PRIVATE CAPITAL ADVISORY

Global Secondary Market Review

JANUARY 2023

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Introduction

The secondary market remained active throughout 2022, despite worsening global economic conditions, and surpassed $100 billion in total volume for the second consecutive year. While market activity and pricing declined in the second half of 2022, limited partners and financial sponsors are expected to continue utilizing the secondary market in 2023, as generating liquidity remains a key focus for investors.

2022 Highlights

- Global secondary volume was $108 billion, which makes 2022 the second biggest year on record, despite an 18% decline from 2021's record volume of $132 billion. LP portfolios accounted for 52% of volume, representing a larger share of the market than GP-led transactions for the first time since 2019
- GP-led volume of $52 billion in 2022 represented the second most active year on record despite an oftentimes turbulent market backdrop, as opportunities involving high-quality, recession-resilient buyout assets were in continued demand
- Most LP sellers sought to rebalance their portfolios given overallocation to private equity, and approximately 50% of all LP sellers were first-time sellers. LP portfolio volume was $56 billion, but a widening bid-ask spread kept many potential sellers on the sidelines
- Average pricing for LP portfolios was 81% of NAV, representing a 1,100 basis point decline from 2021 pricing. Pricing steadily decreased throughout 2022 due to a growing disconnect between public and private company valuations
- The ratio of available capital to LTM volume (capital overhang multiple) increased to 2.1x by the end of 2022. Despite buyers ultimately raising larger secondary funds, the fundraising environment was challenging in 2022, causing buyers to become increasingly selective

About This Report

This report represents Jefferies' annual review of the secondary market. We rely on insights from Jefferies' Private Capital Advisory ("PCA") team who works closely with the largest and most influential limited partners, general partners and other market participants on a regular basis. The results of our discussions, surveys and research are contained within this report, along with our transaction information and known market data from sources such as Preqin and PEI. Unless otherwise noted, data included herein is based on transactions executed by Jefferies' PCA team and public non-Jefferies transactions.

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Full Year Review

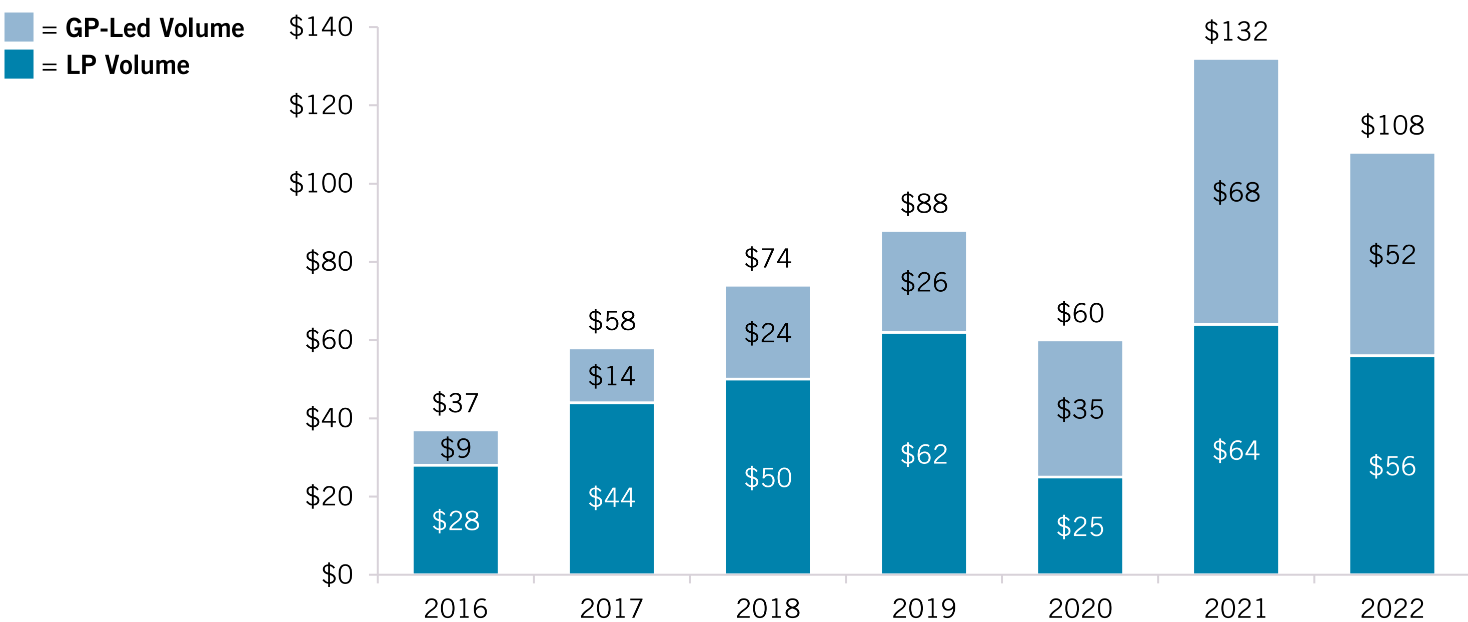
Themes From 2022 and Expectations For 2023

As expected, the secondary market experienced declines in volume and pricing across strategies and geographies in 2022 due to continued macroeconomic instability. However, we believe the market is positioned for a gradual rebound as we enter 2023.

Year in Review	2021	2022
Total Volume Declines	$132 Billion	$108 Billion
LP Pricing Falls	92% of NAV	81% of NAV
GP-Led Volume Decreases	$68 Billion	$52 Billion
Available Capital Decreases	$236 Billion	$225 Billion
First-Time LP Sellers	25% of LP Sellers	50% of LP Sellers

Year Ahead	2023 Expectations
Volume Rebounds	$120+ Billion
LP Pricing Slowly Recovers	↗
Continued GP-LP Balance	~50% of Total Volume Each
Deployment Outpaces Fundraising	<2.0x Capital Overhang Multiple
Overallocation to PE Persists	✓

Fig. 1. Annual transaction volume ($B)



	2016	2017	2018	2019	2020	2021	2022
Total Volume Growth (%)	--	57%	28%	19%	(32%)	120%	(18%)
LP Volume Growth (%)	--	57%	14%	24%	(60%)	156%	(13%)
GP-Led Volume Growth (%)	--	56%	71%	8%	35%	94%	(24%)

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Secondary Volume

Volume Declined as Bid-Ask Spreads Widened

Annual secondary volume was $108 billion, representing an 18% decrease from 2021's record volume of $132 billion. A widening bid-ask spread and increased buyer selectivity – intensified by a valuation disconnect between public and private companies and worsening global macroeconomic conditions – resulted in smaller transaction sizes and shelved deals. These factors led to a quieter-than-expected second half ($51 billion of volume compared to $57 billion in the first half), but we expect a rebound in 2023 as bid-ask spreads narrow and demand begins to return for strategies (e.g., venture and real estate) and geographies (e.g., Asia and Europe) that were out of favor in 2022.

GP-Led Market Exhibits Exceptional Resilience

2022 represented the first period of market volatility the matured GP-led secondary market has encountered, with annual volumes contracting ~24%, comparing favorably to global leveraged loan issuance and IPO volumes, which declined ~67% (1) and ~70% (2), respectively. We believe more continuation vehicle transactions were launched than ever before in 2022, though this activity was metered by high levels of investor selectivity and a narrow focus on mature, cash-flowing assets in resilient, less cyclical sectors.

LP Overallocation to Private Equity

Traditional LP portfolio volume declined 13% from 2021 to $56 billion. Overallocation to private equity continued to be a key motivator for LPs to pursue sales, accounting for 48% of all LP selling activity. Pensions / SWFs were the most active, accounting for 63% of LP volume, and several fund-of-funds (9% of volume) sold to wind down older vehicles. We estimate 50% of sellers were first-time sellers, with many of these being private pensions proactively seeking liquidity to rebalance their portfolios and help fund defined benefit programs in a slowing distribution environment. Volume from endowments decreased from 5% in 2021 to 1% in 2022, as many hoped to dispose of venture / growth assets, but the optics of selling at significant discounts proved too hard to justify.

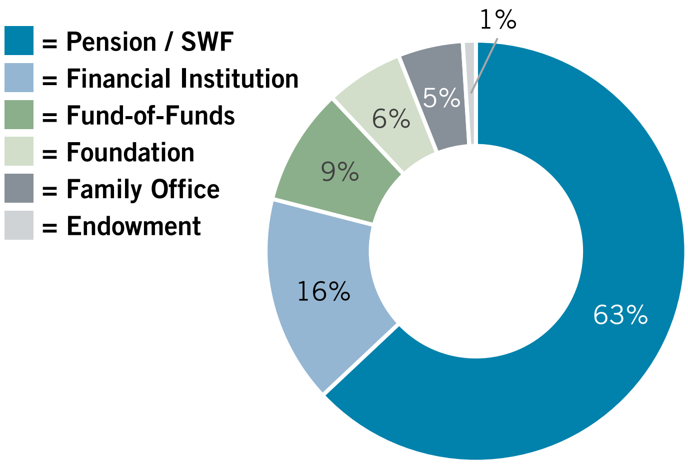
Larger LP Portfolios, but Lower Volume Sold

We estimate over 10 LP portfolio transactions greater than $1 billion closed in 2022. To increase transaction optionality, LPs marketed more (sometimes >2x exposure) than they intended to sell, which is a trend we expect to continue in 2023. However, LPs often sold less than 50% of their desired amount due to softer-than-expected pricing. Still, we estimate that less than 5% of LP deals were completely shelved in 2022, as sellers valued liquidity over hitting a certain "reserve" price in most cases.

Key Highlights in 2022

- **$108 Billion** Total Volume
- **18%** 2022 Volume Decline
- **$52 Billion** GP-Led Volume
- **24%** GP-Led Volume Decline
- **$56 Billion** LP Volume
- **13%** LP Volume Decline

Fig. 2. LP portfolio transaction volume by seller type



(1) Source: Jefferies Leveraged Finance.
(2) Source: S&P Capital IQ.

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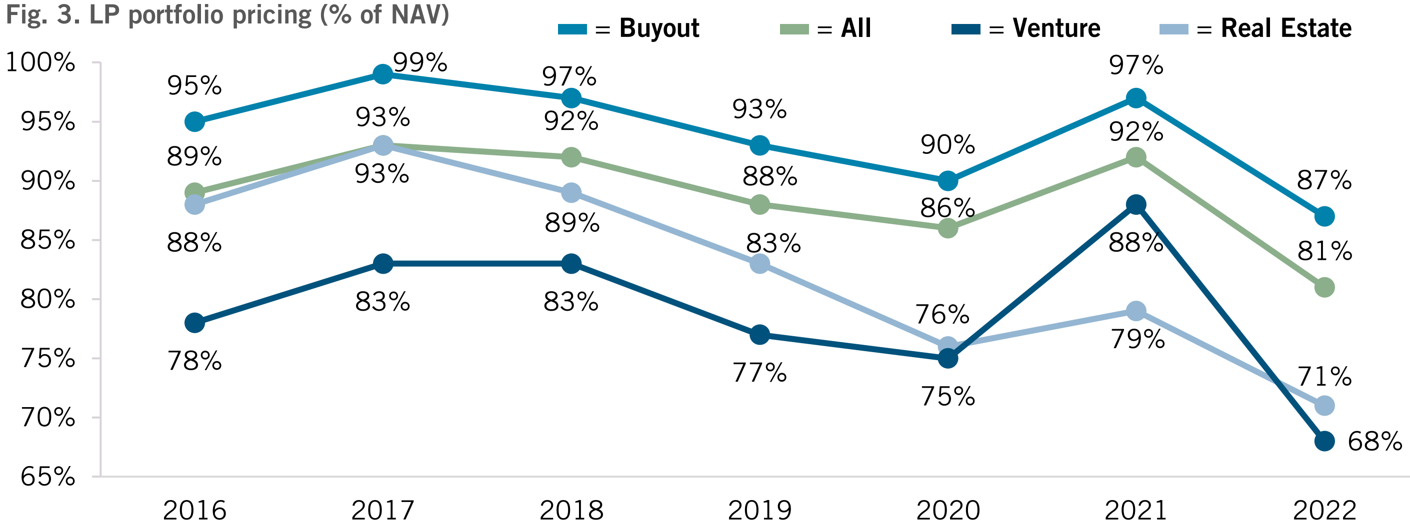
Secondary Pricing & Demand – LP Portfolios

The Great Pricing Reversal of 2022

Secondary pricing for LP portfolios reversed course in 2022, declining 1,100 basis points to 81% of NAV across all strategies. Double-digit pricing declines resulted from (i) perceived inflated private company valuations, (ii) expected delays in portfolio company exits, (iii) higher underwriting hurdles due to recession fears, and (iv) increased buyer selectivity. Interest rate hikes and tighter lender underwriting standards in 2022 also reduced buyers' use of leverage, changing how aggressively they could bid while still hitting target returns. As such, while secondary pricing (as a % of NAV) ended the year at a 10-year low, pricing remains historically strong in dollar terms when considering NAV write-ups over the last 5+ years.

Fig. 3. LP portfolio pricing (% of NAV)



Pricing & Demand by Strategy

Buyout: Pricing declined 1000 basis points from 2021, and in 2H 2022, buyers rarely bid 90%+ of NAV for any fund. Demand for buyout funds remained robust (72% of total volume), as buyers preferred mature assets with stable cash flows.

Venture: Pricing declined 2000 basis points from 2021, representing the largest annual drop for any strategy in history. With the NASDAQ down 33% in 2022, buyers had little confidence in relative asset values and showed limited demand for even the highest-quality GPs without 30%+ discounts. Venture exposure accounted for just 8% of total volume (vs 19% in 2021).

Real Estate: Pricing declined 800 basis points from 2021, as rapid inflation, sustained interest rate hikes, and slowing macroeconomic conditions meaningfully impacted bid pricing and transaction activity across all real estate sub-sectors. While certain sub-sectors, such as industrial and multifamily, continued to be in higher demand, increased cost of debt and slowing rent growth drove buyers to reassess their underwriting / cap rate assumptions.

Credit / Distressed: Pricing declined 800 basis points from 2021 to 75% of NAV, as buyers incorporated increased default expectations and widened credit spreads into their underwriting. Credit buyers were actively seeking supply but remained disciplined in marking funds to market.

Key Factors Driving Pricing Declines

Private-Public Market Disconnect	▪ GP valuations in 2022 did not reflect the 20%+ declines in publics ▪ The magnitude of Q4 2022 write-downs is still unknown	**Declining Economic Outlook**	▪ Looming recession fears amplified as the year progressed ▪ GPs began discussing declines in portfolio company performance
Delayed Exits & Slowing Distributions	▪ M&A activity declined 37% and IPO volume declined 70% in 2022 [1] ▪ Venture distributions (7.1% of NAV) were the lowest since 2009 (7.7%) [1]	**Increased Buyer Selectivity**	▪ Smaller bids from buyers, on average, as compared to 2021 ▪ The use of leverage declined and the required rate of return rose

(1) Source: S&P Capital IQ, Hamilton Lane, Refinitiv

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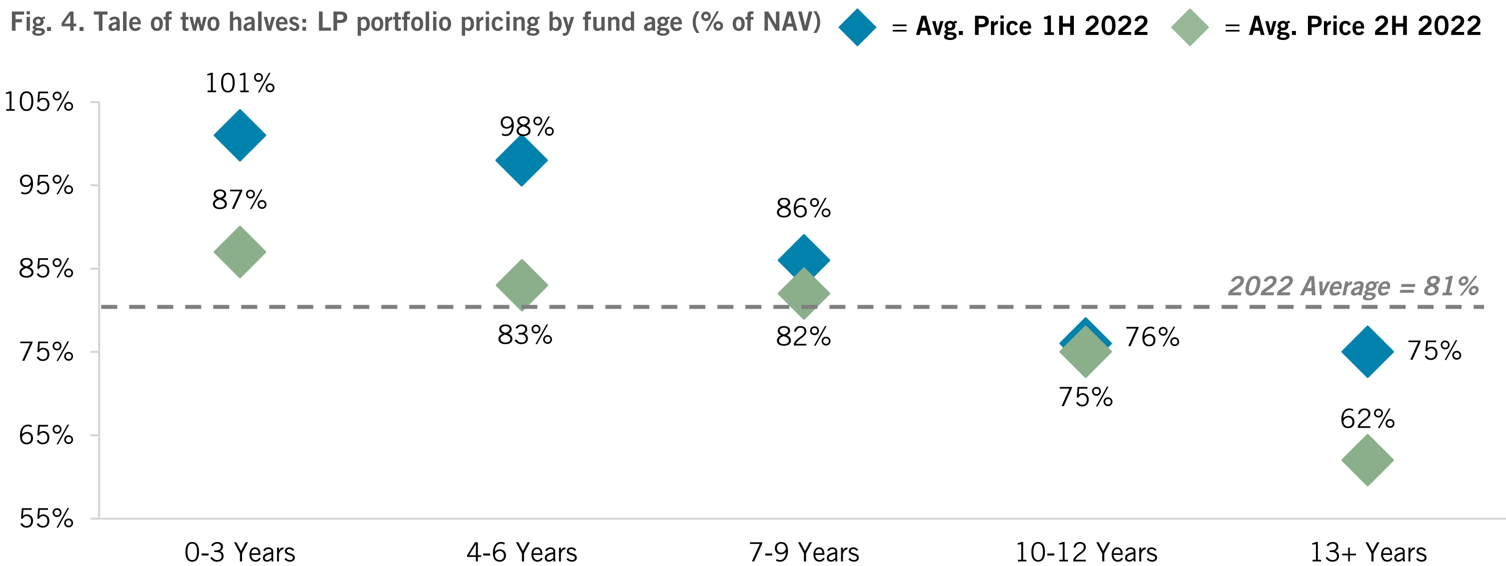
Secondary Pricing & Demand – LP Portfolios (Cont.)

Pricing & Demand by Vintage

The weighted average vintage of all funds sold was 2014 (i.e., eight years old, consistent with 2021). Recent-vintage (i.e., less than five years old) funds priced at 89% of NAV on average (versus 98% in 2021) while tail-end (i.e., pre-2012 vintage) funds priced at 70% of NAV on average (versus 90% in 2021). As expected, buyers showed greater demand for more recent vintages than tail-end funds. Pricing for newer funds, where exits are projected to be many years in the future, was not as affected by buyers' view that 2023 will be a challenging year for realizations. But when comparing pricing from 1H 2022 to 2H 2022, we witnessed the largest pricing decreases in recent-vintage funds, given the struggle to gain comfort with GPs' reported valuations as the year progressed and public markets declined further. In addition, buyers were skeptical of funds substantially deployed in the 2020-2021 market environment, given peak valuations and public multiples, and preferred funds with a greater amount of unfunded exposure for these more recent vintages.

Fig. 4. Tale of two halves: LP portfolio pricing by fund age (% of NAV)



Pricing & Demand by Geography

Buyers continued to show strong demand for North American funds (70% of total volume), with pricing at 84% of NAV in 2022 versus 92% in 2021. Demand for European funds (18% of total volume) fell, due in part to increasing geopolitical concerns related to Russia's invasion of Ukraine, with these funds pricing at 76% of NAV in 2022 versus 93% in 2021. Asia and emerging markets secondary pricing (65% of NAV) and volume (13% of total volume) continued to lag due to regulatory and macroeconomic concerns within China, as well as geopolitical concerns in various parts of the region. Buyers showed limited appetite to acquire Asia and emerging markets exposure, without steep (e.g., 30%+) discounts.

Bridging the Bid-Ask Spread

Significant bid-ask spreads throughout 2022 often drove LPs to hold significant portions of their marketed portfolios. By 2H 2022, two clear trends emerged that helped buyers and sellers bridge the bid-ask spread and execute transactions:

#1) Increased Use of Deferrals & Delayed Closings: LPs were increasingly willing to accept deferred proceeds to improve pricing. Approximately 35% of all LP sales included a deferral component, as compared to 25% of all LP sales in 2021. While LPs also considered alternative structures (e.g., preferred equity, PE-backed bank loans and collateralized fund obligations), traditional secondary sales continued to dominate LP volume.

#2) Mosaic Transactions: Throughout 2022, buyers became highly selective in their bidding behavior and preferred to focus on specific GPs or portfolio subsets. The average number of buyers in multi-buyer (i.e., mosaic) solutions rose to 3.5 in 2022 from 2.4 in 2021. Further, these factors ultimately resulted in smaller bids, as the percentage proportion of NAV purchased by the lead buyer in mosaic transactions decreased from 71% in 2021 to 64% in 2022.

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GP-Led Activity

GP-Led Market Steadfast Heading into 2023

The GP-led secondary market saw an estimated $52 billion of transaction volume in 2022, reflecting a 24% contraction vs. 2021, but still 49% higher than volumes achieved in 2020. Considering 2022 posed a markedly more challenging macroeconomic backdrop than 2021, the sustained momentum of GP-led activity (~48% of total secondaries volume) is indicative of: (i) the GP-led market's ability to deliver innovative liquidity solutions in a tepid M&A and public exit environment, which is advantaged by the fact that continuation fund transactions generally don't trigger change of control provisions with respect to existing credit facilities; (ii) robust appetite from investors to augment their portfolios with high-quality, trophy assets residing in resilient subsectors; and (iii) exceptional levels of adoption of the GP-led toolkit by sponsors, demonstrating the permanence of the modern GP-led market. The decision for sponsors considering a GP-led secondary has largely shifted from a question of "if" to "when." 2022 saw a continuance of several themes from prior years, including: (i) the importance of sponsor relationship and alignment; (ii) the evolution of price discovery techniques; and (iii) an expanding and increasingly sophisticated investor universe.

Fig. 5. GP-led annual transaction volume ($B)

	2016	2017	2018	2019	2020	2021	2022
GP-Led % of Total Volume	24%	24%	32%	30%	58%	52%	48%
GP-Led Growth (%)	--	56%	71%	8%	35%	94%	(24%)

Single-Asset Transactions Retain Largest Share

Continuation funds remain the most popular GP-led transaction type, representing ~85% of 2022 volume. Although investor demand for more diversified transactions has been markedly pronounced, single-asset continuation vehicles comprised ~50% of completed transactions, with multi-asset transactions representing ~35%, and other transaction types (e.g., strip sales, tender offers) encompassing the remainder. An estimated ~85% of volume involved buyout assets (vs. ~75% in 2021), reflecting an investor preference to deploy capital in more mature, profitable businesses benefitting from stable end markets, modest leverage and high levels of free cash flow generation. Conversely, venture / growth assets represented just ~5% of volume, down from ~11% in 2021. The average company hold period for all completed GP-led transactions was ~5 years (flat relative to 2021) , while the average hold period for single-company continuation fund transactions was closer to ~4 years.

Focus on Sponsor Relationships and Dynamics

Amidst an increasingly uncertain macroeconomic environment and a groundswell of actionable opportunities in both the GP-led and LP-led segments of the market, secondary investors placed greater emphasis than ever before on sponsor relationship and perceived alignment when triaging their pipelines. Many investors chose not to evaluate transactions involving sponsors they did not already have a meaningful relationship with. Indicative of the importance of sponsor alignment, ~90% of closed continuation funds featured key principals at GPs re-investing 100% (or more) of their realized economics. A significant minority of transactions involved sponsors making an incremental out-of-pocket commitment beyond their re-invested proceeds. As we predicted in our previous annual report, continuation vehicle transactions featuring parallel cross-fund investments from a sponsor's current flagship fund have become more prevalent and comprised ~25% of single-asset transactions in 2022.

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GP-Led Activity (Cont.)

Navigating Price Discovery in Uncertain Waters

While multi-stage auction processes remained the most common method of price discovery for GP-led transactions in 2022, the share of transactions where pricing was based on a third-party mark via a merger or new minority investment increased. An estimated ~60% of single-asset transactions were priced via an auction process (compared to ~70% in 2021), with the remaining ~40% employing transfer pricing set by a third party. As with pricing compression seen in the LP-led market, GP-led secondary pricing saw a notable decrease in 2022 vs. prior years with ~40% of transactions trading at a discount in excess of 5% to GPs' latest holding values. This compares to prior periods where the vast majority of transactions traded at, near or above par. While this is partially due to GPs' quarterly marks at times lagging broader public market declines, buyers also underwrote to longer hold periods and compressed multiples. Nevertheless, a clear majority of GP-led transactions still priced at or near par. Price-enhancing structures (e.g., performance-based earnouts, deferred payments, delayed closings, fund-level facilities) were frequently utilized in 2022 to bridge bid-ask spreads as investors and sponsors grappled with volatile public markets.

Dynamic Buyside Reacts to Market Opportunity

Secondary investors have rapidly evolved with the GP-led market to meet the growing opportunity set. At this point, nearly all traditional secondary investors have dedicated resources to evaluate GP-led transactions, and many have raised, or plan to raise, specific fund strategies to invest in GP-led opportunities. Simultaneously, the trend of non-traditional secondary investors (e.g., alternative asset managers, buyout sponsors, pension plans, sovereign wealth funds) entering the foray is expected to persist. An influx of investors from platforms known for direct investing has in certain cases created more comprehensive due diligence requirements for GP-led processes. For example, it is rare for a transaction to be marketed without a quality-of-earnings analysis or detailed market study from a reputable provider, and investors are now expected to leverage third-party expert networks and internal / external sector specialists.

Whereas the early innings of the GP-led market featured several keystone transactions with large-cap assets and sponsors, the sustained market shift to single-asset opportunities and vexing company concentration limits for certain secondary funds has led to renewed investor interest in middle-market companies backed by strong GPs, where closing is not predicated on a potentially lengthy syndication exercise. Secondary investors have proven to adapt with the changing opportunity set, and as such, we expect 2023 will demonstrate high levels of GP-led transaction volume with mid-market sponsors.

FY 2022 Key Statistics	
$52 Billion	FY 2022 GP-Led Transaction Volume
~48%	GP-Led Share of Total Secondary Volume
~85%	Continuation Funds *(% Share of GP-Led Volume)*
~50%	Single-Asset Continuation Funds *(% Share of Total GP-led Volume)*
2017	Weighted Average GP-Led Company Vintage
~85%	Buyout Strategy *(% Share of GP-Led Volume)*
~60%	Transactions Priced within 5% of Par
~25%	Single-Asset Transactions with Parallel Cross-Fund Commitments

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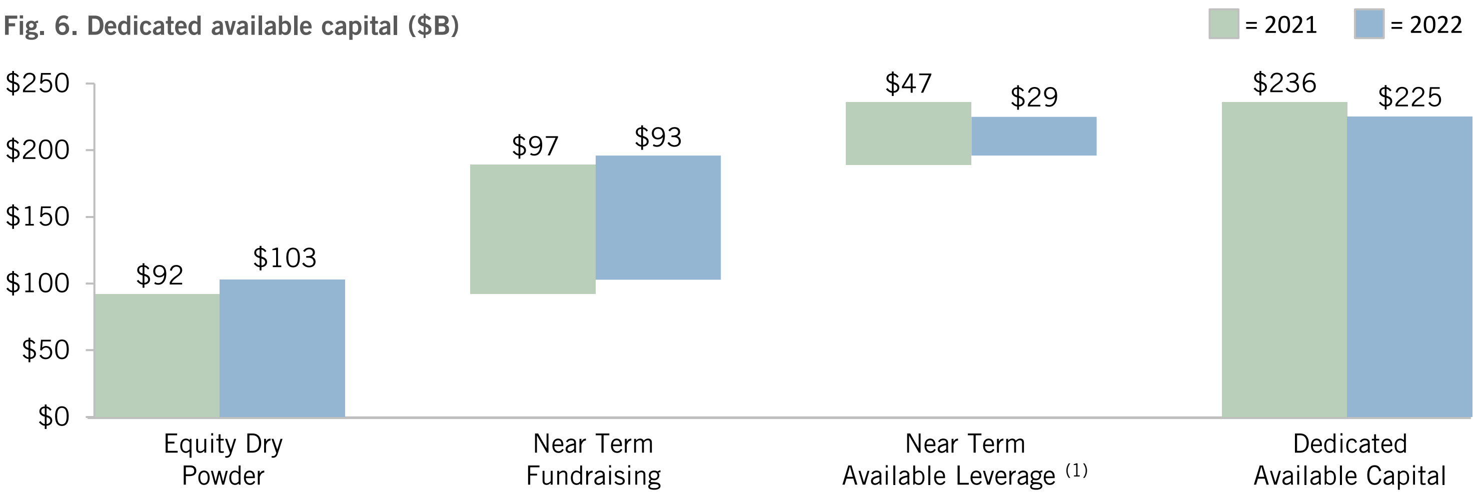
Dedicated Available Capital

Challenging Fundraising Environment

Despite multiple $15+ billion fundraises by the largest buyers, the secondary market is not immune to the challenging fundraising environment across the broader private equity landscape. Buyers frequently extended their fundraising cycles to reach expected targets and accommodate LPs who filled their 2022 capital budget early in the year. Furthermore, the use of leverage declined in 2022 due to rapid interest rate increases and more stringent underwriting standards among lenders. After reaching record levels in 2021, dedicated available capital – which is comprised of buyers' current equity capital, expected near-term fundraising, and likely leverage usage – declined 5% to $225 billion.

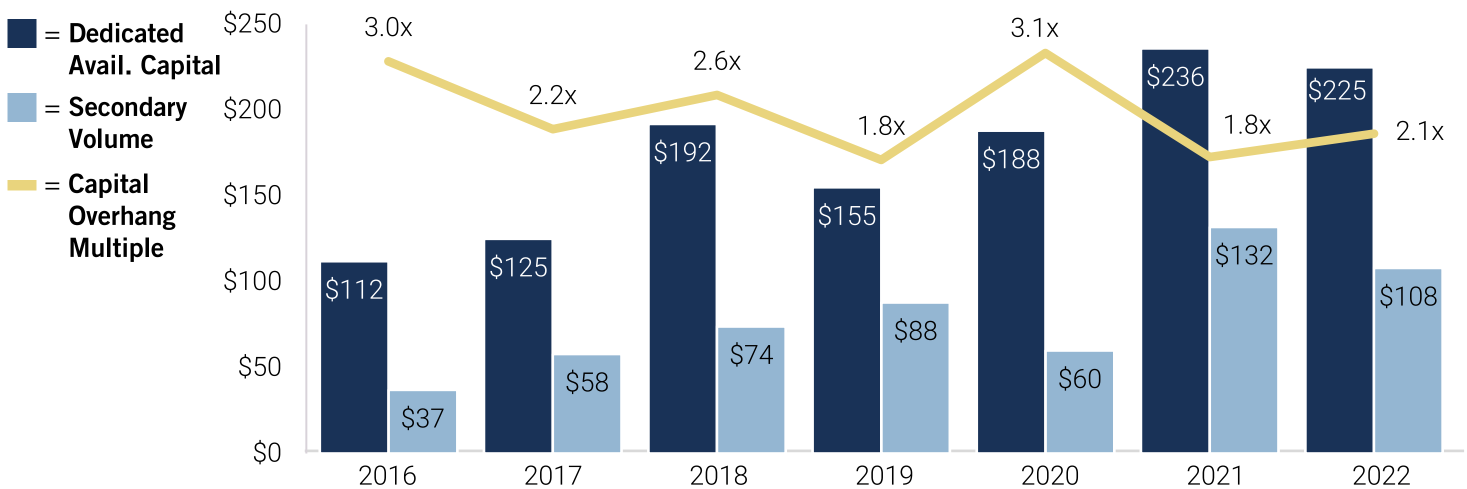
Fig. 6. Dedicated available capital ($B)



Secondary Market Capitalization

Even though dedicated available capital declined, the capital overhang multiple [2] increased 0.3x in 2022 to 2.1x, as buyers cautiously deployed capital throughout the year. Over the course of 2023 and 2024, we anticipate new buy-side entrants to emerge with additional fundraises completed. In the near-term, we expect buyers to remain fairly selective as they balance available capital and the challenging valuation environment. Buyers who invest in both LP and GP-led transactions from a consolidated fund shifted slightly toward LP transactions in 2H 2022, as they looked to increase diversification in their portfolios – a trend we expect to continue into 1H 2023. Ultimately, while buyers will continue to be selective, we expect dedicated available capital will be sufficient to satisfy expected secondary supply in 2023.

Fig. 7. Secondary capital and activity ($B)



(1) Leverage estimated as approximately 25% of equity dry powder plus near-term fundraising for 2021, but only 15% for 2022

(2) Capital Overhang Multiple defined as Dedicated Available Capital divided by total Secondary Volume

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Conclusion

Outlook for 2023

As we enter 2023, we predict market volume will rebound for both LP portfolio and GP-led transactions. Numerous LPs are experiencing negative net cash flows in their private equity programs, as capital calls outpace distribution activity, which will lead to an enhanced need for liquidity and, ultimately, increased secondary supply. Many LPs who contemplated sales in 2022 remain overallocated and will likely bring portfolios to market in 2023. We also expect GPs to utilize the secondary market to hold onto prized assets, and we envision increased variability in transaction types (e.g., tender offers) and across strategies (e.g., credit, growth). We anticipate year-end audits will help reset private company valuations, and pricing for LP portfolios will slowly recover, with volume then increasing as bid-ask spreads narrow. Buyers will likely remain selective in the near-term, but even with a tough fundraising environment, we expect they will have enough fresh capital to deploy to match the pent-up supply we expect from sellers in 2023.

Jefferies' 60-person Private Capital Advisory team has advised institutional investors and general partners on over $20 billion of private equity secondary transaction value in 2022, and over $160 billion since 2001. Through its research-driven, analytical approach to the secondary market, Jefferies assists the most sophisticated institutional investors and general partners in achieving their objectives and fulfilling their fiduciary duties.

If you are interested in a confidential discussion of your alternative asset portfolio, including detailed insight into pricing for assets you would consider selling, or ideas on other avenues to generate liquidity, please contact us.

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