Big Debt Crises Book Review

Part 1 - The Book

Introduction

- Ray Dalio and Bridgewater Associates
- Autobiography - Principles: Life and Work

Book Organization

- Part 1 - big debt cycle archetype (65 pages)
- Part 2 - detailed case studies (Germany 1918-1924, US 1928-1937, US 2007-2011)
- Part 3 - 48 case studies

Bubble

- It is typically the case that the worst debt bubbles are not accompanied by high and rising goods and services inflation, but by asset price inflation financed by debt growth.
- Growth of new ways of lending outside of the normal banking system-often called the "shadow banking" system-is a common feature of bubble periods.

Debt Cycle

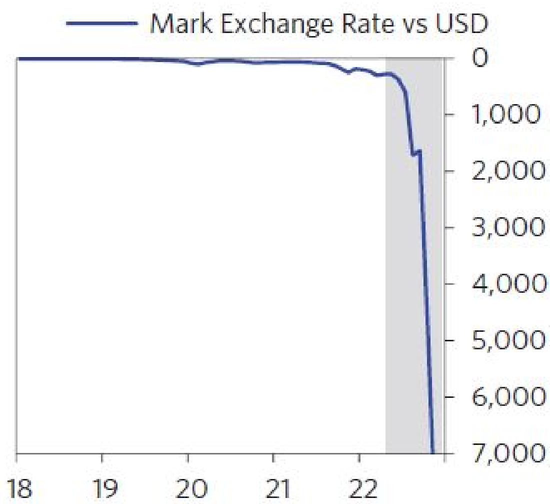
Early part, Bubble, Top, Depression" Deleveraging, Normalization

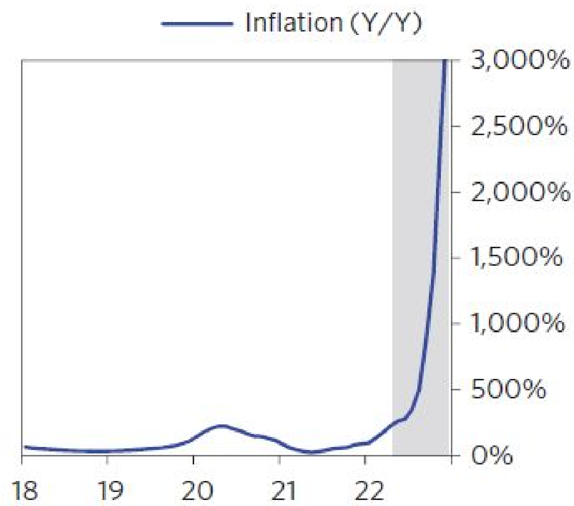
- Deflationary Debt Cycle
- Inflationary Debt Cycle

Dealing with debt crises

1. Austerity (spending less, cut benefit)
2. Debt defaults/restructurings
3. "Printing money"
4. Redistributing Wealth - raising tax on the rich

2-1 Germany 1918-1924

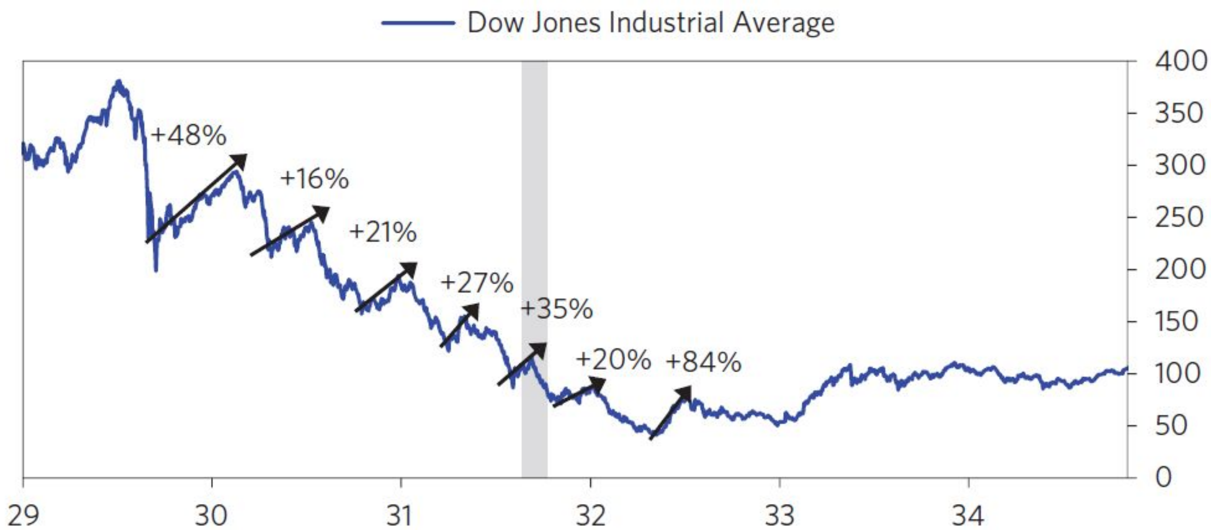




- Inflationary depressions are most common in countries that:
    - Don't have a reserve currency
    - Have low foreign exchange reserves
    - Have a large stock of foreign debt
    - Have a large and increasing budget and/or current account deficit
    - Have negative real interest rates
    - Have a history of high inflation and negative total returns in the currency
- Large domestic debt during the war
- Capital flight from the currency and the country was driving the currency down, which in turn helped drive higher inflation. That's classically how inflationary depressions happen.
- May 1921: The London Ultimatum
    - 132 billion gold marks (push debt from 50% GDP to 330%)
- June 1921 - December 1921: the emerging inflationary spiral
- June 1922-December 1922: Hyperinflation begins
    - German mark completely lost its status as a store of value. Exponential rates of inflation made it impractical to trade in marks, so the currency also began to lose its status as a means of exchange
- January 1923-August 1923: the occupation of the Ruhr
    - Hyperinflation reaching 36,000,000,000 % by November 1923
    - By late October 1923, the entire stock of money in 1913 (6 billion marks) would just buy you a one kilo-loaf of rye bread
- Late 1923 to 1924: Ending the hyperinflation

2-2 US 1928-1937

- 1927-1929 The Bubble
- Late 1929: The Top and the Crash
- 1930-1932: Depression
- 1933-1937: Deleveraging
- 1936-1938: The Tightening causes Recession



- Bubble Spotting
  - Prices are high
  - Prices are discounting future rapid price appreciation
  - Broad bullish sentiment
  - Purchases are being financed by high leverage
  - Extended forward purchase to speculate or protect against future price gains
  - New buyers have entered the market
  - Stimulative monetary policy
- At its bottom in 1932, stocks were worth 11% of their high-water mark. Securities firms declared “apple days” - unpaid vacation days each month to allow destitute brokers to go out and supplement their income by selling apples on the sidewalks.
- Being on a gold standard is akin to having debts denominated in a foreign currency. On April 5, 1933, FDR ordered Americans to sell all their gold holdings to the government. This was followed by the abandonment of the gold standard, the unilateral and retroactive rewriting of contracts, and the devaluation of the dollar. Anyone who held public and private debt suddenly saw its value reduced by nearly half, and debtors--including the U.S. government—suddenly owed their creditors far less. Revaluing the dollar imposed a hefty loss on investors and savers, many of them middle-class American families.

- Canada had four national banks. America had some 25,000 (mostly undercapitalized). 40% of the nation’s banks (9460) went bankrupt between 1929 and 1933.

2-3 US 2007-2011

We all know what happened.

- QEs floods money to the system, pushing down interest rate and push up asset prices.
- Risk premiums reduced.
- 10-year bull market

Part 2. Actionable Ideas

US Debt Crisis - The Elephant in the Room

- Entitlement spending
- Federal deficit

Potential Impact to Retirement

- Higher tax rate
- Lower “real” social security benefit
- Higher medicare premium
- Elimination of preferred passive income tax treatment (qualified dividend, long-term capital gain)
- Inflation - the black swan?

Retirement Portfolio

- Baseline: 10-15x final annual income
- Returns in “the first 5 to 10 years of retirement matter most - the retirement “red zone”
- It is impossible to predict the arrival, duration and severity of bear markets
- The biggest factor determining a return on your asset in the future is the price you pay for it now. If it is expensive when you buy it, your likely return is lower than if you buy it cheap. The best way to value an asset is in terms of the cash flow it will produce. Buy a bond with a low yield, or a stock at a high multiple of its earnings, and you are less likely to make a profit.

Options - there is no magic bullet

- Build up savings as early as possible to take advantage of compounding under long time horizon

- Move to Roth account as much as possible
    - Annual contribution, backdoor, mega backdoor, IRA rollover
- Build up HSA account for triple-tax benefit while you are young
    - Leverage your health premium
- Keep both taxable and retirement accounts for tax efficiency
- Consider deferred/immediate annuity when the savings is not enough - monetize your mortality (e.g., 6.4% yield vs. 3% 30-year Treasury in 2012)
- Be mindful of the risk you are taking

Recommended Readings

Retirement Portfolio

- Retirement Portfolios: Theory, Construction and Management, Michael J. Zwecher, 2010
- Life Annuities: An Optimal Product for Retirement Income, Moshe A. Milevsky, 2013
- Books and articles by William J. Bernstein, e.g., If You Can: How Millennials Can Get Rich Slowly

On Risk

- Against the Gods - The Remarkable Story of Risk, Peter L. Bernstein, 1996
- Seeing Tomorrow - Rewriting the Rules of Risk, Ron S. Dembo & Andrew Freeman, 1998

On Debt

- Red Ink: Inside the High-Stakes Politics of the Federal Budget, David Wessel, 2012
- China’s Great Wall of Debt: Shadow Banks, Ghost Cities, Massive Loans, and the End of the Chinese Miracle, Dinny McMahon, 2018

On US Dollar as Reserve Currency

- The Dollar Trap - how the U.S. Dollar Tightened Its Grip On Global Finance, Eswar S. Prasad, 2015
- Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System, Barry Eichengreen, 2011

On Mortality

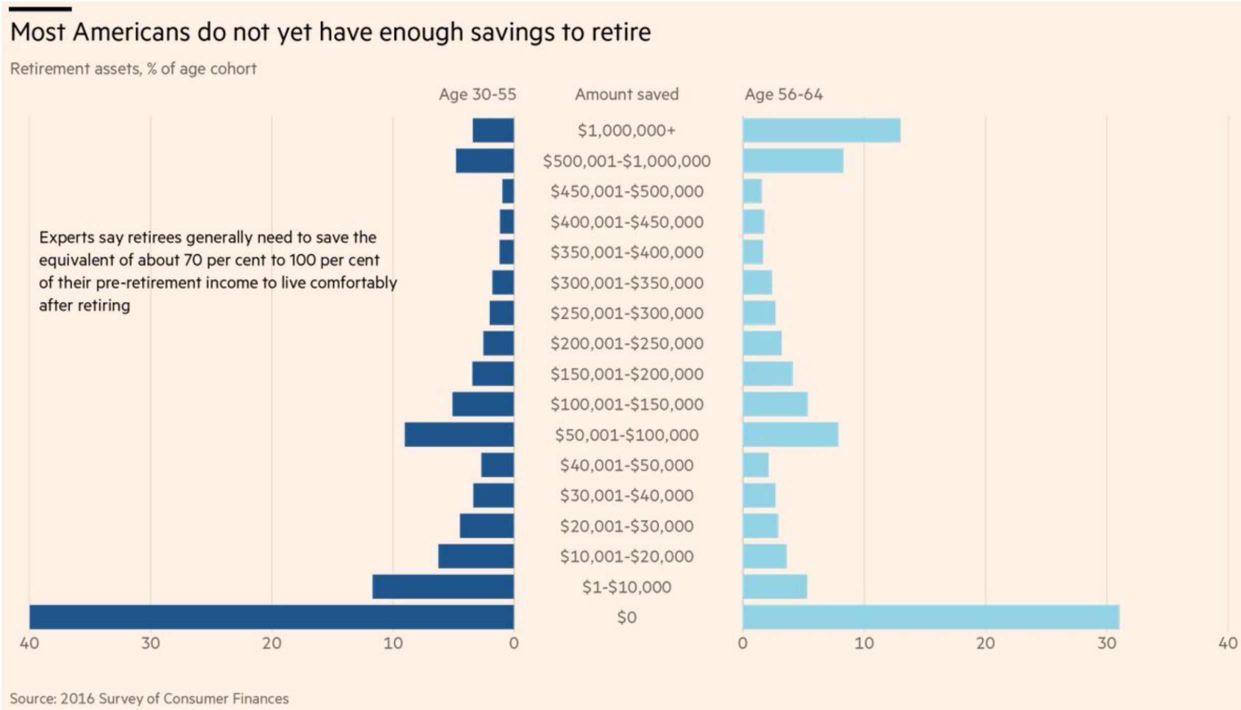
- Being Mortal: Medicine and What Matters in the End, Atul Gawande, 2014
- When Breath Becomes Air, Paul Kalanithi and Abraham Verghese, 2016

On Poverty

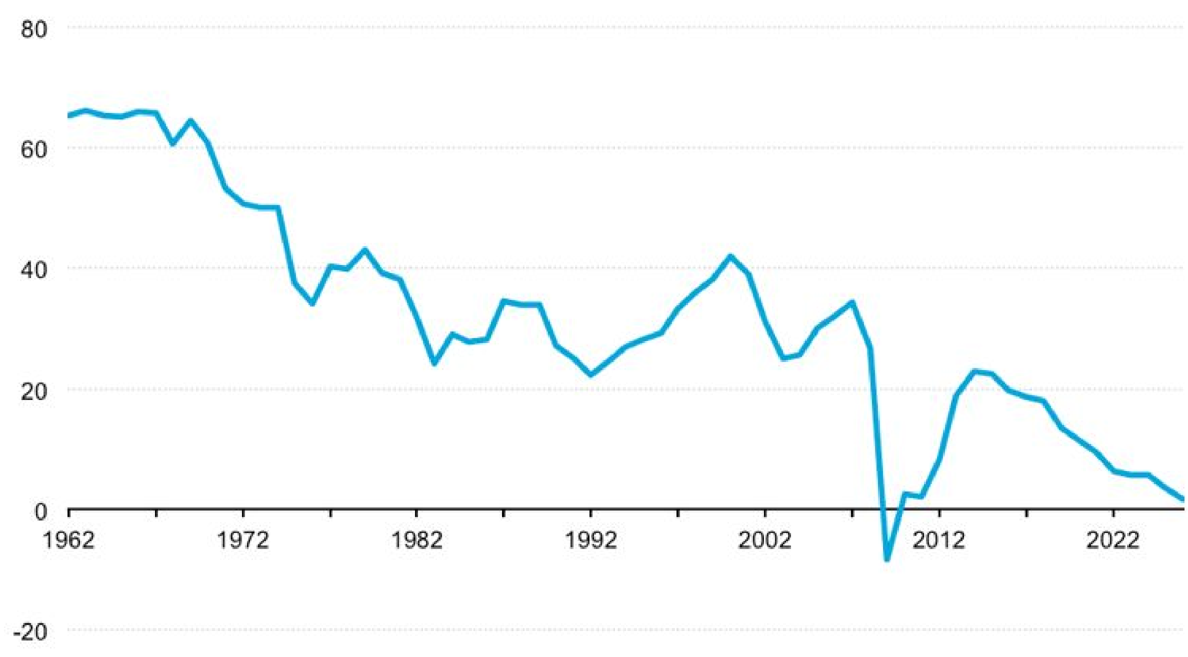
- $2.00 a Day: Living on Almost Nothing in America, Kathryn J. Edin and H. Luke Shaefer, 2015
- Evicted: Poverty and Profit in the American City, Matthew Desmond, 2016

Final Thoughts

- Money is not everything but it gives you choice
- Don't lose sight of your health and your time
    - Facing your own mortality gives you real perspective on what is important in your life
    - The price tag of everything is not just the dollar sign - is a Netflix subscription cheap?
    - Everyone has 24 hours a day, how do you fully live it?
        - On not wasting time - think of filling sands and pebbles in a bottle
        - On saving time
        - Be mindful of the number of decisions you need to make everyday (mind clutter, information anxiety)
        - How do you make everyday meaningful?



Percentage of federal receipts remaining after mandatory and interest spending



Federal Debt Held by the Public (United States)

Percentage of Gross Domestic Product

Source: Congressional Budget Office. For details about the sources of data used for past debt held by the public, see Congressional Budget Office, *Historical Data on Federal Debt Held by the Public* (July 2010), www.cbo.gov/publication/21728.