Global Debt: Giant Pools of Money

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March 17, 2016

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  - Terms (length of time)
  - Transfer of Risk
- State's borrow sovereign debt by issuing government bonds
- Roubini's analogy of an oil tanker

Key Concepts: Inflation (vs Deflation)

- Rate of change in the general level of prices
- Simple Example: Imagine a small, closed economy (autarky) in two time periods
    - Year 1: 10 people make 10 bottles of wine, and there are 10 dollars
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    - Year 2 (doubling of money supply): 10 people make 20 bottles of wine, and there are 20 dollars
    - Year 2 (small increase): 10 people make 20 bottles of wine, and there are 22 dollars
    - Year 2 (quadrupling of money supply): 10 people make 20 bottles of wine, and there are 40 dollars

Key Concepts: Fiscal and Monetary Policy

- States are simultaneously in charge of creating a currency as well as managing its personal finances
- Monetary Policy is the management of the overall supply money supply and interest rates
  - In the US, managed by the U.S. Federal Reserve System (the Fed)
- Fiscal Policy is taxing and spending by the federal government
  - In the US, created/approved by Congress and managed by the US Treasury Department

Timeline: The Global Financial System, 1945

- Stability promotes trade and investment
- Shifted way from mercantilism towards laissez-faire policies
- Keynesian Economics mastered the Business Cycle
- State's cannot be trust with monetary policy - Central Banks must be independent
- Fort Knox, the Creation of the Gold Standard and the International Monetary Fund (IMF)

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- President Nixon announces the US will no longer honor the global standard, and the US dollar will "float"
- President Nixon normalizes relations with China

Key Concepts: Exchange Rate Regimes

- The exchange rate is the price of one states currency in terms of another state's currency
- Floating Exchange Rate
  - Central does Bank not need to intervene
  - USD, EUR, JPY, GBP are all free floating
- Fixed Exchange Rate
  - Central Bank must step in to defend rate
  - CNY (RMB) is a fixed exchange rate
- Managed Exchange Rate
  - Central Bank only steps in when price hits limits
  - Pre-Euro Europe

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  - Your IPhone imported from China is recorded twice, once as an export from China and once as an import to the US
- Trade is registered in the Current Account, Payments are registered in the Capital Account
  - As a rule of accounting, these two figures must balance
  - Buying an IPhone is "exporting" capital to China
  - This does not mean that China captures all of the IPhone's value

Timeline: The Breakdown of Bretton Woods, 1971 - 1979

- Nixon closes the Gold Window, the global economy becomes a lot more competitive
- Controlling inflation becomes biggest concern/fear of Central Bankers
- 1973 the Organization of Petroleum Exporting States (OPEC) launches an embargo
  - US experiences energy insecurity with shortages, failed price controls, and long lines at stations
- 1979 Iranian Revolution again surprises oil markets, although output only fell 4 percent
- US Chair Paul Volcker promotes financial "discipline" in US markets with high rates
- Poor decade for the US and global economy

Timeline: The Developed World Lends, 1979 - 2001

- The US and other OECD countries see rapid growth in financial sector, followed by the financialization of the world
  - Considerable deregulation of the financial sector
    - 1985 Interstate banking
    - Removal of Glass-Stegal Act (the separation of saving and investment houses)
  - Savings and Loans (S&L) Crisis leads to a minor recession
  - Dot com Bubble
  - In 1998 Long-Term Capital Management, a hedge fund, is bailed out
  - Vice President Dick Cheney said "Reagan taught us deficits don't matter"
  - Time were generally good. 90s are an odd era of global growth and low inflation
  - US Fed Chair Greenspan is heralded as the godfather of markets.
- Europe is becoming Europe!

Timline: The Developing World Borrows, 1979 - 2001

- The Latin American Debt Crisis
  - The 80s are a "lost decade" due to failure of Industrialization policies
  - High oil prices lead to lead capital accounts surpluses in Mexico, Argentina, and Brazil
  - US commercial banks lend heavily to fund infrastructure projects
  - IMF seen as forcing governments to accept austerity and failing to coordinate the successful rescheduling of sovereign debt
- 1997 Asian Financial Crisis
  - Similarly high levels of debt-to-exports in Thailand, Indonesia, and South Korea
  - Despite the similar situation and policies, the region bounces back significantly more than Latin America

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- The Housing Bubble
  - The American dream is home ownership and home prices have never fallen
  - Traditionally, the first few payments on a mortgage were all interest
  - Government supports this via Federal Home Loan Mortgage Corporation (Freddie Mac) as a vehicle to bring up low income communities
  - Financial Sector began to loosen lending standard and create new financial products for lenders
    - Adjustable Rate Portages and No income, no asset (NINJA) loans from Country Wide Financial
    - Homeowners encourage people to refinance and take out "second mortgages"

Timeline: The Boom (con't), 2001-2007

- The rise of China is occurring via a overvalued currency which causes a large US trade deficit and current account surplus which floods the US financial system adding more fuel to the fire
- Big Banks cannot give out individual loans to individual homeowners.
  - Investment houses began "bundling" loans into Collateralized Debt Obligations (CDOs)
  - CDO were grouped into "tranches" based on homeowner's credit ratings
  - Rating Agencies certified these "financial weapons of mass destruction" as AAA
  - Pension and mutual funds (conservative borrowers) were able to invest in these assets heavily. American International Group (AIG) is a large insurance company that purchased billions of these "toxic assets."
- Europe followed a similar pattern. However, the EU is a monetary union with a single currency

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- Q42007 the Great Rescission officially starts

Timeline: The Global Financial Crisis of 2007-2008 (con't)

- Country Wide Financial is bankrupt and purchased by Bank of America
- JP Morgan purchases Bear Sterns
- SEC block naked short selling
- Government announces conversatorship of Fannie Mae and Freddie Mac
- US House of Representatives rejects Trouble Asset Relief Program (the Wall Street Bail Out)
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- Federal Reserve lend AIG 80 billion
- Reserve Primary Money Fund (a money market fund) drops below 1.

Timeline: The Global Financial Crisis of 2007-2008 (con't)

- US House of Representatives passes TARP, 700 billion in a mix of tax cuts and spending increases on infrastructure
- US Treasury uses 12.5 billion of TARP funds to purchased preferred stock of 9 US Banks
- US Treasury invests 40 billion in the American Insurance Group (AIG)
- US Treasury Secretary Paulson official announces TARP funds will actually be used for CAP. Gives 33 billion to 21 US banks
- Business Cycle Date Commitment of the NBER started a year earlier
- Housing prices are falling, individuals are underwater on their mortgages, and unemployment is rising rapidly

Timeline: The Response, 2009 - 2011

- President Obama passes the American Recovery and Reinvestment Act of 2009, another 700 billion of fiscal stimulus
  - Half of this amount is actual spending, the other is tax cuts
  - Only big enough to make up for budget cuts at the state level
- The US Federal Reserve makes money "free" with a base rate of 0. Unable to lower rates further the Fed gets creative
  - QE1, fed purchases 750 billion in mortgages (later QE2 and QE3)
  - US banks are stress tested
- The Dodd-Frank Financial Reform Act
  - Reaffirms the regulatory power of the FDIC and Federal Reserve and creates the Financial Stability Oversight Council. Focused on the credit rating agencies and systemic risk.
  - Creates the Consumer Financial Protection Bureau within the US Treasury Department (Senator Elizabeth Warren's brain child)
  - Does not reinstatement the separation of investment and commercial banking
- Speaker Paul Ryan launches budget battles over the debt limit

Timeline: European Sovereign Debt Crisis, 2009-2011

- The Housing Bubble hits Europe even harder than the US. Economic growth has halted and all of sudden debt is a major concern.
- Markets turn their attention to European sovereign debt and rates start to spike
- While Germany and France seem fine, the UK, Spain and Italy's government debt to GDP ratios look questionable. It is clear that Ireland, Portugal, and Greece government debt levels are unsustainable clearly and investors flea.
- Unlike the US and the UK, Euro members cannot devalue their currency to stimulate growth, because it is controlled by the European Central Bank (ECB)
- The EU, the ECB, and the IMF launch a series of programs (or bailouts) with mixed results

Timeline: Starring into the Abyss,2011-???

- Global
  - Will the US dollar remain the world's reserve currency? What will replace it?
  - Will price of oil remain at the lowest levels in decades?
- US
  - Will real wages finally start to rise?
  - Was Dodd-Frank enough? Should the US further regulate the banks? Maybe a transaction tax?
  - Will the US continue to run large budget and current account deficits?
  - Is another bubble forming? In technology? education? housing?
- EU
  - Will Europe complete its half built house? Is fiscal union possible?