

News Release

THE FEDERAL RESERVE BANK of KANSAS CITY
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FOR IMMEDIATE RELEASE
April 09, 2020

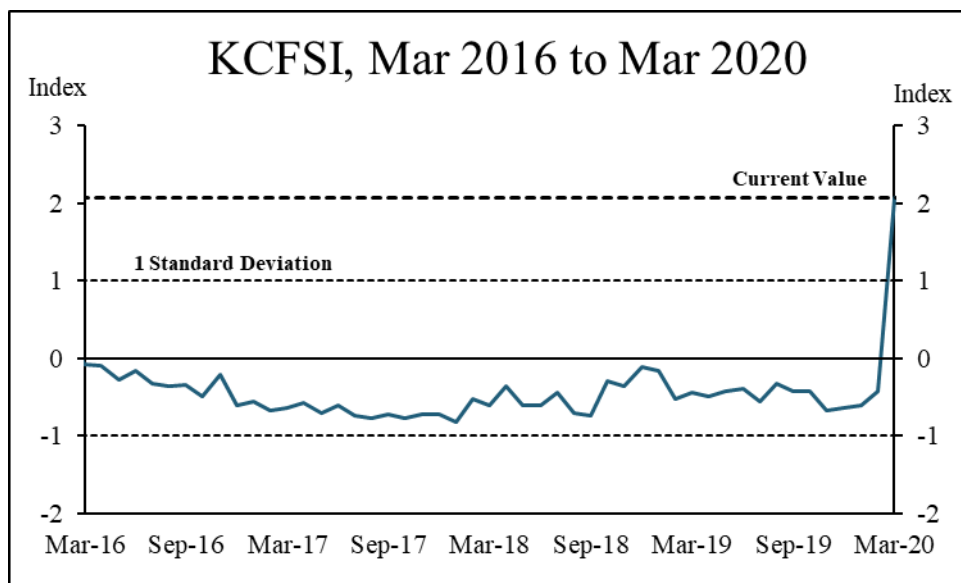
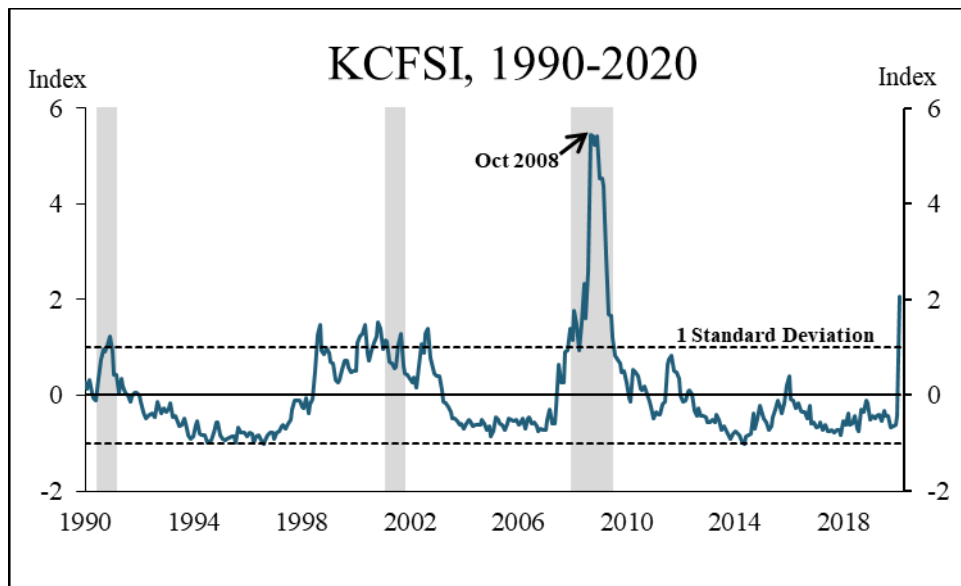
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The KCFSI suggests financial stress increased sharply in March.

The Kansas City Financial Stress Index (KCFSI) increased sharply from -0.42 in February to 2.07 in March, rising above its historical average.

Although the stock market volatility measure (VIX) spiked to a level comparable to the 2008 financial crisis, indicators from the money and credit markets have not reached the level that prevailed during the 2008 financial crisis.

The second table on the following page documents the contribution of each variable to the index. The behavior of yield spreads added 0.90 to the KCFSI in March. The behavior of asset prices, particularly the volatility of stock prices (VIX), added 1.59 to the KCFSI in March.



KCFSI: most recent six months and one year ago							
KCFSI	Mar'20	Feb'20	Jan'20	Dec'19	Nov'19	Oct'19	Mar'19
Current	2.07	-0.42	-0.61	-0.64	-0.67	-0.42	-0.44
Previous	NA	-0.41	-0.60	-0.65	-0.64	-0.39	-0.44
Note: Previous index values are from the March 10, 2020 release.							
NA = not applicable							

Sources of Change in KCFSI from February 2020 to March 2020		
Variable	Contribution to change in Index	Rank (lowest to highest value)
Yield spreads	0.90	
DTCC GCF Treasury Repo/3-month Treasury (REPO) spread	0.03	2
2-year swap spread	0.04	3
Off-the-run/on-the-run 10-year Treasury spread	0.07	4
Aaa/10-year Treasury spread	0.17	6
Baa/Aaa spread	0.16	5
High-yield bond/Baa spread	0.19	7
Consumer ABS/5-year Treasury spread	0.24	8
Behavior of asset prices	1.59	
Correlation between stock and Treasury returns	-0.03	1
Implied volatility of overall stock prices (VIX)	0.77	11
Idiosyncratic volatility of bank stock prices	0.30	9
Cross-sectional dispersion of bank stock returns	0.55	10
Total	2.49	
Note: The contribution of each variable equals the change in the standardized value of the variable multiplied by the coefficient of the variable in the index.		
*Contributions may not add to totals sometimes due to rounding.		

Frequently Asked Questions

What is the KCFSI? The KCFSI is a monthly composite index of 11 variables reflecting stress in the U.S. financial system. These variables fall into two broad categories--average yield spreads, and measures based on the actual or expected behavior of asset prices. The index is calculated using the principal components procedure. Under this procedure, the coefficients of the 11 variables are chosen so that the index explains the maximum possible amount of total variation in the variables from February 1990 through the current month. Further details on the variables and the construction of the index can be found in Section II of “Financial Stress: What Is It, How Can It Be Measured, and Why Does It Matter?” by Craig S. Hakkio and William R. Keeton, *Economic Review*, Federal Reserve Bank of Kansas City, Second Quarter 2009.

Why are past values of the index sometimes revised? Most revisions are due to recalculating the index using the additional data from the current month. These revisions are inherent in the principal components procedure and are explained in more detail in Appendix B of the article by Hakkio and Keeton. Other changes in past values of the index may result from revisions to the data used to construct the variables. Finally, the index may occasionally be revised due to a change in the data sources or in the method of constructing a variable. In this last case, an explanation for the revision is included in the monthly summary.

How should the index be interpreted? The KCFSI is constructed to have a mean value of zero and a standard deviation of one. A positive value of the KCSFI indicates that financial stress is above the long-run average, while a negative value signifies that financial stress is below the long-run average. A useful way to assess the level of financial stress is to compare the index in the current month to the index during a previous episode of financial stress, such as October 2008. For more information on interpreting the index, see Section III of the article by Hakkio and Keeton.

