



The All Clear Dashboard – April 27, 2020

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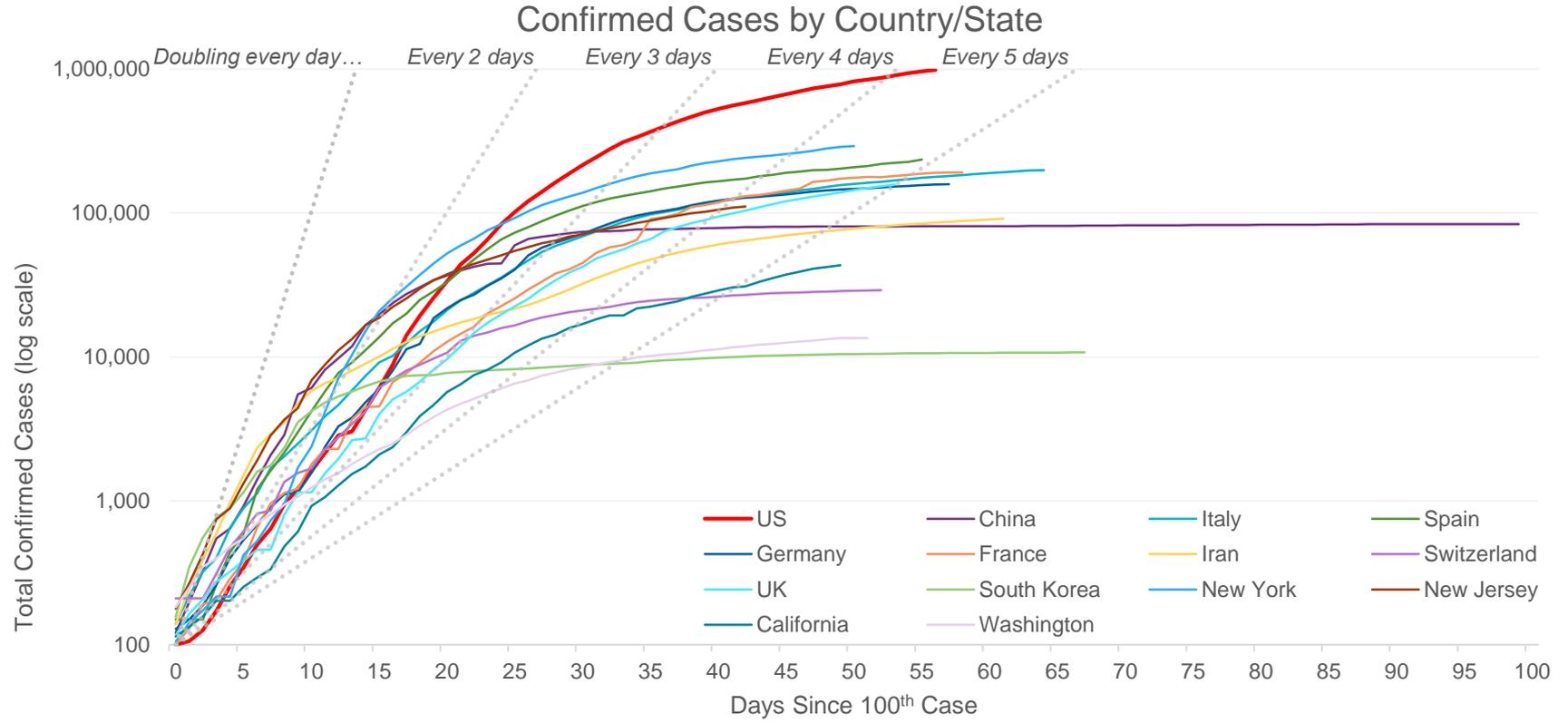
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The Checklist

Issue	Comment	Verdict
Is the virus peaking?	Not yet – but curves are bending	
Has sentiment bottomed?	Bearish sentiment Equity Outflows: Outflows flipped to inflows Credit Outflows: Capitulation, now seeing inflows	    
Are markets priced for a recession?	A mild one, but not a severe one	 
Is the economy restarting?	Some early signs of activity bottoming	
Is the credit market settling down?	Fed support calming markets	
Is the funding market liquefied?	Some signs of marginal stress	 
Monetary response?	Fed is all in – kitchen sink	  
Fiscal response?	Necessary but insufficient – States/Local Govts?	

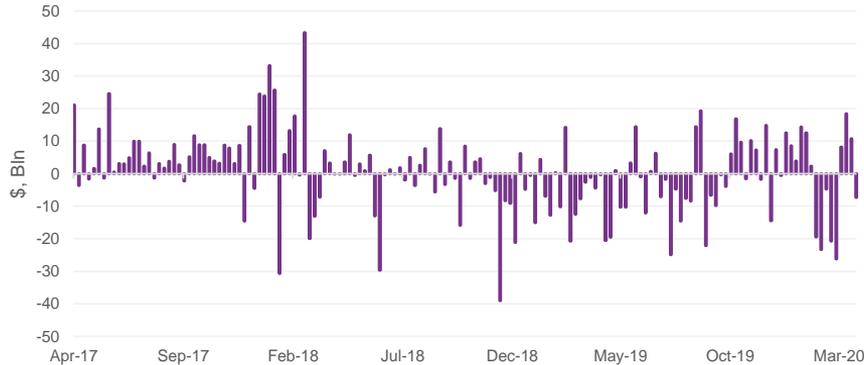
Is The Virus Peaking?



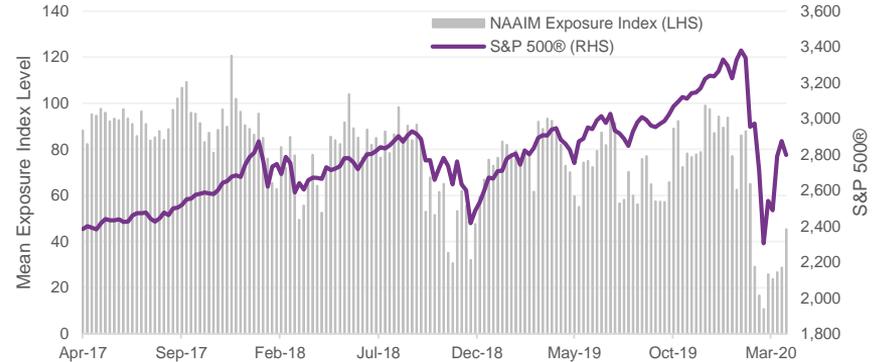
Source: Natixis PRCG, WHO, Johns Hopkins University, COVID Tracking Project, Bloomberg. As of 4/27/20.

Sentiment Bottomed?

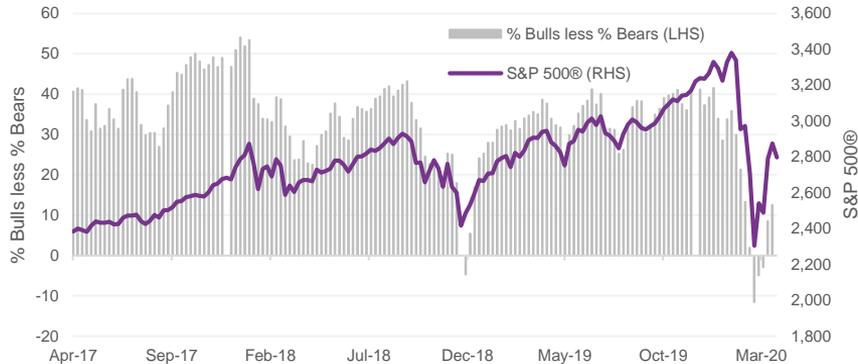
Weekly Equity Flows: ETF and Long Only Funds



National Association Active Investment Managers Exposure Index



Investors Intelligence



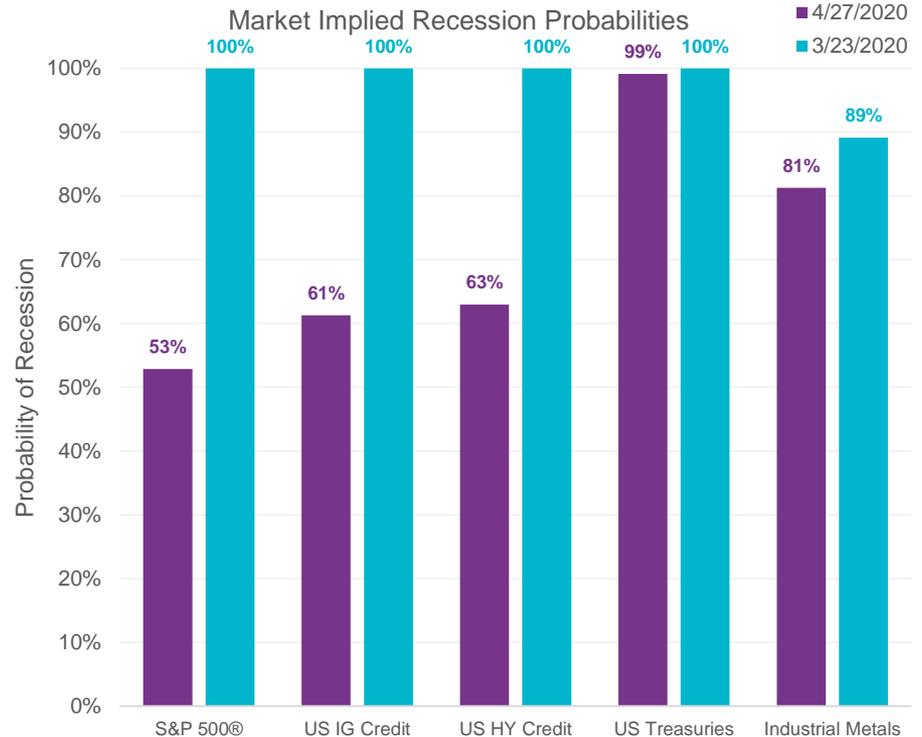
American Association of Individual Investors



Source: Natixis PRCG, FactSet, Bloomberg. Data from 4/28/17 to 4/23/20.

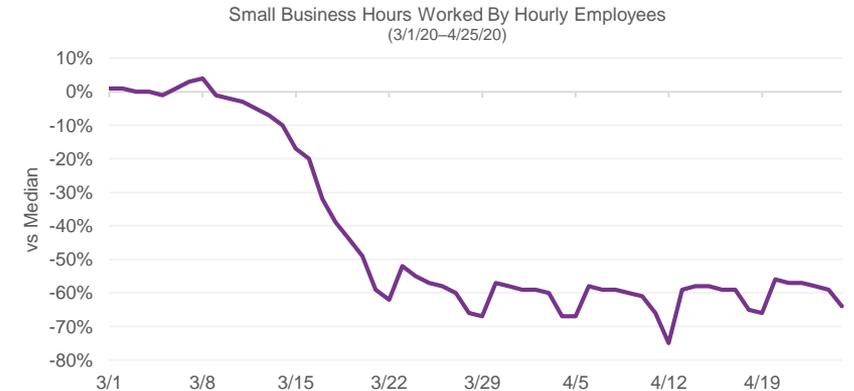
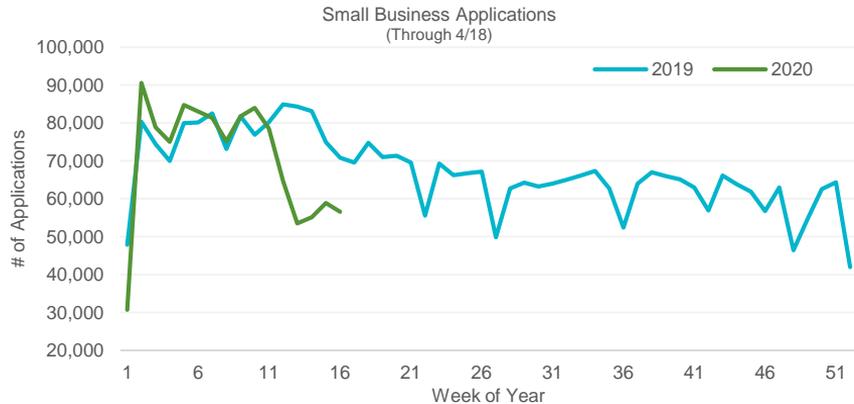
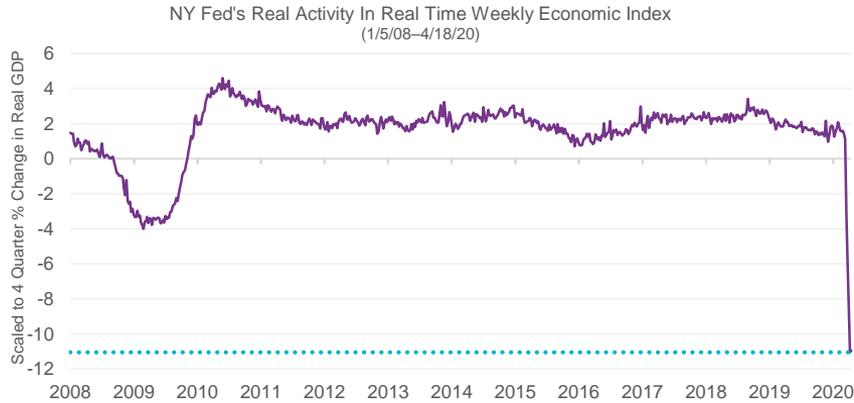
Markets Priced For Recessions?

S&P 500® Peak	S&P 500® Trough	Price Decline	Earnings Decline	Earnings Decline
Jun-48	Jun-49	-21%	-3%	Mild
Jan-53	Sep-53	-15%	-12%	Mild
Aug-56	Dec-57	-21%	-22%	Deep
Aug-59	Oct-60	-14%	-12%	Mild
Nov-68	May-70	-36%	-13%	Mild
Jan-73	Oct-74	-48%	-15%	Deep
Feb-80	Mar-80	-17%	-5%	Mild
Nov-80	Aug-82	-27%	-19%	Deep
Jul-90	Oct-90	-20%	-26%	Deep
Mar-00	Sep-01	-37%	-23%	Deep
Oct-07	Mar-09	-57%	-45%	Deep
Summary				
Average		-28%	-18%	
Median		-21%	-15%	
Average in Deep		-35%	-25%	
Average in Mild		-20%	-9%	
Current Drawdown				
Feb-20	Apr-20	-15%		
Recession Probability				
Average		53%		
Median		72%		
Deep		43%		
Mild		73%		



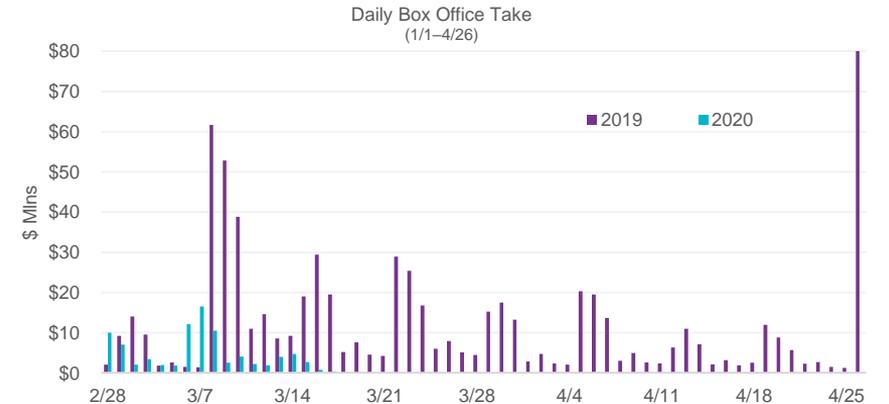
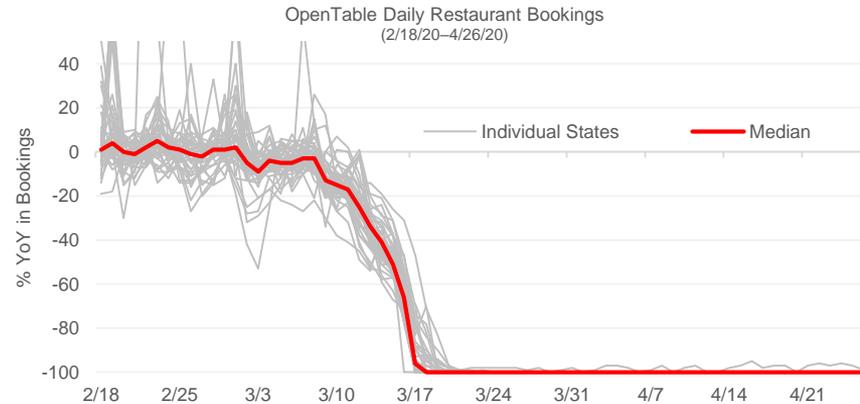
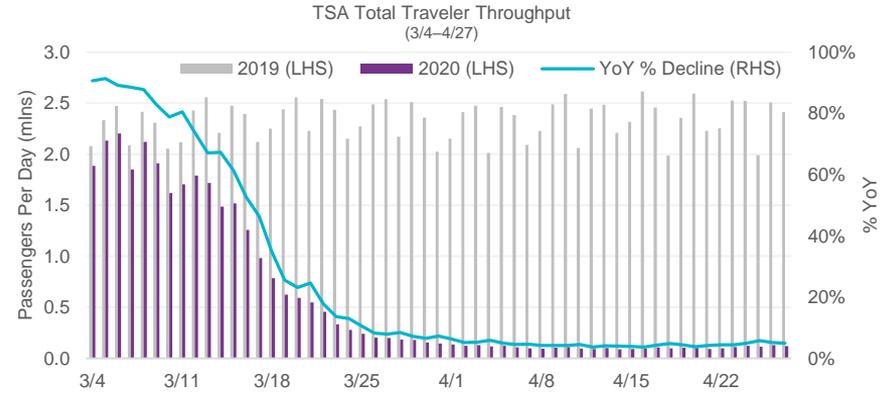
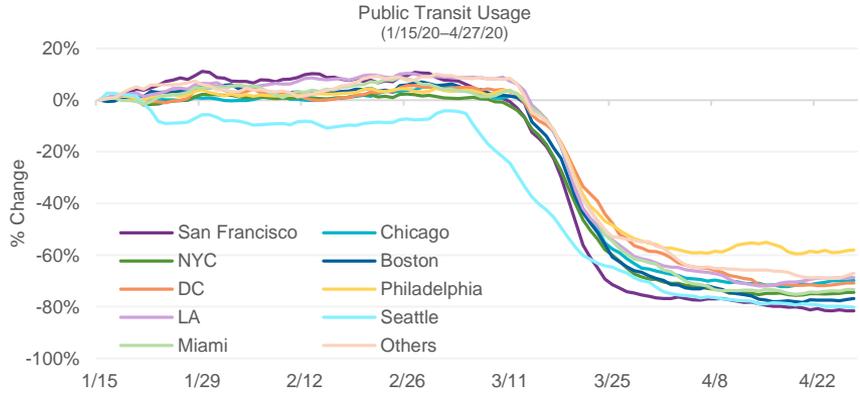
Source: Natixis PRCG, FactSet, Bloomberg. As of 4/27/20. Recession probability for S&P 500® and Industrial Metals represents drawdown to average peak to trough drawdown during recessions. IG and HY probabilities reflect current option adjusted spread as compared to recessionary and non-recessionary averages. US Treasuries probability reflects current change in 5Y yield as compared to average change in recession.

Is The Economy Restarting?



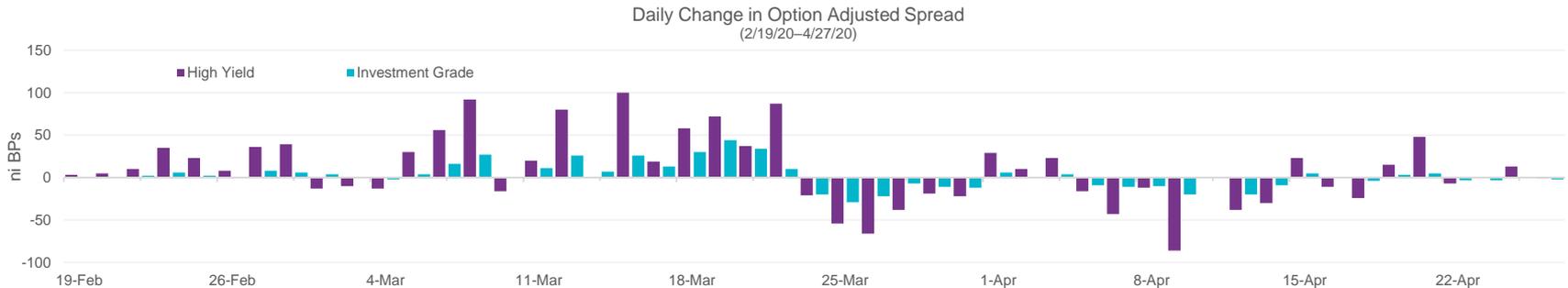
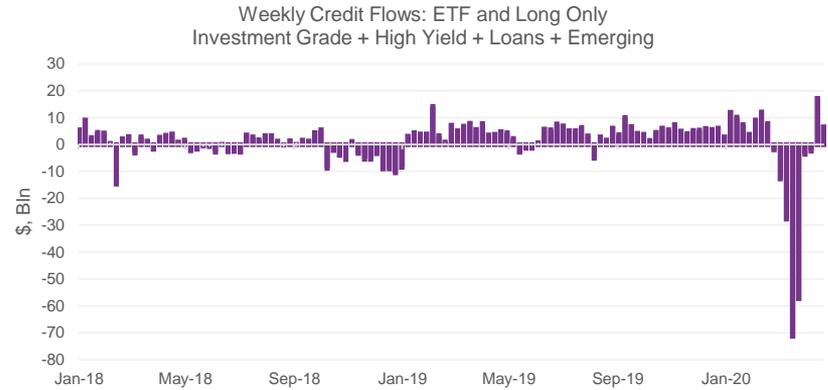
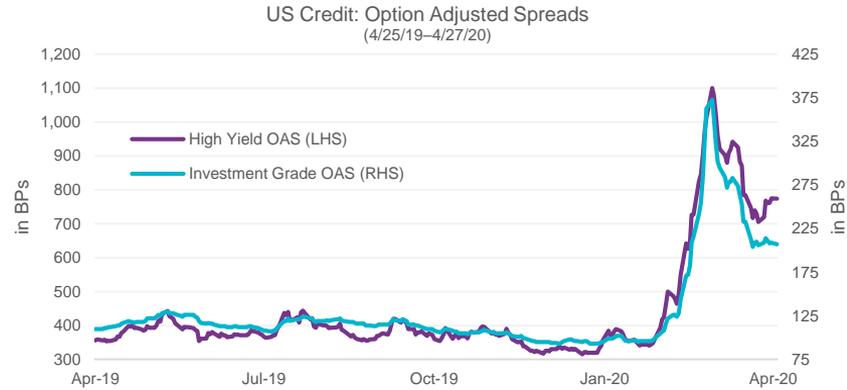
Source: Natixis PRCG, New York Federal Reserve, US Census, <https://joinhomebase.com/data/covid-19/>. Small business hours worked rates compare that day vs. the median for that day of the week for the period Jan 4, 2020 to Jan 31, 2020.

Is The Economy Restarting?



Source: Natixis PRCG, TSA, www.boxofficemojo.com, www.moovit.com, www.opentable.com.

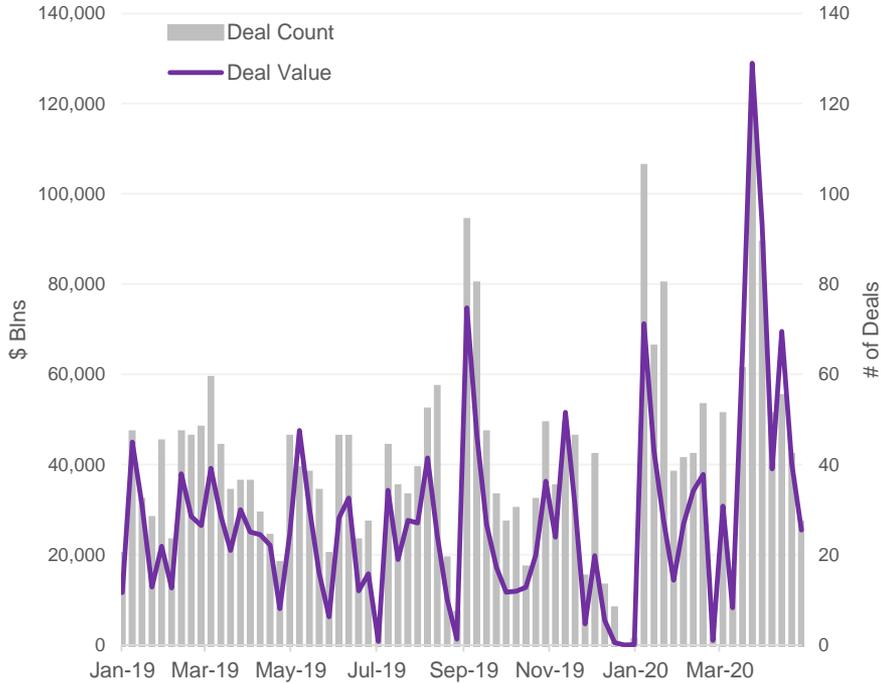
Is Credit Settling Down?



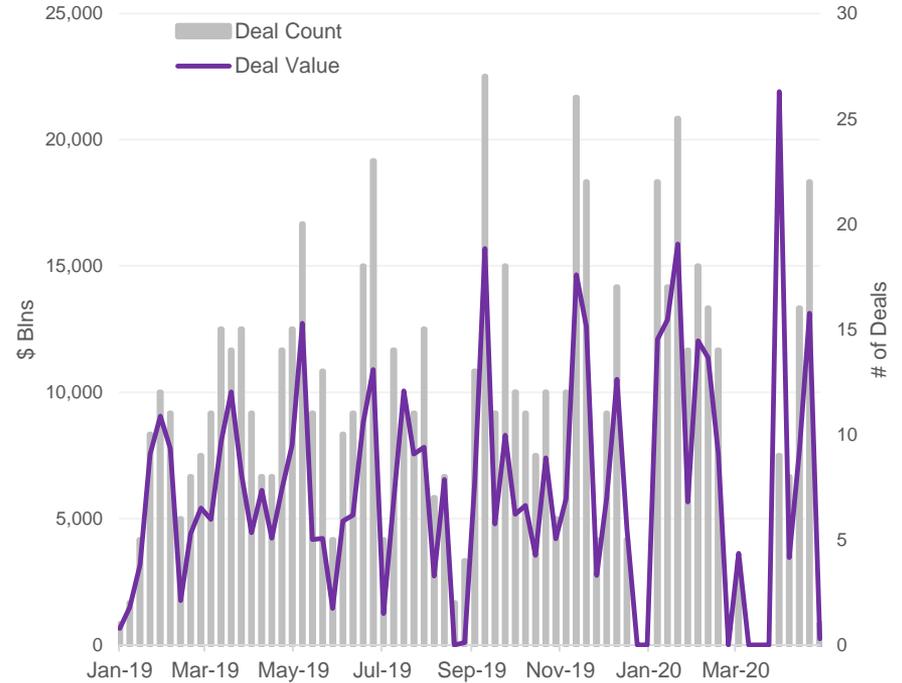
Source: Natixis PRCG, Bloomberg, FactSet. Bloomberg Barclays U.S. Corporate High-Yield Bond Index measures the market of US dollar-denominated, high yield, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt. The US Corporate High-Yield Bond Index was created in 1986, with history backfilled to July 1, 1983, and rolls up into the Barclays US Universal and Global High-Yield Indices. Bloomberg Barclays U.S. Corporate Investment Grade Index is an unmanaged index consisting of publicly issued U.S. corporate and specified foreign debentures and secured notes that are rated investment grade or higher by at least two ratings agencies, have at least one year to final maturity and have at least \$250 million par amount outstanding. Flows data covers 1/5/18 to 4/23/20.

Is Credit Settling Down?

Investment Grade Weekly Issuance
(12/30/18–4/27/20)

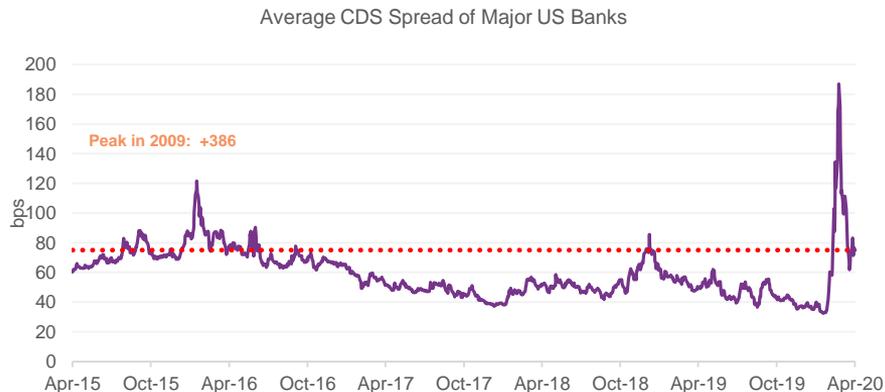
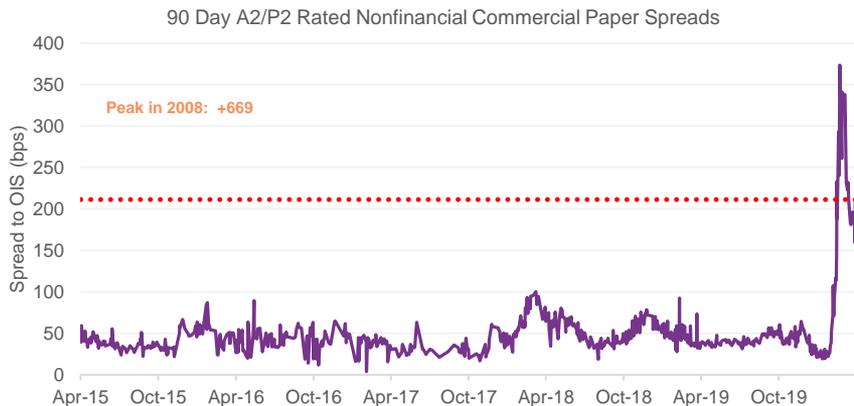


High Yield Weekly Issuance
(12/30/18–4/27/20)



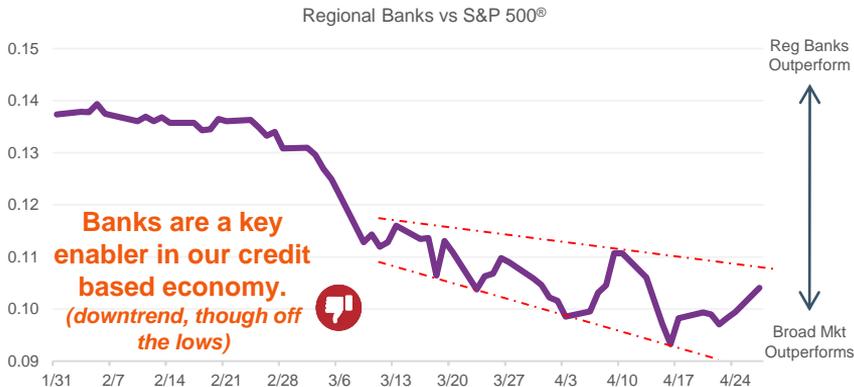
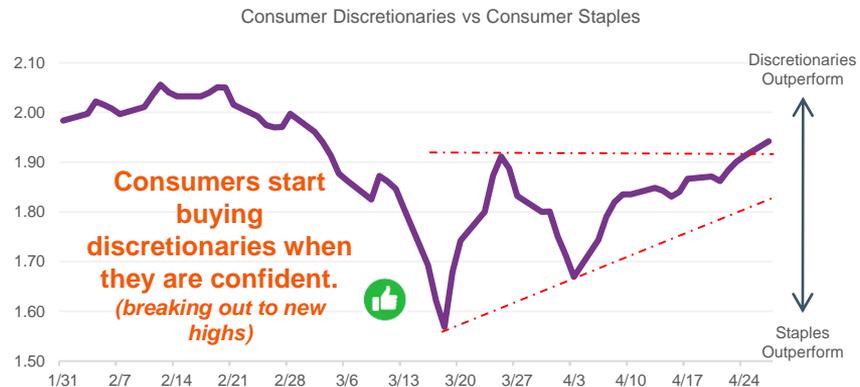
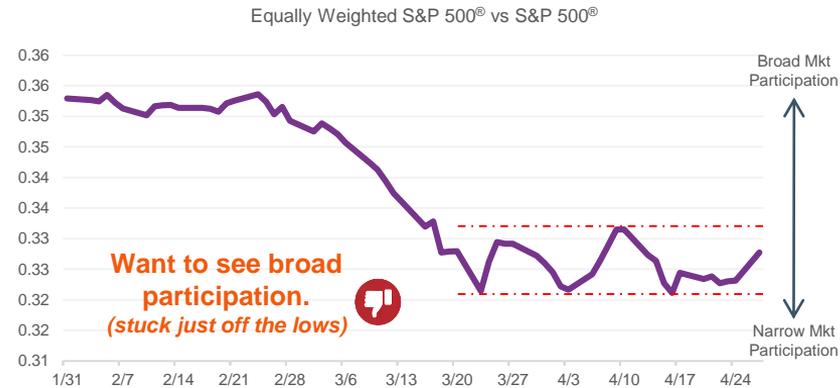
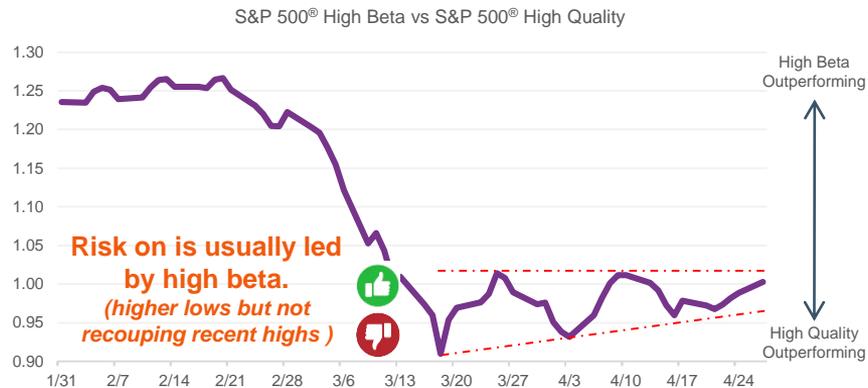
Source: Natixis PRCG, Bloomberg.

Funding Market Monitor



Source: Natixis PRCG, Bloomberg. Data from 4/27/15 to 4/27/20. CDS includes Wells Fargo, Citigroup, JPMorgan and Bank of America. Dotted line is current level. LIBOR – OIS spread as of 4/24/20, Commercial Paper spreads as of 4/24/20.

Leadership Is Important When Finding A Bottom

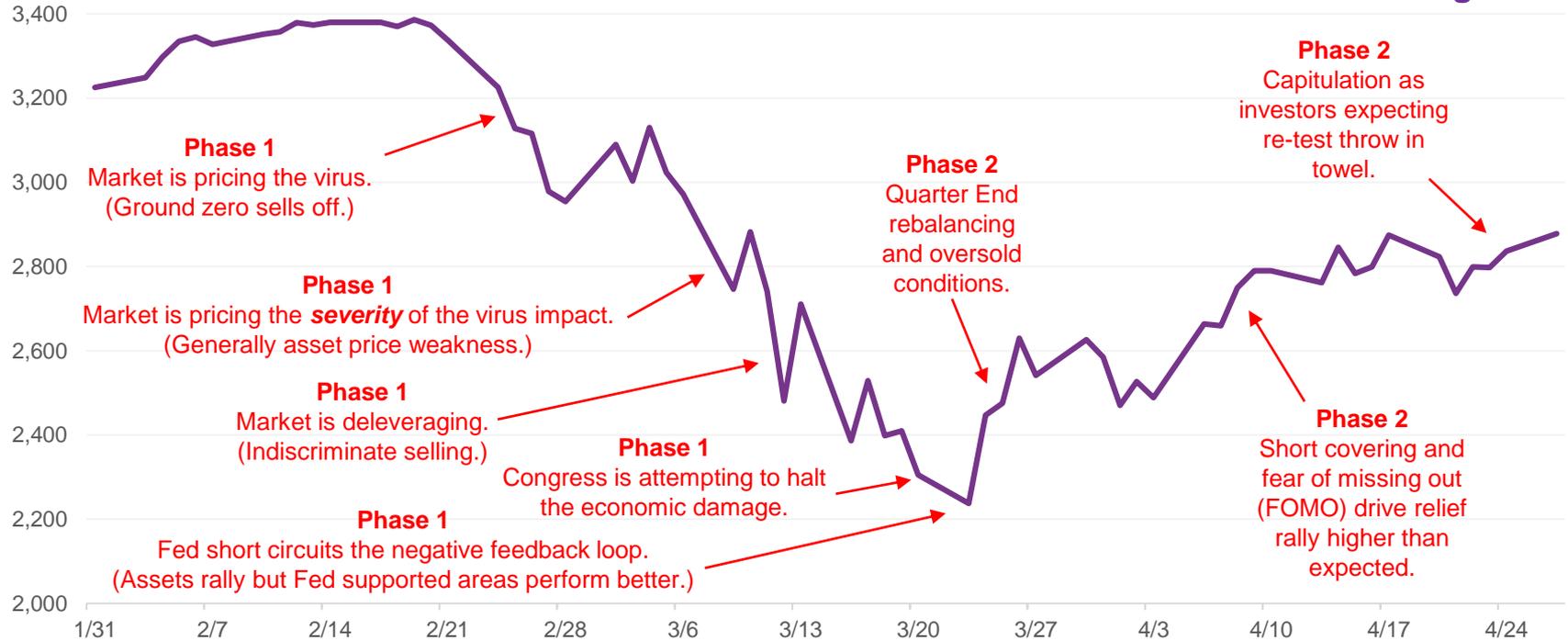


Source: Natixis PRCG, FactSet. ETFs used to represent categories: Russell 2000 - IWM, Equally Weighted S&P 500® - RSP, S&P 500® - SPY, XLP, S&P 500® Consumer Discretionary - XLY, and US Regional Banks - KBE. Data from 1/31/20 to 4/27/20.

Stages Of The Sell-Off

Phase 1: Panic
Phase 2: Relief Rally
Phase 3: Second Leg Down

S&P 500® Price Index
(1/31/20–4/27/20)



Source: Natixis PRCG, FactSet.

The Fed's Firepower

Fed Special Purpose Vehicle	Current Treasury Investment (\$, Bln)	Implied Leverage	Max Leverage Capacity (\$, Bln)	Potential Size of Asset Purchases Assuming Stated Limits
Primary Corporate Credit Facility (PMCCF)	\$50	10x	\$750	~ \$411bln of Corp debt ~ \$33bln of IG ETFs ~ \$10bln of HY ETFs
Secondary Market Corporate Credit Facility (SMCCF)	\$25			
Main Street Loan Facility (MSNLF and MSELF)	\$75	8x	\$600	
Municipal Liquidity Facility	\$35	14x	\$500	
Paycheck Protection Program Lending Facility	N/A	N/A	\$350	
Term Asset-Backed Securities Loan Facility (TALF)	\$10	10x	\$100	
Primary Dealer Credit Facility (PDCF)	N/A	N/A		
Money Market Mutual Fund Liquidity Facility (MMLF)	\$10	10x		
Commercial Paper Funding Facility (CPFF)	\$10	10x		
Total	\$215		\$2,300	

- SMCCF will lever 10:1 for IG bonds and ETFs, 7:1 for non IG bonds, and between 3:1 and 7:1 for other eligible assets.
- PMCCF will lever 10:1 for IG bonds and 7:1 for other assets.
- MMLF and CPFF lack details. Assume IG or better as collateral which has been levered 10:1 in previous facilities.

Source: Natixis PRCG.

Monetary Response

Action	2020 COVID-19	2008 Financial Crisis
Policy Rate Cuts	3/3 – Cut fed funds target rate 50bps 3/15 – Cut fed funds target rate by 100bps Target range 0.00–0.25%, IOER = 0.10%, RRP = 0.00%	Cut rates a total of 6 times from 2007 to 2008 12/16/08 saw fed funds target range 0.00–0.25% IOER set to 0.25%
Permanent Open Mkt Operations (POMO)	3/15 – \$500bln of US Treasury purchases across the curve and \$200bln of MBS purchases. 3/23 – Treasury and MBS purchases are essentially unlimited. Also included in purchases program are CMBS and RMBS issued by government sponsored entities.	Three rounds of QE purchases of both US Treasuries and MBS between 2008 and 2014
Discount Window and Reserve Changes	3/15 – Cut discount rate to 0.25%. Banks can borrow up to 90 days. Encouraging banks to borrow at discount window and utilize intraday credit to extend to business and household. Cut fractional reserve requirement to 0.00%. Asking banks to draw down capital and liquidity buffers to lend.	Cut discount window rate to 25bps above fed funds target rate. Allowed banks to borrow for up to 90 days.
Repo Operations (TOMO)	Up to \$175bln of o/n repo offered daily. \$45bln of 2 week repo twice a week. Up to \$500bln of 3m repo and \$500bln of 1m repo offered weekly. Numerous other operations announced.	
Commercial Paper Funding Facility (CPFF)	3/17 – Will purchase A1/P1 commercial paper from issuers at 3m OIS + 200bps. Provide a funding backstop for issuers. \$10bln of credit protection from Treasury's Exchange Stabilization Fund (ESF). 3/23 – Includes high quality tax exempt commercial paper as eligible securities. Pricing of the facility reduced.	Similar structure to current CPFF but without credit guarantee.
Primary Dealer Credit Facility (PDCF)	3/17 – Loans up to 90 days to primary dealers at discount window rate. Broad range of collateral is eligible.	Similar structure to current PDCF but only overnight loans. Frequency fee imposed by those using it for more than 45 days.
Money Market Liquidity Facility (MMLF)	3/18 – Provides liquidity to money markets. Offers non-recourse loans to purchase eligible assets from MMFs. Also includes short-term municipal debt. 3/23 – Includes municipal variable rate demand notes (VRDNs) and bank CDs.	Similar program announced but only purchased asset-backed commercial paper. Treasury guaranteed MMF – break the buck.
FX Swap Lines	3/15 – FX swap lines with Bank of Canada, Bank of England, Bank of Japan, European Central Bank and Swiss National Bank. 3/19 – Fed opens up FX swap lines with central banks in Australia, Brazil, Denmark, Korea, Mexico, Norway, New Zealand, Singapore and Sweden.	Introduced dollar liquidity swap lines with a number of foreign central banks.

Source: Natixis PRCG.

Monetary Response – Continued

Action	2020 COVID-19	2008 Financial Crisis
<p>Term Asset-Backed Loan Facility (TALF)</p> <p>Municipal Liquidity Facility</p>	<p>3/23 – Supports the flow of credit to consumers and business, Will enable the issuance of asset-backed securities backed by student loans, auto loans, credit card loans and guaranteed by the Small Business Administration and certain other assets.</p> <p>4/9 - The Fed will now accept triple-A rated tranches of existing commercial mortgage-backed securities and newly issued collateralized loan obligations.</p> <p>4/9 - The facility will purchase up to \$500 billion of short term notes directly from U.S. states (including the District of Columbia), U.S. counties with a population of at least two million residents, and U.S. cities with a population of at least one million residents (10 cities, 16 counties). Eligible state-level issuers may use the proceeds to support additional counties and cities. In addition to the actions described above, the Federal Reserve will continue to closely monitor conditions in the primary and secondary markets for municipal securities and will evaluate whether additional measures are needed to support the flow of credit and liquidity to state and local governments. Max amount the SPV can purchase is capped at 20% of the issuer's fiscal year 2017 general revenue and its utility revenue.</p>	<p>Provided up to \$200bln of non-recourse loans to investors to purchase new issue consumer asset-backed credit.</p>
<p>Primary Market Corporate Credit Facility (PMCCF)</p> <p>Secondary Market Corporate Credit Facility (SMCCF)</p>	<p>3/23 – \$300bln in new financing set up where the Department of the Treasury, using the Exchange Stabilization Fund (ESF), will provide \$30bln in equity that can be leveraged through the Fed, to support the flow of credit to employers, consumers and businesses.</p> <p>Under the SMCCF: Can purchase debt rated BBB-/Baa3 or higher, issues with 5 years to maturity or less (~40% of IG market) and debt that is not included from companies that are expected to receive assistance under pending federal legislation. This also includes purchases of up to 10% of an issuer's outstanding bonds and 20% of assets of any investment grade ETF.</p> <p>4/9 – The preponderance of ETF holdings will be of ETFs whose primary investment objective is exposure to the US investment grade corporate bonds and the remainder will be in ETFs whose primary investment objective is exposure to US high yield corporate bonds. Firms that were BBB-rated on March 22 but are now BB can participate (Fallen Angels).</p> <p>Under PMCCF: IG issuers can borrow directly from the Fed in the form of loans or bonds with maturities up to 4 years. The rate will be based on market plus 100bps ("commitment fee") implying that this is a backstop program. In terms of size, companies participating can increase total borrowing relative to the maximum over the last 12M by 40% for AAA-rated issuers, 130% for AA, 120% for A and 110% for BBB-rated issuers.</p> <p>IG purchases levered 10:1. High Yield purchases levered 7:1. Other assets levered 3:1 to 7:1 depending on risk.</p>	

Source: Natixis PRCG.

Monetary Response – Continued

Action	2020 COVID-19	2008 Financial Crisis
Temporary Liquidity Guarantee Program (TLGP)		FDIC announced a temporary guarantee of newly issued senior unsecured debt of banks, thrifts and some holding companies.
Foreign and International Monetary Authorities Repo Facility (FIMA)	3/31 – The facility allows foreign central banks to temporarily raise dollars by selling U.S. Treasuries to the Federal Reserve’s System Open Market Account and agreeing to buy them back at the maturity of the repurchase agreement. The term of the agreement will be overnight, but can be rolled over as needed. The transaction would be conducted at an interest rate of 25 basis points over the rate on IOER (Interest on Excess Reserves). The facility reduces the need for central banks to sell their Treasury securities outright and into illiquid markets, which will help to avoid disruptions to the Treasury market and upward pressure on yields.	
Paycheck Protection Program Liquidity Facility (PPPLF)	4/6 - Bolster the effectiveness of the Small Business Administration’s Paycheck Protection Program (PPP) by supplying liquidity to participating financial institutions through term financing backed by PPP loans to small businesses. The PPP provides loans to small businesses so that they can keep their workers on the payroll. The Paycheck Protection Program Liquidity Facility (PPPLF) will extend credit to eligible financial institutions that originate PPP loans, taking the loans as collateral at face value and with no recourse to borrower.	
Main Street Lending Facility (MSLF)	<p>4/9 - The Main Street Lending Program will enhance support for small and mid-sized businesses that were in good financial standing before the crisis by offering 4-year loans to companies employing up to 10,000 workers or with revenues of less than \$2.5 billion. Principal and interest payments will be deferred for one year. Eligible banks may originate new Main Street loans or use Main Street loans to increase the size of existing loans to businesses. Banks will retain a 5 percent share, selling the remaining 95 percent to the Main Street facility, which will purchase up to \$600 billion of loans (US Treasury is 1st loss of equity capital from original \$75bn investment). Firms seeking Main Street loans must commit to make reasonable efforts to maintain payroll and retain workers. Borrowers must also follow compensation, stock repurchase, and dividend restrictions that apply to direct loan programs under the CARES Act. Firms that have taken advantage of the PPP may also take out Main Street loans. Loan specifics: 4 years, adjustable rate of SOFR + 250-400bp. Minimum loan size of \$1 million and maximum the lesser of \$150mn or figures derived from outstanding debt levels.</p> <p>Fully leveraged: \$2.6 trillion in liquidity commitments</p>	

Source: Natixis PRCG.

Fiscal Response

Provision	In Bln
Expand and Extend Unemployment Benefits	\$ 260
Boost all unemployment benefits by \$600 per week, cover additional workers who would not normally be eligible, provide an additional 13 weeks of benefits, and other changes	\$ 260
Issue One-Time Checks	\$ 290
Provide tax rebates of \$1,200 per adult and \$500 per child, phased out above \$75,000 of income (\$150,000 per couple)	\$ 290
Provide Small Business Loans and Grants	\$ 758
Support, issue, and guarantee loans to small businesses; offer loan forgiveness for funds spent on payroll, rent, mortgage interest, and utilities (Paycheck Protection Program)	\$ 670
Provide emergency grants for small businesses (incl. EIDL loans and grants)	\$ 73
Other small business support	\$ 13
Funding for Small Business Administration	\$ 2
Support Loans and Loan Guarantees for Large Businesses and Governments	\$ 504
Provide loans to passenger airlines	\$ 25
Provide loans to cargo airlines	\$ 4
Provide loans to firms vital to maintaining national security	\$ 17
Support a new Federal Reserve facility that will offer up to \$4.5 trillion of loans to businesses, states, and local governments	\$ 454
Support State and Local Governments	\$ 175
Provide aid to states (at least \$1.25bn per state)	\$ 150
Additional infrastructure grants to transit providers around the country, including state and local governments	\$ 25
Support Safety Net	\$ 42
Increase SNAP (food stamps) and child nutrition funding	\$ 25
Increase child and family services funding	\$ 5
Boost housing support	\$ 12

Source: Natixis PRCG. Committee for a Responsible Federal Budget.

Provision	In Bln
Increase Health-Related Spending	\$ 283
Increase hospital and public health funding	\$ 100
Increase preparedness funding	\$ 102
Increase funding for community health centers	\$ 6
Increase Medicare payments, expand telehealth and home services, and repeal Medicare sequester	\$ 20
Increase funding for the CDC, FDA, NIH, HIS and other health-related agencies	\$ 10
Increase funding toward veterans and defense health	\$ 20
Emergency grant funding for COVID19 testing	\$ 25
Increase Disaster Assistance	\$ 45
Expand FEMA disaster assistance fund	\$ 45
Increase Education Spending	\$ 32
Establish education stabilization fund for states, school districts, and higher education institutions to respond to COVID-19 crisis	\$ 31
Enact supplemental appropriations for Department of Education programs to respond to COVID-19 crisis	\$ 1
Preserve student aid for those affected by COVID-19	?
Reduce Individual Taxes	\$ 10
Loosen caps on deductibility of charitable giving as a share of income	\$ 1
Temporary deduction for up to \$300 of charitable donations by non-itemizers	\$ 2
Allow up to \$100,000 to be withdrawn from retirement accounts for coronavirus-related reasons	\$ 3
Temporarily waive retirement minimum distribution rules	\$ 5
Temporarily exclude employer-provided student loan assistance from income	?

Fiscal Response – Continued

Provision	In Bln
Cut Business Taxes	\$ 280
Loosen cap imposed under the Tax Cuts & Jobs Act on the deductibility of interest and operating losses	\$ 210
Offer payroll tax credits for businesses who retain workers at a loss	\$ 55
Delay employer payroll tax payments from 2020 to 2021 and 2022	\$ 12
Allow retailers and restaurants to write off the cost of improvements	?
Allow liquor distillers to make hand sanitizer tax free	?
Other Spending	\$ 35
Total	\$ 2,713

Action	Additional Details
Third Legislative Action	A \$2.2 trillion fiscal stimulus – tiered tax rebates worth \$1,200 for middle class, \$500bn to companies impacted by pandemic and \$350bn for small businesses, \$150bn for state and local government, \$100bn for hospitals.
Fourth Legislative Action	Increases funding for the forgivable small business loan Paycheck Protection Program (PPP) from \$349 billion to \$670 billion — a \$321 billion increase. The bill stipulates that \$60 billion in loans are to be made by small banks, community financial institutions, and credit unions with under \$50 billion in consolidated assets.

Our Thoughts:

1. Necessary but insufficient.
2. Need and expect subsequent packages.
3. Infrastructure to distribute policies will be challenged and taxed for both individuals and small businesses. System not designed to distribute funds.
4. Aid to states and municipalities is woefully too small. One-time payments to individuals enough?
5. Helps to stop bleeding but does nothing to help jumpstart the economy.

Source: Natixis PRCG. Committee for a Responsible Federal Budget.

Action	Additional Details
Keeping American Workers Paid and Employed Act	<p>Bill provides \$350bn to support loans through a new Paycheck Protection Program for: small employers with 500 employees or fewer as well as those that meet the current Small Business Administration size standards; self-employed individuals and gig economy individuals, and certain nonprofits.</p> <p>Loans would be equal to 250% of employer's average monthly payroll (max \$10mIn).</p> <p>Payroll costs covered include salary, wages, cash tips, health care benefits including insurance premiums, retirement contributions and covered leave.</p> <p>Employee retention credit – those firms forced to close due to COVID19 or whose revenues fell by 50% can qualify for credit.</p>
Cash Payments	<p>Direct payments of \$1,200 to every adult making \$75k and under and married couples making up to \$150k and \$500 per child to Americans. Those whose incomes are higher will see smaller checks. Individuals making \$99k or more and couples who make \$198k or more will not receive a check. Income will be based on 2018 taxes.</p>
Bailouts, Equity Stakes and Buyback Plans	<p>\$500bn in loans to distressed industries. An inspector general and a five-person congressional panel to oversee the fund. Those companies receiving assistance would be required to freeze pay for most workers who made more than \$425,000 in 2019 and to cut pay for those making \$3mIn. Annual pay cannot rise above the 2019 level through late March 2022 in the case of air carriers and contractors, or for a year after any loans or guarantees are no longer outstanding in the case of other companies. Severance pay for the same employees would be limited to double their 2019 pay. Companies receiving assistance where anyone is making more than \$3mIn in 2019 would see their pay limited to \$3mIn a year plus half of whatever they made over that amount in 2019.</p> <p>Businesses controlled by the president, VP and members of Congress would be prohibited from receiving loans or grants from Treasury programs.</p> <p>Companies taking the emergency federal loans or loan guarantees are banned from either buying back their own stock or paying shareholder dividends, not only for terms of the loans but for a year after the aid has ended. Other stipulations: pledge to lay off no more than 10% of their workforce, curbs on executive compensation and limits on outsourcing and offshoring.</p>

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