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**"SPECIAL PURPOSE ACQUISITION COMPANIES (SPAC) IN ITALY:
AN EMPIRICAL ANALYSIS"**

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INTRODUCTION

Special Purpose Acquisition Companies (SPACs), as their name suggests, are companies with no assets but cash that are listed in regulated markets with the only aim to find a target firm during a specified period of time (18 or 24 months) and merge with it. At the end of this operation, the result is to get listed the target company.

These companies were born in U.S. in the 90s, after the failure of blank-check companies in the 80s, mainly used for fraudulent schemes.
This particular structure of investment vehicle was rediscovered from 2003 in the U.S. and then adopted in other countries. In 2005, the first SPACs got listed in European markets.
During the years, special purpose acquisition companies have become an important phenomenon and, in 2011, the first SPAC joined in the Italian market. From that year (to November 2017), 18 SPACs got listed in Borsa Italiana, 10 of which already completed the business combination with a target firm.

Literature is mostly focused on U.S. SPACs and only a few papers analyse European and Italian SPACs. The main result of U.S. and European literature state that the stock returns of companies are poor (and in most cases negative) even if operating performances might improve.
In fact, according to them, only less-performing and highly leverage firms used SPACs to enter into public markets, while companies with a positive financial background, sustainable financial structure, and a good competitive advantage used the direct way to get listed, the IPO.

The scope of this thesis is to perform an empirical analysis on Italian SPACs and their target firms in order to understand if these particular investment vehicles can help Italian firms to get listed and raise new capital through the public market, increasing their size and profitability. According to literature, in fact, special purpose acquisition companies are considered as a secondary way to access the public markets.
The empirical analysis is performed by examining operating and stock performance before and especially after the business combination between SPACs and their target firms, trying to understand the reasons behind this choice.
The thesis, then, compares results with those of other papers in the academia.

Special purpose acquisition companies are an interesting topic not only because is a recent new type of investment, but also because it’s becoming a large phenomenon in Italy.
Moreover, in December 2016, the Italian government introduced a new rule that encourages investments in Small and Medium Enterprises (SMEs), by eliminating taxation on interest and capital gain on long-term investments. This has increased the demand for companies’ stocks which might push more firms to get listed, that now can choose to use the IPO or a SPAC.
During the first ten months of 2017, in Borsa Italiana, the Italian stock exchange, there were 23 new initial public offerings (IPO), which 7 were Italian SPACs (30% on the total).

In this thesis, in chapter 1 are presented the main characteristics of a SPAC and regulations that in the past brought to the creation of this particular investment vehicle.
Chapter 2 and 3 discuss the differences between SPACs and private equity funds and Initial Public Offerings, and the relative literature.
Chapter 4 presents the main models of analysis for operating and stock performance used in the literature, in particular Ignatyeva, Rauch, and Wahremburg (2013), Lewellen (2009), and Kolb and Tykvová (2016).
Finally, in chapter 5, all Italian SPACs listed in the market (AIM Italia or MIV) are briefly analysed with a particular focus on those which completed the business combination with a target until 2015. In fact, in these cases, it’s possible to analyse also post-acquisition performances to understand if SPACs can increase the value of firms.
Following models of literature, this analysis tries to investigate what are the performance before the business combination and especially after.
The analysis will focus on revenues, total assets, EBITDA and measure of profitability of the companies such as return on invested capital (ROIC) and return on assets (ROA), both calculated excluding goodwill and other similar intangibles.

1. What is a Special Purpose Acquisition Company?

The argument of this thesis is Special Purpose Acquisition Companies or, as more often referred with the acronym of SPACs.

They are essentially public companies which are listed on stock exchanges through Initial Public Offerings and have only cash as asset side of their balance sheet. The only purpose of these companies is to find a privately-held firm and merge with it. In this way, after the transaction, the target firm become listed and can use the cash to boost growth (both internally or through Mergers & Acquisitions) or to repay debt.

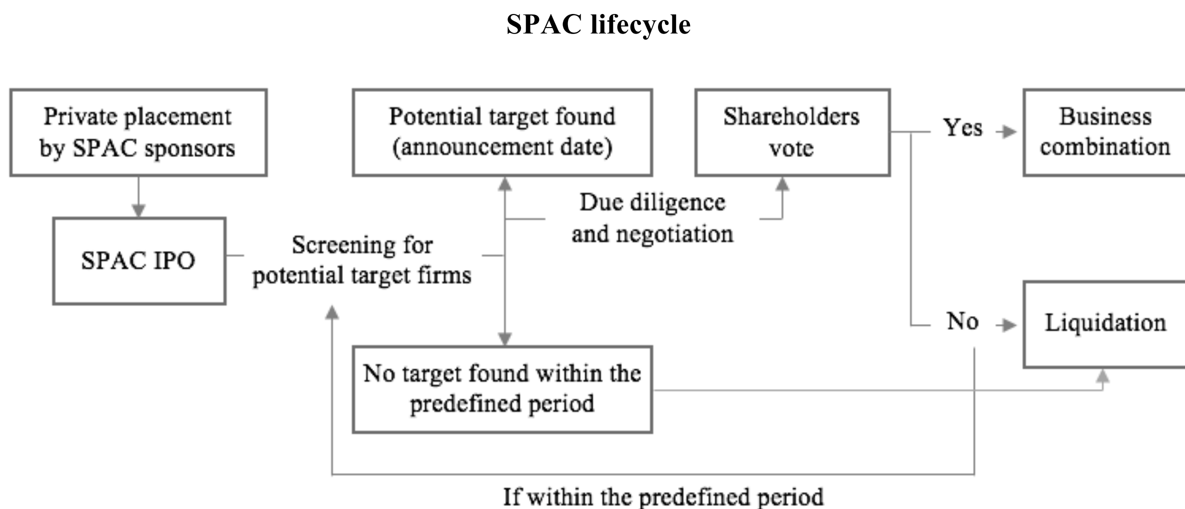
Founders of these particular companies are typically managers with experience in the private equity industry, corporate finance or are expert in management, restructuring, valuation or in specific industries in which the single SPAC is interested.

Once they created the company, they have typically from 18 to 24 months to complete the business combination with a potential target.

If they don't find a suitable target within the agreed period of time, the company is liquidated and almost all proceeds raised through IPO are distributed pro-rata to shareholders.

In case of liquidation of a SPAC, founders are not compensated for their work and so they do not receive any money. This is an incentive for the management to work efficiently and do their best to find a suitable target to merge but also is a strong incentive to complete a business combination even if the target company is not the best available.

SPAC lifecycle



SPACs are often compared with private equity funds and IPOs because of the similar characteristics they share. A complete explanation is provided in chapters 2 and 3.

1.1 Regulation and history of SPACs

The literature on Special Purpose Acquisition Companies is quite recent. First vehicles aimed at getting listed privately-held companies appeared in the United States in the '80s, called 'blank check' companies. The name 'blank check' derives from the fact that investors virtually write a blank check to sponsors of the vehicle because neither sponsors nor investors know in advance what is the object of the investment.

In the '80s blank check companies were typically very small in term of side but, according to the Security and Exchange Commission (SEC), they could issue 'penny stock' (for this reason they were also called 'penny stock companies').

SEC is the independent agency of the government of United States of America that is responsible for the security of U.S. stock exchanges (in Italy, the equivalent authority is the CONSOB). The mission of the SEC is "*to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation*".

SEC defines *penny stocks* as securities issued by small companies that are exchanged at a price below $5. Usually, penny stocks are quoted over-the-counter, for example in the OTC Bulletin Board or OTC Link.

These markets are less regulated than main stock exchanges, sometimes illiquid and prices can be highly volatile due to low volumes. Prices of securities in OTC markets are more inclined to be manipulated if there are no specific regulations to prevent this.

Penny stocks were first regulated by the Security Act of 1933, introduced after the stock market crash of 1929 to ensure that buyers would have received enough information before the purchase of securities.

In the '80s however, black check companies were associated with fraudulent behaviour of managers and investors that used pump-and-dump schemes to fraud other investors.

Pump-and-dump schemes consist in a voluntary inflation of stock prices by disclosing fake news or misleading statements. Beneficiaries of this scheme were owners of stocks who could sell their investments at a higher price (that didn't reflect its fundamental value).

Notwithstanding prices of these securities were low and the issuing companies had a tiny market capitalization (compared to companies in regulated markets), these schemes caused financial frauds in term of millions of dollars. Moreover, even if investors recognized the presence of a fraud, they could find difficulties in selling stocks due to a possible illiquid market.

After this kind of scandals came to light and SEC understood the need of a regulation to prevent them and to protect investors, Penny Stock Act was indeed introduced in 1990 and, in 1992, SEC changed also the Rule 419 of the Security Act (1933). By introducing this regulation, the SEC didn't prevent the creation of cash shells but it made them safer and more legitimate.
Rule 419 regulates '*blank-check companies*' having the following characteristics:

- the company has to be in the development stage
- the company issue penny stocks
- the company has not a business plan or a specific purpose, or its only purpose is to merge with a not yet identified firm.
- The company has not more than $5 million in assets (or it's planning to raise less than $5 million).

Main features of the new regulation to which blank check company must comply with are:

(i) Gross proceeds must be deposited in an escrow (at least 90% minus underwriting commission)

(ii) Stocks issued during the IPO must be deposited in an escrow as well

(iii) The merger must be completed within 18 months from the IPO (otherwise all the money in the escrow are distributed among investors)

(iv) After having received all relevant information, shareholders must vote and agree about the target company to which merge

(v) The fair value of the target company must be at least 80% of funds raised.

It's easy to understand how the SEC increased investors' protection and the transparency of the blank-check vehicles. Firstly, requiring that almost all proceeds raised and stocks issued through the IPO are deposited in an escrow, it prevents frauds, inappropriate usage of the investors' money and, in case of stocks, it prevents also abusive trading (short sellers, rumourmongers, and pump-and-dump schemes). In addition, the requirement of the minimum fair value of the target company found was set to prevent the improper usage of the money raised. Secondly, the time horizon gives investors that either a merger will be accomplished or they will receive their money back.
Lastly, before the approval vote, a blank-check company must prepare a document containing all relevant information about the deal on which investors are going to vote. This document is similar to a listing prospectus, and need to be approved by the Security and Exchange Commission.
Another additional reform was adopted in June 2005 in which SEC defined a '*shell company*' as a company with no or nominal assets (other than cash) and no or nominal operations.

This reform requires that shell companies completing a business combination (or whenever there is a change in control) must publish, among other information, target firm's audited financial statements for the previous two years within four days from closing instead of seventy-one days. This obviously increased transparency of these vehicles.
The 2005 regulation is important because it makes clear that, even if a company without assets but cash is not subject to Rule 419, it need to disclose important information about its business combination before it happens, in order to provide timely reporting to investors.

Normally companies which want to be listed in a regulated market use the Initial Public Offering process but other different methods are available. One alternative way to be listed is to be acquired by a listed company and subsequently merge with it through a 'reverse merger'. According to Cumming et al. (2014), a reverse merger can be performed with two vehicles: *natural shells* and *cash shells*. The former are companies having sold their assets and operations after being bankrupt whereas the latter are companies created with the only intent of merging with a privately-held company.
Natural shells typically have very few assets and almost no cash available, so they are only suitable for private companies that seek to be listed fast and do not need to raise external funds for growth or restructuring.
On the other hand, cash shells have available liquidity that target firms can use to pursue growth initiatives or give the possibility to initial shareholders of the target firm to cash out their investment.

Floros and Sapp (2011) highlight that '*reverse mergers have become a popular way for a firm to go public in recent years while avoiding the delays and expenses of the traditional IPO process*'. They identity five major advantages of reverse mergers over IPOs:

1) Avoiding the stock exchange regulation process for being listed (which can be lengthy)
2) Lower direct and indirect costs (such as underpricing)
3) Stocks are traded immediately after the merger (avoiding the risk from worsening market condition)
4) Firm's managers focus more on operations (and not on road shows)
5) Owners maintain a higher stake in the resulting public company.

Despite these advantages, authors suggest that going public with a secondary route 'have acquired a bad reputation, due primarily to their lower listing requirements'. These shell companies, in fact, are listed in less regulated markets or in over-the-counter-markets.

Since they are not required to disclose all information about their governance and performances, the quotation of their stocks is characterized by asymmetric information, conflict of interests of management and (sometimes) very high risk for investors.
In this context, Special Purpose Acquisition Companies resolve the main disadvantages of going public through a reverse merger. As further explained in the chapter 3, when a SPAC get listed, it need to file a prospectus to the relative stock exchange regulator in which are stated who are the founders, how much of their time founders can spend in searching for a suitable target, available time to find the target and if shareholder need to approve the merger with the target and the relative voting threshold.

From a regulatory point of view, a special purpose acquisition company is different from a blank check company because as soon as the SPAC raise more than $5 million, it is exempted from the Rule 419. However, in order to attract investors, a SPAC needs to protect their interests and so setting for itself a well-structured bylaw.
Sometimes, and especially in first years of this century, they were also called *specified* purpose acquisition companies because they have the pre-defined - or specified - objective of merging with a private firm.

The concept of the actual structure of special purpose acquisition companies was created by David Nussbaum who is currently chairman of the board at EarlyBirdCapital, a boutique investment bank in New York.
Even if SPACs are not subject to very strict regulation, Nussbaum decided to voluntarily adopt some provisions of Rule 419 to increase transparency of management team, to attract more investors and to obtain the positive opinion of the exchange commission.
Thus, even if not legally required, Nussbaum's new 'blank check company' deposited all proceeds raised in an escrow, with the exception of a relatively small amount to be used for operating expenses and for paying underwriting commissions. Managers had a limited period of time to identify a target company, as in Rule 419, but with the different limit of 24 months. Another important feature that Nussbaum took from Rule 419 was the requirement for the approval of the proposed target company by ordinary investors.
Tradable shares and warrants were an important difference which characterized the SPAC with respect to blank-check companies. The possibility to buy additional shares or dispose of them gave to shareholders the ability to change their investment strategy whenever they wanted.

When investors put money in a SPAC, they buy units which are composed by one share and one or many warrants: they give to investors the possibility to purchase additional shares later (usually after the effectiveness of the reverse merger).
Moreover, in Nussbaum mind, each SPAC should have focused on a different sector in finding the right firm, which required a management team not only with experience in corporate finance, mergers and acquisitions or private equity, but also with a past in the specific focus industry.

Summarizing, the new generation of special purpose acquisition companies, appeared in the market from 2003, embedded from one side the investors' protection provided by the Rules 419 but also allowed shares and warrant to trade freely in regulated markets.

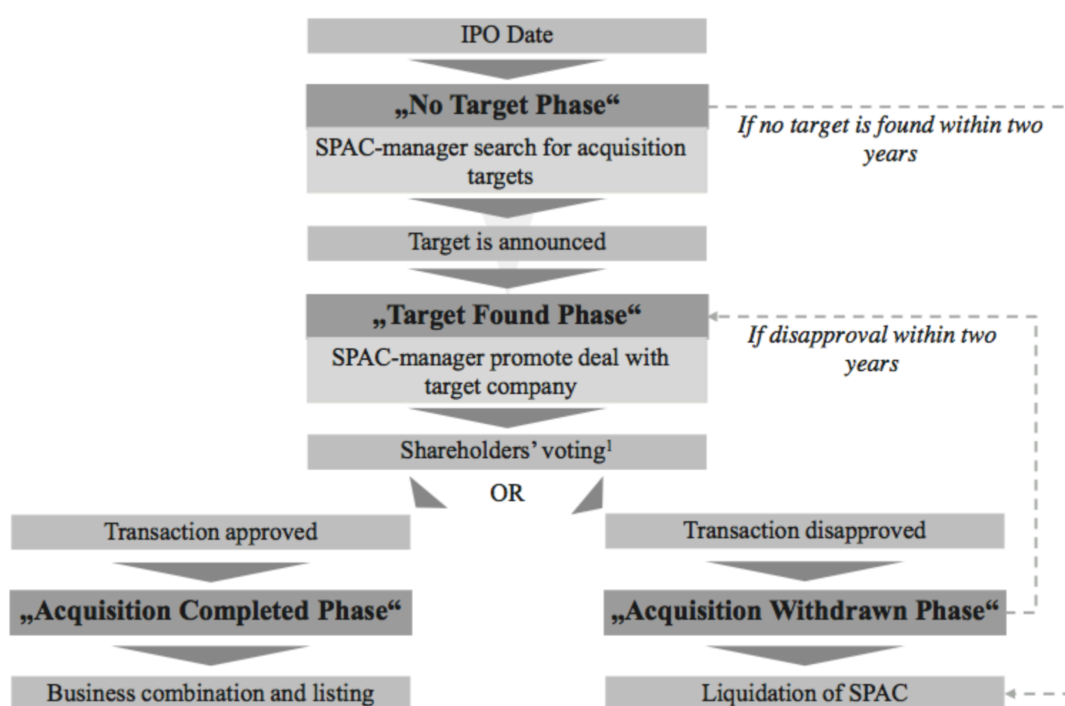
1.2 Characteristics of a SPAC

Millstream Acquisition Corporation was the first modern Special Purpose Acquisition Company (i.e. a SPAC with the characteristics of the actual ones) appeared in the U.S. in 2003. This company was founded by the investment bank Early Bird Capital that was the pioneer and, nowadays, the leader in special purpose acquisition vehicles.
In Europe, *Metal Enterprises Inc.* was the first SPAC incorporated, quoted in the London Alternative Investment Market (AIM) and in 2007 *Pan European Hotel Acquisition Co.* was the first SPAC quoted in a regulated market (Euronext in Amsterdam).
In December 2007, *Liberty Acquisition Holdings Corporation* was the first SPAC (IPO underwriters was Citigroup and Lehman Brothers) raising more than 1 billion dollars.
In Italy, the first special purpose acquisition company was *Italy 1 Investment S.A.*, founded in 2011 by Vito Gamberale, Carlo Mammola, Gianni Revoltella, Roland Berger, Florian Lahmstein, Gero Wendenburg and incorporated in Luxemburg.

Special Purpose Acquisition Companies, as their name suggest, are created with the only purpose to acquire a private firm and, through a reverse merger, make the latter being listed in the public market.
It's possible to distinguish four main periods during a SPAC's life, as Lewellen (2009) and Cumming, Haß and Schweizer[1] (2014) suggested.
Periods are segmented by the most important event characterizing a special purpose acquisition company.

[1] See figure in the next page.

The first stage is called '*No Target*' which last from the IPO date until the day when the target company is announced. After the individuation of the target company by managers, the SPAC enters in the '*Target Found*' phase, which ends on the day of the shareholders meeting. In this day, shareholders are called to vote on the approval of the business combination between the target company and the SPAC. The result of the vote decides which phase follow. If the business combination is approved, the SPAC enters in the '*Acquisition Completed*' stage. On the other hand, if the result of the vote is negative, SPAC returns in the '*No Target*' or '*Acquisition Withdrawn*' phase, depending on the time available. In fact, only if there is enough time to let managers find another target company, a new '*No Target*' period occurs.



Characteristics and performance of each phase will be explained better in chapter 4.

SPACs are not subject to specific rules governing their functioning but, reading their prospectus filed to stock exchange authority in the IPO process, it's possible to identify more or less the same characteristics and format.

PROMOTERS

First prerequisite to create a special purpose acquisition company is the presence of a group of people promoting the foundation of the company by underwriting the company equity.

After its creation, sponsors obtain the management of the SPAC.

Founders, *promoters*, *sponsors* are terms used in this thesis to refer to individuals which create the company. *Managers*, instead, are those individuals that sit in the board of directors and manage the company (which in some cases are not founders and for this reason they have not invested a significant stake in the SPAC).

Promoters are usually individuals but can also be legal persons, such as law firms, consulting firms, investment banks or holding companies.

Analysing special purpose acquisition companies, Berger (2008) found out that '*sponsors tend to have demonstrated a track record of success and a proprietary edge, which gives to investors confidence that they can source and execute a value-creating transaction*'.

The experience of promoters is fundamental for the SPAC initial public offering because it's the only valuable assets on which public investors can rely on[2].

In the listing prospectus in fact it's clearly stated which are past experiences of each promoter and who they are. Lakicevic, Shachmurove and Vulanovic (2014) found that on average, SPACs are founded by 5.91 individuals, and they are on average 50.59 years old at the time of filing.

Berger identified four different type of sponsors:

(i) *Accomplished operating executives* who are seeking for larger financial opportunity and more independence with respect to be managers of a private equity fund

(ii) *Unfounded financial sponsors*, deal-maker with a large network of contacts and experience that allow them to create good deal and transactions

(iii) *Alternative asset managers*, such as hedge funds and private equity funds, which invest in non-core opportunities in order to have the possibility to diversify their portfolio

(iv) *Corporates*, which can benefit from SPAC's profits with investments that are outside of the corporate business but might have strategic relevance in the future.

Promoters are required to buy shares or warrants of the SPAC before the IPO, during a private placement. Typically they buy about 20% of outstanding shares at a nominal price. In some cases, proceeds arising from the private placement are deposited into a trust and are not available until shareholders meeting vote in favour of the business combination or the company is liquidated. In other cases, these proceeds are used (at least in part) to cover the expenses of managing the company.

[2] See paragraph 1.3 "SPACs as a proxy to valuate human capital of managers".

Thus, if the business combination is approved, the compensation of promoters is given by a stake in the company that they cannot sell until the expiration of a lock-up period.
Important in this mechanism is the effect: if the SPAC fails to find a suitable target for the business combination or if ordinary shareholders reject the proposal, promoters will lose all their investments. This practice is known as 'skin in the game' because managers risk their own money in the 'game' of investing in the company.
Obviously, it is a mechanism to align the promoters' interests and those of investors but also a strong incentive to find a target company in any case, even if it's not the best choice and the deal would not increase the value of the target company.
If managers do not risk their own capital in a SPAC, they could have the incentive not to fully commit their time in searching the optimal target company for the merger, but spending their time in other ways. However, even in the best scenario, they usually do not spend all their working time in searching for targets and managing the special purpose acquisition company because they have their own job. It's common for sponsors of SPACs to be employed in other jobs because they need to have a secure inflow of cash in the case the SPAC doesn't find a target and it's liquidated, giving no compensation to its managers.
To protect investors, the possible conflict of interest of managers is clearly stated in the listing prospectus. For example, reading the prospectus of 'EPS Equita Pep', an Italian special purpose acquisition company listed in AIM Italia in August 2017, it's possible to read that:

"*Si segnala che tutti i membri del consiglio di amministrazione dell'Emittente esercitano attività imprenditoriali e/o professionali ulteriori rispetto all'attività svolta presso l'Emittente e, pertanto, sono portatori di interessi inerenti ad attività professionali non connesse a EPS. Gli stessi, inoltre, svolgono […] attività simili a, ovvero potenzialmente in conflitto con, quelle dell'Emittente*."

During the IPO, promoters are given also the possibility to buy additional shares at the same price and with the same right of ordinary shareholders. Sometimes shares bought by managers during or after the IPO allow managers to vote in the shareholders meeting for the approval of the business combination, whereas in other cases it doesn't happen. For example, the prospectus of 'EPS Equita Pep' states:

"*Si segnala che la politica di gestione dei conflitti d'interesse adottata dalla Società in data 13 luglio 2017 prevede che i Promotori e/o i soci e/o gli amministratori della Società non*

esercitino il diritto di voto inerente alle Azioni Ordinarie da essi eventualmente acquistate nell'assemblea chiamata ad approvare l'Operazione Rilevante."

In this case, even if managers buy shares directly in the open market, they do not have the possibility to influence the vote in the shareholder meeting for the approval of the business combination.

Contrarily, SPACs in which managers are not prohibited to vote for shares bought in the open market, sometimes experience an increase in stock price just before the shareholder meeting because managers try to buy shares from 'no voting' investors in order to make the business combination happen (and so receiving their compensation).

UNITS

SPACs offer to investors *units*, composed of shares and warrants. They are bought together but, after the quotation of the company in the stock exchange, they trade separately.

This characteristic offers to investors the possibility to dispose in different ways of the two instruments. The most interesting case occurs when a shareholder disagrees about the proposed target company for the business combination: for example he can sell his shares, liquidating his position, but holding warrants in the case in which his forecast about the business combination would results wrongful. In that situation, he will convert his warrants in shares, realizing at least part of total profits.

After the IPO, almost the entire amount of proceeds raised are transferred to a trust or a restricted account which is managed by an underwriting bank. The percentage of money transferred here is typically from 95% to 100%. During the last years, SPACs increased the percentage of proceeds transferred to the restricted account to increase investors' protection.

Lakicevic, Shachmurove and Vulanovic (2014) compared all U.S. special purpose acquisition companies from August 2003 and August 2012, dividing them into three sub-periods: 2003-2006, 2006-2009 and 2009-2012. Referring to the percentage of proceeds deposited in a trust, they found data as reported in the following table.

Period	2003-2006					2006-2009					2009-2012				
	Obs.	*Mean*	*Std. D.*	*Min*	*Max*	*Obs.*	*Mean*	*Std. D.*	*Min*	*Max*	*Obs.*	*Mean*	*Std. D.*	*Min*	*Max*
Unit offer price	*78*	*7.06*	*1.41*	*6.00*	*10.10*	*84*	*8.64*	*1.25*	*6.00*	*10.00*	*21*	*9.52*	*1.25*	*6.00*	*10.00*
Proceeds in trust	78	0.93	0.05	0.85	1.03	84	0.99	0.01	0.95	1.03	21	1.01	0.01	1.00	1.03

As shown in the table, the average proceeds in trust of U.S. SPACs have increased through time.

In Italy, almost all SPACs (from 2011 to 2017) transferred 100% of proceeds raised during IPO in a trust.
Even the unit offering price is increasing through time. Cumming, Haβ and Schweizer (2014) suggested that in the first decade of the 2000s, U.S. SPACs issued units in IPOs at a price ranged between around $6.00 to $8.00. However, in recent years, prices have reached up to $10.00.
In Italy, all SPACs listed in the market offered their units at a price of €10.00.
Money in the trust is typically invested in risk-less assets such as government bonds. This is the reason why, before the announcement of the target firm, SPAC's yield should reflect those of treasuries bonds.
Warrants guarantee to shareholders the possibility to buy additional shares at an established price, called 'strike price', but only after the success of the business combination. Normally, the strike price is lower than the offering price of the share, i.e. the warrants are in the money.

To run day by day operations of the company, managers can only use proceed raised in private placement and interests deriving from proceeds deposited in the restricted account.

At the time of the initial public offering, usually SPACs are subjected to a lower underpricing effect with respect to traditional IPOs.
Jog and Sun (2007) analysed 62 U.S. SPACs in the period between 2003 and 2006: the result for underpricing was a mean of 1.9%. According to Jay R. Ritter, professors of Finance at the University of Florida, the average first-day return of U.S. IPOs during 2003-2006 was 11.6%.
These numbers are not surprising because, at the time of the IPO, a special purpose acquisition company is essentially formed only by cash, there is no operating history and the value of the stocks reflect mainly the pro rata value of the trust.
As suggested by Jog and Sun (2007), a possible explanation of SPAC's underpricing could be the underwriting bank's mis-valuation of demand for units which cannot be satisfied after exercising the overallotment option. Another interpretation was provided by Kim (2009), who explained that the underpricing of a SPAC can be the market valuation of the quality of management team (see paragraph 1.3).

INVESTORS

Investors of a special purpose acquisition company can be hedge funds, private equity funds, investment banks, family offices, high net worth individuals (HNWI) and companies.
One main advantage between a SPAC and a private equity fund is the possibility of retail investors to buy shares of SPAC while there is no possibility for him to invest in a private equity

fund. In fact, even if markets in which SPACs get listed are less regulated and (for some aspects) riskier than principal markets, retailer investors are admitted buying and selling shares.
Individuals can invest in SPACs through funds as well, which in turn buy shares of a SPAC in the open market.
Investing in SPAC is a very interesting opportunity because gives a potentially high return with a limited downside scenario. In the case in which management is not able to find a suitable target or shareholders disagree about the business combination and they reject it, they will receive the pro-rata value of proceeds deposited in the trust.
Thus, as Lewellen (2009) wrote, "*investors essentially own a riskless zero-coupon bond with an option on future acquisition*".

As briefly illustrated, shareholders have the possibility to vote on the business combination with the target company proposed by SPAC's management team. The right of *voice* is another advantage of a special purpose acquisition company over a private equity fund.
Investors can either vote, positively or negatively, or sell their shares in the open market. When they vote against the business combination they will eventually receive the pro-rata value of the trust while when they sell their shares they receive their market value. For this reason, as Lewellen (2009) and other suggested, SPACs should never trade below the discounted pro rata value of the trust or the restricted account in which proceeds are deposited.

The business combination is approved if the following situations happen:

(i) A majority of the shareholder meeting approve the acquisition.
(ii) An important part of shareholders decides not to redeem their shares (typically 70%).

Those thresholds are only regulated by the bylaw of a SPAC and for this reason they can be different between companies.
In case in which the aforementioned requisites are not satisfied, the SPAC is liquidated or, if there is available time to find another possible target company, the management team should continue searching for accomplishing a deal.
When managers do not find a suitable target during the period of life of the SPAC (usually 24 months), and thus there is no time left, the company is liquidated and all proceeds deposited in the trust or restricted account after the IPO are distributed pro-rata to shareholders.
If this happens, managers are not remunerated for their (incomplete) work done.

TARGET

The scope of a special purpose acquisition company is to find and merge with a privately-held firm. In fact, target companies of SPACs are mainly private firms seeking to go public in regulated markets. Those firms are interested in merging with a special purpose acquisition company because it doesn't require a time and financial consuming traditional IPO process.

Referring to the first decade of the 2000s, literature pointed out that companies choosing to go public merging with a SPAC had less operating performance, carried more debt, invested less and had less growth opportunity with respect to their industry peers and to contemporaneous IPOs[3].

Others suggested that SPACs are vehicles to access the public markets in situations in which traditional IPOs are not possible[4].

SPACs can be the solution to get listed for example for companies with high debt (since SPAC have lots of money available), growth opportunity but with no great past history (required for a traditional IPO) or in situations of negative market conditions, for example in bear markets.

Moreover, a SPAC can contribute to enhance growth opportunities, to optimize the capital structure of the firm (thanks to skills and expertise of SPAC's management team) and to provide an exit strategy in the case where there are no strategic buyers interested in acquiring the target company.

Lewellen (2009) argued that "like most private equity firms, SPACs typically acquire private companies within industries or geographies in which the management team has (often substantial) expertise."

One example is the Italian SPAC 'Glenalta Food', which has been created with an investment focus on the food business. In the listing prospectus, it's clear the focus:

'Glenalta Food si propone di indirizzare la propria attività di investimento principalmente verso società italiane di medie dimensioni (con un equity value compreso tra Euro 100 milioni e Euro 250 milioni), non quotate, ad alto potenziale di crescita operanti, sia a livello nazionale sia internazionale, nel settore alimentare italiano e in particolare nei settori Food & Beverage, Consumer e Retail.'

From the prospectus, it's also easy to understand that three out of four executive directors in the Board of Directors have a past in food industry. More specifically, *Gino Lugli* was Sales

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[3] In particular, Datar, Emm and Ince (2012).

[4] In particular, Berger (2008).

Director in the Parmalat Group, then General Manager and CEO at Ferrero S.p.A. and from 2015 is a member of the board of directors of Ferrero S.p.A. and vice-president of Ferrero Food Service Luxembourg. *Luca Fabio Giacometti* was co-founder and Managing Director of 'Nutequity', an investment fund supported by Ferrero family (devoted in particular to food products), and then was co-founder and executive director of two Italian SPACs, 'Made in Italy 1' and 'IPO-Challenger' (the latter merged with two wine producers). *Stefano Malagoli* was firstly product manager of fresh product in 'Ferrero Belgio', member of Monitoring Committee and then he focused on the investment banking sector, being an expert in corporate finance, debt restructuring and M&A. *Silvio Marenco* is Corporate Service Director and professor at the Business School ESCP Europe in Turin and an expert in strategic and industrial planning and in corporate restructuring, especially in food, manufacturing, retail and textile industries.

LIKEHOOD OF A SPAC ACQUISITION

Kolb and Tykvová (2016) tried to understand what are factors that influence the choice of a firm to enter in a public market through a SPAC rather than with a traditional initial public offering.

Analysing 127 U.S. special purpose acquisition companies during the period 2003-2015, they identified nine variables, grouped in three categories:

- *(i)* *Market-specific variables*
- *(ii)* *Deal-specific variables*
- (iii) *Firm-specific variables*.

Authors used them to model the probability of success of a SPAC acquisition using a logistic regression.

For the first category (i), authors analysed *market volatility* and *cost of debt*: the former variable was positive meaning that, in higher volatile markets, firms were more likely to access the public market with a SPAC while the latter variable was negative meaning that with lower cost of debt there were more SPAC deals. These findings are not surprising: in general, SPACs are less vulnerable to turbulent market conditions when completing the deal with respect to traditional IPOs since they have already raised cash. Moreover, when the cost of debt is low, SPACs can use additional external funds to acquire a company, giving them more flexibility in searching the most suitable target firm.

Deal-specific variables (ii) that authors analysed were *cash out* and *time to resolution*. The first variable was positive meaning that original shareholders of target companies could quickly and more easily convert their shares into cash in SPACs rather than in traditional IPOs. The second

variable was positive as well, suggesting that a SPAC took more time to complete an acquisition (time from the announcement of the deal and the effectiveness of the business combination). Last finding might seem counterintuitive: one expects that the process of going public is faster using a SPAC than using the traditional IPO process since there are no roadshows, no presentations and money are already available. However, using a SPAC, the acquisition must be approved by shareholders, a process that could take a long time.

Last category, firm-specific variable (iii), were composed by *return on assets (ROA*), *market-to-book asset ratio*, *debt ratio*, *size* and *venture capital involvement*.

Return on assets measured current profitability but was statistically insignificant in the model; market-to-book asset ratio measured growth opportunity and had negative sign meaning that, on average, firms using SPACs to get listed had weak growth opportunity; debt ratio variable was positive, suggesting that only high levered firms chose SPACs; size variable was negative, in line with literature which stated that only small firms enter in public market through a SPAC; lastly, venture capital involvement was a dummy variable which had a negative sign, suggesting that if venture capitalists were involved in the original shareholder base, firms were less willing to use a SPAC. In fact, even if with a SPAC venture capitalists can cash their investments faster, they usually prefer using traditional IPO process because it reduces information asymmetries and it is associated to more prestigious.

In the model analysed by Kolb and Tykvová, all deal and firm-specific variables had a great impact in the likelihood of a SPAC acquisition.

Their results are in line with the literature: SPAC acquisitions are possible alternative solutions to IPOs for getting listed in public markets for firms with lower growth opportunity, more debt or in difficult periods when traditional IPOs are not feasible.

RETURN OF MANAGERS

An important topic in analysing special purpose acquisition companies is the return that investors and founders obtain after the merger between the special company and its target firm. According to literature, there is a huge difference in return between ordinary shareholders and sponsors of a SPAC.

Jog and Sun (2007) analysed 62 SPACs that raised capital during the period 2003-2006. The result of their analysis was that shareholders earned an average annualized return of -3% while management obtains a return of 1,900%. This is why they argue that ‘*it looks like the investors wrote a blank check to management*’.

This huge return for management is explained by the fact that sponsors of a SPAC are given the possibility to buy special shares during a private placement (before the IPO) at a high discount. In other cases, like happen in Italian SPACs, sponsors buy special shares at the same price of ordinary shareholders but they are rewarded in different moments with additional shares. For example, taking the case of the Italian SPAC 'Equita EPS PEP', its listing prospectus states that, provided the rewarding exchange ratio between special shares (400,000) and ordinary shares is 1:6, the conversion will happen in the following cases:

Event	Special shares to be converted	% of special shares to be converted on total	Exchange ratio	Shares after the conversion
Business combination is effective	66,667	5/30	1:6	400,002
Price > €11[5]	80,000	6/30	1:6	480,000
Price > €12[5]	120,000	9/30	1:6	720,000
Price > €13[5]	133,333	10/30	1:6	799,998
TOTAL	**400,000**		**1:6**	**2,400,000**

From this table, it's easy to understand that managers hugely benefit from the successfulness of the business combination, especially in the best case in which the price of the SPAC increase at least by a 30% in three years (€13), signalling a value-creation deal.

It's also easy to understand the high incentive for management to find a suitable target firm for the SPAC and to complete the business combination. Indeed, even if the deal is value-destroying – and so the stock price decrease – managers obtain (at least part of) their investment. In the worst scenario, when the business combination is rejected, managers lose their investments obtaining (at minimum) a return of -100%.

1.3 SPACs as a proxy to valuate human capital of managers

As previously explained, the management team is the most important asset that a special purpose acquisition company have when approaching the market in an IPO. Investors can only rely on experience, networks and competences of managers when deciding whether to invest or not.

Even after IPOs when companies raise their proceeds, what really differentiate a SPAC from another are mainly skills of its managers.

[5] Price must be equal or greater of that amount for at least 15 days out of 30 consecutive days in which stock exchange is opened, within 36 months from the effectiveness of the business combination.

The listing prospectus of a SPAC contains all important information about every single manager: their education, past experience, important role covered, particular companies in which they worked connected to the industry focus of their SPAC and other relevant information of their life or career. In this way, investors can have an idea of the appropriateness of managers to run a SPAC.
However, this is only a qualitative method to 'valuate' the overall quality of management team.

Kim (2009) in his '*Essays on management quality, IPO characteristics and the success of business combinations*' tried to individuate a quantitative method to evaluate skills of managers. He used the phenomenon of underpricing, typical of traditional IPOs. In fact, during the first day of trading in the stock exchange, typically prices of new stocks rise. The literature states that underpricing phenomenon could be the result of asymmetric information between the company and its investors. Firms have incentives to provide all information to investors in the IPO process because underpricing is costly for them (companies sell their shares at a lower price).
However, there are always some investors who are more informed than other and who valuate more a company and thus, more underpricing could mean more performing companies[6].
Kim's intuition is the following: in traditional IPOs, the phenomenon of underpricing can be used to infer the quality of companies but, when a SPAC get listed, it has no assets and no history behind it. Thus, in the case of a SPAC, only the quality of management team can explain the phenomenon of underpricing.
This implies that in SPACs, the underpricing experienced in the first day of trading can be a proxy for the quantitative valuation of the quality of management. In particular, the author used the following formula:

$$MV_{mq,i} + PTA_i = Cprice_i$$

where $MV_{mq,i}$ is the market value of the management quality of the SPAC i, $Cprice_i$ is the first-day unit closing price for each SPAC i, and PTA_i is the value per share of proceeds deposited in the trust for each SPAC i.
It's easy to understand that, in the first day of trading in the public market, the difference between the closing price and the value of the pro-quota cash in the trust can be the market value of the quality of managers per share.
This finding is important because it explains that market can value also non-quantitative characteristics of a stock.

[6] See Zheng and Stangeland (2007).

Moreover, Kim's analysis also pointed out that in SPACs there were more experienced managers and were involved more outside directors than in traditional IPOs.

1.4 Status of SPACs

In this paragraph are presented some general statistics about U.S. and Italian special purpose acquisition companies and their actual status: '*successful*' means that a SPAC completed the business combination with its target, '*pending*' refers to SPACs which have already announced their targets but are waiting for shareholders' approval, '*developing stage*' phase include companies searching for their targets and '*liquidated*' are companies which were not able to find any targets and were liquidated.

- Italian SPACs from 2011 to October 2017

Total deals	**18**	**100%**
Successful	9	50%
Pending	1	6%
Developing stage	8	44%
Liquidated	0	0%

- U.S. SPACs from 2003 to October 2017[7]

Total deals	**274**	**100%**
Successful	150	55%
Pending	10	4%
Developing stage	35	13%
Liquidated	79	28%

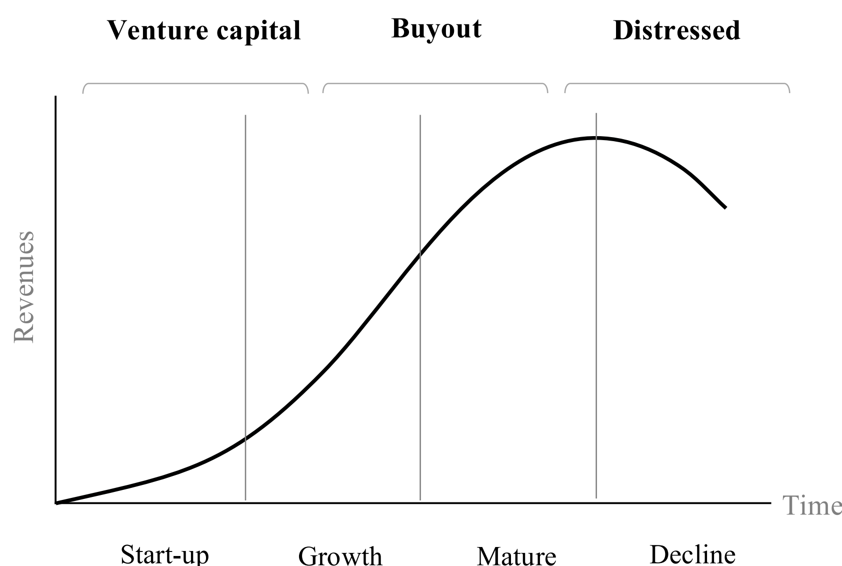
[7] Data taken from [www.spacanalytics.com].

2 SPAC and Private Equity: similarities and differences

Special Purpose Acquisition Companies are often associated with private equity funds because of their similar characteristics with respect to their role in the market.
The main characteristic is that both SPAC and private equity fund (PE) are created with the role of acquiring (with a minority or majority stake) a private company, or only in the case of PE, a company in the delisting phase, with the objective of enhancing performance of the target and then make it public through an IPO or a reverse merger.
Some authors, in fact, say that SPACs are a public form of a one-shot private equity fund.

According to Invest Europe[8] (formerly known as European Venture Capital Association), "private equity is a form of equity investment into private companies not listed on the stock exchange. It is a medium to long-term investment, characterised by active ownership. Private equity builds better businesses by strengthening management expertise, delivering operational improvements and helping companies to access new markets. In particular - venture capital is a type of private equity focused on start-up companies. Venture capital funds back entrepreneurs with innovative ideas for a product or service who need investment and expert help in growing their companies."

There are various types of private equity funds which invest in specific companies in depending on their lifecycle period.



[8] 'Invest Europe represents the European private equity industry, from venture capital-backed start-ups to the largest private equity firms and investors such as insurers, family offices and pension funds', www.investeurope.eu.

Venture Capital funds typically invest in early-stage companies, such as start-ups. The aim of these funds is to buy early promising companies when they are (reasonably) cheap and gain from their divestiture, realising 5 or 10 times the fund's investment. Divestiture usually occurs when the target company goes public or is acquired by an industrial investor or another fund.

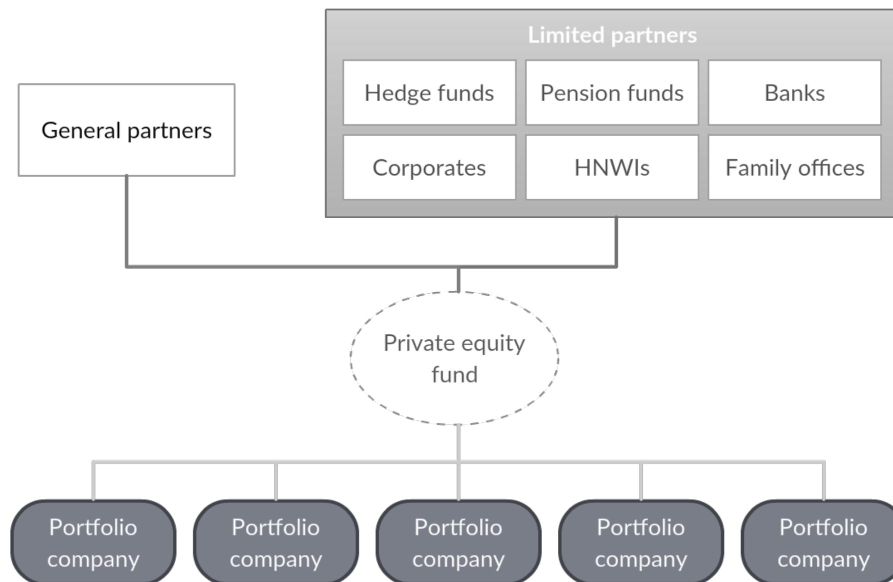
Buyout private equity funds, on the other hand, have different targets. They typically buy companies in mature industries that generate steady and positive cash flows, net from investments.

As Rodriguez and Stegemoller (2011) suggest, these positive cash flows in mature companies could be a risk in the principal-agent problem between shareholders and management. Managers could use these free cash flows for their own interests rather than use for better managing the company or to increase value for shareholders (their principals).

In this contest, buyout funds can solve this risk by buying mature companies using debt. This 'leverage buyout' eliminate the possibility to use the excess cash available in the company because, after the acquisition, it can be only used to repay the debt (essentially a mortgage with the company itself as a collateral).

Distress investing is the last category of private equity funds. They invest in companies which are suffering financial distress or have already filed for bankruptcy. These particular funds invest in companies' debt and, during the financial restructuring, they swap the debt into equity obtaining the control of the company indirectly. The objective of the management of these funds is to buy what they think is an undervalued debt for the purpose of selling the company after the plan for restructuring it at a higher price. These funds are a particular kind of investments because it involves very high risk: for the success of the restructuring plan is required that all company's debtholders agree to the plan and that management (or the new management appointed by the fund) is able to restore the company's going-concern.

Notwithstanding the different focus of private equity funds, they all have the same functioning structure. Typically a PE fund is structured as a limited partnership managed by general partners. In this context, investors are limited partners (identified also as 'LPs') because they do not assume any liabilities whereas managers of the fund are called general partners ('GPs') because they are involved in the management of companies acquired by the fund and for this reason they are responsible for the investments done.



Limited partners have no voice right in the investment process nor in managing companies acquired. They commit a certain amount of money to the fund which the general partners can call when they need them to make an investment.
Even if LPs do not have to disburse their money at the beginning of their investment, they are not allowed to withdraw their committed money from the fund. To be more specific, sometimes cash can be withdrawn but with the approval of general partners and provided that the fund does not need that money or the LP need to find another investor. In other cases, the exit from the fund is forbidden and, if happen, it triggers a penalty.

The *lack of exit and voice rights* imply that investors of private equity funds can only be institutional investors (such as pension funds, hedge funds, banks), corporates, family offices and high net worth individuals (HNWI).
The investment in such funds is focused on a medium-long period, typically from 5 to 10 years. This is one of the reasons why private equity investments are not easily convertible in cash, along with the fact that these funds invest in private firms not listed in regulated markets (it's more difficult to find another buyer for exiting investor's shares).
General partners use fund's money to invest in start-up companies, private firms, mature companies, distress firms or even public companies. In the latter case, private equity funds usually acquire a company in the delisting phase with the objective of enhancing the performance of the target and then make it public through an IPO or selling it to an industrial buyer.

Given that the normal time horizon of a fund is 10 years, usually general partners invest fund's money in the first half of the period in order to have enough time to implement the business plan for increasing the value of the target company.
Private equity funds generally create more funds and companies acquired by a single fund form its portfolio.
Normally funds tend to focus on a specific industry, geographic area and in company stage of development when they start investing (venture capital, buyout, distressed firm).
Private equity funds, and in particular those focalized in venture capital investments, are very active in pharmaceutical and technology industry.
One of the world's most important venture capital fund active in the technology sector is 'Sequoia', which invested in famous companies such as Airbnb, Apple, Cisco, Dropbox, Google, LinkedIn, Oracle, WhatsApp, Yahoo!.

General partners of funds are managers who experienced a past in private equity, corporate finance, or they are accountants, portfolio managers or experts in the specific focus sector of funds.

After having briefly described how a private equity fund works, the main **similarities** and **differences** between private equity funds and special purpose acquisition companies are presented in the following paragraphs.
Similarities comprise the role of *managers' reputation*, *time horizon* of the two investment vehicles, the participation of the general partners or promoters in the investment (called '*skin in the game*') and the *investment focus*.

With regard to the first point, as explained before describing SPACs and private equity funds, the reputation of the managers is fundamental for both vehicles because it's the only 'asset' on which investors can rely when investing their money.
Investment focus is strictly connected to the background of managers.
Some private equity funds and SPACs, in fact, specify their focus in acquiring their targets because management team might be composed by experts in a specific industry or having valuable business relations in specific geographic area.
Example of Italian SPACs with a clear focus in searching their targets are 'GreenItaly1' and 'Glenalta Food'. The former was created with a focus on the green economy while the latter in the food business.

Moreover, the two investment vehicles have a limited time horizon, even if it's different. The scope of a private equity fund is to buy a company and after (usually) 10 years to sell it to the public through an IPO or to an industrial buyer whereas the scope of a SPAC is to find within (usually) 24 months a target company and merge with it.
As previously described, SPAC's life can be segmented in many periods and the most critical event is the identification of the target company for the business combination.
Private equity fund's life can be segmented as well. There are two main periods: the first, lasting from 3 to 7 years (typically 5) called *investment period*, in which the fund makes investments while the second last until the end of the fund and it focuses more on managing and divesting all portfolio companies. Despite the agreed end of the fund, it's possible to postpone that date for two or three years (so-called '*grace period'*) only if the majority of limited partners agrees and the divestiture process is not yet concluded.

To try to align managers' interests with those of investors and to ensure that general partners and promoters manage their companies on a best effort basis, SPACs and private equity funds require managers to invest a meaningful part of their wealth along with limited partners and ordinary shareholders in companies.
Hence, they will not only profit from the increase in the value of the fund/SPAC if things go well, but they will suffer losses in a downside scenario.
This practise is known as '*skin in the game'* because managers risk their own money in the 'game' of investing.
In case of SPAC's promoters, they buy special shares before the IPO and proceeds raised are usually available to management to cover expenses in running the company since SPAC's prospectus ensure that a large fraction of IPO proceeds (from 98% to 100%) is deposited in an escrow and can be used only after the approval of the business combination.
As previously explained, if managers do not find any target company or shareholders meeting refuses it, managers do not obtain any compensation.
Consequently, managers have strong incentives to find the optimal target company.

Notwithstanding the scope of the two vehicles is similar, there are important differences that characterize them.
The more obvious differences of a SPAC respect to a private equity fund is the presence of *tradable shares* and the method by which the two vehicles raise money.

Proceeds raised by private equity funds are the result of a private placement whereas SPACs offer their shares directly to the market through an initial public offering.
Going public through an IPO requires SPACs to issue a listing prospectus which contains the most important characteristics of the company seeking to go public, such as the total number of shares and warrants offered, who are managers, underwriting bank, all functioning information of the company and what are risks for shareholders.
Listing prospectus allows SPACs to be more transparent and protect more their shareholders.
Private equity funds instead invest in private companies and so are not required to provide some information to limited partners.

Another important difference correlated to the previous one is the *exit strategy*.
SPAC's investors can decide whenever they want to liquidate their investments selling shares in the open market where the company stocks trade.
However, there is a technical limitation for investors in exercise this exit right. SPAC's shares are typically listed in less regulated market than principal stocks exchanges – for example the AIM market in London or AIM Italia in Milan. Finding a counterparty willing to buy SPAC shares here can be difficult since these markets are usually characterized by low daily volumes and negotiations are allowed only to institutional investors.
In any case, the exit from the investment in a SPAC is simpler than from an investment in a private equity fund.

Moreover, investing in a special purpose acquisition company, shareholders can decide to pursue investments with short-term as well as long-term perspective depending when they decide to liquidate their stake.
On the contrary, limited partners in a private fund can only pursue a long-term investment gaining from the difference between the price paid to acquire portfolio companies and their selling price.
The *investment strategy* is another difference. As is known, private equity funds are characterized by diversification, since portfolios are composed of many companies.
In SPACs this (almost) never happen because one single special company is used to merge with only a single target firm.
In Italy one case can be associated with this special case. 'Space 2 S.p.A.' decided to split into 'Space 3 S.p.A.' before the business combination with 'Avio S.p.A.'. After only two months from the creation of the new SPAC, in June 2017 it disclosed that its target company would be 'Aquafil S.p.A'. Even if it's not exactly the case, one can think that proceeds raised by a single

SPAC (Space 2) were used to get listed two different target companies (‘Avio’ and ‘Aquafil’). This particular case will be further analysed in the fifth section of the thesis.

Another difference concerns the time when investors need to physically inject money in the vehicle. In SPAC shareholders have to give their money to managers, which cannot use them but they have to deposit (almost) the entire proceeds raised in a trust. The money will be available only after shareholders meeting approves the business combination proposed.
In a private equity fund, limited partners need only to commit to invest a certain amount of money but they have to ensure to provide cash at general partners’ request. This happens because GPs can invest in different moments during the fund’s life.

Next important difference refers to *shareholders’ rights*. Shareholders of SPACs have a voice right, that is the right to express their approval or not about the appropriateness of the proposed target company for the business combination. As already described, this is a very powerful tool to protect investors that do not agree with SPAC’s founders and, if investors vote against the business combination, they will receive their relative share of proceeds deposited in the trust.
In private equity investments limited partners do not have any voice right in investment strategy and they only receive their money back when the fund is closed.

In this contest, another positive feature of SPACs is precisely the limited downside scenario.
If promoters want to pursue what ordinary shareholders think is a value-destroying deal, the latter can limit their losses by voting against the deal and receiving back what they invested. For this reason, Lewellen (2009) considered a SPAC as a riskless zero-coupon bond with an option on a future acquisition.

Next point that should be addressed is the compensations of managers for their work.
In this thesis, the latter it is not considered nor as a similarity nor as a difference between private equity funds and SPACs. The final compensations of the two types of managers are comparable but the mechanisms behind it are different.
Rodriguez and Stegemoller in ‘*Exit, Voice, and Reputation: The Evolution of SPACs*’ (2011) refer to managers compensation of the two vehicles as ‘The Magic 20’.
This number in fact well describe the percentage of compensation of general partners and promoters.
It’s no secret that typically managers of PE funds are paid with 20% of realized profits, derived from selling of portfolio companies to industrial buyers or through a public placement.

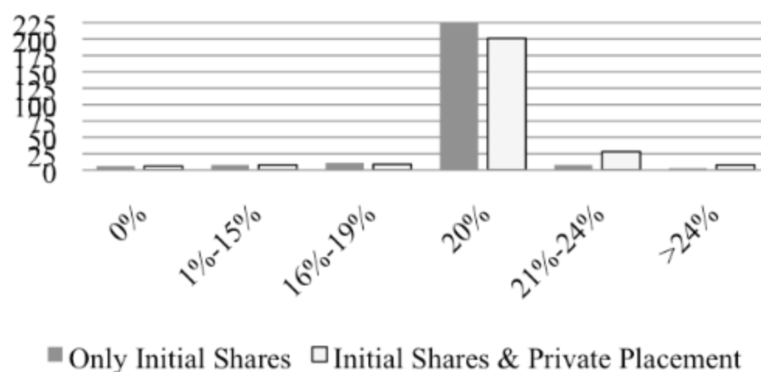
Moreover, an annual management fee from 1,5% to 2,5% of the total value of the fund is paid to managers as a fix compensation.

Special purpose acquisition companies have a different mechanism to compensate their promoters. Firstly, companies do not pay any management fee to them. As already analysed describing the main characteristics of SPACs, this is a strong incentive for promoters to find a suitable target firm and do their best in order that the business combination is approved by the shareholders meeting. If this is not the case, promoters worked for free because they do not receive any (or very few) money of investors' proceeds deposited in the trust.

Secondly, promoters receive around 20% of the future merged company (after the approval of the business combination). Sponsors, in fact, have the possibility to buy shares of the SPAC at the nominal value before the public offering, and these 'special shares' are deposited in an escrow and released only after the acquisition of the target company is completed[9].

The percentage of the company that sponsors received is not always exactly 20%. In their paper Rodriguez and Stegemoller found a sample of 260 U.S. special purpose acquisition companies from 1st January 2003 to 31st December 2011. In their sample, in 211 of 260 SPACs, "sponsors received exactly 20% of the company in the form of pre-IPO share sales", corresponding to an 81% on the total.

Their results are summarized in the chart below[10]:



To be more precise, 224 SPACs give to promoters from 20.0% and 20.9% of the company shares (corresponding to 86% on the total sample). In addition, 11 firms give to them 16-19.9% and 8 firms give them 21-24.9%.

The result of this analysis is that more than 90% of U.S. SPAC compensate their promoters with a more or less 20% of the value of the company.

[9] In other cases (for example in Italy) sponsors buy special shares at the same price of public investors but they have the right to convert them with more ordinary shares for each special share after the business combination.

[10] RODRIGUEZ, U., STEGEMOLLER, M., 2001, *Exit, Voice, and Reputation: The Evolution of SPACs*.

Managers compensation is very important in order to solve the *conflict of interests* between general partners and limited partners in private equity firms and between promoters and shareholders in SPACs.
Even if the compensation for the two types of manager is similar the event triggering the payments are very different. In private equity funds, general partners are paid an annual 'salary' to compensate for their job and, after the liquidation of the fund, they receive around 20% of total profits (if any).
On the contrary, in SPACs, promoters receive their compensation mainly for having pursued an acquisition and not on the basis that they realize profits for shareholders in the long run.
In SPACs (as already mentioned) promoters could have the interest to quickly find a target company in order to be rewarded for the business combination.
For this reason, prospectus of all SPAC IPOs explicitly address this issue warning investors:

"Si segnala che in caso di scioglimento della Società a seguito della mancata realizzazione dell'Operazione Rilevante entro il Termine Massimo: (i) non si verificheranno i presupposti per la conversione delle Azioni Speciali in Azioni Ordinarie; e (ii) le Azioni Speciali saranno postergate alle Azioni Ordinarie in sede di ripartizione dell'attivo nell'ambito del processo di liquidazione [..]. Per tali motivi, i membri del Consiglio di Amministrazione potrebbero versare in una situazione di possibile conflitto di interesse nel valutare l'opportunità di una particolare Operazione Rilevante e la corrispondenza di termini e condizioni della stessa al migliore interesse della Società, soprattutto nell'ipotesi in cui la relativa target sia stata individuata in prossimità della scadenza del Termine Massimo."

This advice allows investors to be aware of the fact that, in some cases (especially if the individuated target firm is announced next to natural end of the SPAC) managers can act according to their own interests rather than those of investors. In this case, investors should evaluate accurately the deal and exercise their vote accordingly: if investors suspect that the proposed business combination would not increase the company value, they can reject the deal in the shareholders meeting and they will receive their money back.
A partial solution for founders' conflict of interests is given by linking their compensation with SPAC performances (see paragraph 1.2, 'Return of Managers').

For all similarities and difference above described of the two investment vehicles, Ignatyeva, Rauch and Wahrenburg (2013) consider a SPAC as a 'one-time-liquid' private equity fund.

Summarizing, SPAC can be seen as a PE fund in which managers seek to accomplish only one deal, shares are listed in regulated markets so shareholders can sell their investments whenever they want and investors have the right of voice, i.e. they can decide about the appropriateness of the proposed deal.

MINORITY PRIVATE EQUITY

One significant characteristic of private equity funds that can help better analyse the difference between them and special purpose acquisition companies is whether private equity funds obtain the control or not of the target firm.

This is an important distinction because, according to the share of ownership acquired, different restructuring approaches can be used, leading to different results in performance.

Indeed, a private equity fund can:

(1) acquire the majority of the capital, obtaining the control of the firm

(2) acquire the minority of the capital.

While in *majority deals* private equity funds become the controlling shareholders and typically appoint a new CEO and change the composition of board of directors, *minority deals* do not change the control of the firm but enter in the board of directors with consultants.

In the latter case, the entrepreneurship of the previous owner is not removed, not compromising the original view of the business and the implementation of the business plan but rather, a minority investment could provide additional expertise in corporate finance and experience in M&A for increasing the efficiency of the firm and for possible external source of growth.

Theoretically, majority deals bring to the target company a large amount of debt so efficiency would only be possible by cutting costs whereas, being typically less leveraged, minority deals could create value by increasing capital expenditure and pushing sales.

According to Battistin and al. (2013), minority private equity investments increase profitability, sales and employment of a firm more than majority investments do.

To prove their thesis, they analysed a sample of 191 Italian deals in the period 1995-2004 and compared target firms before and 3 years after the new investor came in: 101 was minority investments and 90 was majority investments.

Their results suggested that, on average, majority deals were much more leveraged than minority deals; in both cases private equity funds boosted growth by increasing capital expenditure in the target firm but the effect was much more evident in minority investments.

The effect of private equity funds in increasing Earning Before Interests, Taxes, Depreciation and Amortization (EBITDA) was more than 3 times higher in minority than in majorities deals and the effect on sales growth was 2 times higher as well.
Neither minorities nor majorities improve working capital management, meaning than in both cases the efficiency was unchanged after 3 years of private equity governance.

Authors argued also that there were no substantial differences in firms, before the acquisition by private equity funds, in cases of majority or minority investments. The choice should probably be attributed on whether the family or the previous owner is willing or not to sell the control of the firm. This is plausible because, over 191 deals analysed, 164 were family or privately-held company and it's no secret that Italian small and medium enterprises are reluctant to sell the control of their firms.

Summarizing, between 1995 and 2004, *minority investments in private firms were more effective* when private equity funds appointed 'monitoring' members in the board, rather than substituting the company chief executive officers.

These findings are important in studying the performance of special purpose acquisition companies, especially in Italy.
Firstly, SPAC managers will obtain around 20% of shares of the target firm so the previous owner will usually remain the controlling shareholder.
Secondly, Italian SPACs are on average smaller than those incorporated in other countries: the average proceeds raised in Italy in the period 2011-2017 was €109.4 million, in the U.S. the average was $172,4 million, while in Europe in 2005-2011 the average was €489,4 million.
In the U.S. however, the average proceeds raised are increasing every year: in 2016 was $269.2 and from only January to August 2017 was $310.7 million.

Thus, in Italy, the scenario of SPACs is different from the United States and Europe: Italian SPACs' target firms are typically smaller than U.S. and European ones and probably they are family-owned.
Since costs of a traditional IPO can be very high for a relative small Italian firm, a SPAC can be a valid substitute to get listed in regulated markets, being less time and money consuming.
In addition, it's common knowledge that Italian entrepreneurs are typically reluctant to lose the ownership of their companies but they can gain from the expertise of SPAC managers, boost growth and increase the export outside Italy, without losing the control of the company.

For these reasons, Italian SPACs can behave more like minority investments by private equity funds rather than U.S. and European SPACs and, despite international literature pointing out the poor performance of European and US SPACs, in Italy they could have different results and be a positive push for growth and internationalization of Italian firms.

3 SPAC and Initial Public Offering: similarities and differences

The principal aim of a special purpose acquisition company is to help a firm to get listed on a regulated market. This is exactly the same purpose of an initial public offering (IPO).
In this chapter, firstly are analysed the main characteristics of a traditional IPO process and then are presented the main advantages and disadvantages for a firm in going public with a SPAC rather than with an IPO.

An initial public offering is a way for a privately-held firm to raise capital on public and regulated markets. As the name suggests, in an IPO a firm sells its shares for the first time to the general market by issuing new shares. On the contrary, secondary offerings are used when a large block of shares (already listed on a stock exchange) are sold to other investors: typically these shares for sale are owned by large investors or institutions. The main difference between initial and secondary offering is the role of the issuing firm in the transaction.
In the secondary offering, the transaction is between the old owner of the shares and the new investor, whereas in an initial public offering the company sells new equity to the market and all the money raised (less underwriting fees and legal costs) are available for any purposes.

The initial public offering has several *benefits* for firms but also *costs* which can be huge given that some of them are fixed and do not depend on the amount of the capital increase.
Benefits are:

- Raising public equity for financing growth opportunities or reducing net financial position
- Increase the company's reputation and recognition
- Liquidity for shares
- Possibility of an exit strategy for actual shareholders
- Make easier M&A operations

For a firm, entering the public markets contributes to raise capital at a relatively low cost and to avoid borrowing money which has to be paid back to debtholders. Moreover, being listed increase the reputation of the company (since for sure it passed all strict requirements of the stock exchange commission) and the transparency to market investors. This positive status gives the company the possibility to increase leverage in the future at a lower cost of debt and

create the possibility to pay future merger and acquisition deals not only with cash but also with shares.
After an IPO, actual shareholders have the possibility to cash out their investments in the company directly in the market. For example, private equity funds try to get listed their portfolio companies when they need to liquidate their positions and there are no industrial buyers or no other investors willing to acquire them.

Although these benefits there are also direct and indirect costs relating to the IPO process and other recurring costs. *Direct costs* are mainly underwriting fees and legal costs at the time of the IPO. *Indirect costs* are the underpricing phenomenon and time spent and effort of management team during the IPO process: in particular they concentrate their attention for road shows, marketing, book-building rather than on daily operations of the firm. In addition, there are some *on-going costs* that a firm has to sustain from the time it become public, like for example costs for supplying regularly information to investors and to the market as a whole, and a costlier corporate governance (stock exchange regulators usually set a minimum number of independent members of the board and a more efficient management control system and internal auditors).
In addition to costs, a company seeking to be listed need to fulfil stringent legal requirements by the stock exchange authority: in the U.S. the responsible for the regulation of the relative securities market is the Securities and Exchange Commission (SEC) whereas in Italy is the ‘Commissione Nazionale per le Società e la Borsa’ (CONSOB).

The most important document in an IPO is the *listing prospectus*, where are contained all relevant information about the firm’s past performance, its governance, its management team, its auditors, the investment bank (or banks) responsible for the underwriting process and, most important, the reason why the firm is seeking to get listed and how it is going to use proceeds raised.
Before the final prospectus, usually it’s issued a preliminary prospectus and then the management team of the company along with investment bankers usually conduct a marketing campaign in order to promote the company and its stocks. Besides they conduct a due diligence and a ‘roadshow’ to the most important cities in the world, presenting the company to potential institutional buyers that have the possibility to discuss and ask questions directly to management.

In this phase, both investors and, most important, underwriters come out with their valuation of the company: eventually, underwriters value company's stocks and communicate the price to the market. The whole IPO process can last from 6 to 12 months.

In the first day of trading typically there is an increase in the stocks' price, due to a higher valuation by the market. This phenomenon is known as 'underpricing' and can have different causes. In literature there are several explanations of the underpricing effect on stock prices and four main theories can be distinguished[11]: *asymmetric information*, *institutional reasons*, *control considerations* and *behavioural approaches*.

The most established cause affirms that underpricing is due to asymmetric information. Key parties of an IPO transaction are the issuing firm, the underwriting bank and investors: the aforementioned theory suggests that one of these parties is more informed than others. Some authors argued that the most informed party is the underwriters because it knows more about the demand for stocks than the issuer, leading to a principal-agent problem; some authors argued instead that the issuing firm is better informed about its true value whereas others suggested that some investors can be better informed about the issuing price than others.

The second theory considers institutional reasons. For example, underpricing can be caused by price stabilization and for this reason the issuing price is lower in order to avoid future price drop, or for tax advantage purposes or, eventually, the firm wants to sell its shares at a lower price in order to avoid lawsuits from investors disappointed with the post-IPO performance.

The third category of theories is control considerations and it mainly refers to the possibility of underpricing in helping to shape the shareholders base, reducing the intervention by outside investors when the company is listed because of the higher stock price.

Lastly, behavioural approaches assume the presence of 'irrational' investors who buy firms stocks, even if their prices are above the fundamental value.

In dollar terms, IPO firms appear to leave lots of billions 'on the table' every year (i.e. to investors and not to firms) due to the underpricing phenomenon, as shown in the next table[12].

According to Ritter (2017), the average first-day return of US IPOs during 2003-2010 was 10.66%.

He collected data from a sample of IPOs with an offer price of at least $5.00 which stocks were listed the principal stock exchanges in the U.S. (Amex, NYSE, and NASDAQ).

[11] LJUNGQVIST A., 2007, Chapter 7 of Handbook of Corporate Finance Vol. 1, 'IPO Underpricing'

[12] https://site.warrington.ufl.edu/ritter/files/2017/08/IPOs2016Statistics.pdf

Year	Number of IPOs	Average first day return	Aggregate proceeds (billion)	Aggregate amount left 'on the table' (billion)
2003	63	11.7%	$9.54	$9.96
2004	173	12.3%	$31.19	$3.86
2005	159	10.3%	$28.23	$2.64
2006	157	12.1%	$30.48	$3.95
2007	159	14.0%	$35.66	$4.95
2008	21	5.7%	$22.76	$5.63
2009	41	9.8%	$13.17	$1.46
2010	91	9.4%	$29.82	$1.84
2001-2016	1,735	14.0%	$430.00	$54.84

Other than formal requirements imposed by the stock exchange authority, firms should provide also substantial prerequisites. To be admitted to the stock exchange and to attract investors, a firm need to have a value proposition which creates value not only for shareholders but also for all stakeholders, a good market and competitive positioning, and growth opportunity for the future. Furthermore, in order to present a financially sustainable business plan, a firm needs to show increasing profitability (*return on invested capital, ROIC*) and an adequate financial structure that allows to increase leverage in the future without any negative impact on the firm. From the legal point of view, sometimes companies have to reorganize itself or the group structure and they need to adopt the appropriate accounting standards for annual reports, where not yet applied.

The valuation of a company during the IPO process consists of many phases.
Typically, the first valuation method applied is *multiple analysis*, which allows the firm and the nominated investment bank to know how the market values it with respect to comparable firms. The result of this preliminary valuation is usually a range of prices.
A point estimation is then calculated by applying the *discounted cash flows method* (DCF), where the enterprise value is based on discounted cash flows that the firm will produce in the future.
In any case, at the end, who really prices the firm is the market: if the demand for its stocks is high, probably the price (and so the entire valuation) will be higher. That's why the marketing phase and the road-show are so crucial.

As already analysed, the most common way to go public for a company is through an IPO, selling its new and/or existing shares in regulated markets. In addition to IPO, other methods

are available, one of which is through a reverse merger that can be accomplished by using a SPAC.

Before presenting main *advantages* and *disadvantages* of using special purpose acquisition companies rather than a traditional IPO process, some statistics representing the actual IPO and SPAC market in Italy and in U.S. are presented in the next paragraphs.

The following table describes the number of SPAC deals and IPO in the Italian stock market at October 2017. The source of data in the table is 'Borsa Italiana', which is the only stock exchange in Italy, based in Milan and part of the London Stock Exchange Group since 2007.

	2011	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
SPACs	**2**	**0**	**3**	**0**	**3**	**2**	**7**[13]
IPO	4	4	15	26	23	12	16
Total	6	4	18	26	26	14	23
%	*33%*	*0%*	*17%*	*0%*	*12%*	*14%*	*30%*

In the United States of America there are more than one stock exchanges and the most famous and internationally recognized are New York Stock Exchange (NYSE) and National Association of Securities Dealers Automated Quotation (NASDAQ).

The following table[14] presents the number of SPAC deals and IPO in the US stock markets at October 2017.

	2011	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
SPACs	**16**	**9**	**10**	**12**	**20**	**13**	**25**
IPO	81	93	168	232	132	85	95
Total	97	102	178	244	152	98	120
%	*16%*	*0.1%*	*0.6%*	*0.5%*	*13%*	*13%*	*21%*

Next table exhibits the amount in million euros or dollars raised by SPAC deals at October 2017.

	2011	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Italy (€)	200	0	215	0	439	150.5	833[15]
U.S. ($)	1,100	491	1,447	1,750	3,902	3,499	7,789

[13] Not including 'Space 3', creating by available proceeds not used for the business combination between 'Space 2' and 'Avio'.

[14] Source: 'spacanalytics.com', 'EDGAR' database by the U.S. Securities and Exchange Commission and 'Quarterly Review' of U.S. IPO market by Renaissance Capital.

[15] Not including €152.85 million of 'Space 3'.

From previous tables, it's easy to understand that the Italian SPAC market is tiny with respect to the American one but, in proportion to the relative financial market, they are comparable.

Datar, Emm and Ince (2012) analysed the main feature of traditional and SPAC IPOs in U.S. between 2003 and 2008. The following table summarizes their findings:

Table 4
IPO Characteristics

Panel A: Total Amount Raised ($ mill)							
	2003-2008	2003	2004	2005	2006	2007	2008
SPAC IPO	21,023.37	21.00	362.48	2,027.57	3,296.46	11,926.86	3,389.00
Conventional IPO	180,072.33	10,243.65	32,840.58	27,592.33	37,623.69	47,622.05	24,150.04

Panel B: IPO Characteristics	Mean	Median	Min	Max	St. Dev.
Amount raised ($ mill)					
SPAC IPO	210.82	138.00	51.60	1,035.00	188.19
Conventional IPO	229.39	113.75	1.40	17,864.00	708.65
Initial Unit Offer Price ($/share)					
SPAC IPO (as of separation date)	7.78	7.40	5.00	9.75	1.30
Conventional IPO	14.78	14.00	3.25	85.00	5.97
Warrants Per Unit					
SPAC IPO	1.60	1.00	0.50	10.00	1.40
Conventional IPO	--	--	--	--	--

Note: Panels A and B of this table show the descriptive statistics for the sample of 156 SPAC IPOs and 794 conventional IPOs. The statistics for SPAC IPO amount and initial unit offer price in Panel B are based on incomplete sample of 83 SPACs.

Average proceeds raised by traditional IPO firms and SPACs were quite the same, but traditional firms experienced a higher variation (1.40 – 17,864.00 million dollars compared to SPAC's range of 51.60 – 1,035.00 million dollars). The same applied to unit prices: SPACs offered their shares and warrants at a price ranging from $5 to $9.75 whereas traditional firms offered their shares from a minimum price of $3.25 to a maximum of $85.00.
These results suggested that traditional IPO firms are more heterogeneous but, on average, they are able to raise more money in the market at a higher price.

Jog and Sousa (2009) individuated six characteristics which characterize SPACs over traditional IPO:

(1) A small group of senior management raise capital in advance and then search for a target
(2) Indirect way for small investors to get into a hedge fund type investment
(3) Since a SPAC do not have any history, articulated or specific business plan a part of the declaration that proceeds raised will be used for an acquisition in 18/24 months, the listing process is easier and quicker (and also prospectus is easier)
(4) More transparent listing prospectus
(5) Explicit statements about their conflict of interests

(6) Approval by shareholders and at least 70/80% of them need to approve otherwise the company is liquidated.

The last is probably the more distinguishing characteristic of a SPAC with respect to an IPO.

Notwithstanding SPACs and IPOs fulfil the same object, there are some **advantages** for a firm using a SPAC rather than the traditional process to get listed.

The first advantage is the time spent by the management team of a firm to complete the listing process. Being already listed and having already completed the road-show phase, a SPAC allows targets companies to concentrate more on day-by-day operations rather than marketing or long and time-consuming due diligence (Kolb and Tykvová, 2016).

Even if before the shareholder meeting the SPAC need to release most important information about the deal and, in general, about target company (such as certified financial statements of last years), there are less legal requirements imposed by the stock exchange commission to be provided, making this process less costly in terms of time and money.

In addition, the IPO process that a SPAC needs to follow is easier because assets comprise only cash and there is no history to analyse. Underwriting fees are usually lower than traditional IPOs because of the faster company valuation and price setting.

One debated advantage of going public through a SPAC is the length of the process from the target company perspective.

In the first decade of the 2000s, literature suggested that using a SPAC to get listed took less time than traditional IPO process but in recent years, Kolb and Tykvová argued that the presence of the shareholders' vote in order to approve the business combination could lengthen the whole process.

An important benefit of using a SPAC is the minor exposure to market conditions. A SPAC is already listed on a regulated market and it already raised proceeds so cash is immediately available after the business combination, irrespective of the current market environment.

In periods of high market volatility, companies do not want to start a long and costly IPO process and then abort it because investors changed their mind or because prices fell.

In analysing the likelihood of success of a SPAC, Kolb and Tykvová (2016) found that increasing market volatility by 1%, the probability of going public with a SPAC increased by 0.77%[16].

[16] They use a sample of 127 SPACs and 1128 IPO firms between 2003 and 2015.

Thus, as Boyer and Baigent (2008) suggested, special purpose acquisition companies can be the solution for going public in periods when the IPO market may not be especially robust.

Another difference between the initial public offering of a SPAC and of a normal firm is the *underpricing*. This phenomenon implies that stocks of a company are offered at a lower price to investors but, on the first day of trading in the secondary financial market, the price will typically rise. This has the negative consequence for the issuing firm' owners of receiving less money from investors than what the market is willing to pay.
As before analysed, causes of underpricing can be for example asymmetric information between the issuing company, underwriting banks and investors, inability of underwriters to predict the demand for stocks, condition of the market and excitement of the market ('irrational' investors want to buy the shares even if the price is above the fundamental value).

Special purpose acquisition companies suffer the underpricing phenomenon as well, but with different magnitude. Jog and Sun (2007), Boyer and Baigent (2008), Murray (2011) and other authors found that SPACs have very low average underpricing with respect to traditional IPOs. Theoretically, the effect on these particular vehicles should be higher than normal firms because the uncertainty about the future of the company is at the maximum level. Moreover, even if in a SPAC's listing prospectus are presented lots of information not provided during a traditional IPO process (such as conflict of interests), there are very few information which characterizes each single SPAC.
Despite this, the protection of investors' money plays an important role in SPACs. The mechanism of depositing almost all proceeds raised from investors in a trust protects them, limiting losses in case of undesired deals. Thus, even if there is asymmetric information between the firm, underwriter and investors, and the future of the company is unknown, investors can always receive their money back by only voting contrarily to the proposed business combination. Moreover, the valuation of a SPACs is quite simple since there are no critical assets in the company other than cash.
One possible explanation of underpricing phenomenon in special purpose acquisition companies is the market valuation of the quality of management team proposed by Kim (2009) (see paragraph 1.3).

Murray (2011) quantified the underpricing of U.S. SPAC IPOs during the period 2003-2010, gathering data on first day returns of companies listed on the principal regulated markets in U.S. (AMEX, NYSE, and NASDAQ) and on non-regulated market (OTC).

OTC	Average first day return	Minimum return	Maximum return	Std. dev.	# of IPOs
2003	2.33%	2.33%	2.33%	-	1
2004	1.23%	-0.83%	8.33%	2.59%	11
2005	1.54%	-6.25%	12.50%	4.12%	20
2006	4.48%	-2.67%	23.33%	6.93%	15
2007	1.59%	-1.25%	7.50%	2.42%	16
2008	2.24%	1.83%	3.13%	0.57%	5
2009	-0.40%	-0.40%	-0.40%	-	1
2010	0.04%	0.00%	0.10%	0.05%	5
AMEX					
2005	-0.41%	-1.67%	0.00%	0.69%	6
2006	1.62%	-4.75%	13.33%	4.33%	18
2007	0.36%	-1.63%	3.60%	1.16%	50
2008	-0.90%	-3.10%	1.20%	1.48%	10
2009-2010	-	-	-	-	0
NYSE					
2008	0.80%	0.80%	0.80%	-	1
2009-2010	-	-	-	-	0
NASDAQ					
2008	1.50%	1.50%	1.50%	-	1
2009	-	-	-	-	0
2010	-0.10%	-0.20%	0.00%	0.14%	2

As shown in the table, the average underpricing of SPACs IPOs is very low in all American stock exchanges compared to traditional IPOs. During the period 2003-2010, American SPACs suffered an average underpricing of about 1-2% whereas traditional IPOs more than 10%.

Since now, lots of advantages were presented for a privately-held company in going public with a special purpose acquisition company rather than the traditional IPO process and one might ask himself why all firms do not choose these vehicles to get listed.
The reason is that there are important **disadvantages** which prevent big and robust companies using special purpose acquisition companies.
First, a firm which seeks to be listed with a SPAC needs obviously to find such company. Even if the existence of a special purpose acquisition company can be well-known in the market, a firm aiming to be listed through it may be in competition with other firms with the same scope. Managers of the SPAC will obviously choose the best firm to present to its shareholders in order to increase the possibility of deal's approval, making firms competing with each other. If

a firm is not attractive for the market, typically neither SPAC managers nor the stock exchange commission will help it to get listed.

Another characteristic which might prevent a firm to get listed with a SPAC is the mandatory shareholder vote to approve the business combination. It's true that SPACs reduce the market uncertainty of the IPO process since the company is already listed but some uncertainty remains in any case because the listing on the stock exchange is subordinated to the approval of SPAC shareholders. In addition, existing shareholders of the target firm might fear a dilution in their shares because of the presence of 'in the money' warrants which can be used by SPAC investors (Lakicevic, Shachmurove and Vulanovic, 2014).

Trading volume is another possible risk for investors. Typically, the majority of SPAC are listed in less regulated market with tiny trading volume which can prevent large firms in using these special vehicles. However, there are examples of target firms that, once they got listed through SPAC, they ask for entering in main stock markets.

The literature on SPACs pointed out that usually only privately-held firms with poor performance use these special vehicles to enter in stock exchanges. There is no doubt that firms which completed successfully the listing process and enter in the stock exchange have a positive reputation and are better considered not only by investors but also by customers, suppliers, and banks (which might grant credit lines at a lower price).
In this situation, market can negatively consider private firms that choose a secondary alternative in going public, thinking that these firms probably won't satisfy the stringent requisites of stock exchange commissions.
For example, Kolb and Tykvová (2016), analysing the likelihood of a SPAC acquisition through a regression, found that the variable 'market-to-book asset ratio' had a negative sign meaning that the more growth opportunity a firm had, the less was probability that it would have merged with a SPAC. Thus, SPAC targets tend to be of lower quality and with weak growth opportunities (see chapter 4).

However, one important point raised by Datar, Emm and Ince (2012) is that in various analyses of SPACs and traditional IPOs there might be a *selection bias*. Firms which got listed on stock exchanges are, by definition, those with the best performance and future perspective in order to attract as more investors as possible and be evaluated at a higher price.

Typically, these firms were in the past and are currently over-performing peer companies because, if their operating performances declined significantly or something else of negative happened, probably IPO candidates would have postponed or cancelled the public offering.
In addition, even if firms which entered in the IPO process have not solid fundamentals, they have strong incentive to show and inflate their results until the offering is completed to better present themselves to the market.
Thus, companies listed on stock exchange are (at least on the paper) the best performing in their industry and above the average in terms of sales, growth opportunities, cash flows and are less leveraged.
In this context, private firm can choose SPACs to get listed either because they are unable to outperform their industry peers or they are unwilling to present to the markets and to regulators inflated or biased accounting figures.
The result of the selection bias is that only bigger companies, which have better future growth opportunity and with a relatively low amount of debt, use the traditional IPO process to get listed while less performing, with less future perspective and more leveraged small and medium firms (SMEs) use other ways to go public.

Concluding, although most of the literature depicts a negative picture of SPACs, Berger (2008) suggested that these vehicles might help private firms to access to the public markets in situation in which the traditional IPO cannot. In particular, this is possible because the negotiations are held by two parties[17] rather than including the whole market.
The author individuated six possible characteristics that a merger between a firm and a SPAC usually exhibit:

(1) Complicated situations that are not suitable for a traditional IPO
(2) Available cash that can improve the firm's capital structure
(3) Experienced managers that can provide peculiar insights
(4) Collaborative transaction structures that align the target's interests with the public shareholders
(5) Solutions for target companies for which the valuation is complicated (no research coverage in their industry and they have few or no comparable companies to benchmark the target's firm valuation)
(6) Exit opportunities where there are no strategic buyers for the target company.

In order to better explain some of these elements that a SPAC typically have, Berger (2008) presented the example of 'Aldabra Acquisition Corp.', founded by Nathan Leight and Jason

[17] Or, at least, a small fraction of the market, i.e. shareholders of the SPAC.

Weiss which raised $55 million in its IPO in February 2005. In January 2007 it merged with its target firm 'Great Lakes Dredge & Dock', the largest provider of dredging services in U.S.
There are three main reasons why this firms would not have had the possibility of going public through a traditional IPO. Firstly, the private firm had not a past positive story because in 2003/2004 it experienced the decline of public funds in dredging activities and, since most of its dredging contracts were signed with public entities, the firm was forced to defer its projects. This obviously reduced its revenues and the firm suffered financial difficulties. Secondly, since the firm was the leader in dredging services, having a 40% market share in the U.S., there was no strategic buyer in the industry willing to merge with the firm. Lastly, research was not available for the dredging industry, making less attractive a traditional IPO path due to lake of experienced analysts and comparable companies on which to base the firm valuation.
The business combination of 'Great Lakes Dredge & Dock' with the special purpose acquisition company 'Aldabra Acquisition Corp.' gave the necessary cash to the firm, making possible to regain the financial flexibility to increase capital expenditures, make acquisitions and pay dividends.

4 Analysing the performance of SPACs

Before entering in the empirical analysis of Italian special purpose acquisition companies, in this chapter of this thesis are presented the most important studies of SPACs' performance available in the literature.

A complete analysis on special purpose acquisition companies is probably the one performed by Ignatyeva, Rauch, and Wahremburg (2013). They collected data on 19 special purpose acquisition companies listed in European public markets which completed the business combination with their targets firms within the period 2005-2011.

In particular they analysed the main features of European SPACs themselves, the ownership structure and operating and stock performance of their target firms in the medium-term period (which most of the literature didn't).

They found that European SPACs quoted mainly on the Alternative Investment Market (AIM) of the London Stock Exchange (13 company over 19), probably because it is a less regulated market and therefore it has less listing requirements which allow for a less expensive and less complicated market listing process.

For what concern the ownership structure of European SPACs, they found that before the acquisition, founders on average owned 22.2% of the company, institutional investors 39.1% and other off-record shareholders (free float) owned 38.7%.

Things changed after the success of the business combination: founders reduced their ownership to 17.2%, institutional investors increased their ownership to 55.3%, free float counted for 25.5% and the management of the target firms received 2.2% of the SPAC.

Their analysis suggests that founders decreased their ownership after the acquisition, probably to partially convert into cash their shares, while institutional investors increased their ownership. However, authors highlighted that, during their observation period, the group of institutional investors who invested in a SPAC almost completely exited the company, selling their shares to other institutional investors. This suggests that different investor groups may be interested in becoming shareholders and investing in different lifecycle phases of SPACs.

To analyse the success of managers in choosing SPACs' target firms, Ignatyeva, Rauch, and Wahremburg (2013) collected data on the most important financial indicators before and after

the business combination for the purpose of studying the operating performance of SPAC's targets in the long run.
In particular they used financial data of the year in which the acquisition was completed and the change of the same indicators in periods surrounding the acquisition (two years after the acquisition and from two years before to two years after the acquisition).
Moreover, to obtain an accurate analysis, they compared each target firm performance with that of its industry-specific benchmark (ICB), data implemented in Thomson Datastream.
Their results are presented in the following exhibit (data in € thousand).

	At Acquisition		Change (0/+2)		Change (–2/+2 yrs.)	
Ratios	Mean	Median	Mean	Median	Mean	Median
Revenues	365,883	150,770	+810,095	+277,429	+531,442	+209,976
Net Income	–12,632	3,141	–35,993	–3,700	–93,377	–4,293
Total Assets	8,131,151	630,802	+5,168,849	–82,628	+5,009,599	+36,641
Long-Term Debt	2,237,262	50,431	+2,528,427	+38,774	+3,898,230	–228,777
Earnings per Share	168.9	0.11	–180	–0.13	–11.61	–0.22
Return on Assets	0.004	0.0107	–0.12	–0.011	–0.12	–0.008
Leverage	0.22	0.24	–0.019	–0.077	–0.19	–0.32
Profit Margin	0.057	0.018	–5.03	–0.020	–4.8871	–0.035
Diff. Earnings per Share to ICB	126.5	–0.07	–135.3	–0.1	–8.79	–0.2
Diff. Revenues to ICB	+208,565	+41,835	+684,547	+97,411	+450,347	+113,884
Diff. Return on Assets to ICB	+0.033	+0.005	–3.90	–0.015	–3.80	–0.03

The difference between the means and the medians suggest a considerable heterogeneity in the data set. In fact, in their analysis there were some outliers which increased, for example, the average of revenues and especially earnings per share.
Compared to their industry peers, at the time of the acquisition SPACs' target firms were larger in terms of revenues (+€208.6 million) and slightly more profitable in terms of return on assets (+3.3%). These numbers suggest that SPACs' managers chose financially sound medium-size firms, on average larger than the industry peers. This also means that managers chose firms that could, in theory, go public without the acquisition by the special purpose acquisition company or could have access to other sources of financing.

However, the most important result is the evolution of financial indicators after the business combination, because it highlighted if target firms were able to improve their profitability and financial structure, increase revenues, especially compared to their industry peers.
To do so, the authors analysed financial performance in two different periods: from the acquisition to two years after it and from two years before to two years after the acquisition.
For the two years after the acquisition, on average they found a strong negative development of profitability in terms of net income (-€36 million), return on assets (-12%) and profit margin (five times less). Despite this, SPACs' target firms increased in size: on average, revenues grew

by €810 million, total assets by €5,168 million and also long-term debt increased by €2,528 million.

In those years, Europe was hit by the sovereign debt crisis which could have had a negative impact on the financial strength of all companies; in this case, SPACs' target firms should have the same underperformance of their industry peers.

However, they performed worse than their industry peers; in particular, after two years from the business combination, SPACs' target firms on average decreased their return on assets (almost four times less) compared to their industry peers.

This means that, even after accounting for the macroeconomic environment, SPACs' target firms decreased their profitability both in absolute term and compared to similar firms. The same reasoning hold for the five years surrounding the acquisition (from two years before to two years after the business combination).

The strong increase in revenues, total assets, and long-term debt suggest that probably target firms focused more on increasing their size rather than improving profitability.

This medium-term analysis of financial performance is interesting primarily for medium firms seeking to go public. With special purpose acquisition companies, they can be listed in regular markets reducing the expenses and the risk connected to the initial public offering process, obtaining new capital to be invested in the companies' growth.

On the other hand, analysing stock performance is useful for investors who aim at a financial return in the long-run.

In literature, many authors addressed this topic using different analyses of the stock performance of SPACs and their target firms, but they eventually arrived quite at the same results.

Recalling from paragraph 1.2, different behaviour can be seen in the four phases of a special purpose acquisition company, which are:

(i) *No Target*
(ii) *Target Found*
(iii) *Acquisition Completed*
(iv) *Acquisition Withdrawn*.

In the first phase, the company is still without any assets but cash, and there is no operating business.

The volatility of the stock in this phase is low and usually there is low trading volume. Prices and returns should reflect those of Treasury or Government bonds because proceeds raised in the IPO are deposited in trusts and are usually invested in risk-less instruments.

Lewellen (2009) calculated the premium and discount at which a SPAC's stock price[18] trade with respect to the pro-rata value of the trust in the four phases. He used a sample of 97 SPACs that completed a merger transaction from 2003 and 2008.
According to the author, in their life SPACs' stocks quoted on an average daily basis discount of 0.20% on the trust value.
When SPACs are in the '*No Target*' stage, they traded at a discount on average of about 3.9%. This might seem counterintuitive since the stock price of a SPAC should never trade below the value of the trust. As already explained, the fundamental value of a special purpose acquisition company can be seen as a zero-coupon bond (which pay the trust value at the maturity or, in this case, the liquidation of the company) with embedded an option on a future acquisition. According to this, two different situations can happen, both inconsistent with the theory of efficient markets. (1) The option value is negative in SPAC during the first phase or (2) the option value is priced correctly but the shares trade below the discounted value of the trust.
The author tried to verify empirically if transaction costs, noise trader risk or liquidity could be possible reasons for this mispricing but he didn't find a positive result.

On the contrary, in the '*Target Found*' phase, on average SPACs traded at a premium of 8.6% with respect to the pro-rata value of the trust.
In the announcement date, SPACs analysed traded on average at a premium on the trust value of 0.48%. However, this value was very different depending on whether the SPAC later completed or not the acquisition: those which successfully complete the business combination reacted trading at an average premium of 2.25%, while those which rejected the deal traded at an average discount of 0.41%.
Approaching the day in which shareholders were asked to vote on the acquisition, the average premium on the trust value was more than 9%, suggesting that, on average, the market believed in the positive vote and therefore in the success of the deal. Again, this number greatly differed: SPAC which later completed the acquisition traded at an average premium of about 14%, whereas others showed a very tiny market reaction.
Last results explain that shareholders vote positively only on deals which they expect will increase the value of the company. Moreover, results are also consistent with the literature's

[18] He considered the stock price only before a SPAC completed the business combination.

theory stating that a SPAC market price should never trade below its trust value. By voting against the acquisition, shareholders perfectly know that they will receive their money back, so shares should not trade at a high discount with respect to the pro-rata value of the trust.

All detailed findings are reported in the following table[19]:

Panel A: Common Stock Prices and Trust Values

Category	Year	Avg. Premium to Trust Value*	Std. Dev.	% of Days With Discount
All days	All	-0.20%	15.09%	66.1%
No Target	All	-3.92%	8.23%	81.5%
Target Found	All	8.57%	23.22%	34.3%
Acquisition Withdrawn	All	3.53%	2.97%	14.9%
No Target	2003	-4.07%	0.90%	100.0%
No Target	2004	-4.92%	2.49%	94.4%
No Target	2005	-0.84%	5.69%	57.1%
No Target	2006	-1.09%	9.28%	67.7%
No Target	2007	-5.25%	10.20%	86.8%
No Target	2008	-6.00%	3.54%	96.4%
Target Found	2004	28.75%	13.99%	0.8%
Target Found	2005	21.90%	26.40%	0.0%
Target Found	2006	10.31%	24.11%	28.1%
Target Found	2007	9.63%	22.29%	33.4%
Target Found	2008	-1.50%	18.89%	58.0%
Acquisition Withdrawn	2006	4.24%	1.07%	0.0%
Acquisition Withdrawn	2007	5.02%	1.56%	1.4%
Acquisition Withdrawn	2008	2.25%	3.37%	27.35%

** Negative values indicate a discount to the trust value.*

Panel B: Average Premiums at Selected Dates

	All	Acq. Approved	Acq. Withdrawn
First Day of Equity Trading	-6.36%	-5.00%	-5.24%
Announcement Date	0.48%	2.25%	-0.41%
Shareholder Vote Date	9.14%	14.28%	0.05%
Acquisition Completion Date	NM	12.08%	NM

Other than stock performance during the life-cycle of a SPAC, it's important to analyse what is the long-run stock performance of target companies after the business combination.

Most authors in the available literature on special purpose acquisition companies focused their attention on the performance of target firms for maximum two years[20]. Significant is the contribution of Kolb and Tykvová (2016), who expanded the analysis including five years of target firms' stock performance after U.S. SPACs' acquisitions.

[19] From 'SPACs as an Asset Class', Lewellen (2009). The sample period is August 2003 to June 2008. Prices and returns are taken from CRSP and Bloomberg. Trust values are taken from investment bank reports and SEC filings. Averages in Panel B are calculated using the closing price on each respective date.

[20] In particular: Lewellen (2009), Jenkinson and Sousa (2011), Datar et al. (2012), Ignatyeva et al. (2013), Lakicevic and Vulanovic (2013), Rodrigues and Stegemoller (2014).

They individuated two possible outcomes of long-term stock performance: (1) if the target of a SPAC is a low-quality firm, it probably underperforms even after the acquisition or (2) if the target has ‘hidden potential’ that the acumen of SPAC sponsors individuated, notwithstanding actual poor performance, it should show superior performance in the future with respect to peer firms.

Kolb and Tykvová referred to the latter as a ‘*frog*’ that will turn into a ‘*price*’ in the future.

To verify which case applied most in the reference period (2003-2015), they calculated buy-and-hold abnormal returns (BHARs) of stocks of U.S. SPACs’ target firms (127 SPACs) as the difference between SPACs’ returns and returns of a benchmark portfolio in the same period.

‘*Market adjusted*’ values were obtained from the difference between SPACs’ returns and the return of the Russell 2000 index, the U.S. index representing the small-capitalization stock market. They also calculated BHARs of all U.S. IPOs during the same period and, to have more comparable results, they selected, among all U.S. IPOs, those that are most similar to analysed SPACs in term of size, age and industry (‘*Matched sample*’).

Their results, summarized in the following table[21], are in line with the literature.

Table 6
Buy and hold abnormal returns.

	SPAC BHARs			Whole sample					Matched sample				
				IPO BHARs			WMW Test	*t*-Test	IPO BHARs			WMW Test	*t*-Test
	Median	Mean	*N*	Median	Mean	*N*	*z*-Value	*t*-Value	Median	Mean	*N*	*z*-Value	*t*-Value
6 months													
Market adjusted	−0.28***	−0.29***	109	−0.07***	−0.06***	1112	5.89***	6.48***	−0.13***	−0.06	113	3.92***	4.50***
Size & btm adjusted	−0.30***	−0.32***	92	−0.10***	−0.07***	1046	5.56***	5.57***	−0.16***	−0.09*	104	3.49***	3.96***
Industry adjusted	−0.31***	−0.34***	109	−0.10***	−0.08***	1100	6.36***	6.66***	−0.17***	−0.09*	111	4.04***	4.64***
12 months													
Market adjusted	−0.46***	−0.46***	109	−0.15***	−0.08***	1082	7.40***	8.29***	−0.17***	−0.12**	110	4.75***	4.96***
Size & btm adjusted	−0.58***	−0.57***	92	−0.16***	0.10***	1021	7.53***	7.59***	−0.18***	−0.14**	101	4.88***	5.14***
Industry adjusted	−0.51***	−0.57***	109	−0.18***	−0.13***	1070	7.91***	8.59***	−0.23***	−0.15*	108	5.13***	5.59***
24 months													
Market adjusted	−0.56***	−0.59***	104	−0.30***	−0.21***	969	6.22***	7.11***	−0.35***	−0.34***	108	3.36***	3.23***
Size & btm adjusted	−0.92***	−0.96***	87	−0.39***	−0.30***	914	7.27***	6.88***	−0.43***	−0.43***	99	4.71***	4.77***
Industry adjusted	−0.88***	−0.85***	104	−0.44***	−0.36***	958	7.01***	7.17***	−0.54***	−0.45***	106	4.29***	4.34***
60 months													
Market adjusted	−0.90***	−1.02***	88	−0.58***	−0.20	704	7.47***	4.01***	−0.69***	−0.37*	84	4.87***	3.82***
Size & btm adjusted	−2.07***	−2.48***	76	−1.05***	−0.79*	666	9.14***	5.88***	−1.29***	−1.01**	78	6.01***	5.56***
Industry adjusted	−1.72***	−1.80***	88	−1.25***	−0.98**	695	5.62***	3.75***	−1.25***	−1.13***	83	3.79***	3.58***

This table presents median and mean (log) BHARs of SPAC acquisitions and IPOs executed in the period 01/2004–12/2015 over 6, 12, 24 and 60 months and their significances. It also shows the values and significances of the Wilcoxon–Mann–Whitney (WMW) test and *t*-test we run to compare BHARs between SPAC acquisitions and all as well as matched IPOs. *, **, and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

Authors found that, even if both U.S. IPOs and SPACs underperformed with respect to the market and their peer firms, special purpose acquisition companies showed the worst performance in all calculated periods. More interesting is also the fact that performance of U.S. special purpose acquisition companies decreased over time: taking as an example the

[21] From ‘Going public via special purpose acquisition companies: Frogs do not turn into princes’, Kolb J., Tykvová T., 2016.

comparison between SPACs and market abnormal returns, after 12 months on average SPACs' prices underperformed by 46% while after five years SPACs' prices underperformed on average by 102%.
These results suggest that SPACs (at least in U.S. during this period) allowed firms to get listed in public markets in difficult time and that those firms were less performing than those which entered the market with a traditional IPO process.
Thus, as other authors suggested, firms entering the public markets through a SPAC typically carry more debt, have fewer growth opportunities, are smaller and invest less than peer companies in the market. That's why Kolb and Tykvová (2016) stated that in going public with a special purpose acquisition company, 'frogs do not turn into princes'.

As already mentioned, in the period lasting from the IPO to the announcement of the target company, there is no significant fluctuation in SPAC's stock price which reflects (more or less) the trust value per share.
On the contrary, in the day in which the SPAC announce its target, the stock price starts to move reflecting the investors' opinion about the value of the deal.
In the paper "*Why SPAC investors should listen to the market*", Jenkinson and Sousa (2009) analysed 58 SPACs from 2003 to 2008 and they found out that market investors well forecasted the value of the deal and for this reason, all shareholders (including managers) should react accordingly.
Provided that the stock price should never trade far below the trust value per share, there are two possible outcomes: (1) if the SPAC share trade at a price equal or slightly below the trust value, it means that market evaluate the proposed deal as value-destroying for shareholders and, if investors are rational, the SPAC should be liquidated or should search another target company or (2) if the shares quote above the trust value per share, market's opinion is positive and the deal should go through. Thus, market prices of SPACs are informative and, the simple rule of voting according to the market reaction when the target company is announced, allows shareholders to avoid losses.
Jenkinson and Sousa proved this theory by diving companies in two groups: 'Good SPAC' are those which experienced an increase in market prices on the announcement day, whereas market prices of 'Bad SPAC' stay flat. After 26 weeks, Good SPACs produce an average return of -6% and Bad SPACs produce an average return of -34%.
Furthermore, authors deal with a possible reason why Bad SPACs were not liquidated, causing losses among investors: there is indeed a strong incentive for sponsors of SPACs to buy shares of investors who are unwilling to vote positively for the deal. By doing so, sponsors can alter

the decision in the shareholder meeting, making the merger happen and, eventually, they can receive compensation for their work.

Another contribution in the literature for what concerns the analysis of the stock performance of special purpose acquisition companies is provided by Ignatyeva, Rauch, and Wahremburg (2013). The main difference between the analysis of these authors and those of others is that, analysing 19 European SPACs in the period 2005-2011, they reported raw SPAC returns (table below), while other compared the results with the market return or with trust value.

	Pre-announcement period	Pre-voting period	+ 6 months	+ 12 months
Average	0.60%	3.00%	-11.00%	-14.40%

They suggested that the post-acquisition period of European SPACs was characterized by negative returns (-14.40% after one year), even if they performed better compared to U.S. SPACs: Jog and Sun (2007) found an annualized return of -17.34% and Jenkinson and Sousa (2011) found a -55% after one year.

5 Italian Special Purpose Acquisition Companies

Born in 2011, Italian SPACs are becoming more popular especially after the new regulation on Italian government in December 2016 that introduced incentives for investments in Italian small and medium enterprises (SMEs).

At October 2017, 18 special purpose acquisition companies were listed in Italian stock markets. Stock markets in which they were listed are the '*Alternative Investment Market Italia'* (AIM Italia) and, in the case of Space, Space 2 and Space 3, the '*Market of Investment Vehicles'* (MIV), create on purpose for investment companies, funds, and SPACs.

In this chapter, they are firstly presented an overview of the Italian stock market, the new regulation introduced by the Italian government in December 2016 as well as some descriptive statistics about all listed Italian special purpose acquisition companies until October 2017.

Secondly, the first five Italian SPACs which completed a business combination are described and analysed more in detail, following the models proposed in the literature. Results are summarized in paragraph 5.3.

5.1. Italian market: AIM Italia and PIR regulation

According to the Italian stock exchange (Borsa Italiana), companies should be listed in order to finance their growth, increasing their competitive advantage, diversify their source of financing, increasing power against suppliers and clients, facilitate the transfer of the business to the younger generation and make the equity liquid.

As previously introduced, Borsa Italiana is divided into segments dedicated to different types of companies since different are requirements to be admitted in each of them.

The main regulated Italian market is the '*Mercato Telematico Azionario*' (MTA) which is dedicated to medium and large capitalization companies, in line with the best international standards of other countries stock markets. Exchanges in this market are opened to institutional, professional and retail investors. Inside this market, there is the segment STAR, conceived for medium capitalization companies and emphasising on liquidity, information transparency, and corporate governance.

Another regulated market of Borsa Italiana is the '*Mercato degli Investment Vehicles*' (MIV), which is dedicated to various types of investment vehicles such as investment companies and real estate investment companies, private equity funds, real estate funds, and Special Investment Vehicles (SIV) like special purpose acquisition companies (SPAC) and specialized funds or

multi-strategy funds. In general, MIV is open to institutional and retail investors while only institutional investors can buy shares of *special investment vehicles*.
These regulated markets are subject to the supervision of the Italian stock exchange authority, CONSOB.

The other segment of the Italian stock exchange, '*Alternative Investment Market Italia*' (AIM Italia), is subject only to the Borsa Italiana regulations and for this reason is classified as a non-regulated market. Requirements to be admitted in this market are gauged on the needs of small companies.
The following table summarized the main requirements that companies need to comply in order to be admitted in the relative segment of the Italian stock exchange.

	MTA	MTA STAR	MIV	AIM
Floating	25%	35%	25% (35% for SIV)	10%
Market cap[22]	€40 mil	€40 mil – max €1 bn	€40 mil	/
Certified F/S	3	3	3 (if any)	1 (if any)
Accounting standards	IAS	IAS	IAS	IAS or Italian GAAP
Investors	Institutional and retail	Institutional and retail	Institutional and retail (SIV only institutional)	Institutional, retail only after the IPO
Prospectus	Yes	Yes	Yes	Only listing prospectus
Advisor	Sponsor (Global Coordinator)	Sponsor (Global Coordinator)	Sponsor (Global Coordinator)	Nomad

From the previous table, it's easy to understand that the AIM Italia segment is less regulated and require less stringent requirement in order to be admitted to the stock exchange.
Another critical aspect to underline is the role of the Nominated Advisor (NOMAD), required only for companies to be listed on the AIM segment.
A Nominated Advisor is a key figure and for this reason must be approved by Borsa Italiana. It can be a bank, a financial intermediary or a corporate finance advisor. The main role of the Nominated Advisor is to assess the appropriateness of the company seeking to be admitted to the market, supporting it in maintaining an adequate profile of transparency, and helping the company to comply with the rules deriving from being listed on AIM Italia.
Moreover, according to the regulation of the AIM Italia market, main duties of a Nominated Advisor are to evaluate whether a company is eligible for the admission to the market by performing a due diligence; to handle the listing process, coordinating all parties involved,

[22] Minimum market capitalization required to be admitted.

supporting the company in the preparation of the listing prospectus; to assists the company throughout all the period in which it is listed on the AIM Italia.

From tables at pages 62 and 63 summarising all Italian special purpose companies listed until October 2017, it can be noted that SPACs mainly chose the AIM Italian instead of the MIV (created on purpose for them) probably because of the less stringent regulations to comply with, making their Initial Public Offering easier and less expensive than IPO in other regulated markets.

In 2017, there has been an increase in special purpose acquisition companies' IPOs in Italy.

One possible reason of this could be the new investment law, regulating the '***Piani Individuali di Risparmio'***, better known as *PIR*. On 11 December 2016, the Italian government introduced it with the 'Legge di bilancio n. 232', art. 1, commas 100-114.

These '*piani individuali di risparmio*' are savings programs which, according to this new regulation, are not subject to taxation if:

- individuals invest in funds managed by banks or other intermediaries
- funds must invest at least 70% of their money in financial instruments (even if not listed in regulated markets, e.g. AIM Italia) issued by Italian or European companies (different from real estate companies)
- at least 30% of the 70% must be invested in companies not listed in FTSE MIB index or in other similar European indexes.

Moreover, a fund cannot invest more than 10% of the total money in a single company.

To benefit from the de-taxation, individuals must maintain the investment for at least five years and cannot invest more than €30,000 per year, for a maximum of €150,000.

This regulation has been considered the main cause of the increase in IPOs on AIM Italia (and also the increase in the number of SPACs listed) along with the positive economic scenario in Italy, that is recovering from the adverse economic and financial crisis of the past years.

5.2. Italian deals – CASE STUDIES

Before analysing in details the first five Italian special purpose acquisition companies and their target firms, in the following two tables are presented the most important information of all Italian SPACs and their target firms, in order to offer a complete picture of the Italian SPAC market.

SPAC name	IPO date	IPO Mkt	Current Mkt	Proceeds (€ mln)	Status	Target	Announce-ment date	Shareholder meeting	Business Combination[23]
Italy 1 Investment	27-01-11	MIV	MTA	150	Completed	**IVS Group**	02-03-12	12-04-12	16-05-12
Made in Italy 1	27-06-11	AIM Italia	MTA Star	50	Completed	**SeSa**	15-10-12	27-11-12	01-02-13
Industrial Stars of Italy	15-07-13	AIM Italia	MTA	50	Completed	**Lu-Ve**	26-01-15	28-04-15	09-07-15
Space	18-12-13	MIV	MTA Star	130	Completed	**F.I.L.A.**	15-01-15	20-02-15	01-06-15
GreenItaly1	27-12-13	AIM Italia	AIM Italia	35	Completed	**Zephyro**	25-06-15	08-10-15	23-12-15
Space 2	31-07-15	MIV	MTA Star	308	Completed	**Avio**	19-10-16	01-12-16	10-04-17
Capital for Progress 1	04-08-15	AIM Italia	AIM Italia	51	Completed	**GPI Group**	05-09-16	19-10-16	29-12-16
Glenalta Food	10-11-15	AIM Italia	AIM Italia	80	Completed	**Orsero**	28-10-16	30-11-16	13-02-17
Industrial Stars of Italy 2	27-05-16	AIM Italia	AIM Italia	50.5	Completed	**Sit Group**	24-02-17	05-05-17	20-07-17
Innova Italy 1	19-10-16	AIM Italia	/	100	Seeking acq.	**/**	/	/	/
Crescita	15-03-17	AIM Italia	/	130	Seeking acq.	**/**	/	/	/
Space 3[24]	05-04-17	MIV	MTA Star	152.85	Announced	**Aquafil**	14-06-17	27-07-17	13-11-17
Grenalta	19-07-17	AIM Italia	/	98	Seeking acq.	**/**	/	/	/
Sprint Italy	21-07-17	AIM Italia	/	150	Seeking acq.	**/**	/	/	/
EPS Equita Pep	01-08-17	AIM Italia	/	150	Seeking acq.	**/**	/	/	/
Capital for Progress 2	04-08-17	AIM Italia	/	65	Seeking acq.	**/**	/	/	/
SPACTIV	27-09-17	AIM Italia	/	90	Seeking acq.	**/**	/	/	/
Industrial Stars of Italy 3	19-10-17	AIM Italia	/	150	Seeking acq.	**/**	/	/	/

[23] The day in which the target is effectively listed in the stock exchange
[24] From ‘Space 2’

SPAC name	Promoters	Time Available[25]	Promoters' investment (€ mln)	# ordinary shares	# promoters' shares	Proceed in trust	Units (10€)	Days Announ.	% redemption
Italy 1 Investment	Gamberale, Mammola, Revoltella, Berger, Lahmstein, Wendenburg	24/ (36)	5.035	15,000,000	3,750,000	99.2%	1sh+1w	400	21%
Made in Italy	Carlotti, Giacometti, Strocchi	24	1.5	5,000,000	150,000	100%	1sh+1w	476	16%
Industrial Stars of Italy	Arietti, Cavallini	24	1.5	5,000,000	150,000	100%	2sh+1w	560	0%
Space	Erede, Mion, Italia, Pagliani, Subert, Ambrosio, De Bernardi	24/ (30)	4.6	13,000,000	460,000	99%	3sh+2w	393	0%
GreenItaly1	Carlotti, Idea Capital Funds sgr, Vedogreen	24	1.2	3,500,000	120,000	100%	1sh+1w	545	17%
Space 2	Erede, Mion, Italia, Pagliani, Subert, Ambrosio, De Bernardi	24	8	30,800,000	800,000	98.5%	4sh+2w	446	0%
Capital for Progress 1	Capuano, Perricone, Fumagalli, Bianchi, Gattai	24	1.95	5,100,000	153,300	100%	10sh+2w	398	0%
Glenalta Food	Giacometti, Lugli, Malagoli, Marenco	24/ (30)	1.5	8,000,000	150,000	100%	2sh+1w	353	7%
Industrial Stars of Italy 2	Arietti, Cavallini	24	3.2	5,050,000	320,000	100%[26]	2sh+1w	273	0%
Innova Italy 1	Conti, Costaguta, Ferrario, Gianni, Pansa	24/ (30)	2	10,000,000	200,000	100%	10sh+2w	/	/
Crescita	Armanini, D'Ippolito, Drago, Moser, Tazartes, Toffoletto[27]	24/ (30)	3	13,000,000	300,000	100%	10sh+2w	/	/
Space 3	Erede, Mion, Italia, Pagliani, Subert, Ambrosio, De Bernardi	20/ (26)	4	15,285,000	400,000	98.5%	4 sh+1w	70	0%
Grenalta	Giacometti, Lugli, Malagoli, Marenco, Bachshmid, Di Iorio	24	2	9,800,000	200,000	100%	10sh+2w	/	/
Sprint Italy	Braggiotti, Carlotti, Pintucci, Totah, Morpurgo	24/ (30)	3	15,000,000	300,000	100%	10sh+2w	/	/
EPS Equita Pep	Equita PEP Holding, Equita SIM, S. Lusting, R. Ruffini	24/ (30)	4	15,000,000	400,000	100%	10sh+5w	/	/
Capital for Progress 2	Capuano, Perricone, Fumagalli, Bianchi, Gattai	24/ (30)	1.95	6,500,000	195,000	100%	10sh+2w	/	/
SPACTIV	Borletti, De Spirt, Bavagnoli	24/ (30)	3	9,000,000	300,000	100%[27]	10sh+2w	/	/
Industrial Stars of Italy 3	Arietti, Cavallini	24/ (30)	2.9	15,000,000	480,000	100%[27]	2sh+1w	/	/

[25] In some SPACs, more time is given (in parenthesis) only if a potential target has been already identified.
[26] 1% of proceed can be used after the approval of the board of directors.
[27] through Crescita Holding S.r.l. and DeA Capital SpA.

Analysing the main features of Italian special purpose acquisition companies, it's easy to note that the average proceeds raised in Italy are two times less than the one raised in U.S., according to Datar, Emm and Ince (page 44). In fact, in Italy, the average is €108.1 million while in U.S. $210.82 million. However, in U.S. the maximum amount raised was $1.035 billion, suggesting that there are big American companies which can use this kind of vehicles to get listed. In Italy, on the contrary, there are only a few big companies (usually already listed) but there are lots of small and medium enterprises (SMEs). According to a statistic made by '*Confcommercio*' in 2009, in Italy 99.9% of the firm were SMEs.

Moreover, compared with the result of Datar, Emm and Ince (2012), Italian SPACs took more time on average to find a suitable target firm (461 days compared to 395.5), more time from the shareholders' approval to the effectiveness of the business combination (78 days compared to 2.5) but Italian SPACs were on average faster asking the vote of shareholders (56 days compared to 216.1).

EXHIBIT 1: ITALIAN SPACs STATISTICS

	Mean	Median	Min	Max
Days from IPO to announcement	461	446	273	696
Days from IPO to approval	517	489	343	732
Days from announcement to approval	56	43	33	105
Days from approval to business combination	78	75	34	130
Days from IPO to business combination	595	585	419	833
Amount raised (€ Million)	108.1	98	35	308
Unit price (€)	10	10	10	10

In the following table by Datar, Emm and Ince (2012), they refer to the announcement date as '*agreement*' date; the day when the business combination was effective as '*consummation*'; the day of the shareholders' meeting as '*approval*'; and the day in which a SPAC announced a target firm that would have been refused by investors as '*terminated agreement*'.

Descriptive Statistics: 2003-2008

	N	Mean	Median	Min	Max	St. Dev.
All mergers (N = 86)						
Days from IPO to agreement	86	408.3	455	74	840	187.8
Successful SPACs (N = 71)						
Days from IPO to agreement	75	395.5	405	74	840	188.5
Days from IPO to terminated agreement	3	349.3	331	218	499	141.4
Days from agreement to approval	75	216.1	186	20	638	113.1
Days from approval to consummation	75	2.5	1	0	21	4.2
Days from IPO to consummation	75	614.1	687	245	1004	172.6
Liquidated SPACs (N = 44)						
Days from IPO to agreement	43	467.9	483	142	696	155.1
Days from agreement to termination	43	178.2	177	24	512	104.5
Days from IPO to liquidation	42	735.9	731.5	490	878	74.6

Comparing Italian special purpose acquisition companies with those listed in all European public markets, differences widen.
In fact, Ignatyeva, Rauch, and Wahrenburg (2013) suggested that European SPACs between 2005 and 2011 raised on average €489.4 million (the median value was €275), which was larger than American gross proceeds, and therefore larger than the Italian one.

Although at October 2017 there are 9 SPACs which completed the business combination successfully, only for the *first five* can be analysed operating and stock performances for a quite long period after the acquisition of a target firm. In fact, in order to have a reasonable comparison with European and U.S. analyses, only SPACs which completed their acquisition before 2016 can be considered.
Data of Italian SPACs and their target firms were taken from the companies' websites, listing prospectus, EIKON database by Thomson Reuters, AIDA database by Bureau van Dijk and, for the missing information in financial statements, data were taken from '*Registro delle Imprese*'.

ITALY 1 INVESTMENT S.A.

Italy 1 Investment was the first SPAC listed in an Italian regulated market. It was formed on 26 August 2010 in Luxemburg (that's why it was a 'Société Anonyme') by Vito Gamberale, Carlo Mammola, Gianni Revoltella, Roland Berger, Florian Lahmstein, Gero Wendenburg. The purpose of such company was '*acquiring one company or operating business through a merger, share exchange, share purchase, asset acquisition, reorganization or similar transaction (a "Business Combination"). The Company intends to focus on the completion of a Business Combination with relevant business operations in Italy*'[23].
It offered to the market 15,000,000 units at a price of €10.00, which comprised one market share and one warrant.
Warrants gave investors the right to buy an additional market share for a price of €9.30: they were exercisable after the business combination (or from one year after the IPO if the business combination was completed before) and they expired five years from the listing date.

[23] From the listing prospectus of Italy 1 Investment S.A.

Founders of this SPAC received 3,750,000 special shares for a price of approximately €0.0093 (€35,000 was the total proceeds raised by this private placement), representing 20% of the total outstanding shares. Moreover, founders bought 5,000,000 warrants at a price of €1.00.
On 27 January 2011 market shares were admitted to trading in MIV at Borsa Italiana.

	Number of shares	%	Proceeds	%
Founders	3,750,000	*20%*	€5,035,000	3.2%
Investors	15,000,000	*80%*	€150,000,000	96.8%
TOTAL	18,375,000	*100%*	€155,035,000	100%

From this table, it is easy to understand the dilution effect that market shareholders needed to suffer in favour of founders.

At the time of the publishing of the listing prospectus, the average age of the member of the board was 59 years.
The prospectus ensures that SPAC's directors '*have an extensive network of relationships from which to identify and generate acquisition opportunities. They believe the combined experience of the management team in advising, investing in and operating businesses across sectors, and their proven track record of delivering attractive investment returns and senior managerial and operational expertise within the sectors will contribute to the success of the Company's strategy*. *The Directors have extensive management experience working with public and private corporations*.'
The Chairman ***Vito Alfonso Gamberale*** has working experience of over 40 years including working with Italian public and private corporations (for example Autostrade S.p.A., now Atlantia), Italian State-controlled entities (Telecom Italia and Eni), private equity firms and companies held by prominent Italian families (21 Investimenti, private equity fund owned by the Benetton family).
Prof. Dr. h.c. ***Roland Berger***, the Co-Chairman and Executive Director of the board, is the founder and Chairman of 'Roland Berger Strategy Consultants GmbH', based in Munich (Germany). He was also a member of various supervisory and advisory boards of national and international companies, foundations and organizations, like for example Fiat (now FCA), Telecom Italia, RCS MediaGroup, but also Sony Corporation and Blackstone Group.
Carlo Giovanni Mammola, CEO of the SPAC, is a Founding and Managing Partner of Argan Capital Advisors LLP, a pan-European private equity fund and CEO of 'Fondo Italiano d'Investimento'. He was also a member of the Board of Directors of the European Private

Equity and Venture Capital Association (EVCA, now '*Invest Europe*'). He worked at PAI Partners, where he was Managing Director and Partner and Sopaf S.p.A. Currently, he is professor of Management at Bocconi University in Milan.

Florian Lahnstein, co-CEO and Executive Director of the SPAC, is a Managing Director at Siguler Guff. He was founder and joint CEO of RiverRock European Capital Partners. He worked at UBS as Head German Investment Banking Division and at Merrill Lynch Investment Banking as Head of German TMT. Mr. Lahnstein holds a Master in finance and marketing at the University of Cologne.

Gero Wendenburg, Executive Director of the SPAC, is Head of Corporate Finance at equine Bank AG (a German investment bank) and Partner at MountainPeak Capital AG. He was Managing Director at Oddo BHF-Bank AG and Bear Stearns International Ltd. He also worked at RiverRock European Capital Partners as Managing Director.

Currently, he holds a degree in Business Administration from the University of Passau.

In addition, *Mariano Ermanno Frey*, *Christoph N. Kossmann,* and *Guido Rossi* are part of the board of directors of Italy 1 Investment as independent non-executive directors.

It's worth noting that Berger and Lahnstein were founders of the *Berger Lahnstein Middelhoff & Partners LLP*, investment company based in London: in July 2008, they create 'German1', a special purpose acquisition company focused on the German market and listed on Euronext in Amsterdam where it raised €250 million. In September 2009, the SPAC merged with '*AEG Power Solution'*.

As in all U.S. and European SPACs, investors of Italy 1 Investment had to approve the acquisition of the proposed target firm with the majority of market shareholders[24] and, in order for the business combination to be successful, less than 35% of market shareholders could exercise their redemption right. If such conditions were not satisfied, the company would have been liquidated or it would continue searching for a target company if enough time were available. Important is to underline that market shares held by founding shareholders and directors would vote in favour of the business combination.

The liquidation of the SPAC would also trigger if after 24 months from the IPO managers were still not able to identify a suitable target or, having identified it, within additional 12 months, they were not able to complete the business combination.

[24] In the first meeting, in order to approve the acquisition, shareholders representing at least 50% of issued market shares had to be present and at least 2/3 had to vote positively; in a second meeting, no quorum was required.

The listing prospectus also contained the amount of underwriting commissions, legal and accounting fees and other expenses, which are summarized in the following table.

	€	%
Underwriting commission	€7,500,000	*5.0%*
Legal and accounting fees and expenses	€600,000	*0.4%*
Stock exchange supervision	€40,000	*0.0%*
Miscellaneous expenses	€750,000	*0.5%*
TOTAL OFFERING EXPENSES	€8,890,000	
GROSS OFFERING PROCEEDS	€150,000,000	

Banca IMI and J. P. Morgan Securities, as underwriting banks, decided to defer €4,125,00 of their underwriting commission (which equals 2.75% of the gross offering proceeds) until completion of the business combination.

Including these deferred expenses, €1.5 millions of planned working capital, plus €5 million raised from founding shareholders placement, the total amount of cash deposited in the trust were €148,735,000, equal to 99.2% of gross market offering proceeds (€9.92 per share).

The focus of Italy 1 Investment was to enter into a business combination with an Italian family-owned firm, a portfolio company of private equity funds or corporate spin-offs.

Besides the SPAC set some characteristics that its target firm needed to have:

- an established company with a proven track record;
- a company with strong free cash flow characteristics;
- a strong competitive industry position;
- an equity value between approximately €300 million and €1,000 million;
- an experienced management team;
- and a diversified customer and supplier base.

The investment strategy was mainly to acquire more than 50% of the outstanding equity interests or voting power of one target business. To do this the company could increase its leverage with both senior secured debt as well as subordinated debt.

Target company: IVS Group S.A.

After 13 months, on 2 March 2012, the SPAC announced to have found its target: 'IVS Group S.p.A.'. Now, the firm is Italian leader in the *vending machines industry*, with a market share

of 12% (in this industry the market is highly fragmented). It is also present in Spain and France, being the third operator in Europe in its industry.

Founded in 1972 by Cesare Cerea and Piero Gualdi with the name of ‘Bergamo Distributori’, the firm can be considered as the pioneer in the Italian vending industry. At the time of the acquisition, in 2012, it was already the Italian leader and generally recognized as best practice in the European vending machines market.

The vending business unit is vertically integrated: the company prepare and test new vending machines but also revamp them at clients’ sites.

In 2017 IVS manages a network of approximately 185,000 vending machines and office coffee service machines, located at corporate offices, institutions and public places, through which we sell a broad range of products, including hot and cold beverages, in-between meals, snacks, and confectionary.

IVS also has a second business unit, called “Coin Services”, which is related to coin management with operations based only in Italy.

The firm has significant economies of scale compared to its competitors in personnel expenses (27% of the turnover) and exercises power over suppliers.

Innovation has always been an important factor in IVS: it continuously improves technologies used and software installed in vending machines, products, and logistics.

Thanks also to the cash provided by the special purpose acquisition company, IVS in the last ten years completed more than 150 acquisitions rapidly increasing sales and decreasing costs.

In fact, the major part of SPAC proceeds were used to make new acquisitions. Moreover, in 2013 IVS issued a bond of €200 million listed in Luxembourg Stock Exchange and another of €240 million listed in MTA in Italy.

Remarkable is the partnership with the famous coffee capsules maker ‘Nespresso’, which allows the exclusive distribution of its products in offices and automatic coffee distributors.

At the beginning of 2017, IVS completed the acquisition of ‘*Grup Ibervending’*, one of the most important players in the vending machines industry in Spain (becoming the third biggest company), and ‘*Demomatic*’, a Swiss vending machines company.

Next tables present a summarized restated income statement and balance sheet of IVS Group.

EXHIBIT 2 IVS GROUP: Restated Income Statement

€ thousand	2008	2009	2010	2011	2012	2013	2014	2015	2016
Revenues	259,779	270,441	269,719	278,366	297,800	312,600	321,500	347,700	362,300
Revenues growth		*4.1%*	*-0.3%*	*3.2%*	*7.0%*	*5.0%*	*2.8%*	*8.1%*	*4.2%*
Operating costs	-134,872	-142,171	-130,614	-136,314	-149,000	-158,400	-163,300	-173,500	-181,100
Personnel expenses	-71,767	-79,359	-80,811	-81,726	-85,200	-87,900	-92,500	-95,900	-99,400
EBITDA	**53,140**	**48,911**	**58,294**	**60,326**	**63,600**	**66,300**	**65,700**	**78,300**	**81,800**
EBITDA margin	**20.5%**	**18.1%**	**21.6%**	**21.7%**	**21.4%**	**21.2%**	**20.4%**	**22.5%**	**22.6%**
D&A	-32,407	-36,483	-37,556	-35,531	-38,318	-38,611	-38,517	-39,468	-39,604
EBIT	**20,733**	**12,428**	**20,738**	**24,795**	**25,282**	**27,689**	**27,183**	**38,832**	**42,196**
EBIT margin	**8.0%**	**4.6%**	**7.7%**	**8.9%**	**8.5%**	**8.9%**	**8.5%**	**11.2%**	**11.6%**
Net income	**-7,112**	**135**	**5,240**	**3,598**	**-14,018**	**7,089**	**2,883**	**-18,368**	**18,496**

In 2012, the Group suffered a loss mainly because of expenses and fees deriving from the merger with the special purpose acquisition company.

In the two years after the business combination revenues have increased with a higher growth rate but profitability of the company has been almost unchanged (both EBITDA and EBIT). In the subsequent years, the profitability increased (EBITDA margin +2.1% in 2015) along with revenues. Probably, management of the company focused more on growth than profitability in the first years after the business combination.

The net loss in 2015, instead, was attributed to an accrual of provision for risks and charges related to an Italian Antitrust Authority investigation (for €28,575 thousand) and to the early repayment of the senior secured notes (which expenses amount to €10,367 thousand).

EXHIBIT 3 IVS GROUP: Restated Balance Sheet

€ thousand	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net working capital	-6,081	-32,660	-19,034	-1,271	-27,040	-6,018	-21,300	-33,561	-23,313
Operating fixed capital	147,317	158,860	147,460	149,439	197,137	196,137	199,737	199,237	207,637
Other non-current operating assets and liabilities	1,874	6,367	6,329	18,098	15,600	15,400	29,300	16,900	-5,700
Goodwill and other similar intangibles	259,337	284,620	285,622	295,928	314,800	318,100	339,500	347,400	356,500
Non-operating assets	-1,283	-1,661	-1,966	-3,596	-19,937	-17,137	-13,437	-2,437	-3,437
Total funds invested	**401,164**	**415,526**	**418,411**	**458,598**	**480,560**	**506,482**	**533,800**	**527,539**	**531,687**
Net financial position	343,153	356,905	353,847	389,452	175,760	196,082	232,000	245,639	233,087
Debt equivalents	6,267	7,753	9,325	9,428	6,700	6,600	8,700	8,200	8,700
Shareholders' equity	51,743	50,870	55,238	59,718	298,100	303,800	293,100	273,700	289,900
Total source of financing	**401,163**	**415,528**	**418,410**	**458,598**	**480,560**	**506,482**	**533,800**	**527,539**	**531,687**
ROIC	**13.58%**	**3.64%**	**10.33%**	**11.78%**	**13.76%**	**14.54%**	**11.86%**	**19.60%**	**18.68%**
ROA adjusted	**9.56%**	**5.32%**	**9.18%**	**8.73%**	**7.39%**	**6.94%**	**6.64%**	**6.01%**	**9.92%**
ROE	**-13.74%**	**0.27%**	**9.49%**	**6.02%**	**-4.70%**	**2.33%**	**0.98%**	**-6.71%**	**6.38%**

As a result of the business combination, the Group received new cash for €114,359 thousand. This cash allowed IVS Group to improve its net financial position and to boost revenues by new acquisitions.

Return on Invested Capital and Return on Assets (which measure the profitability of the company's assets) were computed by excluding 'goodwill and other similar intangible' because the next step of the analysis is to compare the SPAC's target firm with a peer company in the same industry. It's worth to recall that, excluding goodwill and other similar intangibles from ROIC and ROA has the advantage of comparing companies, in the same industry, that have different business strategies (external growth generates goodwill while internal growth not). Moreover, by definition, ROIC does not consider non-operative assets too.

Following the model of the analysis conducted by Ignatyeva, Rauch and Wahremburg (2013) in studying the operating performance of SPAC's targets, in the following table are presented the most important indicators in the year in which the business combination was completed and the change of the same indicators in periods surrounding the acquisition.
To compare results of IVS Group, a competitor was chosen: '*Gruppo Argenta'*. It is an Italian company, covering 9% of the market, which operates in Italy through 60,000 vending machines, 19 branches, and 1,400 employees.

EXHIBIT 4 IVS Group: Performance

€ thousand	At acquisition	Change 0/+1	Change -1/+1	Change -2/+1	Change -2/+2
Revenues	**297,800**	**14,800**	**34,234**	**42,881**	**51,781**
Revenues growth		*4.97%*	*12.30%*	*15.9%*	*19.2%*
EBITDA	**63,600**	**2,700**	**5,974**	**8,006**	**7,406**
EBITDA margin	**21.36%**	**-0.15%**	**-0.46%**	**-0.40%**	**-1.18%**
EBIT	**25,282**	**2,407**	**2,894**	**6,951**	**6,445**
EBIT margin	**8.49%**	**0.37%**	**-0.05%**	**1.17%**	**0.77%**
Net income	**-14,018**	**21,107**	**3,491**	**1,849**	**-2,357**
Total assets	**656,700**	**60,600**	**137,317**	**205,767**	**237,167**
Net financial position	**175,760**	**20,322**	**-193,370**	**-157,765**	**-121,847**
Shareholders' equity	**298,100**	**5,700**	**244,082**	**248,562**	**237,862**
ROIC	**13.76%**	**0.78%**	**2.76%**	**4.21%**	**1.53%**
ROA adjusted	**7.39%**	**-0.46%**	**-1.79%**	**-2.24%**	**-2.54%**
ROE	**-4.70%**	**7.04%**	**-3.69%**	**-7.15%**	**-8.50%**
Diff. Revenues from competitor	**100,058**	**15,754**	**38,418**	**25,089**	**39,370**
Diff. Revenues growth competitor		**15.74%**	**14.38%**	**5.96%**	**12.26%**
Diff. EBITDA from competitor	**22,057**	**2,599**	**5,273**	**4,444**	**5,869**
Diff. EBITDA marg. from competitor	**0.35%**	**-0.30%**	**-1.25%**	**-0.29%**	**-0.60%**
Diff. ROA adjusted from competitor	**-1.85%**	**-1.00%**	**-1.82%**	**-0.63%**	**0.58%**
Diff. ROE from competitor	**-10.89%**	**12.01%**	**-12.88%**	**-21.07%**	**-18.18%**
Diff. Earnings from competitor	**-16,716**	**23,197**	**-363**	**-4,363**	**-5,498**

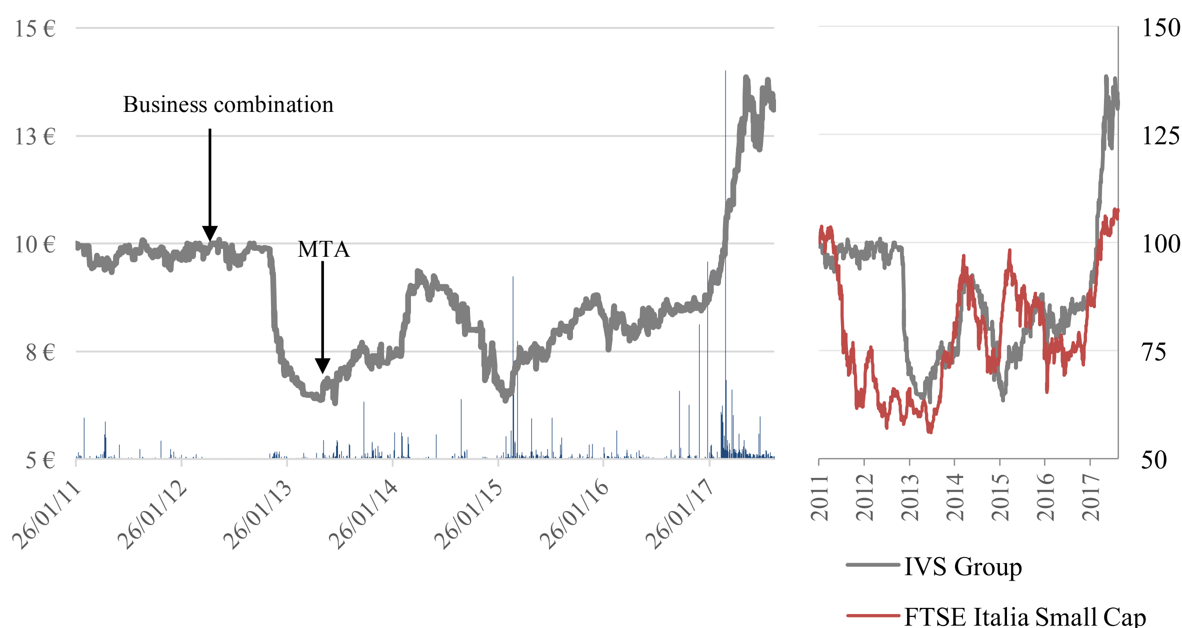
Focusing on the target company, it's clear that the effect of the merger with the SPAC was an increase in revenues and in total assets while the EBITDA margin remained almost unchanged (-0.15% in the year following the acquisition).
Return on invested capital (ROIC), excluding goodwill and other similar intangibles, also remained almost unchanged in the year after the business combination but, considering the 3 years surrounding the acquisition, it increased by 2.76%.
Comparing with the competitor, at the time of the acquisition, IVS Group was larger in terms of revenues (+€100 million), has a slightly larger EBITDA margin (+ 0.35%) but it was less profitable by -1.85% in term of return on assets (excluding goodwill and other similar intangibles).
Looking at the performance of both companies in the years surrounding the acquisition (especially in the period from two years before to two years after the acquisition), the difference in revenues growth become more evident, with IVS Group growing more than 12% than its competitor, while the profitability slightly worsens (EBITDA margin -0.60%).

These number suggests that getting listed through the SPAC helped IVS Group to expand its sales, not compromising the profitability since the management of the company was not changed. Although the target company had positive benefits for being entered in this operation, it's important to underline that, in 2011, it probably would not have been able to enter in an IPO process by itself because it was highly leveraged.

From an initial investor point of view, the return on the SPAC's stock was negative for the first four years after the business combination.
According to the former CEO of the group, the huge drop in the stock price occurred in December 2012 was due to the absence of counterparties for founders of the SPAC willing to sell their shares (since the MIV is typically an illiquid market).
On 3 June 2013, the company transferred its share to the main market, MTA.
Here below is presented a graph which shows the price and volumes of the IVS's stock on the left, while on the right side there is the comparison between normalized movements of the stock and the FTSE Italia Small Cap index (which contains companies with a small capitalization not part of the FTSE MIB and FTSE Italia Medium Cap).
To ensure comparability between the two prices, normalization of the company's stock and the market index was made by considering both values as '*100*' at the date of the company's IPO.

It's clear that from 2013 the IVS's stock has followed the Italian market trend and, after the increase in net income of 2016 and forecasted net income of 2017 and 2018, the price increased, outperforming the market.

EXHIBIT 5 IVS GROUP: Stock performance							
Pre-announcement period	Pre-voting period	6 months following	12 months following	24 months following	36 months following	48 months following	60 months following
-1.00%	-1.31%	-1.10%	-36.00%	-8.55%	-26.05%	-20.20%	26.50%



MADE IN ITALY 1

Made in Italy was the second Italian special purpose acquisition company founded by Luca Fabio Giacometti, Matteo Carlotti, and Simone Strocchi.

The SPAC was listed on 27 June 2011 in the AIM Italia.

The company offered 5,000,000 units, composed by one share and one warrant, at a price of €10.00. Warrants gave investors the possibility to buy additional shares according to the following formula: $\frac{Average\ monthly\ price - Strike\ Price}{Average\ Monthly\ Price - Price}$, where *Price* was equal to €0.10 and *Strike Price* was €9.50. Warrants were exercisable from one month after the effectiveness of the business combination and they expired five years after the shareholder's meeting approving the acquisition or 30 days after the average monthly price would have been over €13.30.

Founders of the SPAC were given 150,000 special shares at a price of €10.00: these particular shares were not transferable until the business combination was completed and they didn't carry the right to vote on the acquisition.
Special shares are converted into 7 ordinary shares under the following conditions:

- 50,000 special shares (1/3 on the total) were converted into 350,000 ordinary shares after 45 days of the shareholder's meeting which approved the acquisition.
- 100,000 special shares (2/3 on the total) were converted into 700,000 ordinary shares if, within 24 months from the business combination, the stock price is equal or higher €12,00 for 15 days over 30 consecutive days.

If both conditions would be satisfied, founders obtained a total of €1,050,000 ordinary shares, corresponding to around 17% of the SPAC shares. Shares resulting from the conversion of founders' shares were subject to lock-up for 18 months from the effectiveness of the business combination.

	Number of shares after the acquisition[25]	%	Proceeds	%
Founders	1,050,000	*17%*	€1,500,000	2.9%
Investors	5,000,000	*83%*	€50,000,000	97.1%
TOTAL	6,050,000	*100%*	€51,500,000	100%

The board of directors was composed by founders and by the independent manager Marco Reboa.
Luca Fabio Giacometti, Chairman of the board of directors, started his career working in the Investment Banking division of Citibank and then as vice-director in Banca Commerciale Italiana (now Intesa San Paolo). From 1996 to 2002 he was Managing Director of GE Capital (now part of Banca IFIS) and in 2003 he was co-founder and Managing Director of Nutequity, investment fund promoted by the Benetton family.
From 2007 he was partner of Capital Dynamics, an incubator for start-up, and from 2012 he is independent member of the board of directors.
After the experience in Made in Italy 1, he was founder of other two special purpose companies, Glenalta Food (which on 13 February 2017 merged with Orsero S.p.A.) and Glenalta (currently searching for a suitable target firm).
Matteo Carlotti started his career as Investment Manager of Chase Capital Partners Italia (then Chase Gemina Italia). Then from 1997 to 2009 we worked in Argos Soditic Italia S.p.A., where

[25] Considering the best scenario in which all special shares are converted in 7 ordinary shares.

he covered the role of Partner, Chairman, and CEO of the company. From 2009 he is a private equity consultant, being non-executive director in some companies, part of private equity funds. After Made in Italy 1, he founded other two special purpose acquisition companies, Green Italy 1 (which on 23 December 2015 merged with Zephyro S.p.A.) and Sprint Italy (listed on AIM Italia on 21 July 2017).

Simone Strocchi was textile product manager at Decathlon Italia and Deputy Director Financial Engineering Department at Banca Commerciale Italiana (now Intesa San Paolo). From 2002 he is founder and Managing Partner of Electra, company which offers deal structurer and M&A advises. Moreover, from December 2013 he is chairman of AISPAC, Italian association of SPAC's promoters.

After 2015, he created IPO Challenger and IPO Challenger 1, pre-booking companies considered the evolution of the SPACs.

Marco Reboa is professor at the 'Carlo Cattaneo' university and a professional accountant and auditor. In his career, he was member of the board of directors of some Italian listed companies such as Luxottica, Indesit, Parmalat, Interpump, Mediobanca, ENI, and Saipem.

Ordinary shareholders had to approve the acquisition and, to be successful, at least 30% of ordinary shareholders had not to exercise the right of withdrawing their shares. Moreover, dissenting shareholders could hold their warrants, which continue to trade in AIM Italia until the expiration date.

In the case in which the vote would have been positive, the shareholders' meeting would have modified the business purpose in order to let the target company operates.

If the shareholder's approval of the acquisition had not been before the 30 June 2013 (24 months after the IPO), the special purpose acquisition company would have had to liquidate.

In case of liquidation, founder received the pro-rata value of proceeds deposited in the trust only after ordinary shareholders were satisfied.

In the listing prospectus were also presented the amount of underwriting commission (€825,000, equal to 1.65% of the public offering) and other expenses connected to the listing process (€685,000). In addition, the company forecasted €250,000 of fixed yearly expenditures mainly related to accounting, auditing, and remuneration of independent managers and auditors. These expenses were covered with proceeds deriving from founders' private placement and interests deriving from IPO's proceeds, which were all deposited in the trust (i.e. 100%).

Parties involved in the listing process were Centrobanca S.p.A. as Joint Global Coordinator, Nominated Adviser and Specialist, and Intermonte SIM S.p.A. as Joint Global Coordinator.

In the listing prospectus, Made in Italy 1 stated that it intended to merge with an Italian small or medium non-listed target company in which investing at least 70% of proceeds raised through the IPO. Besides, the acquisition could be financed with other sources of financing, whether they were debt or equity.
Important to underline that the SPAC had not identified specific industries on which to focus but it excludes target firms operating in biotechnology, real estates, financial and renewable sectors as well as start-ups. The reasoning for this choice was to look for the best and most profitable firm in the entire Italian market.
The SPAC would have focused its attention mainly to companies with an enterprise value of a range between 100 and 300 million euros.

Target company: SESA S.p.A.

After 15 months, on 15 October 2012, Made in Italy 1 announced that its target firm would have been 'SeSa S.p.A.'.

The company was founded in the 70s by Paolo Castellacci and Pero Pelagotti. It has grown from a company which only offered information technology advises to Tuscan firms, to provider of IBM personal computers. It also provided its own computer software, as well as support for both hardware and software.
In the 90s, the SeSa Group started the subsidiary 'Computer Gross', which became the main supplier of IBM products and also commercialize Cisco, Microsoft, Lexmark and Lenovo products. In 2009 was created the second business units, VAR, which focuses on the software and system integration industry.
During 2011 and 2012, the headquarter facility was expanded to create a new datacentre dedicated to the *cloud business*.
Currently, SeSa Group is divided into three business units: VAD, VAR, and Corporate.
The first one (VAR), is dedicated to software and system integration and supports small and medium enterprises in their information technology needs.
The second one (VAD, value-added distribution) is formed by Computer Gross Italia S.p.A. and its subsidiaries, which sells to enterprises both software (proprietary and third-parties' ones) and hardware.

The third business unit (Corporate) focuses on managing the entire group, which comprises administration, accounting, auditing, HR, information technology, investor relations and legal activities.

At the time of the acquisition by the special purpose acquisition company, SeSa Group was the first Italian distributor of IBM, Microsoft, Oracle (only software) and Cisco and one of the most significant players in the software and system integration industry for small and medium enterprises. Revenues of the company came mainly from Italy.
In 2012, SeSa had various competitive advantages with compared to other firms operating in the same industry:

- it had a *strong and stable business relationships* with main international IT companies (which had the power to influence the global demand);
- a customer portfolio, made of loyal resellers (17.5% of the total Italian resellers) for the VAD business unit and around 15,000 small and medium enterprises (6.35% of the total) for the VAR business unit;
- technical know-how of employees for third-parties' hardware and software (100 individuals were certified directly by suppliers);
- strong financial structure, mainly due to reinvested earnings;
- active shareholders and managers which have experience in the sector.

Following the acquisition, SeSa Group intended to use the capital provided by the SPAC to increase its market position of the two main business units (VAR and VAD), expanding the presence of its network in Italy through new branches, and investing more in the cloud computing business. During the period from the acquisition to April 2017, SeSa Group made five new acquisitions to increase the company's market share.
In October 2014, SeSa S.p.A. was the first company to successfully transfer its share from AIM Italia to the main segment of the Italian stock exchange, MTA (Mercato Telematico Azionario). Moreover, from March 2015 shares of the company are traded in the STAR segment of the MTA.
In an interview, SeSa's CEO Alessandro Fabbroni said that "*Il passaggio al Segmento STAR rappresenta l'evoluzione di un percorso che ha visto l'approdo al listino AIM in data 1 febbraio 2013, a seguito della fusione con la prima SPAC di diritto italiano Made in Italy 1 S.p.A. ed il successivo passaggio al mercato MTA nell'ottobre 2013. Tale percorso è stato caratterizzato da una progressiva crescita sia dei fondamentali del gruppo, dai ricavi, all'occupazione ed alla redditività operativa che della capitalizzazione di Borsa, con il raggiungimento di requisiti di*

flottante in linea con quanto richiesto dal Regolamento di Borsa Italiana per l'ammissione al Segmento STAR".

Next tables present summarized restated income statement and balance sheet of SeSa Group, which ends its fiscal year in April.

EXHIBIT 6 SESA: Restated Income Statement

€ thousand	04/2011	04/2012	04/2013	04/2014	04/2015	04/2016	04/2017
Revenues	746,501	812,024	832,274	947,556	1,060,150	1,229,602	1,271,469
Revenues growth		*8.8%*	*2.5%*	*13.9%*	*11.9%*	*16.0%*	*3.4%*
Operating costs	-680,974	-731,880	-744,706	-855,135	-963,657	-1,122,145	-1,149,730
Personnel expenses	-31,168	-38,857	-43,371	-47,866	-50,322	-59,004	-70,107
EBITDA	**34,359**	**41,287**	**44,197**	**44,555**	**46,171**	**48,453**	**51,632**
EBITDA margin	**4.6%**	**5.1%**	**5.3%**	**4.7%**	**4.4%**	**3.9%**	**4.1%**
D&A	-4,199	-5,106	-6,053	-5,313	-4,820	-4,769	-6,846
EBIT	**30,160**	**36,181**	**38,144**	**39,242**	**41,351**	**43,684**	**44,786**
EBIT margin	**4.0%**	**4.5%**	**4.6%**	**4.1%**	**3.9%**	**3.6%**	**3.5%**
Net income	**11,902**	**17,201**	**20,617**	**21,162**	**22,595**	**25,055**	**27,098**

From the year following the acquisition by the SPAC, the company started growing with higher rate its revenues. In 2017 revenues grew at a lower rate mainly because of the change in the business model of some of SeSa's supplier of hardware.

Net income increased every year ($CAGR_{2014-2017}$ +8.6%), even if profitability is slightly decreasing compared with revenues (EBITDA margin from 5.3% in the fiscal year closed at April 2013 to 4.1% in April 2017).

EXHIBIT 7 SESA: Restated Balance Sheet

€ thousand	04/2011	04/2012	04/2013	04/2014	04/2015	04/2016	04/2017
Net working capital	92,692	63,005	73,288	78,160	89,427	89,168	91,697
Operating fixed capital	34,078	32,378	42,802	43,151	45,433	61,978	71,874
Other non-current operating assets and liabilities	2,315	4,417	7,206	12,674	10,894	14,018	16,695
Non-operating assets	6,385	5,132	4,641	4,158	4,975	1,804	-1,163
Total funds invested	**135,470**	**104,932**	**127,937**	**138,143**	**150,729**	**166,968**	**179,103**
Net financial position	61,416	13,166	-12,189	-16,148	-22,760	-28,282	-37,352
Debt equivalents	6,257	7,712	10,224	10,308	13,057	15,836	17,427
Shareholders' equity	67,797	84,054	129,902	143,983	160,432	179,414	199,028
Total source of financing	**135,470**	**104,932**	**127,937**	**138,143**	**150,729**	**166,968**	**179,103**
ROIC	**18.74%**	**21.36%**	**25.19%**	**20.04%**	**19.72%**	**19.78%**	**18.42%**
ROA adjusted	**8.46%**	**9.08%**	**8.16%**	**8.24%**	**8.08%**	**7.06%**	**6.48%**
ROE	**18.00%**	**20.96%**	**16.20%**	**15.05%**	**14.48%**	**14.54%**	**14.17%**

The merger with Made in Italy 1 improved the financial structure's stability and net financial position, creating a solid basis for future expansion of the group.

During 2013, proceeds from the SPAC were indeed used for making acquisitions and completing the new datacentre (about €15 million) and the remaining cash improved the net financial position (for approximately €25 million).

Before the business combination with the SPAC, profitability in terms of return on invested capital (ROIC) excluding goodwill and other similar intangibles was increasing mainly due to a more efficient net working capital.

In the following table are presented the most important financial indicators in the year in which the business combination was completed and the change of the same indicators in periods surrounding the acquisition, according to the model by Ignatyeva, Rauch, and Wahremburg.

The competitor chosen to compare results is *Accenture Italia S.p.A.*, the Italian subsidiary of the U.S. international company Accenture.

It offers services and innovative solutions in strategy, consulting, digital, technology and operations sectors to Italian companies. It has been chosen because both SeSa and Accenture Italia offers, even partially, the same services (SeSa Group also offers hardware while Accenture doesn't) and because they have a comparable size in terms of revenues.

EXHIBIT 8 SESA: Performance

€ thousand	At acquisition	Change 0/+1	Change -1/+1	Change -2/+1	Change -2/+2
Revenues	**832,274**	**115,282**	**135,532**	**201,055**	**313,649**
Revenues growth		13.85%	16.69%	26.9%	42.0%
EBITDA	**44,197**	**358**	**3,268**	**10,196**	**11,812**
EBITDA margin	**5.31%**	**-0.61%**	**-0.38%**	**0.10%**	**-0.25%**
EBIT	**38,144**	**1,098**	**3,061**	**9,082**	**11,191**
EBIT margin	**4.58%**	**-0.44%**	**-0.31%**	**0.10%**	**-0.14%**
Net income	**20,617**	**545**	**3,961**	**9,260**	**10,693**
Total assets	**467,553**	**8,820**	**78,106**	**120,039**	**155,464**
Net financial position	**-12,189**	**-3,959**	**-29,314**	**-77,564**	**-84,176**
Shareholders' equity	**127,229**	**13,338**	**58,493**	**74,434**	**89,895**
ROIC	**25.19%**	**-5.15%**	**-1.32%**	**1.30%**	**0.98%**
ROA adjusted	**8.16%**	**0.08%**	**-0.85%**	**-0.23%**	**-0.38%**
ROE	**16.20%**	**-1.15%**	**-5.90%**	**-2.94%**	**-3.52%**
Diff. Revenues from competitor	**-430,549**	**89,948**	**58,340**	**-3,902**	**62,783**
Diff. Revenues growth competitor		**20.89%**	**10.32%**	**8.01%**	**18.86%**
Diff. EBITDA from competitor	**-17,498**	**-2,829**	**-3,297**	**12,221**	**-8,271**
Diff. EBITDA marg. from competitor	**0.42%**	**-0.76%**	**-0.60%**	**1.24%**	**-0.59%**
Diff. ROA adjusted from competitor	**-1.14%**	**2.58%**	**0.80%**	**3.66%**	**-0.17%**
Diff. ROE from competitor	**-10.56%**	**-52.05%**	**-200.65%**	**-52.97%**	**-1.97%**
Diff. Earnings from competitor	**7,812**	**-156,606**	**-207,019**	**-135,719**	**6,126**

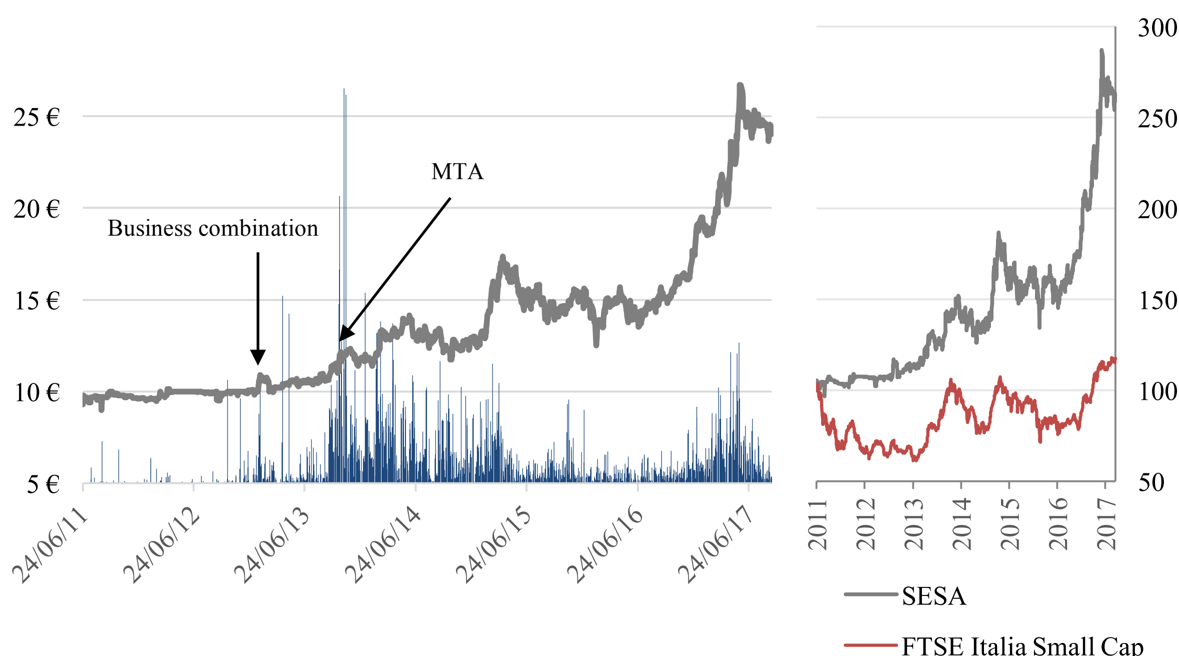
Considering the performance of SeSa Group, revenues are considerably increased in the years following the acquisition (+42% in the five years surrounding the acquisition), as well as total assets (+€155 million), mainly driven by new acquisitions. Profitability deteriorated after the merger: ROIC decreased in the year following the acquisition (-5.15%) while considering three and five years surrounding the acquisition it improved (+1.30% and 0.98% respectively).
ROA excluding goodwill and other similar intangibles remained almost unchanged, as well as EBITDA margin and EBIT margin (-0.66% and -0.44% respectively in the year after the acquisition).

Comparing with its competitor (Accenture Italia), at the time of the acquisition SeSa Group was smaller in terms of sales but its growth rate has been higher in the following year (+20.89%).
Similarly, the difference in ROA adjusted from the competitor was -1.14% in the year of the acquisition but, in the following year, SeSa outperformed Accenture Italia by 2.58%.
On the contrary, EBITDA margin was slightly higher for SeSa with respect to Accenture in 2013 but in the following years, Accenture's one increased more.

From this analysis, it seems that there was not a single and clear cause for the company not being able to enter the public market directly through an IPO. However, possible causes that pushed the SeSa Group to be acquired by a SPAC could have been the negative market conditions in 2013 that could have resulted in a lower market multiple valuation (and so a lower acquisition price) and the scarce interest of the market for firms in that particular industry.

Stock performance has always been positive, suggesting the successfulness of the deal and that initial shareholders of the SPAC were confident in the creation of value that it would have generated. Peaks of trading volume in October 2013 coincided with the entering in the main Italian market, MTA. Next graph shows the price and volumes of the SeSa's stock on the left and, on the right side, there is the comparison between normalized movements of the stock and the FTSE Italia Small Cap index. It's clear that SeSa's stock has always outperformed the market.

EXHIBIT 9 SESA: Stock performance							
Pre-announcement period	Pre-voting period	6 months following	12 months following	24 months following	36 months following	48 months following	60 months following
2.04%	7.50%	-1.86%	5.86%	23.53%	31.16%	73.86%	/



INDUSTRIAL STARS OF ITALY

The third Italian special purpose acquisition company was Industrial Stars of Italy, listed on the AIM Italia on 15 July 2013.

It was founded by Attilio Francesco Arietti and Giovanni Cavallini.

The SPAC offered 5,000,000 shares and 2,500,000 warrants (one warrant was associated with two shares). Warrants gave to investors the possibility to buy at the price of €4.65 additional shares according to the following formula: $\frac{Average\ monthly\ price - Strike\ Price}{Average\ Monthly\ Price - Price}$, where *Strike Price* was equal to €9.30. Warrants were exercisable from one month after the effectiveness of the business combination and they expired five years after it or 30 days after the average monthly price would have been over €13.00.

Founders received 150,000 special shares at a price of €10.00: these particular shares were not transferable until the business combination was completed and they didn't carry the right to vote on the acquisition.

Special shares were converted into 7 ordinary shares under the following conditions:

- 50,000 special shares (1/3 on the total) were converted into 350,000 ordinary shares after 7 days from the effectiveness of the business combination;

- 50,000 special shares were converted into 350,000 ordinary shares if, within 28 months from the business combination, the stock price is equal or higher €11,00 for 15 days over 30 consecutive days.
- 100,000 special shares (2/3 on the total) were converted into 700,000 ordinary shares if, within 28 months from the business combination, the stock price is equal or higher €12,00 for 15 days over 30 consecutive days.

If both conditions would be satisfied, founders obtained a total of 1,050,000 ordinary shares, corresponding to around 17% of the SPAC shares. After the conversion, each tranche is subject to a lock-up period of 12 months.
On the contrary, if the last two conditions were not satisfied within 28 months, the remaining special shares would be converted into ordinary shares at the exchange ratio of 1:1.

The board of directors was composed by the two founders and Matteo Tiraboschi, with the role of independent manager.
Giovanni Cavallini, after an MBA at the Harvard Business School of Boston, started his career in 1978 at Boston Consulting Group, where he worked for ten years, founding the Italian subsidiary of the Group as partner. Then he was founder and CEO a large retail chain of bricolage products (later acquired by OBI), he was CEO of the Interpump group and independent member of the board of directors in Ansaldo STS and Migross T.A.S.
Currently, he is member of the board of directors of Brembo S.p.A. and Davide Campari-Milano S.p.A. In 2012, he was nominated '*Cavaliere del Lavoro*' by the President of the Italian Republic.
Attilio Francesco Arietti, after the MBA at the Harvard Business School of Boston, started his professional career as Assistant Manager at Deloitte & Touche in New York and Milan.
In 1980, he founded Baker Tilly Consulaudit S.p.A. (now Baker Tilly Revisa), where he was CEO for 20 years: the company was one of the biggest not '*big four*' accounting firms in Italy.
In 1999, he founded Arietti & Partners S.r.l. – M&A International, an Italian company focused on M&A operations in the mid-market (especially cross-border M&A).
In 2016, the Italian company along with M&A International formed in Italy Oaklins Arietti.
Matteo Tiraboschi started his career as auditor and then as a chartered accountant. Currently, he is Chief Financial Officer in Brembo S.p.A., where he has worked from 2005.

The same group of managers, in May 2016, also founded *Industrial Stars of Italy 2*, which on 20 July 2017 effectively merged with SIT S.p.A., and *Industrial Stars of Italy 3*.

For the success of the business combination, the majority of ordinary shareholders had to vote positively for the approval and only 30% of owners of ordinary shares could exercise their right of redemption.
In the case in which managers of Industrial Stars of Italy would not have been able to either identify a target firm for the business combination within 24 months after the IPO or the shareholders' meeting voted against the acquisition, the SPAC had to be liquidated.

The listing prospectus of the SPAC forecasted that total expenses connected to the initial public offering process of the company should have been €1,380,000, of which €800,000 were distribution fees (1.6% of the public proceeds raised) and the other €580,000 were general expenses for professional services and other costs for the IPO process.
As a result, 100% of proceeds raised during the public offering was deposited in a trust.
In the IPO of Industrial Stars of Italy were involved UBI Banca, Unipol and Banknord as joint global coordinator, joint bookrunner while KPMG was the auditor. UBI Banca was also the Nominated Advisor (NOMAD).

Industrial Stars of Italy intended to focus its attention on finding non-listed Italian medium enterprises which operate both at national and international level.
The SPAC, at the time of the IPO, had not identified a specific sector on which to focus its attention but excluded a priori sectors such as real estate, financial, insurance, renewable energy, along with start-ups and companies in a turnaround situation.
Moreover, the target should have an equity value between €150 and €200 million.

Target company: LU-VE S.p.A.

After 18 months, on 26 January 2015, the special purpose acquisition company announced its target firm: LU-VE S.p.A.
The company offers four main categories of products: *heat exchangers* (for domestic, HORECA, and industrial application, industrial refrigeration, mobile application and power generation), *air-cooled equipment*, *close control air conditioning*, *glass doors and losing systems*.

LU-VE was founded in 1986 in Uboldo (VA), as one of the first venture capital investment in Italy. The company, in fact, acquired Contardo S.p.A. (a bankrupt firm) with a management

buy-out transaction: for this reason, it has been called LU-VE which stands for 'Lucky Venture'.
Currently, the group has ten manufacturing plant in many countries (Italy, Czech Republic, Poland, Sweden, China, and India) and a network of 12 sales offices in Europe, Middle East, and Asia.
Focusing mostly on research and development of new products, LU-VE has been the first company in the world to apply leading-edge technology solutions to commercial and industrial refrigeration. Over the years, the company has introduced a new way of conceiving and making refrigeration and air-conditioning products, using avant-garde technologies which have then become a constant reference point for the entire industry.
In fact, for over twenty years, the Group has collaborated with some of the most outstanding European and Italian Universities, in particular, the '*Politecnico di Milano*'. Currently, it works with 22 Universities and research institutes in 13 different countries.
In the sector in which the company operates, it has technological leadership due to constant introduction of technological innovation and patents onto the market, for setting new energy efficiency standards in the sector and because it is the first company in the world to use nanotechnology in heat exchange process.
Another strength is the R&D leadership because LU-VE has the largest research and development laboratory for its sector in Europe (and it's the only one to test CO_2 systems) and it's the first in the industry to use 'green' technology/solutions.

As result of the acquisition of the SPAC, LU-VE received about €50 million in cash, with would have been utilized to increase the growth of the company. Moreover, in the first semester 2015, the company re-negotiated its debt expenses in order to decrease interests paid.
From 20 June 2017, LU-VE's stocks trade on the main Italian market, the MTA.

Next exhibits present the summarized restated income statement and balance sheet of LU-VE Group.

EXHIBIT 10 LU-VE Group: Restated Income Statement					
€ thousand	2012	2013	2014	2015	2016
Revenues	188,029	199,724	215,488	212,264	251,279
Revenues growth		*6.2%*	*7.9%*	*-1.5%*	*18.4%*
Operating costs	-128,426	-132,880	-140,441	-139,709	-167,339
Personnel expenses	-38,431	-40,002	-43,628	-46,335	-50,965
EBITDA	**21,172**	**26,842**	**31,419**	**26,220**	**32,975**
EBITDA margin	**11.3%**	**13.4%**	**14.6%**	**12.4%**	**13.1%**
D&A	-12,011	-11,966	-11,789	-12,340	-13,491
EBIT	**9,161**	**14,876**	**19,630**	**13,880**	**19,484**
EBIT margin	**4.9%**	**7.4%**	**9.1%**	**6.5%**	**7.8%**
Net income	**6,103**	**8,613**	**10,892**	**9,597**	**18,321**

In 2015, notwithstanding the acquisition of Industrial Stars of Italy, revenues decreased by 1.5% mainly for the effect of exchange rates, especially in countries most affected by commodities' prices (for example Russia). In fact, in the management report of the annual report, the company calculated that, without the negative effect of exchange rates, the decrease in sales would only have been 0.4%. This problem was also reflected in a lower EBITDA.

In 2016, the increase in revenues' growth rates was mainly due to the consolidation of the newly acquired company in India, '*Spirotech*'. This acquisition has been the biggest in the history of the group.

EXHIBIT 11 LU-VE Group: Restated Balance Sheet					
€ thousand	2012	2013	2014	2015	2016
Net working capital	10,255	9,576	7,145	4,543	15,626
Operating fixed capital	98,454	95,510	97,636	98,679	112,815
Other non-current operating assets and liabilities	-10,643	-10,414	-15,138	-10,122	-10,461
Goodwill and other similar intangibles	20,193	18,179	29,572	29,575	48,744
Non-operating assets	1,977	3,089	3,581	67,135	77,204
Total funds invested	**120,236**	**115,940**	**122,796**	**189,810**	**243,928**
Net financial position	41,088	30,813	50,301	60,707	105,597
Debt equivalents	2,825	2,843	3,639	3,305	3,936
Shareholders' equity	76,323	82,284	68,856	125,798	134,395
Total source of financing	**120,236**	**115,940**	**122,796**	**189,810**	**243,928**
ROIC	**11.34%**	**15.12%**	**18.55%**	**11.69%**	**10.02%**
ROA adjusted	**5.04%**	**7.77%**	**9.97%**	**4.84%**	**6.04%**
ROE	**11.72%**	**15.77%**	**16.60%**	**7.84%**	**13.82%**

In 2015, the company invested proceeds received by the SPAC and resulting for the renegotiation of its debt (€65 million) in various financial assets (most of them could be converted into cash quickly, for example, to make new acquisition). These investments

increased the total funds invested but without any impact on net income (ROIC excluding goodwill and other similar intangibles decreased from 18.55% in 2014 to 11.69% in 2015).

To compare the result of LU-VE in the year in which the business combination was completed and the change of the same operating indicators in periods surrounding the acquisition, the competitor 'Aermec' was chosen.

Aermec brand was born in 1963 in Bevilaqua (VR), created by '*Giordano Riello*'. The company offers air conditioning applications for residential, commercial and industrial use as well as data centres and public spaces. It manufactures, among others, hydronic terminals (fan coils and thermo-convectors), heat recovery units, chillers, heat pumps, dry coolers, and air-conditioners. As LU-VE, Aermec applies highly advanced technologies, implementing a continuous product development cycle, pursuing energy efficiency and renewable energy integration. The company is present with its product in Italy, France, Germany, Poland, Russia and the United Kingdom.

EXHIBIT 12 LU-VE Group: Performance

€ thousand	At acquisition	Change 0/+1	Change -1/+1	Change -2/+1
Revenues	**212,264**	**39,015**	**35,791**	**51,555**
Revenues growth		18.38%	16.61%	25.8%
EBITDA	**26,220**	**6,755**	**1,556**	**6,133**
EBITDA margin	**12.35%**	**0.77%**	**-1.46%**	**-0.32%**
EBIT	**13,880**	**5,604**	**-146**	**4,608**
EBIT margin	**6.54%**	**1.21%**	**-1.36%**	**0.31%**
Net income	**9,597**	**8,724**	**7,429**	**9,708**
Total assets	**316,107**	**55,056**	**144,680**	**161,411**
Net financial position	**60,707**	**44,890**	**55,296**	**74,784**
Shareholders' equity	**122,355**	**10,217**	**66,949**	**77,965**
ROIC	**11.69%**	**-1.67%**	**-8.53%**	**-5.10%**
ROA adjusted	**4.84%**	**1.20%**	**-3.93%**	**-1.72%**
ROE	**7.84%**	**5.98%**	**-2.78%**	**-1.95%**
Diff. Revenues from competitor	**33,166**	**22,857**	**2,249**	**15,321**
Diff. Revenues growth competitor		**68.92%**	**-4.13%**	**3.03%**
Diff. EBITDA from competitor	**15,746**	**3,563**	**-3,241**	**2,329**
Diff. EBITDA marg. from competitor	**6.50%**	**-0.38%**	**-2.97%**	**-1.11%**
Diff. ROA adjusted from competitor	**1.08%**	**-0.41%**	**-6.30%**	**-3.69%**
Diff. ROE from competitor	**3.41%**	**4.46%**	**-5.80%**	**-3.28%**
Diff. Earnings from competitor	**5,308**	**-7,028**	**4,155**	**7,900**

Since the acquisition of the SPAC was completed in 2015, there is only one annual report available after the merger, so it was not possible to compute the change of the main operating indicators the five years surrounding the acquisition as in the model of analysis conducted by Ignatyeva, Rauch, and Wahremburg (2013).

However, in the year after the business combination, LU-VE's revenues increased as well as total assets. The increase in sales of 2016 (due to the acquisition of 'Spirotech') increased also

the EBITDA in absolute value but, compared to the year before the acquisition, the EBITDA margin was slightly lower (-1.46%).
Return on invested capital (ROIC) decreased in the year following the acquisition as well as for the three years surrounding the business combination (-8.53%), while ROA (calculated excluding goodwill and other similar intangibles from total assets) increased by 1.20% after one year the acquisition but worsen by 3.93% in the three years surrounding it.
This was mainly due to the cash introduced into the firm' assets by the SPAC that had not been yet utilized for operative investments.

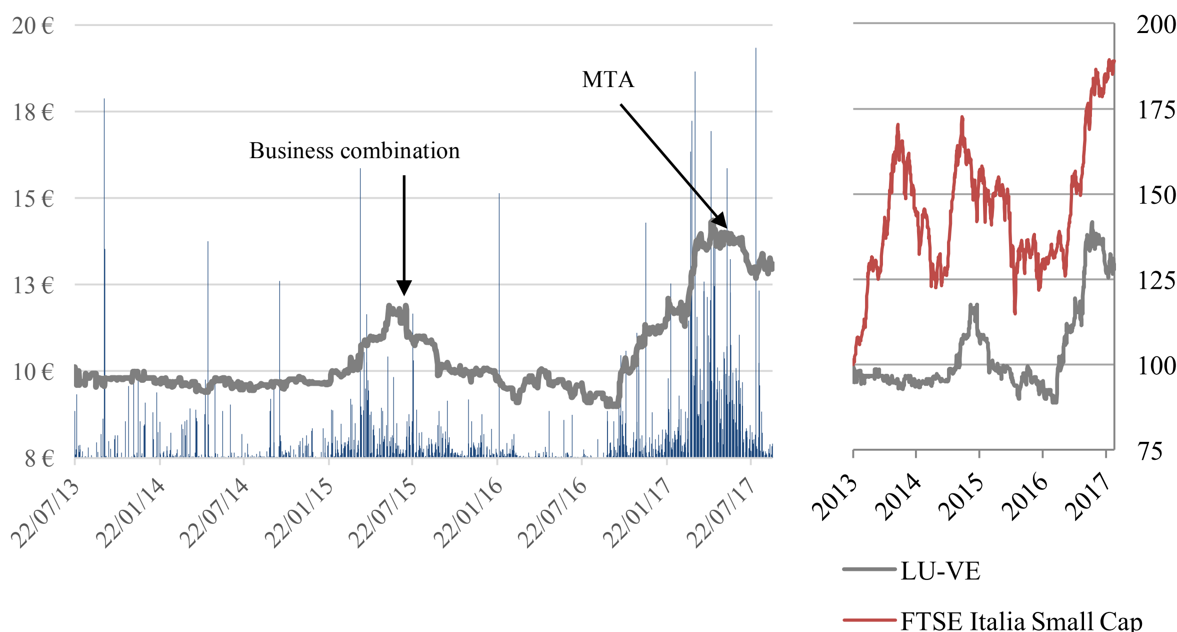
Comparing results with its closest competitor, in line with the U.S. and European literature of SPACs, LU-VE at the time of the acquisition was slightly bigger in term of size and was more profitable (+6.5%), but the profitability in terms of return of assets (excluding goodwill and other similar intangibles) increased more for the competitor than for LU-VE in the year following the business combination and especially considering the three years surrounding it (-6.30%).

The analysis of operating performance suggested that possible reasons why LU-VE entered the public market with a SPAC are not strictly connected with the performance of the company but rather with the condition of financial markets. In fact, the low interest of investors for firms operating in the B2B business (and so not known to the final customer) together with the not so positive market condition could have resulted in a lower market multiple valuation. It's worth to recall that, when going public with a SPAC, the price for the acquisition (and so the valuation of the company) is determined by an agreement between the management of the SPAC and the managers of the target firm, and not by the market as in the case of an IPO.

For what concerns the financial return of company's stocks, during the first year after the business combination the performance was negative but, after two years the return became positive (+20%).
The next graph represents, on the right side, the normalized[26] LU-VE stock's performance compared with the one of the FTSE Italia Small Cap index (containing similar Italian firms): LU-VE's stock has followed movements of the market even if has underperformed the market.

[26] To normalize and compare the LU-VE and the FTSE Italia Small Cap index performances, both values were considered as '100' at the date of the company's IPO.

EXHIBIT 13 LU-VE Group: Stock performance							
Pre-announcement period	Pre-voting period	6 months following	12 months following	24 months following	36 months following	48 months following	60 months following
-3.75%	12.83%	-10.79%	-15.25%	20.25%	N/A	N/A	N/A



SPACE

The special purpose acquisition company *Space* was founded by Gianni Mion, Sergio Erede, Roberto Italia, Carlo Pagliani, Edoardo Subert, Alfredo Ambrosio and Elisabetta De Bernardi. As others Italian SPACs, its scope was to accomplish a business combination with a firm, single business units or spin-offs based in Italy. It was listed on MIV on 18 December 2013.

It offered 15,000,000 shares at the price of €10.00 which embedded two warrants every three market shares. As a result, total proceeds raised through the initial public offering was €150,000,000. Initial shareholders (founders) are given 475,000 special shares at the same price of ordinary shares, and with the same warrants included. Moreover, initial shares of the company (before the IPO), held by founders at the time of the incorporation, were converted into 25,000 special shares. Thus, total special shares amount to 500,000.

To link the remuneration of founders to the performance of the SPAC, special shares would have been converted into 5 ordinary shares under the following conditions:

- 175,000 special shares (35% of the total) were converted into 875,000 ordinary shares at the effectiveness of the business combination;
- 125,000 special shares (25% of the total) were converted into 625,000 ordinary shares if, within 36 months from the business combination, the stock price is equal or higher €11,00 for at least 20 days over 30 consecutive days.

- 100,000 special shares (20% of the total) were converted into 500,000 ordinary shares if, within 36 months from the business combination, the stock price is equal or higher €12,00 for at least 20 days over 30 consecutive days.
- 100,000 special shares (20% of the total) were converted into 500,000 ordinary shares if, within 36 months from the business combination, the stock price is equal or higher €13,00 for at least 20 days over 30 consecutive days.

Thus, if all these conditions are satisfied, founders could have the ownership of about 15% of the special purpose acquisition company, having invested only €5 million.

Without considering the conversion of warrants and considering the stock price at the minimum level for the conversion of all founders' special shares (€13), they could have a return of about *+550%* on their initial investment.

	Number of shares after the acquisition	%	Proceeds	%
Founders	2,500,000	*14,4%*	€5,000,000	3.2%
Investors	15,000,000	*85,6%*	€150,000,000	96.8%
TOTAL	17,500,000	*100%*	€155,000,000	100%

Management team was composed by Gianni Mion (chairman of the board of directors), Roberto Italia (CEO), Sergio Erede, Carlo Pagliani, Edoardo Carlo Maria Subert and, as independent managers, Maria Patrizia Grieco, Micaela Le Divelec Lemmi and Alberto Amadio Tazartes.

Gianni Mion started his career in Peat Marwick Mitchell (now part of KPMG), working as auditor in Rome and Chicago. In 1973 entered as controller in Mc Quay Europa S.p.A. (now part of Daikin Industries Ltd) and from the following year he worked as manager in Gepi S.p.A. until 1983 when he became member of the board of directors of Fintermica S.p.A.

In 1985 was Chief Financial Officer in Marzotto S.p.A. and in 1986 became CEO at Edizione Holding (owned by the Benetton family) where, from 2012, he is executive vice-president.

Roberto Italia started working in STET/Telecom Italia. Then, after an MBA at INSEAD in Fontainebleau has started working in the private equity industry in Warburg Pincus, Henderson Private Capital and eventually in Cinven. He is member of the board of directors in some Italian companies.

Sergio Erede, after having obtained a Master of Law at Harvard Law School in 1964, he became a lawyer in 1967. He started his career being associate with Hale & Dorr (now WilmerHale) in Boston and then with Sullivan & Cromwell in New York. From 1965 to 1969, he was general counsel of IBM in Italy. In 1969, he founded its independent law firm 'Erede e Associati', firstly known for M&A advisory and securities transactions. Then in 1999, his firm merged

with other two important Italian law firm, 'Bonelli e Associati' (specialized in company law and bankruptcy) and 'Pappalardo e Associati' (specialized in antitrust and community law).
Carlo Pagliani began his professional career in the Capital Market department of Hambros Bank, PLC, in London. In 1988, he transferred to Paribas (London) and then to Banque Paribas (Milan). In 1995, he became responsible for Investment Banking in Italy. After joining Morgan Stanley, he became Managing Director and then Senior Advisor. Currently, he is a Consultant for Morgan Stanley.
Edoardo Subert started his career at Citibank where he became director of the M&A group. In 1990, he moved to Rothschild (first in London and then in Milan) becoming partner of the team. Since 2013, he has been senior advisor for the investment banking department of Rothschild in Milan.
Patrizia Grieco started his career in Italtel, where he became CEO after the reorganization of the company. Then she was CEO of Siemens Informatica, Gruppo Value Team (now NTT Data) and Olivetti. She also was member of the board of directors of Fiat Industrial, CNH Industrial, and Anima Holding. Currently, she is chairman of the board of the directors of Enel.
Micaela Le Divelec Lemmi started her career in Ernst&Young as auditor. In 1998, she began working in Gucci, being controller, CFO and, currently, Executive vice-president.
Alberto Amadio Tazartes was manager at Boston Consulting Group (in Paris and Milan). Then, from 1989 to 2005, he was Managing Partner of BC Partners, a private equity firm. From 20017, he is member of the board of directors of 'Fondazione DeAgostini'.

Ordinary shareholders had the right to approve the acquisition of the target firms proposed by managers: for the business combination to be successful, the majority of ordinary shareholders had to vote positively and shareholders representing less than 33% of outstanding shares could exercise the redemption right.
If after 24 months from the IPO, managers have not yet identified any target firm, the SPAC would have been liquidated. In the case in which they identified a target company within 24 months, they have additional six months to call the shareholders' meeting for approving the business combination.

Expenses connected to the IPO process included a 2,25% (€3,375,000) on total proceeds raised as underwriting fees and €1,200,000 as general and advertising costs.
Available resources to managers for running the special purpose acquisition company were all €5,000,000 from special shares placement, plus 1% of proceeds raised through the IPO. As a result, 99% of public placement were deposited in a trust.

In the IPO process were involved Mediobanca and Morgan Stanley as joint global coordinator and Equita SIM as sponsor.

From the listing prospectus, the SPAC specified that it could have acquired majority or minority stakes as well as other equity instruments especially of family-held firms, firms part of private equity funds or firms owned by multinational corporations.
The company intended to focus on Italian sectors which are internationally recognized as excellences such as luxury, fashion, furniture, design, food, biomedical and advanced mechanic industry. Moreover, the SPAC excluded, a priori, companies operating in sectors such as real estates, banking, commodities and in production of weapon.
The management team should have invested at least 67% of IPO proceeds (even if not binding) and could have used other source of financing, being debt or future equity increase.

Target company: F.I.L.A. S.p.A.

After about one year from the IPO, on 15 January 2015, Space announced that its target company would have been 'Fabbrica Italiana Lapis ed Affini S.p.A. (F.I.L.A.).
The F.I.L.A. Group operates in the creativity tools market, producing colouring, design, modelling, writing and painting objects, such as pencils, crayons, modelling clay, chalk, oil colours, acrylics, watercolours, paints and paper for the fine arts, school, and leisure.
With its products, F.I.L.A. is present in many countries in Europe as well as Canada, U.S., Mexico, Brazil, Chile, Argentina, South Africa, China, India, Indonesia, Australia, and Singapore.
The company was founded in 1920 and in almost a century of innovation, it's now one of the leading world groups dedicated to creative expression, with a broad range of brands and thousands of products.
The most important acquisitions have been in the last twenty years: in 1994 it acquired the Italian Company Adica Pongo, in 2005 the U.S. group Dixon Ticonderoga, in 2008 the German group LYRA, in 2010 the Mexican company Lapiceria Mexicana, in 2012 the Brazilian company Lycin and in 2014 the Italian firm Maimeri.

In 2016 the group employed approximately 7,000 individuals in 21 production facilities and 39 subsidiaries across the globe. Its portfolio of brands comprises GIOTTO, DAS, LYRA, Canson, Maimeri, Daler & Rowney Lukas and Ticonderoga.

In 2015 the special purpose acquisition company Space provided net cash flow of €64,766 thousand. This amount, along with other bank loans, allows F.I.L.A. to acquire in 2015 the control of the Indian company Writefine Products Private Limited, and in 2016 of Daler-Rowney Lukas Group, St. Cuthberts and Canson Group. These last three companies produce and distribute materials and accessories on the arts & crafts market (such as the production of high-quality artist's papers), with brands internationally recognized.

EXHIBIT 14 F.I.L.A.: Restated Income Statement

€ thousand	2011	2012	2013	2014	2015	2016
Revenues	217,214	220,429	222,155	237,402	282,543	442,261
Revenues growth		*1.5%*	*0.8%*	*6.9%*	*19.0%*	*56.5%*
Operating costs	-139,890	-142,756	-146,764	-153,554	-185,099	-303,038
Personnel expenses	-42,545	-41,325	-42,205	-48,829	-55,664	-82,399
EBITDA	**34,779**	**36,348**	**33,186**	**35,019**	**41,780**	**56,824**
EBITDA margin	**16.0%**	**16.5%**	**14.9%**	**14.8%**	**14.8%**	**12.8%**
D&A	-5,683	-6,099	-6,033	-5,698	-6,792	-14,910
EBIT	**29,096**	**30,249**	**27,153**	**29,321**	**34,988**	**41,914**
EBIT margin	**13.4%**	**13.7%**	**12.2%**	**12.4%**	**12.4%**	**9.5%**
Net income	**13,899**	**14,571**	**13,550**	**16,681**	**-16,453**	**21,972**

The increase in sales in the last two years are mainly due to external growth. In 2016 the M&A activity brought €133,329 thousand (which comprised, among others, €72,595 thousand from Daler-Rowney Lukas, €37,168 thousand from Writefine Products, €21,353 thousand from Canson group) while the organic growth counted for €25,723 thousand less the negative effect on exchange rates for €11,776 thousand.

The Group suffered a loss in the year when it merged with the SPAC (2015) which was mainly due to non-recurring operating costs of €5,800 thousand, concerning legal and M&A advice on the merger and for €45.8 millions of financial expenses regarding the fair value measurement of Space S.p.A. equity.

EXHIBIT 15 F.I.L.A.: Restated Balance Sheet

€ thousand	2011	2012	2013	2014	2015	2016
Net working capital	106,578	111,196	109,080	121,349	145,852	202,595
Operating fixed capital	38,730	39,366	35,936	38,260	93,846	221,896
Other non-current operating assets and liabilities	552	7,057	5,324	5,142	4,378	2,547
Goodwill and other similar intangibles	6,494	6,509	6,381	8,557	42,212	77,865
Non-operating assets	2,797	3,484	3,506	4,620	-5,585	-26,297
Total funds invested	**155,151**	**167,612**	**160,227**	**177,928**	**280,703**	**478,606**
Net financial position	85,516	85,096	64,032	61,034	42,119	228,293
Debt equivalent	3,548	3,541	3,847	4,926	26,857	11,343
Shareholders' equity	66,087	78,975	92,348	111,968	211,727	238,970
Total source of financing	**155,151**	**167,612**	**160,227**	**177,928**	**280,703**	**478,606**
ROIC	**14.96%**	**14.44%**	**12.44%**	**13.10%**	**13.10%**	**6.20%**
ROA adjusted	**12.55%**	**13.35%**	**11.79%**	**11.37%**	**10.22%**	**6.96%**
ROE	**21.32%**	**18.62%**	**14.76%**	**15.09%**	**-8.76%**	**10.24%**

As already described, after the business combination with Space, the F.I.L.A. group acquired four companies, which were the result of the increase in total funds invested.

To accomplish these acquisitions, it used the cash provided by the transaction and it borrowed €188,498 thousand from banks (Unicredit, Intesa Sanpaolo, Mediobanca and BNL) in 2015. In 2016 the group borrowed other €92,543 thousand for the acquisition of Canson Group, €6,850 thousand for St. Cuthberts Holding and €109,357 thousand for Daler.Rowney Lukas.

In 2016, the year after the acquisition by the special purpose acquisition company, F.I.L.A. suffered a decline in profitability: ROIC and ROA (excluding goodwill and other similar intangibles) decreased by 6.90% and 3.27% respectively. This however is not negative: when a company expands and to operate its business, it needs more fixed operating capital and also more net working capital. As a result, invested capital increases in the year when the investments are made, but returns are postponed to the following years. Obviously, in the calculation of the return of assets were excluded goodwill and other similar intangibles in order not to account for the price premium paid for acquisitions.

The next table exhibits the value of the most important operating indicators and ratio in the year of the business combination, the change of the same indicators in the following years as well as in the 3 and 4 years surrounding the acquisition.

F.I.L.A. performance is compared with the one of '*Sicad Group*', an Italian company founded in 1972 which produces various types of adhesive tape with the brand 'Eurocel'.

The company is headquartered in Uboldo (VA), employs 700 individuals and has five affiliates all over the world. As reported on their website, Sicad's values are *quality, innovation, and safety*.

EXHIBIT 16 F.I.L.A.: Performance				
€ thousand	At acquisition	Change 0/+1	Change -1/+1	Change -2/+1
Revenues	**282,543**	**159,718**	**204,859**	**220,106**
Revenues growth		*56.53%*	*86.29%*	*99.08%*
EBITDA	**41,780**	**15,044**	**21,805**	**23,638**
EBITDA margin	**14.79%**	**-1.94%**	**-1.90%**	**-2.09%**
EBIT	**34,988**	**6,926**	**12,593**	**14,761**
EBIT margin	**12.38%**	**-2.91%**	**-2.87%**	**-2.75%**
Net income	**-16,453**	**38,425**	**5,291**	**8,422**
Total assets	**384,451**	**296,050**	**413,998**	**443,778**
Net financial position	**42,119**	**186,174**	**167,259**	**164,261**
Shareholders' equity	**187,760**	**26,721**	**103,948**	**122,653**
ROIC	**13.10%**	**-6.90%**	**-6.90%**	**-6.24%**
ROA adjusted	**10.22%**	**-3.27%**	**-4.41%**	**-4.83%**
ROE	**-8.76%**	**19.01%**	**-4.85%**	**-4.51%**
Diff. Revenues from competitor	**59,852**	**166,764**	**210,594**	**220,190**
Diff. Revenues growth competitor		**278.63%**	**88.88%**	**99.12%**
Diff. EBITDA from competitor	**17,705**	**15,703**	**21,933**	**15,440**
Diff. EBITDA marg. from competitor	**3.98%**	**-1.99%**	**-2.13%**	**-5.89%**
Diff. ROA adjusted from competitor	**2.42%**	**-3.35%**	**-6.72%**	**-8.86%**
Diff. ROE from competitor	**-14.12%**	**15.16%**	**-8.47%**	**-11.62%**
Diff. Earnings from competitor	**-23,349**	**32,214**	**-862**	**-2,217**

In the year of the acquisition, F.I.L.A. was larger than its competitor *Sicad* in terms of revenues and also more profitable in terms of EBITDA margin. Return on equity was higher for the competitor because, in 2015, F.I.L.A. suffered a loss due to extraordinary expenses related to the merger with the SPAC. However, in the year following the business combination, even if F.I.L.A.'s sales considerably grew more, its profitability decreased respect its competitor: EBITDA margin -1.99% and ROA excluding goodwill and other similar intangibles -3.35%.
These results are in line with the literature on SPACs: target firms after the acquisition uses proceeds received to expand their business and to make new investments rather than improving the profitability of the company.

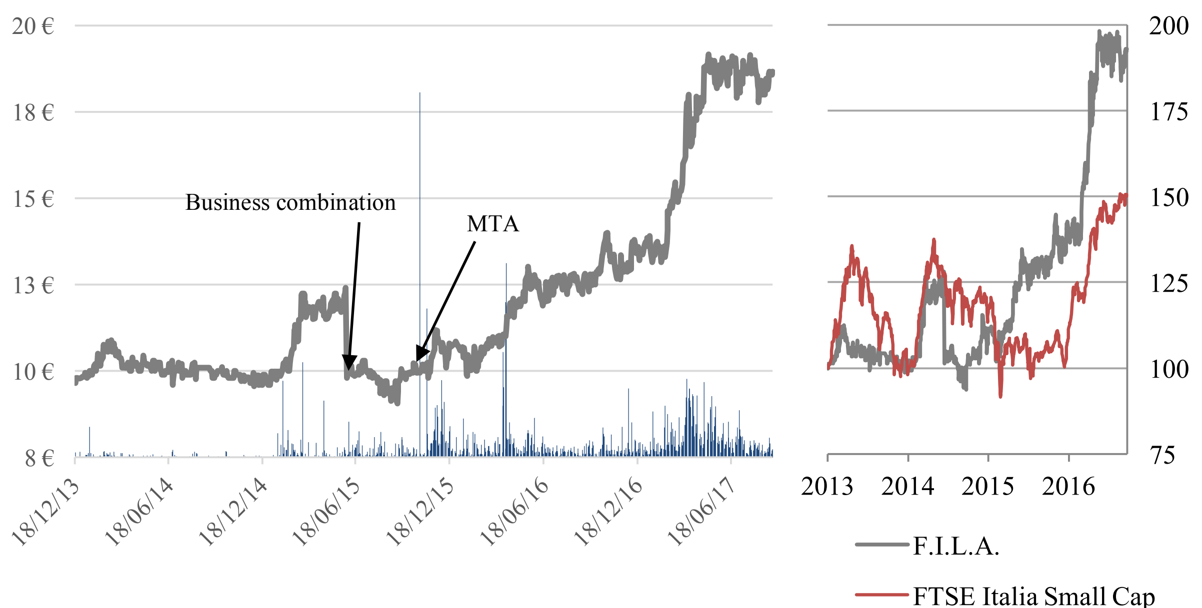
The company, in the four years before the acquisition by the special purpose acquisition company SPACE, increased revenues at a quite low growth rate ($CAGR_{2011\text{-}2014}$ +3%), net income was almost stable, EBITDA and profitability in terms of ROIC (excluding goodwill) was decreasing. These factors, in addition to not so positive market conditions, pushed F.I.L.A. to get listed through the merger with the SPAC which ensured an enterprise value of about 7.25x the EBITDA.

From the IPO of the special purpose acquisition company, the stock price has almost never decreased its value. The increase in the stock price between the announcement of the target and the shareholders' meeting (+16.3%) could indeed be seen as the expression of confidence by investors on the success of the business combination, as suggested by Jenkinson and Sousa (2009). The creation of value is straightforward since in only two years after the merger with Space, F.I.L.A.'s stock price has almost doubled.

On 12 November 2015, stocks were admitted to the segment STAR of the MTA and from since trading volume increased. Since then, F.I.L.A. has always over-performed the FTSE Italia Small Cap index (next graph, on the right side).

EXHIBIT 17 F.I.L.A.: Stock performance

Pre-announcement period	Pre-voting period	6 months following	12 months following	24 months following	36 months following	48 months following	60 months following
0.78%	16.31%	10.20%	30.31%	93.27%	N/A	N/A	N/A



GREENITALY1

Last special purpose acquisition company analysed in this thesis is GreenItaly1, founded by Matteo Carlotti, Idea Capital Funds SGR, and Vedogreen. As its name suggests, the SPAC focused its attention on targets firms operating in the *green economy*.

Idea Capital Funds is a private equity and private debt investment group in Italy while Vedogreen is an Italian company which aim is to finance listed and not-listed *green* firms.

GreenItaly1 offered to ordinary investors 3,500,000 units at a price of €10, which comprised one share and one warrant. Warrants gave to investors the possibility to buy a number of additional shares according to the following formula: $\frac{Average\ monthly\ price - Strike\ Price}{Average\ Monthly\ Price - Price}$, where *Strike Price* was equal to €9.50 and *Price* was €0.10.

Warrants were exercisable from one month after the effectiveness of the business combination and they expired five years after it or 30 days after the average monthly price would have been over €13.30 (+40% on the strike price).

On the other hand, founder shareholders received 120,000 special shares for €10.00. These shares would have been automatically converted into 7 ordinary shares after the following events occurred:

- 40,000 special shares (1/3 on the total) were converted into 280,000 ordinary shares after 7 days the effectiveness of the business combination;
- other 40,000 special shares (1/3 on the total) were converted into 280,000 ordinary shares if, within 24 months from the acquisition, the stock price is equal or higher €12.00 for 15 days over 30 consecutive days, or
- 80,000 special shares (1/3 on the total) were converted into 560,000 ordinary shares if, within 24 months from the acquisition, the stock price is equal or higher €13.50 for 15 days over 30 consecutive days.

If all these conditions would have been satisfied, founders obtained a total of 840,000 ordinary shares, corresponding to around 19% of the SPAC outstanding shares.

In the case in which, after 24 months from the acquisitions, these conditions are not entirely fulfilled, remaining special shares would have been converted into ordinary shares at the exchange ratio of 1:1.

Shares resulting from the conversion of founders' shares were subject to lock-up for 18 months from the effectiveness of the business combination.

On 27 December 2013, GreenItaly1's shares started trading on AIM Italia.

The management team was formed by Matteo Carlotti (chairman), Sergio Luciano Buonanno, Marco Giorgino, Anna Lambiase, Francesco Pintucci, Enrico Testa and Lorenzo Pozza (as independent manager).

Matteo Carlotti started his career as Investment Manager of Chase Capital Partners Italia (then Chase Gemina Italia). Then from 1997 to 2009, we worked in Argos Soditic Italia S.p.A., where he covered the role of Partner, Chairman, and CEO of the company. From 2009 he is a private equity consultant, being non-executive director in some companies, part of private equity funds. He also founded other two special purpose acquisition companies, Made in Italy and Sprint Italy.

Sergio Luciano Buonanno started his career in 1997 in Enel in the research and development division and then as investment manager in Enel Capital between 2000 and 2002. Then he was manager of the M&A team of the Enel group, where he dealt with companies operating in waste to energy sector. Currently, he is managing director in Idea Capital Funds.

Marco Giorgino is a professor of corporate finance and global risk management at the '*Politecnico*' of Milan. He is also a consultant for the banking industry, institutional investors.

Anna Lambiase founded IR Top, now the Italian leader company which provides investor relations, financial communication and capital markets advisory to small and medium capitalization public companies and private small and medium enterprises. He also founded *Vedogreen* in 2012.

Francesco Pintucci was senior associate of Argos Soditic, company which manage closed funds. Then from 2009, he collaborates with Marco Carlotti as specialist in private equity for Swiss Merchant Corporation.

Enrico Testa was president of Legambiente, chairman of the board of directors of ACEA (Azienda Comunale Energia e Ambiente of the municipality of Rome) and Enel and also member of the board of directors of Wind. From 2010 he is vice president of Idea Capital Funds.

Forecasted expenses of the management team in running the company amounted to €250,000 of fixed costs, mainly related to Nomad fees and audit and accounting services. However, this didn't include due diligence expenses.

Underwriting commissions amounted to €880,000 which were partially postponed by the Global Coordinator (Intermonte) after the effectiveness of the business combination.

These expenses were covered by proceeds from special shares (€1,200,000) and, as a result, 100% of proceeds raised in the public offering were deposited in a restricted account, which could only be used for the fulfilment of the business combination, in case of liquidation of the SPAC or to payback dissenting shareholders.

Shareholders, as in all other special purpose acquisition companies, had the right to express their opinion on the proposed target firm by voting at the shareholders' meeting. Required conditions for the approval of the business combination were that the majority of ordinary shares' owners would have voted positively and that only shareholders representing less than 30% of ordinary shares would have exercised their right of redemption (within 15 days from the approval).
In the case in which these conditions were not satisfied or if managers didn't find a suitable target firm within 24 months after the IPO, the special purpose acquisition company would have to liquidate.

According to the listing prospectus, GreenItaly1 sought a target firm operating in sectors such as *eco-building*, *green chemistry*, low impact *lighting solutions*, *smart energy*, *waste management*, *agribusiness*, *eco-mobility*, *environmental services*, *water, air, noise treatment* or *white biotech*. Moreover, the target firm should have an equity value of at least €100 million (not binding).
According to an analysis made by VedoGreen (2013), companies operating in the *green economy* were concentrated in the north of Italy (77%), especially in Lombardy (34%), Veneto (14%) and Emilia-Romagna (14%). Moreover, on the total *green economy* firms, 36% operates in *smart energy* sector, 21% in *waste management* sector and 11% in *eco-building* sector.

Target company: Zephyro S.p.A.

After almost 18 months, on 25 June 2015, GreenItaly1 announced to have found its target company: 'Prima Vera S.p.A.'. On 13 January 2016, the company changed its name to Zephyro S.p.A. This company is an Italian operator in the energy efficiency sector and a provider of integrated energy management solutions for complex structures, such as large enterprises, government agencies, large private and public building and healthcare facilities. Integrated energy management comprises the design, implementation, and financing of energy requalification with high-technological content aimed at reducing fuel consumption and pollutant emissions while achieving cost savings.

Zephyro was founded in 2000 in Milan by the actual chairman Domenico Catanese which, in an interview after the announcement of the deal said: "*L'operazione con GreenItaly1 permette*

la trasformazione indispensabile nella futura proiezione di Prima Vera, con l'obiettivo di proseguire nel percorso di crescita in un settore strategico per il futuro del Paese e competere sui mercati internazionali. La SPAC rappresenta lo strumento ideale per reperire i capitali necessari ad accelerare il processo di consolidamento della nostra leadership e incrementare lo standing sul mercato, coinvolgendo nel capitale primari investitori istituzionali".
Zephyro has three different business units: *energy*, *biomedical* and *facility management*.
The biomedical division provides the management and the maintenance of biomedical equipment in hospitals in Italy.

The business combination consisted in Grennitlay1 acquiring a minority stake of 8.6% of Prima Vera for €8 million. Thus, the equity of the company was valued €93 million.

EXHIBIT 18 Zephyro: Restated Income Statements

€ thousand	2010	2011	2012	2013	2014	2015	2016
Revenues	76,419	85,265	96,992	101,412	96,113	101,196	94,616
Revenues growth		11.6%	13.8%	4.6%	-5.2%	5.3%	-6.5%
Operating costs	-56,944	-64,348	-73,631	-74,691	-70,120	-75,573	-58,465
Personnel expenses	-6,467	-7,889	-9,542	-11,029	-12,881	-13,823	-12,052
EBITDA	**13,008**	**13,028**	**13,819**	**15,693**	**13,111**	**11,800**	**24,100**
EBITDA margin	**17.0%**	**15.3%**	**14.2%**	**15.5%**	**13.6%**	**11.7%**	**25.5%**
D&A	-1,408	-2,518	-3,635	-5,853	-6,990	-8,207	-10,757
EBIT	**11,600**	**10,510**	**10,184**	**9,840**	**6,121**	**3,593**	**13,344**
EBIT margin	**15.2%**	**12.3%**	**10.5%**	**9.7%**	**6.4%**	**3.6%**	**14.1%**
Net income	**7,296**	**6,288**	**6,181**	**6,616**	**3,829**	**2,730**	**13,301**

In 2015 the increase in revenues was driven mainly by new energy-efficiency management contracts with hospitals and new agreements in the biomedical sector.
In 2016, the decrease in revenues was due to the delay in the signing of relevant contracts, along with the reduction in sales in the biomedical business unit. However, in 2016, the lower operating costs increased the profitability of the company, reaching an EBITDA margin of 25.5%, respect to 11.7% in 2015.

EXHIBIT 19 Zephyro: Restated Balance Sheet

€ thousand	2010	2011	2012	2013	2014	2015	2016
Net working capital	10,727	5,730	6,978	10,432	6,126	-4,883	8,797
Operating fixed capital	11,525	18,773	15,313	14,449	28,350	39,586	40,352
Other non-current operating assets and liabilities	-5,974	-5,581	-7,730	-7,039	-868	16,732	12,845
Goodwill and other similar intangibles	0	0	0	5	0	5,721	4,570
Non-operating assets	-534	-248	722	-2,654	-7,186	-7,059	-7,848
Total funds invested	**15,744**	**18,674**	**15,283**	**15,194**	**26,423**	**50,097**	**58,717**
Net financial position	-143	-3,426	-7,535	-14,537	2,516	-11,148	-5,180
Debt equivalent	395	635	987	1,265	1,611	1,880	1,090
Shareholders' equity	15,492	21,465	21,831	28,466	22,295	59,366	62,807
Total source of financing	**15,744**	**18,674**	**15,283**	**15,194**	**26,423**	**50,097**	**58,717**
ROIC	**48.64%**	**41.18%**	**42.92%**	**40.27%**	**17.26%**	**9.57%**	**26.79%**
ROA adjusted	**14.57%**	**11.95%**	**10.41%**	**9.85%**	**6.18%**	**2.47%**	**10.35%**
ROE	**47.10%**	**29.29%**	**28.31%**	**23.24%**	**17.17%**	**4.60%**	**21.18%**

The merger between the SPAC and Zephyro improved the financial structure of the latter by increasing the equity and the net financial position.

Moreover, the company increased its equity investments in other companies and, in 2016, Biomedicale S.r.l. was created as spin-off of Zephyro.

It's worth to highlight that in the years before the merger with the SPAC (2015), the company suffered a decreased in revenues' growth (-5.2% in 2014) and a decrease in the profitability of invested capital (ROIC).

Carbotermo S.p.A. was chosen as the closest competitor of Zephyro in terms of sectors and dimension. This company operates in the energy sector since 1951, when it was founded in Milan. It has a turnover of €90 million and employs over 250 individuals.

Through its business unit 'Engineering', the company provides services covering the design and the implementation of advanced heating systems, ensuring high performance, dependability as well as low costs and energy efficiency.

Next table shows the analysis of Zephyro's operating performance in the year of the business combination and in the years surrounding it, as in Ignatyeva, Rauch, and Wahremburg (2013).

EXHIBIT 20 Zephyro: Performance				
€ thousand	At acquisition	Change 0/+1	Change -1/+1	Change -2/+1
Revenues	**101,196**	**-6,580**	**-1,496**	**-6,796**
Revenues growth		-6.50%	-1.56%	-6.70%
EBITDA	**11,800**	**12,300**	**10,989**	**8,407**
EBITDA margin	**11.66%**	**13.81%**	**11.83%**	**10.00%**
EBIT	**3,593**	**9,751**	**7,223**	**3,503**
EBIT margin	**3.55%**	**10.55%**	**7.73%**	**4.40%**
Net income	2,730	10,571	9,472	6,685
TOTAL ASSETS	**151,060**	**-17,597**	**34,389**	**33,543**
Net financial position	**-11,148**	**5,968**	**-7,696**	**9,357**
Shareholders' equity	**59,366**	**3,441**	**40,512**	**34,341**
ROIC	**9.57%**	**17.22%**	**9.54%**	**-13.48%**
ROA adjusted	**2.47%**	**7.88%**	**4.17%**	**0.50%**
ROE	**4.60%**	**16.58%**	**4.00%**	**-2.06%**
Diff. Revenues from competitor	**31,083**	**-5,847**	**10,100**	**7,187**
Diff. Revenues growth competitor		**-18.81%**	**12.76%**	**10.07%**
Diff. EBITDA from competitor	**-135**	**10,219**	**11,089**	**9,168**
Diff. EBITDA marg. from competitor	**-5.36%**	**10.63%**	**9.06%**	**7.52%**
Diff. ROA adjusted from competitor	**-4.28%**	**6.53%**	**5.12%**	**2.54%**
Diff. ROE from competitor	**-6.86%**	**14.24%**	**8.44%**	**4.06%**
Diff. Earnings from competitor	**-2,654**	**8,432**	**10,076**	**6,562**

As previously described, in the year after the merger with GreenItaly1, Zephyro's revenues growth was negative although the EBITDA margin increased, resulting in a higher net income. ROIC excluding goodwill and other similar intangibles, in the year following the acquisition increased by 17.22%, increasing the profitability of the company.
Comparing the company's performance with its competitor, even if in 2015 Carbotermo was more profitable, in 2016 Zephyro increased significantly the EBITDA margin with respected to its competitor (+10.63%) as well as ROA (calculated excluding goodwill and other similar intangibles (+6.53%).

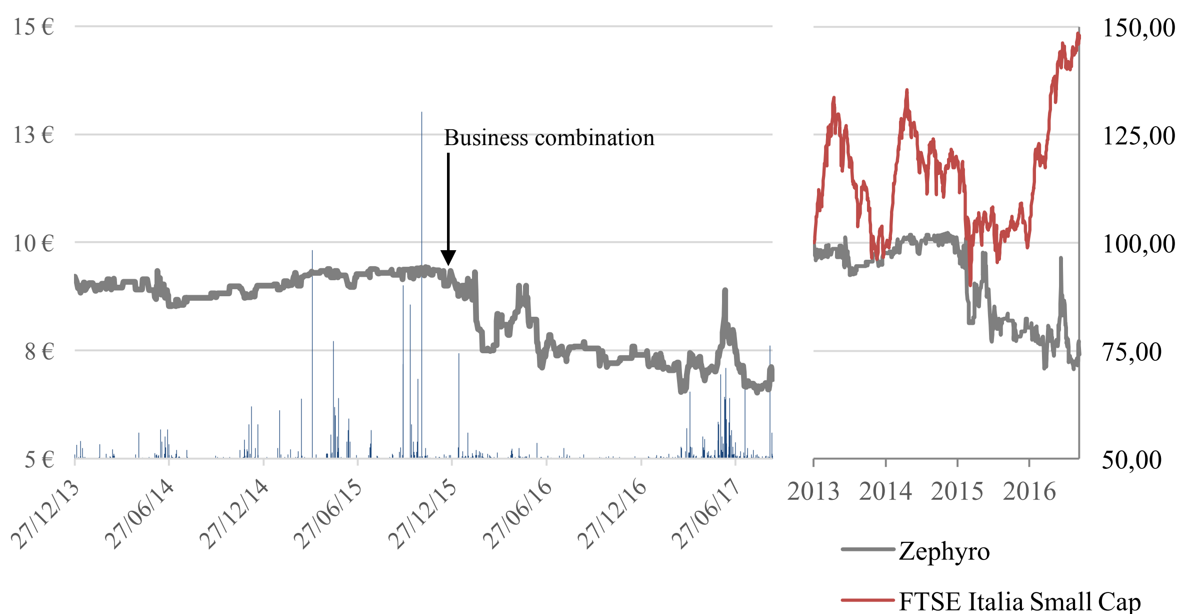
From the analysis of operating performance of Zephyro there are some considerations to be made regarding the possibility of the firm to get listed by itself through an initial public offering. In fact, in the 3 years before the business combination with the SPAC, the firm's sales were almost unchanged (in 2013 increased but in 2014 they returned to the 2012's level), the compound annual growth rate (CAGR) of EBITDA margin in the same period was -2.6% and the $CAGR_{2012\text{-}2014}$ of ROIC was -36.6%.
These data suggest that before the opportunity offered by the SPAC, the firm didn't show a sustainable growth in its business and increasing profitability, which are substantial prerequisites for an IPO. However, even if data are not sufficient to judge the success of the deal, in the year after the business combination the Zephyro considerably increased its

EBITDA, ROIC and ROA (excluding goodwill and other similar intangibles), respectively by €12 million, 17.22% and 7.88%.

On the other hand, even if the operating performance of Zephyro seemed to be positive, the stock performance was not so good. Before the business combination, the stock's return was only slightly positive, suggesting that maybe investors were not so confident in the success of the business combination. Unfortunately, at the time when this thesis was written, there were no long-term financial data for a more accurate analysis.
However, the example of LU-VE suggested that is not impossible that a target firm of a SPAC could increase its market value after a period of reorganization and expansion.
An important feature to take into account is the market in which the stocks trade: in fact, target companies which have transferred its shares to the main Italian market (MTA) typically have increased their market capitalization.
The right-side graph (here below) makes clear that, even if in some period the Zephyro's stock followed the market trend, it clearly performed worse than the market (FTSE Italian Small Cap index).

EXHIBIT 21 Zephyro: Stock performance

Pre-announcement period	Pre-voting period	6 months following	12 months following	24 months following	36 months following	48 months following	60 months following
0.51%	1.28%	-20.64%	-20.75%	N/A	N/A	N/A	N/A



5.3. Results: operating and stock performance

After having briefly presented the main characteristics of the first five Italian special purpose acquisition companies, in this final section data were summarized to provide an analysis following the model of Ignatyeva, Rauch and Wahrenburg (2013) and Kolb and Tykvová (2016).

Firstly, ***operating performance*** is presented. To prepare the following exhibit, the most important indicators for all five SPACs' target firms previously analysed were taken and the simple average and the median value were computed.

The same applied for the difference of each target firm with its peer company in order to investigate how SPACs' targets performed compared to their competitors.

Peer companies, by definitions, are those which have the same characteristics, are comparable in terms of size, profitability and operate in the same industries of those of SPACs' target firms.

EXHIBIT 22 SUMAMRY STATISTICS

	At acquisition		Change 0/+1		Change -1/+1		Change -2/+1		Change -2/+2[27]	
€ thousand	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Revenues	**345,215**	**282,543**	**64,447**	**39,015**	**81,784**	**35,791**	**101,760**	**51,555**	**182,715**	**182,715**
Revenues growth			17.45%	13.85%	26.07%	16.61%	32.20%	25.81%	30.61%	30.61%
EBITDA	**37,519**	**41,780**	**7,431**	**6,755**	**8,718**	**5,974**	**11,276**	**8,407**	**9,609**	**9,609**
EBITDA margin	**13.09%**	**12.35%**	**2.38%**	**-0.15%**	**1.53%**	**-0.46%**	**1.46%**	**-0.32%**	**-0.71%**	**-0.71**
EBIT	**23,177**	**25,282**	**5,157**	**5,604**	**5,125**	**3,061**	**7,781**	**6,951**	**8,818**	**8,818**
EBIT margin	**7.11%**	**6.54%**	**1.76%**	**0.37%**	**0.63%**	**-0.31%**	**0.65%**	**0.31%**	**0.31%**	**0.31%**
Net income	**495**	**2,730**	**15,874**	**10,571**	**5,929**	**5,291**	**7,185**	**8,422**	**4,168**	**4,168**
NOPLAT	**19,524**	**24,215**	**2,028**	**3,073**	**4,681**	**1,335**	**6,252**	**3,338**	**7,919**	**7,919**
ROIC (excl. Goodwill)	**14.66%**	**13.10%**	**0.86%**	**-1.67%**	**-0.89%**	**-1.32%**	**-3.86%**	**-5.10%**	**1.26%**	**1.26%**
Total assets	**395,174**	**384,451**	**80,586**	**55,056**	**161,698**	**137,317**	**192,908**	**161,411**	**196,316**	**196,316**
Net financial position	**51,050**	**42,119**	**50,679**	**20,322**	**-1,565**	**-7,696**	**2,615**	**9,357**	**-103,011**	**-103,011**
Long-term debt	**46,439**	**13,580**	**65,240**	**13,888**	**33,845**	**7,919**	**31,477**	**7,705**	**-5,889**	**-5,889**
Shareholders' equity	**158,962**	**127,229**	**11,883**	**10,217**	**102,797**	**66,949**	**111,591**	**77,965**	**163,879**	**163,879**
ROA adjusted	**6.62%**	**7.39%**	**1.09%**	**0.08%**	**-1.36%**	**-1.79%**	**-1.70%**	**-1.72%**	**-1.46%**	**-1.46%**
ROE	**3.04%**	**4.60%**	**9.49%**	**7.04%**	**-2.64%**	**-3.69%**	**-3.72%**	**-2.94%**	**-6.01%**	**-6.01%**
Diff. from competitor of:										
Revenues	**-41,278**	**33,166**	**57,895**	**22,857**	**63,940**	**38,418**	**52,777**	**15,321**	**51,076**	**51,076**
Revenues growth			***64.7%***	***15.7%***	***24.4%***	***12.8%***	***25.2%***	***8.0%***	***15.6%***	***15.6%***
EBITDA	**7,575**	**15,746**	**5,851**	**3,563**	**6,351**	**5,273**	**8,720**	**9,168**	**-1,201**	**-1,201**
EBITDA margin	**1.18%**	**0.42%**	**1.44%**	**-0.38%**	**0.42%**	**-1.25%**	**0.29%**	**-0.29%**	**-0.60%**	**-0.60%**
ROA adjusted	**-0.75%**	**-1.14%**	**0.87%**	**-0.41%**	**-1.78%**	**-1.82%**	**-1.40%**	**-0.63%**	**0.21%**	**0.21%**
ROE	**-7.81%**	**-10.56%**	**-1.24%**	**12.01%**	**-43.87%**	**-8.47%**	**-16.97%**	**-11.62%**	**-10.08%**	**-10.08%**
Earnings	**-5,920**	**-2,654**	**-17,147**	**8,432**	**-38,802**	**-363**	**-25,567**	**-2,217**	**314**	**314**

[27] Only 2 observations.

From exhibit 22 can be seen that, on average, target firms increased their revenues in the years following the business combination with a SPAC. The same applied to net income and especially to total assets. The low level of the average net income at the time of the acquisition, however, was due to losses suffered by IVS Group and F.I.L.A., because of higher expenses connected to the business combination.
To increase their assets, analysed firms used money received by the SPACs but they also got new loans from banks. Total assets increased, on average, by €80 million in the year after the acquisition and long-term debt by €65 million in the same period.
Moreover, these firms on averagely slightly increased the EBITDA margin (+2.38%) in the year following the business combination.
On the other hand, profitability on assets excluding goodwill and other similar intangibles (ROIC) remained almost unchanged: 0.86% in the year after the merger with the SPAC and -0.89% in three years surrounding it. The same applied with ROA (adjusted by excluding goodwill and other similar intangibles).

Thus, data on Italian target firms of special purpose acquisition companies, are in line with the international literature. In fact, on average they increased revenues, total assets and long-term debt in the years following the business combination.
On the other hand, although international literature pointed out that target firms of SPACs were of lower quality and they worsen the profitability following the merger (for example Ignatyeva et al., 2013[28]), in Italy the scenario was better.
Data on Italian target firms didn't provide a strong positive relationship between being a SPAC's target and profitability but at least it's not negative.
This could be the effect of the investment strategy of SPACs: in fact, they typically acquire a minority stake in their target firms (not acquiring the control) but, from a qualitative point of view, they only offer the expertise of SPAC's managers in the board of directors. As a result, CEO of a target firm remains the same, not compromising the original idea of the business and the implementation of the business plan. This implies that the CEO focuses more on business development (through internal and external growth) by operating in the same way as before and so not increasing the profitability of the firm significantly (at least in the few years analysed).
This is in line with Dimitrova (2016), which suggested that the higher was the SPAC sponsors involvement as shareholders and board members, the worse the target firm performance were. However, SPAC sponsors' representation in the board of directors, had a positive effect on performance: he found that, after two years from the acquisition, returns were at least 57%

[28] See chapter 4.

higher if one SPAC sponsor was appointed as a chairman of the merged company. For Dimitrova (2016), sponsors '*may add value by monitoring the newly merged company, at least initially after the acquisition*'.
Moreover, he found evidence that the involvement of the target management also affected performance on average because they know better the business and, sometimes, they are also the founders of the target firm.

Compared to their competitor, at the time of the acquisition, Italian SPACs' target firms on average were smaller but the positive median value suggests the presence of an outlier (SeSa). Moreover, EBITDA margin for SPACs' targets was higher on average (+1.18%) than their competitors.
In the year following the acquisition target firms increased turnover considerably: on average +64.7% compared to their competitors. The same applied considering 3 and 5 years surrounding the acquisition.
About EBITDA margin, on average target firms slightly increased profitability (+1.44% compared to competitors in the year after the business combination). However, the median result is negative (-0.38%): in fact, IVS Group, SeSa, LU-VE and F.I.L.A. suffered a decrease in EBITDA margin respect to competitors (even if not severe, between 0.5% and 2%) in the year following the acquisition while Zephyro positively improved it (+10% in the following year) respect to its competitor 'Carbotermo'.
To compare the profitability of the companies' assets, was calculated the difference of ROA between each SPAC's target firm and its competitor: in this ratio were not included goodwill and other similar intangibles from total assets to account for different business strategies of companies in the same industry (external growth generates goodwill while internal growth not). Thus, the average ROA adjusted of SPACs' target firms was almost equal to those of their competitor at the time of the acquisition (-0.75%) as well as the change in the first years after (0.87%). In the three years surrounding the acquisition, competitors of SPACs' target firms increased more their ROA adjusted by 1.78%.

After having presented the operating performance of the first five target firms of Italian SPACs, it's important to summarize the possible drivers of that pushed these firms to enter the public market indirectly, rather than directly with an initial public offering.
Although there was not a single and clear cause of why the analysed target firms used a SPAC to get listed, some hypothesis can be suggested.

SPAC	Target firm	Business Combination	Possible main causes
Italy 1 Investment	IVS Group	16-05-2012	High debt
Made in Italy 1	SeSa	01-02-2013	Negative market condition, market probably not interest in the industry
Industrial Stars of Italy	LU-VE	09-07-2015	Negative market condition, market probably not interest in the B2B industry
Space	F.I.L.A.	01-06-2015	Not great past performance, Negative market condition
GreenItaly 1	Zephyro	23-12-2015	Poor past performance

For some firms, it would have been difficult to enter into the public markets because of their own financial problems. For example, IVS Group was highly leveraged while F.I.L.A. and Zephyro experienced poor financial performance (especially the latter).

Having an adequate financial structure, good past performance, and increasing ROIC are indeed substantial prerequisites to go public through an IPO.

On the other hand, for SeSa and LU-VE the causes are not straightforward. Their financial statements of the years before the acquisition showed positive growth rate for revenues, increasing EBITDA and ROIC excluding goodwill and other similar intangibles. Moreover, SeSa reduced its net financial position (from €61 million in 2011 to €13 million in 2012).

In these cases, firms probably decided to enter into agreements with a special purpose acquisition company because of the negative financial market conditions (in 2013 and even in 2015) and because of the scarce interest of investors and markets for industries in which they operate (B2B and IT software and computers support).

As previously explained, in periods when market conditions are not robust and are not favourable for new IPOs, companies are reluctant to start a costly IPO process (both in term of money and time) with the probability that investors could change their mind, or that the final companies' valuation could be lower than their expectations, or with a possible higher underpricing effect.

In these situations, SPACs can be the solution for going public, as suggested by Boyer and Baigent (2008). In fact, using these special companies, the valuation of their targets firms is not influenced by market environment but, on the contrary, it's determined by the agreement between the management of the SPAC and the managers of the target firm.

However, these companies are not of second quality and, maybe in other periods, they could have been listed directly through an IPO.

This reasoning is also proved by the fact that, currently, four out of five firms analysed had successfully completed the transition to the main Italian public market (MTA) with stricter requisites (*see paragraph 5.1).*

In the next exhibit, the ***stock performance*** of all five special purpose acquisition companies analysed is presented. The following data shows the difference in closing prices[29] in each relative date.

RETURN SPACs	Pre-announcement period	Pre-voting period	+ 6 months	+ 12 months	+ 24 months	+ 36 months	+ 48 months	+ 60 months
Italy 1 Investment	-1.00%	-1.31%	-1.10%	-36.00%	-8.55%	-26.05%	-20.20%	26.50%
Made in Italy 1	2.04%	7.50%	-1.86%	5.86%	23.53%	31.16%	73.86%	/
Industrial Stars of Italy	-3.75%	12.83%	-10.79%	-15.25%	20.25%	/	/	/
Space	0.78%	16.31%	10.20%	30.31%	93.27%	/	/	/
Green Italy 1	0.51%	1.28%	-20.64%	-20.75%	/	/	/	/
AVERAGE	**-0.28%**	**7.32%**	**-4.84%**	**-7.17%**	**32.12%**	**2.56%**	**26.83%**	**26.50%**
MEDIAN	**0.51%**	**7.50%**	**-1.86%**	**-15.25%**	**21.89%**	**2.56%**	**26.83%**	**26.50%**
VOLATILITY	**2.2%**	**7.5%**	**11.6%**	**25.8%**	**43.2%**	**40.5%**	**66.5%**	**/**

These data provide (partial) support for the European and international literature, suggesting that in the pre-announcement period stock performance should be almost zero, while in the pre-voting period the return of SPACs' stocks should reflect the market opinion about the ability of the business combination to create value. In fact, according to Jenkinson and Sousa (2009), market reaction in this phase predicts the future return of the stock in the long run.

This is precisely what happened in Italy: on average, in the pre-voting period Italian SPACs' investors got a return of 7.32% and, after two years, they received +32.12%.

Unfortunately, for periods longer than two years from the business combination of Italian SPACs and their target firms, there were available data for only two companies (IVS Group and SeSa), so the results for 36, 48 and 60 months after the business combination of Italian SPAC are incomplete.

However, after 24 months after the acquisition, on average target firms increased their stock price by 32.1%. The overall analysis provides the empirical proof that special purpose acquisition companies can be a possible positive investment for all investors in Italy.

[29] From EIKON database by Thomson Reuters.

As described in chapter 4, in literature there are two main studies of SPACs' stock performance which differs from each other for the period of analysis and the data they used: Ignatyeva, Rauch and Wahremburg (2013) presented raw stock return while Kolb and Tykvová (2016) presented the difference of U.S. SPACs returns and a market index.

Next exhibit shows average raw returns of the 19 European SPACs analysed between 2005 and 2011 analysed by Ignatyeva, Rauch and Wahrenburg.

	Pre-announcement period	Pre-voting period	+ 6 months	+ 12 months	+ 24 months	+ 36 months	+ 48 months	+ 60 months
Average	0.60%	3.00%	-11.00%	-14.40%	/	/	/	/

They suggested that the post-acquisition period of European SPACs was characterized by negative returns (-14.40% after one year), even if they performed better compared to U.S. SPACs: Jog and Sun (2007) found an annualized return of -17.34% and Jenkinson and Sousa (2011) found a -55% after one year.

Compared to their analysis, after one year from the business combination, Italian SPACs performed better on average (-7.17%) than European and U.S. ones.

From another perspective, Kolb and Tykvová compared U.S. SPACs' target firms with the return of the Russell 2000 index, the U.S. index representing small-capitalization stock market.

	Pre-announcement period	Pre-voting period	+ 6 months	+ 12 months	+ 24 months	+ 36 months	+ 48 months	+ 60 months
Difference of U.S. SPACs' target firms return and Russell 2000 index								
AVERAGE	/	/	**-29%**	**-46%**	**-59%**	/	/	**-102%**
MEDIAN	/	/	**-28%**	**-46%**	**-56%**	/	/	**-90%**

Following this approach, the stock returns of each Italian SPAC were compared to the return of a comparable index in the same period.

The best index that should be used would have been the FTSE AIM Italia index, which comprises all companies listed on the AIM Italia market and presumably should have the same risk and liquidity of SPACs listed on the same market.

However, this index was created only on 1 March 2012, after the merger between AIM Italia and MAC segment of Borsa Italiana, while the first Italian SPAC got listed in 2011; therefore the FTSE Italia Small Cap index was used. This index contains companies with a small capitalization not part of the FTSE MIB and FTSE Italia Medium Cap (companies in this index represent 4% on the entire Borsa Italiana capitalization).

Next exhibit represents the average and medium return of Italian SPACs compared to the FTSE Italia Small Cap index. Volatility was computed as the standard deviation of the difference between the return of each SPAC and the return of the index in the same period.

	Pre-announcement period	Pre-voting period	+ 6 months	+ 12 months	+ 24 months	+ 36 months	+ 48 months	+ 60 months
Difference of SPACs' return and FTSE Italia Small Cap								
AVERAGE	**-1.11%**	**2.88%**	**0.93%**	**-5.11%**	**8.32%**	**-29.53%**	**1.21%**	**-38.18%**
MEDIAN	**-0.75%**	**3.91%**	**2.45%**	**-15.94%**	**-0.39%**	**-29.53%**	**1.21%**	**-38.18%**
VOLATILITY	29.99%*	**9.57%**	**10.78%**	**30.09%**	**50.62%**	**59.54%**	**56.12%**	**/**
FTSE Italia Small Cap return								
AVERAGE	0.83%	4.45%	-5.77%	-2.06%	23.81%	32.09%	25.62%	64.68%
MEDIAN	1.52%	-2.63%	-4.58%	-4.81%	22.28%	32.09%	25.62%	64.68%
VOLATILITY	28.55%	14.75%	4.44%	15.66%	8.24%	19.09%	10.39%	/

Results are not linear and, also considering that the number of observations was limited (only 5 SPACs), it is not possible to suggest if there was a relation between SPACs' returns and the one of the FTSE Italian Small Cap index.
One thing to be noted is that the volatility was higher in SPACs than in the index, because of the high heterogeneity of the special purpose acquisition companies' target firms.
Moreover, volatility in the pre-announcement period is misleading because in that phase SPACs are considered as a free-risk investment and, comparing it with companies operating in different industries, for sure carries an equity risk higher than a free-risk rate.
In any case, even if the relationship between stock performance of Italian SPACs and FTSE Italia Small Cap index was not linear, it was better than the relationship between U.S. SPACs and Russell 2000 index: after 2 years the business combination Italian SPACs on average over-performed the market index by 8.32% while U.S. ones on average underperformed the market index by 59%.

Concluding, results of operating and stock performances of the first five Italian SPACs suggested that they were able on average to increase revenues and total assets while the profitability of target firms remained unchanged or slightly decreased in terms of EBITDA margin and return on invested capital (ROIC).
For what concerns stock performance, although in the first year after the business combination Italian SPACs' target firms suffered a reduction in the stock price (probably due to the less liquid market where they were listed), they increased their stock price on average by 32.1% after 2 years from the acquisition.

These analyses suggested that sponsors and managers of Italian special purpose acquisition companies were able to identify target firms for their SPACs with hidden potential and by the cash and expertise provided by special purpose acquisition companies, they were able to increase firms' growth and create value for shareholders.

Using the concept of Kolb and Tykvová (2016), Italian SPACs' managers were able 'to turn frogs into prices'.

CONCLUSIONS

After the presentation of the main characteristics of a special purpose acquisition company and the difference between it and an initial public offering (IPO) or a private equity fund, in this thesis was conducted an empirical analysis of Italian SPACs and their target firms, following models in literature (Ignatyeva, Rauch and Wahremburg, 2013 and Kolb and Tykvová, 2016), in order to understand if these special investment vehicles can increase the value of Italian firms. In particular, the first five Italian SPACs were analysed, identifying their operating and stock performances.

The study was performed by considering some financial indicators for each SPACs' target firm such as revenues, EBITDA, total assets, ROA, and ROIC excluding goodwill and other similar intangibles. These indicators were calculated in the year of the targets' acquisition by SPACs and the change of the same indicators in the three or five years surrounding the business combination.

Results of similar analyses in literature pointed out that firms which got listed through a SPAC increased revenues, total assets and debt although they suffered a worsening in profitability. Moreover, stock returns of companies after the business combination were negative, especially for U.S. SPACs' target firms.

In fact, according to them, only less-performing and highly leverage firms used SPACs to enter into public markets, while companies with a positive financial background, sustainable financial structure, and a good competitive advantage used the direct way to get listed, the IPO.

The result of the empirical analysis is that, thanks to the new capital brought by special purpose acquisition companies and additional debt, Italian target firms were able, on average, to increase their size: in the year following the acquisition revenues grew at +17.45%, and also their assets increased by €80 million. In addition, they on average increased the EBITDA margin by +2.38%.

On the other hand, profitability on invested capital excluding goodwill and other similar intangibles (ROIC) remained almost unchanged (or slightly decreased): 0.86% in the year after the merger with the SPAC and -0.89% in three years surrounding it. The same applied with ROA (adjusted by excluding goodwill and other similar intangibles from total assets).

With respect to their competitors, although target firms were on average smaller in terms of revenues, they increased more in the years following their acquisition by a SPAC. Profitability

in terms of EBITDA and ROA (calculated excluding goodwill and other similar intangibles from assets) was similar to the target firms' competitors and didn't improve more in the year following the acquisition.
This probably because management of firms focused more on growth and making new investments rather than increasing the profitability of their firms. Returns on new investments will be indeed postponed to the following years.

Before the announcement of their target firm, so when Italian SPACs were only cash shell, stock returns were on average flat, in line with the literature. Then, in the period from the announcement of the target firm to the shareholders' vote on the acquisition, the stock returns on average increased, suggesting that market valued the deal as value creating.
In the first year after the acquisition, Italian SPACs suffered negative stock return (-7.17%), in line with European and U.S. literature but, from the second year after the business combination, on average, Italian SPACs performed positive stock returns with respect to the value at the acquisition date (+32.12%).

Thus, the analysis conducted in this thesis pointed out that Italian SPACs on average performed well and they could be a good investment in the medium-long term.
However, among ten SPACs which completed the business combination, for only five of them were available enough post-acquisition data to perform the analysis. Moreover, for three companies analysed were available financial statements of only one year after the business combination. This means that the analysis is not complete and cannot be used to provide a clear overview of the Italian SPAC market, but results must be confirmed in the following years.

The thesis also tried to explain why these Italian firms choose these special vehicles to get listed into public markets rather than using a traditional IPO. For some firms, the reason of this decision could be the result of high debt respect to equity or for poor financial performance (IVS, F.I.L.A. and Zephyro), while for others, the main reasons seemed the negative financial market conditions and because of the scarce interest of investors and markets for industries in which they operate (SeSa and LU-VE).

Concluding, it seems that in Italy special purpose acquisition companies succeed, on average, in increasing value of target firms which would have some difficulties in entering the public markets through a traditional initial public offering. These positive results (at least until now), along with a positive financial markets scenario in Italy and the favourable legislation on PIR

(Piani Individuali di Risparmio) for investments, pushed the creation of 7 new special purpose acquisition companies in Italy in 2017 (from January to October).
However, critical will be next years, in which are expected more SPAC deals since 8 Italian special purpose acquisition companies are seeking an acquisition.

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