BlackRock

Private market secondaries

The case for a well-diversified private markets program

Spring 2020

Secondaries play an important role in a diversified private markets program

- Many institutional investors have historically viewed secondary strategies as a beneficial allocation early in a private equity program's life due to several attractive features. These features include J-curve mitigation, efficient capital deployment, significant diversification and, not least of all, the opportunity for strong risk-adjusted returns. After a brief description of the secondary market in Section 1, we describe in greater detail why many investors choose to allocate to secondary strategies early in a private market investment program in Section 2.
- In Section 3 we explain why many sophisticated private market investors have come to view secondary market exposure as a permanent component of their private market allocation, even though their illiquid alternatives programs are now mature. One reason for this more consistent role in the portfolio is the desire for exposure to flexible, opportunistic and in some cases counter-cyclical capital able to react quickly to market dislocations. These dislocations could be widespread such as an economic recession or a public equity bear market. Or they could be more localized in a specific private market strategy (private credit, real estate, energy, infrastructure, or venture capital for example) or by seller type (financial institutions facing regulatory change or public pensions confronting new asset allocation guidelines). In this updated version of the white paper, we expand further on the various types of dislocation that may generate secondary investment opportunities. Another reason for the increased exposure to secondary strategies is the view that the secondary market's combination of rapid growth and innovative transaction structures will continue to provide attractive investment opportunities for secondary fund managers with investment mandates broad enough to seek out the best risk/reward opportunities across the full spectrum of private market strategies.
- As an example of the above-mentioned innovation, in Section 4 we focus on recent developments in the secondary market including non-traditional, also known as general partner (GP)-led or manager-led secondaries including reasons for the rapid growth in this part of the market and different transaction types. We discuss the ways in which traditional and non-traditional secondaries differ in terms of required ingredients for successful investment programs.
- Of note, we use the words private market intentionally throughout this paper, as opposed to private equity. We believe at this point the secondary market has become large and institutionalized enough to support numerous firms and funds targeting niche and asset-specific strategies as well as large generalist secondary firms and funds with broader mandates. The decision to invest in a secondary fund with a focus on a specific sub-market, such as European secondaries or venture capital secondaries, may be warranted by the investment thesis that those private market sectors will present better-than-average investment opportunities during the fund's investment period. However, we believe some capital should always be allocated to secondary managers with the experience and expertise to source broadly and to underwrite a wide variety of asset types.

1. Private market secondaries

Background and definitions; sizing the opportunity set

Definitions. Private market secondaries involve the sale and purchase of investors' existing interests in illiquid alternative investment funds, and sometimes in portfolios of direct investments in private companies or other illiquid assets. Purchasers (secondary funds or other investors) typically acquire interests in a fund's remaining assets and assume the seller's commitments to meet future capital calls. Historically, most secondary transactions involved the sale of limited partnership (LP) interests in individual funds or portfolios of funds. The secondary market has since evolved to include more complex and customized liquidity solutions including both direct secondaries (defined as portfolios of direct investments in companies or assets not held in typical fund structures, almost always involving a third party private equity team that manages the investments on a day-to-day basis on behalf of the secondary investor) as well as manager-led secondary transactions, a topic we will spend more time on later in this paper.

The secondary market exists principally to provide liquidity in an otherwise illiquid asset class. It is one of few ways for LPs to exit early or opportunistically from their investments in what is typically a 12-year vehicle structure. Private investors seek liquidity in the secondary market generally as a matter of portfolio management, much as public market investors periodically sell stocks to rebalance their portfolios. The secondary market also allows investors needing more wholesale changes to their portfolios – think financial institutions needing to fully liquidate private assets in response to regulatory or strategic changes.

A brief discussion of how a secondary transaction is typically conducted, followed by the sources of return available to secondary investors may be helpful context. A traditional secondary sale begins with the selling limited partner identifying a buyer of the interest. The seller could ask the general partner (GP) of the fund for an introduction to fellow LPs that have expressed interest in buying secondary interests, or the seller could engage an advisor to run a process to identify potential buyers. Once a buyer has been identified and purchase price agreed, the closing process involves several steps including negotiation of a purchase and sale agreement between buyer and seller, as well as the transfer agreement among buyer, seller and GP. The GP's approval of the replacement limited partner is an important step in the process as the GP must be comfortable the buyer is a creditworthy investor with sufficient capital to make future capital calls and to monitor its investment responsibly.

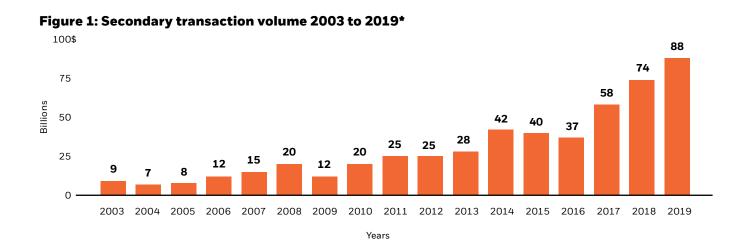
There are a number of ways that a secondary manager seeks to generate returns for their investors. First is having 'macro views' in terms of relative risk/reward across various private market strategies, industries and geographies. Given the size of the opportunity set in the secondary market today, no secondary manager can pursue every opportunity so having a clear sense of the types of assets that are most likely to appreciate in value is an important first step. Targeting specific cash flow profiles is another important tool for secondary managers. For example, last year the secondary transaction flow was roughly split 1/4 funds with vintage years 2009 or older, 1/4 funds with vintage years 2010 – 2014 and 1/2 funds with vintage years post-2014. Obviously the cash flow profile of the oldest cohort of funds will be very different from the less mature funds. Secondary managers may seek out different cash flow profiles based on factors including their view of the economic cycle or whether they are more interested in generating strong internal rates of return (IRRs) or returns on investment (ROIs) (older vintage funds are often able to be purchased at significant discounts to net asset value (NAV) which can generate strong IRRs but lower ROIs given less time to final exit). Yet another type of macro view relates to the types of investors who may be seeking early liquidity. For example, knowledge of changing regulatory regimes that may cause certain financial institutions to exit their private market investments and provide a fertile 'hunting ground' for secondary managers to seek investment opportunities.

1 Source: BlackRock; *Evercore Private Capital Advisory YE 2019 Secondary Market, January 2020.

Once an attractive portfolio is identified, the secondary manager will conduct an asset-by-asset valuation as well as an assessment of the general partner's ability to create value at the company level. Each underlying company or asset will be valued based on forecasting future cash flows taking into account prevailing market conditions. The secondary manager will also assess the quality and expertise of the GP managing the portfolio companies. To the extent that the secondary manager has concern the GP may not optimize value in the future, the secondary manager could apply a 'GP discount' to the price. A 'GP premium' is not common but is theoretically possible if the secondary manager views the GP as likely to generate unusually high returns with any remaining unfunded capital. The secondary manager will also forecast future management fees and carried interest payable to the underlying GP based on the aforementioned cash flow modelling and deduct these fees from the purchase price. In this way, investors in secondary funds typically bear only one layer of fees and carry (those payable to the secondary manager). In a traditional secondary, where the secondary investor is stepping into the shoes of the seller, much of the value creation is achieved by valuing the underlying assets correctly and negotiating as favourable a price as possible. Non-traditional secondaries often offer the chance for additional value creation levers, including negotiating deal-specific incentive structures to create (or recreate) alignment between GP and LP.

Market size and growth. The secondary market has tracked the rapid expansion of primary fundraising. The primary fund investment universe has seen significant growth (more than 11% per year on average over the last five years), and in 2019 alone US\$535 billion was raised across closed-end private market funds². Market data shows that 3,000+ managers are actively investing today and that the average number of funds raised each year is more than 750³.

Similarly, the secondary market has experienced rapid growth over the past two decades, as the global private markets have grown and matured. In fact, as seen in Figure 1 below, transaction volume globally in the secondaries market reached a record high of over US\$88 billion in 2019, more than seven times the levels seen a decade ago and almost 10 times the volume in 2003⁴.



Source: BlackRock; Greenhill Global Secondary Market Trends & Outlook, January 2020.

- 2 Source: BlackRock; Preqin Historical Fundraising and Assets Under Management search tools as derived February 2020.
- 3 Source: BlackRock; Preqin per 17 March 2020. Vintages 2015-2019. Buyout, mezzanine, distressed, venture, growth, special situations. Minimum fund size US\$100m.
- 4 Source: BlackRock; Greenhill Global Secondary Market Trends & Outlook, January 2020.

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4 Private market secondaries

Secondaries have evolved into a 'legitimate' dimension of the private markets landscape from the GP, LP, seller and buyer perspectives. Long-term data suggests that annual secondary market volume has historically averaged approximately 2.5% of total private equity NAV or approximately 1.5% of total private market NAV. With more than US\$2.4 trillion of global private equity NAV (see Figure 2 below) and over US\$5.5 trillion of private market NAV today⁵, annual secondary closed transaction volume of more than US\$100 billion over the next several years would not be unexpected – as the primaries of today become the secondaries of tomorrow.

\$2.4 trillion in cumulative unrealized NAV (2000-2019) \$3.4 trillion in cumulative capital raised (2010-2019) 10-year life of a PE fund 600\$ 535 527 500 438 419 368 400 **JSD** billions 322 315 283 300 263 257 193 ¹⁹⁷178 ¹⁸³167 171 200 160 133 105 82 100 25 0 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Years

Unrealized value by vintage year

Figure 2: Historical private equity fundraising figures including the unrealized value in each vintage year

While investors seeking liquidity during times of stress and dislocation have historically been a key driver in secondary market selling (for example in the aftermath of the Global Financial Crisis), the private market landscape has evolved in sophistication such that the secondary market has become a more commonly utilized portfolio management tool for private market investors of all types. Even in a benign market environment, there are continued drivers of activity for secondaries, and we believe any broader market volatility should drive further supply as investors may perceive themselves to be overallocated to the asset class (given mark-downs in other parts of their portfolio) or in need of liquidity. In 2019, 45% of secondary transaction volume was attributed to selling from active portfolio management (either due to rebalancing, or idiosyncratic and opportunistic factors), 32% from manager-led secondary transactions (more on this topic later), 10% from regulatory pressure, 9% from winding down tail-end funds, and 4% for other reasons⁶. Sellers using the secondary market were also very diverse and reflective of the composition of the global investor base, with meaningful engagement from public and private pension plans, asset managers and financial institutions, endowments and foundations, sovereign wealth funds and family offices across mostly North America and Europe (86% of seller activity).

We expect the global secondary market to continue to grow over the short and longer term given the expansion of unrealized private markets assets, strong primary fundraising, an attractive market structure that continues to facilitate deal activity and continued broad acceptance of utilizing the secondary market as an active portfolio management tool by both LPs and GPs. The unabated growth of new primary fundraisings and remaining unrealized NAVs – combined with the institutionalization of secondaries solutions – point to likely continued increase in secondary deal flow.

In addition, emerging transaction types, most notably manager-led liquidity options could serve as a key catalyst to drive incremental market growth.

5 Source: Cambridge Associates, Returns Report by Asset Class, as derived on 7 February 2020.

Aggregate capital raised

6 Source: BlackRock; Evercore Private Capital Advisory YE 2019 Secondary Market, January 2020.

2. The role of secondaries in newly started private market programs

Secondary market exposure has historically been viewed favorably by private market investors due to the ability to invest in mature, substantially funded assets with reduced blind-pool risk relative to making new private market fund commitments. Secondaries have the potential to generate attractive returns with lower risk given this visibility into underlying asset and portfolio performance. Secondaries are typically acquired at a discount to NAV, and often to comparable company and transaction multiples. The underlying manager economics (fees and carried interest to underlying managers of the fund interests acquired) can be deducted from portfolio pricing. Cash-on-cash returns and net money multiples are attractive in secondaries given the potential for quicker deployment and return of capital. In fact, secondaries as a strategy have historically delivered the highest net median returns among private equity strategies, on a standalone basis and also relative to the standard deviation of returns among private equity strategies⁷.

In addition to strong performance, secondaries have traditionally provided the following benefits to investors new to private markets or seeking to ramp their exposures, each of which is expanded upon below:

- Diversify and accelerate deployment by back-filling older vintages through acquisition of interests and portfolios
- Act as a portfolio hedge/potential for counter-cyclical exposure
- Mitigate the J-curve
- · Cash efficiency
- · Potential for strong risk-adjusted returns

Portfolio diversification. Secondaries allow for immediate diversification in portfolios through exposures to a variety of older vintage investments, diversified across managers, strategy, industry and geography. Secondary portfolios can range widely in size and composition, from small, single fund interests, to multi-billion dollar portfolios of dozens of funds managed by numerous different private market managers. The number of underlying companies in individual transactions could number in the hundreds, and a well-constructed secondaries portfolio could have exposure to well over 1,000 companies and assets. The ability to 'back-fill' past vintage year exposures is attractive particularly for investors seeking more immediate exposure to private equity and looking to ramp-up their multi-year private equity investment programs quicker.

Counter-cyclical exposure. Record fundraising across newly formed private market funds (primaries) and the increased co-investment activity by LPs could generate future secondary opportunities. Secondary sales driven by liquidity needs - which is more likely to be prevalent during a market cycle downturn or periods of stress and uncertainty - is likely to increase, potentially leading to an increase in attractive secondary opportunities at a time when other private market investment strategies such as primary fundraising and co-investing typically slow due to the prevailing adverse market conditions.

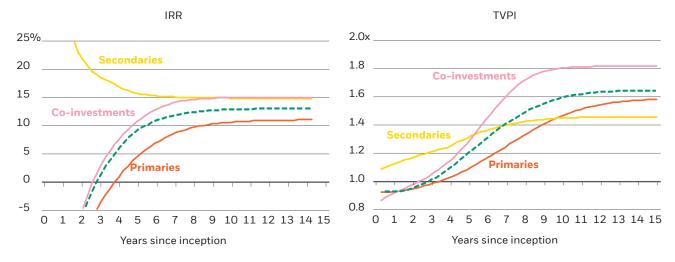
⁷ Source: Cambridge Associates, Returns Report by Asset Class, as derived on 7 February 2020; returns based on median since inception to Q3 2019 net IRR across all funds (i.e. all vintage years and geographic regions for each strategy noted) in the Cambridge Associates database. **Past performance is not indicative of future results.**

J-curve mitigation. The J-curve represents the period of time during which the performance of a private market fund is negative. This performance is calculated based on historical cash flows and the latest NAV of the investment. The cumulative net cash flow curve represents only the cash flow experience of the investor and does not take into account the unrealized portion or NAV. Both the J-curve and the cumulative net cash flow curve can be used to illustrate nicely the benefits of secondaries. The principle reason for the J-curve is management fees paid early in the investment period while capital contributions are relatively low. Typically, the management fee rate is 1.0% - 2.0% of LP commitments while historical analysis shows that typical capital contributions during the first year of a fund total is approximately 20%. Putting the two together implies that the multiple after one year is about 0.9 times and IRR is -20% or even lower, depending on the timing of the cash flows⁸. Value creation and resulting uplifts in valuations or early distributions cause the performance to increase fairly rapidly - industry data shows that it takes on average three years to show positive performance, meaning that the average J-curve of a buyout fund is about three years.⁸

Figure 3 shows the time evolution of the IRRs (left) and the total value over paid-in (TVPI also commonly referred to as multiple of invested capital or MOIC) (right) for three diversified programs that invest, evenly and equally during four years, in primaries (orange), secondaries (yellow) and co-investments (pink). It should be noted that for primaries and co-investments, internal historical performance data was used and that the performance of secondaries was simulated using actual market pricing as reported by sell-side advisor Greenhill. Further details about the data and methodology used to generate these results can be found in the Appendix.

Figure 3: Time evolution of performance

Time evolution of three diversified programs that invest, evenly and equally during four years, in primaries (orange), secondaries (yellow) and co-investments (pink). The dashed green line is for a single buyout fund and is included for reference. Data based on historical information and is for illustrative purposes only.



As can be seen above, primaries' performance turns positive between years 3 and 4, slightly longer than a single primary fund because investments are performed for four years which elongates the entire pacing of cash flows⁹. Co-investments turn positive more quickly, after about two years, principally due to the lower fee structure typical for co-investment funds. Secondaries, because they are typically acquired at a discount to NAV, often involve 'discount recapture' as the assets are valued at the next quarter's NAV and, therefore, generate high early IRRs that then asymptote to more normal levels by years 4 to 5.

- 8 Figures are confirmed by industry data (Burgiss Private iQ) and historical performance of internal fund investments.
- 9 All simulations are net and underlying as well as providers management and performance fees are included. Credit facilities and recycling mechanisms are excluded from these analyses.

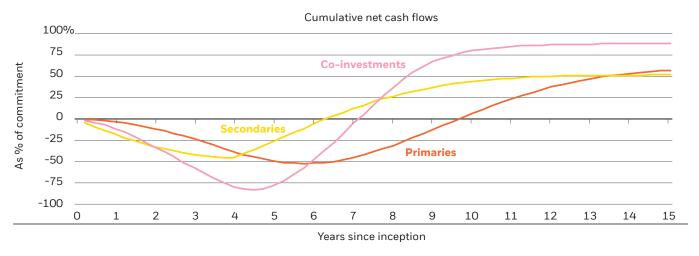
Efficient cash flow profile. The cumulative net cash flow curve shows the cash flow experience of the investor and does not consider NAV. Figure 4 shows these curves for the same three diversified programs that invest, evenly and equally during four years, in primaries (orange), secondaries (yellow) and co-investments (pink). For a typical primary program, it takes 10 to 11 years to become cash flow positive and show a realized multiple larger than times one. This breakeven point for co-investments is earlier, after about seven to eight years, whereas for secondaries it is earlier still after about six to seven years. The fact secondaries have the potential to generate an earlier return of capital is an attractive feature for many investors new to private market investing.

The minimum of these curves indicates the maximum cash flow exposure or 'net out-of-pocket' exposure. Co-investments are typically fully funded in year 1 and distributions arise mainly from realizations and hence a co-investment program shows the largest net out-of-pocket exposure of about 80%-85%. Secondaries are typically slower funded than co-investments and distributions arise earlier from underlying funds and hence a secondary program shows a much lower net out-of-pocket exposure of about just less than 50%. Again this feature of secondaries, namely that an investor who commits US\$100 to the strategy (to pick a round number) will have the full US\$100 invested on their behalf but the secondary manager may only ever call approximately US\$50 from the investor. The difference is accounted for by the fact that the secondary portfolios purchased early in the funds' life may generate early distributions that may be re-cycled into new investments, allowing the secondary manager to minimize the 'net out-of-pocket' capital called from investors.

A primary program's net out-of-pocket exposure is roughly 50%-55% and lies between secondaries and co-investments.

Figure 4: Cumulative cash flows over time

Net cumulative cash flows of three diversified programs that invest, evenly and equally during 4 years, in primaries (orange), secondaries (yellow) and co-investments (pink).



Attractive risk-adjusted returns. As mentioned above, secondaries have historically delivered attractive risk-adjusted returns with lower risk (defined by standard deviation of returns) and low loss ratios (percentage of transactions that result in loss of invested capital) relative to other private market strategies including buyout, venture capital, private real estate, private infrastructure, distressed for control, and private energy¹⁰.

10 Source: Cambridge Associates, Returns Report by Asset Class, as derived on 7 February 2020; returns based on median since inception to Q3 2019 net IRR across all funds (i.e. all vintage years and geographic regions for each strategy noted) in the Cambridge Associates database. Past performance is not indicative of future results. There can be no assurance that the strategy will achieve its investment objective or generate any positive returns.

To give a better sense of the risk-reward profile of primaries, secondaries and co-investments, Figure 5 shows dispersion metrics at the end of a private markets program. The median IRR of 10,000 randomly structured primary programs is 12.9% net IRR. The difference between the 75th and 25th percentiles (the inter-quartile range or 'IQR') is 6.4% and the worst 5th percentile is 7.1% net IRR.

Compared to primaries, secondaries historically generated a higher median IRR of 15.4% net IRR compared to the median primary IRR of 12.9% with slightly lower ROI. The lower ROI for secondaries makes sense because the shorter duration of secondaries means less time for value to compound. The lower IQR and the higher 5th percentiles for secondaries can be interpreted as a manifestation of the reduced blind-pool risk when investing in secondaries and suggests that secondaries can demonstrate favorable risk-adjusted returns.

Larger IQR and lower 5th percentiles for co-investments indicate larger dispersion of outcomes. The larger difference between mean and median suggests that the probability distribution of returns of co-investments has a longer right tail on the right, which emphasizes the potential for investment selection to be a key driver of returns.

Figure 5 : Expected return and dispersion obtained through Monte-Carlo simulation as explained in the Appendix

IRR			TVPI			
Characteristic	Primaries	Secondaries	Co- investments	Primaries	Secondaries	Co- investments
Mean	13.0%	15.5%	19.1%	1.59x	1.50x	1.84x
Median	12.9%	15.4%	15.8%	1.58x	1.49x	1.79x
Inter-quartile range	6.4%	5.3%	17.8%	0.18x	0.16x	0.50x
5% VaR	7.1%	9.8%	5.6%	1.39x	1.30x	1.31x

3. Secondaries' role in mature private markets programs

Let us now turn to why an increasing number of institutional investors have chosen to make secondary market exposure a core component of their illiquid portfolio, even when their private markets portfolio has reached maturity and benefits such as J-curve mitigation and increased exposure to prior vintage years may be less relevant.

Such investors commonly cite several reasons for continued secondary exposure including:

- Secondary market structure is attractive supply-demand imbalance favors the buyer
- Opportunistic strategy ability to capitalize on dislocations
- Potential for superior risk-adjusted returns

Supply-demand imbalance favors the buyer. A number of empirical factors have driven and, we believe, will continue to drive growth in secondary market supply faster than buyside capital can form to invest in the opportunity set. These factors include the growth of 'tail end' exposures remaining from investments over ten years old. Unrealized value in buyout, venture capital and growth funds that are 10+ years old has increased from US\$170 billion at Q4 2016 to US\$200 billion in June 2019¹¹. The amount of newly raised primary capital over the past decade of almost US\$3.5 trillion will also drive future secondaries activity as those funds are deployed – the primaries of today will be the secondaries of tomorrow. Atypical private market investors could also be a driver of secondary deal activity; for example, hedge funds that held private investments in illiquid side pockets were forced sellers of these assets in the aftermath of the global financial crisis and similar contexts could catalyze future secondary market activity. The growth of equity co-investments across various investor types in recent years will also provide additional secondary deal flow in the future.

Market innovation among secondary stakeholders is also expanding the market opportunity. We believe emerging transaction types, most notably manager-led liquidity options will continue to serve as a key catalyst to drive incremental market growth. Private equity managers are now strategically accessing the secondary market to achieve objectives that may include spinning out from a captive parent, facilitating investors' requests to swap earlier investments for new commitments, addressing transition issues, and terminating older funds. The notable trend today of high-quality GPs using secondary capital to reshape their LP and capital base (a key driver of 2019 deal activity, representing 30% or US\$26 billion of transaction volume in 2019¹²) is likely to continue to expand. Examples of managers that have executed GP-led secondary transactions include BC Partners, NEA, Nordic Capital, PAI, TPG and Warburg Pincus among many others.

Structured solutions are another example of continued market innovation; these are transactions that seek to change the normal cash flows of a private equity portfolio, often providing a preferential cash flow to the new secondary investor in exchange for early liquidity for the assets' owner. Structured solutions in the form of preferred equity deals transaction volume increased in 2019 to US\$3.7 billion (vs. approximately US\$3.0 billion in 2018)¹³.

Finally, there has also been significant expansion in capital raised in other private market strategies such as private credit and real assets (real estate, energy and natural resources, infrastructure) that should continue to provide additional secondary opportunities going forward, especially in the event deteriorating fundamentals in these underlying markets cause valuations and performance to decline, potentially creating incentive for some LPs to reduce exposure to underperforming strategies.

Taken all together, the above data suggests that the supply of secondary assets available in the market could continue to grow rapidly, in line with the last decade's experience.

Turning now to the demand side of the ledger, secondary market advisors estimate there was approximately US\$96 billion of dry powder targeting the global secondary market as of year-end 2019, which is just over one year's worth of deal activity (versus almost three years' dry powder in the broader private equity market). Even with estimates of an additional US\$74 billion secondary capital that may be raised in 2020, the secondary market remains the private market strategy with the lowest ratio of available capital to deal activity.¹⁴

- 11 Source: Pregin as of 17 March 2020.
- 12 Source: BlackRock; Greenhill Global Secondary Market Trends & Outlook, January 2020.
- 13 Source: BlackRock; Evercore Private Capital Advisory YE 2019 Secondary Market, January 2020.
- 14 Source: BlackRock; Evercore Private Capital Advisory YE 2019 Secondary Market, January 2020; assumes all-equity financing.

Capitalize on dislocation. Secondary strategies may allow investors to access private market assets efficiently and at scale following dislocations that create favorable entry points. We define dislocations as times when unexpected change creates opportunities to acquire assets at discounts to their intrinsic values, where intrinsic value is based on asset-by-asset, bottom-up valuation. We categorize these dislocations into three broad categories: market driven, limited partner driven and general partner driven. These dislocations may be broad-based financial market volatility that cause a large number of investors to seek early liquidity. Conversely, the dislocation may be more focused on a specific market sector or investor type. We describe various types of dislocations and provide examples of specific investment opportunities these dislocations created historically.

Market-driven dislocations

- · Broad-based economic dislocation/significant public equity volatility: Broad public equity declines, such as after the terrorist attacks of September 11, 2001, the bankruptcy of Lehman Brothers and global financial crisis of 2008-2009 and more recently with the Covid-19 pandemic, have historically offered attractive entry points for investors with long-term time horizons.
 - a. The conundrum private market investors face is that it can be challenging to ensure that committed capital actually gets deployed during the time period that equity values are low. Direct private equity funds will, of course, be on the look-out for attractive investment opportunities in their respective geographies or industries. They may, however, also be distracted by issues at existing portfolio companies and constrained by the scarcity or expense of debt financing for new investments. It is also possible that owners of individual companies will be less likely to choose to sell at valuations that are significantly below what these owners perceive to be long-term fair value.
 - b. A consistent allocation to secondaries may increase the probability of investor capital being deployed while asset prices are low because there may be sellers motivated to accelerate liquidity for non-economic reasons for example, due to the 'denominator effect' which is when real-time public equity values are mixed with private market valuations that are three to six months lagged, leading investors to believe they are over-weight private equity. This incremental selling can obviously create a spike in secondary market selling volume. For a market that is currently in balance between supply and demand, as seen by the fact that there is only 1.1 years' worth of secondary dry powder relative to 2019's \$88 billion of closed transactions, a surge of additional supply may create an especially attractive buying opportunity for secondary investors.
- Industry-specific: Over the last decade there are numerous examples of industry-specific dislocations that created attractive investment opportunities for secondary investors. They include hedge fund side pockets and real estate assets following the financial crisis as well as energy secondaries in the mid-2010s.
- · Credit dislocation: As credit cycles evolve, the secondary market has been a source of capital for LPs and GPs that are not able to access traditional sources of debt capital. For example, GPs in need of incremental follow-on capital faced with higher lending standards and limited access to limited partner equity (because the fund is 100% called) have used the secondary market for preferred equity or mezzanine-type financings.
- Regulatory change: In recent years, regulatory changes including the Volker Rule and Basel III framework have made it more difficult for certain investors, primarily financial institutions, to hold private assets. These changes have caused many sellers to divest private equity portfolios on an accelerated basis. In 2019, the largest secondary transaction in the history of the market, a \$5bn portfolio of limited partnership interests, was catalyzed by Norinchukin Bank looking to ease regularity pressures related to their private assets.

Limited partner dislocations

- Active portfolio management: LPs may consider secondary sales as a prudent and sensible tool for portfolio management. The catalysts for active management often include modest changes such as changes in valuations, cash flow management or industry and geography exposures which cause the investor to re-balance in order to be in alignment with their strategic asset allocation.
- Strategy change: Over time, institutions may see other areas of investment opportunity emerge and look to reallocate capital to these opportunities. When existing investments are held in private assets, the secondary market is the only early liquidity mechanism. For example, Alaska Permanent Fund brought approximately \$1bn of limited partnership interests to the market to redeploy the proceeds into other strategies.
- **Desire for liquidity:** Longer-than-expected duration investments are necessitating liquidity options for LPs who in some cases have been invested in funds and portfolios for well over a decade and need the ability to fully realize their investments.
- Governance changes: As CIO and portfolio management roles change, newly appointed teams have looked to
 reallocate capital away from investments or strategies that were selected by their predecessor. The secondary
 market allows for accelerated liquidity that can be deployed into the new investment strategy.

General partner dislocations

- Manager-specific dislocation: Over time, the alignment of interest between general partners and limited partners may become dislocated. This can be driven by many different reasons including a fund not being positioned to earn carried interest due to poor performance early in the fund's life, a change in the management of the portfolio, or imbalanced portfolios. The secondary market can provide capital to provide a liquidity option for existing limited partners, re-incentivization of the general partner, and a potentially longer timeframe for value creation.
- Corporate dislocation: When institutions merge, there are often duplicative aspects of each business that need to be divested to achieve synergies. One of the largest examples of this impact in the secondary market came through the merger of JPMorgan and BankOne. Both of the banks had their own captive private equity investment teams and JPMorgan Capital Partners was spun-out into a stand-alone firm, CCMP Capital, through a \$1bn secondary transaction.

Continued strong investment performance. There are several reasons why we believe the secondary market may continue to deliver attractive returns to investors. As mentioned above, we believe the opportunity set will continue to grow and the supply-demand balance will continue to tilt in favor of the buyer. In addition, the secondary market remains highly inefficient relative to most other investment strategies. Certain parts of the market, most notably traditional portfolios of high quality, brand name 'flow' funds have become more transparent and efficient in recent years. However, the heterogeneous nature of private market data means the secondary market is still characterized by price and information inefficiencies and an overall market structure that remains favorable for the well-resourced secondary manager. Private equity reporting continues to be uneven and inconsistent between managers and strategies, and time-lagged by months or quarters.

- 15 Figures are confirmed by industry data (Burgiss Private iQ) and historical performance of internal fund investments.
- 16 All simulations are net, meaning underlying and providers' management and performance fees are included. Credit facilities and recycling mechanisms are excluded from these analyses.

4. A bifurcating market

Traditional and non-traditional secondaries (and what it takes to be successful at each)

Over the last several years, a bifurcation has begun to take place in the secondary market in terms of transaction types. We believe noting this market shift is important because it may have implications for how investors think about the risk-reward framework for secondaries and therefore about the role that secondaries play in a portfolio.

While there are no agreed-upon terms for the various types of secondary strategies, one generally accepted framework is to divide secondary transactions into two broad categories: traditional and non-traditional. Traditional secondaries are transactions in which a secondary investor purchases either a single limited partnership interest or a portfolio of more than one - and sometimes many - partnership interests from a limited partner who desires early liquidity. These transactions are characterized by buyer-seller bilateral price negotiation with minimal involvement by the manager(s) of the fund(s) being traded, other than to approve the transfer once terms are agreed. Traditional transactions are how the secondary market started and today still account for a majority of secondary market volume. A diversified secondary portfolio constructed by executing 15 transactions each involving the acquisition of 10 funds with 10 companies each can easily result in a very diversified portfolio of more than 1,500 underlying portfolio companies.

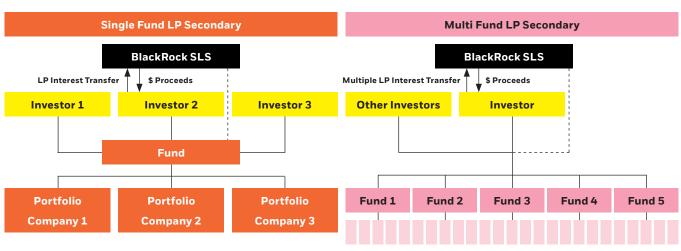
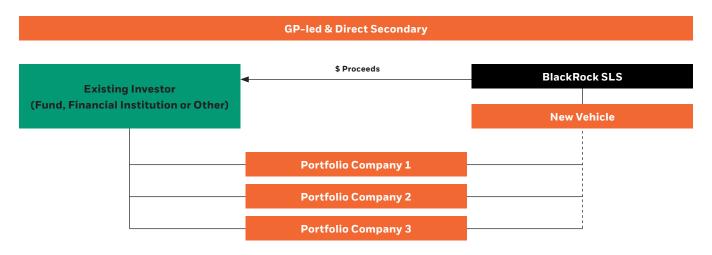


Figure 6: Traditional secondary transaction structure

Non-traditional secondaries are more complicated to define precisely because there are a wide variety of substrategies, but generally have two defining characteristics: 1) the manager of the fund has a more active role in the secondary transaction and 2) the portfolios in question tend to be more concentrated. Regarding the fund manager's role in the transaction, often it is the manager itself initiating the transaction. Consider, for example, a fund manager who wishes to offer an early liquidity option to all existing limited partners in a particular fund and partners with a secondary investor who extends a tender offer for any and all interests in that fund. Another example would involve a fund manager who realizes one or more portfolio companies will need more time and/or more capital than available in the current fund. The manager chooses to partner with a secondary investor to purchase the companies and put them into a new partnership with longer duration and/or additional capital to execute the value creation plan. In either case, the fund manager is much more involved in the transaction compared with a traditional secondary; negotiations, pricing and structuring is much more complex as there are often more stakeholders than just buyer and seller involved; and the portfolios are more concentrated with each transaction often involving one to 10 companies. Therefore, a secondary portfolio constructed entirely of non-traditional transactions may have fewer than 100 underlying companies once the secondary investor has completed its investment period.

Figure 7: Non-traditional secondary transaction structure



The ingredients for successfully executing each of these two broad types of secondary strategies have, in our view, become increasingly distinct.

For example, the requirements for strong performance on the traditional side of the secondary market involve a robust primary business including access to information on a large number of private market funds (a funds database) to allow for rapid and/or 'off-the-shelf' pricing of a large number of funds, points of view on manager quality and likely performance of unfunded capital and strong relationships with a broad network of private equity managers with whom one is not currently invested in order to be confident of securing general partner approval for the transfer of the interest once price is agreed. Technology increasingly plays a role in the traditional side of the secondary market as secondary investors realize that the private markets are data rich but analytics poor and offer the opportunity for the application of data science and artificial intelligence to assist secondary buyers in making more informed investment decisions. Finally, access to portfolio management tools such as fund-level leverage and currency and public company hedging are increasingly important for most managers focused on traditional transactions.

Conversely, skills required for successful execution of non-traditional secondary transactions include a solutions mindset in order to create and execute a liquidity solution that meets the needs of both the fund manager and the limited partners; experience and expertise structuring complex multi-party transactions is of paramount importance to the fund manager for whom the secondary transaction is often strategically important to the franchise. In addition, the ability to customize the transaction in terms of including/excluding certain assets or exerting influence on portfolio company governance provides more value creation tools for the secondary investor relative to traditional secondaries. Finally, the ability to conduct direct private equity-style investment diligence of the underlying companies is critical. While still delivering significant diversification, the more concentrated nature of most non-traditional secondary investments requires the ability to 'go deeper' into the companies than is often practical or possible when purchasing traditional portfolios.

Given these key differences between traditional and non-traditional secondary strategies, we suggest it is likely that there is a corresponding difference in the expected risk-reward profile of each. The larger number of value creation tools in non-traditional secondaries, the more bespoke and less competitive nature of such transactions, and the explicit ability for alignment of interest with the sponsor involved suggests that skilled managers have greater ability to deliver higher returns, albeit with modestly higher volatility given the more concentrated nature of non-traditional secondaries. We therefore intuitively suggest that a purely non-traditional secondary strategy should fall between traditional secondaries and co-investments in most risk-reward frameworks.

5. Conclusions

The secondary market for illiquid alternative investments has grown rapidly over the last 25 years and has now become a core allocation for many institutional investors. This paper has attempted to define how secondary managers create value and why the risk-return profile of secondary strategies may be diversifying and accretive to other private market strategies such as primaries and co-investing. Finally, the paper has sought to highlight the bifurcation between traditional and nontraditional secondary strategies and the distinct characteristics of each.

Appendix

Monte Carlo simulation

All analyses are based on diversified private equity programs investing evenly and equally during four years in primaries, secondaries and co-investments. All programs are constructed in a random manner by sampling, without replacement, from a large universe of existing investments of which the full cash flow and valuation historical was available. Cash flows of underlying investments are aggregated to a program level and then aggregated to calculate the program IRR and TVPI, net of all management fees and carried interest at underlying and at provider level. In total, 10,000 simulation runs were performed. Results are representative for investors in these programs, not in individual investments or transactions.

By constructing such simulated programs, one can calculate more insightful risk metrics such as dispersion, inter-quartile ranges and extreme scenarios. Also, risk-adjusted return metrics taking into account fat-tailed characteristics, such as the Sortino ratio, can be derived.

Dataset:

- Primaries: internal data since 1997, 271 buyouts funds with at least five years of data
- Secondaries: same data as primaries but simulate a secondary transaction by purchasing a stake in a random primary during years 4, 5 or 6 at market pricing. A threshold of 50% funded and a 0.8x TVPI at the transaction date was applied. As such the secondaries programs in this work represent only the traditional component of secondaries and not the GP-led or non-traditional part of the market that might provide incremental alpha.
- · Co-investments: internal data since 2001, 96 fully or partially realized buyout co-investments with at least five years of data
- Complemented with industry data from Burgiss Private iQ and Pregin.

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