Framework Investing's

Hedging

Framework Member Conference Call

November 2, 2017

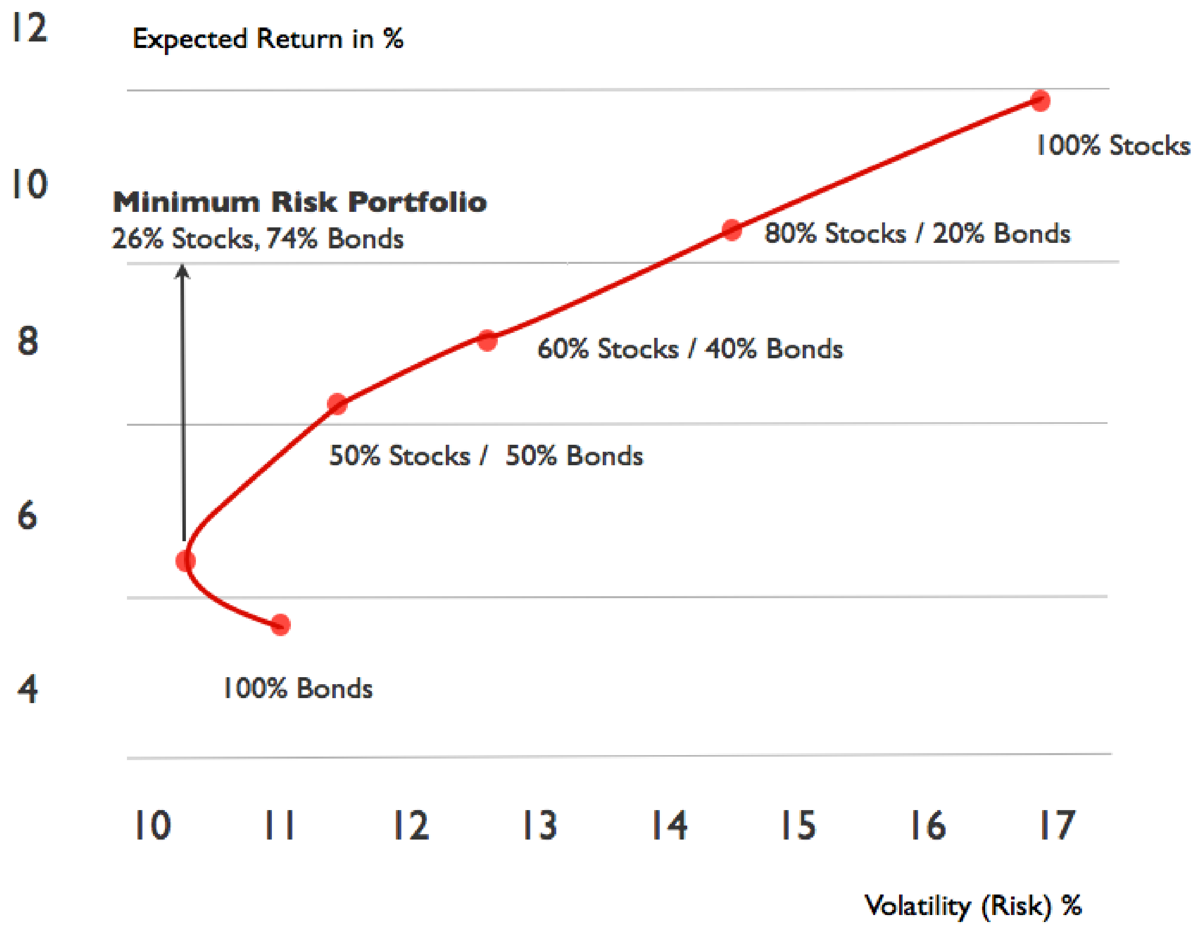
Agenda

- The Value of Cash
- Hedging vs. Insurance
- Hedging Funds
- Natural Hedging
- Q&A

The Value of Cash

Eh… It depends…

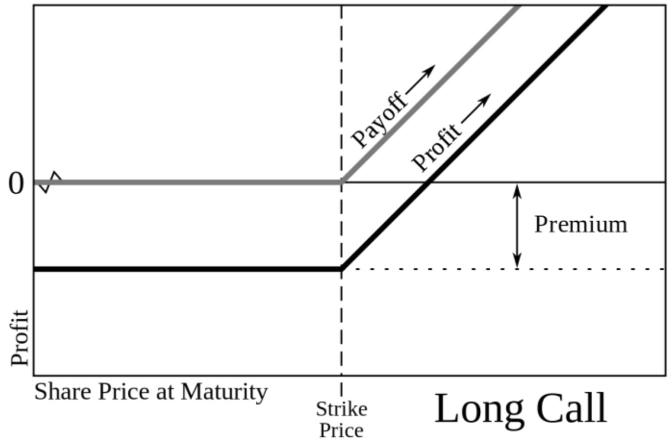
The Academic Perspective

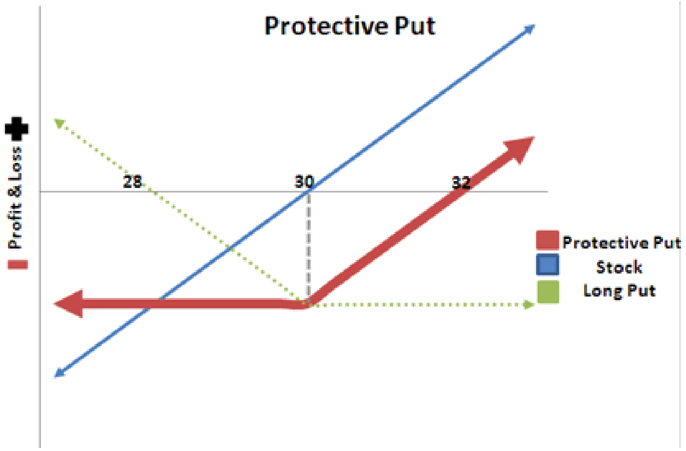


Data Source - JJ Abodeely - Sitka Pacific Capital

- Cash is safest investment, and only generates, at most, the overnight rate
- In modern portfolio theory (MPT), cash is considered a terrible asset to invest in – creates a “drag” on a portfolio

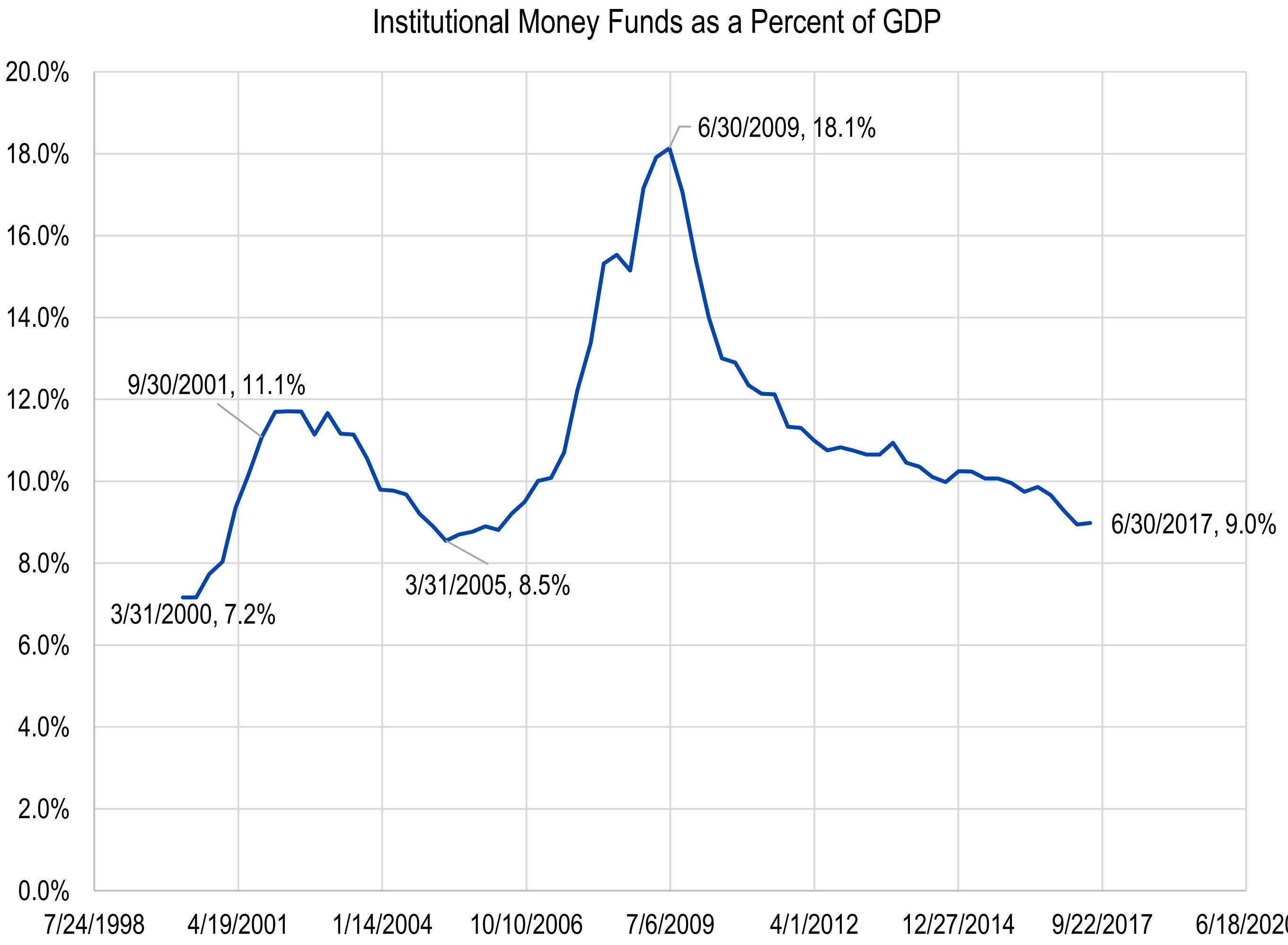
Framework Perspective





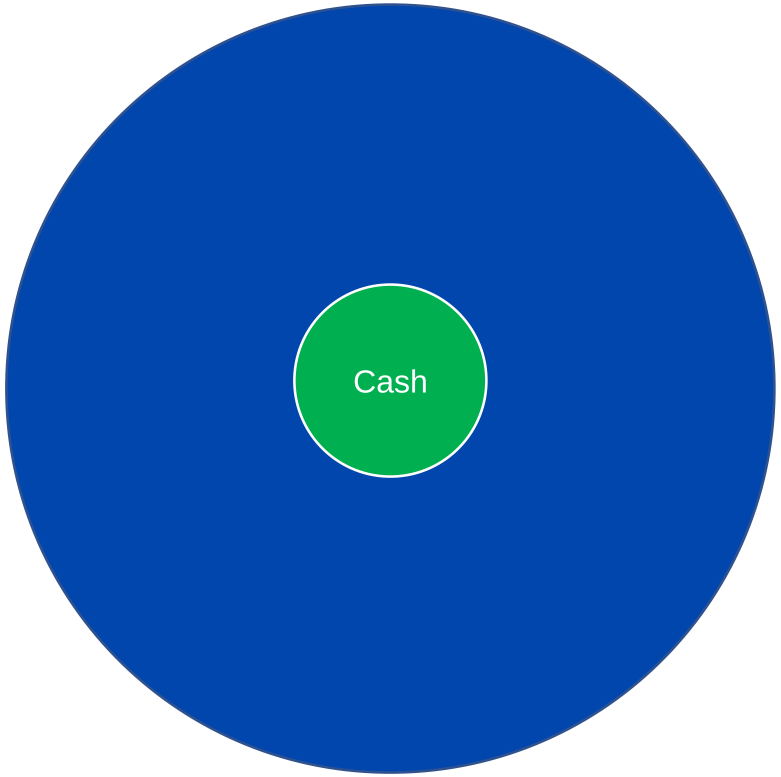
- The value of cash depends on the availability of investment opportunities
  - Cash as a call option
  - Cash as a put option

Framework Perspective



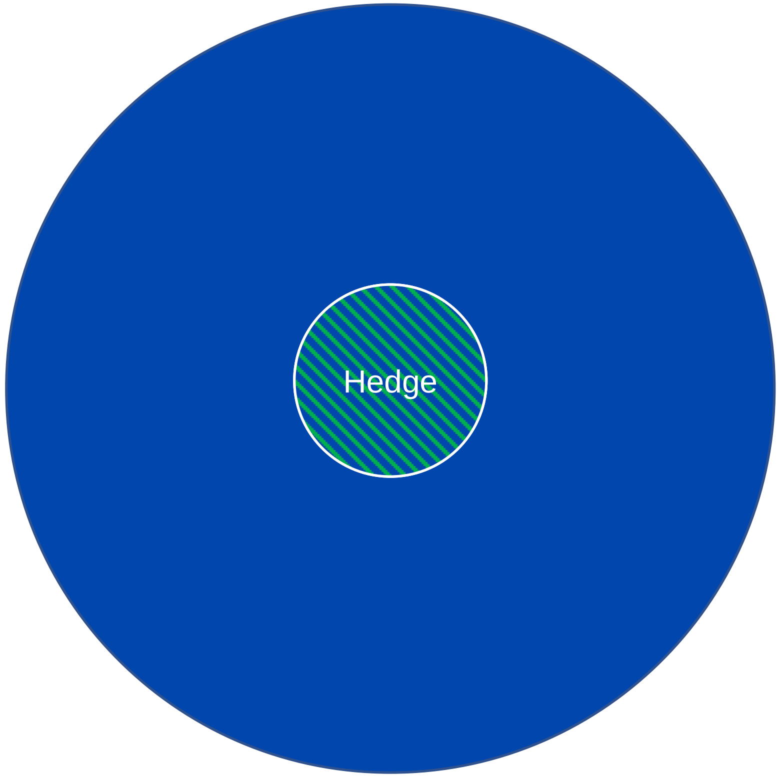
- The value of cash depends on the availability of investment opportunities
  - Cash as a call option
  - Cash as a put option
- The problem is that people tend to reverse investment timing
- Cash value is negatively correlated with market directionality

Framework Perspective



- Cash forms the “kernel” of an investment portfolio
- Cash represents potential return
- A “hedge” represents potential cash

Framework Perspective



- Cash forms the “kernel” of an investment portfolio
- Cash represents potential return
- A “hedge” represents potential cash
- We should judge our hedge versus opportunity cost and assess its option value
- A hedge offers leverage

Hedging vs Insurance

Can you succeed with Black Swan investing?

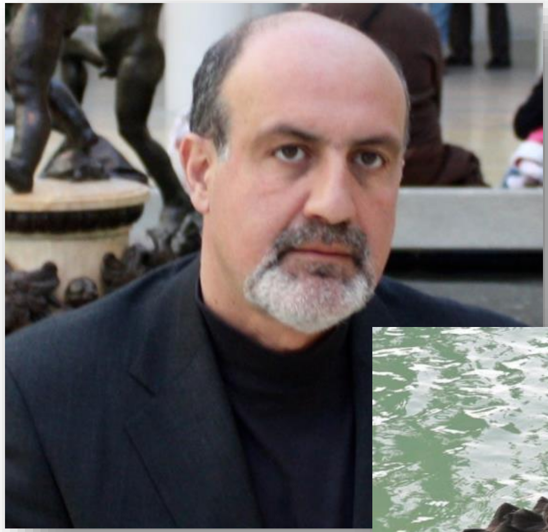
Insurance

- Insurance is a negative expected value transaction
- In some cases, though, it does make sense
- Would you pay $100,000 / year to insure your $1 million home?
- Most real assets depreciate over time (or the value grows only slowly)

Hedging

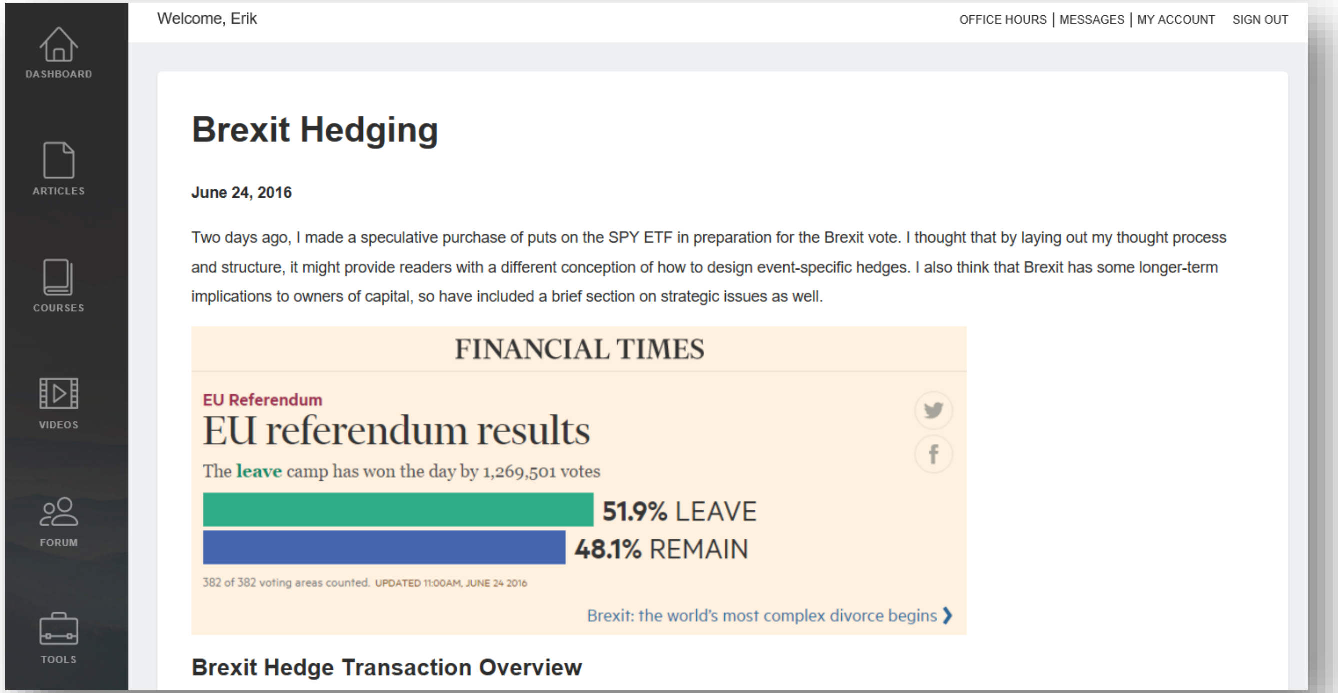
- Most of the time, stocks drift upward
- Must always consider level and timing
- For this insurance, you are paying 100k / year for $1 million coverage (and / or you have a very high deductible)

Black Swan Insurance



- Concept made famous by Nic Taleb – humans don't price fat tails well
- Spend 10% / year on far OTM puts in different markets – payout is huge
- *The Black Swan* sold many copies
- Actual results are dubious

My Experiment with Brexit



- I was exactly right
- My timing was perfect
- My net return on day 1 was 100%
- My net return on day 2 was (100%)
- I would have been happier if I had fallen into a 24-hour coma

Hedging Funds

How the pros hedge

The Jones that No one Keeps Up With

EDUCATION

Hedge Fund History

April 13, 2013

The father of hedge fund is considered to be Alfred Jones. He came up with the term hedged fund and created the first hedge fund structure in 1940. But Warren Buffet would say that the father of hedge fund industry is Benjamin Graham, who he says managed a hedge fund in mid 1920s.

As the historians and Warren Buffet would disagree on who is the father of hedge funds – we gathered facts form hedge fund history in both sides.

Alfred W. Jones is credited with coining the phrase "hedged fund" and is erroneously credited with creating the first hedge fund structure in 1949. Jones referred to his fund as being "hedged", a term then commonly used on Wall Street, to describe the management of investment risk due to changes in the financial markets.

Alfred Jones was born in Australia in 1901 to American parents. He moved to the United States as a young child, graduated from Harvard in 1923 and became a U.S. diplomat in the early 1930s, working in Berlin, Germany. He earned a PhD in sociology from Columbia University and joined the editorial staff at Fortune magazine in the early 1940s.

It was while writing an article about current investment trends for Fortune in 1948 that Jones was inspired to try his hand at managing money. He raised $100,000 (including $40,000 out of his own pocket) and set forth to try to minimize the risk in holding long-term stock positions by short selling other stocks. This investing innovation is now referred to as the classic long/short equities model. Jones also employed leverage in an effort to enhance returns.

Alfred Jones

- Alfred Jones – PhD sociologist and journalist created a private partnership to pool investing assets in the 1960s
- Paired long positions with short ones – birth of a "market neutral" strategy

Equity Long/Short

BDMIX

Global Long/Short Equity Fund

BLACKROCK®

As of 06/30/2017 | Class K: BGCKX | **Institutional: BDMIX** | Investor A: BDMAX | Investor C: BDMCX

A Low Volatility Alternative to Traditional Global Equities

Broadening the opportunity set through a long/short strategy, the fund seeks to profit with little dependence on overall market movements.

Answering Fundamental Questions Using Big Data

Seeks to use our powerful data capabilities to identify and capitalize on select "non-obvious" opportunities before the rest of the market.

Seeking Returns Independent of Market Direction

An experienced management team that has been executing long/short strategies for nearly two decades has an added advantage with the broader research capabilities of BlackRock.

Bronze

Morningstar has awarded the Fund a Bronze medal. Fewer than 10% of US open-end funds hold medalist ratings (Effective 12/07/2016).†

ANNUALIZED PERFORMANCE

Without Sales Charge	1 Year	3 Year	5 Year	10 Year	Since Inception
Institutional	8.88	0.39	N/A	N/A	3.67
Benchmark	0.49	0.23	N/A	N/A	N/A
Morningstar Average	2.71	0.35	0.88	0.72	N/A

CALENDAR YEAR PERFORMANCE

Without Sales Charge	2012	2013	2014	2015	2016	YTD	2Q2017
Institutional	N/A	18.76	1.13	-0.98	-6.85	6.15	1.97
Benchmark	N/A	0.07	0.03	0.05	N/A	0.31	0.20
Morningstar Average	0.18	2.92	0.76	-0.25	2.23	0.66	0.02

KEY FACTS

Size of Fund (Millions)	**$596.0M**
Fund Launch Date	**12/20/2012**
Share Class Launch Date	**12/20/2012**
Morningstar Category	**Market Neutral**
Number of Holdings (Long)	-
Number of Holdings (Short)	-
Benchmark	**BofA ML 3-MO US Treasury Bill (G0O1)**

ANNUAL EXPENSES

Gross Expense Ratio	**1.86%**

SECTOR BREAKDOWN (%)[2]

	Long	Short	Net
Consumer Discretionary	28.6	-22.1	6.5
Industrials	21.1	-19.2	1.9
Information Technology	21.3	-14.2	7.1
Materials	14.7	-17.4	-2.7
Financials	10.7	-13.1	-2.4
Health Care	10.7	-9.9	0.8
Real Estate	9.1	-9.4	-0.2
Consumer Staples	8.0	-6.2	1.8
Energy	3.8	-5.2	-1.4
Utilities	3.0	-5.8	-2.8
Telecommunications	2.8	-0.5	2.3
Cash and Derivatives	1.9	0.0	1.9

TOP COUNTRIES (%)[2]

	Long	Short	Net
United States	71.3	-74.1	-2.8
Japan	15.8	-11.7	4.0
United Kingdom	11.0	-7.4	3.6
Germany	5.5	-6.5	-1.1
Canada	3.5	-6.2	-2.6
France	1.9	-5.8	-4.0
Australia	4.4	-1.6	2.8
Switzerland	3.6	-1.9	1.6
Netherlands	3.3	-0.8	2.5
Hong Kong	3.6	-0.1	3.5
Other	11.7	-6.6	5.1

- 130 / 30 allocation – 130% long, 30% short
- Proceeds from shorts pay for levered longs
- Ideally, every investment will generate a positive return
- Value-based and quantitatively-based

The Institutional Imperative

- Reduce volatility around earnings so as to maintain AUM – single stock
- Reduce overall volatility in market declines
- Client pays for the reduced volatility, so the strategy is nearly riskless for the fund manager

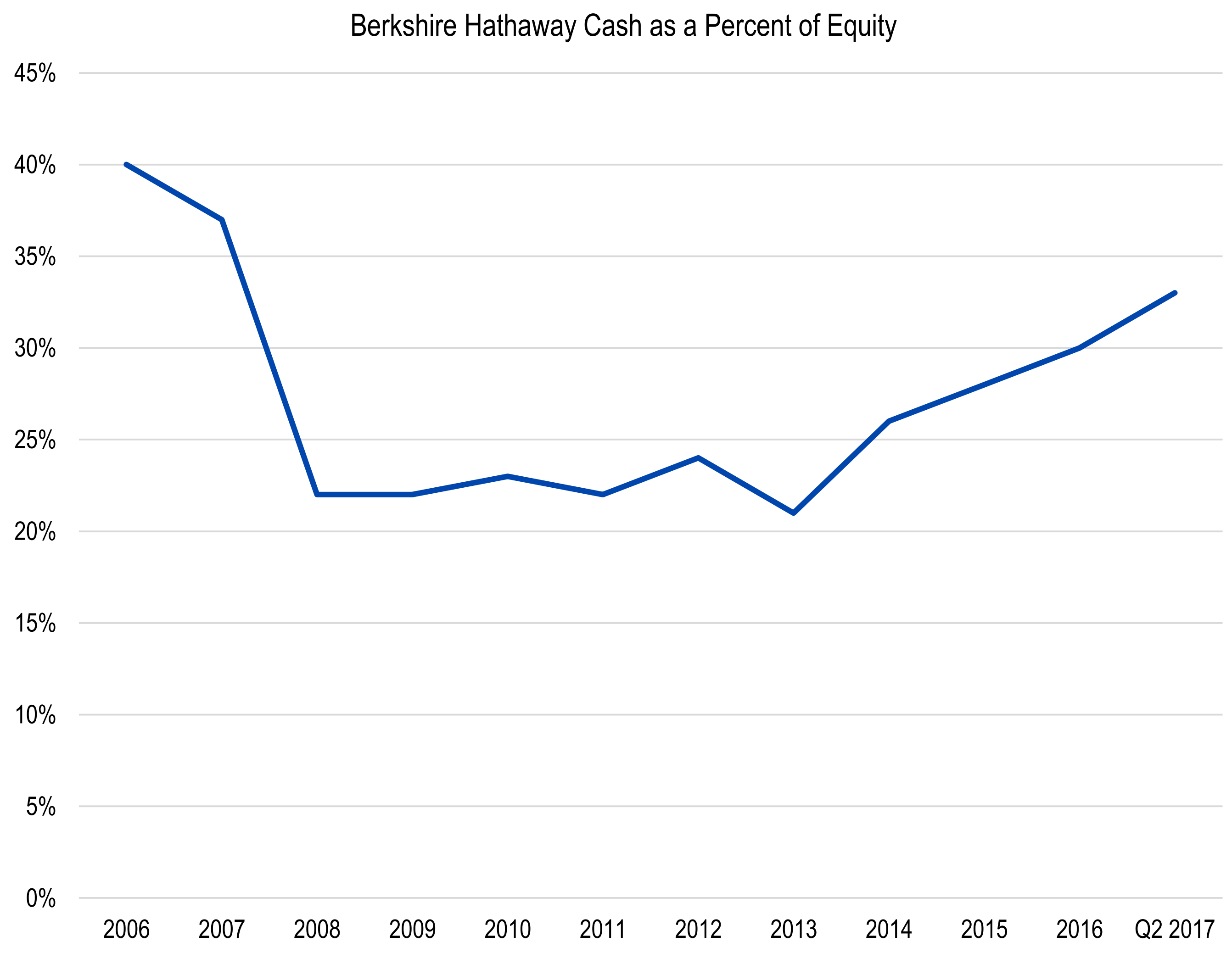
Natural Hedging

Let’s not call it market timing

“I hate cash”

Berkshire Hathaway's Cash

- Buffett's comments are critical of short-selling and dismissive of hedging
- He talks about cash as a burden and he only keeps it long enough until he has a good idea
- As ideas come more slowly, cash builds up



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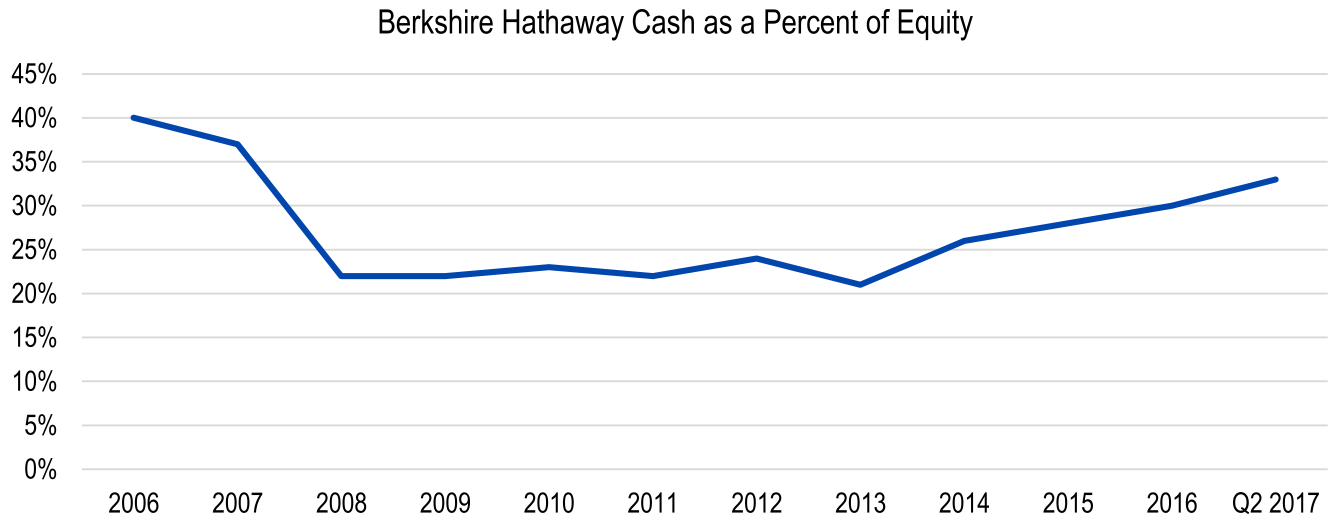

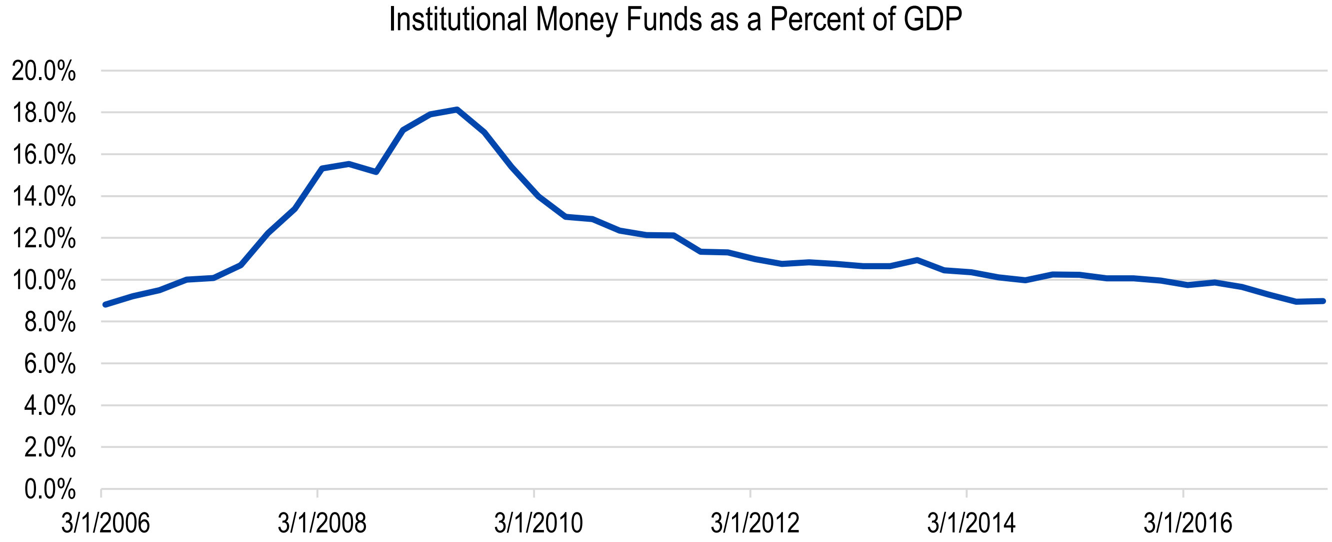

Framework's Take on Hedging

- Solving a hedging problem or an allocation problem?
- Perfectly hedged = risk-free return
- Valuation is crucial to be able to utilize natural hedging
- Hedges ideally should be positive expected value investments
- Cash is a hedge – unlevered
- Options are efficient potential sources of cash – levered
- Black Swan insurance sells books…

Thank You

Q&A Session