

# Fundamentals of Private Equity Markets

**Presented By:**

**William J. Fink, CPA, GCMA**

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# Definitions

- Leveraged Loan – A commercial loan to a below investment grade company that has considerable debt.
  - Under InterAgency Guidance of US Banking regulators, a commercial loan is classified as “leveraged” if either the senior debt or total debt exceed for 3.0x and 4.0x, as measured by Senior Funded Debt/EBITDA or Total Funded Debt/EBITDA and lacks tangible collateral.
- Covenant-Lite Loans – Covenant-lite loans are commercial loans which lack standard maintenance covenants for type of loan provided.
  - In many cases, the maintenance covenant(s) are replaced by incurrent covenants which only have to be met if borrower want to undertake a particular action (i.e., make an acquisition, distribution or take on more debt.

## Definitions (Cont.)

- Club Deal – A commercial loan, usually ranging in size from \$25.0MM to \$150.0MM, that is structured and arranged by 3-5 commercial banks where one of the commercial banks serves as lead arranger or “agent.”
- Syndicated Loan – A commercial loan that is structured and arranged by a group of more than 5 commercial bank where one bank serves as lead arranger or agent.
  - It is not unusual for larger syndicated loans to have more than 10 participating banks and have more than one bank serve as co-agents and other banks serve as documentation agent(s) and collateral agents, depending on loan size and complexity.

## Definitions (Cont.)

- Broadly Syndicated Loan – A first-lien secured commercial loan that is of \$250.0MM to a company with EBITDA of \$75.0MM or greater and a public debt rating not lower than B3 by Moody's or B- by S&P.
  - Broadly Syndicated Loans comprise the largest segment of the US syndicated loan market which totals approximately \$2.5 trillion dollars at 12/31/2021.
  - Approximately one-third of all outstanding syndicated loan are held by non-commercial bank.
  - The largest non-bank holders of syndicated loans are held by Collateralized Loan Obligations (50%), with the remainder held in private equity funds, loan funds and pension funds.

# What is Private Equity – The Fundamentals?

Private Equity is the investment of equity capital in private companies

# What is the Size of the Private Equity Market?

- The global Private Equity market totaled \$10.0 trillion in assets under management in September 2021 according to Preqin, a leading financial data provider.
  - This represents an increase of approximately 5x since 2007.
- The US Private Equity market totaled \$6.0 billion in assets under management in 2022, increasing from \$2.0 billion since 2012.
- By count, there are approximately 4,500 Private Equity firms in the US covering all business segments, with nearly 1,200 Middle Market Private Equity firms.
- There are over 8,000 businesses owned by US Private Equity firms compared to nearly 4,300 public companies based on 2019 data.

# Private Equity as an Asset Class

Private Equity is attractive to long-term investors such as pension funds or Sovereign Wealth Funds willing to forego liquidity to achieve higher potential returns than shorter term or less risky investment alternatives

<b>More Liquid</b> <span style="font-size: 2em;">→</span> <b>Less Liquid</b>						
<b>Equity</b>	Equity EFTs/ Index Funds	Actively Managed Mutual Funds	Equity Hedge Funds	Secondaries	Private Equity	Venture Capital
<b>Fixed Income</b>	US Treasuries	High Yield Bonds	Municipal Bonds	Credit Hedge Funds	Mezzanine Debt	Rescue Finance
<b>Real Assets</b>	REITs, Index Funds, Commodity EFTs	Active REIT Funds	Real Estate Debt/Hedge Funds	Private Real Estate Debt	Private Equity Real Estate	

# Types of Private Equity Investors

- Investors can include:
  - Angel investors are high net-worth individuals who provide capital to a start-up or early stage business in exchange for equity.
    - Angel investors can be accredited or non-accredited individuals as defined by the SEC.
  - Incubators and accelerators are competitive programs which provide entrepreneurs financial support, mentorship, industry introductions and connections, offices and working space and technical resources in exchange for a minority equity



## Types of Private Equity Investors (Cont.)

- Venture capital firms provide capital from limited partners who fund and mentor start-ups and early stage companies.
  - Target companies are often in emerging technology such as life sciences, bio-technology or information technology.
  - Venture capital firms make money if the target company is successful and goes public or the venture capital firm sells its shares to another investor in the secondary market for a profit
- Corporate Venture Capital (CVC) is a subset of venture capital in which large corporations strategically invests in start-ups and early stage companies often operating within or adjacent to their core business.

## Types of Private Equity Investors (Cont.)

- The objectives of these investments is often to identify and obtain a competitive technological advantage or accelerate revenue and net income growth.
- Unlike mainstream or traditional venture capital investments, CVC investments are made using corporate dollars and not through contributions from limited partners.
- Much like Venture Capital Private Equity firms invest in businesses with the goal of increasing value over time before selling the investment at a profit.
  - In contrast to Venture Capital firms, Private Equity firms usually take a majority stake – 50% or more of the ownership of the target business which now include early-stage, growth and mature companies.

# What is a Private Equity Fund?

- A Private Equity Fund is a pool of capital raised from investors which is invested over the course of years.
  - The investment is typically in a business or asset such as real estate.
- The investment thesis in a Private Equity Fund is that strong/superior investment returns are expected to be generated by:
  - Operational improvements and growth of a business or asset;
  - Growth of purchase and exit multiples for the business/asset; and
  - Use of leverage expands returns, particularly in leverage buy-outs.
- The Operator of the Private Equity Fund is the General Partner, often termed the “Manager” and the investors are the Limited Partner.
- Limited Partners are only required to invest capital when an investment happens.

# How Are Private Equity Funds Structured?

- Private limited partnerships;
- Individual managers are General Partners (termed “GPs”);
- Providers of capital are Limited Partners (termed “LPs”);
- Partnerships traditionally have a 10-year life, often with an option of limited extensions at the discretion of the GPs;
- Investments periods usually range from 4-6 years, depending on the Fund and its core purpose;
- Management fees usually range from 1-2% per annum;
- Profits are traditionally split at 80-20, after achieving the hurdle return rate for LPs;

# How Are Private Equity Funds Structured?

(Cont.)

- LPs must fund typically within 15-30 days of a “capital call;”
- Penalties are imposed under governing Fund documents for an LP that fails to fund a capital call
- Internal Rate of Returns (IRRs) depend on when the money is transferred by the LPs.

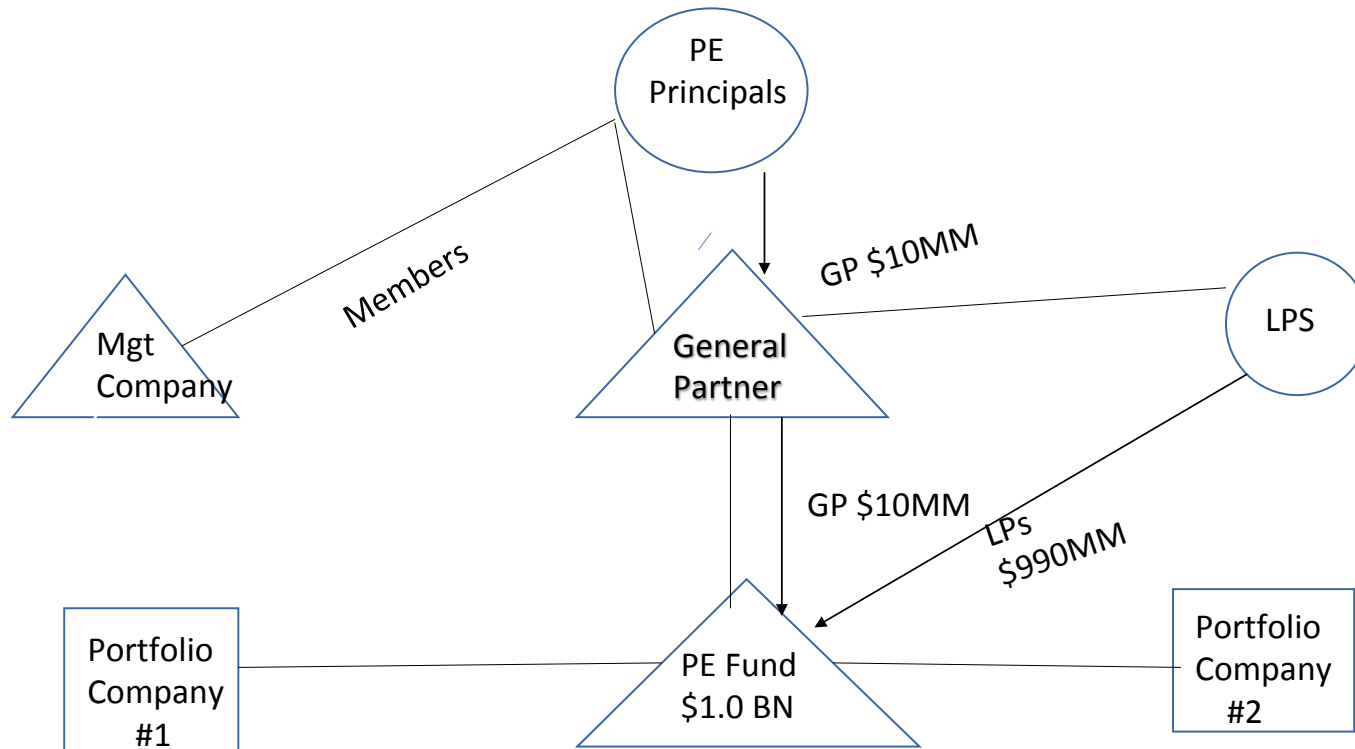
# General Partner Activities

- The General Partner is:
  - Responsible for identifying and selecting the investments that align with the Funds purpose;
  - Designs the transactions and structures the investments;
  - Monitors the performance of the investments
  - Provides strategic, operational and financial oversight to portfolio companies;
  - Defines exits from investment in portfolio companies, including;
    - financial or strategic sale;
    - Single stage or multi-stage IPO; and
    - Full or partial recapitalization.

# Sources of Funds – Three Key Sources

- Equity
  - From the Private Equity fund
  - From management of the acquired business;
  - From existing shareholders (e.g., rollover);
  - From a strategic partner; and
  - Co-investment by a Limited Partner
- Debt;
  - Bank and Direct Lender debt (termed “senior debt”)
  - High-Yield Debt (termed “subordinated debt”)
- Mezzanine Securities
  - Can be more debt-like or more equity-like, depending on the circumstances

# Structure of a Private Equity Fund





# Types of Private Equity Funds

- Venture Capital – Sometimes termed Early Stage, Growth Capital or Emerging Markets;
- Middle Market – Often defined by deal size < \$250MM or EBITDA < \$50-\$75MM;
- Leveraged Buyouts – Generally referred to LBO;
- Mezzanine;
- Distressed Debt;
- Secondary Purchases; and
- Fund of Funds

# What is a Leverage Buy-Out?

- A Leverage Buy-Out, or LBO, is an acquisition where the Private Equity buyer uses cash equity from the investors coupled with debt to fund the purchase of a business.
- The Private Equity firm contributes capital, operating and financial oversight and discipline, often strategic expertise and managerial talent to drive improved financial results for the business.
- In order to leverage investment returns, Leverage Buyouts utilize debt as debt is less expensive than equity, and Private Equity firms want to provide high returns on capital to attract future investors, so leveraging equity against debt is a critical element to the Private Equity formula
- Debt is repaid via the operating cash flows of the business or by the sale of non-core assets of the acquired business.

# What is a Good LBO Candidate?

- History of or potential to have consistent revenue and cash flow, usually measured by EBITDA, to service debt arising from the buy-out;
- Availability of or potential to generate consistent levels of excess cash;
- Separable assets, businesses or business segments (e.g., departments, divisions, foreign operations, etc.);
- Management team with demonstrated experience and expertise;
- Strong brand and market position;
- Industry with barriers to entry to protect brand and/or market position;

## What is a Good LBO Candidate? (Cont.)

- Low potential threat of disruption from change due to emerging technology, regulation, etc.;
- Market or trading value is below book or intrinsic value;
- Clear potential to derive additional value from operational improvements and efficiencies; and
- Defined exit strategy through merger and acquisition or future IPO

Where Does Senior Debt and Mezzanine Play?

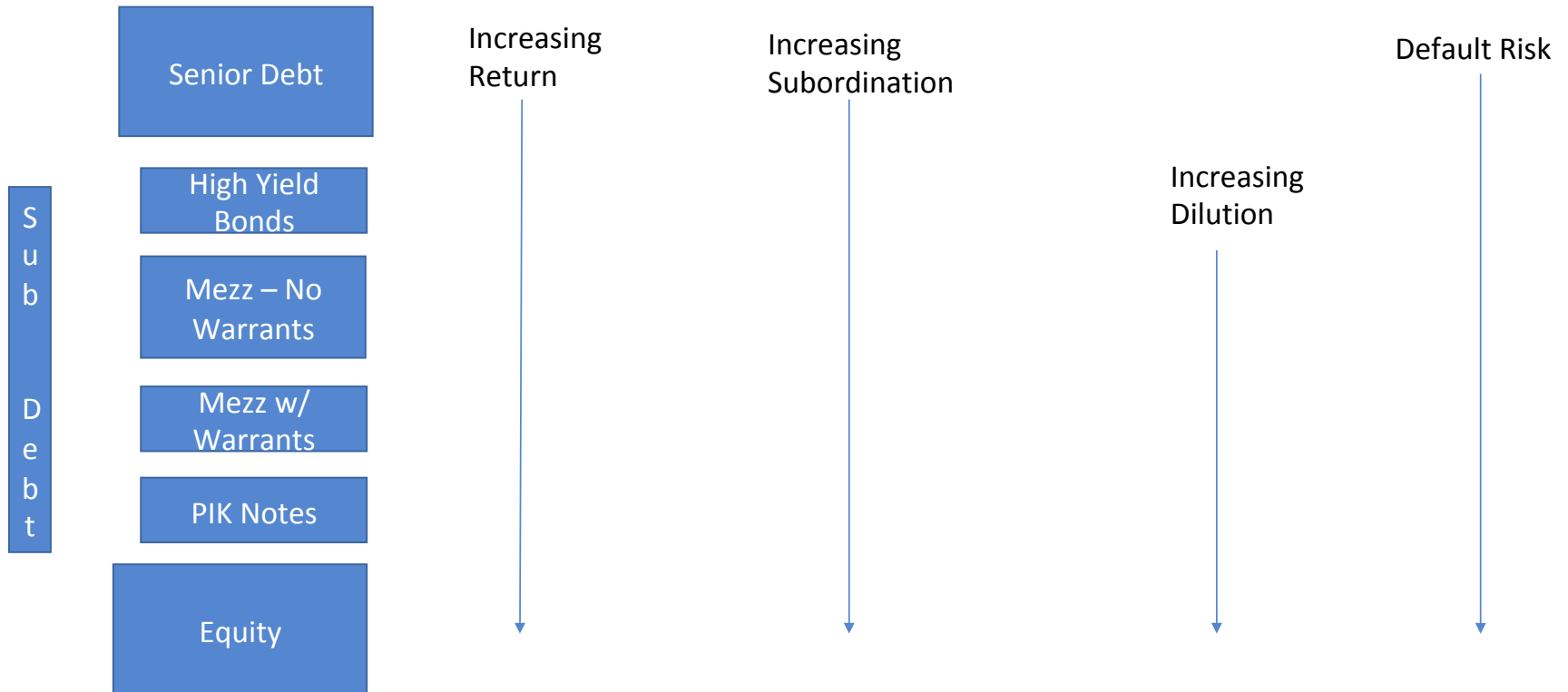
- Senior debt creditors include, but are not limited to, commercial banks, credit unions, insurance companies and even private equity funds in some cases where a unitranche debt structure is utilized.
  - Unitranche debt structure – What does it entail?
- The differentiator between senior debt providers and other credit providers is that senior debt providers are:
  - Ranked first in the capital hierarchy (“capital stack”) which means they are paid first in the event of bankruptcy or other liquidation;
    - First lien debt providers vs Second lien debt providers?
  - Remaining debt providers and shareholders are paid after senior debt providers; and
  - As a result of the payment priority, economic returns represented by interest rates are lower for senior debt providers than other debt providers and shareholders.

- Shareholders have the highest return profile as they take the greatest investment risk while senior debt providers have the lowest return profile and investment risk
- Senior debt credit facilities commonly consist of Lines of Credit and Term Loans
  - Lines of Credit are classified as “Working Capital” or “Revolving” depending on the use of the proceeds and the duration of the credit commitment.
  - Working Capital Lines of Credit typically have commitment periods of 1-2 years and are used to bridge the timing difference in the sale of inventory, collection of accounts receivable and payment of trade obligations in the ordinary business cycle;
  - Revolving Lines of Credit typically have comment periods of 3-5 years and are used for general corporate purposes, including funding mergers/acquisitions, back-up liquidity, bridge funding until a private placement or stock issuance or dividends and distributions.

- Term loans are credit facilities with committed periods of 2-15 years in which repayment of principal and interest is made at an established interval, such as monthly, quarterly semi-annually or annually.
  - Term Loan A versus Term Loan B?
- Credit providers which are not ranked as “senior” are referred to as subordinated debt providers and include:
  - High-yield bonds;
  - Mezzanine debt – warrantless;
  - Mezzanine debt – with warrants;
  - Payment-in-Kind notes;
- Mezzanine debt is usually a non-tradeable instrument which ranks in payment behind the senior debt
- Mezzanine debt often requires payment of principal at maturity (“bullet” payment) as opposed to during the term of the instrument.



## Understanding the Debt/Equity Balance



- Mezzanine debt pays interest either on a cash basis, accrued basis or with additional debt securities (payment-in-kind).
- Mezzanine debt can also provide convertible features to allow for the issuance of equity or preferred shares.
- Relative to the required returns on equity, debt has a far low cost as measured by interest rates.
- However, debt levels are not unlimited and maximum debt levels are measured by Funded Debt/EBITDA and governed by such factors as industry, repayment terms and tenor, default risk of a borrower and whether the debt position is senior or subordinated.
- Maximum debt levels for insured commercial banks are governed by the FDIC and InterAgency leverage lending guidelines which established a highly leverage transaction is one with Senior Funded Debt/EBITDA and Total Funded Debt/EBITDA levels of 3.0x and 4.0x, respectively.

## Current Market Terms and Conditions

	< \$15MM EBITDA		\$15MM - \$40MM EBITDA		> \$40MM EBITDA	
	Pricing	EBITDA Multiples	Pricing	EBITDA Multiples	Pricing	EBITDA Multiples
Facility						
Asset Based Senior	L + 150 - 200	N/A	L + 150 - 200	N/A	L + 150 - 200	N/A
Cash Flow Senior	L + 425 - 525	3.00x - 3.50X	L + 400 - 500	3.00x - 4.00X	L + 375 - 475	3.00x - 3.50X
Senior Stretch	L + 500 - 600	3.50x - 4.00X	L + 475 - 575	4.00x - 5.00X	L + 450 - 550	4.00x - 5.00X
Unitranche	L + 575 - 675	4.00x - 5.00X	L + 550 - 650	5.00x - 6.25X	L + 525 - 625	5.50x - 6.50X
2nd Lien Loans	L + 825 - 925	4.00x - 5.00X	L + 800 - 900	5.00x - 6.25X	L + 775 - 875	5.50x - 6.50X
Sub Debt	Cash Int - 11-12% PIK - 1-2% All In - 12-14%	4.00x - 5.00X	Cash Int - 10-11% PIK - 1-2% All In - 11-13%	5.00x - 6.25X	Cash Int - 10-11% PIK - 1-2% All In - 11-13%	5.50x - 6.50X
Equity	N/A	~ 35 - 40% of Total Capitalization	N/A	~ 35% of Total Capitalization	N/A	~ 35% of Total Capitalization

Source: Buyouts Magazine

# Partnership Agreement – Key Terms

- Key terms of the Private Equity Partnership Agreement include:
  - Compensation structure, including:
    - Management fees;
    - Carried interest;
    - Transaction fees (similar to acquisition fees);
    - Monitoring fees (similar to property management, leasing, construction and development fees
    - Waterfall, including preferred return, catch-up and clawback
  - Covenants, including:
    - Activities of the Private Equity Fund' and
    - Activities of the individual General Partners

# Key Partnership Terms – Management Fees

- Management fees include salaries, leases, travel and administrative expenses
- During the investment period of the Private Equity Fund, management fees are 2% of the committed capital;
  - In rare cases, the management fee is charged only on invested capital;
- Following the end of the investment period, the management fee is 2% of the invested capital;
  - At this point all capital is typically invested so no reduction in the fee takes place
- No management fee is charged after the termination date of the Fund

## Other Fees

- Carried interest is typically 20% of profits, net of all expenses;
  - Carried interest is determine on a portfolio basis as opposed to a deal-by-deal basis;
- Transaction fees are typically range from 1-2% based on deal value;
- Monitoring fees are determined as a % of revenue or EBITDA
  - The portfolio company pays the General Partner and the fees are defined in the Management Services Agreement;
- Current trends
  - General Partners are under increase pressure to find and win deals which result in constant pressure on fees.
  - General Partners have started to share fees with their Limited Partners.

# Distribution Waterfall

- Upon realization of a profit and/or gain by the Private Equity Fund, the proceeds shall be distributed in the following order:
  - Return of capital and costs: Limited Partners recover all investments made, and costs include management fees;
  - Preferred equity return: Preferred equity return on capital and costs compounded annually;
  - General Partner Catch-Up can occur two ways. These are:
    - Fast: General Partner receives all additional profits until the General Partner's share of profits is 20%;
    - Slow: General Partner receives a larger fraction (50% as an example) of all additional profits until the General Partner share of profits reaches 20%;
  - 80/20 share after the above have been completed.

# European VS American Waterfall Approach

- The European Waterfall approach requires the return of all contributed capital, including costs, to all Limited Partners, before distribution of any preferred or carried interest.
- The American Waterfall approach requires the return of all capital contributed for realized investments only before distribution of any preferred or carried interest.
- The American Waterfall approach is most common in the US, with the European Waterfall approach most common outside the US.
- The European Waterfall approach is considered a “best practice” in the Institutional Limited Partnership Association Principles.
  - There is a movement to using the European Waterfall approach in the US.
  - There are some General Partners who are offering a hybrid approach which is between the American and European Waterfall approaches.



# Carried Interest Clawback

- If (a) a General Partner receives more than 20% of cumulative net profits; or (b) the Limited Partners are not fully paid the preferred return, then the General Partner must return any over-distributed carried interest to the partnership
- Clawbacks can happen with either the American or European Waterfall approach
- Partners with equity interest in the General Partner can guarantee the clawback obligation;
- A second option is for a reserve to be established for a portion of the carried interest in an escrow.

# Carried Interest Clawback

- Depending on the method chosen, a tax complication can arise as follows:
  - Deferring carried interest can create an unfunded tax liability for the General Partner;
  - General Partners may not be able to return gross carried interest they have received because of the tax they have paid;
  - In practice, many General Partners only return after tax carried interest, resulting in some tax benefits for future years.

# Covenants

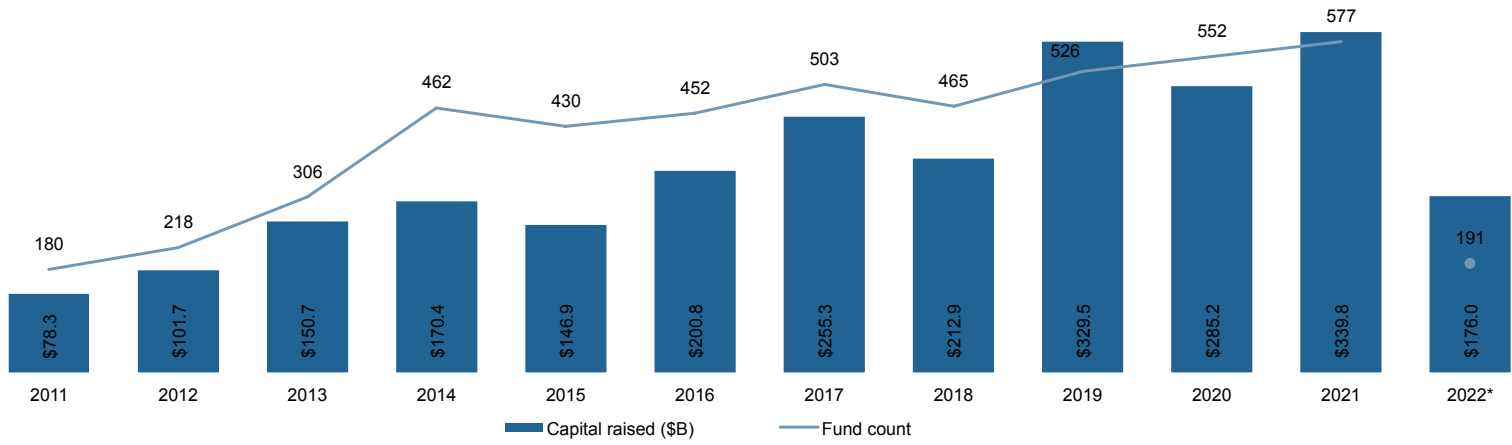
- Covenants are useful as part of a Partnership Agreement as they define the following:
  - They define investment focus which establishes limits on investments in asset classes other than private portfolio companies (such as public companies or other Private Equity partnerships);
  - They establish investments size, including limits on the maximum amount of individual investments and whether reinvestment of profits is permitted or must be returned to Limited Partners;
  - They determine whether co-investment across Private Equity funds is permitted and whether approval by the Limited Partner is required for co-investment in earlier established funds or funds managed by third-parties.

## Covenants (Cont.)

- They define the following:
  - Future fundraising activities are not permitted until a certain amount of the present investment is made of the current Private Equity fund;
  - The requirements for the sale of General Partner interests;
  - Introduction or exit of General Partners is restricted;
  - A “key person” clauses is established and included which provides that if a key person dies or withdraws from the General Partnership, then the Limited Partners reserve the right to suspend contributions or terminate the Private Equity fund.

# Private Equity Market Overview

# Uncertainty Slows Private Equity Fundraising

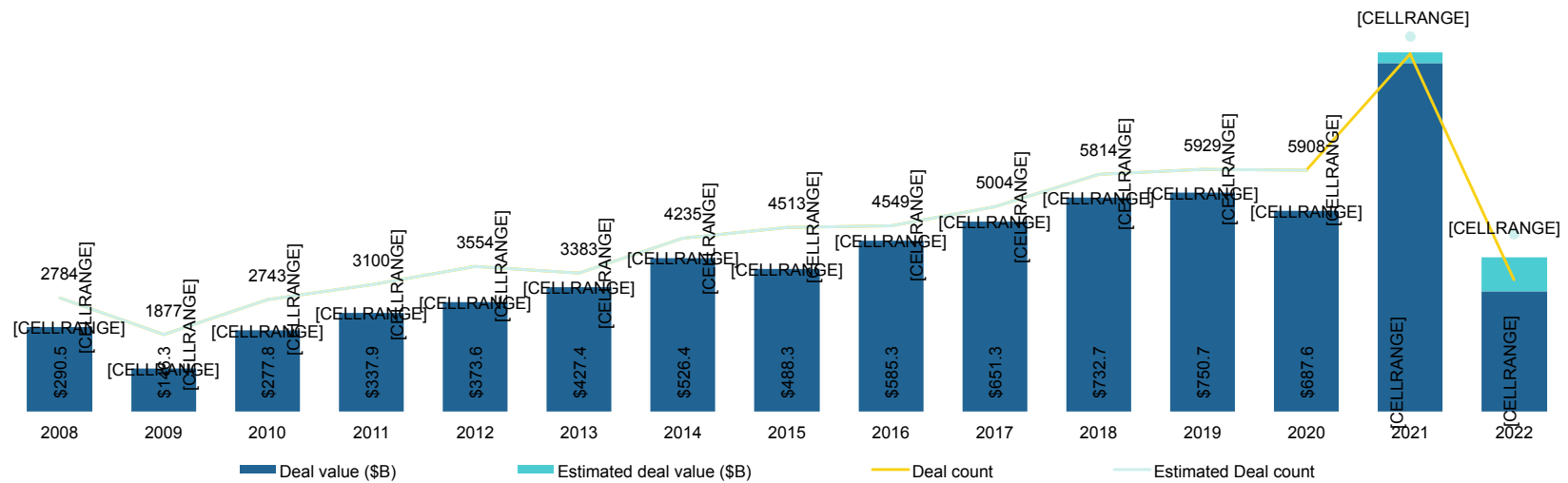


PE fundraising activity

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Capital raised (\$B)	\$208.0	\$167.5	\$91.4	\$36.0	\$78.3	\$101.7	\$150.7	\$170.4	\$146.9	\$200.8	\$255.3	\$212.9	\$329.5	\$285.2	\$339.8	\$176.0
Fund count	253	227	157	137	180	218	306	462	430	452	503	465	526	552	577	191

\*As of 6/30/2022

# Private Equity Deal Value and Deal Count

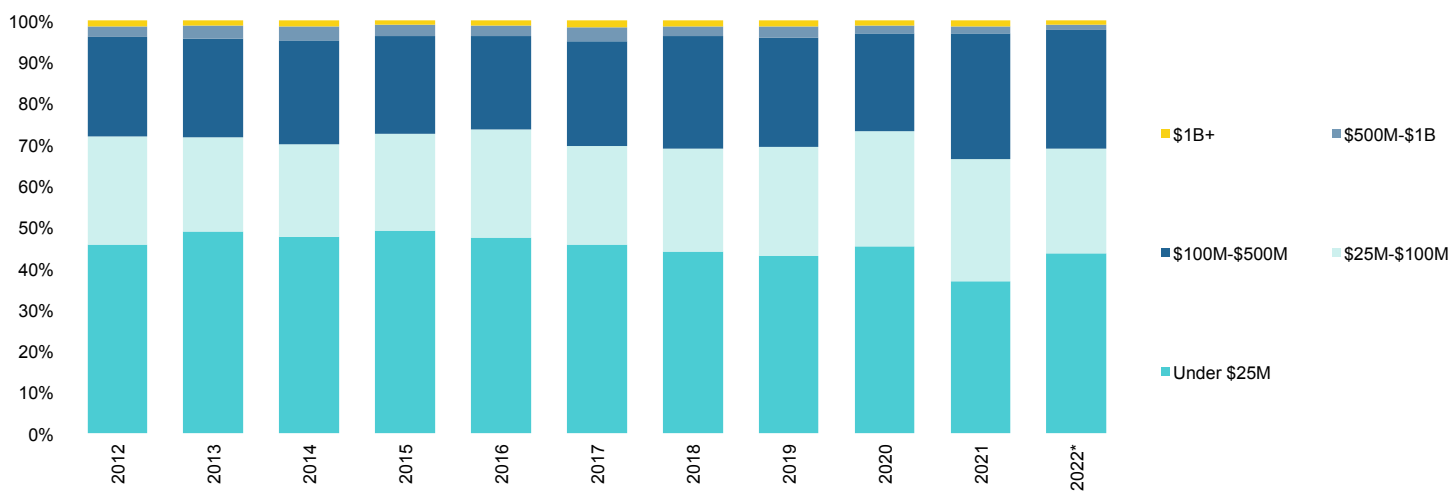


PF deal activity

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Deal value (\$B)	\$290.5	\$146.3	\$277.8	\$337.9	\$373.6	\$427.4	\$526.4	\$488.3	\$585.3	\$651.3	\$732.7	\$750.7	\$687.6	\$1,193.1	\$410.6
Deal count	2784	1877	2743	3100	3554	3383	4235	4513	4549	5004	5814	5929	5908	8758	3230
Estimated deal value (\$B)														\$38.8	\$118.6
Estimated deal count														413	1107

\*As of 6/30/2022

# Private Equity Deals By Dollar Segment

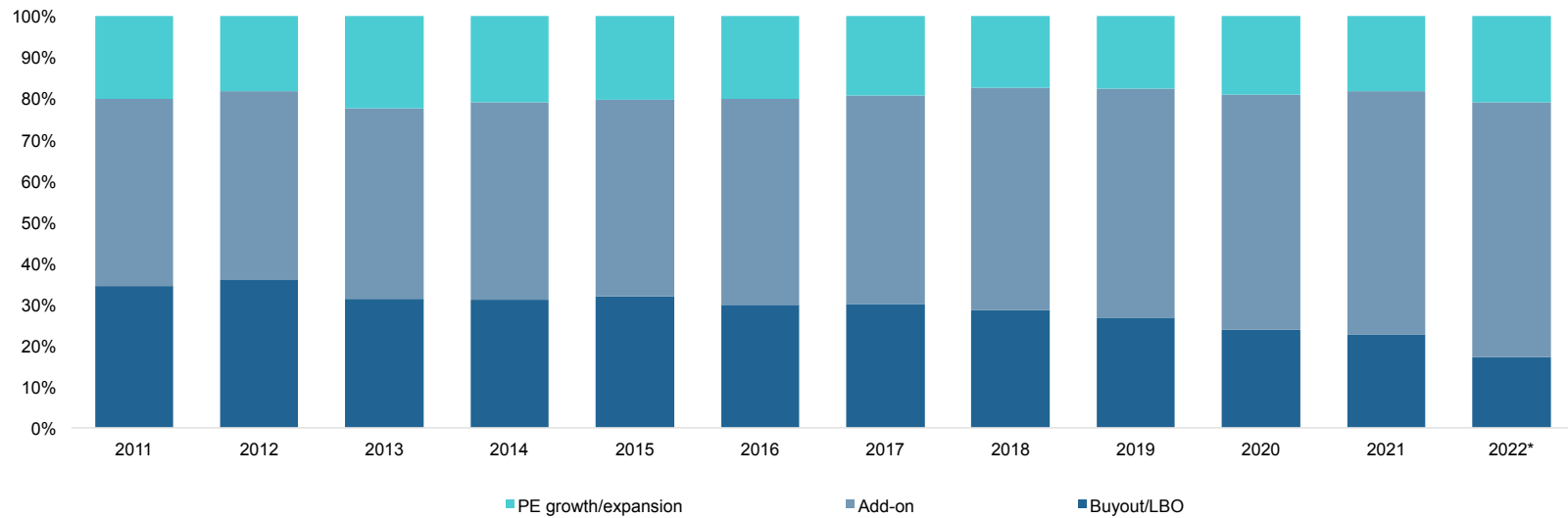


Share of PE deal count by size bucket

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Under \$25M	1,305	1,079	1,277	1,439	1,623	1,653	2,015	2,221	2,156	2,293	2,566	2,554	2,678	3,236	1,408
\$25M-\$100M	851	470	671	754	934	775	951	1,055	1,192	1,194	1,443	1,560	1,644	2,582	819
\$100M-\$500M	552	278	657	784	858	808	1,069	1,066	1,033	1,263	1,585	1,571	1,405	2,666	928
\$500M-\$1B	40	32	110	88	92	106	138	122	108	170	136	166	116	150	38
\$1B+	35	16	28	33	47	41	62	49	59	84	86	78	67	125	35
<b>Total</b>	<b>2,783</b>	<b>1,875</b>	<b>2,743</b>	<b>3,098</b>	<b>3,554</b>	<b>3,383</b>	<b>4,235</b>	<b>4,513</b>	<b>4,548</b>	<b>5,004</b>	<b>5,816</b>	<b>5,929</b>	<b>5,910</b>	<b>8,759</b>	<b>3,228</b>



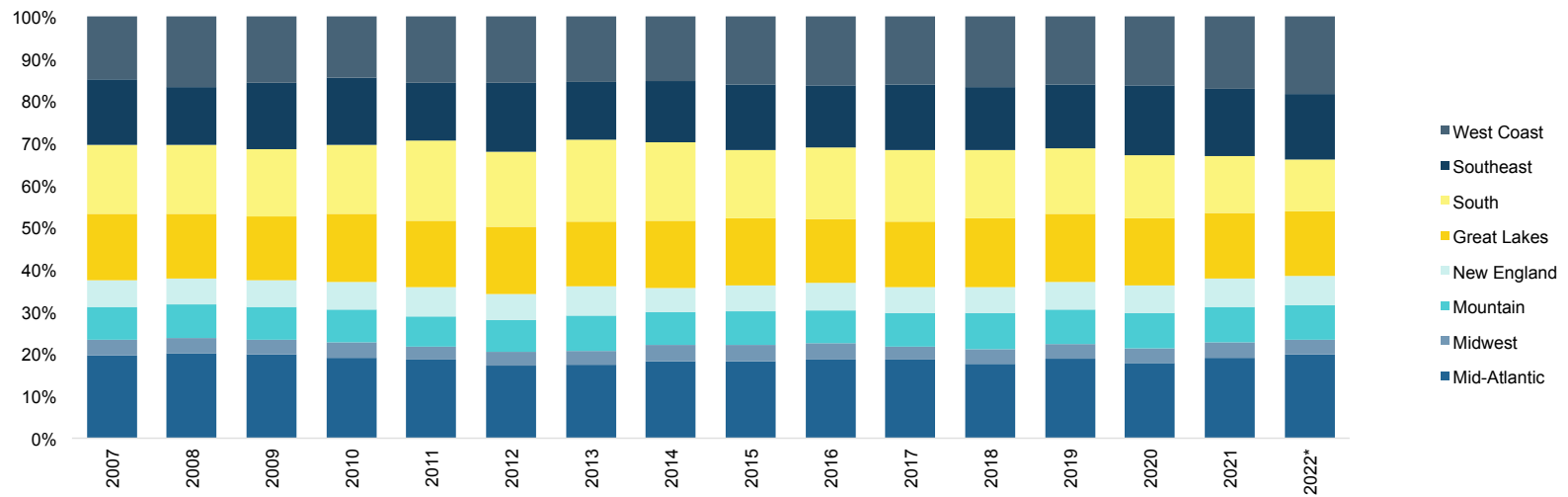
# Type of Private Equity Deal By Count



Share of PE deal count by type

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Buyout/LBO	1,432	1,135	660	998	1,068	1,277	1,062	1,316	1,441	1,357	1,503	1,663	1,580	1,412	1,975	557
Add-on	1,470	1,143	786	1,194	1,408	1,628	1,559	2,033	2,152	2,271	2,534	3,136	3,304	3,372	5,183	1,998
PE growth/expansion	543	506	431	551	624	649	762	886	920	921	967	1,015	1,045	1,124	1,600	675

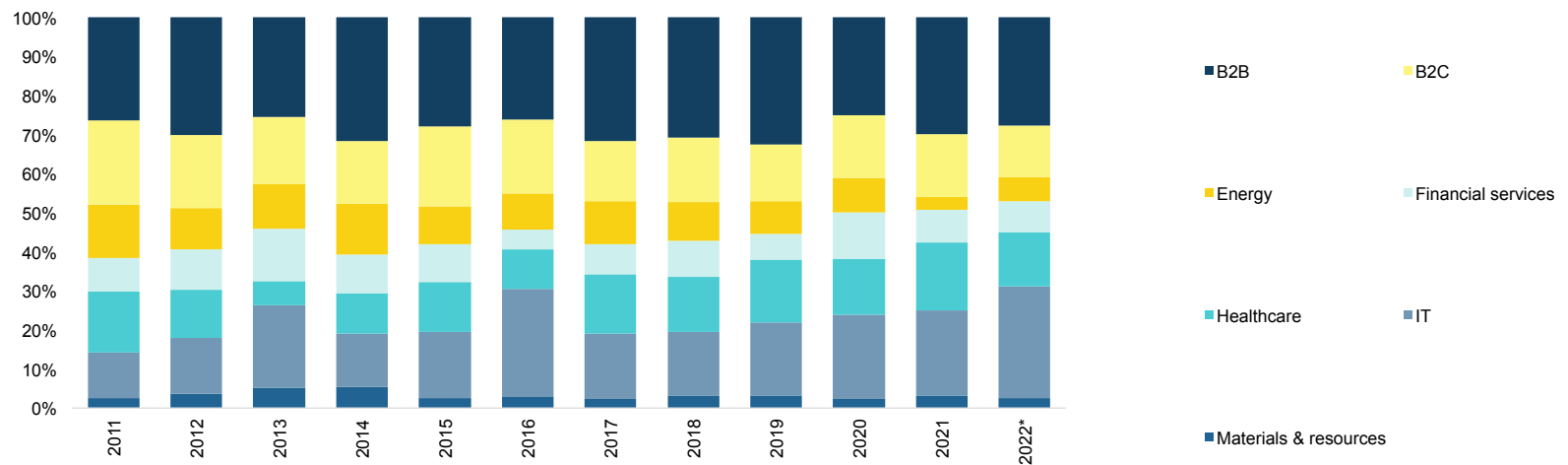
# Private Equity Deal Count By US Region



Share of PE deal count by region

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Mid-Atlantic	677	558	370	519	575	609	583	766	818	848	923	1022	1107	1048	1657	641
Midwest	121	103	66	100	92	116	115	160	175	175	153	192	210	198	322	112
Mountain	269	219	145	213	223	268	281	329	359	348	400	499	480	496	731	263
New England	216	167	118	176	215	214	231	244	271	292	301	348	386	382	588	226
Great Lakes	542	428	282	441	484	564	516	663	717	691	777	949	943	937	1367	490
South	558	453	298	448	585	630	657	790	725	769	848	928	915	873	1164	394
Southeast	537	380	292	434	425	580	456	603	697	662	774	868	887	972	1403	503
West Coast	510	462	293	395	484	557	523	645	723	739	798	960	949	958	1485	591

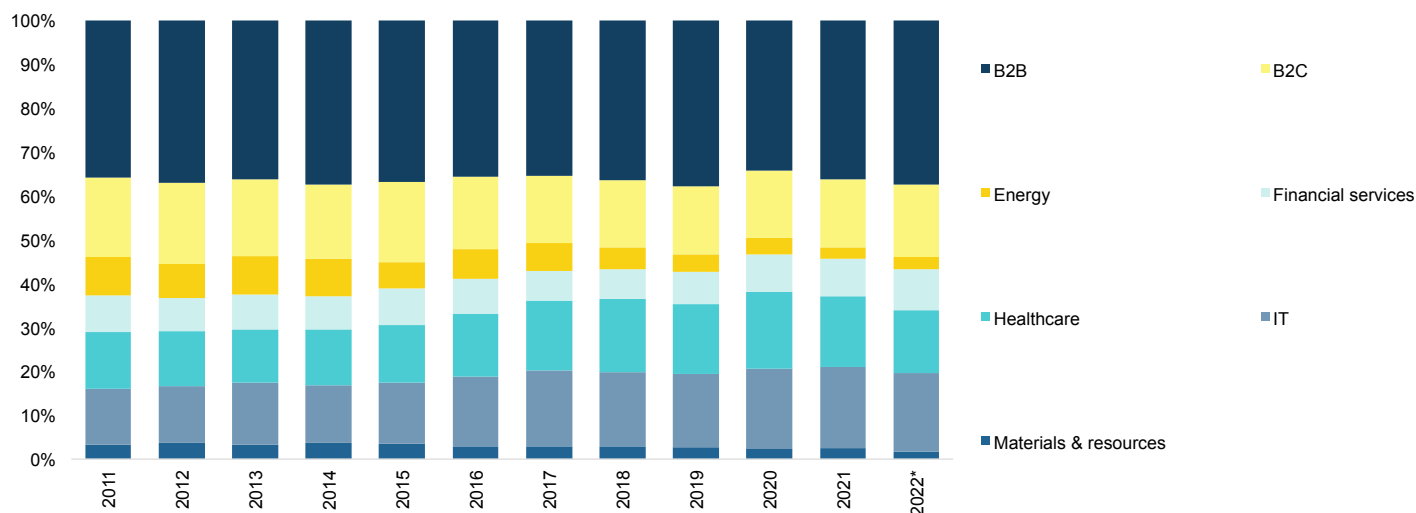
# Private Equity Deal Value By Industry Sector



PE deal value (\$B) by sector

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Materials & resources	\$21.1	\$17.3	\$6.2	\$11.5	\$8.5	\$13.8	\$22.3	\$28.3	\$12.4	\$17.0	\$15.3	\$23.2	\$24.2	\$15.4	\$37.3	\$10.5
IT	\$124.2	\$29.3	\$18.0	\$31.8	\$39.8	\$53.0	\$90.4	\$72.4	\$82.4	\$162.0	\$109.0	\$119.7	\$139.8	\$148.5	\$262.2	\$117.9
Healthcare	\$56.0	\$30.5	\$13.2	\$40.4	\$52.3	\$46.6	\$25.9	\$54.3	\$63.1	\$58.2	\$98.4	\$102.9	\$121.8	\$98.9	\$206.3	\$56.9
Financial services	\$46.6	\$32.5	\$26.4	\$31.9	\$29.1	\$38.5	\$57.2	\$51.6	\$46.6	\$30.4	\$50.9	\$67.3	\$48.8	\$81.0	\$100.6	\$31.8
Energy	\$103.5	\$29.7	\$23.5	\$23.9	\$46.2	\$39.3	\$49.7	\$68.7	\$47.5	\$53.5	\$71.2	\$73.0	\$62.8	\$61.1	\$37.7	\$25.6
B 2C	\$193.4	\$77.6	\$21.0	\$53.8	\$72.8	\$70.0	\$73.3	\$84.6	\$100.2	\$111.1	\$100.6	\$120.5	\$108.7	\$110.0	\$193.6	\$53.9
B 2B	\$219.3	\$73.6	\$38.0	\$84.5	\$89.4	\$112.4	\$108.6	\$166.5	\$136.0	\$153.1	\$205.8	\$226.2	\$244.5	\$172.8	\$355.6	\$114.0

# Private Equity Deal Count By Industry Sector

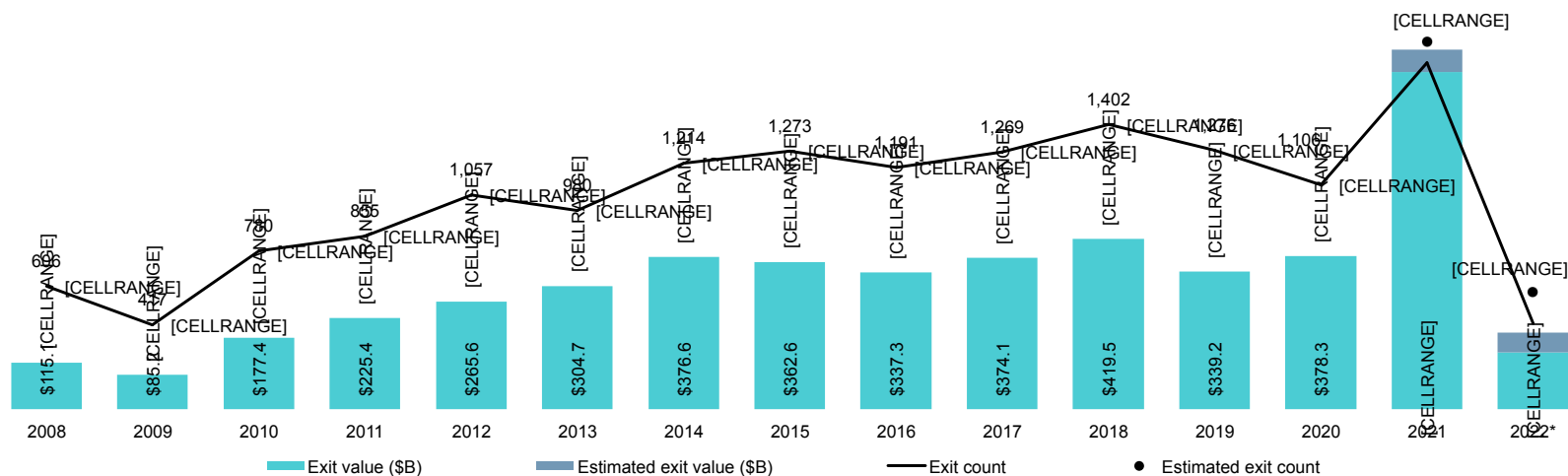


PE deal count by sector

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Materials & resources	147	109	75	115	104	134	114	155	161	131	144	170	156	142	220	56
IT	412	340	260	379	393	459	473	557	629	722	863	977	1,000	1,076	1,624	579
Healthcare	338	323	220	345	401	441	412	536	592	658	796	971	941	1,034	1,410	459
Financial services	224	201	149	266	261	272	270	326	376	354	345	401	436	505	737	301
Energy	248	215	142	178	268	276	297	356	270	312	319	285	236	218	234	93
B2C	779	587	375	512	564	654	588	718	820	754	763	889	915	914	1,363	535
B2B	1,297	1,009	656	948	1,109	1,318	1,229	1,587	1,665	1,618	1,774	2,121	2,245	2,019	3,170	1,207

\*As of 6/30/2022

# Private Equity Exit Deal Activity



PE exit activity

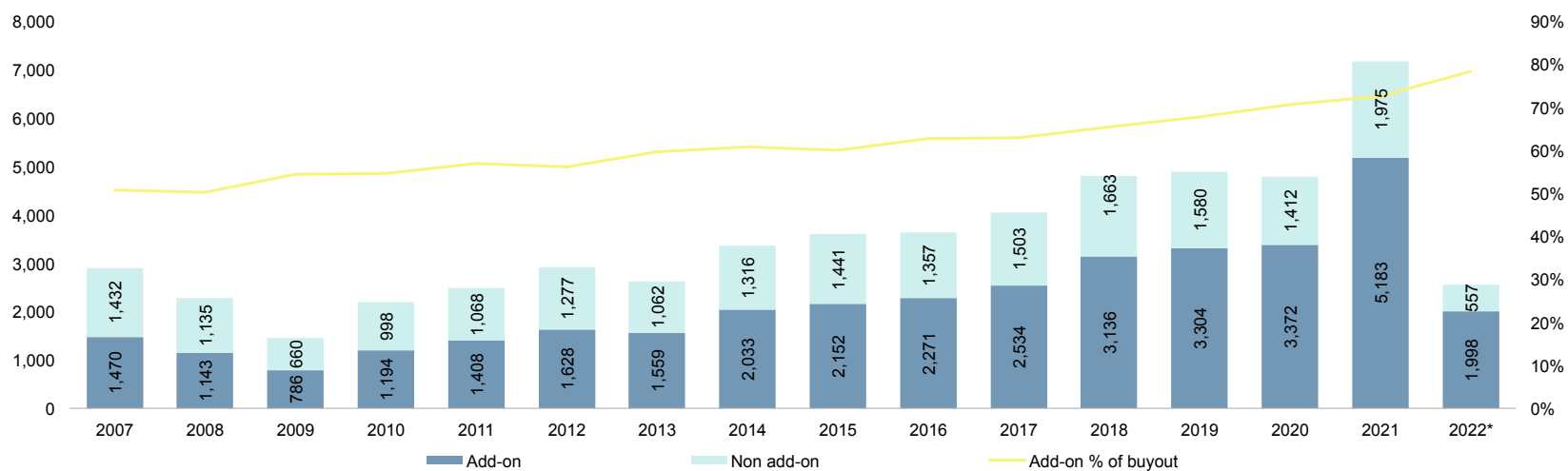
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Exit value (\$B)	\$115.1	\$85.2	\$177.4	\$225.4	\$265.6	\$304.7	\$376.6	\$362.6	\$337.3	\$374.1	\$419.5	\$339.2	\$378.3	\$830.5	\$140.6
Exit count	606	417	780	855	1,057	980	1,214	1,273	1,191	1,269	1,402	1,276	1,106	1,708	424
Estimated exit value (\$B)														\$54.7	\$49.2
Estimated exit count														103	153

\*As of 6/30/2022

\$885.2  
1,811

\$189.9  
577

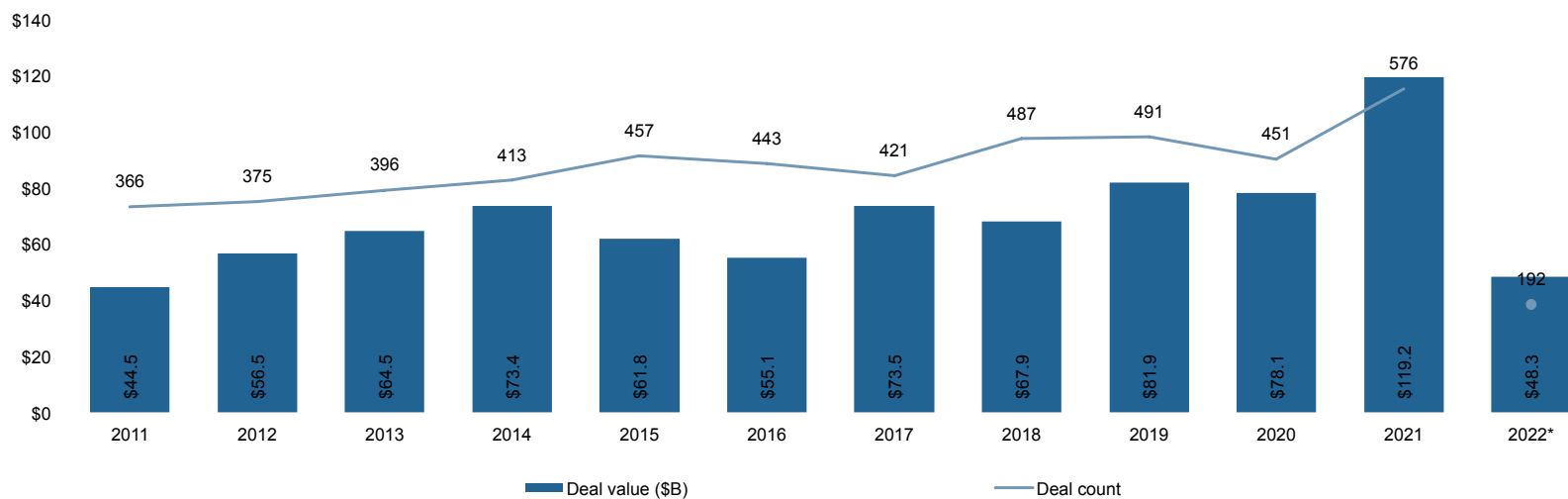
# Private Equity Add-On Deal Activity



PE add-on deal count

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Add-on	1,470	1,143	786	1,194	1,408	1,628	1,559	2,033	2,152	2,271	2,534	3,136	3,304	3,372	5,183	1,998
Non add-on	1,432	1,135	660	998	1,068	1,277	1,062	1,316	1,441	1,357	1,503	1,663	1,580	1,412	1,975	557
Add-on % of buyout	50.7%	50.2%	54.4%	54.5%	56.9%	56.0%	59.5%	60.7%	59.9%	62.6%	62.8%	65.3%	67.6%	70.5%	72.4%	78.2%
Grand total	2,902	2,278	1,446	2,192	2,476	2,905	2,621	3,349	3,593	3,628	4,037	4,799	4,884	4,784	7,158	2,555

# Private Equity Divestiture Deal Activity



PE carveout/divestiture deal activity

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Deal value (\$B)	\$83.5	\$34.6	\$21.3	\$32.7	\$44.5	\$56.5	\$64.5	\$73.4	\$61.8	\$55.1	\$73.5	\$67.9	\$81.9	\$78.1	\$119.2	\$48.3
Deal count	299	247	239	289	366	375	396	413	457	443	421	487	491	451	576	192

# Secondary Buy-Out Share of All Non Add-Ons



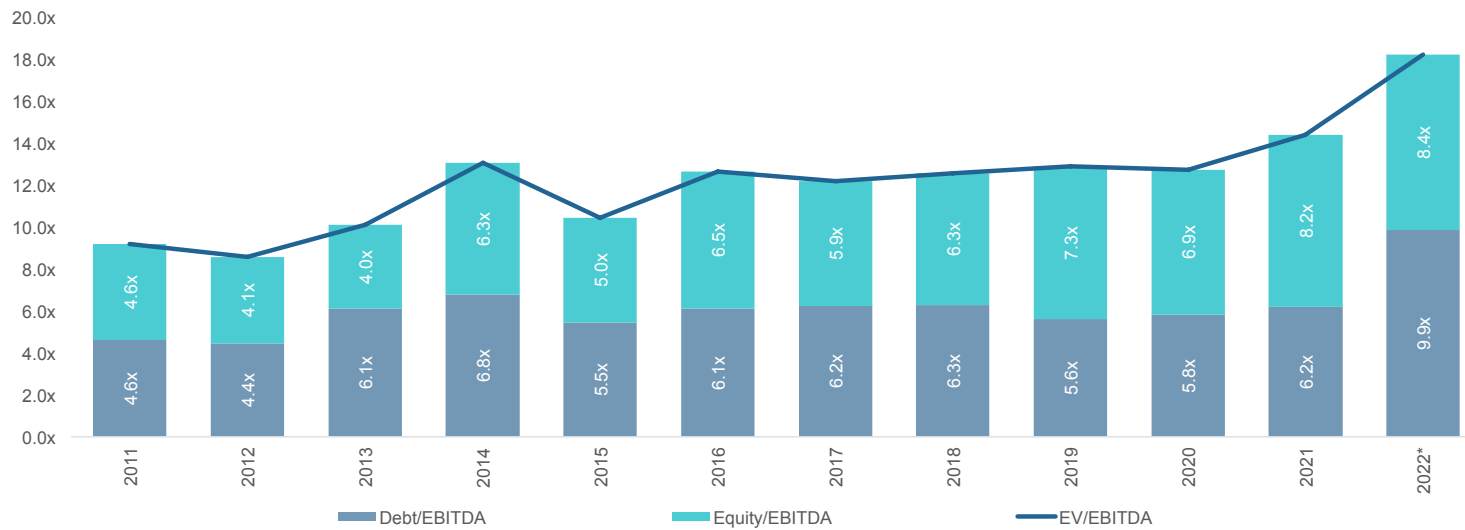
SBOs as share of all non-add-on PE buyouts

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Secondary buyout	249	164	83	211	235	293	235	302	329	294	335	347	345	258	431	114
Traditional buyout (excluding add-ons)	1,183	971	577	787	833	984	827	1,014	1,112	1,063	1,168	1,316	1,235	1,154	1,544	443
% secondary buyout	17.4%	14.4%	12.6%	21.1%	22.0%	22.9%	22.1%	22.9%	22.8%	21.7%	22.3%	20.9%	21.8%	18.3%	21.8%	20.5%

\*As of 6/30/2022



# Median Rolling 4-Q Buyout EV/EBITDA

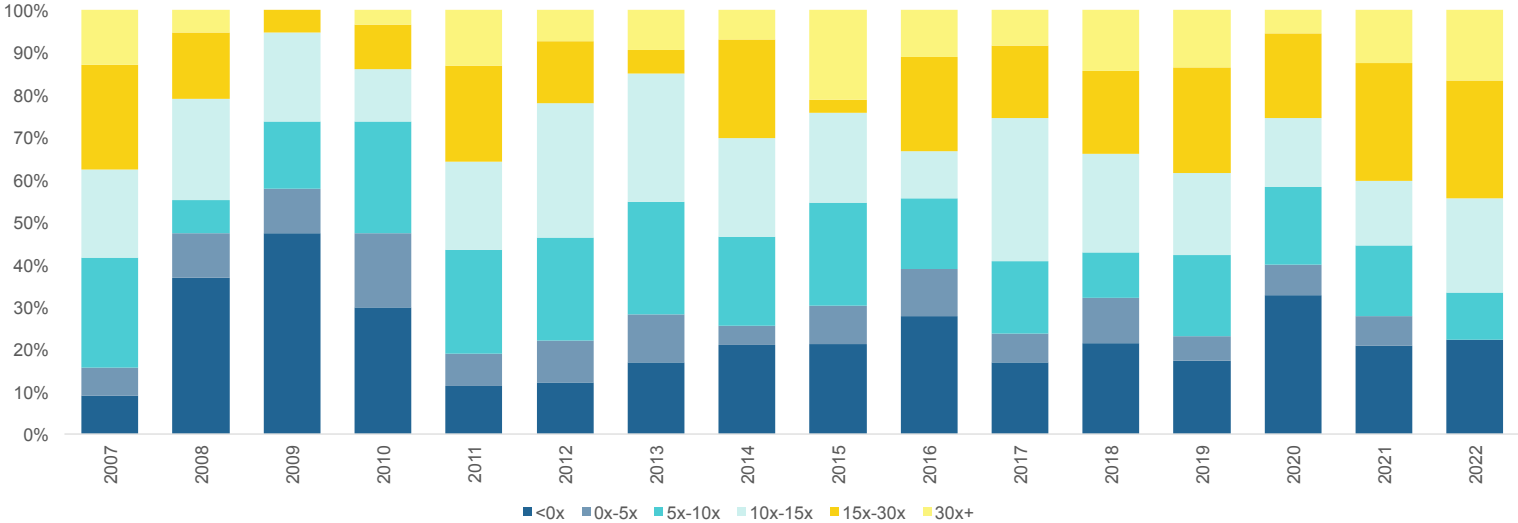


	2016				2017				2018				2019				2020				2021				2022*	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
EV/EBITDA	10.8x	11.0x	12.0x	12.6x	12.2x	11.9x	12.0x	12.2x	12.1x	12.8x	13.1x	12.6x	12.5x	12.6x	12.5x	12.9x	15.2x	12.9x	12.7x	12.7x	12.4x	13.0x	12.7x	14.4x	14.8x	15.4x
Debt/EBITDA	5.4x	5.4x	5.9x	6.1x	6.1x	6.1x	6.2x	6.2x	6.2x	6.5x	6.2x	6.3x	5.8x	5.7x	5.7x	5.6x	6.8x	5.8x	5.9x	5.8x	5.9x	6.3x	5.7x	6.2x	6.3x	6.5x
Equity/EBITDA	5.4x	5.6x	6.1x	6.5x	6.1x	5.8x	5.8x	5.9x	5.9x	6.3x	6.8x	6.3x	6.7x	7.0x	6.8x	7.3x	8.4x	7.1x	6.8x	6.9x	6.5x	6.6x	7.1x	8.2x	8.5x	8.9x
Debt Percent	50.2%	48.9%	49.1%	48.4%	50.0%	51.2%	51.4%	51.3%	51.0%	50.5%	47.8%	50.0%	46.7%	45.0%	45.8%	43.4%	44.7%	44.7%	46.3%	45.6%	47.7%	48.7%	44.5%	43.2%	42.4%	42.0%

EV/EBITDA count	43	39	44	49	53	53	55	57	54	56	47	39	43	39	39	41	41	35	35	34	30	44	52	56	54	45
Debt % count	93	96	93	97	102	100	114	125	130	132	121	107	96	91	94	96	99	83	73	70	64	80	87	90	93	72

\*As of 6/30/2022

# Share of EV/EBITDA Multiple By Size

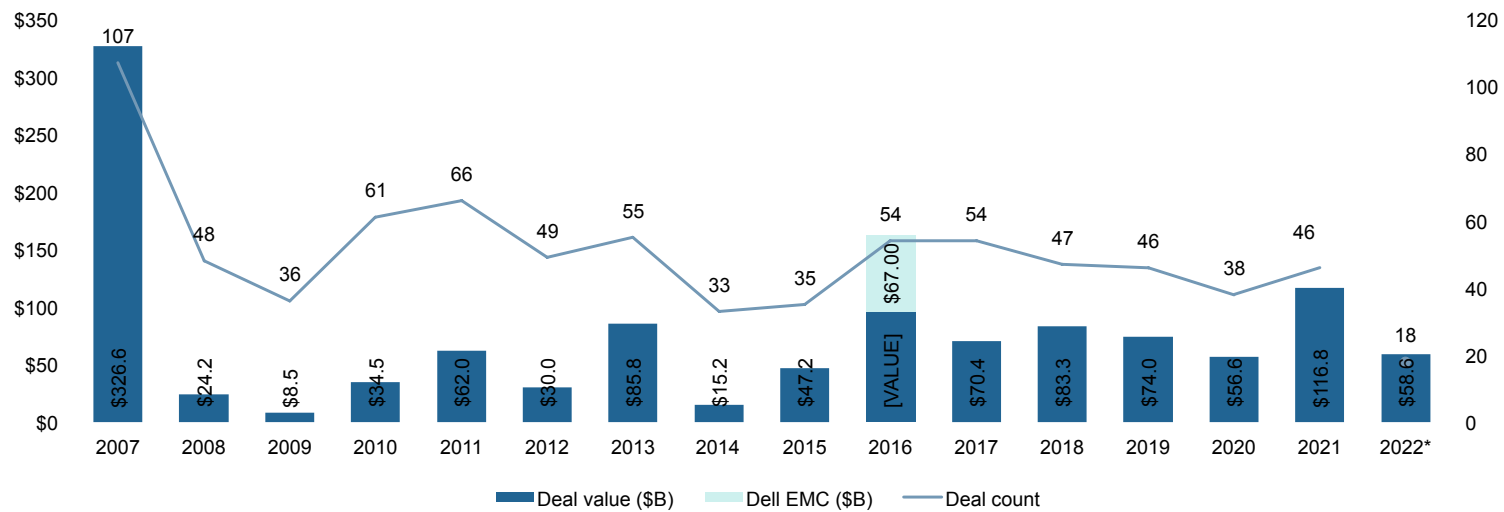


Share of PF EV/EBITDA multiple count by size bucket

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
<0x	7	14	9	17	6	5	9	9	7	15	10	12	9	18	15	4
0x-5x	5	4	2	10	4	4	6	2	3	6	4	6	3	4	5	0
5x-10x	20	3	3	15	13	10	14	9	8	9	10	6	10	10	12	2
10x-15x	16	9	4	7	11	13	16	10	7	6	20	13	10	9	11	4
15x-30x	19	6	1	6	12	6	3	10	1	12	10	11	13	11	20	5
30x+	10	2	0	2	7	3	5	3	7	6	5	8	7	3	9	3

\*As of 6/30/2022

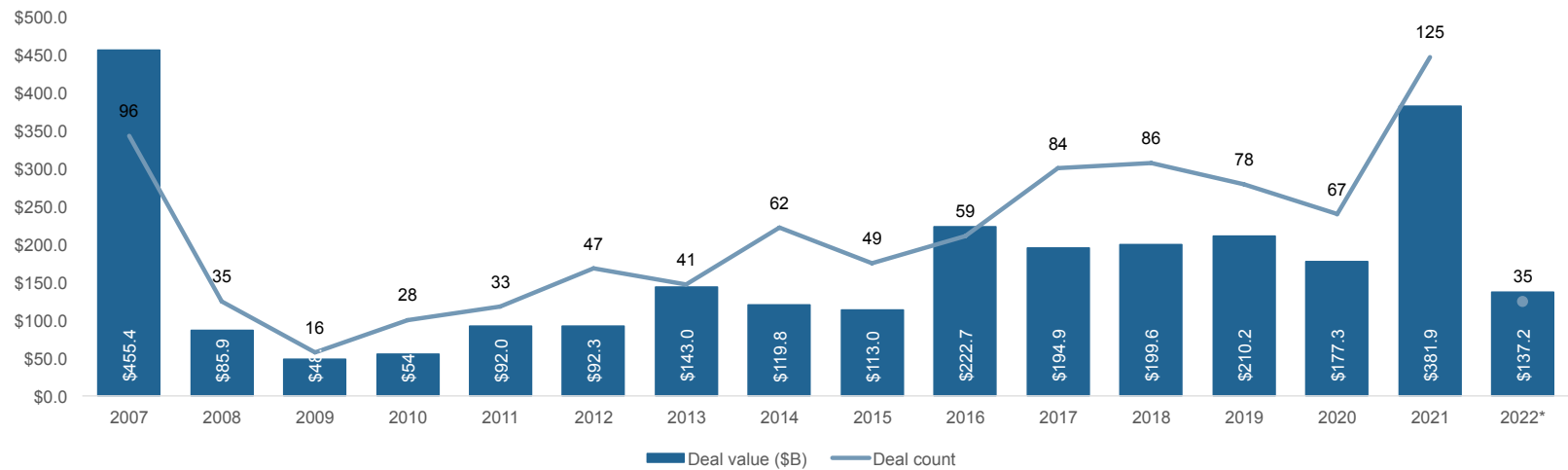
# Private Equity Take-Over Deal Activity



PE take-private deal activity

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Deal value (\$B)	\$326.6	\$24.2	\$8.5	\$34.5	\$62.0	\$30.0	\$85.8	\$15.2	\$47.2	\$162.3	\$70.4	\$83.3	\$74.0	\$56.6	\$116.8	\$58.6
Deal count	107	48	36	61	66	49	55	33	35	54	54	47	46	38	46	18

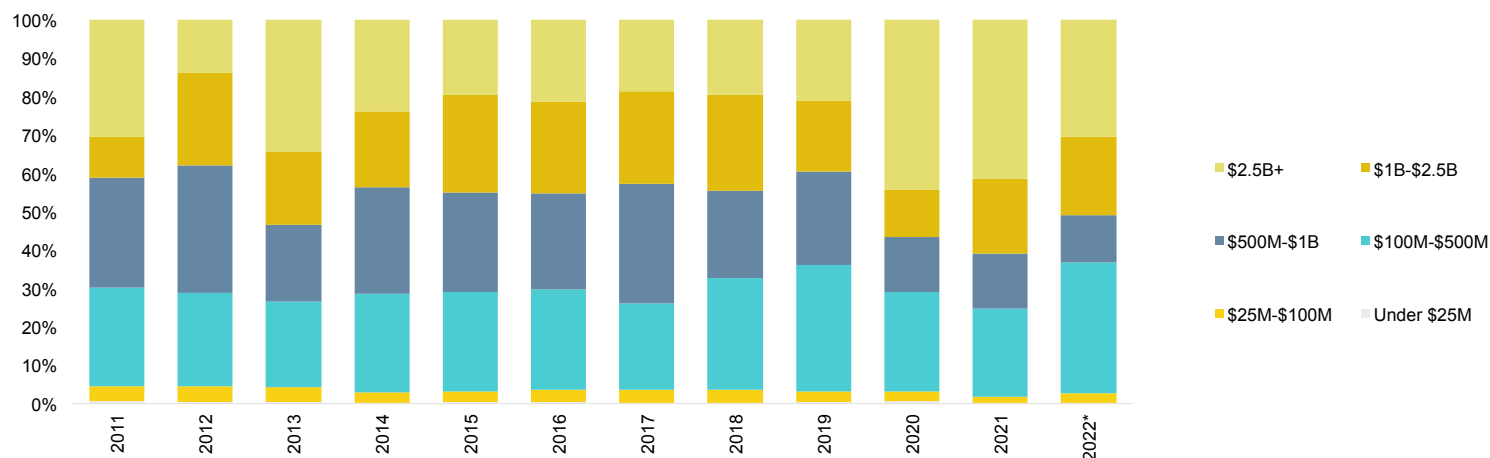
# Private Equity Deal Activity > \$1.0Bn



## PE \$1B+ deal activity

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Deal count	96	35	16	28	33	47	41	62	49	59	84	86	78	67	125	35
Deal value (\$B)	\$455.4	\$85.9	\$48.2	\$54.7	\$92.0	\$92.3	\$143.0	\$119.8	\$113.0	\$222.7	\$194.9	\$199.6	\$210.2	\$177.3	\$381.9	\$137.2

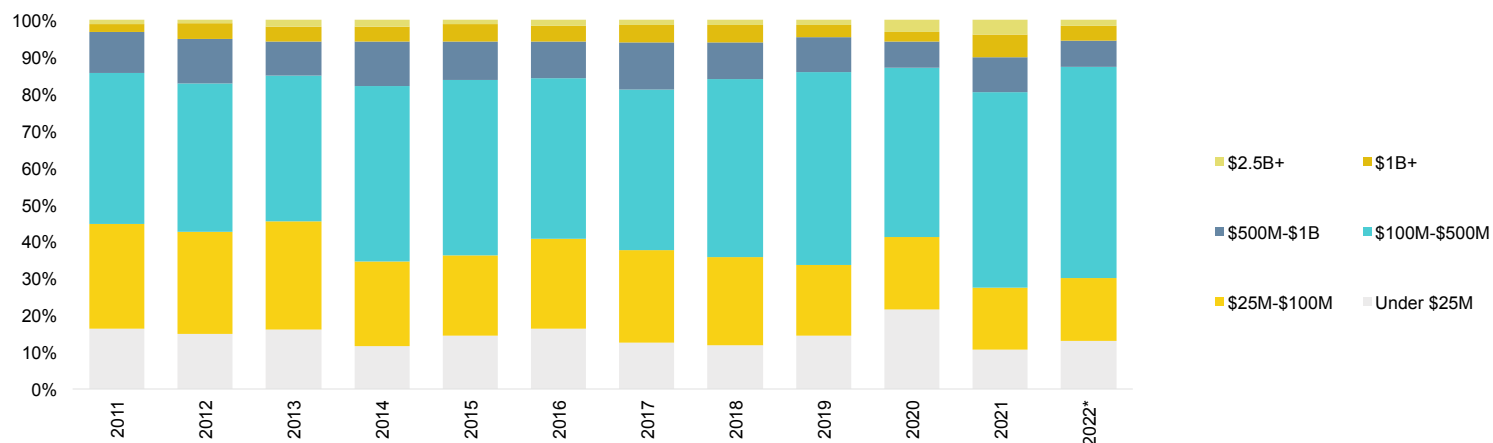
# Private Equity Exit Value By Dollar Range



Share of PE exit value by size bucket

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Under \$25M	\$0.9	\$1.1	\$1.2	\$0.7	\$1.2	\$1.1	\$1.3	\$0.9	\$1.4	\$1.4	\$1.1	\$1.2	\$1.6	\$2.4	\$1.6	\$0.3
\$25M-\$100M	\$9.7	\$9.1	\$4.7	\$6.4	\$9.1	\$11.0	\$11.7	\$10.5	\$10.3	\$10.9	\$12.2	\$13.8	\$8.9	\$9.8	\$13.1	\$3.3
\$100M-\$500M	\$65.8	\$50.6	\$24.5	\$39.8	\$57.9	\$64.4	\$68.4	\$96.5	\$94.2	\$88.4	\$84.7	\$122.7	\$111.9	\$97.7	\$190.2	\$48.0
\$500M-\$1B	\$60.8	\$23.1	\$15.4	\$75.5	\$64.5	\$88.6	\$60.5	\$104.4	\$93.8	\$83.8	\$116.1	\$95.3	\$82.8	\$54.2	\$119.2	\$17.5
\$1B-\$2.5B	\$46.7	\$16.0	\$15.0	\$39.5	\$24.2	\$63.6	\$58.3	\$74.4	\$92.6	\$80.9	\$90.3	\$104.6	\$62.6	\$46.5	\$162.5	\$28.6
\$2.5B+	\$52.4	\$15.3	\$24.4	\$15.5	\$68.4	\$37.0	\$104.6	\$89.9	\$70.4	\$71.8	\$69.7	\$81.9	\$71.4	\$167.8	\$343.9	\$42.9

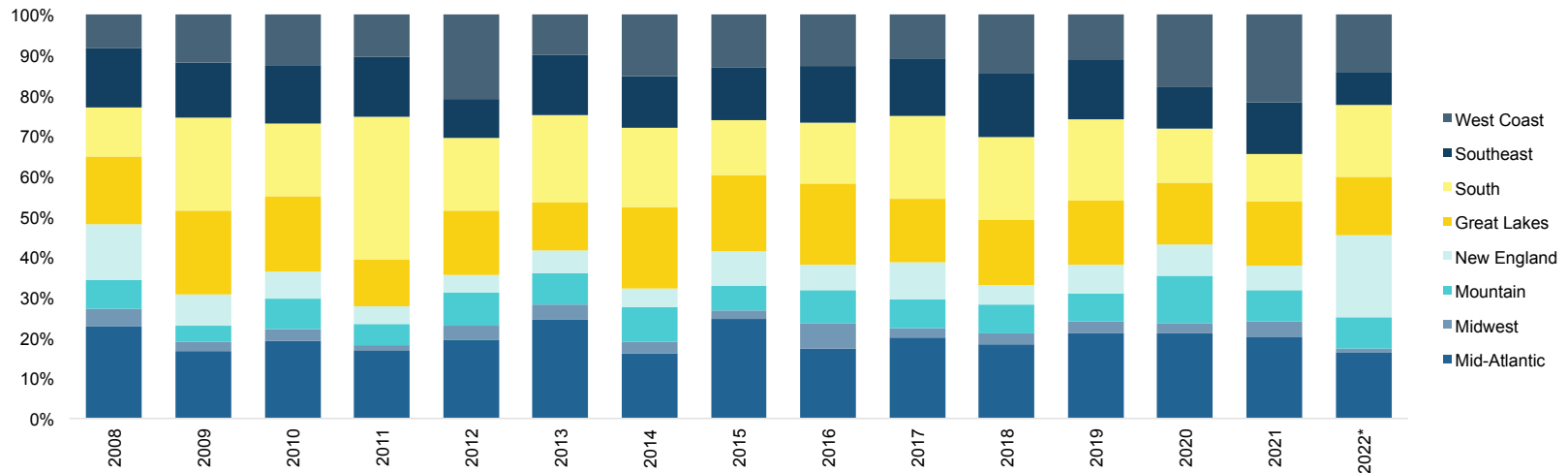
# Private Equity Exit Activity By Deal Count



Share of PE exit count by size bucket

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Under \$25M	116	112	124	129	140	157	158	141	184	196	160	167	185	239	182	55
\$25M-\$100M	224	182	112	202	243	292	287	278	276	288	318	333	244	217	288	72
\$100M-\$500M	402	265	139	301	350	427	386	576	606	520	550	677	667	507	902	242
\$500M-\$1B	90	34	26	114	94	126	90	146	134	118	164	138	122	76	162	30
\$1B+	32	11	10	28	18	45	39	50	59	52	59	69	43	30	105	17
\$2.5B+	11	4	6	5	10	10	19	22	15	18	17	18	16	36	69	7

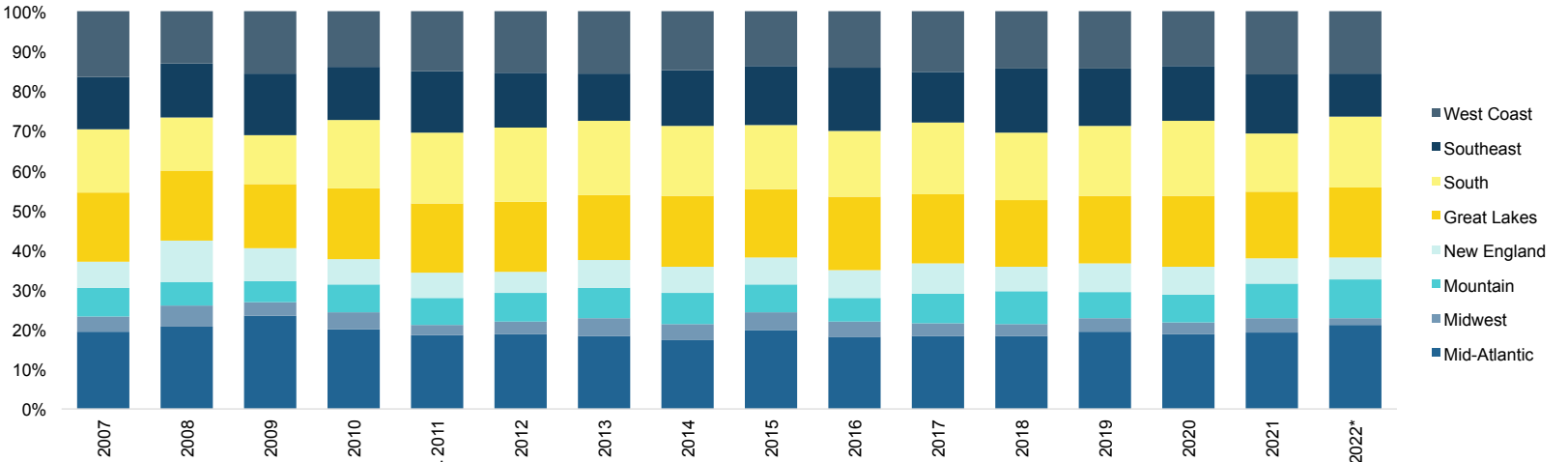
# Private Equity Exit Deal Value By US Region



PE exit value (\$B) by region

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Mid-Atlantic	\$26.1	\$14.3	\$33.9	\$38.2	\$51.4	\$73.9	\$60.4	\$88.9	\$58.2	\$74.9	\$76.8	\$71.7	\$79.8	\$167.7	\$22.8
Midwest	\$5.0	\$1.9	\$5.4	\$2.7	\$9.4	\$11.3	\$11.3	\$7.7	\$21.6	\$8.9	\$11.2	\$9.5	\$9.6	\$31.2	\$1.6
Mountain	\$8.3	\$3.4	\$13.2	\$11.9	\$21.9	\$23.9	\$32.1	\$21.9	\$27.4	\$26.1	\$29.9	\$23.5	\$44.4	\$65.2	\$10.8
New England	\$15.8	\$6.6	\$12.1	\$10.0	\$11.5	\$17.0	\$17.1	\$31.5	\$20.7	\$34.6	\$20.3	\$24.6	\$28.7	\$48.9	\$28.9
Great Lakes	\$19.5	\$17.6	\$32.8	\$25.7	\$42.2	\$36.6	\$75.5	\$68.2	\$68.4	\$58.2	\$67.5	\$53.5	\$58.2	\$133.7	\$20.2
South	\$13.9	\$19.7	\$32.1	\$80.0	\$48.1	\$64.9	\$74.5	\$49.7	\$50.5	\$76.9	\$85.6	\$68.1	\$50.2	\$96.8	\$25.1
Southeast	\$16.8	\$11.6	\$25.5	\$33.6	\$25.5	\$45.4	\$47.4	\$47.0	\$47.3	\$53.1	\$65.9	\$50.2	\$38.9	\$105.5	\$11.4
West Coast	\$9.6	\$10.0	\$22.2	\$23.2	\$55.3	\$30.1	\$57.4	\$47.4	\$42.8	\$40.5	\$60.7	\$37.9	\$67.8	\$180.4	\$19.9

# Private Equity Exit Deal Value By Industry Sector

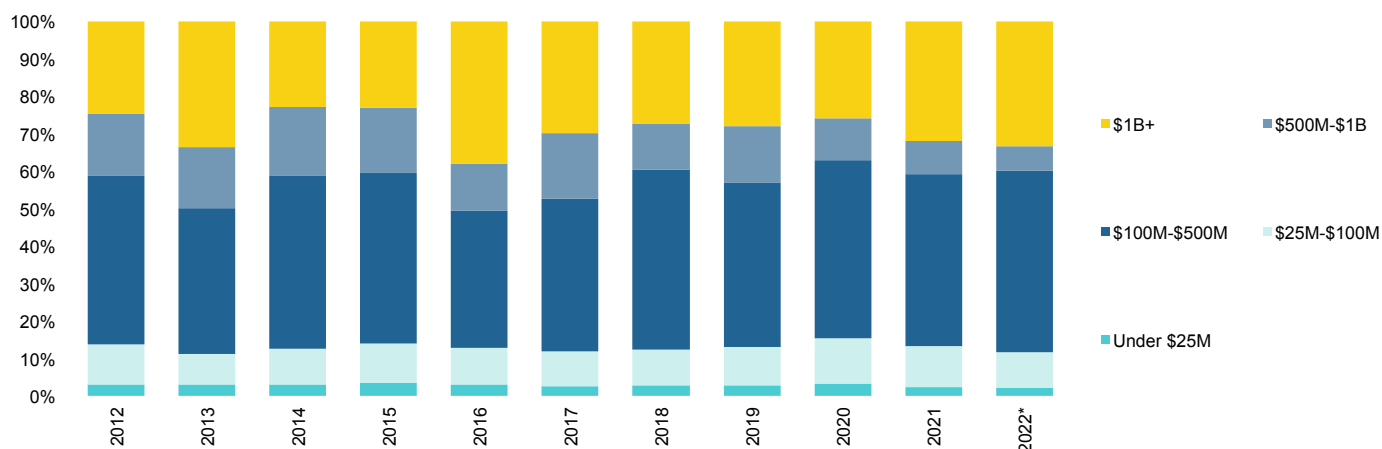


PE exit value (\$B) by sector

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Materials & Resources	\$9.7	\$11.6	\$1.7	\$9.4	\$8.6	\$16.7	\$21.7	\$19.7	\$16.9	\$15.0	\$16.9	\$18.2	\$14.7	\$6.3	\$17.2	\$3.5
IT	\$42.7	\$17.3	\$13.7	\$28.5	\$17.0	\$37.7	\$38.7	\$47.7	\$61.4	\$43.4	\$63.1	\$80.2	\$56.9	\$98.7	\$229.9	\$24.0
Healthcare	\$12.7	\$11.3	\$15.1	\$23.2	\$37.6	\$34.0	\$34.9	\$33.3	\$61.2	\$46.6	\$52.5	\$34.3	\$51.9	\$61.7	\$143.6	\$41.2
Financial Services	\$26.1	\$7.0	\$5.7	\$17.2	\$20.5	\$29.0	\$19.4	\$51.9	\$28.6	\$23.0	\$41.4	\$47.3	\$29.4	\$28.6	\$45.0	\$6.3
Energy	\$26.2	\$12.1	\$10.2	\$18.2	\$52.7	\$25.3	\$31.2	\$40.4	\$28.6	\$25.5	\$29.4	\$48.5	\$31.6	\$17.7	\$41.0	\$16.0
B2C	\$52.4	\$20.6	\$22.9	\$33.1	\$30.1	\$53.7	\$88.3	\$75.8	\$57.3	\$82.2	\$63.9	\$70.6	\$63.0	\$76.3	\$145.4	\$15.0
B2B	\$66.3	\$35.4	\$16.0	\$47.8	\$58.9	\$69.2	\$70.5	\$108.0	\$108.7	\$101.7	\$106.8	\$120.3	\$91.7	\$88.9	\$208.3	\$34.7



# Private Equity Deal Value By Size



Share of PE deal value by size bucket

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Under \$25M	\$13.2	\$7.4	\$9.2	\$10.3	\$12.0	\$12.9	\$16.9	\$17.6	\$17.8	\$17.3	\$21.0	\$21.8	\$23.3	\$29.0	\$9.0
\$25M-\$100M	\$44.8	\$20.7	\$28.2	\$32.1	\$39.8	\$35.4	\$50.1	\$50.7	\$57.7	\$60.1	\$70.4	\$77.2	\$82.2	\$128.8	\$39.1
\$100M-\$500M	\$120.9	\$49.6	\$112.4	\$144.1	\$167.3	\$165.6	\$242.0	\$222.9	\$214.0	\$266.0	\$351.8	\$328.6	\$326.7	\$548.7	\$199.2
\$500M-\$1B	\$25.7	\$20.3	\$73.3	\$59.3	\$62.1	\$70.5	\$97.6	\$84.2	\$73.1	\$113.1	\$89.9	\$112.9	\$78.1	\$104.8	\$26.0
\$1B+	\$85.9	\$48.2	\$54.7	\$92.0	\$92.3	\$143.0	\$119.8	\$113.0	\$222.7	\$194.9	\$199.6	\$210.2	\$177.3	\$381.9	\$137.2
<b>Total</b>	<b>\$290.5</b>	<b>\$146.3</b>	<b>\$277.8</b>	<b>\$337.9</b>	<b>\$373.6</b>	<b>\$427.4</b>	<b>\$526.4</b>	<b>\$488.3</b>	<b>\$585.3</b>	<b>\$651.3</b>	<b>\$732.7</b>	<b>\$750.7</b>	<b>\$687.6</b>	<b>\$1,193.1</b>	<b>\$410.6</b>