# WITH THE RIGHT TOOLS, SURETIES CAN NAVIGATE TOUGH ECONOMIC CYCLES

- Industry's evolution through recessions offers insights into how technology has enhanced performance.
- Guy Carpenter's SureSight analytics enable clients to proactively adapt to changing market conditions.

The results of the surety line of business can be influenced by fluctuations in economic conditions, which in turn impacts available capital, construction activity and the credit performance of contractors. These factors make surety underwriting especially challenging during recessions and recovery periods, including the current one precipitated by the global pandemic. Data from this recession and those of the past offer insights into how surety writers can continue to achieve profitable growth into the future.

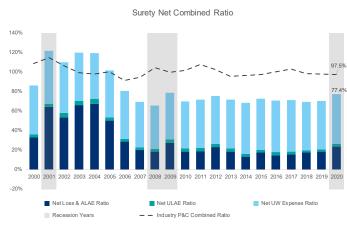
## **Lessons from recessions**

Recessions create stressors in the surety marketplace in several ways. One is the dampening of new projects and demand for surety bonds, impacting top-line growth. Another is the negative impact on principals' ability to generate cash and liquidity. Still another stressor is heightened competition for projects, which tends to squeeze margins and weaken credit profiles.

In the 1990s, the surety industry transitioned from quota-share reinsurance to excess of loss, shifting more volatility and loss severity to reinsurers. The reinsurance market tightened in response to the frequency of larger contractor and commercial surety losses in the late 1990s and early 2000s. While some high profile commercial losses were the result of accounting and financial fraud at Enron and WorldCom, it helped bring to light the trend in co-surety and shared accounts that exposed reinsurers to aggregation of losses. Reinsurers have since put much more focus on disciplined portfolio management.

Surety industry underwriting results have remained relatively stable since 2005. Loss activity spiked in the early 2000s, leading to combined ratios ranging between 124 percent in 2001 and 117 percent in 2004 (see Figure 1). Factors contributing to the high combined ratios in the early 2000s included sharply increased competition in the surety sector in the late 1990s, higher loss frequency among large accounts and a lack of sophisticated underwriting tools.

Figure 1: Surety results generally stable since 2005



Source: Guy Carpenter

An analysis by Guy Carpenter shows that recessionary periods between 2001 and 2021 have had an impact on the surety marketplace and led to underwriting innovations. Learning from these cycles, surety companies can better manage risk and take advantage of opportunities, even when economic conditions are uncertain.

Three recessionary periods, described in Table 1, have shaped the surety industry and led to further development of technology to analyze credit portfolio exposures:

**Table 1: Recessionary Periods** 

Period	2001	2008-2009	2020
Major Events:	The first recession of the 21st century was relatively short and shallow. According to the National Bureau of Economic Research, the 2001 recession lasted only eight months. <sup>1</sup> In the view of many economists, the negative but mild impact on gross domestic product (GDP) from the attacks of September 11, 2001 was a major factor in turning 2001 into a recession. <sup>2</sup>	The subprime loan collapse that occurred by the third quarter of 2008 precipitated a global financial crisis, including a bank credit panic. Equity markets crashed, and banks came under pressure due to their exposure to mortgages. In early 2009, the U.S. Congress enacted a USD 787 billion stimulus package and stopped the credit panic. <sup>3</sup> This recession lasted through 2009.	As COVID-19 developed into a pandemic, the threat of a deep recession loomed. With the effect of safety measures and lockdowns still unknown, uncertainty was high. Surety companies expected losses to increase, particularly in the transportation, hospitality, and oil and gas sectors.
Impact on Surety Results:	Prior to 2001, sureties lacked the technology to analyze and benchmark their portfolio credit exposure as a number of new carriers entered the industry and increased competition. As the recession unfolded, weak credit profiles became distressed and claims mitigation workouts grew more challenging. As a result, loss ratios increased significantly.	Despite the crisis, surety markets were stable. Improvement in underwriting, risk selection and portfolio management had increased the quality of their portfolios.  Average combined ratios did not exceed 80 percent during the 2008-2009 recession, and at times were even better. Even though real GDP fell 30 percent and private construction spending dropped more than 20 percent, direct written premium volume for sureties decreased only 5 percent in 2009 with a manageable uptick in losses.	The COVID-19 pandemic has forced surety companies to scrutinize their portfolios amid heightened risk. Uncertainty about the depth and duration of the pandemic led to further tightening. Economic stimulus legislation – particularly the Paycheck Protection Program, part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, put an estimated USD 35 billion of funding into the construction industry. Nonetheless, continuing lack of clarity about the pandemic recovery and potential loss activity is making the surety industry more sensitive to risks. Underwriters are hoping for the best but preparing for weaker conditions by making further adjustments to surety portfolios and continuing to apply exposure-based pricing.
Underwriting Changes:	Sureties began investment into enhanced underwriting platforms to better manage exposure aggregations within their portfolios.  This era marked the emergence of exposure and credit modeling tools to measure the quality of risk. Surety industry leaders worked with the Surety & Fidelity Association of America to develop portfolio metrics.	Financial modeling advancements enabled surety companies to more accurately predict potential near-term changes in loss frequency and anticipate changes in portfolio volatility. As surety portfolios improved through better analysis and underwriting, they became more resilient and more able to face the financial challenges brought on by the recession.	Modeling tools enabling sureties to stress test their portfolios for outsize impacts offered additional insight on where to pivot as the pandemic emerged. Even though the surety industry's net combined ratio deteriorated to 77.4 percent in 2020, from 70.4 percent in 2019, the industry continued to generate underwriting profit.
Evolution of Guy Carpenter Capabilities:	Surety severity loss curve developed to add exposure modeling capabilities	Guy Carpenter incorporated surety loss-cycle adjustments into exposure modeling capabilities. The new feature allowed clients to stress portfolios for potential near-term changes in loss frequency to anticipate changes in portfolio volatility.	After the 2008 financial crisis, GC SureSight model was enhanced to implement credit scoring of principals to add further granularity in modeled loss allocation by account, which has provided guidance in addressing portfolio vulnerabilities through the pandemic.

Source: Guy Carpenter

# **Technology benefits**

One reason for the surety industry's sustained profitability through the recent recessions is the continuing development and adoption of technology, particularly exposure modeling tools such as SureSight. Guy Carpenter's proprietary surety exposure model provides a superior view of risk characteristics through:

A differentiated severity modeling approach. SureSight has a proprietary loss curve built for contract surety and commercial surety, and can correct for known distortions in the industry severity curve.

**Surety-specific frequency modeling.** This incorporates credit quality and loss frequency, and is adjustable to the surety underwriting cycle.

**Customized modeling.** SureSight can deliver modeling for commercial and international surety exposures, probable expected loss and probable maximum loss per contract, relative credit quality, and full severity and frequency distribution.

The surety business model relies largely on credit risk selection, making analysis of individual accounts as well as portfolios essential. Today, portfolio risk management capabilities are at the forefront of discussions to quickly identify issues and adjust underwriting. By using sophisticated exposure modeling tools with industry-leading analytics, such as SureSight, surety companies can better underwrite and manage the risks in their portfolios, tailor effective reinsurance solutions, and guide their growth strategies while enhancing profitability.

Guy Carpenter has a history of innovation in developing the latest credit and portfolio tools in support of the firm's surety company clients. That innovation, coupled with extensive experience, industry leading market share and unrivaled technical resources, has resulted in highly efficient reinsurance solutions in an ever-changing risk environment.

### **Endnotes**

- <sup>1</sup> "Business Cycle Dating Committee Announcement," National Bureau of Economic Research, July 17, 2003; https://www.nber.org/news/business-cycle-datingcommittee-announcement-july-17-2003
- <sup>2</sup> "The 2001 Recession: How Was It Different and What Developments May Have Caused It?" Kevin L. Kliesen, Federal Reserve Bank of St. Louis, September/ October 2003; https://files.stlouisfed.org/files/htdocs/publications/review/03/09/Kliesen.pdf
- <sup>3</sup> "The Great Recession," Robert Rich, Federal Reserve Bank of Cleveland, 2013; https://www.federalreservehistory. org/essays/great-recession-of-200709
- <sup>4</sup> "The Paycheck Protection Program," U.S. Department of the Treasury; https://home.treasury.gov/policy-issues/ coronavirus/assistance-for-small-businesses/paycheckprotection-program

WITH INDUSTRY-LEADING ANALYTICS, SUCH AS SURESIGHT, SURETY COMPANIES CAN BETTER UNDERWRITE AND MANAGE THE RISKS IN THEIR PORTFOLIOS.

#### **About Guy Carpenter**

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