Book Synopsis

From Craig Weightman

Crisis Economics

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Crisis economics is the study of how and why markets fail. This book is concerned with the economic crisis in 2008-2009, how it developed, how it is like many crises before it, and what things can be done to minimize the aftereffects and problems going forward.

It is simply not true that the financial crisis was unexpected. However, the people who predicted it were dismissed and ignored. The bubble, crisis, and hubris surrounding the refusal to listen to signs of the impending crisis are a constant and continuing part of our capitalistic system.

A tour of the past – we are not unique

The sequence of events preceding the Great Depression is eerily similar to our current crisis (i.e. it is not a Black Swan -- or an event that could not be predicted). Before the rise of capitalism crises tended to be the result of government malfeasance and and over indebtedness. The asset bubble is a creature born with the rise of capitalism.

Global financial crises began with the panic of 1825, starting in Britain. A panic started in the U.S. in 1857 and the railroad crisis of 1873 also spread worldwide. A number of crises have occurred since then; none larger than the Great Depression in 1929. Aldous Huxley: "The charm of history and its enigmatic lessons consist in the fact that, from age to age, nothing changes and yet everything is completely different."

Crisis Economists – economic thinkers of the past

The differences in conflicting opinions of economists have profoundly shaped our responses to crises, including the current one. Most economists are concerned with how and why markets work and can be ignorant of reasons for their failure. The specific study of market failures and reasons for their failure is the focus of crisis economists.

Adam Smith: Selfish and divergent interests coalesce into a stable, self-regulating system (not a crisis economist).

- A corollary to his statement is: If markets are self-regulating, and their collective wisdom is always right, then prices of assets bought and sold in the market are accurate and justified.
- The University of Chicago started building elaborate mathematical models to prove markets are utterly rational and efficient after the second world war (Efficient Market Hypothesis formed by 1970).

Robert Shiller used statistical analysis to demonstrate that stock prices exhibit far more volatility than the EMH thesis can possibly explain.

- Investors will ride a price rise with no apparent basis in fact and will sell in a down market irrationally (psychology is not grounded in rational facts).
- Capitalism is a system prone to "irrational exuberance" and unfounded pessimism.

John Stuart Mill: Tried to generalize about what caused booms and busts in 1848 (cradle of crisis economics). He had a very good description of the boom-and-bust cycle.

- Bubbles begin with some external shock or accident (a new market) and proceed beyond what is justified due to speculation.

- Credit and debt play a key role in establishing a bubble. A great expansion of credit takes place.
- A failure of a handful of firms creates an atmosphere of general distrust and growth ceases.
  - o Uncertainty freezes the credit supply and panic sets in.
  - o The atmosphere of general distrust spills over to the business community and the crisis spreads beyond the financial sector.

Karl Marx: Believed that crisis was built into the concept of capitalism and was a sign of its inevitable collapse (1848).

- He believed the capitalistic model (laissez-faire) would create a two class system, pitted against each other, with the capitalists controlling most of the wealth and the proletariat becoming ever poorer, until the entire society became unstable.
- He is the first thinker to see capitalism as inherently unstable and prone to crisis – inevitably plunging into the abyss and taking the economy with it.
- After Marx, economists had to reckon with the possibility that capitalism contained the seeds to its own demise.

John Maynard Keynes: Born the year Marx died and arguably became the most important economist of the 20th century.

- He broke entirely with economists who believed that market was capable of regulating itself.
  - o It was previously assumed that full employment was the natural order of things and unemployment only rose when the economy contracted; falling as the economy improved.
  - o He argued that effective/aggregate demand is what determined employment levels and cutting wages would reduce demand, making the economy worse.
  - o Economic recovery depended as much on confidence ("animal spirits") to spend as on economic fundamentals
- Government should step in to help create demand and reverse the downward spiral, dealing with the debt incurred after the economy had much improved.

Milton Friedman: A strict monetarist from the University of Chicago School of economics, he believed that instability within any given economy can be explained by fluctuations in the money supply.

- During the Great Depression it was the run on the banks that reduced the money supply; causing aggregate demand to collapse and reducing spending, income, prices, and later employment.
- The government should not have increased spending, but reduced the rates at which banks could borrow from the Federal Reserve.

Hyman Minsky: Concentrated on aspects of Keynes approach not generally thought about by other economists.

- Keynes observed that financial intermediaries (i.e. banks) play a critical and growing role in modern economics, binding creditors and debtors in elaborate and complex financial webs. The economics profession in the post-war era had little or no place for banks and other financial institutions.
- The centerpiece of Minsky's argument was debt; how it is accumulated, distributed and valued.
  - o Banks and other financial institutions could, as they became increasingly complex and inter-dependent, bring the entire system crashing down.
  - o Debt is part of a dynamic system that would evolve over time, inserting uncertainty into economic calculations.
- Uncertainty in good times is allayed by growth, but in bad times curtails lending in order to reduce risk, exposure, and to hoard capital.
- Minsky broke debtors into three catagories:
  - o Hedge borrowers – make payments on interest and principle
  - o Speculative borrowers – make only interest payments
  - o Ponzi borrowers – mortgage future earnings betting on a rise in the value of assets
- During a speculative boom the number of hedge borrowers declines
  - o With extra cash hedge borrowers now start loaning to speculative and Ponzi borrowers, with the attendant increase in risk to their portfolios.

Friedrich Hayek (Austrian school of economics): Libertarian economic beliefs

- Skepticism toward government intervention of any kind
- Focus on individual entrepreneurs as the basic unit of economic analysis, rather than actions by organizations larger than the individual (i.e. the government)

Joseph Schumpeter: Theory of entrepreneurship often expressed as *creative destruction.* While not libertarian, he viewed most regulation and support in the business sector as worse than the disease of the bubble-burst cycle.

- Waves of innovation in prosperous times, followed by a brutal winnowing in times of depression.
- In this view, Roosevelt prolonged the depression by intervening in the economy, running up massive public debt, and insuring the survival of corporations that should have been liquidated due to their moral hazard and poor business decisions.
- This school of thought also views regulation with suspicion, as it leads to government insurance and support for lender-of-last-resort.

The two schools of thought – Keynes and Schumpeter – clash when an asset bubble bursts. One school saying it is the job of the government to properly minimize both the bubble and the crisis, while the other side claims the creative destruction created in the crisis will purge out the businesses and industries that should no longer survive. Both sides have some merit.

- In the long run Schumpeter is correct in saying that individuals, corporations, and countries have to reduce their level of debt and putting it off too long can cripple or even destroy the country.
- In the short term the Schumpeter approach creates so much chaos that the society can get caught up in a downward spiral, much like Marx predicted.
- The problem with deflation is that asset prices can decline faster than debts are reduced, whereupon the real value of the debt is actually increased. This will destroy individuals, companies, and countries during a time when aggregate demand is falling.
- Therefore, to prevent a disorderly collapse of the financial system the government…
  - Becomes a lender-of-last-resort
  - Uses capital injections into ailing banks
  - Props up aggregate demand through stimulus and tax cuts

When looking at crises it is best to see them as part of a broader continuum of causes and effects that have similar origins, but constantly varying specific events/decisions.

Structural origins of the recent crisis

Financial innovation – securitization of loans by banks

- The S&L crisis speeded the use of securitization (originate and hold became originate and distribute)
- Ratings agencies became corrupted
  - They were paid by the very organizations they were supposed to regulate
  - The securitized products intentionally were designed to be opaque
- Subprime loans became profitable because of the development of the first two bullet points

Moral hazard

- Bonus computed for short term gain became the majority of traders' pay
- Opaque securities left sales, not management or the stockholders, in control of the sales process (typical principle – agent problem).
- Borrowed money became the primary cash, therefore shareholder's incentives were as short term as the traders and managers.
- Deposit insurance and past practice indicated the government would backstop losses if they became too great, minimizing moral hazard penalties.

Government policy – Alan Greenspan headed the Federal Reserve and supported deregulation

- Refused to 'prick the bubble' when small, but rescued the banks when the bubble burst
- Emasculated and finally repealed the Glass-Steagall Act (1999)
- Cut the borrowing rate almost to zero (2001) and held it there through 2004
- SEC loosened leverage rules (2004) from 12.5/1 to 20/1 or 25/1 and higher

Shadow banks – look, act, borrow and lend, and invest like banks, but arre not regulated like banks (investment firms, hedge funds, etc)

- Borrowed in short term, liquid markets and invested in long term illiquid assets; just like a bank

Awash in cash

- Nations saving more than they were spending were investing in America's securitized debt, supplying shadow banks more cash

Leverage – the greater the reliance on debt to finance activities, the more fragile the financial system (Minsky)

- 1981 debt to GDP = 123% and 2008 debt to GDP = 290%
- Mass margin calls beget lower prices and more margin calls; other assets may then be devalued

Links with other crises

Walter Bagehot (1873) – Banks "are imprudent in so carefully concealing the details of their government, and in secluding those details from the risk of discussion." In a downturn this practice becomes a liability and a stain on one firm stains the entire group, greatly impairing the credit of all, i.e. panic.

Hyman Minsky

- "Cassandra-like warnings that nothing basic has changed, that there is a financial breaking point that will lead to a deep depression, are naturally ignored in these circumstances."

As in every financial crisis, a "canary in the coal mine" signal that all was not well: subprime mortgages issued in 2005 and 2006 began to exhibit unusually high rates of delinquent payments.

The ABX index was introduced to measure stress for subprime home loans and almost immediately went into freefall in 2007.

Uncertainty replaced risk and, amid growing panic, cash seized up.

In 2008 all five independent investment banks were destroyed, absorbed, or muzzled.

How and why the crisis went global

Crises rarely cripple perfectly healthy economies; usually underlying vulnerabilities and weaknesses set the stage for collapse.

Money markets are where banks and financial firms borrow and lend on a short term basis. They are elaborate chains that cross national boundaries. Therefore, they are fragile in times of panic and are a hallmark of financial crises. When Lehman Brothers failed the money markets simply froze up.
Investors in multiple countries hold identical assets, i.e. subprime securities were held around the world.

The stock market plunge impacted other stock markets around the world.

Disease vectors

- Countries exporting to the U.S. were devastated and their supply-chain countries also were impacted
- “Letters of credit” guaranteeing payment for goods in transit ceased upon the failure of Lehman Brothers; therefore global trade almost completely ceased.
- Barriers to trade went up as nations reacted to a worsening of employment at home.
- People sending money home from developed countries lost their jobs and their families lost their income (up to 10% of national income in some Central American countries).
- Commodity and currency prices are set in world markets. This means a change one place can induce instability (oil prices spiked due to speculation by hedge funds).

Shared excesses

- When one country’s boom goes bust it often takes another boom along with it
  - The housing bubble (total value of residential properties doubled between 2000 and 2005)
  - Leverage and risk taking was often between 33/1 to 61/1 while Lehman Brothers was at 31/1 and Bank of America at 11/1

India did not deregulate their financial system and banks were forced to maintain hefty reserves – they were also pretty immune to the U.S. virus.

Investments in emerging economies

- Countries borrowing in good times and investors fleeing in bad times
- Exporting countries with account surpluses were aggressively intervening to keep their currency undervalued; thereby helping exports and accumulating dollars. This cheap money contributed to asset bubbles and inflation.

Why aftershocks linger

Bernanke was uniquely qualified to head the Federal Reserve at the time of the crisis because he was one of the world’s leading authorities on the Great Depression. He revolutionized monetary policy and probably averted another depression, but left a lot of unsettling questions for economists.

- How to scale back his policies, once in place?
- How to distinguish between the illiquid and the insolvent? Probably can no longer do that.
- He infringed upon some of the traditional powers of the elected government, namely the power to spend money.

If this recession becomes a “double dip” recession, then deflation could become a problem, because there is little additional flexibility for fiscal manipulation – increasing the pressure to print money (inflation).

Quantitative easing: The central bank intervened in markets for long-term debt (massive purchases), similar to the way it does with short-term debt. Banks weren’t putting money into the economy, but hoarding it and parking it in long-term government instruments, forcing the government’s hand.

Now that the government has used all these techniques to attack the crisis, firms may reasonably expect this help when problems grow in the future. This almost eliminates the concept of moral hazard, guaranteeing problems in the future.

Fighting the crisis

Hoover stood at one watershed in the history of fiscal policy and we may be living at another. Hoover past: patience and balanced budgets. Hoover future: fiscal policy to cushion economy and increase demand for goods and services. Today we are running massive budget deficits that are increasing to possibly unsustainable levels.

Keynes:

- Stimulus spending to increase demand and reduce unemployment
- Tax cuts and rebates
- Transfer payments like unemployment insurance, food stamps, retraining, and local government spending

However, at some point the debt needs to be paid.

2008/2009 tax cuts yielded only 25 to 30 cents/dollar and the remainder went to reduce private debt – increasing the public debt percentage.

At the end of 2009 we purchased stability, but at a tremendous cost

- Public debt will double as a % of GDP (90%)
- Bailouts have delayed the 'creative destruction' necessary for capitalism's long term health, but not relieved the pressure to accomplish this.
- Moral hazard is a growing issue with our system
- Countries going into the crisis with relatively low debt levels should be stronger coming out – the U.S. is not in this group
- There is now a window available to address the issues of moral hazard and enduring reforms, but can the current political climate take advantage of this?

First steps

Crises go hand-in-hand with regulation and reform – there are no libertarians in financial crises. Part of the reason there is less call for reform is that government acted more quickly and more deftly to this crisis than the depression 80 years ago. However, there is fundamental weakness and distortion that plagues the world's financial systems.

Curing compensation: The biggest problem is not the size, but the basis on which it is paid.

- Corporations are run by managers not stockholders and managers target short-term earnings.
- When employees are rewarded with restricted stock provisions, there should be a longer hold time than is now customary (say 10+ years or at retirement).
- The bonus culture pays for short-term wins, but does not penalize for long-term loss
    - Pay bonuses based on longer horizons (say 3 years or so).
    - Hold the bonus in escrow, to be impacted by longer term results.
    - Use the pool of new assets created to pay the bonus from (poor asset quality, poor bonus quality)
- To avoid bonus rules driving people from firms employing them, the government must be involved – not to cap compensation, but set the ground rules.

Making better sausage: In the system of securitization all parties become complicit and the solution must incentivize all parties to more carefully consider the risk.

- Force intermediaries to hold some of the product in question
    - Hedging bets would not be allowed
    - This is a complementary, not a cure-all solution because traders may benefit short-term by holding some risk.
- Reform securitization so that it is more standardized and transparent – like what the FDA did with food
    - Standardization to quantify risk
        - Deal structures
        - Reporting requirements
        - Quality of ingredients
    - CDOs must be heavily regulated or banned due to their inherent lack of transparency.
    - Focus on the circumstances in which loans are originated (garbage-in-garbage-out) – we already have organizations that can regulate this.

Reforming ratings: Originally they were paid by/through investors, but now they are paid through the insurers of debt. They also make money advising issuers of debt how to obtain the highest ratings.

- Make consulting illegal for a ratings agency – regardless the identity of the customer.
- Open up competition in the ratings agencies.
- Force a return to investor payment
    - Mandate that all institutional investors, even less regulated ones, pay into a common pool that would be administered by regulators.

Dealing with derivatives: Have been around for centuries as swaps, options, futures, and are used to hedge against risk. However, the new incarnation allows someone with no interest in a good outcome to bet on a bad outcome – incentivizing them to help that 'bad' outcome occur.

- Phil Gramm inserted a provision into the Commodity Futures Modernization Act exempting CDO and over-the-counter derivatives from regulation (read private and opaque transactions).
- Counterparty risk – the possibility that the insurance would have to be paid out – was ignored by financial institutions investing in these instruments.
- The history of derivatives is replete with many financial crises, but they do serve a valuable function in their basic form.
- CDSs must be regulated and made more transparent, i.e. force simpler derivatives into a central, regulated exchange.
- Over-the-counter and exotic derivatives should be registered in a central clearing house to assist in regulation.
  - Insure parties have sufficient collateral
  - Raise margin requirements to reduce systemic risk
  - The clearinghouse database would be public to contribute to transparency
- Ban CDS contracts: Eliminate incentives to force a bad outcome. At a minimum, insurance companies should be barred from selling these guarantees.
- Consolidate the SEC and CFTC

Basel Committee on Banking Supervision – global guidelines concerning derivatives

- Tier 1 Capital should be tangible Common Equity (common share only), therefore creating a more conservative estimate of capital on hand.
- Avoid capital procyclicality
  - Use dynamic provisioning to increase capital requirements in good times and reduce them in crises.
  - Contingent capital – bank issues contingent convertible bonds in good times and, if the bank's balance sheet declines past a 'trigger point' the debt will convert into shares.
    - More capital in good times
    - More shareholders in bad times
    - Original bondholders (good times) and shareholders (bad times) don't like this arrangement and will keep a closer eye on the bank to reduce highly fluxuating cycles.
- Greater emphasis on the management of liquidity risk
  - Avoid short-term borrowing (say yearly, instead of daily)
- Financial institutions use their own internal models for assessing risk and people game them for short-term gain.
  - AIG siloed risk in its divisions, therefore, one small division was able to accumulate enough risk to bring down the entire company.
  - Risk managers stand in the way of greater profits in most companies, therefore they are marginalized.
  - For these reasons risk management must exist outside individual sections and report directly to the CEO.

Moving to exchanges not only makes things more transparent, but reduces the power and interconnectedness of large financial institutions.

Radical remedies

Radical changes are needed, including breaking up large banks and imposing firewalls on the financial system.

The use of monetary policy to prevent speculative bubbles.

Significant obstacles that stand in the way of regulators doing a better and smarter job.

- Regulatory arbitrage – evasion of regulatory oversight
- Lack of regulatory coordination and supervision
- Quantity and qualities of the regulators themselves

Problems with avoiding arbitrage: The purposeful movement of financial activity from more regulated to less regulated venues.

- Selective application of regulations (exempting auto loans, for example) is a profound mistake, opening the door to more regulatory arbitrage.
- Using extremely granular (specific) regulations. Regulations should be simple general rules, like a cap on leverage (absolute, not risk-adjusted).

Enforcement and coordination

- Currently how and where banks are incorporated has a lot to do with how they are regulated and which regulatory authority oversees them – they effectively choose the regulator based on the state they are incorporated in.
- Reform should be coordinated globally to reduce the incidence of what is now happening between states.

Who will regulate the regulators?

- Economists with a laissez-faire view think of regulators as fools who can't compete in the private sector and this view must be corrected.
  - The government can offer better job security – more appealing to the 'old hounds' who have seen it all and/or are nearing retirement (a good pool of experience).
- Regulatory capture: The revolving door between government and the regulated industries.
  - Time frame for lobbists should be 4-5 years, not 2
  - It is very hard to break the tie between very large firms and the legislative branch, so…

Break up too-big-to-fail firms

- Wind down firms in an orderly fashion
  - Living wills
  - Bankruptcy regime financed through the financial industry
- Too-big-to-fail firms are also too big to be managed properly
  - Impose higher capital adequacy ratios on organizations over a certain size
  - Beyond certain sizes, firms do not gain economies of scale
  - Responsible businesses want to deal with more than one supplier of their needs.

Glass-Steagall on steroids – Eliminate too-interconnected-to-fail by compartmentalizing the system

- Ban proprietary trading as a conflict of interest
- Prohibit investment banks from receiving "short-term" overnight financing from insured banks
- Prohibit hedge funds from obtaining large-scale short-term financing
- Prohibit insurance companies and private equity firms from financial intermediation beyond their core activities
- Categorize firm types and restrict them to their own turf

Banishing bubbles

- Policy makers intervene to attack inflation – why not attack asset bubbles?
  - Interest rates
  - Margin requirements
  - Alter reserve ratio

Global economics

Transitioning away from the American century

Current Account: A measure of how a country's economy compares to other countries at a given time.

- Imports and exports
- Foreign assets and liabilities
- One-sided transfers of money across borders (foreign aid, migrant worker remittances, etc)

If a country runs a current account deficit through foreign debt denominated in a currency other than its own, a crisis can quickly exasperate the problem as that countries currency falters.

After repeated crises in the 80's through early 2000's, emerging countries have learned to run current account surpluses and it is developed countries that are now running deficits.

- U.S. culpability
  - Reckless tax cuts
  - Unwillingness to reign in housing boom

Non-residents hold about half the U.S. Treasury bills and bonds, with 2/3 held by central banks and sovereign wealth funds, not private investors.

- Countries with current account surplus will buy up U.S. debt to keep their currencies down and their exports up, however, they are now increasingly vulnerable to U.S. currency decisions.