ICADE BUSINESS SCHOOL

ALTERNATIVE INVESTMENT IN TIMES OF HIGH VOLATILITY AND LOW PROFITABILITY: REAL ESTATE

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ABSTRACT

The current situation of financial elements, mainly the high volatility and low profitability, makes it complicated to find attractive investment instruments among the traditional assets because the duality risk-yield is not worthy for most investors. The only option all these investors have is to opt for alternative investments as Real Estate, which solve properly and in its majority both problems: it is a predictable investment, so it hedges against the volatility, for example, of the stocks, and it provides high return in a long-term. It does also have some disadvantages, such as illiquidity, that can result in a 'trap' if the investor wants or needs to sell quickly; leverage is the other important quandary if it is not used with responsibility and knowing how to act.

There exist various appraisal methods for these type of asset, we are going to explain some of them in order to give a solution to the problem of correct valuation.

Real Estate is a candent theme among financial agents and institutions, it is getting more weight during last years, and it is expanding. The concept of 'SOCIMI' is, with no discussion, talked about and known day after day by more people. Its American reflection, and inspiration, REITs are gaining importance worldwide.

In short, we are going to explain what the sector bases on, the reasons of its expanding importance, and why it should be, at least, considered as a decent alternative to the classic investments in times of great uncertainty in the market.

INDEX OF CONTENTS

INDEX OF CHARTS

INDEX OF EQUATIONS

INDEX OF ILUSTRATIONS

INDEX OF TABLES

INTRODUCTION

Nowadays markets are undergoing an agitated epoch, politic uncertainty based on the not already solved question of which is the way some worldwide important countries are taking as United Kingdom regarding of its Brexit and their leaving of the European Union and consequently the future of the latter, or the new self-sufficiency policies that President Trump is willing to implement, vide, duties to foreign products arriving the United States, the fines to those domestic companies not transferring their production plants to national territory and even the strict regime of immigration that can be discerned (in UK as well) either for the construction of the border wall or the veto to migrate from certain countries. These disturbances do not help to calm down the markets, moreover, together with some economic elements collaborate to the prevailing nervousness and are reflected in the financial variables.

These periods are characterised by the high-volatility and low-profitability in relation to traditional assets (ups and downs in the quotation of public regulated markets or the negative interest rates that harm bonds profitability) leads, at least, investors to question if continue operating with those assets or look for a 'Plan B' that satisfies their target. Lately, traditional investments do not have it easy to beat the benchmark (usually used any stock index) due to the continuous fluctuation of the market, mainly related with its globalization, so anything happening almost anywhere in the World is affecting it. This let practically two choices: passive management[1] of the portfolio, that is to say, to mirror the market index used as benchmark; or shift to unconventional assets which are not influenced by globalization, at least not as much as traditional ones.

Aforementioned, these types of investments have gained more significance when high-volatility and low-profitability environments have battered the markets. The latest example is the recent financial crisis of 2008, when traditional investment options suffered an increase in their volatility not followed in turn by a rise in the profitability because of the so low interest rates. These combination of elements repelled the investors that moved towards searching others more atractive posibilities. Then was when alternative investments occupied that empty space fulfilling the requirements by providing of a bearable stability and an appropriate yield.

It is necessary to discern the two main categories in which financial investment sphere frames its different possibilities: traditional investments, which includes Equities, Bonds or Cash; and alternative investments, which in turn splits in other two subdivisions, classic alternative investments covering Real Estate and Private Equity; and atypical alternative investments such as Art, Collectibles, and Commodities.

The second of these categories, alternative investments, is the one we are going to base our study on, concretely on the classic ones using Real Estate and Private Equity because of their greater importance among the great possible diversity.

In order to put the topic in a frame, we are going make a superficial view of what Real Estate and Private Equity consist on, to lately dig deeply and separately in each of them.

[1] Passive management (also known as passive investing) is an investing strategy that pursues a market-weighted index or portfolio. The most popular method is to mirror the performance of an externally specified index by purchasing an index fund.

When talking about Real Estate investment we are referring, roughly, to the business of trading with land and buildings, as well as providing services related, namely: remodeling, advisory, administration, among others.

Although Real Estate market experienced a convulse period during the crisis due to the delinquent mortgages that drove to CDO's default, massive evictions, and the tightening of the requirements by banks for funding future mortgages, the sector has recovered and it has made a come-back, the price stopped decreasing and is going upstream once again.

Regarding of Private Equity, the problems to find a job that coincides with the qualification level of the people has entailed that many have started their own business occasioning the appearance of lots of SME (Small and Medium-sized Enterprises), nowadays also known as start-ups. This fact linked to the latest successes of new-born enterprises, mainly technological, as Google, Facebook or Amazon has encouraged investor to pull for these recently created organizations as a way of investing their capital.

The consideration of alternative investment as a real possibility opposite to traditional one is true, and it is worthy of study for all the implications it entails.

OBJECTIVES

In our study, we are trying to understand the incentives that provokes particular and institutional investors to switch from the traditional investments to the altenative ones during epochs of high-volatility and low-profitability using for that the case of Real Estate. With this in mind, for the reader to manage with ease the matter and the possibilities that alternative investments offer, we will define this option, and, with the unique intention of making it simpler and clearer to comprehend, mention some examples of each of them, as well as including some well-known real examples. After that, the issue will turn accesible to readers understanding, so we could enter into detail of financial factors related; risk associated not only with the operations (I.e: liquidity, volatility or market risks) but also with the profile of investors (growth profile, balanced, etcetera), the market timing, et cetera. These are the truly important elements because they form the essence regarding of finances. Lastly, quandary it implies, for instance, minimum capital to operate or legal aspects in this case.

Using these approach we would have enough information to determine if it is a good opportunity and fulfills the investors target, or if, however, it is mostly a bad decission. In the end, to draw some conclusions in that regard and to be in disposition of making a modest, and of course non-professional, recommendation.

METHODOLOGY

This document is divided in the following parts: "Real Estate main concepts and analysis of the sector", where we are going to provide a definition for real estate and make an historical summarization and a research of the current situation of the sector; "Property valuation", in which we are going to explain the different methods of real estate valuation; "Investment Vehicles", for explaining the most known and used vehicles and products to invest in real estate; and finally, "Reasons to invest in Real Estate", to describe the characteristic of the real estate investment, and its advantages and disadvantages.

The method that is going to be used in the study of this issue is the search and extraction of relevant information from scholar databases such as Google Scholar or Scopus, being of utility everything that are reference manuals, concrete chapters of textbooks, updated academic papers, etcetera. Also, a proofreading of acclaimed literature related with the subject of study and an obtaining outstanding information from specialized scientific dissemination journals will be considered as a source of knowledge.

Reading of the data analysis we are going to gather datum from market reports published by enterprises and organisms pertaining to both sectors such as CB Richard Ellis, Jones Lang LaSalle, Colliers, and governmental institutions such as SEC, CNMV, etc.

Making use of these findings we expect to have the needed base to puzzle out the hidden details that form these markets and be capable to extract a conclusion that fits in our objective.

REAL ESTATE MAIN CONCEPTS AND ANALYSIS OF THE SECTOR

Definition and classification

Real Estate is the financial concept of the business consisting of acquiring, owning, managing, renting or selling land and the buildings on it together with its natural resources, and that has as main purpose obatining, at least initially, long-term profitability while keeping volatility low.

Otherwise, 'MarketLine' holds that *"The real estate industry looks at renting and leasing residential properties. The industry is valued using the total revenue generated by landlords via leasing and renting private and council properties."*

Inside this, we can find a great variety of assets, to take into consideration:

- Residential Real Estate Investment: consist of properties as houses, apartments, buildings, vacation houses or townhouses and hotels for which people is willing to pay to live in. The duration of the stay, as well as the price and the rest of conditions will depend on the lease agreement.
- Commercial Real Estate Investments: are principally office buildings and skyscrapers. Usually leased out to companies and business owners. It is common to deal with multi-year leases regarding of this concrete cathegory. This can drive to larger stability as for cash flows. The fluidity of interest rates can also impact on them because owner would be guarded in case of drops, but his benefits would be hurted if interest rates rise substantially.
- Industrial Real Estate Investments: for everything related to storehouses rented out to firms as storages or distribution center. In the manner of Commercial Real Estate Investment, it normally reaches long-term agreements. In addition it often results in notable fees and service flows.
- Retail Real Estate Investments: cover shopping centers, strip malls and other store windows. In certain cases, the owner gets a percentage of the sales generated by the lessee apart from the base rent to encourage him (the lessee) to keep facilities in superb conditions.
- Real Estate Investment Trusts (REITs): when investing in these vehicles you are purchasing shares of a corporation that have the ownership of real estate properties and distribute part of its income as dividends. You can invest in a REIT that matches your concrete desires (i.e. hotel industry REIT). (Tax problem?: not eligible for the low tax rates on common stocks).

Some important Real Estate strategic consultancy services multinational companies established in Spain have analysed this market since last years and have also make a forecast for the actual one.

Neil Livingstone, Managing Director and founding partner of Colliers International Spain, a Real Estate strategic consultancy services multinational company, in a interview offered his perception of the sector during the last years. Also, Jones Lang LaSalle, a competitor of Colliers, published recently its inform analysing the market during these recent years and forecasting numbers for 2017. In the interview conceded to 'E&ENews', Mr. Livingstone explained that during 2006-07, they focused mainly on the transactional market, but after the crisis of 2008 that made the housing bubble burst, they did a switch to provide different services as valuation, development advisory or technical services. Both company's analysts coincide that, some years later, in 2013, uncertainty diminishes and certain braver enterprises started investing in Real Estate. These unafraid societies were called 'Oportunistic investors', for example Blackstone, which were looking for high-risk assets to get big returns. In 2014, the entrance of REITs[2] (acronym of Real Estate Investment Trust) such as Merlin Properties, Axiare Patrimonio or Lar España. These REITs are listed on the Spanish stock exchange and began to raise funds especially on Value Add investing and shopping centers. In 2015, the low bond yields and volatile stock market joined to Quantitative Easing measures impulsed to channel capitals into the commercial real estate sector.

The lack of available quality products haas limited Spanish market, although 'Real Estate Investment Market Report' of JLL (Jones Lang LaSalle) from March 2017 deliver some optimistic figures:

Real Estate investment (without including indirect one) exceeded €8.7 Billion, not reaching the previous year €9.4 Billion, but considerably higher than 2008's €6.7 Billion and 2007's €7.3 Billion.

The dominant cathegory in the sector is still the retail, although it dropped 3% during 2016. It is followed by commercial, which also experienced a pronounced fall of 13% during last year. In third place, hotel industry with a total amount of 2.15 billion and an increase of 25% with respect the previous year. Lastly, as the fourth cathegory regarding invested amount is the industrial that represents a total amount of 819 million and an extraordinary growth of 89% in 2016.

The attractive of real estate lie over the potential revenues. Thus, the spread over the Spanish Government bond is in a wise situation of +140bp. To delve into it, in the logistic sector it holds in 6.10%, which suppose -65bp in front of Q4 2015. Office yields maintain a 3.75% experimenting a decrease of 50bp facing Q4 2015. For retail, yield has fallen 50bp opposite to Q4 2015, which means it is now at 5.75%. As regards Retail Warehouse parks and shopping centers, the yields have reducted 50bp and 55bp to stand at 4.5% ad 3.35% respectively.

The main players among this sector are companies and institutional investors. It has traditionaly been dominated by insurance companies, which have big amount of money to invest for the long-term and expects a considerable yield without significant fluctuations (low volatility). That is why it is common to see that skyscrapers of important cities belong to insurers. Nowadays they are being displaced by the previously mentioned REITs. It is acceptable to bear in mind that many of these investment vehicles are participated by Asian and Middle East companies. This is because they look for diversity as long as their portfolio are mainly formed by oil, whose swings they are trying to hedge with the lower volatility of real estate, and also, because of the slower growth in some of those countries. This last fact explains that

[2] REITs (in Spanish called 'Socimi', the acronym of 'Sociedades Anónimas Cotizadas de Inversión Inmobiliaria') are listed public limited companies whose main activity is acquiring, promoting and restoring urban nature assets for its renting.

foreing capital has more protagonism in terms of investment activity over national one, the latter is increasing the weight for the three last years, from 35% in 2013 to the up-to-date 46%.

These proffessional analyses includes an outlook over 2017. They remark that, despite the political uncertainty that reigns the developed areas, investors confidence is strenghthening. Foreign capital is forecasted to keep leading off the market. The blend of economic growth and the in underway improve in job market might provide the so requested stimulation to reinforce the whole real estate sector growth, extending the number of both companies and employees. This would not only foment consumption, but also occupancy levels and commercial real estate rents. Such is the case that both Madrid and Barcelona lead the rental and capital growth European rankings respecting of office, retail and logistic markets for the following years.
The low interest rates paired with the return of loans will keep on drawing investors to real estate investment. The expected continuous yield compression, the deficit of higher class products and the ascending desire to buy upholds this descending tendency.

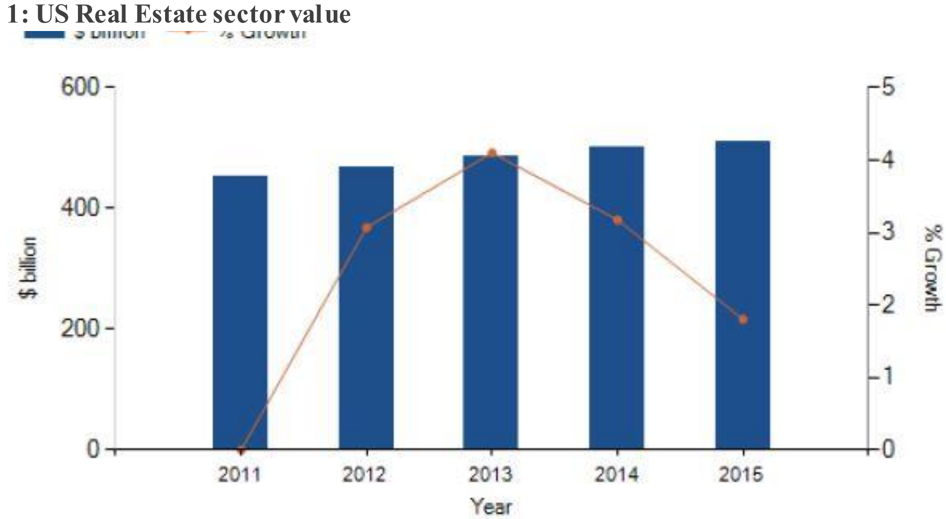
Analysis of Real Estate sector in the United States

The real estate market in the USA grew reasonably during the 2010 to 2015 period in reference to value. This growth is predicted to decelerate over the 2015 to 2020 projection period, resulting in a small growth, taken as a whole.

This current growth is partially due to the ascend of renting. Researches suggest that this tendency is set to persist.

The US Real Estate Industry obtained a total revenue of $511.1bn in 2015, which meant a CAGR of 3% in the immediately four-year prior period.

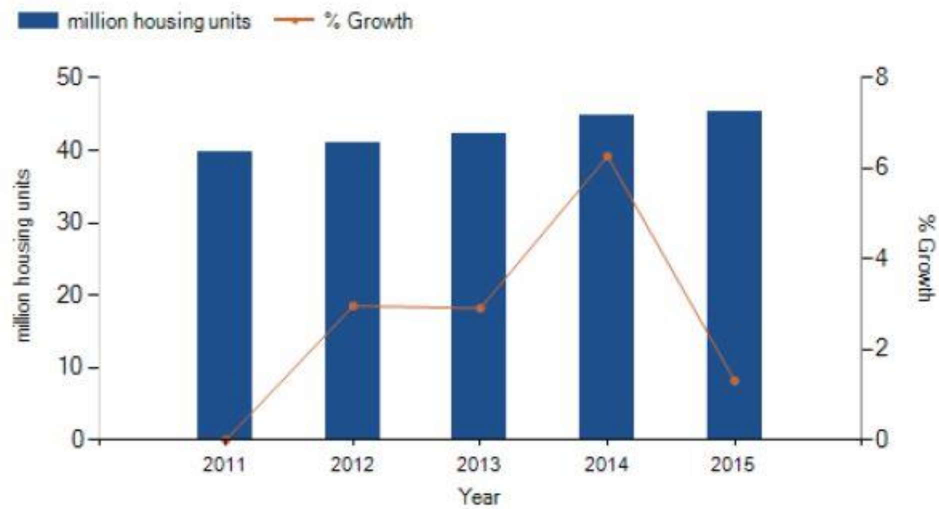
Chart 1: US Real Estate sector value



Source: MarketLine

It is remarkable that the growth has been slowed down significantly the last year until 1.8% while the three previous years growth fluctuated between 3.1% and 4.1%. These leaded to a continuous growth in $ billion and supposed a 3% Compouned Annual Growth Rate of the period of 3%.

Chart 2: US Real Estate sector

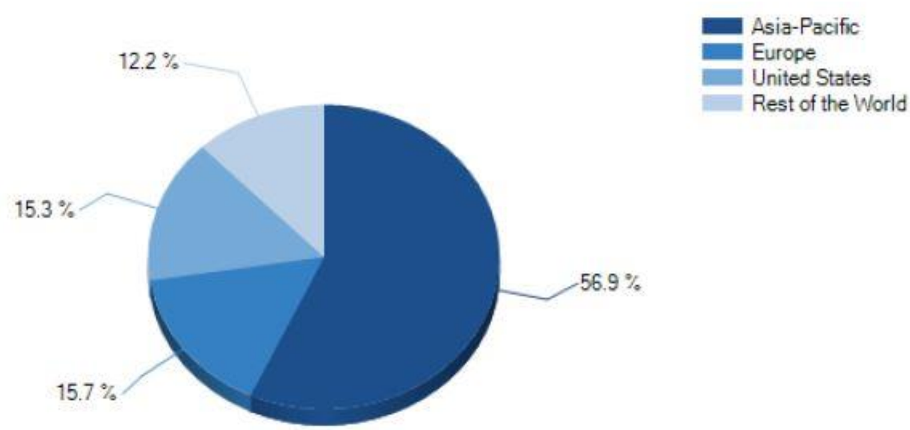


Source: MarketLine

Market Volume reflects a similar deceleration in growth in 2015 reaching 1.3%, quite distant to the prior year ratio which marked 6.3%. The overall 4-year period Compound Annual Growth Rate showed 3.3%.

The volume of houses transacted raised to 45.4 million units in 2015 showing a steady evolution.

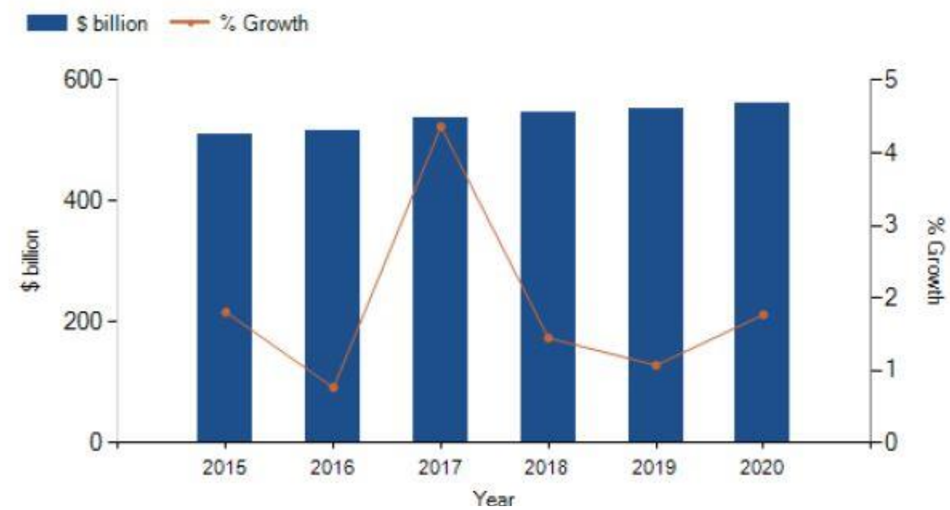
Chart 3: US Real Estate sector area distribution (% of value)



Source: MarketLine

The United States accounts for 15.3% of th real estate market value worldwide.

Chart 4: US Real Estate sector prediction

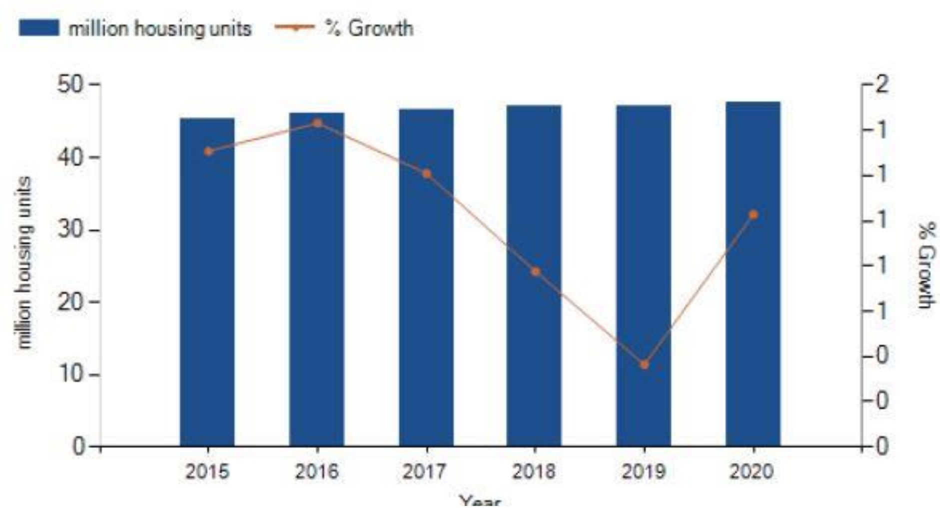


Source: MarketLine

Regarding of the market outlook, the United States real estate market is forecast to reach a value of $560.8 billion in 2020, corresponding to a increase of 9.7% with respect to 2015, and showing a CAGR of 1.9% along the 2015-2020 period.

Although the growth is expected to be very weak during 2016 with 0.8%, it would be compensated with the large improvement in the following year growing a 4.4% in 2017.

Chart 5: US Real Estate size projection



Source: MarketLine

The market volume prediction shows that the United States real estate market is expected reach 47.6 million houses transactionss in 2020, which supposes an increase of 4.9% since 2015.

In this figure, we can observe that the weak years when speaking about volume growth are 2018 and 2019, showing 0.8% and 0.4% rates respectively.

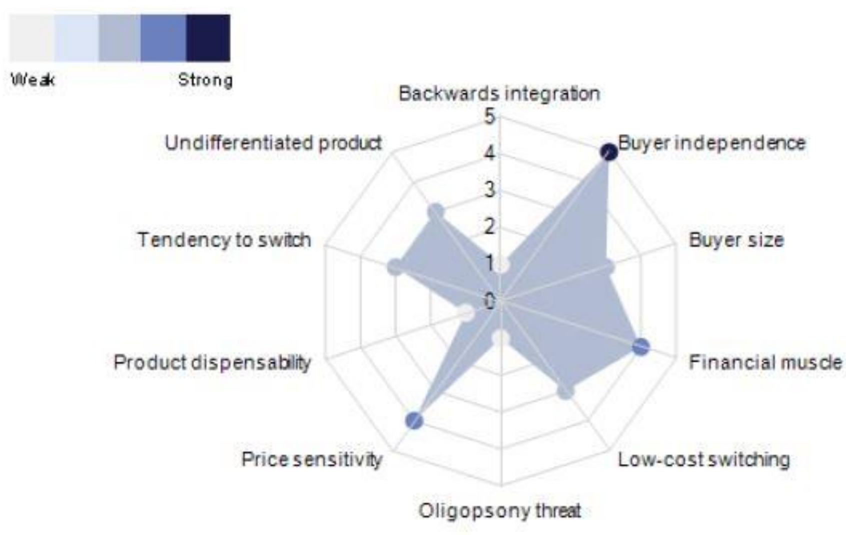
The CAGR maintains in an acceptable 1% during the period from 2015 to 2020.

Chart 6: Porter's five forces in US Real Estate sector

Source: MarketLine

When analyzing buyers power, we are taking as individual customers through to large businesses as key buyers, and construction companies and renting agencies as key suppliers.

Chart 7: US Real Estate sector customer power

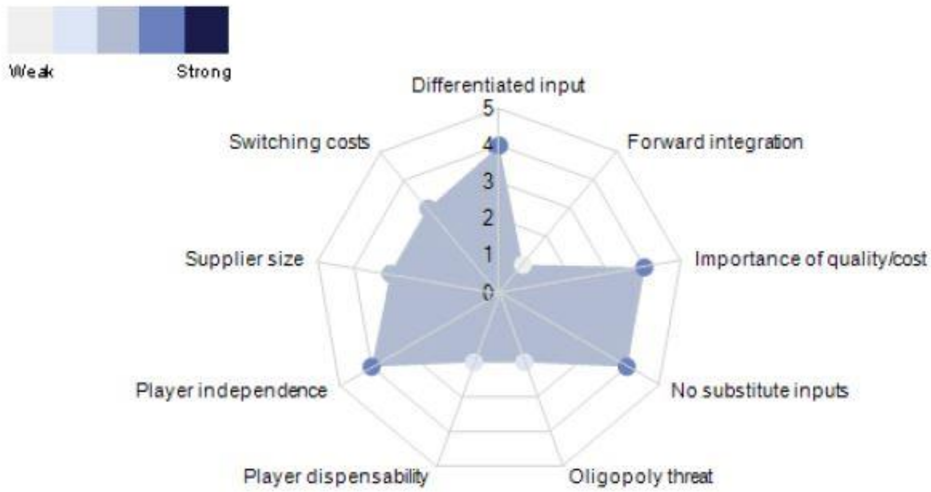


Source: MarketLine

Being so many individual customers in this sector, would abate the buyer power as the consequence of losing a customer is not such important for suppliers. On the other hand, this market is composed by a heterogeneous indicividuals with different financial force connoting that power may depend on their aptitude to negotiate. Main factors playing a role in captivating buyers are price, location, suitability, and more associated elements, but name perception is also important due to reputation, confidence or preceding experience.

The vacancy rate in 2016 Q1 (First Quarter) was 7%, the lowest in the last years. This suggests a decrease in buying power level.

Chart 8: US Real Estate sector supplier power



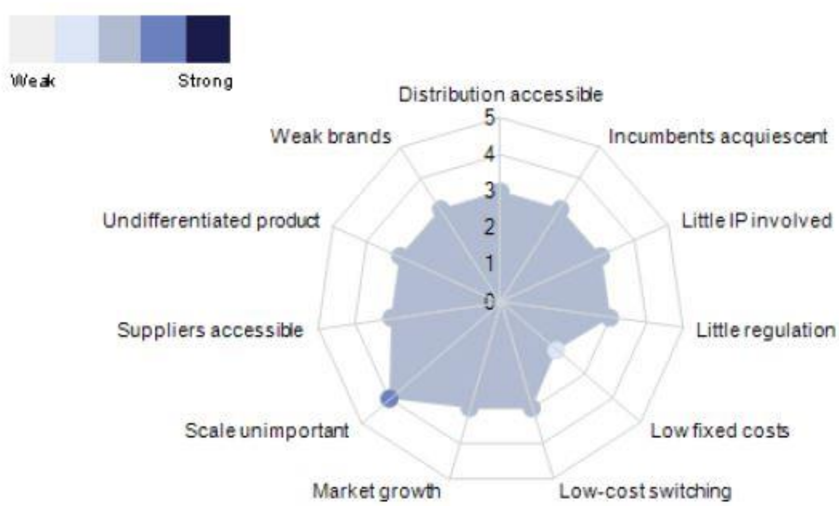
Source: MarketLine

The great amount of building, constructing or repairing property serves to lessen the supplier power noteworthyly.

Due to the usual long-term contracts that are signed in with suppliers, these ones gain supplier power. Furthermore, qualified employees with notorious skills are a distinction input in this market, so the ability to retain them is, as a rule, crucial.

Generally, supplier power is determined as modest in this business.

Chart 9: US Real Estate sector new entrant barriers



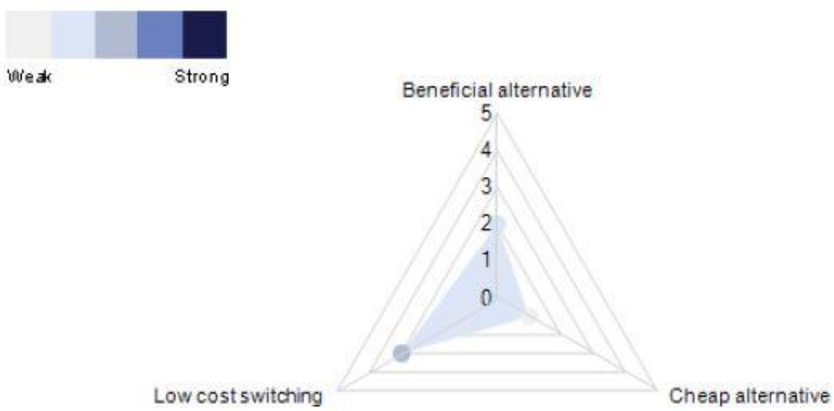
Source: MarketLine

High amount of capital is asked for entrying in this industry so as to purchase and sustain property. That capital can be usually raised business or mortgage loans. Nevertheless, the financial crisis has led to more strict regulation and more exigent requirements, making the amassing of capital more problematic. Financial constraint can emanate for novel firms as important investment usually needs a period of time before revenues start to surface.

Entry to this industry can be carried out on a small scale. Large enterprises do not tend to gain much from economies of scale; on the other hand they can have the benefit of name recognition.

From a customer point of view *"the principal alternative to property renting is to buy it, rather than lease it" (MarketLine).*

Chart 10: US Real Estate sector menace of substitutes



Source: MarketLine

Over a lifetime renting is improbable to be money-saving than the purchase of a home and the rental property is never owned. The fact of low interest rates determined by the Federal Reserve and the expectancy for them to stay low in nearer future might animate customers to take out affordable mortgages rather than going on to rent.

In general, the threat of substitutes is weak.

Chart 11: US Real Estate sector level of competition among agents

Source: MarketLine

The United States real estate market is very fragmentated with small firms being in the running alongside large multinational agencies. The moderate growth during the last years has attracted new entrants into the market. This tends to mitigate the strong competition somehow. A company, if diversifies, may find some regions more profitable than others. Competitive pressure is emphasized by the uncertainty of the economic encironment and the a rate of 64.5% of ownership in 2014.

The doubts comes up to a company when there exists the posibility that money received from a property is sizeable than the investment put in.

The 'hard to get' mortgage market join together with limited supply and increasing property prices have impeled many possible purchasers into rental accommodation, making easier the level of rivalry even more. Generally, rivalry within the industry is assessed as moderate.

Analysis of Real Estate sector in Spain

CRISIS PERIOD AND THE SPANISH REAL ESTATE BUBBLE

In the year 2007 worldwide economies started presenting liquidity lacks and a contraction of the real estate market. These factors, amongst others, led to a global banking crisis that derived in a recession period that has hit almost every developed economy.

In the case of Spain, the effects of the recession lasted some years more than in other countries such as United States, and the arising of the crisis was caused by other structural problems, the real estate bubble for example. In order to analyse the history of the real estate market in the country it is necessary to explain this period.

In the first years of the twenty-first century, the country passed through one of the most significant real estate bubbles of the advanced nations. This boom in the sector, in fact, supposed a great economy driver in Spain until the year 2006, more or less. Until the explosion of the bubble the construction sector grew exponentially, being the production of new buildings greater than the sum of new constructions in Germany, France and Italy (Akin, García, García and Peydró, 2014).

Apart from the increase in the construction of new buildings, one of the most important events was the huge increase in housing prices during the period, and the number of mortgages that were attributed. This increase in the number of mortgages as well as in the amount conceded are explained by the harsh competitiveness that arose in the mortgage origination market, due to the low Spanish banking sector mortgage rates.

This dependence of the country's GDP on the real estate sector and the large offering of mortgages had as a consequence the bigger impact and harder effects of the financial crisis in Spain than in other economies.

It was in 2007 when the decrease in construction of new buildings and real estate transactions started to be noticeable. In this context, the breakdown of the real estate sector caused that the valuation of the properties that were covered by the loans decrease rapidly, with the subsequent effect that the borrowers started having issues to repay the quotes (BBC, 2012).

Until the recovery of the global economy, and the more delayed recovery in Spain, the real estate sector experienced a crunch in mortgage conceding, and the construction sector lived a period of contraction.

The year 2015 is regarded as the first year of recovery of the sector, which will be analysed in the following section.

POST-RECESSION PERIOD

In order to understand the current situation and future expectations for the real estate sector, it is important to briefly analyse how the economic situation has been since the recession period and which are the forecasts for future years.

Regarding economic growth, the country has been experiencing a sustained GDP increase since, approximately, 2013, year in which the crisis started to subside. The factors that have helped to this improvement have been amongst others the recovery of the employment sector or the fiscal ease, which made household consumption increase. The forecasts for the GDP growth are still upwards, although it will increase more slowly in 2017 and 2018, passing from a 3.2% in 2016 to a 2.4% expectation in 2018.

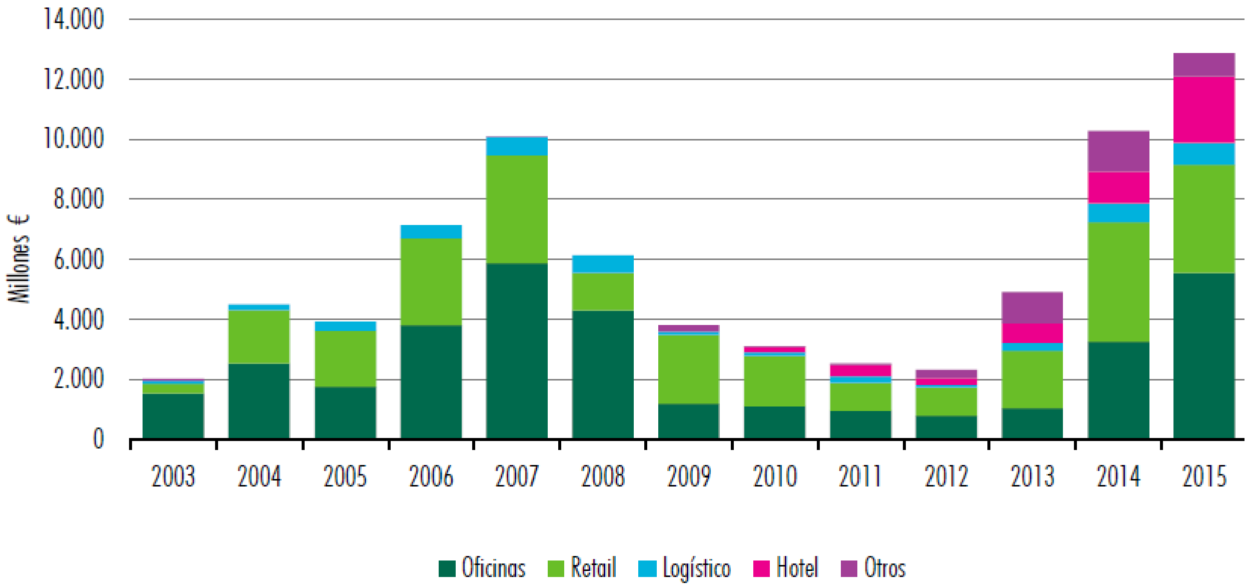
Apart from this, the variables that are conditioning the country's economic prospects in a global slow growth framework are the uncertainty that is present globally and in the stock markets, which is making investors seek for less risky assets (CBRE, 2016).

From 2014 investment activity in Spain has reached maximum points after a period of slowdown, although experiencing a slight decrease last year. In 2015 the country situated amongst Europe top investment nations, being the huge volume experienced that year caused especially by the Merlin Properties acquisition of Tesla Inmobiliaria.

In 2016 the investment activity showed a slight decrease, although maintaining in elevated figures (8.5 bn-9.5 bn), slowdown marked by some external and internal variables, such as the dollar appreciation or the Spanish political instability. Despite this slight slowdown, the expectations, at least for the two following years, are optimistic for the sector, as the returns are still expected to maintain above the Spanish bond yield.

Regarding the type of real estate in which investors preferred to invest, offices got the biggest investment part, a 43%, although in general investment in all types was great.

Chart 12: Type f Real Estate Investment Evolution Between 2003 and 2015



Source: CBRE

In the graph above the reader can observe the protagonism of the office and the retail sector, although it can be appreciated that hotels and other real estate sectors are gaining importance in term of volume invested.

During 2015 the type of investors in the real estate sector was varied, leaded by SOCIMI as Merlin Properties, Hispania or Axiare. This type of society supposed the 42% of the total investment of the year. Although this type of investor will be explained in more depth in following sections, only mention that these societies are obtaining a big importance in the sector, fact that can explain the exponential increase in the number of SOCIMI listed in the MAB (Mercado Alternativo Bursátil). The majority of investors, without taking into account the SOCIMI investment, are European, at the same time that Asian capital started increasing its presence.

The main change that the sector has experienced since the first recovery years is the changing from an opportunistic market in 2013 to a more core market, with the entrance of institutional investors, insurance funds and private investors with focus on patrimony (CBRE, 2016). On the other hand, the principal challenge that the sector will face in future years will be the lack of supply of office and retail products, and this could make the alternatives of investment decrease.

Another important fact is the huge decrease of the prime yields last years, below 4% for office sector and around 3.5% in high street locations. In this low yield situation, investors are focusing on the rents possible increase in order to obtain returns. In this "rental" segment, the expectations are that Spain will get one of the biggest growth rates for all type of real estate rent in next years (CBRE, 2016).

PROPERTY VALUATION

It is crucial in a Real Estate operation to test correctly the value of the asset in order to be correct when prognosticating the transaction and getting profits.

One of the methods, and the most usually used is the one based on Cap Rate.

The capitalization rate is the ratio of a real estate investment asset that represents the income that the asset is estimated to produce. The capitalization rate is used to calculate the inverter's possible return on the investment.

Basic standards of valuation

Far from many assets that within a short possession go a long way absolutely, Real Estate's earnings extends along a wide time. This stands for the basis of good appraisal of Real Estate assets, because depending on that, there would be worthy to invest in it or not. Nowadays, and even more if talking about assets like buildings, an appraisal of a property's value should consider economic and social preferences, as well as bureaucratic procedures or regulation, that may impact in it. As we have said, value is affected by measureless things, but in economic terms, we could reduce the range to just a few to get to understand what does value depend mainly on.

a. Demand: it is the wish or necessity of an economic agent (a person, an institution, public firm…) to get the owning of a product. The higher the demand, the higher the value of the product and vice versa.
b. Utility: the capacity of appropriating of a good because through its owning he can satisfy a major need, solve a problem, or just satiate a desire. Anyway, the utility can be found by the consumer of the product either practically or emotionally.
c. Scarcity: the lack of existence of a product makes it more coveted, raising the potential amount that consumers would pay for it, and consequently, raising its price. It has closely to do with the supply, which is the wish or need of an economic agent of getting rid of a good. The lower the supply, the higher the value, and vice versa.
d. Transferability: it is the key element of value in real estate. It entails the facility to transfer the proprietor tittle to the counterparty.

Differences between value, cost and price.

Value, cost and price are different concepts:

- Cost comprehends the overall spends that have been employed in the construction or production of something. Raw materials and employees' wages are the clearest examples, but also resources expenditure such as electricity or water and even the assets with which the product is been realized (machinery, equipment, facilities, etc) are also included, in some manner, in the cost.
- Value is the amount of money that the product is rated in concordance with the market law. Here takes part the previously defined concepts 'DUST'. Although as much cost as price can impact value, they do not establish it.

- Price is the final quantity that, after or not a negotiation, is paid out for the product. It may coincide with both the cost and the value, or it may not. It can be higher or lower than the two anterior concepts.

Market Value is the most presumable price that a product will reach in the market[3]

With the objective of approximating to the real value of the asset in a concrete date, an appraisal must be done. An appraisal is the calculation, taking into account different elements, of the value. These estimations are used in firms reports, public entities, individual investors, etc, when involved in a business transaction. The purpose of a valuation is to fix a product's market value, explained above.

.

Capitalization rate valuation

The Real Estate valuation based on Cap Rate consists on:

$$Valuation\ of\ the\ asset = Stabilized\ NOI\ /\ Cap\ Rate$$

Stabilized NOI[4] refers to the Net Operating Income, that is, the return that the asset can provide to its owner.

Cap Rate[5] depends mainly on:

1) Location: If the asset is in the city center or in the surroundings, next to a source of resources (i.e. a river, the sea, a coal mine, a forest…), near a high-level acquisitive area, or, on the contrary, close to a problematic area, where misdemeanour or felonies are common. It is presumably the most important factor when calculating the Cap Rate.
2) Type of asset: if the asset is a garage, a home, an office space, or a local commercial will affect the valuation in a very determinant way.
3) Offer and demand: of course, the most demanded an asset is, the higher valuation will result. In contrast, a high offering of it will decrease it valuation.
4) Timing in cycle: depending on the economic era in which the valuation is carried out, the number obtained could change considerably. In a recession period, it is normal that the value is lower than in an expansion (or grow) phase, in which the value could probably be larger.
5) Others: some factors like architecture, space use, materials used in the construction, careful maintenance of the equipment, etc…can also affect in either way, positively or negatively, in its valuation.

The higher the capitalization rate, the more profit margin could be gained with the transaction.

As a clarification, we could maintain that for the seller a low cap rate is good, while for the buyer, a high cap rate is better because he will find it easier to get profits in a future sale having a significant margin to work with.

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[3] Competitive and

[4] A normal measure of Stabilized NOI can be EBITDA

[5] Calculated as a perpetuity.

How do we calculate the Net Operating Income (NOI) Property Management, Asset Management and expense streams?

Rental Income at full occupancy

+ Other income (parking, etc…)

= Potential Gross Income (PGI)

- Vacancy

= Effective Gross Income (EGI)

- Operating Expenses (property taxes, insurance, maintenance, utilities, repairs…)

= Net Operating Income (NOI)

Cost approach valuation

The valuation method of the cost approach is based on the assumption that the customer is going to pay for a property the same amount that it would take him to build an analogous construction with similar conditions. The quantity resulting when using cost approach valuation is composed by the land, the construction and building components, minus the depreciation of the building, that is why this method gives a more precise value if the construction is new, because the depreciation has not to be calculated.

Once stated the above explanation, it is deductible that a potential buyer should not spend his money in an asset that is more expensive that the amount required to build another alike and equally desirable.

It is habitual to make the mistake of mixing the cost approach valuation with the procedure of sales comparison appraisal, because each of them use a different method to calculate, for example, land.

The following list from American society of farm managers and rural appraisers (2003), holds the conditions under it most applicable the cost approach valuation:

- The improvements are new and represent the highest and best use
- The subject property has characteristics that are typical for the area
- The subject is a special-use property
- Adequate data are available to value property components, but limited data are available to value the whole property

They have also added some situations in which the cost approach valuation method is least applicable (American society of farm managers and rural appraisers, 2003):

- No vacant land sales are available
- Construction costs are difficult to measure
- Depreciation is difficult to measure
- The improvements are very old

The procedure when using this valuation method consist on the four following actions (American society of farm managers and rural appraisers, 2003):

1) Valuating the land. The land must be valued as if it was devoid and disposable for its highest and best use, despite of its current application. Comparable land sales with an approximate highest and best use are used in the valuation.
2) Valuating the improvements: calculate the outlay of the spare parts and upgrades.
3) Calculate the amount of depreciation.
4) Lessen the amount of depreciation originated by any cause from the overall cost estimation.[6]

Equation 1: Cost approach valuation formula

$$\begin{aligned}Cost\ approach\ Valuation &\\ &= Land\ Estimation + Building\ Estimation + Building\ Components\ Estimation\\ &- Depreciation\end{aligned}$$

The cost approach is based on some principles (American society of farm managers and rural appraisers, 2003):

a. Substitution: it maintains that a rational customer using common sense would not pay more for a property than the amount to build a similar and equally desirable one with its improvements and with no delay.
b. Supply and demand: variations make the price to change upwards as much as downwards. If these proportional changes do not affect the price, an under-construction edifice would be sort of remunerative.
c. Contribution: since the improvements adhered to the construction affect its value, it is necessary to estimate what is the contribution that those improvements add how much that contribution values.
d. Externalities: outer factors may influence in the cost estimation. These factors are usually physical, but can also be of other kind such as statements, changes in the regulation etc.
e. Highest and best use: as previously exposed, value of land highly depends on which is its highest and best use that is the optimal benefit that the land can generate.

Regarding of the land value, as we have stated before, there can exist the possibility that it is “vacant” or “improved”. To explain these concepts, the American society of farm managers and rural appraisers differentiates urban properties from rural ones.

In urban areas, a vacant land means that it does not have any constructed structure. On the other hand, if the land is “improved” with *“frontage on a paved street, a curb cut, availability of water, sewer, gas and electrical service, it still would typically be thought of as an unimproved site as long as there were no building or structures.”* (American society of farm managers and rural appraisers, 2003)

In rural areas, the concept of vacant refers to *“the absence of farmstead or other buildings, Unimproved land usually does not mean that there are no “land improvements” such as perimeter fence, drainage tile, levee, stock pond and similar improvements. The land improvements are valued with the land and not as separate items as buildings. In special cases, appraisers are asked to value the site improvements separately. In those cases, special care should be taken not to value the land improvements twice.” (*American society of farm managers and rural appraisers, 2003)

Key bullets to develop this method are: i) determination of the replacement cost of building an analogous edifice on the current date (or the date in which is expected to purchase the real estate. The more remote

[6] For more information about the cost valuation approach, the reader should read the complete paper: Cost Approach, Section 6 of the American society of farm managers and rural appraisers (August, 2003).

the date is, the more difficult is to calculate how much it would cost to construct a similar one); ii) adjust the value obtained through the calculation with the depreciation and obsolescence, which is more difficult to calculate than depreciation due to the absence of regulation that rules, and that converts it in a very subjective element. These adjustments are principally related with the following characteristics:

1. Physical: the most obvious. It refers to everything material of the construction. The structure itself and the complements, fixed or not. If the building is very old, it more likely to be deteriorated and, consequently to need a higher reparation that would cost more money. But not only it has to deal with the antique, but also with the material used in the construction. There have been many cases in which buildings constructed many years ago with a harmful material (either because it is detrimental for health, or because it is combustible), have caused a tragedy or they have had to change it completely to obey the valid law.

2. Functional: it is the related with the design and distribution of spaces of the building. There are buildings which are for any reason (land irregularities, architect desire, etc) are not making the most of the spaces, or that the aesthetic is not acceptable for the customer (visible plumbing up against the wall, noisy air-conditioning, etc.)

The pro of this method is that fixes the valuation according to the current price of the asset. On the contrary, it has that it uses a different valuation model to estimate the land, and that relates in excess the concepts of cost and value, leaving aside if any of them can generate higher returns.

Sales comparison valuation

This method considers prices of buildings with similar characteristics, in a close location that have been sold recently to calculate the estimated price of another one. The principal elements taken into account in this appraisal are: location, design, area (dimensions), materials of the elements used in the construction.

It consists basically in constantly gathering data of analogous properties. Then, the factors that may have certain sway in the value must be weighed, as well as some business elements that are of important concern such as means of payments.

Gather information of a resembling property related to sales, listings, etcetera by a deep and meticulous investigation, and corroborate the data and to check that are accurate, for that is necessary to choose the adequate units to analyse them and make a comparison over each one.

Advantages and disadvantages:
As pro point, this method is the easiest to carry out and the more functional when valuating residential houses. It also provides an impartial appraisal because the current sector is part of it, despite any particular preference.

As cons, it may be complicated to find adequate edifices to take outstanding conclusions that could help to approximate the value. That is is the reason why this method suits better when there are many, or at least, enough properties that are almost equal. It is usually considered as a correct number of comparisons to use this approach between three and five, but it finally depends on each valuation

Equation 2: SPC calculation formula.

$$Valuation = Sale\ Price\ comparison \pm Adjustments$$

Land valuation method

It is obvious that land forms part of the property, as well as any complement that is located in it, and therefore, it is important to carry out a correct and precise appraisal. The value of land, as that of the buildings, varies depending if the disposable supplies are over or down the demanded ones, or if the land in question has intrinsic value over the nearby ones. (i.e. if it contains oil, coal, etc.)

The land valuation method consists on a mild estimation, so that financial agents, promoters and individuals can obtain a reliable final value for the property. The figures that conform the final equation can result or difficult to estimate, but the final calculation of the residual value of the property is a basic calculus, with a reliable basis for its purpose.

The result of this land value forecast is necessary for the interested parts in order to estimate other expenses that the investment could suppose, to finally get a maximum money amount they are willing to invest in the property.

In the most basic expression, the equation for the residual method of valuation would be as follows (Investopedia):

Equation 3: Simple form of land valuation equation

$$\text{La}nd = GDV - (\text{Total Costs} + profits)$$

Where land would be the final value for the land or property, GDV stands for Gross Development Value, construction involves all the building and construction costs for the property, the fees related to transaction costs or the hiring of professionals, and finally the profits that developers would require.

In more depth, the amount available for the land or the site purchase is one of the main elements of the residual valuation equation, since it can determine reliably how much you should in a first moment pay for the development of the field or building. Moreover, when valuating this kind of assets it is important to be conscious that the residual valuation figure, or what you can afford to pay for the property, is quite improbable to be the same as the sellers asking price, moment in which negotiations between the parts would start.

In the following paragraph, the components of the equation will be explained in more depth, in order the reader get a complete idea of this valuation method.

First, the GDV, that stands for Gross Development Value, is one of the important elements of the calculation, which professionals in the sector usually sets before the valuation or negotiation. The figure resulting, will mark the estimated final value of the property promoted for the time when it is transferred to another party.

The GDV component of the residual equation is set up on current values and not forecasted values.

The Total Costs includes all the expends related to the construction of the building, including material, labor costs, resources, etc; the several costs, which are conformed for the permits, technical charges, etc; the commercial costs, those related to the sponsor, marketing and publicity; and the general expenses that groups all other possible expense that may appear in the process of construction.

Finally, the profits refer to the promoter’s profit, that will be charged in the price of the service, and means a cost for you as investor.

INVESTMENT VEHICLES

There exist various ways of investing in Real Estate, each of them with different characteristics and level of complexity, either for understanding or for getting access. We are going to name some of them, for subsequently explaining in more detail: (Fernández Gimeno, Roig Hernando, and LLovera Sáez 2012, 309-363) [7]

The most basic is the direct acquisition of the asset either by own funds or by the concession of a mortgage loan (debt). Another, more sophisticated type, is the indirect participation (mainly) in a fund or a partnership, such as REITs or SOCIMI. Lastly, the more complex instruments to invest in Real Estate are the MBS.

Direct acquisition: In the direct acquisition, we can find obviously the purchase of the asset through the own funds of the investor, whose intention is to recover the investment with a gain when reselling it after a revaluation, or through the monthly payments if renting it. Purchasing a property with a determined rate of leverage can also be considered as a direct acquisition.

Indirect acquisition: Consists principally in using some specialized investment vehicles to enter the real estate market, most famous vehicles are the above mentioned SOCIMI and REITs.

Finally, the third way of investing in real estate is through more complex operation, the called MBS (Mortgage-backed securities), which we are going to explain lately.

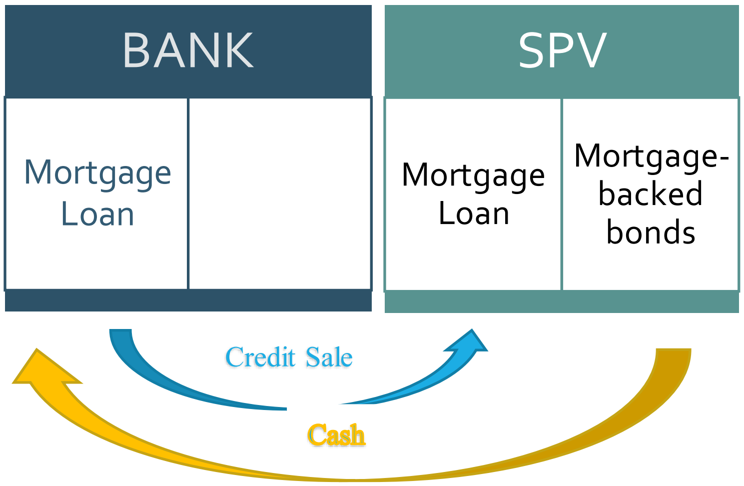
MBS

Apart from buying yourself a property (with own capital or by borrowing funds) and the indirect participation in an investment vehicle, you, as an investor, can opt for alternative instruments. MBS is one of them. In accordance with SEC, Mortgage-backed securities *"are debt obligations that represent claims to the cash flows from pools of mortgage loans, most commonly on residential property. Mortgage loans are purchased from banks, mortgage companies, and other originators and then assembled into pools by a governmental, quasi-governmental, or private entity. The entity then issues securities that represent claims on the principal and interest payments made by borrowers on the loans in the pool, a process known as securitization"* (SEC)

Securitization is the process in which an ensemble of credit rights are grouped in a common portfolio. Commonly, this portfolio is created in a separated vehicle of the company, called Special Purpose Vehicle (SPV). Through this mechanism, financial entities get it easier to get financing turning into usable assets that individually would be very illiquid. As well of gaining a more attractive and marketable instrument, the financial institution gets rid of the credit risk since they transfer it to the new SPV.
Once this process is completed, they generate mortgage-backed bonds over the mortgage loan and sell them to both, institutional and particular investors.
This illustration describes how is the proceedings of the transaction.

[7] Fernández Gimeno, J., Roig Hernando, J., & LLovera Sáez, F. J. (2012). Los reits españoles como vehículo de inversión y financiación de la actividad inmobiliaria: Las SOCIMI. *Intangible Capital, 8*(2), 309-363

Illustration 1: Functioning of MBS through SPV



Source: Own elaboration

During the financial crisis of 2008, MBS took an important part, being the instrument used in fomenting the Real Estate market and the its good functioning drove banks to concede mortgages to many individuals that could not afford its payments. People who did not satisfy the minimum requirements of solvency, later they would be known as 'ninja', people with no-income, no-job and no-assets.
When 'ninja' people could not continue paying its mortgage, many MBS defaulted and lot of investors that took it as a very save investment (AAA rating in many cases), such as retirement funds, lost their money and provoke a domino effect, infecting other institutions and funds worldwide.
The financial crisis made the regulator to learn from the mistakes and added adaptations to the legislation in order to avoid similar future crisis and to have more control over complex financial instruments, its valuation, and its risk measure. That is why Basel III agreements incorporated new modifications.
In terms of securitizations, it says: *"Strengthens the capital treatment for certain complex securitizations. Require banks to conduct more rigorous credit analyses of externally rated securitization exposures."* (Bank for International Settlements, 2015).
It means that there will gain importance the risk analysis of the instruments, and that those analysis will be carried out by independent third parties and not by the own institution.

There are three federal agencies from which nearly all mortgage-backed securities dawn in: The Government National Mortgage Association (Ginnie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and Federal National Mortgage Association (Fannie Mae), being only Ginnie Mae completely public owned, making it the only in which the government stands behind their securities. These are agencies whose principal function is to acquire mortgage loans from lenders (banks and saving institutions), join them into pools (funds, stores, reserves…) and sell shares (not really shares but 'portions') to investors. These portions are participation certificates, most commonly known as pass-through securities. Those investors who opt for this instrument receive the principal and interest payment from the homeowner as an income, in the percentage of their participation over the total package.
It may look like the technique used with bonds, but according to Miller (2003), the difference dwells in the period of payments: while bonds pay interest semiannually- usually- mortgage-backed securities do it

monthly and with the inclusion of part of the principal payment. The same author also provides some other differences between mortgage-backed securities and other investment instruments such as the maturity of the mortgages in front of that of the mortgages com-backed security, being commonly 30 years for the mortgages and around 12 years for the latter.
A priori, it may seem to be the optimal mixture of yield and risk, because they usually offer some basic points over the sovereign bond and are as well supported and supervised by the government. The problem settles down, firstly, in the interest rates. It is an element that affect directly to these assets because if they rise, the price of the MBS decreases because recently originated instruments offer more yield than yours. Curiously, on the opposite case, if interest rates drop because of the same reason explained before, fixed-income investments would reevaluate, but not the MBS. In the case of MBS, house proprietors, to benefit from that decline, usually refinance their mortgage, this is, redeeming the old and stablishing a new one with lower interest rates. The effect over the investor in MBS is not a rise in the installments, but a shorten in the reception of the payments of the principal. The problem that arises here is that you need to find a new asset to invest your money, and with low interest rates, what will reward you with low returns.
An option to get protection against the beforehand amortization, Miller (2003) proposes three alternatives:

- Mutual funds: you can participate in a mutual fund by contributing with a minimum of $1,000 putting the minimum of $25,000 to invest directly in MBS aside. Mutual funds works reinvesting the payment received chiefly and the rest is disbursed among all the shareholders monthly. As well, the author also explains that the fact of having a wide amalgam of maturities, it can be in some way more protected against interest rate oscillations. This alternative could suit to perfection if you want a long run investment and your objective is to get relatively high returns while practically dismissing the risk of default.
- Collateralized mortgage obligations (CMOs): these instruments were invented to dodge these two obstacles: the inflexible Federal Agencies' cash flow functioning, and the $25,000 requirement to invest in MBS that was prohibitive for many investors.
  Being the minimum investment $1,000, its functioning consists on separating the payments from MBS into tranches[8] depending on the maturity. When a payment is received, almost all maturity tranches get some interest payment, but the principal is set aside the tranche with lower maturity until it is retired, when the principal payment is allocated in the coming shortest maturity tranche. This way, *"the longer the maturity of your tranche, the greater your protection against early principal payoffs." Miller (2003).*
  Other characteristics of CMO are:
    i. The backed mortgages do not need to be government originated, the issuer could as well be a bank or a promoter. The collateral backed by a financial institution. Of course, the securest CMOs are from the Federal Agencies.
    ii. CMOs suffer depreciation when commercialized in the secondary market, so better maintain them.
- Stocks of the agents: not Ginnie Mae, which is a public owned institution, but Freddie Mac and Fannie Mae are listed on the stock exchange, so they are an option for avoiding interest-rate problematic, although they do not offer such an attractive yield as MBS.

There exist different kinds of MBS. Here we are going to explain two of the most important:

[8] According to Cambridge dictionary, "one of several parts of a financial arrangement, payment, amount, etc."

RMBS[9] *"are pools of residential mortgage loans that could include some or all different types of fixed and/or floating rate loans, such as prime, subprime, Alt-A and Option ARMs (adjustable rate mortgages)"*(National Association of Insurance Commissioners, 2017)

Insurance companies or retirement funds have frequently opted by RMBS because of the future (mainly long-term) cash flows that generate. As the NAIC (2017) maintain, the insurance companies have also taken part in making up the system of mortgage investing niche. Traditionally it has been managed by the Federal Agencies Freddie Mac and Fannie Mae, the called 'agency segment', and now there also exists the 'non-agency segment'. In the latter, are private institutions (Banks, thrifts, etc.) the ones that issue the Residential MBS, whose *"underlying collateral generally consists of mortgages which do not conform to the requirements (size, documentation, loan-to-value ratios, etc.) for inclusion in mortgage-backed securities issued by agencies such as Ginnie Mae, Fannie Mae or Freddie Mac"* (National Association of Insurance Commissioners 2017)

Before 2007, the non-agency RMBS supposed a sturdy part of the issuances. With the arrival of the financial crisis, the issuances of non-agency RMBS sank spectacularly. It is true that during the last years, it has grown again, but insignificantly compared with 10-year ago datum.

As we have referred before, the insurance sector occupies an important part of this sector, concretely, the life industry with 82%. That is why insurance companies were rated as high-quality investments[10]. In that time, insurers were more focused on hedging the interest-rates volatility and prepayment.

CMBS[11] are, as National Association of Insurance Commissioners (2017) defines, guarantees backed by underlying collateral, that, different from RMBS, encompass commercial mortgage loans on retail, office and industrial properties, as well as multi-family housing and hotels.

"The properties are income producing and operate for economic profit. Commercial real estate loans used as collateral in these types of transactions are often ten-year, fixed-rate loans. The loans are often no more than 80% of the value of the property and the borrowers are required to maintain minimum cash balances to cover interest payments. Unlike residential mortgage loans, commercial mortgage loans often have strong protections ("lock out periods") against prepayments for up to ten years."(National Association of Insurance Commissioners 2017)

Once again, it is insurers who cover the majority of the sector, and concretely life represent the highest percentage among the industry, 75% of the total.

SOCIMI

SOCIMI are the analogous Spanish version of American REITs. Its initials corresponds to 'Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario'. This figure was born in 2009 with the law "Ley 11/2009, de 26 de octubre, por la que se regulan las Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario."

[9] Residential Mortgage-backed securities.
[10] Rated investment grade or higher by one or more of the NRSROs.
[11] Commercial Mortgage-backed securities.

What at first glance makes a SOCIMI an investment vehicle with high potential growth is a 2012 modification in the law destined to be similar to SOCIMI with the rest of European REITs removed its direct taxation (art. 8 and followings). So, this regime will make SOCIMI tax at 0% rate, although in the law the choice remains at the decision of the shareholders' meeting. As well, to resemble even more to those European REITs, it was brought in a toll of 19% that taxes the SOCIMI investors in order to avoid low taxation schemes when the dividends are distributed.

There are some requirements that must be fulfilled to be considered a SOCIMI, these are:

1. To be listed on regulated or alternative markets (art. 4): either in the Spanish, the European Union or the European Economic Area during the whole tax period. Since the 2012 reformation, it is also permitted to be listed on the alternative market either in Spain (Mercado Alternativo Bursátil also known as 'MAB'), the European Union or the European Economic Area.
2. Decision to apply the special tax regime (art. 8).
3. Legal form: must be inscribed as listed join stock corporation[12] (art. 5): the shares must be nominative, and just one class of shares is allowed. Additionally, the corporate denomination must include its legal name in Spain "Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario, Sociedad Anónima" or its acronym "SOCIMI, S.A.".
4. Minimum capital share of €5 million (art. 5).

SOCIMI must have as main corporate object (art. 2):

a. The acquisition and promotion of urban real estate for rental purposes.
b. The possession of equity stocks of other SOCIMI or REITs whose corporate objective and income allotment conditions are approximated.
c. To be in possession of shares of other SOCIMI, which have as social object the acquisition of urban real estate for rental, and whose income distribution and leverage conditions are similar.
d. The possession of shares of real estate collective investment institutions[13]

There is no stipulation to be satisfied by the shareholders, but there are for the listing.
Regarding of the listing, there exists a two-year pardon limit since the moment of application to become a SOCIMI to get listed.
With respect the holding of shares, EPRA makes a concise explanation of the law: *"As a general rule, the minimum free float for listing on the Spanish Bolsa is 25%. In the case of MAB listing, shareholders holding a percentage of less than 5% of the share capital must own a number of shares which, as a minimum, represents either (i) an estimated market value of EUR 2 million; or (ii) 25% of the SOCIMI's issued shares. Such calculation will include the shares made available to the liquidity provider to carry out is liquidity duties. Notwithstanding the above, and according to the MAB Regulations, SOCIMIs would have a maximum term of 12 months as from its listing to ensure that their shares are effectively distributed within several shareholders throughout the market (i.e. after a 12 months period the free float requirement would not be fulfilled anymore by making available the free float shares at the disposal of the Liquidity Provider)."* (Andromeda Yelton 2015, 13)

In terms of the allocation of assets (art. 3), at least 80% of them might consist of 'Qualifying Assets'. EPRA simplifies the possibilities determined by the law with the next classification:

i. Urban real estate for rental intention.
ii. Shares in akin entities (REITs, other SOCIMI, etc).
iii. Shares in real estate Collective Investment Institutions.

As annotation, there is no asset diversification precept.

[12] In Spanish: Sociedad Anónima.
[13] Sociedades de Inversión Colectiva Inmobiliaria.

Moreover, the returns received from the lease of qualifying assets, joined to those received from dividends of subsidiaries, must indicate at least 80%.
Lease agreements between connected firms do not count as qualifying activity, so the incomes generated by that activity cannot surpass the 20% of the total income.
About the capital gains, they are, a priori, not included in the requested 80/20 condition. The exception is clarified by EPRA in this manner: *"Capital gains derived from the sale of Qualifying Assets are in principle excluded from the 80/20 revenue test. However, if such Qualifying Asset is sold prior to the minimum three year holding period, then (i) the capital gain would compute as non-qualifying revenue; and (ii) it would be taxed at the standard corporate income tax rate, currently set at 25%. Furthermore, the entire rental income derived from this asset would be also subject to the standard corporate income tax rate (25%)."* (Andromeda Yelton 2015, 13)

A minimum holding period for the qualifying assets is stipulated in the law. The period reaches the three years since (art. 3):

i. Its acquisition by the SOCIMI, or
ii. The first day of the financial year that the company began to be a SOCIMI if the asset was owned before achieving the regime of SOCIMI.

In relation to leveraging, does not exist any restriction.

Finally, about the profit distribution, there exist some obligations that EPRA (2016) tries to summarize in its report:

- A minimum of 80% of the operating income of the SOCIMI must come from leasing activities. It is mandatory to give away the total profits derived from dividends of qualifying institutions.
- A minimum of the 50% of the gains originating from the transfer of real estate assets and qualifying holdings have to be distributed. The remaining 50% have to be reinvested in Qualifying Assets in a three-year period, or in other ways, distributed to the shareholders.
- The incomes that have to be paid to the shareholders must be made effective in the successive month after the distribution promise.

Once we have clear the concept and the requirements enumerated in the corresponding law, we are going to analyse some figures from the most important Spanish SOCIMI that will help us to understand the important evolution that the sector has and its promising future growth.
The four most important Spanish SOCIMI are Axiare, Hispania, Lar and Merlin Properties.
Here are some figures, obtained from their annual reports, to get updated knowledge of the situation of these companies nowadays:

Table 1: SOCIMI Gross Rental Income 2015-2016 comparison

Socimi	**GRI 2016 (thousand €)**	**GRI 2015 (thousand €)**	**Variation (%)**
Axiare	42,412	35,496	+19.48%
Hispania	142,867	37,798	+277.97%
Lar	60,234	35,734	+68.56%
Merlin P.	351,023	214,454	+63.68%

Source: 2016 Annual Reports (Own elaboration)

Firstly, we can observe the increase in the Gross Rental Income, this is, the returns they have obtained during fiscal year of 2016. They all have increased their returns. The highest revenue with an important difference is of Merlin, which is considered the more powerful of the four, it has experienced an increase of 64% in comparison with 2015. Then Hispania, being the second in revenues but the first when talking about variation, elevating to 278% its increase from the one achieved in 2015. Afterwards, and far away in terms of GRI are Lar and Axiare, with more than 60,000 thousand € and 40,000 thousand € respectively. In terms of variation, both have increased regarding of the previous year. The fact of increasing revenues should be an optimistic signal of demonstration that the sector is recovering from the damage suffered during the crisis. These revenues come, depending on each SOCIMI, from different segments of the market. For instance, Hotels represent 80% of the revenues for Hispania, its key sector. In its annual report 2016, they affirm: *"El segmento hoteles ha tenido un comportamiento muy positivo, apoyado principalmente en los hoteles situados en Canarias"* (Hispania Annual Reports, 2016). It is a direct effect from the economy revival that ALZA again the tourism as an important BAZA for Spain, and indirectly, it affects positively to the Real Estate. Another example is the case of Merlin Properties, which collect the more rents through offices, 39% of all its returns, but again, hotels run an important part, and while they have got a low representation in Merlin's income- only 7%- the upwards variation regarding of the previous year has been the highest, with 136% of increase.

The four of them have incremented the incomes with respect the previous year.

Table 2: SOCIMI Net Profit 2015-2016 comparison.

Socimi	**Net Profit 2016**	**Net profit 2015**	**Variation**
Axiare	148,626	85,340	+74.15%
Hispania	358,974	84,171	+326.48%
Lar	91,430	43,559	+109.89%
Merlin P.	582,774	48,953	+1,090.47%

Source: 2016 Annual Reports (Own elaboration).

It is after observing the net profit when we realise of the not so common situation in which profits are higher than the gross income. It is due to the particularity of managing buildings, that according to the accounting legislation, a revaluation of a building can be recognised in the balance accounts. These latter years after the crisis in which the country is experiencing a recovery in its economy is reflected as well in many sectors, and consequently affect positively to others. As we have said previously, the tourism has raised, and indirectly the value of the buildings- hotels in this case-, or, resulting of the bigger businesses operated, companies are choosing Spain as a destiny, so they need sites in which develop their activity, increasing in this way the value of offices.

If we get into analysing the numbers, it is clear that, not only they are obtaining great profits, but also that the trend when comparing with the anterior year is upward and very steep. Is to emphasize the case of Merlin Properties, which is probably the most important SOCIMI of the four, that has seen its profits augmented in more than 1,000% in only one year.

Of course, the situation of recuperation is propitious for these types of investments, but as important is the selection of assets that have carried out the managers of these companies.

Table 3: SOCIMI 2016 dividend yield

Socimi	**Dividend Yield**
Axiare	0.34%
Hispania	0.00%
Lar	0.78%
Merlin P.	0.81%

Source: EPRA 2016 EPRA Report (Own elaboration).

Lastly, due to the legal obligation that SOCIMI have of distribute dividends, is a key factor to examine the dividend yield that represents the final returns that the investors are receiving from choosing this company as their option.

We can observe that both Merlin and Lar provides high returns to their investors, followed by far by Axiare, and last position remains for Hispania, with a 0% dividend yield in spite of its a priori good results.

From the datum obtained and analyzed, we can understand that among real estate sector professionals, Merlin Properties is so well valued and considered the best of the four Spanish SOCIMI, because it presents good figures for every significant value.

REITs

According to the SEC[14] definition (2012), a REIT (formerly, Real Estate Investment Trust) *"is a company that owns – and typically operates – income-producing real estate or real estate-related assets.*" (SEC, 2012). In addition, it indicates that REITs procure a way for particular investors to obtain a share of the income generated from commercial real estate proprietorship – without the obligation of going "to the street" and buy it. The previously mentioned income-producing real estate assets refer to such a wide range that include shopping centers, offices, hotels, apartments, as well as mortgages or loans.

Usually, REITs specialize in a concrete niche of real estate. So, we can find REITs focused on offices, residential, healthcare, etc. What finally makes the difference between a REIT and another real estate company is that *"a REIT must acquire and develop its real estate properties primarily to operate them as part of its own investment portfolio, as opposed to reselling those properties after they have been developed."* (SEC, 2012)

In consonance with EPRA 2016 report about global REITs, the legal figure of a REIT was born in 1960 with the objective to put at hand to small investors those income-producing real estate assets. The advantages that characterize REITs are diversification, which is higher than wagering all to just one asset. The management of the investment is carried out by professionals of the sector. The top-five US-REITs are: Simon Property Group, Public Storage, Prologis, Welltower Inc and General Growth Properties.

Different from the Spanish SOCIMI, in the US the status of REIT is achieved by the fulfillment of a form[15].

There are also differences in the legal form and the minimum share capital in comparison with the Spanish law.

[14] US Securities and Exchange Commission.
[15] Form 1120-REIT

In the US, it is enough to be an American legal entity (including corporation, business trust, etc.) taxable as a national corporation, except for banks and insurers.

The obligatory nature that the REIT has to be administered by at least a trustee or director, and that the shares have to be subject to transfer are extra prerequisites.

Minimum share capital is not required for a REIT.

In terms of shareholders conditions, it is mandatory to get at least 100 shareholders, whom five or less (either individuals or institutions) might not keep more than the half of the shares (50%) during the last six months of the taxable year.

About listing requirements, it is not mandatory to get the REIT status, since a private REIT is permitted.

Regarding of the assets and activity distribution, EPRA report (2016) elaborates the following bullet points from the Internal Revenue Code that rules the REITs.

A minimum of 75% of the REIT's assets should be conformed of real estate16, government collaterals or cash17. The problems here, and the intention of the regulations trying to elucidate it, is what can we consider a real estate asset and what not. They admit *"land, inherently permanent structures, and structural components are real estate for purposes of this 75% asset test rule"* (Andromeda Yelton 2015, 13).

Revenues coming from real estate assets rental or from interest on mortgages on those assets has raise up to 75% as a minimum limit. Moreover, *"at least 95% of the gross income must come from a combination of real estate related sources and passive sources, such as dividends and interest."* (Andromeda Yelton 2015, 13). On the other hand, revenues deriving from non-qualifying assets must not surpass 5% of the REIT's overall.

In terms of leverage, there is no limit stablished.

Finally, when referring profit distribution obligations:

It is mandatory by law that US REITs have to distribute annually as dividends the equivalent to 90% (minimum limit) of the ordinary income.

Law does not foresee any regulation regarding of the distribution of the capital gains, that in case of not been distributed are submitted to taxation of corporate income, that would at the end, benefit the shareholders in their tax basis apportion.

REASONS TO INVEST IN REAL ESTATE

Once the importance of Real Estate in the finance sector have been explained and understood, especially in times of difficulties like the current we are going through, and after we have accepted it as a serious alternative for the classical assets that do not fulfill what investors look for, it is time to expose the reasons that converts this choice in a quite attractive option depending on what are the priorities and the investment goal.

[16] Includes mortgages.
[17] Includes money market funds.

It is by all known that real estate provides great returns in a long-term period. Many variables take part in it: the fact that real estate underlying is actually material and useful for any quotidian activity such as central office of an enterprise, an storage, or apartments in which have a shelter, act as certain for its proprietor, that understand that is almost a basic necessity[18], so this point lifts real estate to the level of a very coveted article and customers would be willing to spend more on it.

There are also problems in relation to real estate investment. The high cost that supposes entering this market may back out a potential investor, principally particular ones who cannot afford such an expensive outlay. There exist some solutions to this setback: leverage. Leverage consists on confronting an investment with a percentage of own capital, and the rest with debt, this means, with the aid of some other part's money[19]. This strategy can strengthen some ratios such as ROE[20] or RNA[21], because it ameliorates the profitability – on investment, not on the accounting result. The same way it can improve those ratios, leverage can also be very dangerous if the result on the investment is negative.

The condition that must be suited to enable leverage is the next:

Equation 4: leverage condition

$$RNA > Kd$$

And the extra returns that results when leveraging are represented in the following formula:

Equation 5: ROE calculation

$$ROE = RNA + \frac{D}{E}(RNA - Kd)$$

The question of where is the limit of leverage, and how can it be found is answered with the formula expressed below:

Equation 6: DSCR calculation

$$DSCR^{22} = \frac{EBIT}{[Interests + Principal\ Amort\ (1 - t)]}$$

DSCR is usually used to calculate the indebtedness capacity of a company, and it might indicate the limit up to which the firm should leverage.

Summarizing, leverage in Real Estate is at the same time a problem and a solution, so it must be treated with care.

Liquidity is maybe the most well-known risk of Real Estate. It comes from the high expense of investing in this sector, which normally leaves the customer with very low capacity of reaction when a problem

[18] It would really behave like that depending on other factors such as supply and demand, price, etc.
[19] Vide: a loan or a mortgage.
[20] Return on Equity.
[21] Return on Net Assets.
[22] Debt Service Coverage Ratio: measures a company's ability to make debt payments on time. (a definition by the Bank of Canadá)

appears. Illiquidity of Real Estate derives from the difficulty of dealing with it. Buying a property takes a time− the buyer to think if it suits its necessities, if the price is the correct, get the financing, if there is no another option that satisfies him more, etc. So when there is an urgency of selling the asset to assign the money to solve that problem, it is not possible.

These last two problems: leverage and illiquidity, can be mitigated through the option of Real Estate investment vehicles such as REITs or SOCIMI. These vehicles permit entering the market with not a very high minimum investment and they are a very liquid instrument since they are listed on the stock exchange. This is why they are increasing as a choice for real estate. These vehicles also count on a good advantage that real estate offers, diversification.

Real estate is an alternative investment because it is non-correlated with the traditional ones:

Table 4: Asset Correlation (2015)

	US Lg Cap Growth	US Lg Cap Value	US Mid Cap Growth	US Mid Cap Value	US Sm Cap Growth	US Sm Cap Val	Foreign Industrialized Mkts Stocks	Emerging Mkts Stocks	US Investment Grade Bonds	US High Yield Bonds	Non-US Bonds	Cash	Commodities	Real Estate
US Lg Cap Growth	1.000	0.848	0.896	0.740	0.856	0.718	0.582	0.517	0.189	0.528	0.005	0.023	0.124	0.444
US Lg Cap Value	0.848	1.000	0.778	0.899	0.743	0.844	0.586	0.537	0.230	0.577	-0.008	0.052	0.141	0.588
US Mid Cap Growth	0.896	0.788	1.000	0.776	0.980	0.792	0.558	0.559	0.125	0.562	-0.019	-0.019	0.162	0.515
US Mid Cap Growth	0.740	0.899	0.776	1.000	0.767	0.957	0.536	0.512	0.212	0.620	-0.015	-0.002	0.150	0.678
US Sm Cap Growth	0.856	0.743	0.980	0.767	1.000	0.805	0.539	0.560	0.097	0.581	-0.036	-0.035	0.161	0.541
US Sm Cap Val	0.7118	0.844	0.792	0.957	0.805	1.000	0.516	0.517	0.160	0.644	-0.032	-0.013	0.157	0.701
Foreign Industrialized Mkts Stocks	0.582	0.586	0.558	0.536	0.539	0.516	1.000	0.667	0.170	0.398	0.288	0.052	0.181	0.389
Emerging Mkts Stocks	0.517	0.537	0.559	0.512	0.560	0.517	0.667	1.000	0.036	0.432	0.025	0.003	0.201	0.343
US Investment Grade Bonds	0.189	0.230	0.125	0.212	0.097	0.160	0.170	0.036	1.000	0.382	0.447	0.237	-0.107	0.157
US High Yield Bonds	0.529	0.577	0.562	0.620	0.581	0.644	0.398	0.432	0.382	1.000	0.082	0.010	0.039	0.499
Non-US Bonds	0.005	-0.008	-0.019	-0.015	-0.036	-0.032	0.288	0.025	0.447	0.082	1.000	0.229	-0.076	-0.001
Cash	0.023	0.052	-0.019	-0.002	-0.035	-0.013	0.052	0.003	0.237	0.010	0.229	1.000	-0.163	-0.050
Commodities	0.124	0.141	0.162	0.150	0.161	0.157	0.181	0.201	-0.107	0.039	-0.076	-0.163	1.000	0.159
Real Estate	0.444	0.588	0.515	0.678	0.541	0.701	0.389	0.343	0.157	0.499	-0.001	-0.050	0.159	1.000

Source: Morningstar (Own elaboration)

As can observe in the table above, Real Estate is not so correlated with most of the assets with a rate below 60% with all of them. Some of them like commodities or US investment grade bonds the rate of correlation is quite small (15.9% and 15.7% respectively). Even, it has a negative correlation with cash and non-US bonds. In addition, the variety of submarkets within real estate, makes it even more diversified, so the possibilities that an asset suffers losses is partly mitigated with the uncorrelated one gains. It the safest way to invest in a way that the risks are minimized at maximum possible.

Regarding of the investment vehicles like SOCIMI and REITs, the diversification arrives from the fact that this firms have the possibility of investing in real estate worldwide, what makes diversification effect going a step beyond, because it is more difficult that assets in many different countries follow the same fall tendency at a time.

Although it may seem all advantages, the real estate investment vehicles have also cons. They, as a rule, have high management costs, because in the end, they are professionals that controls your investment. Furthermore, when you put your money in one of this companies, you are investing in stocks, what entails all the risks associated.

The final characteristic of real estate we are going to treat here is that it provides a reliable hedging against inflation when making long-term contracts. It is due to the fact that properties vary it value independently, and generally it goes up[23].

CONCLUSION

After we have explained in depth everything important to be commented about this market and obtained an outlook of what Real Estate sector is and its present situation, after understanding how it works, its principal agents and its advantages and disadvantages, we could reach to the reasoning that, in moments of market difficulties, where traditional assets do not offer sufficient decoy to convince investors, Real Estate places itself as one, if not the best, of the alternatives for the asset allocation of a portfolio. It provides possibilities for almost all types of investment profile.

Although of course it has points on its contrary as illiquidity or leverage, there are ways of avoiding them. The in-growth entities REITs & SOCIMI are a great example of the evolution and expanding of the property market. Almost blurring the problem of illiquidity, and demonstrating the force and weight that they are gaining in the market.

We must accept that as almost every financial market in periods of recession, real estate also diminishes its returns, but during last years it has shown one of the biggest recoveries among financial assets. Moreover, real estate is considered to beat resistances of returns in the following years, as this type of asset is gaining great importance in investment.

Whenever thinking to allocate assets for a portfolio, in order to gain diversification, inflation hedging, great returns and rate of returns, and considering as well, its risks and problems, and the alternatives offered to hedge against them, real estate should, at least, be taken into account the option of Real Estate through all its possibilities.

[23] We cannot take for granted this affirmation beyond just a usual aspect of these investments, because as we could see in the recent crisis, it values dropped.

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ANNEXES

ANNEX 1: Basel III Pillars and Standards

Basel Committee on Banking Supervision reforms - Basel III

Strengthens microprudential regulation and supervision, and adds a macroprudential overlay that includes capital buffers.

	Capital					Liquidity
	Pillar 1			Pillar 2	Pillar 3	
	Capital	Risk coverage	Containing leverage	Risk management and supervision	Market discipline	Global liquidity standard and supervisory monitoring
All Banks	**Quality and level of capital** Greater focus on common equity. The minimum will be raised to 4.5% of risk-weighted assets, after deductions. **Capital loss absorption at the point of non-viability** Contractual terms of capital instruments will include a clause that allows – at the discretion of the relevant authority – write-off or conversion to common shares if the bank is judged to be non-viable. This principle increases the contribution of the private sector to resolving future banking crises and thereby reduces moral hazard. **Capital conservation buffer** Comprising common equity of 2.5% of risk-weighted assets, bringing the total common equity standard to 7%. Constraint on a bank's discretionary distributions will be imposed when banks fall into the buffer range. **Countercyclical buffer** Imposed within a range of 0-2.5% comprising common equity, when authorities judge credit growth is resulting in an unacceptable build up of systematic risk.	**Securitisations** Strengthens the capital treatment for certain complex securitisations. Requires banks to conduct more rigorous credit analyses of externally rated securitisation exposures. **Trading book** Significantly higher capital for trading and derivatives activities, as well as complex securitisations held in the trading book. Introduction of a stressed value-at-risk framework to help mitigate procyclicality. A capital charge for incremental risk that estimates the default and migration risks of unsecuritised credit products and takes liquidity into account. **Counterparty credit risk** Substantial strengthening of the counterparty credit risk framework. Includes: more stringent requirements for measuring exposure; capital incentives for banks to use central counterparties for derivatives; and higher capital for inter-financial sector exposures. **Bank exposures to central counterparties (CCPs)** The Committee has proposed that trade exposures to a qualifying CCP will receive a 2% risk weight and default fund exposures to a qualifying CCP will be capitalised according to a risk-based method that consistently and simply estimates risk arising from such default fund.	**Leverage ratio** A non-risk-based leverage ratio that includes off-balance sheet exposures will serve as a backstop to the risk-based capital requirement. Also helps contain system wide build up of leverage.	**Supplemental Pillar 2 requirements.** Address firm-wide governance and risk management; capturing the risk of off-balance sheet exposures and securitisation activities; managing risk concentrations; providing incentives for banks to better manage risk and returns over the long term; sound compensation practices; valuation practices; stress testing; accounting standards for financial instruments; corporate governance; and supervisory colleges.	**Revised Pillar 3 disclosures requirements** The requirements introduced relate to securitisation exposures and sponsorship of off-balance sheet vehicles. Enhanced disclosures on the detail of the components of regulatory capital and their reconciliation to the reported accounts will be required, including a comprehensive explanation of how a bank calculates its regulatory capital ratios.	**Liquidity coverage ratio** The liquidity coverage ratio (LCR) will require banks to have sufficient high-quality liquid assets to withstand a 30-day stressed funding scenario that is specified by supervisors. **Net stable funding ratio** The net stable funding ratio (NSFR) is a longer-term structural ratio designed to address liquidity mismatches. It covers the entire balance sheet and provides incentives for banks to use stable sources of funding. **Principles for Sound Liquidity Risk Management and Supervision** The Committee's 2008 guidance *Principles for Sound Liquidity Risk Management and Supervision* takes account of lessons learned during the crisis and is based on a fundamental review of sound practices for managing liquidity risk in banking organisations. **Supervisory monitoring** The liquidity framework includes a common set of monitoring metrics to assist supervisors in identifying and analysing liquidity risk trends at both the bank and system-wide level.
SIFIs	In addition to meeting the Basel III requirements, global systemically important financial institutions (SIFIs) must have higher loss absorbency capacity to reflect the greater risks that they pose to the financial system. The Committee has developed a methodology that includes both quantitative indicators and qualitative elements to identify global systemically important banks (SIBs). The additional loss absorbency requirements are to be met with a progressive Common Equity Tier 1 (CET1) capital requirement ranging from 1% to 2.5%, depending on a bank's systemic importance. For banks facing the highest SIB surcharge, an additional loss absorbency of 1% could be applied as a disincentive to increase materially their global systemic importance in the future. A consultative document was published in cooperation with the Financial Stability Board, which is coordinating the overall set of measures to reduce the moral hazard posed by global SIFIs.					