

White Paper – Private Equity Secondaries

Roadmap for small to mid-sized investors to successfully access secondaries

April 2, 2013

Introduction

The secondary market is a relatively young, yet maturing segment of the overall private equity marketplace. By virtue of various advantages over other private equity strategies and its remarkable growth over the last 10 to 15 years, this segment has attracted a broad spectrum of investors including pension plans, endowments, foundations, family offices, corporate pensions and high net worth individuals. When reporting on secondaries, the private equity media generally focuses on very large institutional investors and their corresponding investment strategies. However, when **small to mid-sized investors** contemplate developing a private equity secondary program, they generally have different requirements from large investors, which must be taken into account.

This paper serves as an introductory guide for small to mid-sized investors who may be newer to the private equity asset class and are considering gaining exposure to secondaries – regardless of whether they currently have exposure to private equity. This paper presents the characteristics and the current state of the secondary market and its participants. Additionally, this paper compiles Capital Dynamics' Research findings, which aim to highlight the benefits of secondaries, and outlines options for constructing a secondary portfolio. Consequently, this paper aims to give answers to the following three relevant questions:

- *What are the characteristics of the private equity secondary market and its participants?*
- *What are the unique advantages of secondaries and how does my private equity portfolio benefit (qualitatively and quantitatively) from adding secondary exposure?*
- *What are the options for constructing a private equity secondary portfolio?*

1. Private equity secondary characteristics and marketplace

1.1 Introduction to the mechanics of the private equity secondary marketplace

“Secondary stakes change hands when investors, who typically agree to lock up their money for a decade, decide to sell early.”¹

The private equity asset class is illiquid by nature and thus intended to be a long-term investment for investors with a 10-12 year horizon. After overcoming some early stigmas, a robust and mature secondary market has developed over the last two decades and is open to all investors (known as “limited partners”, or “LPs”) that want to exit a private equity commitment. This no longer clandestine “over-the-counter” market encompasses transferring an existing commitment from the current LP (seller) to a new owner (buyer). Today, participants trade private equity fund interests as single positions, portfolios of all sizes, “tail-end” and structured transactions across all types of private equity (such as buyout, growth equity, venture capital, mezzanine, distressed and real estate) and across the entire maturity spectrum – from early secondaries (less than 50% funded) to more seasoned secondaries (50% or more drawn down).

The investor commitment can take the form of a single LP interest, a portfolio of LP interests, or a fund of funds interest. It is important to note that sellers of private equity interests not only dispose their current portion of the fund's entire Net Asset Value (NAV) but also any remaining unfunded commitments. Therefore, the secondary sale not only allows the original LP to receive liquidity for the funded part of the commitment but also releases that LP from any remaining unfunded obligations.

1.2 History, growth, pricing evolution and outlook of the secondary market

The roots of the private equity secondary market date back to the 1980s, when a handful of firms started selectively purchasing private equity interests in leveraged buyout and venture capital funds. Nonetheless, it took the secondary market two decades to develop from a niche market – characterized by scarce liquidity, few buyers, distressed sellers and significant discounts to NAV – to a functional and active marketplace featuring meaningful and steady transaction volumes and numerous market participants, including brokers.

Over the past decade, secondary transaction volume saw an impressive upward trajectory, reaching approximately USD 25 billion in 2012². This growth is high compared to growth in other asset classes and relative to primary fundraising for private equity. In particular, the period between 2006 and 2008 helped fuel recent growth in the secondary market as the financial crisis drove global banks and insurers to scale back their overall businesses and sell off portions of their massive private equity holdings. In addition, the universe of sellers has widened in recent years as foundations, endowments, large pension funds and listed private equity vehicles entered the seller's arena.

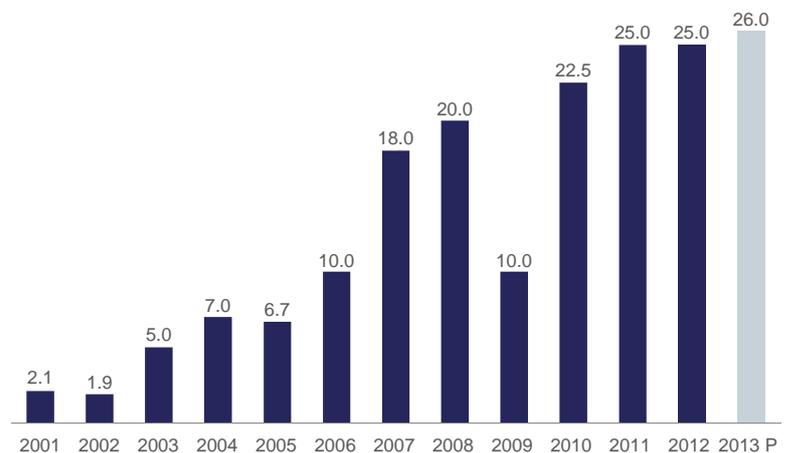
¹ The Economist, December 10, 2011.

² Cogent Partners: Secondary Pricing Trends & Analysis, January 2013 and Capital Dynamics.

Following steep declines in public equity markets, many secondary transactions were driven by the so-called “denominator effect”³, forcing investors to exit their immature private equity holdings in order to be released from unfunded commitments. In 2009, a halt in secondary market trading took place as the bid-ask spreads between buyers and sellers widened dramatically, causing deal volumes to slump by 50% from 2008 levels. This setback did not last long however, and since mid-2010, the secondary market has experienced increased activity and continues to grow, especially as the larger end of the market eagerly acquires diversified portfolios and the smaller end continually and opportunistically buys stakes in funds.

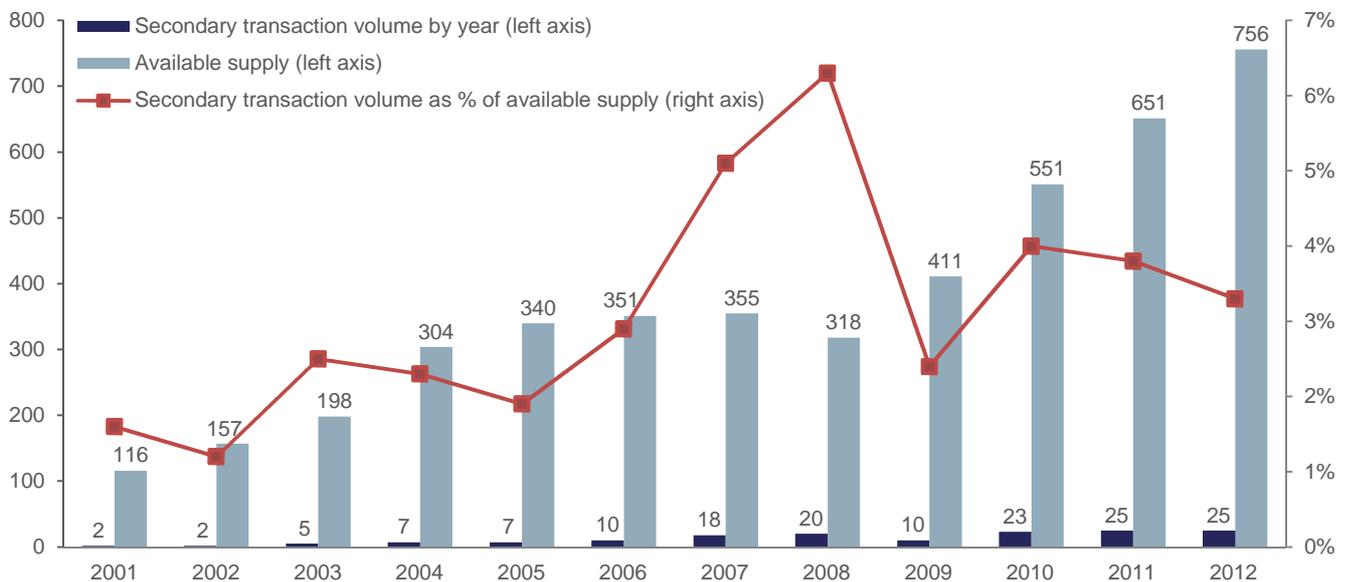
Currently, financial institutions face continued pressure from industry regulations such as Basel II/III, the Volcker Rule and Solvency II. These regulations are forcing large banks and insurance companies to continue to adjust their holdings and divest private equity stakes, further increasing the private equity secondary supply. In addition, many significant institutional private equity investors – such as pension plans, sovereign wealth funds and insurance firms – regularly use the secondary market as a portfolio-rebalancing tool.

Graph 1 to the right presents the historical global secondary transaction volume as well as Capital Dynamics’ projection for 2013’s volume.



Graph 1: Global secondary transaction volume in USD billion, with Capital Dynamics’ 2013 projection (Sources: Cogent Partners, Capital Dynamics, January 2013)

Despite the sophistication of the secondary market, current secondary transaction volume still represents only around 3-4% of the corresponding aggregated US and European private equity supply⁴ (see **Graph 2**).



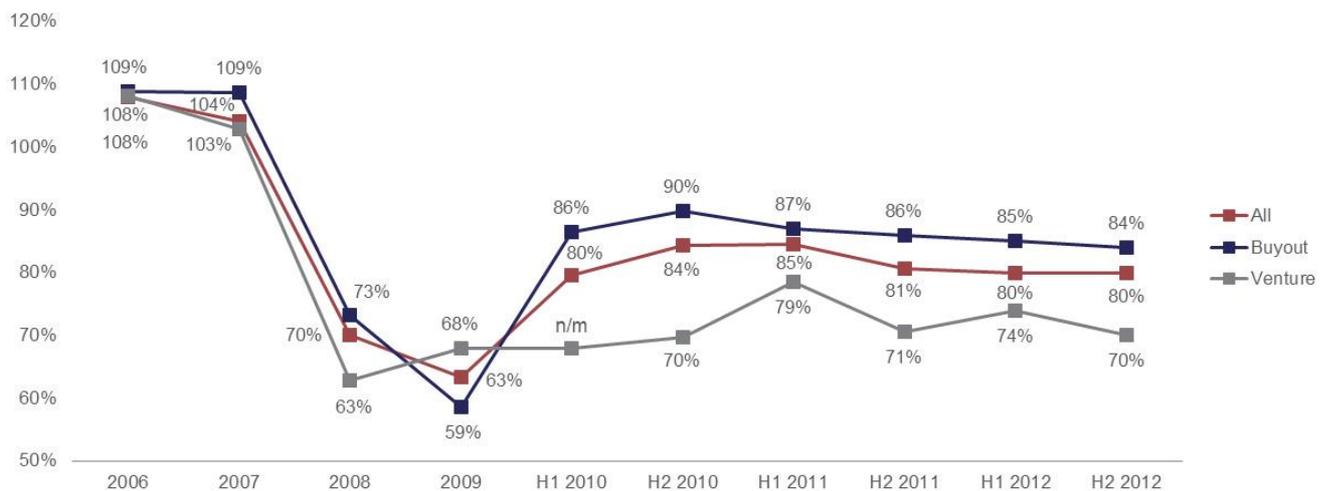
Graph 2: Secondary transaction volume versus aggregated US and European private equity supply (methodology for calculating supply explained in Footnote 4 below) (Sources: Thomson Reuters, Cogent Partners, Capital Dynamics, January 2013)

Secondary transaction volumes are closely connected to (public) market dynamics, the corresponding investor sentiment and ultimately the prices sellers and buyers are willing to transact upon. **Graph 3** shows the average secondary market pricing history expressed as average

³ The “denominator effect” describes the uneven balance between the public and the private equity exposure versus its target ratio. After the crash in equity markets following the Lehman Brothers’ bankruptcy in 2008, many LPs were desperately looking for liquidity as the rapidly declining public equity exposure led their private equity exposure to rise above the target allocation (in percentage terms), forcing them to sell private equity fund interests to bring the ratio back into balance.

⁴ The available supply in any given year is calculated as the aggregated assets (comprising NAVs plus unfunded commitments) of all US and European buyout and venture capital funds for the previous 10 vintage years, applying a lagging effect of 4 vintage years. For example, we compare the 2012 secondary transaction volume (USD 25 billion) with the aggregated supply of all funds of vintage years 1999-2008 (10 vintage years), by summing up NAVs and unfunded commitments of all those funds (USD 756 billion) as of year end.

high bids as a percent of NAV⁵. In 2006 and 2007, the average high bid was above par, i.e. buyers paid premiums to NAV⁶. After the exuberant 2006/7 years, the market cooled off and prices in 2007/8 fell steeply below par as not many deals closed, driving transaction volumes to very low levels. It is worth noting that venture capital pricing in 2009 was more resilient to the downturn due to little or no use of leverage by underlying portfolio companies⁷. Since 2010, as market participants became cautiously optimistic, both deal flow and pricing have risen steadily. Regulatory requirements and opportunistic rebalancing of private equity portfolios are the top drivers for potential private equity sellers. Since the second half of 2011, overall secondary market prices have remained stable, but the market has experienced a “bifurcation” – top-quality buyout stakes have traded close to par whereas lower quality venture capital stakes have traded at significant discounts to NAV.



	2006 to 2007	2008 to 2009	Mid 2009 to early 2010	H2 2010 to H1 2011	H2 2011 to today	Outlook
Market	Exuberant	Volatile	Uncertain	Cautiously optimistic	Volatile	Stable
Deal flow	Growing	High	High	High	High	High
Transaction volumes	Growing	Low	Low	Accelerating	High	High
Seller drivers	Lock-in gains Rebalancing	Liquidity	Liquidity	Regulatory Rebalancing	Opportunistic Rebalancing	Various

Graph 3: Average secondary market pricing history and corresponding market environment/dynamics. The secondary market pricing is expressed as average high bids as a percentage of NAV (Sources: Cogent Partners, Capital Dynamics, January 2013)

Looking ahead, 53% of the investors polled by Prequin for its latest private equity special report believe the secondary market is “of core or growing importance” to their private equity portfolios⁸. Further, the same survey revealed that 43% of LPs expect secondary market activity to increase in 2013 while 55% expect it to match 2012 levels (i.e. around the USD 25-26 billion mark). Of those LPs looking to sell fund interests on the secondary market, 66% plan to exit buyout funds.

⁵ It is important to note that these pricing indications are average high bids collected in competitive processes and not clearing prices.

⁶ Investors are sometimes willing to pay a premium to NAV because they expect to still achieve their targeted returns based on their assessment of future return expectations.

⁷ This makes the argument for prudently diversifying a secondary program across multiple types of strategies.

⁸ Prequin Special Report: Private Equity Secondary Market, March 2013. The survey was based on analyses of secondary transactions, pricing, buyer and seller appetite, and fund-raising conditions as well as interviews conducted with over 40 institutional investors worldwide in March 2013.

1.3 Secondary market participants

As the secondary market has matured, various players with differentiated strategies have emerged. Hence, it is useful to segment the market along various criteria. We have chosen to segment the market along three differentiating factors: “size”, “primary capabilities” and “strategy”.

1.3.1 Size: The evolution of secondary market participants – the big get bigger

While mature, the secondary market is still relatively young compared to the private equity primary market in terms of penetration, number of sellers and creativity in transactions. Furthermore and as outlined above, the secondary transaction volume as a percentage of overall private equity fundraising is still small. Various secondary buyers have evolved and become specialized along the lines of size, geography, deal types, domain specialties and complexity. Many managers that started small now oversee secondary funds that exceed USD 1 billion, and several mega cap funds with USD 5 billion (and more) have emerged.

According to Preqin data, there are approximately a dozen firms with a fund size of more than USD 1 billion. This large-scale asset-gathering mind-set has created a vacuum for funds addressing the smaller end of the secondary market – a market featuring the largest number of prospective sellers. In addition, the small-end of the market is one of the fastest growing segments of the overall secondary market.

Closely linked to “size” is the fact that the smaller end of the market exhibits more inefficiencies and information asymmetries to a greater extent than the larger end of the market. Although still less efficient than other (public and private) markets, a substantial majority of secondary private equity transactions today are intermediated – market participants’ consensus is approximately two thirds⁹. This is especially the case for large portfolio transactions (above USD 100 million) as well as those involving sellers with fiduciary duties to public shareholders or pension holders (financial institutions, pension plans, trustees). Larger transactions generally exhibit well-run processes and can be fiercely competitive, with sellers achieving prices above predicted “fair value” in many instances. However, smaller transactions are generally less intermediated, less competitive and often negotiated directly between the buyer and the seller – both of whom value confidentiality and quick execution capabilities in addition to a fair price. Generally, even in smaller brokered deals, there are only a handful of global smaller secondary funds (i.e. with fund sizes below USD 500 million) participating in the process, resulting in higher odds for a qualified buyer to have his bid accepted. The small-end of the market, which often consists of individual LP stakes and small portfolios, is often a “shadow market” – one offered only to existing LPs. Capital Dynamics estimates that the small-end of the market accounts for USD 8-10 billion in annual transactions and is growing faster than the overall secondary market.

1.3.2 Primary capabilities: GPs prefer long-term investment partners

General partners (“GPs”) are becoming astute in using secondary opportunities to enhance their LP base with LPs with whom they have existing relationships or buyers with strong primary platform capabilities that the GPs can court for future funds. GPs realize secondaries are opportunities to develop new LP relationships and have become much more proactive in securing transactions. GPs are also getting more adept at channelling LP ownership stakes to buyers according to size preferences. In general, these dynamics favor global private equity platforms with dedicated direct, primary, secondary and co-investment capabilities over pure secondary buyers, as they can address a spectrum of preferences. Furthermore, global private equity houses with multiple points of contact and regular interactions with a wide array of GPs and constant updates on the underlying investments are able to unlock information advantages more quickly and effectively than pure secondary houses.

1.3.3 Strategy: Flow buying – Should you be buying what just happens to be for sale?

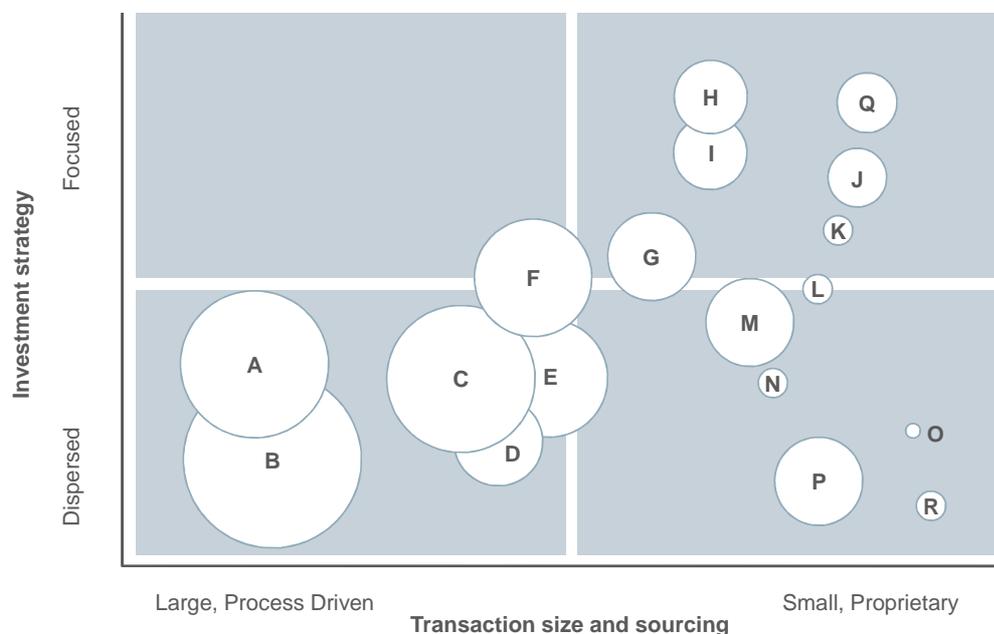
Over the last few years, the secondary market has bifurcated into a “flow-buying market” (the purchase of large and intermediated portfolio transactions) and a specialized, off-market segment in which secondary buyers focus on smaller private equity stakes, specific strategies, deal types or geographies. Large flow-buying transactions are often bundled portfolios of mixed-quality assets that provide “indexed” exposure to secondaries. In addition, fierce competition often leads to unreasonably high pricing¹⁰, benefiting the sellers of large heterogeneous portfolios. An alternative to flow-buying is to tactically build a portfolio – using a focused strategy targeting the highest quality funds and their managers, and finding relative value in the market through geography, strategy (buyout versus venture), vintage or

⁹ Capital Dynamics, other market participants and relevant intermediaries (such as UBS Private Funds Group and Cogent Partners) support this estimation.

¹⁰ This leads to a phenomenon often cited as the “Winner’s Curse”. In common value auctions with incomplete information, the winner will tend to overpay. Avoiding the winner’s curse is not easy and solving for the optimal bid is not trivial as two main factors affect its incidence and magnitude (see Max H. Bazerman and Paul A. Samuelson, MIT, 1983): The degree of uncertainty on the item’s value up for bid and the number of competing bidders. Further, it has to be noted that in such auctions, rationality is an assumption as opposed to a behavioral fact.

other factors. Multi-billion dollar secondary funds must bid on large flow deals that come to market in order to efficiently deploy their capital during their investment periods and maintain their investment pace. Smaller funds with commitment sizes below USD 500 million, however, can be ultra-selective about the deals they choose since there are more positions for sale relative to their fund size.

To understand which seller provides which benefits to a potential investor, we think it is helpful to plot secondary players (and their most current fund sizes) along the axes “investment strategy” and “transaction size and sourcing” (see **Graph 4**). This view can help an investor choose a provider offering “alpha” at the smaller end of the market, rather than a “beta” provider.



Note: Bubble size refers to fund size

Graph 4: Secondary market differentiation map: Focused, small and proprietary transactions (Source for fund sizes: Preqin, December 2012)

To summarize, those funds that are most successful in penetrating the small-end of the market exhibit the following features:

- Broad and expedited information flow and sourcing advantages provided by dedicated direct, primary, and co-investment capabilities;
- Global reach with dedicated on-the-ground teams and resources – supported by a global platform with institutional research and advisory offerings; and
- Access to the small cap segment, providing a gateway to the least efficient segment of the market.

1.4 Secondary market demand-supply equilibrium

Many people ask whether there is too much money in active secondaries funds. In our view, the demand-supply equilibrium is very favorable, with a current funding runway of 24 months by the end of 2012, down from 60 months at its peak in 2009¹¹. Therefore, we believe 2013 will be an attractive year to enter the secondary market – secondary dry powder currently stands at a multi-year low capital balance of demand versus supply (see **Graph 5**).

(in USD billion)	October 2007	July 2009	September 2012
Available capital	27.2	21.7	36.0
Capital being raised	17.0	36.5	15.0
Capital overhang	44.2	58.2	51.0
Annual transaction volume	18.0	10.0	25.0
Secondary capital runway	29 months	60 months	24 months

Graph 5: Secondary capital runway (Sources: Cogent Partners, Capital Dynamics, January 2013)

¹¹ Cogent Partners: Secondary Pricing Trends & Analysis, January 2013.

2. Advantages of secondaries – beneficial qualitative/quantitative portfolio effects

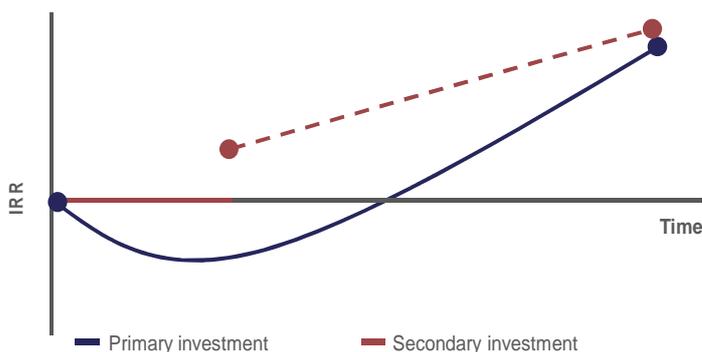
This chapter is split into two sections: first, we catalog the qualitative benefits of secondary investments, and then we present the findings of our in-depth research analysis on the quantitative benefits of secondaries – both on a stand-alone basis and as a complement to an existing private equity portfolio.

2.1 Qualitative benefits

We generally distinguish between “stand-alone qualitative benefits of secondary investments” and “qualitative benefits in a portfolio context”, meaning the effects of adding secondary investments to a pre-existing private equity portfolio.

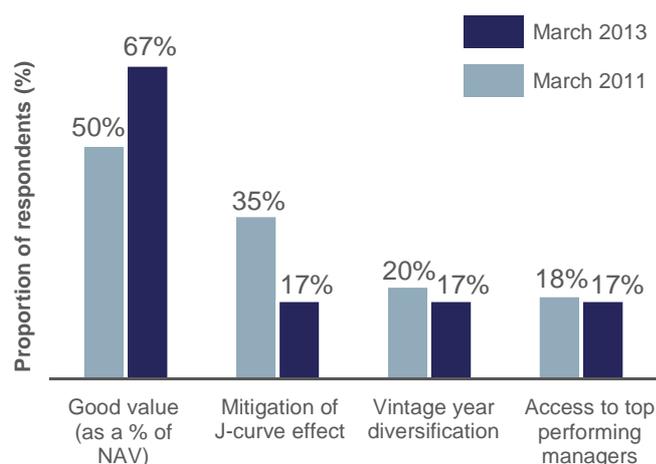
2.1.1 Stand-alone benefits

- **Largely reduced blind pool risk / enhanced visibility:** A secondary investment significantly reduces, and can (partially or entirely) eliminate the risk of entering a blind pool. The more the LP interest is funded, the higher the number of underlying assets and therefore visibility and predictability on the expected exit of the portfolio assets. This results in lower loss rates for secondary investments as evidenced by the results of our quantitative research discussed in the next section. Furthermore, this “see-what-you-buy” advantage enables an investor to acquire the exact underlying assets he is looking for.
- **Shallower and shorter J-curve effect (if any):** In the initial years of a traditional primary private equity investment, a fund will exhibit low or negative returns. This is a normal but dragging effect on the internal rate of return (IRR) as management fees are charged on the basis of committed capital, and underperforming assets are usually identified early (and consequently written down or off). Investing in a fund as a secondary investor rather than a primary investor allows buying into the fund at a later stage, often directly into its distribution phase (see **Graph 6**), which provides early positive cash flow, partially or entirely eliminating the J-curve effect.



Graph 6: Mitigation of J-curve of a secondary investment (Source: Capital Dynamics)

- **Risk mitigation through pricing:** Successfully transacting secondary fund positions requires negotiation between the buyer and seller. Private negotiations permit the buyer to offer the exact price he is willing to pay for an LP interest. This often results in secondary asset acquisitions at discounts to the reported NAV.
- **Access to certain funds or general partners:** By acquiring stakes in the secondary market, a buyer can enter into new relationships with GPs that were not possible previously, either because of a missed opportunity during fund raising or because certain fund managers restrict access to their funds in the primary fund raising process, but then (need to) open up to new investors as a result of secondary sales.
- **Lower loss rates:** As this paper will show in the following section, secondary funds offer lower loss rates vis-à-vis primary and/or buyout funds.



Graph 7: Most important benefits of buying fund interests on the secondary market (Source: Preqin Special Report: Private Equity Secondary Market, March 2013)

Data provider Preqin traditionally ranks the benefits of buying LP interests by conducting surveys in the buyer community. It was possible for the respondents to name more than one effect.

In Q1 2013, buyers ranked “good value (as a percent of NAV)” with a full 67% first on the list, meaning they were motivated to buy assets on the secondary market mainly by the opportunity to purchase fund interests at a discount to NAV. Consequently, secondaries can be viewed as an attractive value-oriented private equity strategy.

Mitigation of the J-curve effect, vintage year diversification, and access to top performing managers were equally important at 17% (see dark blue bars in **Graph 7**). For comparison, results of Preqin’s Q1 2011 study are presented in light blue as well.

2.1.2 Benefits in a portfolio context

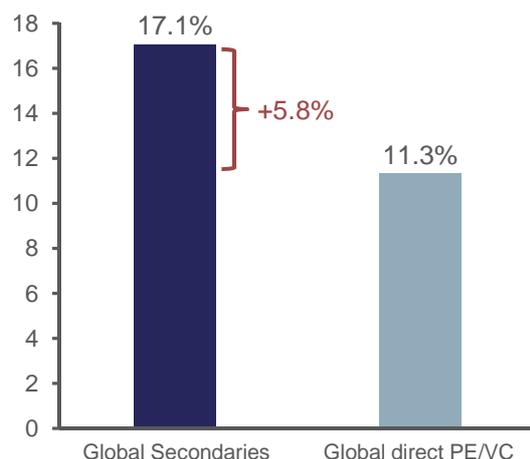
The private equity market has transitioned from a static “buy and hold” approach to a rather dynamic strategy, with LPs actively rebalancing their private equity portfolios. While this evolution has contributed to a higher turnover in LP stakes, it also reflects the maturity and robustness of the secondary marketplace where LPs employ active and continuous optimization of their private equity portfolios to their strategic advantage. Clearly, some of the stand-alone advantages of secondary investments discussed above also hold true in a private equity portfolio context. Nonetheless, some of them may be differently pronounced. From our perspective, the following are the key portfolio benefits of private equity secondaries.

- Accelerated build up of private equity exposure (faster deployment of capital):** By acquiring secondary stakes, an investor can accelerate his private equity exposure much faster than with traditional primary commitments. From a portfolio perspective, new investors to the private equity asset class often utilize this key benefit of secondaries to jump-start their exposure. Acquiring top-quality secondary stakes during the first few years of a portfolio’s life cycle is an attractive, lower risk approach to building a private equity portfolio, especially if private equity allocation budgets are limited.
- Shorter ramp-up periods and reduced lock-up periods:** The quick build up of private equity exposure (faster deployment of capital, see above) also leads to shorter lock-up periods, which describe the traditional 10-year (plus a two-year extension) private equity holding periods. Private equity stakes acquired on the secondary market are already several years into their investment periods and hence also faster out of the 10+2 year lock-ups, which translates into shorter private equity exposure and a flatter J-curve (as shown above).
- Broad diversification across vintages, sectors, geographies/regions, strategies, managers and underlying companies:** Adding secondary exposure to an existing private equity portfolio provides backward vintage year diversification. In addition to vintage diversification – which is the most important diversifier in private equity investing – buying private equity stakes on the secondary market allows additional, specific exposure to industry sectors, geographies/regions, fund strategies and GPs – which in aggregate means broader diversification across the entire private equity portfolio.
- Relative maturity leads to early distributions:** Closely connected to the benefit of vintage year diversification is the fact that by adding more seasoned private equity stakes to an existing portfolio, distributions to the new investor (through exits of underlying companies) will kick in much earlier.

2.2 Quantitative benefits

In this section, we will present the findings of our in-depth research analysis. We will show that secondary investments offer the following quantitative benefits relative to primary investments – either as a first foray into building a diversified private equity portfolio or as a complement to an established private equity program: higher average net IRR, minimal loss in net multiple, low levels of annual volatility, significantly lower chances of incurring returns less than 1.0x, accelerated cash back, lower return dispersion and greater downside protection.

2.2.1 Higher average net IRR

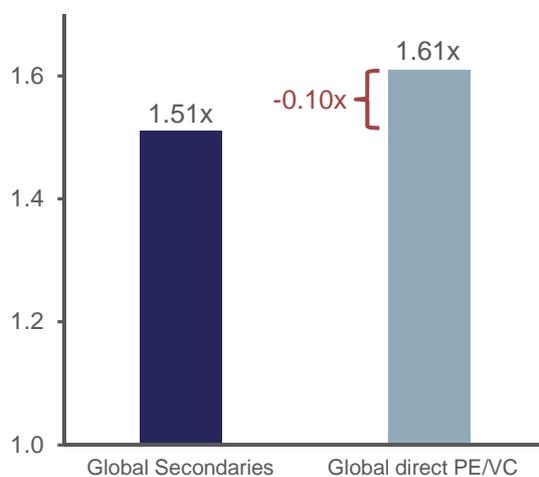


Graph 8: Average net IRR (in %)¹² (Source: Cambridge Associates, performance data per September 30, 2012)

Capital Dynamics' Research team analyzed the most recent Cambridge Associates data and compared the average net IRRs for all available secondary funds versus all available global private equity and venture capital funds formed between 1993 and 2009. We found that secondary funds outperform by 5.8%, generating a 17.1% average net IRR versus 11.3% reached by global direct private equity and venture capital funds (see **Graph 8**).

This IRR outperformance is due to both the inherent discounts in secondaries and shorter holding periods compared to global direct private equity and venture capital funds.

2.2.2 Minimal loss in net multiple



Graph 9: Average net TVPI multiple¹³ (Source: Cambridge Associates, performance data per September 30, 2012)

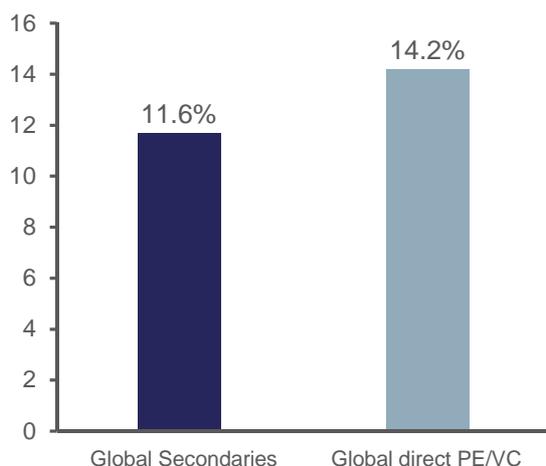
Using the same approach as above, we analyzed the corresponding net multiples. We again looked into the most recent Cambridge Associates data and compared the average net multiples for all available secondary funds versus all available global private equity/venture capital funds formed between 1993 and 2009. We found that secondary funds exhibit only a minimal loss in net multiple of -0.10x, generating 1.51x average net multiple versus 1.61x reached by global direct private equity and venture capital funds (see **Graph 9**).

This slight underperformance is because secondary investments typically are made at a stage when portfolio companies' valuations begin to accrue and are being recognized in direct fund NAVs. If LP interests in such appreciated funds are acquired, the investment cost for a secondary fund investor would be higher (ignoring the discount) compared to a direct fund investor. This works the opposite way as well: if depreciated funds are bought and realized values of those funds recover, the secondary fund TVPI ("Total Value to Paid-In" ratio) may exceed that of a direct fund.

¹² Methodology applied: Based on data compiled for 133 secondary funds and 2,859 global private equity and venture capital funds, formed between 1993 and 2009. The average IRR is a weighted average based on the number of funds in each vintage year. Capital weighted averages were not used to eliminate large cap bias as capitalization of each vintage year was not available. Source: Cambridge Associates Secondary Funds Index, Global Private Equity & Venture Capital Index and Benchmark Statistics, as of September 30, 2012.

¹³ Methodology applied: Based on data compiled for 133 secondary funds and 2,859 global private equity and venture capital funds, formed between 1993 and 2009. The average TVPI is a weighted average based on the number of funds in each vintage year. Capital weighted averages were not used to eliminate large cap bias as capitalization of each vintage year was not available. Source: Cambridge Associates Secondary Funds Index, Global Private Equity & Venture Capital Index and Benchmark Statistics, as of September 30, 2012.

2.2.3 Low levels of annual volatility



Graph 10: Annual volatility of quarterly returns (in %)¹⁴
 (Source: Cambridge Associates, performance data per September 30, 2012)

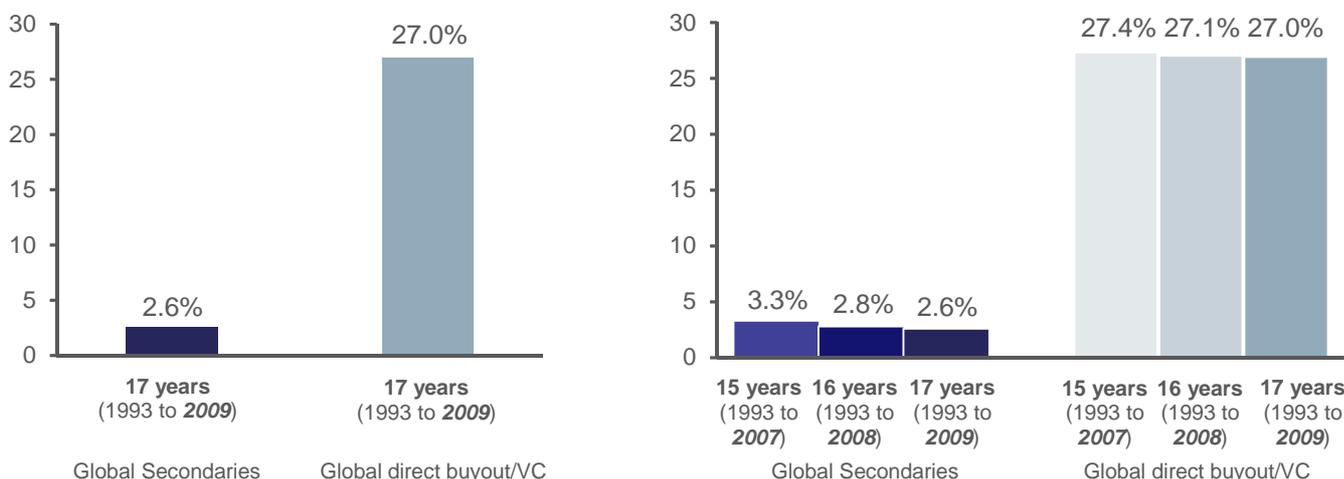
Further, we took a closer look at the volatility of global secondary funds versus global direct private equity and venture capital funds. The result favors a secondary investment that only exhibited 11.6% annual volatility of quarterly returns versus 14.2% for global direct private equity and venture capital funds. In short, compared to global direct private equity/venture capital, secondary funds achieved higher IRRs with lower volatility (see **Graph 10**).

This is because a secondary buyer enters the fund's life later compared to committing to a global direct private equity/venture capital fund. In other words, the secondary buyer circumvents the more volatile early years in which performance fluctuates more significantly. It is typically between year one to year four, in which the write offs or significant write-downs are likely to be made by the general partners. The astute secondary buyer will identify in his due diligence which portfolio companies perform worse than others and the corresponding pricing (bid) will reflect this assessment.

2.2.4 Significantly lower chances of incurring returns less than 1.0x

We utilized Preqin's Performance Analyst database to determine whether secondary funds are less likely to fail to return investors' capital. Indeed, we found that only 2.6% of global secondary funds' end (or most recently reported) TVPI was lower than 1.0x, compared to a more than 10x higher ratio of 27.0% for our – significantly larger – sample of buyout, turnaround, distressed debt, mezzanine, special situation, growth, and venture capital funds with known TVPI. We performed this analysis for an overall period of 17 years. As direct private equity/venture capital experiences the so-called J-curve effect in the early years of a fund's life, we also compared more mature secondary funds with more mature direct private equity/venture capital funds (see right-hand side of **Graph 11**), yielding similar results.

Therefore, the risk of losing capital in secondary funds is significantly lower than with selecting individual primary funds. This is primarily because the benefits of secondary investments offer substantially reduced blind pool risk, greater predictability on the expected outcome of the portfolio companies and loss protection through discounts.



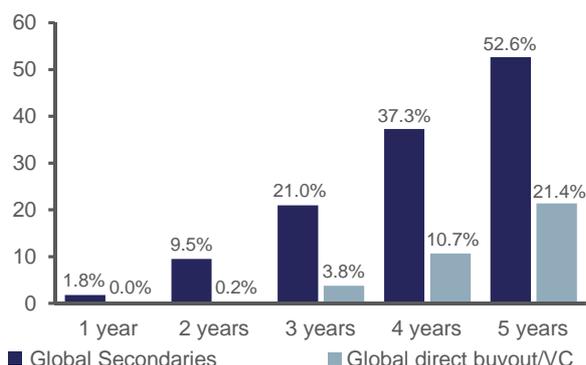
Graph 11: Ratio¹⁵ of funds returning less than 1.0x (in %)¹⁶ (Source: Preqin, performance data per September 30, 2012)

¹⁴ Methodology applied: For the purpose of this comparison, the annual volatility of quarterly returns of the Cambridge Associates Secondary Funds Index and Cambridge Associates Global Private Equity & Venture Capital Index is measured. Volatility is calculated as the standard deviation on a series of quarterly net end-to-end returns based on cash adjusted NAVs for the period Q1 1993 to Q3 2012 (79 quarters) and annualized thereafter. The Cambridge Associates Secondary Funds Index included data for 145 secondary funds, formed between 1991 and 2012, and the Cambridge Associates Global Private Equity & Venture Capital Index included 3,528 global private equity and venture capital funds, formed between 1981 and 2012. Source: Cambridge Associates Secondary Funds Index, Global Private Equity & Venture Capital Index and Benchmark Statistics, as of September 30, 2012.

¹⁵ The ratio compares the number of funds with Total Value Paid-In (TVPI) less than 1.0x with the total number of funds in Preqin Performance Analyst.

¹⁶ Methodology applied: The custom report included 115 secondary funds of the vintage years 1993 to 2009 and 2,245 buyout and venture capital funds with known TVPIs. In addition (on the right hand side of the graph), the same ratio was also calculated for samples excluding the vintage year 2009 (middle column) and excluding vintage years 2008 and 2009 (left column) to provide a comparison between secondary funds and more mature global direct buyout/VC funds. Performance information is since inception until most recently available as of September 30, 2012. Source: Preqin Performance Analyst. Data was extracted on February 28, 2013.

2.2.5 Accelerated cash back

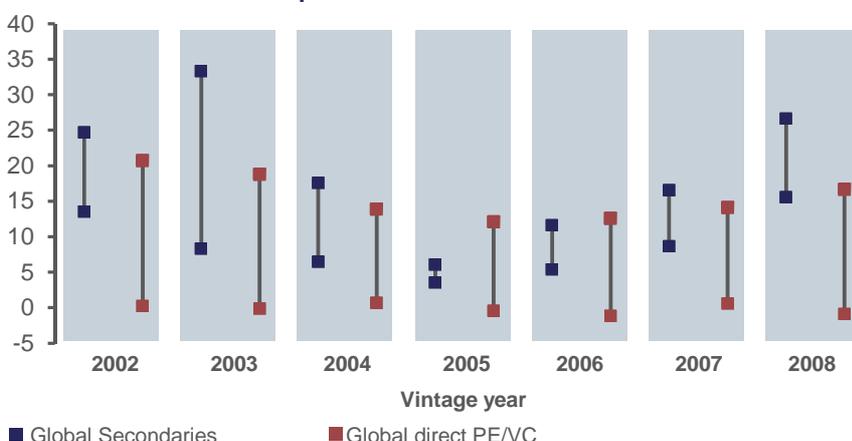


Graph 12: Median ratio of Distributions to Committed Capital¹⁷ (in %)¹⁸ (Source: Preqin, data extracted on November 14, 2012)

In our next quantitative analysis based on Preqin’s Performance Analyst database, we examined the unique, but widely known advantage of secondaries’ potential to return cash faster than primary global direct buyout/venture capital funds. We performed the analysis for one-to-five year periods (the “early years”) by presenting the median average ratio of distributions compared to committed capital (DCC). Global secondary funds show higher ratios for all periods – and in the case of the five-year horizon, the DCC-ratio more than doubled (see **Graph 12**).

This effect reflects the inherent mature nature of secondary investments.

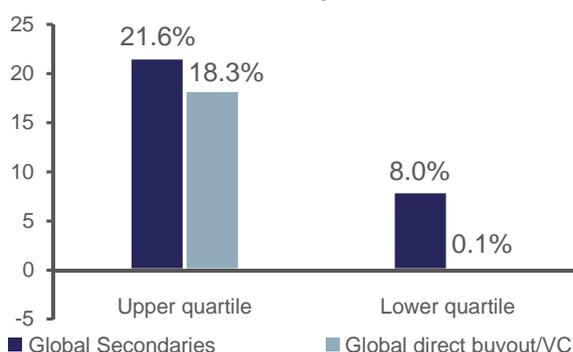
2.2.6 Lower return dispersion



Graph 13: Secondary funds’ upper and lower quartile IRR returns versus global direct private and venture capital (in %)¹⁹ (Source: Cambridge Associates, performance data per September 30, 2012)

Furthermore, we found that secondary funds’ return dispersion is lower compared to global direct private equity and venture capital (except for vintage year 2003). Between vintage years 2002 and 2008, secondary funds’ IRRs ended up in narrower ranges of return bands in most cases, and are thus more predictable than global direct private equity and venture capital. In addition, the lowest mark of the respective bands (see **Graph 13**) is always higher for global secondaries.

2.2.7 Greater downside protection



Graph 14: Pooled net IRR since inception (in %)²⁰ (Source: Preqin, performance data per September 30, 2012)

We also analyzed the downside protection effect on a pooled IRR basis. Based on Preqin data from 1993 through 2009, the pooled upper quartile net IRR (since inception) for global secondary funds is 21.6% whereas the respective pooled upper quartile net IRR (since inception) for global primary direct buyout/venture capital is 18.3%, resulting in a 3.3% outperformance. Turning our attention to the lower quartile, the pooled net IRR for secondary funds is still a respectable 8.0% whereas global direct buyout/venture capital ended up in negative pooled net IRR territory, at 0.1%, outperforming by 7.9% (see **Graph 14**).

Therefore, global secondary funds feature ample downside protection, particularly in the lower quartile – a very reassuring quantitative benefit.

¹⁷ The median ratio of Distributions to Committed Capital (DCC) was calculated based on the DPI (Distributions to Paid-in Capital) ratio and % of capital called by individual secondary, buyout and venture capital funds worldwide of the vintage years 1998 to 2009 from the Preqin Performance Analyst database.

¹⁸ Methodology applied: DPI and % of capital called was not available for secondary funds older than 1998. The custom report included 79 Secondary Funds and 792 buyout and venture capital funds with available DPI and % of capital called information as of the year end since 1999 through 2011. Gaps in reporting data for individual funds do not significantly distort results based on a test performed with a carry forward of DCC ratios for previously reported periods. Source: Preqin Performance Analyst. Data was extracted on November 14, 2012.

¹⁹ Source: Cambridge Associates Secondary Funds Index, Global Private Equity & Venture Capital Index and Benchmark Statistics, as of September 30, 2012. Quartile information was not available for vintage years before 2002 and for 2009.

²⁰ Methodology applied: Return information was generated by using the “Custom Benchmarks” service that is part of the Preqin Performance Analyst database. The custom portfolio included all 116 secondary funds and all 2,316 buyout and venture capital funds formed between 1993 and 2009. Performance information is since inception until most recently available as of September 30, 2012. Source: Preqin Performance Analyst. Data was extracted on February 28, 2013.

3. How to develop a secondary program

3.1 The main options in constructing a private equity secondary portfolio

An investor that is new to private equity can start building a private equity portfolio via primaries, secondaries, or both. As demonstrated above, because secondaries are well suited for accelerating private equity exposure in a diversified fashion, it is not necessary to have an existing private equity program in order to efficiently and effectively start investing in secondaries. Investing in secondaries can be initiated either through a fund or a separate account solution. Both are effective ways of gaining private equity exposure as secondaries provide backward vintage year diversification and fast deployment of capital (see benefits section above).

The two main routes to constructing a private equity secondary portfolio are by employing an in-house team with secondary investment experience or by choosing a manager to invest into secondaries on behalf of an investor. Both options feature distinct advantages and challenges, which are outlined below:

3.1.1 In-house team with secondary investment capabilities buying limited partnership interests directly

Advantages:

- Full control over investments (blind pool risk is limited to unfunded capital)
- A sufficiently large program allows diversification across vintages, geographies and strategies

Challenges:

- Building broad, in-house capabilities (sourcing, due diligence, negotiation, transaction execution and portfolio monitoring) can take years
- Small- to mid-sized secondary deals constitute the more inefficient end of the market; an extensive sourcing network is required to find suitable transaction opportunities
- In-house team must be quick (often measured in days) in making decisions to keep up with the transactional nature of secondary investing

3.1.2 Outsourced solution – investment in private equity secondaries via funds or separate account solutions

Advantages:

By outsourcing a provider with an integrated platform with extensive primary capabilities, investors can leverage various benefits:

- Immediate access to extensive private equity secondary deal flow through broader sourcing capabilities and networks
- Experienced secondary team offers value-added by interacting with primary, direct and co-investment colleagues
- Effective diversification across vintages, geographies and strategies
- High-quality legal execution capabilities
- No reporting requirements

Challenges:

- Investor does not have full control over the investments; nonetheless the outsourced provider will invest along pre-defined criteria (increased blind pool risk versus in-house approach)
- Additional layer of fees; although they are substantially lower for secondary funds versus traditional private equity funds

3.2 Other considerations

3.2.1 Global versus local

Does a secondary provider with an integrated team and global platform have advantages over regional secondary players? We believe that effective secondary fund investing is a global task, and an integrated team with a global platform features non-disputable advantages:

- Established primary investment management expertise, illustrated with a documented track record, allows for more accurate due diligence and – most importantly – deeper knowledge and relationships with general partners
- Presence in all regions of the world allows broader sourcing
- Global institutional research and structuring capabilities
- Ability to allocate tactically to the best geographic opportunities

3.2.2 Discounts versus uplift

Some might argue that secondary investing is only about acquiring LP assets at deep discounts. We believe deep discounts are relevant, but not the only key to a successful secondary transaction. Further elements to a successful secondary transaction are:

- Deep/long-standing knowledge of, and closeness to the GP
- Consistent ability of the GP to deliver top-quartile returns
- Significant expected multiple uplift of the fund – substantiated by a thorough understanding of the exit expectations of the GP in relation to the underlying portfolio companies
- Assets at so-called “inflection point”, meaning that the fund is valued slightly below, at or slightly above cost

Secondary fund managers focused on high IRRs in the early stage of their secondary fund's life will initially primarily invest in transactions featuring steep discounts to the GP-reported NAV. Over the subsequent quarters however, this IRR-boosting effect will diminish if the underlying portfolio companies lack the quality to sustain the initial IRR level.

On the other hand, quality-oriented secondary fund managers look for upside potential and near-term exits in the underlying portfolio companies, with realized performance increasing over time because the high-quality nature of the manager and/or the portfolio is more likely to pay off relative to lower quality managers and/or assets.

3.2.3 Use of leverage

Some secondary providers apply leverage to their transactions (at the deal and/or fund level) in order to enhance returns. Therefore, it is very important that the astute investor distinguishes between secondary players that deploy leverage and managers that do not. Generally speaking, leverage might lead to higher returns – but it also comes with higher commensurate risk and higher volatility. Generally, the larger the secondary provider's fund, the more likely the use of leverage. Furthermore, bank- and insurance-affiliated secondary fund managers are more likely to operate with leverage due to their parents' ability to provide it. In contrast, smaller, independent secondary providers normally do not use third-party leverage as some of them believe that the leverage used at the underlying company level is sufficient and do not want to expose their investors to additional leverage on the secondary fund level.

Concluding remarks

Private equity secondaries are a highly attractive asset class. This paper presents the characteristics and the current state of the secondary market and its participants. Further, it outlines the qualitative and quantitative benefits of secondaries, both in a stand-alone and in a portfolio context. In particular, Capital Dynamics' Research findings have shown that secondaries offer appealing advantages relative to primary investments such as higher average net IRR, minimal loss in net multiple, low levels of volatility, significantly lower chances of incurring returns less than 1.0x, accelerated cash back, lower return dispersion and greater downside protection. Finally, the paper outlines options and other considerations when constructing a secondary portfolio.

If choosing an outsourced solution, small to mid-sized private equity investors are advised to consider providers that are successful in penetrating the small-end of the secondary market. When conducting diligence, investors should look for managers that benefit from broad and expedited information flow and sourcing advantages provided by their dedicated direct, primary, and co-investment capabilities and have global reach with dedicated, on-the-ground teams, supported by a global platform with institutional research and advisory offerings.

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About Capital Dynamics

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