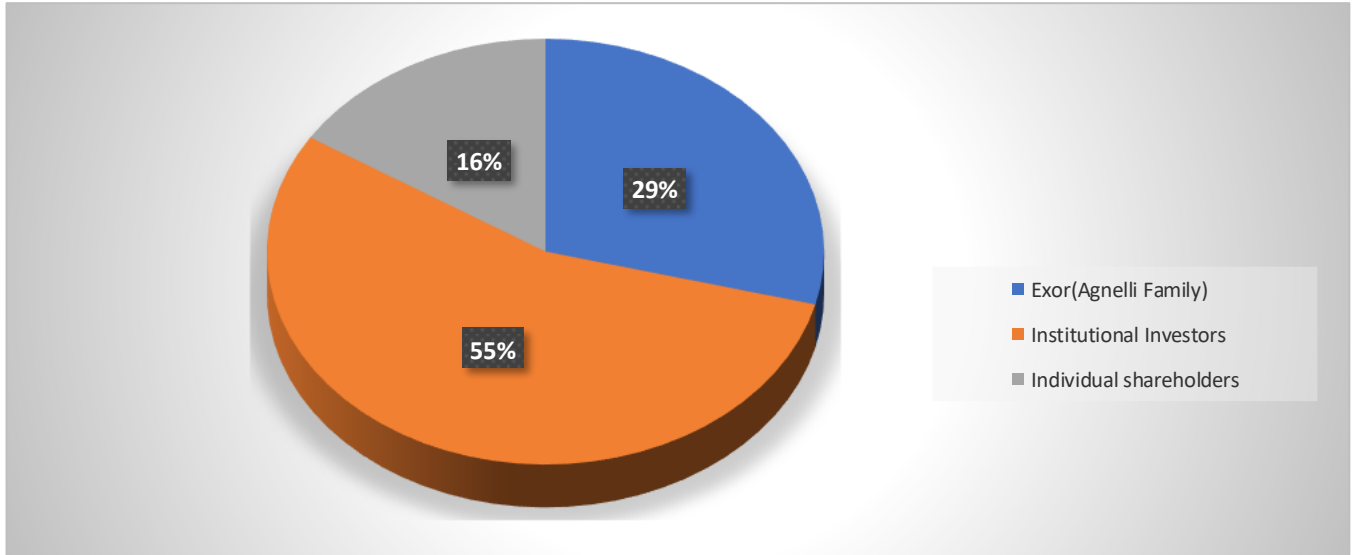
Source : Renault Annual Report 2018

Also Renault has changed significantly throughout the decades. Founded in 1899 by the Renault family, it became a state enterprise in the years following World War Two. This status prevented it from filing for bankruptcy between 1980 and 1986, years of serious stress and crisis for the firm. Today, the French state is still the leading shareholder with a 15 percent stake. Although Nissan owns the same percentage the French government never allowed for them to obtain voting rights. Furthermore, it is interesting to notice how just over 60 percent of Renaults shares are owned by

individual investors.

The FCA Fundamentals

Figure 3.6 FCA ownership structure

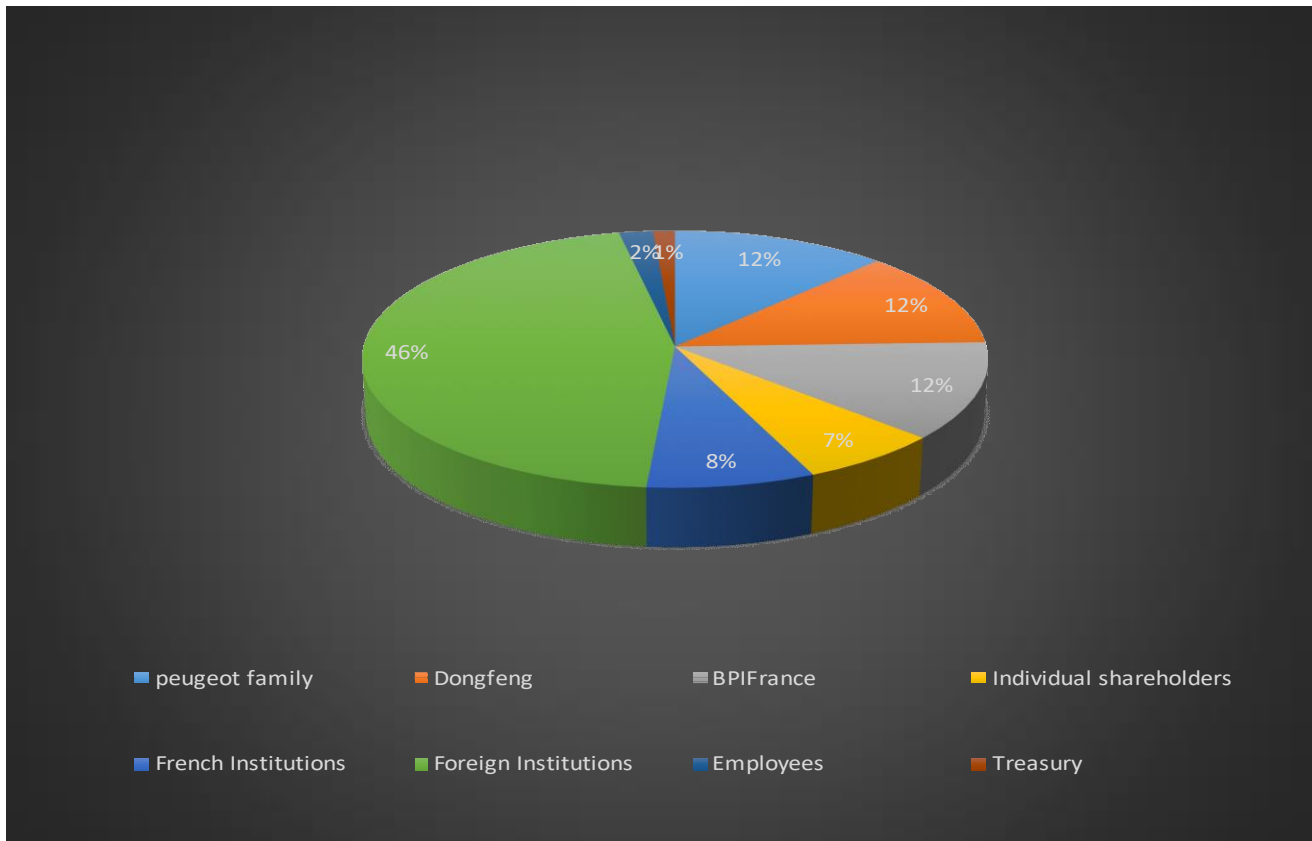


Source : FCA Annual Report 2018

Fiat was founded in 1899 by Giovanni Agnelli in Turin. In 1966 his nephew, also named Giovanni but better known as Gianni, took the lead of the business which is considered as an emblem of family driven companies. The model adopted by FIAT was subsequently replicated by a large number of firms born in Italy. FIAT became FCA in 2014, when it merged with the Chrysler group. The new company is tax based in Britain but follows Dutch jurisdiction. The Agnelli family, through Exor corporation, still owns the majority of the shares with 29 percent. The rest are divided between institutional investors and individual shareholders.

Figure 3.7

PSA ownership structure



Source : PSA Annual Report 2018

Similarly to FIAT, Peugeot started out as a family driven company. Founded in Paris in 1896 the firm's first merger included Citroen and was completed in 1976. In more recent years, it has created a strong joint venture with Chinese autoproducer Dongfeng Motor Corporation. The objective of this venture was to strengthen PSA's position in Asia through the creation of a common platform for small car production. The capital structure of the firm has although been affected by this decision as to date, both the Peugeot and the Dongfeng Motor Corporation possess the same percentage of share, 12.2 percent, and of voting rights, 19.5 percent. BPIFrance also has a relevant stake in the company through BPIFrance, a French sovereign wealth fund. Even though it possesses the same amount of shares as the other two main shareholders it is only entitled to 9.75 percent of voting rights. This allows the public sector to still be one of the major shareholders in the firm.

3.3 How corporate governance is affected by capital markets

Both the amount of debt possessed by a firm and its ownership composition are of fundamental importance in a companies governance. Like we mentioned previously, they will directly influence decisions made by managers. Overall firm value is also affected by the ownership structure as, when major parts of ownership are controlled by single entities, they will be able to augment the monitoring activities and enhance the companies efficiency. Hence the corporations total value will rise. We will now discuss the four firms corporate governance models and observe how they are influenced by debt holders and shareholders concerns.

FIAT possess two independent boards which regulate control and management. The Board of Statutory Auditors and the Board of Directors. The latter is concerned with managerial decisions. It is invested with large managerial decision making power and decides on the benchmarks to be adopted for the internal control structure and risk management policies. In fact, it has to agree to and supervise any risky or important projects or transactions proposed by top management. The former instead is concerned with the company's observance of the related By-laws and laws as well as ensuring that the company complies to the Governance code it adhered to. FIATs corporate governance directives have been largely influenced by the company's decades of family ownership. For instance, even though in recent times it has declined, many employees and workers felt a sense of belonging in the family driven company. We must consider that FIAT can be considered as one of the pioneers of the Italian economy and hence its workers, constantly led by the same family, started to feel involved in the company. Furthermore the firm has managed throughout the decades to find passive investors, who accepted not having major control over the firm. This enabled the family to both raise capital and not lose control over their business. Hence, we should not consider FIATs corporate governance solely from a capitalistic perspective. Even so, FIAT first and FCA later have been considered in the last decade to be a relatively unstable company, as we can see from its Standard and Poor rating. Although Marchionne, FCAs former CEO and creator of the merger between Chrysler and FIAT, dramatically reduced the firms debt and considerably improved its profits the firm is still seen to be in a precarious situation. Marchionne's successor, Mike Manley, has been in talks with Renault in the past months to try and secure a merger. Allegedly the merger was not completed due to the interference of the French government. This merger, although certainly positive for the firms cost reduction objectives, might cause many layoffs both in France and Italy, and is considered to be the reason way the French government refused to accept the deal.

The two-tier model is adopted by PSA and so possesses a Managing Board and a Supervisory Board. From when its current CEO Carlos Tavares was appointed in 2014 the firm has recovered from serious losses and has constantly seen profit each year. The alliance with the Chinese auto producer Dongfeng Motor Corporation has been essential as it allowed PSA to expand in the Asian continent. Regarding PSA corporate governance model, Carlos Tavares and PSA consider Corporate Social Responsibility to be important in a good corporate governance model. In fact the environmental and social responsibilities policies pursued by the companies CEO are expressed through three essential pillars :

- ° A commitment to sustainable mobility, to reduce the environmental impacts of vehicle production and use.
- ° A social commitment to the regions in which it operates, to create an ecosystem that fosters employment and the integration of local economic players.
- ° A social commitment, with the implementation of innovative and needs adapted practices enabling employees to enhance and make full use of all their talent.

Volkswagen governance system is also composed by two Boards, a Supervisory Board and a Board of management, as predicted by the German Corporate Governance code. Volkswagen has changed its ownership thoroughly through time and this has had effects on managements main objectives. Since Porsche became the main shareholder it unequivocally became a private corporation rather than a state owned one. Later on we will observe the implications this change had on agency problems regarding the firm focusing on the 2015 emissions scandal. Another important side of VW governance policies is its strong relationship with the companies blue-collar workers. Top management and labor unions have strong ties between them and the latter have been able to shape top managements decisions in some occasions. For instance, when Volkswagen was facing hard times in 1993 , Ferdinand Piech was vigorously influenced by workers unions. In his plan to uplift VW one of the most relevant features was to reduce workers hours rather than fire thousands of them.

A Board of Directors, Management Committee and Executive committee form Renaults corporate governance system. Differently from VW Renault has experienced feuds with labor unions during

the crisis suffered in the 1980s hence causing the counterparties to move further apart. Moreover, during the decades the French state began leaving the companies policy-making processes, granting higher independence to managers. Nevertheless, in recent times, just as the Peugeot Group, Renault puts appreciable effort in CSR matters and is frequently ranked among the best in Europe thanks to its environmental and social initiatives. Considering capital markets instead Renault finds itself in a particular situation. As we have seen Renault possess a relatively high amount of leverage which burdens the firm and has a wide ownership structure which includes a partnership with Nissan. As a matter of fact Renault possesses around 44 percent of Nissan, and relative voting rights, while Nissan only owns 15 percent of non voting shares in Renault. Although it was meant to be a partnership it is clear that one party has more influence than another. Infact, in recent times Nissan has been calling for a change in this ownership structure as relevant corporate governance issues between the firms have emerged. Nissan is indeed attempting to change its own governance system to better face corporate problems in the future but Renault is currently imposing a veto on this change. As a two thirds majority is needed for Nissan to change its policies, the proposal cant be accepted until Renault agrees to the terms or the financial structure is changed.

3.4 Automotive industry related agency problems

Just as the vast majority of industries also the automotive one is prone to several types of agency problems. Since the industry is so large there are many variable and different situations in which these problems could present themselves. We will analyze what are considered to be the most common in this industry and see some relevant examples of such problems which occurred in the last decade.

As we have previously mentioned a high separation in ownership can create various agency problems for a firm, such as Renault, which is owned for around 60 percent by individual investors. When such a diverse shareholder base is present in a firm's ownership structure conflicts between different shareholders' interests and managerial problems are more easily found. Furthermore, a study produced by Denis, Sarin and Denis (1997), also stated that managers will likely take advantage of the situation by accepting entrenching investments and work in favor of their paycheck and prestige. This conduct can be traced back to the difficulties in supervising management behaviour due to the free rider problem, where the cost of monitoring is superior to the benefit and hence won't take place. Even if it allegedly lowers companies' value, differentiated ownership does still exist in several firms, as Renault. Other than individual investors the main shareholder in the Renault company is the French government. Clearly it has different goals respect to individual investors and aims at social and long term targets rather than short term profits, which are generally pursued by individual investors. Hence, the French representatives will sometimes promote some initiatives that, although maybe not economically convenient, result in favourable outcomes for the nation. For instance, it tries to keep production inside the country's borders even though from an economic perspective it might be inconvenient. For this reason the government generally subsidizes large economic sectors, making sure that work places are not lost due to outsourcing. This happened in 2009 when six billion euros were granted to Renault and PSA as subsidy for the firms, ensuring that jobs wouldn't be lost by the two firms' French workers, and moreover the measure also benefited French auto components producers. Clearly, these objectives are not aligned with individual shareholders' interests. So management faces a choice between satisfying one of two opposed views. Inevitably one of the two will remain dissatisfied. Another recent example of this dualism is represented by the Renault-FCA merger previously mentioned. Apart from the complex governance issues, a more practical problem faces Renault's shareholders and management. The deal was essentially blocked by the French government because of its concerns regarding the work places which would be lost in France. These concerns might be real

but, on the other hand, the merger is said to be potentially extremely beneficial to both the firms, as it would create the third largest automotive producer in the world. This would supposedly mean big gains for individual investors. For the moment the deal has been blocked but it has not been completely abandoned yet. Meanwhile, FCA through its new CEO Mike Manley, initiated talks with the PSA group to see whether they would be interested in a merger. Although discussions have just started it is regarded as a concrete alternative to the FCA- Renault merger. Even so, we must take into consideration that PSA too presents a diverse ownership. It is composed by institutions, the Peugeot family, Dongfeng Motors and the French state. This might lead to harder negotiations.

Another common agency problem when talking about large companies is what is known as empire building. It is really hard, if not impossible, to determine whether management is undertaking an M&A operation for the actual good health of the company or for the personal success of the manager. This was the case with Sergio Marchionne, when he decided to pair up with Chrysler and later on with other projects, but it is now clear that the operations undertaken by him were positive for the company, as he managed to save FIAT and put the company on the right track again. These concerns may also involve current FCA CEO Mike Manley and his intention to merge FCA again. Clearly it is not possible to know whether the firm will benefit from such an operation, or indeed if it will happen at all, but for sure Manley would gain international prestige and visibility from such an operation.

Conflict of interest is also another major agency problem, and sometimes presents itself together with empire building, as was the case with VW and Ferdinand Piech, the nephew of VW's founder and former head of the supervisory board. A paper written by Elson, Ferrere and Goossen in 2015 shows us how Piech was mainly interested in empire building rather than value creation. As a matter of fact, his shares controlling rights were far superior to his economic share of the cashflow coming from the company. Furthermore, he had never hidden his desire to create the biggest and most powerful automotive corporation in the world. His conflict of interest arose from being both one of the major shareholders, from his family's shares, and an important board member. This was one cause, even though not the only one, that brought VW to suffer the emissions scandal. From the paper we can deduce that the scandal was also caused by the German states' active presence in the Boards and the companies' particular Board structure, which all led to management being overlooked. Board members have always sustained that they were not informed about the emissions cheat until just days before the news was given to the general public, so inferring that only few employees were responsible for the misconduct. When these scandals occur minority shareholders

are the ones who suffer the most and furthermore are in no condition to influence or monitor management. As of 2018, Reuters declares that this scandal has cost VW the incredible amount of 27.4 billion euros only for fines and penalties. Furthermore, shareholders have sued the company for 9.2 billion euros due to the stock value crash that occurred just days after the scandal. The VW shares lost 37 percent of their value in the days following the incident.

In January 2019 FCA was also condemned with a total of 800 million euro fines due to emissions scandals. This also caused a drop in FCA stock of around 16 percent when the scandal was revealed in 2017. It is clear to see that such industry specific agency issues harm the firms shareholders, especially minority and individual investors.

Conclusion

The automotive industry is highly dependent on external financing for the growth and maintenance of the business. Even so, capital markets are a two sided medal. On one hand they are crucial for staying competitive in our modern, global and fast moving economy, but on the other hand when used capital markets unavoidably raise different problems. In small firms agency issues and costs are less notable, as top management is generally also the dominant shareholder. However in the automotive industry, and more in general in large firms which have market capital in the order of billions, this is much less likely to happen.

Equity and debt alike have relevant consequences on a company. If a firm decides to finance itself mainly through debt, its financial leverage will increase, but, as leverage increases, issues related to risk perception from investors start to arise. We have discussed the debt equity tradeoff, and how debt will at first be preferred over equity. However the amount of debt must remain within the firms capabilities, if not the company will most likely have to deal with agency and governance problems. Above this, we have seen how the pecking order theory presents us with a preference list for firms financing, and how it should develop. We concluded that companies should desire to remain at the top of the ladder, as the higher positions mean that the company is in good economic health.

As a matter of fact, the possibility of recurring to sources of internal company financing influences the firms capital structure formation. We can look at VW and FCA as an example. Although VW has undertaken a much larger amount of debt than FCA its credit ratings are much better, suggesting that VW has a higher chance of paying back the debt. The debt to equity ratio each firm decides to maintain is also influenced by the environment each company works in. As we have seen, Renault and VW present around the same debt to equity ratio but nevertheless have two distinct credit ratings. This difference, with all the consequences that come with it, is also given by the context in of the two firms. The German position of VW is seen as an advantage as the German economy considered to be the strongest in Europe.

Likewise, equity will too have an impact on a firms governance. We have analyzed diverse ownership structures and seen how these differences will lead to differences also in the corporate governance directives. For instance, we have discussed VolksWagen history and showed how its

main goal changed throughout time. The reason why it was founded was to create a car for the general public, because in that era such a car did not exist. Today its objective has changed and, as a private corporation, is clearly aimed at making profits.

Due to agency costs, and hence earnings for shareholders, the ownership structure also influences how much a corporation is worth. Capital markets relentlessly keep firms under pressure. We have seen this both throw scandals that have thrashed equity value and through ratings. We have observed how, for instance in FCA, even a relatively small amount of debt can put great pressure on the firm. Shareholders and top management are faced with a tough choice, whether to issue equity or debt.

Hence, we can say that automotive firms are not immune to this dilemma and that an actual tradeoff is present. Corporations will decide to adopt a debt/equity ratio that they believe to fit best with their current capital structure, their future predictions and economic forecasts. Moreover, they must choose whether to keep their current ownership structure or if to resort again to capital markets, inevitably changing their nature.

References

- Allen F., Brealy R. A., Myers S. C., 2011, “Principles of corporate finance” McGrawHill/Irwin, New York.
- Beatty R. P., Ritter J. R., 1986, “Investment banking, reputation, and the underpricing of Initial Public Offerings”, *Journal of Financial Economics* 15, pp. 213-232.
- Bolkestein F., 18 October 2004, speech during the European Corporate Governance Forum to promote convergence in Europe (http://europa.eu/rapid/press-release_IP-04-1241_en.htm?locale=en).
- Casson J., 2013, “A review of the ethical aspects of corporate governance regulation and guidance in the EU”, pp. 16-17, Institute of Business Ethics.
- Chang, Shih-Chung & Guo, Guixia. (2018). Payoff Structure, External Corporate Governance and Financing Decision of Firms. SSRN Electronic Journal. 10.2139/ssrn.3269505.
- Connor G., Woo M., 2004, “An introduction to Hedge Funds”, International Asset Management, The London School of Economics and Political Sciences.
- Denis D. J., Denis D. K., Sarin A., 1997, “Agency Problems, Equity Ownership, and Corporate Diversification”, *The Journal of Finance*, Vol. 52, No. 1, pp. 135-160.
- Easterbrook F. H., 1984, “Two agency-cost explanations of dividends”, *American Economic Review*, 74, pp. 650-659.
- Elson C. , Ferrere C. , Goosen N. , “ The bug at Volkswagen : A lesson in co-determination, ownership and board structure “
- Ernst and Young , 2012, Panorama des pratiques de gouvernance de sociétés cotées Françaises.
- European Commission, 2002, The Report of the High Level Group of Company Law Experts on a Modern Regulatory Framework for Company Law in Europe.
- Fama E. F., French K. R., 2002, “Testing trade-off and pecking order predictions about dividends and debt”, *The review of financial studies*, Vol. 15, No. 1, pp. 1-33.
- Fiori G., Tiscini R., 2005, “Regolamentazione contabile e trasparenza dell’informativa aziendale”, Franco Angeli
- Hicks J., 1939, “Value and Capital”, Oxford University Press.
- Ibbotson R.G., 1975, “Price performance of common stock new issues”, *Journal of Financial Economics* 3, pp. 235-272.
- Jensen M. C., 1986, “Agency costs of free cash flow, corporate finance, and takeovers”, *American Economic Review*, 76, pp. 323-329.

Jensen M. C., Meckling W. H., 1976, "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics* 3, pp. 305-360.

Jerzemowska M., 2006, *Acta Oeconomica Pragensia*, vol. 2006, issue 3, pp. 9-17.

John T. A., Kose J., 1993, "Top-Management Compensation and Capital Structure", *The Journal of Finance*, Vol. 48, No. 3, pp. 949-974.

Jungmann C. , 2009, " The dualism of one-tier and two tier board systems in Europe "

Jurgens U., Lung Y., Volpato G., Frigant V., "The arrival of shareholder value in the European auto industry a case study comparison of four car makers", in "Competition & Change", 2002, Vol. 6(1), pp. 61 to 80, Routledge.

Kral, Pavel & Tripes, Stanislav & Pirozek, Petr & Pudil, Pavel. (2012). Two-Dimensional Governance Matrix: A Framework to Evaluate Organizational Governance.

Lazarides, Themistokles G. and Pitoska, Electra, 2009, *Corporate Governance and Debt to Equity Ratio*

Mello A. S., Parsons J. E., 1998, "Going public and the ownership structure of the firm", *Journal of Financial Economics* 49, pp. 79-109.

Miller M. H., 1988, "The Modigliani Miller Propositions after 30 years", *The Journal of Economic Perspectives*, Vol. 2, No. 4, pp. 99-120.

Rajan R. G., Zingales L., 1995, "What do we know about capital structure? Some evidence from international data", *Journal of Finance* 50, pp. 1421-1460.

Sleem, Kevin, 2010, "A Theoretical Role for Government in the Financial Markets"

Stoughton N. M., J. Zechner, 1998, "IPO-mechanisms, monitoring and ownership structure", *Journal of Financial Economics* 49, pp. 45-77.

Tully S., September 1993, "The real key to creating wealth", *Fortune Magazine*

Volpato G., 1983, "corporate governance at Fiat Spa "

Weil, Gotshal & Mangers, 2002, *Comparative Study of the Corporate Governance Codes relevant to the European Union and its Member States*.

Zingales L., 1995, "Insider ownership and the decision to go public", *Review of Economic Studies* 62, pp. 425-448.

Web references

ABCs of Banking Banks Thrifts and Credit Unions. (2019). Retrieved 27 September 2019, from <https://portal.ct.gov/DOB/Consumer/Consumer-Education/ABCs-of-Banking--Banks-Thrifts-and-Credit-Unions>

Alvino, F., Liguori, F., Alvino, F., & Liguori, F. (2019). Corporate Governance 2019 | Laws and Regulations | Italy | ICLG. Retrieved 27 September 2019, from <https://iclg.com/practice-areas/corporate-governance-laws-and-regulations/italy>

Annual Report 2018 FCA

https://www.fcagroup.com/it-IT/investors/financial_regulatory/financial_reports/files/FCA_NV_2018_Annual_Report.pdf

Assonime Report

http://www.assonime.it/_layouts/15/Assonime.CustomAction/GetPdfToUrl.aspx?PathPdf=http%3A%2F%2Fwww.assonime.it/attivita-editoriale/studi/Documents/ABSTRACT%20NS%202018%20DEF.pdf

Bain private Equity report

https://www.bain.com/contentassets/875a49e26e9c4775942ec5b86084df0a/bain_report_private_equity_report_2019.pdf

Capital Markets Fact Book, 2019 - Capital Markets Fact Book, 2019 - SIFMA. (2019). Retrieved 27 September 2019, from <https://www.sifma.org/resources/research/fact-book/>

Che cos'è l'AIM Italia. (2019). Retrieved 27 September 2019, from <https://quifinanza.it/pmi/che-cos-e-laim-italia/133803/>

Code - dcgk - english. (2019). Retrieved 27 September 2019, from <https://www.dcgk.de/en/code.html>

Codice di autodisciplina

<https://www.borsaitaliana.it/comitato-corporate-governance/codice/2018clean.pdf>

Corporate Social Responsibility & Responsible Business Conduct - Internal Market, Industry, Entrepreneurship and SMEs - European Commission. (2019). Retrieved 27 September 2019, from https://ec.europa.eu/growth/industry/corporate-social-responsibility_en

Debt to Equity Ratio Screening, Rankings of best performing Companies, Sectors, Industries, Industry ranking Page no. 7. (2019). Retrieved 27 September 2019, from <https://csimarket.com/screening/index.php?s=de&pageI=7&fis=#tableind>

Debt to Equity Ratio Screening, Rankings of best performing Companies, Sectors, Industries, Industry ranking Page no. 8. (2019). Retrieved 27 September 2019, from <https://csimarket.com/screening/index.php?s=de&pageI=8&fis=#tableind>

Diesel emission allegations just lost Fiat \$2.3bn. (2019). Retrieved 27 September 2019, from <https://www.independent.co.uk/news/business/news/flat-diesel-emissions-scandal-accusation-a7524296.html>

Establishing viable capital markets. (2019). Retrieved 27 September 2019, from <https://www.bis.org/publ/cgfs62.htm>

EUR-Lex - 52012DC0740 - EN - EUR-Lex. (2019). Retrieved 27 September 2019, from <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52012DC0740>

Everything you need to know about bank capital. (2019). Retrieved 27 September 2019, from <https://www.vox.com/2014/4/14/18076734/bank-capital>

Facts about the Automobile Industry | European Automobile Manufacturers' Association (ACEA). (2019). Retrieved 27 September 2019, from <https://www.acea.be/automobile-industry/facts-about-the-industry>

FCA Settles With U.S. Regulators Over Its Own "Dieselgate". (2019). Retrieved 27 September 2019, from <https://www.forbes.com/sites/davidkiley5/2019/01/10/fca-settles-with-u-s-regulators-over-its-own-dieselgate/#38515c357557>

FCA US reaches settlements on diesel emissions at estimated cost of \$800M. (2019). Retrieved 27 September 2019, from <https://www.greencarcongress.com/2019/01/20180110-fca.html>

FCHA.MI - Fiat Chrysler Automobiles NV Profile | Reuters. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/companies/FCHA.MI>

FIAT CHRYSLER AUTOMOBILES : Shareholders Board Members Managers and Company Profile | NL0010877643 | MarketScreener. (2019). Retrieved 27 September 2019, from <https://www.marketscreener.com/FIAT-CHRYSLER-AUTOMOBILES-18206341/company/>

Fiat Chrysler Automobiles Debt to Equity Ratio 2014-2019 | FCAU. (2019). Retrieved 27 September 2019, from <https://www.macrotrends.net/stocks/charts/FCAU/fiat-chrysler-automobiles/debt-equity-ratio>

Fiat Chrysler cuts debt by more than expected. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/article/us-fiatchrysler-results/fiat-chrysler-cuts-debt-by-more-than-expected-idUSKBN1HX1OG>

Girard, P., Cahen, L., & Girard, P. (2019). Corporate Governance 2019 | France | ICLG. Retrieved 27 September 2019, from <https://iclg.com/practice-areas/corporate-governance-laws-and-regulations/france>

International debt capital market value by currency 2019 | Statista. (2019). Retrieved 27 September 2019, from <https://www.statista.com/statistics/247300/transaction-volume-on-the-global-bond-market-by-currency/>

International debt capital market value by currency 2019 | Statista. (2019). Retrieved 27 September 2019, from <https://www.statista.com/statistics/247300/transaction-volume-on-the-global-bond-market-by-currency/>

IPO Data - Jay R. Ritter. (2019). Retrieved 27 September 2019, from <https://site.warrington.ufl.edu/ritter/ipo-data/>

KPMG Cost of Capital 2017

<https://assets.kpmg/content/dam/kpmg/ch/pdf/cost-of-capital-study-2017-en.pdf>

PEUGEOT : UG Stock Price | FR0000121501 | MarketScreener. (2019). Retrieved 27 September 2019, from <https://www.marketscreener.com/PEUGEOT-4682/company>

PEUP.PA - Peugeot SA Profile | Reuters. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/companies/PEUP.PA>

Qui sommes-nous ? - Middlednext. (2019). Retrieved 27 September 2019, from <http://www.middlednext.com/spip.php?rubrique13>

Rating | FCA Group. (2019). Retrieved 27 September 2019, from https://www.fcagroup.com/it-IT/investors/bond_info_and_credit_rating/Pages/ratings.aspx

RENA.PA - Renault SA Profile | Reuters. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/companies/RENA.PA>

RENA.PA - Renault SA Profile | Reuters. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/companies/RENA.PA>

RENAULT : Shareholders Board Members Managers and Company Profile | FR0000131906 | MarketScreener. (2019). Retrieved 27 September 2019, from <https://www.marketscreener.com/RENAULT-4688/company/>

Renault governance, a balance between directors, checks, shareholders - Groupe Renault. (2019). Retrieved 27 September 2019, from <https://group.renault.com/en/finance-2/corporate-governance/>

Renault rift with Nissan widens over governance, casts shadow on alliance. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/article/us-nissan-renault-governance/renault-rift-with-nissan-widens-over-governance-casts-shadow-on-alliance-idUSKCN1TA0PS>

share, P. (2019). Peugeot share price: see the stock exchange share price. Retrieved 27 September 2019, from <https://www.groupe-psa.com/en/finance/peugeot-sa-share/#ownershipstructure>

Spaulding, W. (2019). Types of Depository Institutions: Savings Institutions, Commercial Banks, Bank and Financial Holding Companies. Retrieved 27 September 2019, from <https://thismatter.com/money/banking/depository-institutions-types.htm>

Standard & Poor's | Americas. (2019). Retrieved 27 September 2019, from https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceId/10814301

The French Model. (2019). Retrieved 27 September 2019, from <https://frenchcorporategovernance.wordpress.com/the-french-model/>

Value of U.S. IPOs by sector 2018 | Statista. (2019). Retrieved 27 September 2019, from <https://www.statista.com/statistics/453869/ipo-deal-value-usa-by-sector/>

VOLKSWAGEN AG : Shareholders Board Members Managers and Company Profile | DE0007664039 | MarketScreener. (2019). Retrieved 27 September 2019, from <https://www.marketscreener.com/VOLKSWAGEN-AG-436737/company/>

Volkswagen AG Debt to Equity Ratio 2006-2019 | VWAGY. (2019). Retrieved 27 September 2019, from <https://www.macrotrends.net/stocks/charts/VWAGY/volkswagen-ag/debt-equity-ratio>

VOWG_p.DE - Volkswagen AG Profile | Reuters. (2019). Retrieved 27 September 2019, from https://www.reuters.com/companies/VOWG_p.DE

VW investors sue for billions of dollars over diesel scandal. (2019). Retrieved 27 September 2019, from <https://www.reuters.com/article/us-volkswagen-emissions-trial/vw-investors-sue-for-billions-of-dollars-over-diesel-scandal-idUSKCN1LQ0W4>

World's Top 10 Investment Banks 2019. (2019). Retrieved 27 September 2019, from <https://www.advratings.com/banking/top-investment-banks>

Worldwide Sales by Model 2018 - Groupe PSA. (2019). Retrieved 27 September 2019, from <https://www.groupe-psa.com/en/publication/worldwide-sales-model-2018/>