Economic Analysis

When will the U.S. economy recover from the infection?

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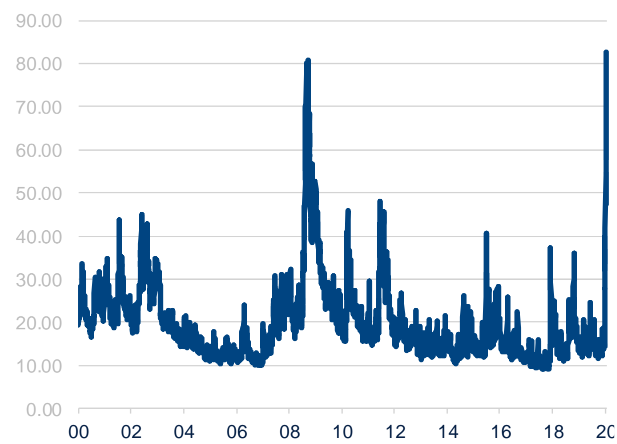
The current crisis represents an unprecedented risk to the U.S. economy as the fallout from the coronavirus has created a confluence of supply- and demand-side shocks coupled with a financial meltdown. Although the U.S. is still transiting into the worst phase of the pandemic, the experience in China, Italy and other countries suggests that the number of cases could peak in the Spring or early Summer. Therefore, the direct economic impact should be large, but temporary; however, the second-round effects from the financial meltdown to the real economy could imply a deeper shock and a slower recovery. Moreover, limited data availability, financial market volatility, and unprecedented policy responses imply elevated uncertainty on the economic outlook during the next few quarters.

The shocks

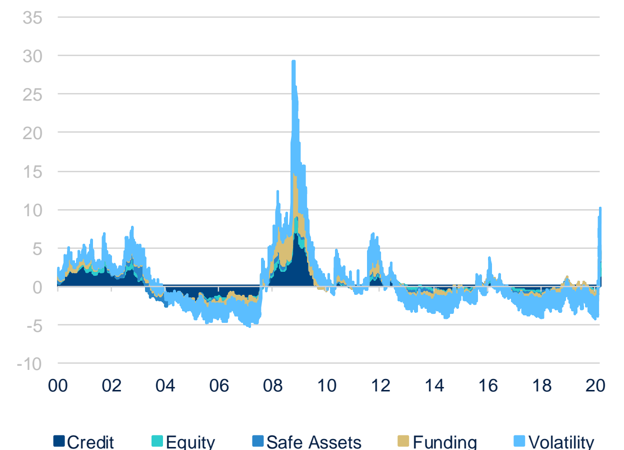
The supply-side shock brought about the Covid-19 pandemic is forcing factories to close resulting in cutbacks in the provision of products and services, as well as lower labor force participation and productivity. That being said, advances in technology have increased firms and employees' ability to operate remotely and remain productive, while innovations in on-line delivery and direct to consumer shipping supply chains (e.g. Amazon) could soften part of the impact on the supply side for the consumer.

Figure 1. **CBOE Volatility Index**



Source: BBVA Research and Haver Analytics

Figure 2. **Financial Stress Index** (0=average stress)



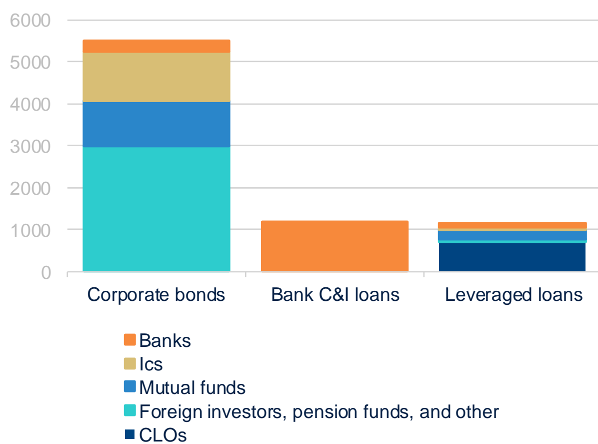
Source: BBVA Research and Haver Analytics

However, as individuals avoid getting infected and the government restricts mobility and closes public spaces, the economy will suffer a demand-side and confidence shock, which causes an increase in savings and a decline in spending. The demand shock has been particularly strong for industries such as ground passenger, pipeline and air transportation, arts, entertainment and recreation, and accommodation and food services. With supply chains disrupted and demand weakening further, manufacturing, wholesale and retail trade and freight transportation are experiencing a sharp slowdown. In the mining sector, the effects of lower demand are being amplified by the drop in commodity prices associated with the probability of a global recession. The impact has been more pronounced in the oil sector where excess supply has also magnified the shock.

In terms of financial markets, as expectations on future earnings deteriorate and risk aversion increases, investors and firms begin to deleverage by selling securities and hoarding cash. As fire sales intensify and asset valuations deteriorate, a negative feedback loop emerges, reinforcing the appetite for refuge in low risk securities, gold and cash. This increases the probability of further deterioration in asset values and thus wealth destruction, as well as a sharp liquidity and credit squeeze, which further reinforces the negative shocks to economic activity.

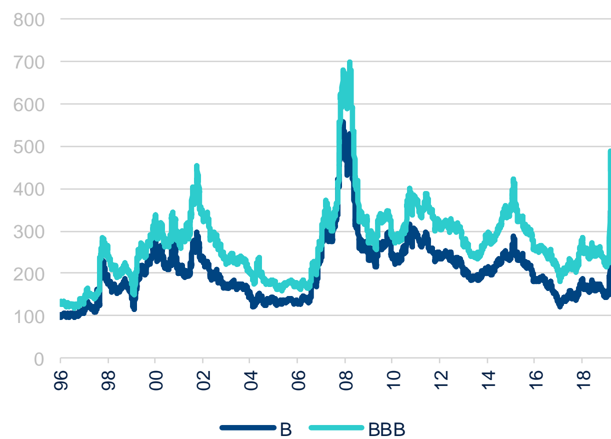
Liquidity and credit constraints will be particularly harmful for highly leveraged firms. From a systemic perspective, given substantial growth in recent years, low quality nonfinancial business debt has reached historical high levels at above $2.5tn, equivalent to 25% of total corporate credit. In addition, more than 60% of the outstanding leveraged loans have been securitized in Collateralized Loan Obligations (CLO) while 20% are held by mutual funds. A large portion of investment grade business debt could be downgraded and many firms will find it harder to refinance their debt, potentially leading to higher delinquencies and bankruptcies, thereby exerting even more pressure on the financial sector.

Figure 3. **Corporate Debt by Type of Holder, ($US BN)**



Source: BBVA Research and FRB

Figure 4. **Corporate Spreads (Basis Points)**



Source: BBVA Research and Haver Analytics

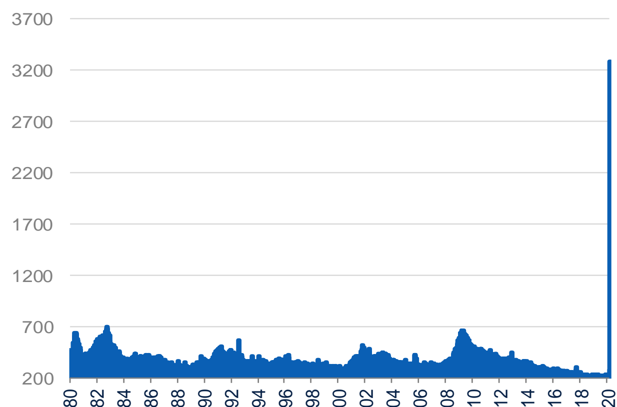
Policy responses

Although monetary and fiscal policies are not well equipped to contain the effects of supply-side shocks, they can be effective at mitigating the drop in demand and the stress in the financial sector. On the monetary policy side, the textbook response from the Fed is to lower the policy rate to stimulate consumption and investment. In addition, the Fed's main role in times of crisis is to act as the lender of last resort by providing enough liquidity to the economy and thus avoid a credit crunch. The Fed has initiated a round of unlimited quantitative easing (QE) and implemented a series of backstop measures so that financial intermediaries can continue providing credit to the rest of the economy. However, the Fed cannot easily reduce liquidity and funding pressures for sectors that do not have direct access to the Fed. Moreover, the new rounds of QE and emergency lending measures could imply an increase in the Fed's balance sheet of several trillion dollars that could take decades to unwind.

On the fiscal side, the government has committed to $2tn in fiscal stimulus that includes a significant increase in funding for health care to deal with the pandemic. However, even with more resources, the health care sector faces important capacity constraints. In addition, the government has committed to moderate the shocks to households by providing income support and paid sick leave, particularly for individuals whose income depends on tips, or for those that are unable to work remotely or have been laid-off as a result of the drop in economic activity. Many thousands of people live paycheck to paycheck and without a stable source of income will be unable to make ends meet, much less fulfil their financial obligations. Likewise, the government has committed to guarantee loans to small and medium sized enterprises. Many of these firms cannot remain afloat for more than a few weeks if they are unable to sell their products and services, which increases the chances of higher unemployment, delinquencies and bankruptcies.

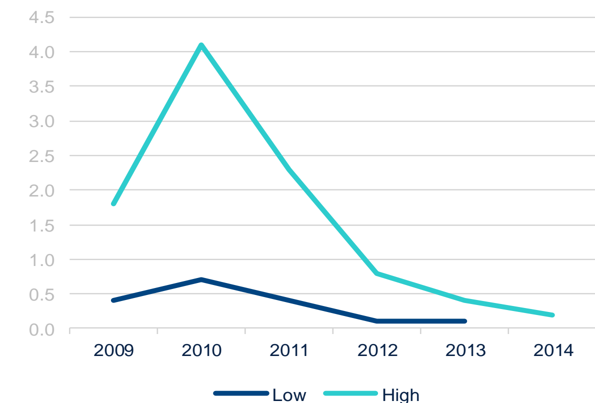
The unprecedented fiscal stimulus (almost 10% of GDP) implies a substantial increase in the federal deficit and public debt, which were set to reach 5% and 80% of GDP in 2020, respectively. In 2009, the deficit increased to almost 10% of GDP from 3.1% in 2008 while the public debt increased from 39% in 2008 to 74% in 2014. Despite the sizable fiscal stimulus, its net economic impact remains unclear. For example, even long after the passing of the American Recovery and Reconstruction Act in 2009, economists are still debating the effects that range somewhere between 1.7% and 9.6% of GDP over six years.

Figure 5. **Unemployment Insurance Claims, (Thousands)**



Source: BBVA Research and Haver Analytics

Figure 6. **Estimated Economic Impact from ARRA (% of GDP)**

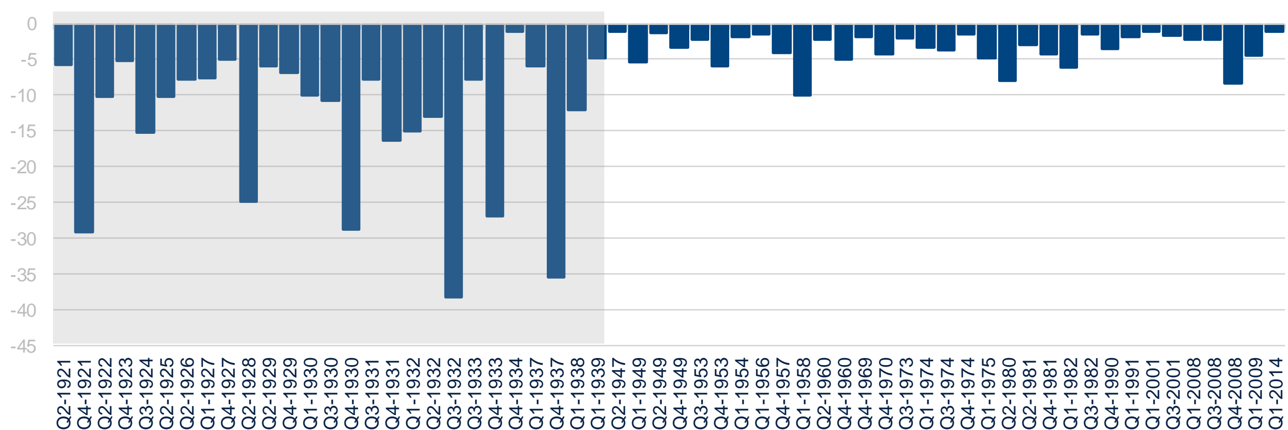


Source: BBVA Research and CBO

Economic outlook

Although the economy started the year on solid footing, the deterioration of economic conditions in March has been dramatic, suggesting that the drop in activity during the latter part of the month may be enough to offset the previous gains. If this is the case, 1Q20 GDP growth could be negative. Moreover, as the lockdown extends throughout the country, the drop in economic activity during 2Q20 could be the largest since the Great Depression. The three largest quarterly declines in the post-WWII era (1958, 1980 & 2008) averaged -8%. The compression of this crisis into a few weeks has the potential to amplify the drop. This implies a significant increase in the number of unemployed, possibly millions, and a spike in the unemployment rate of several percentage points to double-digit levels.

Figure 7. **Quarterly Negative GDP,** (% change annualized)

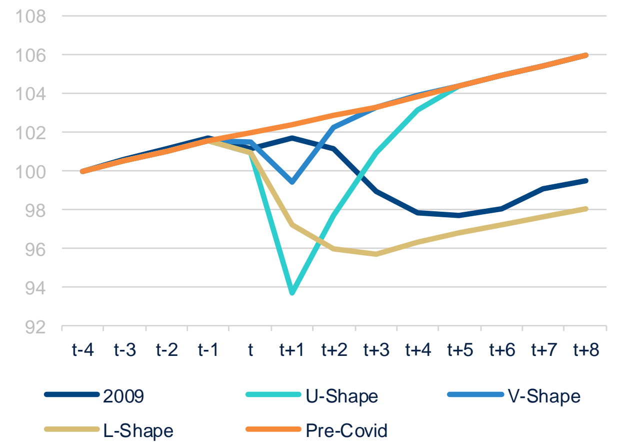


Source: BBVA Research and Haver Analyticis

The elevated uncertainty both on the magnitude and duration of the crisis raises questions on how quickly or slowly the economy will be able to recover, whether or not there would be longer-term effects even after the healthcare crisis has passed or if the epidemic could return during the winter season before a vaccine is made available to the general public.

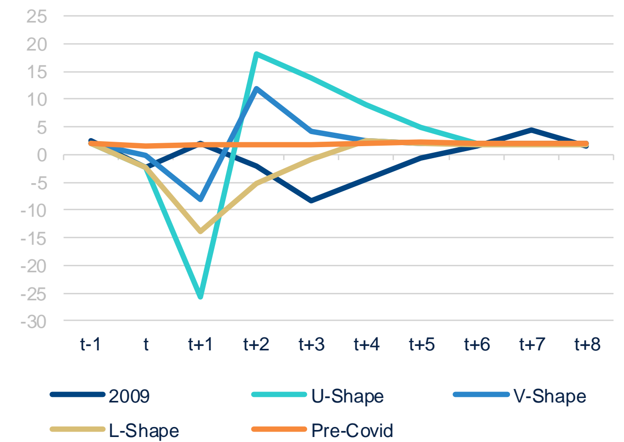
A V-shaped recovery implies that most of the losses in 1Q20 and 2Q20 -even if they are quite large- are offset between 3Q20 and 4Q20. In this case, a sharp increase in unemployment would be followed by strong job gains and GDP will return to pre-crisis levels in a couple of quarters. On the contrary, a U-shaped recession implies that although GDP would grow above potential during the recovery, the economy takes longer to return to pre-crisis levels. The unemployment rate will continue edging up several months after the end of the crisis but will come down once normalization is in full swing. An L-shaped recovery implies that the recovery will be very slow and it could take a couple of years for GDP to return to pre-crisis levels. This scenario implies that potential GDP growth has withered, the economy has suffered structural damages and monetary and fiscal responses were not effective. With the information available so far, the most likely scenario lies between a V- and U-shaped recovery.

Figure 8. **GDP Simulations: Pre-Covid vs V, U and L-shape recoveries**
(Index t-4=100, quarters)



Source: BBVA Research

Figure 9. **GDP Simulations: Pre-Covid vs V, U and L-shape recoveries**
(QoQ % Change, annualized, t=start of recession)



Source: BBVA Research

Moreover, consumer prices, particularly for goods and services that have experienced a sharp drop in demand will decline significantly, potentially sending inflation into negative territory. Considering that inflation was low before the pandemic started and that short-term market-based inflation expectations are negative, a decline in the price level will undoubtedly exacerbate the risks of a deflationary environment raising concerns within the Fed and the potential need for additional unconventional actions.

Under these conditions, short-term interest rates will remain near zero percent for a long period while long term yields will stay well below their historical average, as investors' demand for safe assets remains high. Already, the spike in risk aversion has sent shockwaves in foreign exchange rate markets around the world as banks and companies boost their demand for USD, which acts essentially as the world's reserve currency.

Beyond the crisis

Besides the damage caused in the following quarters, Covid-19 could have long-term implications and mark an inflection point in history if it changes business' and individual's behavior, the role of government and trends in globalization.

From a behavioral perspective, just as SARS accelerated e-commerce in Asia, Covid-19 could increase our reliance on virtual technologies, if for example, e-schooling and telecommuting become more common. Innovation and entrepreneurship could expand in areas such as food security, smart transportation, healthcare, and sustainability. For example, the development of digital nursing assistants or automated temperature screenings to reduce risks of disease transmission, as well as automated robotic delivery to avoid human interaction when they become infected could grow. In addition, we could see a decline in real human interaction.

From a government perspective, the debate on how to enhance our healthcare system and the role of the public sector in mitigating pandemics or other forms of global disasters could intensify. There could also be a resurgence in the role of science and expertise in policy making. Policy makers could use this opportunity to direct recovery efforts towards sustainable projects thereby accelerating the transition to a carbon free economy and implement new regulations or delay pending changes across industries. On the fiscal policy front, relief measures such as direct transfers to residents or temporary paid sick leave could turn into permanent policies. With advances in digital currency technology, the Fed could provide direct access to individuals and small firms in times of crisis.

From a globalization perspective, the pandemic may trigger greater coordination across countries to tackle global threats, including future pandemics, climate change or nuclear war.

However, there is also the possibility that Covid-19 disrupts the workplace, resulting in greater automation and increased inequality. In addition, it could imply greater transfer of power to the government, less trust in public institutions, increased polarization and social unrest. Likewise, it could reinforce the anti-globalization trends, the shift toward domestic supply chains and more restrictions in both the flow of goods, services and people. The final outcome will inevitably include a mix of positives and negatives.

Appendix

Policy Actions

Policy	Organization	Action	Amount
Interest Rate	Federal Reserve	Cut interest rate from 1.50-1.75% to 1.00-1.25% and later to 0.00-0.25%	
		Forward Guidance, "The Committee expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its...goals"	
		Decreased the primary credit rate of the Discount Window from 1.75% to 0.25%	$60 to $120bn
Asset Purchases	Federal Reserve	Commited to purchase $500bn in Treasuries and $200bn in MBS. Later eliminated limits and announced "in the amounts needed"	$1 to $3tn
	Congress	*Proposed amendment to the Federal Reserve Act that would allow the Fed to purchase municipal bonds in "unusual and exigent circumstances"*	*$50 to $100bn*
Credit Facilities	Federal Reserve	Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance; $10 billion of credit protection from U.S. Treasury	$50 to $100bn
		Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds; $10 billion of credit protection from U.S. Treasury	$50 to $100bn
	U.S. Treasury	*Proposal to appropriate $50 billion to the ESF for secured lending to U.S. passenger and cargo air carriers*	*$250 to $500bn*
Emergency Liquidity	Federal Reserve	Large scale repo operations	$0.4 to $1.5tn
		Primary Dealer Credit Facility (PDCF), overnight and term funding up to 90 days against a broad range collateral	$60 to $120bn
Market Liquidity	Federal Reserve	Commerical Paper Funding Faciility (CPFF), a special purpose vehicle (SPV), to purchase three-month U.S. dollar-denominated commercial paper. Later amended to include high-quality, tax-exempt commercial paper as eligible securities and reduced pricing; $10 billion of credit protection from U.S. Treasury	$50 to $100bn
		Money Market Mutual Fund Liquidity Facility (MMLF) to make loans available to eligible financial institutions secured by high-quality assets purchased from money market mutual funds, including prime, single state and other tax-exempt municipal money market mutual funds. Later expanded to include municipal variable rate demand notes (VRDNs) and bank certificates of deposit; $10 billion of credit protection from U.S. Treasury	$50 to $100bn
		Term Asset-Backed Securities Loan Facility (TALF), enabling the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets; $10 billion of credit protection from U.S. Treasury	$50 to $100bn
		Expects to announce a Main Street Business Lending Program to support lending to eligible small-and-medium sized businesses, complementing efforts by the SBA.	*$200 to $400bn*
Swap Lines	Federal Reserve	Enhanced US Dollar swap lines with Bank of Canada, Bank of England, Bank of Japan, European Central Bank, Swiss National Bank; later increased the frequency	$400 to $900bn
		Temporary US Dollar swap lines with the Reserve Bank of Australia, Banco Central do Brasil, Danmarks Nationalbank, Bank of Korea, Banco de Mexico, Norges Bank, Reserve Bank of New Zealand, Monetary Authority of Singapore, Sveriges Riksbank	$150 to $450bn
Macroprudential	Federal Reserve	Reduced Reserve Requirements to 0%	
		Encouraged banks "to use their capital and liquidity buffers to lend and undertake other supportive actions in a safe and sound manner."	
		Encouraged banks "to utilize intraday credit extended by Reserve Banks, on both a collateralized and uncollateralized basis"	
		Revised the definition of eligible retained income for total loss-absorbing capacity (TLAC) to make any automatic limitations on capital distributions more gradual	
		Temporarily reduce its examination activities, with the greatest reduction in activities occurring at the smallest banks	
		Additional time will be granted for resolving non-critical existing supervisory findings	
		Regulators will not direct institutions to automatically categorize loan modifications as troubled debt restructurings (TDRs)	
		Six-month delay in the planned policy changes to the provision of intraday credit to U.S. branches and agencies of foreign banking organizations (FBOs)	
	CFTC	Granted temporary, targeted no-action relief regarding recording of oral communications, time-stamping and certain audit trail and reporting requirements	
	Fannie Mae	Mortgage assistance and relief options to those impacted by COVID-19	
	FDIC	Revised the definition of eligible retained income for banks and BHCs to incentivize the use of capital buffers in adverse conditions and to get rid of the cliff effect on dividend restrictions when they breach capital buffers	
	FHFA	Authorized Fannie Mae and Freddie Mac to enter into additional dollar roll transactions	
	Freddie Mac	Mortgage relief options for borrowers impacted by COVID-19	
	SEC	Provides public companies with a 45-day extension to file certain disclosure reports that would otherwise have been due between	
		Provide additional time to certain investment funds and advisers to hold in-person board meetings and certain filing requirements	
		Temporary flexibility for registered funds affected by recent market events to borrow funds from certain affiliates and to enter into certain other lending arrangements	
Fiscal	Congress	$7.8bn in new spending for a variety of goals including the development of vaccines and the acquisition of medical equipment	$7.8bn
		At least $100bn to expand access to free testing, food aid, limited expansion of unemployment and SNAP benefits and an emergency paid sick leave program	$100 to $200bn
		$2tn stimulus package to support the healthcare sector, individuals, and businesses affected severely by the coronavirus	*$2tn*
	U.S. Treasury	Extend the tax-filing deadline by three months without interest or penalties	
		Proposal to temporarily ease restrictions on its Exchange Stabilization Fund, to create guarantee programs for the money-market mutual fund industry	
	White House	*Proposal to waive interest on all federal student loans, allowing borrowers to temporarily cease payments without facing penalties.*	*$8 to $16bn*
Total			**$4.9 to $9.8tn**

Proposals in italics. Last Update 3/26/20

Source: BBVA Research

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