

**The Financial Effects of the COVID-19 Pandemic Are Not Unprecedented:
Multiple Historical Events Help Contextualize the Crisis**

Original, May 17, 2022

THE FINANCIAL EFFECTS OF THE COVID-19 PANDEMIC ARE NOT UNPRECEDENTED: MULTIPLE HISTORICAL EVENTS HELP CONTEXTUALIZE THE CRISIS



“Another lesson I learned early is that there is nothing new in Wall Street. There can’t be because speculation is as old as the hills. Whatever happens in the stock market today has happened before and will happen again.”¹

- Jesse Livermore (1923)

Jesse Livermore was a famous stock operator who made a fortune manipulating stock prices on Wall Street before the Securities Exchange Act outlawed such practices in 1934. In an interview with Edwin Lefèvre for his classic book, *Reminiscences of a Stock Operator*, Livermore attributed much of his success to his realization that no matter how strange market activity appeared in the moment, it was never unprecedented and would eventually subside. When experiencing market disturbances, Livermore remained calm by focusing on the future in the same way that sailors experiencing choppy seas alleviate nausea by staring at the distant horizon.

The goal of this paper is to demonstrate that the seemingly unprecedented financial events that occurred in the wake of COVID-19 have happened before and will happen again. By recognizing this truth, investors may find it easier to cope with persistent, gut-wrenching market volatility and remain focused on their long-term objectives. This is a valuable outcome because the ability to remain calm under such conditions is what distinguishes successful long-term investors. In fact, those who master it usually view spasms of market volatility as an opportunity rather than a peril. It is only the pervasive human instinct to panic that creates danger. In his timeless book, *Against the Gods*, Peter Bernstein stated, *“For true long-term investors – that small group of people like Warren Buffett who can shut their eyes to short-term fluctuations and who have no doubt that what goes down will come back up – volatility represents an opportunity rather than risk...”²* I hope this paper convinces investors to join this group.

THE COVID-19 FINANCIAL CRISES IN THE CONTEXT OF U.S. FINANCIAL HISTORY

The COVID-19 Financial Crisis seems unprecedented largely because it combines attributes of multiple historical events, several of which occurred more than one hundred years ago. The easiest way to understand the fundamental dynamics of this crisis is to isolate the distinct phases and map them to the most relevant historical events. The cheat sheet below provides a road map for this analysis, and detailed explanations for each phase are explained throughout the remainder of the paper.

**Figure 1: Phases of the COVID-19 Financial Crisis
and Relevant Historical Events**

Phases of COVID-19 Financial Crisis	Relevant Historical Events
Phase 1: Panic (Mar/Apr 2020)	➔ Outbreak of World War I (Jul/Aug 1914)
Phase 2: Emergency Response (Mar 2020 – Mar 2021)	➔ Global Financial Crisis (2008 – 2009)
Phase 3: Side Effects	
Speculation (Apr 2020 – Feb 2021)	➔ Dot-com Bubble (1999 – 2000)
Inflation (Mar 2021 – TBD)	➔ Post-World War I/Great Influenza Inflation (1919 – 1920)
Phase 4: Clean Up	
Asset Bubble Collapse (Mar 2021 – TBD)	➔ Dot-com Bust (2000)
Contractionary Monetary Policy (Mar 2022 – TBD)	➔ Post-World War I Monetary Tightening (1920) ➔ Prelude to the Great Inflation (1965 – 1968)

PHASE 1: PANIC



"Up to the final moment of the launching of the ultimatum between the European governments, no one thought it possible that all our boasted bonds of civilization were to burst overnight and plunge back into medieval barbarism."³

- Henry George Stebbins Noble,
President of the New York Stock Exchange (1914)

The market panic that the U.S. experienced in March 2020 was unique only in the sense that it was different than anything that any *living* American can recall.* What made it so unusual was the magnitude of the impact combined with the suddenness of the onset. Most market shocks at this scale arrive with some advanced warning, providing people with at least some time to brace themselves. The terror of COVID-19, however, struck with almost no warning and with devastating effects. In a matter of weeks, the world's 7.9 billion inhabitants simultaneously reached the horrific conclusion that COVID-19 had metastasized into a global pandemic the likes of which the world had not experienced since 1918. Entire segments of the economy shut down virtually overnight, and Americans confronted the real prospect of a catastrophic economic collapse.

The last pandemic of this magnitude was the Great Influenza, which began in March 1918 and lasted for roughly one year. It seems logical to assume that the financial effects of COVID-19 would resemble those of the Great Influenza, but this would be incorrect. The Great Influenza struck as World War I entered its fourth year, and investors were already numb to major economic disruptions and devastating loss of life. The Great Influenza was also less visible to Americans because the United States (and most developed countries for that matter) had strict censorship rules that forbid members of the media from even acknowledging the existence of the pandemic, much less its severity. Over the course of a year, the Great Influenza killed an estimated 50 million people worldwide, but the economic and emotional impact was largely hidden by the simultaneous destruction of World War I and eerie silence of the media.⁴

The financial effects of the COVID-19 pandemic differed from those of the Great Influenza, but the onset of World War I shows several similarities. Much like the arrival of COVID-19, the outbreak of World War I was sudden, unexpected, and massively disruptive on a global scale. Up until the moment that Austria-Hungary declared war on Serbia, few Americans thought that such a war was even remotely possible. Financial markets were caught completely off guard, making the panic that began on July 29, 1914 look a lot like the panic that Americans witnessed in March 2020.^{5,6} The primary difference was that U.S. policymakers in 1914 were much less prepared to handle the consequences. Foreign securities exchanges immediately shut down and remained closed for years. U.S. securities markets suddenly became the only source of liquidity for investors, and even though the United States initially declared its neutrality, a tidal wave of sell orders forced the New York Stock Exchange (NYSE) to close its doors on the morning of July 31, 1914.⁷ The NYSE remained closed for more than five months, which is the longest closure by a wide margin in all of U.S. history.

The impact of the COVID-19 Financial Panic on U.S. securities markets was much less severe because policymakers had a more robust set of fiscal and monetary policy tools at their disposal. In addition, having learned valuable lessons from the Great Depression and Global Financial Crisis, policymakers were willing to use them with minimal delay. This explains why the similarities between the outbreak of COVID-19 and World War I do not extend beyond the initial panic phase.

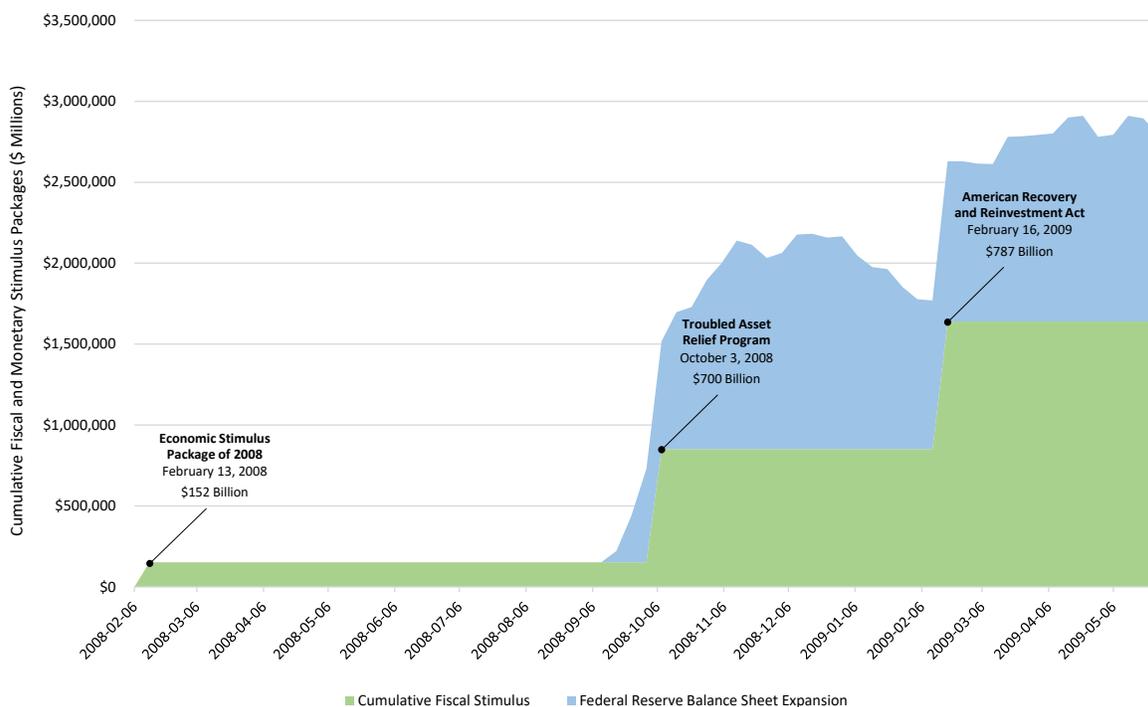
* This may not be entirely true. A handful of Americans are older than 108, but it is doubtful that they remember the financial panic of 1914.

PHASE 2: EMERGENCY RESPONSE

The U.S. fiscal and monetary responses to the COVID-19 pandemic differed from the responses employed at the onset of World War I, but they were far from unprecedented. In fact, the policies looked a lot like the ones employed roughly a decade earlier during the Global Financial Crisis. In October 2008, monetary and fiscal policymakers began flooding the financial system with liquidity to reverse a self-reinforcing deflationary spiral that was slipping out of their hands. Had they failed to act boldly, it is virtually guaranteed that the crisis would have triggered a Great Depression-level event. Nobody appreciated this more than Secretary of the Treasury, Hank Paulson, which explains why he literally dropped to one knee and begged Speaker of the House, Nancy Pelosi to pass the Troubled Asset Relief Program (TARP) after it failed to gain approval in the House of Representatives on September 28, 2008.

Showing the similarity of these two responses, the fiscal programs and Federal Reserve balance sheet expansions during the Global Financial Crisis and COVID-19 are depicted in **Figure 2** and **Figure 3**, respectively.

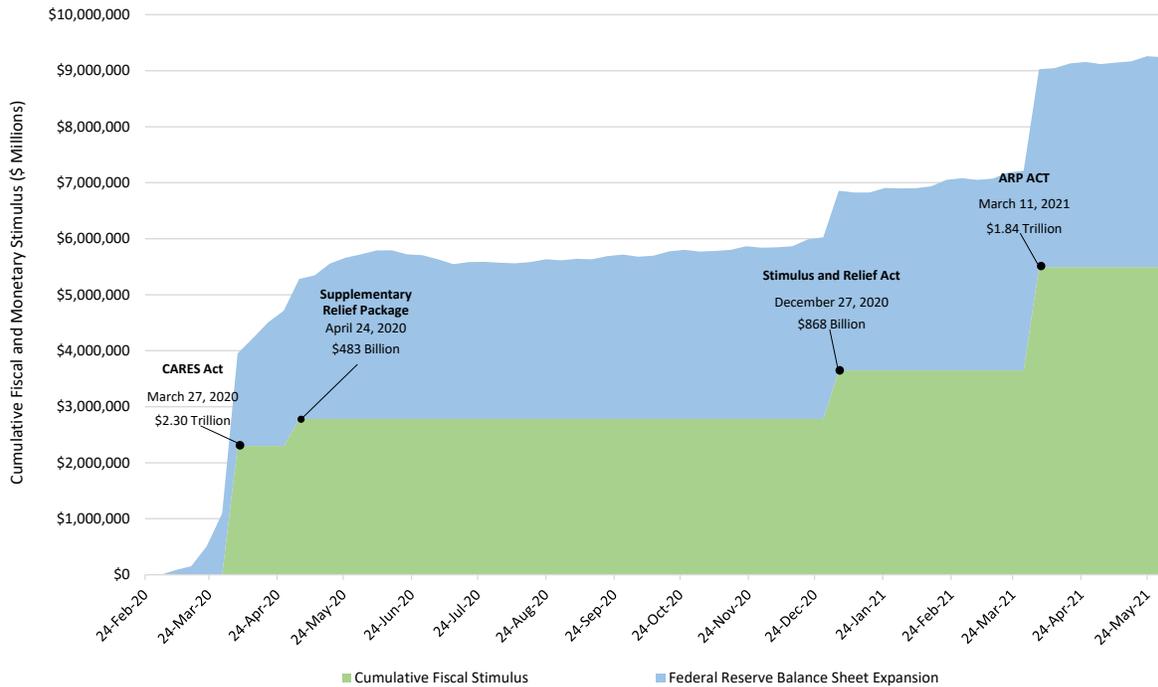
Figure 2: Cumulative Fiscal Stimulus and Federal Reserve Balance Sheet Expansion (\$ Millions)[†]
(February 6, 2008 – May 31, 2009)



Sources: Federal Reserve Bank of St. Louis; U.S. Department of the Treasury.

[†] The actual amount of several programs was later revised; the charts show the estimated values when the programs were first passed into law.

Figure 3: Cumulative Fiscal Stimulus and Federal Reserve Balance Sheet Expansion (\$ Millions)
(February 24, 2020 – May 31, 2021)



Sources: Federal Reserve Bank of St. Louis; International Monetary Fund; U.S. Department of the Treasury.

The COVID-19 stimulus packages were considerably larger and implemented much more quickly than those employed during the Global Financial Crisis, but the fundamental tactics were the same. In a way, Americans were fortunate to have witnessed the response to the Global Financial Crisis so recently because it lowered resistance to these policies when the COVID-19 pandemic hit – and there was little time to spare. The fiscal and monetary policies in response to COVID-19 took effect so quickly that many Americans were in disbelief when the U.S. economy rebounded even though entire industries lay idle. However, this is precisely what is expected when a central bank and federal government fill a deflationary void by printing money and distributing cash freely. In this respect, the quick and massive response by policymakers was a clear success. On the other hand, stimulus efforts of this magnitude always come at a cost. In addition to increasing U.S. debt levels substantially, the emergency response produced two unwanted side effects: reckless speculation and high levels of inflation.

PHASE 3: SIDE EFFECTS

It is worth restating that extreme monetary and fiscal policy responses were essential to manage the economic impact of COVID-19. The alternative was to allow the U.S. to plunge into a Great Depression-level event, which is never a risk to take lightly. Few Americans recall the misery of the Great Depression, but if they did, their dark memories would provide sufficient justification to support extraordinary measures to prevent a repetition. But even these memories would understate the consequences of the Great Depression. In fact, the most devastating effects extended well beyond economic suffering. The truth is that the Nazi party and Japanese militarists likely would have remained fringe movements if not for the destabilizing effects of the Great Depression. When these costs are added, it becomes clear that the devastation of Great Depression-level events is best measured by tallying the loss of tens of millions of human lives rather than mere increases in unemployment and losses of wealth. This explains why policymakers are terrified when they face the possibility of repeating this event. They will do anything in

their power to avoid it, and they are much more likely to err on the side of doing too much rather than too little.

The U.S. stimulus policies enacted in 2020 and 2021 were designed to avoid a Great Depression-level event. The Federal Reserve and federal government flooded the market with nearly \$10 trillion in monetary and fiscal stimulus to achieve this objective. Many pundits later argued that the stimulus was excessive. Some of their criticisms were valid, but if given the choice between doing too little or too much, it is hard to fault them for expressing a bias toward the latter. Nevertheless, when an economy is flooded with more money than is needed, unwanted side effects are inevitable. These typically take the form of reckless speculation and high inflation. By early 2021, Americans were experiencing both, but, once again, neither was unprecedented. The excessive speculation resembled the infamous dot-com bubble in the late 1990s, while elevated levels of inflation resembled the Post-World War I/Great Influenza inflation of 1919-1920.

The Dot-com Bubble of 1999

The formation of speculative asset bubbles is virtually inevitable when people have too much money, which explains why the most recent episode is hardly unique from a historical perspective. The post-COVID-19 bubbles began forming soon after monetary and fiscal stimulus began hitting U.S. bank accounts. During the second half of 2020 and early 2021, Americans poured their newfound wealth into a variety of speculative assets, such as high-risk tech stocks, cryptocurrencies, and cringeworthy NFTs. The bubbles were disturbingly reminiscent of the dot-com bubble that formed in the late 1990s. Those who lived through this mania may recall the millions of dollars in paper profits that investors briefly celebrated after investing in companies, such as Webvan, eToys, and Kozmo.com.

When speculative manias inevitably end, the media searches for an archetypical villain who best encapsulates the overconfidence of the era. After the dot-com bust, villains included Henry Blodget, who was an overly optimistic salesman clothed as a Wall Street analyst, and the company Pets.com, whose lofty valuation was outdone only by the absurdity of its business model. A leading candidate for the archetypical villain of the COVID-19 era is Cathie Wood, CIO of the ARK Innovation ETF (ARKK). Like a dystopian replica of Noah's Ark, Cathie Wood's ARK Fund was laden with a menagerie of overpriced beasts, a few of which deserve extinction. Even the most creative magical thinker would struggle to see a scenario in which the ARK fund would end its journey in anything less than a financial shipwreck. As is usually the case, however, the ARK fund initially experienced breathtaking gains when the monetary flood waters were rising in 2020 and early 2021. The 290% gain from March 2, 2020 to February 12, 2021 made the respectable 27% gain of the S&P 500 seem tame. However, as is always the case with overconfident speculation, the ARK's fall surpassed its rise. As of May 13, 2022, the ARK fund hovered at a mere 29% of its peak value, massively underperforming the S&P 500 Index. **Figure 4** tracks the rise and fall of the ARK Innovation Fund.

Figure 4: Growth of \$1 Invested in the ARK Innovation ETF (ARKK) and S&P 500 Index
(March 2, 2020 – February 12, 2021)



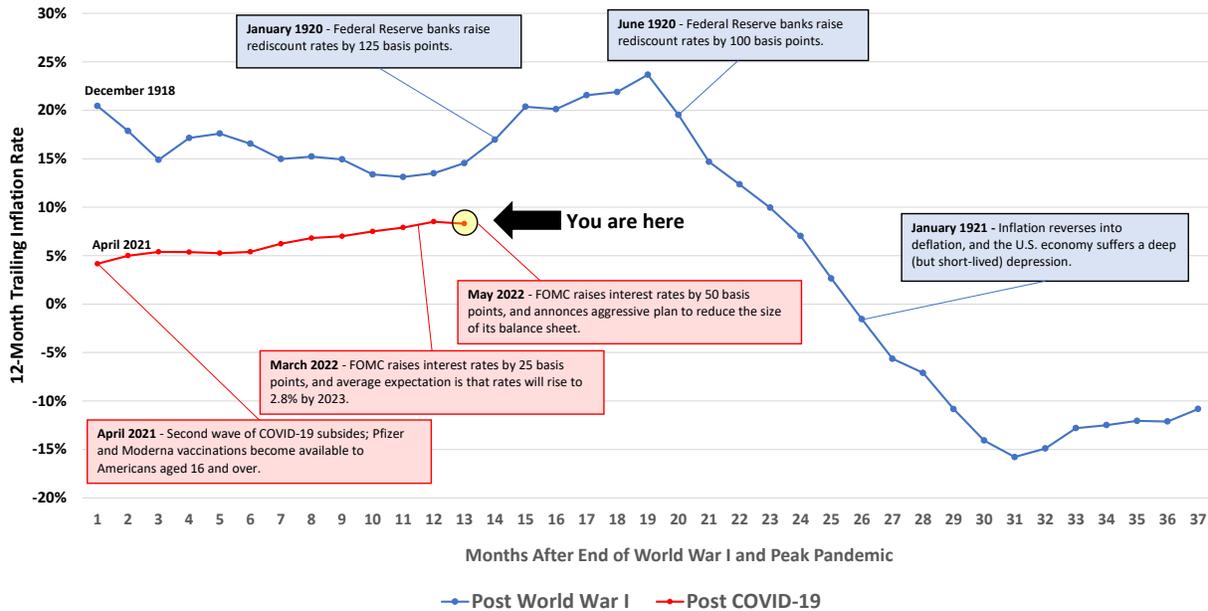
Source: Yahoo Finance.

In fairness, the final verdict on the ARK fund is still out, but the signs do not look promising. The price of the fund will not sink to zero, but it is already much closer to that number than it is to its prior peak – and the monetary tide has only begun to recede!

Inflation of 1919-1920

On April 13, 2021, the Bureau of Labor Statistics reported an inflation rate of 4.2% for the 12-month period ending March 31, 2021. Over the subsequent year, inflation rose to even higher levels, with the most recent reading through April 30, 2022 breached 8% for the second consecutive month. Unlike asset bubbles, persistent inflation at these levels is a relatively rare phenomenon in U.S. history. In fact, the most comparable event occurred almost exactly 100 years ago when World War I and the deadly second wave of the Great Influenza ended nearly simultaneously. In 1919 and 1920, Americans suffered from painfully high levels of inflation, and the causes were remarkably similar to the ones that are now driving post-COVID-19 inflation. Much like today, after the war and pandemic subsided in late 1918, Americans began spending their pent-up savings, while goods and services were in short supply due to supply chain disruptions. In 1919, the supply chain disruptions were a consequence of the U.S. suddenly shifting from total war back to normalcy. **Figure 5** shows inflation rates in the aftermath of COVID-19 compared to those reported after the end of World War I and the deadly second wave of the Great Influenza.

Figure 5: Comparison of COVID-19 Inflation and 1919 Inflation
(Months since End of World War I and Second Wave of COVID-19)



Sources: Federal Reserve Bank of Minneapolis; U.S. Bureau of Labor Statistics.

History never repeats exactly, but it is interesting that the persistence of inflation and the timing of the Federal Reserve’s response are strikingly similar.

PHASE 4: CLEAN UP

The U.S. is now in the final phase of the COVID-19 financial crisis, and the current challenge is how to clean up the mess associated with the previously mentioned side effects. Asset bubbles are already deflating just like the dot-com stocks did in 2000, but inflation remains stubbornly high. This explains why taming inflation is the top concern for the Federal Reserve. While the Federal Reserve leaders have clearly communicated their intent to follow through on their plan to tighten monetary policy aggressively, many investors appear to be discounting the potential consequences because they are accustomed to the dovish bias that the Federal Reserve expressed over the past several decades.

Investors may be applying the “dovish discount” because they are underestimating the degree to which the Fed’s previous bias was circumstantial rather than ideological. In other words, the Fed could afford to be dovish when unemployment and deflationary pressures were the biggest economic risks, but the situation in 2022 is much different. Unemployment is exceptionally low and inflationary pressures have persisted for far too long. If the Fed allows this to continue much longer, high levels of *current inflation* could mutate into high levels of *inflation expectations*. Once this happens, inflationary pressures become woven into the fabric of the economy, making it much more difficult and costly to unwind. It was the failure of the Federal Reserve to appreciate this risk that led to the Great Inflation of 1968-1982. When inflationary pressures built up in the late 1960s, the Federal Reserve and politicians maintained their bias toward maximizing employment at the expense of price stability. Once higher inflation expectations took hold by the end of the 1960s, the die was cast, and the United States suffered the longest period of high inflation in the nation’s history.^{8,9}

A repetition of the Great Inflation is now the event that the Federal Reserve fears most, and they simply cannot afford to allow high levels of inflation to persist much longer. Just like the Federal Reserve

added more liquidity than was necessary to avoid a Great Depression-level event in 2020, they are likely to drain more liquidity than is necessary to avoid a Great Inflation-level event in the 2020s. This will likely require the Fed to tolerate economic pain that exceeds levels to which Americans have become accustomed over the past several decades. The alternative is for the Fed to invite the onset of 1970s-like stagflation, and this scenario would be far worse.

CONCLUSION

In January 1920, the Federal Reserve regional banks raised rediscount rates by 125 basis points, and then raised them again by another 100 basis points in June 1920.¹⁰ The magnitude of the rate increases, combined with the limited warning provided to financial markets, had severe consequences. By 1921, price levels collapsed, and the U.S. entered a painful, but short-lived, depression. In 2022, it is unlikely that the Federal Reserve will act as recklessly, but the outcome may be similar, nonetheless. The expectation for the current tightening cycle is that the Fed will raise rates by as much as 300 basis points, which is more than the total increase of 225 basis points that ended the Post World War I/Great Influenza inflation. That said, the Federal Reserve of today is considerably more cautious when increasing rates, making it less likely that they will cause or tolerate an economic contraction as deep as the one that Americans experienced in 1921.

Considering the financial and emotional roller coaster that the world has experienced over the last two years, it is understandable why investors are tempted to exit the markets and seek temporary refuge from the storm. But this would be a mistake. The most frustrating truth about financial markets is that no matter how much you think you know, it is never enough to forecast the future with certainty. Strangely, making predictions is much more difficult in the short-term than it is in the long-term. For example, it is a high probability bet that the U.S. and global economy will expand over the next 50 years. If this happens, owning a diversified portfolio of equity securities that benefit from the expansion will most likely generate an attractive return. However, it is anybody's guess what equity markets will do over the next 6 months. This explains why market volatility is such a dangerous distraction for long-term investors. Those who seek to avoid or time volatile markets place their long-term objectives at risk. So even though it appears likely that market volatility and additional declines of equity markets are likely as the Federal Reserve withdraws liquidity from the financial system, the best bet for almost all investors is to simply rebalance their portfolios to their long-term targets and keep their eyes fixated on the more stable and predictable long-term horizon.

REFERENCES

- ¹ LeFèvre, Edwin (1923). *Reminiscences of a Stock Operator*. New Jersey: John Wiley & Sons, Inc.
- ² Bernstein, Peter L. (1996). *Against the Gods: The Remarkable Story of Risk*. New Jersey: John Wiley & Sons, Inc.
- ³ Grant, James (2014). *The Forgotten Depression: 1921: The Crash That Cured Itself*. New York: Simon & Schuster.
- ⁴ Barry, John (2005). *The Great Influenza: The Story of the Deadliest Pandemic in History*. New York: The Penguin Group.
- ⁵ Higgins, Mark, "A Post-COVID Recovery is Unlikely to Resemble the Roaring 20s; The Years 1919 and 1999 Serve as More Insightful Comparisons." (May 2, 2021). Available at SSRN: <https://ssrn.com/abstract=3838380>
- ⁶ Grant, James (2014). *The Forgotten Depression: 1921: The Crash That Cured Itself*. New York: Simon & Schuster.
- ⁷ "War's Effect on Our Markets." *The New York Times*. (July 31, 1914).
- ⁸ Meltzer, Allan H. "Origins of the Great Inflation." *Federal Reserve Bank of St. Louis Review*. (March/April 2005).
- ⁹ Higgins, Mark. "The Federal Reserve's Dovish Days are Suspended: Investors Should Brace Hard for the Hawk." (February 5, 2022). Available at SSRN: <https://ssrn.com/abstract=4027547>
- ¹⁰ Board of Governors of the Federal Reserve System. *Banking & Monetary Statistics, 1914-1941*. (November 1943):