NUVEEN ASSET MANAGEMENT

Municipal Bond Defaults: Depression, Recession and Pandemic

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Municipal bond defaults: depression, recession and pandemic

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U.S. government shutdown orders to curb the spread of the coronavirus have led to a collapse in many economic sectors and an unprecedented increase in unemployment. As economists slash second quarter GDP forecasts, a recession seems all but inevitable. What can we learn from how state and local governments managed through past economic downturns? How do municipal defaults during the Great Depression compare to the Great Recession and today?

THE GREAT DEPRESSION: DEFAULTS WERE LARGELY REPAID

Despite the catastrophic drop in economic activity during the Great Depression, state and local governments demonstrated a strong determination to avoid default, whenever possible, and an eagerness to repay past due obligations when default could not be avoided.

From 1929 to 1937, the principal amount of bonds that went into default was equal to about 7% of the average amount of debt outstanding in the early 1930s.

Because most issues did not stay in default for long, the maximum amount of past due principal and interest payments approximated just 1.7% of the outstanding debt, or 16% of average annual debt service.

While a total of $1.35 billion of bonds went into default, only $200 million remained in default by 1939. Those recoveries occurred despite the fact that the average unemployment rate in 1940 remained above 14%.

Of the 48 cities with populations over 25,000 that defaulted, all were out of default by 1938, and all repaid the full amount of principal due on their debt (although some adjusted their interest payments).

Permanent losses totaled about $100 million, or 0.5% of the amount of debt outstanding. Those losses were mostly attributable to small units of government, particularly special purpose districts.

THE GREAT RECESSION: FEDERAL RELIEF EASED THE BURDEN

Relative to their predecessors during the Great Depression, state and local governments that endured the Great Recession enjoyed several advantages.

The economic decline was less severe. From 1929 to 1933, real gross domestic product (GDP) plummeted by 26.7%. From 2007 to 2009, real GDP fell by 2.6% – but in 2010 it grew by 2.9%.

The American Recovery and Reinvestment Act (ARRA) helped carry states through the worst of the recession. ARRA provided $144 billion in relief for state and local governments, most of which was received in 2009 and 2010, with some remaining for 2011. This aid was equivalent to more than 6% of all state and local government expenditures in 2010.

The states began the recession with healthy fund balances. At the end of 2007, aggregate fund balances for all states were equal to 10.1% of annual general fund expenditures, up from 3.2% at the end of 2003.

Local tax revenue continued to grow. While state tax revenue dropped by 9.9% from 2007 to 2009 (with revenue from individual income tax down 14.8%), local tax revenue actually grew by 12.2% during the same period, due largely to a 17.7% increase in property tax revenue. In 2010, as local tax revenue stagnated (up just 0.2% from 2009), state tax revenue rose by 4.3%, which was opportune as the benefits from ARRA came to an end.

As a general rule, declines in property tax revenue are much less severe than declines in real estate values. Property tax revenue did not mirror the 30% decline in house prices after 2006. For the nation as a whole, the greatest drop in local property tax revenue was a 1.8% decline in the 12 months ended in September 2011. Part of the reason for the more moderate impact is that property tax revenue did not rise as fast as housing values during the boom years. From July 1996 to July 2006, seasonally adjusted house prices in the Standard & Poor's/Case-Shiller Price Index of 10 metropolitan areas rose by 11.2% per year, while property tax revenues over the same period rose by 6.1% per year. Furthermore, property tax revenue is a function of both property values and levy rates, which can be adjusted to compensate for changes in value.

Since July 2013, Standard & Poor's has maintained a separate index for defaulted bonds, which have subsequently been excluded from the main S&P Municipal Bond Index. During that initial month, the par value of bonds in default was equal to 0.5% of the combined value of both the main and the defaulted bond index. By August 2015 that ratio had fallen to 0.3%. With the default of Puerto Rico issuers, the ratio climbed to a peak of 1.5% in November 2017.

From the perspective of investors, a key question is how the Great Recession affected returns. The Standard & Poor's Municipal Bond Index includes both investment grade and below-investment-grade bonds. The lowest total return by that index in any 12-month period during and soon after the Great Recession was -5.27% for the 12 months ended November 2008. The return during the subsequent 12 months was 14.91%.

> “*__Declines in property tax revenue__ are generally much less severe than declines in real estate values.*

PANDEMIC: FEDERAL STIMULUS IS UNPRECEDENTED

Similar to the Great Recession, state and local governments have some factors working in their favor as the U.S. economy weakens.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) authorizes the U.S. Treasury to pay $150 billion to state, local, tribal and territorial governments.

That same bill authorizes $454 billion to be used by the Treasury to make loans or loan guarantees or investments in "programs or facilities established by the Board of Governors of the Fed System for the purpose of providing liquidity to the financial system that supports lending to eligible businesses, states or municipalities." In April, the Federal Reserve announced the creation of the Municipal Liquidity Facility, a special purpose vehicle that will initially be funded by an equity investment of $35 billion from the U.S. Treasury, and which will be able to lend up to $500 billion to eligible state and local governments, subject to certain restrictions.

In March, the Fed announced the creation of a Money Market Mutual Fund Liquidity Facility and specified the terms for collateral required to make loans to banks to allow them to purchase assets from municipal money market funds.

In addition to the $100 billion that the CARES Act provided for hospitals, the Paycheck Protection Program and Health Care Enhancement Act provides another $75 billion "to reimburse health care providers for health care related expenses or lost revenues that are attributable to the coronavirus outbreak."

The average total fund balance of states in 2019 was equal to 13.0% of expenditures in 2019, compared to 4.8% in 2009. The average balance in rainy day funds was 8.4% in 2019 versus 4.4% in 2009.

A survey by the National League of Cities in 2019 found that 76% of finance officers believed that their city was better able to meet their city's financial needs than they were in the prior year. That compares to only 12% that thought their cities were better able to meet needs in 2009.

As of April 2020, the par amount of bonds in the S&P defaulted bond index was relatively low at $21.0 billion, of which $16.1 billion was attributable to Puerto Rico issuers. By comparison, the S&P Municipal Bond Index held bonds with a par value of $2.321 trillion. The par value of the defaulted bonds was equal to 0.9% of the total par value of bonds in both indexes, with Puerto Rico accounting for 0.7%, and others accounting for 0.2%. Based on market value, the respective percentages were 0.5%, 0.4% and 0.1%.

The value of housing has increased faster than property tax revenue, which suggests that effective tax rates have fallen. From 2009 to 2019, property tax revenue has grown by 30.5%, or 2.7% per year, while house prices in the S&P Case-Shiller 20-City Composite Index have risen by 49.9%, or 4.1% per year.

LOOKING AHEAD: GOVERNMENTS ARE RELATIVELY WELL POSITIONED

The unprecedented nature of government orders that curtailed much economic activity, coupled with the countervailing fiscal and monetary stimulus, makes it especially challenging to use the past as a guide for what to expect from state and local governments in the future. Following the Great Recession, the municipal market saw several high-profile defaults of governments that were particularly vulnerable to an economic downturn, including Stockton and San Bernardino, California; Detroit, Michigan; and Puerto Rico.

The current medical and economic crisis will likely also reveal the degree to which some governments were ill-prepared for a time of economic stress. Fortunately, the economy has had time to strengthen significantly since the last recession, and most governments benefited from that economic strength.

It seems strange to say that the COVID-19 pandemic could not have come at a better time. But despite the painful impact, the timing was fortuitous for most state and local governments.

For more information, please visit nuveen.com.

Endnotes

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Glossary

The **S&P Municipal Bond Index** is a broad, market value-weighted index that seeks to measure the performance of the U.S. municipal bond market.

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