



C A M B R I D G E A S S O C I A T E S L L C

SECONDARIES: AN INTRODUCTION

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ABSTRACT

1. Since the early 1980s, the secondary market for private equity limited partnership interests has developed into an important portfolio management tool for investors. As primary commitments to non-marketable alternative asset (NMAA) funds have grown over time, secondary transaction volume has increased and new secondary managers and intermediaries have entered the market. Some areas of the market, such as buyout funds, have become fairly efficient in the process. However, other areas, such as early secondaries and real asset secondaries, remain fairly immature and may provide attractive returns going forward. In addition, when macroeconomic factors cause an imbalance of supply and demand, such as during the bursting of the technology bubble in 2000 or the financial market crisis of 2008, buyers may be able to invest opportunistically in secondary assets at above-average discounts.
2. Although secondaries can be an attractive investment simply based on their expected returns, they are also a useful portfolio management and risk reduction tool for many investors. For private equity programs that are still fairly young, secondaries provide a means to build a well-diversified private equity portfolio much more quickly than with a primary investment program. For mature programs, the secondary market provides an opportunity to rebalance the existing portfolio based on strategic or tactical objectives.
3. The *traditional secondary* transaction is a buyer's purchase of an existing limited partnership interest from a secondary seller. Secondary transactions typically involve funds that are relatively mature, that is, mostly invested. Most fund interests trading on the secondary market are between four and eight years of age and are 50% to 80% committed to portfolio investments. The secondary seller usually is the original investor in the partnership. After negotiating an appropriate purchase price for the interest, the secondary buyer assumes the role of the original investor. The transfer is typically subject to the approval of the general partner (GP) of the underlying fund and may also be contingent on whether the other limited partners (LPs) wish to acquire the interest being sold ("right of first refusal"). After acquiring the fund interest, the secondary buyer typically holds the position to maturity.
4. A second type of secondary transaction that has become more common in recent years is the *direct secondary transaction*. A direct secondary involves the transfer of one or more direct company interests, rather than fund interests. Such interests are held on the balance sheet of many large institutions, like banks and corporations, or in the side pockets of hedge funds. These institutions may sell individual companies or entire direct investment programs for strategic, financial, or regulatory reasons.
5. LPs' rationale for selling may include a need to increase liquidity for spending needs or to meet capital adequacy rules, to rebalance portfolios, or to manage earnings volatility. A secondary sale accelerates cash flow when the primary investor is unwilling or unable to wait until the fund realizes its underlying investments, a process that (in total) can take more than ten years. An investor's liquidity can also be enhanced by the avoidance of future capital calls through the sale of largely unfunded commitments, also known as *early secondaries*. Liquidity needs are a primary driver of secondary transactions in times of financial market turmoil.

6. GPs, the managers of the limited partnerships, may pursue a secondary market transaction to liquidate the partnership's direct interest in one or more of the underlying portfolio companies. There are three motivations for direct secondary transactions: to spin out from a parent company, to liquidate tail-end investments, and to realize the value of certain existing portfolio investments.
7. There are two types of secondary buyers: financial buyers, such as secondary fund managers, and strategic buyers, such as institutional investors. The former seek to invest in secondaries to take advantage of informational inefficiencies or temporary supply/demand imbalances. Their main objective is profit. Strategic investors seek to use secondary transactions to improve the long-term return potential of their NMAA programs by creating relationships with GPs and diversifying their existing NMAA programs. However, secondary buyers often combine financial and strategic interests.
8. Secondaries have a number of return and risk characteristics that normally benefit all buyers. Since traditional limited partnership interests are substantially committed to underlying investments, buyers have the ability to assess the quality of the existing portfolio companies before investing, materially reducing the "blind-pool risk." In addition, secondary buyers benefit from lower fee drag, since management fees typically decline after a fund's investment period (the first three to six years of a fund's life). Since the underlying portfolio companies are more mature, secondary investments also tend to generate earlier returns of capital than primary fund investments. As a result of these earlier realizations, secondaries can generate higher internal rates of return (IRRs) than primary investments. However, in the earlier years of a secondary investment, the higher IRR is usually driven by the secondary purchase discount rather than fund realizations.
9. Secondary market intermediaries act as agents between sellers and buyers. Today, secondary sellers—especially ones with smaller investment staffs—rely on intermediaries to assist in the marketing and sale of their fund investments. Given the lack of a public exchange for private equity transactions, prospective buyers and sellers face substantial informational inefficiencies, which benefits secondary market intermediaries. Intermediaries perform the same function as agents in real estate transactions, such as determining an appropriate asking price, providing pertinent documentation for the sale of an asset, advising on optimal transaction structure, and helping the seller secure transfer approvals.
10. Investors venturing into the secondary market should be aware of the risks involved in this asset class. In addition to their exposure to public market risk, secondary returns depend primarily on the buyer's informational advantage over the seller. Secondary buyers without access to individual portfolio company performance metrics and the expertise to use this data to predict future cash flows are more likely to generate below-average returns. Inexperienced investors should rely on an experienced secondary fund manager that has invested across multiple cycles to manage these risks.

SUMMARY

Introduction

Secondary investments in existing private equity limited partnership interests have become increasingly popular in recent years. Newer *buyers* of non-marketable alternative assets (NMAA) may benefit from immediate diversification and an earlier return of capital. *Sellers* can use the secondary market to address liquidity and portfolio management needs. Secondaries provide both parties with an opportunity to take advantage of the market's informational inefficiencies and periodic supply/demand imbalances.

Given the substantial growth in primary NMAA commitments over the last decade, we expect that the importance of the secondary market will increase over time, particularly during periods of market volatility, when sellers may use secondaries to gain liquidity or to rebalance their portfolios. While supply/demand imbalances can create attractive investment opportunities during such periods, secondary buyers need the ability to accurately value existing limited partnership interests to generate positive returns.

The first part of this paper will provide an overview of the secondary market by describing the motivations of buyers and sellers, the role of intermediaries, different types of secondaries, and the economics of the secondary market. The second part will discuss the role of secondaries in a diversified investment portfolio by describing expected returns, cash flow characteristics, and diversification benefits.

Secondary Market Overview

The secondary market has developed over time to address primary investors' need to manage their NMAA portfolios. The *traditional secondary* transaction is a buyer's purchase of an existing limited partnership interest from a secondary seller. The secondary seller usually is the original investor in the partnership. After negotiating an appropriate purchase price for the interest, the secondary buyer assumes the role of the original investor. The transfer is typically subject to the approval of the general partner (GP) of the underlying fund and may also be contingent on whether the other limited partners (LPs) wish to acquire the interest being sold ("right of first refusal"). After acquiring the fund interest, the secondary buyer typically holds the position to maturity.

A second type of secondary transaction that has become more common in recent years is the *direct secondary transaction*. A direct secondary involves the transfer of one or more direct company interests, rather than fund interests.

Secondary Market Sellers

In today's secondary market, there are two types of sellers: LPs and GPs. Both groups have different motivations for participating in the secondary market.

Limited Partners. LPs, the original investors in the funds, can include commercial banks, insurance companies, corporations, pension funds, endowments and foundations, funds-of-funds, or high-net-worth

investors. Their rationale for selling may include a need to increase liquidity for spending needs or to meet capital adequacy rules, to rebalance portfolios, or to manage earnings volatility.

A secondary sale accelerates cash flow when the primary investor is unwilling or unable to wait until the fund realizes its underlying investments, a process that (in total) can take more than ten years. An investor's liquidity can also be enhanced by the avoidance of future capital calls through the sale of largely unfunded commitments, also known as *early secondaries*. Liquidity needs are a primary driver of secondary transactions in times of financial market turmoil.

The desire to manage NMAA allocations is another important driver of the secondary market. Following the recent sell-off in public markets, many NMAA allocations are above their targets. Even as most investors experienced a decline in the invested portion (or net asset value [NAV]) of NMAA commitments along with declines in their total investment portfolio, NMAA allocations generally rose or are expected to rise as investors remain liable for the unfunded portion of their commitments on a dollar-for-dollar basis. As a result, some investors want to sell a portion of their existing fund interests to reduce their illiquid investment allocations.

As the target allocations to NMAA grew over the past decade, investors have taken a greater interest in using the secondary market as a tool to manage their portfolio diversification or to re-allocate capital to higher-priority investment opportunities. In addition, investors with mature NMAA programs may want to sell interests to consolidate their programs with the best managers or to lower administrative costs.

Investors' increased reliance on the secondary market as a portfolio management tool has been facilitated by GPs' increased willingness to facilitate secondary transactions. GPs are now more likely to help existing investors in the transfer process and to share portfolio information with potential buyers than they were ten years ago. This change in behavior has created greater transparency and efficiency in the secondary market.

General Partners. GPs, the managers of the limited partnerships, may pursue a secondary market transaction to liquidate the partnership's direct interest in one or more of the underlying portfolio companies. In addition to private equity GPs, hedge fund GPs may also be sellers of direct company interests, which are typically direct co-investments made with a private equity fund and held in side pockets by the hedge funds. Corporations and financial institutions may also sell direct company interests, or direct secondaries, if they have made such investments on their own balance sheets.

There are three motivations for direct secondary transactions: to spin out from a parent company, to liquidate tail-end investments, and to realize the value of certain existing portfolio investments. In a spin-out, the existing fund management team asks a secondary fund manager to facilitate their exit from the parent company. In these transactions, a secondary manager purchases a direct interest in one or more of the portfolio companies that are managed by the existing team. If a secondary manager has access to primary capital, it may also make new capital commitments to future funds of the spun-out team.

A liquidation of tail-end investments allows a GP to reduce both monitoring and administrative costs of managing unrealized positions in a mature fund. The sale of the tail-end positions allows the GP to liquidate the fund and to focus on younger funds and portfolio companies. It may also crystallize tax losses.

Lastly, a sale to a secondary buyer can be an alternate exit route for GPs that are unable to liquidate individual investments through an initial public offering (IPO) or strategic sale. A sale allows the GP to realize current portfolio investments and releases capital for follow-on financing of other portfolio companies or for cash distributions to LPs. A sale may also help a GP strengthen its realized track record in anticipation of future fund raising.

Secondary Market Buyers

There are two types of secondary buyers: financial buyers, such as secondary fund managers, and strategic buyers, such as institutional investors. The former seek to invest in secondaries to take advantage of informational inefficiencies or temporary supply/demand imbalances. Their main objective is profit. Strategic investors seek to use secondary transactions to improve the long-term return potential of their NMAA programs by creating relationships with GPs and diversifying their existing NMAA programs.

In many cases, secondary buyers combine financial and strategic interests, such as a secondary fund-of-funds with a primary capital allocation. The secondary fund may seek to increase its cash-on-cash return through the pursuit of selected primary investments. At the same time, the fund may build a relationship with the primary fund GP to gain access to future secondary transactions. These relationships also help the secondary manager access portfolio company–level information that is a critical part of its evaluation of future secondary opportunities.

Secondaries have a number of return and risk characteristics that normally benefit all buyers. Since traditional limited partnership interests are substantially committed to underlying investments, buyers have the ability to assess the quality of the existing portfolio companies before investing, materially reducing the “blind-pool risk.” In addition, secondary buyers benefit from lower fee drag, since management fees typically decline after a fund’s investment period (the first three to six years of a fund’s life). Since the underlying portfolio companies are more mature, secondary investments also tend to generate earlier returns of capital than primary fund investments. As a result of these earlier realizations, secondaries can generate higher internal rates of return (IRRs) than primary investments. However, in the earlier years of a secondary investment, the higher IRR is usually driven by the secondary purchase discount rather than fund realizations.

Secondary Market Intermediaries

Secondary market intermediaries act as agents between sellers and buyers. Today, secondary sellers—especially ones with smaller investment staffs—rely on intermediaries to assist in the marketing and sale of their fund investments. As a result, the secondary market has become more efficient, reducing the future expected returns.

Similar to the (non-REIT) real estate market, there is no public exchange for private equity transactions. As a consequence, prospective buyers and sellers face substantial informational inefficiencies, which benefits secondary market intermediaries. Intermediaries perform the same function as agents in real estate transactions, such as determining an appropriate asking price, providing pertinent documentation for the sale of an asset, advising on optimal transaction structure, and helping the seller secure transfer approvals.

In times when the supply of existing limited partnership interests exceeds the demand for such investments, secondary buyers are often able to “cherry-pick” partnership interests from a larger portfolio. In these situations, intermediaries can help sellers find the optimal transaction structure. For example, an intermediary might split a larger portfolio into several subportfolios to attract strategic buyers that would assign higher values to particular fund interests than would a financial buyer. In other situations, sellers may sell a bundled portfolio to transfer fund interests that buyers perceive to be of a low quality. For sellers, it is critical to understand buyers’ distinctive needs, particularly in a “buyer’s market.” Intermediaries may prove useful in this process if they have market knowledge and strong relationships with prospective secondary buyers.

Secondary Market Transaction Types

Traditional limited partnership interest secondaries and direct secondaries characterize the secondary market today.

Traditional Limited Partnership Interest Secondaries. The traditional limited partnership interest secondary is the most common transaction type, accounting for approximately 71% of secondary transaction volume. This transaction involves the transfer of an existing fund interest from an original investor to a secondary buyer. Secondary transactions typically involve funds that are relatively mature, that is, mostly invested. Most fund interests trading on the secondary market are between four and eight years of age and are 50% to 80% committed to portfolio investments. Some secondary buyers tend to avoid fund interests that are older than eight years because of concerns about clawback liabilities or indemnification obligations. In addition, buyers may question a GP’s alignment of interest in older, substantially realized funds, as the GP may be more motivated by the economics of the firm’s newer funds.

A newer subset of the traditional limited partnership interest transactions are *early secondaries*, which involve the sale of existing fund interests that are less than 50% committed to portfolio investments. Early secondaries carry greater blind-pool risk because a larger portion of the fund’s capital is still not committed. They are also slower to return capital than are traditional secondaries because their underlying assets are less mature. In addition, early secondaries provide less of an immediate diversification benefit. However, because of their unique risk and cash flow characteristics, early secondaries should generate returns that fall between primary and traditional secondary investments. Given the supply/demand imbalance that followed the 2008 recession, some early secondaries have traded at a 100% discount to NAV, with the buyer assuming the fund interest from the original investor at no cost other than the assumption of all future capital obligations. In selected cases, early secondaries have even traded at discounts of more than 100%. In

other words, sellers have paid buyers a premium to take over a fund interest. Based on these large discounts, early secondaries could generate a higher return multiple than primary investments.

Direct Secondaries. Direct secondary transactions involve the transfer of direct ownership interests in portfolio companies rather than interests in funds. As discussed earlier, such interests are held on the balance sheet of many large institutions, like banks and corporations, or in the side pockets of hedge funds. These institutions may sell individual companies or entire direct investment programs for strategic, financial, or regulatory reasons.

The sale of an entire direct investment program is often accompanied by the spin-out of the team that manages the assets. In many cases, the acquired portfolio company interests are wrapped in a newly formed partnership structure that is managed by the original team or a replacement team. The new fund's management team may be given performance-based compensation incentives as well as primary capital for follow-on or new investments. This type of transaction is sometimes also called *synthetic secondary*.

A *stapled* transaction occurs when secondary buyers commit new primary capital as part of a direct secondary transaction. These transactions became popular between 2005 and 2008, when primary capital commitments provided buyers with an opportunity to differentiate themselves from their competitors at a time of limited supply relative to demand. Newly independent management teams like to obtain primary capital commitments, particularly from well-established secondary managers, since they often facilitate future fund-raising efforts. For secondary investors, however, the primary capital component of stapled transactions increases the uncommitted capital portion of a transaction and leads to greater blind-pool risk.

Direct secondary transactions have greater execution risk than traditional limited partnership interests because they require a new economic and legal structure to manage these interests going forward. Buyers of direct secondary interests need legal and structuring expertise to deal with the greater complexity of these transactions. Investors in direct secondaries should be aware of the higher risk due to the underwriting of individual management teams and the higher portfolio concentration due to fewer underlying portfolio companies.

Structured Transactions. A structured transaction is a secondary transaction that has been constructed to accomplish particular economic or noneconomic objectives of the original investor and/or the secondary buyer. For example, in a joint venture (JV) transaction, the preferred return structure allows a secondary buyer to recoup his or her investment before sharing proceeds with the original investor. For the original investor, this structure provides a reduction in the unfunded commitment liability together with the retention of a subordinated ownership interest. In addition, the original investor avoids or delays the recognition of a loss. An example of a JV transaction structure is shown in Exhibit 1. For the secondary buyer, the JV structure provides downside protection and an earlier return of capital through the priority interest.

Alternatively, a structured transaction could involve a swap arrangement to transfer the economic interests in a fund to a secondary buyer without triggering a change in legal ownership. This may be

important in situations where the seller does not want to trigger a right-of-first-refusal clause. This clause gives existing LPs the right to buy the interest from the selling LP before it is offered to an outside party. In essence, a right of first refusal allows existing LPs to increase their commitments before an interest is offered to a “late-in-the-game” investor.

A transfer of economic interests may also be useful where publicly traded partnership (PTP) tax rules delay the legal transfer of an existing fund interest.¹ Investors looking to engage in such swaps should be aware of the counterparty risk involved in these types of transactions. In addition, many limited partnership agreements have become much stricter on economic transfers, including the requirement to get GP approval before engaging in such arrangements. Another example of a structured transaction is the sale of “strips” of funds, which allows the seller to maintain relationships with their existing managers while generating early liquidity on a portion of the existing investments. All of these transactions enable the seller and buyer to structure the secondary transfer in a way that meets their particular strategic and financial objectives.

Secondary Asset Types

Both types of secondary transactions—traditional limited partnership interests and direct secondaries—occur across all types of NMAA investments. However, since secondary investment opportunities are a derivative of primary fund raising, private equity (primarily buyout) fund interests have been the largest segment of the market historically. Exhibit 2 shows the historic fund-raising volume by asset class that may drive future secondary opportunities.

Private Equity Secondaries. Private equity secondaries have existed for more than two decades. Until the early 2000s, the secondary market was relatively inefficient, with only a dozen dedicated secondary managers in existence. The bursting of the technology bubble, along with the 2001 recession, created a significant supply of secondary deal flow, leading to the emergence of several new secondary managers. Today, there are more than 60 dedicated secondary investment firms, making the market much more efficient than it used to be.

Most secondary fund managers believe that the average historical turnover rate has ranged between 3% and 6%. In other words, for a vintage year with aggregate capital commitments of \$100 billion, \$3 billion to \$6 billion of such commitments will trade in the secondary market over time. A number of industry players expect that the turnover rate will increase to between 6% and 12% in response to investors’ liquidity and rebalancing needs following the 2008 global financial and economic crisis.

¹ Under U.S. tax regulations, a limited partnership that is readily tradable on a secondary market is classified as a PTP and is taxable as a corporation. Private equity funds generally avoid PTP status through one of several safe harbors, which allow certain transfers to be disregarded when determining whether a fund is readily tradable. The safe harbors generally allow a certain level of fund transfers in any given year. If a fund has reached that threshold in any given year, a structured transaction may allow a transfer of economic interests while delaying the transfer of legal ownership, thereby avoiding taxation as a corporation.

Real Asset Secondaries. The emergence of real asset secondaries has been a new phenomenon in recent years. As institutional investors have increased private real asset allocations over time, they have developed a growing interest in managing these portfolios through the secondary market. Real estate is currently the only type of real asset with an active secondary market. Other private real asset investments, such as energy and natural resources interests, still trade much less frequently because many institutions only recently began investing in them. Although primary fund raising for these types of assets has substantially increased over the last few years, it remains far less than that of real estate funds. As a result, the potential size of the secondary market for these types of funds is also smaller. We do expect the level of activity in these other real asset secondaries to increase.

Although a handful of dedicated real estate secondary funds have existed since the mid-1990s, the current universe includes only about six firms, which is comparable to the number of dedicated private equity secondary funds in the universe 20 years ago. Given the limited competition and the high barriers to entry for new players, we believe the return potential in this market is greater than that of private equity secondaries. Going forward, this market will continue to grow based on the significant increase in investors' primary allocations to real estate over the last five years.

The Economics of Secondary Investments

A secondary buyer earns returns by purchasing existing fund or portfolio company interests at their estimated fair market value, which is equal to the estimated future cash flows from the investment, discounted by a hurdle rate, or the investor's required rate of return. Investors' returns will be net of secondary manager fees and carried interest.

The secondary buyer's primary value-add is in its underwriting process. Contrary to market perception, secondary buyers do not base their purchase price on the reported NAV. Typically, the NAV of non-marketable investments lags behind their fundamental (or fair market) value, a market characteristic that secondary buyers try to exploit. For example, a secondary buyer may purchase an interest *at NAV* if the buyer has information indicating that the investment will be sold at a higher valuation in the near future. In this case, the most recent quarter-end NAV underestimates the investment's fundamental value and the buyer actually purchases the asset *at a discount* (relative to fundamental value). However, the opposite could be true if a company experienced a negative event, like the loss of a key client, which would not yet be reflected in the most recent NAV.

As a result, buyers rely not on an asset's reported NAV, but on their own fair value estimate. Since the NAV may overstate or understate the true value of an asset, the ultimate return of a secondary investment is not dependent on how the price relates to reported NAV. What matters most is the buyer's ability to correctly estimate the amount and timing of future cash flows, and the hurdle rate used to discount future cash flows.

To determine an asset's fair value, experienced secondary buyers conduct a detailed bottom-up analysis of the underlying portfolio companies. This includes an assessment of each portfolio company's

future earnings potential, capital expenditures, debt pay-down, capital structure, acquisition programs, and exit scenarios. Based on the portfolio company analysis, buyers forecast the timing and size of expected future cash distributions from each portfolio company. Individual portfolio company forecasts are then aggregated at the fund level through a discounted cash flow model.

For this bottom-up analysis, secondary buyers need access to information on the expected exit value and timing, which is largely driven by the profitability of the underlying portfolio companies. Without this information, buyers are unable to assess the fundamental value of assets and risk paying too much. Since the GPs managing the investments have the most transparent view into the portfolio companies, secondary buyers are dependent on their network of GP relationships. Secondary buyers with the resources to maintain close relationships with GPs have an informational advantage in estimating future cash flows. In addition, secondary buyers that have previously acquired or evaluated a fund interest are generally able to close a transaction more quickly. Many secondary buyers have a strong preference to acquire assets that they know, especially in a buyer's market.

Secondary buyers also need to understand the impact of fund-specific terms, such as fees, carried interest, and potential clawbacks, on expected cash flows. For example, a significant GP clawback liability may reduce the effective rate of carried interest on future distributions. Secondary buyers need to understand how fund-specific economic and legal terms affect expected cash flows. Again, secondary buyers that have an existing relationship with a manager under consideration will be in a better position to correctly value assets.

By combining the quantitative output from a discounted cash flow model, an assessment of fund-specific terms, and their own qualitative assessments of the investment opportunity, secondary buyers can determine the maximum price they are willing to pay for the asset. The conservatism with which buyers estimate both the *amount* and the *timing* of expected cash distributions drives the ultimate return from a secondary investment, as shown in Exhibit 3. If the investment generates actual cash distributions in excess of estimated distributions, it will generate a larger-than-expected cash-on-cash return. Alternatively, if the investment distributes less cash than predicted, the investment will generate a cash-on-cash return that is below underwriting. If the cash distributions occur sooner than anticipated, the investment will have a higher IRR. If the distributions occur later, the IRR will be lower than projected.

Key Risks in Secondary Market Investing

There are two primary types of risk in secondary investing: capital market risk and valuation risk. Like primary investors, secondary buyers are subject to capital market risk for a portfolio company's exit through an IPO or a merger & acquisition. In addition, buyers risk overpaying for an asset if they lack the informational advantage necessary to develop a realistic assessment of an individual company's fundamental value. Without superior access to GPs, buyers are at a clear disadvantage to sellers.

Buyers are also more likely to overpay if they lack expertise of investing across market cycles. Investors without this experience may overestimate a fund's potential for future cash distributions,

diminishing returns from the investment. Market downturns will negatively affect future earnings of portfolio companies and will decrease exit multiples, which experienced buyers will account for in their models. Inexperienced managers may feel more pressure to invest capital quickly, which may come at the expense of valuation discipline and portfolio diversification.

In addition, investors should be aware of the inherent risks in levered secondary funds. Some secondary investment managers use leverage (beyond subscription lines to bridge-finance capital calls) to amplify the return on their investments. Before making a decision to invest, investors should understand a manager's historical use of leverage and its views on leverage going forward.

In light of the growth in secondary fund sizes, investors should also focus on fund managers that are properly motivated to generate high returns rather than collect fees, and that have exhibited a disciplined investment pace in the past. Given the large fund sizes, less experienced investment teams may feel pressure to invest capital too quickly, leaving investors with less vintage-year diversification than anticipated.

Secondaries: Role in the Investment Portfolio

Secondaries have become an important strategic and tactical investment tool for many institutions. In particular, investors with new NMAA programs are attracted to secondary investments' diversification benefits and accelerated distribution pace. Other investors might use secondaries more opportunistically to exploit temporary supply/demand imbalances caused by market illiquidity. Still others view secondaries as an approach to NMAA investing that has fewer risks than primary investing.

Although secondary investments share many risk and return characteristics of primary investments, there are a number of key differences. This section of the report will discuss the risk and return attributes of secondaries, including their distinctive cash flow pattern. Depending on the underlying asset exposure, secondaries can be a risk-diversifying or risk-adding asset within a total portfolio context.

Expected Investment Multiples

Traditional limited partnership interest secondaries have less risk than primary fund investments because investors are able to assess the quality of the underlying investments before making a purchase decision. Given this reduced risk, secondary investments have lower expected return multiples than primary investments.

Today, most secondary managers claim to underwrite to a 1.6 to 2.0 net to LPs return multiple. The primary risk to realizing the expected multiple is lower-than-expected cash distributions from the underlying assets. This could be driven by portfolio company-specific factors, such as the failure of a new product, or by macroeconomic factors like a general economic slowdown with industry-wide profit declines. As shown in Exhibit 4, the median net return multiple for Cambridge Associates' secondary universe has ranged from 1.3 to 1.6 for vintage years 1994–2003.

Expected Internal Rate of Return

Since the underlying investments of secondary limited partnership interests are often more mature than primary fund investments, they are also more likely to generate an earlier return of capital. Due to the earlier distribution of capital, secondary funds have generally produced a higher IRR than primary funds. A comparison of median net IRRs for secondary, buyout, and venture capital funds over rolling five-year periods is shown in Exhibit 5. Secondary funds have consistently outperformed buyout funds over rolling five-year periods since 1997. Secondary funds also outperformed venture capital funds in the five-year periods ending in 2005, 2006, 2007, and 2008. However, secondaries underperformed venture capital in the five-year periods ending in 2002, 2003, and 2004 due to the high returns generated by venture capital during the tech bubble years.

Although, as mentioned previously, the valuation that buyers put on secondary purchases is not based on the GP's reported NAV, it is common practice for the buyer to "mark-to-market" the assets to the underlying NAV. Assuming the secondary purchase is at a discount to NAV, this initial write-up causes an early spike in the IRR for many secondary funds. This means that a secondary fund's early IRR is driven by the difference between the purchase price and NAV, even though the secondary fund manager's investment decision is based on an independent assessment of the underlying portfolio companies rather than NAV. Therefore, the purchase price expressed in terms of a premium or discount to NAV is not a measure of value, although investors often interpret it as such. Clearly the price relative to NAV is of significant importance to the seller. A discount to NAV does not guarantee a positive return (for the buyer) since a fund's current NAV does not always reflect the current value of the underlying portfolio companies.

In recent years a number of developments have caused a decline in initial portfolio mark-ups. These include the increased sophistication of sellers, the increased involvement of market intermediaries, the increased number of secondary fund managers bidding for assets, and regulatory changes like FAS 157 that seek a fair market value standard among NMAA managers.

Depending on the supply/demand balance in the secondary market, secondary managers may underwrite to a net IRR between 15% and 25%. The primary risk to realizing the expected IRR, everything else being the same, is a delayed receipt of cash distributions. This could be caused by macroeconomic factors, such as a sustained recession, or company-specific factors, such as a delayed new product launch. The median net IRR for Cambridge Associates' secondary universe has ranged from 7% to 34% for vintage years 1994–2003.

Expected Returns—Incremental Management Fees

Like primary funds-of-funds, secondary managers charge management fees and carried interest rates that are incremental to the fees charged by the underlying managers. Typically, secondary managers charge management fees of approximately 1% and carried interest of approximately 10%. Most secondary managers have a preferred rate of return of around 10%, which means that the manager does not earn carried interest

until the secondary fund investor earns at least a 10% return per annum. On average, we estimate that the impact of the incremental fees reduces gross returns by 150 basis points (bps) to 300 bps.

Early Return of Capital / J-Curve Mitigation

Given the maturity of their underlying investments, secondary funds (other than substantially unfunded early secondaries) can have shorter holding periods and an earlier return of capital than primary investments. This characteristic is particularly attractive for new NMAA investors that do not have a mature program with positive net cash flow. For such investors, a secondary investment may help reduce the negative net cash flow in a program's early years.

In addition, secondary investments may help mitigate the "J-curve" effect, which is the term investors use to describe the typical NMAA fund's return profile: negative returns during the initial years of a fund's life are driven by management fees and early portfolio write-offs that are followed by profitable sales of fund investments in later years.² NMAA fund performance typically reaches its low point when the fund reaches four to five years of age, after which returns generally turn positive.

Secondary funds typically purchase limited partnership interests with an average life of five years, approximately the time when these funds reach the bottom of their net cash flow and return profile, as illustrated in Exhibit 6.

For secondary investors, this means that they are closer to the realization of the investments and the resulting cash distributions. Because secondaries return capital sooner, secondary investors see an earlier and lower peak in net cash outlay than primary investors, as shown in Exhibit 7. Investors in secondary funds should take this into account when sizing their commitments. Since the underlying funds' committed capital is mostly invested at the time of the secondary transaction, buyers benefit from investing at the stage of a fund's life where net cash flows are about to turn positive, i.e., where distributions begin to exceed capital calls. This is also the stage at which fund returns begin to recover. For new investors, this means that secondary investments not only improve the net cash flow of their programs, but also mitigate the negative return profile of newer primary investment programs.

"Immediate" NMAA Program Diversification

In addition to their attractive cash flow characteristics, traditional secondary investments also provide investors with a tool for immediate NMAA program diversification. Given their exposure to multiple underlying funds, secondary funds are generally well diversified by vintage year, manager, industry, and geography. New investors often find this characteristic particularly attractive because it allows them to gain robust program diversification within a year or two, whereas a primary investment program may take at least twice as long to reach a similar level of diversification.

² Most NMAA funds charge management fees based on committed, not invested, capital during the investment period, typically the first five years of a fund's life. After year five, management fees are based on invested capital (more specifically, the cost basis of the unrealized investments).

Correlation with Buyout Returns

In terms of underlying asset type, most secondary funds have a clear bias toward buyout investments because the underlying investments are easier to value and because most primary capital fund raising has gone into buyout funds, particularly in recent years. As a result, secondary returns have historically had a positive correlation with buyout returns, as shown in Exhibit 8. The rolling five-year correlation coefficient has increased from 0.43 in 1996 to 0.95 in 2008 as secondary funds' exposure to buyouts has grown over time.

Total Portfolio Diversification

The performance of private equity investments is closely tied to the performance of the public equity markets. In times of strong public markets, the IPO market provides an attractive exit opportunity for venture capital and buyout investments; however, the reverse is true when public stock markets decline. In addition, valuations for private companies are often based on sales or on profit multiples of comparable public companies, creating a direct link between private and public equity performance.

As a result, secondary funds have significant public equity market exposure, although the true level of exposure may be hidden by less frequent valuations of illiquid investments. Therefore, secondary investments have a positive correlation to public equity markets. From 1999 to 2008, the rolling five-year correlation between the secondary funds and the S&P 500 Index has ranged between 0.32 and 0.89, also shown in Exhibit 8.

However, secondaries allow a value-based investment strategy in private markets, similar to "value" investing in public equities. Secondary fund managers generally seek to purchase limited partnership interests at a price that is below their fundamental value. This is similar to value-oriented managers in the public equity markets.

Conclusion

Since the early 1980s, the secondary market has developed into an important portfolio management tool for investors. As primary commitments to NMAA funds have grown over time, secondary transaction volume has increased and new secondary managers and intermediaries have entered the market. Some areas of the market, such as buyout funds, have become fairly efficient in the process. However, other areas, such as early secondaries and real asset secondaries, remain fairly immature and may provide attractive returns going forward. In addition, when macroeconomic factors cause an imbalance of supply and demand, such as during the bursting of the technology bubble in 2000 or the financial market crisis of 2008, buyers may be able to invest opportunistically in secondary assets at above-average discounts.

Although secondaries can be an attractive investment simply based on their expected returns, they are also a useful portfolio management and risk reduction tool for many investors. For private equity

programs that are still fairly young, secondaries provide a means to build a well-diversified private equity portfolio much more quickly than with a primary investment program. For mature programs, the secondary market provides an opportunity to rebalance the existing portfolio based on strategic or tactical objectives.

Investors venturing into the secondary market should be aware of the risks involved in this asset class. In addition to their exposure to public market risk, secondary returns depend primarily on the buyer's informational advantage over the seller. Secondary buyers without access to individual portfolio company performance metrics and the expertise to use this data to predict future cash flows are more likely to generate below-average returns. Inexperienced investors should rely on an experienced secondary fund manager that has invested across multiple cycles to manage these risks.

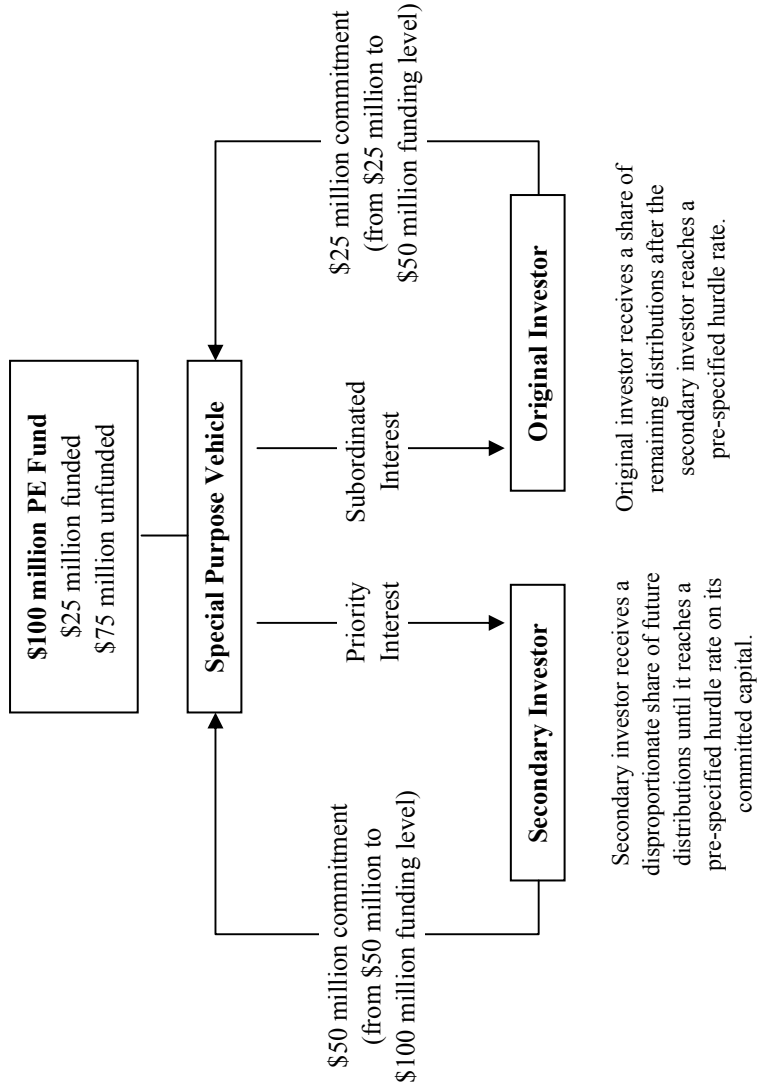
EXHIBITS

Exhibit 1

EXAMPLE OF A STRUCTURED SECONDARY

Joint Venture Structure

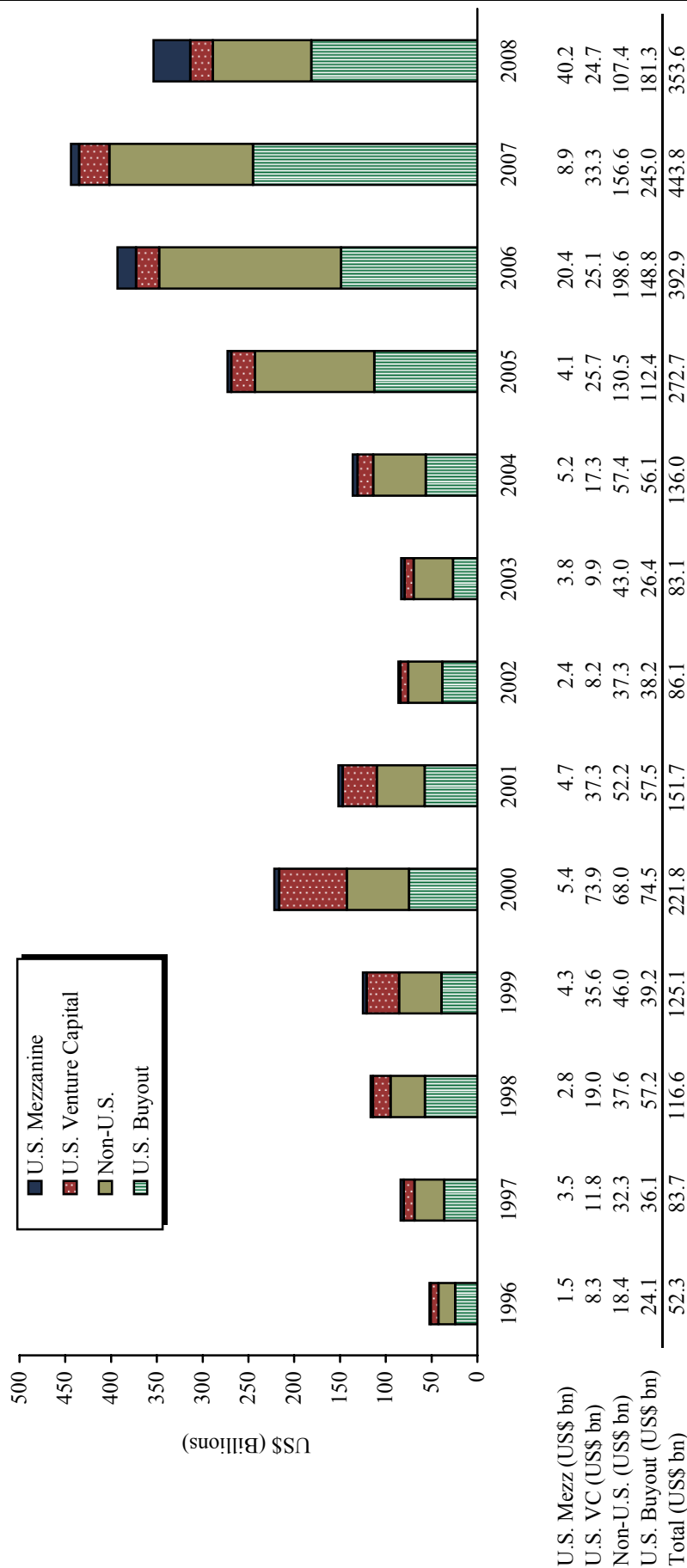
Original investor wants to reduce exposure to \$100 million private equity fund commitment that is currently funded with \$25 million. Secondary investor assumes half of the original commitment in exchange for a priority interest in any future fund distributions. The original investor is required to pay all capital calls up to its newly reduced commitment level (\$50 million). The original and secondary investors share any returns in excess of the secondary investor's priority interest at a pre-negotiated split.



Source: Cambridge Associates LLC.

Exhibit 2
PRIVATE EQUITY FUND RAISING BY STRATEGY

1996–2008



Source: Lexington Partners.

Notes: Capital committed to non-US\$-denominated partnerships (2004–08 vintage) converted to U.S. dollars using December 31, 2008, exchange rates. Earlier vintage years converted to U.S. dollars using their respective year-end spot rates. Non-U.S. fund raising includes venture capital and buyout funds.

Exhibit 3**SECONDARY PRICING EXAMPLE****SCENARIO A***"Early 2007"*

Year ended	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
NAV at Record Date	\$1,000					
Expected Net Distributions		\$0	\$0	\$2,000	\$0	\$0
IRR	26%					
Discount Rate Applied by Buyer		28.0%	<i>Reflects buyer's target IRR of 20% net</i>			
Purchase Price*		\$1,221	<i>Reflects present value of discounted cash flows</i>			
Gross Multiple of Capital to Buyer		1.6x				
Seller's gain (loss) upon sale		\$221				
Seller's gain (discount) to NAV		22%				

SCENARIO B*"2H2008" - Reflects buyer's updated view of amount of cash flows*

Year ended	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
NAV at Record Date	\$1,000					
Expected Net Distributions		\$0	\$0	\$1,500	\$0	\$0
IRR	14%					
Discount Rate Applied by Buyer		28.0%	<i>Reflects buyer's target IRR of 20% net</i>			
Purchase Price*		\$916	<i>Reflects present value of discounted cash flows</i>			
Gross Multiple of Capital to Buyer		1.6x				
Seller's gain (loss) upon sale		(\$84)				
Seller's gain (discount) to NAV		-8%				

SCENARIO C*"2H2008" - Reflects buyer's updated view of timing of cash flows*

Year ended	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
NAV at Record Date	\$1,000					
Expected Net Distributions		\$0	\$0	\$0	\$0	\$2,000
IRR	15%					
Discount Rate Applied by Buyer		28.0%	<i>Reflects buyer's target IRR of 20% net</i>			
Purchase Price*		\$745	<i>Reflects present value of discounted cash flows</i>			
Gross Multiple of Capital to Buyer		2.7x				
Seller's gain (loss) upon sale		(\$255)				
Seller's gain (discount) to NAV		-25%				

SCENARIO D*"2H2008" - Reflects buyer's updated view of timing and amount of cash flows*

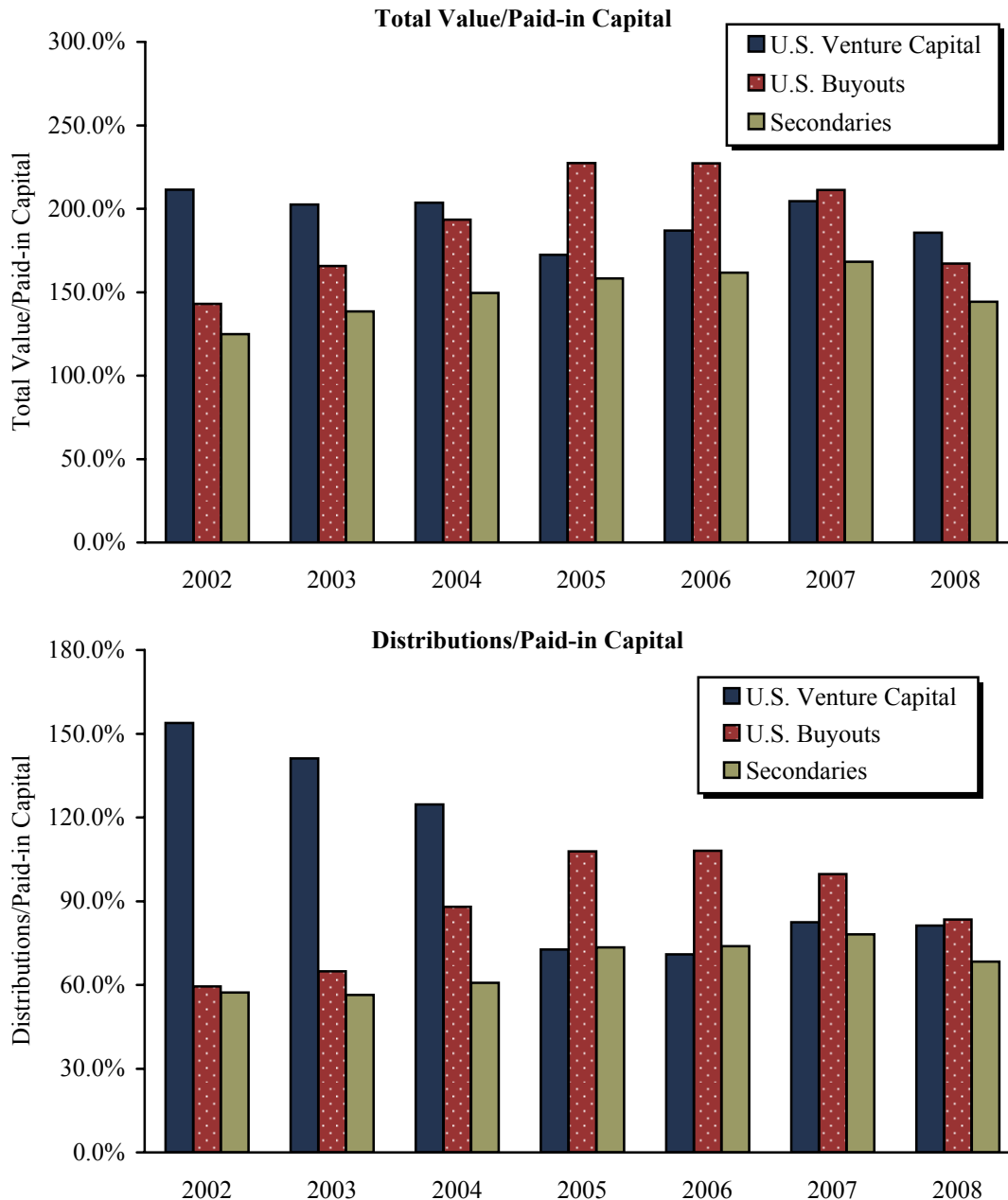
Year ended	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
NAV at Record Date	\$1,000					
Expected Net Distributions		\$0	\$0	\$0	\$0	\$1,500
IRR	8%					
Discount Rate Applied by Buyer		28.0%	<i>Reflects buyer's target IRR of 20% net</i>			
Purchase Price*		\$559	<i>Reflects present value of discounted cash flows</i>			
Gross Multiple of Capital to Buyer		2.7x				
Seller's gain (loss) upon sale		(\$441)				
Seller's gain (discount) to NAV		-44%				

* Assumes 12 months to closing; six months from record date is more realistic.

Exhibit 4

FIVE-YEAR NET INVESTMENT MULTIPLES OF PRIVATE EQUITY, VENTURE CAPITAL AND SECONDARIES

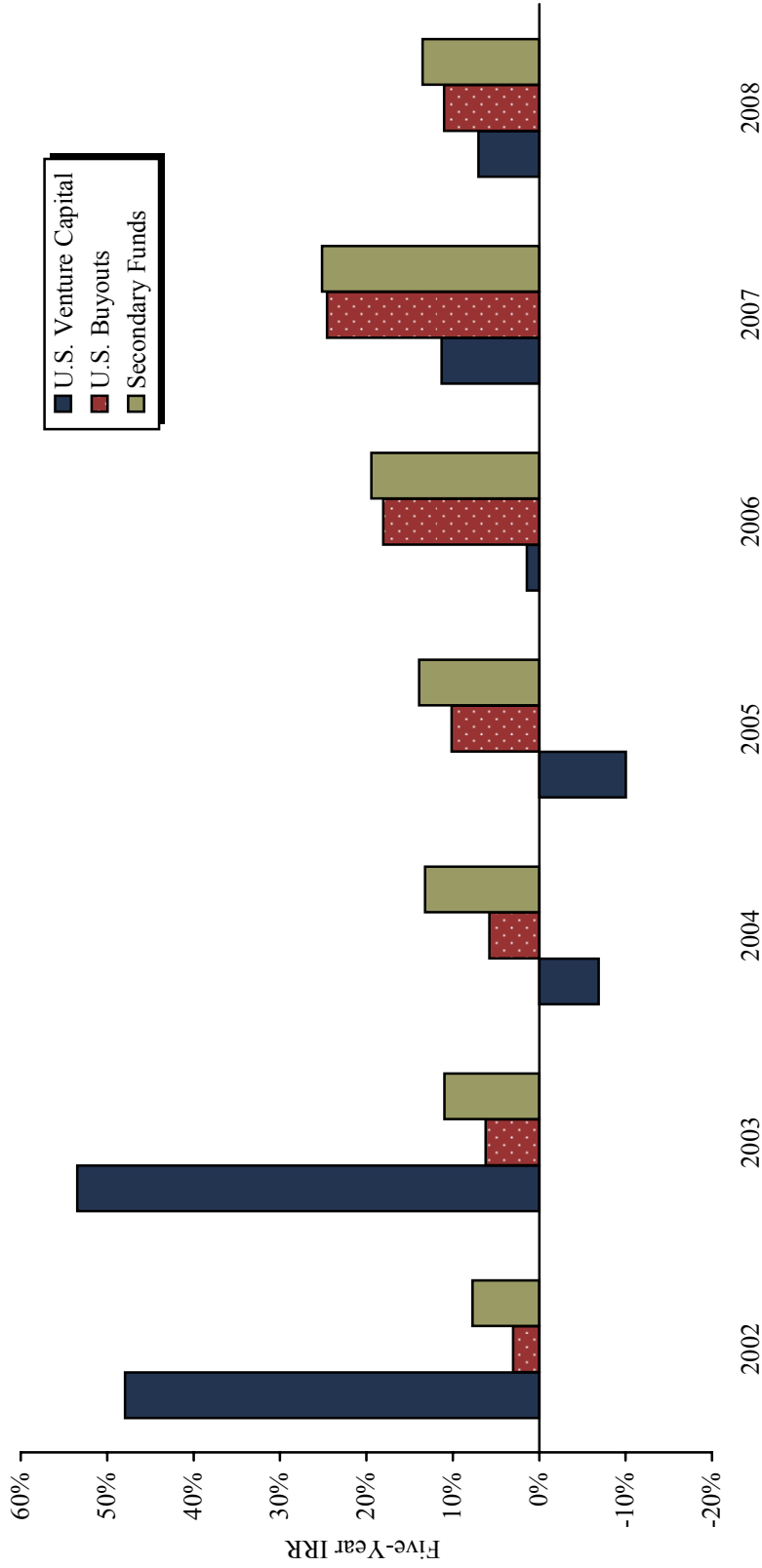
2002–08



Source: Cambridge Associates LLC Non-Marketable Alternative Assets Database.

Notes: Returns are based on rolling five-year periods with ending dates December 31, 2002, to December 31, 2008. Data are based on CA manager universe for U.S. private equity, U.S. venture capital, and secondary managers.

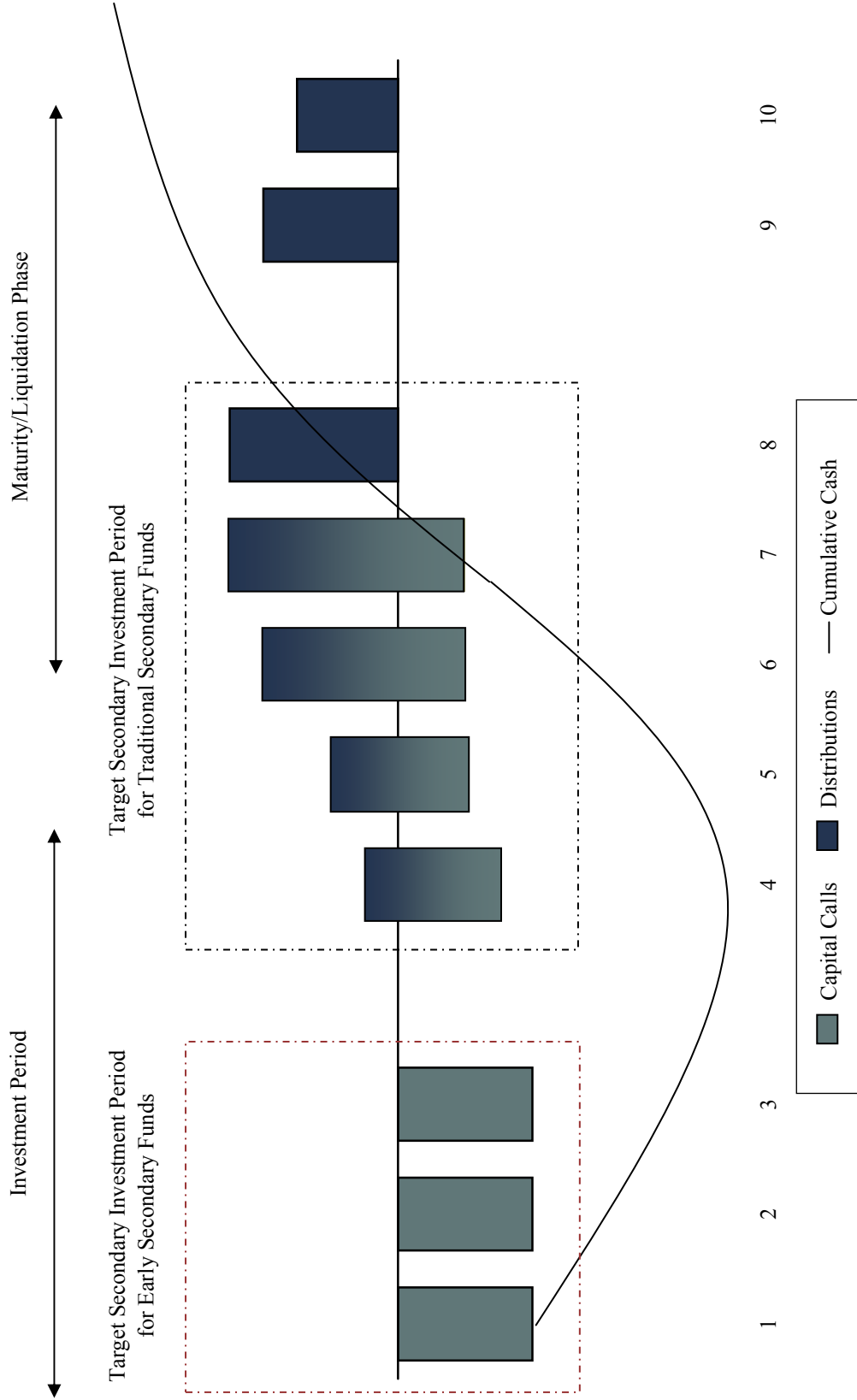
Exhibit 5
FIVE-YEAR POOLED END-TO-END BENCHMARK PERFORMANCE
2002-08



Source: Cambridge Associates LLC Non-Marketable Alternative Assets Database.

Notes: Returns are based on rolling five-year periods with ending dates December 31, 2002, to December 31, 2008. Data are based on CA manager universe for U.S. private equity, U.S. venture capital, and secondary managers.

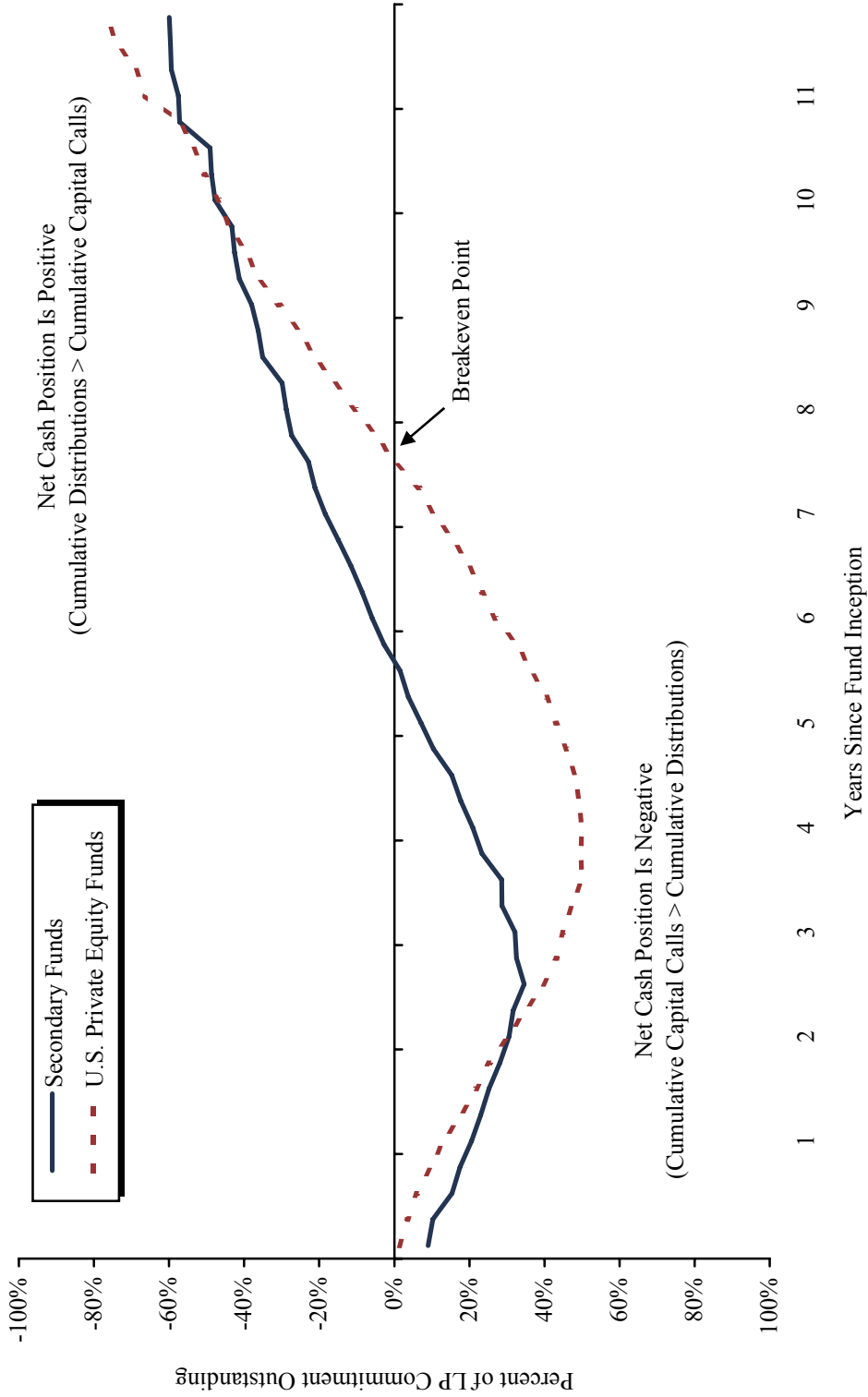
Exhibit 6
CUMULATIVE CASH FLOW TO LIMITED PARTNERS



Source: Lexington Partners.

Exhibit 7

LIMITED PARTNER NET CASH POSITION

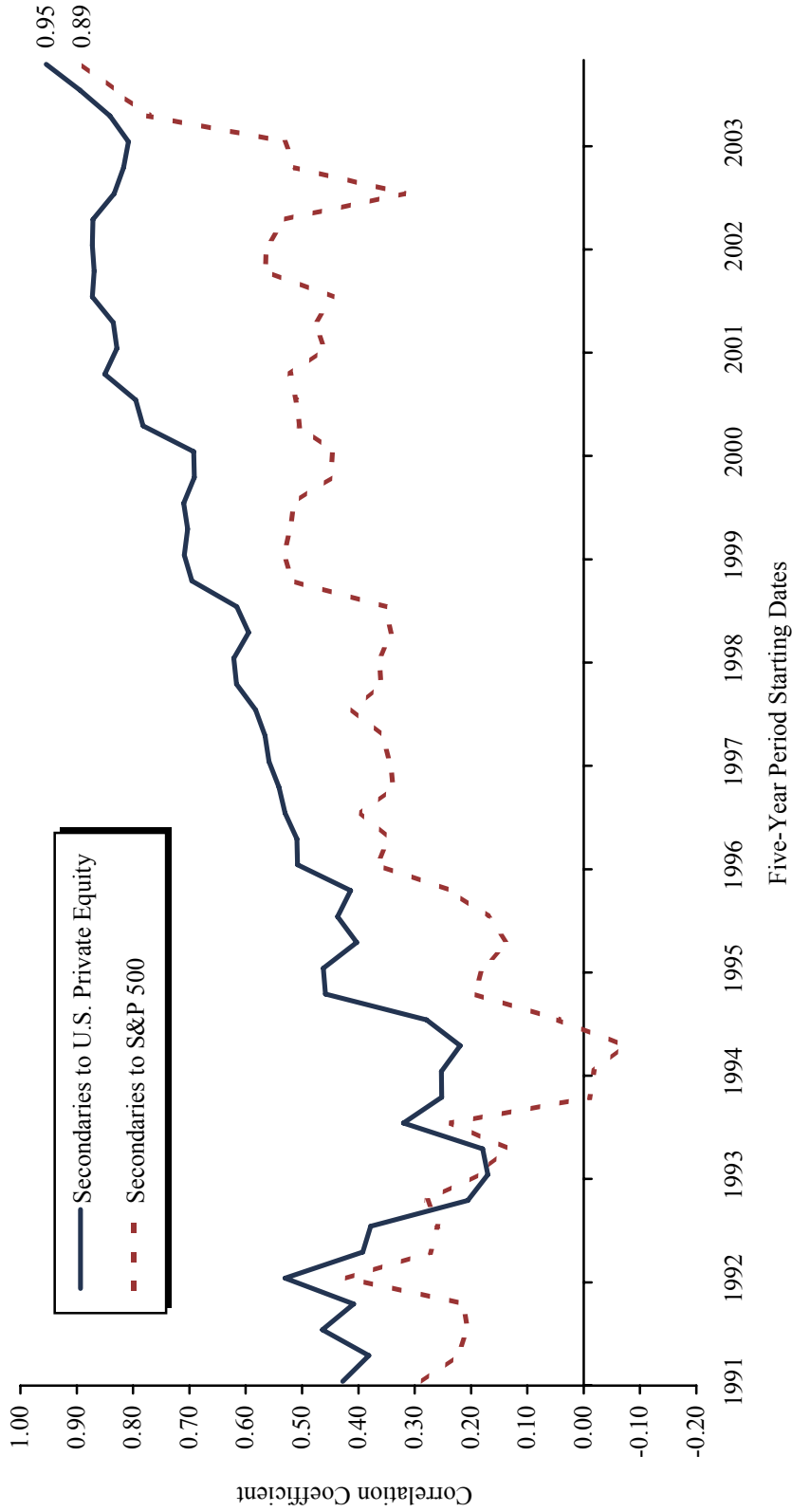


Source: Cambridge Associates LLC.

Note: Data cover secondary funds raised between 1993 and 2008 and U.S. private equity funds raised between 1986 and 2008.

Exhibit 8

**ROLLING FIVE-YEAR QUARTERLY RETURN CORRELATIONS BETWEEN SECONDARY FUNDS,
U.S. PRIVATE EQUITY AND PUBLIC MARKETS**



Sources: Cambridge Associates LLC and Standard & Poor's.

Note: Correlations are calculated using quarterly end-to-end returns for the S&P 500 and Cambridge Associates' universes of secondary and U.S. private equity funds.

APPENDIX A

PROCESS FOR SECONDARY SALES AND PURCHASES

Appendix A

PROCESS FOR SECONDARY SALES AND PURCHASES

Direct Purchases or Sales of Limited Partnership Interests

Investors considering secondary sales or purchases of limited partnership interests have the option to conduct a privately negotiated transaction with another investor or an intermediated transaction, where they rely on an agent to facilitate the transaction. As mentioned earlier, this is comparable to the option that a homeowner or buyer has to either manage the process on his own or to hire a real estate agent. There are advantages and disadvantages to both options.

Direct Purchases of Limited Partnership Interests

A secondary buyer may purchase existing limited partnership interests directly from an original investor rather than through a secondary fund. Some investors prefer this targeted approach because they seek to establish a relationship with a specific manager or because they want to add a certain type of exposure for diversification purposes. A direct purchase of an existing limited partnership interest provides buyers with a better chance of establishing a relationship with the fund's general partner (GP) than they would have by investing the same fund through a secondary manager. In addition, this direct approach allows investors to mitigate the blind pool risk of a secondary fund because they maintain the authority over the fund and manager selection.

There are also important considerations that investors should understand before purchasing a secondary limited partnership interest on a direct basis. The primary risk to the investor is in determining an appropriate purchase price. Most investors, particularly small- and medium-sized institutions, lack the in-house expertise to conduct a bottom-up analysis of a fund's underlying portfolio companies. In addition, they may lack important information on fund portfolios, such as quarterly financial statements, particularly if they have not invested with the GP before. As result, most institutions hire a secondary market intermediary to act as an agent in the transaction. The intermediary has the experience and market knowledge to determine an appropriate purchase price and to facilitate such transactions.

Investors should be aware that the process of completing a secondary limited partnership interest purchase typically takes from two to three months. Legal costs vary but are generally in the range of \$10,000 to \$15,000 per fund. The intermediary's commission is typically born by the seller, although a buyer may retain an intermediary to provide advice.

Exhibit A-1 outlines the secondary purchase process.

Direct Sales of Limited Partnership Interests

When considering the sale of a limited partnership interest, an original investor has two options: to sell directly to a secondary buyer or to sell indirectly through an intermediary. A direct sale to a secondary buyer may be the best option if the seller needs to close the transaction quickly. In this case, a seller may be able to receive sales proceeds more quickly, but often at the cost of a lower price.

There are a number of key considerations to a direct sale. The seller needs to have a good relationship with the GP to determine an appropriate sales price. The seller should not rely on net asset value as a measure of the investment's current value, since the underlying companies could have experienced significant changes in circumstances since the last valuation date. If the sale includes a number of different limited partnership interests, the seller also needs to consider the transaction structure, i.e., whether to sell the portfolio piecemeal or as a whole, and whether an outright sale or another structure, such as a swap or joint venture, is optimal. In addition, the investor will need to understand whether certain legal provisions, such as a right of first refusal, will impact the sales process.

Since most sellers lack the valuation expertise, the market knowledge, and the legal resources to structure secondary transfers, they often rely on an intermediary to facilitate the transaction. The intermediary assists the investor in determining an appropriate sales price and transaction structure, evaluate potential legal barriers, and solicit bids from prospective buyers. Once bids are received, the agent will work with the seller to evaluate bids and will assist in the implementation of the transfer.

The seller is responsible for the intermediary's commission, which is approximately 2% of the sum of sales proceeds and the unfunded commitment amount. In addition, the seller is responsible for legal expenses, which typically amount to \$10,000 to \$15,000 per fund.

Exhibit A-2 outlines the secondary sales process.

Exhibit A-1

SECONDARY PURCHASE PROCESS

	Opportunity Identification	Bid Development	Bid Submission	Negotiation	Execute Transfers
	<p>Sources:</p> <ul style="list-style-type: none"> • Auction process sponsored by intermediary¹ • Direct solicitation from GPs • Direct solicitation from existing LPs • Consultant 	<p>Buyers should:</p> <ul style="list-style-type: none"> • Seek to gain access to data room and financials quickly • Evaluate proposed portfolio assets in context of existing portfolio construction • Determine which assets to bid on (now acceptable to "cherry pick") • Consider a structured transaction • Consult a third party for valuation assistance, if necessary 	<p>Intermediary will:²</p> <ul style="list-style-type: none"> • Collect bids and provide blind feedback to potential seller • Aid potential seller in evaluating bids • Notify winning bidder 	<p>Buyers should:</p> <ul style="list-style-type: none"> • Engage legal counsel to assist with negotiation • Review Letter of Intent (LOI) provided by potential seller • Negotiate and execute purchase agreement 	<p>Legal counsel will:</p> <ul style="list-style-type: none"> • Execute transfer agreements • Liaise with GP counsel
	<p>Possible Participants</p> <ul style="list-style-type: none"> • Potential Sellers • General Partners • Intermediary • Buyer 	<ul style="list-style-type: none"> • Third-party Valuation Provider • Intermediary • Buyer 	<ul style="list-style-type: none"> • Intermediary • Potential Sellers 	<ul style="list-style-type: none"> • Legal Counsel • Intermediary • Buyer 	<ul style="list-style-type: none"> • Legal Counsel • GP Counsel • Seller • Buyer

¹ An intermediary is not always involved in the transaction; some purchases are negotiated directly between buyers and sellers.

² If an intermediary is not involved, these steps will be taken by seller and/or seller's legal counsel.

Source: Cambridge Associates LLC.

Exhibit A-2

SECONDARY SALES PROCESS

Identify Sale Parameters	Engage Advisors	Execute Pre-trade Process	Evaluate Offers	Execute Transfers
Considerations				
<p><u>Evaluate:</u></p> <ul style="list-style-type: none"> • Timing constraints • Liquidity needs • Portfolio of assets LP would consider selling (recognizing not all will transact) • Impact of sale to existing portfolio construction and manager relationships 	<p><u>LP should:</u></p> <ul style="list-style-type: none"> • Contract with an intermediary and legal counsel • Negotiate engagement letters and fees • Provide advisors with sale parameters • Discuss benefits of direct versus structured sale with intermediary and/or consultant 	<p><u>Intermediary will:</u></p> <ul style="list-style-type: none"> • Evaluate portfolio and advise on ROFR, PTP, and other potential obstacles • Provide guidance on sale optimization • Contact GPs • Set up data room • Solicit bids 	<p><u>Intermediary will:</u></p> <ul style="list-style-type: none"> • Provide detailed analysis on bids received • Give guidance on sale optimization 	<p><u>Intermediary will:</u></p> <ul style="list-style-type: none"> • Assist with transfer implementation • Notify GPs <p><u>Legal counsel will:</u></p> <ul style="list-style-type: none"> • Execute transfers • Liaise with GP counsel
Possible Participants				
<ul style="list-style-type: none"> • Limited Partner • Consultant 	<ul style="list-style-type: none"> • Limited Partner • Intermediary 	<ul style="list-style-type: none"> • Intermediary 	<ul style="list-style-type: none"> • Limited Partner • Intermediary • Potential Buyers 	<ul style="list-style-type: none"> • Intermediary • Legal Counsel • Buyers

Source: Cambridge Associates LLC.

APPENDIX B

GLOSSARY

Appendix B

GLOSSARY

Direct Secondary: A transfer of direct company interests, rather than limited partnership interests, from the original investor to the secondary buyer. Historically, direct secondaries, including spin-out transactions, have composed about 29% of total secondaries transaction volume.

J-Curve Effect: This term refers to the typical return and cash flow profile of non-marketable alternative asset (NMAA) funds. In the early years of a fund's life, returns are typically negative as management fees have a disproportionate impact on the fund and early losers are written down or written off. Also, cumulative net cash flows are usually negative, as the amount of capital contributions exceeds distributions. In later years, performance generally turns positive as funds start to harvest profitable investments and cumulative distributions begin to exceed contributions. Due to the greater maturity of underlying investments, secondaries tend to have an earlier return of capital than primary investments, which may help mitigate the performance and cash flow "J-curve" of newer primary investment programs.

Publicly Traded Partnership (PTP): Under U.S. tax regulations, a limited partnership that is readily tradable on a secondary market is classified as a PTP and is taxable as a corporation. The rules include a number of safe harbors that allow for a certain level of secondary transfers in a limited partnership in any given year without triggering the PTP status.

Right of First Refusal (ROFR): An ROFR clause in a limited partnership agreement gives existing limited partners (LPs) the right to buy the interest from the selling LP before it is offered to an outside party. In essence, the ROFR allows existing LPs to increase their commitments before an interest is offered to a new investor.

Secondary Intermediary: A firm that facilitates the sale of existing limited partnership interests. Since there is no public exchange for NMAA, sellers often hire an intermediary to help market the assets for sale and to assist in the transfer process.

Spin-Out Transaction: A type of *direct secondary* transaction. In a spin-out, an existing fund management team asks a secondary fund manager to facilitate the team's exit from the parent company. In these transactions, a secondary manager purchases a direct interest in one or more of the portfolio companies that are managed by the existing team.

Stapled Transaction: A *stapled* transaction occurs when a secondary buyer commits new primary capital as part of a *direct secondary* transaction. Newly independent management teams like to obtain primary capital commitments, particularly from well-established secondary managers, since they often facilitate future fundraising efforts. For secondary investors, however, the primary capital component of stapled transactions increases the uncommitted capital portion of a transaction and leads to greater blind-pool risk.

Structured Transaction: A secondary transfer designed to meet the financial or nonfinancial objectives of the original investor and/or secondary buyer.

Synthetic Secondary: A transfer of direct company interests that requires the formation of a new partnership structure to manage these assets in the future.

Traditional Secondary: A transfer of an existing limited partnership interest from the original investor to the secondary buyer. Historically, traditional secondaries have constituted approximately 71% of total secondaries transactions volume.