FINANCIAL PREPAREDNESS

"One of life's most painful moments comes when we must admit that we didn't do our homework, that we are not prepared." ~ Merlin Olsen

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Complex Systems

It's the punch you don't see coming that knocks you out. ~ boxing adage

Last week I wrote about how imperative it is to take the Red Pill and see things as they truly are. Equally as important is the ability to accept the possibility that tomorrow could be very different from today.

This is difficult for the human brain to do due to Recency Bias, one of about 100 known biases that prevent the brain from making "rational" financial decisions (at least in a behavioral finance lab, but not, say, on the plains of Africa).

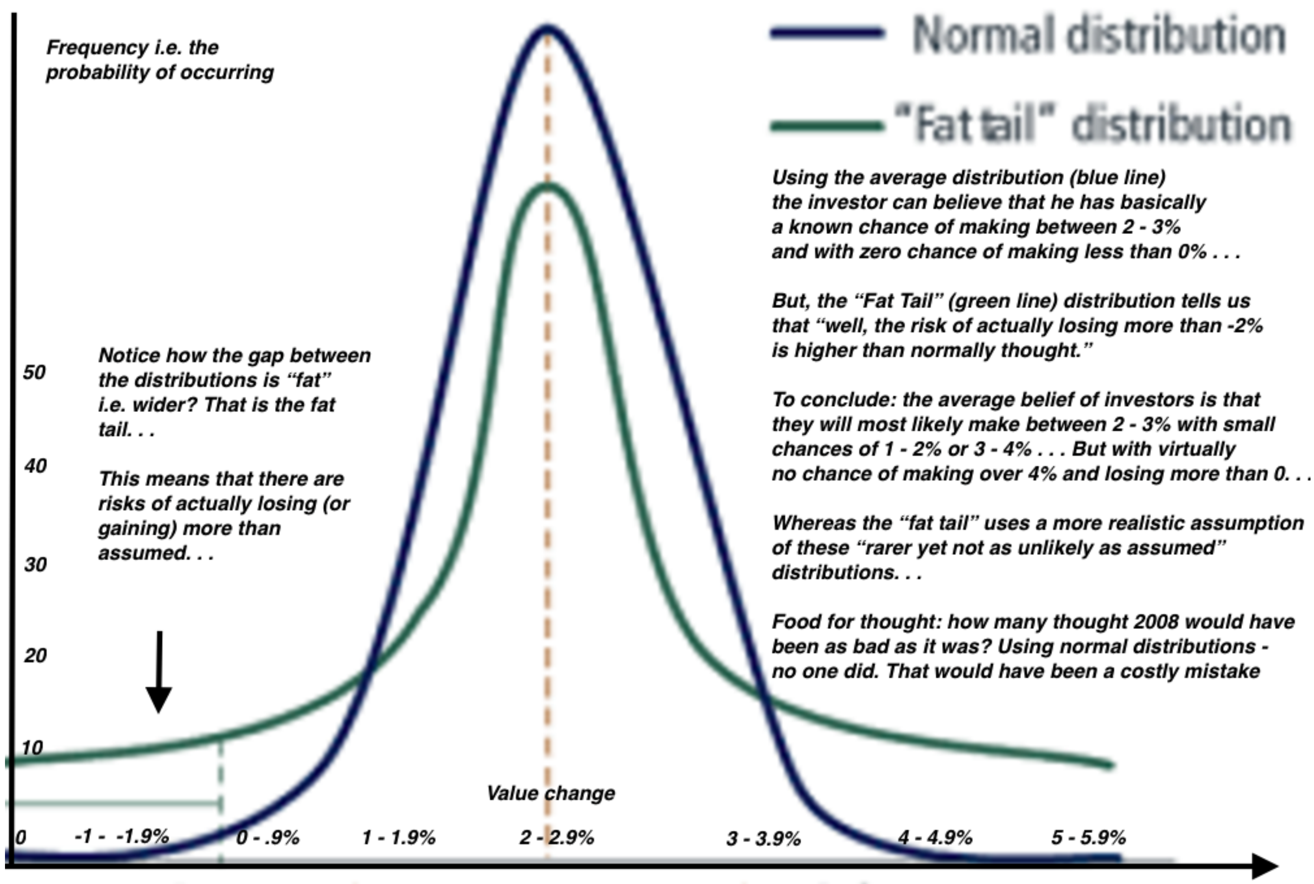
For millennia, not much changed from day to day for the average human, whereas today, not only has the pace of change never been faster, it is accelerating. Additionally, during prehistoric times, virtually no complex systems existed, whereas today the world is awash in them.

The best description/explanation of complex systems that I've seen is in the book <u>Aftermath: Seven Secrets of Wealth Preservation in the Coming Chaos</u> by James Rickards. He writes, "...complexity theory [is] a branch of physics that perfectly describes the dynamics of capital markets. Complexity theory includes concepts such as emergent properties (black swans), phase transitions (the switch from fear to greed), scaling metrics (how large systems produce diminishing marginal returns before collapsing), network effects (contagion) and hypersynchronicity (herd behavior). The next input is...behavioral psychology." I'll discuss each of these in turn.

According to Investopedia, "A black swan is an unpredictable event that is beyond what is normally expected of a situation and has potentially severe consequences. Black swan events are characterized by their extreme rarity [and] severe impact....[They] can cause catastrophic damage to an economy by negatively impacting markets and investments."

The bible of black swans is of course The Black Swan by Nassim Taleb, whose books are always mind-expanding but often challenging to read. During his childhood in Lebanon, a civil war broke out. Everyone thought it would be over in weeks or months. Instead, it dragged on for a decade.

Wars are in what he calls Extremistan, which doesn't have "normal", Gaussian, bell curve-shaped distributions like Normalstan. Extremistan has what are called "fat tails," or significantly more extreme events on the far left and right sides of the scale.

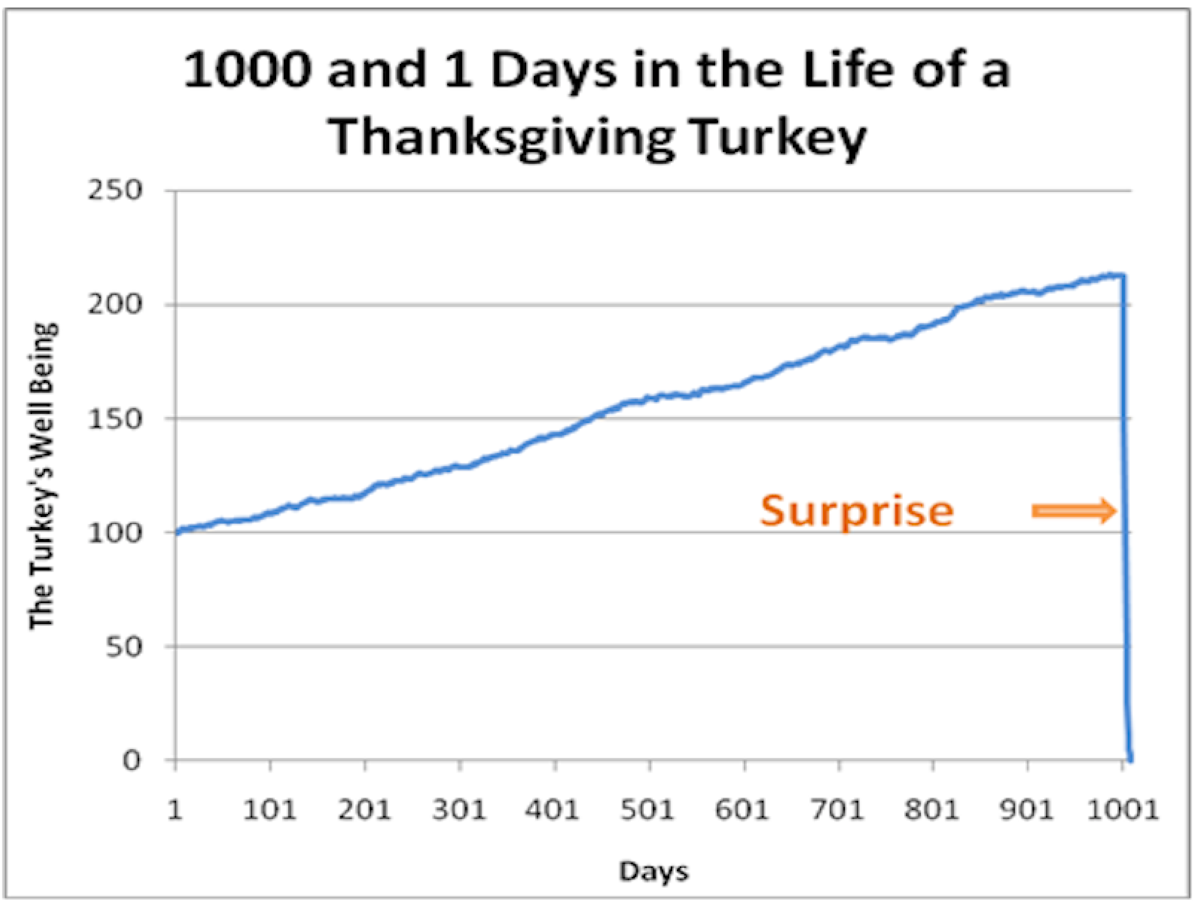


Normalstan includes things like coin tosses (heads or tails), or the height of men in a homogenous country. Graphing these observations will result in a "normal" distribution like the blue bell curve above.

Notice how low the probabilities are when you look at the "tails" on the far left and right. Are the odds of finding a man who is 7'6" tall 0.01%, 0.001% or 0.0001%? Here's the thing: The human brain has trouble envisioning very large (e.g., the federal government's budget) and very small numbers, probably because for millennia, it never encountered them. Because of the very low probability, the meaningless numbers and in order to save scarce resources (thinking requires a lot of energy), the brain takes a mental shortcut and assumes those events won't even happen.

The danger of this is then magnified when the primitive brain encounters seldom-seen-before-until-recently complex systems (such as financial markets, war and politics) that are in Extremistan and actually have fat tails like the green curve above. That's when the punch comes that man never saw coming.

In The Black Swan, Taleb has a chart that shows the life of a Thanksgiving turkey. For years, life is good and nothing much changes. Then one day, the farmer and his axe change everything. The turkey never saw it coming, especially since he had never experienced anything like it. Humans have a difficult time visualizing things that could happen but haven't happened yet, because it's not in their memory.



You want to avoid being the turkey.

An aside: Speaking of large numbers, I remember reading an article in *The Wall Street Journal* around 1994 when I was in grad school. That was the first time the federal budget was going to be larger than $1 trillion, and the article tried to explain how large that was.

If I remember correctly, if you filled a train of boxcars with a trillion $1 bills, it would stretch from Washington, D.C. to New York City.

The federal government is currently spending over $8.1 trillion per year, with a budget deficit of $4.65 trillion (the Fed makes up the shortfall in revenue by printing it out of thin air). The national debt is almost $28 trillion, and unfunded liabilities are about $160 trillion (source).

Now imagine you're a Congressman on the House Budget Committee trying to deal with this. Where do you even begin? How do you wrap your mind around those numbers? (And how can Congress provide effective oversight over that much spending?)

Complex systems have "emergent properties," which means that the results of how the players interact with each other *emerges* and thus cannot be predicted in advance, which can lead to some wild and unexpected outcomes (fat tails).

Just like a snow-covered mountainside in a snowstorm, a complex system can suddenly undergo a *phase transition* after a single, unremarkable snowflake falls at just the right place on a hidden arm of instability (such as the $617 trillion notional value of [unregulated] currency and credit derivatives, much if not most of which are owned by your ~~hedge fund~~ commercial bank), causing an avalanche (collapse). Again, the punch you never saw coming.

Generally speaking, as the size of an animal (which is a complex system, and here we can also include corporations and financial markets) increases, it becomes harder for it to survive. That's because as size increases, the energy inputs required to keep the system going must increase at an exponential rate. This is why the big banks, hedge funds, Big Tech and federal government are so desperate to keep The Game going by any means necessary—even if it means doing crazy things like dropping "money" from helicopters or setting interest rates below 0%. Because if the growth rate of energy (in terms of purchasing power) coming into the system even faltered to a rate of 0%, the system would collapse, and the elite 1% would have to find an honest way to fund their lifestyle.

The book The Fearful Rise of Markets: Global Bubbles, Synchronized Meltdowns, and How to Prevent Them in the Future does a great job of explaining why the correlation coefficient of almost everything moves towards +1.0 (perfect positive correlation—two assets moving in the same direction at the same time with the same amount of amplitude) during a market crash. But now the risk of a synchronized meltdown is far higher, for the following reasons.

First, investors have been trained to believe that "the Fed has their back," that it will print massive amounts of "money" if financial markets crash, thus bailing them out (at least with nominal values). These bailouts amplify the normal business cycle, resulting in ever-larger booms and busts, until we reach the final Bubble of Everything (which we're in now), where everyone is bullish simply because they think the Fed will keep cranking out the green paper on its printing press. When everyone leans to one side of a boat, it flips.

Second, the vast majority of financial assets are now owned by a very small percentage of the population. When these few investors turn bearish and want to sell their massive holdings, there will be few buyers, especially since the bottom 90% of society doesn't have much wealth with which to buy.

Further, never before has so much of the stock market been invested in index funds. Investors have bought into the Efficient Market Hypothesis (EMH), which began to emerge in 1900. Its assumptions include no transaction costs (including taxes), information (including non-public) about all relevant factors is freely and widely available among all investors and is immediately factored into prices, ***investors behave rationally*** and have homogenous expectations, prices move in a random walk (so trends don't matter), etc. Although these are convenient assumptions for a mathematician or professor devising a theory in an ivory tower, they do not reflect real world conditions at all.

In a highly complex, rapidly changing world full of uncertainty, danger, ambiguity and deception, the EMH is a convenient and reassuring mental crutch that alleviates an investor's anxiety and eliminates their need to think, thus preserving precious mental energy. Instead of "This very bad storm means the gods are angry at us," it's "I don't need to worry about financial crashes because prices are always fair."

The vast majority of stock index funds are weighted by market capitalization (number of shares outstanding times the stock price), so a company worth $1 trillion will have ten times the weighting of one worth $100 billion. Now let's say the stock price of that $1 trillion company doubles (even though its fundamentals don't change) because it's in favor with investors, perhaps because of a mania, stories the media are telling, etc. The company is now twice as richly valued as before (implying lower future returns), yet index funds *have to double the number of shares they hold by buying at those rich prices*. Now let's say the bubble in that stock pops and the stock crashes so the company is now worth only $100 billion. Index funds now have to sell 95% of their shares in that company at those much lower prices. Buy high, sell low.

Index funds are a very crude tool, one that is very binary, with no room for nuance. When investor greed turns to fear (and by the way, not only is fear about 2.5 times more powerful an emotion in the human brain than greed, it also shuts down one's critical thinking in their prefrontal cortex) and investors want to flee (by asking for their money back), when they go to sell, if they own index funds, they in effect have to sell *everything*. They have to throw the baby out with the bathwater.

When everyone wants their money back at the same time, it's like a stampede trying to get through the single door of a crowded movie theater that's on fire. When prices are crashing and there's no place to hide, this creates a negative feedback loop where crashing prices create more fear, which results in further selling and even lower prices.

One thing that could cause investors to want to get their money back (i.e., to want to quickly get out of a burning theater) is if prices start to crash when they don't have much cash to begin with. The Retail Money Market Ratio compares how much retail investors have in money market funds compared with the market capitalization of the S&P 500

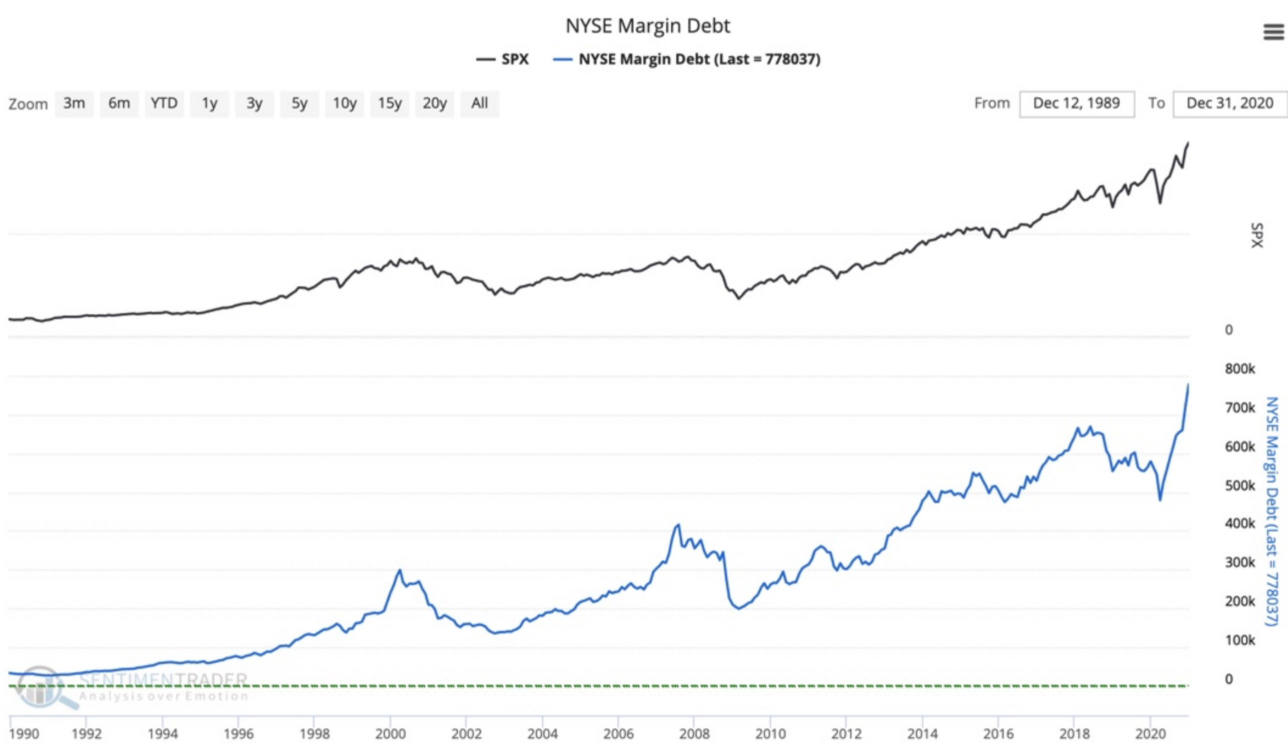
Index. That ratio is currently at 2.44%. Going back to 1981, the all-time low of 2.2% was reached in January 2018. So there is not much cash on the sidelines and thus not much room for error. It's like tailgating the car in front of you at high speed.

Another factor that causes correlations to increase towards +1.0 and asset prices to crash simultaneously is margin debt, which is money that investors borrow from their brokerage firms so they can speculate. Margin debt allows you to goose your returns because you're using Other People's Money. It increases towards the end of a bull market when recent returns have been high (and painful losses are a distant memory, if the investor is even old enough to have experienced a bear market) and investors are feeling very bullish and confident.

To protect themselves from losses, brokerage firms take the assets purchased with the margin loan as collateral, and keep a close eye on their price. If the price drops far enough, the borrower will receive a margin call from the brokerage firm, in which he/she either has to put up more cash as collateral or sell their position (if the borrower doesn't respond quickly enough, the brokerage firm will sell the position at the current price).

So during a crash, correlations tend to move towards +1.0 because investors who have received margin calls often sell assets that are performing relatively well so they don't have to sell the asset for which they received the margin call. So let's say the market crashes because investors realize that we're going to have Zimbabwe-style inflation; the price of precious metals could decline as well temporarily as those assets get sold to meet margin calls, before eventually recovering.

NYSE Margin Debt



The chart above is of margin debt on the New York Stock Exchange. What could go wrong?

Another sort of black swan that I don't think many people have considered is the widespread selling pressure that could occur if, during a crash when fear is pervasive, investors suddenly realize that not only is the market rigged against them (which I'll cover in detail in future issues), but those who have rigged it against them are now rigging it further by preventing them from selling and getting their money back while prices are crashing (i.e., the elite 1% gets to butt in line ahead of everyone else at the door of the burning theater).

We saw something like this recently when the Reddit investors were prevented from buying GameStop shares during their short squeeze of hedge funds that had shorted the stock. Listen, when the financial wellbeing of the government or the elite 1% that controls it is at risk, the rule of law goes out the window and gets replaced by the Rule of Man, where *anything goes*. So yes, at some point, short selling could be banned, trading and withdrawals could be restricted, the stock market could close, etc. Not to mention what could happen with banks, which I'll discuss in a future issue.

Finally, let's talk about how herd behavior can cause crashes and other black swan events. There seems to be an instinctual propensity in man to follow the herd. That's probably because for millennia, generally, doing so served him well. For example, if everyone around you suddenly began to run away, it was probably because a dangerous animal or a hostile tribe was about to attack.

Additionally, one of the greatest human needs is social approval—the desire to be approved of by your peers. This is because--also for millennia—humans lived in small tribes that were highly interdependent. Being accepted by a tribe meant survival, while being shunned meant isolation, severe hardship and an early death. Psychological studies show that if one looks and acts like the people in a group, the group is significantly more likely to approve of him/her.

So one way that someone can increase their social approval is by buying the same assets and having the same investment views as everyone else. At a dinner party (or a bar if you're single), don't talk about your shares of Hormel Foods (which makes Spam and has been a great long-term investment). No, talk about the call options you bought on Tesla stock. If you want to impress that hot chick at the bar, talk about how Tesla just bought $1.5 billion worth of Bitcoin, not about how many cans of Spam Hormel sold last year. If you talk about Spam, (1) it's not “cool,” and (2) it's going to create cognitive dissonance in the other person's brain, which might make them wonder if they need to spend some scarce mental energy on critical thinking, which they are not inclined to want to do.

So as you can imagine, when people use financial markets to seek the approval of other people, it leads to herd behavior, bubbles and crashes. Following the herd in one's tribal stomping ground served man well for millennia. The problem is that financial markets are a complex system in Extremistan (which man has little experience with), and following the herd in such a system can produce catastrophic results. When it comes to investing, you're either a contrarian or you're roadkill. As Charles Mackay, author of Extraordinary Popular Delusions and the Madness of Crowds wrote, “Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one.”

I will discuss behavioral finance in detail in future issues.

What You Should Be Doing Now

I plan to cover the why and how of these in future issues (if I haven't already), but here are some actions I recommend you take (or at least start thinking about) now:

1. Avoid U.S. stocks (especially the largest, most popular ones such as the FAANGs, and those that have a low dividend yield or whose dividend is not secure) and bonds. We are in the midst of a very dangerous mania, one of the biggest of all time. An (ordinary) snowflake falling at just the right spot on a (hidden) arm of instability could trigger a phase transition and a devastating avalanche/market crash. Ever since the bailouts following the Great Financial Crisis, I have been predicting that the next financial crisis would be the worst of our lifetime, if not the worst in human history. There is too much debt (leverage), moral hazard, fraud, gaming of the system, euphoria and speculation, too much “magic.” This is a time to be circumspect, cautious and wary, to take some money off the table and reduce risk, prepare, hunker down and brace for impact.

2. Continue to accumulate healthy food with a long shelf life. Ideally, you want to build up to about a year's worth. Manage your inventory by expiration date.

3. If you don't own any physical gold, consider starting to *accumulate* it *right now*. This morning (2/19), the spot price dropped to $1,759.00, the lowest since the election (note that the premium for actual physical gold is currently over $100 per ounce). The current optimism score of 52 (lower is better for buyers) is also near the post-election low of 51, though certainly still not close to revulsion (though I doubt it's going to drop much further, knowing what we now know). If you'd like an Amazon-like experience, try APMEX. If you'd like some very informed guidance from a reputable company that has been selling bullion for decades, call Robert Goodin at McAlvany ICA at (800) 525-9556 (Mountain Time).

4. If all of your wealth is in the financial system (retirement plans, brokerage firms and banks), start moving some of it out (preferably in a tax-wise manner). Get enough cash in smaller bills so that you could buy at least several weeks of necessities for your family (at inflated prices).

5. To help protect yourself from COVID-19, take Vitamin C and D, and zinc (and something like green tea or Quercetin to get the zinc into your body).

6. Books to read:
   The Money Bubble by James Turk and John Rubino. Outstanding book.

Prepper's Financial Guide by Jim Cobb. Much of this book is about basic prepping instead of finances, and much of the financial part is about basic things such as budgeting and getting out of debt. Three stars.
This Time Is Different: Eight Centuries of Financial Folly by Carmen Reinhart and Kenneth Rogoff
The New Case for Gold by James Rickards
Strategic Relocation: North American Guide to Safe Places, 3rd Edition by Joel Skousen. Indispensable if you want to move.
Reinventing Collapse: The Soviet Example and American Prospects by Dmitry Orlov
How an Economy Grows and Why It Crashes by Peter Schiff. This is a clever and amusing cartoon book that you could use to educate your children or grandchildren about money and economics, but adults can learn a lot from it too.

Preparedness News

Texas Was Seconds Away From Catastrophic Monthslong Blackouts As Ted Koppel describes in Lights Out, because Texas' electrical grid isn't connected to the grid for the rest of the country, it's actually more resilient because it's not susceptible to cascading crashes that can spread from other states.

Is Texas Facing a Humanitarian Crisis? Up to 15 million people without heat and electricity, many of those without water, for days in freezing temperatures. How many of them were prepared to take care of themselves and their families?

I've heard about a lot of people on social media blaming politicians for their plight and saying that they live in a "failed state" because they don't have any water to drink or flush their toilet with or can't stay warm. I don't know about a failed state; I think it's more like a failed society. Instead of waiting like sheep for the government to come rescue us, we need to be more like sheepdogs that take care of themselves.

Weather is a complex system. This storm may have been "unprecedented," but remember that complex systems have *emergent* properties that can't be predicted. Sometimes they do unprecedented things that no one saw coming.

Note the sign. In a crisis, physical cash is king (for a few days, at least).

Hacker Tried to Poison Water Supply With computers connected to the Internet, anything can happen, especially with all of the malicious actors out there.

Venezuela Abolishes Cash, Adopts Digital Currency This is a smart move, for what that government is trying to accomplish. First, they won't have the constant trouble and expense of printing up millions of more notes with more zeros on them. Second, the government's reputation won't be tarnished by millions of its now-worthless older currency notes lying around the streets as litter. Further, it will be able to spy on all financial transactions. And finally, it will make it easy for the government to confiscate assets and impoverish its political opponents. It's a wonderful tool for control. All of this is coming to the U.S. as part of The Great Reset; Venezuela is just an early adopter.

Many States Already Recognize Gold and Silver as Legal Currency Governments are primarily concerned with "continuity of government," i.e., keeping themselves going, including their funding sources. This is a prudent move on their part. Perhaps they see the writing on the wall and suspect that the dollar's days are numbered.

I would love to hear from you! I thrive on feedback from readers. If you have any comments, suggestions, insight/wisdom, or you'd like to share a link to a great article, please email me.

Generally, I don't have time to answer questions about your specific situation, but if you have a general question that I think other readers also have, let me know and I will provide an answer in a future issue.

Feel free to forward this to a friend. If you would like to subscribe (it's free!) or unsubscribe, email me with either "subscribe" or "unsubscribe" in the subject line.

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Investments carry risk, are not guaranteed, and do fluctuate in value, and you can lose your entire investment. Past performance is not indicative of future performance. You should not invest in something you don't understand, or put all of your eggs in one basket.

Before starting a new diet or exercise regimen, you should consult with a doctor, nutritionist, dietician, or personal trainer.