

recessionary trends, risks, and proactive strategies for your community fi



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introduction

The longest expansionary period in U.S. history (over 10 years) was abruptly interrupted in March of 2020 by a global pandemic – resulting in the economic equivalent of a wild roller coaster. But rather than a few minutes of thrilling ups and downs, this ride has dragged on for more than two years.

From supply chain issues, the Great Resignation, dramatic unemployment swings (from 3.5% to 14.2% then back down to 3.8%), and the lowest labor force participation rate since the mid-1970s – we’ve seen it all.

Now, as international tensions stemming from Russia’s invasion of Ukraine mount and inflation grows rapidly to its highest point in 40 years, some economists are predicting our next major recession may be right around the corner. The cycle appears primed to repeat.

While we are still in a period of expanding GDP (as of this writing), growth has slowed to 1.4%. When it dips below 0% for two consecutive quarters, then we will officially be in a recession¹.

This paper outlines: business cycles, economists’ inability to predict the recession onset, recessionary characteristics, the systematic risks in banking, and prudent risk management procedures.

business cycles



“What goes up must come down.”

Sir Isaac Newton

Sir Isaac Newton’s famous quote was referring to his third law of physics, which explains the movement of objects and how they are affected by gravity, but it can also be applied to economic cycles.

What is the definition of a recession?

- A recession is a macroeconomic term that refers to a significant decline in general economic activity in a region, country, or the entire world that goes on for more than a few months. It is visible in industrial production, employment, real income, and wholesale-retail trade. The technical definition of a recession is two consecutive quarters of negative economic growth as measured by a country’s gross domestic product (GDP) – Investopedia

Our economy has gone through 12 expansionary periods and 11 recessions since the end of World War II (Appendix A). The expansionary periods had an average duration was 63.6 months (just over five years), had average annual employment growth of 2.9%, and GDP growth of 4.1%. These “up times” are part of a natural business cycle but are also followed by recessionary (“down times”) periods where the economy contracts.

The primary role of the Federal Reserve is to manage the U.S. economy for growth and modest inflation through setting of fed funds rates and monetary policy. But even the most prudent manipulation of interest rates cannot change the fact that, eventually, there will be a downturn.

In the remainder of this paper, we will review:

- Common characteristics of an economic slowdown.
- Economists' inability to predict a recession.
- Systemic risk in banking.
- Prudent risk management process.

common characteristics of an economic slowdown

In past recessions, FIs have been slow to recognize the economic downturn (just like economists – as we'll see later). The charts below illustrate how the industry has reacted to recent economic slowdowns.

In figure 3, you will see that loan demand declines prior to a recession. At this point in time, many “strong borrowers” are starting to reduce loan demand as they sense the upcoming downturn. Ironically, bankers had still been booking significant new volume (figure 1) leading up to the three most recent recessions. Then, as FIs realized the economic downturn was “real,” they tightened credit quality standards (figure 2) and reduced their growth rate dramatically over a three-quarter period.

While these trends are not surprising, the bigger question is “How can we better recognize the onset of an economic downturn and make adjustment to credit standards more quickly?”

Prior to the 2008 recession, a former colleague of mine started a bank (2006). While he was aggressive in trying to grow his new bank, he was also disciplined to ensure that proper credit and underwriting standards were in place. He later said that his survival was directly related to his

decisions to say “no” to some transactions while other institutions were still enthusiastically lending.

Today, smart bankers are starting to reduce their exposure by both slowing loan growth and tightening underwriting standards in sectors they feel are at risk.



Bottom line: Smart bankers need to be mindful of economic conditions and the characteristics preceding recessionary periods, so they can adjust underwriting and loan growth strategies.

Figure 1: Total Loans and Leases²



economists inability to predict a recession

With all of these early warning signs, **how accurate have economists been at predicting a recession?**

In March 2018, the International Monetary Fund (IMF) conducted the largest study of economic forecasts over 63 countries during a 22-year period to assess the ability for economists to forecast a recession. Below is a summary of their findings:

- We describe the evolution of forecasts in the run-up to recessions. The GDP forecasts cover 63 countries for the years 1992 to 2014. The main finding is that, while forecasters are generally aware that recession years will be different from other years, they miss the magnitude of the recession by a wide margin until the year is almost over. Forecasts during non-recession years are revised slowly; in recession years, the pace of revision picks up but not sufficiently to avoid large forecast errors. Our second finding is that forecasts of the private sector and the official sector are virtually identical; thus, both are equally good at missing recessions. Strong booms are also missed, providing suggestive evidence for Nordhaus' (1987) view that behavioral factors—the reluctance to absorb either good or bad news—play a role in the evolution of forecasts³.



Bottom line: Both public and private economists tend to focus on prior economic data. This data is always lagging, which coupled with the “behavior factors” (cited above) tend to make economists slow to recognize the onset of a recession.

Figure 2: A. Commercial and Industrial Lending Standards⁴

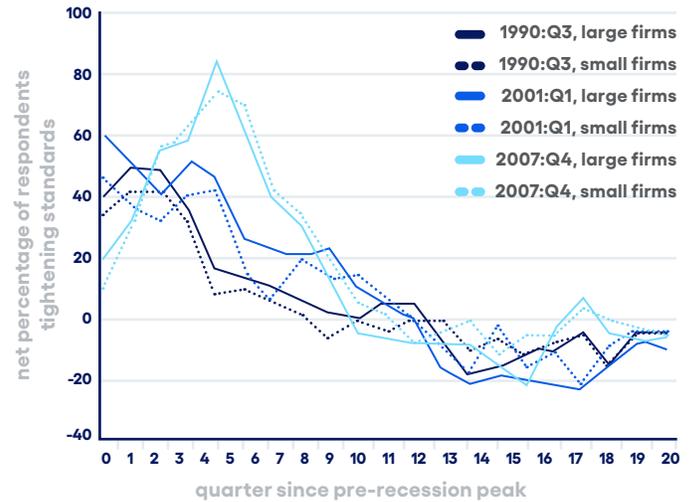
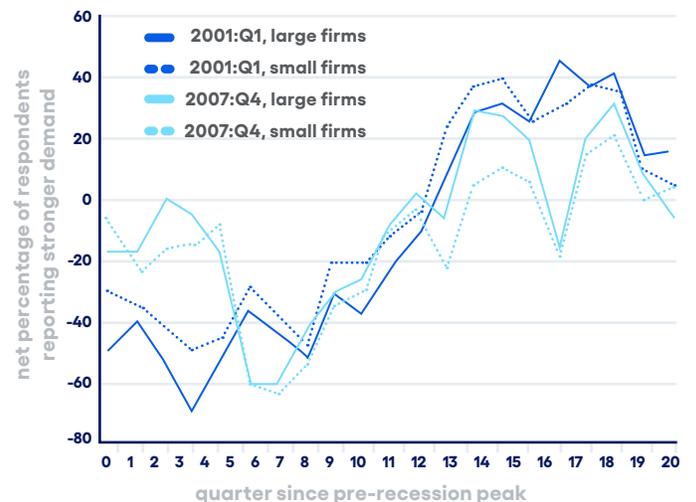


Figure 3: A. Commercial and Industrial Loan Demand⁵



understanding systematic banking risks

In today's day and age, there is a tremendous amount of focus on the "technology risks" facing FIs today. This is understandable, as these risks are significant and often disclosed in the media. But if we take a few steps back and really assess the significant risks that have caused FI failures, we come to the conclusion that the major "systemic" risks in banking are credit, interest rate, and liquidity.

Below is a table from the Federal Reserve Bank in St. Louis which charts bank failures from 1934 to today. While it is difficult to isolate an institution's failure to an individual event or risk, there are three large peaks for failure and some underlying events that lead to these high failures.

- **Great Depression (1930s)** – During this economic downturn, there was significant concern about banks' liquidity and many "runs on the bank" as illustrated by Jimmy Stewart in the movie *It's a Wonderful Life*. During this period, consumers were in a panic and stormed banks looking to get their money. This liquidity crisis coupled

with significant charge-off activity (credit risk) prolonged the Great Depression and caused many bank failures.

- **S&L/Ag Crisis (1980s)** – During this period, the U.S. saw the highest number of bank failures. In 1989 alone, 530 banks failed. The reason for the S&L failures were related to the fact that S&Ls had significant long-term fixed rate loan portfolios as deposit rates soared. Short-term CD rates were over 15%, while mortgages were in the 7-8% range – resulting in negative spreads and significant losses. The S&L crisis magnified the need for Asset Liability Management (ALM), so banks could accurately assess the impact of rising/falling rates. Additionally, many Ag banks experienced failures due to low commodity prices and high oil costs, which resulted in significant Ag charge-offs (credit).
- **Great Recession (2009-2011)** – This most-recent recession saw a period with rising default rates (initially with consumer mortgages), falling stock prices, rising unemployment, and falling interest rates. There were large government bailouts and many institutions failing due to high charge-offs. This large credit crisis resulted in approximately 400 failures during a three-year period.





Bottom line: Failures have historically occurred due to credit, interest rate, and liquidity issues, and FIs must understand and monitor these risks closely.

quantifying systemic banking risks

The recent long period of economic expansion prior to the pandemic was great for the banking industry, but FI management and Board of Directors members must be constantly assessing the financial risks associated with credit, interest rates, and liquidity risks.

According to 2016 Federal Reserve guidance, there will be significant emphasis on this topic:

- Managing risks is fundamental to the business of banking. Accordingly, the Federal Reserve places significant supervisory emphasis on an institution's management of risk, including its system of internal controls, when evaluating the overall effectiveness of an institution's risk management. An institution's failure to establish a management structure that adequately identifies, measures, monitors, and controls the risks of its activities has long been considered unsafe-and-unsound conduct. Principles of sound management should apply to the entire spectrum of risks facing an institution including, but not limited to, credit, market, liquidity, operational, compliance, and legal risk. - Supervisory Guidance for Assessing Risk Management at Supervised Institutions with Total Consolidated Assets Less than \$50 Billion⁷.

Given this guidance, Board of Directors and senior management at banks and credit unions must take an active role to:

- Provide direction and oversight of FI risk management tolerance.
- Develop policies, procedures, and limits.
- Actively monitor risks using management information systems.
- Ensure adequate internal controls.

These four major components of an effective risk management program are derived from an [Implement Risk Management](#) processes article by the Federal Reserve of Minneapolis⁸.

Most of these steps are self-explanatory, but it's worth highlighting: "Actively monitor risks using management information systems." This means that FIs should have system in place to understand significant risks (credit, interest rate, liquidity).

An FI should understand both the current risk in the portfolio, and how these risks change given different economic and interest rate scenarios. FIs should also build multiple scenarios (economic/interest rate) scenarios and apply them to their model(s). If the results are outside board-approved tolerances, then mitigation strategies must be devised to mitigate the risk.

A simple example below illustrates an ALM system and various economic "shocks" for a set of rate scenarios. The scenarios range from Up 300 basis points to Down 300 basis points. As you can see in the Up 300 basis point example, the FI would experience a change in earnings that is outside the prescribed BOD-approved limits. The FI should report this information to senior management and the board along with migration strategies to address this potential scenario.

FIs Should Build a Mitigation Plan If Rates Go Up

| for december 2020 | net income | chg \$ | chg % | lower limits | net income | roa ytd | roe ytd |
|-------------------|------------|---------|---------|--------------|------------|---------|---------|
| Up 400bp shock | 17,395 | -13,978 | -44.555 | -40.000 | -7,624 | -0.655 | -6.641 |
| Up 300bp shock | 21,040 | -10,333 | -32.936 | -30.000 | -3,979 | -0.304 | -2.847 |
| Up 200bp shock | 24,577 | -6,796 | -21.661 | -20.000 | -442 | 0.033 | 0.284 |
| Up 100bp shock | 28,023 | -3,350 | -10.677 | -10.000 | 3,004 | 0.356 | 2.916 |
| Flat rates | 31,373 | 0 | 0.000 | - | 6,354 | 0.662 | 5.128 |
| Down 100bp shock | 30,788 | -585 | -1.864 | -10.000 | 5,769 | 0.548 | 4.287 |
| Down 200bp shock | 28,409 | -2,963 | -9.446 | -20.000 | 3,390 | 0.299 | 1.866 |
| Down 300bp shock | 25,924 | -5,449 | -17.367 | -30.000 | 905 | -0.108 | -0.919 |
| Projection | 31,409 | 36 | 0.116 | 0.000 | 6,390 | 0.665 | 5.151 |

A couple of things to keep in mind:

- Scenarios are meant to “stress test” the FI and determine the amount of risk.
- Risks should not be tested in isolation.

Key Risk Questions a Bank Should Ask:

- Do we have the systems in place to quantify risk associated with various economic and rate scenarios?
- Do we have “early warning systems” in place to identify a downturn quickly?
- Do we have migration strategies in place for risks outside of our tolerance?

summary

Economic and business cycles will continue to affect the U.S. markets and FIs. While you can't be certain when the next recessionary period will occur, as FI managers, now is the time to prepare. Part of preparing for changing economic conditions is ensuring you have adequate policies, systems, and internal controls in place to model various scenarios.

Expansionary Periods Since World War II – Appendix A⁹

| period | number of months | annual employment growth | annual gdp growth |
|-------------------------|------------------|--------------------------|-------------------|
| Oct 1945 – Nov 1948 | 37 | +5.2% | +1.5% |
| Oct 1949 – July 1953 | 45 | +4.4% | +6.9% |
| May 1954 – Aug 1957 | 39 | +2.5% | +4.0% |
| April 1958 – April 1960 | 24 | +3.6% | +5.6% |
| Feb 1961 – Dec 1969 | 106 | +3.3% | +4.9% |
| Nov 1970 – Nov 1973 | 36 | +3.4% | +5.1% |
| Mar 1975 – Jan 1980 | 58 | +3.6% | +4.3% |
| July 1980 – July 1981 | 12 | +2.0% | +4.4% |
| Dec 1982 – 1990 | 92 | +2.8% | +4.3% |
| Mar 1991 – Mar 2001 | 120 | +2.0% | +3.6% |
| Nov 2001 – Dec 2007 | 73 | +0.9% | +2.8% |
| June 2009 – ongoing | 121+ | +1.4% | +2.3% |
| Average | 63.6 | +2.9% | +4.1% |

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