

PRIVATE EQUITY: ARE RETURNS AND VOLUMES CONFLICTUAL?



ESSEC BUSINESS SCHOOL

JANUARY 2017

ARDIAN

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PRIVATE EQUITY VOLUMES

SIGNIFICANT VOLUME IN THE MARKET

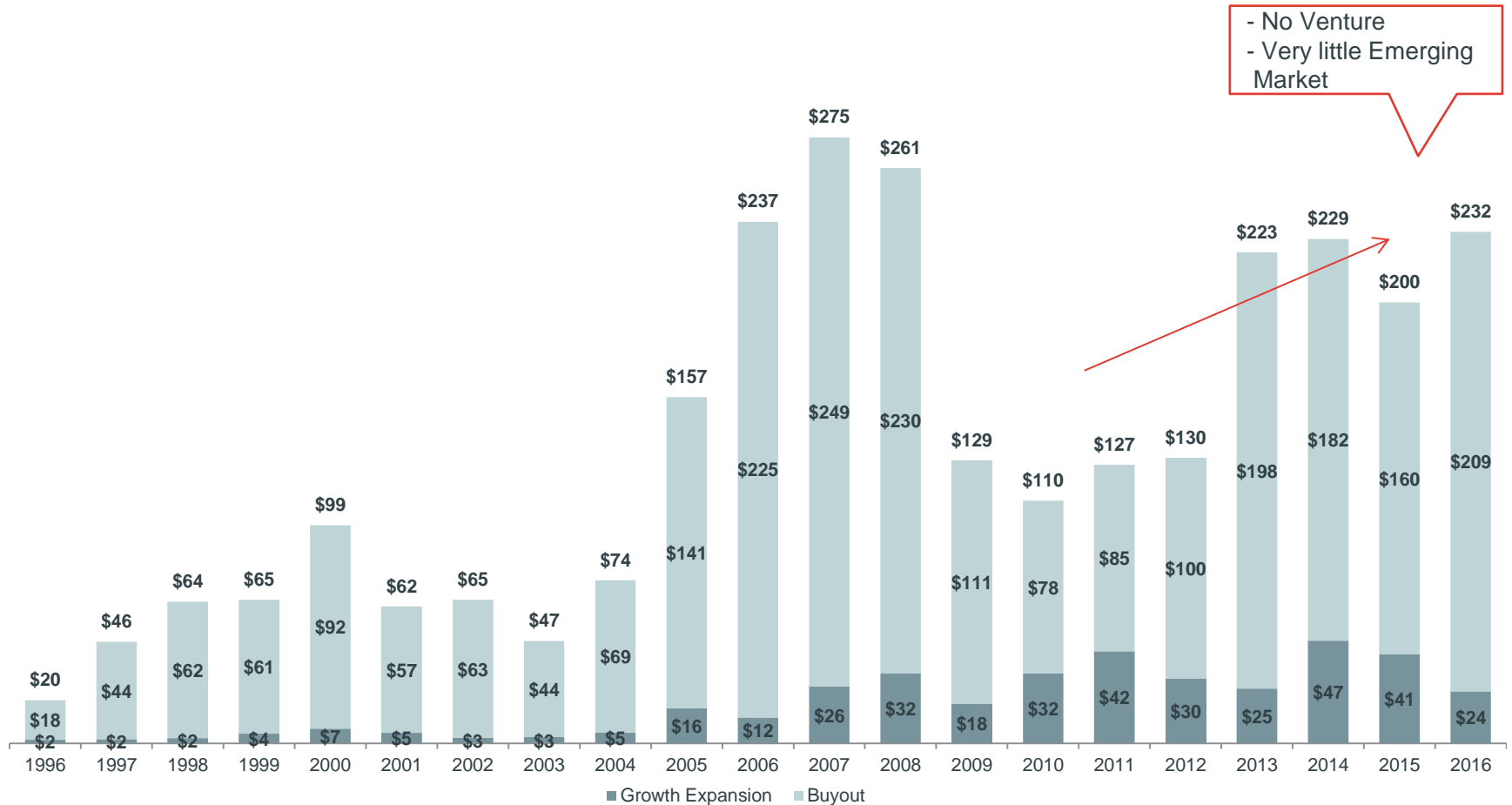


Volume in the asset class has grown consistently - now at substantial levels

Sources: Preqin, Ardian estimates as of January 2017 / * Including NAV + Unfunded.

HEALTHY GROWTH IN FUNDRAISING

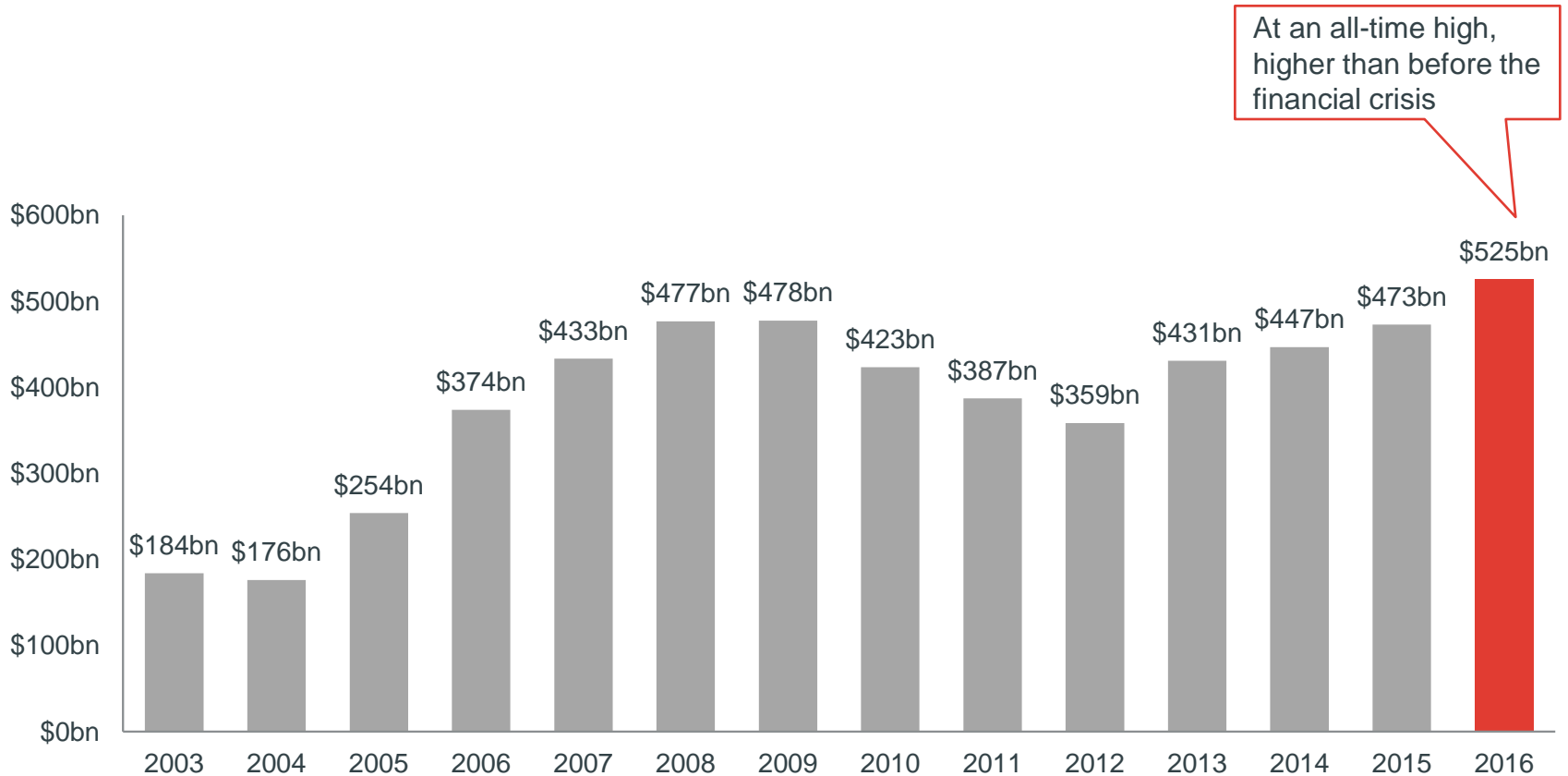
FUNDS RAISED WORLDWIDE BY TYPE (\$BN)



Fundraising volumes are high, but still below 2007 volumes

DRY POWDER IS AT AN ALL-TIME HIGH

GLOBAL BUYOUT DRY POWDER



Slow deployment of capital and healthy fundraising explain the all-time high level of dry powder.

Particularly favourable vs. tougher environment for Hedge Funds / CDOs etc

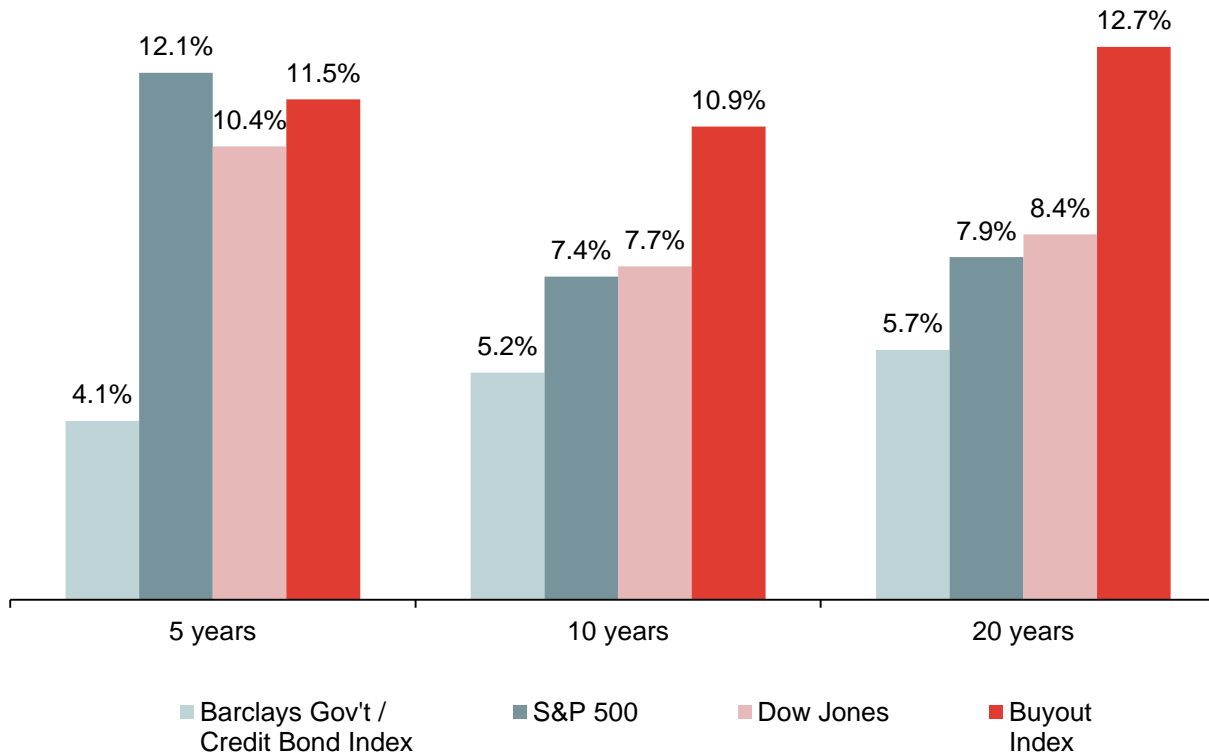
Source: Preqin

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PRIVATE EQUITY RETURNS

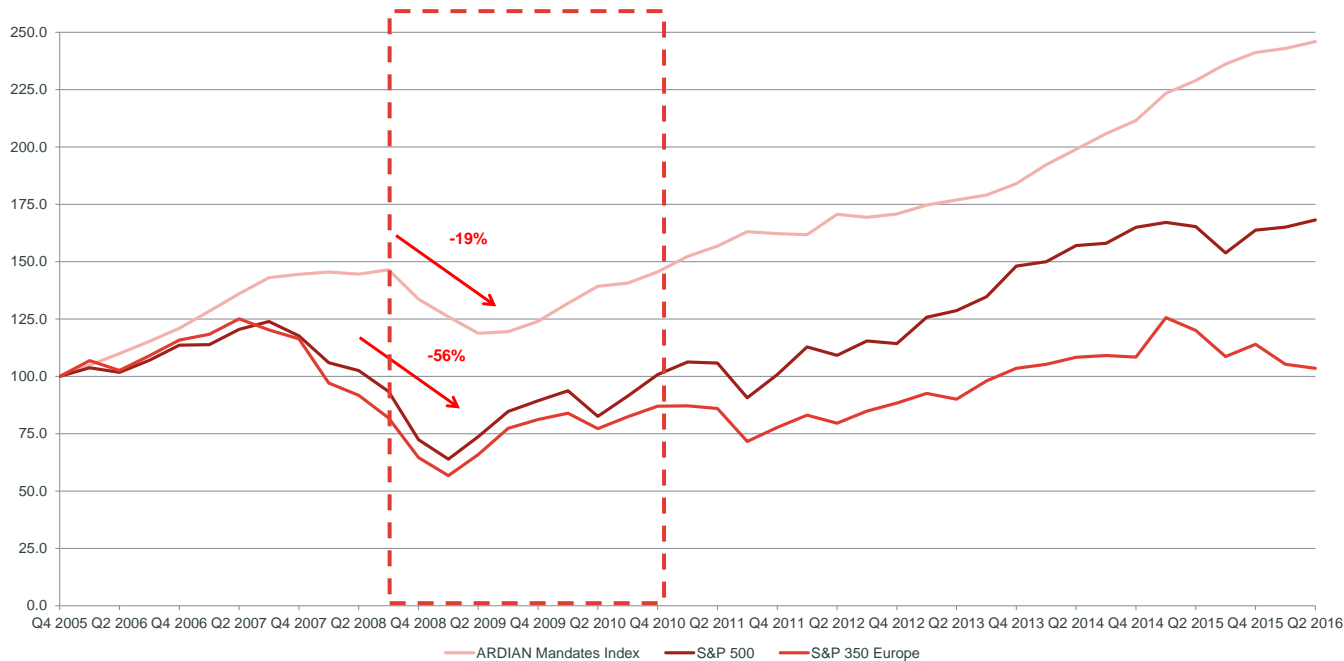
Rates of Return as of June 2016



Through the cycles, Private Equity is the outperforming asset class

PUBLIC MARKET TURBULENCE

RESILIENCE OF PE vs LISTED MARKET



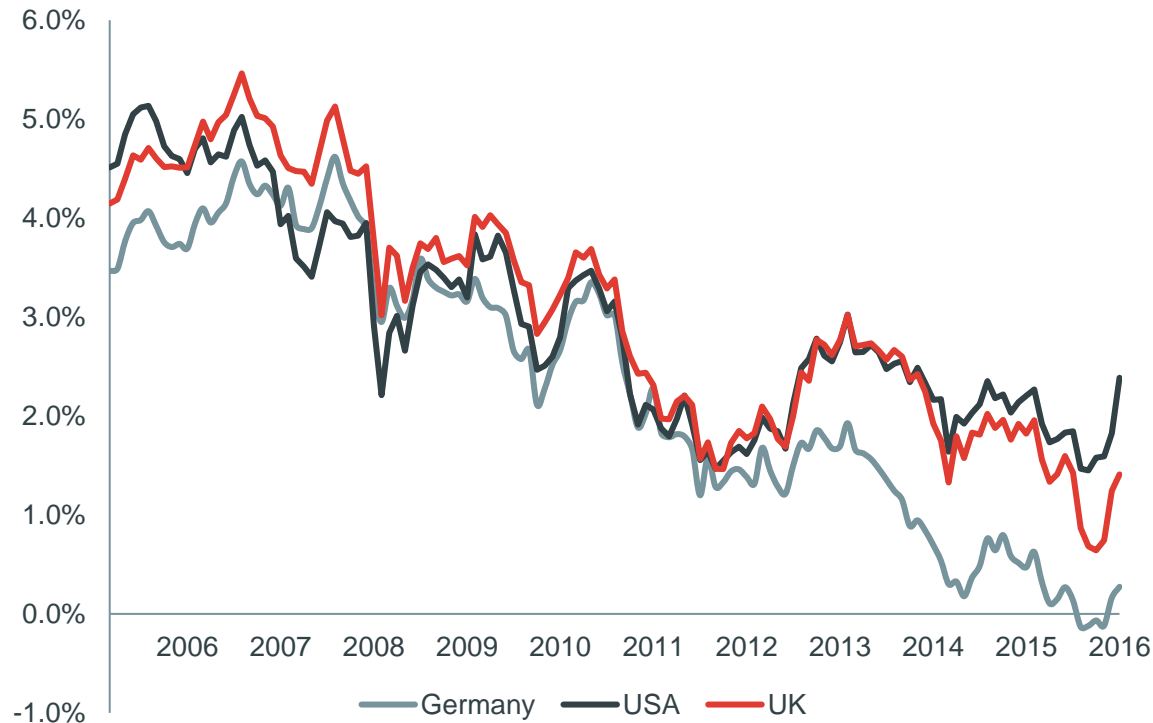
Index	Max. Decrease*	Quarterly Volatility	Time for Recovery
ARDIAN Mandates	-19%	3%	2.0 years
S&P 500	-56%	8%	4.0 years
S&P 350 Europe	-60%	8%	5.5 years

The resilience of PE vs listed markets is a trend we have seen in the past and with PE valuations recovering from the crash in two years

* Based on daily data for S&P indices
Sources: Ardian, Standard & Poor's LCD

NAVIGATING HISTORICALLY LOW INTEREST RATES

Evolution of main government 10-year bond yields since 2006



Private Equity returns have remained strong and are a good solution with low risk in the historically low interest rate environment

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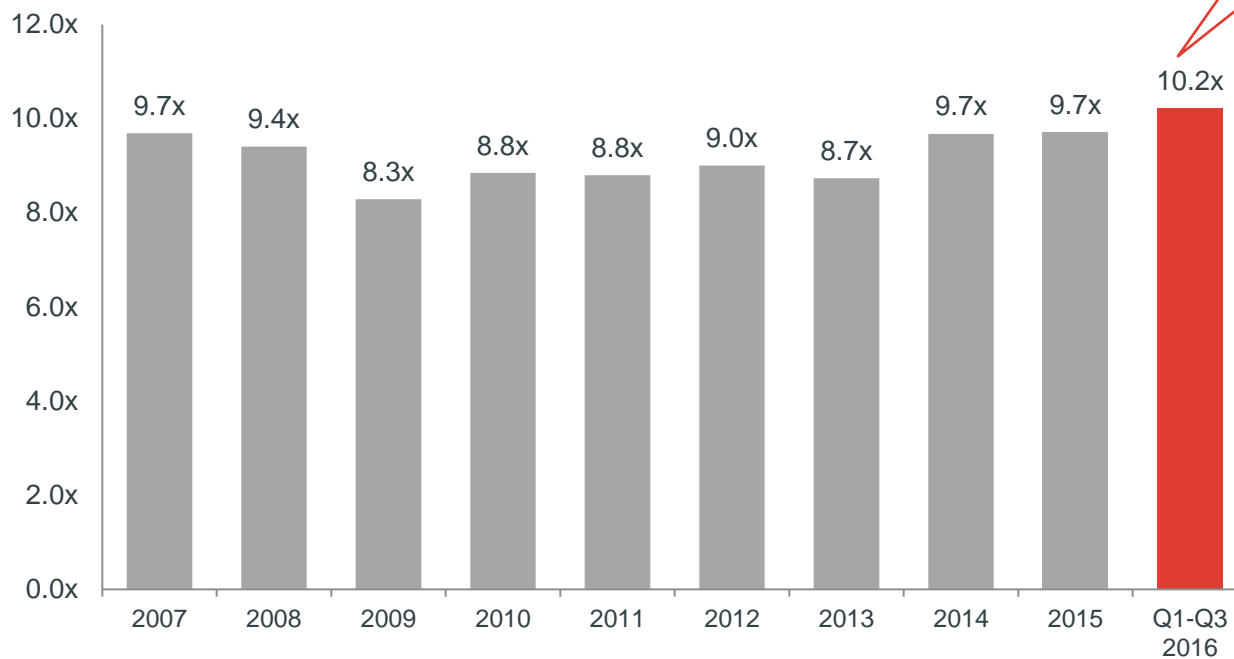
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RICH VALUATIONS (1/2)

VALUATIONS

SOURCE: S&P LCD COMPS Q3 2016

LBO entry price multiples (EV / EBITDA)



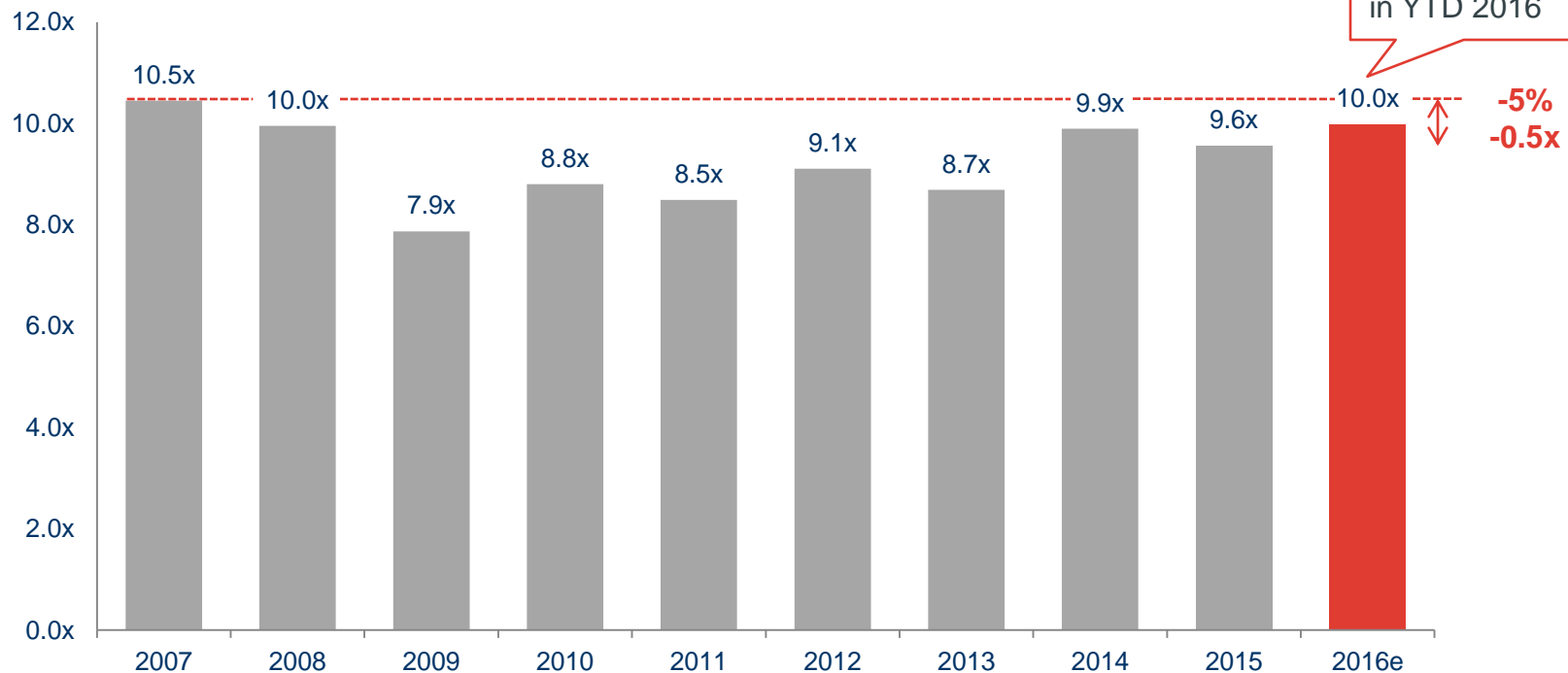
Average purchase price multiples have surpassed peak levels...

RICH VALUATIONS (2/2)

VALUATIONS

SOURCE: ARDIAN DATABASE

LBO entry price multiples (EV / EBITDA) from Ardian portfolio



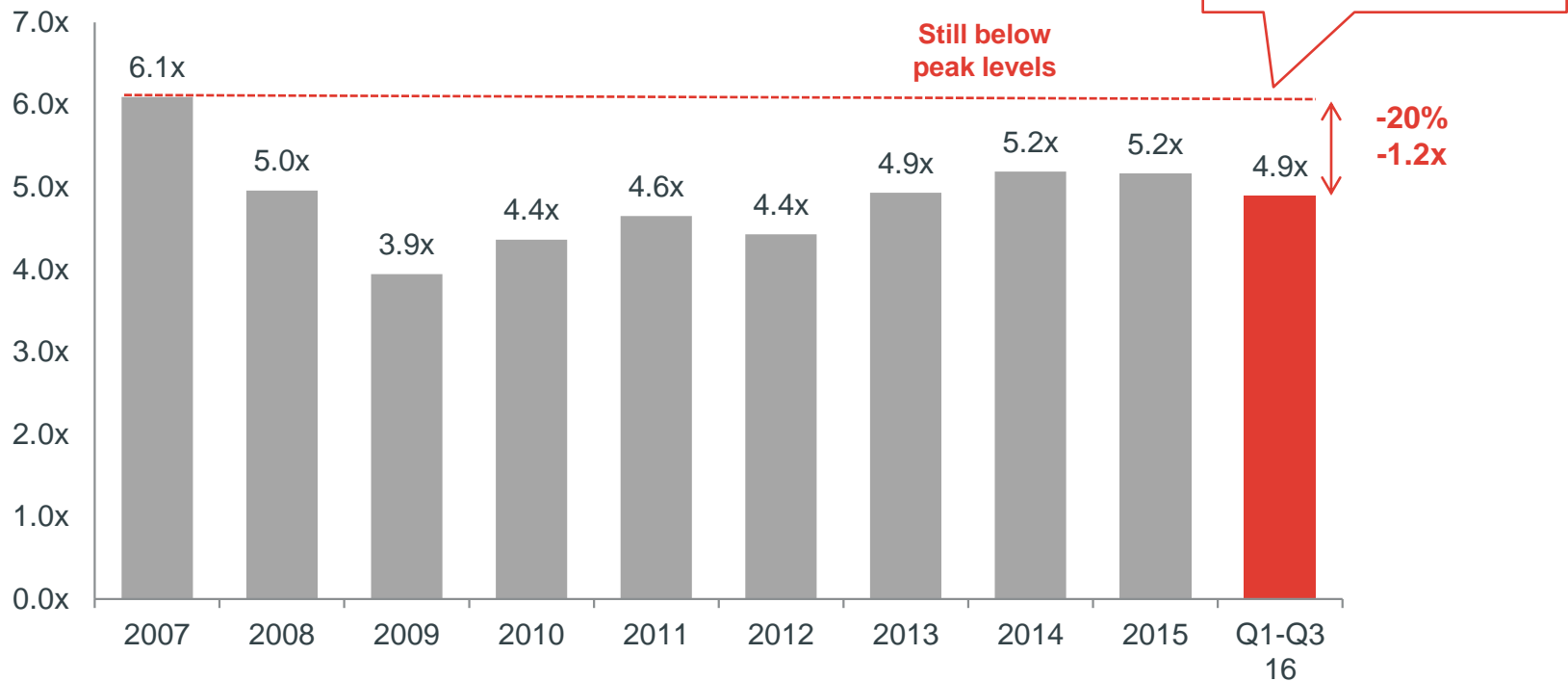
...Although in Ardian's portfolio this is lower than peak

...DESPITE REASONABLE LEVERAGE (1/2)

LOWER LEVERAGE RESULTING IN LOWER RISK

SOURCE: S&P LCD COMPS Q3 2016

LBO debt multiples at Entry (Net Debt / EBITDA)



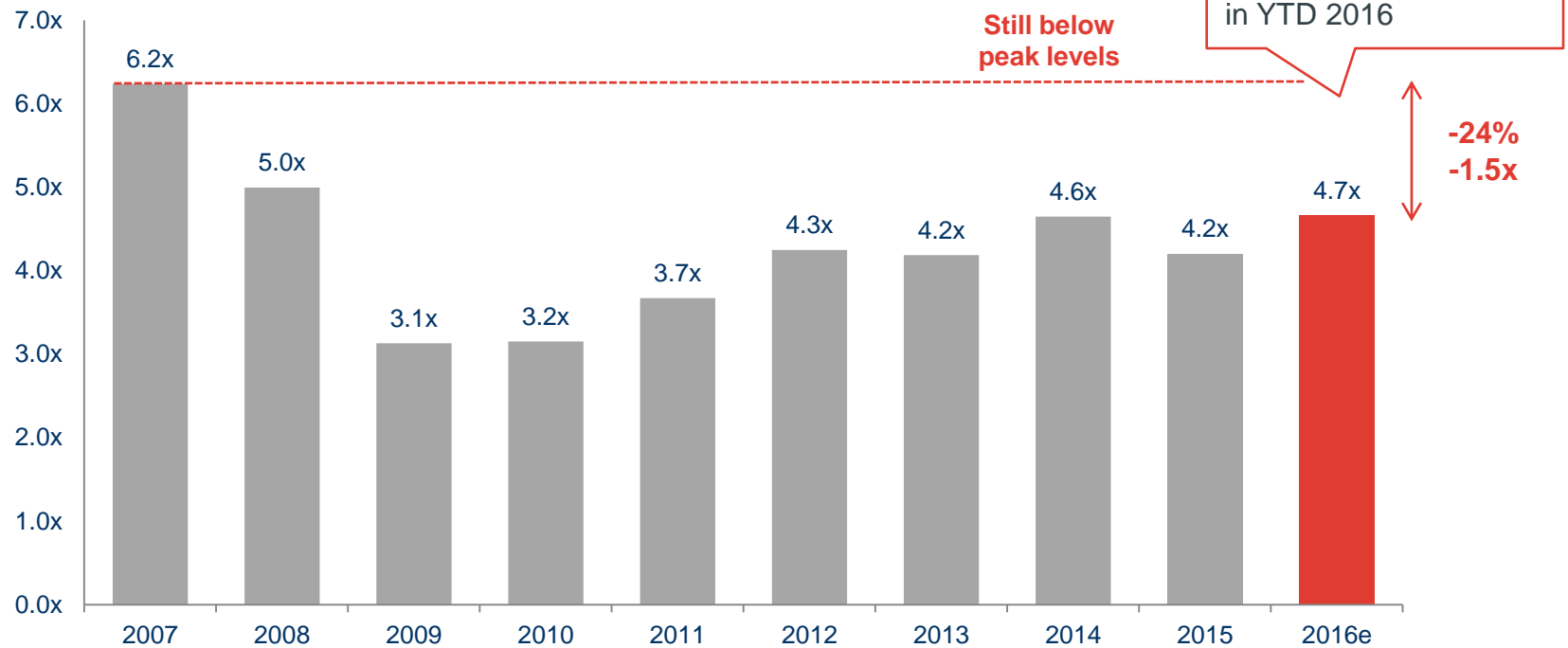
***However, leverage multiples remain relatively reasonable,
20% below peak levels...***

...DESPITE REASONABLE LEVERAGE (2/2)

LOWER LEVERAGE RESULTING IN LOWER RISK

SOURCE: ARDIAN DATABASE

LBO debt multiples at Entry (Net Debt / EBITDA) from Ardian portfolio

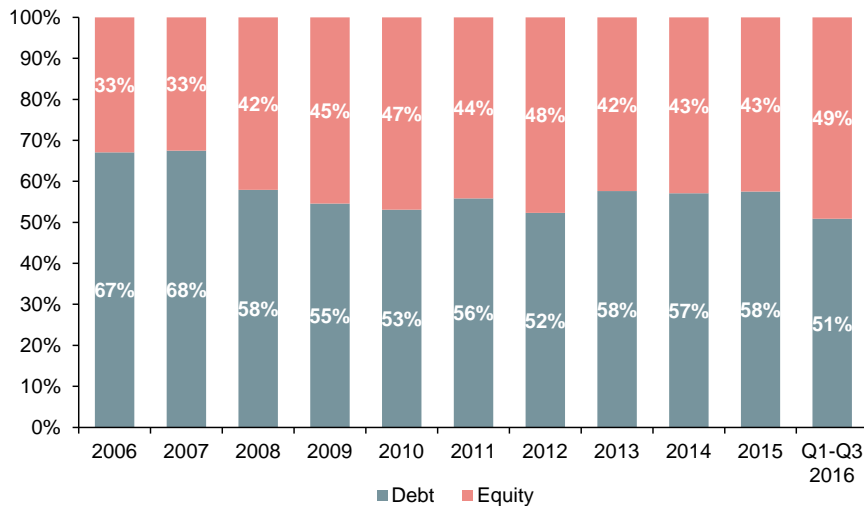


...This difference is even greater in the Ardian portfolio showing 24% lower than peak levels...

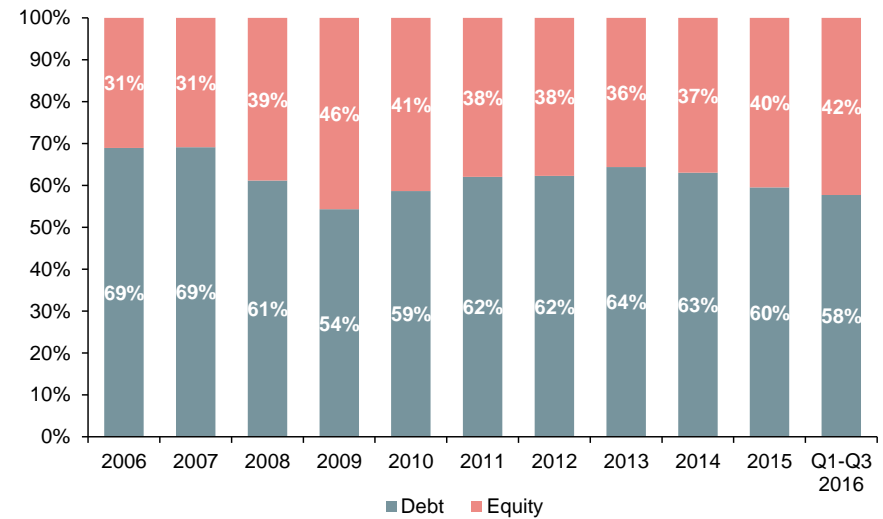
...BRIDGED BY INCREASING EQUITY CONTRIBUTION

EQUITY/DEBT RATIOS

European LBO Leverage

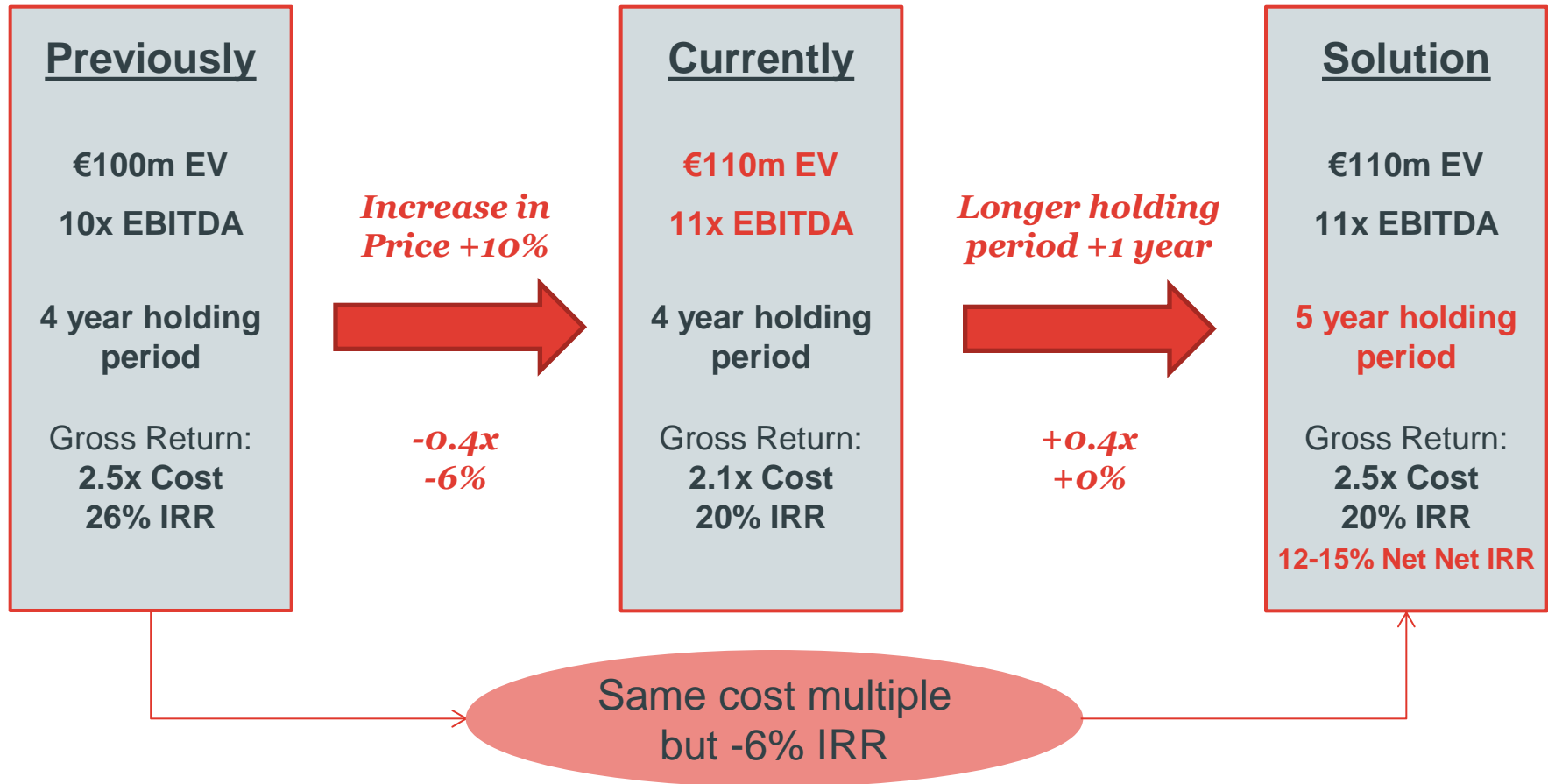


US LBO Leverage



... And since 2013, the price increase has been bridged by more equity rather than more debt, thereby reducing both the risk and expected returns

... LEADING TO LOWER EXPECTED RETURNS, RESOLVED BY AN EXTENDED HOLDING PERIOD



Holding periods increase to secure the same return on investment, resulting in an expected decrease in IRR.

But, still very attractive considering the period of low interest rates

TRENDS IN PRIVATE EQUITY

TOP PRIVATE EQUITY PLAYERS

	North America	Europe	RoW
# of Funds Raising in the Market:	143	82	58
Value of Funds Raising in the Market:	\$134bn	\$42bn	\$34bn
Dry Powder:	\$298bn	\$165bn	\$63bn
Key Players:	<ul style="list-style-type: none"> Blackstone KKR Warburg Court Square Carlyle Apollo Onex TPG Bain Capital TA Associates CD & R Providence Ares Silver Lake Thoma Bravo 	<ul style="list-style-type: none"> CVC EQT BC Alpinvest Bridgepoint Apax Cinven Permira Astorg Montagu Nordic KKR Europe Carlyle Europe HG Capital IK 	<ul style="list-style-type: none"> KKR Asia Premier CVC Asia PEP Baring Affinity Archer Capital CITIC CDH Hahn & Co RRJ Abraaj PAG Northstar Carlyle Asia

Source: Preqin, Ardian - January 2017

TRENDS IN PRIVATE EQUITY

BIG PRIVATE EQUITY PLAYERS NO LONGER JUST FOCUS ON PRIVATE EQUITY

GP Name	AUM	Activities
Blackstone	\$361bn	Private Equity, Real Assets, Credit, Hedge Fund, Secondary Private Equity
Apollo	\$189bn	Private Equity, Real Estate, Credit
Carlyle	\$169bn	Private Equity, Real Assets, Credit, Hedge Fund, Secondary Private Equity
KKR	\$131bn	Private Equity, Real Assets, Credit, Hedge Fund, Capital Markets

The largest Private Equity players are now Asset Managers that have a wider offering than just pure Private Equity for their investors

Source: Blackstone, Apollo, Carlyle, KKR

NEW FUND INITIATIVES

TOP PRIVATE EQUITY PLAYERS CLOSING LONG-TERM BUYOUT FUNDS

GP Name	Fund Name	Size	Fund Life	Gross Targeted Returns
CVC	CVC Strategic Opportunities	€5.0bn	15 years	12-15% IRR
Blackstone	Blackstone Core Equity Partners	> \$5.0bn	20 years	12% IRR
Carlyle	Carlyle Global Partners	\$3.6bn	20 years	12% IRR
KKR	America LTCV	\$1.0bn	10 years	10-15% IRR
TPG	TPG Strategic Capital Partners	In Process of Fundraising		

Some GPs are introducing niche funds with a longer life and lower targeted returns, reflecting the ultra low interest rate environment. These funds have small LP bases, consisting of specific types of investor

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SECONDARY MARKET HAS CHANGED OVER TIME – CHANGING THE PRIVATE EQUITY MARKET

EVOLUTION OVER PAST 15 YEARS

- The image of Private Equity is illiquid - historically, this was the case...
- Regulation has not been favourable (Basel / Solvency / Volcker)



***There has been a transformation in recent years...
Now Private Equity is an industry linked to volume***

ALL INDUSTRIES NEED SECONDARY MARKETS

PRIMARY VS SECONDARY MARKETS

Industry	Annual Primary Market	Annual Secondary Market	Ratio
Automotive (US market 2014)	14m units	40m units	2.9x
Housing (US market 2010)	0.8m units	11m units	14x
Luxury Boat (French market 2012)	1,300 units	3,200 units	2.5x
Bonds (US market 2013)	\$6.4tn	\$295tn	46x
Stocks (UK Listed market 2013)	£10.8bn	£1,022bn	94x
Private Equity (Global Fundraising market 2016)	~\$200bn	~\$40bn	0.2x

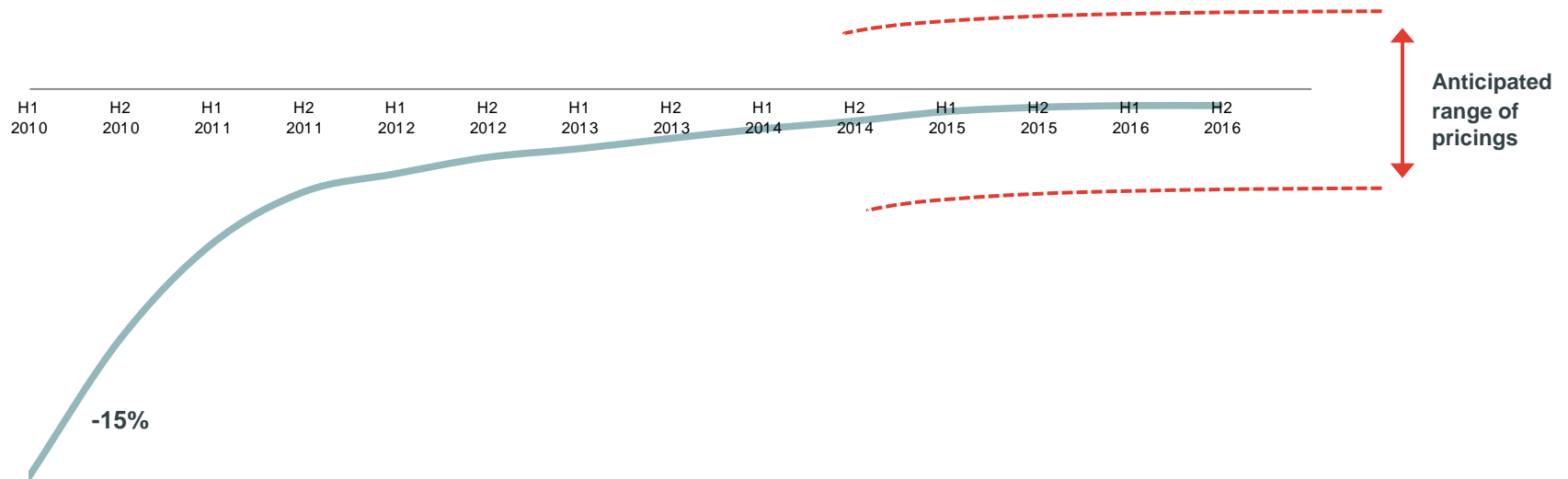
For established industries, the secondary market is often larger than the primary market.

This is not yet the case for Private Equity , but it is no longer illiquid

SECONDARY MARKET PRICINGS

MARKET PRICING OVER THE CYCLES

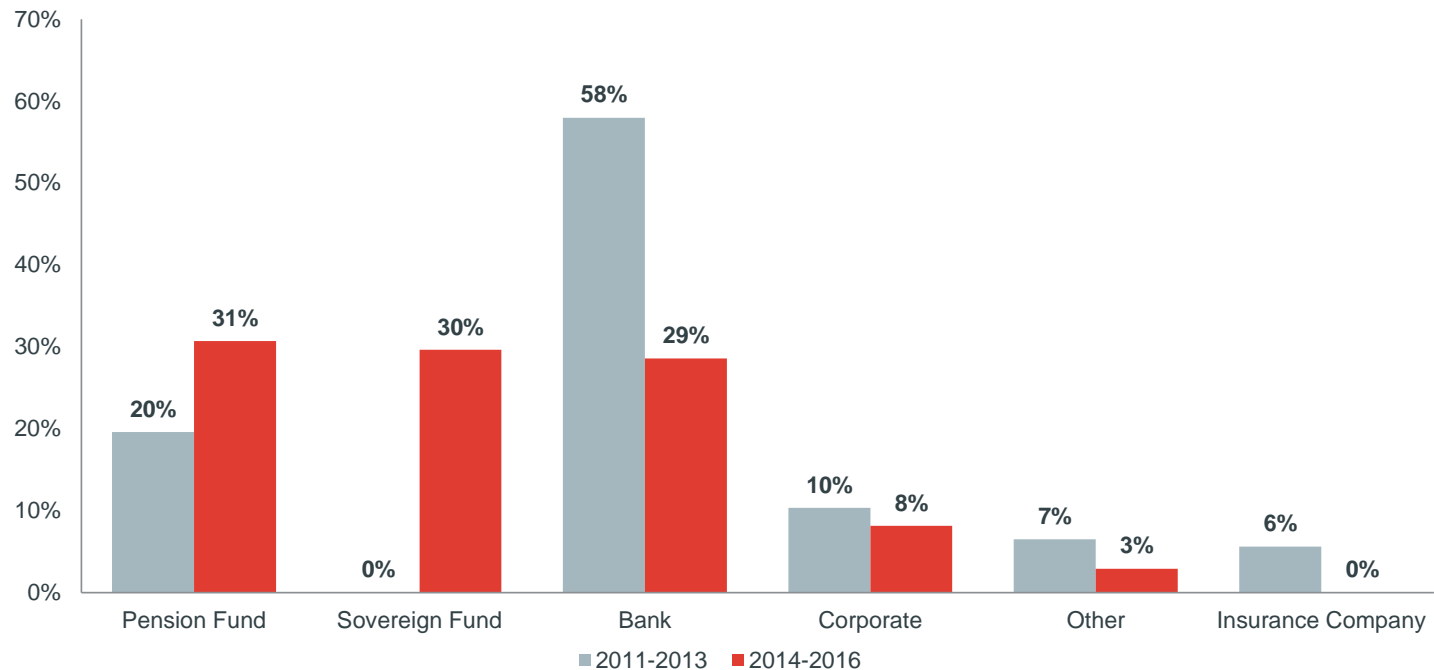
Average premium / (discount) paid for buyout funds on the secondary market
(in % of latest reported NAV)



A fairer price also drives the growth of the secondary market

GREATER NUMBER OF SELLERS

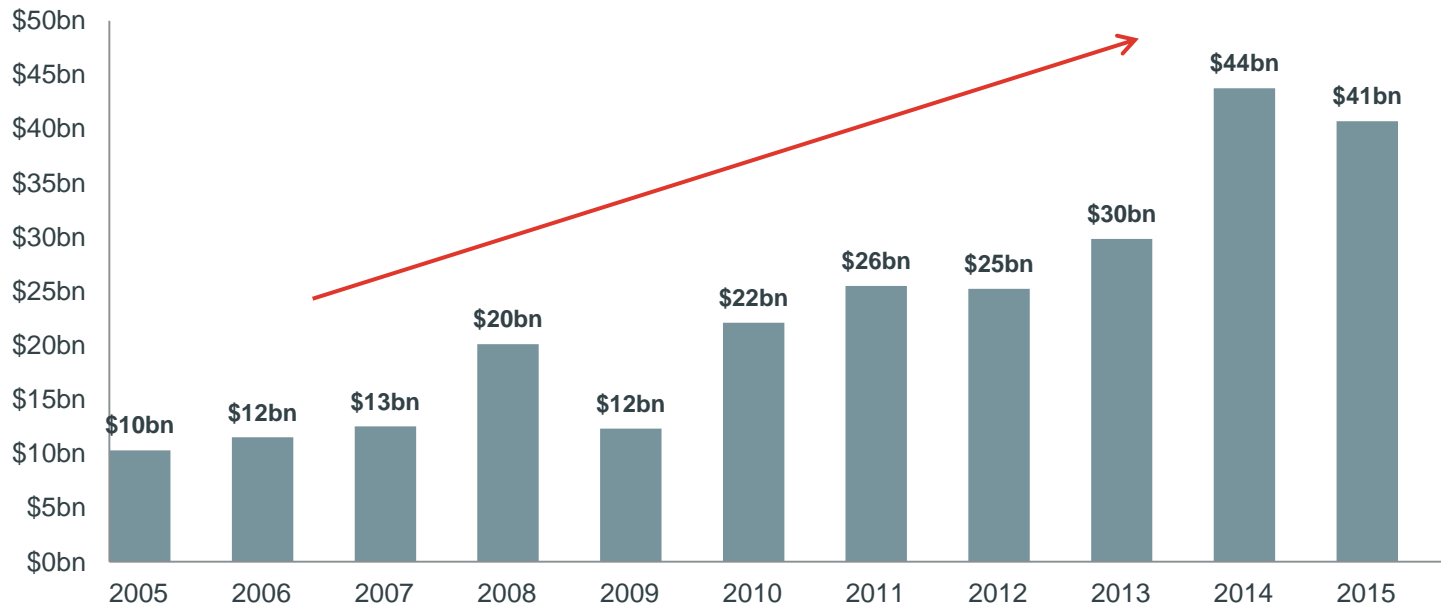
WHERE ARE DEALS COMING FROM?



***The landscape has evolved from one being dominated by banks / distressed sellers.
Today, sellers are large institutions that do not need cash but want to fluidly
manage portfolios***

UPWARDS TREND IN SECONDARY VOLUMES

VOLUMES ARE HIGH



Greater volume in primary Private Equity, and a fairer price in the secondary market, is driving up Secondary volumes...

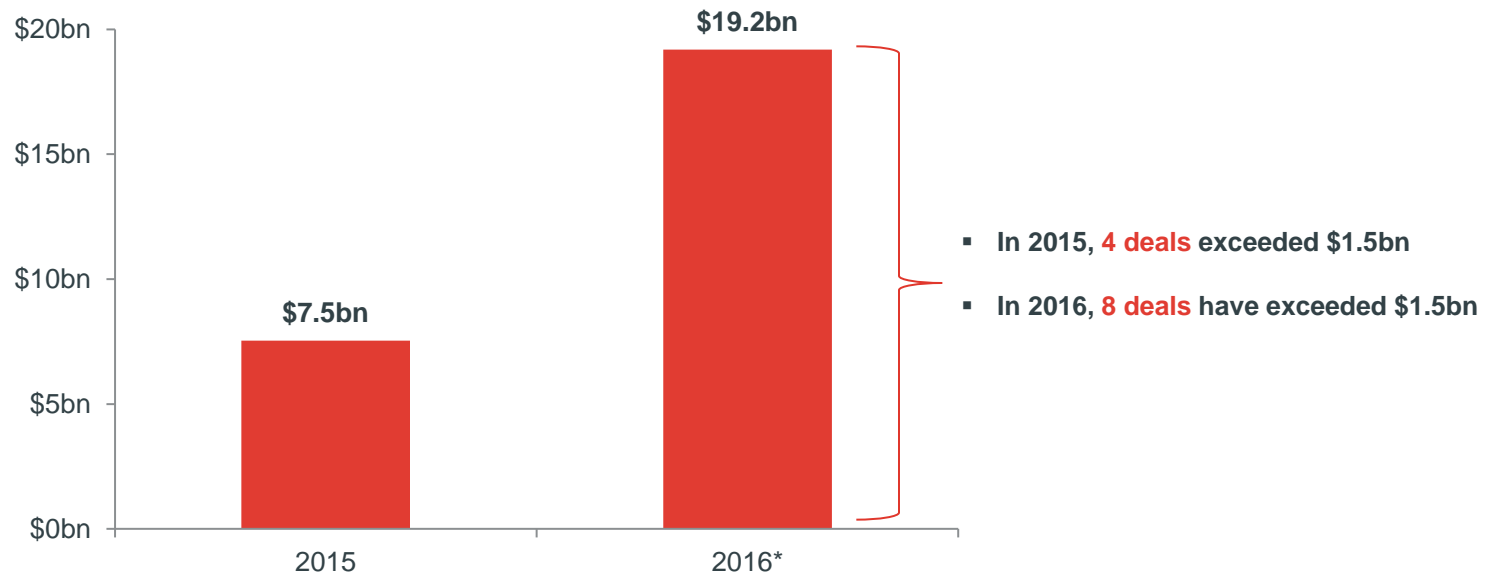
The liquidity provided by the secondary market is making Private Equity more attractive for large Asset Managers

Source: Cogent, Setter & Evercore data

LARGE DEALS IN 2016

DEALS EXCEEDING \$1.5BN IN ARDIAN PIPELINE

Aggregate value of deals exceeding \$1.5bn



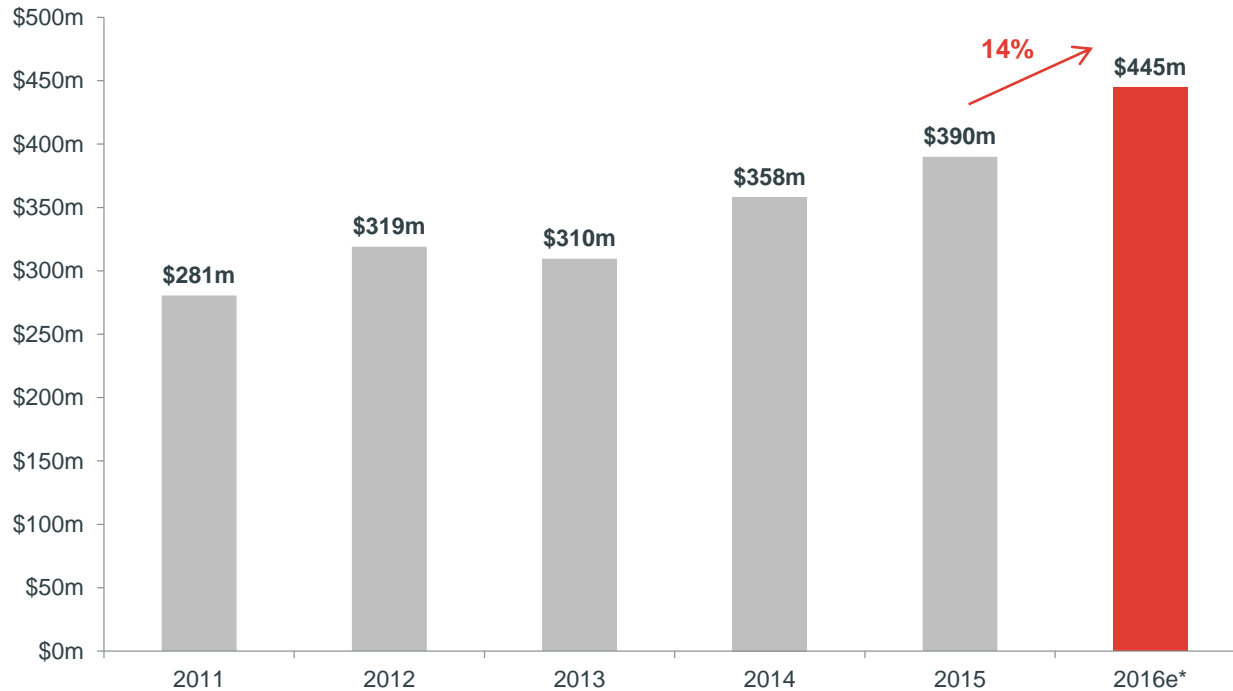
Large sellers are using the secondary market to dynamically manage their positions, as they do in other asset classes

* As of November 2016
Deals in Ardian deal flow

INCREASING AVERAGE DEAL SIZE

AVERAGE DEAL SIZE IN ARDIAN PIPELINE

Average deal size



***...these larger deals have resulted in a 14% increase in average deal size
in 2016 vs 2015***

Deals in Ardiان deal flow

* Expected average deal flow given deal flow as at November 2016

SECONDARY MARKET OVERVIEW

COMPETITIVE ENVIRONMENT

In \$ million	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ARDIAN		220		480			1,040		2,854					7,100**			9,000**	10,800**	
Coller Capital	240	712			2,600				4,800						5,500			7,150	
Strategic Partners				832		1,925		1,900			2,500			2,900			4,400	6,550	
Goldman Sachs	412				1,130		1,500		3,003		5,500				5,800			6,000***	
Harbourvest *		213			505				521			2,900			3,600			4,770	
Landmark	421	400	583		626		427		1,200		2,000					3,250			
Lexington Partners	1,111	657	606		2,004				3,774				7,000					10,100	
Pantheon		418					909		2,000				2,157					2,500***	
Paul Capital Partners	273			808			960			1,650									

* Both Primary & Secondary

** Including co-invest

*** Potential Fund Size

Source: Preqin / ARDIAN, as of December 2016

Evolution of a selection of Secondary Funds

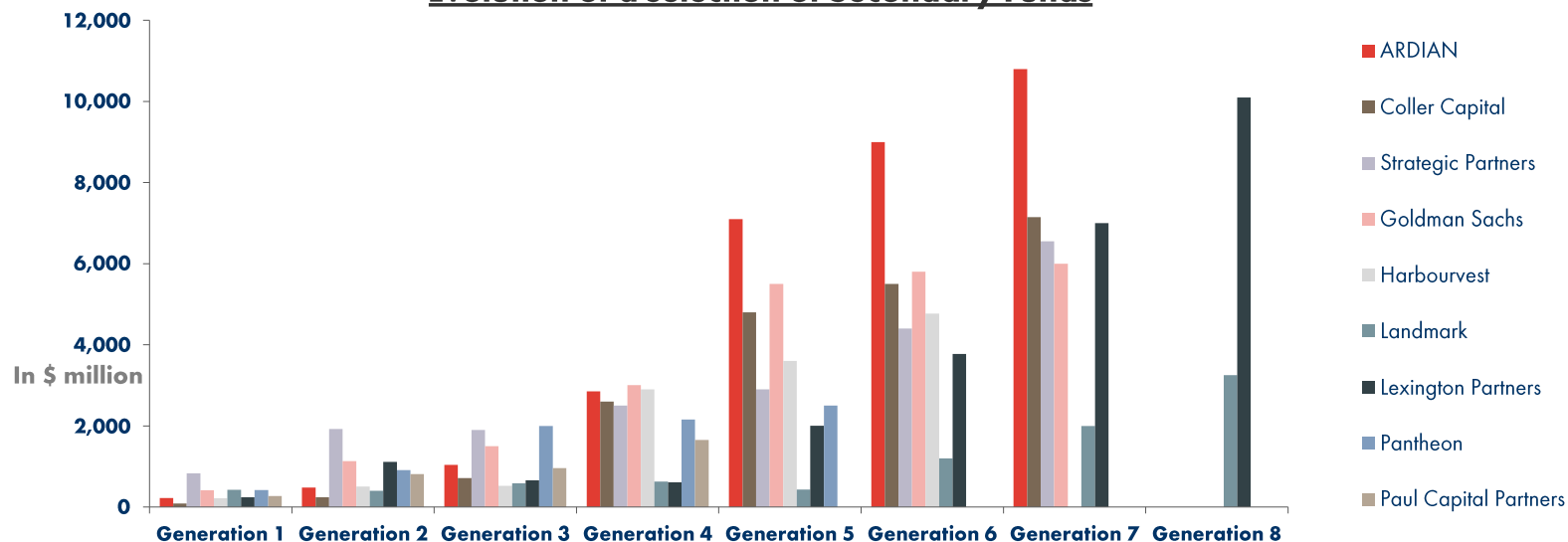


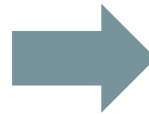
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CONCLUSION (1/2)

PRIVATE EQUITY IS AN INDUSTRY AND VOLUME IS NOT KILLING PERFORMANCE

Strong performance and increasing liquidity



Substantial investment into Private Equity

For example:

1) Pension Funds

Fund	% Private Equity Allocation	Private Equity Exposure	Target Allocation
CalPERS	8%	\$25bn	~
Ontario Teachers	17%	\$21bn	n/a
CDPQ	11%	\$20bn	↑↑
ABP	5%	\$19bn	~
CalSTRS	8%	\$16bn	↑
Teachers Retirement Texas	12%	\$16bn	↑

2) Sovereign Wealth Funds

- GIC, ADIA, Temasek, Future Fund etc: 5-10% of total assets*

Leading institutions invest a significant amount into Private Equity and many wish to increase their position

Source: Preqin

*Assumed as allocation is often highly confidential

CONCLUSION (2/2)

PRIVATE EQUITY IS AN INDUSTRY AND VOLUME IS NOT KILLING PERFORMANCE

3) Family Office

-7% of total assets

4) Insurance Companies

-Solvency II limitations: 1% of total assets

5) Banks

-As of today: Basel / Volcker limitations
-Trump could spark change...

*Historically,
allocation was
reduced due to
illiquidity of
Private Equity*

*Illiquidity led to
harsh
regulation,
which reduced
allocation
further*

Now that the Secondary Market provides liquidity to the Private Equity industry, regulation should soften and allocation to the asset class should increase

Source: Preqin, Ardian, UBS Campden Wealth Research