ARTICLE TO SECURITIES EXPERTS ROUNDTABLE

(To be published on Securities Experts Roundtable Web Site-https://securitiesexpert.org)

THE ABCs OF THE BANK CRISIS

BY: JAMES A KYPRIOS[1] AND WILLIAM PURCELL[2]

DATE: MARCH 30, 2023

I, Jim Kyprios, have recently written an article with Craig Wolson on the Effects of Inflation on the Capital Markets (posted on the SER website on January 18, 2023). The emphasis was on the negative effects of higher interest rates on corporate borrowings. It seemed obvious to us that higher rates will lead to more problems especially for highly leveraged companies leading in turn to more law suits.

BACKGROUND

We did not focus on the effects of inflation on banking. In the last few weeks, all of us have been amazed at the rapidity of the effects of higher rates on the destruction (is there a better word for it?) not only of two fairly large US banks but also of the demise of Credit Suisse. Banking is about confidence. When confidence wanes, there is a run on the banks and that is what we have just witnessed. This latest episode of bank runs could have been catastrophic, but as of this writing, the worst has been averted but it is probably too early to say that the crisis is over. Who would ever have believed that the second largest bank in Switzerland was hours away from bankruptcy?

Now that the era of free money is over, we have to deal with the consequences of higher interest rates which are due to an inflation that many did not believe would ever come back. For 40 years, we have witnessed the steady decline in interest rates. For the most part, times have been

[1] Mr. Kyprios is a member of Securities Experts Roundtable—see web site: www.kypriosinternational.com; he is an expert in domestic and international banking with an emphasis on senior bank management, lending, due diligence and credit analysis.
[2] Mr. Purcell is a voting member of Securities Experts Roundtable—see web site: www.purcellbanking.com; he is an expert in all aspects of investment banking including underwriting and trading of securities, M&A, due diligence, adequacy of disclosures, valuations, fairness opinions and fiduciary duties.

good except for the Great Financial Crisis (GFC) of 2007/2008 which was dealt with by legislation (Dodd Frank Act of 2010). The problem then was caused by credit issues which imperiled the banking system and led to bailouts. This was never supposed to happen again. Banks were to have much higher capital while (credit) riskier loans and investments were penalized with higher capital requirements. We were told very recently that there was adequate capital in the banking system to weather any contemplated storm. Stress tests “proved” this. What was not contemplated was that “so-called” riskless investments (i.e., government securities) could in fact be very risky in a rising rate environment. Because government securities were perceived to be risk free, capital requirements for treasuries were zero. Furthermore, the accounting profession has made a distinction between bonds held to maturity and those which could be traded. Bonds to be held to maturity did not have to marked to market.

In addition, Dodd Frank was substantially weakened in 2018 by both Republicans and Democrats. Until then, banks with assets in excess of $50 billion were considered systemically important and subjected to strict regulation including high capital requirements and annual stress tests. Dodd Frank was amended to increase the threshold to banks with assets of over $250 billion. Ironically, Barney Frank, who by 2018 had joined the Board of Signature Bank, was leading the parade to weaken Dodd Frank. Signature Bank and Silicon Valley Bank have both failed in recent weeks. Both had assets higher than $50 billion but lower than $250 billion and escaped the rigorous scrutiny and testing of the biggest banks. Also, both Signature Bank and Silicon Valley Bank were recently audited by KPMG for yearend 12/31/22 results and both were given a clean bill of health. The adequacy of these audits is beyond the scope of this article.

It appears that the major contributors to inflation were, directly and indirectly, Covid-19 and the war in Ukraine. Supply problems resulting from these two events undoubtedly created some inflation. But there can be little doubt that highly expansive monetary and fiscal policies in 2020 and 2021 were major contributors to inflation. The Federal Reserve and the Biden Administration did not take the threat of inflation seriously enough despite the warnings of eminent economists such as Larry Summers. For too long, we heard that the inflation was transitory. While the Fed and the Administration dallied, inflation and inflationary expectations

increased. Finally, in 2022 the Fed reacted with huge increases in interest rates. At the beginning of 2022, the Fed Funds rate[3] was lower than ½ of 1% and rose to about 4% by the end of the year. The Fed Funds rate is now close to 5%. Libor, which for many years was less than 1% is now nearly at 5%. Ten-year government bonds are now approximately at 3.5% and were recently over 4%. A year ago, ten-year government bonds yielded less than 2.5%.

SILICON VALLEY BANK IS THE POSTER CHILD OF OUR PRESENT-DAY BANK PROBLEMS

In retrospect, Silicon Valley Bank (SVB) had some obvious problems which were in fact detected by the Fed a few years back. On the deposit side, most of its customers consisted of start-up tech companies which were being funded by Venture Capital (VCs) firms. SVB was growing very rapidly. Probably 80% to 90% of its deposits were above the $250,000 FDIC guarantee limit which meant that in times of trouble, these deposits were not to be considered stable. When rates started to increase, the VC fountain was turned off. The startup companies then were forced to draw down their deposits. Banks are not sitting on cash. Most of a bank's assets are tied up in investments including loans and bonds. A bank generally has very short-term liabilities and longer-term assets. When there is a run on a bank, at some point it is not easily able to convert its long-term loans into cash. It can convert its bonds into cash but at the then prevailing market price.

In earlier years, SVB was conservative and invested its cash deposits to a great extent in one year government and government related bonds. In the last two years, it made the decision to buy longer term bonds in order to get higher interest rates on its assets.

Let's assume for the sake of a simple example that SVB bought ten-year government bonds which paid (say) 3% in interest. These were interest only bonds which means that the principal is only paid back at maturity. There is a term familiar to bankers and bond practitioners called

[3] The term federal funds rate refers to the target interest rate set by the Federal Open Market Committee (FOMC). This target is the rate at which commercial banks borrow and lend their excess reserves to each other overnight. The FOMC, which is the policymaking body of the Federal Reserve System, meets eight times a year to set the target federal funds rate, which is part of its monetary policy.
(Source:https://www.investopedia.com/terms/f/federalfundsrate.asp)

"duration". This is basically equivalent to what used to be called the average life of a bond. In this particular case, the duration of the bonds is 10 years. Let's now assume that the bonds were paid off serially each year (10% principal payment each year.). In that case, the duration would be about five years.

There is a simple formula to determine what the price risk is to a bond in case interest rates go up. The formula is this: Percentage drop in value of a bond= percentage point increase in rates X (times) duration. Assume rates went up for ten-year bonds from 3% to 4% and the duration was ten years. Then the loss in value of the bond is 1% x (times) 10 years = 10%. If interest rates had gone up by 2% points, then the loss in value would have been 20%.

To illustrate how dangerous it can be for one to hold long term "risk free" bonds, let's assume a bank holds 30 year duration bonds. A 1%-point increase in rates would result in a 30% reduction in the value of the bonds. So, it turns out that government bonds may be credit risk free but they are not really risk free.

This is what happened to SVB. Customers came in and cashed in their deposits and at some point SVB had to sell off its bonds at a loss. The word spread around that SVB was in trouble and there was a run on the bank. Banks are highly leveraged. For example, assume that for every $1 of equity, a bank has $9 of deposits. This is a leveraged bank but many banks are even more leveraged than that.

If a bank has (say) $10 in assets and $9 in deposits, it has an equity cushion of 10% ($1/$10). If the bank is selling off bonds and taking a 10% haircut on its bonds, it is draining its equity to the point where it will have no more equity. The word got around in Silicon Valley that SVB was insolvent and this led to huge with drawls which in a very short period of time bankrupted SVB.

Would adequate regulations and adequate supervision have led to a better result? We assume the answer is yes.

THE GOVERNMENT'S RESPONSE

The government's response has been evolving. At first, it appeared that the FDIC would only cover the FDIC-guaranteed amounts of $250,000 for SVB. But this would be inadequate since the overwhelming amount of SVB's and Signature Bank's deposits are not covered by FDIC insurance. Under pressure, Jerome Powell and Janet Yellen realized they had to cover all depositors at SVP and Signature Bank to stop the panic. They claimed it was not a bailout because bond holders and equity were not to be covered.

Then Janet Yellen made a comment that the government had not considered whether or not it would cover all depositors in the near future if there were additional bank problems. This caused additional consternation in the markets and, on the next day, she amended her statements by stating that future action would be looked into. The Administration including the Fed and the Secretary of the Treasury cannot unilaterally decide to cover all deposits in the future. This decision can only be made by Congress and ratified (or vetoed) by the President.

The markets are still nervous. It is reassuring that First Citizens Bank is purchasing a good part of SVB. First Citizens will now be the 25th largest bank in the US.

With respect to Credit Suisse, it is still shocking that the second largest bank in Switzerland was literally hours away from collapsing and had to be taken over by the largest bank in Switzerland. It is generally understood and agreed in the financial community world-wide that debt always has priority over equity. There are types of bonds used by banks referred to as a coco bonds. These are contingent convertible bonds. Purchasers of these bonds agree that under certain conditions (when equity falls below a certain level) these bonds can be converted into equity. When the Swiss government forced the merger of Credit Suisse into UBS, it wiped out the equity of Credit Suisse and it wiped out the coco bonds of Credit Suisse. However, UBS bought Credit Suisse by issuing shares to Credit Suisse shareholders at a price substantially below Credit Suisse's book value. This means that the coco bonds get nothing while the shareholders of Credit Suisse will have some equity by virtue of their ownership of UBS shares. This arrangement has not been accepted by holders of coco bonds who are suing. What the outcome of these law suits will be, we cannot say. It is not surprising that the prices of coco bonds world-wide have plummeted.

THE FED'S DILEMMA

Until recently, the Fed had a very clear mission–to get rid of inflation. Theoretically, they wanted to reduce inflation to 2% or less per annum. The Fed would do whatever it had to do to get rid of inflation. They would act like Paul Volcker did in the late 70s and early 80s.
The banking crisis has now changed the Fed's position. If they lean too hard on the monetary brakes, will they cause a serious recession and cause damage to the banking system? What steps should they take to stabilize the economy? Do they now need to loosen up? Are we heading for stagflation? The Fed has come up with a one-year program called the Bank Term Funding Program. This program provides liquidity to US depository institutions, taking eligible financial assets as collateral. This program was launched on 03/12/2023 to help banks, saving associations, and credit unions meet the liquidity needs of all their depositors. The Department of the Treasury has pledged $25 billion as credit protection to the Federal Reserve Banks in connection to this program. The Bank Term Funding Program is set to close by 03/11/2024. One of the controversial aspects of this program is that it will lend against collateral not based on the market value of the collateral but on its face value. This means that a bank can, for example, pledge $100 million of government bonds (with say a market value of $80 million) and obtain more in financing than the market value of the collateral.

Where are we going? Is the banking system being to some extent nationalized? It is hard to know. Are we unwittingly heading towards a system where the risks are being shifted to the government? Is banking being socialized?

POSSIBLE EFFECTS OF THE BANKING CRISIS ON THE LARGER ECONOMY

It is natural for depositors to be leery of keeping their money in smaller banks. Money is being put into money market funds and bigger banks. The bigger banks are becoming more and more important. Banking is more and more concentrated in bigger banks. Will these bigger banks pay attention to the merchant down the road in smaller towns? We don't think so. Is that what we as a nation want?

Smaller, community-type banks have their own specific problem. Many of them are heavily involved in commercial real estate financing which is one of the major problem industries resulting from Covid-19. These banks are not systemically important and will not be bailed out. Are we heading for another S&L crisis which we witnessed in the late 1980s? [4]

Unfortunately, the result of this latest banking crisis will be a tightening of regulations on banks which will inevitably lead to less lending. This will have the effect of slowing down the economy and increasing the possibility of recession, possibly even a serious one. The financial markets are betting that the Fed will have to loosen up in 2023. The Fed says it will continue the fight against inflation.

The banking crisis has made the Fed's job of stopping inflation difficult if not impossible.

Finally, we have the prospect of stagflation or even a serious recession combined with rising prices in 2024, an election year. This is what happened in 1980 when the incumbent President Jimmy Carter was soundly defeated by Ronald Reagan. Stay tuned!

---

[4] This is from Investopedia-**Savings and Loan Crisis (S&L): What Happened and Aftermath**
By Will Kenton- July 30, 2021 (Source: https://www.investopedia.com/terms/s/sl-crisis.asp)
The Savings and Loan (S&L) Crisis was a slow-moving financial disaster. The crisis came to a head and resulted in the failure of nearly a third of the 3,234 savings and loan associations in the United States between 1986 and 1995. The problem began during the era's volatile interest rate climate, stagflation, and slow growth of the 1970s and ended with a total cost of $160 billion; $132 billion of which was borne by taxpayers.1 Key to the S&L crisis was a mismatch of regulations to market conditions, speculation, moral hazard brought about by the combination of taxpayer guarantees along with deregulation, as well as outright corruption and fraud, and the implementation of greatly slackened and broadened lending standards that led desperate banks to take far too much risk balanced by far too little capital on hand…. **The savings and loan crisis was the build-up and extended deflation of a real-estate lending bubble in the United States from the early 1980s to the early 1990s.**