COVID- and Credit Watch List as an Economic Indicator

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IMPORTANCE In early 2020, the global COVID-19 pandemic interrupted a decade-long US expansionary cycle. Equity markets plummeted, but quickly recovered and moved back to positive territory in only a few months. Could the quick recovery have been predicted? We believe we are the first to investigate a new variable that might have provided an early indication that the market had over-reacted to the COVID-19 pandemic based on S&P Credit Watch activity. We further examine this variable's explanatory power when applied to both the life/health and property/casualty insurance industries, and find its power diminished. We surmise this is due to the industry's known resilience and/or higher level of disclosure requirements.

OBJECTIVES

1. Test the validity and explanatory power of a new variable associated with GDP to see if it could have provided an early indication of market over-reaction;
2. Apply the new variable to the more-insulated and highly-regulated insurance industry and note any change in its explanatory power.

RELEVANCE Previous literature has established that credit rating agencies reduce the information gap between corporations and investors, due to access to private information resulting from credit rating agencies' exemption from Regulation FD. Focusing on the S&P Credit Watch activity, which is intended to signal potential upcoming ratings changes due to new and often private information, we find that this variable was closely associated with GDP both during and following the two previous recessions. However, when applied to the recession associated with COVID-19, we find that it was correlated with a smaller GDP loss than what was actually experienced, leading us to wonder if those monitoring Credit Watch activity could have anticipated a recovery, since the variable during that time was not as strongly negatively associated with the market's ultimate reaction.

We further investigate the explanatory power of this variable by applying it separately to the life/health and property/casualty insurance industries where there is less private information for credit rating agencies to discover, due to significantly heightened regulatory requirements. In addition, previous literature has also shown that the insurance industry is less susceptible to systemic risk. With less private information to discover and an industry more insulated from economic shock, one

might expect the Credit Watch activity variable to have less explanatory power than it does when applied to other industries, and indeed, that is what we find.

More research is needed to establish the ultimate predictive value of the S&P Credit Watch activity variable. Our sample spans 25 years, and includes 68,167 Credit Watch actions, with 53,001 Credit Watch Negative warnings and 15,166 Credit Watch Positive alerts. We create a variable comparing the positive and negative Credit Watch alerts in ratio form, pooling them by calendar quarters, and include the variable into a model examining other economic factors known to be associated with GDP. We discover this variable's validitye and can show it has explanatory power in our model; however, this period of time includes only 3 recessions, which presents an obstacle to claiming predictive value. Further, our research establishes that the variable's power is diminished when applied to the insurance industry.

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ABSTRACT

A global pandemic interrupted a decade-long US expansionary cycle. While governments intervened in an attempt to manage a health crisis, the economy stalled, and equity markets crashed. However, equity markets quickly recovered and moved to positive territory a few months later. We examine the actions of Credit Rating Agencies (CRAs) and the signals that are sent through S&P Watch List activity. After creating a significant indicator based on Credit Watch activity, reflecting private firm information, we find that the swift recovery may have been foreseeable for non-insurance firms. The indicator provides less potential predictive power for insurance firms, either because the greater regulatory activity surrounding insurance firms yields less private information to be discovered by CRAs, or possibly because the insurance industry is more resilient to economic shock than other sectors of the economy.

JEL Classification: E32, D82, G24

Keywords:

. Introd⌟ction

A global pandemic ended a decade-long period of economic expansion in the U.S. As local governments took action to restrict business and consumer activity, production stalled and gross domestic product (GDP) plunged. The World Health Organization (WHO) declared COVID-19 a pandemic at the end of the first quarter of 2020, and GDP numbers in the second quarter were abysmal. While the first quarter's GDP approached 0%, the second quarter saw a decrease of over 9% according to the U.S. Department of Commerce (DOC). Economic indicators portended an economic collapse, and equity markets suffered accordingly.

However, U.S. equity markets quickly recovered losses, and by the end of the second quarter, they moved into positive territory for the year, despite having lost over one-third of their value in the first quarter. The goal of this paper is to analyze the association of CRA actions with GDP during times of economic contraction and assess whether CRA Watch activity might provide information about future GDP recovery. Further, if there is useful information provided by CRA Watch activity, we will investigate if that value persists in the highly regulated insurance industry, which would potentially have less private information available to incorporate into CRA ratings. If so, this would tend to indicate that there is either less private information to discover in the insurance industry, or the insurance industry is more resilient to economic shocks than other sectors.

borrowers and investors, quantifying the ability of an entity to meet its financial obligations. Additionally, credit ratings are mandated for banks, many pension funds, and mutual funds. Credit ratings are also assigned automatically to all corporate debt issues which is revealed as discussed later in the paper. While the government's restrictive actions were unprecedented in modern times, we examine whether the indicators

revealed any information that could ave guided onomic xpectations and, in

COVID-19 was unfolding with past economic contractions. Auh (2015) shows that firm ratings are overly optimistic during expansionlly economic cycles. Conversely, when the economy slows, firm ratings decline more than fundamentals might suggest. Auh

and CRAs adjust their ratings to reflect this increased risk of default. It then follows that CRA adjustments might provide a reasonable proxy for expected firm failures related to economic contraction. Our results show that an indicator based on a CreditWatch

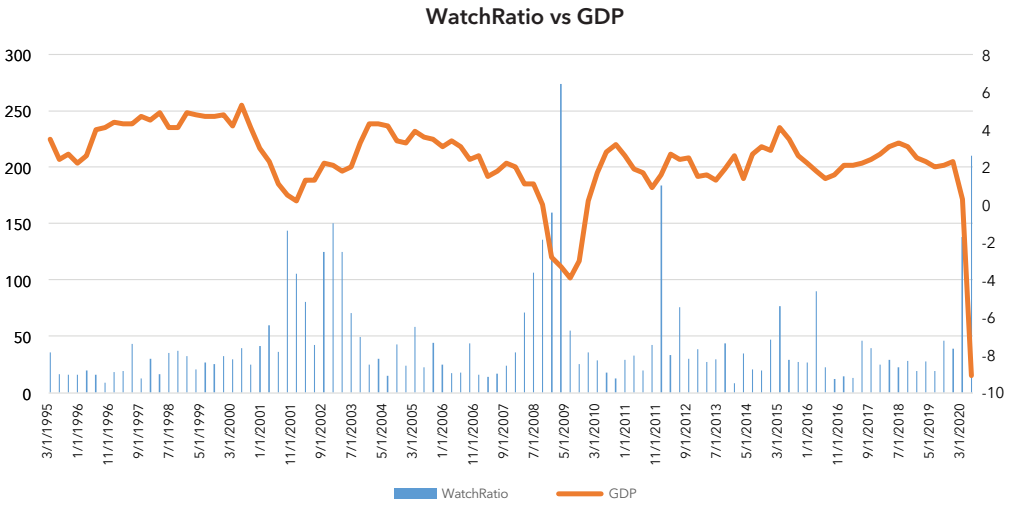
our indicator suggested an economic contraction of approximately -4.25%. While the market reacted to the larger, actual GDP contraction, we suggest that the equity market may have been anticipated based on examination of CRA activities.

List activity reveals information about the length and depth of economic contraction. If firms expected a sustained period of economic tumult and suppressed earnings, Watch List activity could reflect that sentiment.

With respect to highly regulated insurance markets, we hypothesize that there is

Next, we quantify the relationship between GDP and our

Figure



The orange line indicates quarterly U.S. real GDP data, representing annual change, and it is chained to 2012 dollars. The WatchRatio is calculated as the number of CreditWatch Negative warnings divided by the number of CreditWatch Positive alerts. The left y-axis is associated with WatchRatio values for the entire sample, while the right y-axis is associated with GDP. The data covers 1995–2020.

Table

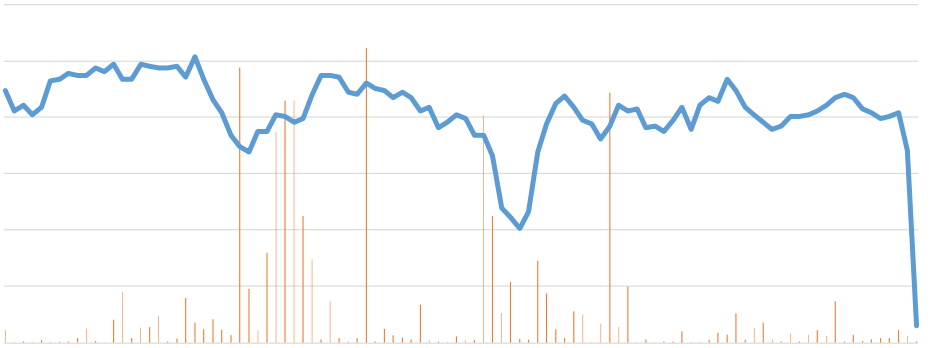
Variable	(1)	(2)	(3)	(4)
[illegible]	0.1852***	0.0886***	0.1719***	0.1753***
	(0.033)	(0.033)	(0.033)	(0.033)
	0.0014***	0.0012***	0.0015***	0.0015***
	(0.000)	(0.000)	(0.000)	(0.000)
[illegible]	0.0022***	0.0019***	0.0022***	0.0023***
	(0.000)	(0.000)	(0.000)	(0.000)
[illegible]		-0.1948***	-0.0138**	-0.0055**
		(0.032)	(0.007)	(0.003)
Adjusted R^2	0.4517	0.5932	0.4698	0.4691
F Value	28.73***	37.82***	23.38***	23.32***
N	102	102	102	102

Table

Variable	(1)	(2)	(3)	(4)
	0.1852***	0.1098***	0.1742***	0.1719***
	(0.033)	(0.031)	(0.032)	(0.033)
	0.0014***	0.0013***	0.0015***	0.0015***
	(0.000)	(0.000)	(0.000)	(0.000)
	0.0022***	0.0020***	0.0022***	0.0022***
	(0.000)	(0.000)	(0.000)	(0.000)
		-0.1968***	-0.0169**	-0.0049*
		(0.033)	(0.006)	(0.003)
Adjusted R^2	0.4517	0.5914	0.4824	0.4646
F Value	28.73***	37.55***	24.54***	22.91***
N	102	102	102	102

The sample includes 1995–2020 and regresses economic variables of interest on the dependent variable: U.S. real GDP_t. Values are quarterly, and the independent variables are $_t$ $_t$ $_t$, and $_{t-1}$, which is defined as the number of CreditWatch Negative actions divided by the number of CreditWatch Posij7 0 0 7 91 1n69.12 0 lS148.ar2erlytio

Figure 3



find improvement with the new model, validating our newly created measure as an economic indicator that adds explanatory power to the model.

Table 1 also presents the results of separately examined insurance companies, compared to the full sample. Column 2 reports results for the entire sample, while Column 3 reports results for life/health insurers, and Column 4 reports results for P/C insurers. We can see that for both life/health and P/C insurers, the power of the is significantly reduced; although, the coefficients remain significant at the 0.05 level, rendering them statistically but not economically significant. One explanation is our first hypothesis; i.e., there is simply less private information to discover since insurers are highly-regulated and already required to submit more detailed information to state insurance regulators. Another explanation is our second hypothesis; i.e., because of a focus on risk management activities and the ability to structure contracts and exclusions, the insurance industry is more resilient to economic downturn; thus, CreditWatch activity will have less explanatory power when applied to insurers.

We further test the initial results from Table 1 in Table 2 by using observations from GDP at time and at time - . There are no substantial statistical differences, thus adding robustness to our original results found in Table 1.

. Conclusion

We examine the association of CRA activity proxied by Watch List activity with GDP. After establishing that the Watch List variable we created has explanatory power, we consider its relationship to GDP during the three recessions contained in our sample period. As shown in Figure 1, during the first two recessions, we notice that our variable is consistently associated with the GDP decline. In Figures 2 and 3, for the subsamples including only life/health insurers and P/C insurers, respectively, we visually note that the relationship between our CreditWatch variable and GDP does not seem to be as strong, a result that is bolstered by our empirical analysis in Columns 3 and 4 of Table 1. We note that there was a relatively swift economic and equity recovery following the economic contraction related to COVID-19, and we show that Watch List activity was associated with a projected economic pause less grand than the actual GDP number revealed. Upon examination, our newly created indicator, , was not associated as strongly with the economic downturn as our regression model would have expected. Consequently, equity investors may have had an opportunity to foresee the rapid market recovery based on private information communicated through CRA alerts.

We chose to apply our new variable to subsamples containing firms in the highly regulated insurance industry for two reasons: 1) we believe the insurance industry has less private financial information available to discover due to heightened required regulatory disclosures; and 2) the insurance industry may also be more resilient to economic shocks by its very nature. We find a dramatic difference when analyzing the insurance sector of the economy. The explanatory power of our newly created indicator, , is significantly reduced when analyzing both life/health insurers and P/C companies. This result can be explained by less private information being

available to discover because of heightened regulatory requirements, and it could alternatively or concurrently be explained by the relative economic resilience of the insurance industry.