Risk Indicators in the NFCI and ANFCI

Financial Indicator[1]	Start Date	Transformation[2]	Frequency	Weight[3]	
				NFCI	ANFCI
FTSE Russell US Global Markets ABS/5-yr Treasury yield spread	29-Dec-1989	LV	M	3.63	3.73
BofAML 3-5 yr AAA CMBS OAS spread[4]	02-Jan-1998	LV	W	3.45	2.34
CBOE Market Volatility Index VIX	05-Jan-1990	LV	W	3.11	2.57
BofAML Home Equity ABS/MBS yield spread	05-Jul-1991	LV	W	2.85	2.20
2-yr Interest Rate Swap/Treasury yield spread	03-Apr-1987	LV	W	2.76	3.56
3-mo. BofAML Swaption Volatility Estimate Index	06-Dec-1996	LV	W	2.60	1.70
1-mo. BofAML Option Volatility Estimate Index	08-Apr-1988	LV	W	2.59	2.39
Counterparty Risk Index (formerly maintained by Credit Derivatives Research)[5]	13-Sep-2002	LV	W	2.08	1.22
On-the-run vs. Off-the-run 10-yr Treasury liquidity premium	04-Jan-1985	LV	W	2.08	1.46
3-mo. TED spread (LIBOR-Treasury)	06-Jun-1980	LV	W	2.00	2.81
1-mo. Asset-backed/Financial commercial paper spread	05-Jan-2001	LV	W	1.95	3.60
3-mo./1-wk AA Financial commercial paper spread	10-Jan-1997	LV	W	1.59	2.90
3-mo. Eurodollar spread (LIBID-Treasury)	08-Jan-1971	LV	W	1.59	2.20
Repo Market Volume (Repurchases+Reverse Repurchases of primary dealers)[6]	07-Oct-1994	DLNQ	W	-1.46	-0.97
FTSE Russell US Global Markets Financial/Corporate Credit bond spread	28-Dec-1979	LV	M	1.20	1.43
10-yr Interest Rate Swap/Treasury yield spread	03-Apr-1987	LV	W	1.04	1.59
FTSE Russell US Global Markets MBS/10-year Treasury yield spread	28-Dec-1979	LV	M	0.89	1.95
10-yr/2-yr Treasury yield spread	20-Aug-1971	LV	W	-0.76	-0.88
3-mo. Overnight Indexed Swap (OIS)/Treasury yield spread	19-Sep-2003	LV	W	0.74	4.08
Fed Funds/Overnight Treasury Repo rate spread	24-May-1991	LV	W	0.59	1.91
Agency MBS Repo Delivery Failures Rate	07-Oct-1994	DLNQ	W	0.55	0.27
3-mo. Financial commercial paper/Treasury bill spread	08-Jan-1971	LV	W	0.54	1.49
Commercial Paper Outstanding	10-Nov-1995	DLN	W	-0.48	-0.09
3-mo./1-wk Treasury Repo spread	24-May-1991	LV	W	-0.42	1.45
1-yr/1-mo. LIBOR spread	10-Jan-1986	LV	W	0.42	1.01
Total Money Market Mutual Fund Assets/Total Long-term Fund Assets	28-Dec-1984	LV	M	0.33	0.16
Agency Repo Delivery Failures Rate	07-Oct-1994	DLNQ	W	0.23	-0.33
Treasury Repo Delivery Fails Rate	07-Oct-1994	DLNQ	W	0.23	0.03
2-yr/3-mo. Treasury yield spread	08-Jan-1971	LV	W	-0.20	0.43
Fed Funds/Overnight MBS Repo rate spread	24-May-1991	LV	W	-0.17	0.51
Fed Funds/Overnight Agency Repo rate spread	24-May-1991	LV	W	-0.16	0.87
FDIC Volatile Bank Liabilities	01-Jul-1994	DLN	Q	-0.09	0.09
Trade-weighted US Dollar Value Index	12-Jan-1973	DLN	W	0.08	0.19
Corporate Securities Repo Delivery Failures Rate	05-Oct-2001	DLNQ	W	0.06	0.34

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[2] LV: Level, LVMA: Level Relative to Moving Average, DLV: First Difference, DLN: Log First Difference, DLNQ: 13-Week Log First Difference, . . . SA: Seasonally Adjusted Prior to Transformation.
[3] Indicators are sorted by NFCI weight. The weights have been scaled to sum to 100 in absolute value for ease of presentation.
[4] ICE/Bank of America Merill Lynch.
[5] Weekly average of 5-yr CDS spreads of top 15 major financial institutions
[6] All data series are from the Haver WEEKLY database

Credit Indicators in the NFCI and ANFCI

Financial Indicator[1]	Start Date	Transformation[2]	Frequency	Weight[3]	
				NFCI	ANFCI
BofAML High Yield/Moody's Baa corporate bond yield spread	07-Nov-1986	LV	W	3.22	0.82
FRB Senior Loan Officer Survey: Tightening Standards on Small C&I Loans	13-Jul-1990	LV	Q	3.19	1.11
30-yr Jumbo/Conforming fixed rate mortgage spread	12-Jun-1998	LV	W	3.14	2.88
FRB Senior Loan Officer Survey: Tightening Standards on RRE Loans	12-Oct-1990	LV	Q	3.08	2.36
FRB Senior Loan Officer Survey: Tightening Standards on Large C&I Loans	13-Jul-1990	LV	Q	2.97	0.95
NACM Survey of Credit Managers: Credit Manager's Index	15-Feb-2002	LV	M	-2.96	-1.12
FRB Senior Loan Officer Survey: Tightening Standards on CRE Loans	12-Oct-1990	LV	Q	2.95	1.54
FRB Senior Loan Officer Survey: Increasing spreads on Small C&I Loans	13-Jul-1990	LV	Q	2.94	1.49
Markit Investment Grade (IG) 5-yr Senior CDS Index[7]	01-Oct-2004	LV	W	2.85	2.44
FRB Senior Loan Officer Survey: Increasing spreads on Large C&I Loans	13-Jul-1990	LV	Q	2.83	1.10
1-mo. Nonfinancial commercial paper A2P2/AA credit spread	10-Jan-1997	LV	W	2.82	2.18
Moody's Baa corporate bond/10-yr Treasury yield spread	03-Jan-1986	LV	W	2.71	1.14
Markit High Yield (HY) 5-yr Senior CDS Index[7]	07-Jan-2005	LV	W	2.54	3.26
Commercial Bank 24-mo. Personal Loan/2-yr Treasury yield spread	05-May-1972	LV	Q	-1.02	-1.26
S&P US Bankcard Credit Card: Excess Rate Spread	31-Jan-1992	LVSA	M	-0.87	-1.19
FRB Senior Loan Officer Survey: Willingness to Lend to Consumers	15-Jan-1971	LV	Q	-0.76	-0.26
30-yr Conforming Mortgage/10-yr Treasury yield spread	02-Apr-1971	LV	W	0.75	1.15
20-yr Treasury/State & Local Government 20-yr GO bond spread	08-Jan-1971	LV	W	0.75	0.29
UM Household Survey: Mortgage Credit Conditions Good/Bad spread[6]	24-Feb-1978	LV	M	-0.39	-0.37
UM Household Survey: Durable Goods Credit Conditions Good/Bad spread[5]	27-Jan-1978	LV	M	-0.37	-0.26
NFIB Survey: Credit Harder to Get	02-Nov-1973	LV	M	0.33	0.24
ABA Value of Delinquent Home Equity Loans/Total Loans	26-Feb-1999	DLV	M	0.33	0.32
Commercial Bank 48-mo. New Car Loan/2-yr Treasury yield spread	05-May-1972	LV	Q	-0.32	-1.21
UM Household Survey: Auto Credit Conditions Good/Bad spread[4]	24-Feb-1978	LV	M	-0.32	-0.26
Bond Market Association Municipal Swap/20-yr Treasury yield spread	07-Jul-1989	LV	W	0.29	1.38
ABA Value of Delinquent Consumer Loans/Total Loans	26-Feb-1999	DLV	M	0.27	0.23
ABA Value of Delinquent Bank Card Credit Loans/Total Loans	26-Feb-1999	DLV	M	0.26	0.16
Commercial Bank Noncurrent/Total Loans	28-Jun-1985	DLN	Q	0.22	0.15
Finance Company Owned & Managed Receivables	02-Aug-1985	DLN	M	-0.19	0.08
S&P US Bankcard Credit Card: 3-mo. Delinquency Rate	28-Feb-1992	DLVSA	M	0.18	0.08
S&P US Bankcard Credit Card: Receivables Outstanding	28-Feb-1992	DLNSA	M	-0.17	-0.10
ABA Value of Delinquent Noncard Revolving Credit Loans/Total Loans	26-Feb-1999	DLV	M	0.14	0.14
Consumer Credit Outstanding	29-Jan-1971	DLN	M	-0.03	0.03
MBA Serious Delinquencies	30-Jun-1972	DLV	Q	0.03	0.06
Money Stock: MZM	01-Mar-1974	DLN	M	-0.02	-0.05

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[4] Series vehrn_nr_all
[5] Series durrn_nr_all
[6] Series homrn_nr_all
[7] Consecutive Markit series are spliced together to form a consistent time series

Leverage Indicators in the NFCI and ANFCI

Financial Indicator[1]	Start Date	Transformation[2]	Frequency	Weight[3] NFCI	Weight[3] ANFCI
S&P 500 Financials/S&P 500 Price Index (Relative to 2-yr MA)	06-Sep-1991	LVMA	W	-2.80	-4.25
COMEX Gold/NYMEX WTI Futures Market Depth	04-Jan-2008	LV	W	2.47	2.74
CME Eurodollar/CBOT T-Note Futures Market Depth	01-Feb-2008	LV	W	2.08	1.64
3-mo. Eurodollar, 10-yr/3-mo. swap, 2-yr and 10-yr Treasury Open Interest	23-Jun-1995	DLNQ	W	-1.15	-1.75
CME E-mini S&P Futures Market Depth	04-Jan-2008	LV	W	0.39	1.23
CMBS Issuance (Relative to 12-mo. MA)	28-Dec-1990	LVMASA	M	-0.22	-0.33
New US Corporate Debt Issuance (Relative to 12-mo. MA)	01-Jan-1988	LVMASA	M	-0.20	-0.40
Commercial Bank Total Unused C&I Loan Commitments/Total Assets	29-Jun-1990	DLN	Q	-0.19	-0.16
Nonmortgage ABS Issuance (Relative to 12-mo. MA)	29-Dec-2000	LVMASA	M	-0.17	-0.05
Net Notional Value of Credit Derivatives	07-Nov-2008	DLN	W	-0.16	-0.31
S&P 500, NASDAQ, and NYSE Market Capitalization/GDP	28-Jun-1985	DLN	Q	-0.11	-0.11
Broker-dealer Debit Balances in Margin Accounts[4]	29-Jan-1971	DLN	M	-0.10	-0.19
Total Agency and GSE Assets/GDP	30-Dec-1983	DLN	Q	0.09	0.10
Commercial Bank Consumer Loans/Total Assets	02-Mar-1973	DLN	M	-0.08	-0.06
New State & Local Government Debt Issues (Relative to 12-mo.h MA)	27-Feb-2004	LVMASA	M	-0.07	-0.02
Total Assets of ABS issuers/GDP	30-Dec-1983	DLN	Q	-0.06	-0.02
New US Corporate Equity Issuance (Relative to 12-mo. MA)	01-Jan-1988	LVMASA	M	-0.06	-0.09
Commercial Bank Securities in Bank Credit/Total Assets	02-Mar-1973	DLN	M	-0.05	-0.14
Commercial Bank C&I Loans/Total Assets	02-Mar-1973	DLN	M	0.05	0.20
CoreLogic National House Price Index	02-Apr-1976	DLN	M	-0.05	-0.17
Wilshire 5000 Stock Price Index	29-Jan-1971	DLN	M	-0.05	-0.11
S&P 500, S&P 500 mini, NASDAQ 100, NASDAQ mini Open Interest	24-Sep-1999	DLNQ	W	-0.05	-0.52
Household debt outstanding/PCE Durables and Residential Investment	02-Apr-1971	DLN	Q	0.04	0.01
Total MBS Issuance (Relative to 12-mo. MA)	29-Dec-2000	LVMASA	M	0.03	-0.49
Nonfinancial business debt outstanding/GDP	02-Apr-1971	DLN	Q	0.02	0.08
Total Assets of Funding Corporations/GDP	02-Apr-1971	DLN	Q	0.02	0.02
Total Assets of Insurance Companies/GDP	02-Apr-1971	DLN	Q	-0.02	-0.06
10-yr Constant Maturity Treasury yield	08-Jan-1971	DLV	W	-0.02	-0.11
Federal, state, and local debt outstanding/GDP	02-Apr-1971	DLN	Q	0.01	-0.00
Total REIT Assets/GDP	02-Apr-1971	DLN	Q	-0.01	0.06
Commercial Bank Real Estate Loans/Total Assets	02-Mar-1973	DLN	M	-0.01	0.04
Fed funds and Reverse Repurchase Agreements/Total Assets of Commercial Banks	30-Mar-1973	DLN	M	-0.01	-0.06
Total Assets of Broker-dealers/GDP	02-Apr-1971	DLN	Q	-0.01	-0.03
FRB Commercial Property Price Index	02-Apr-1971	DLN	Q	0.00	-0.00
Total Assets of Pension Funds/GDP	02-Apr-1971	DLN	Q	-0.00	-0.03
Total Assets of Finance Companies/GDP	02-Apr-1971	DLN	Q	0.00	0.02

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[4] FINRA and NYSE data are spliced to form a single time series.