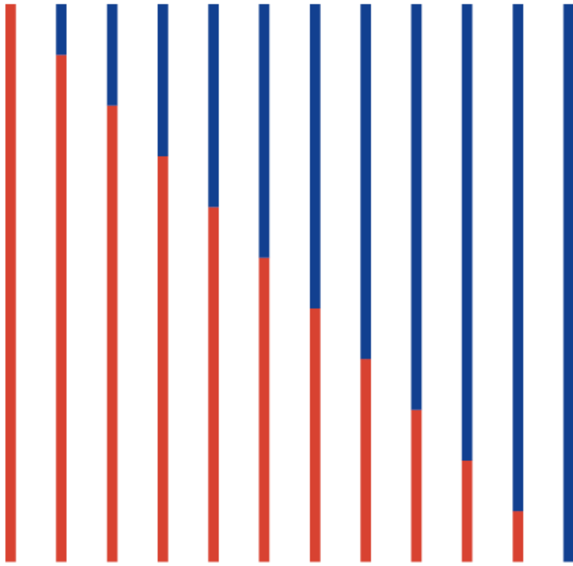

SEPTEMBER 2023

PRIVATE EQUITY: OVERVIEW AND VULNERABILITIES

LAURENT GRILLET-AUBERT

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EXECUTIVE SUMMARY

Private equity is becoming a major player in financing of the economy by investment funds. On the global level, according to the data provider Preqin, its assets under management have more than doubled in six years, from USD 2.8 trillion (thousand billion dollars, trn) in 2017 to USD 7.6trn in 2022, whereas they barely exceeded $1trn following the 2008 crisis. Beyond high-profile acquisitions, posting successes (Hilton Hotels) or followed by bankruptcies (Toys R'Us), private equity is playing a growing role in the financial system, concomitant with the increase in the financing of unlisted joint-stock companies. It is also a vector of significant cross-border investments – particularly American in Europe. Part of the academic literature highlights the beneficial effects of its development: better management of companies, specific expertise and the satisfaction of funding needs, otherwise unsatisfied (e.g. by banks), of innovation, of growth. The returns posted by the funds are higher than those of stock markets (e.g. 15.4% per annum from 2015 to 2021, according to Preqin). Multiple studies explain the choice of this financing channel by companies. Some highlight the benefits of using private equity and the long-term growth of target companies. Other studies, on the contrary, highlight social costs or negative externalities.

In particular, the development of private equity is likely to renew certain questions about the risks falling within the competence of the market regulator. The macroeconomic context (inflation, rising interest rates, recessions) accentuates these questions: portfolio managers, having masses of capital to invest (dry powder), can play a counter-cyclical role, but private equity can also fuel corporate debt, in particular of some exposed issuers in this regard. Certain companies, and the performance of certain funds, have been temporarily impacted by recent developments[1], but vulnerabilities to debt refinancing maturities remain essentially to be assessed. At the fund level, liquidity and leverage effects, and the adequacy of transparency, raise certain questions about the risks for investors. At the macroeconomic level, the choice by companies of this source of financing induces by construction more limited transparency and regulatory requirements, particularly in terms of governance, sometimes less prescriptive. This questions the proper allocation of capital and the implications for corporate governance.

The following specifies the terms of the analysis and resituates the regulatory issues.

The expansion of private equity makes it a major and structuring player in the financial system

Having enjoyed spectacular growth in the past decade, in 2022 private equity constituted the majority ($7.6trn in assets) of the private fund management industry ($11.7trn), a broader range of funds invested in unlisted assets also including debt and infrastructure funds in particular. The $1.2trn in assets identified in Europe do not cover the significant direct holdings of European unlisted companies by North American private equity funds.

Private equity strategies primarily target unlisted equity financing of startups and SMEs (Venture Capital: VC) and more mature firms with prospects of a restructuring or takeover, and growth (Leveraged BuyOuts: LBOs). An intermediate Growth segment is gaining in importance, which targets more mature companies than VC but has broadly the same financial characteristics. These strategies tend to favour investments in intangible assets and innovative sectors. VC comprises a large number of small funds, whereas LBOs concentrate most of the volumes financed in a more limited number of large funds (69.8% in Europe; a ratio that remains to be clarified in France). However, private equity covers an increasingly broad and representative spectrum of companies. The largest global players extend their financing offer to debt products. Some, in the US, but also in Europe outside France, acquire insurance companies, facilitating their fund distribution and/or transaction financing.

Exerting a direct influence over the governance of the target firms, often by taking significant or controlling stakes, private equity closely interconnects the financial sphere and the real economy. The assumption of outperformance relative to the stock markets after taking into account management fees is not without raising questions of method: in particular, the examination of the multiple relevant indicators deserves in-depth consideration of the different market segments and types of investors. The sources of performance – leverage, physical investment, organic growth, financial operations (restructuring, external growth), etc. – are also heterogeneous. Assessing these questions invites in particular to distinguish the LBO, with more internationalized practices and more linked

[1] For example: the (re)financing difficulties of large American LBOs such as that of Citrix in September 2022 or Finastra in August 2023 have illustrated the type of tensions that can emerge.

to indebtedness, from the more locally anchored VC and Growth funds. Part of the literature emphasizes the specific capacity of the latter to support the growth and innovation of companies, which would also justify a form of public support, in particular in France.

A review of potential risks to be reassessed in the new market context

Given the illiquidity of unlisted assets, the length of investment horizons, the customization of vehicles (legal and tax arrangements), the rise of private equity, mainly reserved for informed investors, is linked to that of institutional asset management. However, it also tends increasingly to be promoted to high net worth retail investors and the general public – with possible implications for the protection of investors who need to assess the valuations, performance and risks of their fund investments.

Available literature, particularly on the United States, reveals the cyclical nature of the industry over the long run, attributable notably to the timing of investments and debt leverage. The latter is primarily associated with the LBO which, by nature, puts the target companies in debt. This debt, one of the riskiest segments of debt markets, drew advantage of low interest rates in recent years, with targets financing themselves through high-yield bonds, leveraged loans, sometimes repackaged in the form of securitisations (CLOs), and increasingly (re)financed by private debt funds. Risks could materialize today for target companies and even affect financial stability, for example if a decline in revenues due to the contraction of economic activity (energy costs, pressure on margins, falling demand) added to a rise in financing costs (interest rates) and difficulties in (re)financing the risky debt issued. This all the more as the debt of such arrangements is often subscribed by private debt funds whose origination practices are more aggressive than those of banks and which may themselves be put in difficulty by a rise in rates.

Other –e.g. VC or Growth- strategies do not necessarily prompt their targets to rely on debt on a large scale. However, they can also be cyclical, and the reliability of their asset valuations could be questionable.

Private equity funds could also be exposed to more severe liquidity constraints than previously. Admittedly, the funds are generally closed-ended and they have long investment horizons (e.g. 10 years), and they have raised a pile of capital yet to be invested (dry powder), but demand for liquidity from unitholders is increasing, especially with the distribution to retail investors, as well as the difficulties in liquidating investments. The capacity of the targets to refinance their debts, as well as that of the funds to recapitalize them in the event of a shock, remain to be assessed. A "reverse stress test" would ideally make it possible to assess these combined effects, as well as the threshold and the horizon at which the refinancing needs would become unsustainable for the target companies and the funds holding them ("Maturity wall"). Available information does not allow for such an assessment.

Private equity managers are exposed to multiple potential conflicts of interest, which have been identified for a long time. Their management is subject to regulatory provisions and supervision by the competent authorities. The growth of the private finance industry, in particular of management companies offering multiple, complementary or competing, services (e.g. both private equity and debt fund management), may however raise questions. Jurisdictions may be heterogeneous in this respect, Europe having adopted a prescriptive framework.

Lastly, the expansion of private equity has direct and indirect effects on stock markets. Its development is concomitant with a continuous attrition of the stock exchange list, and it finances also large companies. Since the companies that it finances have less stringent disclosure requirements, it reduces their costs. This results in major negative information externalities, in this case a reduction in market information and the ability to aggregate it, with potentially detrimental effects on capital allocation, competition, and market monitoring and transversal supervision. These externalities are complex to measure, but it matters for market authorities to consider them.

Implications for the market regulator?

The AIFMD directive applicable to private equity in Europe offers the benefits and the limitations of a broad scope, covering all types of funds – some strictly regulated, others only subject to notification to the regulator. Little consideration for the specific features of private equity is noted. For example, the classification of strategies does not recognise the LBO as such. Notably, the leverage metrics are seen here as presenting a limited relevance. The SPVs/holding companies set up by the funds for investing are excluded from their calculation. The full investment structure of the fund is thereby not taken into account. Moreover, the leverage of the target companies (which

refinances that of the funds) is not measured, which it is in the US. The reporting and transparency requirements in the United States, where private equity is more developed, may in some respects give food for thought, as the American initiatives take place in a regulatory context that may be otherwise less prescriptive. The AIFMD revision is nearing completion and has not fully reflected these concerns, and the advisability of additional provisions might be considered.

In any case, there is little capacity for performing, on the aggregated level, a market monitoring for the regulator's purposes. The commercial data (data vendors, rating agencies) and data from professional associations needed for this operation is fragmentary/not easily comparable, sometimes incomplete and often poorly documented from a methodological standpoint. It would matter here first to compare the coverage (types of legal entities and investment vehicles) of the various data sources, including those of the market authorities, for basic indicators such as assets under management, divestment/investment flows, conditions of market operations (e.g. valuation of acquisitions, structure and financing conditions of the funds and targets), and other specific activity and risk indicators (dry powder, leverage ratios, etc.)

These questions are primarily intended to fuel the debate between competent authorities. Addressing them, however, invites first to a dialogue with the stakeholders, and an extension of the relevant analytical work, which is also the subject of this publication.

*

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Ultimately, private equity is now an important channel for financing of the economy. It has structural impacts on the entire financial system. Its specific benefits are perceptible above all for small growth companies; the general observation of outperformance and its sources of value creation remain however to be clarified. Its expansion also entails risks coming within the jurisdiction of the financial regulators, the materiality of which remains to be (re)assessed: risks for investor protection recently also because of its extension to retail investors; risks for financial stability, since the debt burden that it generates creates vulnerabilities. In addition, it has numerous impacts on financial intermediation, stock markets and market organisation, notably through the development of unlisted financing that comes with it, raising questions about the optimal/desired market structure.

From the perspective of the market authorities, these observations could give incentives – on the international level, given the potential for regulatory arbitrage – to re-examine specific points of the applicable regulatory framework, especially to make better allowance for the specific features of private equity. This would mean first better identifying the funds and their characteristics, which are often merely declared (neither authorised nor supervised), and their assets under management are not always known. Next, it would mean better assessing risks. A better leverage metric would seem especially useful in this respect. More generally, an improved monitoring of private equity activities by the supervisory authorities seems to be indicated. It would be likely, at first sight, to benefit from a constructive dialogue with the industry.

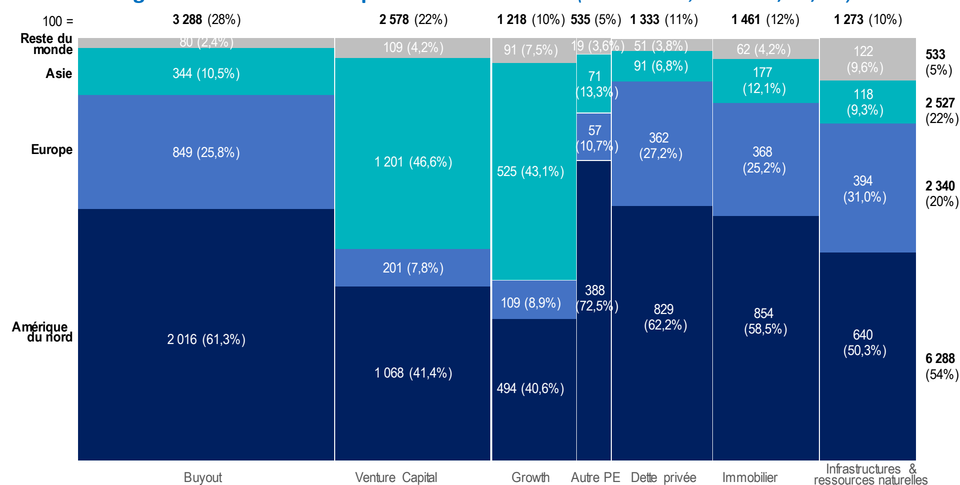
1. KEY ROLE OF PRIVATE FINANCE IN FINANCING THE ECONOMY

Private equity forms part of a broader range of "private finance" investment funds aiming to provide financing by the acquisition of equity stakes and securities not listed on the stock exchange. The purpose of what follows is to describe the structure (characteristics of supply and demand, incentives for stakeholders, etc.) of this funding channel and assess its importance (size, etc.), in order to identify its functioning and the risks involved more clearly. In a context of very limited information, this investigation is based notably on sources of information and on relevant research work that are publicly available.

1.1 The strong global growth of private finance funds, especially private equity, continues

The global growth of private finance funds (a concept covering funds investing in unlisted assets, private equity, but also unlisted debt securities, real estate and infrastructure) continued in 2022, reaching new peaks. As the effects of the pandemic wore off, inflows to private finance funds,[2] which had increased by 20.5% between 2020 and 2021 (to the record level of $1,486 billion), declined in 2022 by 10.4% from 2021 but nevertheless remained high, at $1,332 billion. Global assets under management[3] accordingly increased by 10.3% in 2022 to a new all-time peak of $ 12.8 trn, versus $11.6trn in 2021 and $9.6trn in 2020. This compares with a decrease in assets under management for collective investment management as a whole.[4]

Figure 1: Global AUM of private finance funds *(USD billion, as at 30/06/22)*



Source: McKinsey, Preqin.

Within the private finance sector, the AUM of private equity[5] (in particular venture capital (VC), Leveraged BuyOuts (LBO) and Growth funds) increased even more significantly than the rest of private finance (by 28.5% per year on average since 2019), to $7,616 billion at mid-2022.[6] They therefore represented 65.2% of private finance, versus 59.5% in 2019 (Table 1). Although the AUM of Leveraged BuyOut (LBO) funds grew constantly, by 19.3% per year on average since 2019, their share of private equity assets slipped, from 53.6% in 2019 to 43.2% in 2022, especially to the benefit of VC (33.8% in 2022 vs 25.6% in 2019). In Europe, LBO funds nevertheless remain preponderant (Figure 3), with a 69.8% weight in private equity AUM, whereas they now have only a 50.8% weight in the United States (vs 65.0% still in 2019).

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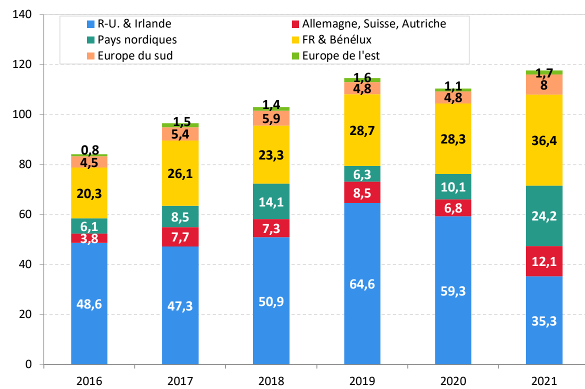
[2] Source: Bain (2023), based on data from the data provider Preqin.
[3] Source: McKinsey estimate in June 2022, based on data from Preqin.
[4] i.e. -12.5% for mutual funds, from $68.4trn to $59.9trn between mid-2021 and mid-2022 according to the EFAMA/IIFA. McKinsey estimates the global assets of private finance funds (Figure 1) at $11.7trn, i.e. $1.1trn less than Bain (likewise on the basis of data from Preqin). According to the SEC (Form ADV, Sept. 2022), the AUM of private finance funds in the United States ($21trn) are similar to the assets of commercial banks ($23trn). The imprecision of the private finance concept is discussed in Section 2, and issues regarding data in Section 4.
[5] Source: McKinsey/Preqin.
[6] Note that these assets are therefore now very significantly larger than those of hedge funds ($4,872 billion according to BarclayHedge at mid-2022), whereas they were still roughly the same ($2,829 billion for private equity, $2,906bn for hedge funds) in 2017.

Table 1: Relative weight of the various types of funds within private finance
(based on AUM in US dollars)

Weight (as %)...	2019	2020	2021	2022
...of private equity in private finance (global)	59.5	61.2	63.9	65.2
...of LBO funds in private equity (global)	53.7	50.6	47.6	43.2
- in Europe	75.3	74.8	73.4	77.3
- in the United States	65.0	59.8	55.5	50.8
...of Venture Capital in private equity (global)	25.6	27.6	29.1	33.8
...of debt funds in private finance (global)	21.1	19.6	18.9	17.5

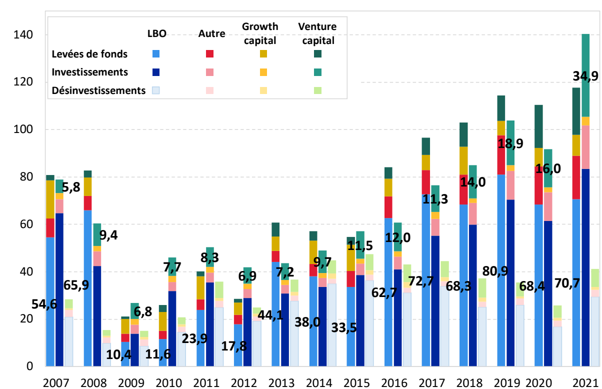
Source: Preqin, McKinsey, AMF calculations.

Figure 2: Fundraising by private equity funds by geographic area in Europe *(EUR bn)*



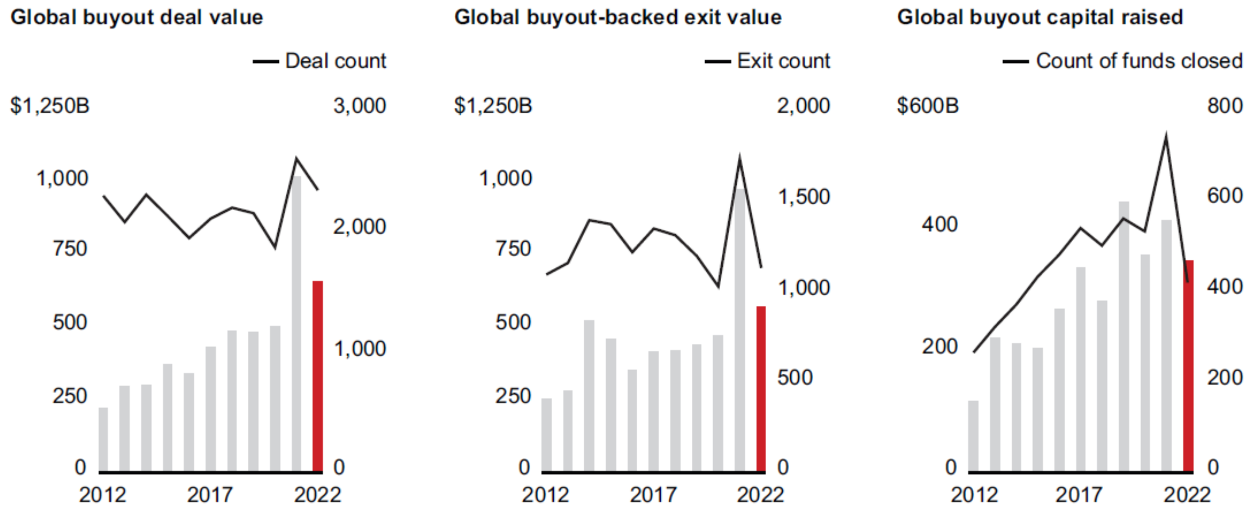
Source: Invest Europe, AMF.

Figure 3: Fundraising and divestments by European private equity funds *(EUR bn)*



Source: Invest Europe, AMF.

Figure 4: Investments (deals), exits and fundraising by LBO funds *(USD bn)*



Source: Dealogic, Preqin, Bain (2023). Notes: Investments: excludes additional capital raised (add-ons), excludes buyout loans and acquisitions of failed assets; based on the date of announcement; includes current transactions for which the figures may be revised; Divestments — total and partial, excluding failures; IPO: amount of the offering, not the enterprise value; Fundraising grouped by year of fund closure; count of all funds, including those for which definitive data is not available; buyout category includes buyout, balanced, co-investment and co-investment multimanager funds; SoftBank Vision fund excluded.

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Measured in dollars, the resilience of global private equity activity (21.1% annual growth in assets in 2022) appears weaker in Europe (10.7%) than in the United States (23.0%) mainly because of the fall in the euro.[7] In fact, in Europe (Figure 7 et seq.), the Invest Europe data points to a less pronounced weakening of activity in 2022. Admittedly, a significant decline in divestments was posted (-27.2% to €33 billion), positioning them at levels close to those of 2020 during the Covid-19 crisis; but despite the 11.3% decline in investments, following a 59.7% rise in 2021, the amounts invested remained at a high level (€129.8 billion). Above all, fundraising by the funds remained very dynamic: growing by 30.2% compared with 2021, they reached an all-time peak of €170.3 billion, driven primarily by LBO funds (€110.9 billion raised, versus €77.0bn in 2021)[8] and by the United Kingdom and the Nordic countries (Figure 10).

These figures call for several observations:

- The asset dynamic seems to be primarily due to valuation effects, as the change in AuM is not explained solely by the - nevertheless significant- net fund collections.
- At a global level, investment growth continued until mid-2022, followed by a steep downward correction in the second half. Bain shows that this correction has also taken place in Europe. In France, according to France Invest, the correction concerned the level of fundraising more than the investments made.
- The conjugation of increased fundraising and the decline in investments supports the hypothesis of an increase in capital raised and remaining to be invested ("dry powder") in Europe in 2022.
- The investments by European private equity funds in 2022 included €7.7 billion invested in the rest of the world, or 6.1% of the total. 30.6% of the total was invested across European national borders, while the vast majority (63.3%) consisted of domestic investments.

1.2 A direct influence on the real economy, on corporate management and on employment

One characteristic of private equity is its direct impact on the management of the companies in which it invests, usually to control them[9], in contrast with very diversified fund managements whose involvement in corporate governance is more limited (e.g. to voting at the annual general meeting). It therefore has direct impacts on the financial management of the companies concerned (e.g. their debt leverage), but also on their strategy and their operational management and employment. The professional associations accordingly stress the number of employees in the companies that it finances. According to the AIC,[10] in the United States 32,041 companies financed by private equity employ 11.7 million people. According to Invest Europe, in 2020 9.9 million employees in Europe (4.3% of the workforce) worked for the 24,663 companies financed by private equity, including 17,781 SMEs employing 855,000 people[11]. According to the same source, France and Benelux accounted for 3.6m of these 9.9 million jobs, and the Ile-de-France region alone employed 1.2 million. These jobs can be found especially in innovative sectors such as biotechnologies, Information and Communication Technologies (ICT) and finance, sectors overweighted by private equity (Table 2, Table 3). While most of the companies concerned are financed by VC funds, employment is largely concentrated in larger, more mature firms controlled by LBO funds (Table 3).

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[7] Between mid-2021 and mid-2022, the increase in assets under management in Europe in dollars is overestimated by 5.6% due to the fall in the EUR/USD exchange rate.
[8] The prior growth was mainly attributable to fundraising by VC, Growth and Other funds.
[9] VC and Growth funds often take minority but significant stakes, possibly alongside other funds, which allow them to influence the strategy of the target company.
[10] Source: site of the American Investment Council as at 21/10/22. The number of companies applies to companies held since 2017.
[11] In France, a study by France Invest-EY (2022a) on job creation by firms controlled by private equity stresses that the impact on employment extends in particular to industrial sectors and B2C (production, distribution, services).

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Table 2: Employment of firms sponsored by private equity in Europe, by economic sector

	Nombre de firmes sponsorisée	Nombre d'employés (2020)	Var. annuelle (2020/2019)
Produits et services aux entreprises	4 338	2 930 167	4 272
Biens & Services de consommation	4 747	2 636 222	4 126
Technologies de l'information et de	8 309	1 313 427	35 126
Biotechnologies & Santé	3220	1 279 903	41 309
Construction	562	449 303	263
Transports	481	277 196	4 014
Energie & Environment	1070	267 249	3 867
Finance & Assurances	844	267 095	11 204
Agriculture	261	216 909	398
Produits chimiques & matériaux	430	170 041	-218
Immobilier	247	97 597	-
Autre	154	12 378	-
Total	24663	9 917 487	103 566

Source: Invest Europe, AMF.

Table 3: Employment of firms sponsored by private equity in Europe, by type of sponsor

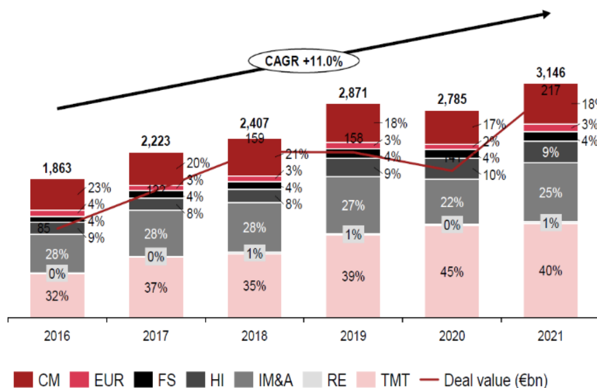
	Nombre de firmes sponsorisées	Nombre d'employés (2020)	Variation annuelle (2020/2019)
Leveraged Buyout	5 041	6 184 810	38 339
Growth	6 354	2 702 234	25 026
Venture Capital	12 754	556 439	31 103
Autre	514	474 004	9 098
Total	24 663	9 917 487	103 566

Source: Invest Europe, AMF

1.3 Overweighting of certain sectors and activities

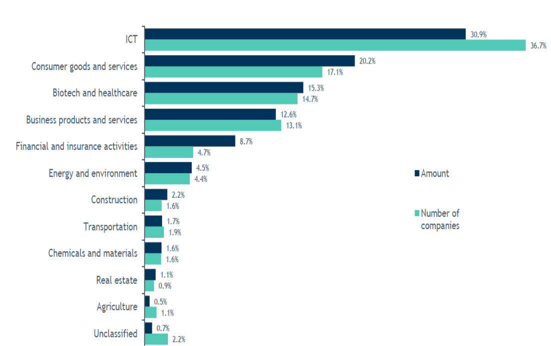
There is increasing exposure to the information technology, healthcare and infrastructure sectors.[12] European private equity here reveals a strong sector bias, which reflects in particular their specific role in financing innovative sectors (cf. 2.1). In Europe, the ICT, Consumer Goods & Services and Biotech & Healthcare sectors accounted for 66.8% of total private equity investments in 2021 (Figure 5, Figure 6). Logically, this bias is more pronounced for VC (80.0%), which targets young growth companies. It is slightly less so for Growth funds (70.0%) and for LBO funds (60.5%). Moreover, the increase in institutional allocations to private finance funds tends to favour infrastructure financing. Being relatively unexposed to the sectors adversely affected (e.g. transport and tourism) and, conversely, more exposed to the sectors which boomed in this environment (e.g. Healthcare, ICT), private equity was relatively resilient to the Covid-19 crisis[13].

Figure 5: Breakdown of European LBO amounts by sector in 2018 and 2019



Source: PwC (2022). Note: CM: Consumer Markets; EUR: Energy, Utilities & Resources; FS: Financial Services & Insurance; HI: Health Industries; IM&A: Industrial Manufacturing & Automotive; RE: Real Estate; TMT: Telecommunications & Media; Transportation.

Figure 6: Investments by European private equity funds in 2019 (number, and amount in EUR billion)



Source: Invest Europe.

[12] According to the *2022 Global Institutional Investor Outlook* survey conducted by Natixis IM in October-November 2021, the most attractive private market sectors in 2022 were above all information technology (45%), healthcare (41%) and infrastructure (40%).

[13] Gompers P., S. Kaplan, V. Mukharlyamov (2021), for example, stress the resilience of private equity target companies during the Covid crisis.

Investments by European private equity funds (EUR billion)

Figure 7: LBO

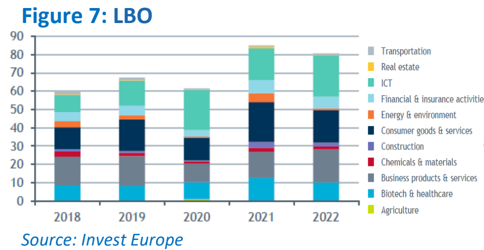


Figure 8: Growth

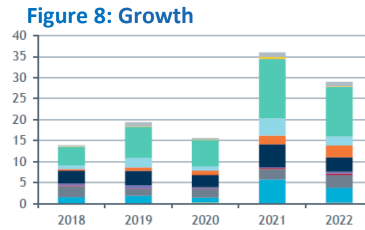
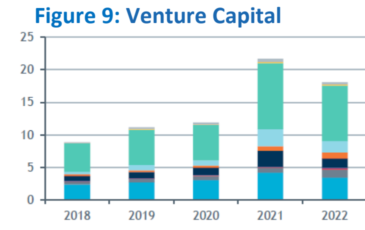


Figure 9: Venture Capital



Source: Invest Europe

1.4 Major cross-border exposures

Private equity entails major international investments, particularly from the United States to Europe, namely $3.6 trillion in investments in unlisted European companies, or 24.1% of the investments of the private equity funds reporting to the US SEC (Table 4). With the necessary methodological caveats,[14] these holdings of European assets by US private equity funds could be as much as or even more than those of European funds themselves (the assets of European private equity funds being $1.1trn according to McKinsey/Preqin in 2021). Added to this, moreover, is the fact that a significant proportion of investments into European private equity funds could come from US investors, as suggested by the breakdown of their fundraising by country of origin (Figure 10 and Figure 11).[15]

Judging by investment flows (Invest Europe), the investments of European funds outside Europe are far smaller. These flows to countries outside Europe represented 6.1% of investments (€7.7bn) in 2022.

Table 4: Aggregate gross value of private equity investments by region (USD bn, %)

	2014	2015	2016	2017	2018	2019	2020	2021	2021 (%)
North America	4,506	4,132	3,942	3,961	4,211	5,163	6,633	9,556	*64.5*
Europe (EEA)	1,259	941	848	963	1,256	1,547	2,155	3,574	*24.1*
Asia	462	447	406	379	435	561	1,028	881	*5.9*
Other Europe	9	21	22	40	46	69	158	409	*2.8*
South America	85	58	111	184	140	149	141	171	*1.2*
Middle East	12	9	15	23	16	18	44	124	*0.8*
Supranational	67	23	37	49	55	60	78	82	*0.6*
Africa	12	12	18	14	10	15	9	12	*0.1*
Total	6,412	5,643	5,399	5,613	6,169	7,582	10,246	14,809	*100.0*

Source: SEC Form PF of 03/01/23, Questions 70 and 78.

Figure 10: Fundraising by private equity funds in Europe by geographic origin (EUR bn)

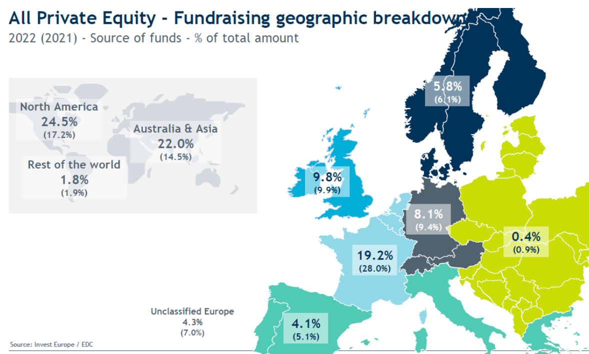
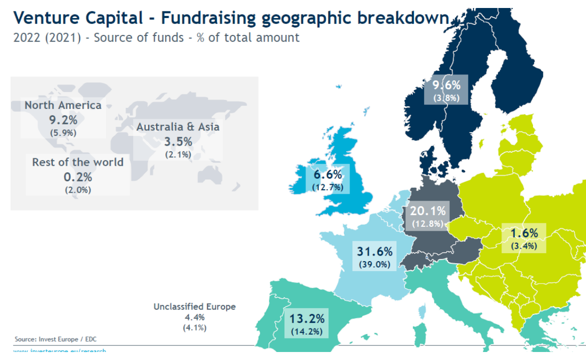


Figure 11: Fundraising by venture capital funds in Europe by geographic origin (EUR bn)



Source: Invest Europe.

[14] These investments correspond to the value of the target companies (generally controlled by the funds) and to €5.9trn gross assets of the reporting funds (of the €6.4trn of identified fund assets). The €5.7trn net assets of these funds reflect a low debt burden at the fund level (cf. discussion in Section 3.3 on the limitations of this indicator, which does not take into account the debt of holding companies or SPVs, through which the funds invest). Europe Invest identifies €8.9bn in investment flows from the United States to Europe in 2021.

[15] For example, according to Europe Invest, 30.7% of the LBO funds raised in Europe in 2022 came from US investors.

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2. PRIVATE EQUITY: AN IMPRECISE CONCEPT

2.1 A fragmented market, a terminology to be clarified

2.1.1 Private equity deploys typical strategies in a great variety of ways

2.1.1.1 Private finance, funds and markets: concepts developed by market participants

Private finance and private markets [16] are concepts established for their own purposes by certain market participants, in particular consultants and analysts (e.g. McKinsey & Co, eVestment, Cambridge Associates, etc.), data providers (Preqin, Dealogic, Pitchbook, etc.), rating agencies (Standard & Poor's, etc.), and various financial analysis and research bodies.[17] Widely adopted by the financial press,[18] these concepts are indeed useful for market practitioners, e.g. to organise their supply of data, benchmarking and analyses. In this context, private finance generally means the following funds:

- Private equity and private debt funds[19], and funds holding other relatively illiquid assets: unlisted equities or debt securities, real estate, infrastructure. In this respect they are different from other alternative management structures (e.g. hedge funds) which target more liquid assets and have shorter holding times;
- Funds initially intended mainly for institutional investors (insurance companies and pension funds) and high-net-worth individuals not covered by the protective thresholds applicable to sales to retail investors;
- Generally closed-ended funds, typically having a lifetime of 5 to 15 years;[20]
- Funds whose creation is related to the performance of market operations (e.g. mergers and acquisitions, company sale by the founders, etc.) with a view to medium-term capital gains (e.g. in 2 to 5 years), exit transactions that can take many forms, including the stock exchange flotation of the companies owned (e.g. IPO, SPAC merger, etc.), commercial sales, or sale to other funds.

The private finance concept may be confusing. It can also refer to private credit markets, especially leveraged loans and credit not listed on the stock exchange, typically granted by non-bank entities. These instruments, which may be specialised (e.g. *commodity trade finance*) or refinanced in a structured form (e.g. securitisation/CLOs), also often give rise to bilateral relations between the financiers and those financed, as loan agreements (e.g. their restrictive or repayment provisions) are adapted to the specific interests and circumstances of the parties. They are risky and relatively illiquid, and tend to be held until maturity by the lenders. This type of credit generally finances deals sponsored by private finance funds, and companies owned by private equity funds. There is therefore a very close link between these private financing methods.

2.1.1.2 Private equity: common characteristics (legal form, tax treatment, fees)

- **General criteria**

For want of a precise positive legal basis, private equity, within private finance, is also defined by the industry as a third-party asset management business specialised in medium- and long-term investment in unlisted equities. In an extended scope[21], it initially takes mainly two forms: VC, particularly developed in France, and Leveraged BuyOuts (LBO), with an intermediate segment (Growth) tending to develop recently, especially in Asia. Schematically, these funds are characterised by the following general properties:[22]

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[16] Other terms similar to "private finance" and "private markets" are "private capital" and "private investing".

[17] Cf. e.g. Aramonte S., F. Avalos (2021) (Bank for International Settlements), Rosov S. (2018) (CFA position paper).

[18] Cf. e.g. The Financial Times (Private markets are a hot topic for 2022 14/01/22; *Next financial crisis likely to centre on private markets 12/04/22, The private market "supercycle" 12/08/22); Bloomberg (The Boom in Private Markets Has Transformed Finance. Here's How 14/06/22; Private Markets Will Pump the Oil 16/06/22; Asian Unicorns Are Trading 40% Cheaper in Private Markets 2/08/22); Risk.net (The private markets dilemma faced by asset owners 20/07/22).*

[19] Despite some similarities, the strategies and objectives of private debt and private equity funds differ. The AIMA Alternative Credit Council (AIMA (2022)) specifies the amounts and sectors of the economy financed by private debt funds.

[20] The funds' legal status is generally different from that of open-ended UCITS or AIFs (cf. Box 4 and Appendix 3 of the IOSCO consultation report (2010)). However, there are exceptions, such as *evergreen* funds (cf. e.g. French *evergreen* FCPR in 2.1.1 and Annex 1).

[21] A more restrictive approach could consider private equity as distinct from venture capital.

[22] Characteristics based notably on the Invest Europe definitions (Glossary and Methodology).

- They are a form of third-party collective investment management: legal structure of a fund or a similar pool of capital;
- Their portfolio consists mainly of shares in the capital of unlisted commercial companies;
- Investment in these companies is performed over a medium to long period (e.g. from 3 to 15 years);
- A divestment (exit) strategy allows the funds to be returned to investors when the fund sells its portfolio assets and/or when it reaches maturity.

- **Legal and tax criteria**

Moreover, the funds' legal arrangements take into account [23] specific **tax and regulatory considerations**, particularly in order to:

- Optimise the applicable tax treatment,[24] which is a major comparative advantage of these funds. More specifically: avoid the double taxation of income or sales of equity stakes by the funds or investors,[25] limit VAT, optimise the tax treatment of charges (recoverable management fees, carried interest), etc. From a tax viewpoint, private equity enjoys preferential conditions: [26] i) specific to carried interest, generally[27] considered as capital income (hence liable to tax on capital gains) rather than as earned income (and taxed as such); ii) due to the fact that interest payments on loans are deductible, whereas dividends are not, which favours corporate financing by debt rather than by equity (cf. 4.2.2), and iii) due to certain specific incentives, e.g. for the financing of SMEs, innovative companies, or in certain regions.

- Legally adapt the created structure and its operation to its purpose, in particular to the countries and types of investors targeted (e.g. to the tax regime of pension funds) and to facilitate marketing of the funds to the target investors. This optimisation aims in particular to facilitate cash flow management (e.g. calls for funds, dividend distributions)[28] and divestments (exits) and any unplanned events (e.g. liquidity requests by investors), while remaining within the systems recognised by them.[29]

The Anglo-Saxon legal form of the limited partnership has become established as an international market standard, particularly for LBO funds. Funds therefore take the form of Limited Partnerships in which the investors (Limited Partners or LPs) delegate management to a fund manager (General Partner or GP). The flexibility of this legal framework permits the great diversity and complexity of structures observed. Apart from the diversity of the economic purpose and contractual specifications of the funds' strategies, their diversity is also largely due to legal arrangements optimising the applicable tax treatment and regulations. Indeed, the differences between tax regimes of the various jurisdictions give rise to extensive arbitraging in the domiciliation of investment vehicles. However, the frequent use of this legal form does not rule out a diversity of national legal forms for the funds, together with numerous specific features (cf. e.g. Box 1 on the forms observed in France).

- **Specific pricing structures**

The pricing of private equity fund management services is specific to them. In particular, in the Anglo-Saxon model, these fees are debited by the fund management company and by the General Partners (GPs) (according to the rights and obligations associated with their class of fund units). Secondly, fees are collected not only from the LPs but also, where applicable (notably for LBO funds), from the target companies (e.g. for their monitoring[30]). They generally[31] comprise fixed and variable components, as follows:

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[23] Cf. e.g. EVCA (2006); Private equity fund structures in Europe.
[24] In. tax havens, when tax arrangements do not enable funds to avoid double taxation, there is generally a withholding tax on distributions to investors. In so-called transparent structures, investors are liable for tax on their share of profits, whether they are distributed to them or not, when the fund's assets are sold.
[25] When the tax arrangements in the fund's jurisdiction enable it to avoid double taxation, there is often a withholding tax on distributions to investors.
[26] According to Jenkinson T., M. Kim, H. Weisbach (2021) "*There are two main reasons why Limited Partnerships have become the standard fund structure: (1) tax efficiency for investors, (2) incentive structures and tax efficiency for fund managers*".
[27] E.g. in the United States, the United Kingdom, Luxembourg and France.
[28] Cf. e.g. KPMG (2020) on tax and legal structure optimisation methods.
[29] According to KPMG (2020), investors' familiarity with Anglo-Saxon legal structures makes this a market standard. This probably explains the success of Sociétés de Libre Partenariat (French limited partnerships), based on this standard in France since 2015.
[30] The collection of fees from targets does not correspond to the practice in France and in this case, in accordance with the applicable code of ethics, they are deducted from the the asset management company's management fees, thus do not create additional costs for the investors.
[31] Cf. e.g. Axelson U., P. Stromberg, M.Weisbach (2009); Metrick A., A. Yasuda (2010); Jenkinson T., M. Kim, H. Weisbach (2021).

1) **Management fees** constitute most of the fixed income insofar as, collected throughout the life of the fund, they are often determined by reference to a fixed rate of 2% per annum (compared to performance fees of 20%). Typically based on committed capital during the investment period (e.g. the first five years) then on the NAV or on amounts invested, during the divestment period (e.g. the following five years). Over a lifespan of 10 years, these costs may therefore represent more than 20% of the capital employed.
   - There are variations, however. These rates can be degressive. Two criteria may apply, in particular: the rate level may decline after the investment period (e.g. by 25 basis points after five years), and the base to which it applies may change from the committed capital to the net capital invested, on completion of the original investment period.
   - On a portfolio of funds invested in the United States and Europe, Metrick A., A. Yasuda (2010) documented median fixed fees of 12% for LBO funds and 17.75% for venture capital funds, with a weak dispersion of fees around the median.

   In addition, the amount of attendance fees received from target investment companies is in practice, at least in Europe, typically deducted from the management fees of the funds concerned.

2) **Carried interest** remunerates positive fund performances and constitutes most of the variable fees. It generally involves, as observed in France, an investment by the management teams in the fund, which interests them in its performance and therefore helps to align their interest with that of the investors. Its level depends above all on four criteria:
   a. The calculation base (e.g. the cumulative disposal value of the fund's investments (exit value) minus the committed capital);
   b. The rate applied (20% is the standard);[32]
   c. The minimum (out)performance level (hurdle rate) determines the collection of these fees;
   d. Possible spreading of fee collection over time according to a fixed schedule.

   Generally, carried interest is debited only once the LPs have recouped all the committed capital and reached the hurdle, in accordance with a contractual schedule (*waterfall*) specifying the order of priority of distributions among the fund managers and the LPs, [33] the expected investment "outperformance" above a threshold of around 8% (hurdle rate). Contractual provisions may allow for an early fee collection, e.g. for some US VC funds[34]. They possibly include clawback provisions in the case of underperformance of the fund subsequent to fee collection.

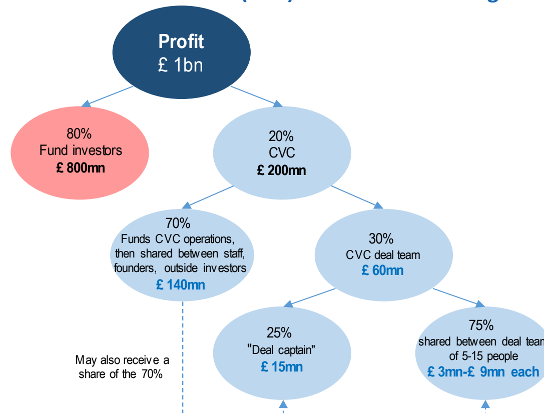
3) **Other fees**, notably transaction and monitoring fees invoiced by LBO funds:[35]

   - **Transaction fees**: When an LBO fund buys or sells shares of a target company, it can in some cases invoice transaction fees for the execution service rendered (e.g. from 1% to 2% of the value of the transaction) [36], which include, but are not restricted to, underwriting fees and arrangement fees. These costs are often borne solely by the LPs, but can also be shared with the GPs in accordance with a pre-established breakdown (e.g. 50/50).

   - Monitoring fees for the companies owned (typically 1% to 5% of their EBITDA each year). Charged to the companies in the portfolio, they specifically remunerate the fund's management of the companies. They indirectly affect the LPs (asymmetrically compared with the GP) [37] given that their collection correspondingly reduces the performance of the fund's investments.
   Note here that in the United States, the SEC's proposed rule of 09/02/22 planned to increase transparency regarding the various types of fees collected, particularly for these types of ancillary fees.[38]

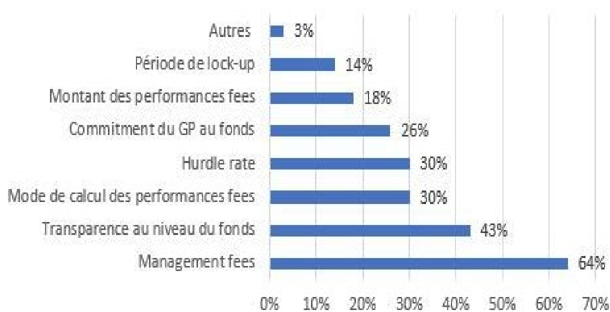
[32] This rate is practised by nearly all LBO funds. It varies more (is often lower) for VC funds.
[33] Cf. e.g. Wylie A. (DLA Piper), M. Barry, J. Terblanche (Maples Group) (2021), English and Luxembourg private equity funds key features.
[34] The French tax rules governing the collection of carried interest limit the benefits drawn from an early collection. The receipt of capital gains from the fund before the other investors have recovered their investment leads to dissuasive taxation of the sums received.
[35] Phalippou L., C. Rauch, M. Umber (2016) describes in detail and discusses this type of fees. Cf. 3.2.3.1 on the conflicts of interest they create.
[36]In France, transaction costs can be borne by the fund (thus by all unitholders) only if paid to third parties (investment banks, advisers, etc.).
[37] Metrick A., A. Yasako (2010) considered these fees as being borne 80% by LPs and 20% by GPs.
[38] The proposal mentions that: "*private fund advisers and their related persons charge a number of fees and expenses to the fund's portfolio companies. These can include consulting fees, monitoring fees, servicing fees, transaction fees, director's fees, and others.*"

Figure 12: Example of allocation of the profits of a private equity fund (CVC) after fees and charges



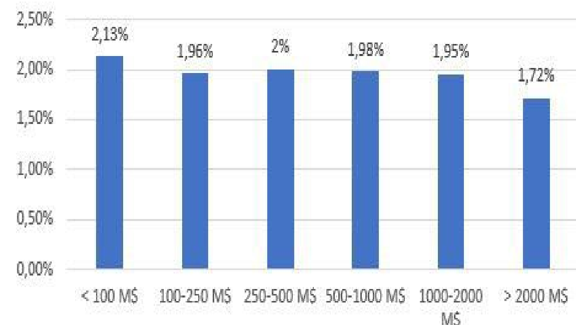
Source: FT Research[39]. Note: indicative, the precise proportions vary from one deal to another. Deal captain: in charge of the deal (some have more than one). He (she) may, with the approval of a senior manager, recommend a profit allocation.

Figure 13: Alignment of interest: LPs' suggestions for improvement



Source: Preqin, Les Echos Capital Finance, 08/04/19.

Figure 14: Average management fees by LBO fund size in 2017-2018



Source: Preqin, Les Echos Capital Finance, 08/04/19.

The levels and transparency of fees[40] are the subject of numerous questions and debates particularly in the United States, for which academic research on this point is richer. Phalippou L. (2020) estimated at $230 billion the carried interest collected on the funds raised between 2006 and 2015 and deduced that this has a considerable impact on the funds' performance that could limit the interest of this type of investment for the target institutional investors (e.g. pension funds).

Begenau J., E. Siriwardane (2022) stressed that, although US VC funds are in strong demand and have less fluctuation in their pricing than LBO funds[41], the substantial differences in fees invoiced by private equity funds to US public pension funds reveal that the level of these fees depends heavily on investors' bargaining power, so the sponsors have significant power for discretionary fixing of prices.

These concerns are found in an investor survey (Figure 13) conducted at a global level, which shows that their main desire (64% of survey respondents) is to increase the alignment of the interests of GPs and fund managers with those of the fundholders concerning the management fee charged to them. The third subject of concern (30% of survey respondents) concerns the method for calculation of performance fees and for setting the hurdle rate.

[39] "CVC's biggest bet yet: the fiercely private buyout firm set to go public. Europe's largest private equity company plans an IPO with implications for the entire sector"; *Financial Times*; 19/10/22.

[40] Since the fees affect the performance of the LPs, transparency regarding fees helps to manage the conflict of interest between the fiduciary duties and remuneration of the fund manager. Cf. 3.1.3.1 for more details on the nature of these conflicts of interest.

[41] According to the authors, fees can be negotiated downward in exchange for higher carried interest or other advantages (e.g. access to co-investment), and the empirical findings are conditional on the quality of the available data.

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Faced with this situation, in 2016 the Institutional Limited Partners Association (ILPA) established a standard reporting framework.[42] For want of fuller information, however, investors' ability to demand compliance with these good practices has apparently remained limited[43].

2.1.1.3 Historically, two main categories: LBO and VC funds[44]

- **Venture Capital (VC) funds**

VC has been recognised in its modern form since the post-World War II period.[45] A VC fund aims to finance small firms in the growth phase,[46] especially when they have limited access to bank credit. In order to realise a capital gain on the sale in several years, the fund therefore acquires (unlisted) equity stakes in firms in the initial stage of their development[47] (e.g. during the first call for funds of start-ups), which have strong growth prospects and are therefore often innovative (hence the sector specialisations noted in 1.3). Invest Europe makes a distinction here between funds for firms at the start of life ("early-stage") and funds for companies that are not yet profitable following initial financing rounds (C or D) ("late-stage")[48]. The funds' equity stakes enable them to influence the management of the target firms, but generally remain minority interests,[49] with several VC funds often investing simultaneously to meet financing requirements. In return, this can diversify the portfolio risk of the funds in question across several target firms.

As indicated by their name and the limited availability of bank financing, VC investments are generally very risky. This can also encourage a search for diversification, e.g. via funds of funds, for cautious investors or for retail investors.[50]

- **Leveraged BuyOut (LBO) funds**

LBO funds finance more mature firms, hence larger deals, and *de facto* together account for most private equity assets under management (cf. 1.1). They take control of the target companies by acquiring majority stakes, with leverage generally of an order of magnitude of 60%[51], in order to exert effective influence on their management (Figure 15). The horizon of investments in target companies is generally 4 to 5 years, that of the funds of about 10 years, but it may be extended[52], and investors' horizon may be longer (i.e. giving rise to re-investment in new funds). Conversely, secondary transactions allow[53] the funds to dispose (transfer the property) of their stakes to other funds or groups of funds. LBO funds are often limited partnerships, and entail complex financial engineering for purposes of tax, legal and regulatory optimisation, which leads them to invest via vehicles created for this purpose (Special Purpose Vehicles or SPVs). The fund's gross return is based on the fund manager's ability to influence the management of the target companies and on the investments' exposure to leverage (cf. 3.3).

Note that the VC segment contains numerous small funds, whereas, conversely, LBO funds together account for most of the amounts of private equity financing in far larger vehicles. The purpose of and risks entailed in VC and LBO funds are therefore very different (Table 5). And yet, with the formation of unicorns (start-ups valued at more than $1 billion), the average size of VC funds has increased significantly,[54] and we note the significant expansion of

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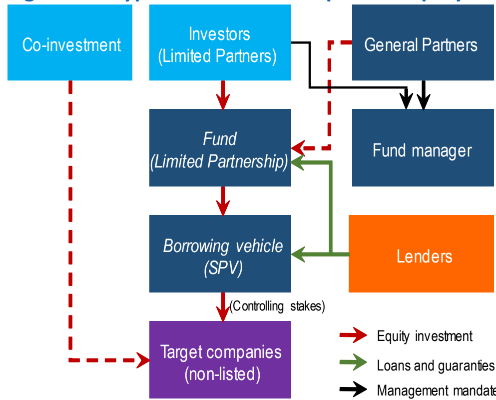
[42] ILPA (2019); Best-Practices; Quarterly reporting standards.
[43] Note, however, that the remuneration of GPs is regulated in Europe, and that it is measured in France via an annual reporting to the AMF containing in particular declarative requirements relating to the remuneration of risk takers.
[44] A narrow concept of private equity can limit it to the LBO. The concept here includes both the VC, the LBO and the intermediate segments.
[45] E.g., G. Doriot's *American Research and Development Corp.* raised $3.5m in 1946 to invest in firms whose technologies, developed during the war, could be used in civil applications (e.g. medical uses for X-rays). He is attributed with founding the first VC fund.
[46] This type of financing is therefore not new. In the modern limited partnership form, its appearance in the United States is dated to the immediate post-war period – e.g. to the launch of the American Research and Development Corporation (ARD) fund which raised $3.5 million in 1946 to invest in firms marketing technologies developed during the Second World War.
[47] "*Firms typically use VC to expand, break into new markets, and grow faster. Although only relevant to a smaller group, VC is essential for the growth of innovative firms*". https://single-market-economy.ec.europa.eu/access-finance/policy-areas/venture-capital_fr
[48] At a finer level of detail, France Invest considers VC sub-categories (seed capital, early stage, late stage, development capital) in addition to the Growth and the Capital transmission categories (further "Buy-Out" and "Buy-In" subcategories relate to the broad LBO notion used here).
[49] Cf. e.g. BPI France.
[50] In France, Bpifrance funds have given retail investors access to private equity (see footnote 191).
[51] This percentage reflects primarily the practice for larger deals (see e.g. S&P LCD and PitchBook (2022)).
[52] In principle one or two times by one year in France.
[53] Jenkinson T., M. Sousa (2015) stresses the importance of this: "*For over 43% of the exits, private equity funds sold to each other*").
[54] According to PitchBook, the average (median) size of late-stage VC funds rose from $431.7m ($65.0m) in 2020 to $775.4m ($114.5m) in 2021.

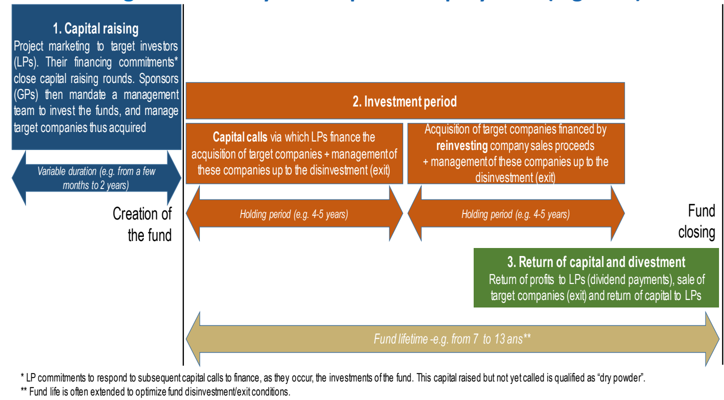
the Growth segment, mid-way between LBO and VC (cf. 2.2.2.1). Moreover, the stages in the life of the funds (Figure 16) are relatively similar, although the time for which companies are held in the portfolio may be longer for VC funds.

Figure 15: Typical structure of a private equity fund



Source: AMF.

Figure 16: Life cycle of a private equity fund (e.g. LBO)



Source: AMF.

Table 5: Differences between VC and LBO funds

	Venture Capital	Leveraged Buy-Out
Target firms	Firms in an initial development stage, innovative and/or with high growth potential	Mature firms, in distress or with growth potential.
Value added by the fund manager	Assessment/management of the high risks this type of investment: selection aiming at the rare exponential growth targets. Support in their initial development phases (e.g. seed money, formation). Provision of advice, monitoring of their financial management (e.g. their cash burn rate).	In general, streamlining the operations and financial management of the targets (e.g. by requiring its own managers, encouraging debt leveraging, payments of dividends to the fund). Frequent influence on the strategy and external growth operations (M&A).
Amount of investments	On average, less than €10 million	From several million to several billion dollars
Fraction of the targets acquired	Minority but active interest, possibly coupled with minority stakes of other funds.	Majority/controlling interest
Capital withdrawal	Generally after 4 years	After 6 to 10 years
Financing	By equity capital, often ahead of bank financing	By equity capital and debt

2.1.1.4 Additional criteria are needed for an operational definition

However, additional criteria are necessary to make the definition of private equity operational. For its statistical purposes,[55] the Invest Europe association takes into account, for example:

- **The strategy and degree of specialisation** of the funds. These funds are first distinguished from hedge funds, with shorter investment horizons, whose trading strategies in theory target markets for more liquid assets. However, certain hedge fund and private equity strategies may be similar. Examples are the "*rescue-turnaround*" (private equity) and "*distressed*" (hedge fund) strategies focused on company bailouts[56]. The main distinction between them is the timeframe in which the stakes are intended to be sold. Real estate and infrastructure funds and project financing are also excluded. And yet, other specialist strategies, e.g. in *clean tech*, are included within the scope of private equity;

[55] To avoid double counting, the definition also excludes funds of funds, but includes their co-investments (direct investments of funds of funds in companies held by private equity funds). Secondary funds, resulting from sales of the stakes of "primary" funds, are also excluded. The terminology of Invest Europe research methodology and definitions dated 07/12/22 is authoritative.

[56] NB: in Anglo-Saxon countries, hedge funds ("debt-for-trading" strategies) and private debt funds ("loan-to-own" strategies) can invest in distressed debt as part of filing procedures balance sheets specific to their law of insolvency proceedings. In France, turnaround funds tend to acquire companies in difficulty before they file for bankruptcy, e.g. for a symbolic €1 and restructure them outside the courts. There is then no competition with hedge funds. Increasingly, they are also turning to so-called complex operations where companies are not necessarily in immediate difficulty but need support to bounce back.

- **The target financing stage**: Private equity is distinguished notably from incubators[57] which operate during the maturing phase of an innovative project, e.g. ahead of business start-up;
- **The relative significance of target financing by debt**. Private debt and venture credit funds and crowdlending are ruled out. Conversely, mezzanine funds, for example, are included – like the similar German "silent partnerships";
- **The provision of third-party management services**. Holding companies (even groups such as Wendel or Kering), in particular, are not considered as investment funds.
- **The nature of the sponsors/investors**. Individuals investing on their own account, "business angels", are also excluded. Certain own-account private equity activities of banks or non-financial companies, very similar to private equity, are included, however. In particular, the corporate venture capital (CVC) funds through which non-financial companies invest in start-ups[58] are organised, managed and operate in a very similar way to VC funds and are considered as such.
- **Certain direct investments** (i.e. dedicated co-investment funds investing in funds of funds of private equity investment firms are also considered as private equity activities.[59]

One notes here, in particular, the sensitivity of the selected scope to the capability of institutional players to carry out private equity activities on their own account, and the classification of these activities in relation to third-party management. Fang L., V. Ivashina, J. Lerner (2013) showed, in this respect, a growing use of this capability by institutional investors.[60] DaRin M., L. Phalippou (2014) also indicated, for example, that in the Netherlands small pension funds tend to grant management mandates to larger pension funds (e.g. APG or PGGM) to invest in alternative asset classes.

2.1.2 Significant specific national features and offshore structures

Over the past decades, a framework specific to private equity has been developed in France, which integrates specific requirements into various types of legal vehicles adapted to particular investment and financing needs. There are funds for the general public, e.g. open-ended (such as so-called evergreen funds), and institutional funds, with various financing objectives (Box 1). Although fund managers are, in Europe, subject to the requirements of the AIFM Directive, the legal form of private equity funds is **far from being completely standardised[61]**. In fact, private equity is not positively defined by the directive, the description of this investment strategy being left to the free assessment of the fund manager in reporting to the regulator (cf. 2.3). Except for the most regulated funds, these are generally limited partnerships. The sponsors and/or managers generally invest alongside the fund's investors. The asset management company may manage several funds, as legal entities in their own right having distinct managers. It is in principle a separate entity owned by the sponsors, which manages all their funds, thus centralising the management of families of funds and concentrating the enterprise value in a single entity. Based on the activities carried out, the manager may be required to register as such (*investment adviser*).

The funds take **multiple national forms**, often associated with specific tax and regulatory incentives, and are sometimes available to the general public. Institutional funds, however, are often vehicles under Anglo-Saxon law or adapting to national law forms based on Anglo-Saxon law. Fiscal and regulatory incentives facilitate offshore domiciliation, e.g. in the British Cayman Islands or Virgin Islands for distribution in the United States and in the rest of the world. Note, however, that the domiciliation issue may be relativised when arrangements are made for investment via vehicles (cf. SPVs of Figure 15) which are themselves domiciled in jurisdictions, which also make it possible to benefit from the incentives in question. In addition to the British Cayman Islands and Virgin Islands, the tax domiciles preferred historically are, in the EU, Ireland and Luxembourg and, more recently, Singapore in Asia. That said, in the United States, the most common legal form of private equity funds is the limited partnership of

[57] NB : many incubators do actually not finance companies.
[58] CVC funds are included in the perimeter since they invest jointly in funds managed by asset management companies.
[59] Some LPs that have it, exercise a right of co-investment when the deal exceeds the capacity of the main fund. The AMC can then propose to invest *pari passu* with the main fund via a co-investment fund. The AMC and its teams can invest in a minority manner, e.g. to reproduce the same rights to carried interest as in the main fund. The AMC does not co-invest directly: this is generally prohibited by the procedures for managing conflicts of interest.
[60] "*In the PE setting, institutional investors are increasingly eschewing intermediaries in favour of direct investments*".
[61] The European EuVECA regimes, for VC funds, and ELTIF 2promote a certain standardization of AIF investment criteria. See 2.3.4 on ELTIF 2.

the State of Delaware. The latter, formed by registering a Certificate of Limited Partnership with the State of Delaware, is legally separate until its winding up and liquidation, under the terms of the partnership agreement (*Limited Partnership Agreement*, LPA), i.e. generally after 10 years barring earlier termination recognised by the Delaware legislation. Generally, these companies do not have to register as such with a public authority if they comply with the applicable exemptions or exceptions, but they may have to if their partners perform management activities in other states of the United States.

In the United Kingdom, the most common limited partnership must be registered by virtue of the *Limited Partnerships Act* of 1907, and at least one partner must be based mainly in the UK. The liability of the investor partners is limited to the capital invested provided that they do not take part in its management. There are also forms of listed investment vehicles known as investment trusts, which are nevertheless restricted by Article 842 of the 1988 Tax Act, which prohibits distributions of capital gains in the form of dividends. However, with restrictions on the amounts and the nature of the companies in which they invest, VC investment trusts offer retail investors non-taxable income and capital gains.

In continental Europe, like the Anglo-Saxon structures, the legal form of the funds is not very restrictive, and hence very specific to its purpose: specified by the contract establishing the fund, this structure reflects the balance of interests of the stakeholders, but also largely fiscal and regulatory considerations. In this context, the funds adopt forms specific to the jurisdictions where they are established. Despite the limitations of the available statistics, Luxembourg (Figure 17, Figure 18)[62] appears as the leading tax domicile for private equity funds in Europe. The relevant legal forms are described in Box 2. In France, AMF information on Sociétés de Libre Partenariat (SLPs: French limited partnerships) show that they account for a major proportion of institutional investment, but other French investment vehicles also exist, as described in Box 1 and Annex 1.

Figure 17: Assets of private equity funds in the EU by tax domicile (EUR million)

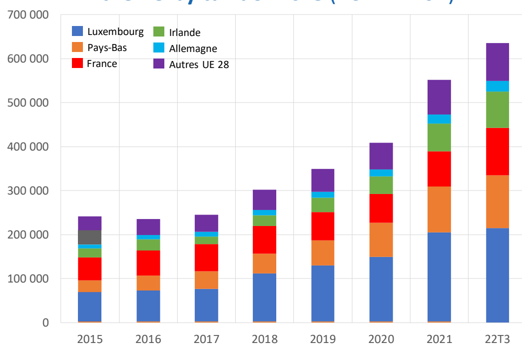
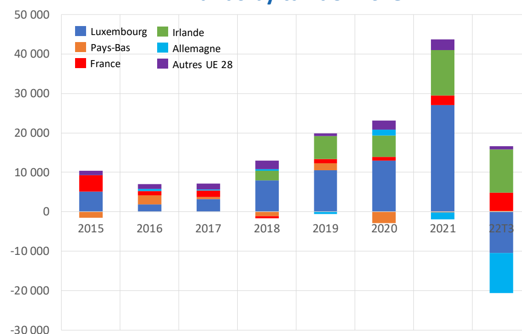


Figure 18: Net inflows of private equity funds by tax domicile



Source: ECB, AMF. Note: 15 jurisdictions report non-null data (Germany, Austria, Cyprus, Spain, Estonia, Finland, France, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal).

- **Varying degrees of requirements**

Lastly, note that, of the investment vehicles subject to regulatory and/or supervisory requirements, those least strictly regulated have seen strong growth in Europe. In Luxembourg, for example, the change in the Luxembourg framework mentioned in Box 2 meant that RAIFs (created in 2016[63] and representing 30% of the number of funds in 2021) are preferred to the SICARs and SIFs which prevailed until then, because the applicable requirements no longer concern the product, which does not have to be declared before being marketed,[64] but merely its manager (authorised as an AIFM).[65]

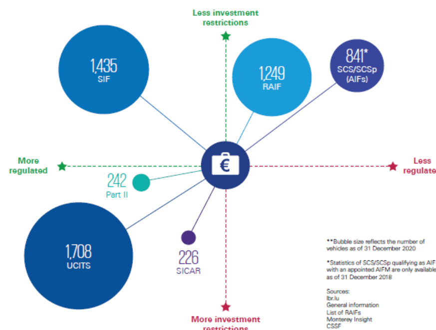
[62] According to the ECB, at the end of 2021 Luxembourg domiciled €202.5 billion worth of private equity funds and the Netherlands €104.1 billion, or 58.0% of the €528.7bn inventoried in the EU. According to Deloitte (2019), the assets under management of Luxembourg private equity funds were €148 billion vs €127.7 billion according to the ECB.

[63] Regulated indirectly (cf. e.g. KPMG (2020), Deloitte (2019), LPEA (2021)), the RAIFs remain subject to the diversification rules of the SIFs (pursuant to Circular 07/309 of the CSSF).

[64] However, notification of the CSSF is necessary to receive the European passport.

[65] Like French SLPs.

Figure 19: Luxembourg fund universe
(number of funds at end-2020)



Source: lbr.lu, Monterey Insight, CSSF, KPMG (2020).

Box 1: Private equity vehicles in France The private equity fund offer in France is characterised by the position initially held by certain regulated vehicles (FPCI, FCPR, FCPI, FIP and FPS funds). A description of these investment vehicles is proposed in Annex 1.

The French supervision data confirms the resurgence of private equity activity in 2021;[66] the number of funds marketed increased by 91 in 2021, boosted by a sharp increase in fund creations. The funds' assets under management (**Table 6**) increased by 17.0% year on year to €92.9 billion at end-2021. The 86.0% proportion of assets of the Fonds Professionnels de Capital Investissement (FPCIs) in these total assets remained stable. The number of products intended for retail investors, particularly *evergreen* funds (FCPRs open to subscriptions-redemptions),[67] decreased to 27 new funds, versus 45 in 2020. The 16 launches (AMF authorisations) of private equity investment firms in 2021 represented a relatively stable proportion (since 2017), 2/5th of new asset management companies in France. In 2020, 72% of these new asset management companies had been the result of entrepreneurial initiatives. In 2021, half of these launches were at the initiative of groups, financial or non-financial.[68]

Table 6: Assets under management of French private equity funds* (EUR million)

	2020	2021	March-22	2021/2020 (%)
Fonds Professionnels de Capital Investissement (FPCI)	68,242	79,880	80,962	17.1
Fonds Communs de Placement à Risque (FCPR)	1,844	2,616	2,807	41.9
Fonds Professionnels Spécialisés (FPS)*	3,714	4,824	4,939	29.9
Fonds Communs de Placement dans l'Innovation (FCPI)	3,104	3,159	2,995	1.8
Fonds d'Investissement de Proximité (FIP)	2,509	2,439	2,386	-2.8
Total	**79,412**	**92,919**	**94,103**	**17.0**

Source: AMF. * Note: excluding Sociétés de Libre Partenariat (SLPs). Regarding the various fund categories, cf. 2.1. * Excluding SLPs.

Sociétés de Libre Partenariat (SLPs: French limited partnerships)

SLPs, established by the "Macron" Act of 6 August 2015,[69] introduce in the category of French professional specialised investment funds (FPSs) structures similar to Anglo-Saxon private equity funds, allowing investment in any legally recognised asset, lending and borrowing. Like for other French Alternative Investment Funds (AIFs), the assets of the SLPs must be held in custody by a depositary and audited by a statutory auditor. In the form of a limited partnership, the SLP is placed under the responsibility of managing partners (*General Partners*) by sponsors (*Limited Partners*). The ownership of its assets must be established by a method recognised by French law, be the subject of no other surety than those granted for the purposes of management of the fund, and their valuation must be reliable. The SLP may grant loans and, on the liabilities side, there is nothing to prevent it from borrowing. Governed by French law, the SLP is subject to the requirements applicable to European AIFs, but may under certain conditions only be subject to registration (not authorization) conditions. . The capacity of sponsor is reserved for three categories of people: professional investors, natural or legal persons related to the SLP,[70] and investors whose initial subscription is at least EUR 100,000. Possibly resulting from the conversion of other funds, and possibly consisting of separate asset compartments (isolated legally and in the accounts), the SLP offers very great statutory flexibility for its promoters. In particular, different rights concerning all or part of the company or its products (e.g. dividends and liquidation surplus) may be assigned to the units issued, which in particular allows GPs to receive carried interest.[71] Moreover, in the event of bankruptcy, the SLP is not subject to bankruptcy rules, so the managers thereby evade legal action to make up insufficient assets.

[66] Cf. 2.1.1 for a description of the existing types of funds.
[67] These funds generally have a lifetime of 99 years. Two were formed in 2021, vs six in 2020, bringing their total number to 12.
[68] Cf. AMF Annual Report, 2021.
[69] Law for economic growth, activity and equal opportunities, the so-called "Macron" Act.
[70] Manager, investment firm and managing partners, as well as any company performing management-related services investing directly or indirectly, together with their managers, their employees or any natural or legal person acting on their account.
[71] Couret A., P. Le Roux, J. Sutour (2015) also specifies the advantageous tax status of SLPs, aligned with that of FPS funds and possibly FCPR funds for tax purposes which extends "*to members of the SLP management team the system of carried interest for the securities, bought or*

To take into account the specific features of this type of investment vehicle, the AMF has amended Book IV of its General Regulation.[72] Moreover, the AMF has included the SLP in the scope of Instruction DOC-2012-06 on the procedures for declaration, amendments, establishment of a prospectus and periodic reporting of FPS funds and professional private equity funds. As such, the SLP is subject to certain reporting requirements.[73] Transparency regarding the amount of the contribution and the capacity of the partners is not required.

The number of SLPs in France has increased significantly since the creation of the status in 2015. There were 489 SLPs in 2022.[74]

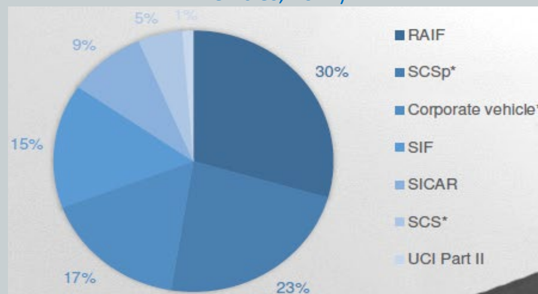
Box 2: Private equity vehicles in Luxembourg According to the Luxembourg Private Equity & Venture Capital Association (LPEA),[75] Luxembourg private equity AIFs governed by European law[76] (14% of the vehicles are not)[77] take the following legal forms, which are not necessarily closed-ended:

Vehicles subject to the authorisation of the CSSF:
- Sociétés d'investissement en capital-risque (SICARs), Act of 15/06/04
- SIFs (Specialized Investment Funds), Act of 13/02/07, reserved for well-informed investors
- UCIs (Part II), non-UCITS retail funds (2010 Act, Part II)
- Reserved Alternative Investment Funds (RAIFs), Act of 23/07/16

"Unregulated" vehicles (subject merely to the obligation of registration):
- Société en Commandite Spécialisée (SCSp)
- Société en Commandite Simple (SCS)
- Other commercial companies (e.g. SCA, SA, SARL)

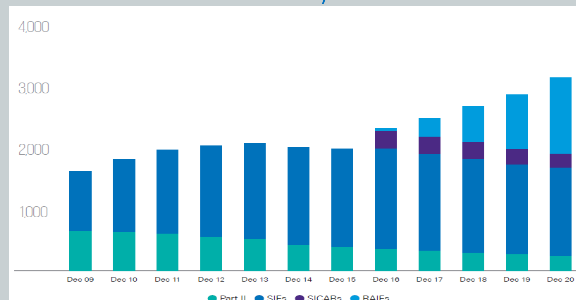
The breakdown by the number of vehicles (Figure 20) underscores the importance of RAIFs and SCS(p) funds, representing 58% of the number of funds. Since the institutional vehicles have larger assets, the weight of funds that are not highly regulated, or not at all, is probably more significant in terms of amounts.

Figure 20: Luxembourg private equity vehicles (number of vehicles, 2021)



Source: LPEA. Note: Not subject to the product of Luxembourg legal regime.

Figure 21: Number of AIFs identified (excluding SCS/SCSp funds)



Source: KPMG (2020).

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subscribed to, to which are attached financial rights different from those of the ordinary unitholders (taxation of profits according to the common law rules on capital gains on disposals of transferable securities)".

[72] The official order certifying these changes was published in the Official Journal of 8/10/15.

[73] Cf. Annex 1-2.1 of AMF Instruction DOC 2012 06 specifying the reporting obligations of an FPS fund (or a sub-fund) in the form of an SLP relating to the information to be made available to investors (Art. 21 of the Instruction), including, where applicable, the latest annual report, the latest net asset value or price of the AIF unit and the AIF's past performance.

[74] As at 17/05/22.

[75] The funds covered include debt funds (20%), infrastructure funds (13%) and funds of funds (20%). LBO (28%) and VC (19%) funds therefore represent less than half of the funds.

[76] Two-thirds of the GPs under review are authorised as AIFMs versus half three years ago.

[77] The LPEA notes: "*14% have a minimum part of their structures as non-AIF which in most cases is represented as SPVs*".

2.2 An industry that is often not well known, in a phase of rapid growth and development

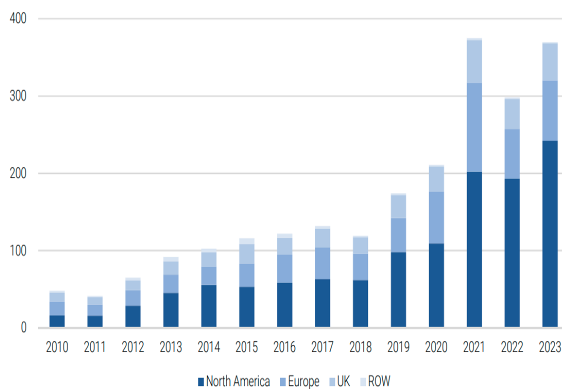
2.2.1 The available information mainly concerns listed asset management companies

Despite being represented by historically well-established professional associations, and the visibility entailed by the stock-exchange listing of the biggest global players,[78] the private equity industry is still often little known[79]. In Europe, for example, AIFMD reporting (although this directive primarily concerns fund managers) and the resulting statistical reports[80] are focused on the products and the strategies employed. They do not form views on the players, the demographics of this population, its structure (geographic, by category, size, etc.) or its profitability.[81] Some estimates by researchers admittedly report large industry profits received by a small number of individuals in the United States,[82] but political investigations and debates[83] illustrate the limitations of the available information[84].

Some indications are given by consultants. Preqin, for example, in reports sold to industry practitioners,[85] counts 3,085 law firms on the global level in private finance, 1,896 private capital placement agents, 677 private capital fund administrators, and 4,236 private capital fund managers in the process of fundraising.

Precise accounting indications are also given concerning listed private equity investment firms, which include major players in the sector (Table 8). Their market capitalisation increased significantly in recent years (Figure 22, Table 7), amounting to $369.6 billion at 31/07/23. Note here that the LPX 50 index of leading private equity investment firms traded at end-July 2023 around 21.5% below the value of its assets (price-to-book ratio less than 1), compared with a premium of around 20% between 2003 and 2007.

Figure 22: Market capitalisation of listed private equity investment firms (EUR bn)



Source: LPX AG Listed Private Equity Barometer; 31/10/22.

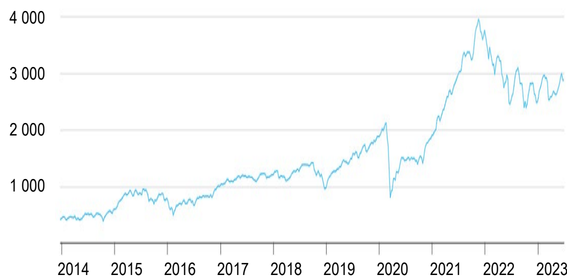
Table 7: Investment style and regional allocation

Investment Style Allocation	
Direct Private Equity	39.22%
Direct Private Mezzanine	40.20%
Private Equity Fund Manager	11.76%
Private Equity Fund of Funds	8.82%
Total	100.00%

North America	62.30%
Europe	26.48%
UK	7.95%
RoW	3.27%
Total	100.00%

[78] Apollo, Blackstone, Blue Owl, Carlyle, KKR and TPG, for example, are monitored by financial analysts (cf. e.g. by PitchBook).
[79] In France, asset management companies report annually to the AMF via an annual information sheet (FRA) – collecting statistical information (incl. on the workforce, financial indicators, own funds, ancillary activities, location of branches and representative offices, categories of investors, distributions, variable compensation, assets under management) of the AMCs and an annual control report (RAC) on their control framework. This is supplemented, if necessary, by specific requests. This information is used in particular in the AMF annual report and in the Key asset management figures. This source could make it possible to extend this analysis with a focus on France.
[80] Cf. e.g. ESMA (2022); EU Alternative Investment Funds; ESMA Annual Statistical Report.
[81] The AMF's French Asset management key figures illustrates the form of a possible monitoring of this area. Failing a "positive" regulatory definition, the aim would be above all to characterise the activities (the "job types") of private equity, interfacing the roles of sponsor, investor, portfolio manager, adviser and debt financing, not to mention the numerous, often outsourced ancillary services (legal, depositary, etc.), and to identify the entities conducting them. A cross-check with supervised entities – e.g. AIFMs in Europe– would be especially enlightening.
[82] According to Phalippou L. (2020) "*the estimated total performance fee (Carry) collected by (..) PE funds is estimated to be $230bn, most of which goes to a relatively small number of individuals. The number of private equity multibillionaires rose from 3 in 2005 to 22 in 2020*". Private equity billionaires are identified by the media (e.g. Forbes; "The 25 richest people in private equity", Business Insider, 02/03/16).
[83] Cf. e.g. debates conducted in the British House of Commons (*House of Commons Treasury Committee* (2007)) and in the US House of Representatives (U.S. HR FSC (2019a,b).
[84] In Europe, article 22 of AIFMD requires a mention in the annual management reports of the fixed and variable remuneration of the different categories of AMC staff. It includes, among other things: the total amount of remuneration for the financial year, broken down into fixed and variable remuneration paid by the manager to his staff, the number of beneficiaries, and, where applicable, the carried interest paid by the AIF; the aggregate amount of remuneration, broken down between senior executives and members of the manager's staff whose activities have a significant impact on the risk profile of the AIF.
[85] Preqin Ferguson Partners (2022), Private Capital Compensation and Employment Review.

Figure 23: Listed private equity index (Total Return)



Source: LPX AG Listed Private Equity Barometer; 31/07/23.

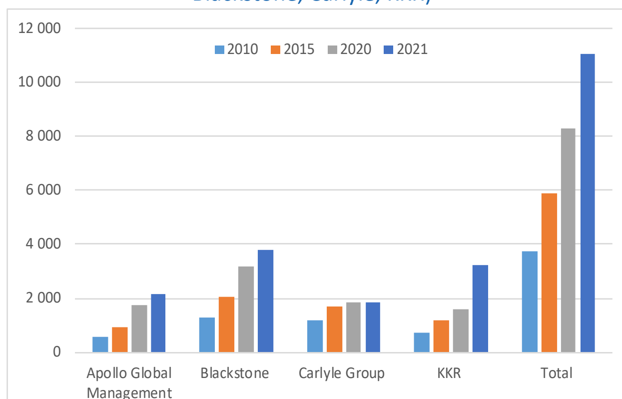
Table 8: 10 largest capitalisations of the LPX 50 index

Top 10 Companies by Weight in the LPX50	Weight
Partners Group Holding Ag	8.55%
Blackstone Group Inc	7.84%
Apollo Global Management Inc	7.43%
KKR & Co Inc	7.42%
3i Group PLC	7.36%
EQT AB	5.29%
The Carlyle Group Inc	4.65%
Ares Capital Corp	4.31%
Ares Management Corp	4.30%
FS KKR Capital Corp	3.55%

Stock market indices[86] identify the leading (US) players among them. They indicate a high performance over the past 20 years (cf. e.g. Table 7, Figure 23), with significant cyclicality, characterised, for example, by sharp corrections in 2007-2008 and since 2020.

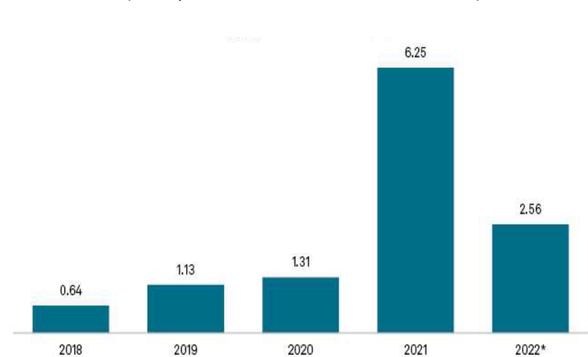
The number of employees of the leading listed private equity investment firms was traditionally small, as attested by historical data on the number of employees of the "Big 4" (Apollo, Blackstone, Carlyle, KKR, Figure 24), but their growth has accelerated sharply and the LinkedIn social media identifies 275,000 people indicating private equity as their main industry.[87] Although the changes partly reflect a sector consolidation attested by an unprecedented amount of merger and acquisition deals in 2021 (Figure 25), the sector is also growing organically. A continuing increase can be observed in the number of investment firms, notably related to entrepreneurial projects, a driver of employment growth in the sector. In France, for example, investment firms promoting projects relating to private equity and infrastructure investment accounted for 38% of the authorisations issued by the AMF in 2021, lending impetus to the growth in the number of investment firms in France.[88] 52% of these authorisations concerned entrepreneurial projects.

Figure 24: Number of employees of the "Big 4" (Apollo, Blackstone, Carlyle, KKR)



Source: Macrotrends.net, AMF.

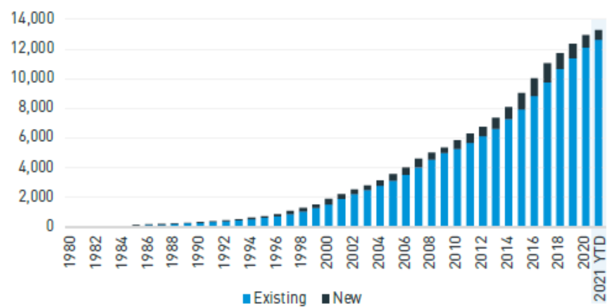
Figure 25: Acquisitions by private equity investment firms (Europe and North America, USD bn)



Source: S&P Global. Notes: at 22/06/22, including VC.

[86] E.g. the LPX 50, Red Rocks Global Listed Private Equity, and S&P Listed Private Equity indices are ETF underlyings. MSCI PIMFA Private Investor and FTSE Private Investor are less specifically focused on private equity.
[87] Many factors distort this estimate (reporting bias), because in principle LinkedIn does not cover the entire industry and serves above all for job seeking. For want of fuller information, Phalippou L. (2020) makes an assumption of 100,000 people on this basis.
[88] Cf. section on Monitoring of market participants, p. 65 of the AMF Annual Report, 2021. Asset management key figures in 2020 adds certain information on French private equity investment firms.

Figure 26 : Number of active private capital investment firms



Source: Preqin. Note: by year of the first fund raised. Includes companies managing separate managed accounts

Figure 27 : Share prices of the "Big 4"
(01/01/18 = 100)

Source: Datastream/AMF

2.2.2 Transformations: expansion, consolidation, innovation and increasing complexity

Apart from the industry characteristics mentioned previously, several factors attest changes in the businesses of private equity. Firstly, the nature of the management services is changing. The product ranges can be subdivided more systematically and continually between VC and LBO funds, with the emergence of Growth funds, and an extension to other types of private finance management, namely debt funds and real estate and infrastructure funds. Secondly, the management of cash flows and the specific needs of LPs (in particular their demand for liquidity) entails resorting to financing operations (e.g. bridge financing), [89] refinancing operations (e.g. secondaries),[90] and numerous tools reflecting the increasing complexity of management techniques.

2.2.2.1 Emergence of Growth funds: a continuum between VC and LBO funds

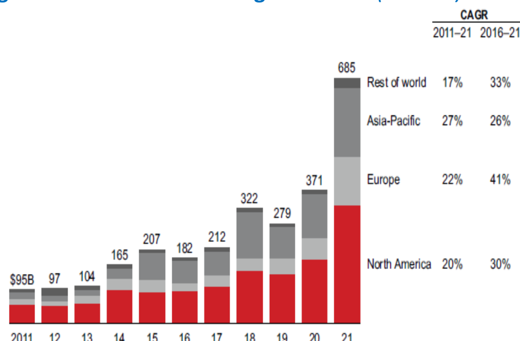
Within private equity, Growth funds, mid-way between VC and LBO,[91] have emerged in recent years, with their assets increasing by 47.3% in 2021 (+194.5% since 2018). This fund category thus now represents almost half of the VC assets under management globally ($1,218 billion vs $2,578 billion in 2022, Figure 1) with similar proportions in the United States ($494 billion vs $1,068 billion) and in Europe ($109 billion vs $201 billion).

In France, the emergence of Growth funds has added to the pronounced growth of VC (development capital).

This segment has expanded especially in Asia, which accounted for 43.1%[92] of the AUM of Growth funds worldwide in 2022, whereas it accounted for 28.4% of the global AUM of private equity as a whole. The expansion of the Growth segment is attested, moreover, by the growth in its activity, as shown by the increase in the amounts of transactions executed by these funds (Figure 28).

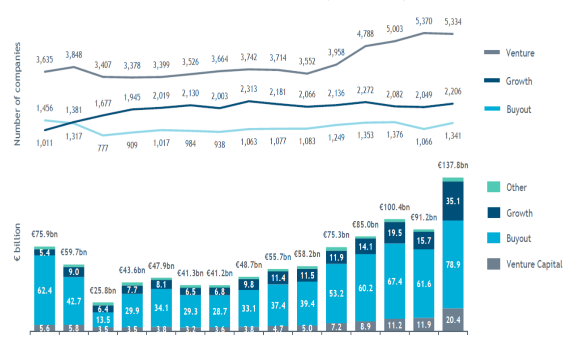
[89] Funds' use of short-term credit lines to finance everyday operations, cf. 3.2.3.
[90] Deals allowing the funds to sell their shares to other funds.
[91] Growth equity (GE) finances more mature and larger firms than VC. The expected sources of profitability are in principle related to the firms' capacity for increasing their scale of production, with execution and management risks, whereas VC aims above all at the profitable launching of commercially viable products or services in new markets, which is usually more risky. GE tends to invest for periods of 3-7 years, less than those of VC (5-10 years).
[92] This ratio was 51.4% in 2021, which reflects the indicator's sensitivity to exchange-rate effects.

Figure 28: Amount of transactions executed by growth funds and late-stage VC funds *(USD bn)*



Source: PitchBook, Bain.

Figure 29: Amounts of private equity investments and number of funds (EUR bn)



Source: Invest Europe. NB: "Other" includes turnaround/rescue and substitute funds.

2.2.2.2 Development of related activities (credit, real estate, infrastructure, SPACs)

- **Development of debt funds**

Debt funds expanded after the banks withdrew from the leveraged loan market during the great financial crisis (e.g., in Europe, the withdrawal of Royal Bank of Scotland, then the leading lender to LBOs).[93] According to PitchBook,[94] these funds raised $191.2 billion in 2021, or 12.1% more than in 2020, close to the all-time peak of $201.7 billion in 2017. Their AUM reached $1,293 billion in 2021 (Figure 30), close to that of VC in the United States. The investment strategies of these funds vary,[95] but are characterised above all by their investment in unlisted debt and/or their lending. This rapid expansion boosted that of certain players in this market segment, especially Apollo and Blackstone among the "Big 4" (Figure 32, Figure 34),[96] but also of new players such as Elliott which in a few years has become a major sponsor of private finance funds, whereas it was initially limited to activist hedge fund strategies.

In France, these debt funds typically take the form of professional specialised investment funds (FPS funds), professional private equity funds (FPCIs) [97] and financing organisations (securitisation organisations – "OTs", or specialised financial institutions – "OFSs") that can grant loans to businesses, or categories of alternative investment funds which can grant credit (origination).[98][99]

[93] According to the FSOC (2022), "*Private credit, defined as direct lending by nonbanks to nonfinancial businesses, makes up a growing segment of nonfinancial business lending. Estimates place the size of the global private credit market at over $1.2 trn as of year-end 2021, up from roughly $600 bn five years earlier*".

[94] PitchBook; 2021 Annual Global Private Debt Report; 15/02/22. NB: major variations in estimates of these funds' assets under management, e.g. by McKinsey/Preqin ($1,188bn) and PitchBook ($1,293bn) at mid-2021, are probably due to differences in data scope.

[95] As per Munday S., W. Hu, T. True, J. Zhang (2018); Performance of private credit funds: A first look; The Journal of Alternative Investments 21-2, 31-51, private credit funds "*can include business development companies (BDCs), mezzanine funds, distressed funds, special situations funds, direct lending funds, and various other strategies like structured credit vehicles or multi-credit strategy funds, among others. Definitions of private credit can also be expanded to include syndicated leveraged loan funds, venture debt and peer-to-peer lending platforms (…)*". BDCs, which are investment funds subject to the Investment Company Act in the United States, are designed to invest (at least 70% of their assets) in SMEs with a market capitalisation of less than USD 250m. These vehicles often use leverage and are generally listed on the stock exchange.

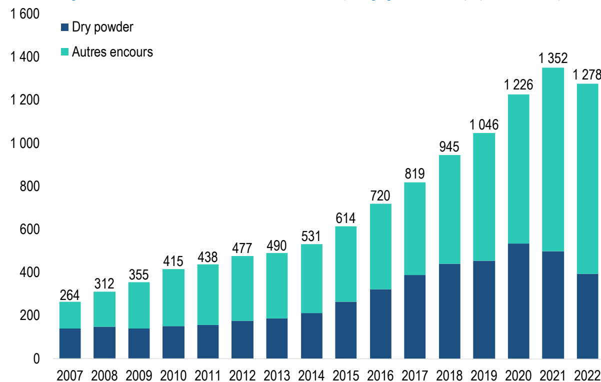
[96] Blackstone's credit activities have been one of its chief growth divisions.

[97] FPCIs in principle only grant loans on an ancillary basis, e.g. mezzanine debt in the form of convertible bonds.

[98] Possibility introduced by Art. 27 of the revised Budget Act (loi de finances) for 2015 specified by Decree 20161587 of 24/11/16. The conditions of exercise of the lending business are specified by the Monetary and Financial Code (Art. L. 214-154 (FPS), 214160 (FPCI), L. 214169 in the version from 01/01/16 to 02/01/18 (OT), L. 2141751, V (OT) and L. 214 1901, V (OFS) in their version applicable since 03/01/18, 2142031 to R. 2142039 (FPS), R. 2142061 (FPCI), R. 214234 (OT) and R. 2142401 (OFS)), the AMF General Regulation and AMF Instruction 201602 "Organisation of AMCs for the management of AIFs which grant loans", of 27/06/16, updated on 17/12/19.
Art. 423362 to 423364 applicable to FPS funds and, referenced by Art. 42356, to FPCIs and, referenced by Art. 425A, to specialised financial institutions (OFSs).

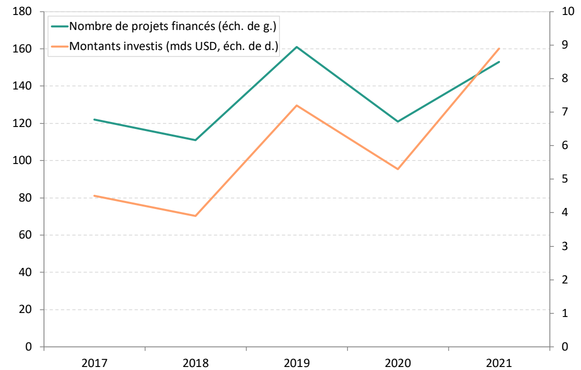
[99] Based on the findings of a series of SPOT inspections, the AMF noted that the quality of the lending arrangements of five inspected AMCs varies, notably according to the conditions of those companies' involvement in this asset class. Generally, the management processes are present, but potential improvements have been identified, e.g. adjustment of the procedures and traceability, or alignment of practices with regulatory requirements. Review of SPOT inspections on Lending (27/10/21).

Figure 30: Private debt funds – assets under management and capital raised for investment (dry powder) (USD bn)



Source: Pitchbook.

Figure 31: Activity of infrastructure funds domiciled in France (USD bn)



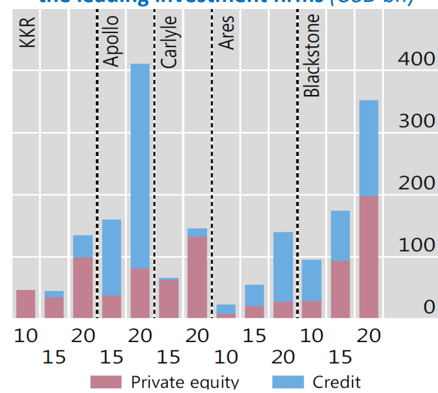
Source: France Invest.

Table 9: Main qualitative characteristics of direct lending

Advantages	Risks
•Direct access to management teams can result in more in-depth due diligence •Greater flexibility to meet borrower specific needs •Opportunity to structure more attractive terms and conditions for lenders because of lack of competition (covenants, amortization, rate) •Ability to capture origination and prepayment fees as incremental sources of return	•Lower liquidity •Greater price uncertainty •Higher credit risk inherent in small and mid-size companies •Greater structural complexity – harder to evaluate risks •Limited observable performance track-record to evaluate managers •Fund level leverage can obfuscate asset level returns and portfolio credit risk

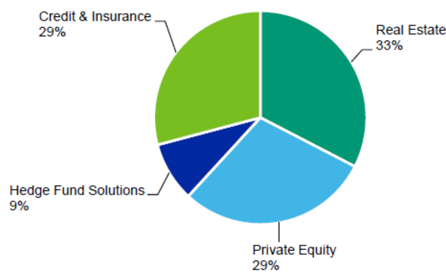
Source: Munday S., W. Hu, T. True, J. Zhang (2018); Performance of private credit funds: A first look; The Journal of Alternative Investments 21-2, 31-51.

Figure 32: AUM of private equity and private credit funds of the leading investment firms *(USD bn)*



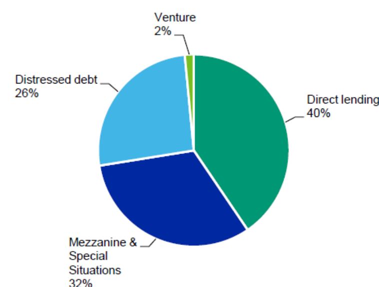
Source: Aramonte S., F. Avalos (2021). NB: Credit: private credit when reported separately, otherwise total credit activities.

Figure 33: Structure of the $915.5 billion of assets managed by Blackstone (as at 31/03/22)



Source: Blackstone, Moody's (2022a).

Figure 34: Structure of private credit (as at 30/06/21)



Source: Moody's (2022b).

- **Development of infrastructure and natural resources funds**

In 2022, on the global level, infrastructure and natural resources funds also established fund inflow records ($158 billion),[100] while the volume of transactions fell from their record in 2021 ($446 billion). Driven by commodity markets, their performance helped to increase their AUM to $1,273 billion at mid-2022 (+14.0%, following +28.3% in 2021) (Figure 1). Infrastructure funds are developing notably as a result of two trends. One concerns sector allocations, as ESG and technological criteria play an increasing role. In 2021, 50% of trading volumes were devoted to alternative energies and information technologies vs 30% in 2007. Furthermore, the infrastructure concept is

[100] This increase in funds raised was especially marked in Europe.

being extended to new sectors, sometimes "unconventional" (*cleantech*, *infratech*, the provision of services, modular medical healthcare units, airport security systems, etc.). The other trend concerns the industry, as specialist fund managers give way to the leading private equity players, which target a broader institutional client base, with the expectation of higher returns in a shorter time frame.

Table 10: Forecast asset allocation by institutional investors in 2022

Alternatives	Increase	No Change	Decrease
Infrastructure	53%	44%	3%
Private Debt	43%	48%	9%
Private equity	41%	50%	9%
Absolute Return Strategies	34%	55%	11%
Real Estate / REITs	33%	52%	7%
Cryptocurrency	28%	62%	10%
Other	25%	75%	NA
Commodities	23%	66%	11%
Gold/Precious Metals	22%	67%	11%

Source: Natixis IM (2022) Global Institutional Investor Outlook. CoreData Research 21Q4 survey of 500 institutional investors in 29 countries in North/Latin America, Asia, Europe and the Middle East.

In France, promoted by a concentrated industry (38 investment firms), according to France Invest infrastructure funds received €17.2 billion in inflows in 2021, to be compared with about €10bn on average in the past four years (€5bn in 2020) (Figure 31).

- **Development of SPACs**

The development of SPACs is separate from but related to that of private equity. A special complementarity appears when private equity funds find opportunities for the sale of assets on the stock market. Box 3 clarifies the nature of the links between these types of activities[101].

Box 3: SPACs and private equity SPACs, listed on the stock exchange, appear at first sight as complementary to private equity: by acquiring and listing its stakes, they enable it to divest, i.e. to withdraw their capital from the target companies via an acquisition or merger (*initial business combination*, IBC). Indeed, in the first half of 2021, 16% of private equity exits took place via SPACs (source: EY), representing $84 billion in divestments (Bain & Co).[102] In Europe, over the same period, 66 listings of companies held by private equity funds via SPACs raised €72.7 billion (i.e. twice as much as in the same period of the previous year).

However, management of a SPAC is also in many respects similar to that of a private equity fund.

Legally subject to debate, their classification as an AIF opposes two arguments. The SPAC can in theory be considered as a "collective investment undertaking" (...) "raising capital from a number of investors" in accordance with a "defined investment policy" (AIFMD Art. 4 §1(a)). If, however, controlled by their investors, they have a specific commercial purpose, for want of a "defined investment policy", they are considered as "holding companies" exempted from the provisions of the AIFMD (Art. 2 §3(a)).

Economically, the SPAC operator provides a service of identification/selection/acquisition of unlisted targets similar to that of a (secondary) private equity fund manager in the investment phase. Based on Debevoise & Plimpton (2017), for a private equity fund manager, the following reasons for sponsoring a SPAC are identified: i) to acquire 20% of the SPAC post-IPO (*promote*) and realise potential gains post-IBC; ii) to refinance private equity assets in the stock market (capital withdrawal) while limiting market risks (by comparison with an IPO) and price uncertainty; iii) to provide investors in the SPAC with liquidity that would not otherwise be available; iii) to co-invest, e.g. together with private equity funds, with less leverage and more equity capital; iv) to acquire larger targets or avoid the statutory constraints of funds (e.g. fund size objectives, sector constraints, etc.).

It is recognised in practice that "*The sponsors (...) of SPACs (...) are usually well known entrepreneurs or private equity firms. Blackstone, Apollo, TPG Capital and several other renowned private equity firms have all acted as sponsors. (...), the role of sponsor is now increasingly ensured by professional companies*" (Zukova V. (2022)).

Particularly if they are conducted simultaneously with private equity management, the activities of a SPAC sponsor create conflicts of interest: "*LPs have questioned whether SPACs can distract private equity managers from focusing on their fund's core investment strategy, with many buyout groups using the same teams internally. To allay their concerns, some private equity funds are considering ways in which they can share the upside with their investors, by placing a SPAC inside of their funds, or by negotiating a co-investment with the shell company, an EY report in April noted*".[103]

[101] On SPACs, see e.g. the 2022 AMF Market and risk outlook (section 1.2.3) and Grillet-Aubert L. (2021).
[102] Cf. Private Equity News; Private equity keeps the SPAC train running; 23/08/21.
[103] Cf. also *Private Equity News; Private equity keeps the SPAC train running*; 23/08/21.

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Two aspects have crystallised the conflicts of interest of SPAC promoters: the opacity and magnitude of SPAC management fees on the one hand, and the valuation of their acquisitions on the other hand (Klausner et al. (2022); Gahng et al. (2021), de Juvigny B. (2021), Grillet-Aubert L. (2021)). For SPACs, like for private equity secondary transactions, very high valuations have resulted in systematic heavy losses for investors in SPACs, especially post-IBC in the United States (Klausner et al. (2022); Gahng et al. (2021)).

2.2.2.3 Increasingly complex deals

There are several possible explanations for the reduction in the rate of private equity fund closures observed despite the high levels of valuation, such as the expectation of higher performances than those that could be achieved in a short time frame or the difficulty in finding financing in the primary equity markets.[104] In any case, it has been concomitant[105] with significant growth in the refinancing of funds by secondary funds (continuation funds)[106,107] (Figure 35 and Figure 36), operations which had previously often been confined to the specific transfer to a new investor of the fund units (and the associated rights and commitments) of an existing investor (Limited Partner, LP). While these operations (secondaries) enable the LPs to liquidate all or part of their equity stakes, and to satisfy LP demands, they now also effectively reflect the desire of the managers (General Partners, GPs) to dispose of portfolios entirely, and their needs for refinancing and liquidity. They generally involve increasingly complex transactions,[108] often going hand-in-hand with portfolio restructuring and asset disposals (strip sales), the establishment of refinancing structures (e.g. preferred equity), or taking a hybrid form in which the sale by the GP to a new LP of stakes in an existing fund is accompanied by the commitment of said LP to invest in a new fund (*stapled sales*). For example, preferred equity structures make it possible to raise funds from certain investors in return for preferred stakes in the capital, i.e. senior equity compared with the ordinary shares of the LPs, and giving entitlement to a preferred yield based on holding a specific portfolio or certain assets.

To optimise their liquidity management, the funds tend to use bridge financing.[109] These short-term credit lines[110] meet cash requirements and temporarily substitute for fundraising from LPs. This practice has become widespread, with an extension of the maturity of loans[111], and the "creativity" of the lenders, increasingly private debt funds, has been decried[112] (cf. discussions in Section 3.). These various transactions entail choices which can create conflicts of interest, e.g. concerning the valuation of the assets divested, allocation of the revenues from asset disposals among exiting and remaining investors, and the remuneration of the fund managers.[113] More generally, the development of secondary transactions extends the length of time for which private equity funds are held,

[104] The AMF's Markets and Risk Outlook has regularly stressed the scale of the phenomenon of market attrition. The 2020 edition (Chapter 1) shows that this attrition was more acute during the Covid crisis, in France and in Europe (cf. 4.3).

[105] In France, however, the end-of-life management of funds open to individuals has not led to increased reliance on continuation funds.

[106] In this case, the assets of an existing fund are transferred to a new fund (continuation fund), usually managed by the same GP. The LPs of the pre-existing fund have the temporary option of selling all or part of their stakes in the fund to other LPs, existing or new. The fund created thus extends the existence of the initial portfolio by changing its investor base if necessary. Other types of secondary operations have also been growing (IOSCO (2023)). We distinguish in particular between secondary transactions initiated by the LP (LP-led) and those initiated by the GP (GP-led), which are increasingly frequent.

[107] We also note a heavy concentration of secondaries in a limited number of large deals (Figure 35).

[108] Clifford Chance (2019, 2020); Decoding the secondary market -Parts I, II, III & IV.

[109] Bridge financing is generally secured by the investment of the LPs. Other forms of financing for the funds (e.g. preferred equity) may be secured by the investments in the portfolio (PitchBook (2020), Oaktree Capital (Marks H. (2017)).

[110] In theory three months, but in practice often longer. According to Oaktree Capital (Marks H. (2017)), cited by Ivashina V., B. Vallée (2020), usually credit "*must be repaid in the early or middle part of the fund's life (unless extended), although terms are beginning to lengthen*". In Europe, AIFMD prohibits the use of credits of more than 12 months (otherwise the fund is reclassified as a leveraged fund). In practice, "*banks grant a short-term uncommitted facility (12 months) renewable during the fund investment period, on the basis of a pricing of 150 to 200 bp payable when the line is redeemed (and not all 3 months, as usually). Due to the duration of less than 1 year and the "uncommitted" nature of equity bridge financing (EBF), a lending institution does not have to carry the line in its balance sheet and is thus able to offer an attractive pricing (both in terms of margin and arrangement fees) To determine the amount it is willing to lend and thus set a coverage ratio (i.e. ratio between the amount of the facility and the contribution commitments made by the LPs), the bank scrupulously studies the quality of the subscribers (rating, etc.), and therefore the associated default risks. On this basis, the commitments must generally cover approximately 150% of the amount of the equity bridge*". "*EBF: a powerful and effective tool for managing capital calls*" Les Echos 22/09/14.

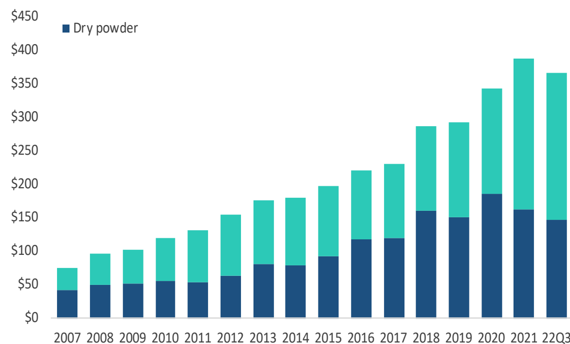
[111] In Europe, it remains however in general of less than one year.

[112] Cf. e.g. "Bridge Financing and Facilities in Private Equity"; Majumder B., Frost Brown Todd; 16/12/21.

[113] Clifford Chance and certain industry representatives point to a debate on the subject.

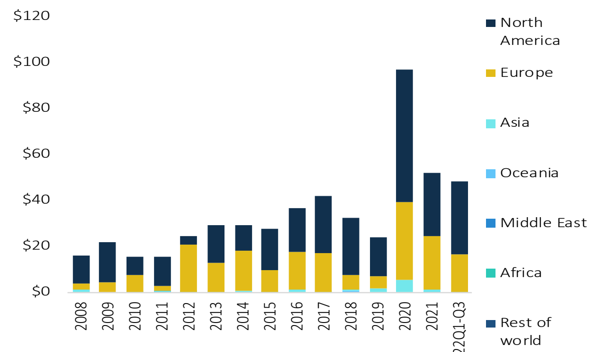
which tends to reduce the potential returns, e.g. if the new funds take over assets at valuation levels that are already high.[114] Conversely, a greater maturity of the targets is likely to reduce related risks.

Figure 35: Amounts of private equity secondary transactions (USD bn)



Source: PitchBook (2023).

Figure 36: Capital raised by secondary funds (USD bn)



Source: PitchBook (2023).

2.2.2.4 Increasing "vertical" integration, particularly with the insurance sector

For more than a decade, primarily in the U.S., private equity firms have undertaken to acquire insurance (and reinsurance) companies. This increases their assets under management, enables them to obtain financing regularly and predictably,[115] and accessorily to receive numerous commissions and related revenues.[116] Insurance companies in pursuit of return – under a liability constraint in a low-interest-rate environment[117] – have found there, in particular: i) sources of profitability (hence also of risk) for their investments; ii) the opportunity to reduce their capital charges (see below); and iii) sources of economies of scale, given that this trend consolidates the sector. According to the NAIC (2022), at end-2021, US insurers[118] owned by private equity firms accounted for a total of $472 billion worth of assets, 37% more than in 2019, and ten times the 2011 figure.[119] This represented only 6% of the $8 trillion of the insurance sector in the United States, but the importance of the links between private equity and insurance is also underscored by the fact that: i) the life insurance stakes of the five largest private equity firms (by AUM) represent 15% to 50% of their assets under management;[120] ii) alliances are also established by the acquisition of minority stakes (e.g. via SPVs)[121] or through partnerships;[122] iii) the specialists predict even closer ties between these industries, as attested by the pace of transactions in progress or planned.[123]

This trend has resulted in increased risk taking, as attested by a sharp rise in the unconventional long-term investments and fixed-income investments of the insurance companies concerned (private ABS, RMBS and CMBS, structured debt) in the United States.[124,125] Some US insurers have exploited regulatory arbitrage opportunities

[114] The increased use of these transactions has been disparaged by industry players, some even speaking of Ponzi schemes (cf. e.g. Private equity vs. holdings cotées (Alpha Value); Zone Bourse; 26/07/19; *Amundi warns that parts of private equity market resemble 'Ponzi schemes'; Financial Times; 01/06/22; Private equity may become a 'pyramid scheme', warns Danish pension fund ATP; Financial Times*; 20/09/22.
[115] McKinsey (2022b) suggests a concept of "permanent capital" in this respect.
[116] EY notes "*a large number of synergies*" in these alliances. Blackstone emphasises the benefits of the group's acquisition of Resolution Life. According to McKinsey (2022b), "*For some public carriers, these transactions have generated near-instantaneous expansion of their price–earnings multiple*".
[117] Regarding this, it is important, in particular, to identify the assets relating to pension fund management and their nature (DC vs DB pension plans).
[118] According to McKinsey (2022b), "Such investors now own over USD 900bn of life and annuity assets in Western Europe and North America".
[119] Best (2021), McKinsey (2022b).
[120] McKinsey (2022b). From a perspective focusing on insurers' CLO holdings, Risk.net; KKR, Ares and the Bermudan arbitrage; 14/03/22 stresses the acquisition of Athene by Apollo, (of a majority stake) of Global Atlantic by KKR and of Aspida (formerly F&G Reinsurance) by Ares Management.
[121] E.g. Carlyle owns 10% of the SPV that acquired (for USD 2.1bn) Fortitude in 2021, Blackstone 6% of that which bought Resolution Life.
[122] Cf. S&P Market Intelligence (2023).
[123] Cf. e.g. S&P Market Intelligence (2023), McKinsey (2022b).
[124] RMBS, CMBS, CLO, ABS: securitisation vehicles backed respectively by residential mortgages, commercial mortgages, corporate loans and other non-monetary assets.
[125] Cf. NAIC (2022).

and located their operations in Bermuda – a jurisdiction which enjoys regulatory equivalence regimes:[126] the capital charges there are similar for CLOs and corporate bonds, and the excess returns from CLOs can be used to reduce their liabilities. These arrangements have mainly profited insurers held by private equity, whose insurance companies invest more in CLOs (which, moreover, mostly refinance the debt of private equity target companies) than the conventional players in the sector. Questions have also been raised regarding supervision of the risks incurred. In this context, the United States Senate Committee on Banking, Housing, and Urban Affairs asked for a report to assess the investment strategies of insurers controlled by private equity, their impact on the protection of pension schemes and the ability of the authorities to estimate and manage the risks generated by these insurers. The supervisory authorities (the NAIC)[127] reported on initiatives in this area,[128] mentioning control of the risks in question,[129] but also further ongoing investigations concerning reporting of investments, assets held and provided as collateral, the reliance on rating agencies and implementation of the directives regarding the transfer of pension-related risks. The Senate Committee asked the NAIC and the Federal Insurance Office to continue to prioritise their work on these risks and to provide further reports on their progress.

Although a trend towards the takeover of insurance companies by private equity funds is also observed in Europe[130], it remains more limited, especially in France, and is likely to have very different implications[131].

2.3 An evolving regulatory framework

2.3.1 AIFMD: the European framework for private equity players

In Europe, the AIFM directive*[132]* applies to managers of AIFs even outside the EU, without any condition of size, whenever their AIFs are managed or marketed in the EU. Those managing less than €500m (when the fund has no significant leverage and when its investors have no right of redemption in the first five years, otherwise the threshold is €100m)[133] are nevertheless exempted from most of the AIFMD rules, i.e. they are subject merely to a simplified registration and declaration regime.[134] At a more granular level, certain AIFMD provisions apply at fund level, particularly on leverage and reporting. The latter also considers several categories of private equity funds.

[126] Equivalence granted in the United States in 2013, and in 2015 in Europe. NB: In Europe, insurers can use the extremely high returns from CLOs to reduce their liabilities, but the capital charges on these products apparently greatly limit their use. Cf. Risk.net *op. cit.*

[127] Steven Seitz, Director of the Federal Insurance Office within the Treasury Department and Kathleen Birrane, Commissioner of the Maryland Insurance Commission on behalf of the NAIC; insurance supervision in the United States takes place not at the federal level, but at the state level.

[128] Ms Birrane mentions 13 regulatory considerations related to the ability of states to adequately estimate the risks posed for insurers controlled by private equity and for conventional insurers having similar characteristics.

[129] According to Mr Seitz: (i) liquidity risk, (ii) credit risk and capital adequacy risk, (iii) the implications of offshore reinsurance and the interconnection between insurance markets in the United States and in Bermuda, and (iv) potential conflicts of interest.

[130] See section 3.5 of the AMF Markets and Risk Outlook (2023).

[131] The acquisition in France of April by KKR in 2023 is not representative, as it takes place in a very different institutional context from the U.S. – e.g. where the banking and insurance sectors are generally integrated, and pension financing frameworks very different.

[132] Directive 2011/61/EU of the European Parliament and of the Council on Alternative Investment Fund Managers of 8/06/11 (AIFMD).

[133] In France, to benefit from the approval exemption, following rules apply:
- the manager is below the threshold of 500-100 Mn EUR and does not propose redemption within less than 5 years;
- is aimed exclusively at professional clients within the meaning of the MiFID directive (allocating carried interests to its teams would, for example, prevent the GP from benefiting from this provision);
- does not manage any FIA whose category is named by the Monetary and Financial Code formed and regulated by the AMF (FPS, FPCI, etc.) therefore only manages "Other FIAs" (structured in the form of classic commercial companies, e.g. SAS).

[134] In 2009, the European Commission anticipated that: "*A threshold of €100 mn implies that roughly 30% of hedge fund managers, managing almost 90% of assets of EU domiciled hedge funds, would be covered by the Directive*".

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Box 4: AIFMD requirements

At the time of its authorisation, the fund manager must describe in detail its organisational structure, regulatory capital, compensation policy and financial projections, and provide information on the funds that it plans to manage.

- **Requirements:** The AIFMD stipulates in particular the obligation for the fund manager (AIFM) to:
  - Use a **depositary** to verify the ownership of the fund's assets, keep its records, monitor its cash position, and perform oversight functions, e.g. by ensuring the effective payment of dividends and carried interest.
  - Establish a procedure indicating the main characteristics of the **asset valuation** method. The valuation policies shall be reviewed at least once a year and before any change of investment strategy or investment in a new type of asset. Several valuation methods are considered, e.g. reference to (firm) prices on an active market, or using valuation models validated by a competent independent person (e.g. an auditor). The independence of the appraiser relative to asset management strands at the heart of this system.
  - Disclose **compensation** in the annual reports of the AIFs, more specifically the total compensation paid by the fund manager to its personnel and the carried interest paid by the fund, as well as the breakdown of the total compensation between fixed and variable.[135]
  - Take responsibility for compliance with the rules for **delegation of authority**, namely appoint service providers such as administrators, and retain responsibility for the performance of their functions. The level 2 rules (Art. 75) specify these arrangements, i.e. the rights that the AIFM must retain in order to ensure compliance with the rules by the delegate and in the event of sub-delegation.
  - Ensure **the operational and administrative separation of portfolio management and risk management**. A permanent risk management function identifies, measures and monitors all the risks of the AIFs' investment strategies, and those to which each AIF may be exposed. These arrangements are common to all the AIFs. However, specific arrangements limit consideration of the leverage of private equity funds (cf. 3.3): "*In particular for private equity and venture capital funds (...) leverage that exists at the level of a portfolio company is not intended to be included when referring to such financial or legal structures*" (Recital 78).[136]
  - **Manage conflicts of interest**: Ensure that no decision favours one fund manager compared with an AIF, one AIF compared with another AIF, or one investor compared with another investor. That requires separating incompatible duties and responsibilities within investment firms, with an obligation of heightened vigilance and transparency by putting in place independent risk assessment and management functions.
  - **Avoid asset stripping**: Best efforts must be made to prevent any distribution, capital reduction, buyback or acquisition of its own shares during two years after taking control of an unlisted company[137].
  - **Ensure transparency**: Provide the investors in each AIF managed or marketed in the EU with an annual report containing a balance sheet (or statement of assets and liabilities), a revenue and expense account (for each year), details of activities in the financial year and the (fixed and variable) compensation of the staff, their beneficiaries, and the carried interest paid.
  - **Fulfil reporting obligations**: Meet reporting requirements concerning the AIFM and the AIFs managed, the risk profile of the AIFs, their main exposures and risk concentrations, and their leverage and liquidity.
- **Revision of the AIFMD**

As part of the **revision of the AIFMD** initiated in 2021, the European Commission proposed amendments concerning, in particular:

- **Delegation of authority**: new reporting requirements and an increased role for ESMA in supervision of the delegation of authority, and clarification of the number of people who must be employed by the AIFM;
- **Origination** rules/loan liquidity: new liquidity management tools for open-ended funds;
- Reporting: additional fee disclosure requirements;
- Depositaries: the possibility of using a depositary located in another Member State.

These changes and new amendments have been discussed (trilogues). The directive's revision process resulted in a political agreement on July 19, 2023, the technical specifications are in progress, and the publication of a stabilized version of the text is therefore imminent.

Note that the authorisation of a fund manager by its competent national authority, and its compliance with the AIFMD requirements – i.e. with regard to capitalisation, custody and valuation of the assets, transparency with the regulator and investors, and compensation – enable it to manage and market funds throughout the EU by means of a single passport, which leads some managers whose funds are located below the stipulated thresholds to nevertheless opt, voluntarily, for the status of AIF (opt-in).[138]

[135] NB: To align the interests of the managers and investors, ESMA requires that clawback provisions should apply when the compensation agreement fixes a return-on-equity threshold (*hurdle rate*) to be exceeded before paying carried interest.
[136] "For AIFs whose core investment policy is to acquire control of non-listed companies or issuers, the AIFM shall not include in the calculation of the leverage any exposure that exists at the level of those non-listed companies and issuers provided that the AIF or the AIFM acting on behalf of the AIF does not have to bear potential losses beyond its investment in the respective company or issuer", Art. 6 of the Delegated Regulation of December 2012.
[137] See e.g. reference to article 30 of AIFMD by Linklaters du 03/06/23.
[138] Failing a passport, the distribution of the fund is subject to the private placement regime.

The AIFMD has made it possible to include in the regulatory scope funds which evaded the regulatory framework, e.g. Ireland's "1907 partnerships".[139] And yet, the specificity of the AIFMD requirements concerning private equity –within the broad perimeter of AIFs - is limited: its characterisation (private equity is not positively defined[140]), and the characterisation of its investment strategies (which, for example, do not recognise the LBO as such[141]) are *de facto* left to the free judgment of the reporting entity. Likewise, certain forms of leverage specific to private equity are not taken into account – only that located at the fund level strictly speaking (not that of the entire investment structure that could be put in place to acquire target companies – cf. 3.3.1).

Note that the Sustainable Finance Disclosure Regulation (SFDR[142], Box 5) also applies to private equity, even though its prescriptive nature is greatly limited by the criterion of proportionality (the size thresholds for asset management companies) on which depends the application of its rules.

Box 5: Provisions of the Sustainable Finance Disclosure Regulation (SFDR) Articles 3 to 5 of SFDR apply at the level of financial market participants (FMPs), a category of entities to which AIF managers belong.

Article 4 requires FMPs to publish an annual report on the consideration of the main negative impacts of their investment decisions on sustainability factors. These provisions are accompanied by a comply or explain mechanism: only FMPs with a size of more than 500 employees or which are the parent company of a group of more than 500 employees are required to publish this annual report. Smaller players can explain why they do not take these main negative impacts into account. FMPs had until June 30, 2023 to comply with Article 4 of SFDR and publish this report in accordance with the provisions set out in level 2 of SFDR[143].

FMPs must also be transparent about how sustainability risks are taken into account in their investment decisions (Article 3) and how their remuneration policies reflect the integration of these risks (Article 5).

As regards reporting at the level of all financial products:

- A comply or explain mechanism applies to take into account sustainability risks and their expected impact on the performance of the product concerned (Article 6);
- A comply or explain also applies to take account of the main negative impacts (Article 7).

In addition, it should be stressed that the reporting requirements depend also on the ambition displayed at the level of the financial product. In fact, this is the case for:

- A product with a sustainable investment objective ("Art.9"), for example with a greenhouse gas emissions reduction objective;
- A product promoting one or more environmental and/or social characteristics ("Art.8"). The notions of "characteristics" and "promotion " were clarified by the European Commission in July 2021[144].

⇨ These products known as Art.9 and Art.8 are subject to ex-ante and ex-post transparency requirements. Among them, reporting on the share of investments made in activities aligned with the European Green Taxonomy is planned.

⇨ Note that compliance with the provisions of Article 7 is not mandatory for products referred to as Art.9 and Art.8. It is also not possible for a product referred to as Art.6 to comply with the provisions of Article 7, as such compliance is an environmental and/or social characteristic leading de facto the product to fall within the scope of Article 8.

Finally, it is essential to remember that the provisions of SFDR relate only to the transparency of FMPs and financial products. Consequently, the "categories" of financial products Art.9 and Art.8 are not intended to be considered as labels.

2.3.2 Cross-border marketing and location of activities

From a geographical viewpoint, the regulatory scope is determined in Europe by the AIFMD marketing regime. Within this framework, an AIF managed by an authorised AMC (AIFM) may be marketed in Europe to professional clients within the framework of a passport mechanism, after notifying the AMC's competent authority. On the other hand, marketing to retail clients is a matter for the host Member State. The table below describes the

[139] See e.g. KPMG (2014); Navigate through AIFMD in Ireland.

[140] AIFMD does not positively describe any management strategy. On the other hand, its consideration of the specificities of private equity appears to be less, for example, than that of hedge funds.

[141] The AIFMD reporting distinguishes the categories: VC, Growth, Mezzanine, Multi-strategy and Other. The LBO, accounting for 69.8% of assets under management in 2022 in Europe according to McKinsey/Preqin, falls therefore within the residual "Other" category.

[142] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27/11/19 concerning the disclosure of information on sustainable development in the financial services sector.

[143] Delegated Regulation (UE) 2022/1288 of the European Commission of 06/04/22.

[144] Cf. reply to question 1 of section V of the consolidated Q&A.

procedures for marketing an AIF in France, without prejudging the applicable provisions different from those of the AIFMD (e.g. relating to the Prospectus Regulation).

Table 11 - Procedures for AIF marketing in France

		French asset management company		**Management company authorised in another Member State**	**Manager established in a third country**
		Not authorised under the AIFM Directive	**Authorised under the AIFM Directive**		
French AIF	**Professional clients**	As appropriate: authorisation, declaration or compliance with the provisions based on the Prospectus Regulation	Prior notification of marketing to the AMF, possibly as part of the authorisation, declaration or approval procedure	Marketing with a passport: prior notification to the authority regulating the AMC	Not applicable
	Retail clients		Prior marketing authorisation from the AMF, possibly as part of the authorisation, declaration or approval procedure	Prior authorisation from the AMF (mutual recognition agreement required)	Not applicable
FIA established in another Member State	**Professional clients**	Marketing impossible	Marketing with a passport: prior notification to the AMF	Marketing with a passport: prior notification to the authority regulating the asset management company	Marketing without a passport: prior authorisation from the AMF
	Retail clients		Prior authorisation from the AMF (mutual recognition agreement required)		
AIF established in a third country	**Professional clients**	Marketing impossible	Marketing without a passport: prior authorisation from the AMF		
	Retail clients		Prior authorisation from the AMF (in particular, mutual recognition agreement required)		

Source: AMF[145].

2.3.3 Certain activities similar to private equity are exempted from the AIFMD regime

The classification of activities as third-party asset management is key for assessing the degree of regulatory and supervisory requirements applicable to private equity investment vehicles and players. In Europe, within the AIFMD framework, this means first assessing for a given vehicle whether it "*raises capital from a number of investors in order to invest it, in accordance with a defined investment policy, in the interest of those investors*",[146,147] and checking that there is no effective operational involvement of the investors in the fund's management.[148] In particular, the following are not AIFs:[149] assets managed on a discretionary basis or by family offices (which are not classified as collective investment schemes),[150] or joint ventures and holding companies (within the meaning of the AIFMD), or pension plans and employee savings schemes, and insurance contracts. As regards private equity, four boundaries distinguish it from activities that are sometimes very similar, namely fund management:

- Discretionary management, which AIFMs are, moreover, by derogation, authorised to conduct, on a discretionary and personalised basis, along with their collective investment management activities;
- Family office, managing assets on a proprietary basis for high-net-worth individuals. However, it may carry out activities very similar to those of private equity. Some family offices, on the back of their success, have indeed developed third-party management activities (under applicable regimes, e.g. AIFMD);

[145] Cf. dedicated section of the AMF website.
[146] AIFMD Article 4 1.a i). Concerning the interpretation and transposition into French law, see AMF (2013), AIFMD Guide for asset management companies.
[147] UCITS are considered separately. Any investment fund not having UCITS status is deemed to be an AIF.
[148] According to Art. 5 of the AIFMD "*each AIF (…) [shall have] a single AIFM (…). The AIFM shall be either: a) an external manager, (…) b) where the legal form of the AIF permits an internal management and where the AIF's governing body chooses not to appoint an external AIFM, the AIF itself, which shall then be authorised as AIFM*".
[149] "(…) *this Directive should not apply to the management of pension funds; employee participation or savings schemes; supranational institutions; national central banks; national, regional and local governments and bodies or institutions which manage funds supporting social security and pension systems; securitisation special purpose entities; or insurance contracts and joint ventures*" AIFMD, Recital 8.
[150] "*Investment undertakings, such as family office vehicles which invest the private wealth of investors without raising external capital, should not be considered to be AIFs in accordance with this Directive.*" AIFMD, Recital 7.

- Pension funds which, while they are in principle above all commercial targets for private equity, can also, above a critical size, insource this type of management to minimise its cost;
- Corporate vehicles such as certain holding companies[151, 152] Several differences, however, distinguish holding companies from private equity funds, e.g. related to their listing on exchange, such as the lack of an investment time frame, portfolio transparency, and immediate liquidity. The question of the classification of corporate structures as AIFs has been posed in particular for vehicles such as SPACs (cf. Box 3).

In France, any AIF manager must be authorized as a portfolio management company. By way of derogation, an exclusive manager of "Other AIFs" (category including private equity funds), when it is intended only for professionals, must, under certain thresholds of managed assets, only register with the 'AMF[153]. The "Other AIFs", under these conditions, are not "required to appoint a depositary and to be managed by a portfolio management company"[154].
In Luxembourg in 2019, 83% of private equity funds[155] (91% of AUM) were managed by an AMC authorised under AIFMD and hence directly or indirectly subject to its regime (Deloitte (2019)), but only 63% (vs. 47 % en 2018) of Luxembourg GPs were authorised (4% more being in the process of requesting authorisation) as AIFM[156].

2.3.4 ELTIF 2: a regime favourable to private equity

Within the framework of the 2020 action plan for the Capital Markets Union, and notably in order to promote the long-term financing of infrastructure and the securities of unlisted companies and listed SMEs, the European Commission and co-legislators in 2015 introduced the "European Long-Term Investment Fund" label (ELTIF) (Regulation (EU) 2015/760).[157] European AIFs may, if they meet the conditions, benefit from the ELTIF label and the European passport for retail clients.

On 25 November 2021, to accelerate democratisation of the regime, the European Commission proposed amending the ELTIF framework, initiating a legislative process at the end of which European Regulation 2023/606, "ELTIF II", was formally enacted.[158] ELTIF II amends the provisions of the initial regime to increase its attractiveness, notably by the following measures (Table 12):

- The minimum ratio of an ELTIF's investments in eligible assets is reduced from 70% to 55% of its capital;
- European AIFs and UCITS become eligible for the investments of an ELTIF, which may be invested entirely in other funds (European ELTIF, EuVECA, EuSEF, UCITS and AIF) vs 20% previously;
- The minimum "entry ticket" of €10,000, for retail investors whose portfolio of financial instruments does not exceed €500,000, is eliminated.

[151] AIFMD 4.1) o) defines holding companies as "*a company with shareholdings in one or more other companies, the commercial purpose of which is to carry out a business strategy or strategies through its subsidiaries, associated companies or participations in order to contribute to their long-term value*" and which is either a company "*i) operating on its own account and whose shares are admitted to trading on a regulated market in the Union; or ii) not established for the main purpose of generating returns for its investors by means of divestment of its subsidiaries or associated companies, as evidenced in its annual report or other official documents*".
[152] Cf. inclusion by Europe Invest of Corporate Venture Capital funds in the statistical scope of private equity mentioned in 2.1.
[153] See AMF position Questions and answers relating to the transposition into French law of the AIFM-DOC-2013-22 directive. "Other AIFs": within the meaning of Art. L. 214-24 of the Monetary and Financial Code. Size threshold: under €100 mn in AuM after taking leverage into account or €500 mn without accounting for leverage.
[154] Cf. article L. 214-24 of the Financial and Monetary Code
[155] 86% of the number of funds in 2021 according to the Luxembourg Private Equity and Venture Capital Association (LPEA (2021)).
[156] Some other funds could actually be registered, however, if national schemes prior to the directive combined with the AIFMD regime.
[157] Regulation (EU) 2015/760 of the European Parliament and of the Council of 29 April 2015 on European long-term investment funds.
[158] Regulation (EU) 2023/606 of the European Parliament and of the Council of 15/03/23 amending Regulation (EU) 2015/760 published in the Official Journal of the European Union on 20/03/23, which will come into force on 10/01/24.

Table 12 – Main changes in the rules on the composition of ELTIF portfolios

	ELTIF 1.0	ELTIF 2.0
Minimum proportion of eligible assets	• 70% (the rest of the assets are invested as an UCITS)	• 55% (the rest of the assets are invested as an UCITS)
Cap on exposure to a single entity	• 10% of the assets invested in a single firm, a single real asset or a single fund • 5% for non-eligible assets (UCITS)	• Retail investors: ○ 20% of the assets invested in a single firm, a single real asset or a single fund. ○ 10% for non-eligible assets (UCITS) • Professional investors: no cap.
Cap on participation ratio	• 25% for an underlying fund • UCITS limits for the pocket of non-eligible assets	• 30% for an underlying fund except for professional investors or master-feeder structures • UCITS limits for the pocket of non-eligible assets.

Source: AMF.

Note that although ELTIFs are by nature closed to redemptions, they may depart from this rule and open up their units or shares for redemption whenever they meet the conditions of paragraph 2 of Article 18 of the Regulation. ESMA has been mandated to prepare technical standards specifying these provisions.

2.3.5 Changes in the US regulatory framework

Several decades of easing the regulatory constraints limiting unlisted equity financing have permitted and sustained the rapid growth of private equity (cf. 3.5 and Box 7). More recently, the expansion of the industry and of private equity led the Securities and Exchange Commission (SEC) in 2022 to propose strengthening the applicable regulatory framework. The aim of these legislative proposals is, on the one hand, to revise the reporting of private funds (*Private Funds Form*, called *Form PF*), e.g. to better assess the risks for financial stability, and, on the other hand, to adopt measures to increase investor protection[159].

As regards private equity (PE), these proposals aim in particular to:

- Obtain useful data for **systemic risk assessment** by the Financial Stability Oversight Council (FSOC), and for the SEC in its duties of investor protection. Reduce from $2bn to $1.5bn of AUM the reporting threshold for private equity investment firms to restore the industry's coverage ratio which prevailed at the initial adoption of the reporting requirements;
- Amend Section 4 of Form PF to collect additional information on the funds' strategies, their use of leverage, financing of the companies held in the portfolio, the levels of the capital structure of the target companies where the investment and restructuring and recapitalisation of these companies are performed;
- Inform the SEC and FSOC of situations of distress or instability affecting private equity funds, and in particular, within one business day, of events relating to secondary transactions, the exercise of clawback provisions, the withdrawal of a GP, the end of the investment period and the winding up of a fund;
- Add rules of transparency to investors regarding the performance of speculative funds (also applicable to hedge funds): require that investors provide standardised quarterly reporting, and a mandatory annual audit. Certain provisions specifically concern private equity: the proposed transparency extends to fees invoiced to investors, and the expenses of asset management companies. Other proposals concern the prohibition of certain invoiced fees, and preferential treatment of investors (particularly side letters).

Note that in 2019 the SEC had reminded the portfolio managers that it authorises (including private equity managers) of their fiduciary duties and prohibited contractual provisions authorising investors to waive the fiduciary duties of the manager or absolving him from any conflict of interest.[160] Concerns having been reiterated

[159] SEC Proposed Amendments to Form PF; 22/01/26 and SEC Proposes to Enhance Private Fund Investor Protection; 9/02/22.
[160] SEC interpretation regarding standard of conduct for investment advisers of 12/07/19. The SEC specified that such contractual waiver provisions are "*incompatible with the Investment Advisers Law, regardless of the client's sophistication*".

on this subject,[161] the new regulatory proposals have been supported by a reminder of the requirements in this regard[162] and accompanied by proposals for amendment of the compliance rules applicable to authorised fund managers with a view to ensuring that they document in writing the annual review of their compliance policies and procedures.

The importance of these regulatory proposals, was attested by the number of replies to the relevant public consultation.

Apart from this, Gary Gensler, Chairperson of the SEC, expressed his concerns about the effects of using private equity on market transparency and competition between the service providers within it, stating that: "*More competition and transparency could potentially provide greater efficiency for this important part of the capital markets*".[163]

Following its regulatory proposals, the SEC adopted in 2023 new rules applicable to private funds, and in particular private equity, "*designed to protect investors by increasing transparency, competition and efficiency in the private market funds*"[164]. These rules are the subject of a challenge by the industry[165].

3. RISKS FOR INVESTORS AND MARKETS

The following aims to present an initial systematic review of the risks falling within the remit of the market authorities likely to affect private equity, without always prejudging of the degree of their mitigation by the existing regimes, in particular when these are based on standards formulated by the market entities themselves[166]. Moreover, the observations are part of an international perspective and are not intended to qualify specifically the national (e.g. French) regimes, the analysis of which would require an extension of the investigation.

3.1 Preamble: identifying investors

3.1.1 Mainly institutional investors

Access to private equity funds is generally limited to qualified investors able to finance high initial investment amounts. This population includes institutional investors such as insurance companies, university endowment funds (i.e. U.S. endowment funds), pension funds, sovereign wealth funds and other government agencies, such as the Public Investment Bank (BPI) in France.

In the United States, the SEC provides statistics (Form PF) on the main types of investors in the $4,473 billion in private equity assets under management reported as at mid-2022 Table 13). It shows that they are predominantly held by pension funds (26.3%, especially those of civil servants (19.0%)) and sovereign wealth funds (10.6%). High Net Worth Individuals (HNWIs) account for a significant but smaller share of assets under management (7.7%, of which 5.9% are domiciled in the U.S.). This raises questions about the nature of private equity investment by private funds, which represents a major proportion of ownership (21.7%), and the significant residual item ("Other", 17.9%).

In Europe, information provided by the Invest Europe association (Figures 37, 38 and Figures 10, 11) provides indications of the main types of investors behind the inflows (funds raised).

[161] Cf. e.g. statement by Gary Gensler on 24/10/22: "*Sometimes, GPs seek waivers at the state level of their fiduciary duties to investors. I understand that many LPs have concerns about these waivers*".
[162] Private Fund advisers proposal. Statement in support of accountability enhancing updates; by SEC Commissioner C. Creenshaw; 9/02/22.
[163] "Competition and the two SECs" Remarks before the SIFMA annual meeting; Gary Gensler; 24/10/22. Prepared remarks at the Institutional Limited Partners Association summit; Gary Gensler; 10/11/21, had announced the series of regulatory reforms concerning private funds.
[164] In May 2023, the SEC strengthened its reporting obligations regarding large private equity funds to prevent systemic risks in the event of a significant event among these players. On August 23, 2023, the SEC adopted new rules and amendments to its existing rules: the improvement of transparency rules is accompanied in particular by rules governing GPs' preferential rights (e.g. side letters) given to some of their investors.
[165] Private asset managers sue to block 'unwarranted' SEC rules on disclosure; Financial Times; 06/09/23.
[166] In France, the AMF General Regulations (art. 321-46 et seq.) and, in particular, position-recommendation 2012-19 offer a framework for managing the most classic conflict of interest situations. This system is supplemented by an AFG-France Invest code of ethics (2013) approved by the AMF, part of which (the "provisions") is binding on AMCs.

Table 13 - Structure of private equity ownership in the U.S. ($ billion, %)

	20Q3	20Q4	21Q1	21Q2	21Q3	21Q4	22Q1	22Q2	%
Private Funds	468	656	659	662	662	956	974	973	21.7
State/Muni. Govt. Pension Plans	526	652	654	655	655	836	850	851	19.0
Other	392	513	544	544	544	818	802	802	17.9
SWFs and foreign Official Inst.	285	361	387	388	388	501	477	477	10.6
Pension Plans	201	246	246	247	247	324	325	326	7.3
U.S. Individuals	132	186	187	187	187	264	265	265	5.9
Insurance Companies	154	189	190	190	190	252	255	256	5.7
Non-Profits	140	180	180	180	180	237	238	238	5.3
Non-U.S. Individuals	56	63	63	63	63	82	82	82	1.8
State/Muni. Govt. Entities	54	65	71	71	71	83	77	77	1.7
Sec-Registered Investment Comp.	28	27	27	27	27	49	50	50	1.1
Banking/Thrift Inst.	37	38	38	38	38	45	49	49	1.1
Unknown Non-U.S. Investors	19	25	25	25	25	33	34	34	0.8
Broker-Dealers	1	3	3	3	3	3	3	3	0.1
Total	2,493	3,204	3,274	3,280	3,280	4,483	4,481	4,483	100.0

Source: SEC Form Private Funds, Questions 9 and 16.

Figure 37: Funds raised by private equity in Europe by investor category (€ bn; %)

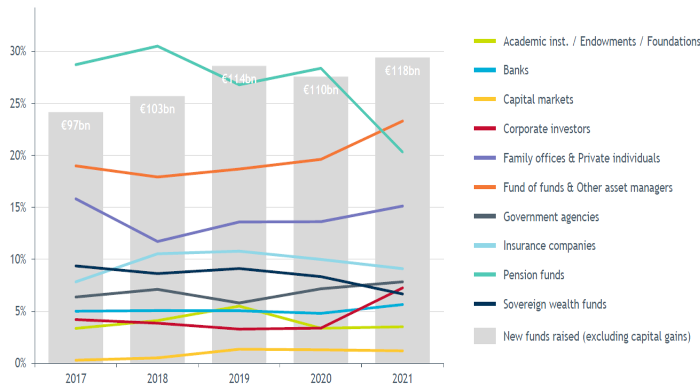
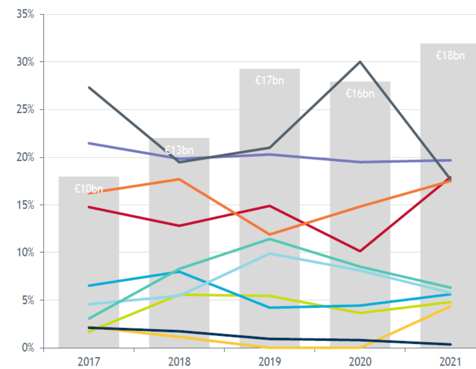


Figure 38: Funds raised by venture capital in Europe by investor category (€ bn; %)



Source: Invest Europe.

Given the search for high returns and the structural changes in the financing needs of the economy, institutional investors, faced with the promotion by the main sponsors of new products and alternative structures,[167] have significantly increased their allocations to private equity funds.[168] According to CEM Benchmarking, their average allocation to private markets increased from 12.5% to 18.5% between 2012 and 2020. This rise in allocations is also characteristic of an increasingly broad institutional population, including public and private pension funds and insurance companies. In addition, there is growing demand from retail investors, in a context where they are gradually gaining access to private markets (see 4.2), particularly through life insurance.

Commitments to invest made by investors at fundraisings - in other words, the remaining capital to be invested that funds can call upon at any time to finance the acquisition of target companies (dry powder) - reached a record $3.7 trillion in 2022, of which $1.9 trillion for private equity - mostly LBOs ($1.1 trn) (Figure 39). Moreover, this dry powder aged increasingly for LBOs (their average age rose from 19 to 25 months between 2019 and 2021),[169] reflecting probably, considering the rise in valuations (Figure 58, Figure 59), the difficulty in identifying investment targets.

This strong demand also reflects a change in the liquidity needs expressed by investors (see 3.2).

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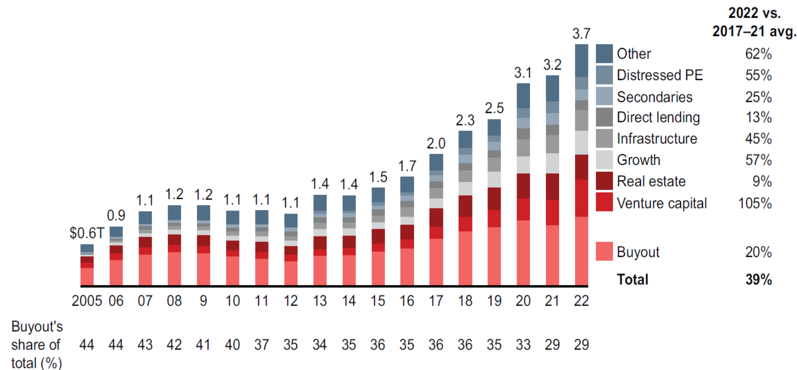
[167] See the AMF's 2021 Markets and Risks Outlook.
[168] According to the American Investment Council, US pension funds allocated 9% of their assets to private equity in 2020. See *Private equity returns help public pension funds*; Pension & Investments; 12/07/21.
[169] Source: Bain (2022); *Global private equity report* (Preqin data).

Figure 39: Amounts of capital raised but not yet invested *(dry powder, $ 1,000 billion)*



Source: Preqin; Bain & Co. (2022). Notes: "Other" category includes fund of funds, natural resources and mezzanine. LBO includes buyout, balanced, co-investment funds, including multi-manager funds.

3.1.2 Increasing promotion to retail investors

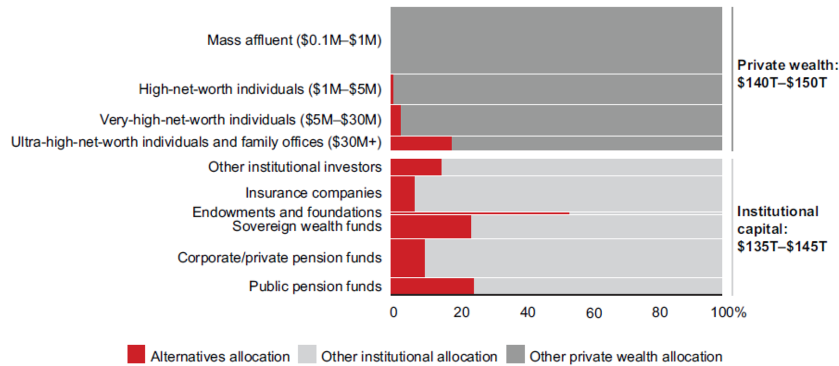
- The development of the retail offering: a strategic challenge for private finance

In recent years, the private equity market has become increasingly open to retail investors. In this context, McKinsey (2022) indicates that "*investors' appetite for alternative investments is as high as ever, with the young leading the way: about 35 percent of 25-to-44-year-old investors indicate an increased demand for alternatives. Within alternatives, private markets (private equity, private debt, real estate, infrastructure, and natural resources), an asset class that was once the preserve of institutional investors, is making inroads to individual portfolios (…), and home offices make it easier for clients to access the products concerned (...). Increased client demand and innovations have potential to increase the share of assets allocated to private markets from about 2% in 2020 to 3 to 5% by 2025, representing asset growth of between $500 billion and $1.3 trillion It is imperative for wealth managers to facilitate this growth by making it easier for their clients to access private markets.*"[170]

Non-institutional clients are therefore the new growth target for the major private equity managers, who see them as a relatively untapped[171] capital pooling tool and their ambition to increase assets under management for individual investors is explicit: Blackstone estimates the potential increase in private equity investment by individuals to be between $200 billion and $500 billion, KKR expects between 30% and 50% of the capital raised over the next few years to come from private wealth, and Apollo expects to raise $50 billion in funds from individuals between 2022 and 2026 (Bain (2023)). This ambition also reflects a search for growth drivers, where institutional investors may be able to achieve medium-term targets for their allocations to private markets, or even revise them downwards.[172]

[170] McKinsey (2022); US wealth management: A growth agenda for the coming decade; Feb.
[171] According to Bain (2023), retail investors hold half of the $275-295 trillion of funds under management globally but 16% of alternative investment funds. McKinsey (2023) estimates the potential pool of retail investors at $45 trillion.
[172] Shahrawat D., U. Singh Chawla, V. Shah (2022); points out that lower valuations in public markets push allocations to private markets (as a share of portfolio assets) above target levels (denominator effect).

Figure 40: allocation of financial wealth by investor type (2022)



Source: Preqin; Bain (2023).

The retail investor population is in fact very diverse. The wealthiest[173] are sometimes already private equity clients, and have expectations closer to those of institutional investors. At the other end of the spectrum, the "affluent masses" are primarily financing their retirement and until now had little access to this market. In general, the promotion of alternative investments by financial advisors is becoming more widespread but is primarily aimed at HNWIs looking for diversification and higher returns.

- The offering that has been developed has major impacts on fund management and distribution

The major private equity firms are effectively developing, notably in the United States, retail distribution capabilities and vehicles. According to S&P Global, in 2021 "*private equity upped its pace of hiring asset management professionals, as executives at some of the industry's largest management firms spoke of unlocking a retail investor market potentially worth tens of billions of dollars*".[174] According to PitchBook (2022), "*Some of the big names with dedicated retail efforts include KKR, Apollo, and Ares, but the movement is not just in the U.S. — Partners Group out of Switzerland has announced the establishment of a Private Wealth business unit. They have been operating evergreen funds since 2001, per the recent release, and have a 40-Act private equity fund with USD 12.0 bn in client assets*".[175,176]

Targeting retail investors represents a significant shift in the way private equity funds are managed and distributed, from a largely one-to-one, two-way client relationship management approach, and requires the development of previously largely non-existent infrastructure.

Most importantly, this shift requires, in terms of **management**:

i) offer small holdings. There are techniques for aggregating the holdings of individuals. First of all, some vehicles are structured as feeder funds to group investors in a common pool invested in private management. This structure has long been used by private banks in asset management, and is gaining ground. Platforms, such as the German Moonfare, thus pool the assets of individuals to invest in LBOs. Moreover, more tentatively, tokenised funds rely on the blockchain to split fund shares into tokens and reduce the minimum investment size.[177]

[173] Ultrahigh net worth: $30 million or more in financial assets; very-high-net-worth: $5 million to $30 million, high-net-worth: $1 million to $5 million, and below that, the mass affluent segment (Bain (2023)).
[174] Private equity drives robust wealth management M&A; S&P Global; 28/06/22. Fund managers pitch 'alts' to retail investors as institutions max out; Financial Times; 21/09/22 gives examples of such M&A deals.
[175] "*Partners Group establishes Private Wealth Business unit, reinforcing the firm's 20+ year track record of providing leading private markets investment solutions for individual investors*", Partners Group, 2/11/22.
[176] Bain (2023) reports that Apollo is promoting a fund to replace S&P core equity holdings and to be the largest on its platform by 2023. A Blue Owl fund recently raised $12.9 billion via private banks and financial advisors, over 40% of which was from retail investors. Blackstone has assembled a team of 300 sales agents and launched an alternative investment training programme. Ares has acquired Black Creek's US real estate advisory and distribution business to expand its retail sales force. Partners Group has created a wealth management unit for private banks and financial advisors, and has partnered with platforms such as ADDX.
[177] This practice, however, is not observed in France.

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ii) match supply to the demand for liquidity from holders.[178] For example, KKR and Hamilton Lane have launched tokenised funds to provide liquidity to retail investors. In the United States, an intermediate structure between open-end and closed-end funds is being promoted, i.e. with redemption possibilities at certain dates or linked to the listing (interval/tender funds, BDC).[179]

iii) limit costs in order to maintain attractive fee levels, which requires adapted infrastructures and, more generally, the standardisation of processes.

In terms of **distribution**, the aim is to develop

i) existing channels or create new ones, possibly more direct channels. GPs such as Blackstone, have strengthened their distribution teams. New players like Moonfare, iCapital and Opto Investments have developed platforms for financial advisors, and sometimes directly for retail investors, to offer access to a wide range of alternative products (real estate, debt, private equity, etc.) at lower cost.

ii) tools adapted to the needs of financial advisors, including reporting (for example, on performance, risks and fees), in line with applicable regulatory requirements;

iii) dedicated channels for managing liquidity demand, either through the development of secondary markets or through the provision of liquidity. For example, Securitize tokenises units of private equity managers' funds and may, as a licensed transfer agent in the U.S., operate a token trading platform. Moonfare uses Securitize and a semi-annual liquidity provision system, with a partnership with Lexington Partners to provide additional liquidity in certain situations.

- An evolving regulatory framework

The "retailisation" of private finance does, however, involve many challenges. First of all, the regulatory framework has not been stabilised, given the fast-changing nature of the offering. In the United States, the expansion of the market was facilitated in 2020 by a broadening of the notion of accredited investor[180] and harmonisation of the notion of qualified investor, as well as by the Department of Labor's removal of legal uncertainties regarding access to private equity for defined contribution pension plans.[181] Since then, the authorities have focused on the implications of opening the market to retail investors in terms of investor protection,[182] and have raised questions about the transparency of the sector.[183] In France and in Europe, the financing of unlisted shares by savings of French retail investors has been and will be facilitated by the following:

- ↗ In recent years, new provisions[184] have allowed the development of "evergreen" retail private equity investment funds (FCPRs) - open-ended alternative private equity funds.[185] FCPRs were previously closed to redemptions.[186] In 2022, FCPR Evergreen funds collected 613 million euros according to France Invest.

[178] See 3.2.2 on the implications of liquidity demand.
[179] Created in 1980, Business Development Companies (BDCs) invest at least 70% of their assets in the shares and debt of companies, whether listed or not, with a value of less than $250 million. These companies are often new, seeking financing or in difficulty. BDCs participate in their management, with a heavy use of leverage. BDCs offer liquidity either in closed or listed form or in perpetual form with periodic redemption. These funds have accounted for most of the recent inflows. The BDC regime allows distribution to non-accredited investors. The attractiveness of this regime encourages venture capital funds, which are quite similar, to take this legal form.
[180] See August 2020 review of SEC Regulation D Rules 501(a) and 144(a). According to the SEC, 13% of households meet the criteria for accredited investors and while 2% meet that of qualified investors
[181] See the Department of Labor's information letter of 3 June 2020 of non-objection to the diversification of investments by including private equity in the portfolios of 401k and other individual retirement plans under the Employee Retirement Income Security Act.
[182] See, for example, US Congressional Financial Services Committee hearings of 11/09/19 (Private market exemptions as a barrier to IPOs & retail investment) and the work of the SEC's Asset Management Advisory Committee on the subject.
[183] In a speech on 14 May 2021 entitled "Mind the (Data) Gaps", SEC Commissioner Caroline Crenshaw noted: "For the most part, we do not know who invested in (…) private market offerings or how their investments performed", and called for more data to fill these gaps.
[184] The implementing decree 2019-1172 of the PACTE Law promotes investment in the economy through the expansion of private equity. For life insurance, it defines the criteria for investment by individuals in professional funds (retail venture capital investment funds and professional specialised funds) and removes the investment caps in the authorised funds (retail private equity investment funds, retail venture capital investment funds and retail local investment funds) and units in venture capital companies. It also eases the rules for retail private equity investment funds (redefinition of liquid assets, fund of funds) and reduces their borrowing requirements (professional private equity investment funds, retail private equity investment funds).
[185] Their statutory life span is 99 years. In practice, some funds have an initial holding period.
[186] In general, these retail private equity investment funds have a 10-year life span.

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They reached an outstanding amount of 2.55 billion euros at the end of July 2023. Twelve funds with total assets of more than €700 million had been approved at the end of May 2021;

- The "*Relance*"[187] label for private equity funds and UCITS with a significant proportion of their assets invested in equity and quasi-equity of French SMEs and SMIs, listed or unlisted. Of the 176 funds that had obtained the label by the end of May 2021, 95 were private equity funds, with 23 of them open to retail investors;
- The promotion by BPI France and the Ministry of Finance of funds targeting retails investors to finance unlisted startups and SMEs[188];
- Promotion of distribution networks, such as Boursorama, which offers 4 million retail clients the opportunity to invest in unlisted companies via FCPRs accessible from €25 and with no entry fee;[189]
- The change in the ELTIF 2.0 regime, which opens access to management services previously reserved for professionals.

However, access to professional funds investing directly in unlisted shares continues to be restricted for retail investors,[190] and France maintains a high protection threshold.

Thus, the review of a private equity offering generally requires fund managers to consider the specific nature of the funds - e.g. their legal nature, applicable regulatory requirements, their structure (e.g. fund of funds), their strategy (LBO, VC, etc.) and their sector focus.[191] Examining the provisions for liquidity provision is particularly relevant - for open-ended funds (e.g. evergreen) or because liquidation (disposal of assets) is often a sensitive issue at the end of a fund's life, as funds may have difficulties in meeting liquidity deadlines (see 3.2). This includes assessing the suitability of the strategy for the liquidity offered and the recommended investment horizon/lifetime of the funds. A large fund size may, where appropriate, help to spread risk and relatively reduce operating costs. The benefits of funds of funds (e.g. in terms of diversification, liquidity) should be weighed against the sources of additional costs.

[187] Launched on 19 October 2020 (up till 31 December 2022), the Relance label is attributed by the French Ministry of Finance for four years.
[188] The subscription objective (95 mn €) of this Bpifrance fund of funds (FCPR) Entreprise 1 launched on 01/10/20 was reached before maturity (see e.g. France broadens retail investor access to private equity; Financial Times; 10/26/20). The BPI offering to individuals has since been extended to include the France Entreprises 2.1 and Entreprises Avenir 1 funds (currently being subscribed). Entreprie 1 and 2 (lifespan of 6 years extendable for one year) are funds of funds, with a specific balance between strong diversification and fees. Entreprises Avenir 1 is a direct investment fund with a lifespan of 10 years, extendable by one year twice. The minimum investment amount in these funds has been set at €5,000, €3,000 and €1,000 respectively.
[189] Les Echos; *Boursorama veut convertir ses clients au private equity*; 04/11/22.
[190] For example, the selection of units of such funds as units of account in life insurance is reserved for subscribers: i) investing at least €100,000 or ii) at least €10,000 for an ELTIF; or iii) considered, after assessment, to have the necessary experience, knowledge and competence to make their own investment decisions and to properly assess the risks involved.
[191] The SEC opened the 16/09/20 debate of its Asset Management Advisory Committee on non-listed investment with the following questions: "*Should access only be via a diversified pool (fund of funds)? Should access be via an intermediary and should they act in a fiduciary capacity? What disclosure should investors be provided? Should there be restrictions on underlying investments? (Asset class; Only other PE funds;. Minimum size requirements; Minimum % held by "qualified" or "large" investors) Should there be differentiated access? (retail vs. "super" retail) Should there be an incentive for funds that can show true market pricing and secondary trading. Who are "main street" or "retail investors"? (individuals; IRAs; 401(k)s)*".

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The assessment of the risk-return profile of private equity funds by retail investors remains a matter of debate. Several recent academic contributions point out that outperformance may be low compared to stock market investments used as reference when accounting for the costs and risks involved.[192] This point, which refers to the structural difficulties of valuing the assets of funds,[193] remains open.[194] In particular, easier access to these funds for retail investors and the development of this market segment could provide grounds for re-examining the presentation of risks and performances - especially the discretionary margin in the calculation of stated returns and comparisons with stock market performances (see 3.1.2).[195]

3.2 Valuation methods determine performance measurement

The accounting valuation methods of unlisted companies raises specific issues.[196] Valuations are infrequent, often lack elements of comparison, suffer from the vagaries of valuing intangible assets or assets linked to innovation, and it is difficult to assess the liquidity premium. The use of complex instruments such as those incorporating convertible elements or contingency factors, which are common in private equity, also adds to these difficulties. The importance of these issues is cristallized by the use of "fair value" accounting. Specifically, the implementation of the IFRS 13 and US GAAP ASC 820 norms is detailed by guidelines such as those of the International Private Equity and Venture Capital Association (IPEV[197]), . On a related note, a greater need for valuation of private equity assets can be identified in some particular cases, such as particularly illiquid or stressed markets.[198]

IFRS classifies inputs to the valuation process into three levels, with level 3 referring to inputs that are not observable on the market.[199] Non-listed investments, which are illiquid by nature, are valued using level 3 inputs. Levels 2 and 3 are based on supplier data (e.g. financial databases). For level 3, it is normally necessary to model the data. The assumptions, the model and the sensitivity of the data to the assumptions must then be documented, and a judgement formulated to apply any adjustments (e.g. for credit or liquidity risk) in line with market practices. Furthermore, the valuation of contingent instruments requires the allocation of Business Enterprise Value (BEV) to the different levels of the capital structure, e.g. using option pricing techniques (contingent claims analysis or CCA). The reliance on an independent expertise may also be advisable[200].

Under AIFMD, asset valuation must be independent of portfolio management and remunerated separately (Art. 19.4b). Valuations are submitted to the manager's valuation committee for approval (Art. 71.3d). In accordance with the policy it has defined, the committee examines the value of the assets, compares it with independent valuations and ensures (Art. 19.10) that only approved valuations are used to calculate net asset value (NAV). The external valuer uses data provided by the fund administrator or manager (Art. 19.4a), values the assets on the basis of the valuation committee's policy, and sends the valuations to the fund administrator for incorporation into the NAV calculation process (Art. 19.10). External experts have unlimited liability for material damage caused by fault or negligence.

[192] See, for example, J. Lerner (Harvard), Remarks to the SEC AMAC Private Investments Subcommittee; 16/09/20 and L. Phalippou (Oxford); An Inconvenient Fact; CFA France Roundtable; 25/11/20. More generally, studies show a very wide dispersion of performance across funds, the absence of economies of scale (the size of the funds does not boost their performance) and the absence of a long-term decline in returns.
[193] Affecting the equal treatment of incoming and outgoing holders, valuation is particularly an issue for open-ended funds.
[194] See, for example, "Private equity performance under the spotlight"; Financial News; 24/05/21.
[195] In Europe, the PRIIPs regulation requires private equity funds marketed to retail investors to provide a standardized presentation of fees and their impacts as well as risks (risk scale allowing financial products offered to retail investors to be compared) with the mention of product-specific risks not taken into account in the risk scale. The presentation of product performance is also standardized. A review of the PRIIPS regulation is underway.
[196] At the aggregate level, the valuation of unlisted equities has an important impact in national accounting, especially as unlisted equity financing is higher than listed equity financing (Figure 64). Durant D., R. Massaro (2004) review the methodologies.
[197] Cf. IPEV Guidelines.
[198] See for example the sale of Lehman Brothers' private equity subsidiary Neuburger Berman for $2.15bn to Bain Capital, Hellman & Friedman and some of its managers and employees when the bank was wound up in 2008.
[199] Level 1: quoted prices in active markets for identical assets. Level 2: observable market data other than direct prices, such as quoted prices of comparable assets or data derived from market data by correlation.
[200] See e.g. Deloitte (2023); Clearly IFRS summary guidance and practical tips for IFRS 13: Fair value measurement. In France, for more than 20 years, the code of ethics (règlement de déontologie) of France Invest and the AFG have required independent expertise, for example for portfolio transfers between funds managed by the same management company or involving a company linked to the management company. The expertise, e.g., by the statutory auditor of one of the funds concerned adds then to that of an independent expert.

On this basis, the IPEV proposes three valuation methods:[201] the market approach (on the basis of relevant identifiable comparables), the cost approach (if the value of the investment is based on that of underlying assets rather than earnings, e.g. property assets or funds of funds), or the income approach (discounted cash flow). The fund's valuation procedure defines the method to be applied depending on the type of investment, indicates the conditions for any change in method. It is binding on both internal and external valuators. An external expert may wish to amend a procedure deemed perfectible. Within this framework, choices the choice of the method and the specification of its implementation integrate discretionary elements.

The CFA's performance presentation standards (Global Investment Performance Standards, GIPS) include also requirements for private equity valuation (e.g. at least quarterly, at fair value), calculations (e.g. as regards the nature of cash flows taken into account) and performance display (e.g. as regards the fees taken into account when calculating net performance). The development of these standards reflects a need identified by market participants. However, their application needs to be evaluated.

3.2.1 Valuations sensitive to multiple assumptions and open to interpretation

The impact of the valuation of unlisted assets on the valuation of funds, and the strategic use made by fund managers of the discretionary margins available to them in this respect, are well documented.[202]

In France, audits of private equity funds conducted in 2018 and previously revealed some shortcomings.[203] The requirement for the appointment of an independent valuer was generally complied with, as the requirement for a valuation procedure, despite limitations concerning the "*practical methods of implementation*". Audit trails justified the valuation of shareholdings, tough sometimes to a limited extent and without formal control. Likewise, the valuation of transfers between portfolios, especially buy-and-hold transactions, was poorly documented. Ultimately, if some points have warranted a call to comply with the rules, or a reminder of good practice, on the whole, increasing compliance with regulatory requirements has been noted and, despite certain shortcomings in the fund rules, the periodic report information details the valuation methods in a satisfactory manner. These SPOT controls were monitored and overall, the market reports, at the end of a process of standardization and strengthening of valuation techniques, an almost systematic recourse to the guidelines of the IPEV, which allows a favorable assessment of their effective implementation.

An extreme example illustrates the potential impact of valuation adjustments: that of Franklin Templeton's recent 33.5% downward revaluation of its (minority) stake in the Australia-based Canva, reducing the technology company's value from A$55 billion to A$37 billion.[204] A few months later, T Rowe Price followed suit, downgrading its stake in the firm by 30%. Blackbird, a 14% shareholder in Canva, in turn downgraded the company on 30 July 2022, in agreement with the Australian VC funds Square Peg Capital and AirTree Ventures, also shareholders, reducing the firm's value by 36% to A$20 billion. In November 2022, Franklin Templeton revised its valuation of Canva upwards by 22%. These developments[205] admittedly reflect those, more generally, of the technology sector, but in a context where the firm, which generated A$1 billion in revenues in 2021, has been valued at up to A$55

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[201] See International Private Equity & VC association (Valuation guidelines (2018)) of which AFIC, BVCA and Invest Europe are founding members.

[202] According to Ang A., et al. (2018) "*FASB 157 now requires fund assets to be fair market-valued. However, the private nature of these investments and varying methodologies for evaluation leaves significant uncertainty. Ultimately, reported fund NAVs represent each fund manager's opinion about the assets in his or her portfolio. Brown et al. (2017) find that fund valuations are conservative except when follow-on funds are raised. In times of fundraising, Barber et al. (2017) estimate that NAV is exaggerated by about 3% for buyout funds and about 5% for VC funds*". The fundamental difficulties of valuation are compounded by technical factors. Gornall W., I. Strebulaev (2020), for example, note the abusive valuation of unicorns at the price of their preferred shares.

[203] According to the "Summary of SPOT controls on the valuation of unlisted companies in private equity companies": *(i) shortcomings in the valuation procedures, which are often too succinct and insufficiently precise in terms of the methods used, their hierarchy and the way they are implemented; (ii) a lack of formalisation and traceability (...) during the life of the fund, or even (...) a failure to update the valuation procedures. (…) a failure to update valuations (...)", making it "impossible to ensure the relevance and consistency of the valuation methods used (over time for the same holding and between different holdings)*", or the "*risk of discretionary valuation*". Besides, "*transfers of interests between vehicles were not robustly managed (lack of procedure, absence of recourse to an independent expert or expertise established after the transfer*)".

[204] See Franklin Templeton's report to the SEC on 24 March.

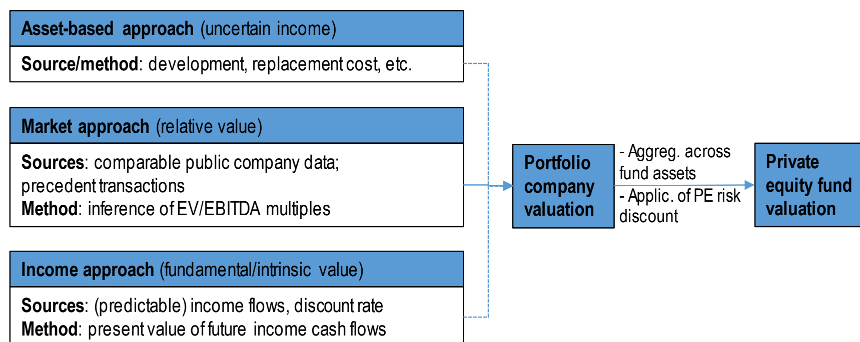
[205] An accurate analysis should account for the rights attached to the participations. Their valuation can also raise questions in itself (Gornall W., I. Strebulaev (2020)).

billion, the differences in the valuation of Canva's shareholders' stakes attest to multiple price formation, and the volatility reveals the limitations of the relevant (e.g. accounting) information available.[206]

More generally, after taking into account the reliability of the targets' income projections and the available data, the valuations mainly give rise to a choice between two asset valuation methods (Figure 41): one, fundamental, based on the discounted cash flow (DCF); the other, relative, is based on the accounting ratios and performance indicators observed on the market for comparable companies. Contrary to what might be expected[207], the DCF method is little used. In France, this observation is confirmed. The use of the DCF method remains rare, the practice rather revealing the use of valuation multiples (e.g. EV/EBITDA) of comparable companies – listed or having been the subject of recent transactions on the markets – to value companies in wallet. A haircut (e.g. 25%) is typically applied to correct systematic risks associated with private equity, and limit overestimation risks.

Relative valuation methods limit the direct impact of rising interest rates on the value of private equity targets, an impact that would be mechanical with the DCF (the rise, in the denominator, of the discount rate reduces the value of firms). The impact of market conditions is therefore delayed, and valuations follow more closely those of comparable listed firms.

Figure 41: : Private equity valuation methods



Source : AMF.

3.2.2 Performance indicators sensitive to assumptions and open to interpretation

Fundamentally, the illiquid nature of the assets and the irregularity of the cash flows of private equity funds necessarily complicate the measurement of their returns and limit their comparability. Two main types of indicators are proposed: absolute performance indicators and relative performance indicators.

Fund valuations are highly sensitive to assumptions about cost of capital. A discount rate that takes specific account of risk (e.g. the size of target companies and their sector specialisation) results in substantial revisions in performance (Gottschalg O., L. Phalippou (2009)). The sensitivity of cash flow valuations to the discount rate was highlighted more generally by Boyer B., T. Nadauld, K. Vorkink and M. Weisbach (2022), who show that the considerable variations in the rates actually used do not reflect market conditions and reflect a "smoothing" of fund net asset values that can bias the allocation of capital to private equity. Gompers P., S. Kaplan, V. Mukharlyamov (2016) point out, however, that in practice, fund promotion makes little use of the discounted cash flow (DCF) method and relies mainly on the display of internal rate of returns (IRR) and valuation multiples.

[206] See, for example, Canva raises At $40bn valuation — Its founders are pledging away most of their wealth, Forbes, 14/09/21; Canva announces USD 40bn valuation fueled by the global demand for visual communication, Canva Newsroom , 15/09/21 ; Canva shares wildly overvalued: Investors; Channel News, 26/04/22; Blackbird reveals Canva's $14b plunge in value, AFR, 26/07/22; Huge blow for young Aussie founders of tech start-up Canva as the darling of the share market is hit by a brutal $20bn setback, Daily Mail, 27/07/22; Is Australia's top performing fund smoke and mirrors? Hostplus, Canva and the year of super losses, Michael West; 31/07/22; Canva's value slashed by 44% by leading US investor, News.com.au, 26/08/22; Canva's valuation rises again as US investor marks it back up 22%, AFR, 29/1122;

[207] Gompers P., S. Kaplan, V. Mukharlyamov (2016) contrasts with the general emphasis on the DCF method in finance courses, e.g. in business schools, and with Graham J., C. Harvey (2001), according to which DCFs were used as much as IRRs.

- **An indicator of absolute performance: IRR[208]**

The IRR[209] is the discount rate that sets the net present value of the fund's cash flows (negative from fundraising, positive from distributions) to zero.

Limitations of the indicators: The IRR is also generally criticised for making the implicit assumption that investments made and distributed during the life of the fund will be reinvested. Similarly, it does not take into account the cost of capital raised but not yet called up by the fund (dry powder). The answer to this criticism is to calculate a "modified IRR" that adjusts the cost of tying up capital using a discount rate that reflects its cost, and the gains from reinvestment using an appropriate rate of return.

Above all, the IRR is very sensitive to the timing of cash flows (**Table 14**), and increases when the raising of capital is delayed by the use of bridge financing. Simulations by Braun R., J. Cornel, P. Schillinger (2019) measure this sensitivity. The use of facilities of less than 6 months increases the average IRR by 47 bp (the median IRR by 20 bp). The use of one-year loans increases it by 120 bp (57 bp median).[210] On the other hand, a high IRR is an incentive to accelerate capital outflows.

There may also be biases resulting from the aggregation of IRRs, e.g. those of multiple investments from the same fund or from different funds. In particular, an IRR correlated to the life of the investment is biased (Gottschalg O. L. Phalippou (2009)). This is because the IRR is a return per period, whereas the investor is interested in the total, final return; funds with a longer lifespan are seen to underperform, resulting in an upward bias in the average IRR. The scope of comparisons between IRRs is therefore generally limited. More generally, comparisons with stock market performance are based on more suitable indicators than the IRR (see section on PMEs below).

In principle, performance can only be measured over the long term, as the IRR is only observable after the fund has been distributed. Boyer B., T. Nadauld, K. Vorkink, M. Weisbach (2018) proposed an alternative: they assessed the performance (of constructed indices) on the basis of actual transaction prices on secondary markets for private equity fund units. These indicators thus make it possible to track market returns on a quarterly basis.

Based on a survey of management companies conducted at the global level, Gompers P., S. Kaplan, V. Mukharlyamov (2016) shows that management companies value their assets rather on the basis of internal rates of return (IRR) and multiples of the invested capital of comparable companies[211], and "*PE investors typically target a return on their investments well above a CAPM-based rate. Target IRRs also seem to be adjusted by different PE firms utilizing different factors*".

- **Performance ratios (Multiple of Money): MOIC and TVPI[212]**

The Total Value to Paid-In (TVPI) multiple relates the sum of distributions already made to fund investors and the fund's residual value (NAV) to the capital actually invested (already paid in). It is therefore based on a decreasing proportion of residual value estimates over the life of the fund. The Multiple of Invested Capital (MOIC) uses the total amount of the initial investment (before payments) as the denominator of the ratio. The two ratios are therefore identical for a fund after the end of capital calls by the fund.

Limitations of this type of indicator: Unlike the IRR, these multiples, which are often used during the life of the fund, do not weight returns over time and therefore do not take into account the timing of capital calls and distributions, or the NAV of the portfolio at any time other than the valuation date under consideration.[213]

[208] See, for example, Albers-Schönberg A., M. Prahl, B. White (2019); Measuring private equity fund performance; INSEAD; US SEC Asset Management Advisory Committee (2020); Private Investment Sub-Committee Update;16/09/20 numerous academic references cited.
[209] Internal Rate of Return
[210] See also discussion by: "The faulty metric at the center of private equity's value proposition"; Institutional Investor; 11/09/19.
[211] Identified and used as benchmarks for relative valuation purposes.
[212] See, for example, Albers-Schönberg A., M. Prahl, B. White (2019); Measuring private equity fund performance; INSEAD; US SEC Asset Management Advisory Committee (2020); Private Investment Sub-Committee Update;16/09/20 numerous academic references cited.
[213] NB: when comparing multiples, it is important to know whether or not they are calculated net of fees and costs and carried interest payable by LPs.

- **Relative performance indicators**

Public Market Equivalent (PME) relative performance indicators compare the performance of funds and stock markets.[214] At fund level, the basic method (Long A., C. Nickels (1996)) simulates the performance that the fund's cash flows would have had if its investments had obtained the same return as the listed markets used for the comparison. The fund's IRR is then compared with the IRR derived from this simulation.

Fine-tuning the relevant indicators: Given the usual time structure of cash flows, these simulations have the disadvantage of often displaying negative values at the beginning of the fund's life. The PME+ method corrects this effect by ensuring that the value of the simulated investment remains the same at the end. For the same purposes as PME+, the mPME from data provider Cambridge Associates uses a correction coefficient that is no longer unique/static but dynamic. Kaplan-Schoar[215] constructs a ratio indicating a relative over-(under-)performance of private investment if it is greater (less) than 1. Finally, the Direct Alpha method[216] measures the fund's performance relative to the benchmark index without bias, by adjusting the cash flows for their simulated performance. By discounting the future value of cash flows (negative for capital calls by the fund, positive for distributions), it calculates the fund's percentage outperformance/underperformance relative to the market in question.

Limitations of the indicators: Korteweg A., S. Nagel (2016) showed that a simple use of PME creates strong distortions in the assessment of VC returns, e.g. in particular for the 1980s and 1990s when the posted returns were the highest, and propose a stochastic approach generalising the PME approach.[217]

L'Her J-F., R. Stoyanova, K. Shaw, W. Scott, C. Lai (2016), on the one hand, and Harris, Jenkinson, and Kaplan S. (2016), on the other, emphasised the importance of the choice of basis for comparing the performance of private equity and stock markets (e.g. the markets or segments of listed equity markets considered for this purpose). Phalippou L. (2020a, 2020b) also highlighted the commercial incentives to make opportunistic choices in this area. For example, the use of international indices of listed equities such as MSCI or FTSE as a basis for comparison with domestic investments is skewed. Evaluating the performance of U.S. LBOs in terms of the S&P 500 index involves sector and size biases. For mid and small caps, comparisons with the Russell 2000 index are affected by this index's stock selection methodology.

The sensitivity of the various indicators to the structure of cash flows is illustrated by a simulation of IRR and MOIC calculations for cash flows of the same net present value in the table below.

Table 14 : Illustration: IRR and MOIC for net cash flow streams of the same net present value

Year	0	1	2	3	4	5	IRR	MOIC	NPV 8%
Investment 1	-10.00	5.00	5.00	5.00	5.00	5.00	41%	2.50	9.23
Investment 2	-10.00	0.00	0.00	0.00	14.10	14.10	26%	2.82	9.23
Investment 3	-10.00	11.19	11.19	0.00	0.00	0.00	76%	2.24	9.23

Source: U.S. SEC. NPV: net present value of cash flows.

3.2.3 Bridge financing impacts on fund performance

The impact of the use of lines of credit by private equity funds derived from the simulations by Braun R., J. Cornel, P. Schillinger (2019) for U.S. LBO funds was confirmed by Albertus J., M. Denes (2020): funds that use lines of credit "*have substantial distortions in performance measures sensitive to cash flow timing. Subscription lines of credit (SLCs) are more common among poorly performing funds and increase carried interest (…). These results highlight the agency costs of SLCs arising from an underlying agency conflict between fund managers and investors*". More generally, PitchBook (2019) observes that almost half of private equity managers revise their IRR downwards as

[214] See for example the methodology described by Albers-Schoenberg (2019); Measuring Private Equity Fund Performance; INSEAD Background Note.
[215] Kaplan S., A. Schoar (2005); Private equity performance: Returns, persistence, and capital flows; Journal of Finance 60, 1791-1823.
[216] Griffiths B. (2009); Estimating alpha in private equity, in Oliver Gottschalg (ed.), Private Equity Mathematics, 2009, PEI Media; Gredil O., B. Griffith, R. Stuck (2014) proposes the Direct Alpha method based on comparisons of performance indicators of actually observed cash flows to assess their noise and skews.
[217] "*With irregularly spaced and skewed VC cash flow data, linear factor models are not readily applicable without strong distributional assumptions. The GPME method avoids these strong assumptions, but is effective in performing risk adjustments (…)*".

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the funds they manage approach the end of their life. Institutional investors who tended, for good and bad reasons (it may also be in their interest to overvalue the IRR), to look too exclusively at the IRR as the sole performance indicator, now seem to recognise the need to monitor several indicators.[218]

3.3 Conflicts of interest and market integrity

3.3.1 Conflicts of interest

Private equity and the various related market intermediation activities potentially expose, particularly within increasingly integrated and diversified groups, its promoters and portfolio managers to multiple conflicts of interest. Without prejudging of their materiality, and the effectiveness of applicable regulatory rules – in particular, AIFMD's requirements for procedures and teams dedicated to compliance and internal control, and in France, the doctrine of the AMF and the AFG and France Invest code of ethics, and other market standards – e.g. the ILPA guidelines – the following describes different potential scenarios.

- **Conflicts of interest with respect to targets**

The risk of extracting value over the investment horizon to the detriment of targets' long-term growth (e.g. at the cost of debt to be repaid after the fund has sold the stake, or even risks to the firm's solvency) has been the focus of public debate, following some emblematic bankruptcies resulting from the acquisition of interests by private equity funds.[219] This type of conflict of interest and questions relating to the governance of targets, i.e. issues of company and employment law, are not addressed here.

Some conflicts of interest relating to market transactions and securities issues, which are covered by securities law, are not specific to private equity, or are of a peripheral nature. Promoting SPACs,[220] for example, creates conflicts of interest when the sponsors are also private equity managers (Box 3). However, certain conflicts of interest are more specific to private equity. For example, in a management buyout (MBO), the management of a company may lack incentives to favour a sale of the company at the best price, contrary to its fiduciary obligations to existing shareholders. In such cases, regulators and investors put in place controls for a listed company (e.g. Chinese wall, committee of independent directors, etc.) that may be lacking in an unlisted company.

Significant conflicts of interest are linked to the (often poorly documented) fees billed to target companies by the GPs[221] who serve on their boards (e.g. surveillance and monitoring fees, see 2.1). Phalippou L., C. Rauch, M. Umber (2016) states here that "*Management Service Agreements (MPAs) (…) waive a number of GP fiduciary duties, contain several other fees (…) (e.g. break-up and topping fees), and allow GPs to claim wide ranging and discretionary set of expenses. Also, potential kick-back arrangements with suppliers to these companies may present the largest potential for conflicts of interest, and these are neither addressed in the Limited Partnership Agreement (LPAs) nor in the MSA. Hence, the issue of the potential for GPs conflicts of interest and their resolution in practice seems to be a highly relevant question*."[222] Generally speaking, a wide range of fee sources (2.1.1.2, Appendix 2, C. Rauch, M. Umber (2016), Figure 74) is likely to come along with conflicts of interest.

- **Conflicts of interest with regard to fund subscribers (for example, LP)**

The main conflicts of interest between private equity managers and investors (e.g. LPs)[223] concern the alignment of the manager's interests with those of investors. However, conflicts may also concern the equal treatment of unitholders, e.g. when the asset management company manages/promotes several funds simultaneously.

[218] See "The faulty metric at the center of private equity's value proposition"; Institutional Investor; 11/09/19.
[219] See e.g. Debates of the U.S. House Financial Services Committee (U.S. HR FSC (2019b)). Some bankruptcies have been publicized, such as Toy's R Us (Bain, KKR, Vornado) in 2018, or recently Envision Healthcare (KKR) in the U.S., or Eurovita (Cinven) in Italy.
[220] See, for example, Grillet-Aubert L. (2021), the AMF 2022 Markets and Risk Outlook however, shows a market downturn.
[221] Note that the collection of such fees is not common in France and is subject to ad hoc treatment (see 2.1.1.2).
[222] LPA: Limited Partner Agreement; MSA: Management Services Agreement: contracts that establish the fund and its management.
[223] In the United States, following an SEC campaign in 2014, the most common observation made when examining private equity firms concerned the collection and allocation of fees by managers. "*When we have examined how fees and expenses are handled by advisers to private equity funds, we have identified what we believe are violations of law or material weaknesses in controls over 50% of the time*" (Andrew J. Bowden, OCIE, U.S. SEC , "Spreading Sunshine in Private Equity", 05/6/14). Transparency on fees continues to be debated across the Atlantic (Private equity's opaque costs mystify the pensions that pay them, Bloomberg, March 29, 2022).

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The UK House of Commons Treasury Committee (2007) identified a number of conflicts of interest specific to private equity, and IOSCO (2007, 2009) took this work further, highlighting in particular related conflicts of interest. In France, the authorisation of management companies is conditioned by their identification and management of conflicts of interest. More generally, however, the works cited identify, for example, possibilities of conflict linked to:

- Marketing and fundraising, justifying appropriate disclosure to stakeholders,
- The management by the same management company of competing strategies or funds, in particular when the management companies simultaneously manage funds financing target companies' debt and equity,
- Various potential factors of unequal treatment of LPs – whether about allocating opportunities, co-investments, or managing defaulting LPs,
- Decisions relating to the management of the fund – e.g. concerning divestments, or the fund's maturity,
- The valuation of the fund's holdings and disposal operations,
- Different methods that may be associated with the management of target companies – e.g. deduction of transaction fees, collection of remuneration, administration of companies, allocation of resources of the management company, etc.

- **Multiple factors and trends increase conflicts of interest or reduce the ability to manage them**

The development of the private equity industry has multiplied the sources of conflicts of interest, in particular its consolidation and the integration of fund management and distribution activities (of insurance companies) into groups (see 2.2). Innovation and the growing complexity of structures and operations (bridge financing, secondary operations, etc.) are widening information asymmetries. The diversification of the service offering and the multiplication of activities (administration and provision of advice to target companies, provision of credit, etc.) also give rise to such conflicts. Conflicts of interest linked to the simultaneous provision of equity and debt financing also arise during economic downturns, when investors' interests diverge.[224]
These risks are, of course, mitigated by the reputational risk weighing on sponsors, and the good practices generally promoted (e.g. for example, IOSCO (2009)). However, the adoption of protective clauses, details of manager incentives in contracts and applicable transparency conditions depend on negotiations which, in the low interest rate environment of recent years, have not been favourable to investors, who are competing with each other in the search for yield.[225] Moreover, institutional investors, who themselves manage funds on behalf of third parties, are also exposed to agency relationships. Their incentives to manage conflicts of interest with private equity managers could be worth (re)examining.[226] Lastly, investment by retail investors creates risks of conflicts of interest that may be specific to them, given their need for transparency and their limited influence over the contractual terms offered.

3.3.2 Manipulation, fraud and market abuse

According to IOSCO, "*The significant flow of price sensitive information in relation to private equity transactions, as with other M&A activity, creates considerable potential for market abuse. In some markets, this flow may increase with greater size and complexity in transactions and when more parties become involved. If a jurisdiction does not have sufficient market abuse oversight mechanisms in place, market abuse can undermine investor confidence in a market and affect the liquidity investors are willing to provide to issuers in the future.*" "*The*

[224] Moody's (2022a) notes: "*Private equity firms have continued to expand their roles as originators and managers of alternative investments, including private credit, while also maintaining traditional private equity investing activity, raising questions regarding how investor interests, whether private equity or private credit, are weighed and prioritized. The lending arms of the same alternative asset managers that operate private equity firms target much of their lending to private equity sponsored portfolio companies, which can lead to potential conflicts of interest (…), which would likely become more extreme in an economic downturn or default cycle*".
[225] See 4.3.3 and for example, "Private funds face a push to provide more disclosure; Wall Street Journal; 06/07/22.
[226] According to L. Phalippou (Brown G., L. Phalippou (2022)): "*The situation is a double-layer agency conflict. The real principal are the retirees themselves, the beneficiaries of the pension fund, which functions as the agent of the beneficiaries—and which is in turned served by another agent, the private equity fund manager. In such cases, the private equity teams working with the pension fund generally do not want things like their own fees to become public information. (…) They are happy with bogus IRRs which exaggerate performance, (…) bogus fee reports that underreport the fees they paid. (…) In sum, LPs and GPs are both agents*".

involvement of participants in both public and private markets and the development of related products traded in different markets, e.g. CDSs on leveraged loans, increases the potential for abuse".[227]

While it is inherently difficult to assess the integrity of the market and its evolution, certain cases illustrate the risks.

The collapse of the Abraaj fund, which had major institutional investors (e.g. the World Bank, Hamilton Lane, etc.), highlighted[228] the ability of such funds to engage in illegal practices, in this case to:

- Using investor funds for the working capital needs and commitments of the Abraaj group;
- Distorting the year-end reporting of funds to conceal a $200 million loss and transactions designed to falsely portray the Abraaj Group as solvent;
- Concealing a $400 million loss on two funds by borrowing $350 million personally and producing banking and financial statements that misled auditors and investors.

One may note here the absence of recourse to the services of a custodian, mandatory within the European Union, which would have been likely to mitigate the risks.

Recently, the SEC sanctioned a series of failures to align private equity with investors' interests (especially practices relating to VC fees), misuse of insider information, a case of fraud ($410 million) - and also a case of audit failure.[229]

3.4 Liquidity risks, despite the generally closed structure of funds

The illiquidity of private equity assets may affect the ability of funds to honour their initial commitment. This problem is exacerbated by the difficulty that funds have in liquidating their assets at the end of their life, which often leads them to extend their lifespan beyond their contractual obligations. In France, at the end of 2020, of the 569 FCPI, FCPR and FIP funds offered to the public, 253 (45%) had exceeded their initially announced lifespan, in some cases by several years.[230] The AMF has set up a working group to identify solutions to facilitate and accelerate the end-of-life of these funds and bring them into line with their prospectuses. The aim is to restore the manager's incentive to complete liquidations, where "*the failure to sell holdings may reflect their poorer quality and the difficulty of finding buyers*. Consequently, the carried interest generated is lower and the management fees, calculated on the remaining assets, are low in absolute terms".[231]

Structurally, the demand for liquidity on the liabilities side of private equity funds reflects the medium-term trend towards the institutionalisation of investment. Historically, fundraising was often the result of LP reinvestments, i.e. based on the proceeds of previous private equity investments. The withdrawal of banks' own-account investments from private equity following the major financial crisis has diminished this pattern. The impact of the change in the nature of investors (LPs) with regard to their liability constraints has yet to be better assessed,[232] as certain changes in supply reveal the growing desire of funds to satisfy LPs' liquidity constraints and demands - through their use of bridge financing, the development of secondary transactions (at a higher rate than the market), etc. (see 2.2.3).

In addition, the ongoing process of “retailisation” is accompanied by increased demand for liquidity: "*Individual investors are often concerned about liquidity (…), so in order to tap that source of funding, fund managers created*

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[227] IOSCO (2007, 2009) draws on work by the FSA (e.g. (2006) and the House of Commons Treasury Committee (2007)).
[228] See, for example, Bloomberg; Abraaj’s Naqvi Fined $136 Mn over firm’s collapse; 27/01/22; Brown G., L. Phalippou (2022).
[229] For example, SEC Charges VC Fund Adviser Alumni Ventures Group with Misleading Investors on fees; Alumni Ventures Group, LLC Repays $4.7 Mn; 02/03/22; SEC Charges VC adviser Energy Innovation Capital Management for overcharging fees; 02/09/22; SEC charges private equity firm Ares Management LLC with compliance failures; 26/05/20; SEC Charges Vika Ventures and its CEO in $6 Mn Fraudulent Offering; 08/12/22; SEC Charges Three Sales Agents at StraightPath Venture Partners With Fraud and Unregistered Broker Activity; 23/03/23; SEC charges PF Auditor and Audit Engagement Partner with Improper Professional Conduct 30/03/23.
[230] See the AMF press release of 23/02/22. L'Agefi Hebdo; Le private equity doit optimiser la fin de vie de ses fonds" of 16/03/22.
[231] Bain & Co (2023).
[232] For example, Goyal A., S. Wahal, M. Yavuz (2021) note that a high proportion of capital raised by funds comes from LPs reinvesting in the same GPs. However, the authors also note a tendency to invest with managers who have no track record. The study also states that "*according to Lerner J., A. Schoar, W. Wongsunwai (2007) (...) the probability of reinvestment is nearly 50% (see also DaRin M., L. Phalippou (2014), Hochberg Y., A. Ljungqvist, A. Vissing-Jørgensen (2014), Phalippou L. (2020), and Robinson D., B. Sensoy (2013)*)", and states that "*reinvestment makes it possible to exploit inside information obtained during previous investments*".

structures with liquidity provisions that allowed for some ability to redeem assets on a regular, often quarterly, basis".[233] In addition to existing evergreen funds (in existence for over twenty years now), which are now experiencing renewed growth, new structures are being created to meet this demand for liquidity from retail investors, with all the related vulnerabilities (see 3.1.1.2). The outflow that led Blackstone to cap redemptions from two of its private (real estate) funds in December 2022 is a recent example.[234]

Private equity investors are exposed to asymmetric liquidity risk in the event of a market downturn. Here, there is a risk that the tightening of credit conditions will have an impact on their asset-liability balance. There could also be "procyclical" effects of private equity fund management: i) delays in funds reaching maturity (for example, IPO of companies in the portfolio, disposals to secondary funds), and returns to investors (dividends, proceeds from asset sales); ii) capital calls by funds taking advantage of low market valuations to make acquisitions. Adverse price effects are also to be feared, where, in a low interest rate environment, the value of targets at the end of a growth phase could be subject to downward corrections (Figure 58, Figure 59). The Capstone hedge fund[235] highlights the impact of liquidity crises on private equity investor demand during market downturns: between 2001 and 2003, the 48% drop in the S&P 500 index is said to have generated a liquidity requirement (in dollars) equivalent to 25% of global private equity assets under management. Following the crisis of 2008-2009, this requirement is estimated to have represented 14% of assets under management. According to this source, this liquidity requirement now stands at nearly $1 trillion, and could force private equity investors to sell liquid assets (e.g. listed shares) in deteriorating market conditions. Against this backdrop, hedge funds offer investors an extreme risk hedge.[236]

More generally, Franzoni F., E. Nowak, L. Phalippou (2012) stated that "*Private equity suffers from significant exposures to the same liquidity risk factors as listed equities and other alternative asset classe*s. *The unconditional liquidity risk premium is 3% per year and reduces alpha to zero in a four-factor model".* The authors explain this by the dependence of private equity returns on funding liquidity): [237] "*times of low market liquidity are likely to coincide with times when private equity managers may find it difficult to refinance their investments. In these periods, they may be forced to liquidate the investments or to accept higher borrowing costs, which in turn translates into lower returns for this asset class (…). Private equity investments are sensitive to the liquidity of credit markets because their debts are occasionally refinanced."* The empirical results confirm this assumption, and the authors conclude that the diversification power of private equity is much lower than expected, without taking liquidity risk into account.

3.5 Risks related to leverage

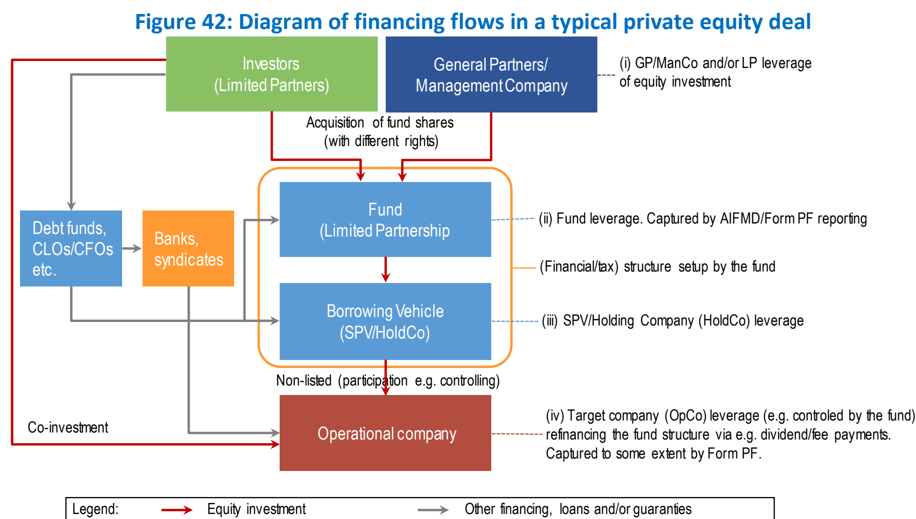
The leverage associated with the implementation of private equity strategies can have several objectives. The first objective is to multiply the return on equity investments. Furthermore, the debt of the companies held further aligns the interests of their management with those of the shareholders. Conversely, these effects create financial risks, for the performance of the fund and even, in some cases, result in the bankruptcy of the target companies. From a macro-financial point of view, the correlation of risks associated with leverage and its procyclical effects have an influence on financial stability, the assessment of which is open to improvement.

[233] Retail investors learn the hard way about private market illiquidity; PitchBook; 10/12/22.
[234] See, for example, Blackstone's BREIT Highlights Looming Dangers of Private Funds; Wall Street Journal; 12/12/22; Blackstone may slow launch of private equity fund after investor withdrawals; Financial Times; 10/12/22.
[235] See the contribution by Tom Leake, Head of Solutions at Capstone Investment Advisors, a hedge fund specialising in derivatives and volatility, to the article "The $1 trillion shortfall if private equity bets turn sour"; Risk.net; 21/04/22.
[236] The techniques used and the ability of hedge funds to absorb such a shock by selling protection would have to be assessed.
[237] The study uses the Federal Reserve's Senior Loan Officer Survey to estimate this capacity.

3.5.1 Nature and measurement of the different sources of leverage

Leverage usually used in private equity - particularly LBOs, which, as their name suggests, involve powerful leverage effects - can be found at several levels:

Figure 42: Diagram of financing flows in a typical private equity deal



Source: AMF on the base, in particular, of BVCA (2014); IPC-PERC (2021); Jenkinson T., M. Kim, H. Weisbach (2021).

i) At the level of the General Partners and/or the management company investing in the fund

GPs and asset managers can incur debt in order to invest in the fund. This indebtedness is not explicitly linked to the investment made and in principle is not disclosed to the public. Under AIFMD, the management company's leverage is explicitly exempt from disclosure, and risks are susceptible, where applicable, to be limited by capital requirements.

ii) Fund leverage in the strict sense of the term

The leverage of the fund's legal entity in the strict sense is declared in Europe under AIFMD and in the United States with Form PF. The AIFMD's disclosure requirements were initially prompted mainly by the desire to monitor and manage hedge fund risks, following bankruptcies[238] that highlighted the systemic impact of market positions obtained using derivatives, i.e. "synthetic" leverage.[239] Today, all AIFs are subject to requirements for managing risks that could affect financial stability and for reporting on liquidity and leverage.[240] In reporting (to the regulator), leverage is defined as "*any method by which the manager increases the exposure of an AIF it manages, whether by borrowing cash or securities, by derivative positions or by any other means*" (Article 4),[241] and two calculation methods are specified:[242]

$$Levier\ brut = \frac{Valeurs\ des\ actifs\ (hors\ dérivés) + dérivés\ en\ positions\ équivalentes\ (sans\ compensation)\ + Emprunt - Trésorerie\ élargie}{Valeur\ Nette\ d'Inventaire}$$

$$Levier\ en\ engagement = \frac{Valeurs\ des\ actifs\ (hors\ dérivés) + dérivés\ en\ positions\ équivalentes\ (avec\ compensation)\ + Emprunt}{Valeur\ Nette\ d'Inventaire}$$

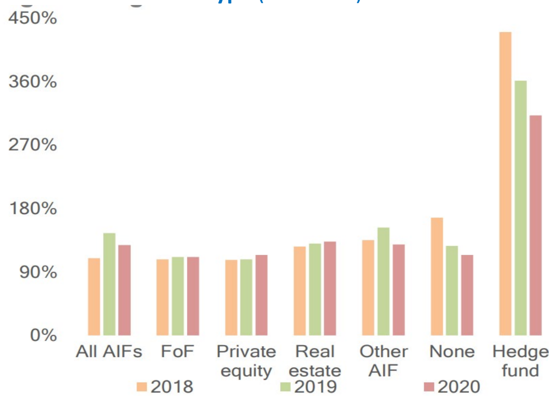
where "Extended cash includes cash and cash equivalents in the AIF's main currency".

On this basis, Article 25 of AIFMD stipulates that the competent authorities "*shall assess the risks that the use of leverage by an AIFM with respect to the AIFs it manages could entail*" and that they may impose limits on the use

[238] BlackRock (2015) lists some of the high-profile bankruptcies. Today, however, the process should be completed to be more exhaustive (for example, also mention the bankruptcy of Amaranth in 2006) and up to date (for example, mention the bankruptcy of the Third Avenue fund in 2017).
[239] See, for example, Breuer P. (2002); Ianiro A., C. Weistroffer, S. Zema (2022).
[240] Reporting requirements vary according to the amount of assets under management.
[241] Breuer P. (2002); Measuring off-balance-sheet leverage; Journal of Banking and Finance, 26-2/3), 223-242
[242] See Le Moign, C. and Siempis. K. (2019) "First results from AIFM reporting" for further details.

of leverage. At the ESRB's request, ESMA clarified and harmonised these provisions[243] in 2021 with guidance on the assessment of individual and systemic risks associated with the use of leverage.[244]

Figure 43 : Europe - adjusted gross leverage ratio* per AIF type (% of NAV)



* Gross leverage ratio excluding interest rate and currency derivatives used for hedging purposes. Note: AIFs managed and/or distributed by all AIFMs and, below reporting thresholds, managers only registered in national jurisdictions. Data for the EEA30. Sources: AIFMD database, national competent authorities, ESMA.

Table 15: France: breakdown of net leverage in commitments by strategy (21Q4, % of NAV)

	Average	Median	1st quartile	3rd quartile
Hedge Funds	475	100	100	174
Private Equity	100	100	100	100
Real estate funds	161	111	100	173
Funds of funds	103	100	100	100

Source: AIFMD reporting to AMF. Note: since leverage in commitments is greater than or equal to 100%, a level of 100% is used when less leverage is declared. Excluding extreme values deemed unrealistic. Note for the reader: for the 1st quartile, for example, 25% of observations are below the value indicated.

Table 15 does not show any significant change between the end of 2019 and the end of 2021 in the level of leverage of AIFs under AMF jurisdiction (managed by French AMCs).[245] While hedge funds show significant leverage ratios (475%[246] on average), the leverage ratios of other types of funds are low, and even zero for the private equity funds under review. Moreover, the private equity funds under review hardly deviate from the average: for non-zero leverage funds alone, the 3rd quartile of commitment leverage is 109%. These low levels of private equity fund leverage are observed more generally in Europe (Figure 43).[247]

However, by its very nature, private equity (such as LBOs) is designed to increase the return on capital investments through (high) leverage. The low levels observed are therefore due to the fact that the leverage lies elsewhere, later on in the investment process. This is because AIFMD was not primarily aimed at private equity, and its reporting requirements therefore take little account of its specific features.

For example, funds also take on debt for operational cash management purposes, and we have seen an increase in the use of short-term credit lines (bridge financing)[248] as a temporary substitute for raising capital from LPs[249] (to reduce their number and delay them).[250] In the absence of precise measurement, this growing use is documented by practitioners (Marks H. (2017) (Oaktree Capital); Private Capital Investors (2019); Silveira M. (2019) (MJ Hudson);[251]; Pitchbook (2020)), who also note a sharp increase in the duration of loans. In principle, this short-term debt is not intended to directly increase fund returns and is not counted as leverage within the meaning of

[243] ESRB (2017) "Recommendation of the European Systemic Risk Board of 7 Dec. 2017 on liquidity and leverage risks in investment funds".
[244] ESMA (2021) "Orientations relatives à l'article 25 de la directive 2011/61/UE".
[245] Since, by construction, this leverage cannot be less than 100%, the commitment leverage has been set at 100% for funds reporting a lower level. Certain extreme values deemed unrealistic have also been eliminated.
[246] The average leverage weighted by net assets is 1,576% for hedge funds, with larger funds making greater use of leverage. For the other fund types, the weighted average is close to the arithmetic mean (of **Table 9**), i.e. 100% for private equity funds, 140% for real estate funds and 105% for funds of funds.
[247] In the United States, the SEC's publication of Private Fund Statistics does not mention leverage at fund level, probably because it is so low.
[248] In principle 3 months, but in practice much longer (e.g. 36 months). According to Oaktree Capital (Marks H. (2017)) quoted by Ivashina V., B. Vallée (2020), in general credit "*must be repaid in the early or middle part of the fund's life (unless extended), although terms are beginning to lengthen*".
[249] Bridge financing is generally secured by LP investment. Other forms of fund financing (e.g. preferred equity) can be secured by portfolio investments (PitchBook (2020), Oaktree Capital (Marks H. (2017)).
[250] NB: by delaying fund calls, they allow for higher fund internal rates of return. The publication of guidelines in 2017 by the Institutional Limited Partners Association (ILPA) was aimed precisely at supervising and restricting the use made of them.
[251] Silveira M. (2019) reports some "*$400 billion in outstanding subscription lines globally*".

AIFMD. In practice, funds' legal contracts tend, in France, to limit recourse to bridge financing to 20-25% of the size[252] of the fund, for a limited period.

It should be noted here that the cost and impact on expected returns of diversifying private equity funds of funds could justify the use of leverage,[253] a phenomenon that does not seem to have been established for French funds of funds at this stage.

iii) Leverage of SPV/HoldCo debt used for investment by the fund

In practice, the leverage in private equity deals is generally carried by a vehicle - Special Purpose Vehicle (SPV) or holding company (HoldCo) - through which the fund invests in target companies (operational companies or OpCo). These SPVs/HoldCos are created for tax optimisation reasons and, specifically, to benefit from leverage effects.[254] They are therefore an integral part of the investment structure set up by the fund, and this leverage is in fact a determining factor in the risk/return profile of the funds.[255]

SPV/HoldCo debt is generally secured by a pledge of OpCo assets, which limits the fund's exposure to the value of its assets. This means that the LPs are not liable for the fund's debts beyond the amount invested in the fund,[256] an argument that allows the debts concerned to escape the reporting requirements of AIFMD.[257] Yet, at least at an aggregate level, the risks associated with these exposures could justify such reporting,[258] especially as the debt that finances private equity transactions is often risky ("leveraged"), recycled in securitisation vehicles (CLOs) or debt funds, vehicles on which information is also very limited and patchy.

iv) Leverage of target operating companies (OpCo)

Following their takeover by funds, particularly LBO funds, target companies of private equity investments are generally encouraged to refinance the acquisition of the company by the fund by issuing debt. The potential leverage of the SPV/HoldCo is thus refinanced by the flow of dividends from the OpCo to the SPV/HoldCo and the payment of other fees. The financing of the structure set up by the funds is therefore closely linked to the debt of the OpCo.[259] This OpCo leverage, which is not the same as fund leverage[260] in the strict sense of (ii) or in the broad sense of (iii), is at the heart of the fund's economic rationale, and must therefore be considered for its dual nature as corporate debt and debt whose purpose is to refinance the fund. Information on this type of leverage is limited, but it has grown significantly in both the United States and Europe (Figure 47, Figure 46).

Questions about the risks associated with this debt and its sustainability are compounded by the fact that the long chain of capital financing upstream of the issuing non-financial companies (NFCs), and the refinancing of this debt downstream, possibly via multiple intermediaries (e.g. CLOs, debt funds, etc.) is likely to further increase the impact of credit events or bankruptcies. It should also be noted that:

- private equity financing directly interconnects the financial world and the real world;
- each link in the chain is itself likely to be leveraged, which in turn is likely to multiply the effects of forced deleveraging.

As we have pointed out, the ability to measure these effects is extremely limited. However, based on the information available, we can see that the risks are currently amplified by the combination of pronounced increases in:

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[252] Cf. e.g. Benefits & risks of bridge financing in private equity; PCI; 07/10/20.
[253] According to FSA (2007): "*In practice leverage facilities at the fund of fund level do occur*".
[254] It should be noted that leverage can also be obtained via master-feeder fund structures.
[255] LPs will therefore find it very useful to have information on the expected impact of this leverage on the fund's risk/return profile.
[256] This argument is not specific to private equity, however, and is very much a feature of third-party asset management.
[257] NB: the implementation of the AIFMD provisions in this regard however continues to be disparate. For example, real estate funds in France include this type of debt in their AIFMD reporting, although this practice has not been harmonised at the European level.
[258] NB: in Europe, real estate funds structured in a similar way to private equity funds are transparent about this type of leverage.
[259] Incidentally, OpCos may also create vehicles (SPVs) themselves to service these loans, particularly in the case of specialised financing (e.g. airlines, car rental companies or finance companies).
[260] Question°3 p.37 of ESMA's AIFMD Q&A of 04/12/19 (ESMA34-32-352) states that the leverage of the target company is not taken into account even if its purpose is specifically to repay the debt incurred by the fund to finance the acquisition of the target company.

- The amounts of financing involved: the increase in NFC debt linked to private equity is attested not only on the loan market - it accounted for more than 80% of the more than €200 billion in leveraged loans in 2022 - but also for a significant proportion of high-yield bonds (40% of issues in 2021).
- The importance of leverage: until recently, LBO leverage was between 3 and 4, i.e. acquisitions represented 75% to 80% of the target's debt (Metrick A., A. Yasuda (2010); Axelson U., T. Jenkinson, P. Strömberg, M. Weisbach (2013)). Since then, the proportion of LBO targets with a leverage ratio of 6 times EBITDA or more has increased, reaching a record of 80% in the United States in 2020, with this ratio even exceeding 7 for more than half of the targets (Figure 46). In Europe, according to S&P Global Ratings, the median leverage ratio[261] fell from its peak of 7.2x in 2020 to 6.3x, and in the United States, from 6.0x (historical peak) to 5.3x in 2021. Even so, a ratio of 4 justifies specific risk monitoring by the banks exposed to it.[262]
- Risk-taking, more generally, by search-for-yield investors. This debt is issued by companies whose valuations have risen sharply and could be adjusted, for example in sectors that are innovative and/or difficult to value.[263] Vulnerabilities are also heightened by the fact that loan contract protections have declined, with covenant-lite loans becoming the market standard.[264, 265, 266]. In markets with low transparency, leverage could amplify losses[267] and liquidity effects could also (3.2.2) amplify the effect of deleveraging or refinancing costs. Banks have therefore tended to withdraw from this type of financing (see 3.3.3), often in favour of private debt funds;
- Rising interest rates against a backdrop of resurgent inflation. Driven by the energy markets, inflation could have an adverse impact on NFCs financed by private equity. We are already seeing tensions of this kind (see 3.3.3).

3.5.2 Treatment of leverage in AIFMD and U.S. Form PF reporting

The provisions under which private equity AIFs do not have to report leverage relating to their acquisition holding companies (SPV/HoldCo) in the context of AIFMD reporting should be read in conjunction with Recital 78 of the Directive, which states that: "*In particular for private equity and venture capital funds this means that leverage that exists at the level of a portfolio company is not intended to be included when referring to such financial or legal structures*." ESMA proposed, in a letter on the AIFMD review published on 18 August 2020, to amend this recital[268]. However, it sticks to the implementation of its provisions[269] and the European Commission's legislative proposals

[261] NB: corrections to the reference EBITDA by issuers are likely to have an impact (in principle downwards) on the level of this ratio.
[262] In the broadest sense (Investopedia), leveraged loans are defined as loans granted to entities whose senior unsecured long-term debt is not rated high yield (or junk), often to finance LBOs, and are the subject of a secondary market. Although the cash flow structure of certain credit derivatives (e.g. loan CDS) are similar to loan contracts, they are not considered as such, but rather as CDS. More specifically, the ECB's May 2017 guidelines define leveraged debt as that of firms whose borrowings and loans are more than four times their EBITDA and include by default that of firms controlled by private equity funds. Specific requirements for risk monitoring by credit institutions are formulated on this basis.
[263] See, for example, Tech start-ups race to find creative debt deals, Financial Times; 21/12/22.
[264] More than 80% of newly issued leveraged debt and speculative grade corporate issues only have covenants to comply with ratios in the event of specific events (incurrence covenants). This proportion was 20% before the great financial crisis and practically zero in 2010. These "covenant-lite" loans have less restrictive maintenance covenants ensuring that certain financial ratios - e.g. leverage and/or interest coverage (EBITDA over interest paid) - do not exceed set thresholds.
[265] Loan agreements are also becoming increasingly complex, reflecting the flexibility granted to issuers in terms of debt, dividend payments and investment, which reduces the clarity of these agreements.
[266] NB: curiously, this does not seem to be accompanied by a general decline in the credit ratings of the firms concerned.
[267] See, for example, 4.2 on the unlisted leveraged debt and private securitisation markets. A deterioration in conditions on these markets has been observed in the United States in particular - see for example US banks use thaw in markets to shift "hung loans" off their books; Financial Times ; 22/11/12.
[268] The letter "*recommends removing the reference in the recital mentioning that private equity funds do not have to report leverage at the level of SPV to ensure harmonised reporting requirements for all AIFs independently of their type".* The section of the recital concerned states: "*For private equity and venture capital funds this means that leverage that exists at the level of a portfolio company is not intended to be included when referring to such financial or legal structures*".
[269] ESMA's Q&A of June 2023 reiterates that the leverage of a vehicle controlled by an AIF which acquires unlisted companies by issuing debt is exempt from the reporting obligation, provided that the AIF does not bear potential losses beyond the amount of its investments in the unlisted companies or issuers.

did not include any amendments to the scope of the leverage considered. The assessment of systemic risks induced by the leverage of private equity funds should therefore remain limited to a consideration of existing metrics.

A letter from ESMA dated August 18, 2020 on the review of the AIFMD directive suggested amending this recital, but did not return to the implementation of these provisions. However, the European Commission's legislative proposals do not provide for amending the scope of the lever considered. The assessment of systemic risks induced by the leverage of private equity funds should therefore remain limited to a consideration of existing metrics.

In the United States, reporting on private equity funds does not seem to take into account the leverage of private equity funds via intermediary or related vehicles (SPV/HoldCos),[270] but unlike in Europe, it does cover the leverage of portfolio companies (Controlled Portfolio Companies or CPCs). In particular, information is requested on debt-to-equity ratios, the amount and structure of debt (short/long term, fixed/variable rate, proportion of zero coupons, Payment In Kind debt), and on credit incidents.

3.5.3 Potential risks to financial stability

The increase in the leverage ratios of private equity targets (Figure 47) goes hand in hand with an increase in the risks associated with this type of debt on the global and European credit and high-yield bond markets. The banking entities that finance this type of leveraged debt are subject, on this point, to recommendations from the Fed, the FDIC and the OCC in the United States[271], and from the ECB[272] in Europe[273]. These risks to financial stability are heightened by cyclical trends in the economy, with the end of accommodative monetary policies likely to slow growth. Target companies therefore appear vulnerable to a scissors effect that could affect both their assets and liabilities. Their assets and revenues could suffer from difficulties in passing on the effects of inflation, or even from falling demand - or adverse impacts on their business in certain sectors (such as innovation sectors). At the same time, their liabilities could, as a result of rising interest rates and/or flight to bond financing which is deemed safer, increase the cost of financing or even make it difficult to refinance the (leveraged) debt issued.

An increase in the cost of (re)financing leveraged debt has already been observed. In 2022, there were significant isolated tensions, especially in the United States, where there were difficulties in (re)financing certain transactions, such as the Citrix and Nielsen LBOs and the acquisition of Twitter. These episodes highlighted the limits of bank financing, and pushed interest rates on debt issued over the 10% mark.[274] In fact, banks have apparently withdrawn from leveraged debt financing (e.g. the syndicated loan market) in the U.S. While this trend was not visible in Europe by mid-2022, the ECB's banking supervisory body (SSM) is voicing concerns: i) in general, about the increase in banks' exposure to leveraged loans, which now account for around 60% of their common equity tier-1 (CET1) capital, compared with 40% in 2017, and ii) specifically, about the inadequate monitoring and risk management of leveraged loans granted by systemic institutions - this type of intermediation being concentrated mainly in a few banks.[275] As a result, private equity funds are tending to take over the credit supply. However, while they are quick to take advantage of tensions in the conditions for granting this type of credit, they are also more selective in this respect[276]. In fact, the players concerned will themselves be exposed to the limits of the sustainability of this debt, with Moody's announcing, for example, a significant rise in default rates and in the share of the lowest-rated loans - in this case, a doubling of the global default rate for speculative-grade securities to 4.5% in 2023, above the long-term average of 4.1%.

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[270] Leaving room for possible interpretation, question 72 of Form PF reads as follows: "*Does the reporting fund borrow or have the ability to borrow at the fund-level as an alternative or complement to financing of portfolio companies?*". The form then asks for the amount and nature of these borrowings (Secured by the investments of the reporting fund/by unfunded commitments/by a combination of the two/Other (explain)).

[271] Board of Governors of the Federal Reserve System, FDIC and OCC, Interagency guidance on leveraged lending, 21/03/13.

[272] ECB Guidance on Leveraged Transactions, May 2017 defines for its own purposes leveraged loans as issued by firms with a leverage ratio of 4x or more or, and in any case by firms owned by private equity funds. See footnote 264 on the implementation of these guidelines in Europe.

[273] IOSCO foresees to submit guidelines for public consultation in this regard.

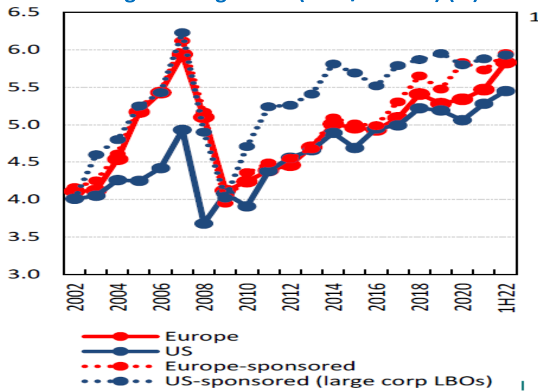
[274] The arranging banks incurred a loss of $600 million in financing the Citrix LBO. The original issue discounts (OIDs) observed correspond to interest rates of 10% for $4 billion of debt in the Citrix LBO and 12.4% for $2.1 billion of debt in the Nielsen LBO. See for example, Bloodbath-Citrix debt BO sale casts shadow over pending deals; Financial Times; 24/09/22, Elliott buys Nielsen debt, backing its own takeover; Financial Times; 13/12/22.

[275] ECB chair of the Supervisory Board (SSM) A. Enria letter to the CEOs of significant institutions on banks on leveraged transactions; 28/03/22.

[276] The implications of tensions on the leveraged debt market for bank and non-bank financiers (private debt funds) are discussed, for example, by After Citrix-Leveraged finance and the point of no return 22/12/22; Euromoney.

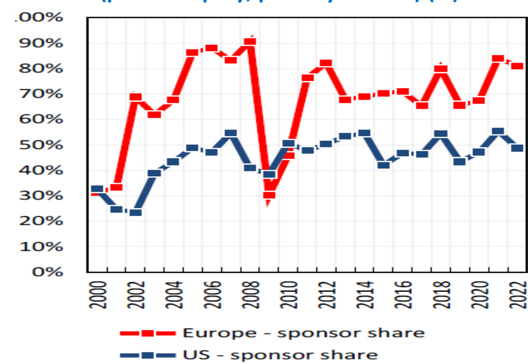
Although the likelihood of these risks has increased, they have not yet materialised on a large scale. It also depends on the ability of private equity funds to act as principal in financed deals (following the example of Elliott,[277] which bought back part of the debt in the Nielsen LBO), and to recapitalise. Faced with a cyclical downturn (see Figure 27 on the fall in the Big 4's share prices), private equity management companies could themselves reach the limits of a business model based, during a period of low interest rates, on diversification and the granting of credit. In any event, we will need to examine the transfer of risk from credit institutions, particularly where intermediation chains are longest (for example, CLOs),[278] and the management of conflicts of interest of the players involved (see 3.1.3), where transparency on risks may appear somewhat limited.

Figure 44: Leveraged loans: Average leverage ratio (debt/EBITDA) (%)



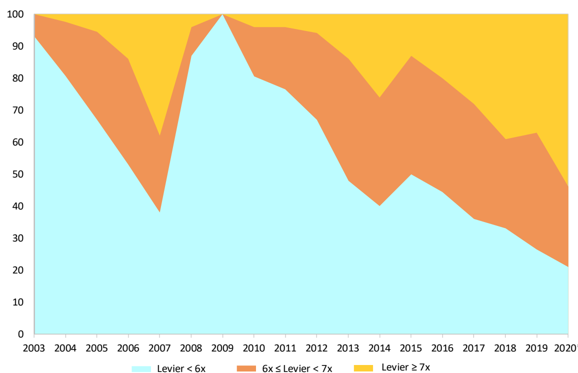
Source: S&P LCD, ECB.

Figure 45 : Leveraged loans: share of sponsored issues (private equity, primary market) (%)



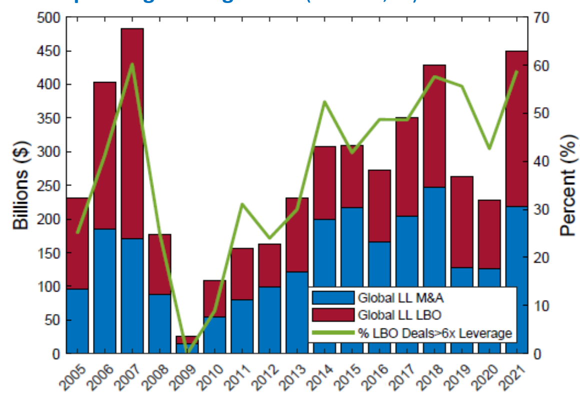
Source: S&P LCD, ECB.

Figure 46 : Breakdown of U.S. LBOs by target leverage (%)



Source: Thomson LPC, PwC, Bain & Co, AMF.

Figure 47: Issuance of institutional leveraged loans financing LBOs and other M&A transactions, and corresponding leverage ratio (USD bn, %)

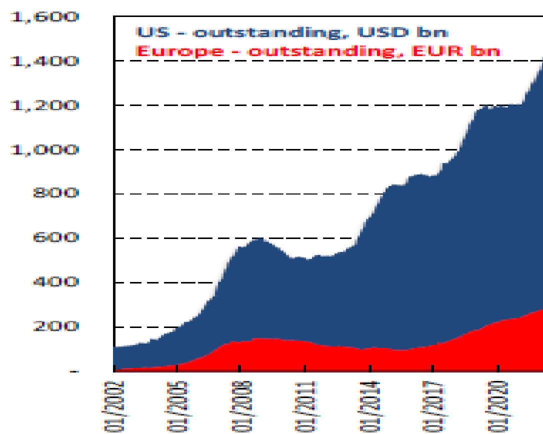


Source: IMF (2021), S&P Global (2021), Kundu (2022).

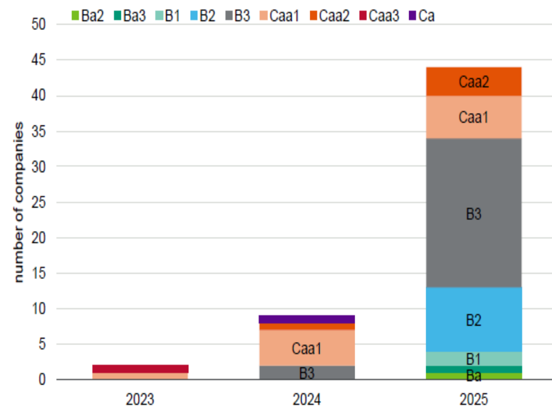
Figure 48: Outstanding institutional leveraged loans in major S&P indices ($bn)

Figure 49: Rating of corporate debt held by private equity maturing within 3 years

[277] Known as an activist hedge fund, Elliott has become a sponsor of private equity funds, e.g. a competitor of Apollo or Blackstone.
[278] IOSCO, for example, has initiated work to identify best practices for managing the risks of leveraged finance.



Source: S&P LCD, Bloomberg, ECB calculations.



Source: Moody's Investor Services. Source: Moody's (2023).

3.6 High cyclicality of the private equity activity, linked in particular to leverage effects

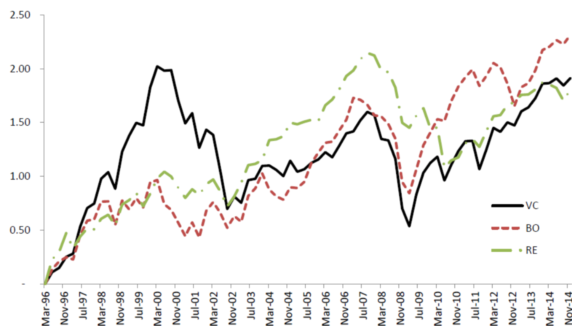
3.6.1 Strong cyclicality of valuations and returns

Academic literature and market practitioners have generally observed cyclicality in valuations and returns. The initial study by Kaplan S., P. Strömberg (2009) found for a sample of public-to-private LBOs that "*prices paid for cash flow were generally higher at the end of the buyout waves than at the beginning. (The first private equity wave began in 1982 or 1983 and ended in 1989; the second began in 2003 or 2004 and ended in 2007)*". Given the "third wave" of investment since this publication, the observation (Figure 58, Figure 59) clearly confirms the perception of increasing upward pressure on company valuations, with LBO EV/EBITDA ratios rising from 8 in 2008 to almost 12 in 2021, both in Europe and the United States (S&P). Ang, A., B. Chen, W. Goetzmann, L. Phalippou (2018) also confirmed the observation of cyclicality in private equity returns, consistent with the assumption that private equity "does well when the economy does well",[279] a conclusion that Robinson D., B. Sensoy (2011) described as follows: "*funds raised in hot markets underperform in absolute terms*". In any case, market practitioners confirm the observation of such procyclicality in LBO returns and more generally in private equity returns, with the (cumulative) returns of funds (Figure 50, Figure 51) appearing to be strongly affected by financial crises. Morgan Stanley-Portfolio Solutions Group (2020) (Figure 53) *therefore notes a high degree of cyclicality for LBOs, and in particular that "the performance of the years immediately following the onset of market crises has been particularly strong, which is true both on an absolute basis, compared with the returns of other years, and on a relative basis, compared with the performance of the stock market during the same years".*

Robinson D., B. Sensoy (2011) stated that the cyclicality of private equity is not unique to the sector: "*Public and private equity co-move (...) co-movement in part reflects the fact that exits (...) are driven by fundamentals in public capital markets (...) and common exposure to underlying business conditions and investment opportunities*". However, modelling the specific component (not explained by stock markets) of private equity returns, Ang, A., B. Chen, W. Goetzmann, L. Phalippou (2018) found that the estimated autocorrelation is consistent with cyclical behaviour over a long-term horizon. This cyclicality differs by fund type, with VC and LBO being weakly correlated.[280] In particular, the LBO premium "*was low from 1998 to 2002 and then increased sharply from 2003 until 2007, which coincides with the well-known boom in buyout fundraising*". The VC premium has been negative since 2001. The authors also note that the volatility of these cash flow-based indicators is at least as high as that of the benchmark listed equity indices.

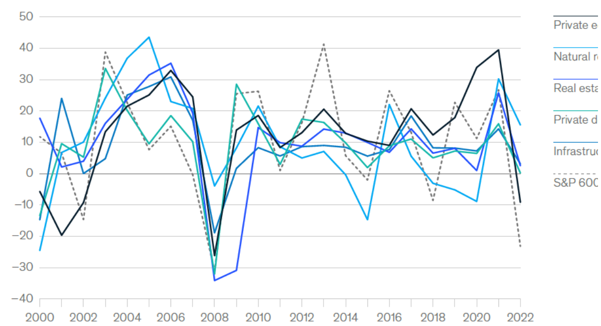
[279] Boyer B., T. Nadauld, K. Vorkink, M. Weisbach (2018) also show that betas calculated on the basis of secondary transactions are significantly higher than those constructed from the Preqin base and obtained from Burgiss, while alphas are lower.
[280] Generally speaking, this implies that a "*diversified strategy across sub-asset classes of private equity may be beneficial*".

Figure 50: Cumulative returns of private equity funds in the United States (LBO, VC, Real Estate)



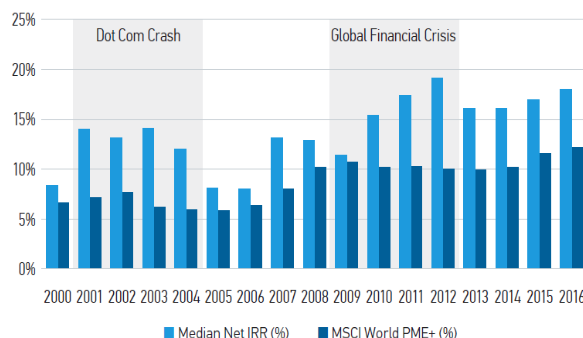
Source: Ang A., B. Chen, W. Goetzmann, L. Phalippou (2018).

Figure 51: Annual IRR of private equity funds
(by year, *%*)



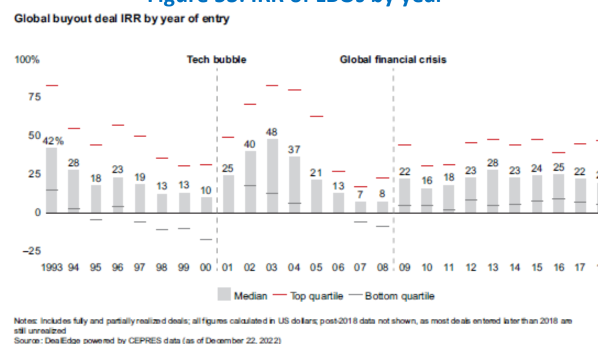
Source: Bloomberg, Burgis, McKinsey (2023). IRR of fund years from 2000 to 2019. Data for 2022 is up to 30/09/22. There is no data available for some periods.

Figure 52: Median IRR of LBOs by year



Source: Preqin, Morgan Stanley (2021).

Figure 53: IRR of LBOs by year



Source: DealEdge (CEPRES data), Bain (2023) as at 22/12/22.

It should be noted that the observed cyclicality of funds does not, individually, suggest that their performance will persist, or that LPs will be able to identify high-performing funds. On this point, Harris R., T. Jenkinson, S. Kaplan, R. Stucke (2020), using a large portfolio of U.S. institutional investors, found: "*little evidence of persistence for buyouts, both overall and post-2000. The conventional wisdom to invest in funds that are, at the time of fundraising, reporting top quartile returns does not hold for buyouts. This occurs because buyout firms raise next funds when the performance of their previous funds is strong*". "*In contrast, we do find persistence for VC funds using the performance of both the previous and the second previous fund at fundraising*". The lack of persistence in LBO performance could be explained by the fact that "*the buyout business has changed, with operating engineering becoming increasingly important*".

3.6.2 Fluctuations due in particular to the timing of investments and leverage effects

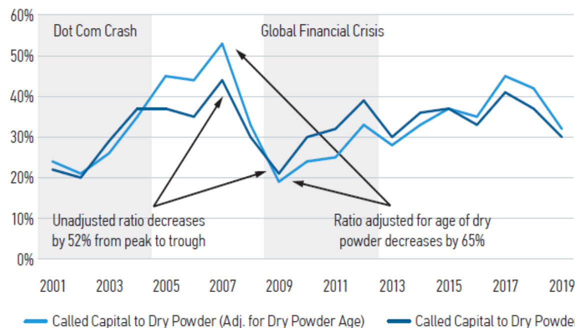
Two factors, which are not mutually exclusive, explain the cyclicality of private equity returns: the timing of cash flows (fundraising, (dis)investment), and debt financing (leverage).

- **Procyclical timing of cash flows**

Guo S., E. Hotchkiss, W. Song (2009) stated that "*funds raised during a boom are then less likely to raise funds (...) suggesting a boom and bust cycle in which positive market-adjusted returns induce investment, which leads to negative market-adjusted returns, and so on*". According to Robinson D., B. Sensoy (2011): "*high private equity fundraising forecasts both low private equity cash flows and low market returns* ", and further): "*distributions rise with public equity valuations* (…) *Net cash flows are therefore procyclical and private equity funds are liquidity providers (sinks) when market valuations are high (low)*".
This interpretation finds empirical support in the analysis by the Morgan Stanley-Portfolio Solutions Group (2020), which examines market cyclicality as a function of GPs' ability to seize market opportunities and increase investments in more favourable years. The analysis concludes that managers have not historically demonstrated such an ability - and that LPs should take this into account and invest in funds at favourable valuations. In fact, GPs

reduced their capital calls by 33% on average in the post-crisis years compared with the pre-crisis years.[281] The ratio between called-up capital (to invest) and raised capital not yet called up (dry powder) highlights this high cyclicality[282] (Figure 54), particularly for recently-raised funds. Compounding this "underinvestment" is the fact that a greater proportion of capital calls (re)finance pre-existing investments (support capital) as opposed to financing new acquisitions, with GPs calling in 51% less capital on average for new acquisitions after as compared with before the crisis. The return of capital (distributions) by funds, however, attests to a timing of capital outflows that maximises the return on investments, albeit with a reduction in distributions during periods of crisis (Figure 55).

Figure 54: Ratio of called capital to dry powder



Source: Preqin, Morgan Stanley, Portfolio Solutions Group (2021). NB: the adjustment of the ratio neutralises the age effects of dry powder.

Figure 55: Ratio of distributed capital to NAV

Source: Preqin, Morgan Stanley, Portfolio Solutions Group (2021).

- **Extensive use of debt financing**

As we have previously seen (see for example; see 3.3), debt is a fairly general feature of private equity strategies. According to Aldatmaz S., G. Brown (2018), LBOs actually increase the level of debt in an industrial sector. Modern theory of the firm abandons the Modigliani-Miller theorem, which theoretically states that the value of a firm, and therefore its investment policy, is not affected by whether it is financed by equity or debt. It considers that the firm's level of debt depends on its cost, in a pecking order of financing sources, and that it reduces its tax burden and agency costs (management disciplines). An optimal debt ratio maximises the firm's value and determines its default risk[283]. In this context, Kaplan S. and P. Strömberg (2009) explained private equity's use of debt and the boom and bust cycles that characterise it by a segmentation between debt and equity markets: a low cost of borrowing compared with equity financing (a high spread between EBITDA/EV and high-yield interest rates (Figure 56)) increases the relative return on private equity: "*leverage translates into structural contribution to performance*".

The trade-off between equity and debt financing is structurally in favour of debt because of the tax advantages it offers. A more circumstantial distortion factor is linked to the supply of credit, e.g. in the case of low interest rate monetary policies.[284] On this second point, "*The pattern of private equity commitments and transactions over recent decades suggests that credit market conditions may affect this activity. (…) investors take advantage of systematic mispricings in the debt and equity markets. (…), when the cost of debt is relatively low compared to the cost of equity, private equity can arbitrage or benefit from the difference. This argument relies on the existence of market frictions that enable debt and equity markets to become segmented*".[285] Regarding the first point, the tax deductibility of interest that prevails in many countries favours debt financing of companies. Guo S., E. Hotchkiss,

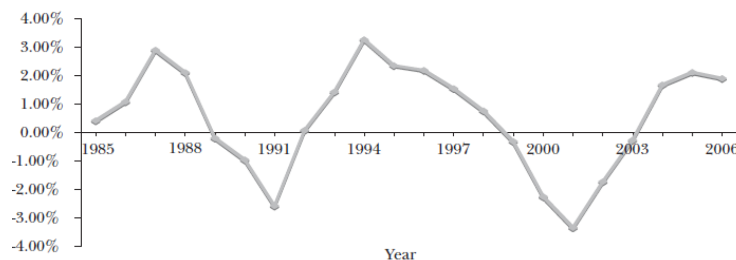
[281] Conversely, market exits are timely: distributions increase by 49% when asset values are at their highest.
[282] As shown in ,adjusting for the "ageing of dry powder" increases the cyclicality observed.
[283] Some authors emphasize the benefits of leverage for corporate governance and operational performance and minimize the risks to financial stability on this basis (e.g. Jensen M. (1989), Hotchkiss E., D. Smith, P. Strömberg (2020) , Haque S. (2023)). These above all microeconomic analyzes lend themselves to a discussion that is not carried out here.
[284] "*Overly favorable terms from debt investors may have helped fuel the buyout wave from 2005 to mid-2007*" Kaplan S., P. Strömberg (2009).
[285] "*assume that a public company is unleveraged and being run optimally. If a private equity firm can borrow at a rate that is too low given the risk, the private equity firm will create value by borrowing. (…) interest rate spreads for private equity borrowing increased from roughly 250bps over the benchmark LIBOR in 2006 to 500bps over LIBOR in 2008 (S&P 2008). Under the assumptions that debt funds 70 % of the purchase price and has a maturity of 8 years, debt mispricing of 250bps would justify roughly 10 % of the purchase price or, equivalently, would allow a private equity fund investor to pay an additional 10 % (that is, the present value of an 8-year loan for 70 discounted at the higher interest rate is 60, not 70). (…) relatively more deals will be undertaken when debt markets are unusually favourable*".

W. Song (2009) pointed out the importance of these tax benefits: "*The effects of tax benefits from increasing debt can be very large*".[286]

Ang A., B. Chen, W. Goetzmann, L. Phalippou (2018) showed that, in line with these predictions, specific private equity returns are strongly and positively correlated with the difference between the cost of capital and the cost of debt. They are also negatively correlated with changes in the VIX, trading volumes and the expected risk premium.

Haddad V., E. Loualiche, M. Plosser (2017),[287] in turn, confirmed the stylised facts of procyclicality, but the compatibility of these analyses remains to be established, for example, with Bernstein S., Lerner J., F. Mezzanotti (2020), according to whom "*During the 2008 financial crisis, private equity-backed companies increased investments relative to their peers, while also experiencing greater equity and debt inflows. The effects are stronger among financially constrained companies and those whose private equity investors had more resources at the onset of the crisis. Private equity-backed companies consequentially experienced higher asset growth and increased market share during the crisis*".

Figure 56: Variance between EBITDA/EV ratio and high-yield interest rates



Source: Kaplan S., P. Strömberg (2009). Median EBITDA/EV of S&P 500 index stocks minus Merrill Lynch High-Yield Master rate. Note: if we can assume, given the evolution of valuations (see e.g. Figure 58 and 59) and interest rates (monetary policies), of a continuation of this cyclicality over more recent periods, that remains to be formally assessed.

4. IMPACTS OF PRIVATE EQUITY AND EXTERNALITIES

The positive effects of private equity in a broad sense – particularly those that are most specific to it, such as the financing of young, growing and/or innovative companies –must be weighed against the externalities linked to the structural opacity of the sector. The assessment of the effects of private equity on the economic and financial system is structurally limited by the scarcity, cost and poor comparability of available information, and the discourse is often influenced by the commercial interests of promoters. Analysis is largely limited to the microeconomic level and conditioned by strong assumptions, while there is little macroeconomic analysis. As a result, there is an increased need for analysis, particularly for the needs of the market regulatory authority, responsible for investor protection, market integrity and financial stability, and for the optimal and efficient organisation of markets. The following is intended to introduce a critical debate on these areas and their potential regulatory implications.

[286] For example, according to this source, "*for firms sold in a secondary LBO, the increased tax benefits account for 29 % of the return to pre-buyout capital*". According to Kaplan S., P. Strömberg (2009), "*a reasonable estimate of the value of lower taxes due to increased leverage for the 1980s might be 10 to 20 % of firm value. These estimates would be lower for LBOs in the 1990s and 2000s, because both the corporate tax rate and the extent of leverage used in these deals have declined*".

[287] Haddad V., E. Loualiche, M. Plosser (2017): "*a low risk premium increases the discounted value of performance gains and reduces the cost of holding an illiquid investment. It determines the changes in the characteristics of LBOs over the cycle, including their risk, leverage and performance (...) Consistent with the literature on LBOs, market expansion phases are characterised by high leverage and low returns to private equity investors*". Nevertheless, "*these facts are difficult to reconcile with the view that LBOs are governed by prevailing debt market conditions*".

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4.1 Effects of private equity on company management: value creation?

Private equity strategies directly influence the management of the companies they invest in, creating a specific interconnection between the financial and real spheres. In this respect, while VCs are less likely than LBOs to take majority stakes in the capital of their targets, their holdings are also intended to have a direct influence on their operational management.[288]

4.1.1 Sources of private equity performance

According to the literature, the performance of private equity funds reflects a financial gain from multiple sources, the main components of which are as follows:

- Specific valuation effects associated with improvements in the operational management of the firms concerned (alpha), linked to the firm's organic growth or its external growth, e.g. as a result of restructuring the production base (asset disposals, etc.) and/or mergers and acquisitions.[289] These gains in operating performance are also attributable to the reduction in agency costs, i.e. to the disciplining effect of governance based in particular on:
  - Aligning the incentives of GPs (carried interest), portfolio managers (co-investors) and managers of target companies;[290]
  - The management and monitoring of sponsors linked to their shareholding in target companies;
  - The specific managerial qualities of the managers (Kaplan S., M. Klebanov, M. Sorensen (2012));
  - Creditors' monitoring of firms, combined with their high level of debt;
- Market valuation effects reflecting changes in general or sectoral economic conditions, and, where applicable, frictions and imbalances between supply and demand for financing. The importance - in relation to operational management - of market/industry valuation was attested to by Guo S., E. Hotchkiss, W. Song (2011). Over and above this fundamental sensitivity of private equity performance to the effects of company valuations, questions are now being asked about the rise in LBO valuation multiples in recent years (Figure 58, Figure 59), which it is feared may reflect excessive yield-seeking by institutional investors competing for access to private equity. See 3.1.2 and the following section.
- The effects of debt leverage. Contrary to the teachings of the Modigliani-Miller theorem - which states that the value of a firm, and therefore the indifference of its investment policy, is insensitive to whether it is financed by equity or debt - the current theory of the firm considers that debt, depending on its cost (which increases by virtue of a pecking order of financing sources), reduces agency costs (management discipline imposed by creditors). There is thus an optimal debt ratio that maximises the value of the firm, taking into account its risk of default. In fact, the performance gain from leverage is linked to the risks it entails;
- Secondarily, the ability to take advantage of specific public incentives, whether tax or other.

Practitioners often use the concept of a "value bridge"[291] to describe such a breakdown into three components of the performance of the equity investments concerned, noted Eq, in: i) variation in revenues and operating margin, ii) valuation multiple and iii) impact of debt between the initiation and closing of a transaction::

$$Eq_T - Eq_0 = M_0 * (EBITDA_T - EBITDA_0) + EBITDA_T * (M_T - M_0) + (D_0 - D_T)$$

where M, the "multiple", represents the ratio of enterprise value per unit of earnings EV/EBITDA

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[288] VC funds can control companies with stakes of less than 50% of their capital. There are two possible effective mechanisms for this: obtaining seats on the board of directors and privileges (contractual clauses) associated with preferential shareholdings; and investing via several funds and/or in association with other investors. [However, according to Guo S., E. Hotchkiss, W. Song (2011), while LBO funds in the US hold an average of 50% of board seats, 27.7% of them involve more than one private equity fund (club deal).

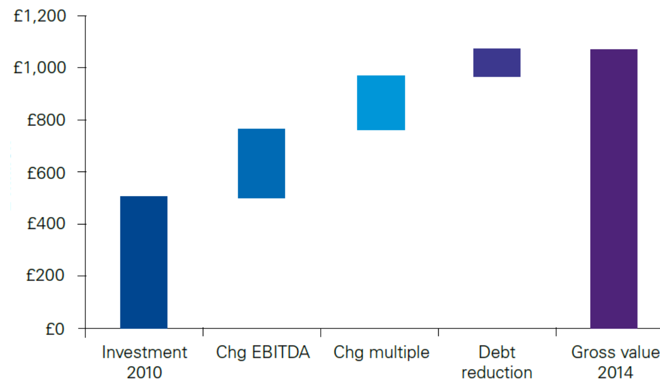
[289] For example, Guo S., E. Hotchkiss, W. Song (2011) show the extent of acquisitions in the three years following the LBO, amounting to an average of 40.2% of the firms' capital.

[290] Guo S., E. Hotchkiss, W. Song (2011), for example, indicate that management contributes to the equity financing of LBOs in 62% of cases and that funds actively manage the managerial choices of investee companies, with 37.2% of LBOs replacing their CEO in the year following the LBO. Kaplan S., M. Klebanov, M. Sorensen (2008) analyse the CEO selection process.

[291] See, for example, CEPRES, Figure 44 (source: Nasdaq), and discussion by Morris P., L. Phalippou (2019).

A major flaw in this approach relates to the treatment of debt, an increase in which is seen as automatically reducing returns, whereas it is often a major source of returns, typically in the case of "dividend recapitalisations".[292] This is because the debt incurred can increase the value of the investment over the investment period in question, and even more so if it is repaid over a longer period.[293]

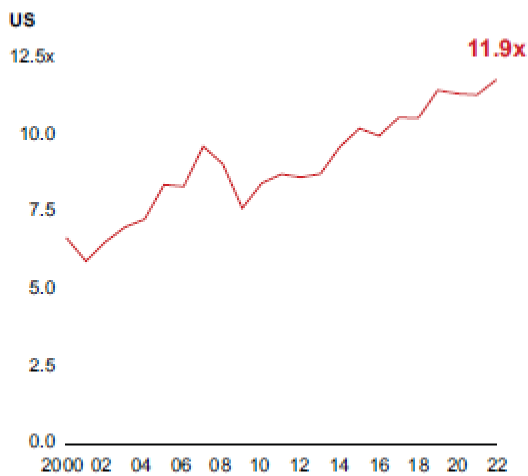
Figure 57: Example of the breakdown of a company's 2010-2014 performance by value bridge
(GBP million)



Source: KPMG (2016) based on company filings, author's calculations.

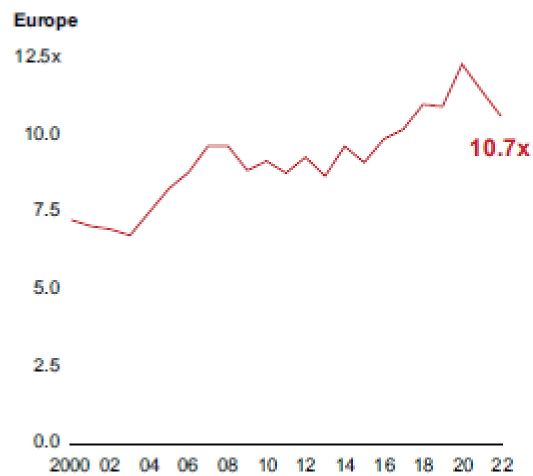
LBO valuation multiples (average EV/EBITDA)

Figure 58: United States



Source: S&P LCD, Bain (2023).

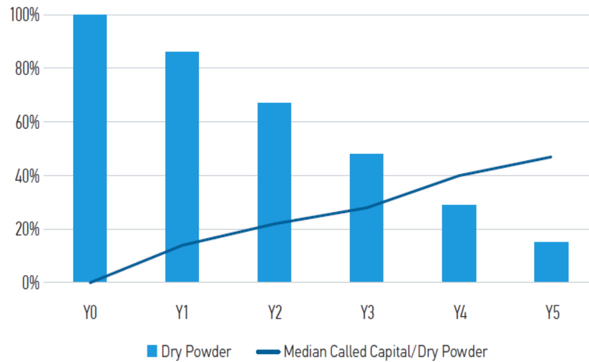
Figure 59: Europe



Source: S&P LCD, Bain (2023)

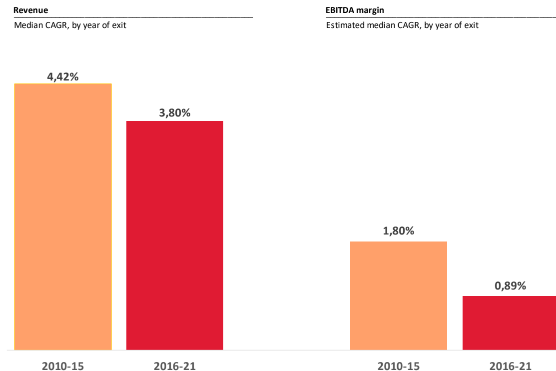
[292] A dividend recapitalisation (also known as a dividend recap) occurs when a company takes on new debt in order to pay a special dividend to private investors or shareholders.
[293] According to KPMG (2016) while the value bridge provides a numerically consistent framework, "*the figures should be interpreted with caution. The value bridge does not reflect the proportion of debt that contributes to private equity returns, as it only captures one dimension of debt. (…) The value bridge only captures the absolute amount of debt repaid in the deal*". Furthermore, the value bridge "*does not allow us to measure whether a company has been better managed than its peers*".

Figure 60: Proportion of capital raised that is not invested (dry powder) and ratio of called-up capital to dry powder (%, mid-2020)



Source: Preqin, Morgan Stanley-Portfolio Solutions Group (2021).

Figure 61: Revenues and operating margin of LBO target companies (median growth rate)



Source: CEPRES, Bain (2022). Note: LBOs excluding real estate and infrastructure funds of more than $50 million as at 14/12/21

The empirical literature on the value creation of companies targeted by VC generally highlights that firms supported by VC perform better than their peers who are not (Harris R., T. Jenkinson, S. Kaplan (2015), Manigart S., M. Wright (2013), Ewens M., D. Sosyura (2023))[294]. Ewens M., M. Rhodes-Kropf (2015), Korteweg A., M. Sorensen (2017) further indicate a performance persistence that distinguishes the best VC funds from the others. After a marked evolution over the past two decades, the entrepreneurial finance market (Ewens M., J. Farre-Mensa (2021)) seems to confirm this observation.[295] This general observation comes however with a great variability in instantaneous cross-sectional performance and, in fact, a multiplicity of strategies and funding implemented. Gompers P., W. Gornall, S. Kaplan, I. Strebulaev (2016) reveals and analyzes in this regard, for a global sample of VC management companies, the differences in practices according to industry, stage of financing , geography and past successes considered. Deal sourcing, deal selection, and post-investment value added are identified here as contributing to value creation, with VC fund managers considering deal selection to be the most important of the three. A specific added value of VC is found in its ability to professionalize its target companies (Manigart S., H. Sapienza, W. Vermeir (1996); Baum J., B. Silverman (2004); Colombo M., L Grilli (2010)). Bertoni F., M. Colombo, A. Quas (2015) highlights the differences between Europe and the United States, and the importance of government sponsorship of VC. In Europe, Manigart S., Standaert T., Knockaert M. (2021) particularly emphasizes the role of the specific qualities of the management team[296] and the mode of governance of the targets. In this regard, the study highlights in particular the effect of the specific qualities of the management team and the mode of governance of the targets (see also Hochberg A., Y. Ljungqvist, Y. Lu (2007), Puri M., R Zarutskie (2012), Ewens M., D. Sosyura (2023)), and highlights four configurations in which VC performs particularly, depending on whether the firms concerned have a significant level of physical capital, or on the contrary of intangible assets, or a low diversity of top management, or that they are spin-offs from other institutions. In France, a study of small and medium-sized firms by the professional association France Invest (France Invest-EY (2022b)) indicates[297] that the performance of companies is two-thirds attributable to the increase in earnings, itself mainly (at 54%) attributable to organic growth (Figure 62, Figure 63).

[294] According to Catalini C., J. Guzman, S. Stern (2019), in the United States, however, firms with growth potential perform similarly, regardless of their source of financing – namely through VC or not.
[295] Harris R., T. Jenkinson, S. Kaplan (2015) indicates an underperformance of VC compared to listed markets in the early 2000s.
[296] A result consistent with the observation in the United States by Ewens M., D. Sosyura (2023) indicating that the presence of a VC director on the board of directors brings, beyond the investment of the fund, unique skills that increase a startup's chances of survival and ultimate success.
[297] The association also stresses the importance of the expertise of the funds for the target companies: for example, external growth operations are sometimes carried out by the funds themselves, in the absence of resources from the companies supported to do so.

Figure 62: Main determinants of value creation (2022)

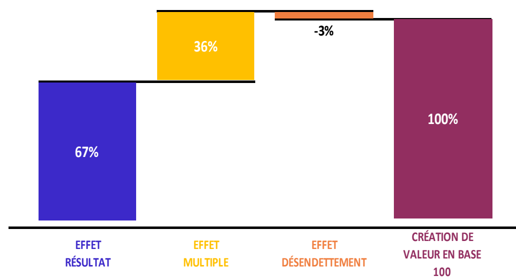
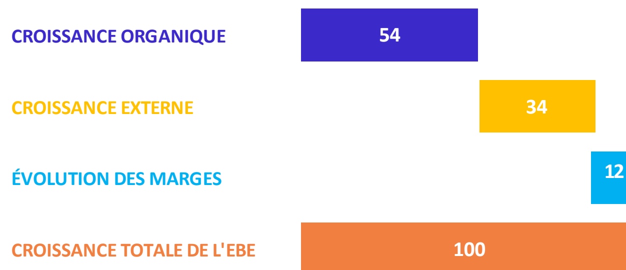


Figure 63: Determinants of EBITDA growth of the operations under review (base 100)



Source : France Invest-EY (2022b). Note: study of a sample of 362 SME disposals from 2012 to 2021. Operating result effect: growth in gross operating surplus (EBITDA)

The performance of (LBO) funds can also be attributed to their (active) management, regardless of the performance of the target companies. Two effects are particularly likely to come into play here: selection and leverage.

- Selection over time (diachronic) and at a given time (synchronic).
    - Diachronic selection (timing of investments and asset disposals/capital exits): the opportunistic timing of investments by LBO funds has been documented.[298] Ayash B., R. Bartlett, A. Poulsen (2017) showed the importance of the timing of fundraising, investments and divestments, irrespective of the fund's strategy, and its impact on IRR. Barber B., A. Yasuda (2017) showed, for VC and LBO funds raised between 1993-2009 in the United States, that the timing and performance of fundraising are closely linked to the managers' desire to maximise their fundraising ("*GPs time their fundraising to coincide with periods of peak performance through (...) exit and fundraise (...)*". Robinson D., B. Sensoy (2011) confirmed[299] the importance of timing for American and European LBO and VC funds, and highlight its negative effects[300] on their performance (see 3.4). As no common factor (e.g. macroeconomic) is identified, the effect is considered idiosyncratic. In the same vein, Morgan Stanley-Portfolio Solutions Group (2021) identified a systematic poor timing of investments (capital calls) made but an ability to divest at the right time.[301] Besides, the duration of investments tended to shrink until recently[302]: "*The average amount of time private equity firms hold assets has slipped steadily, from 5.8 years in 2014 to 4.4 years in 2021*" (Bain & Co. (2022)).
    - Synchronous selection (snapshot): the ability to select the most buoyant sectors and, within them, the best investment projects is part of the management mandate. Guo S., E. Hotchkiss, W. Song (2011) established the importance of valuation effects linked to the sector of the target companies. Several observations make this point clearer in the recent context: on the one hand, the propensity of private equity (VCs but also, to a lower extent, LBOs) to overweight innovative sectors (e.g. technology, healthcare/biotech - see 1.3 and Bain (2022, 2023)); on the other hand, the fact that the Covid crisis has generally benefited these sectors.

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[298] Knigge A., E. Nowak, D. Schmidt (2006) identify the impact of timing, especially for VC funds, which is linked more to the timing of the initial investment than to the timing of capital outflows. Manigart S., K. Mulier, F. Verplancke (2020) indicate that VC investments closer to the IPO date obtain better returns, particularly from VC funds with a good IPO track record.

[299] According to Kaplan S., P. Strömberg (2008), "*Guo et al. (2008) and Acharya and Kehoe (2008) find that post-1980s public-to-private transactions experience only modest increases in firm operating performance, but still generate large financial returns to private equity funds. This finding suggests that private equity firms are able to buy low and sell high. Similarly, Bargeron, Schlingemann, Stulz, and Zutter (2007) find that private equity firms pay lower premiums than public company buyers in cash acquisitions. These findings are consistent with private equity firms identifying companies or industries that turn out to be undervalued. Alternatively, this could indicate that private equity firms are particularly good negotiators, and/or that target boards and management do not get the best possible price in these acquisitions"*. Results subsequent to this study (for example Robinson D., B. Sensoy (2011), Morgan Stanley (2021)) seem to support these alternative interpretations.

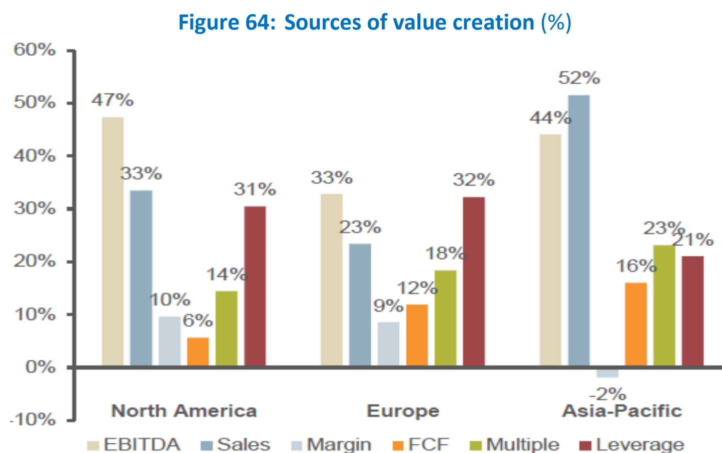
[300] However, we note with Kaplan S., P. Strömberg (2009) that "*private equity funds are able to acquire firms more cheaply than other bidders*", which according to the authors indicates a negotiating capacity rather than privileged access to relevant information.

[301] Given the cyclicality of private equity performance (3.4), the analysis recommends that investors should be "counter-cyclical".

[302] A reversal of this trend cannot be ruled out.

- The use of leverage: the contribution of leverage has been assessed at one third of performance (that of operational improvements, at 51%) (Figure 64). A leverage effect is likely to be taken independently of that of the targets, even if it is backed and/or refinanced by them, which can also impact on the performance (and risks) of the funds (see 3.2).

Figure 64: Sources of value creation (%)



Source : Braun R., B. Puche (2014). Note: based on 701 divestments between 1990 and 2013. The percentages shown may overlap. For example Sales and Margin are components of EBITDA, joint effects can add to it.

In France, based on the observation of 28 "success stories", a study by the association France Invest (France Invest-INUO Strategic Impact (2020)) identifies six channels through which private equity contributes to the creation of value: i) strategic realignment (development of the and business plan), ii) operational realignment (helps to restructure the operational organization and improve efficiency), iii) professionalization of the management team (process, systems, reporting), iv) governance (formalization of decision-making), v) business scale building (e.g. support of acquisition strategies and their implementation); vi) direct financing by capital increase and/or leverage effect (financial expertise, project and acquisition financing).

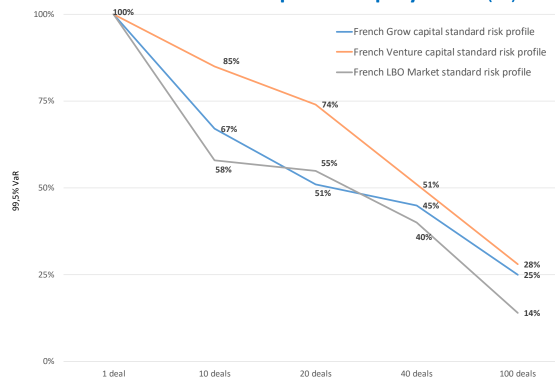
4.1.2 The outperformance of private equity and its origins remain to be confirmed and clarified

- **Characteristics of private equity fund performance**

Even before identifying the sources, we need to be sure that private equity performance is material.
The literature generally notes that private equity outperforms stock markets. Kaplan S., A. Schoar (2005), Phalippou L., O. Gottschalg, (2009), Phalippou L. (2020) established that this outperformance of private equity is weak, however, and is tending to decrease. This result has been supported by Appelbaum E., R. Batt (2017), Harris R., T. Jenkinson, S. Kaplan (2016), Lerner (2020), Cambridge Associates (2022) (Figure 66). Practitioners such as ILPA (2017), Ennis R. (2020), Ilmanen A., S. Chandra, N. McQuinn (2020)) have confirmed that average private equity returns are close to those of the stock market. Ivashina V., J. Lerner (2019), Lerner J., J. Mao, A. Schoar, N. Zhang (2022) confirmed that average net returns from private equity are not much higher than those from listed stocks. Kaplan S., B. Sensoy (2015), Brown G., R. Harris, T. Jenkinson, S. Kaplan S., D. Robinson (2015), and Harris R., T. Jenkinson, S. Kaplan (2016) pointed out, however, that while the outperformance of LBOs since the 1980s has been continuous and on average 3% per year relative to the S&P 500 in the United States, the very high performance of VCs in the 1990s was followed by several years of underperformance, which has since ended.[303]

[303] Sensoy, B., Y. Wang, M. Weisbach (2014) attribute this decline in performance to a maturing of the VC industry and a limited number of investment opportunities.

Figure 65: VaR at 99.5% as a function of diversification: simulation for French private equity funds (%)



Source: Gottschalg (2021).

These observations are tempered by several points:

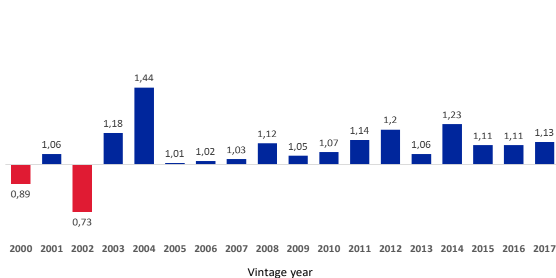
- Managers have **discretionary adjustment margins** for returns. In fact, there is evidence of strategic behaviour in this respect (Jenkinson T., M. Sousa, R. Stucke (2013); Barber B., A. Yasuda (2017); Brown G., O. Gredil, S. Kaplan (2017)): in particular, GPs show the best relative performance during periods when they are raising funds. There are many ways of achieving this. For example, Gornall W., I. Strebulaev (2020) showed, for 135 unicorns owned by VC funds in the United States, that valuing all the capital at the price of preference shares leads to a 56% overstatement of the value of ordinary shares and therefore of the companies concerned. Correcting for this effect would cause 65 of the 135 firms under review to lose their unicorn status. Nevertheless, these effects can be ambivalent. According to Brown G., O. Gredil, S. Kaplan (2017), while some underperforming managers show upwardly biased returns,[304] the best performers rather underestimate their performance. The meaning and importance of potential valuation biases and their effects on aggregate fund performance are therefore not established.
- However, **measurement difficulties** and the strong dependence on the method of calculation chosen (cf. 3.1) for performance remain, e.g. relative to the basis (index/fund population) used by SMEs for comparisons with public markets (Gottschalg O., L. Phalippou (2009), Phalippou L. (2020)). The result is a lack of consensus in the literature on the extent of private equity's outperformance (SEC DERA Memo of 01/09/20) and on the collective benefit likely to be derived from it.
- It is also important to relate returns to the management fees charged (cf. 2.1.2, Phalippou L., O. Gottschalg (2009), Metrick A., A. Yasuda (2010), CEM Benchmarking (2017), Phalippou L. (2020)). Market estimates (for example, Ennis R. (2020)) put the cost of a private equity investment at approximately[305] 6% of the capital invested per year. The modelling of an LBO management is sufficient to establish that: "*On average, LPs may just break even, net of management fees, carry, risk, and costs of illiquidity*" (Sorensen M., N. Wang, J. Wang (2015)). According to Bain (2020): "*For the past decade U.S. public equity returns have essentially matched returns from U.S. buyouts which (to put it mildly) is not what private equity investors are paying for*".
- In addition, the literature (Kaplan S., A. Schoar (2005), Fitza M., S. Matusik, E. Mosakowski (2009)) has highlighted the high **disparity in returns**. The same high disparity is found in the ability of LPs to identify the competence of managers (SEC DERA (2020)). Braun R., T. Jenkinson, I. Stoff (2018), however, attested to a persistent, albeit decreasing pattern of returns. Harris R., T. Jenkinson, S. Kaplan, R. Stucke (2020) confirmed the persistence of VC performance but not of LBO performance. Kaplan S., A. Schoar (2005) and Korteweg A., M. Sorensen (2017) analysed the causes of this persistence and attributed it in part to the skills of GPs. Lerner J., A. Schoar, W. Wongsunwai (2007) also showed the ability of certain institutions (e.g. American endowment funds) to identify outperforming (secondary, follow-on) funds. Laubach O., A-C. Brunen (2020) also pointed to the ability of LPs to identify the most diversifying funds. Goyal A., S.

[304] In contrast to Barber B., A. Yasuda (2019), the authors note a limited effect of performance on subsequent fundraising.
[305] The author relies in particular on McKinsey (2017) which itself quotes CEM Benchmarking, and on Phalippou L. O. Gottschalg (2009).

Wahal, M. Yavuz (2021) characterised the selection factors used by LPs, but emphasised their tendency to follow their peers, to reinvest with a domestic bias, with the same GP, and also to choose funds/GPs with no track record, so that future performance cannot be projected. In any case, LPs' ability to select is highly variable, with Lerner J., J. Mao, A. Schoar and N. Zhang (2022) emphasising the strong dependence on the parties' ability to negotiate: "*bargaining between GPs and LPs leads to gradation in investment performance based on the parties’ outside options*".

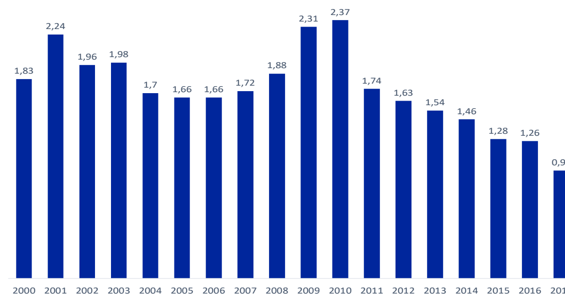
- Lastly, taking **risk into account can affect observed performance**:
  - **Volatility**: according to Ilmanen A., S. Chandra, N. McQuinn (2020): "*The **smoothed returns** of private equity **understate the true economic risk** and are an artifact of the lack of mark-to-market for illiquid assets*”. Ang, A., B. Chen, W. Goetzmann, L. Phalippou (2018) pointed out that a measure based on cash flows tends to correct this "smoothing" of performance: "*Volatility measures for private equity (…) from our cash flow-based return series are at least as volatile as standard aggregate equity market indices*".[306] This point is debated. Gottschalg O. (2021) showed the benefits, for a sample of French funds, of diversifying LP portfolios (especially for VCs, which are riskier) (Figure 65).[307]
  - **Leverage-related risks**: according to Axelson U., T. Jenkinson, P. Strömberg, M. Weisbach (2013), “*Credit conditions also have a strong effect on prices paid in buyouts*”. In fact, leverage induces a marked procyclicality in private equity returns (see 3.4).
  - **Liquidity risk:** Franzoni F., E. Nowak, L. Phalippou (2012) stressed the importance of factoring in a **liquidity** premium when analysing LBO performance. At 3% per annum, this premium is likely to cancel out the specific advantage (alpha) of a private equity investment.

Figure 66: Performance of LBOs in the U.S. against the Russell 3000 index (KS-PME multiple, by year)



Kaplan-Schoar PME. The Russell 3000 index represents approximately 98% of the U.S. listed equity market. Source: Preqin Private Capital Benchmarks, as at 31/12/19, Lerner (2020).

Figure 67: Performance of LBOs in the U.S. against the Russell 2000 index (TVPI, by year)



Source: Lerner (2020). Cambridge Associates "Private equity: Index and selected benchmark statistics" 31/03/20: p.31.

- **Relative weight of performance factors**

Over and above the much-debated assessment of the performance of private equity, the sources of return in terms of the proposed breakdown show a limited share of organic growth –a point that is contradicted for French SMEs[308]:

- Guo S., E. Hotchkiss, W. Song (2011) attributed 22.9% of LBO returns to changes in operating performance, 17.7% to changes in industry valuation multiples, and 33.8% to tax benefits from increased leverage. According to this source, "*pre-buyout leverage is not high (…), but leverage increases are large, increasing by four times EBITDA on average (…) Firms undergoing an IPO typically reduce leverage with some portion of the proceeds from going public*." A repeat of this analysis in the current market context would help assessing whether its conclusions are confirmed.

[306] Moreover, taking into account transactions on secondary markets greatly increases the volatility of returns (Boyer B., T. Nadauld, K. Vorkink, M. Weisbach (2018)).
[307] Note that the benefit of this diversification must be weighed against its cost.
[308] See France Invest (2022) study on value creation cited above.

- Ayash B., R. Bartlett, A. Poulsen (2017) showed the superior returns of strategies focused on revenue growth over those focused on operational efficiencies.

Thus, even if private equity has a major impact on company management and some GPs demonstrate an ability to generate persistent performance, the nature of private equity performance, or at least LBO performance, seems largely attributable[309] to companies' debt and capital restructuring/external growth strategies[310], and is far from being limited to its effects on organic growth alone. According to Bain (2022):[311] "*According to CEPRES Market Intelligence, multiple expansion has been by far the largest contributor to private equity buyout returns over the past decade, dwarfing revenue growth and margin improvement as sources of value creation. Over the past 5 years, the trend has become even more pronounced. While multiple expansion accounted for 48 % of value creation in the average deal from 2010 to 2015, that number jumped to 56 % from 2016 to 2021. The imbalance owes much to the steady tailwind provided by rising asset multiples, which can allow GPs to buy a portfolio company and see an increase in value even if little has changed in its operational performance. Something else is going on as well: Buyout investors on average have actually become less adept at improving the performance of their portfolio companies. Comparing those same 5-year periods, CEPRES data shows that revenue and margin growth among buyout companies have fallen 14 % and 51 %, respectively. For the past decade, then, private equity funds have not only developed an outsize reliance on multiple expansion to generate returns, but they have also lost ground when it comes to adding organic value*".

The specific nature of the returns offered by private equity, compared with stock markets, continues to be debated (SEC DERA (2020)). According to Stafford E. (2017), LBO returns can be replicated by a strategy investing in small cap/EBITDA companies on the stock market, which produces alphas consistent with other studies of LBO returns. However, Ang A., B. Chen, W. Goetzmann, L. Phalippou (2018) qualified this result because, if, in a first approximation, the private equity return "is a leveraged investment in small and mid-caps", it is only partially described (spanned) by factors specific to stock markets. Døskeland T., P. Strömberg (2018) added that replicating private equity returns on stock markets remains a theoretical prospect. Obtaining equivalent exposures would, in the current state of the markets, be prohibitively expensive.

4.2 Private financing vs. equity financing: rethinking market structure

4.2.1 Financing through listed shares is declining in favour of unlisted shares

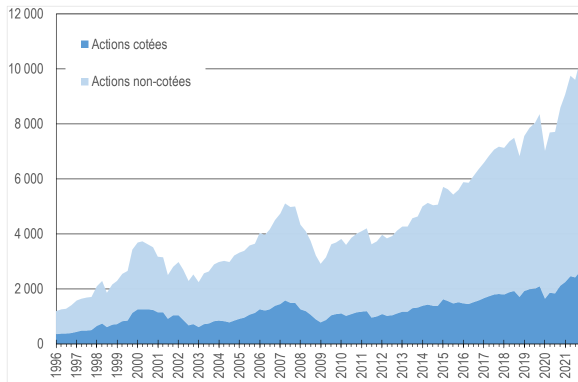
Jensen M. (1989), whose work continues to be a reference, argued that the concentrated holdings of private equity funds in target companies give powerful incentives to fund managers and encourage efficient organisation, limiting the costs of the firms concerned. This efficiency is based on performance-linked management remuneration, high leverage (financed mainly by junk bonds at the time) and active corporate governance. These structures were considered to be better than those of typical listed companies, whose shareholder base was fragmented, and whose leverage and corporate governance were considered to be too weak. They were therefore seen as having a promising future.

Although the crisis of the 2000s proved this prediction wrong, the growth of private equity since then has brought a question into focus: disregarding the debate on the outperformance of private equity,[312] there has been a decline in the financing by stock markets to the benefit of non-listed equity and private equity financing. According to Ewens M., J. Mensa (2019): "*Fewer startups go public, and those that do are older. (…) founders are using their increased bargaining power vis-a-vis investors to stay private longer*". Ewens M., J. Farre-Mensa (2021) state that: "*The U.S. entrepreneurial finance market has changed dramatically over the last two decades. Entrepreneurs raising their 1st round of VC retain 30% more equity in their firm and are more likely to control their board of directors. Late-stage startups are raising larger amounts of capital in the private markets (…)*".

[309] In addition to an LBO bias, geographical disparities are likely, as this does not correspond to the observations of France Invest in France.
[310] This corresponds in particular to the buy-and-build strategy, which consists of buying small targets at attractive multiples, then consolidating them to ultimately sell them at higher multiples.
[311] Castellaneta F., O. Gottschalg (2016) report similar results.
[312] For example, according to Phalippou L. (2020): "*Private equity funds have returned about the same as public equity indices since at least 2006. Large public pension funds have received a net MoM (…) within a narrow 1.51 to 1.54 range. The big four private equity firms have also delivered (…) within a narrow 1.54 to 1.67 range. Three large datasets show average net MoMs across all private equity funds at 1.55, 1.57 and 1.63. These net MoMs imply an 11 % p.a. return, which matches relevant public equity indices*".

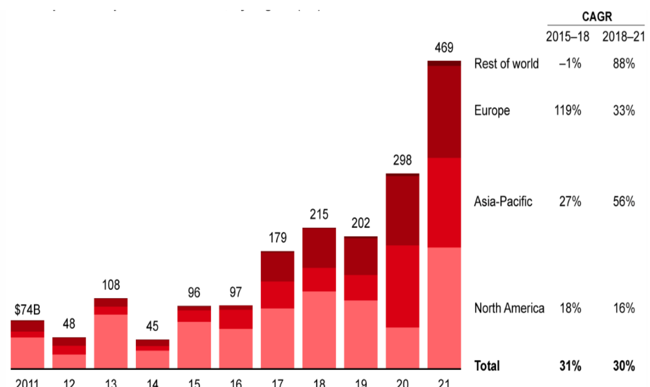
Symmetrically, the number of listed companies has stabilised worldwide over the last twenty years - despite the rapid growth of stock markets in emerging countries - reflecting an erosion of listings in developed countries, particularly the United States. This trend is particularly marked in terms of the number of initial public offerings (Figure 70, Figure 71) and delistings (PtoP,[313] Figure 69)

Figure 68: Listed and unlisted shares outstanding issued by NFCs in France (€m)



Source: national financial statements (Banque de France), AMF.

Figure 69 : *Public-to-Private transactions* $bn)



Source: Preqin, Dealogic, AVCJ, Bain (2022). Note: the region is that of the target. Base: date of announcement of pending deals (subject to revision).

Number of IPOS

Figure 70: United States

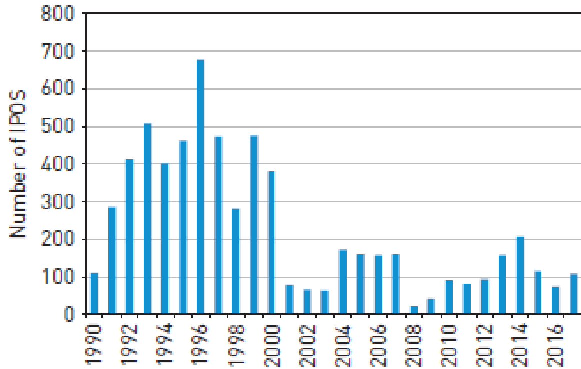
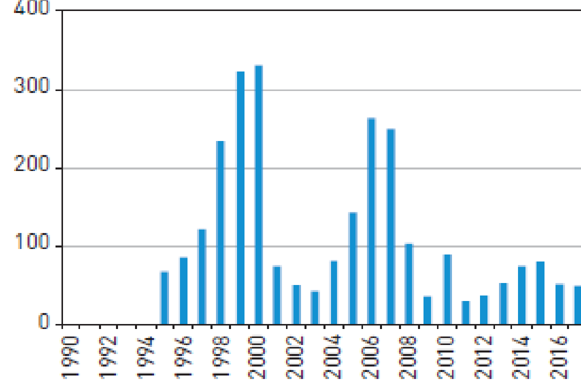
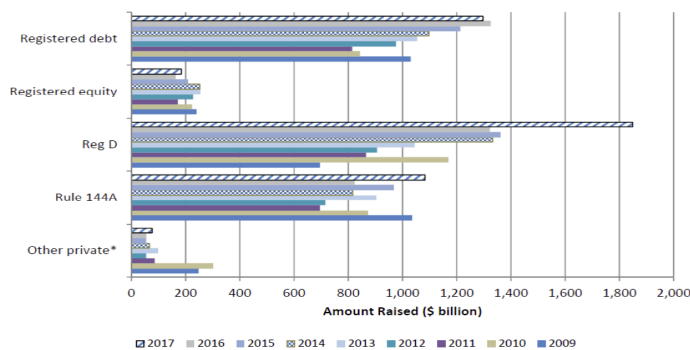


Figure 71: euro zone



Source: Roşov S. (2018).

Figure 72: Unlisted equity financing in the U.S.



Source: U.S. SEC AMAC (2020). Note: capital raised from 2009 to 2017. "Other private" includes Regulation A, S and Crowdfunding offerings.

[313] Public to Private transaction e.g. whereby a private equity fund acquires a listed company and delists it.

4.2.2 A phenomenon attributable primarily to regulatory and tax changes

4.2.2.1 New financing requirements for young, innovative companies

In developed economies, the business models of new companies tend to aim for rapid growth based on investments in intangible assets, which consume relatively little capital. The desire to protect these easily copied assets encourages a concentration of investor holdings and a preservation of control over firms (Roşov S. (2018)). More generally, according to Stulz R. (2019), "*The decline in public equity is explained by (…) changes in the nature of firms. The increase in the importance of intangible assets makes it costlier for young firms to be public when the alternative is funding through private equity from investors who have specialized knowledge that enables them to better understand the business model of young firms and contribute to the development of that business model in contrast to passive public equity investors".*
This argument is all the more valid given that, at an initial stage of their development, firms have no access to stock market financing and limited access to bank financing. Private equity (and other players such as business angels) is therefore particulary suited, and at times the only one willing, to finance them. However, there are some limitations to this argument: we need to explain why the management skills of innovative companies are specifically and exclusively concentrated in private equity.

4.2.2.2 Deregulation of securities markets

However, the development of financing via unlisted markets is primarily the result of legislative and regulatory changes. Deregulation has been documented in the United States in particular (Box 7), as the requirements of the Securities Act of 1933, which had largely restructured the way companies were financed in the wake of the 1929 crisis, were scaled back. This was at the root of the considerable development of stock markets up to the 2000s (De Fontenay E. (2017)).[314] Regulatory developments over the last three decades have been characterised in particular by a downward trend in requirements in terms of:

- Investor information, in particular publication;
- Canvassing and soliciting investors;
- Transfer of securities (secondary market).

These developments have had direct and indirect effects in Europe, where unlisted financing has particularly been encouraged by the expansion of the private equity industry and the range of private equity financing (including American private equity), and by the desire of public authorities to encourage the financing of certain types of company (e.g. SMEs, innovative companies) from alternative sources to bank credit, which had become increasingly rationed.

Box 7 - United States: regulatory changes facilitate the development of private markets

1. Broadening the scope of exemptions from the requirements of the Securities Act of 1933

Reshaping the market structure in the wake of the Great Depression, the Securities Act of 1933 required transparency about all material facts relating to any security offered to the public to enable investors to make informed investment decisions and votes. Section 5 of the Act required that every offer and sale of securities be registered with the SEC, and that issuers provide a prospectus containing audited financial statements and detailed information about the issuer's business, financial condition, risk factors and management. Private securities issues and private equity are exempt from this rule. Exempt offerings have increased since the 1990s following a number of initiatives that extended the scope of these exemptions:

- ↗ The easing, in 1990, of restrictions on the **transfer of private securities** (amendments to SEC Rule 144A);
- ↗ The adoption of the **National Securities Markets Improvement Act** (NSMIA) in 1996, which made private securities issues subject to Rule 506 (Reg D) more attractive, exempting them from state registration and review requirements. Section 3(c)(7) of the Investment Company Act was also added, exempting "investment companies that sell their securities solely to 'qualified purchasers'". According to Ewens M., J. Farre-Mensa (2021): "*NSMIA makes it possible for VC and PE funds to raise larger funds without having to register as public investment companies (and thus be regulated like mutual funds)*".
- ↗ The adoption of the **Jumpstart Our Business Startups** Act (JOBS) in 2012, which:

[314] "*From its inception, the federal securities law regime created and enforced a major divide between public and private capital raising. Firms that chose to "go public" took on substantial disclosure burdens, but in exchange were given the exclusive right to raise capital from the general public. Over time, however, the disclosure quid pro quo has been subverted: Public companies are still asked to disclose, yet capital is flooding into private companies with regulators' blessing*".

- Increased from 500 to 2,000 the number of shareholders above which an issuer must register with the SEC and comply with its public disclosure requirements;
- Increased the amounts of authorised capital raising (Regulation A);
- Created new exemptions for general solicitation and advertisement (Rule 506c), allowing securities to be marketed to any accredited investor, and for crowdfunding.

The SEC's concept release of 18/06/19 on the **harmonisation of exemptions** from securities offering requirements, which came into force at the end of 2020, makes it easier for small issuers to raise capital on the private markets. It adds greater flexibility to the exemptions and private financing offerings (Regulation D), and to the concept of accredited investor, notably by revising Sections 144A and 506(b,c). According to Ewens M., J. Farre-Mensa (2021), "*The deregulation of securities laws—in particular the NSMIA of 1996- has increased the supply of private capital to late-stage private startups, which are now able to grow to a size that few private firms used to reach. NSMIA is one of a number of factors that have changed the going-public versus staying-private trade-off, helping bring about a new equilibrium (…). This new equilibrium does not reflect an IPO market failure. Rather, founders are using their increased bargaining power vis-a-vis investors to stay private longer*".

2. The clarification of the applicable regime has facilitated investment by pension funds

Furthermore, clarification of the conditions of application of the provisions of ERISA (Employee Retirement Income Security Act of 1974) has encouraged pension funds to invest in private equity by removing legal uncertainties. Defined benefit (DB) pension funds were already investing in private equity, but defined contribution (DC) funds were concerned about the legal framework governing such investments (fear of litigation). In response to a request from the industry on this point, a letter from the Department of Labour dated 03/06/20 **clarifies the status of investment in 401k plans** and sets out the conditions for including shares in private equity funds in these plans In this case, such investments are possible provided that they:

- Are not made directly
- Are part of diversified strategies (for example, "target date, target risk, balanced funds")
- Provide an assessment of the specific risks and benefits of the allocation, justifying in particular:
  . Gains (after costs) in terms of diversification
  . Appropriate and transparent management
  . Appropriate handling of complex issues, e.g. relating to costs, liquidity and valuation.

References: U.S. HR FSC (2019); Ewens M., J. Farre-Mensa (2021); Arnold & Porter (2020).

4.2.2.3 A preference for debt financing

Several factors characterise the preference for financing the productive system through debt - and therefore also through private equity (e.g. LBO financing). First of all, of course, the generally applicable tax regimes (see 2.1.1.2). Secondly, debt financing is a major channel for the transmission of monetary policy, which, given private equity's sensitivity to credit conditions and strong link to the real economy, is a particularly effective intermediary. Favouring the search for yield, low interest rate monetary policies have clearly benefited private equity over the past decade.[315] The fact remains, however, that the fiscal and monetary framework distorts the financing of the economy (e.g. vs. the theoretical Modigliani-Miller model), with untested effects in the event of a cyclical downturn. Adding to the factors previously mentioned, this has strongly contributed to the decline in equity financing in favour of unlisted financing, and the attrition from the stock market does not appear to be due to a failure in the IPO mechanism (Roşov S. (2018), Larrain B., G. Philips, G. Sertsios, F. Urzua (2021); Ewens M., J. Farre-Mensa (2021)).

4.3 Multiple externalities at work, linked above all to a lack of market transparency

Major externalities affect the multiple objectives of the market regulator (investor protection, market integrity, financial stability), and collective well-being (market organisation and efficiency, in addition to the questions on value creation that remain open). These are difficult to measure and are poorly documented.

4.3.1 Effects on equal treatment of investors, and even market integrity

Private equity financing is based, for the most part, on vehicles designed for qualified investors and specifically adapted to their needs. Although they have common characteristics, funds take a wide variety of forms, largely determined by the bilateral negotiations that make it possible to establish the contractual terms and conditions specific to each fund, accompanied where appropriate by parallel agreements (side letters,[316] co-investment, etc.). Investors with more resources to carry out due diligence before investing therefore have more negotiating

[315] We note here that the Japanese central bank uses other transmission channels, e.g. interventions on listed equity markets, which create different incentives, more favourable to stock markets.
[316] "Investors often enter into side letter arrangements with the fund manager providing for certain additional terms and conditions such as enhanced reporting, or terms addressing tax or regulatory conditions uniquely applicable to an investor" IOSCO (2009).

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power[317] and better conditions of access to the market.[318] Judging the fairness of the conditions of access to the offer becomes a delicate exercise, and the principle of equal treatment of holders must be considered from a different angle from that which prevails, for example, for UCITS.

The non-standardised nature of funds and their operations, plus the increasing complexity of management techniques (cf. 2.2.2), combine with the sector's low level of transparency to create numerous conflicts of interest and situations where information management requires particularly strict procedures (fairness of information to unitholders, respect for confidentiality of sensitive information, valuation of assets, etc.) in order to respect market integrity (cf. 3.1.3). The concentration of activities (advisory, management, etc.) and offerings (for example, private equity, private debt) within integrated groups creates new risks and conflicts of interest. These developments may raise questions about the need to adapt market supervision.

4.3.2 Effects on reporting and market transparency at several levels

4.3.2.1 At microeconomic and macroeconomic levels

The development of unlisted financing and private equity has an impact on market transparency. It leads to additional costs for investors in researching and processing information, requiring them to negotiate transparency conditions on a case-by-case basis and to carry out specific due diligence to analyse non-standardised information. Basically, it fragments market information and places the initiative and the cost of obtaining it on the investor. Secondly, it encourages the sale of commercial data, which is primarily useful for fund marketing. The increased cost of market information and its processing is a negative informational externality, which can be assessed not only at the microeconomic level of investors, but also at the level of all the information provided by the financial markets to the public about the production system and the economy. As a consequence, the representativeness of stock markets is eroding (Schlingemann F., R. Stulz (2020)), along with the public information associated with them. Transparency to the market is provided in a number of ways, depending on whether it is bilateral (e.g. between manager and LP) or linked to publications, including by data providers. It is important to differentiate it from reporting (to the regulator), which safeguards the public interest without compromising confidentiality. The need for transparency is justified roughly by the need for:

- Retrospective and prospective information on investment opportunities (risk/return profile, fees, contractual terms and conditions), which is generally useful for the competitive operation of the market;
- Market monitoring by stakeholders and supervisors, for purposes ranging from monitoring investment performance to managing risks and conflicts of interest;
- Cross-cutting market analyses, to assess changes (size, structure, balance) and risks, for example to financial stability.

Box 8 - A rich yet limited academic literature

Private equity is a field of academic research in its own right which benefits from a wealth of empirical literature, including leading references (see e.g. references at the end of this publication). This literature deals with the three main areas of interrogation identified (Figure 73): the investor-manager relationship, the specific characteristics of management, and the impact of management on the companies financed. In particular, the literature addresses the difficulties associated with the valuation of illiquid assets, the measurement of the sector's performance, and the information needed to inform the choices of private equity investors and their implementation.

However, this literature has two main limitations. Firstly, it generally falls within the theoretical framework of corporate finance and delegated portfolio management, with little study of 'industrial economics', externalities (particularly informational) and, to a limited extent, market regulation issues (integrity, financial stability, etc.). Secondly, it actually admits that it is very limited by the information available, which is

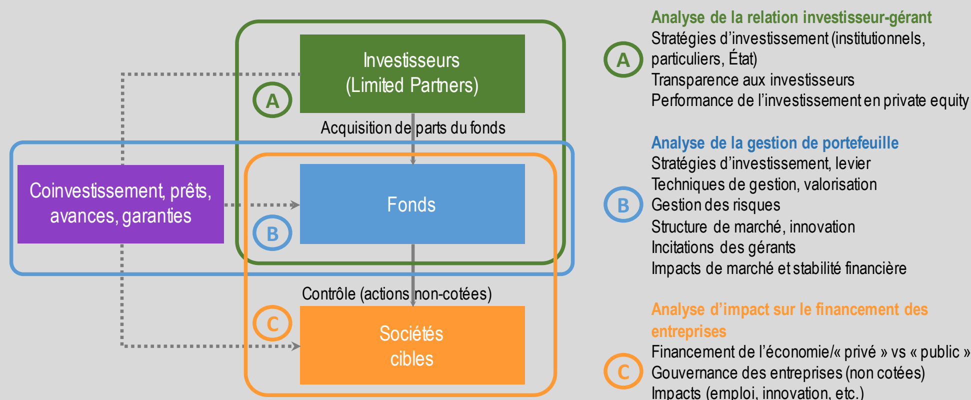
[317] For example, "*State and local retirement systems and other government investment funds control more than $5 trn in combined assets. But they say that (…) in recent years, fierce competition over in-demand managers leaves them at a growing disadvantage. "A frequent refrain that the [New York State Common Retirement Fund] receives in response to its request for improved fund terms that would benefit all investors is: "respectfully declined,'" the fund's chief investment officer wrote in a comment letter to the SEC*" Wall Street Journal; Private funds face a push to provide more disclosure; 06/07/22.

[318] For example, "*In a poll of 100 in-house attorneys representing private-equity investors, 84 % said they accept unsatisfying terms in at least some funds they invest in, out of fear that pushing for better terms will cause their institution to lose access to the fund manager or be allocated a smaller share of the fund*" Private funds face a push to provide more disclosure; Wall Street Journal; 06/07/22.

largely limited to the commercial databases in use and the information that may be transmitted by certain operators, most often investors.[319] The macroeconomic effects of the development of private equity and its industrial economy therefore remain largely unexplored.

Two conclusions in particular can be drawn from this literature: the (over)performance of private equity relative to the stock markets and its value creation remain debated; they appear to be weak but positive. Secondly, there is evidence of pronounced cyclicality in this sector, linked in particular to its pronounced use of leverage, with disparities between VCs and LBOs.

Figure 73: Typology of approaches from the literature



Source: AMF.

When it comes to private equity, academic research is particularly useful for interpreting the available information. However, its contribution is highly dependent on access to relevant data and the nature of that data. There are two types of database. Databases based on data from GPs (such as Preqin or PitchBook), which are subject to declarative/selection biases likely to affect, in particular, performance calculations. The scope of this data therefore needs to be accurately assessed. Unlike hedge fund databases, the performance displayed is often that of deals and, with a few exceptions, fund NAVs are not provided. Information is therefore given on performance that is not net of fees. The second type, such as EurekaHedge, is very difficult to access and is also dependent on the willingness of contributors.

As a result, the general scope of the studies remains limited (Box 8). For example, although the issue of market transparency gives rise to constructive debate,[320] the negative informational externalities arising from the reduced transparency of private finance (e.g. compared with stock markets) have not, to our knowledge, been assessed.

4.3.2.2 For market regulation purposes

The need for reporting is assessed in the light of the competent authorities' duties to ensure investor protection, financial stability and the optimal functioning of the market. It arises above all from the discretion over the contractual relationships establishing the funds, especially as they are poorly regulated (e.g. declared to the authorities but not authorised by them). Competition for access to the market (especially in a period of low interest rates and the search for yield) may have led investors to demand less transparency (race to the bottom), which could constitute a market failure. This context has led the SEC in the United States[321] to propose increasing transparency requirements:[322]

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[319] Fears may be expressed that academic research, which depends on access to data, will be "captured" by the industry, and that researchers (e.g. who also carry out consultancy activities) may have conflicts of interest. Initiatives by researchers to pool access to data and contrasting views in the literature and academic debates tend to limit these concerns.

[320] See, for example, Brown G. L. Phalippou (2022).

[321] See the "*Background and need for reform*" section of the U.S. SEC's proposed rule aimed at improving investor protection in private funds dated 9/02/22, the "*Costs and benefits*" section of the proposed rule amending form PF dated 26/01/22 and the "*Observations from examinations of private fund advisers*" dated 27/01/22.

[322] U.S. SEC (2022b) states that *"Although private equity funds have become an essential part of the U.S. financial system, there is only partial and insufficient information about their governance, strategies, and performance available to regulators*". *"New and more granular information (…) would assist regulators in understanding the diversity of and trends in investment and financing strategies employed by private equity funds, their uses and sources of leverage, the risk profiles of portfolio companies (…) and funds' exposures to these risks, funds' exposure to changes in interest rates, as well as to risks from outside the U.S.*" Furthermore, "*We anticipate that the improved transparency of private equity fund*

- Transparency to LPs on fees, performance,[323] and avoidance of certain types of preferential treatment;
- Reporting (section 4 of *Form PF* for large private equity advisers) :
    - Periodic, to increase information on fund strategies, leverage and financing of controlled companies (CPCs), including whether the management company and/or related parties also provide other financing (credit) to CPCs, on transactions, restructurings and recapitalisations, managers or related persons and conflicts of interest;
    - And on an ad hoc basis (within one business day) when certain events occur: secondary transaction initiated by the portfolio manager, resignation/withdrawal of GP from a fund, termination of investment period or fund closure, activation of clawback clauses (e.g. reimbursement of carried interest received by GPs) by GPs or LPs.

These considerations raise the question of whether the requirements applicable in Europe should be amended. Given that the incentives provided by regulators may be limited by the possibility of regulatory arbitrage between jurisdictions, these issues should be addressed at the international level. Several factors limit the scope of AIFMD reporting, which takes little or no account of private equity. Without a positive characterisation of private equity[324] - and within it fine-grained categories of strategies (e.g. LBOs are not recognised as such and are therefore in a residual category) - the scope covered is imprecise. There is also the more general issue of adapting reporting requirements on liquidity and leverage to the specific characteristics of private equity, e.g. the value of reporting on dry powder, bridge financing, secondary transactions, etc.

The information on private equity that is useful for monitoring the market as a whole and keeping an eye on the risks to financial stability remains very incomplete, fragmented and not very comparable, and insufficiently documented from a methodological point of view. In particular, it is limited to data from commercial databases (which primarily meet sponsors' need to promote/benchmark their offerings), rating agencies and professional associations. Furthermore, information from regulators is limited to the supervised funds. It is therefore difficult to compare precisely the scope covered by the different sources (commercial databases, rating agencies, professional associations, and market regulators). The information is rarely comparable: for example, European trade associations such as Invest Europe, BVCA and France Invest, provide granular data on fundraising, investment and divestment flows[325], but not on assets under management. Information on assets under management is provided by data vendors (e.g. Preqin, PitchBook) and consultants (McKinsey, Bain, etc.) without being able to judge the basis for comparability. The scope of information provided by rating agencies (S&P, Moody's, Fitch) on the market and financing conditions of targets (e.g. debt ratios, transaction valuation multiples) remains difficult to reconcile. Generally speaking, these sources do not make it possible to establish a precise link between the activities under consideration and the many criteria used to identify the entities concerned. These sources therefore make it possible, depending on the case, to assess certain specific aspects/indicators of activity (outstandings, fundraising, dry powder, investments, etc.) but remain very fragmented and imprecise,[326] especially as their own information is discretionary and their methods are not necessarily harmonised. Without this, it remains difficult to reconcile data from the supervisory authorities and from the monitoring of activity by market participants, and to assess their completeness. It should also be noted that information from professional

activities as a result of the proposed current reporting requirements to the SEC and FSOC would enhance regulatory systemic risk assessment and investor protection efforts". "*The proposal is designed to allow the SEC and FSOC to receive more timely information about certain events that may signal distress at (…) private equity funds or market instability*".

[323] These requirements are accompanied by requirements on the audit of funds, their accounts and records.

[324] See for example ESMA's letter on the AIFMD review of 18/08/20: "*We also see merit in specifying the distinction between holdings and private equity funds and clarifying the definition of a joint venture*".

[325] The data of Invest Europe collected from the different national associations follows a harmonized methodology.

[326] Despite the quality and usefulness of these sources, as in the case of hedge funds, the categories of private finance (private equity, debt, etc.) and market activities concerned are based more on market practices than on strict legal definitions, which often vary from country to country. The scope covered is therefore vague and market coverage rates are difficult to assess. Crucially, cross-border activity is not well understood. Furthermore, activity indicators are favoured over indicators relating to risk (leverage, etc.), valuation, pricing and so on. Professional associations publish information on financing flows, not on assets under management.

associations on the private equity management industry itself (e.g. structure, number of employees, profitability) is virtually non-existent[327].

On this basis, consistent monitoring of activity at an aggregate level (assets under management, funding flows, market conditions and other relevant information on regulated entities) remains a challenge for the supervisor in France and Europe. A basis for accurate reconciliation of the different types of legal entities covered by the various sources on the funds and the private equity industry would be a useful prerequisite for progress on this point.

4.4 Overview and questions

4.4.1 The development of private equity is structuring all capital markets

Private finance calls into question the market structure based on stock markets and the positive informational externalities associated with them. Broadly speaking, these externalities are characterised by:

- A nexus of contracts[328] that establish the firms in the production system and a model of shareholder governance that manages agency relationships through standardised contracts and recourse to stock markets. This organisation also lays down the principles of "shareholder democracy", or participative democracy;[329]
- Sharing the income and risks of the production system through a fragmented number of investors, institutional investors intermediating the investment of household and individual savings;
- The provision of a liquidity and fair value service for the production system via a centralised secondary market. In particular, there are positive externalities in terms of:
  - market efficiency (incentives to provide fundamental information on firms (reporting obligations, financial research) and the speed with which fundamental information is incorporated into prices);
  - the provision of aggregated and comparative information (benchmarking) on the market: stock market indices reflect the ability to aggregate standardised information in real time. Previously seen as representative, “broad” stock market indices have lost their status as indicators of economic performance.
- The fragmented nature of firms, investors and intermediaries in a centralised market is conducive to healthy competition (absence of market power) and fairness.

Several negative effects and externalities of private equity have been identified in this perspective:

- A decline in the representativeness of the economy through stock market listings, also linked to a sectoral distortion of listings to the detriment of young and innovative companies;
- Conversely, a need for the stock market as a benchmark, including for valuing unlisted holdings (e.g. the calculation of SMEs in 3.2.2);[330]
- Lower frequency of valuations and public dissemination of quotes (reduced efficiency);
- Increased difficulties in assessing the aggregate cost and efficiency of financial intermediation.

On this last point, in a recent speech,[331] the Chairman of the SEC stressed: i) the cost of financial intermediation (8% of GDP in the United States compared with 5% in 1975), ii) the benefits of concentration in financial

[327] As mentioned in 2.1, in France, management companies submit detailed annual reports to the AMF via an annual information sheet (FRA) and an annual report on controls (RAC).

[328] The firm is thus understood as a place where contracts are concluded to organise the production system. This concept is central to the theory of corporate finance initiated by Jensen M., W. Meckling (1976). See also Butler H. (1989).

[329] For a discussion and critique of the concept of shareholder democracy, see for example, Croquevieille M. ((2018).

[330] Roşov S. (2018): "*a smaller proportion of the corporate sector will be subject to social corporate transparency, limiting support for the corporate sector. (…). This situation poses challenges for expected returns and asset allocation*".

[331] Competition and the Two SECs; G. Gensler Remarks Before the SIFMA Annual Meeting; 24/10/22.

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intermediation (access to information, economies of scale, network effects), and iii) the importance, for healthy competition between financial intermediaries, of taking into account:

- Transparency conditions that reduce the benefits of player consolidation and information asymmetries, with more players having access to information and being able to challenge it;
- Effective access to the market for issuers and investors, not limited to the largest or most central players, since such access fosters competition and innovation;
- The fairness of this access, which must treat similar players equally.

Gary Gensler points out the following: "*Private funds hold approximately USD 21trn in gross assets. Given its relative growth, soon, this sector may surpass the U.S. commercial banking sector ($23 trn) (…) Given that these funds touch so much of our economy, efficiency and competition among these intermediaries is important. That's why I supported our recent proposal to require registered private fund advisers to provide detailed reporting to investors of fees, expenses, performance, and preferential treatment, such as side letters. More competition and transparency could potentially bring greater efficiencies to this important part of the capital markets*".

4.4.2 Questions to be considered by the market regulator

It is clear from the foregoing that the impact of the growth of private equity financing is not limited to microeconomic considerations on the financing of the productive system: it calls into question the capitalist market model, in particular the transparency (the optimal balance between the cost and benefits of monitoring firms and transparency to the public), equal treatment of stakeholders and competition that are supposed to represent the market standard. We are therefore exploring the impact of the development of private equity in a context that is less confined to the sphere of the market practitioners directly concerned. A major difficulty here is that of measuring the externalities associated with transparency, where it is easy to highlight the costs of producing and publishing information.[332]

Debates have sometimes taken a political turn in the United States.[333] It is up to the competent authorities to identify ways of objectifying the terms and specifying the costs and benefits of the possible options. More in-depth analyses would be useful at several levels. The first level would be to improve understanding of the market's structure and equilibrium, and of the incentives and strategic behaviour of market participants. The second level would be to assess more specifically the risks and the need to adapt regulation and supervision to protect investors (e.g. integrity and management of conflicts of interest) and financial stability, and to organise the market (competition, fairness, efficiency).

In the short term, the lack of transparency highlights the need to better - e.g. more systematically and explicitly - assess the risks under review, including for financial stability. In this respect, the effect of private equity on target debt levels is often considered in the literature for the good microeconomic incentives it gives to creditors (monitoring) and management (alignment of interests), and the related benefits in terms of management efficiency. However, this literature neglects the negative externalities arising from the use of leverage and the cyclicality it induces for financial stability. The argument that "*The wall of debt and private equity losses during the great financial crisis turned out to be remarkably small, and the private equity industry itself proved amazingly resilient*" (Brown G., L. Phalippou (2022)) seems insufficient to characterise current vulnerabilities, and to prospectively assess the possible effects of adverse developments in the economic cycle.[334] What we need to do today, in a "reverse macro stress test", is assess the conditions under which private equity targets exposed to the " scissors effect " of a rise in interest rates (on their profitability and liabilities) become vulnerable to credit

[332] We can compare this with the argument on costs put forward by Brown G. in Brown G., L. Phalippou (2022): "*average cost of IPOs' regulatory disclosure is about $2.5 mn and on an ongoing basis, the annual costs for a typical small-cap company about $1.5 mn (…) since the vast majority of private equity portfolio companies would be microcaps (…), disclosure costs for private equity-backed companies would be proportionally higher*", and those of the SEC's cost-benefit analysis in its proposals to amend reporting (U.S. SEC (2022c).
[333] See, for example, the debates of the House of Representatives Financial Services Committee.
[334]We could also look more systematically at the history of private equity in this area, e.g. at the systemic dimension of (failed) LBO deals or the underperformance of venture capital during the bursting of the internet bubble in the early 2000s.

refinancing conditions, and the ability of the funds that hold them to effectively recapitalise them.[335] Such an exercise is totally unrealistic in today's transparent environment.

Over and above immediate needs, the analysis remains very much limited to the microeconomic level, conditioned by strong assumptions and often influenced by commercial interests. There is a greater need for critical examination of the limits of the information disseminated, particularly on the performance of the sector, and for the needs of the market regulator: investor protection and market integrity, financial stability, optimal and efficient organisation of the market - taking externalities into account. Despite the useful information provided by professional associations, data redisseminators and other market participants (managers, consultants, rating agencies) and relevant academic work, the assessment of the effects of private equity on the financial and economic system is structurally limited by the scarcity, cost and low comparability of the information available.

A more in-depth dialogue with stakeholders should be a prerequisite for such initiatives, also to take into account the rapid transformation of market practices.

CONCLUSIONS - RECOMMENDATIONS

A number of findings and observations have emerged from this investigation.

1. Private equity: a channel that has become crucial for financing the economy

The importance of private equity for the global and European financial systems is demonstrated by the amounts of financing involved: US$6.3 trillion and US$1.2 trillion, respectively, in 2022. However, these figures do not reflect the sector's rapidly growing importance or other factors. They also reflect the financing of key sectors of the economy, in particular small and innovative companies, and/or companies with limited access to bank or stock market financing. Moreover, the intensive use of debt increases control over the economy. It also strongly interconnects the real economy and the financial sphere, exerting a direct influence on the management of companies and being highly exposed to their performance. It also strongly interconnects the real economy and the financial sphere, exerting a direct influence on the management of companies and exposing it strongly to their performance.
However, the private equity industry and to a lower extent the private equity market, in part subject to policy frameworks that are less restrictive, remain badly known in their own right. In particular, there are still limited activity and risk indicators, and the demographics, structure (geographical, by product type, etc.), concentration and profitability of the industry remain largely unexplored. Filling such gaps could draw benefit from the support of the relevant trade bodies.

2. The outperformance of private equity seems established, but needs to be qualified

While the performance of private equity is still a matter of debate, it is generally acknowledged that it outperforms stock markets. It is attributed to efficiency gains linked in particular to the managerial qualities of its managers. This observation needs to be qualified for a number of reasons:

- It seems to be due more to the fund's ability to engineer and facilitate financial transactions, to the timing of its investment operations, and to gains due to leverage, than to any contribution to the organic growth of the firms concerned, and a positive impact of private equity on the physical investment of targets remains to be confirmed;
- It is highly differentiated, with a weak correlation between venture capital, which concentrates a large number of companies in the growth phase, and LBOs, which concentrate a majority of financing in large deals involving mature companies;

[335] Although set in a different context and focusing on a case analysis, Moinade S. (2013) offers an interesting perspective on the 'maturity wall', i.e. the ability to extend debt maturities and its sustainability.

- Its persistence remains debatable. Aggregate returns have appeared to be falling (for the LBO in the U.S., Figure 66), and are also highly cyclical, while the volatility and low liquidity of investments could justify (higher) risk premiums;
- Lastly, at a time when the sector is attracting new talent, it raises questions about the remuneration of fund managers, which is poorly measured, and about the ability of demand to fully exploit competition in this type of financial intermediation.

3. The development of private equity is also a source of potential risk

These developments are accompanied by more or less proven risks in many areas of financial regulators' remit.

- In terms of investor protection:
  - First, they renew some questions about the ability of institutional investors to apprehend the information on their investments (e.g. concerning asset valuation, measurement of risks due to leverage and illiquidity, fees) and on the materiality of conflicts of interest and risks to market integrity. If these risks are, in France, the subject of ethical provisions of the professional associations concerned -which have regulatory force- they are more generally likely to be increased in particular by:
    - Difficulties in valuing assets and low market transparency due in part to the lack of standardisation of relevant information, which is generally conditioned by the contractual clauses specific to the funds that establish them;
    - The increasing complexity of the offering and its concentration in large diversified groups, combined with a cyclical economic environment - all of which are likely to increase conflicts of interest for fund managers;
  - They raise new risks associated with increasing distribution to retail investors, starting with those with a higher net worth.

- In terms of financial stability, private equity's high exposure to leverage and its highly cyclical nature raise questions about the ability of these closed-end funds and the companies they hold to manage refinancing maturities (a potential 'maturity wall'). There have already been isolated signs of tension on the debt markets concerned, particularly in the United States, but whether this is a precursor remains to be seen.

- In terms of market organisation, the development of private equity:
  - Results in a decline in stock market financing and negative informational externalities linked to the fragmentation and privatisation of market information;
  - Impacts, in return for adapting supply to the specific needs of investors, their equal treatment, against a backdrop of differentiated market access and transparency;
  - May have adverse effects on the cost of financial intermediation to the extent to which it reduces transparency and comparability of the offer. The Chairman of the SEC in the United States has expressed fears of a lack of competition[336].

4. Implications for market authorities

From a market authority perspective, the above observations are likely to lead to:

- A re-examination of some provisions of the applicable regulatory framework. An initial analysis shows that in Europe, given the fact that AIFMD covers a wide spectrum of asset management players:

[336] Note that in Europe, transparency of fees is the subject of several binding regulations: PRIIPS, ELTIF 2, and potentially in the future, within the framework of the Retail Investment Strategy project presented by the European Commission.

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- An imprecise characterization of private equity by the AIFMD directive[337]. As an illustrative example, the reporting, which leaves the strategies considered to the discretion of the reporting entity, does not explicitly include a subcategory for LBOs[338].
- There is insufficient visibility for vehicles that are simply declared (unauthorised, unsupervised), and even their assets under management are not officially known.
- The types of leverage specific to private equity are not taken into account. Firstly, fund leverage does not include the vehicles (SPVs/holdings) through which they invest in target companies. Secondly, the leverage of these companies, which is generally increased on the initiative and for the needs of the funds that hold them, is not known (this is not the case in the United States).

Furthermore, to the need for further examination of the ability to manage conflicts of interest and risks to market integrity could be reassessed. Given the global nature of the industry's activities and the possibilities for regulatory arbitrage, such a review should be conducted from an international perspective.

↗ Better monitoring by the supervisory authorities appears advisable. In addition to the regulatory data available, more relevant aggregate activity indicators would be useful. The definitions and scopes covered by existing market data need to be clarified, especially where the scope of entities and products is difficult to align with the reference frameworks available to the regulator. On this basis, increasing dialogue with the sector could lead to more systematic mapping of its assets and activities.

[337] AIFMD does not positively describe any management strategy. However, its consideration of the specificities of private equity appears to be less, for example, than that of hedge funds.
[338] AIFMD reporting distinguishes the categories: VC, Growth, Mezzanine, Multi-strategy and Other. The LBO, or 69.8% of outstandings in 2022 in Europe according to McKinsey/Preqin, is therefore in the residual "Other" category. More generally, FIA reporting falls under level 2 rules, which specify the content and leave little room for ESMA to amend the data fields (create them, or even supress them if they are redundant). To date, the Strategy on supervisory data in EU financial services did not affect this reporting.

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ANNEX 1 - FRENCH PRIVATE EQUITY FUNDS

French private equity funds can take the following forms:

- FCPR (retail private equity investment fund): a close-ended alternative investment fund (with some exceptions) with a usual life of five to 10 years that invests at least 50% of its assets in securities of unlisted companies, in some cases issued by SMEs. They are offered to all types of investors, including retail investors, and are eligible for special tax benefits.
- FPCI (professional private equity fund): reserved for professional or similar investors able to invest at least €100,000. Unlike FCPRs, these funds are not subject to AMF authorisation, but only require notification to the AMF. Subscribers may also qualify for special tax benefits, subject to certain conditions. It should be noted that FPS (professional specialised investment funds), a more generic category of fund than FPCI (see FPS regime), make it possible in certain specific cases to implement strategies similar to private equity (long-term closed-end funds investing predominantly in unlisted equity securities).
- SLP (Free partnership companies): created in 2015 to offer a legal form under French law similar to that of Anglo-Saxon private equity funds (see Box 1), SLPs, like FPCIs, are distributed to professional and similar investors.
- Two specific categories of fund focus their financing on specific sectors and, in return, benefit from a more favourable tax regime (see NB 2 below).
  - FCPI (retail venture capital investment funds) are made up of at least 70% of holdings in the form of financial securities, shares in limited companies and current account advances issued by SMEs less than 10 years old that carry out R&D expenditure or demonstrate the creation of recognised innovative products or services. Although FCPIs are not necessarily intended to invest in unlisted companies, in practice this is generally the case.
  - FIP (retail local investment funds) invest a minimum of 70% in unlisted regional SMEs that have been in existence for less than 8 years and whose main activity (excluding securities or property management) is in an area of the European Economic Area (EEA) chosen by the fund. The fund also benefits from tax advantages (up to 25% reduction in income tax on subscription) and capital gains tax.

NB 1: Exceptionally, FCPRs and FPCIs can be open-ended, and in this case are referred to as "evergreen". It should also be noted that subscriptions via life assurance can offer secondary liquidity, where appropriate.

NB 2: Private equity funds, especially those likely to be marketed to the general public, may benefit from tax advantages over and above the standard regime (single flat-rate levy) applicable to transferable securities (30% on capital gains, comprising 12.8% income tax and 17.2% social security contributions). Under certain conditions (e.g. holding the units for at least 5 years and reinvesting dividends), capital gains may be tax-exempt. FCPRs that benefit from tax measures (under Article 163 quinquies B of the French General Tax Code) require at least 50% to be invested in securities of unlisted EEA companies, comprising, up to a limit of 20% of the fund's total assets: i) shares of companies with a market capitalisation of less than €150 million, and ii) debt securities of unlisted companies; and for the remainder, other equity securities of unlisted companies. FPCIs investing at least 50% in securities of unlisted EEA companies are also exempt from capital gains tax under the same conditions, provided that they do not hold more than 25% of the securities of the companies in which the fund invests. Other tax regimes may also apply, such as, for example, for FPCIs, the regime applicable to entrepreneurs in a capital transfer situation (Article 150-0 B ter of the French General Tax Code).
To offset the risk associated with the specific investment constraints applicable to FCPIs and FIPs, unlike FCPRs and FPCIs, their tax regime entitles subscribers to a reduction in income tax.

For funds distributed to the general public, see the AMF's guide for private equity funds: Guide AMF de 2019 sur les FCPR, FCPI et FIP.

ANNEX 2 – PRIVATE EQUITY: EXAMPLES OF POTENTIAL CONFLICTS OF INTEREST

The following aims, in support of section 3.3.1 on conflicts of interest, to illustrate, on the basis of IOSCO (2007, 2009), the scenarios that private equity companies may face. As indicated in this section, these illustrative examples do not intend to reflect the materiality of the risks mentioned or assess the effectiveness of the implementation of the applicable ethical rules, in particular at the national level. In France, for example, the rules for managing conflicts of interest must, in accordance with the applicable ethical regulations, be included in the fund's legal contract and communicated to investors before investment, and any change of the rules must be communicated to investors.

- **Marketing**: for example, during fundraising, the private equity firm may solicit placement agents to market its fund(s) and present the merits of investing in certain funds rather than in others. These conflicts of interest justify appropriate disclosure to prospective investors of the conditions (costs, affiliations, incentives) and information (transparency on the funds promoted), e.g. in the LPA.[339]
- **Competing strategies and funds:**
  - **Competing strategies.** A large proportion of sponsors deploy competing strategies to varying degrees, in particular equity and debt funds likely to invest in the same company at different levels of its balance sheet. For a fund investing in a company's equity alongside funds financing its debt, when the company's performance ceases to be positive, the alignment of interests of the holders may be compromised and the interests of the different types of investors may diverge. Mitigating these risks *ex ante* (e.g. by appropriate clarification and delineation of investment mandates and strategies, and by Chinese walls within the management company), contributes to limiting them. It is therefore necessary to ensure ad hoc transparency when conflicts arise (prior information on the company's proposed management of the transaction, via the advisory committees of investors in the funds concerned).
  - **New vs. old funds.** In principle, sponsors have little incentive to raise/invest new funds with the same or similar strategy until the predecessor fund has invested a significant amount (e.g. 75% to 90%) of the capital raised, thereby protecting the interests of the predecessor fund's investors and allowing the predecessor fund to pursue investment opportunities. However, when raising new funds, the private equity firm may use its discretion to allocate investment opportunities between two funds. In principle, the first fund is given priority. However, the promotion/negotiation of new fundraising may lead to a departure from this rule and create conflicts of interest. *Ex ante* management rules may stipulate the allocation of investment opportunities between the funds concerned, e.g. according to their precise strategy (exposure of the funds by country, sector, currency, etc.), or on the basis of an allocation key. The problems associated with joint ownership are avoided by setting exclusive allocation rules (to one fund or the other). Priority allocation of investment opportunities to previous funds should be disclosed to prospective investors. There should be greater transparency through the funds' investor advisory committees.
  - **Secondary or bailout funds.** Their management by the same sponsor also raises conflicts of interest, for example at the end of the investment phase or the life of the previous fund. In particular, these conflicts affect the price of secondary transactions and the new fund's guarantee that it will not support the previous fund at the expense of more attractive investment opportunities. In such cases, it is generally advisable to have the valuation performed by an independent third party.

[339] Limited Partnership Agreement. According to IOSCO 2009, "*Fees associated with the engagement of a placement agent are often borne by the private equity firm (either directly, or paid by the fund with a corresponding offset against the management fee). In some cases, the fund splits such fees with investors and/or bears 100 % of the burden over a specified threshold. We further note the need for potential investors to receive up front disclosure of the basis under which placement agents are being remunerated by fund managers*".

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- **Co-investment:**
    - **of the GP and/or management subsidiary:**[340] in principle they align their interests with those of the LPs. However, they may be offered different terms (e.g. sweet equity,[341] loan conditions) from those applicable to LPs, and discretionary margins may be exploited, e.g. if they can invest on a case-by-case basis (cherry picking). Conflict of interest arises above all when it comes to allocating investment amounts. The granting of preferential co-investment conditions by private equity firms is no longer the norm in developed countries.
    - **of LPs**: These are offered by the private equity firm and make it possible to increase holdings beyond the fund's limits (e.g. in terms of amounts or diversification). These agreements allow the fund to retain control of the investment - avoiding the need to enter into agreements with other private equity firms (club deals) - and allow the LPs to increase their investment on pricing terms that may be different from those of the fund. In principle, all LPs have access to co-investment offers. In practice, GPs sound out LPs' appetite as soon as the fund is launched, and only LPs that can commit quickly benefit from offers when they arise, which makes it possible for certain investors to have preferential access to the detriment of others who are equally willing and able, and would characterise unfair treatment. This conflict of interests is also linked to the management fees received by GPs, whether or not they receive them for co-investment.[342] A co-investment and the basis on which it was made must be disclosed ex post to all investors in the fund, in accordance with regulatory requirements.
- **Additional remuneration for fund managers:**
    - Receiving fees from target companies (e.g. directors' fees, supervisory board fees, advisory fees) creates a conflict between fund managers and their fiduciary duties to LPs. Fund managers are therefore in principle required to disclose to LPs the nature of any fees they may receive and obtain their consent to collect them. Fees received in this context may be contractually deducted from the fund's management fees and verified by a third party, and in any event be the subject of detailed information to the LPs on an ongoing basis.
    - Income may be derived through affiliated parties providing fee-based services to the fund and/or target companies, where appropriate on non-competitive terms. LPs may contractually request to be informed of the nature of any services to be provided to the fund and its target companies attributed to affiliated parties, and third party verification as part of the fund's ongoing reporting. Bidding processes that inform fund investors may also be effective.
- **Transaction costs** have an adverse financial impact on the issuing company, and therefore indirectly on the fund's performance. Although the terms and conditions (nature, basis) for invoicing the company are generally agreed in advance with investors when the fund is created, the amount of these fees is not precisely known in advance, and may therefore give rise to strategic behaviour. *Ex post* transparency (on the fees actually charged) in the fund's performance reports is likely to reduce this risk. In France, the code of ethics of the private equity portfolio management companies of AFG and France Invest stipulates that these fees are deducted from the management fees initially announced, and that the sums concerned and the application of the rules of the documents constituents of the fund in this regard, are included in the fund's periodic reporting. These costs therefore do not go to the manager but to the service providers (auditors, lawyers, bankers) contributing to the realization of the investment.
- **Target company administration:** The management company often asks (on behalf of the fund) to sit on the board of the target company (to monitor its performance and have a say in its management). In principle, the LP and target company's interests are aligned. This may no longer be the case, for example,

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[340] Typically a pro rata participation of 2 to 5% of all fund investments, *pari passu* with LPs

[341] *For example, the possibility of investing only in equities where other investors must invest in equities and primarily in bonds. With a higher proportion of capital than other shareholders, the beneficiary strengthens its control and exposure. Sweet equity is often a component of the management packages of companies under LBO.*

[342] Charging a management fee "artificially" increases the AUM base on which it is calculated. Conversely, the absence of a management fee can make co-investor LPs free riders on the other LPs in the fund.

if the target company is in financial difficulty and seeking new sources of financing. In this case, company law generally stipulates that the director has primary responsibility for the company. In such cases, management companies may release their representatives from their obligations to the fund and appoint another person to manage the fund's investment. This dual role of the administrator also requires specific and appropriate management of each party's information and confidentiality. If the fund retains a significant stake in the target company in the event of an IPO, it continues to sit on the board of directors. The information that its representative (insider) is authorised to disclose is limited, affecting the fund's ability to dispose of its remaining holdings in the listed company. Disposing of holdings before the IPO disengages the fund, but reduces its incentives to make the IPO a success.

- **Allocation of the investment management company's resources:** The investment management company may favour the management of a high-performing fund to the detriment of others, e.g. if a fund loses its chances of generating outperformance fees. The initial fund documentation, such as a private placement memorandum, informs investors of the management company's resources. Protective clauses may be provided, such as "no fault divorce" clauses, where LPs can terminate the management mandate without justification or "key person" clauses, which require that certain individuals remain specifically assigned to the management of a given fund or funds.
- **LP default:** The default of an LP, or its inability to meet the fund's capital calls is usually covered by clauses that set out the remedies available to the fund - e.g. forfeiture of a share (from 25% to 75%) of the defaulting LP's investment in the fund. However, the fund manager can choose how to balance the interests of the different investors (defaulters and non-defaulters). There may be contractual clauses specifying procedures in the event of a default, e.g. requiring certain remedies to be applied if the default is not resolved within a specified period of time and promptly informing the investor advisory committee of investor defaults and remedies applied.
- **Bailout:** In times of crisis, the need to (re)finance target companies may prompt funds to recapitalise target companies.[343] In the absence of resources, they may seek additional financing from existing or third-party investors, to whom they then tend to offer preferential terms. The investment of LPs that do not take part in these fundraisings can then be significantly diluted and create major conflicts between investors who benefit from the offer and those who do not. Protection is provided by investors specifically negotiating qualified majority approvals for these financings and requiring that they first be offered on a prorated basis to investors in the existing fund.
- **Extension of the fund's lifespan.[344]** In general, funds have a 10-year lifespan, with up to three one-year extensions approved by investors. Extensions give the fund manager additional time to clear the fund's assets without having to sell them at a discount or distribute them in kind (which is generally considered undesirable). If the extension is prompted by the fund manager's desire to collect additional management fees (which it often waives)[345], it creates a conflict of interest. It may also create a conflict of interest between LPs whose interests (liquidity needs) diverge. Investors may make some or all extensions subject to the approval of the investor advisory committee and stipulate the conditions for charging management fees. In any event, an extension should trigger a renegotiation of fees with the fund's investor advisory committee.
- **Valuation:** Owing to the illiquidity of fund assets, fund managers have a margin of discretion when they carry out valuation (see 3.2.2 and 4.1). Conflicts of interest may arise if the fund manager has an incentive

[343] As recapitalisation is likely to alter the risk/return profile of the fund, it is a strategic choice made to the detriment of financing new transactions that are more likely to target growth objectives (Morgan Stanley-Portfolio Solutions Group (2021)).
[344] See 3.1.2 on the AMF's work on the end-of-life of retail private equity funds.
[345] Fees over the entire life of the fund (whether or not it is extended) are often capped or it is planned from the outset that the manager will not receive management fees on extensions.

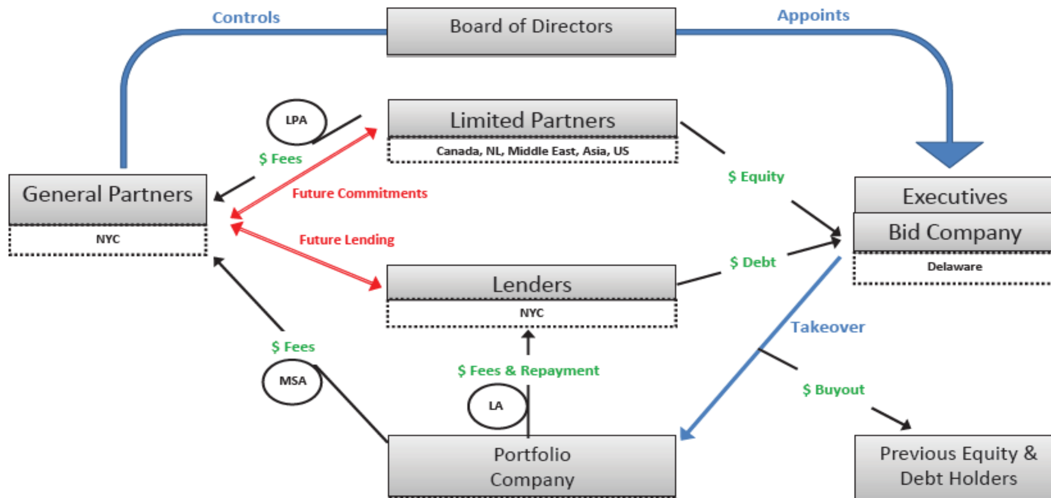
to overvalue the assets, for example in order to receive management fees[346] or to present better performance to prospective investors.[347]

- The most effective mitigations against the risks associated with market value fees are for investors to contractually agree in advance the basis on which the fund manager will be remunerated and to ensure that the manager provides detailed disclosure of all such fees on an ongoing basis, which must be verified by an independent third party. It may also be advisable to establish and disclose valuation policies and procedures. It should be noted that the use of external fund auditors is an established industry practice. Furthermore, investors often negotiate and approve (either directly or through the investor advisory committee) the fund's valuation methodology.
- **Divestment of assets held by several funds.** The basis on which the fund manager determines the most appropriate time to exit a portfolio investment can create a conflict of interest, particularly where that investment is held jointly by several funds that it manages. It is generally preferable for the fund manager that such disposals are made by all the funds simultaneously, at a time determined by the fund that made the initial investment or reached the end of its life first, but this possibility is severely limited by the timing of fund launches by their promoters, and the fact that they are therefore at different stages in their life cycle. A conflict of interest arises when a fund at the end of its life has to sell its stake, whereas a younger fund would aim for higher returns over a longer period. The risks are more limited when, for example, the divestment criteria are set out in the articles of association, the proposed disposal is justified to the investor advisory committees of the respective funds, including with regard to the ability to extend the life of the fund, and the approval of non-proportional disposals by the investor advisory committee is required. An independent valuation of the transaction is particularly appropriate.
- **Disposals on the secondary market** create similar conflicts. In general, the transfer of interests in the fund to a third party, by investors seeking to sell them, is subject to the manager's approval, with the fund's articles of association generally reiterating the illiquidity of the investment and making secondary sales subject to the manager's approval. A conflict of interest arises, for example, if the fund manager considers the buyer (e.g. a competing private equity firm) to be unsuitable[348].
- **Retention of minority interests.** A VC fund, for example, whether in up cycles where the fund is financing growth, or in down cycles where it is financially constrained, may sell the majority of its stake in a target company but, given its growth potential, retain a minority stake for another of its funds. Since the manager is on both sides of the transaction, conflicts of interest may arise, particularly with regard to the price of the transaction. The manager can mitigate this conflict by submitting the offer for approval to the two investor advisory committees concerned before proceeding with the transaction. In principle, when the fund is created, the fund manager informs investors of its preferred divestment strategy in the event of an IPO.

[346] Management fees are generally charged during the investment period on the basis of the value of the capital invested when the fund closes. Thereafter, they are calculated on the basis of the capital invested, at historical cost or amortised in accordance with the applicable valuation standards.
[347] This practice is documented by academic research (see 4.1.1).
[348] In practice, the fund's rules generally provide that the AMC can only refuse its approval for considerations linked to money laundering (AML), tax and more generally in the interest of unitholders.

Figure 74: The wide range of fee sources increases the potential for conflicts of interest

Simplified version of the private equity model. It abstracts from i) the offshore fund which intermediates between LPs and bid companies, ii) the separation betweer investment advisory firm and the general partner vehicle (which together form the transaction sponsor), and iii) intermediary offshore holding companies that fully owr bid company. Contracts are shown in circles. Double arrows show repeated interactions between two parties. Places in the dotted lines show the typical geograpl location of the headquarters. LPA, MSA and LA refer to Limited Partnership Agreement, Management Services Agreement, and Lending Agreement respectively.



Source: Phalippou L., C. Rauch, M. Umber (2016).