POTENTIAL OF VENTURE CAPITAL & PRIVATE EQUITY FOR INSURERS AND PENSION FUNDS IN SPAIN

ANUARY 2021







The Spanish Venture Capital & Private Equity Association (ASCRI) is the body that represents the Venture Capital & Private Equity (VC & PE) industry before authorities, the Government, institutions, investors, entrepreneurs and the media. ASCRI issues communications on a regular basis and provides up-to-date statistics and information on the evolution of the fiscal and legal framework. ASCRI also organizes a series of activities (training courses, events and round tables) for members and the general public in order to spread and strengthen the contribution of VC & PE to the economy and growth of SMEs in Spain. ASCRI disseminates and guarantees professional standards among its members: transparency, best practices and good governance. ASCRI encompasses more than 140 national and international VC & PE firms, 80 service providers and 14 investment partners (Limited Partners).

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Letter from ASCRI's Chairman and Managing Director

VC & PE has amply demonstrated its positive impact on the companies it invests in, being a catalyst for innovation, internationalization or job creation.

However, it is essential to claim and explain its role as an investment destination. We must look at the other side of the balance sheet. The development and success of VC & PE has a positive impact on investors, who are largely small savers through pension funds or all of us as insurance premium payers. The wealth created by VC & PE is available to us all if we are able to channel institutional and individual savings into the sector. This is especially relevant in an environment of very low interest rates that the pandemic threatens to perpetuate in the medium and long term. It is therefore imperative that we find a way to channel more investments into a sector that consistently generates very attractive returns and that, if done professionally, achieves them with a moderate level of risk.

Spain suffers a chronic deficit in institutional investors who also have exposure to VC & PE, and to private assets in general, that is much lower than desirable and largely below that in other countries around us. And this shortage has a direct effect on the sector's ability to continue investing in the development of our entrepreneurial and business fabric. We are a global sector, and for many years we have benefited from foreign investment in Spain, which has led to a great dependence. We must therefore boost our local investment base, which will necessarily invest also globally, but where Spain will undoubtedly play a leading role as an investment destination.

This study addresses the problem in an objective and professional way by identifying the reasons for it and proposing recommendations for all: VC & PE fund managers, investors and regulators.

Only by tackling the problem rigorously and pragmatically can we generate a virtuous circle that increases investors' exposure to the sector, boosts productive investment with social, corporate and environmental

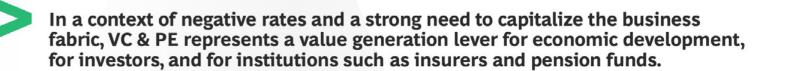
responsibility parameters, improves returns for such investors (we repeat, we are all investors), and attracts more investments and resources to the sector.

We certainly have some high-impact quick wins within our reach, but also a long way to go that demands responsibility and pragmatism from all of us. We are a sector that always operates with a long-term view and our business cycle is very long. Investors should make an effort to know the asset, invest in an organized and professional way, and gain confidence in it. There are no shortcuts or magic formulas, we just need to do things right by properly managing diversification, being selective and persistent.

We would like to extend our most sincere thanks to BCG for conducting this study, and to Inderhabs, Alantra Private Equity, Altamar, Arcano Capital, Axis, BBVA Asset Management, Capital Dynamics, Capital Partners, Casa Grande de Cartagena, Inderhabs, LGT Capital Partners, Loreto Mutua, Mapfre AM, Mutua Madrileña, Orienta Capital and Yielco Investments for their participation. We would also like to thank Inverco, Invest Europe, Isabel Rodríguez (King & Wood Mallesons) and José Martí Pellón (Webcapitalriesgo).

Let's get down to business right now!

Aquilino Peña Chairman of ASCRI Founding Partner of Kibo Ventures José Zudaire Managing Director of ASCRI



Unlike other developed economies, Spain devotes a small part of national savings to VC & PE investments, which entails an opportunity cost:

- For the economy: Investing in VC & PE generates economic growth and develops the productive fabric
- For the savings and profitability of pension funds: VC & PE provides better returns, protecting and improving the value of pensioners' savings
 - For the insurance and pension fund industry: VC & PE represents a long-term investment alternative, with returns higher than that of assets in which these institutions have traditionally invested, such as fixed-income securities.

This study delves into the root causes involving less investment in VC & PE by Spanish institutional investors, mainly insurers and pension funds, compared to other developed economies, as well as into the identification of best practices, to finally define a series of actionable recommendations for the VC & PE sector, insurers, pension funds, and the regulator.

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Specific characteristics of Spain and 50 factors with future impact

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Executive summary

VC & PE in insurers and pension funds

- VC & PE in Spain is more developed than the European average. However, the level of investment by national insurers and pension funds is significantly lower
- Its development would be beneficial in order to achieve a richer and more diversified investment base, along with international investors

Attractiveness of VC & PE

- VC & PE is attractive for its historical returns above other assets and for its differential risk profile
- Spain has a healthy investment ecosystem, returns comparable to those in other countries and good reputation with LPs¹

Success stories of VC & PE investments by institutional investors

- Globally, institutional funds are increasingly investing in VC & PE, being a strategic asset in their portfolios
- In Spain, there are success stories of different types of investors that obtain double-digit returns, which shows that investing in VC & PE is a valid and attractive investment strategy

Special characteristics of Spain and factors with future impact

- Insurers and pension funds have invested less in VC & PE due to country-specific factors, such as:
 - Fixed-income securities: The high return on Spanish fixed-income securities has not made it necessary to turn to alternative assets
 - Pension model: Spain has favored individual pension plans, which are less suitable for VC & PE investment, while employment schemes or the public system, which are more suitable, have low capitalization levels
 - Insurance: Solvency II and the conservative profile of the sector in Spain have not favored the increase of investments in the asset
- In the future, there are factors that may encourage VC & PE investments: low rates, rising interest from insurers, pension reform (uncertain impact, but probably only favorable in the medium-long term) and evolution of Solvency II

Recommendations

- VC & PE: Provide greater visibility to the attractive returns that are obtained (profitability, social impact, sustainability, corporate governance, etc.), and strengthen the focus on advising and adapting the service to investors
- Insurers and pension funds: Continue to broaden the knowledge of the asset and work with the regulator to adapt more favorable regulations
- Regulator: Review pension and insurance regulations to facilitate VC & PE investments





VC & PE investments by national insurers and pension funds are lower than in other countries

Aggregate levels of VC & PE investments in Spain are above the European average

- However, the VC & PE investments made by national institutions, especially insurers and pension funds, are significantly lower than in other countries
- In addition to this lower investment, most of it is geographically diversified

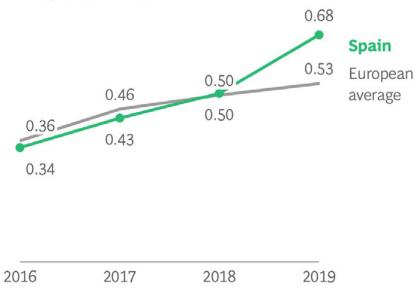
As a result, the national savings captured by insurers and pension funds are not directly and significantly focused on VC & PE investments in Spain, unlike other countries around us



Aggregate levels of VC & PE investments in Spain are above the European average

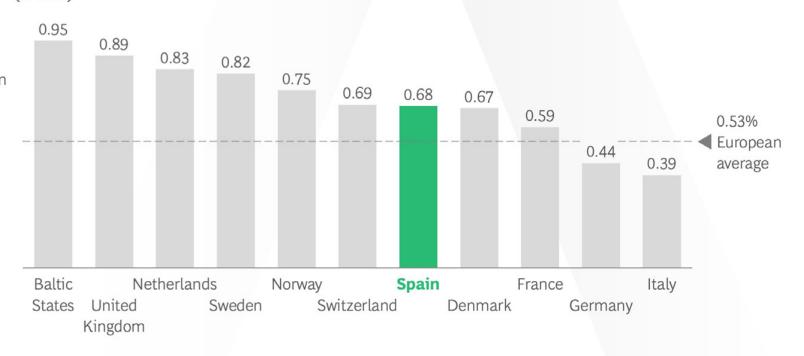
Average VC & PE investment in Spanish companies vs. GDP exceeds the European average for the first time

VC & PE investment in Spanish companies/GDP (% GDP)



There is still potential for improvement, compared with leading countries like the Baltic States or the United Kingdom

Investment in 2019 according to the location of the portfolio company/GDP (% GDP)



The volume of VC & PE investments in Spain has grown at a sustained rate (CAGR 38%), but annual fund raising has stabilized

The VC & PE sector has reached peaks in terms of investment volumes and Assets under Management

Annual volume of VC & PE investments in Spanish companies (€M)



Volume of Assets under Management (€M)



Some maturity is observed with the stabilization in the annual raising of new funds

Annual volume of new funds raised by Spanish VC & PE General Partners (€M)

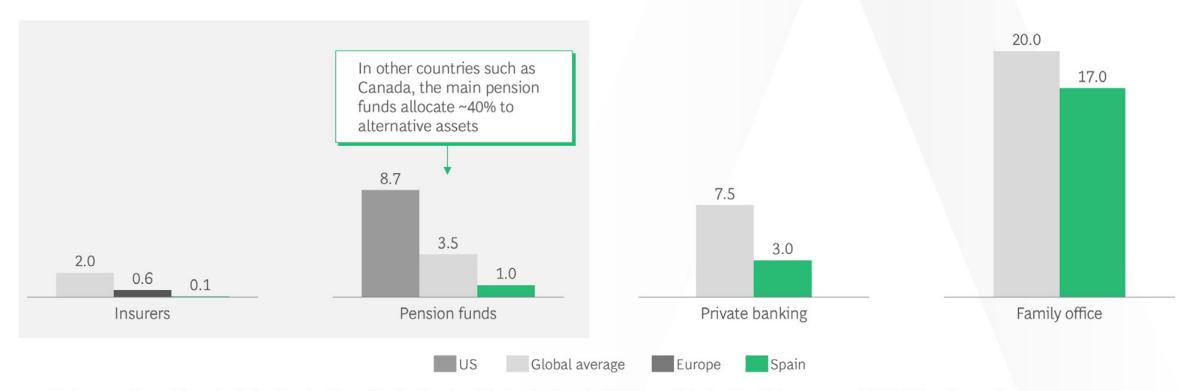


The chart does not include funds raised by relevant international firms worldwide from capital originating from Spain. International funds invest following a geographic diversification approach, partly to the benefit of the Spanish



The VC & PE investments made by national institutions, such as insurers and pension funds, are significantly lower than in other geographic regions

Average VC & PE investments in 2019¹ – By investor category (% funds available to invest)



^{1. 2019} data except for Spanish pension funds, private banking and family offices, for which 2017 data from the ASCRI report "Attitude of Spanish investors towards VC & PE" have been used Source: Preqin Pro (global data); ASCRI report "Attitude of Spanish investors towards VC & PE" (Spain data except for insurers); American Investment Council (US data); EIOPA (European Insurance and Occupational Pensions Authority) (data for European and Spanish insurers)



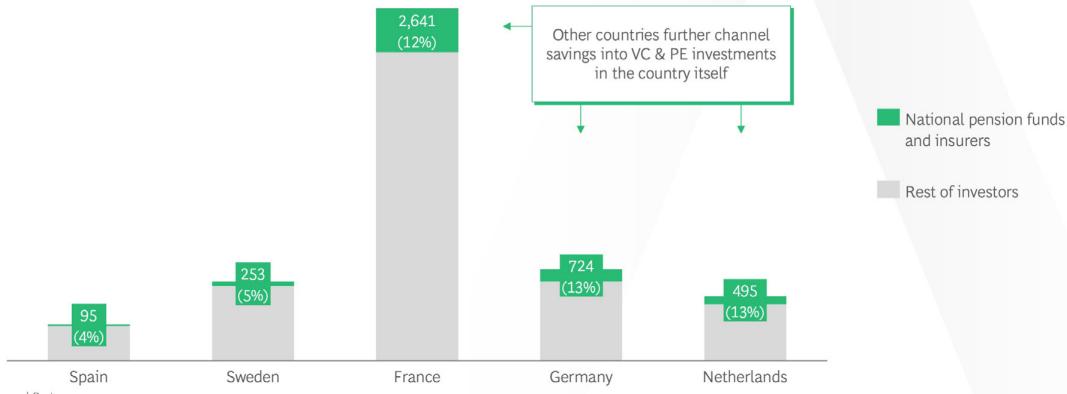
The VC & PE investments made by insurers, pension funds and other investors are to a large extent geographically diversified outside Spain

Breakdown of the amount invested in alternative assets – By investor category (% invested in each type of fund vs. total invested in alternative assets)



The funds raised by local GPs¹ from insurers and pension funds are lower than those raised by GPs¹ in other countries around us

New funds raised in 2019 by managers (General Partners) based in the country according to investor type (Limited Partner) (€M)



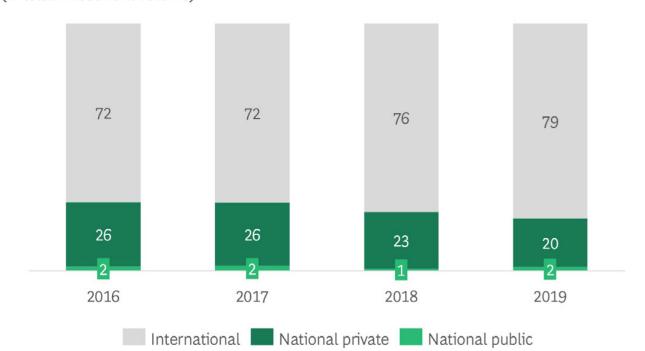
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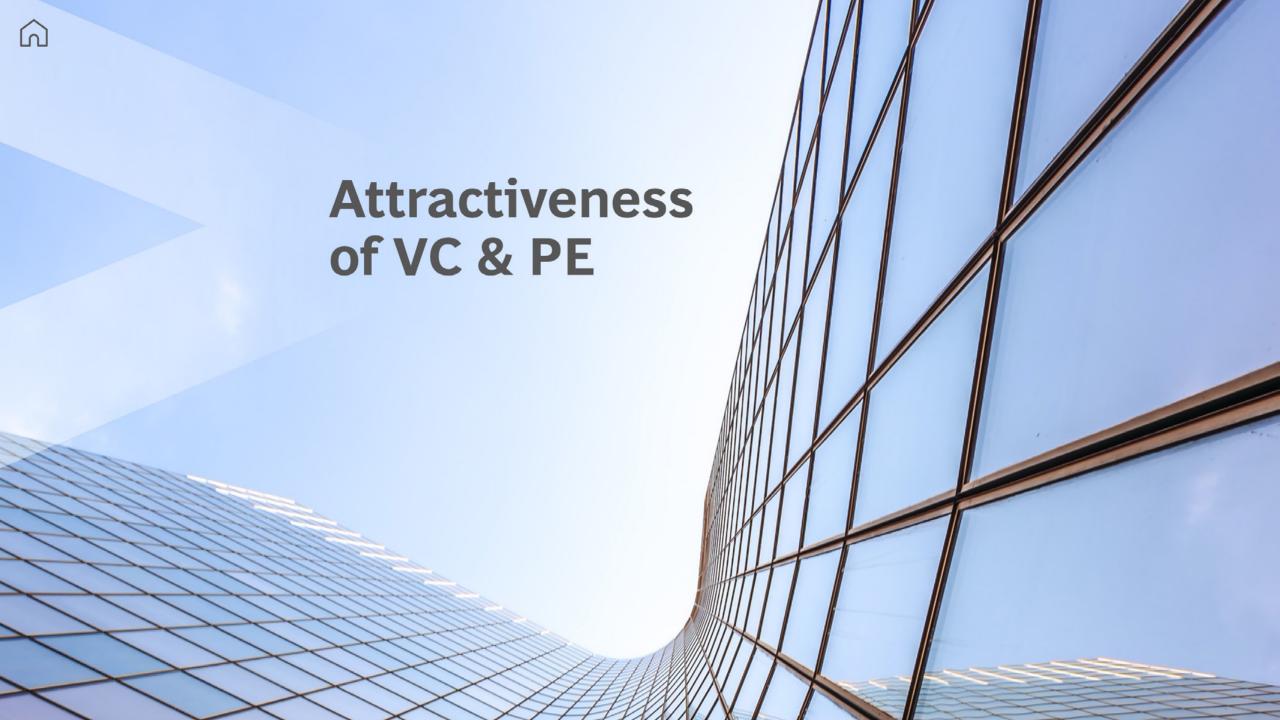
This means that VC & PE investments in Spain heavily rely on investments by international GPs¹ ...

~80% of VC & PE investments in Spain is made by international managers (General Partners)

Investment in companies based in Spain according to the location of the management company (General Partner) (% total investment volume)



...which must be maintained and encouraged, while further investment of national savings, for example, from insurers and pension funds, should be fostered to have a richer and more diversified VC & PE investment base



The asset is attractive due to its returns, risk profile and ability to generate growth, and has a good ecosystem in Spain

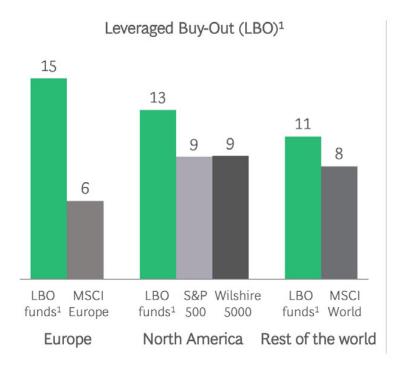
- VC & PE is an attractive asset thanks to its historical returns above those of other assets and its differential risk profile, despite its lower liquidity:
 - Attractive return compared to other assets:
 - VC & PE has consistently offered superior returns in any region and investment strategy (Leveraged Buy-Out, Growth, Venture Capital)
 - In Europe, it has shown higher historical returns than other more traditional assets
 - Differential risk profile as a result of its non-correlation with the cycle, lower volatility and high diversification potential:
 - VC & PE offers very attractive risk profiles to the investor because of a certain noncorrelation with the economic cycle...
 - ...and lower levels of volatility than other assets, even in situations of economic crisis. This is because mark-to-market is not subject to overreactions on stock markets, given their liquid nature, which in turn provides it with stability, among other factors
 - In addition, VC & PE investments support very high risk diversification, reaching as far as VaR¹0%
- > VC & PE investments generate economic growth and develop the productive fabric, as has happened in Spain
- VC & PE in Spain presents a healthy investment ecosystem:
 - VC & PE profitability in Spain is comparable to that in other countries, proving to be a competitive asset, as investors point out
 - The assessment of VC & PE in Spain made by national and international investors is very positive
 - Within VC & PE, VC² is proving its ability to create sectoral champions and a growing number of relevant companies



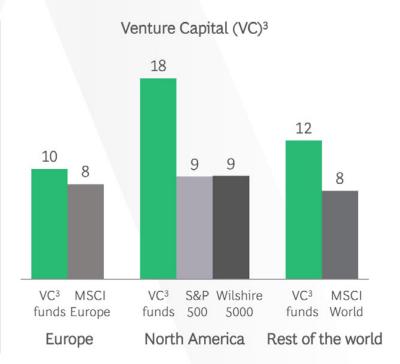


VC & PE has steadily offered higher historical returns in any region and investment strategy (LBO¹, Growth², VC³)

Average net return on VC & PE funds from 1986 to 2019 vs. comparable investments in stock market indexes (%)







Note: Details of the calculation of returns in the methodological note on the next page 1. LBO: Leveraged Buy-Out. Acquisition of companies in which a substantial part of the price of the deal is financed with debt capital, partly guaranteed by the assets of the acquired company, partly funded with capital provided by the investors of the deal, who become owners 2. Financing the growth of a profitable company. The funds may be allocated to the acquisition of fixed assets, the increase in working capital for the development of new products, or the access to new markets 3. VC: Venture Capital. Capital contribution to a company that is at an initial or early development stage. VC investment is typically made in technology or highly innovative companies

Source: Invest Europe (The Performance of European Private Equity, 2019 report); ASCRI



Methodological detail of the calculation of returns

Returns on VC & PE funds

- The data come from a study conducted by Invest Europe on a sample of 438
 Leveraged Buy-Out funds, 42 Growth funds and 161 VC funds, from 1986 to 2019
- The data collected in this methodological note correspond to the total sample
- The IRR is the rate used to measure the profitability of the funds. It is calculated based on (i) the return of the liquidated funds (39.5% of total Leveraged Buy-Out funds, 19.0% of Growth funds and 29.8% of VC funds), and (ii) the estimate of the return not realized by managers on active funds. In general, the returns on liquidated funds are higher than those on active funds in the different geographic regions and periods analyzed
- Non-liquidated funds have a significant maturity (value ratio distributed among the total value of the fund), so a substantial part of the return on active funds is realized and not estimated. Leveraged Buy-Out maturity: 75% Europe, 70% North America and 63% Rest of the world. Growth maturity: 55% Europe, 58% North America and 43% Rest of the world. Venture Capital maturity: 56% Europe, 61% North America and 36% Rest of the world
- For each investment strategy, the IRR provided is the average IRR of the funds that follow that strategy at the end of 2019

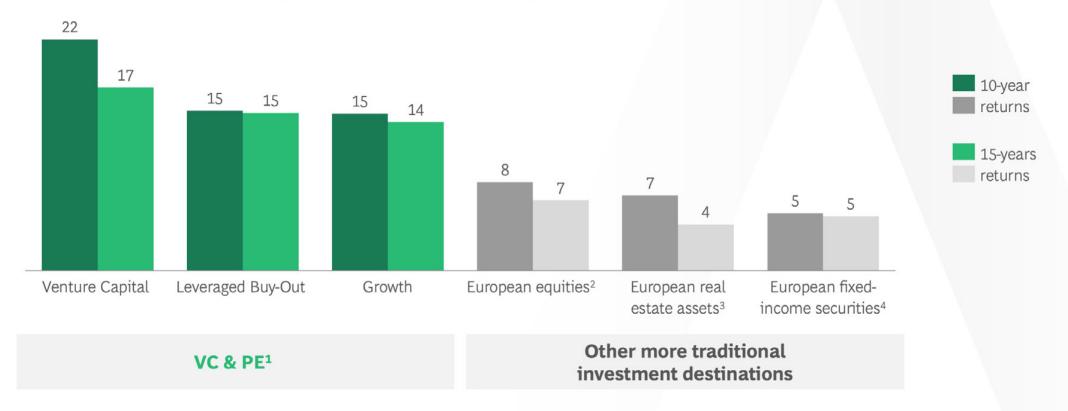
Returns on comparable assets by investment strategy

- Calculated by Invest Europe using the PME Public Market Equivalent –methodology, aimed at being able to make comparisons in similar terms between VC & PE and stock market indexes
- This methodology compares investments in MSCI, S&P 500 and Wilshire 5000 indexes with the portfolios of each of the investment strategies, replicating each fund's cash flows as if they had been invested in the same way in those indexes
- The detail of the methodology is available in the report
 "Benchmarking Public and Private Markets with the Public Market Equivalent (PME)"



In Europe, VC & PE has shown higher historical returns than other more traditional assets

10- and 15-year net returns provided by different investment destinations (%)



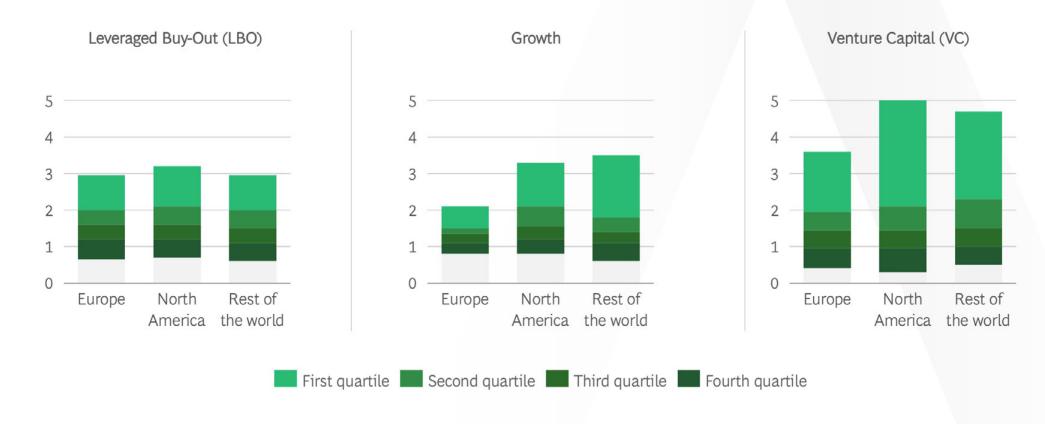
^{1.} Net returns provided by VC & PE funds from 2009 (10 years) or 2004 (15 years) to 2019, at the end of 2019 2. MSCI Europe. Calculated as (index value at the end of 2009 (10 years) or 2004 (15 years)/index value at the end of 2019)^(1/10 (10 years) or 15 (15 years))-1). Invest Europe's PME methodological adjustment explained in the methodological note is not made when comparing the index in general with all investment strategies 3. MSCI Real Estate Europe. Calculated as (index value at the end of 2009 (10 years) or 2004 (15 years)/index value at the end of 2019)^(1/4 (10 years) or 15 (15 years))-1) 4. 10-year sovereign bonds from the EMU (Economic and Monetary Union). Calculated as (index value at the end of 2009 (10 years) or 2004 (15 years)/index value at the end of 2019)^(1/10 (4 years) or 15 (15 years))-1) Source: Invest Europe (The Performance of European Private Equity, 2019 report); Refinitiv Datastream





By strategy, appreciation levels (MOICs¹) have been similar in LBO² and Growth, with maximum values in the first quartile of VC³

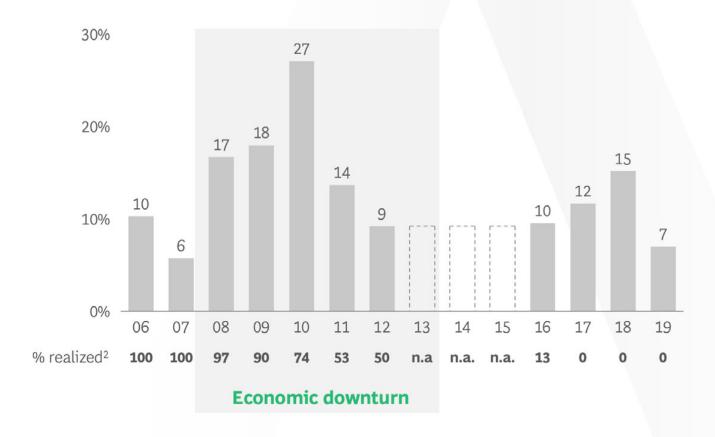
Appreciation by quartile (MOIC¹)





VC & PE offers very attractive risk profiles to the investor because of a certain non-correlation with the economic cycle

IRR at the end of 2019 of funds from VC & PE portfolios¹ in different years (%)



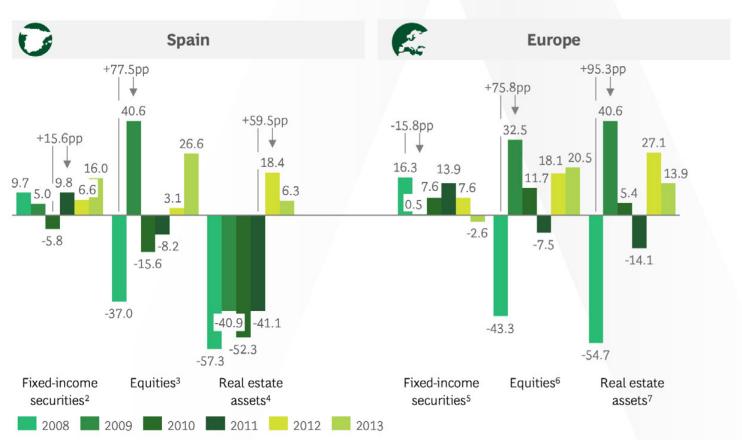
Investments in different years of expansive and recessive cycles have provided in this case study attractive returns on a sustained basis within the range of ~6-27%, which shows a certain lack of correlation with the cycle

The highest returns correspond to 2008-2010, i. e. to virtually liquidated funds in their entirety, so returns are realized



VC & PE is less volatile than other assets, even during economic crises, avoiding overreactions on stock markets

Evolution of annual return by asset type¹, 2008-13 (%)



The lower volatility of VC & PE is due to the fact that mark-to-market is not subject to overreactions on stock markets given its illiquid nature, which in turn gives it stability, among other factors, as the "alpha" component of the investments, or investing in economic segments not captured by stock markets

The fluctuations in returns in consecutive years of fixed-income securities, equities and real estate assets in Spain and Europe in crisis years are very significant:

- In Spain ~16-78 p.p.
- In Europe ~16-95 p.p.

^{1.} Considering the annual return (year n/year n-1, at year-end) 2. Spanish 10-year Treasury bonds (IBOXX Total Return) 3. MSCI Spain 4. MSCI Real Estate Spain 5. 10-year sovereign bonds from the EMU (Economic and 21 Source: Investing; Refinitiv Datastream; BCG analysis



VC & PE investments support high risk diversification reaching as far as **VaR² 0%**

Illustrative simulation of risk diversification carried out by Europe Economics¹

| | (1) | | VaR ² | | | |
|----------------|-----------------------------|--|-------------------------------|---|--|--|
| | Portfolio risk ² | Small direct funds (n=7) | 15-23% | > | Even with a small portfolio size, the level of risk is much lower than the standard risk of default applied by Solvency II ³ (49%) ⁴ | |
| | | Small funds (n=7), including some funds of funds | 13-21% | > | Potential for risk diversification through funds of funds | |
| o size | | Medium-sized direct funds (n=10, n=15) | 11-16% (n=10) 6-12% (n=15) | > | Substantial risk reduction through the diversification of direct VC & PE funds | |
| Portfolio size | | Larger direct funds (n≥50) | ~0% | > | Once a large enough portfolio is built, the risk goes down to virtually zero (with achievable and smaller portfolio sizes than many of today's | |
| + | | (n = number of funds) | | | existing portfolios) | |

^{1.} Monte Carlo simulation, based on 50,000 random VC & PE portfolios 2. VaR (Value at Risk) measures financial risk indicating probability of loss. Based on capital risk (risk of loss of invested capital – calculates the risk that at some point the value generated by the fund may be less than the value paid by the investor in that fund) and realization risk (risk of loss of the current internal liquidating value, by keeping the fund until the end of its life cycle - calculates the risk that in the coming years the value of the fund may be less than the current value) 3. Regulatory scheme for EU insurers establishing, among other aspects, solvency obligations based on economic risk 4. The standard market risk level (49%) is indicated. However, regulations provide certain monthly asymmetrical adjustments and exceptions under specific circumstances 22 Source: Europe Economics

Investing in VC & PE generates economic growth and develops the productive fabric, as has happened in Spain

The sector has benefited more than 2,000 Spanish companies, favoring the creation of more than 440,000 jobs

It has been proven that the results obtained by portfolio companies² are better than those of their peers¹





^{1.} According to the ASCRI report "Economic and social impact of VC & PE on middle market deals in Spain" comparing the results obtained by 186 companies supported by VC & PE and 186 companies that make up the control group, with similar characteristics 2. Companies with VC & PE investment Source: ASCRI; ASCRI report "Economic and social impact of VC & PE on middle market deals in Spain"



The profitability of VC & PE in Spain is comparable to that in other countries around us, proving to be a competitive asset, as investors point out

The profitability obtained in different samples for Spain is in line with that observed in other countries around us in different studies: Double-digit IRR around 15%



but similar IRR values are observed around 10-15%

Investors have highlighted the competitiveness of the asset in Spain, not being a factor that discourages investment

The returns provided by the sector in Spain are as high as or higher than those in other countries around us. If it continues to attract international interest, competition for assets could decrease marginal returns, but we still see potential for further investing in Spain with attractive returns"

International LP7

We like Spain as an investment destination, and we even like it more than other southern European countries. In Spain there are professionalized General Partners and opportunities to obtain very good returns. In our case we diversify a lot geographically because it's a matter of investment policy, not because Spain doesn't offer very good possibilities"

National LP7

^{1.} IRR realized obtained by Fond-ICO Global from the 5 divested VC & PE Funds 2. Simple average of net returns obtained in different years since 2006 3. Estimated IRR on portfolio Growth and VC funds as of December 31, 2019 4. Net returns provided by VC & PE funds from 2009 (10 years) or 2004 (15 years) to 2019, at the end of 2019 5. 2019 returns reported by France Invest 6. Average return on investments over the last 10 years. Study conducted by the Italian association AIFI 7. Limited Partner. Source: Invest Europe; France Invest; AIFI; interviews with ASCRI members; BCG analysis



The assessment of national and international Limited Partners (LPs) on VC & PE in Spain is very positive

The VC & PE market in Spain has been developed, offering attractive returns and industries, and a very dynamic public sector

- Strong development in recent years
- Supporting role of the Official Credit Institute (ICO)
- Good returns and investment opportunities with attractive sectors
- Sector mix or industrial fabric too mid-market oriented as less positive elements
- International interest
- 66 The Spanish market has experienced a very good development in recent years. The environment for investing in Spain is generally positive. For example, the role of the ICO through Fond-ICO is a great help"

International LP1

66 It is true that a significant part of savings is invested outside Spain, but it is more because of the profile of the Spanish institutional investor in VC & PE than because investing in Spain is not attractive, quite the opposite. Family offices give priority to diversified investment in their strategy but include Spain in their portfolios. Other LPs¹ such as insurers would invest a higher proportion in Spain"

National LP1

66 There are factors that could act somehow as a barrier, such as sectoral composition in Spain, especially affected by crises like the current one, or the type of industrial fabric, which is too mid-market oriented. However, it's a fact that the Spanish market arouses a growing investment interest internationally"
National LP1

Highly professionalized General Partners invest in Spain

 Good level of national and international General Partners to be able to invest in Spain

- 66 There are good General Partners to invest in the Spanish market, both national and international, with investment experience in Spain" National LP1
- 66 To invest outside Spain there are good national providers of funds of funds, in addition to international General Partners. Spanish GPs² don't channel many investments internationally so far. Except for this aspect, I don't see many differences in the management quality of national and international General Partners, there are very good General Partners of both types"

National LP1

The Association provides a good environment and promotes the development of the sector

- Healthy associational environment, increasingly developed and comparable to that in more advanced countries
- Periodic profitability reports as the only means for achieving best practices
- 66 The Association is doing a good job in leveraging the impact of VC & PE investments on improving the governance of companies, sustainability, innovation and development of the economic fabric"

International LP1

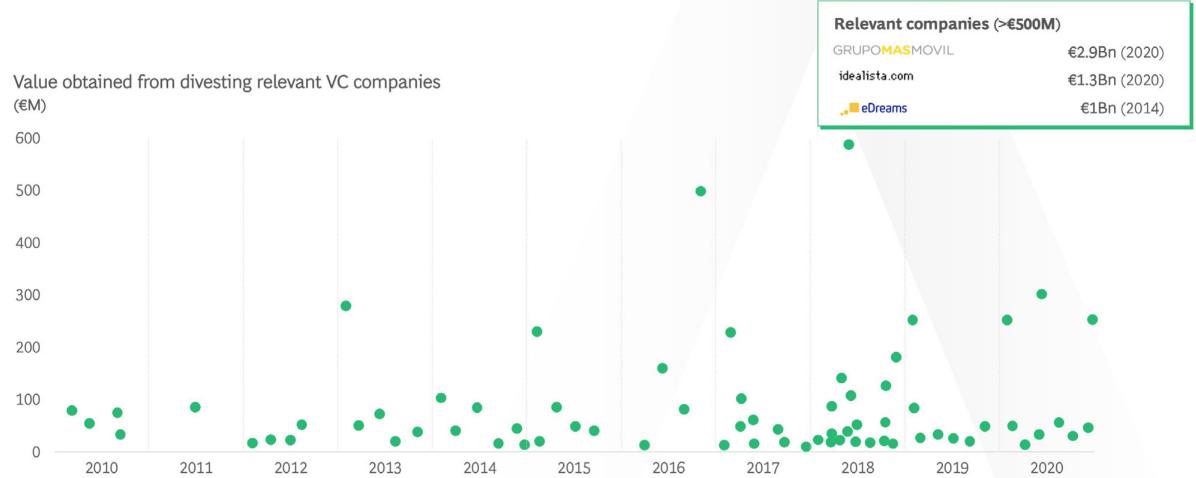
- 66 The Association integrates more and more players from the VC & PE investment landscape in Spain and is closely in contact with stakeholders such as the regulator"
 - National LP1
- 66 From an associational point of view, I see no gaps compared to other countries with a developed VC & PE sector"

International LP1

66 The only aspect that could be developed is the aggregate profitability reports generated by some other association" National LP1



Within VC & PE, VC¹ is demonstrating its ability to generate significant returns and a growing number of relevant companies



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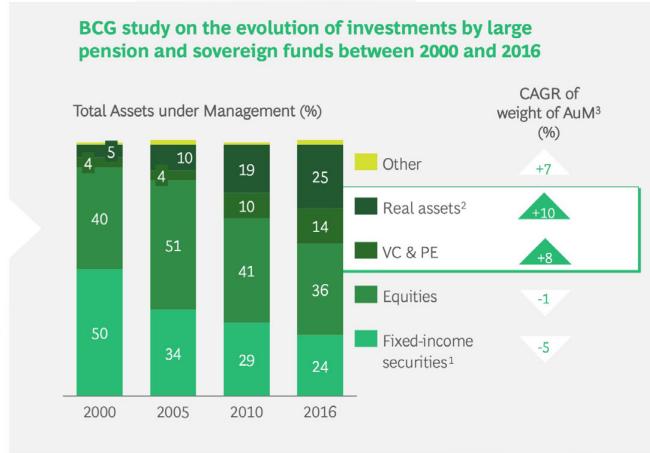
Examples of international success stories

Examples of national success stories



Globally, institutional funds have invested significantly in alternative assets, including VC & PE, since 2000

- Fixed-income securities and equities represented around 90% of Assets under Management at major pension and sovereign funds in 2000
- However, the return on fixed-income securities began to decline, and that on equities became increasingly volatile
- Alternative investments showed good returns, mainly VC & PE, real estate and infrastructures
- The 2008 crisis accelerated the shift towards these investments in alternative assets, as many purely financial investments were paralyzed
- Between 2000 and 2016 its weight increased more than three-fold
- This resulted in success stories in different geographic regions with different national economic models



^{1.} Fixed-income securities include sovereign debt, monetary assets, and other debt instruments 2. Real assets include real estate, infrastructure and inflation-linked bonds 3. CAGR 2000-2016 of Assets under Management (AuM)

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Many insurers and pensions funds have achieved attractive returns and are committed to increasing investments in the asset

Trends observed in the cases analyzed

- Double-digit returns on VC & PE
- More and more allocations of alternative assets and VC & PE
- Consideration of the asset as a strategic investment, not circumstantial or optional
- Increasing involvement in asset management with great development of internal capabilities:
 - Evolution of the investment strategy from investments through funds with external advisors to co-investments, and even direct investments

International success stories analyzed

Selection of different geographic regions and types of companies



Canadian pension funds

Canadian public and private pension funds



California Public Employees' Retirement System US public pension fund



Minnesota State Board of Investment US public pension fund



Sixth Swedish National Pension Fund Swedish public pension fund



CNP Assurances

French insurer



International endowments

Endowments of academic institutions, with a focus on Oxford and Yale



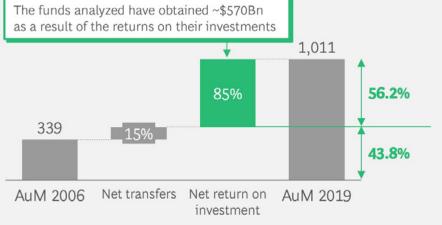


Canadian pension funds invest ~15% in VC & PE and at least 56% of its total assets comes from the returns already obtained

| | Ranking of pension funds ² | Track record ³ | Assets under Management (AuM) (\$M) | Investment in VC & PE (\$M) | | Allocation to alternative assets ⁴ (%) |
|---|---|------------------------------|---|--------------------------------|-----|--|
| CPP INVESTMENT BOARD | 1 | 2001 | 295,475 | 62,079 | 21 | 48 |
| Caisse de dépôt et placement du Québec | 2 | 1984 | 256,374 | 38,661 | 15 | 19 |
| ONTARIO TEACHERS' PENSION PLAN | 3 | 1991 | 156,347 | 29,034 | 19 | 53 |
| BCi | 4 | 1995 | 153,400 | 15,954 | 10 | 21 |
| PSP Investments | 5 | 2004 | 126,528 | 17,916 | 14 | 51 |
| AIMCo | 6 | N.A. | 118,762 | 3,799 | 3 | 27 |
| HOOPP Healthcare of Ontario Pension Plan | 7 | N.A. | 94,102 | 5,637 | 6 | 14 |
| OMERS | 8 | 2001 | 82,451 | 11,494 | 14 | 64 |
| Total Top 8 | | | 1,283,438 | 184,573 | 15% | 39% 4 |







Major pension funds commit to investing in alternative assets by increasing their weight in the portfolio (~40% of investments in 2019 vs. ~30% in 2014)

^{1.} Taking as a reference the assets in 2006, which already had some contributions and returns obtained previously 2. Ranking of Canadian pension funds according to AuM 3. Date of the first known relevant investment in the market or reported by the company 4. Includes investments in VC & PE, infrastructures and hedge funds 5. Calculation based on CPP, CDPQ, Ontario Teachers, HOOPP, PSP and OMERS, as they are 31 the only ones with information available for the entire period of time analyzed



CalPERS, one of the largest public pension funds in the US, allocates ~\$27Bn (8% of its investment) to VC & PE

California Public Employees' **Retirement System (CalPERS)**

Type of institution

Public pension fund



Type of managed assets

CalPERS serves all public service workers in California

The main products offered are pension funds and health insurance, although it also provides life or disability insurance

Other relevant data

Founded in 1932

It is the fifth largest public pension fund in the US:

- 2 million members in its pension system
- 1.5 million members in its health coverage program

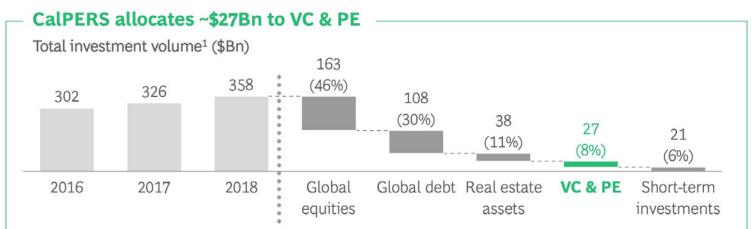
CalPERS' investment strategy focuses on long-term value creation, reducing volatility and boosting the local community

According to its investment strategy, CalPERS:

- Sets profitability-risk targets that ensure long-term returns
- Cannot exceed a volatility threshold of 8% p.a. for the entire portfolio

CalPERS is committed to investing in the community:

- It focuses investments on the infrastructures and health system of the community to directly stimulate the economy of their members
- It is committed to increasing the percentage of the investments linked to socially responsible investment initiatives



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CalPERS has committed to investing in VC & PE since 1990, obtaining attractive returns

CalPERS has been investing in VC & PE since 1990, with a clear commitment to continuing to do so

Track record

1990: date of the first investment

Investment model

Through funds of funds, General Partners and with direct (co-)investment

VC & PE investment strategies

Leveraged Buy-Out, Growth, Venture Capital and special situations

Future investment strategy

VC & PE is our most profitable asset, and we want to further increase our activity in it. To do this we are developing new tools and internal models that allow us to improve our investment decisions"

Investment volume: ~8% of its investments (~\$27Bn) are allocated to the VC & PE sector, resulting in a portfolio of 270 funds





Returns: The asset yields attractive returns

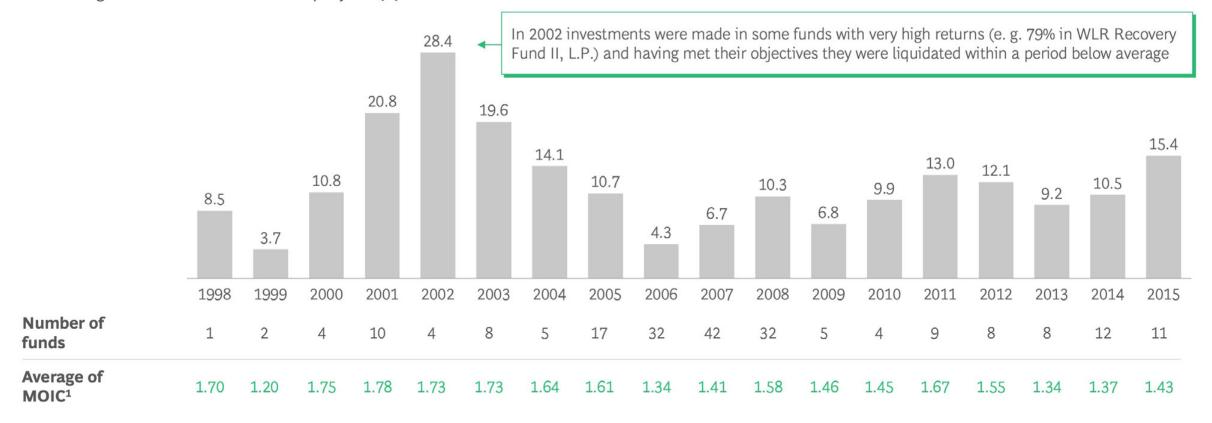


Net multiple²



CalPERS has achieved positive average returns over the years, especially in 2001-2004

Net average IRR of VC & PE investments per year¹ (%)





Minnesota SBI allocates ~\$23Bn (8-10% of its investment) to VC & PE in order to achieve attractive long-term returns

Minnesota State Board of Investment

Type of institution

Public pension fund



Type of managed assets

Minnesota SBI invests the assets of the funds used for Minnesota State's benefit plans for active and retired employees (pension funds, trust funds, and bank accounts), which are managed by third-party companies

Other relevant data

More than 20 years investing in VC & PE (in 2000¹ it already allocated 4%)

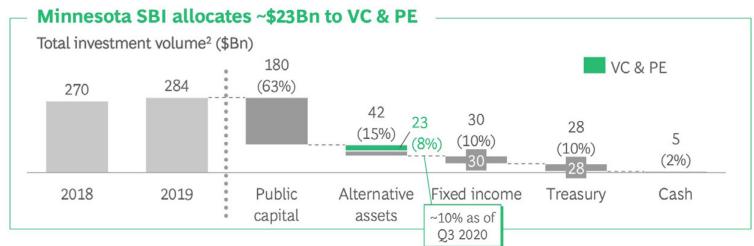
Minnesota SBI's investment strategy focuses on long-term value creation and reduced volatility

According to its investment strategy, Minnesota SBI:

- Decides allocation based on long-term returns and portfolio risk, considering diversification to improve risk-adjusted returns
- May sacrifice some short-term liquidity to pursue higher long-term profitability, but the ability to pay benefits every year is a key risk element to consider

Investment commitments on which asset management is based (applicable since 2017):

- Long-term investment. The main mission is to maintain the viability of the retirement system
- Commitment to socially responsible investment initiatives



σ the

Minnesota SBI increases VC & PE investments each year, improving the overall return on its portfolio

Track record

Late 20th century: date of the first investment

Investment model

Investment in ~140 funds distributed across ~50 VC & PE firms (Q4 2019), in various sectors and geographic regions

VC & PE investment strategies

Leveraged Buy-Out, Growth, Venture Capital and other special situations

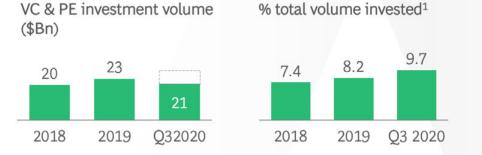
Future investment strategy

The & F

The Board recognizes that the allocation of VC & PE may lead to a more volatile short-term portfolio than a conservative policy focused on fixed-income securities, but the long-term returns from this policy have compensated and are expected to compensate for the future additional volatility"

The objectives of the VC & PE portfolio are to achieve attractive returns and provide portfolio diversification"

Investment volume: 8-10% of its investments (~\$23Bn) are allocated to the VC & PE sector, building a portfolio of ~140 funds





Funds in which investments have been made²



General Partners²

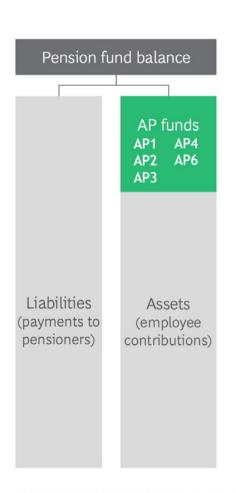
Returns: It is the asset with the best returns in all time horizons



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The Swedish public pension fund has 5 investment structures, with the latest one, AP6, being exclusively focused on VC & PE investments



The investments by the Swedish public pension fund are made through 5 distinct structures

- Since 2009, contributions have been higher than payments, resulting in a volume of funds available to invest
- These investments are made through 5 independent structures (funds) (AP1-4 and AP6)
 - AP1-4 are open funds (there are annual flows with the fund's balance sheet), with the same size and investment rules
 - AP6 is a closed fund (it received ~€1Bn when created and with its benefits it covers its reinvestments and costs)

VC & PE investments are made through the fund AP6

- AP6 is the only vehicle whose capital is exclusively allocated to VC & PE
- All other structures (AP1-4) are expected to increase their investment in VC & PE in the coming years
 - Until 2019 its investments in illiquid assets were limited to 5%
 - This limit has increased up to 40% and during 2019-2020 it has defined new investment strategies through which the firm is expected to increase its exposure to alternative assets

AP6 invests directly and through funds, showing a growing preference for the latter



^{1.} Exchange rate (€/SEK): 0.098 2. ~82% of direct investments are co-investments with General Partners (GPs) and the rest with other non-GP companies as partners. In recent years AP6 has expressed its interest in increasing its co-investments with GPs, driving the weight of these partners.

37
Source: AP6 annual report for 2019, 2018, 2017 and 2016

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AP6 is predominantly invested through funds and to a lesser extent with direct investments, and has obtained returns of 10-12%

AP6 has a clear commitment to VC & PE, showing a preference for indirect investment through funds

Track record

1996: date the fund was created

Investment model

Through funds and with direct investments

VC & PE investment strategies

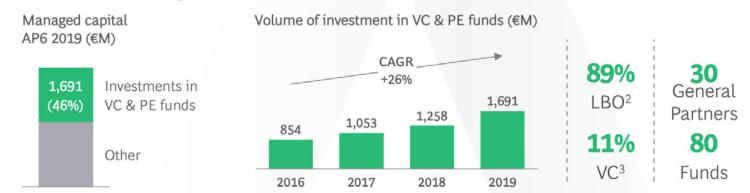
Leveraged Buy-Out and Venture Capital

Future investment strategy

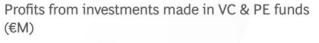
After rethinking our strategy in 2013, we are committed to engaging in a greater number of investments and creating a diversified portfolio.

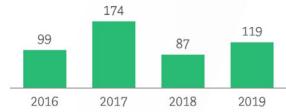
The aim is to continue investing at constant rates and to expand the number of funds with which we invest"

Investment volume through funds: AP6 has been increasing (CAGR 26%) its investment through funds



Returns: In its investments in funds, AP6 has earned profits over the last few years and returns of 10-12% over the past 10 years





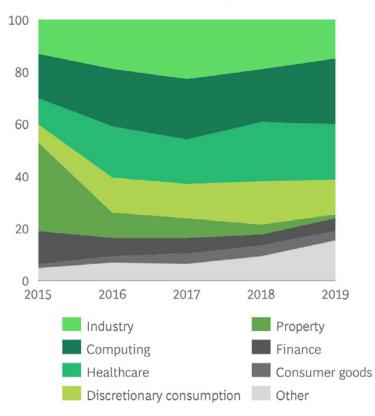


1. Return on Capital Employed 2. Leveraged Buy-Out 3. Venture Capital Note: Exchange rate (€/SEK): 0.098 Source: AP6 annual report for 2019, 2018, 2017 and 2016

AP6 is committed to increasing its sectoral and geographical diversification

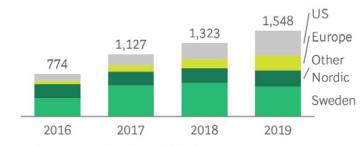
Total managed capital shows increasing sectoral diversification

% VC & PE managed by AP6 (direct investment and in funds)

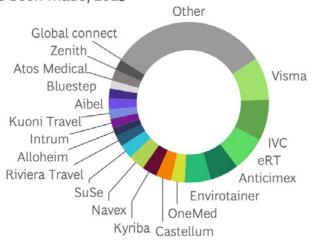


AP6 shows greater geographical diversification in its direct investments

Directly invested volume (€M)

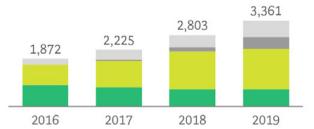


Main companies in which investments have been made, 2019

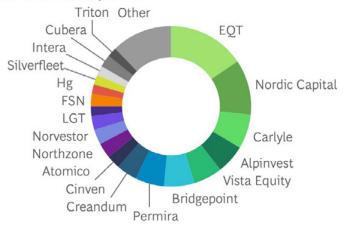


AP6 shows greater geographical diversification in its investments in funds

Volume committed in VC & PE funds¹ (€M)



Main General Partners in which investments have been made, 2019



Source: AP6 annual report for 2019, 2018, 2017 and 2016

39

^{1.} Includes total exposure (market value of invested assets (€1,691M in 2019) and capital committed or to invest in the next 3-5 years Note: Exchange rate (€/SEK): 0.098





CNP Assurances is one of the top 50 global VC & PE investors, with ~€8Bn in the sector

CNP Assurances

Type of institution

Main French insurer, founded in 1959, with a strong footprint in Europe (>15 countries) and Latam (Brazil and Argentina)

Type of managed assets

CNP Assurances offers savings plans, pension funds and insurance coverage (credit, health, life and others)

Other relevant data

CNP Assurances is among the top 50 global VC & PE institutional investors¹

In 2016, CNP Patrimoine – CNP Assurances' asset management entity - launched a vehicle focused on VC & PE, managed by Ardian, a VC & PE specialist that manages \$55Bn in Europe, North America and Asia

CNP Assurances allocates 2% of its investment (~€8Bn) to VC & PE



In 2019, CNP Assurances undertook to invest €500M in 14 VC & PE funds in Europe and the US. These funds invest mainly in SMEs and mid-caps operating in different economic sectors

CNP Assurances perceives VC & PE as the asset with the best returns



Everyone wins in VC & PE [...] In the last 20 years, VC & PE has surpassed other alternative assets. CNP Assurances is an important player and allows its asset management clients to capitalize these returns, giving them the option to have the cash from their savings at any time"

6

Anglo-Saxon academic institutions (endowments) invest significantly in VC & PE, taking advantage of their lower liquidity requirements and investment constraints

Endowments' assets come from donations and are intended to promote the development of academic institutions

Endowments are funds born from charitable donations. The endowments of academic institutions are the best known

The ultimate purpose of endowments is to support and address the needs of teachers, researchers and students

Investments in endowments should be made to ensure that, in the long term, the resources donated that may only be allocated to developing the academic institution remain constant or grow

The specific characteristics of endowments allow them to invest greater proportions of their assets in VC & PE

The liquidity requirements of endowments are lower than those of other institutions, such as pension funds

66 Managing an endowment is not like managing a traditional investment due to the nature of the beneficiaries. For most managers, such as pension funds, beneficiaries are alive, but in the case of endowments, beneficiaries may not even have been born yet. We need to know how to balance the management of the interests of today's beneficiaries with those of future generations. To do this, we must preserve the real value of donations to finance activities and generate absolute real returns"

Oxford Endowment Fund

Limitations on investment destinations are reduced

- Fund donors may impose some restrictions on the destination of their donations. Overall, however, they leave endowment managers room for action
- Regulatory limitations in this regard have a minimal impact

As a result, major institutions invest ~20% in VC & PE















Oxford Endowment Fund allocates 23% of its investments to VC & PE, focusing on this asset given its profitability and diversification power

Oxford Endowment Fund

Jendowment

VC & PE investment strategies

Mainly Growth, niche sectors and Venture Capital

Type of managed assets

Assets from more than 40 charity investors linked to the university

Future investment strategy

In recent years, simply investing passively produced positive real returns. However, this approach may pose serious challenges in the coming years. We firmly believe that, in the long term and considering the different market environments, an active management approach with the right partner is the most effective way to manage the fund. Thus, we will reinforce our active management approach in the different assets, with a special focus on VC & PE"

Oxford Endowment Fund allocates 23% of its investments (€1Bn) to VC & PE



Oxford Endowment Fund underlines profitability and diversification power as great attractions of the asset

Returns obtained on different portfolio assets (%)





VC & PE allows OEF to access differentiated ideas on capital investment that simply could not be accessed on stock markets. Since its creation, the net IRR of the VC & PE portfolio is 15.9%, although the fund has grown substantially during this time and a large portion of the capital has been invested in less than five years"



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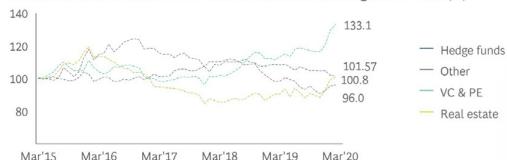
American endowments have progressively increased their exposure to VC & PE (~15% AuM), obtaining attractive returns

VC & PE has become a relevant asset for American endowments (15% AuM), with a clear trend towards further increasing these investments

American endowments Assets under Management (AuM), 2019 (%)

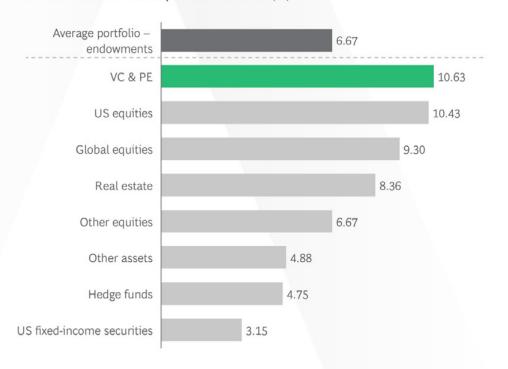


Changes in the volume of capital invested in alternative assets by American endowments with >\$1Bn in assets starting from 2015 (%)



VC & PE investments have consolidated as the most profitable ones, improving average return of portfolios

Return in 2015-2019 per asset class (%)



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Yale Endowment invests 37% in VC & PE (\$11Bn), with a special focus on VC3 given the institution's exposure to opportunities in this field

Yale Endowment

VC & PE investment strategies

VC3 and LBO4, with a special focus on VC3



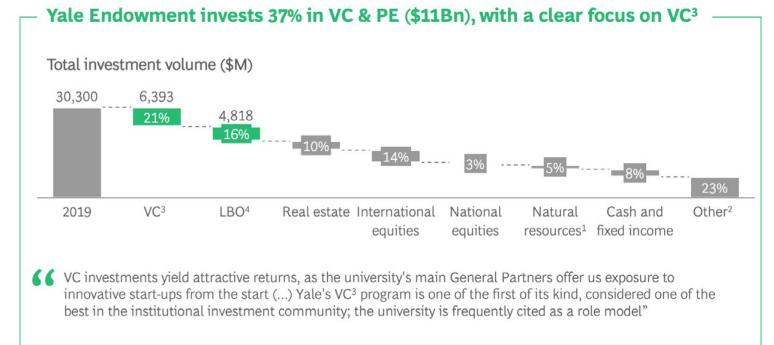
Type of managed assets

Assets from more than 100 charity funds linked to the academic institution

Investment strategy

The clear commitment to non-traditional assets is explained by their potential return and diversification power. Today's real and target portfolios are expected to yield much higher returns than the 1989 portfolio with a similar volatility. Alternative assets, by their very nature, tend to be priced less efficiently than traditional marketable securities, providing an opportunity to take advantage of market inefficiencies through active management"

Investments are made with an eye on long-term relationships (usually an allocation is expected to be the first of several) and in the close alignment of the interests of GPs and LPs"





^{1.} Investment in oil, gas, wood and agriculture 2. Yale Endowment does not provide details about the investment of 23% of its assets under the item "Other", as they are possibly limited to certain purposes 3. VC: Venture Capital 4. LBO: Leveraged Buy-Out

Source: Yale Endowment report 2019; Yale Endowment website











In Spain there are also different types of investors who successfully invest in VC & PE

Trends observed in the cases analyzed

- Shorter track record than the most advanced international practices
- Average double-digit returns:
 - Both on divested assets (although they are still limited) and those expected by the valuation of current portfolios
- Consideration of the asset as a strategic investment, not circumstantial or optional
- Increasing involvement in and sophistication of asset selection and management:
 - The track record has allowed them to know the asset much better, get more involved in management and selection with advisors, and even make co-investments

National success stories analyzed

Illustrative selection of ASCRI members



Fond-ICO Global

Public-private funds of funds

Pension funds and employment plans

LORET

MUTUA

Loreto Mutua

Mutual fund focused on individual pensions plans and employment funds



BBVA Asset Management

Asset manager of BBVA's investment funds, pensions and other products

Caxis &



Since 2013, Fond-ICO Global has invested in 64 funds, obtaining a net IRR of 18%¹ on already divested funds, and of ~11%² on active funds

axis 🐝

Fond-ICO Global

Type of institution

Public-private fund of funds

Type of managed assets

Fund with state-owned €2Bn created to revitalize the VC & PE industry in Spain

Since 2013, Fond-ICO Global has been a very active Limited Partner in Spain

Track record

2013: date the fund was created

Investment model

Through funds

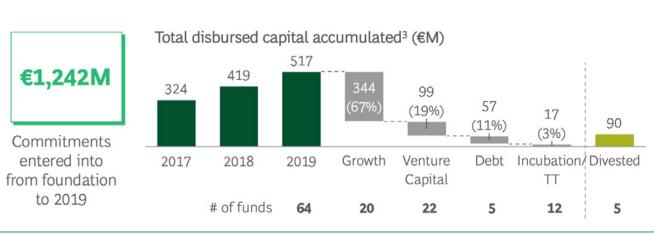
Investment categories

In all categories (incubators, Venture Capital, Growth, Leveraged Buy-Out,...)

Investment strategy

The main objective is to boost the financing of projects that combine innovation and entrepreneurship, investing in companies that are in any of their development stages"

Fond-ICO has entered into commitments worth ~€1.2Bn from its incorporation in 2013 to 2019. It has disbursed €517M in active funds



Fond-ICO Global has achieved an average return of ~18% on its divestments, with an expected return in 2019 of ~12% and 7% on its current Growth and VC portfolio

| | Net IRR on divestments ¹ | Estimated net IRR on portfolio funds as of December 31, 2019 |
|-------------------------------|-------------------------------------|--|
| Growth Capital | 17.8% | 11.6% |
| Venture Capital | 19.0% | 7.0% |
| Global portfolio ³ | 18.2% | 11.0 % ² |

Note: The net IRR is calculated considering all the disbursements made by Fond-ICO Global and the reimbursements received from each of the funds. For portfolio funds not liquidated as of December 31, 2019, the amount that managers allocate to Fond-ICO Global's stake is included as the latest reimbursement 1. Average IRR on the 5 divestments (3 for Growth and 2 for Venture Capital). The outflow occurred according to previously agreed repurchase options that allowed divesting under previously agreed conditions 2. Synthetic net IRR on Growth and Venture Capital funds 3. Disbursed capital accumulated as of December 31, 2019 in the 59 active funds 47 Source: Fond-ICO Global: Fond-ICO website

LORETO



Loreto Mutua invests ~5% in VC & PE with a net IRR of ~20%, and ~12-14% in alternative assets in total

Loreto Mutua

Type of institution

Mutual fund focused on pensions and employment

Type of managed assets

It was born as the mutual fund of the airline industry, although it also markets products for individuals and companies from other sectors

Pension funds

and employment plans

LORETO

Its main products are individual pension funds and employment plans

Loreto Mutua has invested ~€60M in VC & PE, the maximum allowed by its investment policies

It allocates 5% ~5% (maximum limit set in its policies) Investment of its investments volume to VC & PE

Disbursed capital

Current investment value

which

Funds in investments have been made

It has invested in VC & PE since 2007, being one of the pioneering pension funds

Track record

Source: Loreto Mutua

2007: date of the first investment¹

Investment model

Through funds, funds of funds and co-investment with GPs4

Investment categories

Leveraged Buy-Out, Venture Capital and Growth mainly

Investment strategy

We are clearly committed to maintaining our VC & PE investments, as their benefits are multiple. The returns are very attractive and offer a great opportunity for diversification. VC & PE provides access to strategies and sectors such as agri-food, tourism, energy,... which show a great development but are not listed"

It foresees attractive returns on its portfolio funds: ~20% on Leveraged Buy-Out and co-investment, and ~10% on Venture Capital

| | Net IRR ³ | Multiple ³ | |
|-------------------|----------------------|-----------------------|--|
| Leveraged Buy-Out | 22% | 1.57x | |
| Venture Capital | 11% | 1.23x | |
| Co-investment | 23% | 1.73x | |

- The returns on VC & PE investments have always been very positive, in the different time horizons and categories"
- **CONTINUE OF** VC & PE has allowed us to rely on professional shareholders, with influence on the boards of directors, who create real value in portfolio companies"

^{1.} It makes the first investments in 2007, but they are marginal. Since 2012 it consolidates a more active presence as a Limited Partner 2. At the end of 2019, €60,693M as capital disbursed and €84,458M as capital committed in all its VC & PE investments (Leveraged Buy-Out, Growth, Venture Capital, secondary, real estate, co-investment, funds of funds and infrastructure) 3. Valuation at the end of 2019 of the funds in which investments have been made 4. General Partners

BBVA



BBVA advises multiple institutional clients on their VC & PE investments, having invested ~€830M in more than 70 funds since 2004

BBVA Asset Management (BBVA AM)

Type of institution

Asset manager company



Type of managed assets

BBVA Asset Management manages in Spain total assets worth €69Bn, of which €36Bn correspond to investment funds, €23Bn to pension funds and the rest to other products such as institutional mandates, discretionary management portfolios, etc.

BBVA AM has been investing in different VC & PE strategies since 2004

Track record

2004; date of the first investment. Investment in more than 70 funds

Investment model

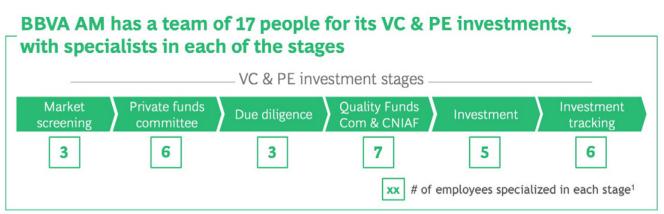
Through funds of funds, direct funds and co-investment funds

Investment categories

Mainly Leveraged Buy-Out and core according to the asset, but also Venture Capital, Growth and Value Added

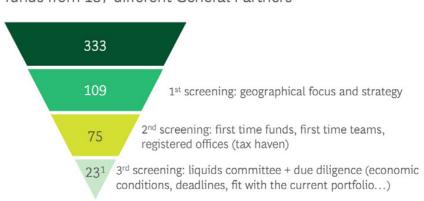
Investment strategy

VC & PE investments bring great diversification and returns to our portfolio. That's why we've set up a team with strong internal capabilities"



BBVA AM has a strong track record of investments in the asset, having committed more than €830M

Since 2017, BBVA AM has analyzed a total of 333 funds from 187 different General Partners



€418м

Capital committed in pension funds (~5% of pension funds' assets available to invest)

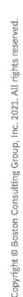
€414м

Committed capital for private banking



Special characteristics of Spain and factors with future impact







Regulations and other characteristics of the country have determined the low investment levels by insurers and pension funds, but there are favorable factors for the future

In general, insurers and pension funds in Spain have invested less in alternative assets and VC & PE due to country-specific factors, both regulatory and sectoral:

Return on fixed-income securities: It has been significantly higher than in other geographic regions, providing high returns without having to invest in alternative assets

Pension model:

В

The Spanish pension model has so far favored individual pension schemes, which, because of their liquidity requirements, do not have a good fit with long-term investments in VC & PE In addition, the weight of private pensions is limited, resulting in very small employment plans

The public pension system does not follow a capitalization system that makes managed capital grow. On the contrary, the Social Security Reserve Fund is becoming undercapitalized

- Pension regulation factors: Regulations on Pension Plans and Funds do not favor VC & PE investments:
 - C.1 Cascading fees: Mainly impact individual pension funds, whose fees are close to the maximum allowed
 - C.2 Maximum investment ratios: Mainly impact employment funds, as by their nature they may reach higher levels of investment, being limited by regulatory ratios

 Reimbursement windows: Mainly impact individual pension funds as they generate greater liquidity requirements to cover potential reimbursements
- Insurance regulation factors: Solvency II regulations have resulted in high levels of capital consumption compared to other assets.
 - Profile of insurers' investments in Spain: Characterized by a very high weight of listed assets, especially fixed-income securities with predictable cash flows
- Experience and capabilities to invest in VC & PE: As a result of the above points, in-house teams at insurers and pension funds have generally not developed as many skills and experience in VC & PE investment as in other assets

Factors with future impact

For the future, there are factors that can encourage VC & PE investments: (1) Economic context of low rates in the long term; (2) increasing interest and development of investment projects by insurers; (3) reform of pension regulations, favoring employment plans (uncertain impact, but probably only favorable in the medium-long term), (4) flexible capital consumption for alternative assets in Solvency II



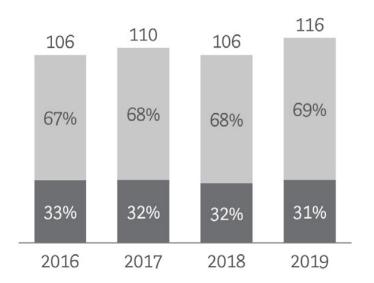
Up to now, the return on fixed-income securities had been higher than in other regions, so there was no need to turn to alternative assets



52

The pension model has favored individual pension schemes, which, because of their liquidity requirements, do not have a good fit with long-term investments

Assets of Spanish pension funds (€Bn)1



Individual pension funds

Employment funds

Individual pension schemes have higher liquidity requirements, as regulations enable their transfer between entities and reimbursement under certain assumptions

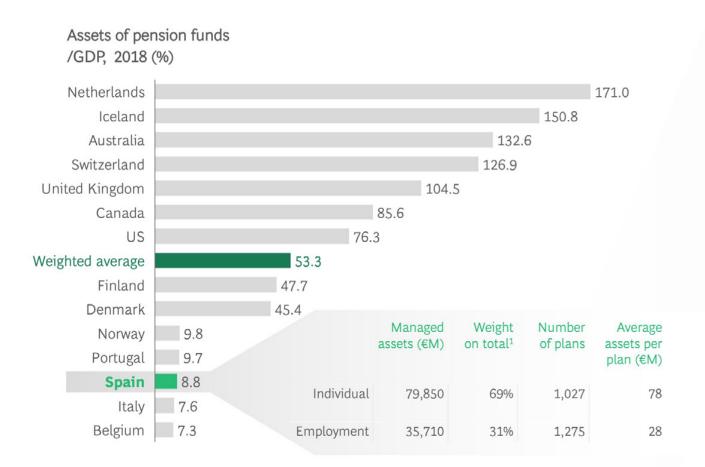
| Characteristics | Individual pension plans | Employment plans | |
|-----------------|---|---|--|
| Underwriting | By individuals in their private capacity | Promoted within a company or public administration ² for the benefit of their workers | |
| Transfer | These plans may be transferred to other individual and employment plans | They can only be transferred to an individual plan when the employment relationship no longer exists or when the plan has expired | |
| Reimbursement | Reimbursement windows allow redeeming contributions made in certain cases, being broader for individual plans | | |

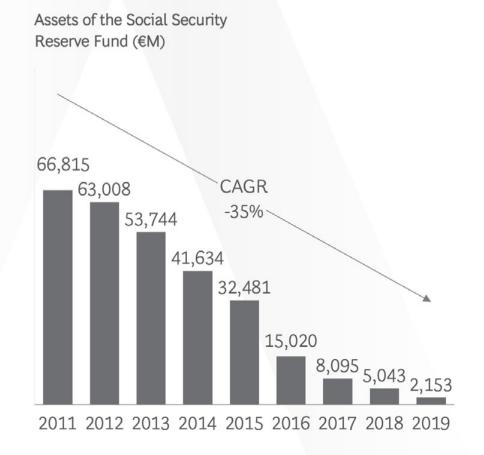
As a result, its managers prefer not to invest in illiquid and long-term assets that require stability in managed capital, such as VC & PE

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⁵³

In addition, the weight of private pensions is limited, resulting in very small employment plans, and the public pension system does not follow a capitalization system that makes managed capital grow







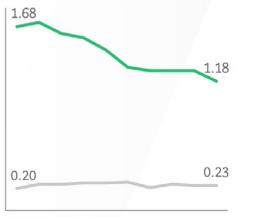
Regulations on cascading fees discourage VC & PE investments for individual pension funds by limiting maximum fees

According to regulations on cascading fees, GP fees³ must be accumulated to calculate maximum levels...

- The current regulations¹ on the compensation of pension fund managers limit the maximum fees for funds with VC & PE assets to 1.5%²
- For the calculation of the above limit, in accordance with the regulations on cascading fees, the fees charged by pension fund managers themselves and GPs³ must be accumulated (both management and success fees)
- This limitation on cascading fees does not exist in the main countries around us such as England, France, Germany, Italy or Luxembourg, where the search for the best interest of pension funds and their holders (Prudent Man Rule) prevails

...discouraging VC & PE investments, as the fees for individual pension funds are already close to the limit

Total fees (management and deposit) (%)



- '10 '11 '12 '13 '14 '15 '16 '17 '18 '19
- Individual pension funds
- Employment funds

- Unlike employment funds, the average fees for individual pension funds are close to the maximum limit (1.18% on average vs. 1.5% maximum limit)
- This accumulation discourages VC & PE investments compared to other assets with lower fees, despite the fact that they yield much lower returns



Regulations on cascading fees do not improve holders' net profitability, as they are not aligned with the success-based incentives for VC & PE

Regulations discourage investment in assets with success fees, even if they provide higher returns...

- Investments in VC & PE imply higher fees because they are based on success to align managers' incentives
- Thus, the higher the return on the asset, the greater the fees
- Regulations do not consider that the net gains for the pension fund are higher, simply promoting investment in assets with lower fees

... limiting the improvement in the profitability of pension funds

Regulations limit the profitability of pension funds:

- They discourage investment in VC & PE, which as an asset is providing the most significant returns
- They discourage investment in the managers with the best returns, which, because of their scheme based on success fees for VC & PE, have higher fees
- They encourage investment in managers with lower fees, which may be of lower quality (lower management fees) or have worse results (lower success fees)

Other factors that justify the modification of regulations

Regulations are born to eliminate the accumulation of financial intermediation fees in the same business group

However, the nature of VC & PE and pension fund fees are very different, so they should not accumulate:

Objectives of VC & PE fees

- Cover the management costs of assets, which are very expensive as they are investments in real economy companies
- Align the interests of the manager, being closely linked to success

Objective of pension fund fees

 Cover the financial intermediation costs of financial assets



Employment funds are limited by the maximum investment ratios established in regulations on pensions, without which they could invest more

Regulations¹ establish several maximum investment ratios for individual pension funds and employment funds

Scope of application

Investments from individual pension funds and employment funds

Maximum investment ratios

On total assets

The investments in assets that cannot be traded on a regulated market (e.g. FCR, IICIL and IICIICIL) cannot exceed 30% of the assets available to invest

On the same investment vehicle

- FCR: 3% of the assets of the pension fund or 20% of the vehicle in question
- IICIL and IICIICIL: 5% of the assets of the pension fund or the vehicle in question

On the same investment vehicle manager

- FCR: 6% of the assets of the pension fund or 20% of the vehicle in question
- IICIL and IICIICIL: 5% of the assets of the pension fund or the vehicle in question

Regulations mainly limit VC & PE investment for employment funds

Employment funds, because of their lower liquidity requirements, could sometimes commit more capital than regulations allow them to



In some investments we have seen how the managers of the employment funds wanted to commit more capital, but they didn't do it because of the 3% limitation imposed on the investment vehicle"

National LP2

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For European insurers, Solvency II regulations have resulted in high levels of capital consumption compared to other assets

Solvency II establishes one of the highest capital burdens for VC & PE investments

| • | Asset type | Average capital burden estimated ¹ |
|----------------|---|---|
| S. | VC & PE | 49% |
| Capital burden | OECD equities ² | 39% |
| Capita | Infrastructure investments | 30% |
| | Real estate assets | 25% |
| austive | Non-EEA ³ sovereign bonds | o-4.5% ⁴ |
| Non-exhaustive | EEA ³ sovereign bond | ds 0% |

It would be beneficial if Solvency II could develop the treatment of the asset, as has done with others

The higher burden was justified by the illiquidity and unpredictability of the asset, but it has already proven to be excessive:

- VC & PE investments are very diverse, so they require greater flexibility in capital consumption to adapt to the particularities of each one
- The broader experience in asset management makes it possible to better estimate the cash flows from investments

Regulations should recognize this development, as have already done for other assets

- Promoting alternative assets is a key factor for the sector in a context of low interest rates
- In 2016, the capital burden of infrastructure funds was already reduced from 49% to 30%
- The reduction for infrastructure funds has had a very positive impact, boosting investment in them

29%

CAGR 17-19 insurers' volume of investment in infrastructure funds

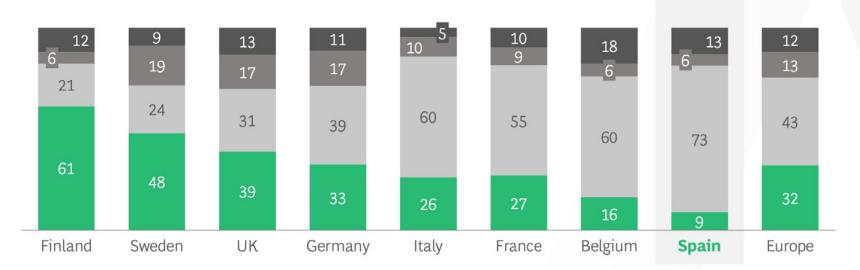
4%

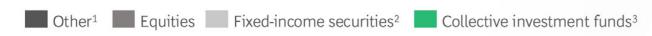
CAGR 17-19 insurers' total volume of investment

^{1.} The capital burdens indicated are the standard ones provided for each of the assets in the Delegated Regulation (EU) 2015/35. However, they can be (i) reduced in certain specific cases (e. g. in investments in long-term OECD equities they are reduced to 22%) or (ii) slightly adjusted (i. e. symmetrical adjustment to OECD VC & PE and equity ratios according to monthly EU publications. For example, the adjustment in force as of November 30, 2020 is -1.73%) 2. Shares listed on OECD regulated markets 3. European Economic Area 4. Depending on the credit rating (being 0% if it is at least AA and 4.5% if it is B or lower) Source: EIOPA (European Insurance and Occupational Pensions Authority), 2019; BCG analysis

Spanish insurers invest more heavily in assets with predictable flows, such as fixed-income securities

% of investment/insurers' portfolios by country (Q3 2020)





More traditional investment destinations

- The investment strategy of Spanish insurers is primarily focused on fixed-income assets (state and corporate debt)
- This trend is mainly explained by the historical profitability of these assets and insurers' preference for assets with a lower level of risk
- This investment profile is in contrast with the rest of European countries, where the investment in these assets is ~40-50% lower

Insurers and pension funds in Spain generally have less experience investing in VC & PE than in other assets

Fixed-income securities yielded good returns with an asset they knew very well, and easy to take out, which also applies to equities

I can invest in listed assets with a single click, while to invest in VC & PE, I must carry out a due diligence and various processes that are more complex"

National LP1

I still have some outstanding balances for fixed-income securities at very good returns, although I have less left than before"

National GP²

VC & PE is a more complex asset that requires specialized capabilities that are available on the market

There are no entry barriers to the asset if you are interested in investing in VC & PE, as you can access external resources that provide you with everything you need to start investing"

National LP1

There are specialized advisors who can provide you with comprehensive advice to start investing in the asset, as well as advisors with whom to cover only parts of the process as you develop your capabilities"

International LP 1

The capabilities to be developed to invest in VC & PE are not a significant entry barrier, as there are specialized advisors to do so

Gradual process of developing internal capabilities

investment

| | Internal capabilities required | Advisors required | Investment strategy | Illustrative |
|---------------------------------|--------------------------------------|----------------------|------------------------|--|
| int of nts | • | | Funds of funds | To make the first investments, the full or partial dedication of one of the team members together with an advisor (e. g. for an operational due diligence) is sufficient The team can be expanded and progressively become in-house, as investments do Making the first investments through funds of funds is a good strategy because they directly provide a more diversified portfolio and great knowledge about the asset |
| s of developme & PE investme | 5 5 | | Co- investment | Once the VC & PE portfolio is consolidated, greater in-house capacities can be built and the diversification strategy defined (by year, sector, geographic region,) In addition, co-investments can be made with General Partners (GPs) |
| Levels VC & | | | Direct | The most advanced investors have greater internal capabilities and even make direct investments Unlike the most advanced countries such as the US or Canada, in Spain and generally in Europe, |

the direct investments made by Limited Partners (LPs) are very small

with professional shareholders that add value to the investments

• Direct investments are only recommended when there is enough critical mass of Assets under Management. Otherwise, co-investments and investments through specialized GPs allow obtaining the benefits of investing





There are factors that could favor VC & PE investments in the future

Economic context of low rates LT¹



Interest rates are not expected to rise, and the inflation generated in financial assets does not allow expecting good returns in the coming years

Growing interest from insurers



Insurers have an increasingly long track record and broader experience with the asset, and there is more and more news about new VC & PE investment projects (e. g. Mutua Madrileña, Mapfre, Santa Lucía):

- New players investing
- Investment in greater proportions using technical provisions, in addition to shareholders' equity, which until now they had barely used to invest in VC & PE

New regulation



- The reform in pension regulations (in the absence of details), according to the information published, will predictably favor employment plans in the mediumlong term, even if it may result in an effective increase in the volume managed by pension funds in total. However, in the short term, it will likely reduce contributions
 - Solvency II developments are expected to further relax and adjust the levels of capital consumption for investments in alternative assets

1. In the long term



Recommendations







Actions recommended to increase investments in VC & PE by insurers and pension funds

Recommendations to the VC & PE sector

- Give greater visibility to the attractive returns that are obtained (profitability, social impact, sustainability, corporate governance, etc.), with periodic reports of the sector, as in other geographic regions
- 2 Strengthen the focus on advising and adapting the service to institutional investors

Recommendations to insurers and pension funds



- Work with the regulator on adapting more favorable regulations, such as the pension model and regulations; and Solvency II, both in the EU and in its national implementation and interpretation
- 4 Continue to deepen knowledge of the asset, to achieve faster the levels of sophistication and experience that insurers and pension funds already have with other assets

Recommendations to the regulator



- 5 Individual pension funds:
 - Review the regulations on cascading fees
- 6 Employment funds:
 - Make investment ratios more flexible
- 7 Insurers: Make capital consumption more flexible
 - Develop regulations on Solvency II with the EU in order to apply standard capital consumption models that are more adjusted to the risk of investing in alternative assets
 - Adapt the implementation of Solvency II in Spain in a way that allows developing and applying internal capital consumption models
- 8 Increase public pension investments in VC & PE (like the Swedish model), softening the public debt investment policy adopted by the Management Committee of the Social Security Reserve Fund





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