GDP ... Profits ... Equities

All That Matters is Growth

And Policies That Promote Growth

- Three Invariant Rules.
- **❖** What Happened? Why?
- **A Recessions: The Happen. They End.**
- **Big Positives.** Big Risks.
- **A Map of Possible Outcomes.**

Three Invariant Rules

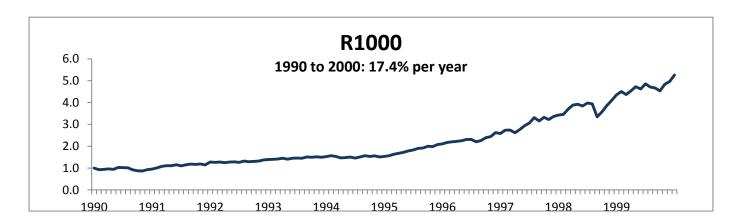
Real GDP Growth = P + N

P = productivity growth

N = working population growth

- 2. Equity returns = Δ EPS + Δ PE + dividends
- 3. Never fight the Fed, ECB, or a liquidity flood

When Earnings Grow and PEs Expand

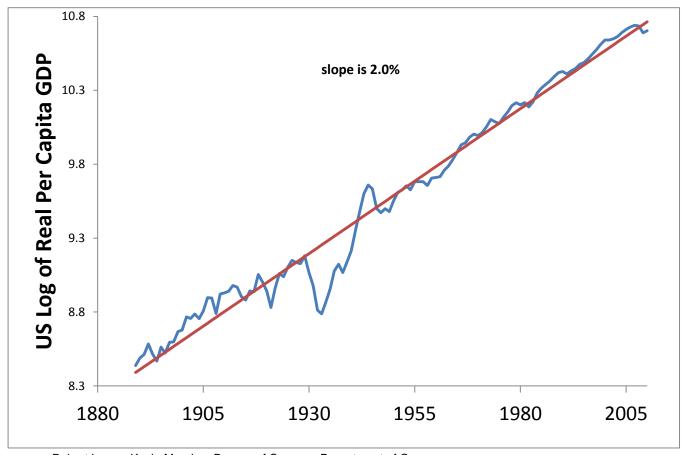


| Dec. 31, 1990 to Dec. 31, 2000 | R1000 | R1000 Value | R1000 Growth |
|--------------------------------|-------|-------------|--------------|
| Actual Return, Annualized | 17.4% | 17.4% | 17.3% |
| | • | | |
| Earnings Growth | 9.5% | 9.6% | 6.9% |
| Multiple Change Annualized | 5.1% | 4.0% | 8.2% |
| Dividend | 2.2% | 2.9% | 1.2% |
| Estimated Annualized Return | 17.6% | 17.2% | 17.1% |
| | | | |
| P/E (Year 1) at Dec. 1990 | 14.1 | 12.3 | 16.3 |
| P/E (Year 1) at Dec. 2000 | 23.2 | 18.14 | 35.9 |

Some Perspective: The Remarkable US

Productivity growth = 2.0% since 1890 Trend GDP growth = 3.0% since 1890 Productivity growth = 2.1% since 1950

Trend GDP growth = 3.2% since 1950



source: Robert Lucas, Kevin Murphy. Bureau of Census. Department of Congress

What Happened? How Bad?

2008 - -2012

Imbalances

- US housing
- US savings
- Global savings (current account imbalances)
- Eurozone productivity, wage disparities

Events

- US housing bubble bursts
- Lehman/Reserve fund failures
- US non-bank bank run, 11% of GDP
- A sudden stop worldwide, then recession
- The Fed and FDIC save the day
- US federal fiscal stimulus; state & local austerity
- Austerity in the UK
- China and other EM stimulus
- Central Banks absorb exploding government debt
- Greece debt problems and bailout, and no growth

US QEs

- Eurozone: LTRO, ESM, ESFS, ECB
- Growing fiscal deficits
- Sovereign debt no longer risk free
- Eurozone, austerity dominates
- Greece: bank runs, default and euro future
- Contagion: Spain & Italy
- Southern Europe in recession
- Eurozone at stall speed; PMIs below 50
- UK at recession speed
- US growing, below trend
- EM growing, but slower pace--China slowing

Perspective

Eurozone 1945

100mm people < 1,500 calories/day

Communism on the rise: 40% in Italy

Life Expectancy (1950); circa 66 years

US 1929

Inflation: 0.0%

Long-term bond yield: 3.6%

GDP per capita (2005\$): \$8,106

Life expectancy: 57 years

US 1980

Inflation: 13.5%

10-year bond yield: 13.6% (February)

GDP per capita (2005\$): \$25,640

Life expectancy: 74 years

US 2010

Inflation: 1.6%

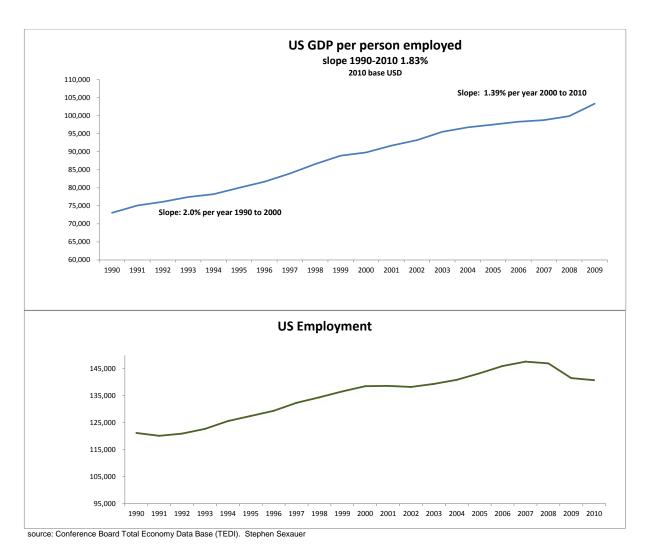
10-year bond yield: 3.3%

GDP per capita (2005\$): \$42,832

Life expectancy (2008): 78 years

Stephen Sexauer Georgia State University Economic Forecasting Center August, 2012

Here is the Challenge



7

Recessions and Growth

- Recessions happen. Recessions clear imbalances.
- Growth comes from change (productivity), not from the Fed.
- Stopping change stops growth—and keeps the imbalances.
- Productivity from:
 - Human capital
 - Physical capital = investment = profits (a good thing)
 - Improvements in technology and innovation
- Growth uses lots of energy.

Big Positives

Profits

- At all-time high as a % of GDP
- Near the long-term trend; innovation continues
- Corporate balance sheets: rebuilt/strong

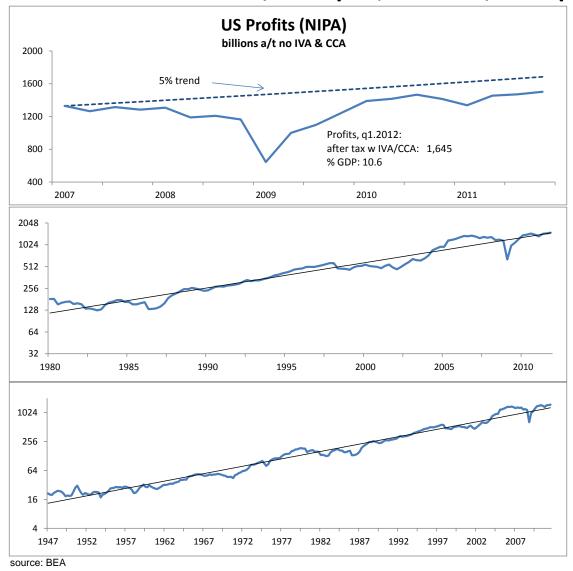
Imbalances

- \$1 trillion in bad assets written off—limited Zombie banks
- Housing trend demand is 1 million units; supply of starts is running at 480-760k; some inventory shortages
- US Savings rate: household and corporate

Energy and Manufacturing

- Energy supply: global growth constraint lessened
- Balance of payments gains
- Global political rebalancing
- US manufacturing boom

US Profits
Since Q4.2006: before tax, 3.4% p.a.; after tax, 4.1% p.a.



Energy: Global Growth Uses a Lot of It

Real GDP Growth = P + N (P = productivity. N = employment)

8 barrels of Oil = One life's work

Output per life per person: 11.2 billion gram-calories. **44 million BTUs** (think farmers in Western China, emerging markets)

60 barrels of oil = One year's work

Output per year per person: 84 billion gram-calories. **333 Billion BTUs** (think you and me, developed markets with technology)



When 2 billion-plus people in third-world economies are pursuing a better life, they will need energy to succeed. A life's work of labor for them is about 8 barrels of oil of output (BTUs). People in the developed world have working for them about of 60 barrels of oil of energy every year--from making iPhone chips to surgical scalpels to building our roads. An energy supply curve that is upward sloping and shifting to the right (driven by incentives, innovation, and technology) makes all the difference.

Energy and Tail Risk

North Dakota's Bakken Field:

2003: 10,000 b/d produced

• 2/2012: 558,000 b/d produced--55-fold increase

• Forecast: 1,200,000 by 2020

Note: OPEC "swing" capacity is 4 million b/d

Big Risks

- Japan/Southern Europe-like policies:
 - Lower productivity growth
 - Disincentives to work, save, invest
 - Limited change; slow growth; Zombie banks
- US fiscal policy:
 - The bond markets suddenly close
 - The US becomes Japan—the bond markets stay open, but the US never puts its fiscal house in order
- Eurozone Contagion
- EM slowdown: China growth collapses

Possible Equity Outcomes: A map

Long-term policy dominates all: Elections have consequences

| | Past 2008 - | Present -2012 | Future 2012 - forward | Possible Outcomes |
|--------|---|--|--------------------------|------------------------|
| Imbala | nces | O US QEs | | |
| • | US housing | Eurozone LTRO | | EM up 10-15% |
| • | US savings | Growing fiscal deficits | Growth + Deleveraging | US up 5-10% |
| • | Global savings (current account imbalances) | Sovereign debt no longer risk free | | Eurozone up 10-50% |
| • | Eurozone productivity, wage disparities | In the eurozone, austerity dominates | | |
| Events | | Greece, bank runs, and euro future | Slow Growth | Flat from here is good |
| • | US housing bubble bursts | Contagion fears: Spain & Italy | | |
| • | Lehman/Reserve fund failures | Southern Europe in recession | Debt-Deflation or | |
| • | US non-bank bank run, 11% of GDP | Eurozone at stall speed | Stagflation | Don't ask |
| • | A sudden-stop worldwide, then recession | UK at recession speed | | |
| • | The Fed and FDIC save the day | US growing, below trend | | |
| 0 | US federal fiscal stimulus; state & local austerity | EM growing, but slower pace | | |
| • | Austerity in the UK | | | |
| 0 | China and other EM stimulus | | | |
| • | Central Banks absorb exploding government debt | | | |
| • | Greece debt problems and bailout, and no growth | r | | |

Outcomes and Possible Returns

| | | Emerging Markets | Developed Markets | | | |
|-----------------------------|------|-------------------|------------------------------|-------------------------------------|--|--|
| | | All | United States | European Union | | |
| Policy Environment | | | | | | |
| Liquidity/Easing On? | | spring floods | tsunami | spring floods | | |
| Fiscal Policy Favorable? | | yes | federal: yes state/local: no | circular firing squads of austerity | | |
| Debt-to-GDP Under Control? | | for the most part | no | no | | |
| Productivity and Investment | | yes | unclear | unclear | | |
| Incentives to Hire | | yes | limted to no | austerity rules the day | | |
| Earnings Growth | | 5-10% | 5% | None-Negative | | |
| Equity Valuations | | lowerend | fair | low to your low | | |
| Equity Valuations | | lower end | fair | low to very low | | |
| Possible Equity Outcomes | up | 10%-15% | 5%-10% | 10%-50% | | |
| | down | 15%-20% | 10%-20% | as much as 40% | | |

Appendix

| | US | | | | | |
|------------------------|------|-------------------|------|------|------|------|
| | | SPX index fwd P/E | -17% | 0 | 13% | 25% |
| | Δ | EPS EPS | 10 | 12 | 13.5 | 15 |
| typical recent decline | -40% | 59.4 | -57% | -40% | -28% | -15% |
| end F11 | 0% | 99 | -17% | 0% | 13% | 25% |
| e(2012) at Mar2012 | 5% | 104 | -12% | 5% | 18% | 30% |
| e(2013) Mar2012 | 19% | 118 | 3% | 19% | 32% | 44% |

GDP growth^e: 2.5% + 2.6 inflation =~5%

Dividend yield¹: 2.3

source: Bloomberg

EU stoxx

| | | SX5E index | -20% | 0 | 20% | 40% |
|------------------------|------|----------------|------|------|-----|-----|
| | Δ | fwd P/E EPS | 8 | 10 | 12 | 14 |
| typical recent decline | -23% | 195 | -43% | -23% | -3% | 17% |
| end F11 | 0% | 253 | -20% | 0% | 20% | 40% |
| F12 | 2% | 257 | -18% | 2% | 22% | 42% |
| e(2012) at Mar2012 | 13% | 285 | -7% | 13% | 33% | 53% |
| e(2013) at Mar2012 | 30% | 329 | 10% | 30% | 50% | 70% |

GDP growth^e: $-0.5\% + \sim 2.5\%$ inflation $= \sim 2\%$

Dividend yield: 4.9

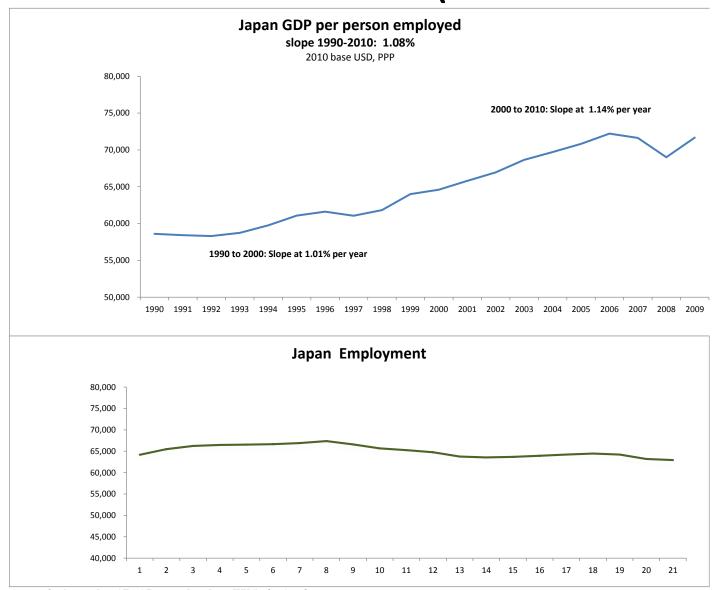
MSCI EM

| | | MXEF index fwd P/E | -10% | 0 | 10% | 20% |
|--------------------|------|-----------------------|------|------|-----|-----|
| | | EPS EPS | 9 | 10 | П | 12 |
| low 2010 | -18% | 74 | -28% | -18% | -8% | 2% |
| end F11 | 0% | 90 | -10% | 0% | 10% | 20% |
| e(2012) at Mar2012 | 9% | 98 | -1% | 9% | 19% | 29% |
| e(2013) at Mar2012 | 23% | 111 | 13% | 23% | 33% | 43% |

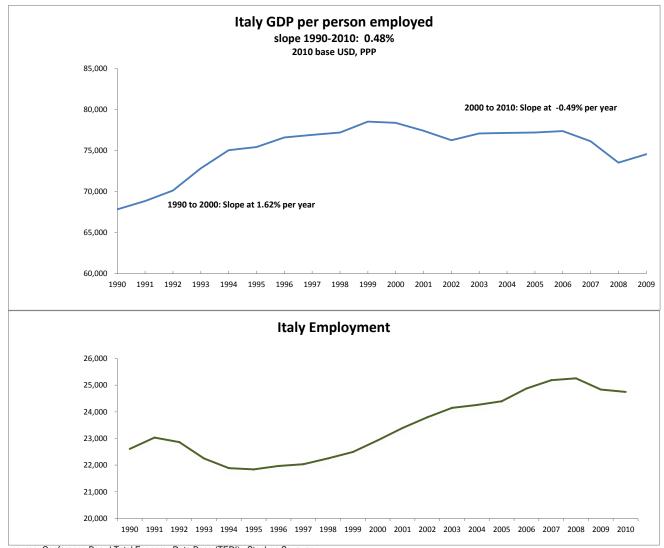
GDP growth e : 6% +5% inflation =11%

Dividend yield: 2.91

The Results of Bad Incentives (and Zombie Banks)

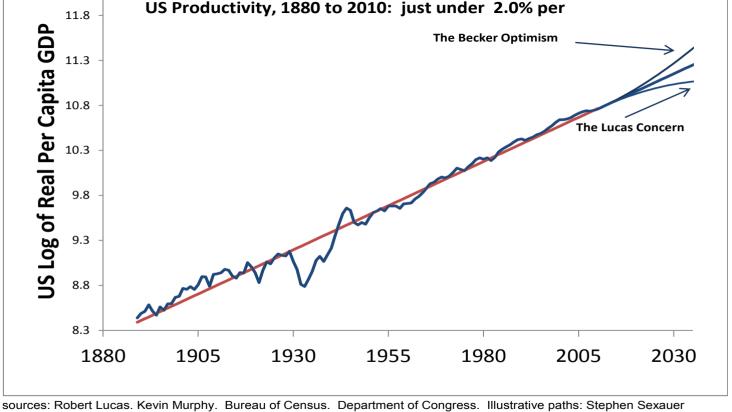


More Questionable Incentives



source: Conference Board Total Economy Data Base (TEDI). Stephen Sexauer

August, 2012



Stephen Sexauer

Allianz Global Investors (AGI) (2003 – 2012)

Stephen Sexauer has been Chief Investment Officer of AGI Solutions since inception in June, 2008, and has been a Managing Director of Allianz Global Investors of America LLC or one of its affiliates since May, 2003.

Morgan Stanley Asset Management (1989 – 2002)

Salomon Brothers: (1988 - 1989)

Mr. Sexauer holds an MBA from the University of Chicago with concentrations in economics and statistics and a BS from the University of Illinois in economics.

Economic data in this presentation are derived from internal research publicly available statistics published by Bloomberg, the U.S. Federal Reserve, the U.S. Department of Commerce and the International Monetary Fund.

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