

International Investing - Preview

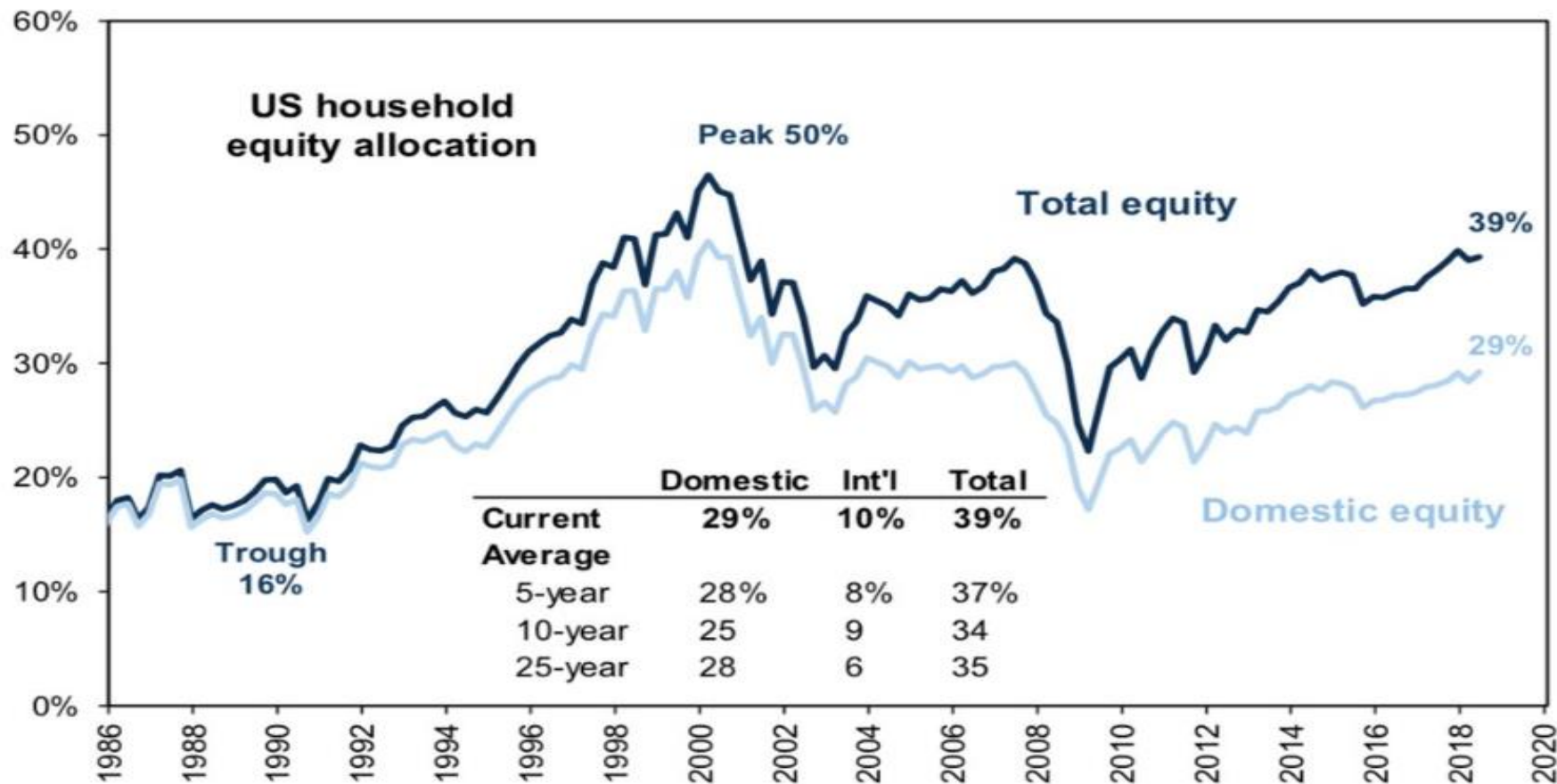
South Bay Bogleheads Chapter Meeting

February 11, 2019

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US investors in international investing

Households have increased their ownership of non-US equities



Vanguard guidance

- In November 2018, Vanguard argued that international stocks would substantially outperform (6-8%) US (3-5 %) in the coming decade.

Reasons –

- Domestic investors have a heavy exposure to US, not enough to foreign
- High valuations of US stocks
- US monetary tightening is at a later stage than abroad.

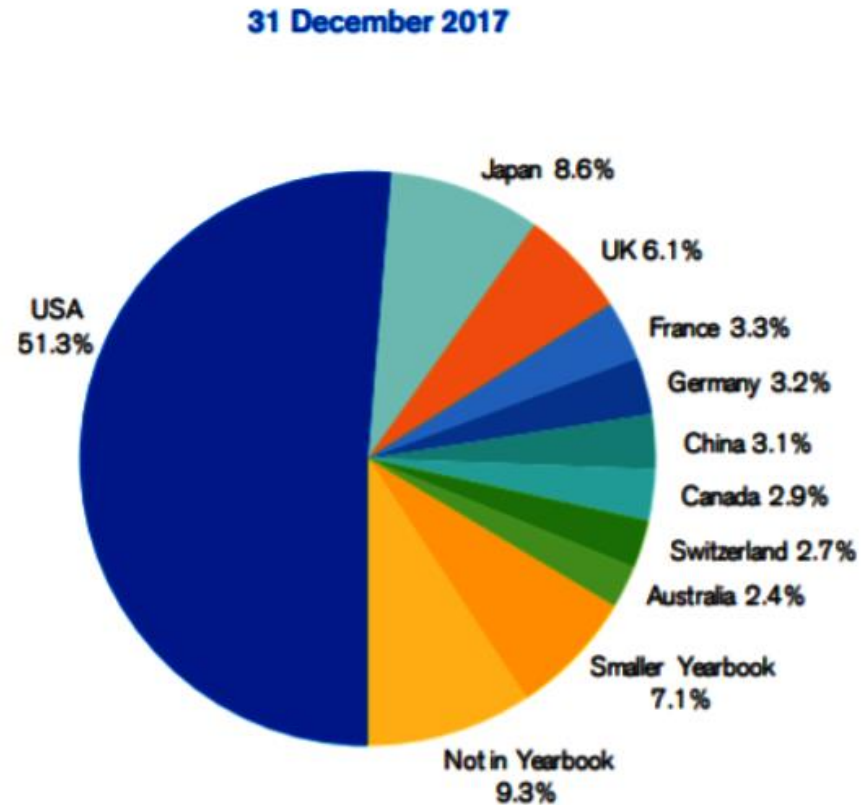
US and global markets valuation spreads (1990 – 2018) – Why the difference?



Important Considerations

- Why invest abroad?
- Historical performance of global markets
- Diversification in the short and long term
- What valuation multiple to expect for foreign markets vs US?
- How much allocation to international?
- Strategy to rebalance portfolio

If I have a diversified US portfolio, do I need international also?



Source: FTSE Analytics FTSE All-World Index Series, December 2017

What can we learn from these charts?

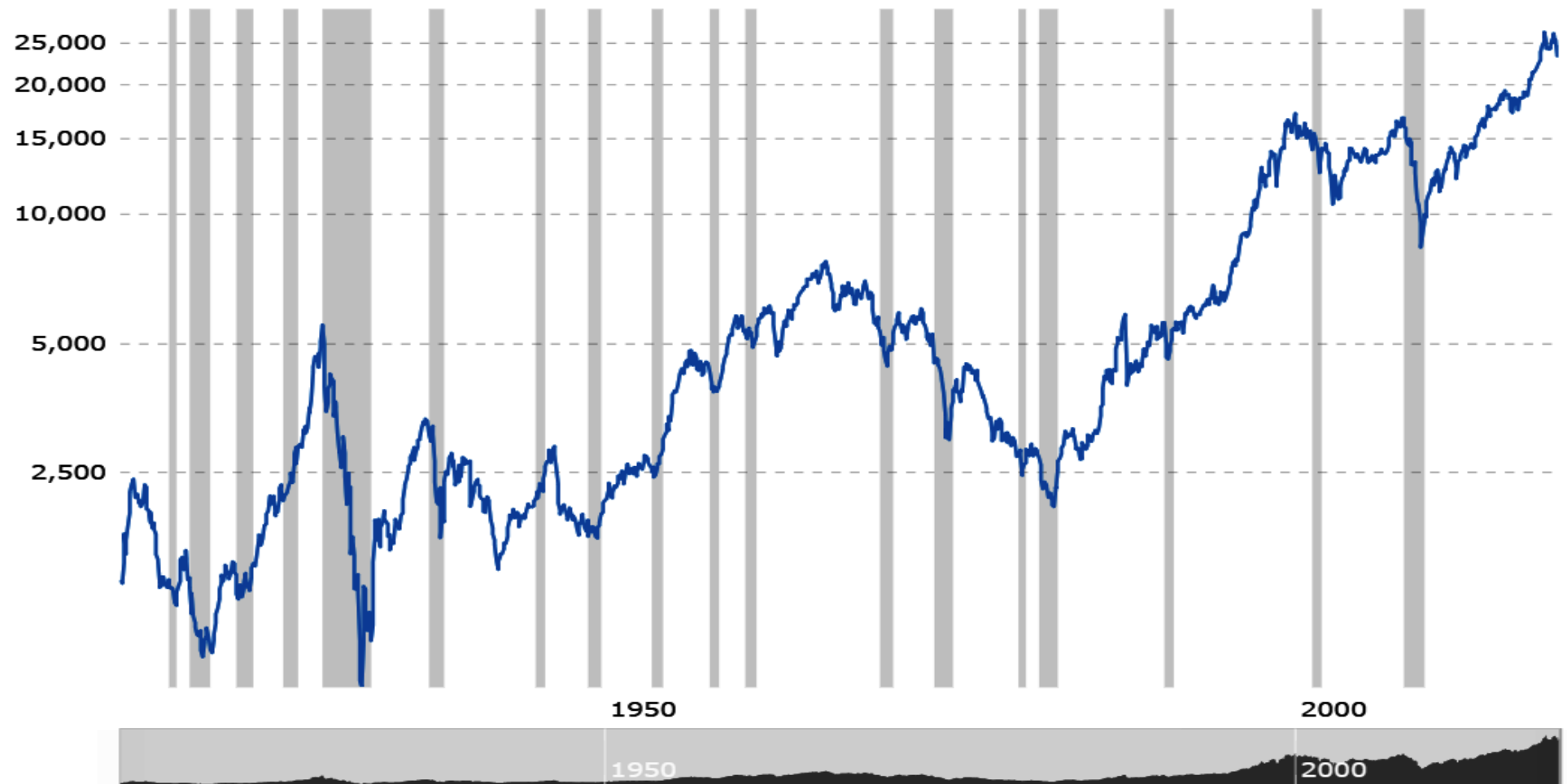
Nikkei 225 Index - 67 Year Historical Chart



China - Shanghai Composite Index



.....and this one?



Historical performance of international markets

MSCI EAFE: 1970-2018		
Market Environment	Dates	Drawdown
Bear	Jan 1970 - May 1971	-20.62%
Correction	Aug 1971 - Nov 1971	-11.83%
Bear	Mar 1973 - Oct 1974	-47.22%
Correction	June 1975 - Sept 1975	-14.79%
Correction	Feb 1976 - Oct 1976	-16.29%
Correction	Oct 1978 - Nov 1978	-10.29%
Correction	Oct 1979 - Nov 1979	-11.42%
Correction	Feb 1980 - Apr 1980	-16.21%
Correction	Apr 1981 - Sept 1981	-19.92%
Bear	Dec 1981 - Aug 1982	-23.47%
Correction	Aug 1986 - Oct 1986	-10.77%
Bear	Oct 1987 - Nov 1987	-21.68%
Correction	Apr 1988 - Sept 1988	-12.20%
Bear	June 1990 - Sept 1990	-31.97%
Correction	Feb 1991 - Aug 1991	-16.96%
Bear	Jan 1992 - Apr 1992	-20.08%
Correction	Sept 1994 - Jan 1995	-11.36%
Correction	July 1997 - Jan 1998	-16.30%
Bear	July 1998 - Oct 1998	-24.57%
Bear	Jan 2000 - Mar 2003	-53.58%
Correction	May 2006 - June 2006	-15.08%
Correction	July 2007 - Aug 2007	-12.67%
Bear	Oct 2007 - Mar 2009	-61.85%
Bear	Jan 2010 - May 2010	-20.53%
Bear	May 2011 - Oct 2011	-27.60%
Correction	Mar 2012 - June 2012	-17.53%
Bear	July 2014 - Feb 2016	-25.21%
Correction	Jan 2018 - July 2018	-11.73%

Bear Markets defined as 20% peak-to-trough losses

Corrections defined as double digit losses not exceeding 20%

Price index only; no dividends included

Historical performance of emerging markets

MSCI Emerging Markets: 1994-2018		
Market Environment	Dates	Drawdown
Bear	Sept 1994 - Mar 1995	-32.6%
Correction	Jul 1995 - Nov 1995	-14.3%
Bear	July 1997 - Jan 1998	-38.2%
Bear	Mar 1998 - Sept 1998	-46.4%
Bear	Mar 2000 - Sept 2001	-53.7%
Bear	April 2002 - Oct 2002	-30.0%
Correction	Jan 2003 - Mar 2003	-12.4%
Bear	April 2004 - May 2004	-20.4%
Correction	Feb 2005 - April 2005	-10.6%
Bear	May 2006 - June 2006	-24.5%
Correction	Feb 2007 - March 2007	-10.6%
Correction	July 2007 - August 2007	-17.7%
Bear	Oct 2007 - Oct 2008	-66.1%
Bear	Nov 2008	-23.0%
Bear	Jan 2009 - Mar 2009	-21.8%
Correction	April 2010 - May 2010	-18.3%
Bear	May 2011 - Oct 2011	-31.1%
Correction	Oct 2011 - Nov 2011	-13.1%
Correction	Mar 2012 - June 2012	-18.3%
Correction	Jan 2013 - June 2013	-18.4%
Correction	Oct 2013 - Feb 2014	-12.3%
Correction	Sept 2014 - Dec 2014	-17.3%
Bear	April 2015 - Jan 2016	-35.5%
Bear	Jan 2018 - Aug 2018	-19.7%

Bear Markets defined as 20% peak-to-trough losses

Corrections defined as double digit losses not exceeding 20%

Price index only; no dividends included

Note the performance of Int'l stocks (blue) and emerging markets EM (Yellow) 2009 – 2018

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10 Years
EM 68.9%	REITs 28.4%	TIPS 13.3%	EM 19.1%	Small Cap 41.0%	REITs 30.4%	REITs 2.4%	Small Cap 26.6%	EM 37.3%	Cash 1.7%	Small Cap 15.0%
Small Cap 41.6%	Small Cap 27.2%	REITs 8.6%	Int'l Stocks 18.8%	Mid Cap 35.2%	Large Cap 13.5%	Large Cap 1.3%	Mid Cap 20.5%	Int'l Stocks 25.1%	Bonds 0.1%	Mid Cap 13.4%
Mid Cap 37.6%	Mid Cap 26.3%	Bonds 7.7%	REITs 17.6%	Large Cap 32.3%	Mid Cap 9.4%	Bonds 0.5%	Comdty 12.9%	Large Cap 21.7%	TIPS -1.4%	Large Cap 13.0%
REITs 30.1%	EM 16.5%	Large Cap 1.9%	Large Cap 16.0%	Int'l Stocks 21.4%	Bonds 6.0%	Cash -0.1%	Large Cap 12.0%	Mid Cap 15.9%	Large Cap -4.6%	REITs 12.1%
Int'l Stocks 27.0%	Comdty 16.2%	Small Cap 1.1%	Small Cap 15.7%	REITs 2.3%	Small Cap 5.5%	Int'l Stocks -1.0%	EM 10.9%	Small Cap 13.1%	REITs -6.0%	EM 6.6%
Large Cap 26.4%	Large Cap 15.1%	Cash 0.0%	Mid Cap 15.2%	Cash -0.1%	TIPS 3.6%	TIPS -1.8%	REITs 8.6%	REITs 4.9%	Small Cap -8.6%	Int'l Stocks 5.8%
Comdty 20.1%	Int'l Stocks 8.2%	Mid Cap -1.5%	TIPS 6.4%	Bonds -2.0%	Cash -0.1%	Small Cap -1.8%	TIPS 4.7%	Bonds 3.6%	Mid Cap -11.3%	TIPS 3.3%
TIPS 8.9%	Bonds 6.4%	Int'l Stocks -12.3%	Bonds 3.8%	EM -3.7%	EM -3.9%	Mid Cap -2.5%	Bonds 2.4%	TIPS 2.9%	Comdty -13.1%	Bonds 3.1%
Bonds 3.3%	TIPS 6.1%	Comdty -14.0%	Cash 0.0%	TIPS -8.5%	Int'l Stocks -6.2%	EM -16.2%	Int'l Stocks 1.4%	Comdty 0.7%	Int'l Stocks -13.8%	Cash 0.2%
Cash 0.3%	Cash 0.0%	EM -18.8%	Comdty -2.1%	Comdty -11.1%	Comdty -18.6%	Comdty -28.2%	Cash 0.1%	Cash 0.7%	EM -15.3%	Comdty -4.9%

Funds: EEM, VNQ, MDY, SLY, SPY, EFA, TIP, AGG, DJP, BIL

Over extended periods, it would have been beneficial to diversify into emerging markets.

	MSCI EM	S&P 500
1988-1993	545.4%	128.7%
1994-1998	-38.5%	191.3%
1999-2007	420.1%	37.5%
2008-2018	22.2%	126.0%
1988-2018	11.0%	10.2%

Current valuations

As of last week –

- S&P 500 trades at 14 times projected 2019 earnings
- MSCI Europe Index at 12.4 times 2019 projected earnings
- MSCI Emerging markets Index at 10.5 times projected 2019 earnings

What valuation multiple do you put on foreign markets?

How to value foreign markets?

Consider the following facts -

- In 2015, China replaced a 1,300 ton bridge in 43 hours
- In 2015, China was adding another billionaire a week
- China built 2.6 million miles of roads between 1996 and 2016
- Between 2011 and 2013, China used more cement than the U.S. did in the entire 20th century
- In 2011, China built a 57-story skyscraper in 19 days
- China is the largest trading partner for over 130 countries
- Since the great recession, 40% of global growth occurred in China

How did the Chinese market perform in those years? (MSCI China vs S&P 500)



Which “neighborhood” do you want to invest in?



What do sectors compositions of markets tell us?

Sector	VEU	VWO	VOO	VTI
Financials	25.20%	29.10%	13.40%	19.40%
Consumer Goods	14.70%	15.20%	17.30%	7.90%
Industrials	13.20%	11.40%	9.20%	12.90%
Consumer Services	8.90%	9.80%	9.90%	13.60%
Health Care	8.80%	8.70%	15.60%	13.90%
Technology	7.90%	8.00%	20.10%	19.50%
Oil & Gas	7.10%	7.30%	5.30%	5.00%
Basic Materials	6.90%	4.40%	2.70%	2.50%
Telecommunications	3.90%	3.10%	10.10%	2.00%
Utilities	3.40%	3.00%	3.30%	3.30%

Shift in sector composition of the US market between 1900 and 2018

Sector	U.S. Stock Market (1900 share)	U.S. Stock Market (2018 share)
Finance	20%	19%
Transports	38%	2%
Utilities	6%	3%
Consumer Discretionary	4%	10%
Real Estate	1%	3%
Industrials	5%	8%
Materials	8%	5%
Consumer Staples	5%	8%
Energy	8%	7%
Communications	5%	14%
Information Tech	0%	12%
Health Care	0%	9%

As of 2018, the market is more varied than it's ever been.

Questions to ponder -

- Are you investing globally?, Are you investing enough?
- If you are not investing international, why not?
- What should be your time horizon?
- What valuation multiple would you put on foreign vs US stocks?
- How much international allocation is optimum?
- How often should you rebalance portfolio?

- Discussion