## Prelude

Investing should be made simple, but not simpler.

TC Lee 12-15-2016
Talk at CACS

## 股市投資方法很多，可說五花八門

－Index Funds and index ETFs
－Dow Dogs
－Sector Rotation via ETFs／index funds
－Stock picking
－Buy and Hold（Warren Buffet is the master）
－Dual momentum investing（Gary Antonacci）
－Hedging（long and Short and use of options）

## 本講分兩大段：

1．股市簡易投資策略
2．但是別以為股市簡單

## Acronyms:

DJIA: Dow Jones Industrial Average
SP500: Index of Standard and Poor 500 companies
NASDAQ index: the Nasdaq index of 3000 plus companies
ETF: Exchange traded Fund, consisting of a basket of stocks with given characteristics.
Index Fund: A mutual Fund that tracks an index or a sector SPY: an ETF that tracks the SP500. IVV and VOO are equivalent ETFs. FUSVX: A Fidelity index fund that tracks the SP500, just like SPY.
QQQ: an ETF that tracks the 100 large, growth oriented companies in NASDAQ,. It does not include the financial companies, energy companies, materials cos, and REITs, though.
XLF: a S\&P sector ETF that tracks the financial sector
XLE: a S\&P sector ETF that tracks the energy sector
XLV: a S\&P sector ETF that tracks the healthcare sector
XLK: a S\&P sector ETF that tracks the information sector
XLP: a S\&P sector ETF that tracks the Consumer staples sector
XLY: a S\&P sector ETF that tracks the consumer discretionary sector
XLI: a S\&P sector ETF that tracks the industrial sector
XLU: a S\&P sector ETF that tracks the utility sector
XLB: a S\&P sector ETF that tracks the materials sector

DJIA $=\left(\sum P_{i}\right) / d_{\text {DJA }}$
$P_{i}=$ Price of the stock $\quad d_{\text {DJIA }}=$ divisor
$i=1,2 \ldots .30,30$ companies selected by a panel at Wall Street Journal
SP500 Index $=\left(\Sigma N_{i}{ }^{*} P_{i}\right) / d_{\text {SP500 }}$
Where $\mathrm{N}_{\mathrm{i}}=$ Number of floating shares in the market
$P_{i}=$ Price of the stock $\quad d_{\text {SP500 }}=$ divisor
$i=1,2 \ldots .505,500$ large companies selected by Standard and Poor Corp
NASDAQ Index $=\left(\Sigma N_{i}{ }^{*} P_{i}\right) / d_{\text {nasdq }}$
Where $\mathrm{N}_{\mathrm{i}}=$ Number of floating shares in the market
$P_{i}=$ Price of the stock $\quad d_{\text {SP500 }}=$ divisor
$i=1,2 \ldots .3000,3000$ large companies selected by the National Association of
Securities Dealers (NASD) to enable investors to trade securities on a computerized, speedy and transparent system, and commenced operations on February 8, 1971.

All indices are updated every 15 seconds in the market. Divisor will be adjusted to guarantee continuity as a result of stock split and/or stock replacement.

## SIMPLE METHOD

- Diversification using mainly ETFs and index funds covering a large portion of the market ; a side benefit is low management fees
- Buy and Hold for the long term
- Ignore the Not So Simple


## NOT SO SIMPLE METHODS

- Deciding the proportion of stocks and bonds and cash is not so simple
- Need confidence in the future prosperity of Corporate America
- Volatility is not the same as real correction. How do you distinguish them?
- Sector weighting can be tricky also
- Pay attention to Economic Indicators
- Develop a broad understanding of US and International Economies, mainly, US, China and EU. Try to grasp the implications of Brexit, China's economy transformation, and the Trump Surprise, etc.



## Could actively managed funds help you beat the market?

Consider what's happened over the past 15 years ${ }^{1}$,
Active stock fund managers
$19 \%$ outperformed benchmarks.
$81 \%$ underperformed benchmarks.

## Active bond fund managers

14\% outperformed benchmarks.
86\% underperformed benchmarks.
When you're trying to track the markets and not beat them, you can worry less about how accurate your predictions may be.

Footnote ${ }^{1}$ Sources: Vanguard calculations, using data from Morningstar, Inc. Based on funds' excess returns relative to their prospectus benchmark for the 15 -year period ending December 31, 2015.

| Company | Price <br> Change |
| :--- | ---: |
| AMC Networks | $-33.3 \%$ |
| Apple | -8.0 |
| Celgene | 7.7 |
| CVS Health | -19.6 |
| Delta Air Lines | -4.0 |
| Discover Finl Services | 20.7 |
| Electronic Arts | 7.4 |
| Foot Locker | 11.8 |
| General Motors | 0.5 |
| Mohawk Industries | 1.1 |
| Average | $\mathbf{- 1 . 6}$ |
| S\&P 500 | $\mathbf{4 . 8}$ |
|  | Source: Bloomberg |

Barron's 2016 picks underperform the market as of 12/02/2016 The market average beats the Barron's by a whopping 6\%.

| Stock | Weight | Amount |
| :--- | ---: | :--- |
| Apple | $3.10 \%$ | $\$ 6,557,889,442$ |
| Microsoft | $2.43 \%$ | $\$ 5,151,314,506$ |
| Exxon Mobil | $1.86 \%$ | $\$ 3,940,968,793$ |
| Johnson \& Johnson | $1.60 \%$ | $\$ 3,389,266,466$ |
| AMAZON.COM | $1.59 \%$ | $\$ 3,362,218,905$ |
| Berkshire Hathaway INC. Class B | $1.55 \%$ | $\$ 3,287,903,458$ |
| J.P. Morgan Chase \& CO. | $1.47 \%$ | $\$ 3,118,297,577$ |
| General Electric Company | $1.45 \%$ | $\$ 3,073,408,184$ |
| Facebook INC. Class A | $1.45 \%$ | $\$ 3,073,751,010$ |
| AT\&T | $1.23 \%$ | $\$ 2,608,208,333$ |
| Wells Fargo \& Company | $1.22 \%$ | $\$ 2,593,038,426$ |
| Alphabet INC. Class A | $1.19 \%$ | $\$ 2,515,238,316$ |
| Alphabet INC. Class C | $1.16 \%$ | $\$ 2,458,762,495$ |
| Procter \& Gamble Company | $1.14 \%$ | $\$ 2,416,524,574$ |
| Bank of America | $1.08 \%$ | $\$ 2,294,126,413$ |
| Chevron | $1.08 \%$ | $\$ 2,289,797,244$ |
| Verizon Communications | $1.06 \%$ | $\$ 2,238,911,334$ |
| Pfizer | $0.98 \%$ | $\$ 2,083,964,931$ |
| Merck \& CO. | $0.88 \%$ | $\$ 1,865,819,254$ |
| Comcast Corporation Class A | $0.86 \%$ | $\$ 1,816,763,889$ |

## S\&P 500 Current Sector Weightings (\%)



Stock

| Apple | $10.87 \%$ | $\$ 4,396,053,416$ |
| :--- | ---: | ---: |
| Microsoft | $8.54 \%$ | $\$ 3,454,753,583$ |
| AMAZON.COM | $6.74 \%$ | $\$ 2,724,736,046$ |
| Facebook | $5.10 \%$ | $\$ 2,062,712,940$ |
| Alphabet | $4.76 \%$ | $\$ 1,923,585,624$ |
| Alphabet | $4.18 \%$ | $\$ 1,691,446,595$ |
| Intel | $3.00 \%$ | $\$ 1,211,827,302$ |
| Comcast | $2.96 \%$ | $\$ 1,196,841,073$ |
| Cisco Systems | $2.69 \%$ | $\$ 1,086,063,400$ |
| Amgen | $1.95 \%$ | $\$ 788,054,007$ |
| Kraft Heinz CO/THE | $1.82 \%$ | $\$ 736,452,431$ |
| Qualcomm | $1.81 \%$ | $\$ 733,719,563$ |
| Gilead Sciences | $1.78 \%$ | $\$ 718,217,349$ |
| Celgene | $1.70 \%$ | $\$ 688,483,417$ |
| Walgreens Boots Alliance | $1.64 \%$ | $\$ 663,880,020$ |
| Starbucks | $1.51 \%$ | $\$ 612,251,787$ |
| Priceline Group INC/THE | $1.36 \%$ | $\$ 548,625,656$ |
| Texas Instruments | $1.34 \%$ | $\$ 542,252,286$ |
| Charter Communications | $1.32 \%$ | $\$ 534,706,010$ |
| Biogen | $1.27 \%$ | $\$ 515,488,991$ |

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## QQQ - PowerShares QQQ

Equity - US Equity

| Overview | Performance | Portfolio | Distributions | Documents |
| :--- | :--- | :--- | :--- | :--- |

Sector Allocation


## Fidelity Index Funds

Premium Share Class - $\$ 10 \mathrm{~K}$ Minimum Investment

| Fund Name |
| :--- |
| Fidelity ${ }^{8} 500$ Index Premium (FUSVX) |
| Fidelity ${ }^{8}$ Total Market Index Premium (FSTVX) |
| Fidelity ${ }^{8}$ Extended Market Index Premium (FSEVX) |
| Fidelity ${ }^{8}$ Large Cap Growth Index Prm (FSUPX) |
| Fidelity ${ }^{8}$ Large Cap Value Index Prm (FLCHX) |
| Fidelity Mid Cap Index Premium (FSCKX) |
| Fidelity Small Cap Index Premium (FSSVX) |
| Fidelity ${ }^{8}$ International Index Premium (FSIVX) |
| Fidelity Glo bal ex US Index Premium (FSGDX) |
| Fidelity ${ }^{8}$ Total Intl Index Premium (FTIPX) |
| Fidelity Emerging Markets Index Premium (FPMAX) |
| Fidelity Real Estate Index Premium (FSRVX) |
| Fidelity ${ }^{8}$ US Bond Index Premium (FSITX) |
| Fidelity Short-Term Treasury Bd Index Prm (FSBAX) |
| Fidelity Intermediate Trs Bd Index Prem (FIBAX) |
| Fidelity Long-Term Treasury Bd Index Prem ( FLBAX) |

## Vanguard Index Funds

Admiral Share Class $-\$ 10 \mathrm{~K}$ Minimum Investment

| Comparison Based on Expense Ratio |  | Fund Name <br> Vanguard 500 Index Admiral (VFIAX) |
| :---: | :---: | :---: |
| . $045 \%$ | .050\% |  |
| . $045 \%$ | .050\% | Vanguard Total Stock Mkt Index Admiral (VTSAX) |
| . $070 \%$ | .090\% | Vanguard Extended Market Index Admiral (VEXAX) |
| . $070 \%$ | . $080 \%$ | Vanguard Growth Index Admiral (VIGAX) |
| . $070 \%$ | .080\% | Vanguard Value Index Admiral (VVIAX) |
| . $070 \%$ | .080\% | Vanguard Mid Cap Index Admiral (VIMAX) |
| . $070 \%$ | .080\% | Vanguard Small Cap Index Admiral (VSMAX) |
| . $080 \%$ | . $090 \%$ | Vanguard Developed Markets Index Admiral (VTMGX) |
| . $110 \%$ | . $130 \%$ | Vanguard FTSEAll-Wld ex-US Index Admiral (VFWAX) |
| . $110 \%$ | .120\% | Vanguard Total Intl Stock Index Admiral (VTIAX) |
| . $140 \%$ | . $150 \%$ | Vanguard Emerging Mhts Sto ck Index A dmiral (VEMAX) |
| . $090 \%$ | . $120 \%$ | Vanguard REIT Index Admiral (VGSLX) |
| . $050 \%$ | .060\% | Vanguard Total Bond Market Index Admiral (VBTLX) |
| . $090 \%$ | .100\% | Vanguard Short-Term Govt Bd Index Admiral (VSBSX) |
| . $090 \%$ | . $100 \%$ | Vanguard Interm-Tm Govt Bd Index Admiral (VSIGX) |
| . $090 \%$ | . $100 \%$ | Vanguard Long-Term Govt Bd Index Admiral (VLGSX) |

Expense ratio information as of July 1, 2016 for Fidelity; June 28, 2016 for Vanguard

Index Funds from Fidelity and from Vanguard, 2 premier brokerage houses

Expense ratio information as of July 1, 2016 for Fidelity; June 28, 2016 for Vanguard
Fidelity and Vanguard offer other share classes of these funds with different investment minimums and expense ratios.
The following funds have a short-term redemption fee for fee eligible shares held less than 90 days: Fidelity Total Market Index Fund .50\%, Fidelity Extended Market Index Fund .75\% Fidelity Small Cap Index Fund 1.5\%, Fidelity International Index Fund 1.00\%, Fidelity Glo bal ex US Index Fund 1.00\%, Fidelity Total International Fund 1.00\%, Fidelity Emerging Markets Index Fund 1.5\% and Fidelity Real Estate Index Fund. $75 \%$. The Fidelity Mid Cap Index Fund has a short-term redemption fee of. $75 \%$ for fee-eligible shares held less than 30 days.

## Fidelity Sector ETFs

## Fund Name

| Fidelity ${ }^{8}$ MSCI Consumer Discret ETF (FDIS) |
| :--- |
| Fidelity ${ }^{8}$ MSCI Consumer Staples ETF ( FSTA) |
| Fidelity ${ }^{8}$ MSCI Energy ETF (FENY) |
| Fidelity ${ }^{8}$ MSCI Financials ETF (FNCL) |
| Fidelity ${ }^{8}$ MSCI Health Care ETF (FHLC) |
| Fidelity ${ }^{8}$ MSCI Industrials ETF (FIDU) |
| Fidelity ${ }^{8}$ MSCI Information Tech ETF (FTEC) |
| Fidelity ${ }^{8}$ MSCI Materials ETF (FMAT) |
| Fidelity ${ }^{8}$ MSCI Telecommunication SVC ETF (FCOM) |
| Fidelity ${ }^{8}$ MSCI Utilities ETF (FUTY) |
| Fidelity ${ }^{8}$ MSCI Real Estate ETF (FREL ) |

## Vanguard Sector ETFs

| Comparison Based <br> on Expense Ratio | Fund Name |  |
| :--- | :---: | :--- | :--- |
| $.084 \%$ | $.100 \%$ | Vanguard Consumer Discretionary ETF (VCR) |
| $.084 \%$ | $.100 \%$ | Vanguard Consumer Staples ETF (VDC) |
| $.084 \%$ | $.100 \%$ | Vanguard Energy ETF (VDE) |
| $.084 \%$ | $.100 \%$ | Vanguard Financials ETF (VFH) |
| $.084 \%$ | $.090 \%$ | Vanguard Health Care ETF (VHT) |
| $.084 \%$ | $.100 \%$ | Vanguard Industrials ETF (VIS) |
| $.084 \%$ | $.100 \%$ | Vanguard Information Technology ETF (VGT) |
| $.084 \%$ | $.100 \%$ | Vanguard Materials ETF (VAW) |
| $.084 \%$ | $.100 \%$ | Vanguard Telecommunication Services ETF (VOX) |
| $.084 \%$ | $.100 \%$ | Vanguard Utilities ETF (VPU) |
| $.084 \%$ | $.120 \%$ | Vanguard REIT ETF (VNQ) |

Expense ratio information as of July 1, 2016 for Fidelity; June 28, 2016 for Vanguand

## A hypothetical all ETF portfolio to hold for 10 years

| Symbol | Weight |
| :--- | :--- |
| SPY | $30 \%$ |
| QQQ | $40 \%$ |
| PFF | $15 \%$ |
| FFC | $15 \%$ |


| Symbol | 10-year Return-annualized | Current Yield |
| :--- | :--- | :--- |
| SPY | $6.62 \%$ | $2.1 \%$ |
| QQQ | $11.6 \%$ | $1.0 \%$ |
| PFF | $5.56 \%$ | $5.76 \%$ |
| FFC | $10.54 \%$ | $8.44 \%$ |

If history repeats, you will have an annual return of 8.3\%
Remember: past performance is no guarantee of future returns


Comparison of stock prices of SPY, QQQ and two preferred stock ETFs

## My investment experience with SOAR Endowment Fund

- Minimize risk, because our mantra is capital preservation. We need the capital to sustain scholarships.
- Use a mixture of index funds, stocks, and bond like funds. Adjust weight depending on my view of the economy in the next year or two. Today we are $30 \%$ income ETFs, $50 \%$ stocks and $20 \%$ cash. As late as August, 2016, we were $50 \%$ income ETFs, $40 \%$ stocks.
- Panic in 2015 August
- The fund started in May, 2014. We have spent $\$ 115 \mathrm{~K}$ on scholarships, and our asset is still more than the total amount of donations. The market in the past two years has been pretty tough.
- Looking to 2017, I see Trump policies as the mother of all uncertainties. I am holding my cup, while studying the tea leaves.


## 誰能預料股市之大起大落？

股票市場的價格：
是投資界集體的信心指數。

雖然可以衡量之數據很多，但常發出不同的信號，甚至互相茅盾，故見仁見智，有不同的看法，故而股市有漲有落，有時高深莫測。

網路上和媒體常報導大投資人和經濟學家的看法。一般說來，投資人的看法比較準確細膩，因有切身利益投入。 但經濟學家於宏覌比較專業，因為除了經濟層面，更需了解政治層面，包括國際間的geopolitics。可惜他們由於不同的背景和個性，意見也常有很大的 diversity。

能預料股市大起大落的人是 鳳毛麟角，但是人們永不停的猜測股市的未來，人性就是如此。



## X=Stocks <br> $X+Y+Z=100 \%$ <br> $Y=$ Bonds <br> Z=Cash

Allocation of $X, Y$ and $Z$ is not easy

Important things to pay attention:

- Fed Policy
- Economy Leading Indicators
- PMI is very important
- Inflation or deflation
- The dollar Strength: good and bad
- EPS forecast


The Fed Chairs are almost as powerful as the presidents,


## Warren Buffet Invest Rules—Not So Simple

1. Use the 50-year rule. Before investing in a company, ask yourself if the business will still be thriving in 50 years.
2. Look for stable companies.
3. Take advantage when the market misprices good companies.
4. "It's better to buy a wonderful company at a fair price than a fair company at a wonderful price."
5. Buy stocks you would want to hold if the market were to close for 10 years.
6. Invest in companies with a long history. Take a look at Berkshire's five largest stock holdings: Wells Fargo, Kraft Heinz, Coca-Cola, IBM, and American Express.
7. Identify a durable competitive advantage before buying a stock.Also known as a "wide moat," Buffett likes to invest in companies that have an advantage over their peers that will stand the test of time.
8. Maintain a focused portfolio.
9. Look for shareholder-friendly management. These include a clear and justified dividend policy, executives who own a lot of stock themselves, reasonable executive compensation, and open and frequent communication with shareholders.

|  | Berkshire Hathaway | S\&P 500 | Annual <br> Outperformance |
| :---: | :---: | :---: | :---: |
| 1960s | 28.3\% | 5.0\% | 23.3\% |
| 1970s | 22.2\% | 5.9\% | 16.3\% |
| 1980s | 39.1\% | 17.3\% | 21.7\% |
| 1990s | 20.5\% | 18.0\% | 2.5\% |
| 2000s | 5.9\% | -1.0\% | 6.8\% |
| 2010s | 17.9\% | 15.3\% | 2.6\% |
| 1965-2014 | 21.7\% | 9.8\% | 11.8\% |

## Leading Economic Indicators: (used by the Conference Board)

- PMI: purchase manger’s index
- Average hours worked per week
- Weekly jobless claims
- New orders for consumer goods
- New orders for capital goods
- Vendors diffusion index
- Building permits
- M2 money supply
- SP500 index
- Consumer confidence-Michigan index

Can get numbers from The Conference Board web site, and from Bloomberg web site

Change in Leading Economic Indicators Published by Conference Board

| Country/Region | Change | Date |
| :---: | :---: | :---: |
| Australia | $\Delta_{0.5 \%}$ | 21 Nov. 2016 |
| Brazil | - ${ }_{0.1 \%}$ | 17 Nov. 2016 |
| China | - $0.8 \%$ | 21 Nov. 2016 |
| Euro Area | - $0.3 \%$ | 22 Nov. 2016 |
| France | - $0.7 \%$ | 17 Nov. 2016 |
| Germany | V $0.2 \%$ | 21 Nov. 2016 |
| India | V $0.3 \%$ | 15 Nov. 2016 |
| Japan | - $0.3 \%$ | 09 Nov. 2016 |
| Korea | - 0.0\% | 10 Nov. 2016 |
| Mexico | V $0.8 \%$ | 16 Nov. 2016 |
| Spain | - $0.3 \%$ | 10 Nov. 2016 |
| U.K. | - $0.1 \%$ | 16 Nov. 2016 |
| U.S. | - $0.1 \%$ | 18 Nov. 2016 |

Purchasing Managers' Index - PMI
The Purchasing Managers' Index (PMI) is an indicator of the economic health of the manufacturing sector. The PMI is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. The purpose of the PMI is to provide information about current business conditions to company decision makers, analysts and purchasing managers.



Services Sector


FRED -10 -vear Treasury Constant Maurity Mius 3. .Month Treasur Constant Masurity


Interest rate spread is a good leading indicator of recessions



OPEN
DAY RANGE
101.100
100.830-101.480

PREVIous close
100.890

Another Trump effect: the dollar is rising quickly

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Almice from pirs

$11 / 20$

$$
\begin{array}{ll}
132+15 & 12847 \\
=147 &
\end{array}
$$

$11 / 17 \quad 118^{19} \quad 832.5147 \%^{56} \quad 130,90$
$\begin{array}{llllll}11 / 24 & 118,22 & 132.61 & 148,1 & 131^{23} \\ 1219 & 132,69 & 148,21 & 131.57\end{array}$ suTtue the jump
$12 / 1 \quad 118,19 \quad 132,69 \quad 148.21 \quad 131.57$

Kiplinger forecasts 2.1\% GDP growth and 11\% EPS growth in 2017

## Trump presidency Outlook

－He will adopt a stimulative fiscal policy，mainly Infrastructure spending and tax reduction for corporations and individuals．
－The economy will initially grow faster，but
－The government debt will increase，and inflation is likely to accelerate．Therefore the Fed has to increase interest rate，causing the dollar to go higher．Higher dollar and higher interest rate may cause a US recession at some time in the future，maybe a year or two．
－The government debt，which is already at $110 \%$ of GDP，will continue to rise．High debt will weaken the US economy and the US World leadership position．
－Trade talks．Will renegotiate trade deals．He will abolish TPP，and may embark upon one－on－one negotiations with countries like China，Mexico，Japan，EU，etc．His commerce secretary Wilbur Ross is a shrewd business man versed in negotiations．He is a master at buying beat down properties，and make big bucks．But Trump cannot ignore WTO rules．He will use the US economy size and military power to full advantage in the negotiations．
－He＇ll also try to bring manufacture jobs back to US．It does not seem to make economic sense when the labor cost of Mexico for one day is about the same as labor cost for one hour in US．My view is that， just as water finds the lower places，manufacturing will find the cheaper labor．You cannot fight gravity．
－Immigration policy is a big problem．The US farming and construction business relies on the Mexico immigrants and the high tech business depends on $\mathrm{H}-1$ Visa immigrants from many places in the world like Europe，India and China．The US is already near full employment；is it wise to stop immigrants from entering？
－Trump just finished appointing major cabinet posts，and may get cooperation from the Congress．Their policies may take about 6 months to a year to play out．This is an important time to develop the big picture view about the emerging Trump era．
－Trump seems like a bully businessman：連唬帶騙

## Total USA Debt vs GDP

| 咅 | 1 Y | 5 Y | 10 Y | MAX | Ilv |
| :--- | :--- | :--- | :--- | :--- | :--- |

Export Data $\rightleftarrows$ API Access

US GOVERNMENT DEBT TO GDP


## Compare.

It Forecast $\boldsymbol{M}$ AlertMe $\dot{\sim}$ Watch Embed

## Combined Gross Public Debt US from FY 1900 to FY 2020




US HOUSEHOLDS DEBT TO GDP


## How about China?

- The most difficult hurdle to economy transformation (from export driven to internal consumption ) lies in Big State owned Corp debt level, more than 200\% of China's GDP and still increasing today.
- Keeping Employment level healthy while optimizing the efficiency of the big corps is a huge challenge. Social stability is top priority compared to paying down debt. If we look at the chart of GDP growth vs Debt growth among nations, China is one of the worst.
- Loans of shady banks. Many of these loans may default, resulting in a large debt crisis. It could cause a housing bubble.
- Big Hope: The OBOR Initiative. But the progress is slow due to geo-economic and geopolitical reasons.
- One major advantage: Leadership vision and energy of the young generation.
- Another advantage: the large pool of bank deposits, mostly peoples' savings, support the debt level, which mitigates the chance of a monetary crisis.
- The size of the Chinese economy, and the large foreign reserve play to China's advantage. The government debt level is modest, at about 60\% of GDP.
- The optimistic scenario is that China's GDP growth will gradually slow down without a hard landing while the transformation takes root.
- Will Trump's trade and foreign policy throw a curve ball to the optimistic scenario?

| 160.0 |  | 246.8 <br> 165.1 |
| :---: | :---: | :---: |
| 104.7 | Corporations |  |
| 17.8 | Households | 40.5 |
| 14.6 | Government | 22.1 |
| 22.9 | Banks | 19.1 |
| 2005 |  | 20 |
|  | Debt as \% GDP |  |

## Breakdown of China's Debt

Debt Growth vs GDP Growth

Debt level vs. economic advancement (2005 to 2015)

The graph shows the efficacy of driving growth with debt among nations. The slope is a good efficacy indicator


## China's Labor is Less Productive

Rates are less than a tenth of European, Japanese and U.S. levels

- Annual labor productivity in 2015


Sources: International Labour Organization, National Bureau of Statistics of China
Data are in constant price of 2005
Bloomberg

## Trouble Ahead for China?

Massive debt creation and real-estate speculation could threaten the growith of China's economy. Total nonfinancial borrowing is approaching $330 \%$ of GDP, and housing prices are rising by double digits in major cities. Neither trend looks sustainable.


Source: Barrons, 11-07-16

## of debt to GDP in just the last 5 years:

Fig. 13: China: Debt-to-GDP ratio (breakdown by sectors)

| (\%) | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Government | 39 | 40 | 41 | 40 | 43 | 41 | 49 | 49 | 50 | 52 | 53 | 58 |
| Household | 18 | 18 | 17 | 16 | 19 | 18 | 24 | 28 | 28 | 30 | 34 | 36 |
| Enterprises - non-financials | 109 | 103 | 95 | 100 | 97 | 98 | 99 | 101 | 124 | 113 | 128 | 123 |
| Financials | 9 | 9 | 11 | 12 | 13 | 13 | 15 | 13 | 16 | 18 | 18 | 18 |
| Total | 175 | 170 | 164 | 170 | 172 | 170 | 187 | 192 | 204 | 215 | 221 | 236 |

Total debt was in decline until very recently
Cumulative change from 2003-2014 (ppt)

| Government | 1 | 2 | 1 |  | 2 | 10 | 10 | 11 | 13 | 14 | 19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household | 0 | -1 | -2 |  | 0 | 6 | 10 | 10 | 12 | 16 | 18 |
| Enterprises - non-financials | -6 | -14 |  | -12 | -11 | -10 | -8 | 15 | 4 | 19 | 14 |
| Financials | 0 | 2 |  | 4 | 4 | 6 | 4 | 7 | 9 | 9 | 9 |
| Total | -5 | -11 | -5 | -3 | -5 | 12 | 17 | 29 | 40 | 46 | 61 |

Nomura

In 2005, China's debt was $164 \%$ of GDP. Now it's $236 \%$ of GDP. It's not the scale that's worrying. Many countries have debt that is twice GDP. It's the speed at which it is changing, compared to the slower pace of economic growth.

## So who's on the hook?

As with Japan, China's debt is largely locally funded and is backed by a huge hoard of domestic deposits. That makes any Asian financial crisis-style blow-up unlikely.


Figures for 2015, except Japan (2014)

How is the debt load sustained


China's PMI data in 2016

## My Daily Routine as an investor

- Watch the stock market and read web news for an hour or more in the morning. Trade as needed. My personal trades involve the use of options.
- Watch PBS's Nightly Business News in the evening at 6:30 PM. Susan Herera, and Tyler Mathison. Very good summary of the day events.
- Read Barrons on Saturday morning for about 2 hours.
- I am not into charts, though I have read several books about charting.
- Useful Books:

Stocks for the long Run, $5^{\text {th }}$ edition, by Jeremy Siegel Technical analysis of the financial Market, by John Murphy

- Magazines: Barron's; Investor Daily; Wall St. Journal; Kiplinger letters



## Outflow Pressure Grows

China currency holdings fall fastest since January amid depreciation pressures
■Foreign Reserves (USD) (R1) China Renminbi Spot (L1)


Foreign Reserve follows RMB: effort to curb the outflow

## Options

Calls: Right to buy a stock or an ETF at a set price at a set time in the future
Puts: Right to sell a stock or an ETF at a set price at a set time in the future

Both Calls and Puts can be bought or sold. You pay a premium when you buy, and you get paid a premium when you sell.

Example: Amazon, today (12/14) price is $\$ 768$ per share
Call Jan 20-2017, strike 780, premium $=\$ 19$ per share
Put Jan 20-2017, strike 740, premium=\$12 per share
They can increase the value of the portfolio if properly applied.

