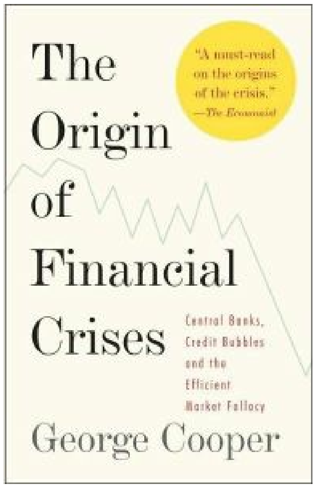

Book The Origin of Financial Crises

Central Banks, Credit Bubbles, and the Efficient Market Fallacy

George Cooper
Vintage Books, 2008

Recommendation

Analyst George Cooper's book seems to prioritize passionate (although informed and understandable) advocacy over a strictly reportorial explanation of economic ideas. He clarifies his belief that much of the present fiscal misery flows from decades of unwarranted confidence in the "Efficient Market Hypothesis." He offers the work of 1970s American economist Hyman Minsky, 19th century physicist James Clerk Maxwell and the inventor of fractal geometry Benoit Mandelbrot, to support his claim that experts could detect, govern and manage economic bubbles before they pop. He also recommends a dose of inflation plus governmental controls on credit creation to fix the economic system. He summarizes Minsky, uses Maxwell's work on steam engine governors as a metaphor for managing credit creation and applies Mandelbrot's observation of a memory effect to the economy. Even though his presentation of the efficient markets fallacy seems oversimplified in parts, his theory is interesting. *BooksInShort* recommends Cooper's background research on fiscal policy ideas, if not on every facet of fiscal events. The more government controls you favor, the more likely you are to be persuaded by his passion.

Take-Aways

- The "Efficient Market Hypothesis" fails too many empirical tests to warrant serious use.
- Yet, those who have managed the U.S. economy employed it.
- Barter, commodities and "fiat money" all cause problems if used improperly.
- Government economic policy is likelier to cause inflation than commercial activity is.
- Government should not try to manage the economy in a way that will stabilize the consumer price index.
- When credit creation runs ahead of asset income, it is a sign of economic trouble.
- James Clerk Maxwell showed how to use "feedback" to moderate complex systems.
- High debt levels that are manageable in times of low interest rates can become untenable when interest rates rise.
- Hyman Minsky explained why creating unrestrained credit during stable times generates economic instability.
- The U.S. government should use inflation to redistribute wealth as it works toward an improved economy.

Summary

Binges Have Consequences

For the past decade or so, European and American businesses, governments and even private citizens have taken on debt at levels that only cosmic metaphors can describe. In 2008 and 2009, the vast credit bubble began to deflate with terrible dislocations worldwide. No one can predict how this will end, but governments are struggling mightily to keep their economies from imploding. The widespread nature of this problem flows from universal devotion to the "Efficient Market Hypothesis" (EMH), which states that if markets are left to work on their own they will reach equilibrium, and any attempt to control or shape them will only make them less efficient. Prices will rise and fall to signal availability, and to allocate resources to those who desire them the most and can use them best.

> "Current events represent the wholesale failure of monetary policy as practiced over recent decades."

But, the markets are not efficient. For example, say that when a Picasso painting comes on the market, someone pays tens of millions of dollars for it. This inspires someone else to pay more than a hundred million for the next one. The efficient market hypothesis says that rising prices should lower demand, but – to the contrary – the demand for rare art rises as prices increase. Similarly, when housing prices begin to decline, buyers should purchase the available stock and prices should recover. However, if people are no longer sure their remaining equity can cover their debt, panic sets in and the demand to sell deepens the depression of prices. Another obvious contradiction in the EMH is the nearly universal use of central banks. If markets were efficient, governments would not need central banks to manage aspects of their economies, but they do – so why pretend that these are free market economies?

> "Improving bank regulation is important, reforming central bank monetary politic is essential, and these reforms are required at both the national and international level."

Efficient market hypothesis apologists explain that very rare circumstances unfolding over several days cause such events as the collapse of Long Term Capital Management; this explanation strains credulity. More likely, their models, statistics and science are bad. John Maynard Keynes offered a better explanation in his 1936 "General Theory," which U.S. economist Hyman Minksy developed in the 1970s in his "Financial Instability Hypothesis."

> "The basic conflict between guaranteeing return of capital while also putting that capital at risk is a key channel through which financial stability can be, and recently has been, generated."

He said efficient markets are supposed to contain inflation by adjusting prices to match supply and demand. However, if the money supply expands quickly, more currency chases the same goods, so prices must rise or the market will allocate goods while unmet demand remains.

If you switched to barter, you would bear tremendous transaction costs as you traded to gather the right goods, for instance, to pay your plumber. When people trade commodities, such as gold, they run the risk of governments minting coins with varying gold content or reissuing coins with less gold, but the same assigned values. Governments once provided currency that could be converted to gold, but the supply of these certificates was often greater than the gold backing them. Modern societies use "fiat money," currency that has value because the government issuing it says it does. Coins and paper money have no intrinsic value; they are backed only by the full faith and credit of the issuing government.

Currency and the Banking System

When governments issue money faster than the supply of goods can grow, prices rise and inflation is born. While other events can provoke price increases, most inflationary episodes are due to government action. Some inflation gets so extreme that prices rise by the minute; that is hyperinflation. Inflation destroys the value of savings. Lenders are repaid with money that is worth less, so they charge higher interest; this slows economic activity. During extreme inflation, people even refuse to take such debased currency as payment unless the government forces them. Such government-induced inflation is a monster let loose in society, whether the government realizes it or not. When governments reduce the money supply, units of currency become worth more, but people have fewer of them to pay their debts. The inevitable defaults also destabilize society.

> "The U.S. Federal Reserve has inadvertently slipped into...monetary policy that is generating...ever-larger credit cycles and...if continued, will significantly impair the prospects of ...the world's most important and most vibrant economy."

Private sector economic activity rarely causes inflation because of the demands of competition in each industry, and consumer's ability to substitute one good for another. When chicken gets costly, people can eat beef, pork, fish or pasta until the price of chicken falls back in line with demand. Private citizens and businesses borrow money from banks, which create debt and money in pairs. When real money meets the "anti-money" created by the bank, both are annihilated and the money supply returns to its original level. Governments use central banks to create currency and serve as the lenders of last resort. Generally, these banks have two conflicting objectives: keeping prices stable and promoting economic growth. Central banks may emphasize one over the other, but tipping too far either way can have hard-to-fix consequences that always take more time to rebalance than the citizenry's patience will allow. This mix of central bank objectives works against the efficient market hypothesis and undermines its credibility.

Market Stability

According to Adam Smith and EMH devotees, free markets can adapt to supply and demand changes, and find the optimal prices. While this makes some sense for actual goods in limited supply, it does not work for financial assets, because banks can create money at will. When banks issue certificates of deposit or such instruments, they also set up debts, or "anti-money." Banks generate these assets, assemble them, divvy them up and sell them to investors like bonds. However, changes to underlying financial conditions can affect the value of the assets behind such instruments. If defaults on the underlying loans become widespread, banks cannot trade these collateralized instruments and their value plummets. This requires investors to mark them down, expanding the cycle of crisis. These spikes should not happen if EMH is a correct model.

> "The Efficient Market Hypothesis has no room for asset price bubbles or busts."

Various internal and external economic forces can destabilize markets, undermining EMH's fundamental claims. While the model can accept and handle small temporary deviations, the kind of large-scale destabilizations around the globe in recent years are outside EMH's framework. The EMH model claims that detecting bubbles in assets, currency and commodities as they are inflating is impossible. It turns to rapid central bank action to try to repair the situation after a bubble pops. Is there really no alternative to ignoring inflating bubbles and making frantic efforts to recover from extreme dislocations when they burst?

> "The Efficient Market Hypothesis...views an economic expansion as a sign of an economy moving toward the hypothesized stable equilibrium."

Another option does exist. To detect inflating bubbles, monitor credit growth. When credit expands more rapidly than economic growth, it marks an unsustainable bubble, probably caused by overly rapid credit creation. To measure such expansions, experts can monitor lending and growth (or inflation) in asset prices. If prices and debt grow simultaneously, that signals oncoming disaster. If lenders are providing cheap, easy credit, observers should worry whether debtors will be able to pay if conditions tighten and interest rises. For another sign of a bubble, notice if an asset's value appreciates more than the income it generates. That is, watch for credit creation.

Bank Governors and Governance

Although talented engineers designed London's Millennium Bridge for pedestrians to cross the Thames River, it became wobbly due to vibrations from the walkers' footsteps. Engineers fixed it by adding dampers to counteract the footsteps, but adding similar dampers to the economy is a much bigger problem because – unlike the bridge – it does not have a single response frequency.

> "The idea that credit expansions can be excessive...is denied by the efficient market philosophy."

One of history's great minds, James Clerk Maxwell, wrote in the 19th century about the mechanical governors that dampened the extremes of speed on steam engines. He used engine feedback to calculate the right way to bring the machine's motion into a desirable range. Central bankers can learn from his approach. Rather than trying to dampen the economy too directly and too abruptly, they could use appropriate feedback from the economy itself, especially credit creation, to dampen bubbles' inflation and deal with their aftereffects. Smaller bursting bubbles generate fewer problems and are easier to handle. The key to creating the best dampening system is using the right variables in the equations. At present, central banks wrongly focus on consumer price inflation and ignore credit creation.

When You Don't Know What You Don't Know

Benoit Mandelbrot, the inventor of fractal geometry, argued that financial markets, in actuality, do not fit the efficient market hypothesis. He said that real-world data demonstrates a "memory" effect, as seen in the greater likelihood that prices will repeat recent patterns – rather than engaging in the famous random walk. However, neither EMH nor the memory effect explain the financial markets' strange behavior under extreme conditions, the so-called "fat tails" of their distribution curves. While EMH claims that markets have no memory, and Mandelbrot claims a memory effect, you require Minsky to understand the behavior the markets exhibit and the extremes of the price distribution curve. Minksy said stable markets create conditions that lead to instability. For example, when inflation is low and credit is easy to get, the combination creates a debt load. When market conditions eventually tighten, that debt becomes impossible to service and collapse is inevitable.

> "We tend to consider today's explosive economic growth as the normal condition, but in truth the last few hundred years of human history have been quite exceptional when compared to the preceding several hundred thousand years of economic stagnation."

Why aren't borrowers and lenders more prudent during good times? Because the system doesn't give them any feedback that their behavior is creating future instability. In the recent crisis, managers used the wrong measurements. They weren't prepared for the tidal wave of sell orders when asset prices began swinging. The mark-to-market rules reinforced the negative aspects of the asset price rises. The EMH's pretense that prices are subject to randomness leaves investors, regulators and bankers unprepared for dislocations.

Getting Past the Fixation on Efficient Markets

Economic theories should be subject to the same rigorous testing as any other scientific theory. Only the best theory, the one that most accurately predicts future conditions and provides the most reliable understanding of the economy, should survive. The present economic crisis is outside the realm of EMH, which should be replaced by Minsky's Keynes-based theory. Look toward the "M3" – Minsky, Maxwell and Mandelbrot – for a new financial market philosophy.

> "We should adopt the Financial Instability Hypothesis as our working assumption of how our financial system really works."

Governments should deal with the present near collapse of the financial system by taking practical steps. First, realize that floods of debt caused the present inflationary pressures. The economy cannot keep expanding forever and remain healthy. The central bank should get the primary task of monitoring the system for excessive debt creation and purging it when found. Done incorrectly, this would damage growth, but bankers should not be afraid to learn as they work toward a healthier economy. Second, government should forget trying to manage the economy according to the consumer price index. Rather than using cheap imports to justify low interest rates, the U.S. should have had higher interest rates during the import boom. Now that commodity prices are rising, the U.S. would have had room to cut interest rates. Third, the country needs a stronger mechanism for overseeing and managing its economy. The government should construct stricter budgets, implement them precisely and, under normal circumstances, abandon deficit spending. The U.S. should consider three options:

1. Accept the business cycle, allowing normal expansion and contraction to cleanse the system of inefficient organizations while freeing their resources for use by those who can deploy them to greater advantage.
2. Look for another bubble to inflate to give the economy the appearance of growth.
3. Release the monster of inflation to pay existing debt with cheaper dollars. Of course, this is a free pass for debtors and a tax on savers. But boom and bust also threatens property rights by creating vastly unpopular dislocations within the economy.

> "Adam Smith's invisible hand is the benign force guiding the markets to the best of possible states. In the asset markets the invisible hand is playing racquetball, driving the markets into repeated boom-bust cycles."

Although unpalatable, inflation is the best option as the U.S. works toward a better, sounder macroeconomic policy. The country should adapt its actions around the foundational role of credit in creating both wealth and financial instability. Focusing only on wealth creation while ignoring the instability of excessive credit creation is myopic and unnecessarily harmful. The U.S. must abandon its faith in market efficiency, and accept that government needs to monitor and govern the rate of credit creation.

About the Author

Dr. George Cooper worked at Goldman Sachs, Deutsche Bank and J.P. Morgan, and is now a principal at Alignment Investors (a division of BlueCrest Capital Management, Ltd.). He is the author of *Money, Blood and Revolution*.