SURPRISE, THE ONLY CONSTANT*

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A review of ALEX POLLOCK & HOWARD ADLER, SURPRISED AGAIN! THE COVID CRISIS AND THE NEW MARKET BUBBLE (2022)

> *I approach phenomena that I don't understand with good cheer and don't give in to them. I'm above them. Man should be aware that he is above lions, tigers, stars, above everything in nature, even above what is incomprehensible and seems miraculous, otherwise he's not a man but a mouse afraid of everything.*
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> The House with the Mezzanine: An Artist's Story, Anton Chekhov

In the late 1980s, the United States experienced what was called the "Savings and Loan Crisis." Savings and loan associations (S&Ls), firms much like banks, had committed the financial sin of borrowing short and lending long: they borrowed by taking deposits repayable in the near term to finance their making of longer-term thirty-year residential and other real estate loans at fixed interest rates. As interest rates eventually rose, the S&Ls and investment firms found themselves having to pay higher and higher amounts of interest to cover the low fixed amounts of interest they were receiving from their borrowers. That is a financial practice in which one can engage, albeit not

* Note from the Editor: The Federalist Society takes no positions on particular legal and public policy matters. Any expressions of opinion are those of the author. To join the debate, please email us at info@fedsoc.org.

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indefinitely. Regulators and investors nonetheless were surprised when many S&Ls failed, costing the federal government billions of dollars.

Even after that, in the late 1990s and early 2000s, the government and financial markets incented banks and investment firms to lend to higher-risk low-income borrowers to purchase homes. Policymakers thought sincerely that relaxed lending standards would enable lower-income persons to more quickly and easily realize the American dream of home ownership, which would in turn enable them to build up equity in their newly purchased homes as home values rose. That equity could be used to start a small business or send children to college. Unfortunately, home prices did not continue to rise relentlessly and eventually dropped, leaving lenders with inadequate collateral. As these borrowers eventually were unable to repay their loans, the lenders found themselves holding loans of dubious and uncertain value, and investors were surprised. This all came to a head in 2008 with what is now called the "Great Financial Crisis." Regulators charged with protecting our financial system were surprised again.

In 2023, interest rates rose at the behest of the Federal Reserve Board as it fought inflation. Silicon Valley Bank (SVB) and other banks found themselves holding bonds and loans paying lower rates of interest, which thus were of increasingly lower market value. SVB and some other banks had followed a business model of attracting large deposits in amounts greater than the $250,000 cap on federal deposit insurance. Those uninsured deposits—what bank regulators call "hot money"—could be expected to be withdrawn by depositors seeking higher interest rates or sensing trouble at the bank. And in our technological age, most banks provide corporate treasurers with the means to transfer money in and out of the bank in an instant electronically. The combination of hot money and the ability to withdraw funds instantly enabled a run on SVB and other banks the moment that corporate treasurers sensed that financial weakness at SVB threatened repayment of their uninsured deposits. Regulators and markets were surprised yet again.

Somehow, regulators responsible for protecting the financial system and investors are repeatedly surprised by financial crisis after financial crisis.

It is in that context that Alex Pollock and Howard Adler have written *Surprised Again! The COVID Crisis and the New Market Bubble*. Pollock was the Principal Deputy Director of the U.S. Department of Treasury's Office of Financial Research, and Adler was the Deputy Assistant Secretary of that Department for the Financial Stability Oversight Council (FSOC). Both agencies were established by the Dodd-Frank Act in 2010 to prevent another

financial crisis. Thus, both writers are highly qualified to serve as prophets warning of another possible financial crisis and to help avoid the next surprise.

I. COVID-19 AND ITS DIRECT EFFECTS

Every reader is familiar with the health crisis associated with the spread of Covid-19 in 2020, and many will be familiar with the political problems caused by that health crisis. However, many will not be familiar with the economic and financial problems associated with the pandemic. In April 2020, U.S. unemployment reached 14.8 percent, the highest level since 1940, much higher than the 9.9 percent recorded in 2009 during the Great Financial Crisis. In six weeks, stock prices dropped 36 percent. Gross domestic product dropped by nine percent in a single quarter. Then, in the second half of 2020, the U.S. economy experienced an unprecedented rebound.

The authors explain how the inevitable government intervention in 2020 continued into the rebounding 2021. The amount of assets on the Federal Reserve's balance sheet doubled in two years from $4.2 trillion in February 2020 to $8.9 trillion in February 2022 as it bought government bonds and mortgage-backed securities to stimulate the economy. In December 2021, housing prices rose more than 19 percent. Government intervention triggered a seven percent rise in the Consumer Price Index that year, though the Federal Reserve had, in December 2020, forecast a 1.3 percent rise in prices for 2021. It was surprised again. Inflation, of course, reduces the value of savings and wages, and it continues as I write.

Pollock and Adler believe that warning signs were on the horizon even before the Covid crisis began in 2020. But they argue those warning signs were missed by policymakers, regulators, markets, and even the authors themselves.

II. FINANCIAL PANIC

The book begins by explaining how quickly financial panic spread after the first U.S. Covid death in February 2020. In the following month, as in all historic panics, investors sold assets to "dash to cash." Investors no longer were interested in buying debt (bonds and loans), and interest rates, accordingly, rose. Bond prices dropped. Banks dramatically increased their loan loss reserves.

Simultaneously, Americans, like people around the world, were seized by an entirely rational fear of sickness and death. In 2020, 350,000 Americans died of Covid, 0.1 percent of our population. Government intervention shut down much of the U.S. economy, leaving millions jobless and thousands of businesses failing. In April 2020, the unemployment rate peaked at almost 15 percent.

Pollock and Adler explain the financial crisis that ensued.

Unemployed borrowers likely would have defaulted on their debts, so the federal government decreed a moratorium on foreclosures and evictions and prohibited lenders from reporting failure to pay as delinquent. The consequence was stress on the $11 trillion housing finance industry.

The shutdown also hurt various other industries, such as the travel and hospitality sectors, and, indirectly, firms that had lent to those industries. In the initial two weeks of the Covid crisis, March 11-24, 2020, investors withdrew 30 percent of their holdings from money market funds whose assets consisted of nongovernment securities. That was worse than the 26 percent of holdings withdrawn during the worst two weeks of the 2008 Financial Crisis.

Credit reporting agencies downgraded corporate debt dramatically. Issuers that were downgraded from investment grade to high-yield—so-called "fallen angels"—reached the highest number, as Pollock and Adler wryly put it, "since Lucifer and his cohorts were cast from heaven." Inevitably, many issuers of corporate bonds defaulted.

Revenue to pay municipal revenue bonds issued to pay for now-empty airports, stadiums, and office complexes dried up, leading to rating agency downgrades of those bonds.

Values of retail, hotel, and office commercial real estate dropped as people stayed home. Indeed, we are still experiencing this effect on office commercial real estate. This had—and continues to have—a negative effect on commercial real estate lenders, including banks. Residential real estate values, however, experienced a bubble as the Federal Reserve Board maintained mortgage interest rates at around an unprecedented three percent through 2020 and 2021 by buying mortgage-backed securities in such large amounts that, by year-end 2021, it held $2.6 trillion in such securities.

Covid's effects on the American economy were almost as bad as the sickness and death caused by Covid.

III. Government Intervention

In any financial crisis, the federal government seems to step in to save the day, and the Covid financial crisis was no exception. Pollock and Adler explain the myriad extraordinary efforts the federal government undertook to avoid financial disaster, far beyond the Federal Reserve's extraordinary purchases of massive amounts of mortgage-backed securities. As mentioned above, Congress enacted a law requiring holders of federally backed mortgage loans to forbear from reporting defaults to credit reporting agencies, thereby undermining the reliability of credit reports.

After explaining all this background, Pollock and Adler describe how the government raced to the rescue with massive lending programs. To finance the massive lending, the federal government itself borrowed by issuing bonds. Those bonds in large part were purchased by the Federal Reserve System by creating new money to pay for those bonds. The Federal Reserve itself established fourteen lending programs, including a facility to support the commercial paper market; facilities for foreign central banks that purchased U.S. Treasury securities; and facilities to support money market mutual funds, municipalities, and medium-sized businesses. Total assets on the balance sheet of the Federal Reserve increased from $4 trillion to more than $8 trillion, as mentioned above. Thus, more than $4 trillion was pumped into the economy. That flood of new money created by the Federal Reserve System undoubtedly caused the dramatic increases in prices the U.S. subsequently experienced. However, by the end of 2020, the U.S. economy had recovered. The short-term panic had been stemmed, but the stimulus continued. At what long-term cost?

The book explains, chapter by chapter, the effect of the crisis on various components of the financial sector: money market mutual funds, cryptocurrencies, banks, mortgages, states and municipalities, pension funds, and student loans. This gives the book a clear shape and a pace that keeps moving. It is a lively and coherent narrative.

IV. Money Market Mutual Funds

The authors first describe how money market mutual funds, in 2020 as in 2008, faced a "run" as fund investors demanded return of their cash at $1.00 per share. However, the short-term high-quality investments held by the funds were less liquid than the fund shares. As mentioned above, the Federal Reserve created a facility to save the money market mutual funds: it lent

to banks to finance the purchase of the assets of money market mutual funds by such banks.

After the Great Financial Crisis of 2008, the Securities and Exchange Commission, traditionally a regulator promoting disclosure, imposed substantive safety and soundness regulations on the money market mutual fund industry. But those regulations failed to prevent financial problems in 2020 and, in some cases, exacerbated the problems. The SEC implicitly acknowledged this in December, 2021 when it proposed 325 pages of amendments to its money market mutual fund rules. Pollock and Adler don't propose regulating money market mutual funds like banks, but one might wonder whether these financial intermediaries ought not to be regulated precisely in the same way banks are regulated. However, as we have seen in financial crisis after financial crisis, bank regulation certainly is not a panacea for the prevention of bank failures.

V. The Everything Bubble

In another chapter, the authors explain a second surprise: the 87 percent increase in the Dow Jones Industrial Average between its trough in March 2020 and September 23, 2021, even though the health crisis continued unabated. What the authors call the "Everything Bubble" affected not only stock prices, but also bond prices, the price of housing, and even prices of cryptocurrencies, all fueled by low interest rates maintained by the Federal Reserve. Some quipped that these rates were the lowest in 5,000 years.

The rapid economic expansion was fed not only by low interest rates, but also by government payments and subsidies that created enormous budget deficits requiring the issuance of large amounts of government debt that was monetized by purchases of that debt by the Federal Reserve. In March 2020, the yield on 10-year Treasury bonds hit 0.32 percent, which, to be fair to the Fed, was more a function of investor flight to safety than Fed monetary policy. However, 18 months later, those rates were at relatively historic lows of 1.5 percent; at that point, Federal Reserve policy appears to have been solely responsible for the low yields. Then, of course, as the fundamental laws of economics had not been repealed, inflation reared its ugly head, rising to seven percent for the year 2021. This particularly hurt holders of long-term bonds paying low interest rates. Meanwhile, savers, particularly retirees, found themselves losing as inflation rates exceeded rates paid on savings. In passing, the authors make the profound point that, in effect, the government

was expropriating those savings to finance deficits incurred to ameliorate the effects of the Covid crisis—an unlegislated redistribution of wealth.

As this reviewer writes in early April 2024, the Everything Bubble has continued to expand. A surge in the price of artificial intelligence chip-maker Nvidia has driven the stock market to record highs. The price of Nvidia stock has risen 700 percent since October 14, 2022, making it the third most valuable U.S. company, with a market value of more than two trillion dollars. The firm reported record earnings on February 21, 2024, and its market value increased by almost $280 billion in two days. It took 180 trading days for its market value to jump from one trillion dollars to two trillion dollars. It took Apple and Microsoft more than 500 days to do the same thing. Other chipmakers have seen an increase in value too, and the NASDAQ Composite Index reached a record high on February 29, 2024. The S&P 500 has already reached 15 record closes in 2024. The Everything Bubble continues to grow.

VI. CRYPTOCURRENCIES

Readers unfamiliar with cryptocurrencies and the public policy issues they raise will receive a quick education in the book's chapter on the subject. Cryptocurrencies were not unaffected by the Everything Bubble in asset prices. The price of Bitcoin, as the authors explain, increased 600 percent from October 2020 to April 2021. The price then dropped, bounced back up, and then dropped again, before ending up quite high. Other cryptocurrencies experienced similar price volatility. Of course, we are all accustomed to government-issued currency—fiat currency—taking for granted a governmental monopoly on the issuance of money. However, some economists have questioned whether such a monopoly is healthy. They argue that permitting people to reject money abused by the government (i.e., money devalued by inflation caused by excessive government spending), and permitting them to accept currency they trust, might be a very effective check on a government's mismanagement of its finances.

It is not clear that cryptocurrencies could ever become a form of money that people would trust and use as a means of payment. Most cryptocurrencies have no assets backing them up and no intrinsic value except for perception. Beyond functioning as speculative investments, they have only been substantially utilized as a means of payment by criminal elements. Pollock and Adler explain that cryptocurrency prices seem to be far too volatile for them to be used as a means of payment. Yet El Salvador, in September 2021, adopted Bitcoin as its official currency, alongside the U.S. dollar. Meanwhile,

central banks around the world are considering issuance of central bank digital currency (CBDC). Cryptocurrency in its infancy was not considered a significant threat to financial stability, but by year-end 2021, the total market capitalization of cryptocurrencies exceeded the amount of U.S. currency in circulation. Of course, U.S. currency is usable for the making of payments whereas cryptocurrencies, again, are not generally used to make payments.

The authors describe how, shortly before the Covid crisis, Facebook, which then had more than three billion users, announced that it was considering issuing a form of cryptocurrency to be called "Libra," a stablecoin backed by investments in financial assets. It was essentially a money market mutual fund, to be governed from Switzerland. The authors explain how this could have become a threat to the status of the U.S. dollar as the world's reserve currency and indirectly could have increased U.S. government borrowing costs. Furthermore, Libra would have been outside the control of U.S. regulators, who were not only concerned about money laundering implications, but also about the ability of Facebook to access spending information about billions of individuals. In 2019, the Chairman of the House Financial Services Committee formally asked Facebook to stop any forward movement on Libra. Finance ministers and central bankers from around the world expressed formal concerns about Libra. Facebook proposed changes to the Libra framework, agreeing to comply with all regulations of every regulator in the world. It applied for a payment system license from the Swiss Financial Market Supervisory Authority which, in April 2020, advised Facebook that it, the Authority, needed to coordinate with more than 20 other national supervisory authorities and central banks. Facebook responded that it would not proceed until all relevant regulatory approvals were received. In May 2021, Facebook abandoned the Libra application, instead proposing to issue a dollar-denominated stablecoin through a U.S. bank. In January 2022, Facebook announced that it was dissolving its stablecoin business and selling the technology to the U.S. bank.

Potential U.S. regulation of cryptocurrency is complicated by the differing jurisdictions of federal agencies. The SEC has jurisdiction over issuers of any cryptocurrency that constitutes an "investment contract," i.e., a right to a return based on the efforts of others. However, the SEC is authorized to regulate primarily to ensure full disclosure of material information and the prevention of fraud, not to ensure the safety and soundness of investments. The Commodities Futures Trading Commission (CFTC) claims jurisdiction of other types of cryptocurrencies as "commodities," but it is also generally

limited to the prevention of fraud. Most states have laws regulating firms that transmit money, essentially protecting consumers who entrust funds to such firms. The Financial Crimes Enforcement Network (FinCEN) in the U.S. Treasury Department requires registration of all "money service businesses" to combat money laundering. The federal agencies have asked Congress to legislate regulation of stablecoins and cryptocurrencies to remedy gaps in this patchwork,.

The authors describe unsuccessful efforts to regulate stablecoin, which theoretically is backed by dollars, but practically may not be freely redeemable. Contracts between the issuer and the buyer may permit redemptions by the buyer, except in certain cases—such as the issuer experiencing losses, illiquidity, unavailability of reserves—and then only in very large amounts and subject to fees. The reserves of the issuer also may be invested in low quality assets. The issuer is not legally required to provide full audited financial statements to buyers.

Proposals have been floated to regulate issuers of stablecoins in the same way FDIC-insured banks are regulated. Issuers would be subject to capital requirements and required to pay insurance premiums to a government insurer that would examine the issuer to control its risk. Stablecoin issuers would be subject to the myriad regulations to which banks are subject. The authors contend that would adversely affect the profitability of stablecoin issuers. Such regulation would require congressional action, which has not been forthcoming. The book suggests that the FSOC could theoretically designate issuers of stablecoins as systemically important, which would subject them to some bank-like supervision and regulation by the Fed; ironically, this would put the issuer of U.S. currency, Federal Reserve Notes, in charge of regulating its competitors, issuers of cryptocurrency.

The book describes China's approach to regulation of cryptocurrency and compares that to the U.S. system. China's central bank issues its own digital currency, and Chinese law prohibits all other cryptocurrency transactions by its citizens. This leads to the question whether the U.S. should follow China's lead and develop its own CBDC over which the Federal Reserve, like China's central bank, would likely then have a monopoly.

Pollock and Adler logically turn to a discussion of CBDC. As evidenced by China's system, CBDC is a means by which an authoritarian government can monitor and control its population, as every transaction by every citizen must pass through the central bank's computer system. Ominously, too, of course, the government theoretically could freeze the account of any

discomforting "dissident," preventing the dissident from transacting; the government could even confiscate the funds in the account of the dissident.

The Federal Reserve has been studying issuance of its own CBDC for at least three years and has even invited public comment on the issue. It has said that it would not issue such currency without authorization from Congress. The authors discuss the pros and cons of a U.S. CBDC and predict that the U.S. will eventually adopt its own CBDC, albeit over libertarian objections.

VII. Banks

In March 2020, at the time of the initial Covid shock, bank stock prices crashed. Banks, facing the unknown, took huge provisions for potential loan losses, reducing earnings already reduced by the low level of interest rates. As it turned out, loan losses were not as serious as portended, and bank stocks recovered to pre-pandemic levels a year later. The book questions, quite appropriately, whether bank-feared loan losses would have been realized in the absence of the government's extraordinary intervention in the economy. The authors take this opportunity to discuss whether some large banks are too big to fail, concluding that those large banks, indeed, are too big to be allowed to fail.

Pollock and Adler also explain why they believe that the number of bank failures during the Covid crisis pales in comparison to the number of bank failures in earlier financial crises. They predict coming financial risk, particularly the risk posed by leveraged loans (loans to already highly leveraged (indebted) firms) that bank regulators have discouraged banks from making. The risk related to leveraged loans has shifted to nonbank players. Those nonbank firms rushed to fill the gap created by the regulator-forced abandonment of that market by banks. Pollock and Adler also cite as a source of risk the exposure that many small and medium-sized banks have to commercial real estate loans. As Covid forced many employees in office buildings to work from home, and as workers have resisted efforts by employers to persuade them to return to the office, office buildings sit largely empty. Employers paying rent on empty office space seek rental concessions from landlords who nonetheless need revenue to repay their bank loans. It is hard to avoid the conclusion that eventually this pressure will increase defaults on those loans and cause serious loan losses at banks.

VIII. MORTGAGES

The book also discusses the effect of the Covid Financial Crisis on the nation's mortgage markets. It describes what it calls the three-sided "Government Mortgage Triangle," consisting of:

1. what the authors call the "Government Mortgage Complex": the majority government-owned purchasers of most residential mortgages in the U.S., the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC), along with the wholly government-owned Government National Mortgage Association (GNMA), which guarantees residential mortgage loans made by the Federal Housing Administration and the Veterans Administration);

2. the U. S. Treasury, which is the majority owner of FNMA and FHLMC (and, in effect, guarantees their obligations) and the sole owner of GNMA; and

3. the Federal Reserve, the holder of trillions of dollars in Treasury debt and mortgage securities.

At one point, the authors ponder how helpful it would be to have a consolidated set of books for the Triangle, eliminating interagency transactions. Regrettably, the book does not speculate on what such a consolidated financial statement might look like. The Government Mortgage Complex guaranteed $8.8 trillion in obligations in late 2021 and held assets of $8.3 trillion; the Fed held $2.7 trillion in mortgage securities at that time.

By the time Covid reached our shores, the Federal Reserve had long maintained unusually low interest rates, partly by purchasing hundreds of billions of dollars' worth of mortgage-backed securities (eventually indirectly holding 23 percent of the country's residential mortgages) with new money that the Federal Reserve created. The demand for housing was consequently stimulated, and as the supply of housing did not correspondingly increase, the fundamental laws of economics dictated that housing prices would rise accordingly. By subsidizing residential mortgages, the Federal Reserve inflated the price of housing. Between March 2020 and October 2021, housing prices on average increased by 27 percent. Instead of removing the proverbial punchbowl, the authors comment, "the Federal Reserve . . . was spiking the punch." That adversely affected housing affordability for low-income families, although it likely benefited the housing industry of builders and their suppliers and laborers.

As Mr. Pollock is fond of correctly explaining, the Federal Reserve does not follow Generally Accepted Accounting Principles, even though the banks it regulates are required to follow such principles. If the Federal Reserve did apply such accounting principles, in the current normal higher interest rate environment, it would have a substantial negative net worth if it also marked to market value its substantial multi-trillion dollar securities portfolio which it, instead, carries at par (face) value.

The book further explains that, while the Fed was inflating housing prices in 2020 and 2021, other federal agencies were at work similarly helping the housing industry and wealthy homebuyers by pushing up housing prices. The Federal Housing Finance Agency (FHFA), which regulates the government-owned and implicitly government-guaranteed FNMA and FHLMC, which purchase most of the residential mortgages originated in the country, increased the size of any individual loan they might buy to enable them to finance the purchase of homes sold at a price of $1,213,500, the top three percent of houses in the country at the time. Not to be outdone, the Federal Housing Administration (FHA), the government's lender to high-risk low-income borrowers seeking to purchase homes, decided to lend for the purchase of homes at prices as high as $1,011,250. The authors attribute these developments to the natural desire of institutions to grow, a desire supported by the beneficiaries of their largesse. The authors quip that, while the Fed was spiking the punch, the FHFA and the FHA brought in a bigger punchbowl.

The book also explains another extraordinary effect that the Covid financial crisis had on mortgage markets. Payments on most residential mortgages are not actually made to firms that *own* the mortgage loans but to firms that *service* the loans, collecting payments and forwarding them on to the holders of the loans. The servicers are often firms that originated the loans, but not always. An unusual aspect of the servicing business is that servicers' contracts with the holders of the loans require the servicers to make payments to loan holders and to property- taxing authorities even if borrowers fail to pay. When the federal government imposed a moratorium on mortgage payments to help consumers hurt by the pandemic, mortgage servicers nonetheless retained a contractual obligation to pay the holders of the loans. Those servicers would have gone out of business, as the authors explain, but for three government actions. First, GNMA set up a program to finance mortgage servicers. Second, FNMA and FHLMC—technically the holders of vast amounts of those mortgages—voluntarily limited the contractual exposure of servicers to four months' worth of payments. Third, as interest rates dropped

at the behest of the Fed, many borrowers refinanced their mortgage loans at lower rates, providing servicers the cash flow needed to advance payments to mortgage holders and taxing authorities. States are now in the process of adopting capital and liquidity requirements for mortgage servicers.

IX. STATE AND LOCAL GOVERNMENTS

The Covid financial crisis not only affected securities, currency, banking, and mortgage markets; the authors explain how it also affected the ability of state and local governments to borrow. Investors withdrew almost half the shares in municipal bond funds, and municipal debt issuance dropped by more than half in March 2020 as investor interest shrank. Normally, municipal bond interest rates are lower than interest rates paid on U.S. Treasury obligations because interest on municipal bonds is not subject to federal income tax. However, during the Covid crisis, the flight to safety reversed that for a year and a half, as investors demanded higher interest on municipal bonds to compensate for the higher credit risk (and lesser liquidity) that state and local government obligations presented compared to that of obligations of the federal government. Investor concern over the credit risk presented by state and local government debt was justified by the negative effects that lockdowns had on local income and sales tax and other revenues.

As revenues declined, state and local government expenses for health care and education rose. In 2020, 82 local bond issuers defaulted on $5.8 billion in principal, the largest amount since 2012. In April 2020, the Fed came to the rescue, calming these bond markets by establishing a facility to buy up to $500 billion in state and local government debt. And, in March 2021, Congress passed the American Rescue Plan Act which made $350 billion available to state and local governments. Meanwhile, property tax revenues, on which local governments depend, increased as housing prices were driven up by low mortgage interest rates. The market for state and local government obligations thus recovered. The authors also go beyond the Covid crisis to share thoughts about the large amounts of unfunded pension debt owed by certain states and municipalities—Illinois and Chicago being the worst cases—and provide some in-depth analysis of Puerto Rico's debt struggle.

X. PENSION FUNDS

Pension funds, which the authors characterize as "dubious promises," were also affected by the Covid financial crisis. The authors estimate that

there is a $6 trillion shortfall between the amount of the total assets of U.S. pension funds and their estimated liabilities. They explain that is partially a consequence of the Federal Reserve's maintenance of low interest rates. As rate follows risk, the return on safe assets held by pension funds had been minimal. Single private employer and union multiemployer pension plans are each guaranteed by separate programs of the federal Pension Benefit Guaranty Corporation (PBGC). The PBGC's union multiemployer program was insolvent in 2020 with a negative net worth—a $68 billion deficit. That deficit was the consequence of long-standing factors wholly unrelated to Covid. In 2021, Congress in the American Rescue Plan Act bailed that program out, the result being a $500 million positive net worth for the program. The Act further provided that the federal government would pay any insolvent or critically troubled union multiemployer plan enough to pay all benefits due through 2051; that is estimated to cost $86 billion, an estimate that may be conservative since the shortfall at just one large union multiemployer pension plan is about $44 billion. The authors suggest, and I wholeheartedly agree, that this bailout was only made possible by the government's willingness to spend astronomical amounts of money in response to the Covid crisis. Pollock and Adler also point out the irony that most of the taxpayers who ultimately will pay for these union multiemployer benefits do not have such benefits themselves. They also point out that past government bailouts have been accompanied by reforms to prevent the recurrence of such bailouts, but that no such reforms were required or made in the case of this bailout.

Surprised Again! also discusses the even greater problems with public pension funds covering state and local government employees. The assets of such funds in 2021 totaled only 84 percent of their estimated liabilities, meaning that such funds are underfunded by $1 trillion. As in the case of the union multiemployer pension funds bailout, Congress used the Covid crisis as an excuse to bail out state and local governments; the American Rescue Plan Act gave $350 billion to those governments.

The authors provide a case study of pension problems using the State of Illinois, the state with the worst public pension plan problem. The state's five public pension plans were underfunded by $144 billion on June 30, 2020, according to the state itself; but Moody's, using more realistic discount rates, estimated that the number was $313 billion. When the state's additional 662 public pension plans, including Chicago's, are added, the overall deficit rises to $530 billion, according to Moody's. The Pew Charitable Trust estimates that Illinois' pension plans are only 39 percent funded, the lowest funding

percentage in the country. It is estimated that Illinois public employees contribute only four to eight percent of what they will receive. Sixty percent of Illinois government workers retire in their fifties. Further contributing to the problem is the fact that government employees in Illinois earn extraordinarily high salaries: tree-trimmers make more than $196,000 a year, nurses in state prisons make more than $277,000 a year, and junior college presidents make more than $491,000 a year. A quarter of the state's budget goes to pensions. The state's constitution prohibits pensions from being reduced, a seemingly insurmountable obstacle to public pension reform in Illinois. Pension benefits and public employee contributions are negotiated between unions and the politicians dependent on their support. What could go wrong? This would have nothing to do with the Covid financial crisis, except that Illinois was the only state in the union to borrow from the Federal Reserve under the Fed's April 2020 $500 billion municipal bond facility.

XI. STUDENT LOANS

Pollock and Adler then turn to student loans, characterizing them as a failed government lending program. Student loans outstanding in 2021 totaled $1.8 trillion, $1.6 trillion of which represented federal student loans guaranteed by the U.S. government. The total amount had doubled in the prior ten years, substantially fueling the rising costs of college. In response to Covid, politicians deferred payments on student loans and stopped the accrual of interest on those loans, costing the government $4 billion to $5 billion a month. Student loan losses due to Covid could cost taxpayers $500 billion, according to one estimate.

After the book went to press, President Biden, in August 2022, proposed his first student loan forgiveness program, forgiving up to $10,000 to $20,000 in debt per borrower depending on the nature of the student loan. The Biden administration estimated the total cost of this program to be $30 billion a year, but the Congressional Budget Office estimated that the giveaway would add $426 billion to the deficit the first year. The Supreme Court ruled that this program was beyond the President's legal authority. Undeterred, President Biden then, in January 2024, announced another student debt relief program costing taxpayers, in his analysis, $4.9 billion; yet another announced in March 2024 would cost, in his estimate, $6 billion. In April 2024, President Biden announced an additional $7.4 billion in student loan relief.

In discussing student loans, the book returns to the theme it discussed regarding securities and mortgage markets: dramatically increasing the flow of money inevitably results in increased prices, be it of securities, housing, or college. Reckless government spending inflates prices. The authors propose that problems with the risk of student loan defaults could be avoided if colleges had "skin in the game," i.e. financial responsibility for a portion of losses on student loans, proceeds of which they receive. That solution was adopted by law to reduce risk in the case of residential mortgage loans after the 2008-2009 financial crisis. Colleges no doubt would oppose any such legislative fix on the basis that they are not able to assess repayment risk any better than the government is.

XII. Central Banking

Finally, *Surprised Again!* turns to central banking. Historically, the role of central banks like the Fed has been to serve as the lender of last resort, advancing liquid funds against illiquid, but good, collateral. During the Covid financial crisis, the Federal Reserve advanced trillions of dollars. The authors express strong concern that financial markets in the U.S. and speculators have come to expect, in crisis after crisis, that they will be able to put risk to the Fed in one way or another. The expectation is that the Fed will maintain excessively low interest rates and print money and buy debt and establish facilities to lend directly, or indirectly through banks, to firms in need or on the security of their debt. That expectation fuels speculation. On the other hand, the authors recognize that it would be irresponsible to let our financial system come crashing down. Without question, the Fed has saved the day repeatedly. But in doing so, it undoubtedly has, created unfortunate expectations. One wonders why it must do so repeatedly, i.e. why our economy and financial system seem to careen from crisis to crisis. Regrettably, reflections on that phenomenon are not within the scope of this short book of only 194 pages.

The authors do explain that other countries also followed the central-bank-as-savior model in the Covid crisis. In Japan and the larger European countries, central banks purchased more than half of the debt issued by their national governments during the Covid financial crisis. And they note that, as the crisis subsided in 2021 and markets revived, the Fed, the Bank of Japan, and the European Central Bank, along with the Bank of England and the Swiss National Bank, continued to pursue Quantitative Easing, buying new government and mortgage securities, thereby creating new money, restraining

interest rate growth and fueling the rise in prices. The amount of the Fed's assets doubled with Quantitative Easing in 2009 and doubled again every five years thereafter. Thankfully, the amount now is declining, with Quantitative Tightening, as the Fed fights the inflation and price instability that it arguably caused, or at least failed to prevent.

The authors note that the majority of Fed assets consists of Treasury securities, but that a very significant amount has consisted of mortgage securities. Thus, the Fed has been subsidizing the housing industry, doubtless an important part of our economy. Wealth has been transferred from taxpayers to firms working in that sector. This represents an allocation of credit to a specific sector of the economy, the policy basis for which was not adopted by the representatives of the people sitting in Congress. This governmental preference for one industry over all others raises fundamental democratic questions. Might we someday find a progressive government's Fed purchasing bonds issued by firms engaged in the fight against climate change? Or might a hawkish wartime Fed buy bonds issued by weapons manufacturers? Should these decisions be made by our elected representatives sitting in Congress or, as at present, by unelected government officials?

The authors explain that the creation of trillions of dollars of Covid financial crisis stimulus would not have been possible had the value of the dollar been tied to the price of gold, as it was under the international Bretton Woods Agreement at the end of World War II. In August 1971, President Richard Nixon "temporarily" suspended the convertibility of the dollar into gold, thereby permitting the unlimited creation of dollars. Nixon's action was followed by the inflation of the 1970s—up to 13 percent annually. Today, the Fed, to reduce the risk of deflation, targets a two percent annual rate of inflation despite its statutory duty to maintain long run growth of the monetary and credit aggregates to promote effectively stable prices. Due to a combination of the Fed's actions and federal government spending, the annual inflation rate reached 9.1 percent in January 2021. Although Fed economists initially assured everyone that inflation was merely "transitory," it is still with us as I write. The Fed and those who listened to it were surprised, again. The authors note that this could not have happened but for President Nixon's fateful decision in August 1971, almost 50 years before.

XIII. The Next Financial Crisis

In their last chapter, the authors ponder what the next financial crisis will be, noting that historically a new financial crisis seems to arise every ten years.

They wryly quote the late Federal Reserve Chairman Paul Volcker as saying, "[a]bout every ten years, we have the biggest crisis in 50 years." Their thoughts on this subject are particularly important when one recalls their backgrounds at the Treasury's Office of Financial Research and FSOC.

The authors suggest that one cause of another financial crisis might be central banks' taking away the proverbial punchbowl too soon. If central banks do so—after asset prices have inflated so much, and debt increased to such high levels—the necessary contraction when the punchbowl is removed would trigger massive failures and losses. As I write, consumer credit is at an all-time high, as are consumer delinquencies. A related potential cause of crisis would be the effect of high interest rates on the price of housing. Real estate mortgage interest rates have, since Covid, hovered around seven percent, with no consequent crash in housing prices (except possibly in China), a fact that the authors presciently predicted.

Other potential causes of a future financial crisis the authors mention include a serious hack of our computer-dependent financial system; a similar failure of our electrical system; another pandemic (can we place much assurance in the understanding that Covid was a once-in-a-100 year health event?); and a major war (the media have been mentioning a potential World War III over Ukraine, the Middle East, and Taiwan). Moreover, analysts increasingly express concern about whether commercial real estate loans on the books of small and medium-sized commercial banks will be repaid. Real estate developers find their tenants defaulting on their rent obligations as workers decline to return to the office. The Chairman of the Fed has testified before Congress that we should expect more bank failures consequently. Or the cause of the next financial crisis could be a surprise again.

Finally, the book updates itself. The manuscript was finished in early February 2022; an epilogue was added three months later, illustrating how quickly economic developments come. In those three months, Russia invaded Ukraine, and the U.S. imposed economic sanctions on Russia. That incented Russia and other countries to transact in currencies other than the dollar, thereby weakening the dollar. Meanwhile, Canada froze the bank accounts of truckers protesting Covid vaccine mandates, serving as an example of what a government issuing its own digital currency could do to dissidents. Inflation continued, causing the Fed to increase interest rates. Financial markets—including those for cryptocurrencies (and even for stablecoins)—dropped. Gross domestic product fell. These were the developments that made it into the epilogue.

But rapidly changing economic developments are a problem for books about any financial crisis, even for an excellent book such as this: things just keep changing. Since *Surprised Again!* was published, financial markets have recovered and reached new highs; FTX, a major cryptocurrency exchange, and similar firms have failed; significant bank failures have occurred; war has started in the Middle East; municipal governments have become financially overwhelmed by migrants entering the U.S. unlawfully; the Federal Reserve System has experienced unprecedented losses on a Generally Accepted Accounting Principles basis; the President has tried to issue blanket student loan forgiveness, been rebuffed on that by the Supreme Court, and tried again and again nonetheless; and a major bridge in Baltimore supporting the East Coast supply chain has collapsed.

XIV. CONCLUSION

When one considers the implicit guarantees that the federal government has made for FNMA and FHLMC and the PBGC, the explicit guarantee of GNMA, plus the roughly $34 trillion national debt, one can easily reach the conclusion that our federal government has been financially mismanaged for years and probably decades. The irresponsibility of congressmen and senators could not be clearer. Add the loose monetary policy pursued by the Fed with its inflationary impact, and one must wonder whether our government has helped or hurt us. Nonetheless, the book resists explicitly blaming and shaming anyone. (Mr. Pollock is a bit less reluctant to do so in a letter to the editor of *The Wall Street Journal* published in March of this year in which he wryly suggests that "[e]veryone should pity members of the [Fed] who must inwardly confess that they can't know the answers, yet have to play their parts in the Fed melodrama nonetheless.")

The book explains all of this quite cogently and in a manner easily understandable for the reader who is not a financial expert. Occasionally it ventures into effects on Treasury markets and short-term funding markets—such as those involving repurchase agreements, securities lending, and commercial paper—and on collateralized debt obligations. These may be somewhat beyond the understanding of non-financial readers. Nonetheless, Pollock and Adler have provided a concise and compelling view of the financial crisis triggered by Covid. Unfortunately, no one, not even Pollock and Adler, can ensure that, when the next financial crisis hits, the regulators, the markets, and the American people won't be surprised again.

The book also opens a fascinating window into the thinking of two highly placed government officials, the two authors, who had enormous financial responsibilities during the Covid crisis. As mentioned above, Pollock served as Principal Deputy Director of the Office of Financial Research in the U.S. Treasury Department as the Covid crisis unfolded, and Howard Adler served as the Deputy Assistant Secretary of the Treasury for FSOC during that time. The book illustrates how sophisticated their thinking was and is, and on how grand a stage they operated.

Surprised Again! The COVID Crisis and the New Market Bubble provides a fascinating mosaic of economic data illuminated by easily comprehensible charts deployed in the service of informing the reader of every currently foreseeable consequence of the Covid financial crisis. Nothing that I can foresee is left in the shadows.

Though Pollock and Adler's book is written in clear, concise, understandable language, it is not unsophisticated. Indeed, to this reader, many aspects of the explication seem profound. Although this writer has never been an academic, he cannot help but think that the book would make an excellent case study for college economics courses teaching the far-flung consequences of economic policy decisions.

Finally, on a strictly philosophical level, one might wonder at man's eternal search for certainty and predictability, the desire to avoid surprise by striving for the means to know all and understand how everything in nature functions. In ancient times, man turned to religion to explain things and, over the centuries, he turned to science. Some talk of the laws of nature and suggest that those laws are immutable, again assuring us of certainty and predictability. The study of economics is part of that search for certainty and predictability. The desire to subject all of life to discernible rules may be in vain and, thus, we may be doomed—at least in the universe of finance and economics—to be surprised again, and again, and again. Capitalism itself particularly requires investors and bankers to believe in some level of certainty if they are to invest and lend with an expectation of a return. Still, those investors and bankers find themselves surprised again!

Other Views:

- Eric Milstein & David Wessel, *What did the Fed do in response to the COVID-19 crisis?,* BROOKINGS INST. (Jan. 2, 2024), https://www.brookings.edu/articles/fed-response-to-covid19/.
- Vern McKinley, *Surprised Again! The COVID Crisis and the New Market Bubble*, CATO INST. (Summer 2023), https://www.cato.org/regulation/summer-2023/surprised-again-covid-crisis-new-market-bubble.