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Private Equity in the tile industry: an empirical analysis

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ACADEMIC YEAR 2020/2021

To Carlo, Annagrazia and Benedetta.

I owe you everything.

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Introduction

The tile industry is one of the most recognized and powerful flagships of the Italian manufacture. Since the end of the World War II, it has contributed considerably to the Italian economy creating value, employment, know-how and wealth. With its industrial district, the ceramic hub of Modena, Sassuolo and Reggio Emilia is the beating heart of the national sector, manufacturing the 90% of the total Italian production. The tile industry is representative of the Italian economic framework: fragmented and studded with a plethora of growing SMEs. Right from this observation was born the idea of matching the potential of the industry blended with private equity activity. Potentials of the combination between financial and managerial knowledge from private equity and technical expertise from manufacturer drives this work from the beginning to the end.

The first chapter is a window of the private equity world, in which fundamentals and theory are set out. It is important to define what private equity is, how it has evolved over time and how a fund behave during its life. Moreover, it is crucial to understand in which ways private equity create value and through which strategy.

The second chapter is a representation of the two main markets: both tile and private equity industries are overlooked from an international point of view, with some hints on the Covid-19 pandemic and finally focusing on the Italian highlights of both industries (tile and private equity).

The third chapter focused on private equity operations in the Italian tile industry. A first analysis will be conducted regarding several aspects of transactions, with the aim of finding the best practice in terms of strategy pursued and to which company's parameter could better apply. Secondly, the Buy and Build strategy will be depicted with all its characteristics to present the theoretical framework of this type of strategy.

The fourth chapter, in the end, includes the analysis of Italcer Group business case, the most representative example of the buy and build strategy in the Italian tile industry, under profitability and solvency profile.

CHAPTER 1

A deep dive into the Private Equity Industry

The purpose of the chapter is to provide a clear description of the Private Equity (PE) investment activity. Supported by academic literature and professional data, we are going to display the definition, the historical timeline and actual state-of-the-art of PE, which is vital for a better understanding of its role in the tile industry. From the launch to the disinvestment phase, we will reflect on each of the fundamental facets that contribute to it. We will go through the PE industry's definition and history, we will see its nuances and similarities in different areas of the world such as the US, Europe and Italy more specifically and the emerging countries. We will see the different investment classifications, we will focus on its growth and expansion which make up the most of the tile industry's transactions, on the life cycle of a fund and what is their business model, and finally we will observe the efforts put into the creation of value for investors and companies.

Definition and history of private equity

There is not a universal definition of Private Equity. Partially it is due to the fact that this type of investment activity is carried on through different strategies and by various types of operators, partially because it's a very complex and jagged activity and it largely depends on the target firm subject of the investment. But what makes PE a peculiar investment, is the private nature of the asset in which to invest. In fact, as the AIFI (Italian Association of Private Equity, Venture Capital and Private Debt) states, Private Equity is

"the investment activity in the equity of private firms with the objective of the valorisation of the company itself in a medium-long term disinvestment horizon"[1].

This type of investment activity has always represented both an alternative and a counterpart to public markets, but only after the financial crisis of 2008, it has spread and consolidate through a wider audience of investors. The aftermath of the crisis was a confining setback for the credit market because banks were not able anymore to cover the entire credit demand. This led private equity funds and other financial institutions to supply this demand through different channels and services (among the others, Private Debt). The consequence was a surge in secondary market investments and this fixed one of the PE's biggest problems: the illiquidity. While public markets still remain the main investment vector for the world's audience of investors, secondary markets are used to be subject to much more resistance due to the non-standardization of transactions and the difficulty in finding a counterpart. The increasingly wider investor base, composed by an increasing number of new players (club deals, family offices, sovereign fund), has changed the prospect of the entire industry, starting new funds characterized by the scope and the maturity of the target firm. The investment alternatives are various, and they cover an increasingly diversified plethora of asset classes that the entire industry changed its name in "Private Capital"[2]. One last crucial factor regarding the spreading of the private capital market is the level of disclosure and the importance of ESG (Environmental, Social, Governance) parameters. In fact, due to the increasing common sentiment of social responsibility among investors and the will to defend customer's rights in the investment process by the legislator, the private market has become more and more transparent in recent years. This is contributing, among other things, to a safer and more conscious participation by all types of investors in the PE industry.

Private Equity is a worldwide phenomenon and it is still evolving. In order to understand what it really is now, its state-of-the-art, it is important to understand the path of PE up until these days. The historical perspective covers a fundamental role in this process and it is mandatory to take into account the differences between the three main macro sections in which the global market can be divided into: USA, Europe and Emerging Countries. Considering the aim of this dissertation, a brief history of the Italian private equity market

[1] Resolution of the AIFI Board, 22 July 2004.

[2] G. Fraser-Sampson, *Private Equity as an Asset Class*, The Wiley Finance Series 2017.

will be exposed in the end. Much like people from different parts of the world represent different cultures, products of their path of growth among centuries, Private Equity, in the same way, developed different characteristics and different dynamics depending on its legal, cultural and historical background. For our purpose, the focus will be only on the above-mentioned markets, with particular attention to the Italian compartment.

United States of America

In general, it is evident that the investment activity is a consequence of the proliferation and expansion of commercial trades. This is the reason why we can attribute to the United States of America the title of prime witness of the PE phenomenon. We have evidence of the existence of the first investment company comparable to a PE firm in the early 40's of the 20th Century. The objective of the firm, the American Research & Development Corp. (ARD), was to invest in companies born from the development of new technologies during the 2nd World War. However, this PE ancestor was not a game changer in the industry, mainly for the investors' lack of trust in this new type of business activity. In this case, in fact, the capital was provided by natural persons, not by venture capital Limited Partnerships.

The legal protection in the investment field was the turning point of the industry. The tangible revolution, indeed, started in 1958, when the Small Business Act (SBA) was introduced[3]. The Act was meant to provide a legal framework for the creation of Small Business Investment Companies (SBIC), private institutions with the aim of supporting American Small Businesses via equity contribution. These entities were such a powerful financing instrument because they benefitted from subsidised loans up to 4 times their capital and their target were mostly companies in start-up phase. Both public and private sector provided capital to SBIC and due to almost interest free loans and fiscal reductions they became of extraordinary importance for the American economic scene. Is estimated

[3]AIFI, *The USA venture capital market*, Capital for development.

that more than 700 SBIC where launched up to the ‘70s, financing almost 100.000 new companies[4].

In the second half of the ‘70s, another Act revolutionized the PE sector: the ERISA (Employee Retirement Income Security Act). Introduced in 1974, the ERISA “is a federal law that sets minimum standards for most voluntarily established retirement and health plans in private industry to provide protection for individuals in these plans”[5]. In 1979 the U.S. Department of Labour amended the Act adding PE to the range of possible investments available for pension funds, while before it was considered too risky as investment class. From that moment, large amounts of cash started flowing into the industry, giving birth to new Limited Partnerships to manage the capital available. The first fraction of the 80’s has been a golden era for the industry.

After a brief timeframe of slowdown, the PE market surged again in the 90’s. The IPO boom and the information technology sector (World Wide Web) gave a new boost to PE, culminated with the dot-com Bubble. Venture Capital and PE suffered from severe losses in their portfolios and the investment activity was reduced significantly due to the difficult market conditions.

The first 20 years of the new millennium were characterized by frequent periods of crisis situations. The stock market crash in 2000, the 2008 financial crisis and the coronavirus pandemic represented real challenges for the American economy. What all these crises have in common is the method employed by the U.S. Government and the Federal Reserve to keep the economy afloat. Quantitative Easing and an expansive fiscal policy are still considered as a universal panacea to cure all the suffering these days, even despite inflation.

[4] A. Gervasoni, F. Sattin, *Private Equity and Venture Capital*, 2020
[5] U.S. Department of Labour Website

Figure 1 - Federal Funds Rate over 20 years (Trading Economics)

The liquidity generated from these policies were translated in low-cost borrowings and massive leveraged buyout transactions from 2003 to 2007, provoking the PE resurgence of popularity among investors[6].

After the 2008 crisis, the PE industry response was consistently different than in the dot-com Bubble aftermath: the credit crunch caused trust issues in the financial industry and this was the cause of a massive reduction in credit supply. For that reason, high leverage transaction were distant memories at that time and PE market faced a significant reduction in terms of average operation size. The predominant usage of equity putted an end to aggressive leverage acquisition schemes and strategies came back to their original purpose: creating fundamental values for the acquired firm instead of making gains through arbitrage on market multiples. The crisis, on top of that, raised awareness about the need of a more stringent regulation, which became reality in 2010 with the Dodd-Frank Act.

In the recent years, the American PE market grew at a phenomenal rate, with an increasing fundraising activity and an ascending number of operations. Solely in 2019 PE funds invested more than 300 Billion dollars in almost 5000 operations and the size of transactions themselves, thanks to the so-called "Megafunds", can reach 20 Billion in dollars[7]. The predominant position of the USA market in the world is a clear signal of the

[6] G. Bracchi, *Private Equity: investire nello sviluppo delle imprese nei momenti di recessione*, AIFI internal pubblication, 2009.
[7] Prequin, *2020 Prequin Global Private Equity & Venture Capital Reports.*

ability of its players to predict the future megatrends: more and more funds, in fact, are developing their investment strategy following principles different from just economic and financial criteria (ESG are gaining more and more importance, becoming key factors while evaluating an investment opportunity)[8]. The technological innovation covers a primary role also in defining the American market as the first in the world. PE funds are investing heavily in advanced technology sector, as healthcare, fintech and digital innovation. A particular mention, finally, has to be made in favour of the space economy: in fact, entrepreneurs widely prefer capital from PE funds than from public markets, mostly because of negative economic results and more freedom to operates without having bonds or limitation from public investors.

Europe

The birth and the evolution of the PE market in Europe is strictly linked to the financial history of the United Kingdom. The first form of PE firm was the Investment Trust, through which, starting from 1800, English investors had financial interests in American Railways. In 1945 the Bank of England created the 3i (Investing In Industry), which is still a solid entity in the English PE Market.

However, the real step change in the European PE market was the reforming process of the European Union that creates a perfectly integrated market of products and capitals. In the 80's research made by the European Commission disclosed the importance of new technologies and limits of European SME in pursuing them due to a lack of access to capital and debt. Consequently, in 1980, the Commission created a program aimed at supporting the cooperation between various European Venture Capital institutions, one for each member state. Earlier this year there was also the creation of the USM (Unlisted Security Market), following the path of the Nasdaq in the USA, which was an important exit route from companies. After few years, in 1983, the programme was a success and

[8] Global Sustainable Investment Alliance Review 2018.

the EVCA (European Venture Capital Association) was instituted. In the same year was introduced the BES (Business Expansion Scheme), which granted tax relief for investments until 40000 Pounds in non-listed companies. In spite of the fact that most of the PE activity started in the UK, the European Union had a strong influence in the PE market creation process. If it were not for the willingness of the European legislator, the European PE market would not be so integrated among member states.

In the early '90s, due to diminishing returns, the PE faced a brief setback. The recession affected the entire industry and operators struggled to find profitable disinvestment routes. Moreover, the entire industry focused more on growth capital deals rather than start-up's operations. From the second half of the 90's decade, the European market faithfully reproduced the path of the American one:

The information technology boom led to a fast development of the PE market, followed then, after the dot-com Bubble, by a decline. The wide availability of low-cost debt made buy-out operations grow dizzyingly until the 2008 crisis. The European legislator, just as in the case of the American one, realized the need for a more stringent financial regulation and almost in conjunction with the Dodd-Frank Act (2010), released the AIFMD Directive (Alternative Investment Fund, 2011/61 UE).

The intent of the Directive was to provide a common regulation for Alternative Investment Funds and to introduce a passport for the free circulation of capital aimed at financing European SMEs and the Regulation EuVECA 345/2013/EU was enacted to implement the legal framework. After two years, the Regulation 760/2015/EU was established in order to enshrine the ELTIF discipline, extending the participation in alternative funds from institutional to retail investors.

In recent years the European PE market soared impressively[9]: the fundraising exceeded 100 billion from 2016 to 2019 and investments reached the impressive level of 95 Billion in the same period, with almost 8000 firms participated by funds. EVCA became Invest Europe in 2015 and today it counts 600 partners. While in the past the PE European market could have been considered as an extension of the United Kingdom one, now the situation has changed. Still undisputable is the relevance of the English market, but

[9] Invest Europe

continental one is becoming more and more autonomous. France and Germany, for example, recorded respectively 15 and 16 billion of investments, against the 22 invested from UK. After Brexit, moreover, financial institutions are moving toward the Continental Europe and considering the lack of a solid industrial sector, it is to be expected a reduction of PE activity in the UK. In conclusion, it needs to be underlined that the European Union has always promoted policies toward more flexible and costless transactions in terms of foreign exchanges and custom duties in product markets. The same result has been achieved in the capital markets, with a progressive unification in capital markets -known as European Capital Market Union- which boosted the private equity activity.

Emerging countries

Starting from the 1990s an increasing interest toward emerging economies has been established among institutional investors. For the first time in their existence, countries like India and Cina were implementing an entrepreneurial background, increasing their Gross Domestic Product and generating new opportunities for PE compartment. Propellent annual GDP growth rate attracted investors from the entire Occidental world and the initial proposition was to export the model of the modern equity market. Unfortunately, as history teach, every financial and economic development has to be supported by the proper entrepreneurial culture. The still-evolving market, at that time, was mostly composed by family-owned business and this, alongside generally high profitability and returns, did not foster the entrance of foreign capital in domestic firms.

However, after 2000, the disruptive phenomenon of globalisation imposed to emerging countries a gradual opening to external investor and this change came through both private and public sectors. Companies started operating in more competitive markets and the need to growth in terms of revenues and efficiency occurred early in order to survive the globalisation. Entrepreneurs consequently saw in foreign private equity firms the right partners to pursue their objectives and local legislations supported this decision.

In 2004 the EMPEA (Emerging Market Private Equity Association) was formed and more and more funds started establishing their local offices directly in the emerging countries, mostly in China, Brasil and India. Trends in terms of fundraising and number of funds increased dramatically. Just two years before giant Leheman Brothers brought its books to court, at the dawn of the free fall of the American housing market, from 2007 to 2008, investors' belief with respect to private equity in emerging countries consisted in a valid alternative to the negative performance of the equity market in the USA, due to their supposed economic isolation and the consequent uncorrelation of their equities. In reality, due to the financial globalisation the crisis spreaded and the private equity activity fell into a setback just after 2008. Suffice it to say that after the infamous credit crunch, the fundraising collapsed from 67 to 23 billion[10].

From that moment the majority of private investment in the emerging countries started growing again until the 2014. The change of pace was due to the higher returns granted by developed countries' markets. From this year, in fact, the expansionary monetary policy that has characterized the recent time span has promoted an extraordinary boost of financial markets in Europe and above all in the USA.

Nowadays the main institutional investors are represented by banks, industrial players and asset managers, but the increasing wealth allowed the establishment of family offices as a new category of investors in emerging markets. The 90% of the investments are directed to the Asian compartment, but an increasing number of players started to look for opportunities as well in Africa, Eastern Europe and Middle-East[11]. The reason of this growing interest cannot be found anymore in the lack of return of developed markets, but more realistically in the disruptive technological revolution that emerging countries are now facing. Subsequent is the fact that the majority of operations consists in expansion capital rather than in LBOs.

[10] Data from EMPEA

[11] Preqin, *Preqin Global Private Equity & Venture Capital Report*, 2020

Italy

The creation of an Italian private equity compartment has been a twisted, bloody path. Besides any consideration regarding political, cultural, economic and financial reasons, from 1936 the Italian banking system has always operated a clear distinction between Investment and Commercial Banks. That has always been a huge limit for the catalysis of private and public savings into investments in real economy. For more than 50 years the entire Italian banking system stood still, frozen in a "Petrified Forest[12]" that carried on the concept of the dichotomy between long and short-term operations, between investment and retail saving. For this reason, the capital employed in Private Equity operations has been very limited until 1987, when a resolution of the CICR (Comitato Interministeriale per il Credito ed il Risparmio[13]) deliberated the institution of the SIM (Società di Intermediazione Mobiliare[14]), a new legal entity which allowed credit institutions and banks to operate in risk capital through bonds and stocks. In the first half of the 80's, pioneers of Private Equity were private wealthy investors that poured equity capital in Italian SMEs through financial holding companies.

A second step closer to the actual regulation consisted of the Legislative Decree 385/93[15], which smoothed the distinction between Investment and Commercial banks allowing private savings to flow and imposing a more stringent regulation in terms of regulatory capital in the first type, and the Law n. 344 14/08/1993, which shaped a primordial legal form of private investment fund (SICAV). Consequently, many Italian banks started undertaking investment activities through dedicated internal divisions and the Private Equity sector started developing also through the entrance of pan-european megafunds in the Italian market.

These reforms repealed the former banking regulation and introduced again the concept of "Universal Bank", but the real turning point was the Legislative Decree n.58 24th February 1998, widely known as the TUF (Testo Unico della Finanza[16]), which

[12] Giuliano Amato, 1992.
[13] Translated "Credit and Saving Interministerial Committee".
[14] Translated "Securities Firm".
[15] Testo Unico in materia bancaria e creditizia.
[16] Translated. "Consolidate Law on Finance".

completely transformed the legislation of that time and introduced the SGR (Società di Gestione del Risparmio[17]). The contingent regulation provided funds with more operational flexibility and coherence with the international financial framework. At that time, banks were the predominant operative players, but the trend inverted slowly. Many departments were spun-off from banks, giving place to the establishment of separate entities and an increasing number of experienced managers started forming their own SGR. The role of banks switched from operating to investing side, leaving room to experienced professionals.

Remarkable is the role of the institution of the private pension system in the 90's, complementary to the public INPS, which allowed, along with the development of the insurance Italian industry, a superior flow of capital into the private equity markets. Moreover, in this process, Cassa Depositi e Prestiti, the Italian equivalent of a sovereign fund (the 83% is owned by the Italian Ministry of Economy and Finance), cover a fundamental role in the Italian private equity market because other than landing money to State and local institution, it acquires infrastructure, firms or economical projects considered strategic for the Italian economy.

The 1986 born AIFI, in 2003, changed its corporate name in "Private Equity and Venture Capital Italian Association" focusing more on the investment purpose than to the simple representation of all the active investment vehicle. In 2012 the fund tax regulation has been harmonized at the EU level and moreover it was introduced the Legislative Decree 179/2012 which introduced fiscal benefits for investments in innovative business in start-up phase.

From that moment until our days, the subsequent legislation was mainly produced in order to comply and harmonise the Italian framework to the European one[18]. Nowadays main operators are SGR, SICAV and international players, but the banking system still plays an important role in debt capital for LBO operations and in the deal flow.

Types of operations varied in the course of time: from the first reform in 1987 until 2000 the Italian market has witnessed mainly early stage and expansion capital operations but

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[17] Translated "Asset Management Companies"

[18] Treasury Decree n. 30/2015 on OICR (Organismi di Investimento Collettivo del Risparmio), Bank of Italy provision 19/01/2015 and Regulation EU 760/2015 assumed through Legislative Decree 233/2017 on ELTIFs.

due to high liquidity, low interest rate and the high-performing equity market, after the dotcom bubble, there was a change in the most widespread strategy and the LBO model became predominant, initiating a compelling trend of megadeals which involved as well international huge funds. However, this practice became obsolete after the financial crisis in 2008: the implosion of the financial markets represented the trigger for a huge change and Basilea III reform imposed more stringent regulation on the credit market. The Italian economic framework has always been characterised by a huge fragmentation and since more than the 99% of the enterprises is comprised in the SME size category[19], with a predominant presence of family-owned businesses and a low predisposition take advantage of regulated equity market, the most common size of operations is notably lower (14mln[20]) compared to Europe and above all USA.

In conclusion, the history of the Italian private equity activity clearly justifies its underdevelopment due to cultural aversity against risky capital activity, sluggishness of the legislation and the renowned political instability.

Investment classification

The main distinction between PE operations, widely agreed on and supported by both academic and professional world, is about the basis of the maturity of the target firm. The logic beneath this rationale is simple: depending on the phase of its life, the firm needs different types of services, financing and know-how and PE funds will be more focused on one of them coherently with the expertise of their teams. In this perspective we can make a distinction between the three principal phases of a company's life cycle: Initial phase, development and finally maturity[21]. Beside them, a particular mention has to be made for peculiar situations which may occur during a firm's life, like crisis, restructuring and turnaround operations. Traditionally the term "Venture Capital" has always been used

[19] Eurostat, 2020.
[20] AIFI, *Il mercato del Private Equity e Venture Capital italiano*, 2020.
[21] K.T. Liaw, *The Business of Investment Banking*, 1996

for operations regarding firms operating in the initial or in the development stage, while investment in mature companies with the aim of acquire a majority stake are usually called Buyouts.

As time goes on, however, PE funds have been focusing in more and more specific context or peculiar types of operations. It is still possible to take into consideration the macro division that originally distinguished PE funds, but other sub-categories were born and took relevance in the international framework: research and statistics firms, in fact, internationally adopt these more specific categories[22].

Seed Capital

Seed Capital is the form of investment aimed at the development of the entrepreneurial idea. Firms which can benefit from this type of investment usually don't have an internal organization neither a fully developed product. The scope of the investment is to complete the R&D stage before the launch of the business, through market research and construction of prototypes.

Start-up

The next step is the start-up phase, in which the idea is fully translated into a product, but there is still the need of financing in order to implement the production. Capitals from this investment stage are usually employed for the product's commercialization, the creation of a structure in terms of human capital, fixed and working capital and commercial distribution.

Later stage

Later stage financing includes every capital contribution toward operating firms which may have reach the break-even point or not. Often, companies in this phase of their life cycle, are already financed by previous venture capitalists, so, this moment sometimes represent an exit opportunity for them.

[22] European Data Cooperative

Expansion and Growth

This type of investment is tailored for more mature firms. It is typically a minority investment in a company which needs cash for a faster growth and for expand its business. Expansion/Growth financing, in a more operative way, is generally useful for internationalization processes, M&A activity and increasing of the production capacity.

Buyout

Buyout consists in the acquisition of the majority stake of a firm and statistically it's the most performed operation. Usually, this type of transaction is financed with a huge portion of debt, which is finally transfer in the balance sheet of the acquired firm (Leverage Buy Out - LBO) and it can be carried on by internal or external management (Management Buy Out – MBO / Management Buy In – MBI), by employees (Employees Buyout – EBO), by private equity firms (Investor-led Buyout – (IBO) and by majority owners themselves (Owner Buyout -OBO). Buyout operations can be an effective instrument in facing maturity issue in the firm's Corporate Governance, like the need of a succession plan or a reorganization in the firm's structure.

As stated before, buyout may be financed through a significant use of debt, which after the acquisition flows in target's balance sheet. In this kind of operation, assets are important to such a decision because they can be used as a debt collateral and their total value represent the maximum value to be used to back debt securities. Furthermore, cash flow is used to determine if, and in what measure, the company is able to repay its obligations.

Debt may be provided in a variety of ways, depending on the riskiness of the business venture. According to the word "senior," senior debt is the least risky financial instrument in a company's capital structure since it has the highest priority in terms of claims and is thus guaranteed to be paid first. It is typically characterized by regular interest payments (interest rates could be fixed or variable) and amortization and it is often structured as a medium-long term liability. If it's secured, it's backed by the company's assets of the. The securitization of the debt has the obvious consequence of lowering the interest rate

comparing to unsecured loans, indeed assets serve as guarantee against the risk of default. The other category of debt is the so called "mezzanine" because it is somewhat in between senior debt and equity, usually unsecured. One of the most important features of mezzanine is risk, obviously higher than senior debt. The relative juniority to senior debt imply consequently the postposition of repayment after senior lenders. Hence, also its cost is higher than senior debt because mezzanine is somewhere in between loans and equity: the reason for that consists in the possibility for it to be structured also granting equity options (equity-kicker), giving lenders the possibility to participate in the potential upside of the deal.

Replacement

Replacement operations are not meant to expand and growth, but they just have the objective to replace one or more shareholders that don't want to be involved in the business' activity anymore. This is usually a good exit opportunity for investors like PE funds.

Life cycle of a fund

Private equity funds have a natural life cycle that usually goes from seven to ten years dependently on the investments type terms of the agreement. Every part of the fund's life is dedicated to a precise goal in terms of investing. In general, it's possible to split the fund's lifetime in 3 phases: fundraising, investment and exit.

After investors have pledged cash during the fundraising phase, the fund will gradually begin to draw down that money during the investing phase. The initial few years of the fund may represent an initial downturn in potential returns for investor because cash is mostly used to support the fund's activities and to pay management fees. Then, once some targets are identified, investments will be made in the first three to five years by the General Partner. Later on, after a variable period of time dependently on the strategy and

the assets held by the fund, investment gains are typically realized in the last three to seven years of a fund's life cycle, which is known as the harvest phase.

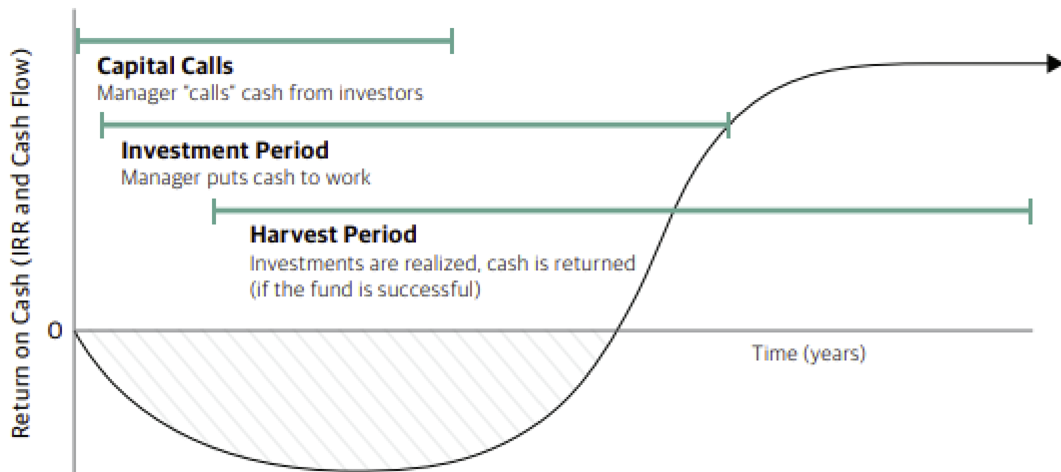

Figure 2 - Graphic representation of PE funds' timeline (Blackstone).

Throughout the life of a fund, the J-Curve depicts an investor's prospective returns. At least for the first several years, funding is being provided by investors, who are also footing the bill for managerial costs. A negative return is the outcome of the fund's inability to offset the costs of capital deployment. Returns may rise with time and with successful investments. A "J" shape is formed when the steps in this method are diagrammed as follows.

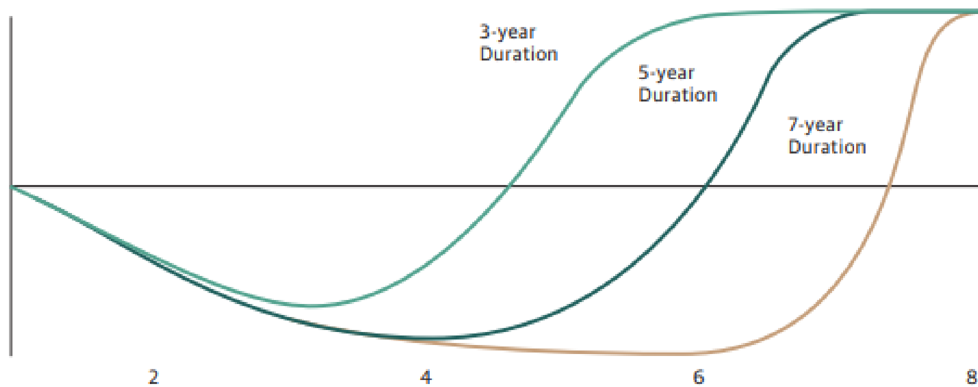

Figure 3 - The J Curve represents investor's potential returns throughout the fund's life (Blackstone).

Private Equity Fund’s business model

Wealthy individuals, large firms, and financial institutions made the largest portion of private company investments prior to the 1970s. Limited Partnerships, on the other hand, emerged in the 1980s and 1990s as a way for investors to participate in private enterprises. For private equity investments and investments in private enterprises in general, this form has arisen as a response to the issue of information asymmetry[23]. Consequently, private equity firms have tended to use the Limited Partnership structure the most throughout the years.

During a fundraising phase of six months to a year, private equity companies claim commitments from institutions and affluent people in order to form one or more investment funds. These funds typically have a ten-year life span, with the option to extend it for another two to five years. It is a two-tiered organization, with General Partners (GPs) and Limited Partners (LPs) (LP).

Members of a private equity company are known as "General Partners," and they are responsible for making investments on behalf of the fund's investors. Their investment decisions are constrained by the terms of the contracts they've signed with the investors. In addition, they are expected to contribute at least 1% of the fund's capital in order to match the interests of the General Partners with those of the investors and minimize Moral Hazard[24]. Making the appropriate pick in terms of a hedge fund management is critical, also because over time, General Partners who have previously achieved top-quartile performance tends not to do the same again in the future, according to research.[25] The so-called persistence of outperformance has fallen significantly since 2007, when it was at its peak.

Only wealthy and institutional investors (such as pension funds and insurance firms) are considered to be Limited Partners. They are the primary contributors to the fund, making long-term monetary commitments and taking personal responsibility for their own

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[23] Stephen D. Prowse, 1998. "The economics of the private equity market," Economic and Financial Policy Review, Federal Reserve Bank of Dallas,

[24] D Bergemann and U Hege, Venture capital financing, moral hazard, and learning - Journal of Banking & Finance, 1998

[25] McKinsey’s Private market annual Review 2019

investments. As a result, they have to sign contracts that keep their money in the fund for the rest of its existence. As a consequence, the investment horizon of the Limited Partners must be aligned with the fund's life. It is also noteworthy that the committed capital is not contributed by Limited Partners right from the start. Committed capital, on the other hand, gets deployed (Drawdown) over time and it is the responsibility of Limited Partners to pay a share of the agreed cash when General Partners find investment possibilities (Capital Call). “Vintage year” is how we refer to the year in which the fund makes its initial capital call. Not meeting capital calls has both economic and reputational costs and the event of short notice or poor liquidity might be a cause of anxiety for investors.

Investments made by a PE fund are known as target firms, which are often referred to as portfolio companies. As a rule of thumb, a fund typically invests in between 10 and 15 firms over its lifetime. Investments are often made in the first half of the fund's existence, while exits are the emphasis of the second half, which determines the return earned by the Limited Partners'.

There are three ways in which General Partners generate money: charging fees, charging carried interest and charging monitoring fees. For years, practitioners and academics have been analysing this compensation system, which has both a fixed and variable component. Limited partners pay yearly management fees that are set at 2% of the assets under management (AUM) and compensation for carried interests is determined as a percentage of the profits earned. Most private equity funds have a 20% carry interest threshold[26]. In that way, General Partners have a strong motivation to produce profits for Limited Partners, who in turn will be rewarded with remaining earning. In the end, the monitoring fees paid by the portfolio firms are a third and less prevalent component of the income.

[26] Kaplan, Steven N., and Per Stromberg. "Leveraged Buyouts and Private Equity." Journal of Economic Perspectives, 2009

Value creation

Private equity firms work with management to develop procedures in order to increase the value of a company after a buyout or an acquisition to increase its overall worth. There are three ways to accomplish this mission: through governance, financial engineering and operational efficiencies.

Governance

PE managers often deploy new governance systems with the aim of reducing agency costs as a result of the asymmetric information problem created by the separation of ownership and control responsibilities. In practice, the objectives of principal-shareholders and agent-managers in the agency dilemma emerging from the division are often different: the first's goal is profit maximization, while the second tend to prioritize their own interests above the goals of the first. Private equity investors want to eliminate the conflict of interest that arises between shareholders and management via the use of stock and option compensation programs, among other things. If the firm's management team is also asked to invest their own money in the business, they will be motivated to perform better because they will be at danger of losing part of their own money if they do not get the outcomes they expect. Equity in private companies is illiquid, which means that managers cannot sell or exercise their options until the private equity fund executes the planned exit strategy, which might take years in certain cases. Even more so, illiquidity makes it more difficult for managers who wish to influence short-term performance to do so, and instead promotes a long-term plan to be pursued by the organization.

Finally, one of the most significant strategies utilized by private equity companies is the nomination of their nominees to the board of directors of a company, therefore acquiring control and exclusive access to information about the company. As a result of the fact that private equity portfolio company boards tend to be smaller and meet more often than the normal board, they are believed to be more effective and more focused on strategic leadership and value generation.

Financial engineering

It is also possible to create value via operational engineering[27], which tries to improve the performance of the company's portfolio. Several studies[28], focused on buyouts in the United Kingdom and the United States, found that private equity-backed firms experienced an increase in productivity in terms of operating margins and cash flow margins following the transaction.

Both the company's financial structure and its financial accounting are included in the term "financial engineering." When the LBO is completed or the firm takes out a loan following the acquisition by the fund, the previous capital structure is replaced with the new one. When a corporation generates cash, it uses that flow to repay its debts and interest. When constructing deals that need a big amount of debt, before or post-operation, repeated contacts with financial institutions lessen knowledge asymmetries and allow for a favourable loan. There are two ways that financial leverage aids in the production of value:

To begin with, interest costs are tax deductible, improving cash flow and generating more value. Interest tax shield refers to the decrease in tax obligation that occurs as a result of interest costs. The calculation is therefore intuitive:

$$VL = VU + PV\ (Interest\ tax\ shield)$$

where VL is the Value Levered and VU is the Value Unlevered. Consequently, the Interest tax shield can be determined as:

$$Interest\ tax\ shieldt = tax\ rate * interest\ expensest$$

[27] Gartner and Kaplan (1996)
[28] Kaplan (1989) Harris (2005)

As the loan is repaid, the equity value of the target firm grows, just as it does with mortgage repayments. Mortgage effect[29] is the term used to describe this impact.

Operational efficiencies

It is possible to increase firm's performance in two ways. The first one is known as "asset and bottom-line initiatives" since it is primarily concerned with expenses. It is feasible to reorganize the firm on the asset side using this method, which aims to identify and take steps to improve operational efficiency and effectiveness in key areas of the business. Working capital, which is often a problem, may also be an option in this situation. To streamline and optimize the cost structure, typical levers include strategic sourcing, pay restructuring and optimization of general and administrative expenditures as well as process enhancements. As a result of outsourcing and staff reductions, a labour problem may occur. However, the company's reorganization is the best way to lay the groundwork for new job and advancement prospects in the future. For companies in turnaround circumstances, a cost-cutting strategy like this is ideal since it may help avert a precipitous drop. When this is the case, in fact, private equity funds should first aim to reduce costs, or at least improve them, before focusing on increasing sales.

The flip side of the coin, of course, is a rise in margins and income. However, this is a long-term goal since it can't be accomplished as quickly as cost-cutting can. Starting with a knowledge of the customer's demands, honing the product portfolio and concentrating on innovation are all necessary steps in building a long-term strategy for value creation. To succeed in this sector, it’s mandatory to know competitors and how they operate and furthermore it's inevitable that the company's strategy involves negotiating with suppliers and forecasting the demand for goods far in advance of when raw materials are needed. Relative to this, for a firm, outsourcing to a foreign country may be less expensive than doing it in in its own, while producing resources in-house may be more expensive. However, there are a few important observations to keep in mind when considering outsourcing labour. Conducting business in a foreign country comes with its own set of

[29] Baker, Filbeck and Kiymaz (2015)

laws, rules, and regulations and it is exactly this knowledge that the fund is intended to provide the company with[30].

Another example may be increasing the effectiveness of the company's internal employees. In that case, the fund should put in place new processes and choose the most qualified team leader it can find. Therefore, the firm may expect greater production as a result of the enhanced output that comes from having the appropriate employees. Finding the most qualified individuals to oversee the operations of a firm is not an easy task and the fund, by virtue of experience and knowledge gained throughout its manager's professional life, can help in this process.

Another method of increasing internal efficiency via digital transformation is through the modernisation of the company's information technology system (IT system).

Through digital transformation, it is possible to increase the efficiency of a firm by improving the customer experience. Digital transformation is characterized by the change of a company's operational value, culture, and process via the use of technology. Private equity firms may hire outside consultants as well to assist them in further integrating digital transformation into their portfolio businesses' operations.

Finding techniques to boost a company's online presence via digital marketing is a critical component of the digital transformation process. Utilizing the services of an independent digital marketing business to increase organic website traffic is a feasible alternative that should be seriously considered. It's never a bad idea to diversify your company's reach across other online domains, especially when digital marketing professionals are particularly specialised in it.

In addition, data analysis systems may be developed via the use of technology. Executives can make better decisions based on the most accurate data owing to software that streamlines all internal activities, such as consolidation, reporting, planning, and control, and helps them make better decisions faster.

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[30] Easterwood, J. C., Seth, A., & Singer, R. F. *The impact of leveraged buyouts on strategic direction.* California Management Review, 1989.

CHAPTER 2

Ceramic Tile and Private Equity markets at a glance.

In this chapter we are going to tackle both the description and the analysis of the market objects of this work: private equity transactions and ceramic tile market. First, we will go through a rundown on the international tile industry with a focus on everything environmental, social and governance, then we will delve into the market's drivers. We will see what consequences the Covid-19 crisis brought along in the sector and focus on the recent developments. We will zoom in on the Italian tile industry and go back to an overview of the international Private Equity market in 2021 by looking at investments, exits, fundraising and returns. Finally, we will dive into the Italian Private Equity market and all its fundraising, investments and exits.

Overview and considerations on the international tile industry[31]

Ceramic tiles may be utilized in both commercial and domestic locations because of their adaptability. The expansion of this industry on a worldwide scale is due to several causes. Demand for housing is driving an increase in the number of development projects. In addition, rapidly urbanizing countries in the Middle East and Asia-Pacific play an essential influence in market dynamics. Quick urbanization and an increase in disposable income are driving these sectors to grow at such a rapid rate. Ceramic tiles are made from feldspar, alumina, zircon sand, silica, and kaolin, among other basic elements. Ceramic tiles made from feldspar are the most often utilized in both residential and commercial building, where they can be found in a broad range of architectural projects. Using feldspar, a material found in nature, these tiles are crafted at a lower temperature. The final product is comprised of flat and thin tiles that offer properties such as wear

[31] Mordor Intelligence, Ceramic tile market report, 2021

resistance, heat protection, and corrosion resistance. Cleaning the tiles is also a breeze. For example, they may be used to cover the tops of walls, floors and roofs, or to make tabletops and bathtubs.

The fast expansion of the ceramic tile industry in North America in the foreseeable future is being driven by a significant departure from imported goods and towards local production of manufactured products. Many Italian enterprises are growing their operations in the area because of its plentiful raw materials and large number of potential customers. As a non-profit organization, the Tile Council of North America (TCNA) aims to promote and support tile manufacturing in the area. These tiles, according to the TCNA Environmental Product Declaration (EPD), have the lowest environmental effect when compared to other flooring alternatives on the market. It has been shown that these materials are safe, and they may be utilized in LEED-certified green building projects.

The demand for commercial and residential construction, as well as for residential replacement, has recently increased, and it is likely to continue to grow in significant growing countries such as India and China. The North American market's aging infrastructure is likely to be a major growth factor throughout the forecast period.

The abundance of raw resources is expected to be a major factor in boosting demand over the estimate period. The availability of raw materials for tile manufacturing is expected to be affected by greater substitution and growing usage of ceramics in refractory applications like disk brakes.

Glazed products sales are expected to rise at a quicker and bigger rate than the rest of the sector between 2019 and 2025. Construction of housing facilities by the government and the consequent increase in living standards are driving up demand for the product. This area's demand for various goods is likely to rise in the future as housing financing becomes more widely available.

The next several years should see an increase in the use of environmentally friendly and ecologically sustainable products. With an increased awareness of environmental issues, ceramic roof tiles are becoming more popular. Moisture resistance, fade resistance, and cost-effectiveness are just a few of the benefits of the product that the market is going to benefit from in the years to come. Demand for energy-efficient, green buildings for office spaces and government buildings is expected to rise because of rising power prices for

short-term periods. Construction companies forecast moderate growth in the next years, but price volatility in raw materials might have an impact.

A compound annual growth rate (CAGR) of 6.0 percent is forecast for the wall tiles sector over seven years, making it the second-largest market share volume wise. The category is predicted to develop as this product is increasingly used in kitchens and bathrooms. - Manufacturers provide a wide range of options, including cork, metallic, mirror, mosaic, and brick and stone tiles.

Future years are expected to see an increase in demand for a wide range of colors, patterns, and textures to improve the visual appeal of interior walls. Increasingly, businesses in this sector are focusing their efforts on redefining their brands. There are a lot of new products coming out from key players in the industry. As demand grows for a wide range of products, manufacturing capacity is always being bolstered to meet it.

According to researchers, North America's market share was 4.7% in 2014 and is likely to rise rapidly during the forecast year. A rise in the number of environmentally friendly buildings in the area is boosting the demand. In 2017, 81% of contractors in the United States were engaged in some way in commercial green building projects, according to the US Chamber of Commerce.

Environmental, Social and Governance

Market players from a wide range of countries support steps to reduce CO_2 emissions and water usage in ceramic tile manufacturing plants. Throughout the projected period, it is expected that kaolin, zircon sand, and alumina production would expand, resulting in the demand for additional goods.

The Asia-Pacific area is projected to provide a number of growth opportunities in the coming years. The need for a wide range of construction materials has expanded as the number of affordable housing projects in nations like India and China has increased.

Ceramic materials are more often employed in flooring applications than any other because of their low cost.

Brazil, Chile, and Argentina are expected to hold a sizable share of the market in the near future due to the availability of raw resources accessible in Central and South America. In addition to stimulating economic and regulatory growth, the lower starting point makes it more probable that increasing building activity will also stimulate regional demand.

Additionally, the global ceramic tiles market is characterized by a significant number of small and medium-sized firms, which contributes to its fragmentation. Quality and innovation are critical to the long-term success and global growth of these enterprises. Thanks to the efforts of key industry players, the premium ceramics line is seeing tremendous growth right now, too. They're also open to initiatives in major cities and smaller ones. Porcelanosa Group, Crossville Inc., Gruppo Ceramiche Ricchetti, Mohawk Industries, and Florida Tile are only a few of the major competitors in the global industry. Major firms like China Ceramics Co. Ltd., Saloni Ceramica, and Veisa Ceramics, among others, dominate emerging markets like India and China.

Market's drivers

A country's gross domestic product (GDP) would not be what it is without the construction industry, which is the largest contributor worldwide. With the three biggest countries (China, the United States, and India) accounting for 57% of global growth, the construction industry is predicted to deliver an 85% rise in economic output by 2030.

The ceramic tile industry is directly influenced by the construction of buildings, both commercial and residential, because the ceramic tile floor is the building's most important component. In order to carry out building plans and real estate projects properly at all stages of construction, including planning and implementation as well as execution, distribution, and sales. This industry uses a significant amount of human capital.

The construction business in the United States is expected to grow faster than the Chinese one over the next 15 years. The construction industry in India is growing at a rate that is almost double that of China, putting it on track to overtake China as the next global economic engine for emerging nations. Britain will overtake Germany to become the world's sixth-largest construction market by 2030, in spite of the fact that Europe will not recover from its "lost decade."

Growth in China's construction business is expected to taper down by 2030, limiting China's participation of the global industry. Comparatively, the US construction sector is expected to grow at a 5-percent annual pace over the next 15 years, outpacing the Chinese industry. India, which is predicted to overtake Japan as the world's third-largest construction market by 2021, is likely to see a surge in building rates as well after a time of stasis.

However, despite the fact that the construction industry is increasing at a higher pace than the global economy, and that developed markets are likely to recover from their present low levels, many will not be back to their old peak levels by 2030, if at all. Growth rates that will happen after the current short-term pause, in most emerging economies are likely to drop in the near future.

Both the south and the north of the United States will see disproportionate increase in new construction as a result of their larger population growth and catch-up potential. Brazil, Russia, Turkey, and India may all see their construction growth rates fall to half of what it is now in the United States as a direct result of the Fed's upcoming lift-off, which could have a big short-term impact on their respective economies.

A fascinating relationship exists between the top three countries, but it is important to note that both Brazil and Russia are experiencing major economic difficulties. In contrast, growth in Indonesia is accelerating at a rate that has never been seen before. Except for the Asia-Pacific region, Mexico and Indonesia are forecast to overtake Brazil in Latin America by 2030 and Japan by 2030, respectively.

Brazil is at danger of a 'lost decade' if excessive bureaucracy and the Petrobras scandal collide, stifling the economy and investment. Demand for construction is projected to plateau over a longer time horizon with the reversal of the strong demographics that have driven Brazilian growth in recent years.

Even though it won't reach pre-crisis levels until 2025, the United Kingdom remains Europe's outstanding growth market. Construction spending there has surpassed that of Germany, and it is expected to rise to the sixth-largest global market share by 2030.

This sector is predicted to be one of the most active industries within fifteen years, and it is extremely essential to the growth of prosperous societies throughout the world.

Thus, a great amount of new employment would be created as well as considerable income for various nations throughout the globe.

Covid-19

Covid-19 totally disrupted the global economy imposing radical changes in almost all industries. Its influence and the need of adaptation affected the international tile industry as well and the Coverings Expo 2020 represent just the surface of the implication that players had to face. In fact, the expo and its design trends have been reinvented in a more expansive digital format (called Coverings Connected), to better serve visitors. These elements, including a digital exposition with over 900 exhibitors and hundreds of fresh product photos, informative webinars with industry experts, live conversations with attendees, a personal trend tour led by industry expert Alena Capra and more, were made available online.

On a more practical and operative way, when it comes to helping individuals who are disproportionately touched by this scenario, the ceramic industry is still doing all it can to ensure that they have access to appropriate protective equipment. Firms donates money to hospitals and informs the public about government restrictions on commercial activity, for example, to assist them in obtaining critical care beds in Italy, where the sector has donated money to hospitals and informed the public about government restrictions on commercial activity to assist them in obtaining them. Manufacturing, shipping, and logistics operations have all been pushed for adjustments in business practices and

operating standards in order to better align them with the current emergency scenario, according to the industry.

However, despite the fact that it seems that there is no end in sight to this crisis at this stage, the ceramic business is certain that it will work closely with all stakeholders to maintain the European economy strong and assist our society as it recovers from this calamity, even though in regard to the consequences in the long haul, there is nothing but uncertainty.

Because of slow paced global demand, it is possible that export sales may suffer. Domestic demand is also likely to be low in the first quarter of this year. The interruptions in China's supply-chain, on the other hand, may result in a rise in the cost of goods. Because of their reliance on global supply networks, it will be possible to keep track of the raw materials that are being procured for specific applications. A one-of-a-kind predicament has been posed by the pandemic for the ceramic tile business. However, despite supply chain disruptions, store closures, and building issues, many customers have diverted money, that they had previously withheld for other reasons, to house improvements and repairs. There has been no other year quite like it in recent memory, and the year 2020 will have far-reaching consequences for every category of the industry, both residentially and commercially. There were many obstacles for the ceramic tile industry, which has been dealing with them for some years now. Ceramic tile was no exception. Ceramic tile sales continued their downward trend in 2020, with a low single-digit loss in total sales and a comparable reduction in volume in the first quarter. Ceramic tile, on the other hand, has witnessed poor, single-digit growth for a number of straight years before then. In the aftermath of the second Covid wave, domestic demand in India has dropped by more than half, according to official records. Increased container freight prices have had some impact on exports, despite the fact that they have suffered the least (10 to 15 percent). It has taken longer than expected for Morbi, one of the main Indian tile manufacturer, to begin production at their new facilities. Due to technical difficulties, commercial operations in India's biggest cluster of new ceramic factories have been delayed by one to three months.

Recent developments

When innovating products, corporations are focusing on the technical and physiological aspects that will attract clients and boost market sales volume: Mohawk's RevoTile, which contains Clic-Fit technology for quicker and simpler installation, and Stepwise, which features Stepwise technology for faster and easier installation and better slip resistance, are two examples of this.

By the end of 2021 Grupo Halcon, a Spain-based ceramic tile manufacturer, will have completed the purchase of Cicogres SA's -a tiles manufacturer stationed in Castellon with a remarkable track record in innovation and over 30 years of activity- industrial assets (featuring 5 contemporary production lines with big format capabilities), its brand and catalogues, and its present employees, according to the company's statement. Following completion of this acquisition, Grupo Halcon will reinforce its position as the world's largest ceramic tile maker, expanding yearly capacity by 10 million square meters (including the two additional lines detailed below) over 21 production lines and creating 250 million euros of excess sales across three well-known brands. Hence, Grupo Halcon will build a new catalogue of trendy designs while continuing to provide classic shapes in order to revive the Cicogres brand.

Technological advancements, such as manufacturing automation, are expected to boost market growth in the coming years. Developments in manufacturing techniques have resulted in the production of ceramic tiles with the highest degree of finish quality. You'll have to go through a lot of polishing steps to get a mirror or stone finish. Because of automation, modern production facilities need very minimal human intervention. Consequently, there has been a massive increase in the manufacture of goods at lower prices.

Digital ink-jet technology is a cutting-edge new method of decorating ceramic and porcelain tiles for floors and walls that is expected to profoundly alter the ceramic and porcelain decoration industry in the future years.

Digital printing occurs when data and images are printed directly from a computer onto a tile. Non-impact printing using ink is known as ink-jet printing. It uses ink droplets blasted from a small aperture to a specified location on a surface in order to create an

image. To create almost any colour, CMYK uses the four primary colors (cyans, magentas, yellows, and blacks) and mixes them together in a multitude of ways.

Ceramic and porcelain tiles may now be printed using the same printing technique thanks to advancements in this technology. This technology uses an inkjet printer and four specifically developed inks enabling for an infinite number of high-quality designs and embellishments while using less resources, generating less waste, and needing less research and manufacturing time than previous methods.

Non-contact ornamentation is possible with ink-jet decorating. When tiles depart the machine at the same pace they entered, it is possible to attain speed up to 50 metres per minute with photographic-quality duplication. Designers now have almost infinite design choices thanks to this new technology. Ink-jet printing has a number of benefits over traditional printing technologies, including a smaller color palette, improved adaptability, ultra-fine resolution, edge-to-edge decorations, full relief ornamentation, random patterns, and computer control of the whole process. Because of this innovative method, the process of designing and decorating tiles has been made easier, faster, and less costly.

Finally, the recent pandemic and advances in technology's relation to hygiene should not be overlooked. In 2021, Italcer Group, the seventh-largest player in the Italian tile business, completed and commercialized ADVANCE, an environmentally friendly antibacterial ceramic floor and wall tile created in first and single fire at over 1200 degrees with 40% recycled raw materials. Throught this innovative product, humans and the environment are both protected from harmful germs and pollutants thanks to the new technology's antiviral and antibacterial characteristics that have been scientifically proven also to absorb a portion of Co2 particles stagnant into the air.

The Italian tile industry

When it came to results for 2020, the consequences of a worldwide pandemic were evident, but not as dramatically as industry executives anticipated during the six-week

nationwide lockdown enforced between March and May 2020. Specifically, the improvements started in May and June and persisted throughout the second half of the year 2020 were responsible for minimizing losses that occurred during the first six months of the year 2020, as previously stated.

Governments are also encouraging the use of environmentally friendly building materials. The Green Building Council of the United States controls the use of environmentally friendly and non-toxic building materials and in doing that it benefits the ceramics sector. On the other hand, Government restrictions targeted at lowering carbon emissions are expected to stifle the expansion of the Ceramic Tiles Market in the foreseeable future and according to industry experts, the development of environmentally friendly products will provide profitable prospects for the ceramics industry in the next years.

Italian tile sales, by the end of 2020, declined by 3.9 percent to 391 million square meters but exports were steadfast, with a 2% increase over the previous year. The manufacture of ceramic tiles in Italy seems to have withstood the storm so far.

According to the National Institute of Statistics, over the course of 2020, 133 companies manufactured 344.3 million square meters (-14.1%) and employed 18.747 agents. The total sales reached 391 million square meters (-3.9%), with a portion of that total coming from the finished product warehouse.

Overall, the number of operating companies in Italy as of right now is 271, they employ approximately 26.750 direct operators, and they bill a total of 6.2 billion euros. In addition to the previously stated costs internalization in Europe and North America, it is necessary to factor in cost internalization in Asia.

A slight decline in volumes (-1.8 percent) results in exports reaching 317.7 million square meters, while sales in Italy reach an all-time low of 73.3 million square meters (a 12.2 percent decrease). Exports account for 4.4 billion euros (-2.2 percent) of total revenue for Italian tile companies, with the remaining 720 million euros coming from the domestic market. Additionally, the first trimester of 2021 has shown positive results, with revenue increasing by 9 percent when compared to the same period in the previous year. This was made possible by both the growth of the domestic market in Italy (which saw an 18.9 percent increase) and the growth of the export market, which saw a 7.2 percent increase. This represents an actual and significant improvement, particularly when compared to the

first trimester of 2019, because it becomes clear that the total increase amounts to 7 percent in that period.

Sanitary ware

In Italy, there are 30 industrial companies that manufacture sanitary ceramic, with 27 of them located in the Civita Castellana district (Viterbo). On a national scale, this branch employs 2.652 direct operators, and the total number of pieces manufactured in the last year was 3.1 million. 306.2 million euros in total revenue, with 137.8 million euros in sales from various international markets accounting for 45 percent of the total.

Refractory materials

The number of active companies in the refractory material manufacturing industry is 31, with a total workforce of 1.704 employees (a decrease of 1.7 percent from the previous year) and a total annual production of 276.000 tons (-23.0 percent). According to the company, total revenue has decreased by 21,6 percent compared to the previous year, and now totals 319 million euros. This is due to a 30.5 percent decrease in sales on Italian soil, as well as an 11.5 percent decrease in exports.

Ceramic tableware

The nine industrial enterprises in Italy employ a total of 644 people, all of whom play an important role in the process that results in the production of 8.400 tons of product (a decrease of 27.6%) and the sale of 7.800 tons of finished products. All of the activity on the domestic market accounts for 80 percent of total sales; the total revenue for the year 2020 amounts to 32.8 million euros (a decrease of 34.1 percent), with sales in Italy accounting for 70 percent of total revenue.

Brickwork

The Italian branch of the clay-brick manufacturing industry is made up of 68 companies that employ a total of 3.000 people. It is expected to generate a total of 380 million euros

in turnover in 2020, the vast majority of which will be generated solely on the Italian market; the total production capacity is 4 million tons[32].

However, after 15 years of steady and continuous growth, Italy has recently experienced a slight slowdown in its manufacturing output. Despite this, the country has managed to maintain its global leadership position in internationalised manufacturing for the foreseeable future. Italian and internationalised productions total more than 500 million square meters, with exports exceeding 414 million square meters (down 1.6 percent from 2017), and sales totalling 410.1 million square meters.

More than 90 percent of the total production is concentrated in the tile district of Modena and Reggio Emilia, which has served as the primary development centre for the Italian tiles industry over the course of the last century. Because of the abundance of assets made available by the local agricultural companies, as well as a strong artisanal tradition that has been deeply rooted in the area for centuries, that area was a fertile ground for said industry.

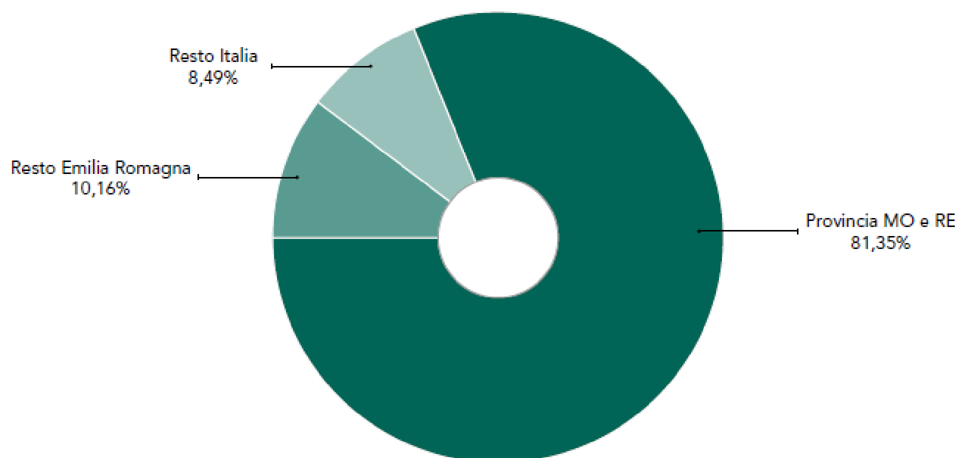


Figure 4 - Production zones (Graphic from Confindustria Ceramica report 2020).

Furthermore, the location was advantageous from a resource standpoint, as there was a great abundance of clay (the raw material around which the tile industry is built) and methane gas in the area (main energetic source to cook the tiles with). During the 1960s

[32] Data from Confindustria Ceramica 2020.

and 1970s, many artisans who were members of the working class or who had previous experience as construction workers made the decision to establish their own businesses that were connected to the tile industry. The tile manufacturers themselves set up internal planning bodies to engineer the processes and design the machinery that will be used in the production of their products.

The urbanization of the world and the increase in the global population are expected to fuel the market's expansion; however, for the time being, only the Old Europe is keeping the Italian exports' financial statements afloat, accounting for 85 percent of total turnover, despite the fact that they experienced a 3.3 percent decline in 2018, amounting to 4.5 billion euros and 327.7 million square meters (-3.1 percent).

Consequently, the sales volume of the tile companies operating in Italy decreased by 3.0 percent to 5.4 billion euros, and the Emilian district, located between the provinces of Modena and Reggio Emilia – which is one of the most renowned from an international standpoint and where 80 percent of total Italian production is brought to life – also experienced a decrease in sales volume. If we include the sales of sanitary tiles, refractory materials, ceramic dishes, and clay bricks in this calculation, the total revenue generated by the entire Italian tile industry exceeds seven billion euros.

The consumption of tiles in the domestic market is essentially limited to a little more than 800 million euros. The threat of overcapacity looms over the "Made in Italy" label: the evolution of tiles into larger sizes, from a simple external coating to a refined furniture and decoration material, has occurred at a rate that has outpaced demand.

The number of square meters sold in Italy in 2018 was 82.4 million square meters, a 1.6 percent decrease on an annual basis and a drop to even lower levels than those experienced prior to the recession.

After five years of steady growth, which reached a zenith in 2017, when new records were set, the ceramic industry, including the ceramic machinery branch, has come to a grinding halt. This branch is also being squeezed by competition from Spain and Portugal, which is threatening to derail the industry's recovery. Construction of new roads and ports has been halted due to delays in infrastructure construction, while Spain continues to invest in the support of local industries. Delays in infrastructure construction have also put a halt to the industry. To give an example, the start of the Campogalliano – Sassuolo motorway

link road construction site in the Emilian district appears to have reached a point of release only now, after a 34-year delay, whereas the Valencia seaport in Spain appears to have opened a new port entrance.

The trade balance for Italian tile is positive, with an export/import ratio of 3 to 1. However, there has been a slight fluctuation in both exports (-0.4 percent; Modenese exports -0.7 percent) and imports, which has continued into the middle of the year.

Europe is the destination of just under 70% of all exports, with France being the most important market, followed by Germany (which is holding up quite well) and the United States, respectively. Italian ceramics remain the world's leading exporter of tiles in terms of dollar value, accounting for more than 30 percent of the United States' ceramics market. The market has been declining for the past two years, partly as a result of the high cost of laying that makes Italian ceramics less competitive, but there are encouraging signs in the fact that the ceramics industry in the United States has requested that the Trump administration restrict the unregulated import of Chinese tiles.The performance of foreign companies, which employed 3,151 people and produced 85.8 million sqm of tiles in 2018, was more stable than that of domestic companies, which produced 85.8 million sqm in 2017.Total sales (86.5 million sqm) resulted in a turnover of 858.9 million euros (-0.4 percent), with 80 percent of the revenue coming from sales in the same market as the factory's main office. Spain is our most important supplier, accounting for slightly less than half of all imports, followed by Germany and India, both of which are expanding.

Overview of the international PE market in 2021

In spite of the devastating Covid-19 outbreak and its worldwide economic impact, dealmakers continued in the making of deals in 2020, while exits and fund-raising dropped back in step with the five-year trends.

When the first shock of government stay-at-home directives hit both buyers and sellers, private equity activity plummeted off a cliff in April and May. Despite the year-long

slowdown in overall transaction volume across most industries, deal and exit values rebounded strongly in the third quarter. The second half of this year was the strongest in recent memory with regards to putting significant amounts of capital to work.

Additionally, the year's total transaction decline of 24% left a significant amount of unfinished work. Stifled demand will certainly have a significant positive influence on current-year transaction counts, given the flurry of worldwide activity in early 2021. Investment funds will continue to look for opportunities in industries that have been least impacted by the still present Covid-19 problem.

In some respects, the industry’s quick rebound isn’t surprising: One of private equity’s enduring strengths is its ability to thrive during periods of economic disruption. Downturns typically offer PE funds a relatively leisurely opportunity to find distressed assets and ride the cycle back up. This is shown in the returns of funds from years following the last two economic downturns in 2002 and in 2009, in which they have achieved an average of internal rates of return (IRR) floating between a range of 17% and 21% range. Conversely, this crisis was different. Deals like Wayfair's and Outfront Media's multimillion dollar recapitalizations benefited distressed investors for a short time, but opportunities to invest in value were rapidly lost. Private asset values (which are closely associated with public equities prices) returned at a rapid pace throughout the summer, following the global credit and public equity markets. The S&P 500 returned to its pre-crisis peak following the global financial crisis in 2008–09 after almost seven years, but this time it recovered its losses within 150 days and concluded the year 16 percent higher than where it began.

Several elements combined to produce this pronounced V-shape. To begin with, private equity firms had a plenty of cash at the time of the Covid-19 crisis. General Partners were ready to put money to work, and the explosion of special-purpose acquisition companies (SPACs) in 2020 added more than $40 billion to the pile of funds seeking buyout opportunities

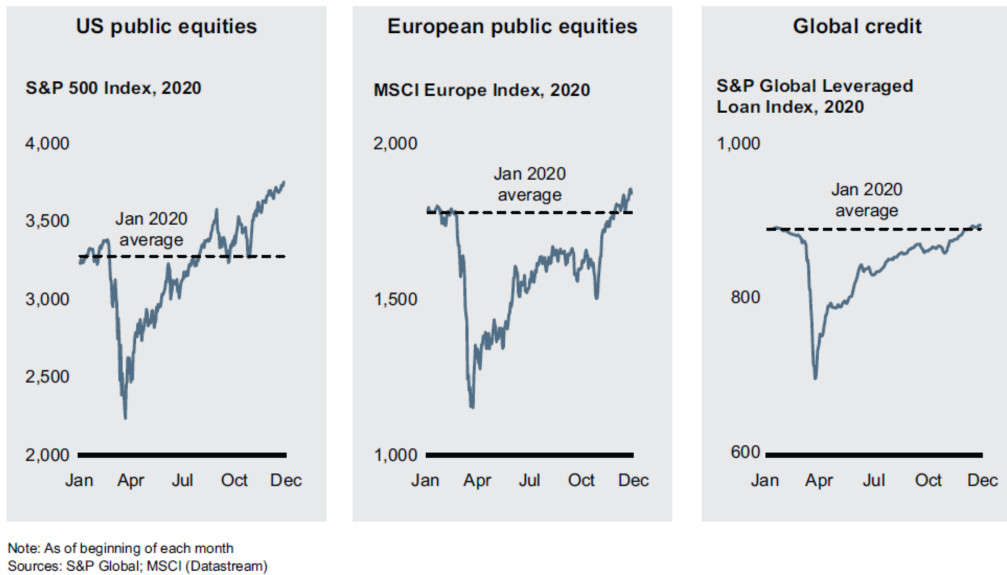


Figure 5 - US and Europe equity markets and the global credit market in 2020 (Graphics from Bain & Company "Global private Equity Report" 2021).

During the moment of uncertainty after Covid-19's worldwide spread, few investors were ready to take a position on the stock market. However, the attitude switched as the US and European central banks aggressively injected billions into the financial industry, relieving liquidity worries for enterprises and their portfolio companies. Consequently, this switched the focus from portfolio reorganization back to deal-making.

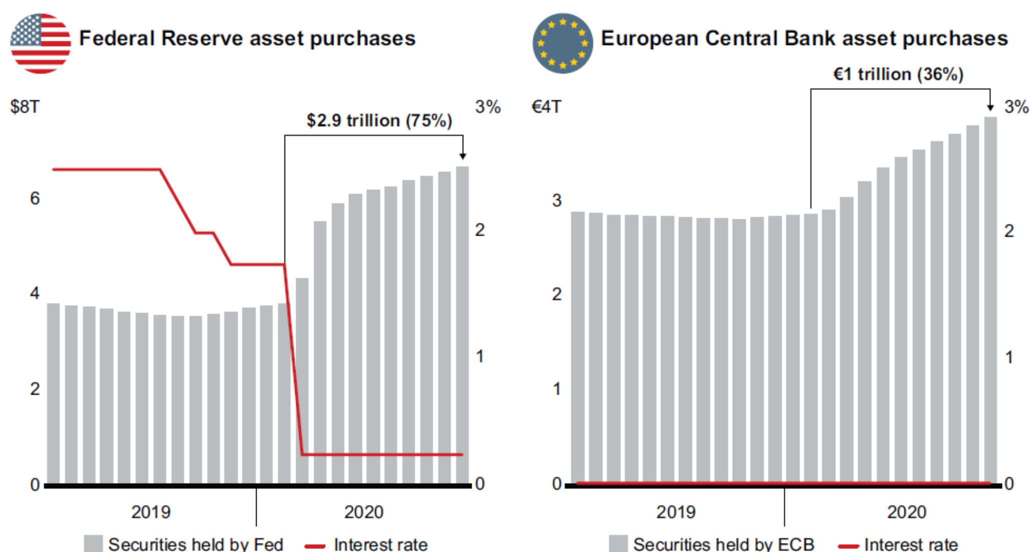


Figure 6 - European and American quantitative easing, compared to interest rates (Graphics from Bain & Company "Global private Equity Report" 2021).

As a result, many investors began to believe that the downturn in the real economy was just a temporary setback. There was also an increase in the availability of low-cost financing to support transactions. As asset values rose, sellers were encouraged to put their assets on the market, especially those from private equity firms engaged in sponsor-to-sponsor transactions. In conclusion, the 2020 second half of the year spikes significantly in transactions more than compensating the second quarter's dip in value.

Predictably, this expansionary monetary policy is coming to an end. The upcoming inflation, which is far from being transitory in case no measures are adopted, has rose to 6,8% in the end of 2021. Chair of the Federal Reserve Jerome Powell announced that the American central bank will start throttling back the economic stimulus tapering its bond-buying program in November 2021, with the scope of phasing out the quantitative easing while continuing the recovery of the nation’s economy. Indeed, the first rise in interest rate has been announced for March 2022. Conversely in Europe, in line with its history, the ECB led by Christine Lagarde is conducting a wait-and-see monetary policy: interest rates, despite inflation peaking at 5% in January 2022, remains at their lower until some future date.

Investments

Despite a terrible second-quarter performance (North American deal value alone was down 85% from the same quarter of the previous year), the worldwide sector raced to the finish line in 2020, with $592 billion in buyout transaction value generated. 8 percent more than in 2019 and 7 percent more than the five-year average of $555 billion, according to the latest data. General Partners rushed to put money to work in the third and fourth quarters, totaling $410 billion. That a central bank stimulus would keep the world economy afloat long enough to see off the Covid-19 outbreak was widely believed.

The number of buyouts reduced by 24% to 3,100 in 2020 from 4,100 in 2019 as a result of Covid. Compared to the five-year average, the number of agreements fell throughout the corporate landscape, except in the technology and telecommunications industries.

Retail, consumer, the media and entertainment industries all took the biggest blow. Although the quantity of deals has dropped considerably, this is most likely a one-time blip. In early 2021, global due diligence activity was at its highest level ever, implying that many of the agreements put on hold because to the pandemic mayhem would be completed soon. That ought to serve as a framework for the 2021 activities.

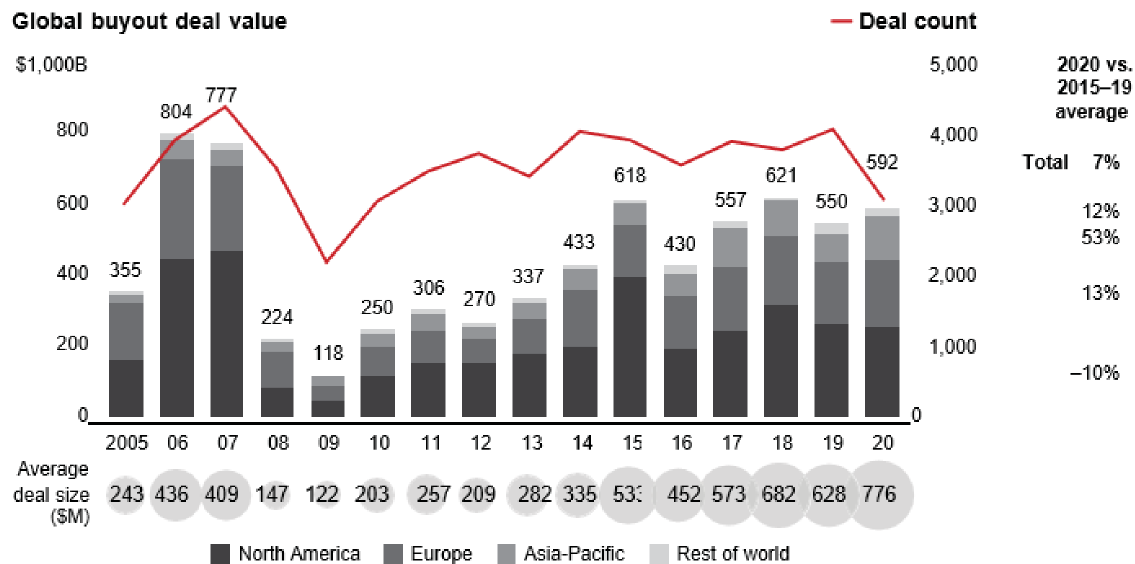


Figure 7 - Global buyout deal value in 2020 (Graphics from Bain & Company "Global private Equity Report" 2021).

Since the average transaction size grew by a whopping 24% to $776 million in 2020, the value of all deals increased but volume decreased. Because of this, the private equity business is becoming more concentrated larger funds must engage in larger transactions to make a difference for their investors. For major transactions, banks make more money accessible in terms of financing, rather than for smaller ones. When the market was tense, they were most at ease with financing to well-established General Partners who were purchasing big and reliable targets.

In 2020, Covid-19's location and timing had a significant impact on regional transaction activity. In the first quarter, the Asia-Pacific region was most hit as China struggled to suppress the first spread of the virus. The second quarter was rough for North America, but by the end of June, the area had recovered. In both the second and third quarters, activity in Europe fell behind the rest of the world, which is why it took longer to recover. With a solid fourth quarter showing, European companies ended the year on a high note

though. The worldwide proportion of private equity in merger and acquisition value rose to 16 percent notwithstanding the ups and downs.

The largest problem private equity investors are facing today is the skyrocketing cost of assets. As a demonstration, a poll conducted by Preqin in December 2020 found that investors believe the most difficult part of generating high returns is accurately valuing assets. Buyout multiples in the United States and Europe reached record highs in 2020 despite fierce competition and an influx of debt and equity investment funds. By the year's conclusion, they were averaging 11.4 times EBITDA in the United States and a record 12.6 times in Europe. The fact that 70% of US buyouts were priced over 11 times EBITDA is a good indication of how hot the market was at the time.

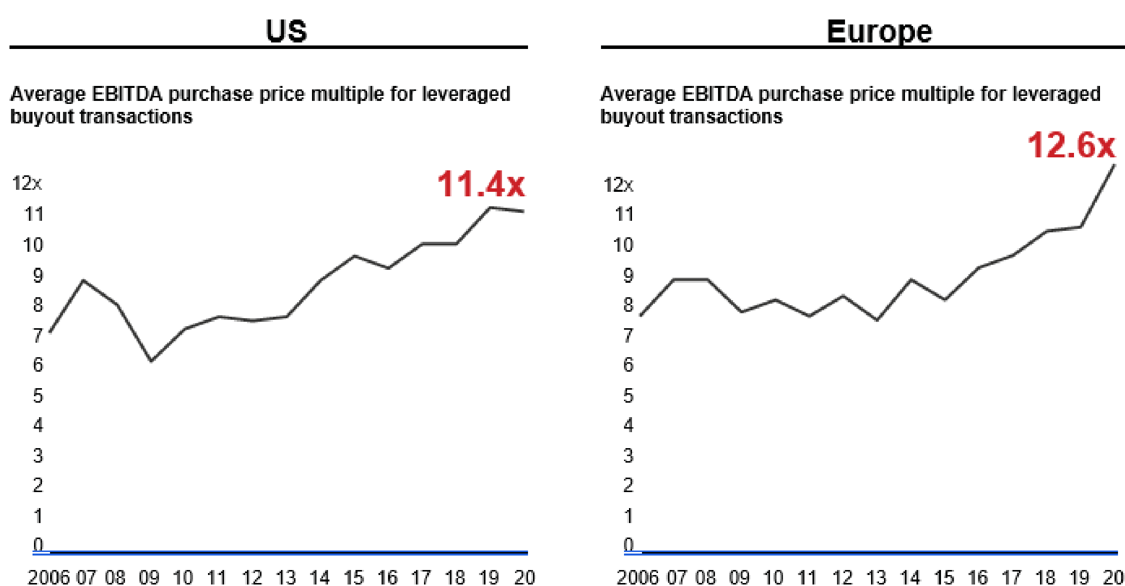


Figure 8 - Average EBITDA multiple in US and Europe LBO markets from 2006 to 2020 (Graphics from Bain & Company "Global private Equity Report" 2021).

Multipliers increased across all industries in 2020; nevertheless, the sectors least susceptible to Covid-19 (such as payments) or most benefitted by the pandemic (such as healthcare and technology) saw the greatest gains. Private equity funds focused on firms that could handle greater debt and banks were more than ready to lend them money. Because of this reason, huge availability of cheap capital push debt multiples rose sharply in 2020, with roughly 80% of transactions leveraged at or above 6 times EBITDA, a level at which federal regulators generally begin to raise red flags. Limited Partners have been

pouring money into businesses at a quicker rate than General Partners have been able to put it to use for some years, creating these dynamics. Unemployed private capital has risen steadily to about $3 trillion since 2013, with about a third of it coming from buyout firms and SPACs and the rest from venture, growth, and infrastructure funds.

Buyout dry powder[33] is also at an all-time high, which has contributed to increased price multiples. However, data does not support the idea that buyout funds are under excessive pressure to invest their cash in productive ventures. Buyout funds have grown significantly more slowly than other alternative investments, in which the accumulation of untouched finances might induce dizziness. Buyout capital is still relatively young, and the cash on hand represents only around two years' worth of investment, a significant decrease from the highs reached just before and immediately after the 2008 recession. Dry powder is a problem, but it isn't anything to be concerned about.

PE funds were remarkably resilient in the midst of 2020's upheaval. A recession was expected, but most businesses had been preparing for it by concentrating on the strongest aspects of the economy leading up to this year. The epidemic itself, on the other hand, was like passing through a portal to a fantasy realm. Retail health clinics, a traditionally recession-resistant industry sector, suddenly became poisonous as stay-at-home orders froze movement overnight. On the other hand, home renovation and recreational vehicle sales, as well as gardening and landscaping sales, soared during the economic slump.

Many portfolio firms found out that they could not survive without the flexibility to change course swiftly.

-Tritium Partners invested $50 million in RVshare in February 2020 to help the peer-to-peer rental marketplace to develop. However, the pandemic struck hard just a few weeks later, and business collapsed as a result of a wave of cancellations of rental agreements, draining the company's financial reserves. So the company's executives were compelled to search for methods of retaining current consumers and generating new income.

-TaskRabbit, an Ikea subsidiary, has a contract with the firm to disinfect all rentals at the beginning and end of the lease term. It started leasing emergency vehicles to medical professionals and public utilities agencies. Once summer stretched on and camping

[33] Dry Powder assets are highly liquid marketable securities considered cash-like.

became a last-ditch option for millions who had to postpone their exotic trips, the prospects of the corporation switched again. There was a dramatic increase in sales and reservations. Another $100 million was invested by KKR in the firm in October.

-Examples of renovation were extremely recurrent: to protect healthcare workers' faces, Apex Tool Group at Bain Capital employed 3-D printing. If you're a fitness or wellness provider, ClassPass has released a new feature that lets you broadcast and manage appointments through the ClassPass app and website. Suuchi, a subsidiary of Edison Partners, has shifted its focus from offering supply chain optimization software to the personal protective equipment industry.

Covid-19 has prompted several companies to make changes in their products and organizations, some of which will last beyond the epidemic. In the months and years ahead, portfolio firms will have a tremendous challenge in identifying the new normal and responding appropriately. The pandemic has shown that broad sector classifications are no longer relevant. Developing and maintaining a strong network of industry specialists and advisors will become more important for creating and executing successful customized investment strategies and deal flow. A striking example is the healthcare industry: in the wake of the pandemic, telemedicine and non-hospital care models soared in popularity, and private equity (PE) firms followed suit. Outpatient and home care deals are expected to more than increase in 2020 to $3.9 billion. However, there were also some less evident issues. As governments and providers hurried to provide more Covid-19 testing, life sciences firms that manufacture tests and tools witnessed large gains in revenue. Any firm that provides vaccine research tools or technology that allows scientists and pharmaceutical corporations to interact was in the same situation. In fact, the epidemic has shown methods to enhance clinical trials so that they depend less on physical contacts in the long run. As a result, companies that offer services like remote patient diagnostics and monitoring will face an increase in revenue.Delays in elective surgeries will put further strain on the healthcare industry, which has a history of surviving economic downturns. Retail clinics, ambulatory surgical centers, and hospitals all suffered, although the effects differed by industry and firm. In 2020, the number of healthcare transactions maintained steady. Real-time comprehension of the effect of Covid-19 on each subsector and knowing which of those impacts would have a positive

or negative influence upon a company's trajectory in the future was essential to place the proper bets.

The entire technology industry is expected to get the most private equity funding in 2020 (representing 29% of worldwide buyout deals, 32% of which include fintech). SaaS-based companies with highly sticky business models, such as vertical software, attracted the biggest portion of investments. A $1.5 billion fundraising round for Epic Games backed by KKR, Baillie Gifford, and BlackRock boosted the gaming industry.

Despite the sluggish economy, the financial industry attracted a lot of private equity investment. However, the dynamics of the subsector had a role here as well. While the payments industry was on fire, the insurance industry remained relatively quiet (as we predicted last year). Covid-19 accelerated the already well-underway secular trend to digital payment methods when businesses and customers alike abandoned cash in favor of credit cards and other online payment options. In 2020, deals involving payments firms accounted for 24 percent of overall financial services/fintech investment value, up from 16 percent in 2019.

Exits

In 2020, exit activity followed the same trend as investments. When the Covid-19 epidemic struck, both buyers and sellers slowed down their activity, and second-quarter business faced a setback.. In the second half, however, exit value improved as revived price multiples and the risk of a tax-law change in the United States offered sellers sufficient reason to list companies—especially the large ones. The number of exits fell short of 2019's total, but the worldwide exit value touched $427 billion in 2020, which is on pace with 2019 and the five-year average.

Strategic buyers accounted for the majority of exits once again. As listed firms in public markets rose, sponsor-to-sponsor partnerships resisted considerably, and IPO grew by 121 percent to $81 billion. Many firms relied on the practice of partial exits, since General Partners preferred to retain a share in appealing assets rather than search for new deals in

a hostile market. The median holding length for companies exited in 2020 was 4.5 years, somewhat higher than in 2019, but in line with the five-year trend.

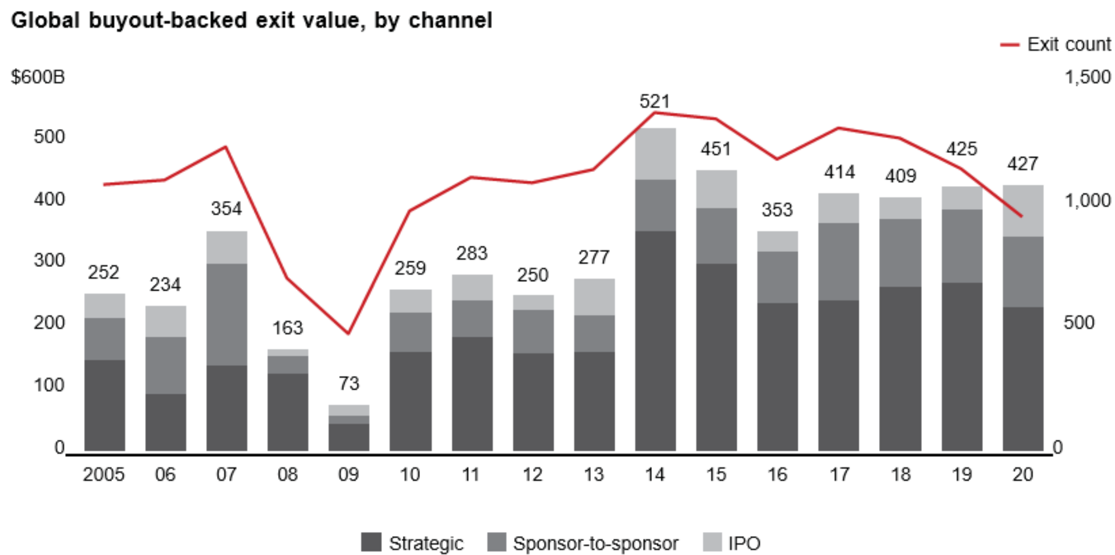


Figure 9 - Global buyout-backed exit value by channel (Graphics from Bain & Company "Global private Equity Report" 2021).

Fundraising

That many General Partners were concerned that Covid-19 would bring an end to the golden period of private equity fund-raising is understandable. However, it turned out that these concerns were unfounded. 2019's record 1.09 trillion dollars in global fund-raising fell to $989 billion this year. Excluding SPACs' $83 billion, it was still the third highest amount in history, and the second highest if you count them out. A total of about $5 trillion has been raised by the business in the last five years. SPAC money directed at buyout-type targets, estimated at $41 billion, is expected to generate an additional $30 billion in buyout funds by 2020, bringing the total to $340 billion.

Clearly, Limited Partners see private equity as a safe house in the face of uncertainty. A brief hiatus was taken by financial institutions in April, at which time the Covid-19 crisis was at its height, but they swiftly resumed operations during the summer. Around 80%

of Limited Partners are indeed convinced that private equity will continue to perform in 2021 and 2022, according to Private Equity International's December 2020 LIMITED PARTNER Perspectives Study, and close to 40% think they are under allocated to that class of assets. Many expect to enhance or maintain their commitments in 2021, according to the majority of the survey's respondents. Limited Partners, for all their enthusiasm, are becoming more selective about the funds in which they choose to invest. An escalation in the quality of investments by major funds is expected by 2020.

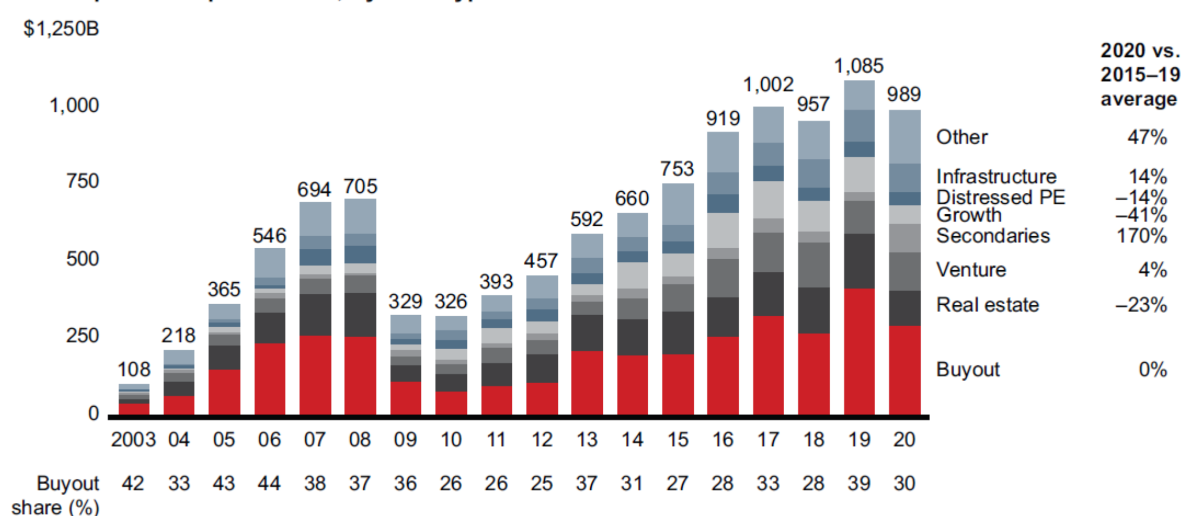


Figure 10 - Global private capital raised by fund type (Graphics from Bain & Company "Global private Equity Report" 2021).

Overall, there were fewer funds closed, but those that did were much larger. Most funds aiming to raise $5 billion or more in assets closed within six months and 18% over their original goal. Taking CVC as an example, it's clear to see that the firm generated $24 billion for its Capital Partners Fund VIII in only five months, surpassing its original goal by 22% Consolidated smaller funds with expertise, on the other hand, closed in an average of 14 months.

The only funds that deviated from this trend were those that had a very specific goal in their mind. As an example, Symphony Technology, located in the United States, completed its $2 billion Group IV fund in less than six months, 33 percent ahead of the foreseen expectation. In only three months, Montefiore Investment raised €850 million,

focusing on France. An investment fund specializing on high-growth, technology-enabled industrial enterprises, like the first timer BNW Investment of South Korea, was able to raise $160 million in five months (32 percent more than it expected). There was considerable interest from limited partners in long-term funds as well. Although it has not yet to divest any of the investments made with its one billion long-hold fund created in 2017, Cove Hill has raised $1.5 billion in new long-term investments.

Returns

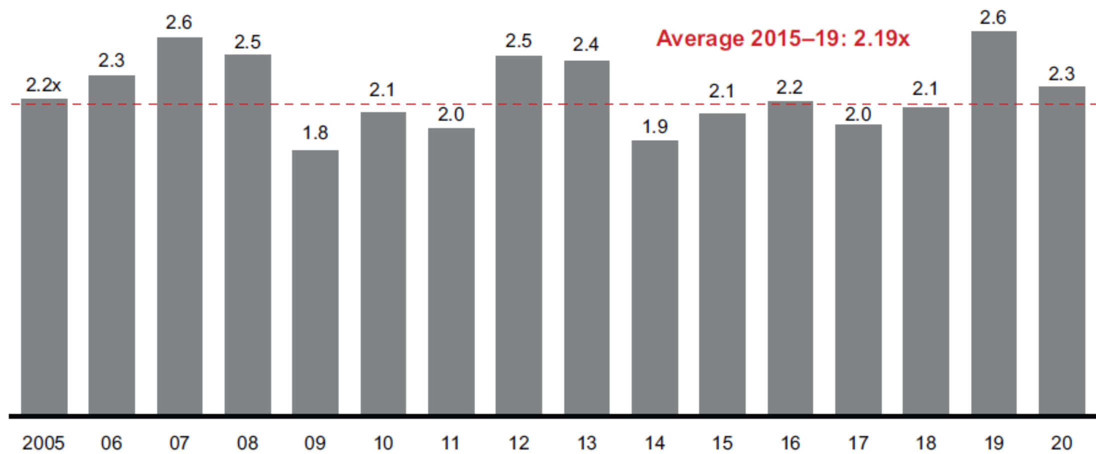
Private equity seems to have been unaffected by 2020's perfect storm in terms of returns. In regards with annualized IRR over a ten-year period, funds have escaped the type of harm seen during the global financial crisis as of lately.

General Partners were already prepared for the conclusion of the decade-long recovery cycle that followed the global financial crisis and broke every record, which helped in some way in terms of returns. But the largest difference between then and today was the huge government boost that bolstered the economy in the face of the very worst Covid-19 could do. As a result of central bank intervention, several industries were spared, allowing investors to preserve or even enhance overall performance even when some branches suffered great losses

Except for the first quarter though, in which public and private market both have suffered, listed private equity firms has done phenomenally. Overall, General Partners started fewer ventures in 2020, but those that did produced multiples on invested capital of roughly 2.3 times, slightly over the five-year average.

In conclusion, over most of the time periods, the worldwide private equity industry has outperformed other asset groups, with high variability dependently on the sub-industry of investments.

Gross pooled MOIC, by year of exit



Notes: MOIC is multiple on invested capital; includes fully realized global buyout deals with more than $50 million in invested capital; excludes real estate and infrastructure deals
Sources: CEPRES Market Intelligence; Bain analysis

Figure 11 - Returns expressed as multiple of initial invested capital from 2005 to 2020 (Graphics from Bain & Company "Global private Equity Report" 2021).

A recent cycle has seen technology and business services increase while other sectors (particularly energy, industrial, natural resources and healthcare) have seen declines in consumer spending. On the other hand, there has been a wide range of results for mergers focusing on subsectors of larger industrial groupings.

This isn't to claim that picking the correct industry is the only way to make returns. Even while sector characteristics are not to be ignored, the selection of the right firm within a strong sector will have a greater impact on a deal's outcome. For instance, there has been a widening disparity between the top-quartile and bottom-quartile performance in technology in the last decade. Energy and natural resources have had a disappointing year mainly due to the increase of energy and commodities, but top-quartile returns have exceeded those in sectors with better median results.

The lesson is obvious, all industries have winning investments. Understanding the characteristics of the industry in which they exist and formulating a strategy for capitalizing on them are two prerequisites for finding these opportunities and producing meaningful value from them.

The Italian private equity market: Fundraising

The total amount of capital raised by domestic operators in 2020 was 2,612 million euros, an increase of 64% over the €1,591 billion raised the previous year. Fundraising activities were carried out by 27 different operators in 2020, compared to 22 operators in 2019. Over the course of the year, 36 funds completed at least one closing, with seven of them raising more than €100 million: three million euros from the parent company and four million euros from the stock market.

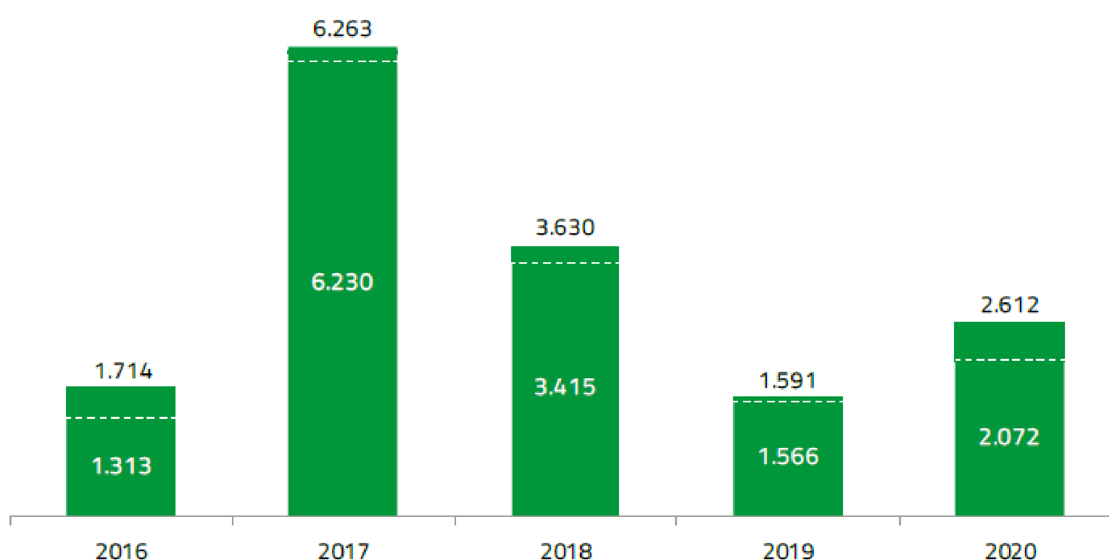


Figure 12 - Raised capital in temporal perspective -under the white line are indicated capital raised from the market- (Graphics from AIFI, "il mercato italiano del private equity, venture capital e private debt", 2020).

Capital raised by independent operators on the Italian and international financial markets totalised 2,072 billion euros in the first quarter of this year, a 32 percent increase over the same period the previous year (1,566 billion euros).

If we look at where the money came from in terms of origin, it is important to note that the domestic component accounted for 90% of the total, amounting to 1,708 billion euros, with the foreign component accounting for

10% (193 million euros).

Among the sources of capital were individual investors and family offices, which accounted for 28% of total capital raised, thanks in part to the closing of several retail funds. Insurance companies, which accounted for 27% of total capital raised and played a leading role in raising a fund of significant size, followed by pension funds and social security funds (16 %) and insurance companies (12%).

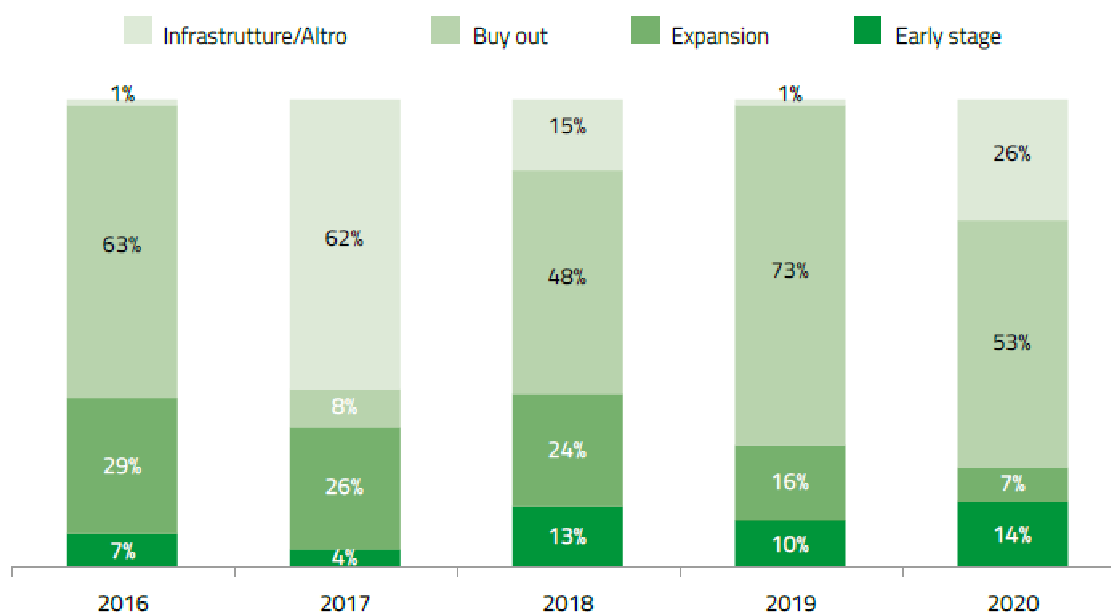


Figure 13 – Distribution of fundraising by category of investment (Graphics from AIFI, "il mercato italiano del private equity, venture capital e private debt", 2020).

The final point to mention is that when it comes to the distribution of independent funding according to the type of target investment, it is expected that most of the capital flowing into the market will be used to carry out buy-out operations (53%). Next, infrastructure (26%) and early-stage venture capital (25%) are the most popular investments (14%).

The Italian private equity market: Investments

It is expected that 471 transactions will be recorded on the Italian private equity and venture capital market in 2020, which will be dispersed among 341 companies and have a total countervalue of €6,597 billion. There was a 9% decrease in the amount invested compared to the previous year (€7,223 billion invested in 370 deals), while the number of investments increased by 27%, driven by the venture capital activity, which saw the launch of an entity with institutional origins that focuses on investments in companies at their early stages of development.

As a result, when it comes to the types of operations that were carried out in terms of numbers, early stage was unquestionably first with 306 investments, followed by buyout and expansion operations, respectively. By contrast, in terms of dollar value, buyouts continued to be the segment of the market to which the majority of resources were directed (4,370 billion euros), followed by infrastructure investments (1,322 billion euros) and the early-stage branch (which received a total of 1,312 billion euros).

The following categories of players engaged in different types of activity: international operators absorbed 67% of the market in terms of the amount invested during 2020, which amounted to 4,425 billion Euros, while domestic operators invested 2,172 billion Euros, according to the data available. It should be noted that international operators without a presence in Italy made a total investment of €1,308 billion in the country, which was spread across 38 different operations. In terms of numbers, domestic operators accounted for the majority of the investments, with 384 totalising 82% of the market share.

Generally speaking, the average cut of the amount invested in a single transaction in 2020 was 14 million euros, representing a decrease of 19,5 million euros from the previous year, as a result of the significant number of early-stage transactions, which are typically of small size. Taking these transactions out of the equation, the average amount was 37,7 million euros,

a slight increase over the previous year's figure of 34,4 million euros. The normalized data, on the other hand, was 7,5 million euros, which was net of the large and mega transactions that took place in 2020. (While in 2019 it was 11,2 million euros).

Taken into consideration in terms of the companies that have been invested in, it should be noted that in 2020 there were two deals with equity payments ranging from 150 to 300 million euros (large deals) and six deals with an amount greater than 300 million euros (mega deals). Overall, the large and mega deals attracted resources totalising 3,463 billion euros, accounting for 53% of the total amount invested in the year under consideration.

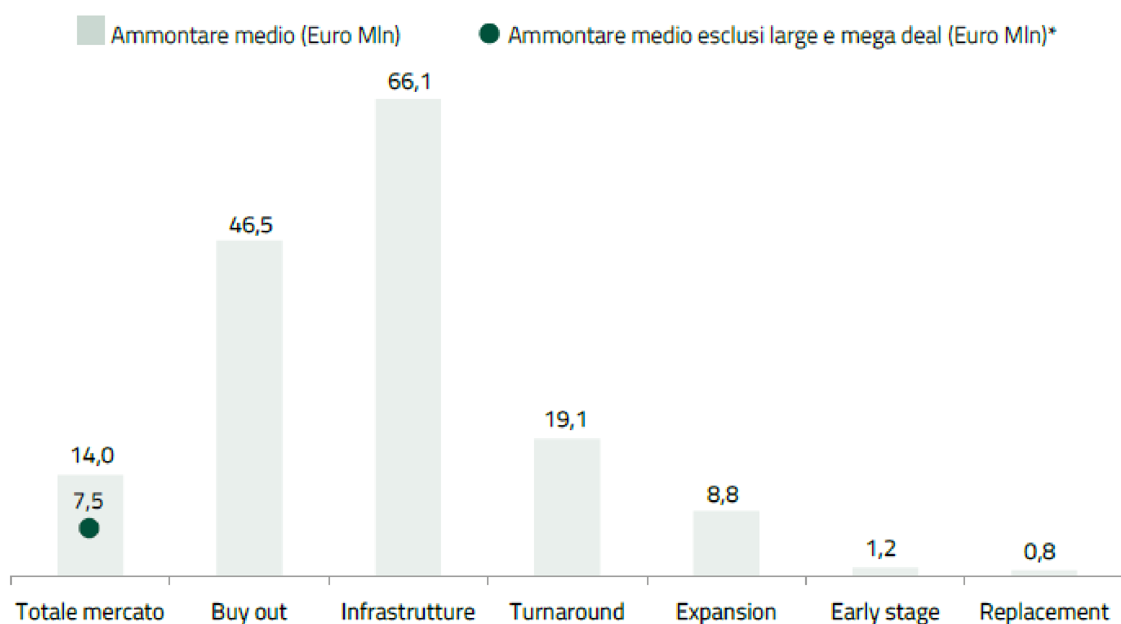


Figure 14 – Avg. amount of investment for investment's type (Graphics from AIFI, "il mercato italiano del private equity, venture capital e private debt", 2020).

Large and mega transactions had brought in 3,375 billion euros in the previous year, accounting for 47% of the total amount raised (thanks to 10 large deals and 2 mega deals). It was 3,134 billion euros in total for transactions characterized by an equity payment of less than 150 million euros (small and medium-sized deals), which represents a decrease from

3,848 billion euros in 2019.

Moving on to the examination of the changes that have affected the various market segments, the early-stage branch (seed, start-up, and later stage) has experienced significant growth in both the amount invested (up from 270 to 378 million euros (+40%) and the number of transactions (168 in 2019, compared to 306 in 2020, an increase of 82%), as anticipated by the activity of a new entity of an institutional nature.

In 2020, domestic operators were responsible for the vast majority of new business ventures, accounting for 89% of total investments and accounting for 80% of total investment funds raised.

In the expansion segment, 354 million euros were invested in 2020, which has spread across 40 transactions. The figures have decreased by 61 percent in terms of dollar value and 17 percent in terms of number when compared to the previous year. In particular, the analysis of the types of investors active in the segment reveals that domestic subjects made the greatest number of investments, as shown in the table below (83 percent , 71 percent in terms of amount). In addition, the turnaround branch maintained its niche position in 2020, with the completion of nine investments, compared to seven in 2019, and an increase in the amount invested from 96 to 172 million euros.

Only 2 investments were made in the replacement segment in 2019, compared to 11 in the previous year, resulting in a total investment of just over 1 million euros (355 million euros in 2019).

In 2020, operations carried out in the infrastructure segment will generate 1,322 billion euros, representing a 159% increase over the previous year, when 510 million euros were invested in the segment. Compared to 2019, the number of such transactions carried out in 2020 an increase by 54% to 20 from 13. The buy-out segment received 66% of the total capital invested in 2020, amounting to 4,370 billion euros, a decrease of 14 percent from the previous year's total of 5,096 billion euros. In specifics, there were 94 transactions (compared to 123 in 2019), representing a decrease of 24% from the previous year. It is important to note that investments made with a

commitment of resources, per company invested in, of less than 15 million euros, accounted for 42% of the total number (compared to 43% in 2019), while the weight of deals between 15 million euros and 150 million euros accounted for 52% of the total number (compared to 43% in 2019). Finally, large and mega deals cover the 6% of the total number of investment transactions (7% in 2019).

According to the geographical distribution of investments, and in accordance with the data collected the previous year, 95% of the investments made during 2020 were in companies located in our country, corresponding to 98% of the total amount invested during the year, according to the data collected in 2019.

Analysing the distribution of investments in different industries, it was discovered that the Information Technology sector would represent, in terms of number of operations, the primary investment target in 2020, with a share of 33%, followed by the medical sector, which had a weight of 13%, and the industrial goods and services sector, which had a weight of 12%.

In terms of dollar amounts, the information technology sector received the biggest portion of resources invested during the year (33% of the total), followed by industrial goods and services (19%) and manufacturing (14%).

For companies operating in high-tech industries, the number of transactions completed in 2020 on behalf of companies classified as "high tech" increased from 134 in 2019 to 181, representing a 38% increase over the total number of transactions in the preceding year. When analysing high-tech transactions, it is important to note that 89% of those identified involved companies in the start-up phase, which is characterized by a significantly lower average level of investment when compared to other segments of the market.

According to data from 2020, there is a concentration of operations on small and medium-sized businesses in terms of the number of investments made in each of the target companies. They attracted resources totalising 2,795 billion euros (42% of the total, 37% in 2019), while the rest of the market, which has a weight of 10% in terms of the number of investments, absorbed 58%

of the total resources absorbed (3,802 billion euros).

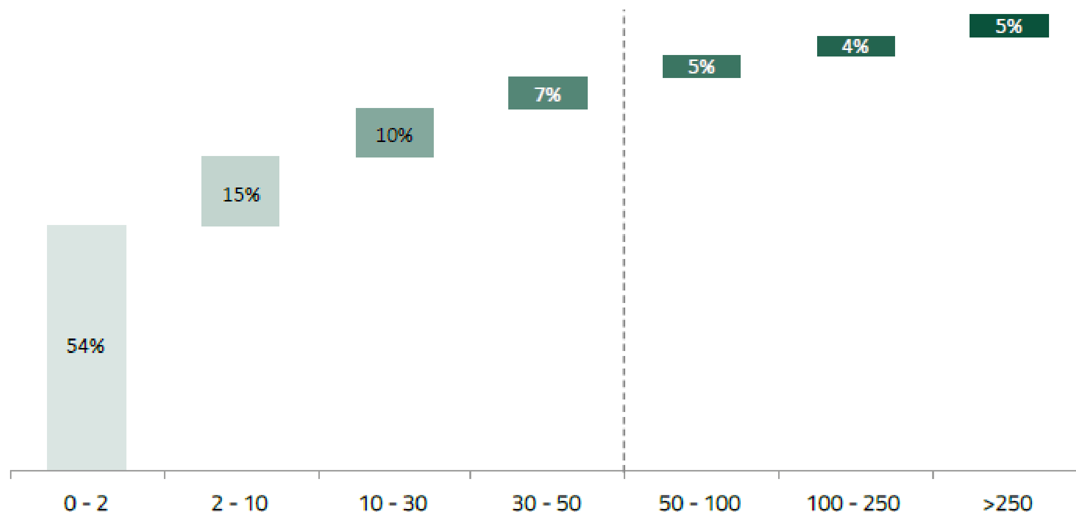


Figure 15 – Distribution of investments based on target's revenues in million (Graphics from AIFI, "il mercato italiano del private equity, venture capital e private debt", 2020).

The distribution of investments by turnover class of the target companies also reveals that small and medium-sized enterprises (with a turnover of less than 50 million euros) continue to be the primary target for private equity and venture capital investments in Italy, accounting for 86% of the total number of transactions, despite the fact that they have only attracted resources equivalent to about 24% of the total.

The Italian private equity market: Exits

Exits in 2020 accounted for 1,594 billion euros, a 28% decrease compared to the amount disinvested in the previous year of 2,216 billion euros. According to the data collected in this case, 81 divestitures were recorded, which is a decrease from the previous year's data (132 exits), which was distributed across 67 companies.

Regarding exit strategies of equity investments, sales to another private equity operator were the most popular, accounting for 55% of all transactions value, followed by IPO/Post IPO/SPAC sales, which accounted for 24% . The fact that both exit strategies represent the majority portion of how private equity fund choose to exit from an investment, in terms of deal value, worth a mention. Nonetheless, in terms of number of transactions, the trade sale continues to be the most common type of exit, accounting for 35 exits (or 43% of the total), followed by sales to another private equity operator and buybacks.

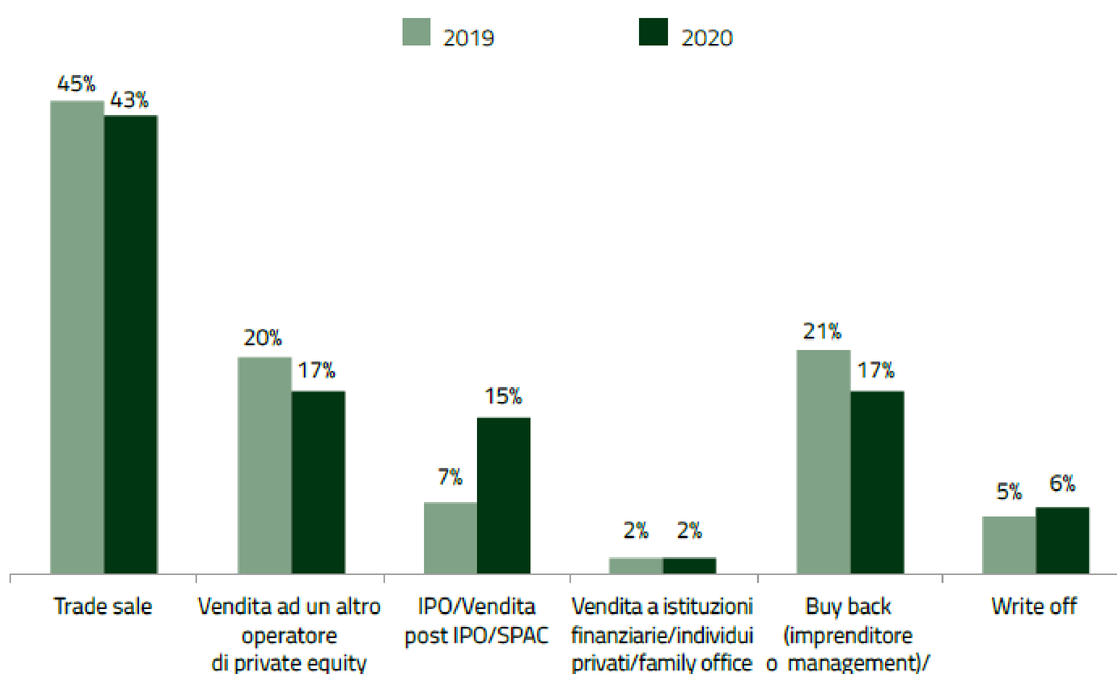


Figure 16 – Percentage of disinvestments for typology (Graphics from AIFI, "il mercato italiano del private equity, venture capital e private debt", 2020).

In terms of the type of investor, domestic operators were the most active in terms of the number of divestitures (69%) while international operators were the most active in terms of the amount of money divested (80%).

CHAPTER 3

Private equity in the Italian tile industry and Buy and Build strategy

This chapter will be about analysing Private Equity transactions in the Italian tile industry and the so called “Buy and Build” strategy. We will go through a general outlook on this technique first theoretically and then diving deeper into how it actually works in practice. We will also see more on platforms, add-ons and synergies.

The previous analysis of the tile industry clearly showed that the size of firms and the product diversification represent the most important roles to the survival of companies over time. The need to optimize production costs is a key factor when it comes to be competitive in the market. Trends are determined predominantly by customers, which mostly are large scale distribution companies having the bargaining power in negotiation of purchasing contracts, and so prices. In the end, since innovation is not much determinant in the choice of a product, ceteris paribus[34], the lower the average production cost, the lower the selling price, the more competitive is a firm than the others[35].

The ability of keeping costs as lower as possible largely depend on the optimization of the plant in which industrial processes are putted in place. The tile production activity, in fact, requires the usage of furnaces of which the switching on and off process takes usually a long time. Due to high temperatures (1.300 C°) necessary for the firing of the ceramic, industrial ovens take three to four days to warm up and the same amount of time to cool down. Indeed, for this reason is mandatory to have a precise annual schedule in order to meet the demand of clients. At the same time, plants need to be used at their full capacity. Moreover, the production chain is based on the dimension of slabs and modifying the plant is costly and time consuming.

Against this background, it’s necessary to understand how to plan and pursue increasing revenues and the optimisation of the average price of production. This result can be

[34] Design, innovation, branding and product quality are indispensable for a viable product.
[35] Luxury products are exluded from this reasoning.

obtained in two ways: through internal investments in fixed assets or implementing a concrete and functional M&A strategy.

Taking a look at the market and at its past history, it’s evident that companies who enhanced an M&A strategy pursued a higher growth in terms of revenues throughout the years. Marazzi Group, Atlas Concorde, Emilgroup, Iris Group, Panaria and Finfloor Group are some illustrious examples. Previous names represent the flagship of the Italian tile industry and consequently to their expansion they all gain a certain relevance in the international background (Marazzi and Emilgroup, for example, have been acquired by Mohawk Inc., a listed American tile group, top player in the international tile industry).

Increasing size through acquisition, in tile and all the other industries is clearly the fastest way to gain market shares and to increase profits[36]. However, despite all the advantages, this strategy also implies a certain degree of knowledge, expertise and skills in finance, which is not so common to find in family-owned businesses, in all likelihood established by former artisans and technicians.

From 2000 to 2020 almost 57 transactions were putted in place in the Italian tile industry, 25 of them were performed by foreigners, while 32 by Italian acquirors. The considerable amount of intranational operations demonstrates clearly the fragmentation of the market, in which M&A represent the most viable solution for generational turnover and high fixed costs. The major evidence of the trend is represented by the decreasing number of Italian tile firms, that in 2010 counted 284 companies, while in 2020 only 133. In conclusion, in 10 years, between mergers, acquisitions and default, due to higher international competition, needs of recurrent and expensive investment in fixed assets, the industry has faced a cut in its players by more than 50%[37].

In the last 10 years deal size varied across time[38]: based on data retrieved, the median deal size was 23 million, with transactions boarding on the upside of one billion and the downside of one million. However, the trend is confirmed by the increasing number of companies whose revenues float between 500 million and one billion, while firms with lower levels of sales are diminishing. The most common type of buyer is the industrial

[36] Snichelotto M., Pegoraro A., “Le operazioni di M&A come strumento di vantaggio competitivo”,2009.
[37] Elaborations from Confindustria reports 2010 and 2020.
[38] Data retrieved from S&P Capital IQ.

player, with 44 transactions, while the other 13 were performed by institutional players. Not a decisive number, but it clearly represents interests generated by potential returns in private equity operations. As predicted, screenings from Eikon database showed that the most recurrent purpose in operations involving industrial players has been to strengthen operations and to expand the market share, while for private equity funds the most adopted strategy was Buy and Build, which is in line with the description of the fragmented Italian tile market.

Before the decades 2020-2010, other private equity funds invested into the Italian tile industry, but with a different approach. Targets' revenues were often above 300 million and they have always been participated by institutional investors with minority stakes, in a position of support toward families or entrepreneur that owned and had the control on the business. This type of strategy is still putted in place, but the generational turnover and the increasingly difficulty to survive market's competition, favoured the Buy and Build strategy in the last years, embraced by two gamechanger Italian funds: Alpha private equity and Mandarin Capital Partner.

Laminam was established in 2001, by Franco Stefani, in Fiorano Modenese (MO), and it specialized in large-scale ceramic slabs for use in architecture, interior and exterior cladding, as well as in the high-end furniture and design industry. The indisputable leadership in the manufacture of this product, with a brand recognized by architects and interior designers all over the globe, is due to its innovative technology, which firstly allowed for a unique thickness in the creation of huge slabs (1000x3000mm, thickness 3mm) in 2004, it opened showrooms in Fiorano, Milan and Moscow (2011) enhancing its export market. In 2015 R&D investments allowed the firm to develope and commercialise a new product: the 12 mm thick 1620×3240 slab. In 2019 a new series of product, IN-SIDE, the first range of ceramic slabs offering body and surface continuity, was created. In the same year, Laminam has been acquired by the Alpha Private Equity, with the aim of reinforcing the brand's world leadership trough a B&B strategy. In 2020 Laminam realised almost 110 million in revenues, while in 2021 the first add-on, Best Surface SL from Barbieri & Tarozzi Group, has been announced in September 2021 by Alpha. Laminam, through the acquisition of a l'Alcora-based manufacturer of ceramic wall and floor tiles, continues its growth in the name of quality and sustainability, entering the ceramic district of Castellón de la Plana and strengthening its presence in the Spanish

market. The development and internationalization effort will be bolstered by the addition of the plant in Spain, one of the world's most important markets, to Fiorano Modenese, Borgo Val di Taro, and Vorsino (Russia). The purchase of Best Surface is an addition to the Laminam Group's ongoing investment of more than 50 million euros to increase manufacturing capacity. The operation also represents further consolidation of the technological partnership between Laminam and the Barbieri & Tarozzi Group and as a result, Alpha and the Laminam management team will be able to take an even more definitive step toward their goal of positioning Laminam as the world's leading manufacturer of high-end ceramic surfaces, with a focus on quality and sustainability of both products and processes.

Due to its recent history, the investment is far away from its completeness and exit, while Italcer, Mandarin Capital Partner's investment, represents the most interesting case applied to private equity B&B strategy in the Italian tile industry. Firstly, however, in order to contextualize the above-mentioned case, it's important to clarify B&B's implications, details and theoretic framework:

Buy and build strategy in a Nutshell

The Buy and Build approach entails private equity firm to purchase a business called "Platform" that then acts as a foundation for other purchases, which are referred to as "Add-ons", that in most cases, are in the same industry as that of the platform. Hence, the private equity firm acquires and merges businesses. In most cases, the platform or the add-on firms are funded with Leveraged Buyout (LBO)[39].

The platform firm is selected because it is the most suitable for pursuing the acquisition plan. In order to select the platform, it has to be taken into consideration several characteristics that make it the best fit for the acquisition and consolidation process. However, the firms that are added to the platform are generally smaller than the platform

[39] Fabozzi, F. J. (Ed.). (2003). The handbook of financial instruments (Vol. 113). John Wiley & Sons.

and have a special feature that might be highly valuable to the platform. As a result, the add-on may have specialized assets, technologies or they operate in a different location. A significant player in that market can only be created by making acquisitions in the same sector, which is generally extremely fragmented. Platforms like this one are able to use economies of scale in order to get an advantage over their competitors. A further benefit of choosing a sector that is extremely fragmented is that acquisitions will not generate antitrust problems and there are still many potential acquisition prospects out there, should they become more appealing.

The Buy and Build strategy, once the takeover has happened, it will be necessary not only to integrate the platform and the add-ons, but also to enhance their performance by using the same creation value strategy mentioned in chapter 1. It may also be necessary to regroup and concentrate efforts for organizational, operational, and financial adjustments which are unavoidable in these kinds of businesses, and, in addition, the leverage might be raised in order to sustain the external growth and generate savings in terms of taxes. In fact, interest payments are deductible and in that way a company's tax burden may be reduced because of leverage. In addition, the increased leverage has the potential to provide stronger incentives for the management because when it comes to repay debt, they will be obliged to enhance their performance and to have flexibility to comply with certain clauses (called Covenants), avoiding moral hazard and pursuing personal interests instead of maximising the firm's potential.

Obviously, investee companies also benefit from the Private Equity firm's expertise. Their major focus of the fund is usually on finance and mergers and acquisitions, which are often handled in a less sophisticated fashion and with a lack of appropriate skillsets by private corporations. Expertise in mergers and acquisitions is essential because the Buy and Build approach relies on benefits that those actions can offer. It is common for companies to gain new markets for their products via M&A activity[40], as well as access to new technologies that may be utilized for the improvement of the current manufacturing process or to develop new products, businesses, and production processes.

[40] Kaplan, S. (1989). The effects of management buyouts on operating performance and value. Journal of financial economics,

Benefits like this are directly related to the maximisation of synergies. As a matter of fact, the access to new markets, products, and technology will undoubtedly be incorporated into the platform firm, resulting in synergistic prospects for cost reduction and revenue development. The tax advantages, as anticipated, are yet another synergistic benefit. Add-on acquisitions and the use of debt capacity may be used to build them, as could tax losses from prior years' operations in order to pay reduced corporate taxes. By using the geographical growth, it is possible to cut tax expenditures and thereby facing lower taxes. Finally, another way to improve profits, performance, and company value is to take advantage of the scale effects that come from becoming a major player in an industry or in a geographical region thanks to cross-selling and branding opportunities. Moreover, due to all these advantages, the company could benefit from a higher level of recognition in the industry and in the social environment in which it operates and is established, increasing the possibility to stipulate agreements with new business partners or social institutions.

According to the risk and return’s trade-off theory, Buy and Build techniques are seen as riskier strategies than classic PE tactics. This general opinion is clearly based on the fact that the ultimate goal is to make the company a market leader and this imply a lot of uncertainties and complexities resulting from the need to deal with the merging of multiple smaller companies into a single entity. Planning, control, and risk management procedures are essential in order to achieve this strategy's desired outcome and a post-merger integration plan is usually necessary. In addition, time and money needed to acquire and integrate new businesses may pose other different challenges. Private equity companies may be hindered in their pursuit of such tactics by firm's narrow investment horizon (as stated in the first chapter, usually PE operations don’t last for more than 5-7 years). In addition, the amount of funds required for such activities is a concern since it has an influence on the decision on which platform business to buy and on how to balance the amount of debt. It is so vitally important, considering these difficulties, to explore different hypothesis than the M&A strategy: joint ventures, R&D and sales partnerships and in-house product extensions targeted at expanding a company's product line may also be valid alternatives.

Buy and Build strategy in practice

It is also possible to think of buy and build tactics as a collaborative purchase partnership between a platform business and a private equity firm. Together, they provide complementary skills and resources (like capital) that supplement each other well and this might be advantageous for both parties involved. In addition to providing equity capital, private equity firms have access to debt capital because of their reputation and experience in terms of financial engineering and deal-making. The platform, on the other hand, has substantial industry understanding and managerial experience. Their expertise in everything that involves products, processes and where synergies might be formed also helps them to better understand the potential firms for add-on acquisitions. Because of this, the two companies work together to take advantage of acquisition prospects that they would never have pursued on their own. For participated firms, the co-existence with a private equity fund and a platform represents a chance to build value.

Platform

Once we have established the B&B approach, we can now look at how the Private Equity company selects its targets, both as a platform and as an add-on. The choice of the platform is the initial step in putting the B&B plan into action, and it is the starting point from which building a generating value strategy. The next analysis is so aimed at showing the characteristics of platform.

First and foremost, the platform company's performances should be taken into account while making a decision. It may be quantified in several ways, such as profits, cash flows, or even the expansion of the company. Even if it may not always be the case, the selection of the most profitable companies is a key factor in future success, so there should be a positive link between a firm's profitability and the likelihood that the company will be part of a Buy and Build transaction. Profitability is also a measure of a company's management and its capacity to produce cash flow from operation’s activity. In conclusion, acquiring a good business is all about these characteristics and for this reason

it is useful to focus more on finding a platform firm that has the right financial features for the B&B plan.

Another concern is the availability of growth prospects and money. Firstly, picking a corporation with strong liquidity as a platform is the better choice because the large sum of cash available on the chosen platform might be used to fund both the buying of add-ons and their progress. Add-ons, as it will results evident in this analysis, have the potential for expansion and the consequent need for funding. Conversely, the cash feature could be a symptom of something different regarding the platform, because a lot of unemployed cash in a firm could be a signal of limited prospects of growth since this capital could have been better spent elsewhere, time before the acquisition. Consequently, the platform's development potentials are represented by the acquisitions that would allow it to fund expansion projects and enhance its market share[41].

Another predictor of a firm's likelihood of being chosen as a platform company is revenue increase. In traditional private equity deals, growth is seldomly taken into account when making a decision on whether or not to invest in a certain firm, mainly because shareholders may be reluctant to give away their decision-making power over a fast-growing company. By the way, growth and the likelihood of being picked as a platform have been shown to be positively related in B&B transactions.

Capacity usage is another factor to consider while selecting a platform and it is estimated by asset turnover, which is a ratio between turnover and total assets. Essentially this shows the efficiency with which assets are put to work in order to earn profits. Having a lower ratio than the industry average would indicate that a firm isn't maximizing the value of its assets and when it comes to apply this assumption in mergers and acquisitions, capacity utilization might be a concern since mergers can be driven by growth aspirations[42] and in PE-backed deals it is preferable to pick firms with a high turnover per total assets. However, in B&B transactions, the same relationship has not been observed, and there is no widespread consensus for a threshold amount at which it would or would not be worthwhile to pick a firm to be a platform. We can simply assume that this is

[41] Lehn, K., Netter, J., & Poulsen, A. (1990). Consolidating corporate control: Dual-class recapitalizations versus leveraged buyouts. Journal of Financial Economics

[42] Andrade, G., & Stafford, E. (2004). Investigating the economic role of mergers. Journal of Corporate Finance,

related to the fact that the platform and add-ons in a B&B transaction will merge their assets in order to improve group efficiency overall. So, as a result, capacity utilization is not a useful predictive indication in the first stage.

In addition, in conventional buyouts, the underutilized debt capacity in B&B plans may be usefully exploited. Even with extra financing to complete acquisitions, it is possible to produce significant value getting funds and taking advantage of the tax and management control resulting from issuing debt, so it will be more convenient to choose a company with an initial low debt-to-equity ratio. In conclusion, other things equal, a platform with a smaller debt ratio is preferable.

The size of a platform is an important consideration as well. Regardless of private equity operations, in general a strong correlation between the size of the business and the likelihood of becoming an acquirer in M&A deals has been observed. This fact might be extended to B&B transactions a well, suggesting that a larger firm is more likely to become a platform company. This might be because a larger corporation has greater resources, like funds and employees and due to the significant transaction’s due diligence costs, a significant size may be required.

Add-ons

When it comes to platform selection, profitability is believed to be more significant. As a general rule regarding add-on investments, it's better to invest in a successful company that shares the platform's features, but profitability it’s not the main driver in the decision-making process. When performance is assessed in terms of cash flows, poor liquidity might also be the consequence of unused development prospects since the firm invests heavily in initiatives but lacks the finance capacity to successfully improve its growth. Even if the firm is identified as one that does not generate cash flows, the company would be an excellent target for a platform that has the liquidity to invest in and fund the expansion plans of the add-on. B&B deal would benefit both parties because of platform's financial availability and expansion potential. Furthermore, an interesting fact is that

revenue growth is inversely correlated with the likelihood of getting picked as an add-on, in contrast to the positive correlation for platform selection. As a result, platforms and private equity firms are searching for businesses that are still expanding but have assets that may be used more efficiently, and this is another point in favour of the uncorrelation between capacity utilization and likelihood to become a platform or an add-on. Regarding indebtedness, having a low debt ratio is critical when it comes to choose an add-on investment. In that way the platform would gain more from an acquisition of a firm with unutilized debt capacity. Finally, the size of the add-on may have the opposite effect of the platform. There are several reasons why a limited dimension is preferable in add-on investments: due to the lack of antitrust concerns, smaller firms may be chosen easily since funds will not risk to be blocked by authorities during the takeover. Another point is about the riskiness of the operation, because the limited size imply less risk and it is easier, under different aspects, to complete a takeover of a small business. On the other side, large firms may have more potential as add-on investments: taking over them, might produce savings on acquisition expenses by eliminating the need to buy many smaller ones and in terms of achieving economies of scale the impact of a larger company may be quicker and more determinant.

Synergies

The vital relevance of synergy is clear from the formulation of the Buy and Build approach. One of the most important aspects of the B&B strategy is the generation of them. Synergies, defined as the combined impacts of the addition of two goods or markets[43], are the primary driver[44] of a total return on the company's combined resources that is larger than the sum of its components. In fact, the "2 + 2 = 5" metaphor is often used to depict synergies, which means that merging two components will provide a greater outcome than the sum of their individual effects. As a result, they may

[43] Ansoff, H. (1965). 1.(1965) Corporate Strategy. New York.
[44] Salter, M. S., & Weinhold, W. A. (1979). Diversification through acquisition: Strategies for creating economic value. Free Pr.

theoretically be calculated as the difference between the actual return and the one predicted by the aggregate of the several drivers, which in this instance might be separate firms.

The buy and build strategy's main goal is to maximize the value of its assets by combining multiple businesses, which results in synergy. A robust post-merger integration strategy is required however, since there are various sorts of synergies that must be carefully exanimated. When Private Equity firms initially approach a potential acquisition, they approach the acquiror, they do a meticulous work of due diligence and finally they evaluate the target firm, activity which consists in finding out the total value of the stand-alone worth plus synergies.

Synergies may take on a variety of forms and have a variety of motivating factors. This means that they must be differentiated in order to better understand, in a B&B strategy, which ones can be realized, and which ones can be levered to raise the value of the investee firm.

“Business synergies" are those that can be achieved all across the whole value chain. Synergies can only be realized if the firms involved have some relation to one other, so it’s almost impossible for a conglomerate corporation to have any business synergy between completely unconnected businesses. There is a need to discover certain points of convergence so that synergies may be generated, for example in activities, products, and marketplaces that have mutual similarities. Once spotted, possible synergies may have been pursued through different strategies, as economies of scale, economies of scope and multi-plant economies.

Economies of scale are defined as the lowering of the average total cost per unit produced while the capacity utilization is improved. Thus, as an example, resources will be more effectively used due to the sharing of the same plant for a larger output. As a result, the plant's costs will be spread out over a larger number of products. For example, a lower price and an increased market share (and hence a lower cost curve) might allow a corporation to profit from lower costs and a bigger mark-up. As a result, the business will have a competitive advantage due to lower prices and major market share over its competitors. Aside from manufacturing, sales and distribution, also research and development may also benefit from economies of scale. As previously stated, a B&B

transaction will have an influence on the asset utilization of the parties concerned, so the post-merger company's size and market share will be greater, resulting in reduced costs and more strategic flexibility, all generated by economies of scale.

Economic scope slightly differs from economic scale because they combine production processes in order to make it useful to the creation of two or more different products. The usage of the same productive system for the total or partial production of more than one product aggregates expenses and the outcome is a substantial save in production costs (at least lower than the amount generated by two or more different plants).

Finally, multi-plant economies are important for internationalization initiatives. As a result, in fact, this strategy brings benefits for the entire economic activity lowering transportation costs, enhancing production flexibility and improving the capillarisation on the final market.

Synergies are not limited to the cost side of the economic activity because target firms, trough the acquisition, also bring their product market's shares and their own portfolio of clients. It is possible to refer to this phenomenon with the term "Market synergies", which develop is pursued by increasing market strength and growth[45]. Market power is the ability to affect the price, quantity, and quality of a product considerably and it may be determined by its growth in size and market share. Indeed, according to the B&B approach, the development of a firm in a fragmented industry via M&A, may result in market power concerns because deals that have this potential are often halted by antitrust regulators. Conversely, synergies in market growth are based on the possibility to cross-selling to generate extra demand and this implies that clients may be incentivized to purchase different or similar product enhancing company's sales and allowing the entrance in new market niches.

Because they don't directly affect expenses or revenues, management synergies are unique. They are crucial, though, since they act as a stabilizing force. Managerial know-how is transferred from one company to the other when integrated or even from the General Partners (usually skilled in business administration) and investee company's new or incumbent management.

[45] Perin, S. (1996). Synergien bei Unternehmensakquisitionen-Empirische Untersuchung von Finanz. Markt-und Leistungssynergien, Wiesbaden: Gabler

Synergies could be found also from a financial perspective, especially in case of SMEs not familiar with extraordinary finance operations. For example, in the process of obtaining capital there are significant fixed transaction expenses that in a bigger firm would have a significant dwarfed impact. In large conglomerates, in addition, it's possible to create cash reserves that a vast variety of divisions might generate and mobilise internally saving significant amounts by eliminating transaction fees and risk premiums that externals (lenders or investors) usually request.

A correct and balanced indebtedness, as stated before, may also provide the firm with tax benefits, which are also pursuable trough tax arbitrage. It is possible to benefit from disparities in taxations of different forms of income, capital gains, and transactions via the use of this legal deficiency. There are several legal loopholes in the tax legislation around the world, allowing companies to reduce their tax burdens by rearranging their business operations.

Finally, risk reduction is the result of a minor correlation between cash flows of the various corporate entities[46]. A well-diversified business may find simpler to repay its obligations when there is a lower chance to encounter a liquidity and solvency problem. This element translates also into cheaper cost of debt and less stringent covenants.

In conclusion, a substantial rise in the company's value can be seen if these synergies are realized. Decreased equity cost resulting from the above listed sources and major stability perceived by investors allow private equity fund to have a wider range of exit options, enhancing returns, the list of past records and generating reputational benefits.

As stated before, two private equity funds invested in the tile industry through a buy and build strategy. Mandarin Capital Partner and Alpha Private Equity both invested in middle market companies acquiring a majority stake in order to support their growth through external acquisition and internal investments. Both projects are relatively recent: Italcer, private equity backed by Mandarin fund, started its operations in 2017, while Laminam has been part of Alpha's portfolio since 2019. Consequently, both funds did not perform yet the exit from their investments.

[46] Lewellen, W. G. (1971). A pure financial rationale for the conglomerate merger. The journal of Finance,

CHAPTER 4

Business case: Italcer S.p.A. & Mandarin Capital Partner

Chapter 4 will revolve around the analysis of the business case that was just mentioned: Italcer S.p.A and Mandarin Capital Partner. We will start by going through an overview of the company and the fund, then we will see about the profitability and we will dig into the solvency analysis, both of which are going to be vital in helping us understand how and why these companies benefitted from the fund's activity.
The scope of this chapter is consequently to analyse MCP buy and build investment in Italcer with the aim of highlighting the creation of value supported by the fund. The analysis is based on economic and financial indices and ratios and their comparison between two periods, pre and post investment. Consequently, every result will be compared to the median of a pool of firms representing the Italian tile market. Precisely on two point the analysis is based: find discontinuity between pre and post operations and make evidence of differences between firms which in their life have been private equity backed pursuing a buy and build strategy and firms which have never been owned by institutional investors. The idea is to compare Italcer in respect to a pool of companies and then to analyse their results under profitability and financial stability point of view.

The pool of firms has been chosen setting a lower limit of 20 million in terms of revenues yearly. The scope of this distinction is to represent a typical target for a private equity fund in terms of size (20 million could be at least a viable add-on investment for a fund) and internal organisation. In total, the analysis is based on 38 companies, all incorporated in Italy, operating in national and international markets. Due to lack of data[47], caused by acquisition from industry's international colossus and the willingness not to disclose results by firm themselves, some well renewed players as Marazzi Group, Atlas Concorde, Ricchetti and Iris Group have been omitted.

[47] data retrieved from S&P Capital IQ Pro and Refinitiv's Thompson Reuters.

Company and Fund's overview

Mandarin Capital Partners II SCA RAIF (MCP) is a Luxembourg based PE fund that invests in mid-market Italian firms that benefits from increased expansion and sourcing strategies in international markets, according to the firm's website. MCP was founded in Milan in 2007 and has offices in Milan, Shanghai, Frankfurt and Luxemburg and it is a totally autonomous organization that acts as a unique cross-border private equity house for mid-market Italian companies with a strategic interest in China.

The investment strategy is to invest in profitable, export-driven, specialized sector leaders, with a preference for noncyclical, high-value-added industrial players. The team is led by experienced and proven management that can benefit from local and international cooperation net, pursuing organic and/or buy-and-build strategy focused on proprietary control transactions. The investment typical target is characterised by an enterprise value around 75 million euro, most likely belonging to the wide category of Italian family-owned SMEs that are increasingly confronting generational shifts and realising the need for institutional finance and assistance.

Completely in line with the fund's target characteristics, Italcer Group was founded in Spring 2017 by Mandarin Capital Partners II, in the person of the founding partner Alberto Forchielli, and by Graziano Verdi, before President and CEO of Iris-Granitifiandre Group, Technogym and the Belgian Multinational Koramic, aiming to create a luxury cluster in the ceramic tile sector. Italcergroup operates in the ceramic sector, manufacturing high-quality outdoor and indoor ceramic products, with a focus on high-end residential and non-residential ceramic tiles, and luxury bathroom furnishing.

On May 8, 2017, Italcer Group announced the acquisition of Castel Bolognese based La Fabbrica Ceramiche (La Fabbrica and AVA Brands). For both indoor and outdoor applications, it is an Italian firm that specializes in producing and distributing high-quality ceramic tiles for floor and wall use alike. On August 3, 2017 the second acquisition of 100% of Elios Ceramica and the connected Elle Ceramica, based in Fiorano Modenese took place. Because of its artisanal focus on fine details, Elios has always been a standout among other ceramic tiles in the artistic ceramics category. It was a perfect fit for La Fabbrica because of its size, location, and geographic areas already successfully supplied.

Later on, Devon&Devon, a worldwide pioneer in the design and production of premium bathroom furniture, was acquired by Italcer on October 18th, 2017. At that time, the company was exporting to over 80 countries thanks to a global network of boutiques, merchants, and flagship stores in key capital cities throughout Europe, United States, Asia and other nations. Ceramica Rondine, one of the most successful industrial companies in the ceramic tile industry, founded in 1961 in the area around Reggio Emilia and Modena, was acquired by Italcer on October 15th, 2018. Ceramica Rondine has been one of the most renowned ceramic tile manufacturers in the whole industry and in compliance with the temporal limit of this analysis, with its atomized production branch (Spray Dry), it represented the last investment of the fund. In the end of 2020, the 1st of December, Italcer acquired Cedir, a historic ceramic tile producer founded back in 1968 in Castel Bolognese in the province of Ravenna, which has a production capacity of 3 million sqm/year of ceramic tiles and 60 employees and fits perfectly with the group's long-term strategic goals. By the way, as part of its expansion scheme, during March 2021 Italcer acquired Equipe Ceramicas, a Spanish ceramics manufacturer based in Figueroles, Castellon, whose special focus was in small design, but due to its recent acquisition and lack of data, it will not be part of the analysis.

The purpose of the investment, which is approaching the exit in January 2022, was to create the most important luxury ceramic hub in Italy. In addition, in contrast to the "best practice" in a buy and build strategy, we can consider the 3rd investment, Rondine, as the platform, while the others can be considered as Add-On investment. Due to its size and characteristic, the platform has a major capacity in production and wider market horizons respect to the other investments and for this reason it's easier to make decisions aimed at the optimization of the most productive plant. This makes Elios, La Fabbrica, Devon & Devon, Cedir and Equipe Ceramicas satellite investments, designed to develop and expand the supply as a function of Rondine, the platform and main driver of the group.

Italcer Group’s analysis: profitability.

In general, this analysis compares a company's potential to generate revenue based on sales, balance sheet assets and operational expenditures. They show how successfully a company utilizes its resources to produce profit and value for its shareholders. Most of the businesses strive for higher profitability ratio or values since they indicate that the company is functioning well in terms of sales, profit, and cash flow. These ratios are particularly relevant when compared to other firms or to earlier periods and this is the reason why they have been chosen in this analysis, which will be developed through the comparison between six indicators. In this way it is possible to assess Italcer’s potential in terms of its capacity to generate value comparing to its Italian peers. It should be recalled that the complete integration of the main entities of the group took place in 2018 financial year, so the timeframe is very limited (from 2018 to 2020). Consequently, dependently on the ration taken into consideration, for example growth rates, data will be available solely from 2019. Moreover, in 2020 financial year, it’s mandatory to contextualise results of the analysis in the global framework of the Covid-19 outbreak: as stated in Chapter 2, the pandemic affected negatively all the industries (apart from rare exemptions), so absolute values may have worsened. From an opposite side, the comparison between Italcer Group and a pool of peers based on relative ratios, can represents a valuable indicator of how effective the response to the virus was.

Revenues Growth Rate

A company's ability to increase sales revenue over a particular period is measured by its Revenue Growth Rate. According to it, the current year's sales are simply compared to last year's annual revenue figure. Using this metric, it is possible to assess a company's potential for expansion and cash flow across time and across various companies and industries. Especially in Italcer group’s case, growth rate of revenues can be a substantial indicator of the effectiveness of synergies sought after the acquisition process. The group acquired Elios, La Fabbrica and Devon & Devon in 2017 and in the same year, aggregate net revenues (intercompany eluded) were 77.1 million. Based on 2018 consolidated financials, netted of new acquired Rondine’s revenues amount of 11.6 million (revenues

from October to December which refers to the post acquisition period from October to December), revenues peaked to 95.1 million, with a 23.4% growth rate. This increase represents an outstanding result compared to the benchmark, which in the same year recorded a median decrease of 0.8% and an average rise of 0.05%. Conversely, from 2018 to 2019 (revenues adjusted integrating Rondine's entire figure in 2018), the group sales declined by 3.9% and from 2019 to 2020, due to Covid outbreak, revenues felt by almost 15%. Both percentages were lower than 2019 and 2020 in respect to the benchmark: the pool of selected firms performed in average an increase of 1,2% in 2019, while in 2020 a decrease of 1.2% and in median a decrease of 0.14% in 2019 and 1.92% in 2020. From a recent interview[48], management of the group declared to expect a consolidated result of 220 million in 2021 financial year, hypothesis more than plausible as confirmed by internal rumours. From sales point of view, cross selling growth strategy was quite difficult to pursue: Rondine, La Fabbrica, Devon & Devon and Elios products have all different market niches and in terms of industry, utilisation of product and final customer, is less likely to achieve cross selling strategies when it comes to the real estate market. Conversely, the acquisition of new market shares due to the number of acquisitions, allowed the group to more than double consolidate revenues from 2017 to 2020. This outstanding result has been achieved thanks to a huge portion of debt, aspect that will be considered later in this chapter.

EBITDA Margin

Profitability is measured in percentage terms of EBITDA margin, which shows a company's capacity to produce value in relation to sales. This measure allows the comparison between profitability of two or more enterprises in the same industry reducing the bias due to different sizes. As demonstrated by Italcer Group's EBITDA margins, management clearly focused more on operating costs optimization.

[48] https://bebeez.it/private-equity/entra-nel-vivo-lasta-per-le-ceramiche-italcer-controllate-da-mandarin-capital/

COMPANY NAME	2017	2018	2019	2020
Italcer Group EBITDA Margin	12,76%	12,84%	15,41%	13,54%
Median	11,38%	10,04%	10,42%	11,50%
Average	12,81%	10,67%	11,66%	12,52%
MAX	34,32%	26,54%	24,54%	25,69%
MIN	-4,94%	-14,45%	-1,13%	2,07%

Figure 17 - Italcer Group EBITDA Margin compared to the benchmark.

As showed by the above tab the margin has always increased over time, demonstrating a constant optimisation of operative costs. Before the creation of Italcer Group, standalone companies La Fabbrica, Elios and Devon & Devon respectively recorded 7.56%, -32.3% and –2.45% in 2015, while in 2016, 9.76%, 5.83% and 14,53%, for an average of -9.05% in 2015 and +10.04 in 2016.

COMPANY NAME	2015	2016	2017	2018	2019	2020
Elios Ceramica	-32,30%	5,83%	11,45%			
La Fabbrica SpA	7,56%	9,76%	12,93%			
CEDIR Ceramiche di Romagna SpA		11,40%	6,73%			
Dex SpA	-2,42%	14,53%	13,71%			
Italcer Group			12,76%	12,84%	15,41%	13,54%
BENCHMARK						
Median	10,02%	11,72%	11,38%	10,04%	10,42%	11,50%
Average	11,66%	12,33%	12,81%	10,67%	11,66%	12,52%
MAX	24,38%	25,86%	34,32%	26,54%	24,54%	25,69%
MIN	2,13%	-6,95%	-4,94%	-14,45%	-1,13%	2,07%
Avgerage EBITDA Margin before acquisition	-9,05%	10,04%				

Figure 18 - EBITDA Margin pre and post-acquisition comparison.

The increasing trend from 2015 to 2016[49] has been continued by the management, but it is noticeable how margins, from the year of the acquisition, overtook the median and the average of the benchmark. This enhancement, supported by a more than proportional increase of EBITDA in respect to sales in 2017, can be justified by the optimisation of operating activities in each plant of the two ceramic tile flooring companies, Elios and La

[49] Data incomplete or unavailable for previous periods.

Fabbrica (Devon & Devon has been acquired in the 3rd quarter 2017 and moreover it is not included in the analysis because of the different product, requiring a different production methodology) and the redistribution of production of different slabs' size in each plant.

COMPANY NAME	Ebitda growth rate 2016-2017	Revenues growth rate 2016-2017
Elios Ceramica	134,11%	19,24%
La Fabbrica SpA	44,01%	8,78%

Figure 19 - Elios and La Fabbrica EBITDA and Revenue growth rate pre and post-acquisition, from 2016 to 2017.

Moreover, a continuously major EBITDA Margin compared to the benchmark median after the acquisition, prove that the buy and build strategy could represent a successful strategy in private equity operations in the Italian tile industry.

Return on Total Assets (ROTA)

ROTA is a financial ratio used to measure how profitable a business is in proportion to the total amount of its assets. ROTA may be used by executives, analysts, and investors to assess a company's efficiency in generating profits from its assets. Net income and average assets are often used to calculate the measure, which is then reported in percentage form. For the scope of the analysis, it will be used EBIT (not EBITDA because due to involvement of assets, it is necessary to take into consideration Amortisation and Depreciation) instead of Net Income to better describe figures coming solely from operating activities. More effective and productive balance sheet yields a greater ROTA, whereas a lower ROTA express the lack of optimization of the firm's assets. By comparing a company's EBIT to the resources in which it has invested, we may determine whether its existence is financially viable or not. Briefly, a higher ROTA means higher asset efficiency. ROTA can vary substantially and are highly dependent on the industry, therefore, when using ROTA as a comparative measure, it is best to take into consideration firm operating in the same market.

From a profitability side, until this moment, the focus has been on pure capability of generating revenues and its comparison with operating costs. To conclude the analysis, it is also useful to understand how much revenues are generated by company's assets after acquisitions: the first one is the ROTA.

COMPANY NAME	2018	2019	2020
Italcer Group	0,0095x	0,0259x	-0,0039x
Median	0,0206x	0,02003x	0,0294x
Average	0,0364x	0,0365x	0,0329x
MAX	0,1442x	0,1385x	0,1140x
MIN	-0,1109x	-0,0278x	-0,0722x

Figure 20 - Italcer Group's ROTA compared to Benchmark.

As showed in the tab, Italcer's ROTA have been slightly lower than median and average benchmark's results in the three years post-acquisitions. These data represent a slight inefficiency, and it means that in the assets ability to generate income, capital has been invested in assets not in the most efficient way in order to generate profits.

Asset Turnover

The asset turnover ratio may be used as a measure of a company's ability to produce sales from its assets. It can be obtained dividing annual revenues with the average of previous an actual year's level of assets. To maximize profits, a corporation must have a high asset turnover ratio. In contrast, a low asset turnover ratio implies that a corporation is not effectively using its assets to generate revenue. The better a corporation performs, the higher its asset turnover ratio, since higher ratios suggest that the company generates more revenue per dollar of assets.

Similar results come up in the Asset Turnover analysis: revenues have been very low comparing to assets in the same timeframe.

COMPANY NAME	2018	2019	2020
Italcer Group	0,7281x	0,6279x	0,5726x
Median	0,7363x	0,6847x	0,6318x
Average	0,7494x	0,7022x	0,6361x
MAX	1,7567x	1,1627x	1,0054x
MIN	0,4041x	0,3283x	0,3450x

Figure 21 - Asset Turnover compared to Benchmark.

These two indicators are generally low, both as regards Italcer Group and benchmark. Asset based multiples are subject to the level of capital intensity and they may vary dependently on the industry. Tile manufacturers typically need huge investments in fixed capital to carry on their business and this explains why they are so low.

The first part of the profitability analysis gave better results compared to the benchmark median, but the relationship between revenues and assets has a completely different outcome. Reasons behind the lack of efficiency in assets usage may be found in the same point of strength of this strategy: acquisitions. After a transaction, the difference between assets market value and the price paid for them is remarkable. In fact, prices also reflect value of intangibles -like the strength of the brand- and the future expectation about the acquired company. This difference is accounted in financial statement's asset side as "Goodwill" and usually it covers a determinant part in balance sheets of companies involved frequently in M&A operations. In Italcer Group's case, in fact, Goodwill cover in 2018 the 34.4% of the total assets, while 32.4% and 29.8% in 2019 and 2020. In conclusion, revenues-assets analysis is not a precise measure of property, plant and equipment's production efficiency[50], but it gives an idea of how much capital has been invested effectively.

[50] Due to lack of data and incompleteness of figures, it was impossible to perform this type of analysis.

Italcer Group’s analysis: solvency.

To gauge a company's long-term financial viability, solvency ratios are the best choice. When it comes to a company's profitability in relation to its financial obligations, a solvency ratio is a good indicator of how well it can meet its financial responsibilities. In a glance, it shows a company's ability to satisfy its debt commitments based on its profitability capacity. The second part of Italcer Group’s analysis, therefore, concerns measure that indicates the level of the company’s capacity to fulfil its debt obligations. It is important to state the level of solvency in this case because most transactions led by funds, as seen in Chapter 2 and Chapter 1, is financed by a certain level of debt (Leverage Buyouts) that flows in the company’s balance sheet after the acquisition. It is consequently crucial to assess and control the level of indebtedness and related indexes. In Italcer Group case, Mandarin acquired Elios, La Fabbrica and Rondine through leverage transactions. All the deal values and financing debt-equity ratios are undisclosed, apart from the bond issued by the group in 2019 in the Rondine acquisition. Pemberton, one of the largest players in the private debt international market, through many of its funds underwrote a bullet bond issued by the group for a total value of 133 million[51]. In this type of operations, the balance sheet’s liability side covers a crucial role for the firm’s stability and in the next it will be examined the group’s solvency in relation to different indexes.

EBITDA ICR (Interest Coverage Ratio)

Before entering the analysis, however, it is necessary to highlight a big missing part: the above-mentioned ratios are the main drivers of the understanding of the solvency capacity of the firm because they all measure the debt sustainability in relation to profitability, equity and the asset side of the balance sheet. However, it was not possible to make a comparison between pre and post deal due to lack of precise data. The EBITDA ICR is a financial ratio used to evaluate a company's financial stability by determining if it is profitable enough to cover its interest expenditures with pre-tax profits, so it states how

[51] BeBeez website: https://bebeez.it/private-debt/italcer-si-compra-rondine-con-laiuto-di-capital-dynamics-e-un-bond-sottoscritto-da-pemberton/

much EBITDA is eroded by the cost of debt. It can be calculated dividing EBITDA for interest expenses.

Despite this lack of comparable peers, it was only possible to retrieve data from Italcer Group financials post 2018:

COMPANY NAME	2018	2019	2020
Italcer Group	2,7596	2,2225	1,7153

Figure 22 - EBITDA Interest Coverage Ratio.

A ratio greater than one indicates that the company has more than enough interest coverage to pay off its interest expenses and this demonstrates the ability of the management to not to overweight the income statement with interest expenses in a tile manufacturer, which usually require huge investments in capex, with the risk of excessive earnings' lowering.

Net Debt to EBITDA

The net debt-to-EBITDA ratio is a measurement of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA. This debt ratio shows how many years it would take for a company to pay back its debt if the two variables are maintained constants. However, if a company has more cash than debt, the ratio can be negative and this could be one of two possibilities: or the firm's ability to generate cash is outstanding, or the amount of cash overtake debts because management is not able to spot profitable investments useful to grow the business profitability.

Net Debt to Ebitda			
COMPANY NAME	2018	2019	2020
Italcer Group	10,8	5,4	7,5
Median	1,9	2,7	2,0
Average	27,2	3,7	3,8
MAX	771,5	16,1	33,8
MIN	- 4,8	- 5,8	- 1,5

Figure 23 - Net Debt to EBITDA.

The net debt-to-EBITDA ratio, as stated before, is a measurement of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA. It is easy to observe that Italcer Group's debt level is clearly impactful on the balance sheet, in fact, its multiples are way higher than the average and the median of the benchmark and implies that the group would take much longer to repay its debts *ceteris paribus*[52]. On the other hand, it is evident that the trend is decreasing, and it is a consequence of the increasing EBITDA and the reduction of the leverage through repayments[53].

Liabilities to Equity Ratio

Financial leverage is assessed by dividing a company's total liabilities by its shareholders' equity. In corporate finance, the D/E ratio is an essential measure because it allows to compare how much a business relies on borrowed money or on equity to run its operations. In addition, in the case of a corporate downturn, it measures the capacity of equity shareholders to pay all existing obligations. As per the previous ratio, Liabilities to Equity followed the same pattern after the first acquisition. Due to the consistent amount of leverage the company rely more on debt than on equity for its operations and this is a consequence of the LBO strategy.

[52] Assuming flat EBITDA and Net Debt.
[53] The 2020 upturn in the ratio is due to a reduction of EBITDA margin during the first year of the Covid-19 outbreak.

Liabilities to Equity Ratio			
COMPANY NAME	2018	2019	2020
Italcer Group	2,5	2,7	3,3
Median	1,8	1,7	1,3
Average	3,1	2,6	1,7
MAX	18,7	21,7	9,2
MIN	0,5	0,4	0,3

Figure 24 - Liabilities to Equity Ratio

NFP (Net Financial Position) to Assets

This ratio measures a company's total net debt compared to its entire assets and it is functional tool in confronting solvency of firms in the same industry, in fact, it is possible to assess a company's financial health by analysing it. The greater the ratio, the riskier it is to invest in that business because of the predominance of debt, both long and short term. There is a correlation between the amount of debt a company has and the amount of money the company has available to pay off the debt it has taken on. Leverage is consequently measured by this method. Debt servicing payments must be fulfilled at all times, otherwise the firm may be driven into bankruptcy by creditors after breaching its debt covenants. When it comes to debt covenants, in fact, there is not much margin of negotiation as there is with accounts payable or long-term leases. It may be more difficult to remain afloat in a recession for a firm with a high degree of leverage. To be effective, the total debt metric excludes short-term liabilities such as accounts payable, and long-term liabilities such as capital leases and pension plan payments.

As a first signal, Italcer Group's Net Financial Position to Assets indicates that is clearly above median and average benchmark's measures. The level of debt in respect to assets has been consistent from 2018 to 2020 and this reflects again the LBO strategy pursued by management.

NFP to Assets			
COMPANY NAME	2018	2019	2020
Italcer Group	47%	49%	51%
Median	13%	12%	2%
Average	14%	14%	5%
MAX	46%	47%	43%
MIN	-19%	-25%	-40%

Figure 25 - NFP to Assets.

Conclusions

The scope of this work is to demonstrate the potential of buy and build strategy in the Italian tile industry, but since data on transactions were not available due to their private nature, the empirical research on investments and returns was not satisfactory. Consequently, the analysis focused more on the Italcer Group's case. In the main part of thesis, in fact, it has been tried to assess how MCP investments has made Italcer Group a more profitable company compared to a benchmark and to its standalone entities before the acquisitions. As showed in the analysis, Italcer, following a buy and build approach, supported brilliantly its growth in terms of revenue and margins, demonstrating unquestionably the effectiveness of the strategy in this case.

Italcer Group is a build-up project aiming at the creation of a leading global player in the Italian luxury ceramic tile sector. The rationale behind Mandarin Capital Partners' investment consisted in the implementation of a buy and build strategy based on the assumption of a growing and fragmented industry, seeking for value creation through increasing size and production volumes. Targets acquired are strongly positioned in the luxury niche and considering that Italian tiles are sold at a 40% price premium to closest competitors' products, the aim was to focus on value creation on building up the first Italian tile luxury pole. Assumptions and points of strength, as showed by the analysis in the previous chapter, are so reflected in the outcome: the fragmented market provided the fund with many undervalued investment opportunities, making the buy and build a good fit for the choice of the strategy. The asset optimisation after acquisitions, on one side, has supported the expansion of revenues and margins, allowing the firm to be positioned well above the average or median growth of the sector; and on the other hand, from a cost optimisation side, it exploited significant industrial synergies through the enhancement of internal organizational processes and redistribution in the production of slabs, increasing the efficiency and the capacity of entity's plants.

From a solvency side, results may seem disappointing, but they must be interpreted in a wider way. Italcer's balance sheet is characterised by high indebtedness, superior to its comparable peers, but before judging this fact in a negative way, it is important to take into consideration two main points:

- The fund acquired singular entities through usage of leverage, which then flows in the group's balance sheet. It is true that more debt implies higher risks, which results in major cost of debt, increasingly stringent covenant and, in case of crisis, a potential reason for default, but considering the initial investment of 30 million[54], it represents the sole option for the fund to close numerous deals in a limited timeframe. Without debt, the fund would not be able to put in place several acquisitions preventing the rapid development of synergies between two or more firms. Buy and build strategy would be impossible to perform.
- High level of debt means also heavy interest expenses, but this should not represent an issue when the debt efficiently support growth in terms of profitability. As long as the firm is able to grow and repay its obligation, even if interest expense largely erodes Italcer Group's earnings, debt should not represent a problem.

Before the Covid-19 outbreak, the disinvestment was planned for 2020, but due to the pandemic, Mandarin Capital Partner's exit has been postponed. The catastrophic event has put a strain on all industries during the year causing downsides in terms of revenues and margins, and precisely for this reason has led to a slowdown in firm's and fund's activities. Italcer Group survived the critical juncture and now, at the beginning of 2022, the investment is about to reach a conclusion. As per management declaration, expected results for 2021 after the acquisition of Equipe Ceramicas (not treated in the analysis due to lack of data) amount for 220 million in revenue and 50 million in EBITDA. Mandarin Capital Partners is receiving different non-binding offers and the deal is expected to close in the first half of the year.

Concluding, the analysis of this case is explicative about potential of private equity in the Italian tile industry, of which market conditions could be summarised in fragmentation, cost inefficiencies and unexploited selling potential. Companies' investing activity has always been a difficult task, in capital intensive industries above all, but expertise and support from private equity funds could represent a disruptive tool. From MCP point of view, it is too early to analyse returns on the investment, but from a company side, the result is undisputable. The comparative analysis between Italcer Group and the

[54] MCP average investment target.

benchmark showed above than average-median performances from the private equity backed firm, allowing several separate entities to merge and to become a landmark in the national panorama, representing a turning point in private equity activity in the Italian tile sector.

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Pool of companies that composes the Benchmark

ABK Group Industrie Ceramiche SpA

Altaeco SpA

Antica Ceramica Rubiera Srl

Casalgrande Padana S.p.A.

Ceramica Del Conca S.p.A.

Ceramica Fondovalle SpA

Ceramica Sant'Agostino - S.p.A.

Ceramica Valsecchia SpA

Ceramiche Ccv Castelvetro SpA

Ceramiche Mariner SpA

Ceramiche Moma SpA

Coem SpA

Cooperativa Ceramica Di Imola

Cotto Petrus S.r.l.

Dado Ceramica S.r.l.

Fincibec SpA

Florim Ceramiche SpA

Gambini Group SPA

Gold Art Ceramica SpA

Gruppo Ceramiche Gresmalt SpA

Industrial Tiles Achievements Abbreviabile in Ita SpA

Industrie Ceramiche Piemme SpA

Italgraniti Group - S.P.A.

Laminam SpA

Novabell Ceramiche Italiane SpA

Nuova Riwal Ceramiche Srl

Panariagroup Industrie Ceramiche SpA

Savoia SpA

Serenissima CIR Industrie Ceramiche SpA

Sichenia Gruppo Ceramiche SpA

Sicis Srl

Tuscania SpA