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**The Added Value of Consultancy within the Veneto SMEs
in the Electrical Equipment Manufacturing Sector**

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Abstract

The aim of this thesis is to study and analyse the consultancy industry with a specific focus on the Italian market. In particular, the presence of external professional consultancy figures such as the Financial, Legal, Accountant and Insurance Advisor in the Electrical Equipment Manufacturing Sector inside the Veneto SMEs is identified in order to assess their contribution to the firms in terms of turnover.

To be able to perform this study, 114 companies belonging to the sector of interest and settled inside the Veneto Region have been contacted.

The enterprises analysed have been divided into small-sized enterprises, whose turnover is less than 10 million euro per year, and medium-sized enterprises, whose turnover is between 10 and 50 million euro per year. Multinationals are therefore not included in the study.

Within the groups thus delineated, the percentages of enterprises referring to each one of the four studied consultancy figures are examined.

The economic background in which companies operate as well as their geographical distribution is then presented.

Furthermore, it is possible to identify four different groups inside the sample of companies studied, i.e., small enterprises using the consultant, small enterprises not using the consultant, medium enterprises using the consultant and medium enterprises not using the consultant. Within each group, four reference indices are calculated for each individual company: ROI, ROE, ROS and the EBITDA to Sales ratio. In this way it is possible to compare the results obtained and thus evaluate the added value of the professional figure in question for each individual company and in relation to its size.

Moreover, multiple linear regression models have been built trying to detect if there are useful linear relationship between the presence of the consultants and the financial indices studied.

The final part of the research summarises the results obtained, highlighting its limitations but also its future potential.

Introduction

The professional figure of the consultant has become increasingly important in recent years. Although it is clear why companies specialised in business consultancy support their fundamental role in the growth and development of a company, many firms prefer not to rely on external consultants. It is therefore interesting to understand whether the potential of consultants is not fully realised or whether they actually represent an additional cost that can be avoided in certain cases. In this way, it will be possible to hypothesise the future development of consultancy industry in the Italian market. In addition, it is important to analyse the difference in the impact of consultants in small companies (with an annual turnover not exceeding 10 million euros) compared to medium-sized companies (with an annual turnover not exceeding 50 million euros).

The study is focused on small and medium-sized companies in order to observe more concretely the contribution of the consultant, which may not be clearly identifiable in a multinational company. Moreover, in order to reduce the variability of the sample studied and therefore the possible biases in the research the companies subject of the analysis belong all to the Electrical Equipment Manufacturing sector and all of them are settled in the Veneto Region.

To assess the added value that a consultant can bring to the entrepreneurial activities under study the sample was examined by analysing which external consultants are used on a continuous basis.

In order to develop the analysis, the theoretical background will be initially set out, including definitions, characteristics and limitations of consultancy services, as well as the history and development of this industry and an overview of the main critical points faced by consultants.

Defining the professional figure of the consultant in a univocal way is not straightforward, for this reason, in order to simplify the analysis, this thesis focuses only on four main consultant figures: the financial, legal, accountant and insurance advisor. These professional figures should be considered as the main variables of the research.

The financial information about the 114 companies that compose the study sample was obtained through the AIDA database, made available by Ca' Foscari University.

Following data collection, each company was contacted by telephone or email. In the phone call, or in the email, it was asked whether the company works with the four professional advisory figures identified above, namely the financial, legal, accountant and

insurance advisor on a continuous basis. It was thus necessary to understand whether these aspects are managed internally or whether companies rely on an external consultant. Particular emphasis was placed on correctly explaining the role played by the professionals being sought, and the need for the relationship with the professional to be constant and ongoing was also emphasised. What is more, it has been asked to the companies if they rely on a continuous basis on some other external consultants that have not been mentioned in the previous analysis. A small study on these professional figures has been performed.

The economic background in which companies operate is presented and analysed. In particular, the Italian economy with a greater focus on the economy of the Veneto Region is introduced. Furthermore, the analysis of the geographical distribution of the enterprises has been developed.

In order to carry out the analysis it is proceeded by analysing the percentage of use of the four consultancy figures by comparing the results obtained in small-sized companies with those obtained in medium-sized companies. In this way it is tried to understand whether there is a relationship between company size and the decision of a company to rely or not on an external consultancy figure.

Subsequently, for each consultancy figure under study it has been determined whether it has an impact in terms of turnover within the companies under study. In this phase the companies are divided into four groups: small companies that use this consultancy figure, small companies that do not use this consultancy figure, medium-sized companies that use this consultancy figure and medium-sized companies that do not use this consultancy figure. For every single company belonging to one of these four categories, the main balance sheet ratios, namely the ROI, ROE, ROS and EBITDA to Sales, are analysed in order to understand if a difference can be observed between the sample of companies that rely on this type of consultancy and those that do not.

Multiple linear regression models are built in order to be able to detect if there are useful linear relationship between the presence of the consultants and the financial indices studied.

Subsequently, an attempt is made to summarise and comment on the results obtained. In the concluding section, the limitations of this research are highlighted, but also its future potential.

Chapter I Consultancy Industry

1.1 History, Structure and Development of the Consultancy Industry

The business of the consulting industry is relatively new. In fact, the first professional management consultants appeared in the United States in the late 19th and early 20th century. In particular, the first management consultancy firm was founded in 1886 by Arthur D. Little. Edwin Booz followed his example in 1914, while James McKinsey started his firm in 1926 (Canback, 1999; Gross & Poor, 2008; Kearney, 2015).

Even though the consultancy industry first developed in the US, already in the second half of the 20th century, US consultancy enterprises started opening branches in Europe in the late 1950s and 1960s, expanding therefore their businesses at an international level (McKenna, 1995; Canback, 1999; Bain & Company, 2015).

The period of major development for this sector can be placed in the late 1980s and during the 1990s (Glückler & Armbrüster, 2003). The acceleration during the 1990s can be explained due to the internationalisation of the industry (Madigan & O'Shea, 1997).

The exponential growth is testified by the ratio of consultants to managers measured in 1965 compared to the one measured in 1995. In fact, this ratio increased from 1:100 to 1:13 in this period (Clark, Greatbatch, & Bhatanacharoen, 2013).

However, the development of the industry went hand in hand with a greater awareness of customers, who slowly began to understand what the standards in terms of time, price, and level of services that may be required to consultants are (Fink, 2013).

It is nevertheless remarkable to underline that, even though under an increasing competitive pressure and higher standards of services, the consultancy industry grew substantially even during the 2000s, just slowing the rate with respect to the previous decade (Mohe & Seidl, 2011).

Although it is not easy to define the consultancy sector in a univocal way, different management styles have spread and consolidated around the world (Crucini & Kipping, 2000). The vast majority of consultancy firms are in fact small or medium-sized companies and often consultants work as self-employed. However, if turnover is taken into consideration multinationals dominate the market (Kipping & Armbrüster, 1999; Baaij, 2014).

The fragmentation of the industry can be noted as far as both geography and market concentration are concerned. In 2008 it was measured that 49% of the revenues of the sector were generated in the US, 33% in Europe, 10% in the Asia-Pacific region and just

8% in the rest of the world (Gross & Poor, 2008).

The Italian case seems particularly interesting due to the high number of small consultancy firms, in fact, in 2019 the consultancy firms defined as “micro” represented the 86,6% of the whole sector while the small consultancy firms counted for the 11,3%.

A micro-enterprise is an enterprise in which less than 3 workers are employed. However, even though big enterprises only represent the 0,1% of the Italian consultancy companies, they generate 56% of industry turnover. The whole sector in Italy is composed by 24.000 companies, generating a turnover of around 4,8 billion euros, and employing more than 48.000 employees (Assoconsult & Confindustria, 2020).

Nevertheless, it is very difficult to describe the consultancy market clearly as it is a very changeable sector where boundaries are not clearly established, and many times individual consultants and small consultancy firms are not taken into account in statistics (Crucini & Kipping, 2000).

Since the focus of the research will be on the external consultants, it is useful to define what is meant by this professional figure. External consultant is defined as “any third party who manages the procurement process on behalf of the client company” (Moorhouse & Kleinman, 2009).

The figure of the consultant, especially in Italy, is atypical since, depending on the activity in which the consultant is an expert, the professional orders involved are different and each of them has its own regulations and code of ethics. It does not exist therefore a unique and established path of professionalisation for this professional figure. This means that such things as congruency in training, consonance in access to the profession, sharing of formal or informal associative spaces are probably not really possible in this type of industry. Nevertheless, in the last years the figure of the consultant is establishing itself and some general regulations started (Maestripietri, 2013).

As far as management consultancy is concerned, an important role is played by APCO - Italian Professional Association of Management Consultants-, a professional association of individuals that brings together and qualifies those who carry out, on a continuous and professional basis, the activity of organisational and management consulting, either individually, or as associates, partners or employees of consulting companies. This association is particularly important because APCO issues its members with a quality certificate in accordance with Law 4/2013 on non-ordering professions, as it is listed by the Ministry of Economic Development. By doing so, some quality standards are set, and

a professional ethic code is developed also for this industry (APCO, 2020).

The reasons behind the fragmented structure of the Italian consultancy market seems to be related to the trend developed from the end of the 1980s onwards, in which an always increasing number of former managers and professionals of a wide number of sectors left their work in order to join the consultancy sector as self-employed or constituting small consultancy firms (Crucini & Kipping, 2000). It is particularly interesting to observe that the large number of professionals that decided to join the consultancy industry is also connected to the structure of the Italian market. In fact, being the Italian market based mainly on SMEs, the possibility for all the previous executives and managers to be employed in big multinationals and large enterprises were highly limited.

This is true especially for the consultancy industry of the 80s and 90s. In fact, especially in that period consultancy was structured on the model of the advisor-consultant: advisor, because the consultant was often a manager on the verge of retirement, who took on a new autonomous role calling himself a consultant and claiming the experience gained over a lifetime as a manager in that sector (Maestriperieri, 2013).

Obviously not all the micro and small consultancy firms have this origin. A large proportion was also set up as spin-offs of larger companies (Crucini & Kipping, 2000). In Italy this happened mainly around the 1980s. It is, in fact, at this moment in time that there is a boom in entries into the world of consultancy in the Italian market, strongly fuelled by self-employment (Maestriperieri, 2013).

The fragmented structure of the Italian consultancy market has several advantages that cannot be ignored. Among them, the high level of flexibility seems to be remarkable. In particular, the smaller the company, the easier it is to adapt the consultancy to the needs of the clients. Moreover, in small companies there is a greater chance of establishing a personal bond with their customers by creating a climate of trust and confidence. In fact, local specificities are particularly significant in the Italian market and are important to be considered while developing a business strategy. Anyway, it is also important to underline that the existence of many self-employed workers and micro and small companies do not exclude the possibility to develop partnerships between workers and companies. Partnerships are a perfect way to exchange know-how and expertise (Crucini & Kipping, 2000). The creation of networks of consultants allows them to be competitive in the market also against bigger corporations. In fact, through networks the flexibility can be combined with a wider range of services offered.

Irrespective of the structure of the company offering the consultancy, some services are by their very nature standardised, so whether one considers a large company or the individual consultant the service offered cannot differ substantially. For example, legislative norms, at both national and international level, reduce the variability of the finance and control consulting practises. Other examples may be the related to the quality management, since many times some specific certifications are required (e.g. ISO 9001), or the IT consultancies, since some software may be needed inside the business organization irrespective of its size (Crucini & Kipping, 2000).

Other types of consultancies may be considered instead as more flexible since there are higher possibilities to adapt those services to the needs of the clients. Examples are Human Resources, Strategy and Formation.

As well as there being many types of consultancies, there are also many types of consultants (such as retired entrepreneurs or young novice consultants).

However, in this thesis the focus will be only on the external professional consultant. Professional consultants do this job because it responds to their personal and professional aspirations. They have a specific technical competence gained mainly in the field that represents an important source of identity for them (Maestriperi, 2013).

1.2 Criticisms against External Consultants and the Consultancy Industry

Many difficulties can be recognised while studying the consulting industry. In particular, the number of firms hiring external consultants is much inferior to the number of firms that would need one. Moreover, many times firms do not fully take advantage of the potential of the consultancy (Shaffer, 1976).

A major criticism against consultants is that they slightly modify a standardised solution in order to convince their clients that they studied a perfect solution tailored to their case rather than actually studying a solution for each case (Kitay & Wright, 2004; Hillson, 2021).

The risk is for the firms to become homologated because consultants after working for a period of time with an organisation may decide to start working with another company of the same industry (Glückler & Armbrüster, 2003). According to this theory, firms would always become more similar because of the same advice they receive.

Nevertheless, it was also noted that firms should always customise the strategy suggested by consultants according to their needs and structure so that even though the consultant may suggest similar paths to follow the resultant strategy may differ significantly

(Kipping & Clark, 2012).

Another critical view towards consultants states that what matters in their evaluation is not the substance but the appearance, i.e., what matters is if consultants are able to make a good impression being professional, but results are rarely consistent at the end (Bloch, 1999). One motivation behind this behaviour may be related to the fact that often external consultants may not fully understand their client's business or the industry sector in which they are operating (Hillson, 2021).

Doctor Shaffer identified some limitations that may prevent clients from accepting the changes and the new practices that could be suggested by the consultants. In particular, he presented the concept of "client absorption capacity". It is defined as the limit of absorption of every client (every company) with respect to speed, scope and range of innovations. This limit should always be considered and respected by the consultant in order to be able to introduce his/her suggestions inside the organisation. It is to say, willingness and ability of the clients should always be taken into account before suggesting any change in the company system. In fact, the client absorption capacity is considered as one of the main causes of the client's dissatisfaction with the consultants' work (Shaffer, 1976).

One risk that consultants face is that they are asked to present certain improvements that could be implemented within the company before they are hired, as a guarantee of their professional skills, and that these improvements are then adopted without actually hiring the consultant (Schmidt, Vogt, & Richter, 2005). However, experience has taught consultants to be forward-looking and to protect themselves from these mechanisms (Macdonald, 2006), either by offering only a general analysis of the company free of charge or by already presenting the client with the prices of the various services they offer.

Another difficulty that may be encountered by consultants is that client companies may demand certain results from consultants just because they pay them without being prepared to make the appropriate changes. This attitude could be caused by the lack of sufficient knowledge of the client companies. For this reason, it is important to establish communication between company and consultant in order to be able to explain properly every change that needs to be introduced inside the organisation and its related difficulties (Shaffer, 1976).

On the other side, consultants may overpromise the results they are able to achieve, for example assuring savings in costs that are not really possible inside the organisation. By

doing so, they would create a mismatch between the expectations of the client company and the results actually achieved (Hillson, 2021).

Another criticism that is often levelled at consultants concerns their attitude towards the company they have to work for. In fact, as it was stated by Moorehouse and Kleinman in 2009 (Moorhouse & Kleinman, 2009) many entrepreneurs complained about the detached attitude towards the company and the projects in which consultants were involved. For many businessmen, especially in the Italian environment, their company is much more than just their work, for this reason if they perceive that consultant may not care enough and spend enough time trying to identify the best solution for the enterprise, they may decide not to follow their suggestions. One possible solution to overcome this problem may be to create long and lasting relationships between consultants and clients. Another winning strategy to overcome this problem is flexibility, it is important to abandon rigorous rules and try to adapt the procedures to every situation (Moorhouse & Kleinman, 2009).

In order to be accepted inside the organisation the consultant should not impose his or her vision but should cooperate with the client instead, trying to build a win-win situation by showing to the entrepreneur the added value that could be created by their cooperation.

It is important to take in mind that “customers do not evaluate service quality solely on the outcome of the service; they also consider the process of service delivery” (Parasuraman, Zeithaml, & Berry, 1985). In the same way, it is important to consider that often clients do not evaluate the consultancy just in relation to the results obtained but also on the quality of the service provided, i.e., if the consultant was helpful, responsive and well-prepared during their cooperation. Overall, clients’ expectations and education seem to have an impact on the perceived results of the consultancy and therefore on the satisfaction of the client (Gable, 1996).

Moreover, especially small companies tend to have less resources available and therefore may consider the changes suggested by consultants as unnecessary and costly in terms of resources and money. In this case, it is important to convey the idea that those introductions may actually facilitate and accelerate the company work and not the contrary. Also in this case a proper communication is demanded (Shaffer, 1976).

On the other hand, consultants may suggest a solution that cannot be practically operated inside the organisation due to its structure or its business strategy so that they present solutions that are good just on a theoretical level and create a sense of mistrust inside the company (Hillson, 2021).

A further critical point in the company-consultant relationship is related to the asymmetry of what is considered to be a successful result. In fact, an action to be considered successful by the client should achieve some measurable results such as productivity gains, reduced costs and customers' acquisitions. Companies may lose their motivation and trust in the consultants if they do not perceive those concrete results to be achieved. On the other hand, consultants may spend more time in theoretical research postponing the achievement of concrete results. Even though this strategy may be successful in the long run, it is important to consider that if clients are not satisfied with the consultants' work, they may decide not to continue their cooperation. For this reason, consultants could decide to divide their strategy into some actions that would lead to concrete savings for the client company and some others whose results will be observed in the future (Shaffer, 1976).

Consultancies may not achieve the expected results, and this may be related on one hand to the lack of confidence of the entrepreneur towards the consultant's new ideas and expertise, on the other hand the consultancy may also fail because the consultant does not really understand or believe in the goals that the client aims to achieve (Gable, 1996). A meaningful selection of the objectives of the consultancy is therefore fundamental in order for the consultancy to be successful and satisfactory for both sides. A consultancy to be effective should not only solve problems that exist at the moment but also teach how to solve and anticipate similar problems that may arise in the future inside the organisation (Kolb & Frohman, 1970).

There are other risks associated with hiring external consultants especially because it is often necessary to share confidential information with them in order for the consultancy to be effective and privacy issues may arise. Moreover, to avoid becoming completely dependent on external consultants it is also important to indoctrinate the internal staff of the company (Hillson, 2021).

In this project an attempt will be made to answer some of these criticisms and an attempt to measure the effectiveness of four consultancy figures will be developed.

1.3 Reasons to Hire External Consultants

In order to study the added value of consultants inside an organisation, it is important to take a step back and analyse why firms usually hire external consultants. According to a theory presented by Fincham, it is a "make or buy" decision, i.e., firms have to decide if they want (or are able) to find an internal solution to a problem they are facing or if they

rather ask and pay for an external consultancy (Fincham, 1999).

A definition of the consultants' role was provided already by Schein in 1998, who described consultants as “doctors”. In fact, they use their knowledge and expertise to find out, understand and solve problems that are present inside an organisation (Schein, 2002). During the years other scholars described consultants in similar ways, defining them as “medical practitioners” (Clegg, Kornberger, & Rhodes, 2004), “therapists” or “agents of change” (Kakabadse, Louchart, & Kakabadse, 2006).

Connected to this very last definition there is the idea that consultants can introduce changes and new horizons inside the firm. It does not mean that consultants implement disruptive ideas or significant changes all the time, in fact their contribution can be also related to a new way of using existing know-how and introducing new communication techniques (Armbrüster, 2006; Czarniawska, 2013).

It was noted that if one activity is considered as a core activity for the company, thus it is performed frequently and there is a high level of control on it, it is usually managed internally and without the help of an external consultant. (Canback, 1999; Glückler & Armbrüster, 2003).

According to this point of view, external consultants could be considered as specialists that add value to the firm as far as their area of expertise is concerned and as far as non-standardised-activities are involved. In fact, consultants use their expertise and their knowledge to find solutions that are suitable for each case they analyse and use a structured approach to introduce such solutions inside the organisation in the most efficient way (Canback, 1998).

Many times, consultants are hired by those companies whose CEOs are young entrepreneurs due to their lack of expertise. This characteristic is connected to the many start-ups and new generations that are leading family firms (Crucini & Kipping, 2000), organisations that are very common in Italy. In fact, over 14.000 start-ups were registered in the Italian Business Register in 2021 (Ministero dello sviluppo economico, 2021) while in the same year the family businesses counted for 101.000 units (Il Sole 24 Ore, 2021). These things considered; it is understandable why the consultancy industry is considered to have a huge growing potential. In fact, many times those type of companies require a professional figure that has a wider market vision, broader experience and competencies (Crucini & Kipping, 2000). A critical factor, however, is whether companies can or will be able to afford to work with a consultant on a stable and continuous basis in the future. Another reason why enterprises may rely on external consultants may be connected to the

lack of time of the entrepreneurs. This is true especially in small companies where the entrepreneur many times has to deal with several aspects of the business and cannot focus efficiently on all its practical aspects. For this reason, time does play an important role in the decision of hiring an external consultant (Moorhouse & Kleinman, 2009).

The time variable is particularly significant as far as rapid changes and new trends of the market are concerned. In fact, these aspects are particularly challenging to be followed by entrepreneurs that need to manage the ordinary business administration. Using external consultants, entrepreneurs can remain focused on their business while the consultants have the task to remain updated on the new technologies, regulations and market trends, in order to allow firms to remain competitive in the constantly changing market (Gable, 1996).

In fact, the successfulness of the external consultancy depends also on the firm's ability to acquire technological knowledge and subsequently transform it into innovation outputs (Bianchi, Croce, Dell'Era, & Di Benedetto, 2015).

Nowadays, innovation is fundamental in order to remain competitive in the market and external consultants can be the tool through which innovative practices are introduced inside firms (Giebel, 2020).

Indeed, consultants provide their clients with new skills and knowledge that allow firms to enhance their operations (Cumming & Fischer, 2012). Therefore, consultants may allow firms to overtake barriers for innovation introducing new practices into the organisations they work with (Giebel, 2020).

Relying on external consultants can be a winning strategy as they can present a fresh perspective, without being limited by preconceptions but adopting an overall view of the business they are analysing (Drucker, 1979; Macdonald, 2006; Fleischer, 2010).

What is more, external consultants are often used also as impartial third parties in case of internal disputes. Consultants are useful when there are disagreements that arise inside the organisation, their role as mediators can solve intricate situations without disrupting the internal balance of a firm (Fleischer, 2010).

Another task often entrusted to consultants is to support and advise managers or heads of department in making delicate and strategic decisions thus simplifying their work (Ernst & Kieser, 2002).

Hillson gave some interesting contributions to the analysis of the benefits of hiring external consultants. In particular, he underlined that they bring guaranteed expertise inside the organisation and learn from experiences made in other firms. Cross-fertilisation

is also possible thanks to them; it means that consultants can introduce ideas and methodologies applied in other industries (Hillson, 2021).

Hillson sees consultants as a source of creativity, innovation, and fresh thinking that do not need training to start working; they are efficient since day one.

Consultants usually know very well the market in which they operate and can introduce avant-garde techniques and practices. By working inside the organisation, they may also indoctrinate the other employees of the firm so that the company could increase its efficiency as a whole. What is more, consultants are usually hired for particular tasks and have clear goals to achieve so that if the cooperation is not effective or satisfactory, the company can easily decide not to cooperate with that consultant again (Hillson, 2021).

Obviously, many other reasons may exist for a firm to hire an external consultant and also more reasons may coexist at the same time. However, in this project work only some of them, considered as the principal ones, have been presented.

1.4 Consultants - Clients Relationship

The relationship between the consultant and the client defines the value of the consulting services, in fact the consultant's activity alone is not sufficient to develop and implement a successful strategy for the company (Werr & Styhre, 2002).

It is important to underline that for the scope of this thesis, only one type of client will be taken into consideration, i.e., the primary client. It is to say, the clients who are responsible for the problem that the consultants are asked to solve or for the situation that consultants are asked to improve and that are going to pay directly the consultants' fee (Schein, 1997).

Moreover, for the sake of simplicity, the company as a whole will be considered as the consultant's primary client and the internal relationship between the consultants and some departments of the company will not be taken into account.

For this reason, although individual employees may have interests that differ from those of the company (Höner & Mohe, 2009), for the purposes of this study we will only consider the effects of consultancy as a whole and the impact that consultancy has had on company performance.

The firm (client) and consultant relationship should not be considered as one-way, but it is necessary to consider this relationship as reciprocal, where there is an exchange between the parties and the contribution of the company and the consultant are equally important (Glückler & Armbrüster, 2003; Bronnenmayer, Wirtz, & Göttel, 2016).

Developing a cooperation between client and consultant rather than just delegating tasks from one to the other will lead to more successful results and more complex projects will be undertaken (Shaffer, 1976).

Even though it is fundamental to trust the consultant in order to follow his/her suggestion and to create a successful relationship, it is also important to monitor his/her work. It might be useful to agree on regular reports to be made by the consultant. These reports might be oral, written or both. Once goals are set and there is clear and direct communication between the company and the consultant, the results will be greater efficiency and fewer problems (Brown, 2006).

Every project developed by the consultant can be considered as a tool to sharpen the company vision and to integrate the business strategy. For this reason, the client-consultant relationship may increase the turnover and enrich both parties. The relationship is successful when both the company and the consultant cooperate trying to understand each other's vision and combining their improvement efforts (Shaffer, 1976).

Moreover, it is important to remember that companies are likely to work with more than one external consultant at the time and it is therefore fundamental to be able to maintain a stable and balanced relationship with all of them. In fact, consultants are probably focused just on the success of the project they are working on or of the area of the firm they are related to, but it is the task of the manager of the firm to develop a general strategy of the enterprise and to set the overall goal of the organisation (Shaffer, 1976).

In addition, the success of the consultancy is likely to be affected by the frequency of the consulting relationship and by the nature of the service itself (Giebel, 2020).

For counselling to be effective it is also important to consider how much freedom the consultant actually has. If the company has problems or possible improvements that need to be made, people working in the company must be ready to implement them. However, this is often not the case and companies that hire consultants are not ready to change certain old habits often established by the managers themselves (Bloch, 1999; Randall, 2016). This difficulty of changing the “old habits” within the organisations affect the business performance significantly (Moorhouse & Kleinman, 2009).

Focusing on the Italian market, the resistance to change is an issue stressed by many consultants. Thus, the work of consultants is many times difficult due to the entrepreneurs' own resistance to change and it is always more important for a consultant to gain a client's trust in order to be allowed to introduce some improvements and changes in the business structure through the introduction of a new mindset. Small consultancy firms seem

therefore to have an advantage related to the higher possibility to create a personal relationship with the clients and thus facilitating the explanation and acceptance of the consultancy for the entrepreneurs (Crucini & Kipping, 2000).

1.5 The Choice of a Consultant Over Others

Many scholars have tried to analyse which are the motivations that impact the choice of a consultant over his/her competitors. In particular, Glückler and Armbrüster (Glückler & Armbrüster, 2003) identified four main reasons behind the choice of a consultant: 1. Their public reputation, 2. Previous experience and trust, 3. Reputation on their network, 4. The price.

Consultants that have a respectable reputation are more likely to behave in a correct way and to work hard to produce the best results (Granovetter, 1985; Hillson, 2021).

In fact, rebuilding a damaged reputation would be costly and not convenient. Reputation is particularly considered by those companies that do not have much experience in the field in which they require advice and rely on reputation as a kind of “insurance” on the professionalism and quality of the consultant hired (Clark & Salaman, 1998; Sieweke, Birkner, & Mohe, 2012).

Nevertheless, relying solely on reputation may lead the company to face certain opportunity costs (Pemer, Werr, & Bianchi, 2014).

In other words, hiring consultants or consultancy firms using reputation as the only discriminating factor, may lead the firm not to rely on consultants who may offer a better-quality service or the same quality but at a lower price.

For this reason, it is important for the clients to remain informed about all aspects of their business and decide some criteria, maybe also through the use of checklists, that would allow them to choose the consultants that better suit their interests and goals. Formalising sourcing procedures would lead the company to significant cost reductions maintaining high-standard quality of services (Pemer, Werr, & Bianchi, 2014)

Another aspect that could be considered when choosing a consultant are the recommendations a company may receive about that consultant from other organisations operating in the same industry or in similar ones. For this reason, once more it is important for a consultant to build a good reputation in order to receive more recommendations and expand their business (Hillson, 2021).

Connected to the second criteria presented by Glückler and Armbrüster (Glückler & Armbrüster, 2003), i.e., previous experience and trust, Hillson stated that a useful weapon

that the consultant may use to prove his/her ability could be related to proven track experiences of successful collaborations in similar situations in the past (Hillson, 2021). It is to say, if the consultant is able to show to the company that in the past, he/she has successfully managed other similar situations to the one that the company is now facing, then there will be higher possibility for the company to trust the consultant.

Yet this raises a problem. In order to convince a client of his/her professionalism and business acumen, consultants might be inclined to reveal the name of their previous clients and the interventions that were necessary to improve their business. However, this kind of behaviour may create doubts about the consultant's ability to keep information confidential and to respect his or her clients' privacy. On the other hand, the same company that is momentarily having difficulties, and therefore calls the consultant, may not appreciate that in the future he/she may tell to firm competitors about the difficulties the company in question is facing. In essence, how to present oneself and how to convince the client that one is the right consultant to solve the problem is not easy and privacy and data protection issues are central to the development of this industry.

Focusing on the fourth point underlined by Glückler and Armbrüster (Glückler & Armbrüster, 2003), i.e., the price, it is remarkable to consider that consultants should be included in the company budget and the right consultant is the one that is affordable within the budget of the year that may not coincide with the one that would lead to the best results for the company (Hillson, 2021).

Another significant contribution to help entrepreneurs to choose the “right” consultant, better defined as the consultant that “fits your organisation”, is given by Julen Brown (Brown, 2006). The author suggests that there are eight criteria to be considered before hiring a consultant: credibility, references, care, cost, response, review, portfolio and profile. Although the first four points have already been discussed throughout this paper, it might be interesting to briefly discuss the following four. According to Brown it is important to analyse the “response” of consultants, i.e., if it is easy to contact them, if they call you back in a short period of time, if they usually answer emails or phone calls and if they are polite while answering. The noteworthiness of the availability of consultants when they are required was stressed also by Hillson (Hillson, 2021).

It is important to consider also the type of “review” consultants will leave. In particular, it is important to take into account if consultants will be able to review the company they are working in online or offline and which effect it will have on the business.

Professionalism of their portfolio is another characteristic to be considered. If it does not

seem professional and complete it might indicate that also the services offered by the consultant do not respect some quality standards.

The last point, “profile”, is also quite important to be considered. This aspect underlines the subjectivity behind the choice of a consultant. In fact, in order to understand which consultant is most suitable for one's own company, it is important to assess which objectives one wants to pursue, and consequently which consultant has a professional profile that is most in line with them (Brown, 2006).

The choice of a consultant over others may be influenced by the relevant and recognized qualifications obtained by the consultants and by the client base that the consultant already has in industries, sectors or projects that are similar to the one of the company that is deciding which consultant to hire (Hillson, 2021).

1.6 Consultants' Cost

The issue of the cost of the consultant is particularly difficult to solve. Indeed, on the one hand, the cost will always be too high if the value and importance of consulting is not fully perceived. On the other hand, if the full potential of consulting were perceived, this professional figure would probably be integrated within the company and there would be no need for the external consultant.

It is interesting to observe that the different types of payment consultants receive may explain what really drives their behaviours. On one hand, if consultants are paid towards a fixed fee, the reason behind their success may be related to their motivation of performing well and to the desire to establish themselves professionally. On the other hand, consultants that are paid towards percentages-related fees, may be more focused on cost reduction and on the success of every single project rather than on the company performance over the long-run (Moorhouse & Kleinman, 2009).

Another possibility is to pay consultants towards contracts of services, i.e., consultants are paid according to the results they obtain (Fleischer, 2010). However, this payment method is not very widespread and is mostly the exception to the rule.

Moreover, consultancy contracts always tend to have an expiry date with the possibility of renewal (Fleischer, zu Knyphausen-Aufseß, & Schweizer, 2014), but this leads many consultants to adopt an attitude of continuity rather than a break with company management and can therefore lead to the adoption of solutions within the company that follow company policy without really renewing it. This may lead to reduced effectiveness of the consultants' work.

These things considered, in order to analyse the cost of hiring a consultant, it is important to consider that not only the consultancy fee impacts the overall expense that the firm has to face. In fact, apart from direct expenses, the company needs to face indirect costs and agency costs.

As far as indirect costs are concerned, these can be considered as those costs related to the time and effort the company has to devote to the consultancy project. Agency costs can arise instead due to the differences of goals that the CEOs and the consultants may have and due to the delicate relationship, that is established between them. These things considered; several scholars underlined the high level of uncertainty present in the consultancy industry (Glückler & Armbrüster, 2003; Sturdy, Wylie, & Wright, 2013).

1.7 The Concept of “Added Value”

In this thesis project an attempt was made to measure the impact of some external consultancy figures on the firms’ turnover. In order to assess the added value of consultants it is necessary to understand what is meant by this concept. The Cambridge Dictionary describes the expression as “an improvement or addition to something that makes it worth more” or also “an increase in the value of a resource, product, or service as the result of a particular process”.

One factor that is emphasised in several articles relating to the consultancy sector is that its value and especially its quality is difficult to assess (Clark, 1993; Glückler & Armbrüster, 2003; Clark, Fincham, & Sturdy, 2011).

There are many difficulties that are stressed by scholars that make a clear definition of this sector so difficult. First of all, it is difficult to measure the quality of the consultancy because it does not only depend on the work of the consultants but also on how his/her suggestions and guidelines are followed by the organisation or by the manager who hired them. Moreover, even though it is possible to observe the effects of the consultancy, it is not really possible to predict what would have happened without the consulting services (Kipping & Engwall, 2003; Schweizer, zu Knyphausen-Aufseß, & Rajes, 2009; Ernst & Kieser, 2012; Fleischer, zu Knyphausen-Aufseß, & Schweizer, 2014). Also, for this reason, in this paper there will be a comparison between firms that do use external consultants and firms that do not, rather than a focus on only one of these two groups.

Another difficulty in measuring the effectiveness of the consultancy is that consultants are unlikely to admit that their work was inefficient. They would rather blame the organisation for the failure of the consultancy stating that it did not implement their advice

fully or correctly (Geffroy & Schulz, 2015). On the other hand, managers prefer not to attribute all the merits of a successful project to the actions of an external consultant, as this may not be good for their career, but it is certainly convenient for them to blame external consultants in the case of some unsuccessful projects (Baaij, 2014).

In order to have an impact on the organisation, and to add therefore value to it, consultants must not only be competent but also be able to adapt their knowledge to each situation in order to develop the best possible solution (Klarner, Sarstedt, Hoeck, & Ringle, 2013).

In order to measure the added value of consultants it would be necessary to establish some measurement criteria before starting the consultancy projects, these criteria should be calculable (Ernst & Kieser, 2012) and easy to be identified after the conclusion of the collaboration (Schweizer, zu Knyphausen-Aufseß, & Rajes, 2009).

The selected criteria may be related to cost-reduction or revenue-increase (Haverila, Bateman, & Naumann, 2011) but they may be also related to other criteria such as the employee satisfaction or the bigger brand awareness (Ernst & Kieser, 2012; Baaij, 2014; Phillips & Phillips, 2011).

Notwithstanding, even if this were the case and all evaluation criteria were selected in advance, there could always be external factors that impact these results and make them not entirely reliable.

Some consulting firms tried to measure the impact they were having on their clients, and it is interesting to mention Bain & Company (2015) that affirmed that in general their listed clients obtained results four times better than their competitors on the market (Bain & Company, 2015). However, the cause-effect relationship between a firm being their client and its subsequent success in the market is not clearly defined.

According to a survey performed by Neil G. Davey in 1971 (Davey, 1971) consultants' activity can lead to more effective changes and policies inside the organisations if they are hired because the company perceives the necessity of a change rather than if they are just hired to audit the actual situation of the organisation and decide afterwards to adopt some changes. This factor may therefore change the perceived added value of the consultants inside the organisation.

1.8 The Consultant Figures Object of the Analysis: Financial, Legal, Accountant and Insurance Advisor

The choice of which external consultants to analyse fell on: financial advisor, legal advisor, accountant advisor and insurance advisor. These figures are, in fact, often present

in the Veneto regional reality and especially in small- and medium-sized enterprises, which are the object of the analysis of this study project. The socio-historical context influenced therefore the choice of the figures under analysis.

1.8.1 Financial Advisor

In order to study and analyse the figure of the financial advisor, it is useful to frame his basic functions and competences.

Basically, a financial consultant is paid to give financial advice to the companies he/she is working in. It means, the financial consultant is in charge of planning the company finances (Napoletano & Curry, 2022).

By helping the company manage its finances, the financial advisor may allow the organisation to reach the financial goals faster and through strategies that increase the company wealth at the same time reducing costs and debts (Corporate Finance Institute). A financial advisor needs that kind of information, like the company's current spending and savings habits, its income and its expenses, in order to plan the finances of the enterprises both on a short and long term, adapting the strategies to the company's goals (Napoletano & Curry, 2022).

Financial consultants are useful especially when companies need another non-partisan and unbiased opinion on some development projects of the company. Financial advisors state their opinion about some projects and then the company is free to follow or not those suggestions (Corporate Finance Institute).

It is interesting to underline that the financial advisor includes other professional figures such as the wealth manager and the investment advisor. There are also certifications to ensure the professionalism and the preparation of the consultants like for example the Certified Financial Planner® or Chartered Wealth Manager (Napoletano & Curry, 2022). There are two types of financial consultants: fiduciary and non-fiduciary.

A fiduciary financial advisor is usually paid on a fee-based system and is not allowed to earn any commission from any investment sale. This is the case for the majority of financial advisors (Corporate Finance Institute).

A non-fiduciary financial advisor usually does earn commissions if they sell specific investment products to their clients. These fees are paid usually by an institution for which consultants work. So, the criteria that are considered by them are related to the availability of the investment for the company, but they do not consider if that investment is the most convenient one for the organisation as a whole. Obviously, every situation must be

studied carefully, and it is not possible to develop a financial solution that is suitable for all the companies but there are some services that are usually offered by the vast majority of financial consultants. These services are advice related to most convenient investments, debt management, budgeting and long-term planning (Napoletano & Curry, 2022).

A major-treat to this type of consultancy is represented by the “robo-advisors”.

Robo-advisors use advanced algorithms that allow to study the financial goals of the company and hence to create the most suitable financial portfolio. When comparing them to financial consultants it is clear that their main advantages are related to cost- and time-savings. It is especially true as time goes on, as technologies advance and software become more accurate. Nevertheless, many people still prefer to communicate with professionals rather than with machines due to their greater empathy and ability to react to sudden changes so that financial advisors still do play an important role in the industry of external consultancy (Maume, 2021).

1.8.2 Legal Advisor

A Legal Advisor is a lawyer who provides legal advice to an organisation and usually specialises in a specific area of law. They also provide general legal advice on business decisions regarding company growth, mergers or other practices (Alma Laboris, 2018).

The tasks entrusted to a legal advisor may vary depending on the sector or the needs of the company in which they work, but it is possible to identify the main duties usually assigned to this professional figure.

One task of the legal advisor is to provide technical support within the company's decision-making processes. In fact, the management of an organisation may not be aware of all the legal consequences of its choices. Thus, the legal advisor enables a company to know the regulatory implications and possible sanctions it faces for its business activities (La Legge, 2021). The legal advisor should therefore regularly monitor the company checking its compliance with local laws but also the international market environment (American International School of Johannesburg, 2015).

Another responsibility usually assigned to the legal advisor is related to closure of contracts and their negotiation. This responsibility includes reviewing existing contracts and creating new ones. For this reason, this type of consultant is an expert in corporate law and reviews all corporate practices and processes to ensure that the company is operating within the legal boundaries.

The legal advisor is usually entrusted with managing conflicts between employees and

management. It is to say, when dealing with incidents of harassment, employment disputes or other conflicts relating to employee relations, legal advisors will apply knowledge of the relevant laws in helping to resolve these issues (Alma Laboris, 2018).

1.8.3 Accountant Advisor

The first important aspect to stress while describing this professional figure is that there is a great variability in this sector and the industry, the employer or the level of experience of the accountant may deeply differentiate his/her tasks.

As for the consultants presented in the previous sections, also for the accountant advisors there are many tasks that he/she could be entitled to. The most common responsibilities attributed to him/her are related to tracking of internal and external transitions, budgeting, forecasting future cash flows, computing taxes to be paid and preparing financial statements (Davis & Main, 2022).

However, it is interesting to understand in a deeper way which tasks exactly an external accountant advisor may perform inside an organisation.

In particular, the consultant may support client companies in the start-up or reorganisation phases by identifying the most suitable organisational, fiscal and legal solutions and carrying out the necessary administrative tasks (registration of new companies with public registers, such as VAT offices, Chamber of Commerce, Inps, etc.). If the consultant cooperates with an already established and operating company, he/she could advise the company in regard to tax-related matters. It is to say, consultants may inform the client about regulatory changes and advise on tax strategies, audit annual and infra-annual financial statements, oversee and prepare tax returns.

Moreover, the accountant advisor may carry out company valuations when negotiating the purchase, sale or division of an economic activity (Atlante Delle Professioni).

1.8.4 Insurance Advisor

The insurance advisor, as the name suggests, provides insurance advice to clients. Through the analysis of the client company situation, he/she defines its specific needs and identifies and proposes insurance solutions that meet those needs. Moreover, the consultant is in charge of drawing up the policy contract and providing insurance technical assistance. The general knowledge an insurance consultant must have to be competitive in the market is composed by basic knowledge of strategic and operational marketing, skills with sales strategies and techniques, familiarity with the

financial/insurance services market, knowledge of the principles of insurance technology and management control, familiarity with business organisation and strategic business planning (Atlante delle Professioni).

The insurance consultant can be considered as the professional figure who supports companies in finding the most suitable solutions to mitigate the economic consequences of unforeseen events (Finanza e Previdenza, 2021).

In order to be sure to offer the solution that best fits the company needs the insurance consultant creates a map of possible business risks by estimating them in quality and quantity. The advantages of cooperating with an insurance advisor include the possibility for the company of operating its business knowing that the risk of carrying out that economic activity is limited by the presence of appropriate insurances. The consultant is concerned with protecting the company but also with being supportive in order to help the company achieve its goals. In this case, the best strategy is to reduce sources of risk and the related loss for the company.

Insurance is a constantly evolving sector, and only a specialised professional can be informed about the constant changes taking place by providing precise and clear information and advice.

In fact, the insurance consultant maintains control over the companies that rely on him/her by keeping them periodically informed about the possibilities of improving the insurance package based on the progressive needs of the company and the changes in the insurance offerings (Consulenza.pro, 2021).

1.9 The Reference Indices: EBIDTA to Sales, ROI, ROE, ROS

In the preceding paragraphs, the external consultancy sector was presented, describing its limitations and opportunities and the consultancy figures chosen to be studied in more detail were also introduced. In the following paragraphs instead, the financial indicators through which these figures will be analysed, and the method of analysis taken into consideration will be outlined.

In order to study the impact of consultants within different organisations, it may be useful to develop a comparison between companies of similar size and belonging to the same sector, that do or do not use a specific consultancy figure. This means, in the particular case of this thesis project, to divide the sample under analysis into four groups: small-sized companies that rely on a certain external consultancy figure and small-sized companies that do not, medium-sized companies that rely on a certain external

consultancy figure and medium-sized companies that do not.

With regard to the analysis of companies results, four indices were chosen which are very commonly analysed to study the financial situation of a company: EBITDA to Sales, ROI, ROE, ROS.

In order to better understand the results obtained, a brief definition of the financial terms under analysis will be presented.

The following definitions have been extracted from the Treccani encyclopaedia economic-financial dictionary (Enciclopedia Treccani, 2012).

In particular, turnover is defined as an economic indicator that measures the total amount of revenue recorded during the accounting period (typically the calendar year) by a business and derived from the sale of goods produced and/or the provision of services.

The Return on Investment (ROI) is instead one of the most frequently used balance sheet ratios in corporate profitability analysis. It is obtained by the ratio of operating profit to total net operating capital employed. The numerator is the result from ordinary operations, the denominator is the sum used only in investments characteristic of the company's business, net of the respective depreciation provisions and any provisions. ROI is an indicator of efficiency in the use of resources available to the company to produce profits through its core business.

The Return on Equity (ROE) is a summary measure of the profit made by company shareholders. It is calculated through the ratio of net income to shareholders' equity. Since investing in a company share implies uncertainty, the ROE should be higher than the return on risk-free securities; the difference should represent the compensation for taking (pro rata) business risk.

Return on Sales (ROS) is one of the most significant indices of a company efficiency and measures the sales profitability. It is to say, it helps to analyse the efficiency of a firm in transforming sales into profits. It is obtained by dividing operating profit by net sales.

EBITDA shows how much is left over from the production value for the remuneration of physical and financial capital and for the payment of taxes. This value, divided by the sales volume (EBITDA/sales), gives an idea of the company profitability.

1.10 Multiple Linear Regression

In order to understand and study in greater detail the financial indices taken as reference and the impact that the four consultant figures under analysis have on them, it was decided to develop a multiple linear regression model. In fact, in the multiple linear regression

model several explanatory variables are used to make predictions on a dependent variable (Levine, Krehbiel, & Berenson, 2002). In the specific case of this thesis project, the financial ratios presented in the previous paragraph will be considered as the dependent variables (the Y variables), while the presence or absence of the consultants (which will represent the independent variables or X variables) will be introduced into the model through dummy variables where the coefficient 1 means that the consultant is present while 0 represents the absence of the consultant. The use of dummy variables allows the introduction of qualitative variables inside the model. In addition, a control variable, namely the turnover, has been also introduced into the model.

To explain the concept of the control variable, it can be said that the focus of this thesis is on the impact of consultants within companies. In order to avoid misidentification, i.e., to avoid attributing to the presence of the consultant certain effects on financial ratios that are instead to be attributed to the turnover, the latter is extracted from the error term and made explicit in the model itself as a control variable.

The control variables are thus those variables which are not necessarily of direct interest but are variables through which an attempt is made to correct the analysis.

Although an attempt was initially made to construct a single model in which all four consultant figures were included and their impact on the financial benchmark index could be observed simultaneously, it was then preferred to build several models considering one consultant figure at the time as it was observed that by including all the variables simultaneously, these could influence the result and make the test not significant. In fact, the presence of a consultant figure may have an impact on the presence of another one and thus collinearity problems may arise. Multicollinearity of the explanatory variables is in fact one of the problems that can result from in the analysis of a multiple regression model. It consists precisely in the presence of a high correlation between the explanatory variables. In this case, collinear variables do not provide additional information and it is difficult to identify the effect that each of them has on the response variable. The values of the regression coefficients could therefore vary highly depending on which of the independent variables are included in the model (Levine, Krehbiel, & Berenson, 2002). Furthermore, working with small samples (59 small companies and 55 medium-sized companies) it was preferred to consider fewer variables at the same time so as not to risk compromising the model itself.

The multiple linear regression was performed through the use of Microsoft Excel and the data analysis package.

With regard to the summary output showing the results of the analysis, the values that will be analysed in the models that are presented in chapter V will now be briefly presented.

In the regression statistic, it is interesting to look at the multiple R section. This is in fact the correlation coefficient that expresses how strong the linear correlation is and can assume values from 0, no correlation, to 1, perfect positive correlation.

The second element present in this section is the value of R^2 , the coefficient of determination. It represents the percentage of variance in Y that can be explained by the variance of the X variables considered in the model. So, it is possible to say that R^2 shows how well the observations fit a curve or line. However, in order to consider also the number of independent variables used and the sample size, adjusted R^2 can also be observed. If more and more useless variables are added to a model, adjusted R^2 will decrease. On the contrary, if more useful variables are added to the model, adjusted R^2 will increase. Adjusted R^2 will always be lower or equal to R^2 . Another important feature of adjusted R^2 is that it allows comparison between models that are trying to predict the same dependent variable with a slightly different subset of independent variables. It is to say, if different models from the same data need to be compared, the one with higher adjusted R^2 should be considered as the preferable one.

It is important to remember that, in the specific case of the models built in this thesis project, the R^2 and the adjusted R^2 may result in low values since few variables are used at the same time and this means that few information is present and therefore the X variables are less able to explain the variance in Y. Moreover, also the limited sample size included in the model affects these values.

The standard error is another value that should be considered in the regression statistic part since it shows the average error of prediction or estimation of the model. It is to say, it allows to measure the precision of the regression coefficients. The bigger the standard error, the less precise the linear regression model is.

In the ANOVA part, the analysis of the variance is performed. The first value that can be observed refers to the degrees of freedom (df). The degrees of freedom are numbers that are used to test hypotheses about the population from which a sample was drawn. If a sample contains n observations, it is possible to say that it consists of n individual pieces of information. In the specific case of this thesis project, the sample contains information from 59 small companies and 55 medium companies.

The degrees of freedom correspond therefore to the number of independent pieces of information that are free to vary in the calculation of a given parameter estimate.

The Sum of Squares (SS) determines instead data dispersion with respect to their mean value. A large value registered in this section means that there is large variance. This means that individual observations are varying extensively from the mean.

Another value present in the ANOVA table is the Mean Square (MS), it represents an estimate of the variance of the population. It is computed through the division of the sum of squares by the degrees of freedom.

The degrees of freedom, the sum of squares and the mean square are computed for the regression, for the residuals and for the total.

On one hand, the Sum of Squared Regression (SSR) is the amount of variation explained by the regression of Y on X. On the other hand, for the residuals (or errors) the Sum of Squares of Errors (SSE) computed corresponds to the amount of unexplained variation.

The sum of SSR and SSE gives the total variation.

The F test for the null hypothesis is then shown. It is used to compare two variances and is a hypothesis test based on the Fisher-Snedecor F-distribution. Its aim is to test the hypothesis that two populations that both follow normal distributions have the same variance.

What is more, before analysing the results obtained after performing the test it is necessary to observe the p-value of the overall F-test. This test is in fact considered to detect if there could be a useful linear relationship between the independent features included in the model and the dependent variable Y. More specifically, the null hypothesis is $H_0: \beta_i = 0$ while the alternative hypothesis is $H_1: \beta_i \neq 0$. It is to say, the null hypothesis states that there is no linear relationship between any of the independent features and Y, while the alternative hypothesis states that there is at least one useful linear relationship between at least one of the independent features and Y.

The p-value of the overall F-test is compared to the alpha-value, that for the models considered in this thesis is settled at $\alpha=0,05$. If the p-value is higher than the alpha-value than the null hypothesis is failed to be rejected. This means that there is not enough evidence against the null hypothesis and the other results obtained in the tests should not be discussed.

On the other hand, if H_0 is rejected it is possible to analyse the p-values of the individual t-tests that are performed for each β under analysis. In this case, the null hypothesis is that X_1 has no linear relationship with Y against the alternative hypothesis that states that X_1

has some useful linear relationship with Y. This linear relationship could be either positive or negative depending on the coefficients of these variables. The t-test can be represented as the null hypothesis $H_0: \beta_1 = 0$ against the alternative hypothesis $H_0: \beta_1 \neq 0$. The p-value of every variable must be observed in order to understand if that variable is a useful linear predictive in the model or if it should be considered to eliminate that variable from the model. Once again, the p-value is compared with the chosen alpha-value (that for the purpose of this thesis is $\alpha=0,05$ and if the p-value is higher than alpha the null hypothesis will be failed to be rejected.

If the null hypothesis is instead rejected, the coefficients of the variables can be analysed in order to continue with the development and interpretation of the model. In particular, a negative coefficient would indicate a negative slope. This means that for an increase of that variable it would be expected to observe a decrease in the dependent variable and vice versa.

In this last part of the summary output, the standard error of each variable is also present. Moreover, the lower and upper boundaries for the 95% confidence interval are shown. Once all these variables have been analysed and the tests have been performed and commented, it is possible to write out the regression model that predicts what the dependent variable will be.

Strictly speaking, the models developed in this thesis project can be represented as $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$. Where β_0 is the intercept, β_1 and β_2 are the coefficients of X_1 and X_2 respectively, X_1 is the dummy variable that takes value 1 if the consultant is present and 0 otherwise and X_2 is the control variable, i.e., the turnover.

In order to find out which is the value of β_1 and β_2 an estimated model is built. The estimated model can be represented as $\hat{Y} = b_0 + b_1 * X_1 + b_2 * X_2$. Since in the models developed in this paper x_1 is a dummy variable, the model could also be rewritten as $\hat{Y} = (b_0 + b_1) + b_2 * X_2$ in the case the consultant is present and $\hat{Y} = b_0 + b_2 * X_2$ otherwise.

Chapter II The Socio-Economic Context and the Study Sample

2.1 Introduction to Italian Economy

In order to fully understand the impact of consultants within companies, it is first of all important to understand the socio-economic context in which they are embedded.

First, the impact of Covid-19 crisis in the Italian market will be briefly presented. To do so, data have been taken by the ISTAT Annual Report 2020 (Rapporto annuale ISTAT, 2021). It is important to remember that the impact of the health emergency due to Covid-19 hit the Italian economy at a stage of near stagnation. In 2019, GDP grew only by 0,3%, decelerating compared to 2018. In the first quarter 2020, the partial blockage of activity linked to the health crisis led to negative effects on the demand and supply side with GDP slumping by 5,3%. The measures taken to contain the epidemic caused a significant reduction in economic activity for a large part of the production system: more than 70% of the enterprises (representing almost 74% of employment) reported a reduction in turnover in the two-month period March-April 2020 compared to the same period of the previous year, and in approximately 41% of the cases the drop was greater than 50%. In addition, for almost 15% of the operators, turnover was zero. By contrast, for about 5% of the companies, turnover increased compared to a year earlier, with the pharmaceutical, chemical and telecommunications industries accounting for the largest share. In April, when business closure reached its peak, industrial production recorded a further fall (-19,1%) after the slump in March (-28,4%). Compared to February levels, the index thus fell by 44%. At the sectoral level, the most negative consequences of this crisis were faced by important industrial sectors and some services severely affected by the direct consequences of the epidemic, such as air transport, accommodation, publishing and travel agencies. An interesting element to analyse is the type of measures that companies activated to react to this difficult situation. First of all, it emerges that for more than one in three companies there had been no intention to develop specific responses to the crisis. This behaviour, which was especially widespread among smaller companies (almost 40% among micro enterprises compared to 14% among large ones), indicates a sort of disorientation against such an unexpected and sudden crisis.

With reference to the manufacturing sector, the monthly data of the industrial production index indicate that the effects of the lockdown led to a level of activity about 42% lower than a year earlier. In this situation, identifying the possible trajectory of the recovery in the following years is an exercise characterised by high levels of uncertainty, but the

comparison of the current crisis with the two previous recessions recorded in 2008-2009 and 2011-2013 could provide useful elements on both the intensity of the crisis and its spread among the manufacturing sectors. In March 2020, the decrease in production affected more than 90% of the sectors, a level similar to that recorded in July-August 2008. However, in April 2020 there was a slight improvement (around 82% of the sectors). The current crisis has therefore very quickly led to a degree of spread of the downturn in manufacturing activity comparable to those observed during the 2008-2009 contraction and significantly greater than that of the subsequent recession, but which could be of shorter duration.

These things considered; it is interesting to analyse the current situation of the Italian economy to better understand the situation in which consultants object of analysis are actually working. In the first quarter of 2022, Italy's GDP rose by 0,1% compared to the previous quarter and by 6,2% compared to the first quarter of 2021. Generally, the growth forecast for 2022 is 2,6%. Regarding the GDP components, on a quarterly basis there was a 0,6% decrease in domestic final consumption, while gross fixed capital formation increased by 3,9%. Imports and exports grew by 4,3% and 3,5% respectively. If the different economic sectors are considered, agriculture and industry were up compared to the previous quarter by +1,8% and +0,5% respectively, while services decreased by 0,1% (Altroconsumo, 2022).

These things considered; it is now possible to analyse the Italian productive system in deeper details.

Analysing the 2021 situation, the industrial production increased by 6,3%. Among the sectors, the greatest growth was recorded in the manufacture of coke and refined petroleum products (+25,1%), the supply of electricity, gas, steam and air (+13,3%) and the production of basic pharmaceutical products and pharmaceutical preparations (+11,6%). Only mining and quarrying (-11%), the manufacture of transport equipment (-9,3%) and the manufacture of electrical equipment (-1,8%) declined (Altroconsumo, 2021).

As far as the future development of Italian productive system, one can see a clear attempt by legislators to introduce new technological changes and opportunities that can lead to a significant change in production processes along the entire value chain.

Digitisation within the Italian production process is relatively mature only in a very small part of companies, while in most cases it finds initial expression through pilot projects and incremental attempts focused on single phases of production processes (Camerano,

Melini, Palazzo, Brancati, & Maresca, 2018).

2.2 Italian Industrial Production and the Manufacturing of Electrical Equipment

In the previous section, the Italian economic situation has been briefly presented. In this paragraph, an attempt will be made to analyse the Italian industrial sectors in more detail and to introduce the sector under study in this thesis, namely the manufacturing of electrical equipment.

In order to study the Italian industrial production, it is interesting to consider the total sold production of every sector on a yearly basis. Data have been collected by ISTAT website and have been extracted in June 2022.

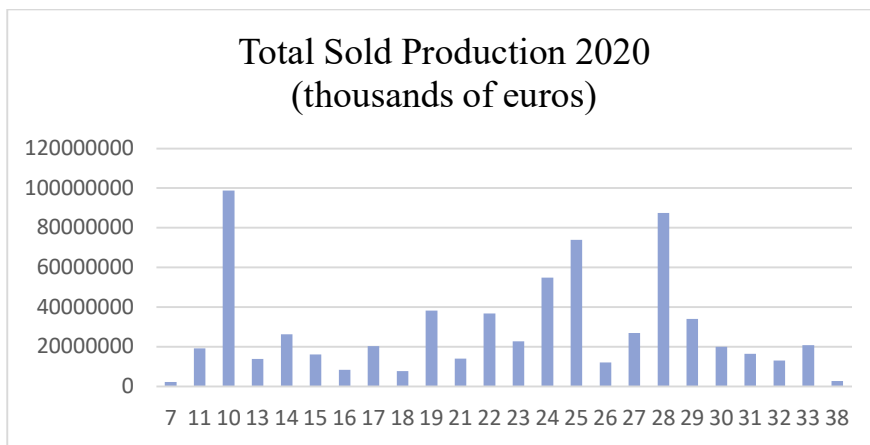


Figure 1 Source: ISTAT

In Figure 1 it is possible to observe the total sold production of 2020 for the different product categories. The different numbers correspond to the ATECO 2007 Codes for the product categories considered.

Number 7, that in this graphic is considered together with number 8, refers to metal ores and other minerals from quarries and mines; number 11, which also includes product category number 12, is representative of the beverage and tobacco industries; number 10 corresponds to food products; number 13 to textile products; number 14 to clothing items (including leather and fur); number 15 to leather products (excluding clothing items) and similar; number 16 to wood, products of wood and cork (except furniture) and articles of straw and plaiting materials; number 17 to paper and paper products; number 18 to products of printing and reproduction of recorded media; number 19, that also includes product of category number 20, is representative of coke and refined petroleum and chemical products; number 21 of basic pharmaceutical products and pharmaceutical preparations; number 22 of rubber and plastic products; number 23 of other non-metallic mineral products; number 24 of metal products; number of 25 of fabricated metal

products, except machinery and equipment; number 26 of computers, electronic and optical products, electromedical equipment, measuring appliances and watches; number 27 of manufacturing of electrical equipment; number 28 of machinery and n.e.c. equipment; number 29 of motor vehicles, trailers and semi-trailers; number 30 of other transport equipment; 31 of furniture; number 32 of products of other manufacturing industries; number 33 of repair, maintenance and installation of machinery and equipment; finally number 38 corresponds to waste collection.

Analysing data, it is interesting to observe that the first product category that registered the highest revenue for sold production in 2020 was the number 10 corresponding to food products. This category alone counts for the 14,4% of the revenue from the whole sold production. The second most remunerative category is number 28, that corresponds to machinery and n.e.c. equipment and is representative of the 12,7% of the revenues deriving from the whole sold production. At third place it is possible to find category 25, i.e., fabricated metal products, except machinery and equipment, that counts for the 10,8% of the total revenues.

If the focus is instead shifted to the lower part of the ranking, the least remunerative sold production is category number 7, referring to metal ores and other minerals from quarries and mines, the revenues coming from this category just counts for the 0,3% of the whole. In penultimate place is the category number 38, it is to say waste collection, with revenues that represent the 0,4% of the total. A slightly better result is achieved by category number 18, products of printing and reproduction of recorded media, that counts for 1,1% of the total revenues.

Once that the general image of Italian industrial production is conveyed, it is interesting to develop a deeper insight on the electrical equipment manufacturing sector in Italy since it is the central topic of the thesis.

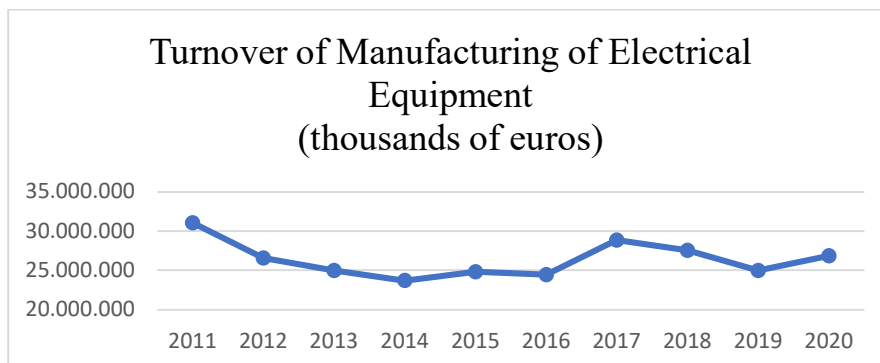


Figure 2

As it is possible to observe in Figure 2, the manufacturing of electrical equipment in Italy

has been fluctuating since 2011. In fact, in that year it had a turnover of 31 billion euros, that decreased to 24 billion euros in 2016 and reached almost 26,9 euros in 2020. In this year this sector was representative of the 3,9% of all the revenues collected by the different product categories being the 8th most remunerative sector in the general ranking. As far as the production sold in number of units is concerned, in 2011 it counted with 2,7 million units. Subsequently there was a decrease to 1,9 million units in 2014 and then a further increase to 6,7 million units in 2018 (ISTAT, 2022).

2.3 Introduction to the Economy of Veneto

After briefly presenting the Italian economic landscape, it is interesting and important to focus on the regional one. It is in fact the latter that is the subject of the studies conducted in this thesis project.

As in the case of the national economy, the regional economy also suffered considerably from the impact of the Covid-19 crisis. Based on data from Unioncamere Veneto, in the first quarter of 2020 the production manufacturing contracted by 7,6% compared to the same period of 2019. Activity declined in all sectors and especially in transport equipment, jewellery, eyewear, furniture and wood and the fashion system. The decline was most intense among smaller enterprises (10-49 employees). The drop in production was almost entirely determined by companies that suspended their production under the Prime Ministerial Decree of 22 March 2020, as amended by the Decree of the Ministry of Economic Development of 25 March 2020, or by their own decision. The production of the companies that remained active stagnated (Banca D'Italia, 2020).

After analysing the negative effects of the crisis, it is also interesting to study the economic upswing that characterised 2021.

In October 2021, total industry turnover increased by 2,8% compared to September 2021. Adjusted for calendar effects, total turnover increased by 23,5% in January-October 2021 compared to the same period of the previous year.

In December 2021, inflation raised by 0,4 % month-on-month and 3,9 % year-on-year. On average, consumer prices grew by 1,9 % in 2021.

In November 2021, producer prices in industry increased by 1,2% on a monthly basis and by 22,1% on a yearly basis.

Overall, for 2021 data show a strong recovery from the shock to which the economic system was subjected in 2020. Among the Italian regions, Veneto shows the strongest resilience, which should be summed up in a GDP improvement of 6.9% in 2021 and 4.2%

in 2022. For 2021, a recovery of 4.2% was estimated for household consumption in Veneto and 16.1% for gross fixed investments (Ufficio di Statistica della Regione del Veneto, 2022).

Shifting the focus to companies established in the region, it can be seen that the fourth quarter of 2021 closed with a slight increase in the number of companies in the Veneto Region compared to the corresponding months of 2020. In fact, in the period October-December 2021 there was a 0,5% increase compared to the same period of the previous year, in line with the third quarter. At the sectorial level, the regional declines recorded in the agricultural and industrial sectors are more than offset by the growth of companies active in the construction and service sectors. This fact could be explained due to the introduction by the Italian Government of new tax incentives for building and services development.

Focusing on trade exchanges, it is possible to notice that there was a significant recovery of the markets in the period January-September of 2021. In fact, in the first nine months of the year the value of Veneto exports of goods grew by almost 19% compared to the figure recorded in the same six months of 2020 and by 6% when compared to the first nine months of 2019. Driving Veneto exports are the metal production sectors and fashion goods.

As regards destination markets, there was a significant increase in sales to all the main markets, with peaks in France, Germany and the USA.

In the Veneto Region two economic sectors stand out from the others in terms of importance: the wine and tourism sectors. For this reason, their performance during 2021 will be briefly discussed.

In 2020, the global wine trade paid the consequences of the Covid-19 pandemic, showing a slowdown in sales. In Veneto, the value of wine exports stopped at 2,245 billion euro, 2,9% less than in 2019 (-1,6% in Italy), interrupting the growth observed in previous years. Nevertheless, with almost 36% of the national value, the Veneto was confirmed as Italy leading region in wine exports. In 2021, after an uncertain start, marked by the restrictions imposed to contain the third wave of Covid-19 contagion, exports of wine made in Veneto began to grow again, returning to pre-pandemic levels. From January to September 2021, the value of exports recorded almost 1,8 billion euros, i.e., an increase of more than 140 million euros with respect to the same period of 2019. On its own, Veneto continues to export more than Piedmont (884 million euros) and Tuscany (815 million) combined, the two regions that follow Veneto in the regional ranking (Ufficio di

Statistica della Regione del Veneto, 2022).

Another fundamental sector in the Veneto economy is the one related to Tourism. Veneto is indeed more specialised than the Italian average in tourism. On the basis of an estimate made from ISTAT's Tourism Satellite Account (CST) for 2015, the direct contribution to the regional GDP of the expenditure of Italian and foreign overnight travellers was about 8%, compared to an average of 6,1% in Italy and 8,2% in the Northeast (Banca D'Italia, 2020). The first ten months of 2021 showed a strong increase in the tourism sector compared to 2020 (+51,6%). From June to August 2021 there were almost the same presences recorded in the whole 2020 and September recorded more presences than the same month pre-covid (+0,3%). In the entire period from January to October 2021 the domestic flows of tourists substantially return to pre-covid figures with only a slight decrease of -1,7% (Ufficio di Statistica della Regione del Veneto, 2022).

Analysing the industrial sector of the Veneto Region it is possible to notice that the main contribution is given by the manufacturing activity and in particular by the capital good sector, i.e., goods used in the production of other commodities. During 2019 the manufacturing sector grew by 0,9%, boosted by the machinery manufacturing industry, the pharmaceuticals and the electrical equipment, which contributed with an increase by 3,1%, 2,4% and 2,3% respectively. If the industry turnover as a whole is considered, it increased by 2,3% with respect to the previous year (Regione Veneto, 2019).

So, it is possible to say that the metal-machinery sector is the major industrial sector of the Veneto Region. In fact, it counts about 25.000 firms of which 2/3 are craft enterprises (Regione Veneto). This sector includes fabrication of machineries, electro mechanics, metal processing and transports.

It is interesting to underline that almost half of the exported goods of the Region belong to this industrial sector. In particular, the first largest export branch is industrial machinery (19,4% of all the exports of the Region) with a turnover of 9,6 billion euros.

The second most exported goods are instead precision and electrical appliances, with an export turnover of 5,6 million euros.

In the Italian market, Veneto is second only to Lombardy in the production of machinery and equipment. This sector involves over 6.000 companies and 55.000 workers, which represent 12,7% of all firms and 15% of all workers in Italy.

The impact of electrical and electronic components has increased during the years becoming essential in many different production processes such as process control tools, electric wares, industrial automation systems, electric motors, IT components and energy

management systems (Regione Veneto).

Moreover, if the trade balance is taken into consideration, it is to say, if the difference between imports and exports is considered, the electrical equipment manufacturing sector registered an increase of 2,5 billion euros in 2020 confirming the strength and the potential of the sector (Regione Veneto, 2021).

Considering these data, for the purpose of this thesis it was decided to analyse and study precisely this sector.

2.4 SMEs

In order to study the effects of external consultants on the SMEs of the Veneto Region, it is important to define what is meant by this expression. The European Commission (EC) provides a clear definition of small and medium enterprises (SMEs) defining them “as business entities that have the following characteristics: fewer than 249 employees, an annual turnover not exceeding €50 million or a total balance sheet not exceeding €43 million” (European Commission, 2003). As it is possible to notice, the criteria to define a SME are mainly financial.

Going into more detail on the classification of small and medium-sized enterprises, a more specific distinction can be made by defining a number of reference thresholds to distinguish between micro, small and medium-sized enterprises. It is to say, micro-sized enterprises are those companies in which less than 10 people are employed and the annual turnover and the total balance sheet are not exceeding €2 million. Small-sized enterprises are those companies in which less than 50 people are employed and the annual turnover and the total balance sheet are not exceeding €10 million. Medium-sized enterprises are instead those companies in which less than 250 people are employed and the annual turnover and the total balance sheet are not exceeding €50 million (European Commission, 2003).

Studying the Italian market, it emerges that of the total 4,34 million companies that constitute the Italian entrepreneurial market, 95,2% are micro-enterprises. The small- and medium-sized enterprises (SMEs) account instead only for 4,7% of the total number of Italian companies. This means that big companies account just for the residual 0,1% of the total. The data shows a clear predominance of micro-enterprises. Another peculiarity is a rather predominant concentration of the enterprises in the North of Italy, while there is an almost equivalent distribution between the Centre and the South (including the islands). Moreover, it is interesting to observe that the percentage of micro-sized

enterprises in Italy is superior to the European average of 93% with respect to the other firm structures. The total number of SMEs in Italy that respect the criteria given by the European Commission is 154.000. Of this total, about 129.000 are small enterprises and about 25.000 are medium-sized enterprises. SMEs in Italy alone are responsible for 41% of the total turnover generated by all enterprises, amounting to €1,054 billion, 33% of all private sector employees, i.e., 4,5 million workers, of whom 2,4 million are employed by small enterprises and 2,1 million by medium-sized companies, and 38% of the country added value, amounting to €247 billion (Angelino, et al., 2021).

As might be deduced from the preceding paragraphs, the main actors of the economy of the Veneto Region are small and medium-sized enterprises. Moreover, the main economy is centred on manufacturing companies (Corò, Plechero, & Volpe, 2020).

This was a further motivation for considering only this company dimension in the study of this thesis project.

2.5 The Sample Object of Study

In order to analyse in a more specific way the Veneto Region market, the AIDA database was used. AIDA is an online database, produced by Bureau van Dijk, that contains financial, biographical and commercial information on corporations operating in Italy. The financial information is provided by Honyvem, which buys and processes all official financial statements filed with the Italian Chambers of Commerce. All data, with a 10-year history, are indexed and can be used as search keys, processed, evaluated and exported in multiple formats (Università degli Studi della Tuscia).

According to this database, 179.580 companies are settled in the Veneto Region in 2022 and 1.522 of them belong to the electrical equipment manufacturing sector. The financial statement of 1.287 of them is available online.

An interesting aspect to underline is that between those 1.287 enterprises, only 29 have a turnover that exceeds the 50 million euros and can therefore be considered big enterprises. Medium-sized companies, i.e., firms whose annual turnover is between 10 and 50 million euros, count for 98 units and small-sized companies, it is to say, companies whose annual turnover is between 2 and 10 million euros, are instead 276. Micro-sized enterprises are therefore 884.

It is thus possible to summarise these data stating that in the Veneto Region the companies belonging to the sector of the electric manufacturing industries are for 68,7% micro enterprises, for 21,4% small enterprises, for 7,6% medium enterprises and for 2,3% big

enterprises. These results are coherent with the conclusions withdrawn in the previous paragraphs.

As previously stated, for the purpose of this thesis only small and medium enterprises were considered. This means that the analysis started over a sample of 374 companies.

An attempt to contact about the same number of small and medium enterprises was made and this allows comparisons between the two sample groups.

Specifically, 59 small and 55 medium-sized enterprises were willing to respond and to collaborate on this thesis project.

Moreover, an analysis of the geographical distribution of the 1.287 companies whose balance sheets are available in the AIDA database was performed.

2.6 Territorial Division of the Study Sample

After having introduced the structure and general characteristics of the companies under study, it is also interesting to analyse their territorial concentration so as to be able to observe the distribution of this type of company across the region.

In order to do so, the seven provinces of the Veneto Region were taken into consideration. It is to say, Venice, Verona, Vicenza, Padua, Treviso, Rovigo and Belluno (Regione Veneto, 2022).

The area comprising the province of Venice has been called the metropolitan city of Venice since 1 January 2015 and is the tenth largest metropolitan city in terms of territorial area in Italy. The metropolitan city consists of an area of 2,5 thousand km², a population of 837,9 thousand people and 44 different municipalities.

By contrast, the province of Verona consists of 98 municipalities, a territory of 3,1 thousand km² and a population of 926,9 thousand people.

Verona is the second most populous province in the Veneto region, after Padua. The latter counts in fact with 932,6 thousand inhabitants, an area of 2,1 km² and 102 different municipalities.

In the third place in terms of population is the province of Treviso. Indeed, 875,9 thousand people live in an area of 2,5 thousand km² divided in 94 municipalities.

To the west of the province of Treviso lies the province of Vicenza, where 852,1 thousand people live in an area of 2,7 thousand km² and 114 municipalities.

Although it has a larger surface area than the provinces presented above, measuring in fact 3,6 thousand km², the province of Belluno has only 198,1 thousand inhabitants and 61 municipalities.

In last place in terms of both surface area and number of inhabitants is the province of Rovigo. It counts indeed with 1,8 thousand km², 228,6 thousand people and 50 municipalities (Regione Veneto, 2022).

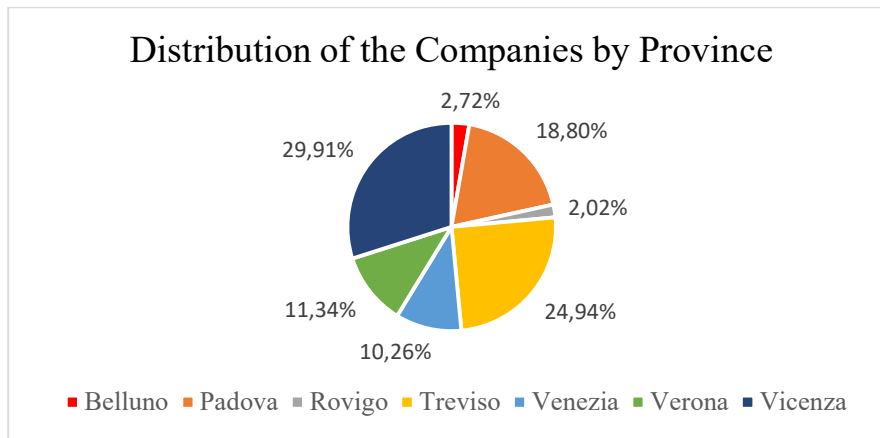


Figure 3

Observing the graph in Figure 3, the 1.287 enterprises under analysis seem to be concentrated in the provinces of Vicenza, Treviso and Padua.

In fact, 385 firms belonging to the electrical equipment manufacturing sector are settled in Vicenza, 286 of whom are micro-sized enterprises, 97 are small-sized enterprises, 42 are medium-sized enterprises and only 10 are big enterprises. In this province the 29,9% of all the firms belonging to this sector settled in the Region is present.

The province of Treviso counts with 321 companies (24,9% of the whole) belonging to the sector object of analysis, the vast majority of whom are micro-sized ones (224 units). However, also 71 small-sized companies, 19 medium-sized companies and 7 big companies are settled in the province.

A similar division is present also in the province of Padua, where 242 firms are settled (corresponding to the 18,8% of the whole). 169 of whom are micro-sized, 50 are small-sized, 18 are medium-sized and only 5 are big companies.

In the province of Verona, the total number of firms is 146 (11,3% of the whole). There are 4 big enterprises, 9 medium enterprises, 21 small enterprises and 112 micro enterprises.

132 companies have established their headquarters in the province of Venice, corresponding to the 10,3% of the total. Of them, 3 are big enterprises, 5 are medium, 28 are small and 96 are micro-sized.

Considerably lower numbers are recorded in the provinces of Belluno and Rovigo, where 2,7% and 2% of the total number of firms present in the Region is settled respectively. In

fact, in the case of the Province of Belluno, the total number of enterprises belonging to the sector under analysis is 35. Of them, 7 are medium-sized companies, 7 are small-sized companies and 25 are micro-sized companies.

Only 26 firms are settled in the province of Rovigo, 2 medium-sized firms and 2 small sized ones. Micro-sized companies are instead 22.

Focusing on small and medium enterprises, corresponding to the firm size studied in this paper, it is interesting to observe the following graphs.

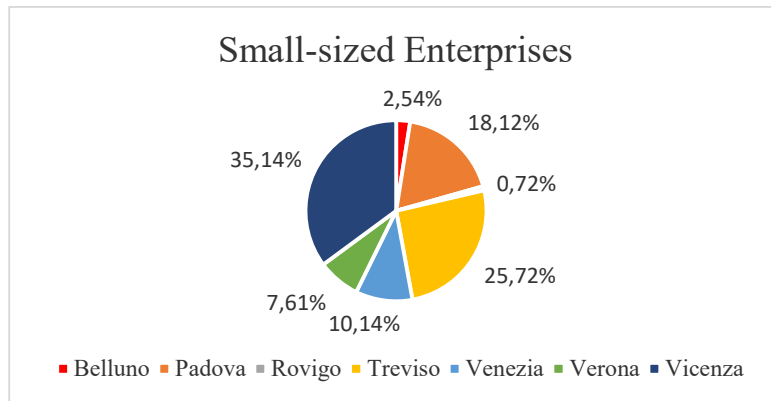


Figure 4

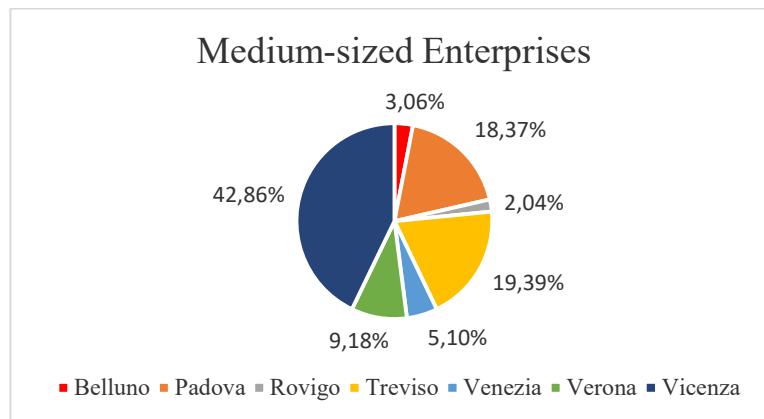


Figure 5

Graphs in Figures 4 and 5 allow us to summarise the percentage distribution of companies belonging to the electrical equipment manufacturing sector by province. In particular, it can be seen that 35,14% of the small-sized enterprises and 42,86% of the medium-sized enterprises are located in the province of Vicenza. On the other hand, 25.72% of small sized enterprises and 19.39% of medium sized enterprises are located in the province of Treviso. The province of Padua registers almost the same percentage of small and medium enterprises, counting with 18,12% of the former and 18,37% of the latter.

After analysing the general percentages of companies in the Region, it is interesting to see whether these values are consistent with the companies that decided to collaborate

with this thesis project. it is important to point out that the phone calls and emails requesting companies to participate in the study were not made according to a territorial criterion, but rather purely by size. That is, all companies that were of a suitable size for the study were contacted.

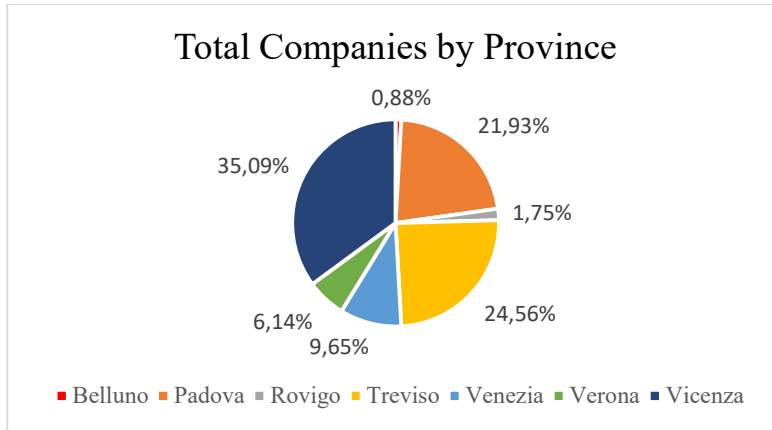


Figure 6

Graph in Figure 6 seem to present data that are coherent with the geographical distribution presented above. In fact, 35,09% of the respondent companies are settled in Vicenza, 24,5% of them are settled in Treviso and 21,93% in Padua.

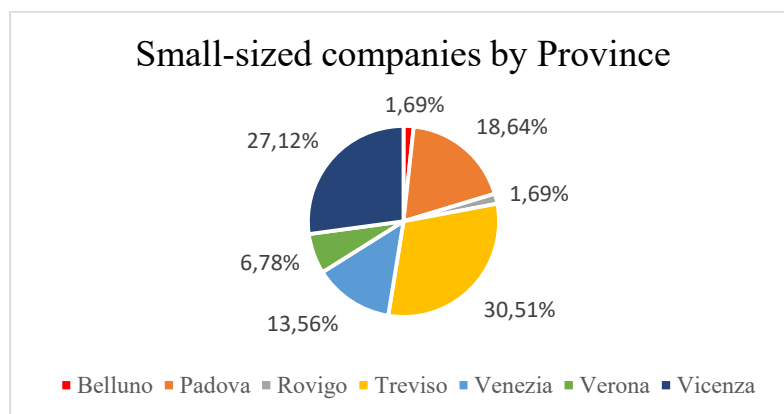


Figure 7

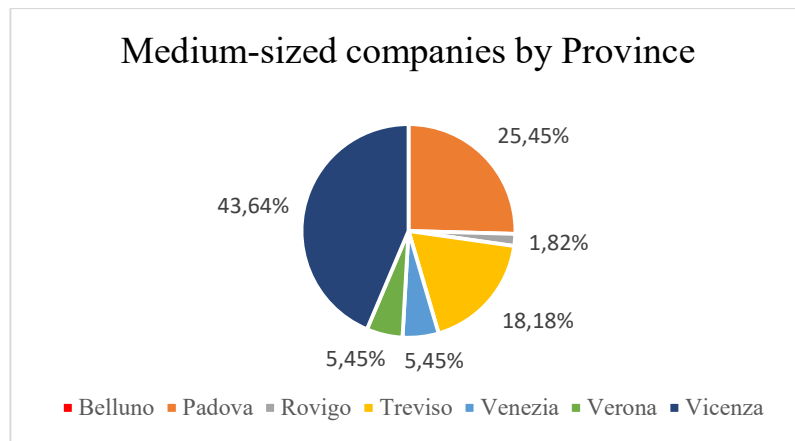


Figure 8

Graphs in Figures 7 and 8 show instead the distribution of companies by province but this time considering their size. Also in this case, data confirm a concentration of enterprises in the provinces of Vicenza, Treviso and Padua.

In fact, 27,12% of the small-sized respondent companies are located in the province of Vicenza, 30,51% in the one of Treviso and 18,64% in the one of Padua.

Medium-sized companies seem instead to be more intensively located around the province of Vicenza (43,64% of them are settled in this area), followed by Padua (25,45%) and then Treviso (18,18%).

Chapter III Analysis of the Four Consultant Figures

The following paragraphs will proceed with the analysis of the four advisory figures under study, namely the financial, legal, insurance and accountant advisor. This analysis will also be carried out considering the size of the companies in which these consulting figures operate. In fact, in previous studies conducted in Great Britain a direct relationship between company size and use of consultants was noted, it is to say, the larger the company size, the more intensive the use of external consultants (Smallbone, North, & Leigh, 1993). This could be explained by the fact that bigger enterprises have to deal with more complex activities, have more means at their disposal and can spend more time looking for the type of consultant that better fits their needs.

It is therefore purpose of this study also to analyse if this is the case in the Veneto Region environment or if other relations between firm size and use of the consultant can be underlined.

3.1 Percentages of Firms Using a Financial Advisor

Many companies rely on the professional figure of the financial advisor. This fact could be related to the very specific knowledge that this type of consultant must have that is typically not available inside small and medium enterprises. Analysing the percentages of medium-sized firms relying on the financial advisor it was noted that 38 over 55 companies use this type of external consultancy on a continuous basis. This means, the 69,09% of the firms interviewed.

Similar results were registered for small-sized companies. In fact, over the 59 interviews, 36 affirmative answers were counted when it was asked if inside the organisation there a continuous use of an external financial advisor was. The percentage in this case is therefore 61,02% of small-sized companies relying on this professional figure.

It is possible thus to observe that medium-sized firms on average use more this type of consultant, and this could be explained by their greater financial availability but also by the greater complexity of the market operations they have to deal with on a daily basis.

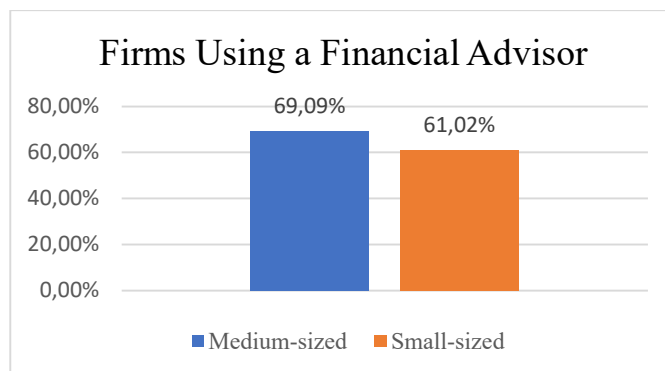


Figure 9

The graph in Figure 9 compares in a clearer way small and medium firms that rely on the figure of the external financial consultant. As already previously stated, the majority of both medium- and small-sized companies do use this type of external consultant.

3.2 Percentages of Firms Using a Legal Advisor

The professional figure of the legal advisor is relatively new and its extensive use inside organisations has developed especially in the last decade. However, many firms still prefer to hire an internal figure in order to receive legal advice instead of relying on an external consultant.

These considerations explain why the percentage of firms using this type of consultant is significantly lower than in the case of the financial advisor. In fact, studying the medium-sized companies only 27 of them engage a legal advisor regularly for day-to-day business. The percentage of medium-sized companies that use an external legal advisor is thus 49,01% as it is possible to observe also in Figure 10.

Similar results have been registered as far as small-sized companies are concerned. In fact, 28 over 59 of them rely on the external legal consultant, i.e., the 47,5% as shown in figure 10.

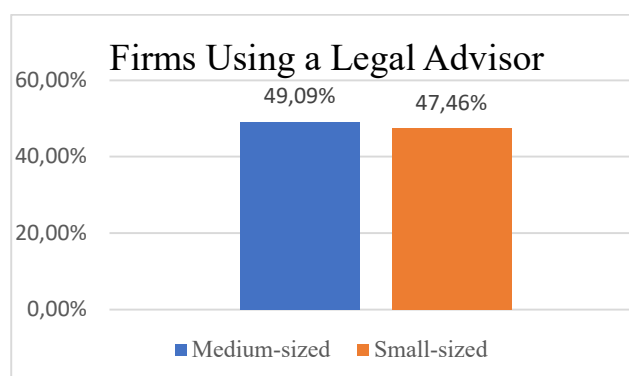


Figure 10

3.3 Percentages of Firms Using an Accountant Advisor

Accounts tend to be kept in-house whenever possible and companies are reluctant to share private information about their economic situation with external consultants.

This is proved by collected data that show that only 19 over 55 medium-sized firms rely on this type of external consultancy figure. It is to say, only 34,5% of firms do not manage the whole accounting internally.

Nevertheless, the situation changes drastically if small-sized firms are analysed. In fact, 42 of them affirmed that they do rely on external accountant advisors, and it means that 71,1% of small-sized companies consider this professional figure essential.

In Figure 11 it is possible to observe the difference in percentages of the results obtained.

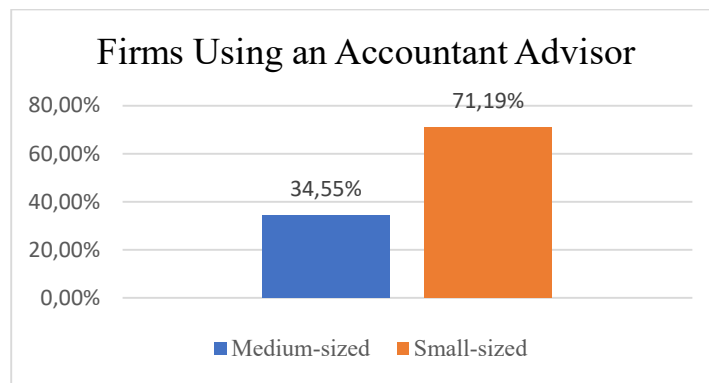


Figure 11

These data may suggest that as soon as firms grow and acquire more resources they try to internalise as much as possible all accounting-related matters while firms prefer to use an external consultant that help them with their ordinary administration when they are still small and with fewer resources available.

3.4 Percentages of Firms Using an Insurance Advisor

A high number of firms rely on an insurance advisor. It may be explained by the fact that companies running a business already have to face many risks in their ordinary administration so that they prefer to be sure to be protected by the external risks that can be avoided. At the same time, since insurance policies are generally renewed on a yearly basis it could not be profitable for SMEs to hire an internal employee to manage and study the most convenient insurance policies.

Medium-sized firms using external insurance advisors are 39, which means the 70,9% of the sample size, as represented in figure 12. Similar results have been registered for small-sized companies with 39 firms relying on an external consultant, thus the 66,1% of them as observable in Figure 12.

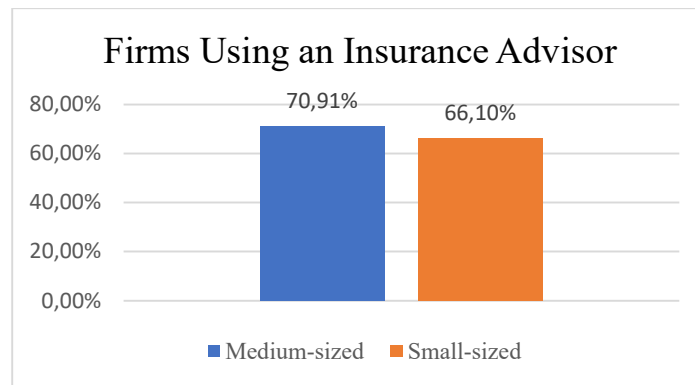


Figure 12

3.5 Other Consultants Used by the Analysed Sample

During data collection, the selected companies were asked whether they make use of other external consultants in order to observe if there were other professional figures particularly present in the sector. The results obtained will be presented below.

A professional figure that is often used as external consultant by companies is the one of the Human Resources (HR) Expert. The consultant ensures proper personnel management so that it respects and follows the company strategic objectives. He/she can intervene in all processes that pertain to personnel management: from recruitment, selection, induction and discharge of personnel to actual management. The consultant is in charge of planning interventions for the evaluation, motivation, training and development of human resources. The degree of specialisation depends strongly on the size of the organisation in which he/she operates, and on the way work is divided (Atlante delle Professioni). 30,9% of medium-sized firms rely on this type of consultancy while only 11,9% of small-sized firms do. This difference may be explained due to different budget constraints.

Another professional figure that many companies refer to is the Labour Consultant. This type of consultant fulfils legal obligations in the field of labour, social security and social assistance in the area of personnel management. He/she also solves personnel classification problems, manages relations, communications mainly with the Employment Centres, the Labour Directorate, INAIL, INPS, and with the trade unions of workers and employers (Atlante delle Professioni).

23,6% of the medium-sized companies cooperate with a labour consultant on a continuous basis and this percentage is even greater (32,2%) for small-sized companies. Many of the companies interviewed stated that this professional figure particularly helps them with payroll management and understanding regulatory references regarding the hiring of new workers.

For the ordinary course of business, several companies continuously refer to an external IT Consultant. This type of consultant enables them to always have a functioning operating system and to implement new cloud functionalities that allow a high continuity of services and a competitive position in the market.

Nevertheless, cooperating with this type of consultant on a continuous basis is expensive and firms may prefer to contact an IT expert only in case a problem arises or in any case only to renew their computer systems on a sporadic basis. This conclusion is supported by the data, in fact only 12,7% of medium-sized firms rely on an IT external consultant on a continuous basis and only 8,5% of small-sized companies do.

Also due to the nature of the chosen business, another important aspect is security. This is why consultants who deal with safety-related matters are present in many of the companies surveyed. In particular, the figure of the Healthy and Safety Manager (in the Italian Legislation called “RSPP”, Head of the Prevention and Protection Service) is very common inside the companies belonging to this sector.

Although the position of security manager can be performed, according to Italian law, by the manager himself or by an employee of the company, many firms prefer to hire an external consultant to take charge of this very delicate aspect of business operations. However, the safety consultant who wants to act as the Healthy and Safety Manager for a company must possess the skills and professional requirements specified in Article 32 of Legislative Decree 81/2008 (Gazzetta Ufficiale della Repubblica Italiana, 2008).

In general, the safety consultant is responsible for providing the manager with all the tools and resources to try to reduce workplace risks and comply with health and safety laws for workers. A safety consultant's main tasks include advising the employees on everything they should wear and on the procedures they should adopt, to ensure that the company comply with safety regulations and to reduce the possibility of accidents. Moreover, the safety consultant is in charge of explaining what to do in the event of workplace accidents (Business School, 2020). 9,09% of the medium-sized companies under analysis rely on this type of consultant against 22,03% of small-sized ones. This data may suggest that firms tend to internalise this figure as they increase their business and have the resources to do so.

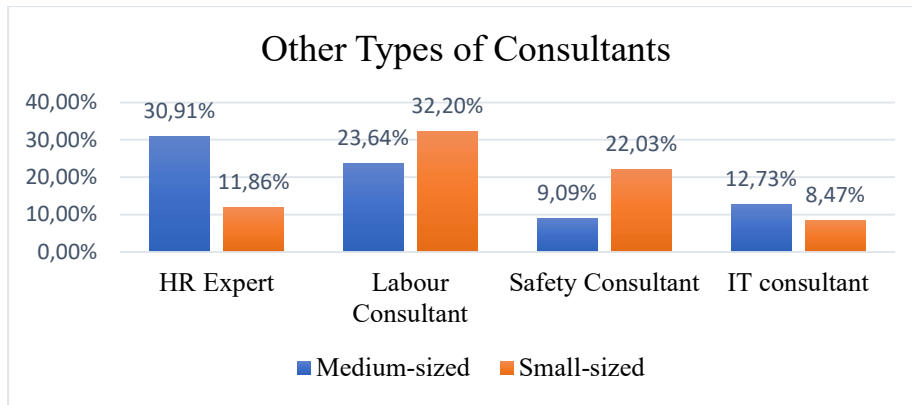


Figure 13

Figure 13 helps summarising and comparing previously stated data.

Some of the companies interviewed also reported using other external consultants on an ongoing basis, such as technical, environmental and management consultants. However, the percentages of companies referring to these professional figures are negligible, so these results will not be discussed in this paper.

Chapter IV The Impact of the Consultants

In the following paragraphs it will be observed if and how the reference indices, it is to say the EBITDA to Sales, the return on investment (ROI), the return on equity (ROE) and the return on sales (ROS), of the small- and medium-sized enterprises object of analysis are affected by the presence of the four consultants figures studied in this paper. A comparison between the two groups will be developed in order to understand if there are detectable differences between them.

4.1 Analysis of the ROI

Analysing the Return on Investments of the firms that belong to the sample, it is possible to notice that the medium-sized firms have an overall average of 12,1% of ROI, while small firms registered a value of 10,7%. These values are both positive, thus firms operating in this sector registered overall positive performances. Nevertheless, it is important to underline that data used were taken from the latest available balance sheet, which for many companies corresponds to that of 2020. The pandemic factor and related crisis have certainly had a negative impact on company performance, leading firms to record lower values than they were used to in previous years and hopefully in future years. As far as the legal consultant is concerned, it is possible to observe some interesting results. In fact, small firms relying on this professional figure registered an average ROI of 14,39% while firms that do not only achieved a value of 7,37%. As far as medium-sized firms are concerned, the difference in the average ROI between firms relying on this type of consultant and firms that do not is much more noticeable. In fact, in the first case an average ROI of 17,71% is observed while in the latter case the average ROI is 6,70%. These results have been summarised in Figure 14.

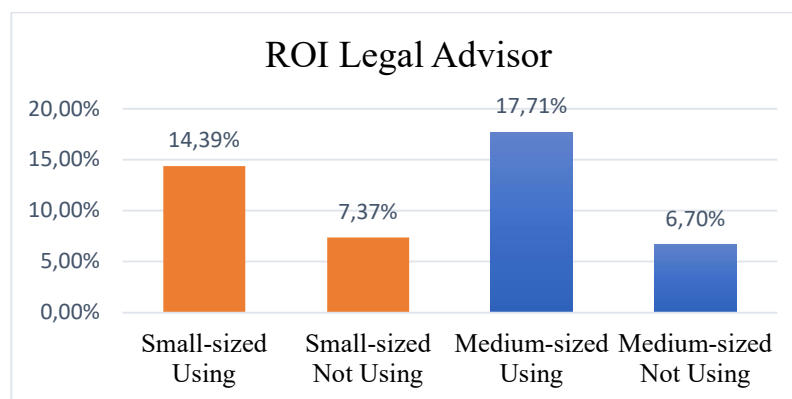


Figure 14

The figure of the financial consultant also seems to have a positive impact in the ROI of

firms under analysis. Small companies using this type of consultant have an average ROI of 11,95% against the 8,75% of firms that do not use this type of consultant. However, as in the previous case, this difference is more evident in the medium-sized firms case. It is to say, the impact of financial advisor is more clearly identifiable in medium-sized companies. The average ROI of firms of this size that do use this type of consultancy is 15,68% against 4,13% that do not as it is possible to notice in Figure 15.

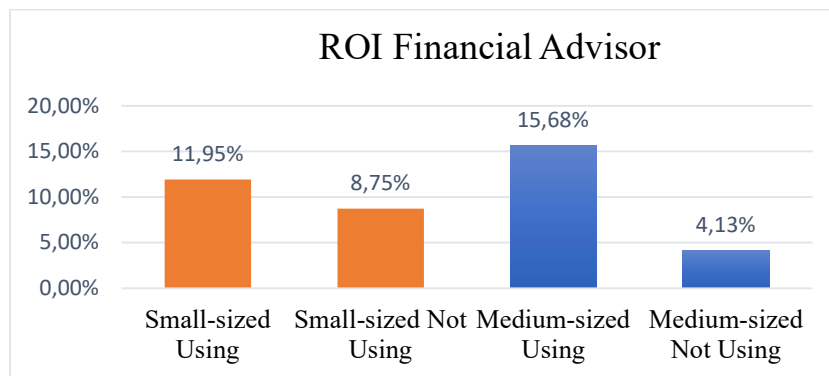


Figure 15

In accordance with these results, also the insurance advisor seems to have a positive effect on the firms he/she is working for, and this can be observed in Figure 16. As a matter of fact, small companies cooperating with him/her present an average ROI of 12,93%, a much higher value than the one of 6,36% achieved by those firms that do not work with this type of consultant. Once more this difference is most evident when comparing medium-sized firms. In this case, the average ROI of firms with the insurance advisor is 15,98% against the 2,67% of the firms without.

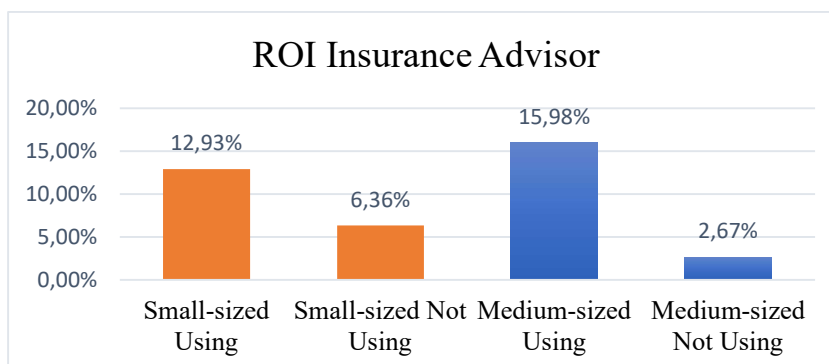


Figure 16

Conflicting results have been noted for the accountant advisor. Small firms without this type of consultant have an overall average ROI of 13,94% against the 9,49% of the other firms. On the opposite side, medium-sized firms not relying on this consultancy figure have an average ROI of 7,67% that is a lower result than the 20,51% achieved by the firms using this type of consultant. One possible explanation for these results could be

that since this type of consultant represents a high cost, small firms tend to externalise their accountability only once they understand that they are not able to manage it by their own, thus when their situation is already critical and external accountant advisors need more time and effort to give their positive contribution to these types of companies. Figure 17 below summarises the results obtained.

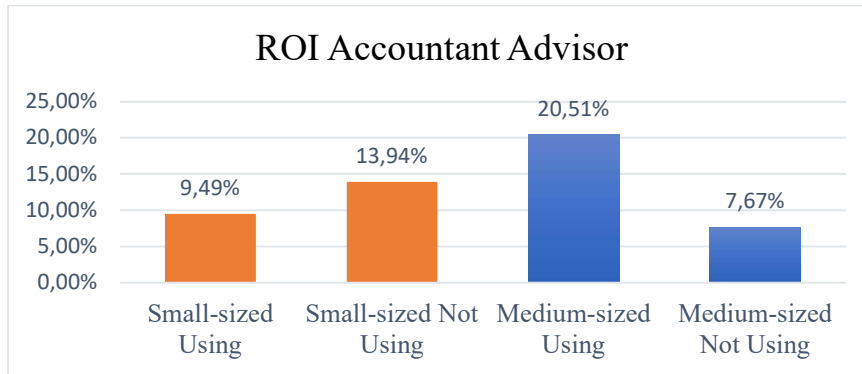


Figure 17

4.3 Analysis of the ROE

As already mentioned, the Return on Equity is one of the profitability indicators, i.e., indicators aimed at assessing the company economic equilibrium and measuring the company ability to generate income and resources. According to the collected data, the average ROE of small-sized firms is 13,8% while the average ROE of medium-sized firms is 14,4%. On a purely indicative level, these values can be defined as encouraging as they exceed the inflation rate by at least 3-5 points (Comitato Torino Finanza).

The average ROE of medium-sized firms relying on the legal consultant registered a value of 19,62%, the one of medium-sized firms that decided not to rely on a legal consultant is instead 9,39%. Similar results have been registered in the case of small-sized firms. In fact, small firms using the external legal consultant have an average ROE of 18,60% against the average ROE of small firms that do not use a legal consultant that is of 9,45%. These results can be clearly observed in Figure 18.

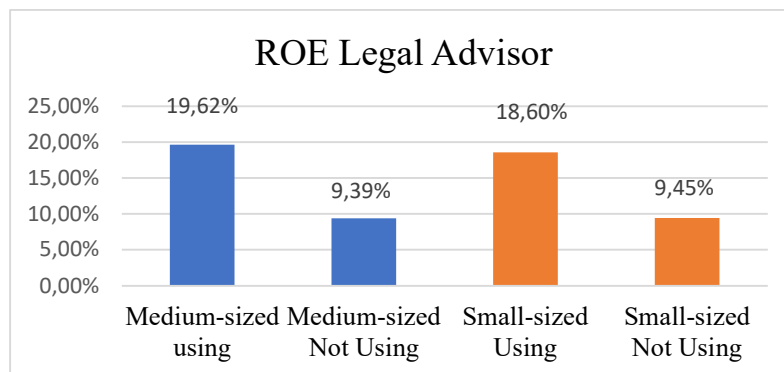


Figure 18

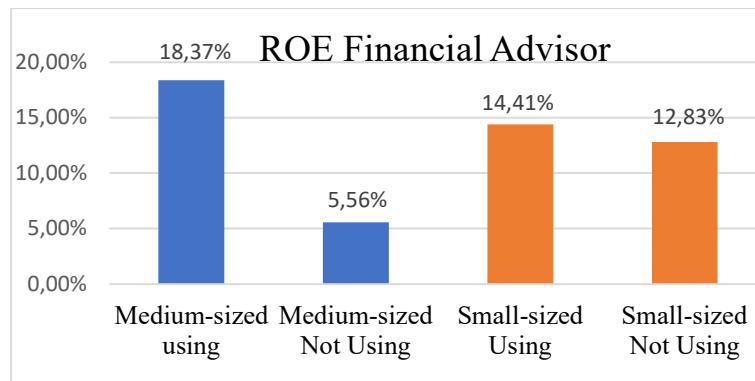


Figure 19

Figure 19 shows that both medium-sized and small-sized firms relying on the figure of the external financial advisor register on average a higher ROE than firms that do rely on this professional figure. In particular, medium-sized companies that cooperate with a financial advisor have a ROE of 18,37% while firms of the same size that do not cooperate with a financial advisor have an average ROE of 5,56%. In the case of small-sized companies this difference is smaller. Small firms not using a financial advisor registered an average ROE only 1,58% lower than the firms that do not use a financial advisor. In fact, in the former case the average ROE is 12,83% while in the latter case the average ROE is 14,41%.

The accountant advisor also seems to have a great impact on the average ROE of the companies under study. In fact, as it is possible to observe in Figure 20, small-sized companies relying on this professional figure register almost the double of the ROE than firms of the same size that do not, i.e., 15,61% in the former case and 8,92% in the latter case.

As far as medium-sized firms are concerned, companies cooperating with an accountant advisor have an average ROE much higher than the firms that do not. In fact, medium-sized companies using an accountant advisor have a ROE of 24,40% while the ones without register a ROE of 9,14%.

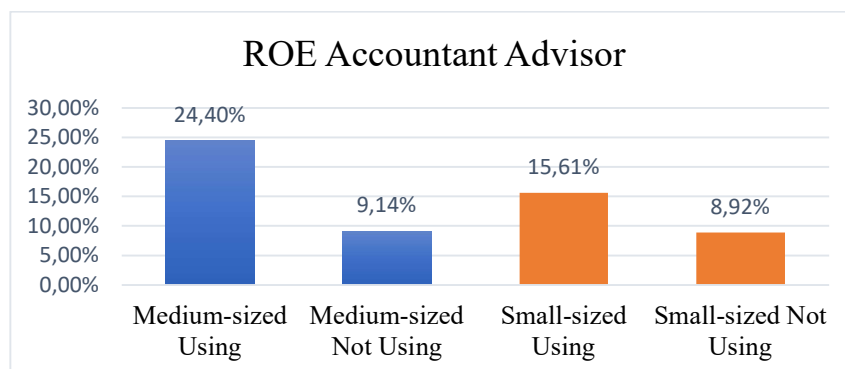


Figure 20

It is interesting to observe the case of the insurance advisor. In fact, small-sized firms not relying on this professional figure show an average ROE of 8,33% higher than firms of the same size that do rely on the insurance advisor. These results are clearly observable in Figure 21. In the case of medium-size firms, the difference is even more remarkable. In fact, medium-sized firms cooperating with an insurance advisor register a ROE of 17,79% that is only much higher than the one of medium-sized firms that do not cooperate with this professional figure that is of 6,17%.

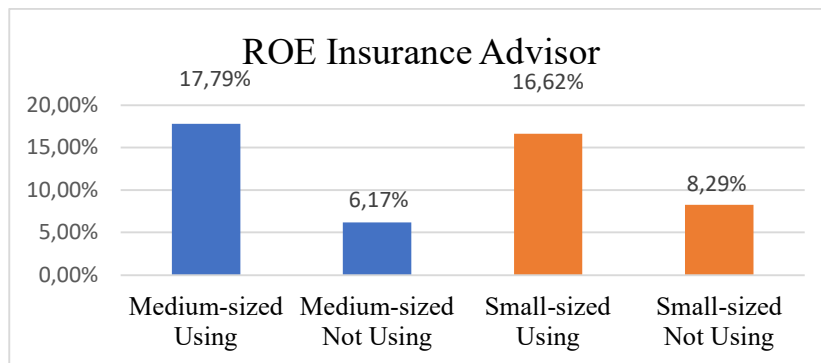


Figure 21

4.4 Analysis of the ROS

The ROS measures the profitability of sales. The companies under analysis register an average Return on Sales (ROS) of 11,25% as far as medium-sized companies are concerned, and of 6,23% in the small-sized companies case. These values, both being positive, indicate that on average the companies enjoy good operational efficiency and are therefore able to meet their operating costs and cover any other charges.

Also for this value, it is interesting to study its variation considering the presence or absence of the four consultants figures.

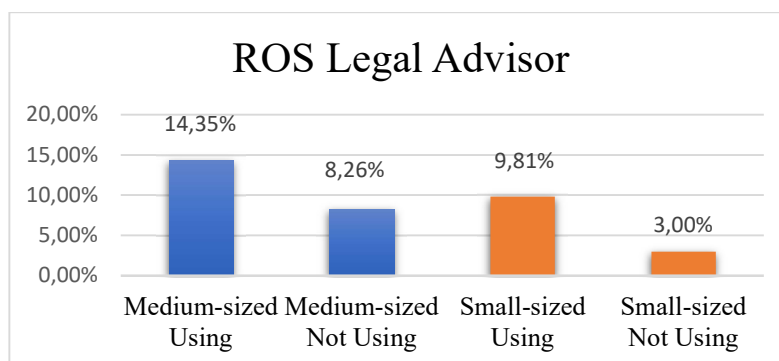


Figure 22

Figure 22 represents the ROS for both medium-sized and small-sized firms that rely or not to the professional figure of the external legal consultant. For both firm dimensions, companies cooperating with a legal advisor have a higher ROS, corresponding to 14,35%

for medium firms and 9,81% for small firms. Companies that do not use the advice of the legal advisor have registered an average ROS of 8,26% as far as medium-sized firms are concerned and of 3% in the case of small-sized firms.

Results collected regarding the impact of the financial advisor are coherent with the ones collected so far. In fact, for both small and medium enterprises, the registered average ROS of firms relying on this professional figure have given higher results than the average ROS of firms that do not rely on the financial advisor, as it is possible to observe in Figure 23. Indeed, the graph below shows that the medium-sized firms relying on the financial advisor have an average ROS of 12,49% against the 8,49% registered for companies of the same size that do not use this professional figure. Small-sized companies have instead an average ROS of 7,98% that is slightly higher than the 3,49% achieved by the small companies without the financial advisor.

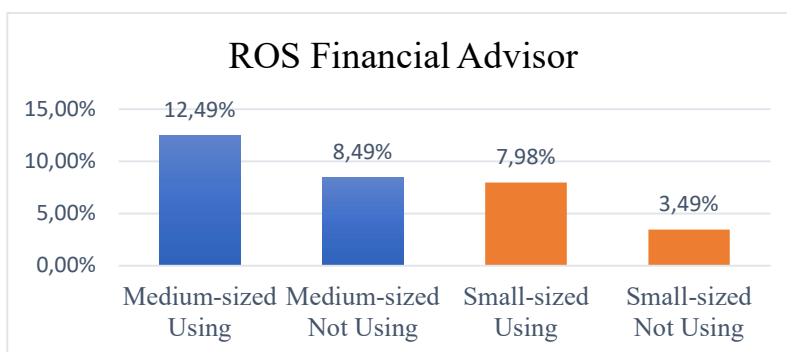


Figure 23

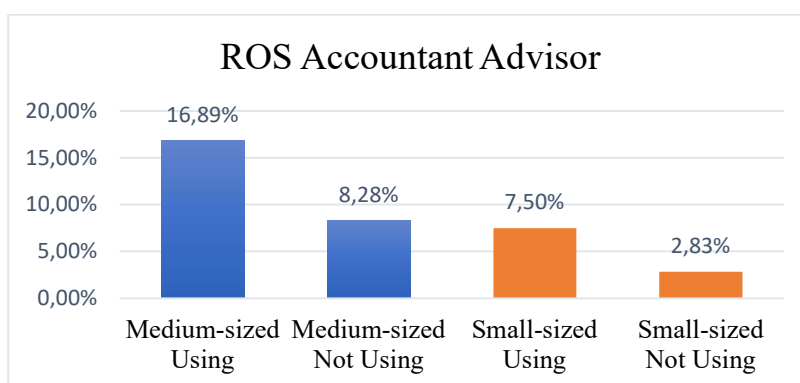


Figure 24

Encouraging results were recorded also by the accountant advisor as can be seen in Figure 24. In fact, both medium-sized and small-sized firms that use this type of consultancy figure have an average ROS that is higher than the one of firms that do not. In particular, medium-sized firms that rely on the accountant advisor have an average ROS of 16,89% against the 8,28% of firms of the same size that do not. Small-sized firms using this professional figure have instead an average ROS of 7,5% against the 2,83% of the ones

that do not.

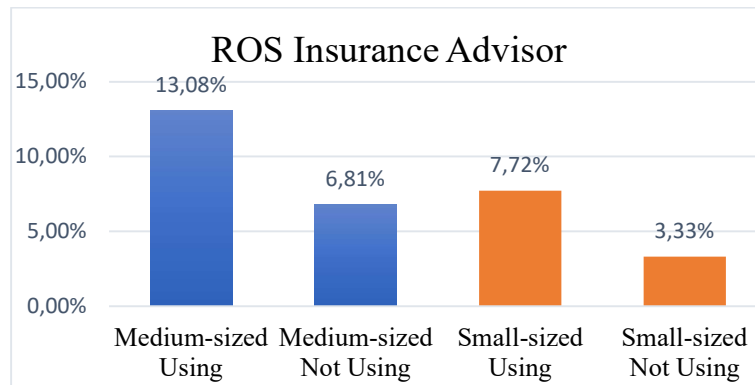


Figure 25

As it is possible to observe in Figure 25, also in the case of the insurance advisor firms working with this type of external consultant do register a higher ROS. In the case of medium-sized firms, the ones relying on this type of consultant figure have an average ROS of 13,08% against the 6,81% registered by the firms without this type of consultant. For small-sized firms the difference is slightly lower, in fact the average ROS of firms relying on this consultant is 7,72% while the average ROS of firms that do not use this consultancy figure is of 3,33%.

4.5 Analysis of the EBITDA/Sales

As mentioned in previous paragraphs, the EBITDA/Sales indicator expresses the company true ability to stay in the market as it measures how much operating income it is able to generate per unit of turnover.

As far as the companies subject of study are concerned, medium-sized enterprises have an average EBITDA/Sales of 13,43% while small enterprises of 9,31%, both value being positive.

If the legal advisor is taken into consideration, it is interesting to underline that the EBITDA/Sales ratio of firms that cooperate with this professional figure is higher for both medium-sized and small-sized enterprises.

More specifically, medium-sized companies with a legal advisor record an EBITDA/Sales of 15,83% compared to the 11,11% recorded by companies of the same size that do not employ this professional figure. The difference is more pronounced in the case of small enterprises where the employment of this professional figure brings the average index to a value of 12,86% compared to the value recorded of 6,11% for enterprises that do not rely on this type of consultant. These data can be observed in Figure 26 below.

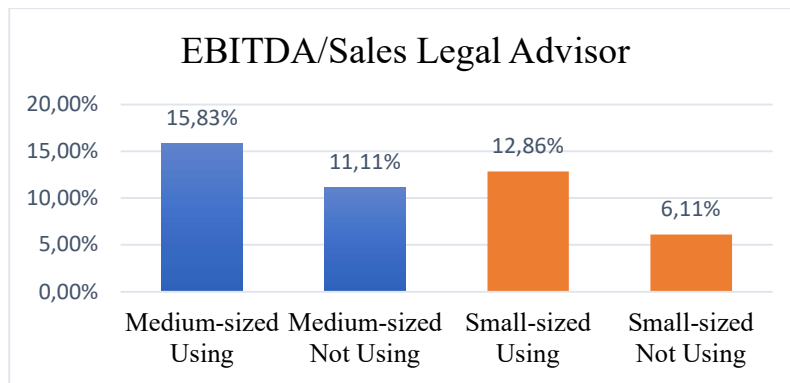


Figure 26

The EBIDTA/Sales ratio seems to be impacted by the figure of the financial advisor too. In fact, firms relying on this professional figure do have a higher EBIDTA/Sales on average. Medium-sized firms using this type of consultant have an average ratio of 14,66% while firms of the same size without this type of consultant have an average ratio of 10,66%. Small firms with the financial advisor have instead an average ratio of 11,11% while small firms that do not rely on this professional figure have an average ratio of 6,5%. Figure 27 shows these results.

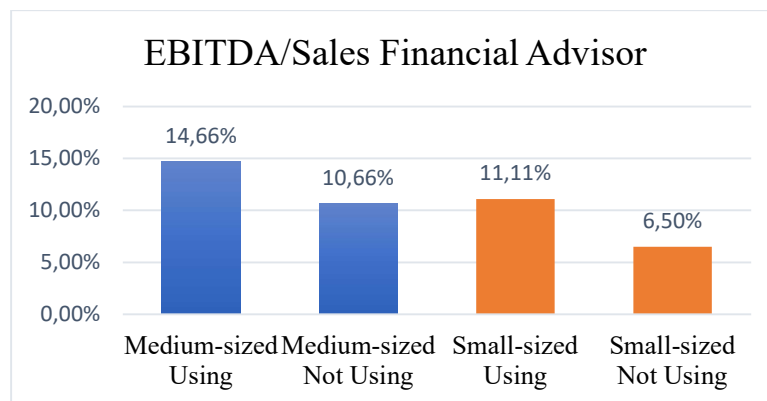


Figure 27

The accountant advisor and the insurance advisor seem to impact in a positive way the EBITDA/Sales ratio of the firms with which they cooperate as it is possible to notice from Figures 28 and 29 below.

Medium-sized firms relying on the professional figure of the accountant advisor have an average EBITDA/Sales of 18,13% while firms of the same size that do not rely on this professional figure register an average ratio of 10,94%. Similarly, small-sized companies working with the accountant advisor achieved an average ratio of 11,44%, higher than the 3,59% recorded by the companies that do not employ an accountant advisor.

Finally, medium companies that cooperate with the insurance advisor have an average EBITDA of 15,26% against the 8,97% registered by the medium companies without the

insurance advisor. Small enterprises working with the insurance advisor register instead a value of 10,62% that is almost 3,87% higher than the ratio computed for small companies that do not cooperate with this professional figure.

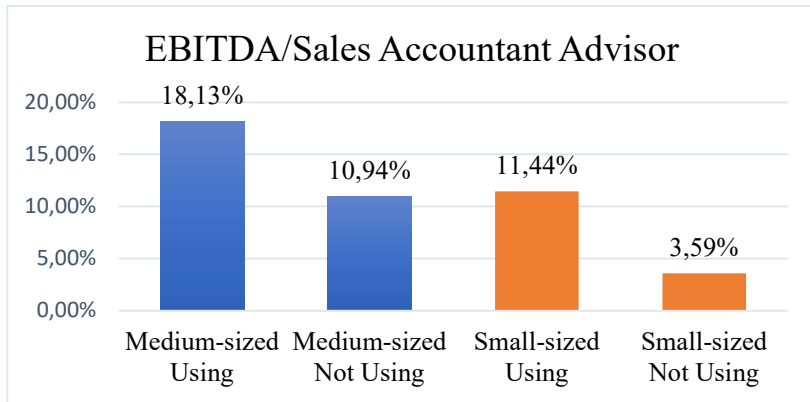


Figure 28

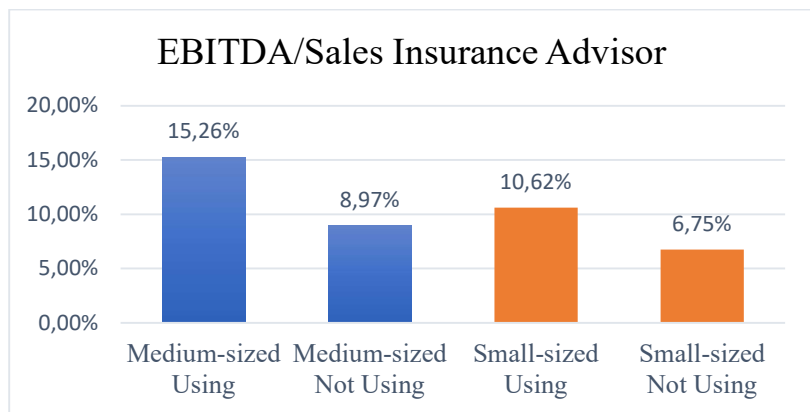


Figure 29

4.5 Summary of the Results

The preceding paragraphs analysed the variation of the benchmark financial ratios with respect to the presence or absence of the external consultants under analysis. In this paragraph, an attempt will be made to summarise the results obtained by focusing more on the consultants under study.

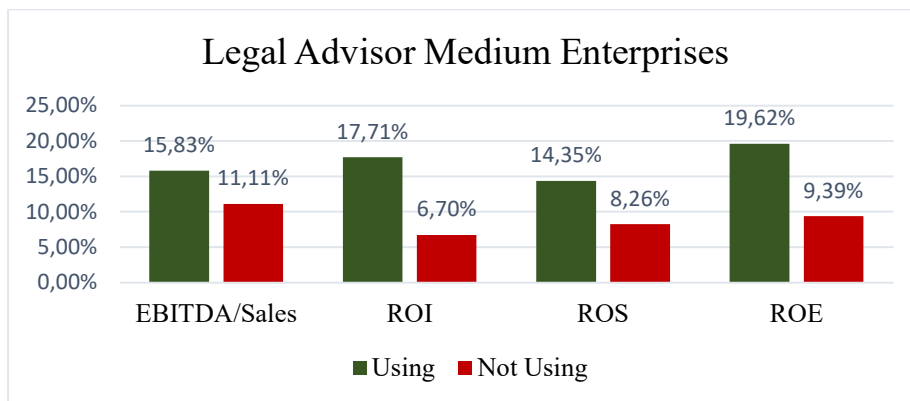


Figure 30

Figure 30 shows the percentages obtained in the reference indices when the legal advisor is taken into consideration. As it is possible to observe, medium-sized firms relying on this type of external consultant registered higher results in all four indices under analysis if compared to the firms of the same size that do not rely on this type of consultant figure. It is therefore possible to assume it is convenient for medium-sized enterprises to cooperate with an external legal consultant.

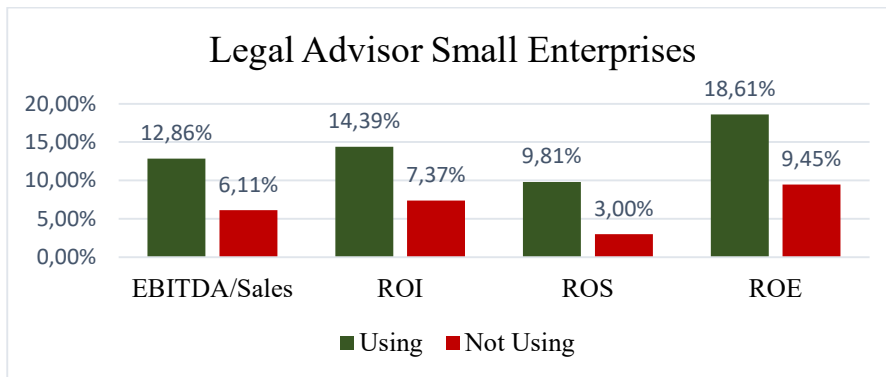


Figure 31

As in the case of medium-sized enterprises, also small-sized enterprises seem to benefit from the presence of an external legal consultant. It is to say, small firms of the analysed sample that cooperate with an external legal consultant registered higher values for all the indices studied in this paper. This could be connected by the fact that by cooperating with a legal consultant small and medium-sized enterprises alike are able to conclude contracts that are more convenient and are better informed about their rights and obligations towards their suppliers, competitors and customers. Results can be observed in Figure 31 above.

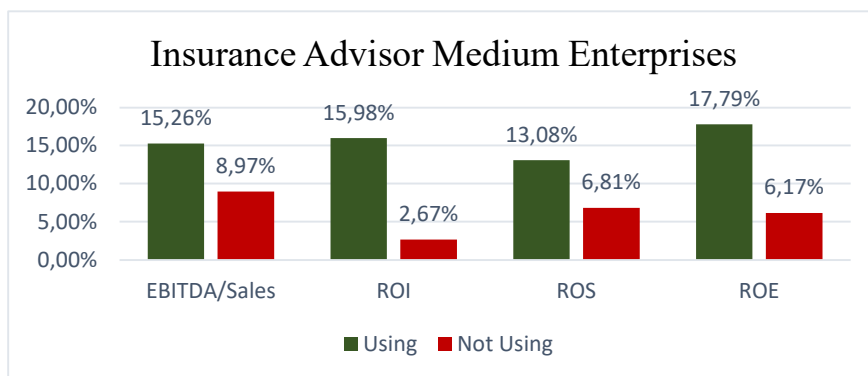


Figure 32

Figure 32 represents the results obtained by the four reference indices when the insurance advisor is cooperating with the medium-sized enterprises. Firms cooperating with this type of consultant figure registered higher financial ratios of firms that instead do not rely

on the insurance advisor. In particular, the higher gap has been registered with the ROI. In fact, medium-sized firms relying on the professional figure of the insurance advisor registered a ROI 13,31% higher than firms that do not.

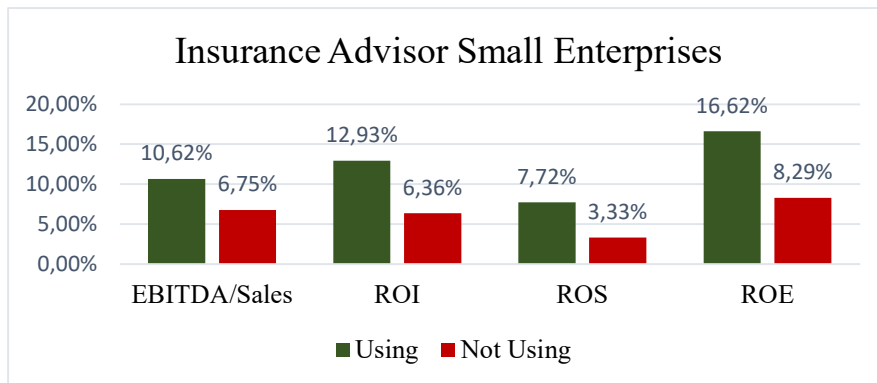


Figure 33

Small-sized firms working with an external insurance advisor also register higher financial ratios than firms that do not as it is possible to observe in Figure 33. However, the difference is not as strong as in the case of medium-sized companies. In this case, the ROE is the ratio that seems greatly affected by the presence of the insurance advisor. This is in fact the ratio in which the difference between companies relying on the consultant and companies not relying on the consultant is higher.

These results could be connected to the type of industry in which the firms under study are working. In fact, in this sector, i.e., the manufacturing of electrical equipment, the risks associated with daily operations are high and it is therefore essential to be insured correctly and considering all the possible sources of risk.

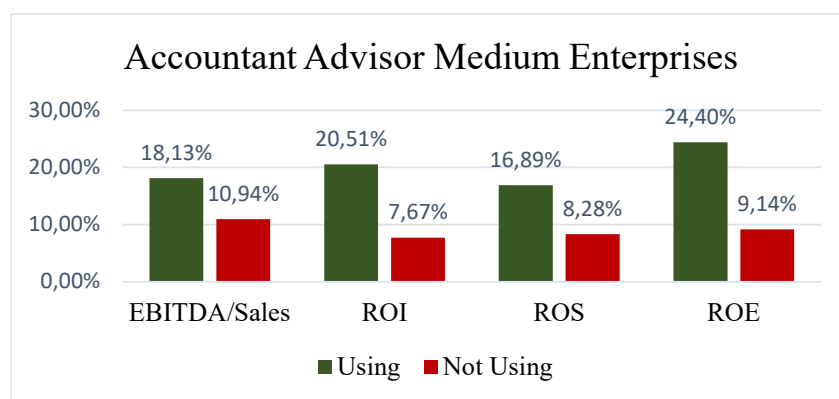


Figure 34

The professional figure of the accountant advisor in medium-sized enterprises impacts in a positive way the results obtained by companies in the four financial indices under analysis as it is possible to observe in Figure 34. In this situation too the ROE is the index that it is greatly affected by the presence of the external accountant under study.

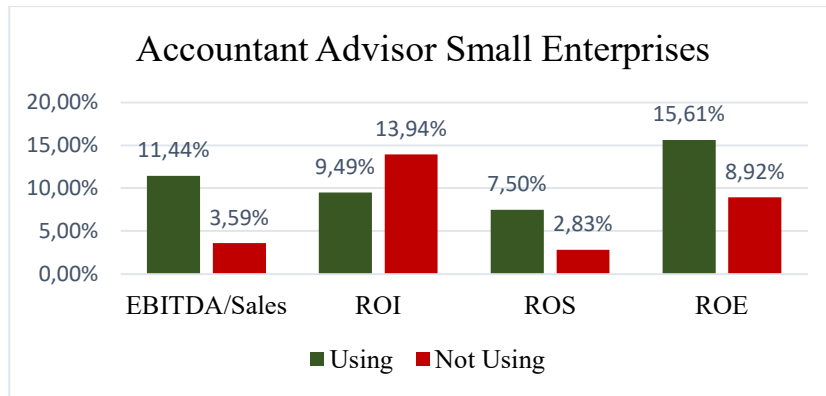


Figure 35

Small-sized companies are positively affected by the presence of the accountant advisor as far as the EBITDA/Sales ratio, the ROS and the ROE are concerned. In particular, the EBITDA/Sales ratio is the ratio that register the highest difference between companies working with the accountant advisor and companies not working with the accountant advisor. Notwithstanding, it is interesting to underline that small-sized companies not using the accountant advisor as external consultant register a higher ROI than the others as it is observable in Figure 35.

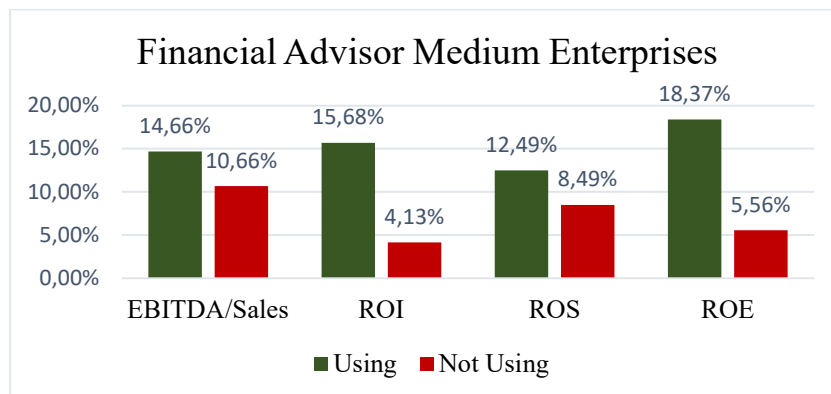


Figure 36

Figure 36 summarises the results obtained by medium-sized companies that use an external financial advisor. Firms seem to benefit by the presence of this type of external consultant. Managing the finances in the most correct way is therefore beneficial for medium-sized companies and affects all the ratios under study.

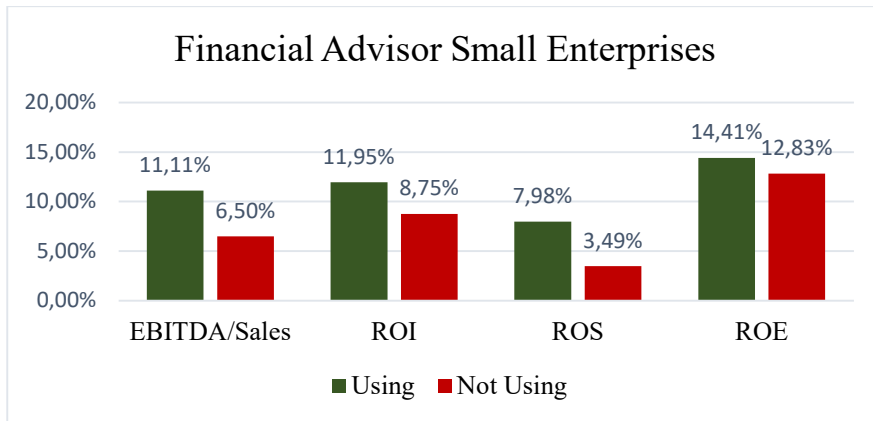


Figure 37

The financial ratios of small-sized companies are positively affected by the presence of the financial advisor too as it is possible to observe in Figure 37. Nevertheless, in this case the difference registered by firms relying on the external financial consultant and the firms that instead do not rely on the consultant is not as remarkable as in the case of medium-sized firms. The EBITDA/Sales ratio seems to be the financial index in which the presence of the financial external advisor has the greater impact.

Chapter V Multiple Linear Regression Models

In order to quantify the relationship existing between the dependent variables, i.e., the reference financial ratios, and a set of explanatory variables, i.e., the presence or absence of the external consultant and the company turnover, a series of multiple linear regression models were constructed. These will then help to predict what the value of Y, the reference financial ratio, will be for given values of the X variables, that in this case are represented by the turnover and the presence or absence of the consultant. The models and analyses were developed following the procedures described in section 1.10 where the methodology used for the study and analysis of the results obtained was described.

5.1 ROI of Small-sized Enterprises

The first model that has been developed is the one that studies the Return on Investment (ROI). As previously stated, the model studied in this thesis project can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Investment, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term is present.

This model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in Model 1, for the presence or absence of the legal advisor in Model 2, for the presence or absence of the financial advisor in Model 3 and for the presence or absence of the accountant advisor in Model 4.

SUMMARY OUTPUT Model 1						
<i>Regression Statistics</i>						
Multiple R	0,390711608					
R Square	0,15265556					
Adjusted R square	0,122393259					
Standard Error	0,121511436					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,148961824	0,074480912	5,044413452	0,009675637	
Residual	56	0,826841633	0,014765029			
Total	58	0,975803457				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,196370676	0,059724355	3,287949705	0,001747004	0,076728416	0,316012936
Insurance Advisor	0,080483151	0,033943588	2,371085528	0,021201269	0,012485973	0,148480329
Turnover	-4,33379E-08	1,73629E-08	-2,496000019	0,015531437	-7,81201E-08	-8,55575E-09

Figure 38

Figure 38 shows the regression analysis performed using Microsoft Excel referring to the presence or absence of the insurance advisor.

Starting with the observation of the R^2 it is possible to know that the independent variables considered explain about 15,26% of the variation of the dependent variable, i.e., the ROI. The observations collected in this case belong to all the small-sized enterprises interviewed, so the sample size is 59.

In order to understand if the test is significant, the Significance F is observed. Since the result that appears in this section is 0,00967 and this value is lower than the alpha value of 0,05 it is possible to state that the test is significant at the 95% confidence level, and it is therefore possible to reject the null hypothesis according to the criteria stated in the methodology section.

It is then important to observe if also the p-values of the coefficients are significant. Since all the p-values are lower than the alpha-value of 0,05 it is possible to say that the coefficients included in the model are significant.

Shifting the focus to the coefficients themselves, it is remarkable to observe that the relationship between the dependent and independent variable is positive when considering the insurance advisor, the X_1 in this model, and is instead slightly negative when turnover is considered, the X_2 in this model. It is to say, when the insurance advisor is present, the ROI of the small-sized companies tend to increase, however, as far as the turnover increases it impacts the ROI in a negative way.

More specifically, on one hand every time the insurance advisor is present the ROI increases by 0,08. On the other hand, when the turnover increases of one unit, the ROI will decrease by $-0,0000000433$.

It is now possible to represent the results obtained through model 1 with the following formula:

$\widehat{ROI} = (0,196 + 0,08) + (-0,0000000433 * x_2)$ in the case the insurance advisor is present and $\widehat{ROI} = 0,196 + (-0,0000000433 * x_2)$ otherwise.

SUMMARY OUTPUT Model 2						
<i>Regression Statistics</i>						
Multiple R	0,412496265					
R Square	0,170153169					
Adjusted R square	0,140515782					
Standard Error	0,12025029					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,16603605	0,083018025	5,741166383	0,00539439	
Residual	56	0,809767406	0,014460132			
Total	58	0,975803457				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,21091402	0,058087312	3,63098262	0,000613007	0,094551151	0,327276888
Legal Advisor	0,083650586	0,031796037	2,63084945	0,010980484	0,01995547	0,147345702
Turnover	-4,36544E-08	1,71574E-08	-2,544352033	0,013733088	-7,80248E-08	-9,28406E-09

Figure 39

Figure 39 represents the summary output of model 2, where the impact of the legal advisor over the 59 small-sized companies interviewed is analysed. Also in this case, the regression is significant since the result of the F-test is 0,005 and this value is lower than the 0,05 significance level.

The R^2 explains that about 17% of the variation in Y, the dependent variable, is connected to the variation in the X variables.

Observing the p-values it is then possible to state that all the independent variables are significant since $0,01 < 0,05$ and $0,013 < 0,05$. Therefore, the independent variables considered do have an impact on the ROI. Observing the coefficients, it is noticeable that the presence of the legal advisor contributes to the increase of the ROI by 0,08 while the turnover seems to have a negative impact by -0,0000000435.

Overall, the results obtained can be summarised by the formula:

$$\widehat{ROI} = (0,21 + 0,0836) + (-0,0000000435 * x_2) \text{ in the case the legal advisor is present}$$

$$\text{and } \widehat{ROI} = 0,21 + (-0,0000000435 * x_2) \text{ otherwise.}$$

SUMMARY OUTPUT Model 3						
<i>Regression Statistics</i>						
Multiple R	0,322877076					
R Square	0,104249606					
Adjusted R square	0,072258521					
Standard Error	0,124934006					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,101727126	0,050863563	3,258708	0,045839114	
Residual	56	0,874076331	0,015608506			
Total	58	0,975803457				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,216362459	0,06038718	3,582920415	0,000712204	0,095392401	0,337332516
Financial Advisor	0,052101449	0,034414443	1,51394138	0,13566471	-0,016838964	0,121041861
Turnover	-4,29068E-08	1,81374E-08	-2,36565577	0,021485224	-7,92403E-08	-6,57325E-09

Figure 40

Model 3 summary output is shown in Figure 40. Observing the significance level of the overall test, it is possible to say that the test is significant since the value obtained is lower than the 0,05 significance level. The value of the R^2 is 0,1 meaning that the model explains about 10% of the variation in the ROI. However, if the p-values of the coefficients are considered, the figure of the financial advisor does not seem to be significant. It is to say, the financial advisor seems not to have an impact on the ROI for the sample considered. The reasons that may explain this result will be discussed in the conclusions. On the other hand, the turnover does impact the ROI, even though through a negative relationship. In fact, for a unit increase in the turnover the ROI decreases by -0,0000000429.

SUMMARY OUTPUT Model 4						
<i>Regression Statistics</i>						
Multiple R	0,344563408					
R Square	0,118723942					
Adjusted R square	0,087249797					
Standard Error	0,123920498					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,115851233	0,057925617	3,772110177	0,029049268	
Residual	56	0,859952223	0,01535629			
Total	58	0,975803457				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,301842463	0,072977811	4,136085464	0,000119632	0,15565034	0,448034585
Accountant Advisor	-0,067568026	0,037483321	-1,802615791	0,076830666	-0,142656141	0,007520089
Turnover	-4,4258E-08	1,80074E-08	-2,457769079	0,017101135	-8,03311E-08	-8,18487E-09

Figure 41

The impact of the accountant advisor is analysed in model 4 and can be observed in Figure

41. Also in this case, the sample size is represented by all the small-sized enterprises and the test is significant since 0,029 is lower than 0,05, i.e., the significance level. R^2 is 0,1187, meaning that the model is able to explain about 11,87% of the variation in Y.

However, once again, observing the p-values the consultant figure under analysis does not seem to impact the result. The possible motivations behind this result will be presented in the conclusions. The turnover has instead an impact on the ROI, making it decrease by -0,0000000442 for every unit increase in turnover. The p-value of this coefficient is indeed 0,017 and it thus lower than the alpha-value of 0,05 at 95% confidence level.

In order to briefly summarise these results, it is possible to say that the return on investment (ROI) in the case of the small-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the insurance advisor and by the presence of the legal advisor while does not seem to be affected by the presence of the financial advisor and of the accountant advisor.

Comparing the four models through their adjusted R^2 it is possible to notice that model 2 seems to be the best model to describe the impact of the consultant on the ROI with an adjusted R^2 of 14,05%, model 1 also seem to be a good model and has an adjusted R^2 of 12,23%. On the contrary, models 3 and 4 only registered an adjusted R^2 of 7,22% and 8,72% respectively.

5.2 ROE of Small-sized Enterprises

The second model that has been developed is the one that studies the Return on Equity (ROE). As in the previous case, the multiple linear regression model under analysis can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Equity, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term, is present.

As in the previous paragraph, this model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in model 5, for the presence or absence of the legal advisor in model 6, for the presence or absence of the financial advisor in model 7 and for the presence or absence of the accountant advisor in model 8.

SUMMARY OUTPUT Model 5						
<i>Regression Statistics</i>						
Multiple R	0,412862536					
R Square	0,170455474					
Adjusted R square	0,140828883					
Standard Error	0,187715695					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,405471605	0,202735802	5,75346242	0,005339636	
Residual	56	1,973282192	0,035237182			
Total	58	2,378753797				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,32806242	0,092264557	3,555671117	0,000775065	0,143234303	0,512890537
Turnover	-8,00365E-08	2,6823E-08	-2,983880155	0,004211517	-1,33769E-07	-2,63037E-08
Insurance Advisor	0,110697925	0,052437404	2,111048931	0,039245463	0,005653183	0,215742667

Figure 42

The first thing that is possible to analyse in Figure 42 is the overall regression accuracy. As already stated throughout this paper, it is determined by the R^2 and adjusted R^2 . In this case, the R^2 is 0,17 it means that 17% of the variation of the output variable is explained by the variation of the input variables.

The second element that is interesting to discuss it the probability that the regression output is not by chance, and this can be checked observing the significance of F of the regression. The smaller the significance of F in the regression, the greater the probability that the regression output is not coincidental. In this case, the significance of F is 0,0053. This means that there is only 0,53% of possibility that the output shown has been obtained purely by chance. This value is compared to the alpha-value of 0,05 for the 95% confidence interval. Since the p-value of the F-test is lower, than the test is overall significant.

In the third part of the regression output, it is possible to study the reliability of the coefficients of the model. This is determined by the p-values of each coefficient.

As it is noticeable in figure 35, all the p-values of the coefficients of the model are significant since their value is lower than the alpha-value of 0,05. Specifically, $0,004 < 0,05$ and $0,039 < 0,05$.

The coefficients allow then the construction of the regression equation:

$\widehat{ROE} = (0,328 + 0,1107) + (-0,00000008003 * x_2)$ in the case the insurance advisor is present

and $\widehat{ROE} = 0,328 + (-0,00000008003 * x_2)$ otherwise.

It is to say, the presence of the insurance advisor seems to impact in a positive way the

ROE. In fact, every time this type of consultant is cooperating within a small-sized firm an increase by 0,1106 in the ROE is registered. On the other hand, for every unit more in the turnover the ROE decreases by – 0,00000008003.

SUMMARY OUTPUT Model 6

Regression Statistics	
Multiple R	0,431255843
R Square	0,185981602
Adjusted R square	0,156909517
Standard Error	0,185950711
Observations	59

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	0,442404443	0,221202221	6,397256967	0,003145996
Residual	56	1,936349354	0,034577667		
Total	58	2,378753797			

	Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	0,347815656	0,089824124	3,872185338	0,000284503	0,167876313	0,527754999
Legal Advisor	0,116453422	0,049168245	2,368468149	0,021337726	0,017957592	0,214949252
Turnover	-8,05977E-08	2,65316E-08	-3,037804889	0,003615791	-1,33747E-07	-2,74486E-08

Figure 43

Figure 43 displays the summary output of the regression analysis related to the impact of the legal advisor. The R^2 of this model is 0,1859 meaning that about 18,59% of the variation in the ROE is explained by the independent variables considered. The overall test is significant since the p-value of the F-test is 0,0031 and this value is lower than the alpha-value considered at the 95% confidence interval that is 0,05.

Observing then the p-values of the coefficients, it is possible to state that, since they are all smaller than the alpha-value, all the independent variables do have an impact on the ROE. In particular, when the legal advisor is present the ROE increases by 0,1164. On the contrary, the turnover has once again a negative impact on the ROE making it decrease by – 0,0000000805 every time that the turnover grows by one unit.

These things considered; the regression equation can be represented as:

$$\widehat{ROE} = (0,348 + 0,1165) + (-0,0000000806 * x_2) \text{ in the case the legal advisor is present}$$

$$\text{and } \widehat{ROE} = 0,348 + (-0,0000000806 * x_2) \text{ otherwise.}$$

SUMMARY OUTPUT Model 7						
<i>Regression Statistics</i>						
Multiple R	0,34535692					
R Square	0,119271402					
Adjusted R square	0,08781681					
Standard Error	0,19342018					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,283717301	0,141858651	3,791859687	0,028548201	
Residual	56	2,095036496	0,037411366			
Total	58	2,378753797				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,359190308	0,093490151	3,842012265	0,00031359	0,17190703	0,546473586
Financial Advisor	0,051740612	0,05327971	0,971112861	0,335668022	-0,054991473	0,158472698
Turnover	-7,68522E-08	2,80799E-08	-2,736911821	0,008295728	-1,33103E-07	-2,06014E-08

Figure 44

Model 7 is shown in Figure 44. In this case the impact of the financial advisor is taken into consideration. The R^2 informs that about 11,93% of the variation in Y can be explained through the variation in the independent variables. The test is overall significant since the p-value is lower than the alpha-value, i.e., $0,0285 < 0,05$.

However, considering the p-value of the coefficients, the figure of the financial advisor does not seem to play a role in the determination of the ROE since the p-value of this variable is greater than the significance level of 0,05. The turnover is instead significant since $0,008 < 0,05$ and impacts the ROE in a negative way, it is to say, for every unit of increase in the turnover the ROE decreases by $-0,0000000768$. The possible explanations for the results obtained will be briefly discussed in the conclusions section.

SUMMARY OUTPUT Model 8						
<i>Regression Statistics</i>						
Multiple R	0,330539337					
R Square	0,109256254					
Adjusted R square	0,077443977					
Standard Error	0,194516804					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,259893728	0,129946864	3,434405362	0,039181215	
Residual	56	2,118860069	0,037836787			
Total	58	2,378753797				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,332210816	0,114552562	2,900073198	0,005321225	0,102734458	0,561687173
Accountant Advisor	0,032377378	0,058837205	0,550287491	0,584310632	-0,085487708	0,150242464
Turnover	-6,62264E-08	2,8266E-08	-2,342970227	0,022708704	-1,2285E-07	-9,6028E-09

Figure 45

Figure 45 shows the summary output of model 8. In this case, the R^2 is 0,1092 meaning

that the model explains about 10,92% of the variation in the ROE. The p-value of the F-test then confirms that the model is significant. In fact, it has a p-value of 0,0391 that is lower than the alpha-value of 0,05.

Nevertheless, when the p-values of the coefficients are considered, it is remarkable to observe that the professional figure of the accountant advisor does not impact the ROE. It has indeed a p-value of 0,58 that is way higher than the alpha-value of 0,05.

The turnover is instead significant since its p-value is of 0,0227 so it is smaller than the significance level. Notwithstanding, the turnover impacts the ROE in a negative way, it is to say, every unit of turnover makes the ROE decrease by $-0,0000000662$.

In order to briefly review these results, it is possible to say that the return on equity (ROE) in the case of the small-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the insurance advisor and by the presence of the legal advisor while does not seem to be affected by the presence of the financial advisor and of the accountant advisor.

Comparing the four models through their adjusted R^2 it is possible to notice that model 6 seems to be the best model to describe the impact of the consultant on the ROE with an adjusted R^2 of 15,7%, model 5 also seems to be a good model and has an adjusted R^2 of 14,1%. On the contrary, models 7 and 8 only registered an adjusted R^2 of 8,8% and 7,7% respectively.

5.3 ROS of Small-sized Enterprises

The third model that has been developed is the one that studies the Return on Sales (ROS). As in the previous cases, the multiple linear regression model under analysis can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Sales, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term, is present.

As in the previous paragraphs, this model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in Model 9, for the presence or absence of the legal advisor in Model 10, for the presence or absence of the financial advisor in Model 11 and for the presence or absence of the

accountant advisor in Model 12.

SUMMARY OUTPUT Model 9						
<i>Regression Statistics</i>						
Multiple R	0,330732368					
R Square	0,109383899					
Adjusted R square	0,077576181					
Standard Error	0,085246414					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,04998079	0,024990395	3,43891063	0,039024305	
Residual	56	0,406949259	0,007266951			
Total	58	0,45693005				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,101743789	0,041899654	2,428272803	0,018408364	0,017808697	0,185678882
Insurance Advisor	0,051574647	0,023813143	2,165806004	0,034599787	0,00387119	0,099278104
Turnover	-2,23554E-08	1,2181E-08	-1,835270342	0,071778213	-4,67568E-08	2,04604E-09

Figure 46

The impact of the insurance advisor in small-sized companies belonging to the electrical manufacturing sector and settled in the Veneto Region is analysed in Figure 46.

In model 9 the R^2 is 0,1094. It means that about 10,94% of the change in ROS is driven by the variables provided in the model. The significance F is 0,039 so the test is overall significant being this value lower than the alpha-value of 0,05.

Considering the p-values of the independent values it is interesting to observe that the insurance advisor seems to impact the ROS, making it increase by 0,0516. On the other hand, the turnover is not a significant variable because its p-value is above the 0,05. This value would be considered significant only if the alpha-value would be changed to 0,1 so the significance level would be in this case at 90% instead than 95% as in the previous cases. In the case this new significance level is applied, then all the other values would still be significant being considerably lower than the alpha value of 0,1.

If the coefficient of the turnover is taken under analysis, it is observable that it has a negative impact on the ROS decreasing it by $-0,00000002235$ for each unit of turnover increase. The model can be therefore represented as:

$$\widehat{ROS} = (0,1017 + 0,0516) + (-0,00000002235 * x_2) \text{ in the case the legal advisor is present}$$

$$\text{and } \widehat{ROS} = 0,1017 + (-0,00000002235 * x_2) \text{ otherwise.}$$

SUMMARY OUTPUT Model 10						
<i>Regression Statistics</i>						
Multiple R	0,462964232					
R Square	0,21433588					
Adjusted R square	0,186276447					
Standard Error	0,080066217					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,097936504	0,048968252	7,638639051	0,001165826	
Residual	56	0,358993546	0,006410599			
Total	58	0,45693005				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,107109235	0,038676258	2,769379432	0,007603394	0,029631379	0,18458709
Legal Advisor	0,075736878	0,021170746	3,577430734	0,000724464	0,033326777	0,118146979
Turnover	-2,45493E-08	1,14239E-08	-2,148939564	0,035976533	-4,74341E-08	-1,66445E-09

Figure 47

Model 10 summary output is shown in Figure 47. R^2 has a value of 0,2143 meaning that the independent variables explain about 21,43% of the variation in Y.

Since the Significance F is lower than the alpha value of 0,05, i.e., $0,001 < 0,05$, it is possible to reject the null hypothesis according to which there are no useful linear relationships between the dependent variable and the independent ones. Once that it is concluded that the model is significant, it is possible to observe the lower part of the summary output where the coefficients are shown. The p-values lower than 0,05 indicate that the independent variables are significant so that it is possible to conclude that the presence of the legal advisor has an impact on the ROS.

More specifically, the presence of the legal advisor increases the ROS by 0,0757. On the contrary, for every unit more of turnover the ROS decreases by $-0,0000000245$.

The equation related to this model can therefore be expressed as:

$\widehat{ROS} = (0,107 + 0,0757) + (-0,0000000245 * x_2)$ in the case the legal advisor is present

and $\widehat{ROS} = 0,107 + (-0,0000000245 * x_2)$ otherwise.

SUMMARY OUTPUT Model 11						
<i>Regression Statistics</i>						
Multiple R	0,357078378					
R Square	0,127504968					
Adjusted R square	0,096344431					
Standard Error	0,084374717					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,058260851	0,029130426	4,091873264	0,021946383	
Residual	56	0,398669199	0,007119093			
Total	58	0,45693005				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,110305865	0,040782741	2,704719269	0,009038947	0,028608218	0,192003511
Financial Advisor	0,056698983	0,023241941	2,439511502	0,017900043	0,01013978	0,103258187
Turnover	-2,51116E-08	1,22491E-08	-2,050067249	0,045050801	-4,96496E-08	-5,73585E-10

Figure 48

In order to study the impact of the financial advisor, represented in model 11, Figure 48 can be observed. R^2 is 0,1275, the model explains therefore about 12,75% of the variation in the ROS. The test is overall significant since the p-value is 0,021 and thus lower than the significance level alpha of 0,05. Observing then the p-values of the coefficients, it is possible to state that also in this case the p-values are lower than the alpha-value of 0,05 so that the variables considered do impact the ROS. In fact, $0,018 < 0,05$ and $0,045 < 0,05$. More specifically, the presence of the financial advisor increases the ROS by 0,0567 while for every unit increase in turnover the ROS decreases by $-0,0000000251$.

The model can thus be described as:

$\widehat{ROS} = (0,1103 + 0,0567) + (-0,0000000251 * x_2)$ in the case the financial advisor is present

and $\widehat{ROS} = 0,1103 + (-0,0000000251 * x_2)$ otherwise.

SUMMARY OUTPUT Model 12						
<i>Regression Statistics</i>						
Multiple R	0,270052932					
R Square	0,072928586					
Adjusted R square	0,039818893					
Standard Error	0,086973599					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,033323262	0,016661631	2,202635502	0,119996704	
Residual	56	0,423606787	0,007564407			
Total	58	0,45693005				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,075732643	0,051219475	1,478590767	0,144852872	-0,026872295	0,178337582
Accountant Advisor	0,039933698	0,026307668	1,517948992	0,134652903	-0,012766894	0,09263429
Turnover	-1,29318E-08	1,26385E-08	-1,023206213	0,310610255	-3,82497E-08	1,23861E-08

Figure 49

Model 12 shows, displayed in Figure 49, the impact of the accountant advisor on the ROS. R^2 is 0,0729 so that according to this value the model explains about 7,29% of the variance in the ROS. This value being so low suggests that the model is not really a good one. What is more, since the value in the significance F is not lower than 0,05, i.e., $0,12 > 0,05$, one can infer that it is not a very strong regression. In fact, it is not possible to reject the null hypothesis according to which there are no linear relationship in the model. These things considered; the results obtained in this model are not very useful for the analysis of the impact of external consultants on small-sized firms.

In order to briefly discuss these results, it is possible to say that the return on sales (ROS) in the case of the small-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the insurance advisor, by the presence of the legal advisor and by the presence of the financial advisor while does not seem to be affected by the presence of the accountant advisor.

Comparing the four models through their adjusted R^2 it is possible to notice that model 10 seems to be the best model to describe the impact of the consultant on the ROS with an adjusted R^2 of 18,6%, model 11 and model 9 also seem to be good models and have an adjusted R^2 of 9,6 and 7,76% respectively. On the contrary, model 12 only registered an adjusted R^2 of 3,98%.

5.4 EBITDA/Sales of Small-sized Enterprises

The third model that has been developed is the one that studies the EBITDA/Sales ratio. As in the previous cases, the multiple linear regression model under analysis can be

represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the EBITDA/Sales, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term, is present. As in the previous paragraphs, this model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in Model 13, for the presence or absence of the legal advisor in Model 14, for the presence or absence of the financial advisor in Model 15 and for the presence or absence of the accountant advisor in Model 16.

SUMMARY OUTPUT Model 13						
Regression Statistics						
Multiple R	0,316132232					
R Square	0,099939588					
Adjusted R square	0,067794574					
Standard Error	0,118075769					
Observations	59					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	2	0,086691295	0,043345647	3,109022946	0,052433214	
Residual	56	0,780745685	0,013941887			
Total	58	0,86743698				
	Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	0,180657244	0,058035683	3,112864968	0,00291666	0,064397801	0,296916687
Insurance Advisor	0,051389712	0,032983852	1,558026369	0,124861006	-0,014684884	0,117464308
Turnover	-3,69443E-08	1,6872E-08	-2,189676945	0,032730346	-7,0743E-08	-3,14556E-09

Figure 50

Figure 50 displays model 13, related to the impact of the insurance advisor on the sample considered. In this model, R^2 corresponds to the value of 0,0999. It means that 9,99% of the variation in the EBITDA/Sales ratio can be justified by the model itself.

The Significance F is in this case 0,0524 it means that if the rule is applied strictly, the test should not be considered significant. In fact, this value is slightly above the alpha value of 0,05. However, since the p-value in this case is only 0,0024 bigger than the alpha value it is still possible to consider the test significant and continue the analysis of the output. Anyway, once the p-values of the coefficients are taken into consideration, it is possible to notice that the insurance advisor does not seem to impact the EBITDA/Sales ratio. In fact, the p-value related to this variable is 0,125 and is therefore higher than the 0,05 significance level. The turnover is instead a significant variable and impacts the

EBITDA/Sales ratio in a negative way. It is to say, for every unit more of turnover the ratio decreases by $-0,0000000369$.

SUMMARY OUTPUT Model 14						
<i>Regression Statistics</i>						
Multiple R	0,407141766					
R Square	0,165764418					
Adjusted R square	0,13597029					
Standard Error	0,113676137					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,143790186	0,071895093	5,563660663	0,006252934	
Residual	56	0,723646794	0,012922264			
Total	58	0,86743698				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,185239974	0,054911645	3,373418776	0,001352759	0,075238731	0,295241217
Legal Advisor	0,079738724	0,030057729	2,652852565	0,010365683	0,019525857	0,139951591
Turnover	-3,95147E-08	1,62194E-08	-2,436264421	0,018045594	-7,2006E-08	-7,02338E-09

Figure 51

Model 14, shown in Figure 51, represents the impact that the legal advisor has on small-sized enterprises. As it is possible to observe through the analysis of the results of the F-test, the overall model is significant since its p-value is below the significance level. i.e., $0,006 < 0,05$. Moreover, the R^2 is 0,1658 meaning that about 16,58% of the variation in the EBITDA/Sales ratio can be explained by the independent variables. Focusing then on the independent variable, it is interesting to observe that both the legal advisor and the turnover do impact the dependent variable in a significant way since their p-values are lower than the alpha value. In fact, $0,01 < 0,05$ and $0,018 < 0,05$. However, on one hand when the legal advisor is present the EBITDA/Sales ratio increases by 0,0797 while on the other hand, for a unit increase in the turnover the ratio decreases by $-0,0000000395$. The equation describing the model can be expressed as:

$\widehat{EBITDA/Sales} = (0,185 + 0,0797) + (-0,0000000395 * x_2)$ in the case the legal advisor is present

and $\widehat{EBITDA/Sales} = 0,185 + (-0,0000000395 * x_2)$ otherwise.

SUMMARY OUTPUT Model 15						
<i>Regression Statistics</i>						
Multiple R	0,354189299					
R Square	0,125450059					
Adjusted R square	0,094216133					
Standard Error	0,116390427					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,108820021	0,05441001	4,01646778	0,023440626	
Residual	56	0,758616959	0,013546731			
Total	58	0,86743698				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,187607658	0,056257618	3,334795613	0,001519167	0,074910107	0,300305209
Financial Advisor	0,06516961	0,03206102	2,032674271	0,046837275	0,00094367	0,129395551
Turnover	-4,08189E-08	1,6897E-08	-2,415741504	0,018990415	-7,46677E-08	-6,97005E-09

Figure 52

In order to study the impact of the financial advisor, model 15 shown in Figure 52 was built. The R^2 suggests that about 12,55% of the variation in the EBITDA/Sales ratio can be explained by the variation in the independent variable. The model is overall significant since the p-value of the F-test is 0,02 and it is therefore lower than the significance level of 0,05. The independent variables are also significant since their p-values of 0,0468 for the financial advisor variable and of 0,01899 for the turnover variable are both lower than the alpha-value of 0,05. These things considered; it is interesting to look at their coefficients. The presence of the financial advisor has a positive impact in the EBITDA/Sales ratio making it increase by 0,0652 while for every unit more of turnover the ratio decreases by $-0,0000000408$. The model is therefore described by the equation: $\widehat{EBITDA/Sales} = (0,188 + 0,0652) + (-0,0000000408 * x_2)$ in the case the legal advisor is present

and $\widehat{EBITDA/Sales} = 0,188 + (-0,0000000408 * x_2)$ otherwise.

SUMMARY OUTPUT Model 16						
<i>Regression Statistics</i>						
Multiple R	0,387156559					
R Square	0,149890201					
Adjusted R square	0,119529137					
Standard Error	0,114752581					
Observations	59					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,130020303	0,065010152	4,936921828	0,010599872	
Residual	56	0,737416677	0,013168155			
Total	58	0,86743698				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,111378307	0,066090056	1,685250608	0,097505665	-0,021015984	0,243772599
Accountant Advisor	0,082699432	0,034161315	2,420850365	0,018751153	0,014266095	0,15113277
Turnover	-2,35386E-08	1,65483E-08	-1,422421681	0,160450407	-5,66888E-08	9,61156E-09

Figure 53

The last model developed to describe the impact of the consultant figures under analysis on the small-sized companies of the Veneto Region belonging to the electrical manufacturing sector is the one shown in Figure 53. In model 16 is in fact possible to observe the impact of the accountant advisor on the sample object of study. R^2 is of 0,1499 meaning that 14,99% of the variation in Y can be explained through the variation in the X variables. The significance F at 0,01 explains that the test is overall significant since this value is lower than the 0,05 significance level.

Analysing the p-values of the coefficients, the accountant advisor is a significant variable since its p-value is 0,019 and is therefore lower than the alpha-value of 0,05. Every time the accountant advisor is present the EBITDA/Sales ratio increases by 0,082. On the contrary, the turnover does not seem to have an impact on the EBITDA/Sales Ratio since its p-value is 0,16 and $0,16 > 0,05$.

In order to briefly comment these results, it is possible to say that the EBITDA/Sales ratio in the case of the small-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the legal advisor, of the financial advisor and of the accountant advisor while does not seem to be affected by the presence of the insurance advisor.

Comparing the four models through their adjusted R^2 it is possible to notice that model 14 seems to be the best model to describe the impact of the consultant on the ROI with an adjusted R^2 of 13,6%, models 16 and 15 also seem to be informative models and have an adjusted R^2 of 11,95% and 9,4% respectively. On the contrary, model 13 only registered an adjusted R^2 of 6,8%.

5.5 ROI of Medium-sized Enterprises

As in the case of small companies, linear regression models were developed for medium-sized companies to study the impact of consultants on benchmark financial ratios. In this case, the sample size is composed by 55 enterprises.

Starting with the Return on Investment (ROI), the model studied in this thesis project can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Investment, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term, is present. This model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in model 17, for the presence or absence of the legal advisor in model 18, for the presence or absence of the financial advisor in model 19 and for the presence or absence of the accountant advisor in Model 20.

SUMMARY OUTPUT Model 17						
<i>Regression Statistics</i>						
Multiple R	0,378222704					
R Square	0,143052414					
Adjusted R square	0,110092891					
Standard Error	0,152284923					
Observations	55					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,201306634	0,100653317	4,340245326	0,018063868	
Residual	52	1,205916278	0,023190698			
Total	54	1,407222912				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,028373853	0,03942718	0,719652104	0,474961385	-0,050742571	0,107490277
Insurance Advisor	0,132975569	0,045211713	2,941175184	0,004871854	0,042251629	0,223699509
Turnover	-4,06601E-11	2,55694E-10	-0,159018231	0,874270523	-5,53748E-10	4,72428E-10

Figure 54

Figure 54 represents model 17 that is trying to determine if there is a relationship between the ROI of medium-sized enterprises and the presence of the insurance advisor, considering also the turnover as control variable. The first value to be analysed is the significance of the F-test in order to understand if a regression relationship exists. In this case, the regression relationship is present since the p-value is lower than the 95% level of significance, i.e., $0,018 < 0,05$. Observing the R^2 of the model, it is possible to conclude

that 14,3% of the variation in the dependent variable can be explained in the model. The p-value of the independent variable is then analysed. In this case, the insurance advisor does have an impact on the determination of the ROI of medium-sized companies. In fact, the p-value for this variable is 0,0048 and is thus lower than the 0,05 significance level taken as reference. Every time the insurance advisor is present, the ROI increases by 0,133. Nevertheless, the turnover is not significant in the determination of the ROI for the sample of reference. It is to say, the turnover does not seem useful in the prediction of the ROI for medium-sized firms.

SUMMARY OUTPUT Model 18

Regression Statistics	
Multiple R	0,354640372
R Square	0,125769793
Adjusted R square	0,092145554
Standard Error	0,153812872
Observations	55

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	0,176986135	0,088493067	3,74045028	0,03035785
Residual	52	1,230236777	0,0236584		
Total	54	1,407222912			

	Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	0,071362593	0,02982182	2,392965731	0,020358883	0,011520733	0,131204453
Legal Advisor	0,115105166	0,042166985	2,729746147	0,008630109	0,030490919	0,199719413
Turnover	-1,72422E-10	2,62489E-10	-0,656874383	0,514158491	-6,99145E-10	3,54301E-10

Figure 55

In order to analyse the impact of the legal advisor, model 18 shown in Figure 55 has been developed. Observing the p-value of the F-test it is possible to infer that the test is significant since its p-value of 0,03 is lower than the alpha-value of 0,05.

The 12,58% of the variation of Y can be explained by the variation in the independent variables as the R^2 suggests.

The legal advisor impacts the ROI since its p-value is lower than the significance level, it is to say, $0,008 < 0,05$. Every time this professional figure is present the ROI increases by 0,12. However, the turnover is not significant in the determination of the ROI since its p-value is higher than the alpha value of 0,05.

SUMMARY OUTPUT Model 19						
Regression Statistics						
Multiple R	0,340272669					
R Square	0,115785489					
Adjusted R square	0,081777239					
Standard Error	0,154688702					
Observations	55					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,162935994	0,081467997	3,404629409	0,040784823	
Residual	52	1,244286918	0,023928595			
Total	54	1,407222912				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,044446173	0,038025332	1,168856938	0,2477918	-0,031857238	0,120749583
Financial Advisor	0,118566742	0,045534598	2,603882507	0,011986696	0,027194887	0,209938597
Turnover	-1,34342E-10	2,62021E-10	-0,512715065	0,610321859	-6,60125E-10	3,91441E-10

Figure 56

Figure 56 shows model 19, referring to the impact of the financial advisor in medium-sized companies. The test is overall significant since its p-value of 0,04 is lower than the significance level of 0,05 for the 95% confidence level.

The R^2 demonstrates that 11,58% of the variation in the dependent variable can be explained by the variation of the independent variables.

Analysing the p-values of the independent variables, it is possible to say that the figure of the financial advisor is significant in the determination of the ROI. In fact, its p-value is lower than the significance level, i.e., $0,011 < 0,05$. Every time this professional figure is present the ROI increases by 0,1186. Nevertheless, the turnover is not affecting the ROI. Its p-value is indeed higher than the significance level, so this variable is not useful in the determination of the ROI for medium enterprises.

SUMMARY OUTPUT Model 20						
Regression Statistics						
Multiple R	0,382192027					
R Square	0,146070745					
Adjusted R square	0,113227312					
Standard Error	0,152016498					
Observations	55					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,205554099	0,10277705	4,447487134	0,016480455	
Residual	52	1,201668813	0,023109016			
Total	54	1,407222912				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,075289857	0,027865137	2,701937438	0,009287077	0,019374369	0,131205346
Accountant Advisor	0,128970409	0,043316507	2,977396365	0,004406617	0,04204948	0,215891339
Turnover	3,08119E-11	2,56483E-10	0,120132245	0,904841351	-4,8386E-10	5,45484E-10

Figure 57

The impact of the accountant advisor is studied in model 20 whose output can be observed in Figure 57. The test is overall significant since its p-value is lower than the alpha-value, i.e., $0,016 < 0,05$. The R^2 is 0,146 meaning that 14,6% of the variation in Y can be explained due to the variation of the independent variables. The figure of the accountant advisor impacts the ROI and this can be stated by observing the p-value of 0,0044 that is lower than the significance level of 0,05. When firms rely on the accountant advisor the ROI increases by 0,129. Nevertheless, the turnover does not impact the ROI having a p-value higher than the alpha-value of 0,05. It is to say, the ROI is not impacted by the difference in the turnover.

In order to briefly summarise these results, it is possible to say that the return on investment (ROI) in the case of the medium-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the consultant figures under analysis.

Comparing the four models through their adjusted R^2 it is possible to notice that model 20 seems to be the best model to describe the impact of the consultant on the ROI with an adjusted R^2 of 11,32%, model 17 also seem to be a good model and has an adjusted R^2 of 11%. Models 18 and 19 registered instead adjusted R^2 of 9,21% and 8,2% respectively.

5.6 ROE of Medium-sized Enterprises

The Return on Equity (ROE) of medium-sized companies has been analysed comparing the results obtained by companies that rely on the external consultants object of study with the ones registered by companies that do not. The model studied in this thesis project can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Equity, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term is present.

This model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in Model 21, for the presence or absence of the legal advisor in Model 22, for the presence or absence of the financial advisor in Model 23 and for the presence or absence of the accountant advisor in Model 24.

SUMMARY OUTPUT Model 21						
<i>Regression Statistics</i>						
Multiple R	0,286489121					
R Square	0,082076017					
Adjusted R square	0,046771248					
Standard Error	0,184866505					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,158901998	0,079450999	2,324785572	0,107888374	
Residual	52	1,777132481	0,034175625			
Total	54	1,936034479				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,066641136	0,047862682	1,392340178	0,169745275	-0,029402363	0,162684635
Insurance Advisor	0,116175053	0,054884826	2,116706238	0,039088914	0,006040593	0,226309513
Turnover	-1,24495E-10	3,10401E-10	-0,401079066	0,690005309	-7,47359E-10	4,98369E-10

Figure 58

The impact of the insurance advisor has been studied in model 21, shown in Figure 58. It is remarkable to observe that if the 95% confidence level is maintained, the overall test does not seem significant since its p-value is higher than the alpha-value of 0,05. However, if the confidence level would be set at 90% the alpha-value would be 0,1. If this is the case, it would be possible to consider the test significant if the rules for rejection would not be strictly applied. In fact, the p-value for the test is 0,108 that is just 0,008 higher than the alpha-value. Observing the R^2 it is possible to infer that the model explains about 8,2% of the variation in the dependent variable. This result can be considered quite low, meaning that not much of the variation in the ROE can be explained by the presence of the insurance advisor. Nevertheless, the presence of this consultant figure does seem to impact the ROE since its p-value of 0,039 is lower than the alpha-value of 0,05 and also of the new alpha-value of 0,1 that has been previously introduced. Every time this professional figure cooperates with a company the latter seems to register a higher ROE by 0,116. On the other hand, the turnover is not significant in the determination of the ROE, meaning that it does not impact the dependent variable.

SUMMARY OUTPUT Model 22						
<i>Regression Statistics</i>						
Multiple R	0,291990778					
R Square	0,085258614					
Adjusted R square	0,050076253					
Standard Error	0,184545745					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,165063617	0,082531809	2,423334083	0,098572673	
Residual	52	1,770970862	0,034057132			
Total	54	1,936034479				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,100243238	0,035780425	2,801622329	0,007125088	0,028444562	0,172041914
Legal Advisor	0,109412125	0,05059224	2,162626619	0,03519063	0,007891368	0,210932882
Turnover	-2,49463E-10	3,14936E-10	-0,792105999	0,431897676	-8,81429E-10	3,82503E-10

Figure 59

Model 22, displayed in Figure 59, analyses the impact of the legal advisor in the medium-sized enterprises. As in model 21, the test is not significant if the 95% confidence level is maintained. However, it is significant if the confidence level is set at 90% so that the alpha value is now 0,1. In fact, $0,0986 < 0,1$. If it is the case, it is interesting to observe the R^2 of the test that states that 8,5% of the variation in Y can be explained by the independent variables. This result is not very encouraging, it is to say, not a lot of the variation in the ROE is connected to the independent variables studied in this model.

If the p-values are taken into consideration, it is possible to say that the presence of the legal advisor impacts the ROE since its p-value of 0,035 is lower than the alpha-value of 0,05 usually considered but also than the alpha-value of 0,1 taken into account in this test. When the legal advisor is present, the ROE of medium-sized firms increases by 0,109. Nevertheless, the turnover does not play a role in the determination of the ROE, since its p-value is higher than the alpha-value considered.

SUMMARY OUTPUT Model 23						
Regression Statistics						
Multiple R	0,330234153					
R Square	0,109054596					
Adjusted R square	0,074787465					
Standard Error	0,182129551					
Observations	55					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,211133457	0,105566729	3,182483987	0,049673915	
Residual	52	1,724901022	0,033171174			
Total	54	1,936034479				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,060983324	0,044770798	1,362122798	0,179030683	-0,028855854	0,150822503
Financial Advisor	0,133393275	0,053612162	2,488115925	0,01608432	0,025812601	0,24097395
Turnover	-2,28984E-10	3,08502E-10	-0,742245254	0,461278477	-8,48038E-10	3,9007E-10

Figure 60

Model 23 that studies the effect of the financial advisor in the medium-sized enterprises is shown in Figure 60. The test is overall significant since its p-value is lower than the alpha-value chosen, i.e., $0,049 < 0,05$. The independent variables are able to explain about the 10,9% of the variation in Y, as it is possible to understand by observing the R^2 .

The figure of the financial advisor is overall-significant since its p-value of 0,016 is lower than the alpha-value of 0,05. This means that by cooperating with a financial advisor firms may increase their ROE by 0,133. On the other hand, the turnover seems not to impact the ROE. In fact, its p-value is higher than the alpha-value of 0,05.

SUMMARY OUTPUT Model 24						
Regression Statistics						
Multiple R	0,387050267					
R Square	0,149807909					
Adjusted R square	0,117108213					
Standard Error	0,177915343					
Observations	55					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,290033277	0,145016639	4,581324237	0,014704274	
Residual	52	1,646001202	0,031653869			
Total	54	1,936034479				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,093170323	0,032612483	2,856891422	0,006136935	0,027728588	0,158612
Accountant Advisor	0,151920176	0,050696281	2,99667298	0,004176247	0,050190645	0,25365
Turnover	-3,9206E-11	3,0018E-10	-0,130608311	0,896589141	-6,41562E-10	5,63E-10

Figure 61

The impact of the accountant advisor has been studied in model 24 that is shown in Figure 61. The test is overall significant since its p-value is 0,0147 and this value is thus lower

than the 0,05 significance level at the 95% confidence interval. R^2 of 0,1498 means that about 14,98% of the variation in Y can be explained by the variation in the independent variables present in the model.

The accountant advisor impacts the ROE making it increase by 0,15 every time this professional figure is present. This variable is significant since its p-value of 0,004 is lower than the alpha-value of 0,05. On the contrary the p-value of the turnover is higher than the significance level and this variable seems therefore not to impact the ROE.

In order to briefly discuss these results, it is possible to say that the return on equity (ROE) in the case of the medium-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the consultant figures under analysis.

Comparing the four models through their adjusted R^2 it is possible to notice that model 24 seems to be the best model to describe the impact of the consultant on the ROE with an adjusted R^2 of 11,7%, model 23 also seem to be a good model and has an adjusted R^2 of 7,5%. On the contrary, models 21 and 2 only registered an adjusted R^2 of 4,7% and 5% respectively.

5.7 ROS of Medium-sized Enterprises

The Return on Sales (ROS) of medium-sized companies has been analysed comparing the results obtained by companies that rely on the external consultants object of study with the ones registered by companies that do not. The model studied in this thesis project can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the Return on Sales, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term, is present. This model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in model 25, for the presence or absence of the legal advisor in model 26, for the presence or absence of the financial advisor in model 27 and for the presence or absence of the accountant advisor in model 28.

SUMMARY OUTPUT Model 25						
<i>Regression Statistics</i>						
Multiple R	0,326610962					
R Square	0,10667472					
Adjusted R square	0,072316056					
Standard Error	0,101143292					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,063522766	0,031761383	3,104739996	0,053241493	
Residual	52	0,531958208	0,010229966			
Total	54	0,595480974				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,07735938	0,026186406	2,954180935	0,004699779	0,024812513	0,129906247
Insurance Advisor	0,062467396	0,030028327	2,080282222	0,042444406	0,002211148	0,122723643
Turnover	-2,31271E-10	1,69825E-10	-1,361819528	0,179125806	-5,72049E-10	1,09508E-10

Figure 62

Model 25 studies the impact of the presence of the insurance advisor inside medium-sized firms object of the analysis and is represented in Figure 62. Observing the p-value of the overall test it is possible to state that the model is significant if the rejection rule is not applied strictly for the alpha-value of the 95% confidence interval or if the 90% confidence interval is instead applied. In fact, the p-value for the test is 0,053 and this value is slightly higher than the alpha-value of 0,05 that should be applied at the 95% confidence interval. However, if the rule is not applied in a strict way, it is possible to reject the null hypothesis even in this case. Moreover, the null hypothesis is strictly rejected if the 90% confidence interval is instead applied, in fact in this case the alpha-value would be 0,1 so that the p-value is clearly lower than this result. The R^2 suggests that about 10,67% of the variation in Y can be explained by the variation in the independent variables. The presence of the insurance advisor is significant, meaning that the p-value of this coefficient is lower than the alpha-value, i.e., $0,042 < 0,05$ and $0,042 < 0,1$. When medium-sized firms cooperate with this consultancy figure their ROS tend to increase by 0,062. On the other hand, the turnover does not seem to affect the ROS since this variable does not result significant due to its p-value that is higher than the significance level.

SUMMARY OUTPUT Model 26						
<i>Regression Statistics</i>						
Multiple R	0,375717105					
R Square	0,141163343					
Adjusted R square	0,108131164					
Standard Error	0,099171655					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,084060085	0,042030042	4,273509843	0,019128235	
Residual	52	0,511420889	0,009835017			
Total	54	0,595480974				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,090529037	0,019227775	4,708243094	1,89413E-05	0,051945684	0,129112389
Legal Advisor	0,069790294	0,027187385	2,567010211	0,013174873	0,015234815	0,124345773
Turnover	-3,10667E-10	1,69241E-10	-1,835648808	0,072130816	-6,50275E-10	2,89399E-11

Figure 63

The impact of the legal advisor has been analysed in model 26 and can be observed in Figure 63. As it is possible to notice from the p-value of the F-test, the overall test is significant. In fact, its p-value is lower than the alpha-value, i.e., $0,019 < 0,05$. About 14,12% of the variation in Y can be explained by the variation in the independent variables, as the R^2 demonstrates. Observing the independent variables, it is possible to say that the legal advisor impacts the ROS since its p-value of 0,013 is lower than the alpha-value of 0,05. This means that every time the legal advisor is present the ROS increases by 0,0698. If the turnover is taken into consideration, it is important to notice that this variable should not be considered significant at the 95% confidence interval. However, it is significant at the 90% confidence interval. In fact, in this case the alpha-value is 0,1 so that it is higher than the p-value of the turnover coefficient that is 0,072. The turnover impacts the ROS in a negative way, it is to say, for every unit of increase in the turnover the ROS decreases by $-0,00000000031$.

In this case, it is possible to summarise the results obtained by the formula:

$$\widehat{ROS} = (0,09 + 0,0698) + (-0,00000000031 * x_2) \text{ in the case the legal advisor is present}$$

$$\text{and } \widehat{ROS} = 0,09 + (-0,00000000031 * x_2) \text{ otherwise.}$$

SUMMARY OUTPUT Model 27						
<i>Regression Statistics</i>						
Multiple R	0,271432271					
R Square	0,073675478					
Adjusted R square	0,038047612					
Standard Error	0,102994457					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,043872345	0,021936173	2,067917216	0,136723191	
Residual	52	0,551608628	0,010607858			
Total	54	0,595480974				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,09119512	0,025317934	3,601996867	0,000705691	0,040390968	0,141999272
Financial Advisor	0,046188245	0,030317736	1,523472772	0,133699419	-0,014648743	0,107025232
Turnover	-2,68055E-10	1,74458E-10	-1,536500264	0,130478695	-6,1813E-10	8,20208E-11

Figure 64

Model 27 shows the impact of the financial advisor on the ROS and can be observed in Figure 64. R^2 is 0,0737 so that according to this value the model explains about 7,37% of the variance in the ROS. This value being so low suggests that the model is not really an informative one. What is more, since the value in the significance F is not lower than 0,05 one can infer that it is not a very strong regression. In fact, it is not possible to reject the null hypothesis according to which there are no linear relationship in the model. These things considered; the results obtained in this model are not very useful for the analysis of the impact of external consultants on medium-sized firms.

SUMMARY OUTPUT Model 28						
<i>Regression Statistics</i>						
Multiple R	0,41818501					
R Square	0,174878703					
Adjusted R square	0,143143268					
Standard Error	0,097205575					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,10413694	0,05206847	5,510518624	0,006752471	
Residual	52	0,491344034	0,009448924			
Total	54	0,595480974				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,091133515	0,01781811	5,114656681	4,60558E-06	0,055378862	0,126888168
Accountant Advisor	0,083019183	0,027698348	2,997261129	0,004169398	0,027438381	0,138599985
Turnover	-1,84636E-10	1,64006E-10	-1,125785397	0,26542549	-5,13738E-10	1,44467E-10

Figure 65

In order to analyse the impact of the accountant advisor, model 28 has been developed and it can be observed in Figure 65. The test is significant since its p-value is 0,0067 and

it thus lower than the alpha-value of 0,05 at the 95% confidence interval. R^2 is 0,175 meaning that about 17,5% of the variation in the ROS can be explained by the model. The accountant advisor has an impact the ROS since its p-value of 0,004 is lower than the alpha-value of 0,05. Every time a medium-sized firms cooperate with this consultant figure its ROS increases by 0,083. On the contrary the turnover cannot be considered a significant variable since its p-value is higher than the significance level. This means that this variable does not help determining the ROS of medium-sized companies.

In order to briefly comment these results, it is possible to say that the return on sales (ROS) in the case of the medium-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the insurance advisor, by the presence of the legal advisor and of the accountant advisor. On the other hand, the ROS does not seem to be affected by the presence of the financial advisor.

Comparing the four models through their adjusted R^2 it is possible to notice that model 28 is to be the best model to describe the impact of the consultant on the ROI with an adjusted R^2 of 14,11%, models 26 and 25 also seem to be good models and have an adjusted R^2 of 10,8% and 7,23% respectively. On the contrary, models 27 only registered an adjusted R^2 of 3,8%.

5.8 EBITDA/Sales of Medium-sized Enterprises

The EBITDA/Sales of medium-sized companies has been analysed comparing the results obtained by companies that rely on the external consultants object of study with the ones registered by companies that do not. The model studied in this thesis project can be represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents in this case the EBITDA/Sales, β_0 the intercept, X_1 is a dummy variable that express the presence (with value 1) or absence (with value 0) of the consultant figure and has a β_1 coefficient while X_2 corresponds to the control variable, i.e., the turnover, and has a β_2 coefficient. In the model also ε , the error term is present.

This model has been repeated for every consultant figure object of analysis, so that X_1 stands for the presence or absence of the insurance advisor in model 29, for the presence or absence of the legal advisor in model 30, for the presence or absence of the financial advisor in model 31 and for the presence or absence of the accountant advisor in model 32.

SUMMARY OUTPUT Model 29						
<i>Regression Statistics</i>						
Multiple R	0,356597799					
R Square	0,12716199					
Adjusted R square	0,093591297					
Standard Error	0,090815786					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,062481249	0,031240625	3,78788699	0,029125602	
Residual	52	0,428870365	0,008247507			
Total	54	0,491351614				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,098603875	0,023512573	4,193665939	0,000107067	0,051422446	0,145785304
Insurance Advisor	0,062693279	0,026962205	2,325228176	0,023996627	0,008589656	0,116796901
Turnover	-2,22871E-10	1,52484E-10	-1,461598657	0,14986836	-5,28853E-10	8,31114E-11

Figure 66

Model 29, shown in Figure 66 analyses the presence of the insurance advisor inside the medium-sized companies and the effect that this consultancy figure has on the EBITDA/Sales ratio. As it is possible to observe, the test is overall significant since the p-value of the F-test is lower than the alpha-value, i.e., $0,029 < 0,05$. R^2 is 0,127 so that it is possible to say that the model explains about 12,7% of the variation in Y. The insurance advisor has an impact on the EBITDA/Sales ratio and every time this professional figure is present the EBITDA/Sales ratio increases by 0,062. This can be stated by observing the p-value of this coefficient that is 0,023 so that it is lower than the 0,05 alpha-value at the 95% confidence interval. On the other hand, the turnover does not seem a significant variable since its p-value is higher than the alpha-value. For this reason, this variable does not seem informative about the EBITDA/Sales ratio for medium-sized companies.

SUMMARY OUTPUT Model 30						
<i>Regression Statistics</i>						
Multiple R	0,345515937					
R Square	0,119381263					
Adjusted R square	0,085511312					
Standard Error	0,091219667					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,058658176	0,029329088	3,524695432	0,036684784	
Residual	52	0,432693438	0,008321028			
Total	54	0,491351614				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,118386524	0,017686013	6,693793712	1,52322E-08	0,082896942	0,153876106
Legal Advisor	0,055353211	0,025007389	2,213474187	0,031276288	0,005172213	0,105534209
Turnover	-2,86201E-10	1,55671E-10	-1,838498665	0,071703269	-5,98577E-10	2,61758E-11

Figure 67

Figure 67 displays model 30 that analyses the effects of the legal advisor on the EBITDA/Sales ratio of the medium-sized companies. The test is overall significant since the p-value of the F-test is 0,037 and this value is lower than the alpha-value of 0,05 adopted at the 95% confidence interval. R^2 is 0,119 meaning that the model explains about 11,9% of the variation in the EBITDA/Sales ratio. The professional figure of the legal advisor is significant since its p-value is 0,03 and it is thus lower than the alpha-value of 0,05. This means, that every time the legal advisor is employed by the medium-sized companies of electrical manufacturing equipment sector, their EBITDA/Sales ratio increases by 0,055. The turnover is instead not significant at the 95% confidence interval, but it would be significant at the 90% confidence interval. In this case, the p-value of 0,07 would be lower than the alpha-value of 0,1. However, the turnover impacts the EBITDA/Sales ratio in a negative way, making it decrease by $-0,00000000029$ for every unit increase in the turnover.

It is possible to summarise the results obtained by the formula:

$\widehat{EBITDA/Sales} = (0,118 + 0,055) + (-0,00000000029 * x_2)$ in the case the legal advisor is present

and $\widehat{EBITDA/Sales} = 0,118 + (-0,00000000029 * x_2)$ otherwise.

SUMMARY OUTPUT Model 31						
<i>Regression Statistics</i>						
Multiple R	0,293197439					
R Square	0,085964738					
Adjusted R square	0,050809536					
Standard Error	0,092934292					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,042238913	0,021119456	2,445292081	0,096613254	
Residual	52	0,449112701	0,008636783			
Total	54	0,491351614				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,112768602	0,022844961	4,936257226	8,6044E-06	0,066926835	0,158610369
Financial Advisor	0,045933184	0,027356397	1,679065525	0,099139268	-0,008961444	0,100827811
Turnover	-2,59467E-10	1,57418E-10	-1,648275229	0,105326039	-5,75349E-10	5,6414E-11

Figure 68

The impact of the financial advisor has been analysed in model 31, shown in Figure 68. As it possible to notice from the p-value of the F-test the model cannot be considered significant at the 95% confidence level. Nevertheless, the model is significant at the 90% confidence level. In fact, in this case the alpha-value of 0,1 would be higher than the p-value of the F-test that is 0,09. R^2 is 0,086 meaning that the model explains only about 8,6% of the variation in the dependent variable. The professional figure of the financial advisor impacts the EBITDA/Sales ratio making it increase by 0,0459 every time this type of consultant is present. It is true at the 90% confidence level since the p-value of this coefficient is 0,099 that is lower than the alpha-value of 0,1. If the rule associated to this confidence level is not applied too strictly then it is possible to consider the turnover variable as significant too. In fact, the p-value associated to this variable is 0,105 that is only slightly higher than the alpha-value of 0,1. If this is the case, it is noticeable that for every unit increase in the turnover the EBITDA/Sales ratio decreases by $-0,000000000259$, the turnover having therefore a negative effect on this ratio.

It is possible to represent the results obtained by the formula:

$\widehat{EBITDA/Sales} = (0,113 + 0,0459) + (-0,000000000259 * x_2)$ in the case the legal advisor is present

and $\widehat{EBITDA/Sales} = 0,113 + (-0,000000000259 * x_2)$ otherwise.

SUMMARY OUTPUT Model 32						
<i>Regression Statistics</i>						
Multiple R	0,393582973					
R Square	0,154907557					
Adjusted R square	0,122404001					
Standard Error	0,089360714					
Observations	55					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	0,076114078	0,038057039	4,765864982	0,012575049	
Residual	52	0,415237536	0,007985337			
Total	54	0,491351614				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,117793316	0,016380121	7,191236217	2,45211E-09	0,0849242	0,150662433
Accountant Advisor	0,068756795	0,025462986	2,700264406	0,00932803	0,017661575	0,119852014
Turnover	-1,84545E-10	1,5077E-10	-1,22401711	0,226462806	-4,87088E-10	1,17997E-10

Figure 69

The impact of the accountant advisor has been studied in model 32, displayed in Figure 69. The model is significant at the 95% confidence interval as it is possible to observe by the p-value of the F-test, i.e., $0,013 < 0,05$. The model explains about 15,49% of the variation in the dependent variable as it is observable by the R^2 of 0,1549. The professional figure of the accountant advisor results significant since its p-value of 0,009 is lower than the alpha-value of 0,05. When medium-sized firms cooperate with this type of consultant their EBITDA/Sales ratio increases by 0,069. Notwithstanding, the turnover seems not to impact the EBITDA/Sales ratio since its p-value is higher than the alpha-value at the 95% confidence interval. This variable seems therefore not significant in the determination of the EBITDA/Sales ratio.

In order to briefly summarise these results, it is possible to say that the EBITDA/Sales ratio in the case of the medium-sized companies belonging to the manufacturing of electrical equipment sector operating in the Veneto Region seems to be impacted in a positive way by the presence of the four consultant figures under analysis.

Comparing the four models through their adjusted R^2 it is possible to notice that model 32 seems to be the best model to describe the impact of the consultant on the EBITDA/Sales ratio with an adjusted R^2 of 12,24%, models 29 and 30 also seem to be good models with an adjusted R^2 of 9,4% and 8,6% respectively. On the contrary, model 31 only registered an adjusted R^2 of 5,08%.

5.9 Summary of the Results and Comparison between Small-sized and Medium-sized Enterprises

In order to better understand the impact that the four consultant figures object of analysis have on the small- and medium-sized companies the results that have been obtained so far will be briefly discussed.

Starting with the Return on Invest (ROI), it seems to be impacted in a positive way by the presence of both the legal advisor and the insurance advisor in the case of small-sized enterprises. In fact, the insurance advisor contributes with an increase by 0,08 in this index and the legal advisor with an increase by 0,084. The R^2 of these two models are 0,1527 and 0,1702 respectively.

On the contrary, the financial advisor and the accountant advisor do not play a role in the Return on Investment if the small-sized enterprises under analysis are considered. Different results have been registered for medium-sized companies. In fact, in this case all the four consultant figures under analysis are significant and have a positive impact on the ROI. In particular, the presence of the insurance advisor increases the ROI by 0,133 and the model has a R^2 of 0,143; the presence of the legal advisor increases the ROI by 0,115 and the model has a R^2 of 0,126; the presence of the financial advisor increases the ROI by 0,119 and the model has a R^2 of 0,116 and the presence of the accountant advisor increases the ROI by 0,129 and the model has a R^2 of 0,146.

Coherent results have been registered if the Return on Equity is considered. Also in this case, the insurance advisor and the legal advisor do impact the ROE by 0,1107 and 0,1165 respectively as far as the small-sized enterprises are concerned. The R^2 of the two models are 0,17 for the insurance advisor and 0,19 for the legal advisor. The financial advisor and the accountant advisor do not have an impact on the ROE as far as the sample under analysis is concerned. Different results have been registered if medium-sized companies are taken into account. In fact, the presence of the financial advisor and the presence of the accountant advisor do impact positively the ROE at the 95% confidence level. In fact, when the former is present the ROE increases by 0,133 while when the latter is present the ROE grows by 0,152. The R^2 for the two models are 0,109 and 0,149 respectively. The models that analyse the impact of the professional figures of the insurance advisor and of the legal advisor are instead significant only at the 90% confidence interval so when an alpha-value of 0,1 is taken into consideration. If this is the case, the cooperation with an insurance advisor increases the ROE of medium-sized companies of the sector

under analysis by 0,116 and the model describing this relationship has a R^2 of 0,082. Medium-sized firms working with a legal advisor increases instead their ROE by 0,109 and the model has a R^2 of 0,085.

The multiple regression analysis considering the Return on Sales (ROS) suggests that only the model that consider the impact of the accountant advisor is not significant as far as the small-sized companies are considered. The presence of the insurance advisor in small-sized companies instead impacts this index by making it increase by 0,0516. The R^2 associated with this model is 0,109. Every time the legal advisor is present the ROS increases instead by 0,076 and the model has a R^2 of 0,214. The financial advisor also plays a role in the determination of the ROS for small-sized companies and when this professional figure is present the ROS grows by 0,057. The R^2 is in this case 0,128.

The ROS of medium-sized enterprises is positively affected by the presence of the legal advisor and of the accountant advisor respectively. In fact, the former makes the index increase by 0,07 and the overall model has a R^2 of 0,141 while the latter grows the ROS by 0,083 and the overall model has a R^2 0,175. If the professional figure of the insurance advisor is instead taken into consideration, it is remarkable to say that the model describing its effect on the ROS is significant at the 95% confidence interval only if the rejection rule is not applied in a strict way. In fact, the p-value of the F-test is 0,053 and this value is slightly higher than the alpha-value of 0,05. Anyway, the presence of the insurance advisor impacts the ROS in a positive way, making it increase by 0,06 every time this professional figure is present. The R^2 associated to this model is 0,107. On the contrary, the model describing the effects of the financial advisor for medium-sized enterprises is not significant, meaning that the financial advisor seems not to have an impact of the ROS of medium-sized companies.

The EBITDA/Sales ratio analysis shows instead different results. In this case the presence of the insurance advisor does not seem to impact the ratio as far as small-sized companies are concerned. This professional figure impacts instead the medium-sized companies increasing their EBITDA/Sales ratio by 0,063. The R^2 of the model is 0,13.

The presence of the legal advisor is important in order to increase the EBITDA/Sales ratio for small-sized firms, in fact every time this professional figure is present the ratio increases by 0,0797 and the R^2 associated to this model is 0,1658. This type of external consultant is also important for medium-sized enterprises. In fact, their EBITDA/Sales ratio increases by 0,055 when they are cooperating with a legal advisor. The R^2 of the

model is 0,12.

Model 15, in which the presence of the financial advisor inside small firms is studied, has a R^2 of 0,1255 and determines that every time this professional figure is present the EBITDA/Sales ratio increases by 0,0652. On the contrary, model 31 that analyses the impact of financial advisor on medium-sized companies is not significant at 95% confidence interval. If instead 90% confidence interval is adopted, then it is possible to infer that the presence of this professional figure inside medium-sized companies increases their EBITDA/Sales ratio by 0,046 and the overall model has a R^2 of 0,086.

Finally, the impact of the accountant advisor was analysed. The EBITDA/Sales increases by 0,0827 every time this professional figure is present inside small-sized companies and the R^2 associated to this model is 0,1499. When this professional figure is instead present inside medium-sized companies the index increases by 0,069 and the associated model has a R^2 of 0,155.

These things considered; as far as the small-sized companies are concerned, the accountant advisor seems to impact only the EBITDA/Sales ratio while the legal advisor seem to impact all the indexes in a significant way. If instead medium-sized companies are concerned, it is remarkable to underline that the model describing the impact of the financial advisor is not significant when the Return on Sales is analysed while the accountant advisor impacts all the indexes under analysis in a positive way.

Chapter VI Conclusions

The aim of this study is to analyse the impact that external consulting figures have on small and medium-sized enterprises in the Veneto Region in order to understand whether external consultancy can really be considered as an added value for the enterprises themselves. In order to simplify and make the study more reliable, in addition to the territorial limitation, two other criteria were added to restrict the variability of the results obtained. In fact, besides presenting the sector and the limits of consultancy as a whole, the study of this thesis focused on four external consultancy figures in particular, namely the legal, insurance, financial and accountant consultants, and on a specific industrial sector, namely the manufacture of electrical equipment.

Although these limitations allowed a clearer and more reliable study of the impact of counselling, it would clearly be useful and interesting to broaden the research criteria by comparing the impact these consultant figures have in different sectors in the Region and in the same sector in different regions. It would then be crucial to include other consultancy figures within the research in order to understand their future potential. It is to say, even though this thesis is an interesting starting point to assess the added value of consulting firms, in order to make the study completer and more interesting, the analysis could be broadened by varying each of the three variables decided upon for this thesis project, i.e., the four consulting figures, the territory in which the companies are established and the sector in which the companies operate. One could indeed study the impact of different consulting figures within the Veneto Region and the electrical equipment sector, or the effect of the same four consulting figures analysed in this thesis on the electrical equipment sector of another region other than Veneto, or even the effect these four figures under analysis have on companies belonging to a different sector in the same region. In short, as can be understood, the possible variations that would allow this research to be completed and concluded are still very numerous. Nevertheless, these considerations help to understand and appreciate the great potential of this thesis.

As far as the consulting sector analysis is concerned, it has been said that it is a relatively new sector, which originated around the end of the 19th century in the United States but developed mainly in the second half of the 20th century. In Italy, the consulting sector has grown considerably and strengthened especially in recent years. However, the structure of this sector is very fragmented and there is still institutionally no training path to follow in order to become a consultant, except for some very specific areas such as

security consultants where specific certifications are required.

This raises the question of whether it is possible and imaginable to envisage a path of institutionalisation towards the figure of the counsellor. This might mean recognising not only the rights of consultants but also their duties and would grant a different authority to this professional figure. It might be conceivable to establish necessary certifications to be obtained for all the main counselling figures. In fact, although there are certifications and courses to be followed required for some professional figures, the consulting sector still seems far from obtaining its own autonomous strength and credibility, detached from the person or context in which it operates.

Institutionalization of the consultant figure could help increase its credibility. In fact, the introduction of a license to practice that could be lost in case of incorrect behaviour, thus contrary to pre-established ethical standards, of the counsellor would ensure more correct and straightforward behaviour of the latter.

A major criticism that is levelled at consultants is that they propose standardised solutions instead of trying to adapt them to the client's needs; on the other hand, many consultants accuse entrepreneurs of being not open to change and of remaining too tied to old business models. With regard to this aspect, the importance of clear and transparent communication between consultant and entrepreneur is emphasised. Communicating the expected results and matching them with realisable expectations and concrete results requires simultaneous commitment on the part of consultants and entrepreneurs. It becomes therefore imperative to combine a scientific and structured method of analysis with the human component of consulting. Talking to the entrepreneur, understanding his and his company needs and objectives must go hand in hand with the implementation of a more efficient structure and more innovative working methods.

Another very important factor that has not yet been discussed in depth in the literature, however, is the problem related to privacy and the importance of keeping a company information confidential even once the collaboration with the consultant is over. There is the risk that many managers do not want to share information with the consultant that could be very important to his or her work because of the possibility that the consultant might then disclose it to competing firms or because of the risk that the firm using the consultant might be seen to be in financial distress and thus the firm credibility might be endangered.

Although these fears of entrepreneurs are partially overcome by the introduction of confidentiality contracts that ensure the privacy related to the sensitive information of

companies that rely on consultants, there is still a lot of work to be done regarding the completeness and standardisation of these contracts in the daily work of consultants. Such work would help to strengthen the credibility of this sector.

The reasons why companies turn to consultants are often of financial origin. To be more precise, companies very often turn to consultants when their economic situation has become critical, and they need quick solutions so that they do not have to go out of business. However, in this way consultants are not allowed to implement and improve the business in the way they consider as the most appropriate and are instead only required to seek quick solutions to remedy emergency situations. Therefore, when consultants are called in too late and the situation is already critical, their action may not be sufficient to revive the company future and may therefore make it appear that the consultant's action was ineffective when in fact it was only belated.

This tendency is indicative of how the figure of the consultant is still perceived in Italy and in Europe in general, namely as someone who fixes a critical situation rather than someone who develops, grows and enables the expansion of an already existing and successful business. This way of seeing the consultant more as a doctor than as an expert can also be seen from the fact that there are many micro-businesses offering consultancy services but that there is a lack of clear regulations and very often the businesses themselves do not set aside a part of their budget for consultancy services. One aspect that would be interesting to analyse in future research related to the world of consultancy is certainly the impact of regional, national and European funding for the development and hiring of external consultants within local businesses. In fact, it is common to see calls for tenders and funding that allow companies to apply for external consultants to support their activities. After collaborating with these consultants, the companies themselves might realise the potential of these professionals and decide to continue the collaboration by reserving a part of their budget for these collaborations. Notwithstanding, this thesis project does not consider government support and the impact this has on the choice to engage a consultant. It would indeed be interesting and important to study and analyse how many companies rely on the consultant because they receive funds from the public purse and how many firms continue the collaboration even after these funds have run out.

In general, a limitation of this thesis, which could, however, become an interesting starting point for future research, is that it does not consider the reasons that led to hiring the consultant while measuring his/her impact on the financial indicators, but only

considers the presence or absence of the consultant. Studying the reasons for hiring an external consultant could provide a more comprehensive explanation for the results found. In fact, if a consultant is hired to improve an already positive starting situation, one would expect to see better results than if the consultant is hired to try to prevent the bankruptcy of a company or in any case within a company that is already in severe difficulty.

In an attempt to even partially remedy this problem, it was decided to consider in this study only those consultants who had long-term relationships with the companies surveyed so that the work and projects implemented by the consultants over time could be observed in the results obtained by the enterprises.

Another aspect that was not considered in this thesis project but can certainly be explored in more detail by other future analyses is the type of business relationships that firms that make use of a consultant have. Indeed, one factor that could impact a firm choice to hire an external consultant is whether or not the firm has relationships with international partners or suppliers or instead specializes more on local trade. For example, firms that tend to export a lot usually enter into contracts with other firms abroad, and the figure of a legal advisor might be more significant than if the contracts sanctioned by the firm are only regionally based.

The fact that the full potential of consultants is not understood and the fact that many entrepreneurs simply believe they do not need them are factors that considerably limit the results of this research. Awareness-raising is therefore essential, and the encouraging results obtained in this research could therefore motivate and push several small- and medium-sized enterprises to make use of external consultants.

In order to better analyse the impact of consultants within enterprises, the economic context in which the companies are embedded was analysed. In particular, an attempt was made to understand the economic situation in which these firms operate and the impact in terms of employment of this sector in the economic overview both nationally and regionally. It was thus possible to note the great potential that this sector has at the national level, being the eighth most remunerative sector by product category at the Italian level and having grown by 2,3% during the last year at the regional level.

The geographical distribution of enterprises was then studied, noting a large concentration of enterprises belonging to the Electrical Equipment Manufacturing sector in the provinces of Vicenza, Treviso and Padua. In particular, 42,86% of medium-sized enterprises belonging to this sector are established in the province of Vicenza.

The reasons behind this concentration of companies have not been explored in detail in this thesis, but it is certainly considered interesting to observe this phenomenon, which can definitely be studied in more detail by further studies.

It would be important to broaden the study to a national level by trying to see in which cities there is a greater concentration of companies belonging to this sector and then trying to understand the reasons behind this phenomenon. By studying possible clusters, it would be possible to understand whether there is actually a sharing of know-how within this sector in the different cities (or regions) where these enterprises are most concentrated. A next step that would be very interesting to carry out would be to analyse the sharing of this know-how in order to understand whether this has an effect on the use of a consultancy figure or vice versa.

In this thesis project, as mentioned earlier, four consulting figures in particular are presented. The reason behind this choice stems from the need to study the impact of consultants within companies in a practical way, and therefore it was necessary to select only a few consultancy figures in order to be able to define them more clearly and study them in deeper detail. Nevertheless, it is evident that the study method applied in this thesis project can also be adapted and repeated for different consultancy figures used within companies. With regard to the external consultancy figures analysed in this thesis, it is interesting to note that the tasks assigned to each of the consultants under analysis are much more varied than one might expect and very often the tasks assigned to these consultancy figures are not completely defined by precise boundaries but often some responsibilities coincide. For this reason, the presence of one consultant may have an impact on the presence of another because a company that relies on an external consultant, precisely by virtue of the relationship that has been established with him/her, may prefer to assign him/her more responsibilities rather than hire a different consultant who is more expert in another area.

It is to say, in this thesis the impact of the consultants was studied individually so as to avoid that the presence of a consultant could impact the results obtained by the presence of another one. However, it would be interesting to study the simultaneous presence of different consulting figures to see whether a specific combination of consultants could lead in general to better results. This seems to be a natural and important development of this thesis. It would be therefore interesting to further the study by trying to understand which counselling figures have an impact on each other and whether there are measurable relationships/connections between certain consulting figures. In this way, by studying the

simultaneous impact of different consultancy figures, it would be possible to understand which combinations of consultants would lead to better financial results and for which businesses.

In this thesis, an attempt was made to observe whether companies that make use of consultancy figures actually recorded higher financial ratios on average than companies that do not. This analysis, performed throughout chapter four, showed optimistic results. In fact, in almost all cases, for both small and medium-sized companies, the various consultants led to higher values than those recorded by companies that did not use the consultant.

In an attempt to establish a model that could quantify the impact that the external consultants under analysis have on the financial indices taken as a reference by the companies, 32 linear regression models were then constructed to study the impact that each of the four consultants considered have on each of the four financial indices analysed throughout the thesis. The companies were divided into two groups according to their size, i.e., medium-sized companies were studied separately from small-sized ones. Although not all models obtained and not all variables considered were significant, the results obtained from the sample studied were generally encouraging. In particular, small-sized enterprises seem to particularly benefit from the legal advisor and the insurance advisor, whereas the accountant advisor seems to be crucial for medium-sized enterprises. It is important to look at some of the results obtained trying to give possible explanations for the phenomena observed. In particular, the fact that for small enterprises the accountant consultant is only significant when considering the EBITDA to Sales ratio was unexpected. That is, the presence of the accountant consultant seems to have no impact on the other financial ratios for Veneto small-sized companies belonging to the Electrical Equipment Manufacturing Sector. This may be explained by the fact that this type of consultant, especially in small enterprises, is called in too late, when the situation is already very critical, and therefore it is very difficult for them to achieve significant results until after a long period of time. Another problem could be related to the fact that very often entrepreneurs who are in charge of small enterprises fail to fully understand the importance and potential of the help of a consultant and therefore do not collaborate with him/her even when it would be necessary, considering this collaboration instead as an avoidable expense. Among the entrepreneurs contacted to collect data for this research, some also pointed out that the economic and health crisis has left companies with a very tight budget, which they cannot afford to pay for external consultancy services except

through public funding. Many times, companies prefer to manage finance and accounting issues internally as they consider them to be fundamental parts of the company business and try to maintain maximum control over them. However, this may not be the winning strategy as an external and more neutral opinion may lead to a more effective funds management that is more focused on business development than on simply maintaining the levels achieved.

These considerations may also explain why the financial advisor appears to have no impact on either the ROE or the ROI in the case of the small enterprises under analysis. Surprisingly, however, the situation changes as far as the legal advisor is concerned. The latter in fact turns out to have an impact on all the financial indices analysed for small enterprises. This result, which was certainly not expected, can be explained by the ever-increasing complexity of contracts and government regulations, which make it incredibly useful to have a figure of reference who allows business activities to be carried out correctly. The figure of the legal advisor is also very useful when considering international trade relations, in this case in fact being aware of the rules governing international trade is essential and the support of a legal advisor can become fundamental. Even in the construction of these models, however, limitations can be noted. First of all, important qualitative variables such as the reasons for referring to a certain counselling figure, which were listed earlier in this chapter, were not taken into account within the models. Furthermore, the impact of consultants was only studied from a quantitative point of view. That is to say, the difference recorded in the financial benchmarks was studied but it was not considered whether there was an improvement in qualitative terms within the companies. The presence of consultants could improve the general working environment, reduce stress, improve communication, give a long-term vision to the company projects and enable new business opportunities among other things.

One could consequently implement this thesis by contacting the companies that were studied and interviewing the entrepreneurs in order to develop an interview based on mostly qualitative aspects, as to whether they have experienced improvements in their working environment after having relied on an external consultant. Another possibility would be to consider these aspects for other future research concerning the consulting sector.

A considerable limitation of this thesis is the fact that the results are based on a sample of only 114 companies. Although this number is sufficient to draw interesting conclusions, it should be increased considerably in order to be able to study more definitive and reliable

results.

Another limitation of this thesis is the fact that the situation of the companies before starting to work with a consultant and after starting the collaboration was not observed. Instead, different companies that use the consultant were compared with companies that do not. The reasons behind this are the difficulty in finding data, the reticence of the companies to state exactly how long the consultant has been working with them and also the difficulty in comparing the company results including also the macro-economic factors that are affecting it at a specific point in time.

The limitations listed above are to be understood as ideas to deepen the results obtained by this research rather than as factors that devalue the thesis itself. The great potential of this thesis is also, and above all, the possibility of demonstrating in a concrete way how much the consultants are to be seen as resources and not as avoidable additional costs. Obviously, the choice of consultant must be influenced by the needs and objectives of the companies in order to be effective.

Having analysed many of the limitations and potentialities of this thesis, in order to best conclude this study, the focus will be shifted on the value of the results obtained. Indeed, for the academic world these results can and should be seen as a starting point for further research in the consulting world. Many studies have already been done in this regard, but the field of Electrical Equipment Manufacturing and the counselling figures featured in this thesis have not yet been adequately analysed in the studies to date. For this reason, this thesis could give them prominence by allowing future students and researchers to start from an already established basis of study.

On the other hand, this thesis can already be regarded as a useful tool in the hands of entrepreneurs and enterprises that have been analysed. In fact, for the medium- and small-sized enterprises belonging to the electrical equipment sector and established within the Veneto Region, it is incredibly useful to already have at one's disposal data indicating the effect that the consultancy figures analysed have had within enterprises similar to them. For this reason, this thesis will be shared with a number of companies that participated in the study and expressly requested to have the results, and their interpretation, once the study was completed. However, companies that operate in the same sector but in different regions could also rely on this study to make their own relative assessments of the consulting world and whether or not they in turn could rely on external consultants.

The investigative method adopted for this thesis research could then be replicated for the study and analysis of other professional figures that work both externally and internally

to companies. It would be possible, for example, to study the impact of an in-house human resources manager compared to relying on an external head hunting and recruiting company, again following the method and structure of analysis outlined in this thesis. That is, this research could be extended and replicated for different professional figures and different sectors, while maintaining the same analytical and investigative structure. Considering this, it is interesting to interpret the results obtained correctly, keeping in mind their limits and potentialities but at the same time understanding the importance and the possible future development of the consultancy sector.

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