The Coronavirus's $4 Trillion Hit to US Corporations

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The coronavirus has created a historic decline in cash flows across the globe. Today, we will share our measure of the losses in the US and some thoughts on how the hole can and will be mitigated. At this point, we estimate US corporate revenue across public and private businesses will decline by roughly $4 trillion. That is a very dangerous decline, and, if not mitigated, it will lead to a long-lasting ripple. Since this hit to revenues is happening throughout the world, the total hole globally will be roughly three times that—about $12 trillion. Governments are responding, of course, but in most cases these responses will just mitigate some of the ripple. Governments' capacities to deal with this hit vary greatly and will be a major driver of markets going forward. Even in the US, which is among the most capable of dealing with this financially due to its reserve currency status, interest rates are rising and gold is falling, reflective of the forced selling of even safe-haven assets to raise cash. In the end, this will spur the Fed to ensure rates don't rise into a slowing economy, probably leading to wartime-like yield curve targeting. That has to happen fast, as the decline in revenue could cascade. In future *Observations*, we will expand to a global perspective and size all monetary and fiscal responses against this hole.

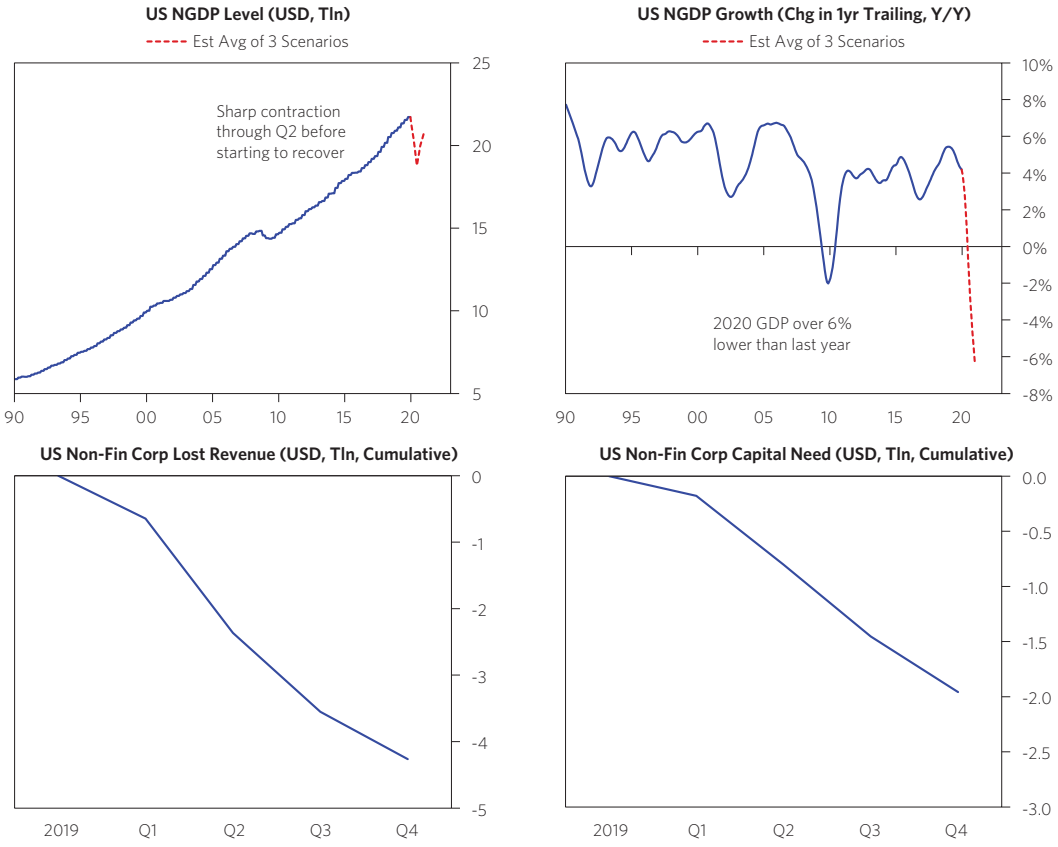
We came to our current estimate for US losses by triangulating three measures. The first interpolates the lost revenue based on the move in equity markets, using a simple discounted cash flow model (assuming half the move is risk premiums). The second uses bottom-up estimates (where corporates or analysts have provided them) and extends them forward using market pricing. The third assumes the hit to revenue by sector in the US is roughly consistent with the by-sector hits we can already see in China. All these methods point to a roughly $4 trillion loss, which, after having poked at these numbers, by and large squares with common sense. It's consistent with about two months of significant lockdown and a gradual recovery. As with any machine, as the inputs change, so do the outputs. We will continue to update our assumptions and what it means for the size of the hole as we get more information about how the virus plays out.

Without meaningful fiscal or monetary intervention, the $4 trillion figure will mean a decline of over 6% for US GDP this year. We see the most extreme decline occurring in the second quarter, where we expect the level of activity to be more than 10% below 2019 end-of-year levels. Annualized growth numbers, as they are typically reported in the US, may read as bad as -30% in the second quarter (though the timing of calculating and reporting the stats will make a lot of difference). The first thing that will occur is a wipeout of most of the corporate profits and cash on balance sheets. When we go to the sector and company level to convert the revenue shortfall to a cash flow gap, we estimate a shortfall of about $2 trillion, concentrated in energy and travel and leisure, and about equally divided between large and small companies. Many companies will try to fill this gap by drawing credit lines, increasing their debt positions. But if policy responses don't help fill the gap, we estimate that:

- Companies are likely to cut spending on capex by about $900 billion (4% of GDP), akin to what occurs in material downturns.
- Companies are likely to cut financial spending on stock buybacks and M&A by about $600 billion, or roughly 3% of GDP. This would remove a material support to markets.
- There will also be meaningful cuts in employment as companies cut back on hiring, which will flow through to the economy.

Some companies won't make it and will default. Market-implied losses are about $850 billion, around a third of which would be borne by banks. This isn't likely to be a debilitating problem for the financial system or even the banks, given a large capital cushion and plenty of liquidity, but it will put further strains on the financial sector to tighten standards and pull back.

The first charts below size the hit to growth, the hit to revenue, and the capital needs that remain even after the hit wipes out company profits and cash.



Based on triangulating across a range of perspectives, if this hit to spending flows through, we estimate year-on-year growth would come in at a decline of over 6% in 2020. That is worse than what we saw in the financial crisis. Of course, what happens from here will depend on the size of the policy maker response relative to the massive cash shortfall. A GDP decline of this magnitude implies an even bigger decline in business revenues. GDP is a value-added measure, while sales are a gross measure, so in total, sales are nearly twice the size of GDP (e.g., if one fewer car is produced and sold in the US, both the car manufacturer and the steel manufacturer lose revenue).

US Non-Fin Corporate Capital Needs (USD, Bln)

	GDP Drawdown (vs End of 2019)				2020 Growth Impact	2020 Lost Sales	Accum Capital Need
	Q1	Q2	Q3	Q4			
Average of 3 Growth Scenarios	**-4.0%**	**-13.1%**	**-8.4%**	**-4.5%**	**-6.5%**	**-4,262**	**-1,958**
Market-Implied	-2.9%	-12.6%	-8.3%	-4.3%	-7.0%	-4,035	-1,866
Bottom-Up	-3.0%	-13.1%	-8.7%	-4.5%	-5.7%	-4,176	-1,918
China Analogue	-6.2%	-13.5%	-8.1%	-4.8%	-6.9%	-4,575	-2,091

$4.2 trillion in lost revenue is a staggering amount. For many of the companies taking the hits, it would more than entirely wipe out the cash held on their balance sheets without substantial spending cuts, lenders extending companies new loans, or companies defaulting/restructuring their debts. And while there will be winners (e.g., pharma) and losers (e.g., travel and leisure, resources) within the corporate sector, the big deal is that the lost revenue will be broad-based and many businesses don't have the cash and profit margins to sustain such a large hit to the top line. This includes many small, unlisted businesses like restaurants, which typically operate at razor-thin margins and are already seeing massive hits to demand. The table below, shows our analysis of the revenue decline by sector of the economy for all companies. For listed companies, our numbers are based on analysis at the level of each individual company, comparing that company's likely 2020 revenues and expenses against its buffer to withstand shortfalls. Looking across these mismatches, the cash hole adds up to a massive $2 trillion that needs to somehow get filled.

US Business Revenue and Capital Need by Sector (USD, Bln)

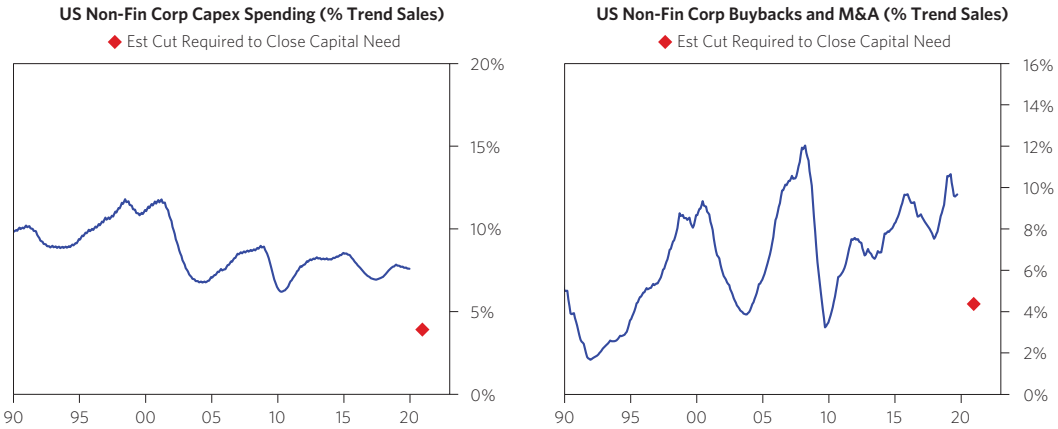
	Listed Companies			Non-Listed Companies		
	Revenue Share	2020 Rev Decline	Cumulative Capital Need	Revenue Share	2020 Rev Decline	Cumulative Capital Need
Total Non-Fin	**100%**	**-1,959**	**-818**	**100%**	**-2,303**	**-1,141**
Travel and Leisure	3%	-199	-67	18%	-920	-471
Consumer Durables	5%	-207	-37	11%	-352	-114
Traditional Investment	15%	-531	-138	4%	-137	-48
Other Cyclical Consumption	25%	-136	-107	27%	-267	-153
Tech Investment	14%	-270	-106	5%	-82	-46
Consumer Staples	14%	-100	-129	13%	-117	-169
Healthcare	7%	-20	-21	18%	-340	-74
Pharma	4%	26	-29	3%	0	-35
Resources	13%	-521	-184	2%	-89	-31

Travel and leisure sector (which includes restaurants) mostly consists of smaller, unlisted businesses

Just over half of the capital need coming from unlisted businesses

Businesses Can Fill Their Cash Needs with Significant Spending Cuts, but This Will Just Shift the Losses Elsewhere

It's clear that businesses will have to take drastic steps to fill their cash flow needs. Without policy intervention, a significant portion of these needs will have to be met by spending cuts or defaults on existing debts (in other words, passing the losses to someone else). In the coming days, we'll separately discuss how we are sizing up the policy response intended to help fill the gap. The charts below give one perspective on what spending cuts might look like. Given financial spending and capital expenditures are usually the first to go, we estimate the cuts needed in both, looking company by company at the gap that needs to be filled. The necessary pullback implies large downstream impacts for growth and equity prices (where corporate spending has been a major support in the past decade).



Firms are also likely to materially reduce spending in other forms, including on labor. Workers paid by the hour in service industries, for instance, are likely to see rapid and automatic hits to income. If corporates need to take more drastic steps like cutting employment, it increases the chances of a self-reinforcing decline in spending.

Credit Markets Are Already Pricing In a Material Loss Cycle, Which Is Likely to Make Banks Less Willing to Extend New Credit

Loss cycles in response to a downturn are part of the economic cycle. To size the implied losses across the major debt markets, we use both the levels and changes in credit spreads and the amount of debt outstanding by player. The change in spreads implies a change in the probability of defaults, which, when applied to debts, gives a rough cut of how expectations for losses have evolved. The table below pencils out these numbers across the US economy, along with mapping the losses to the creditors who are on the hook for them. The losses now priced into US credit markets (roughly $850 billion) are greater than we saw in the 2015 credit cycle but still far short of what we saw going into the financial crisis. The majority of the implied losses are from US corporate bonds and leveraged loans, which have been the largest source of credit this cycle, and these are mostly held by less-levered, real-money players.

Market Pricing of US Losses (USD, Bln)

	Debt Level	Implied Loss Rate	Implied Losses
All US Private Non-Fin Debt	**30,869**	**3.0%**	**926**
All Business Debt	11,154	6.4%	719
Bank Loans	2,522	7.4%	187
Bonds	6,587	5.8%	379
IG Bonds	4,974	3.9%	194
HY Bonds	1,613	11.5%	185
Non-Bank Loans	2,045	7.5%	152
Lev Loans	1,284	8.5%	109
Finance Companies	394	6.5%	26
Other	367	4.8%	17
Commercial Real Estate Debt	4,513	2.3%	104
All Household Debt	15,202	0.7%	103
Household Mortgage Debt	11,073	0.3%	33
Consumer Credit	4,130	1.7%	70

More corporate lending and losses this cycle through capital markets

Who Bears the Priced-In Losses? (USD, Bln)

Total Implied Losses (Priced-In)	**926**	**100%**
Banks	309	33%
Foreign	165	18%
Insurance	139	15%
Households, Directly and via Mut Funds/ETFs	103	11%
Government Entities	82	9%
Pensions	64	7%
Non-Bank Financials	63	7%
REITs	2	7%

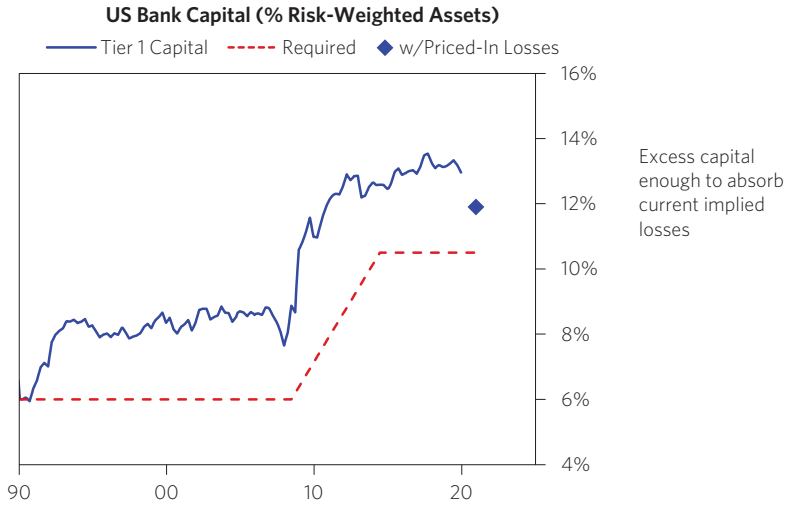
Roughly one third held by banks; low relative to past cycles

More lending to corporates by less-levered players

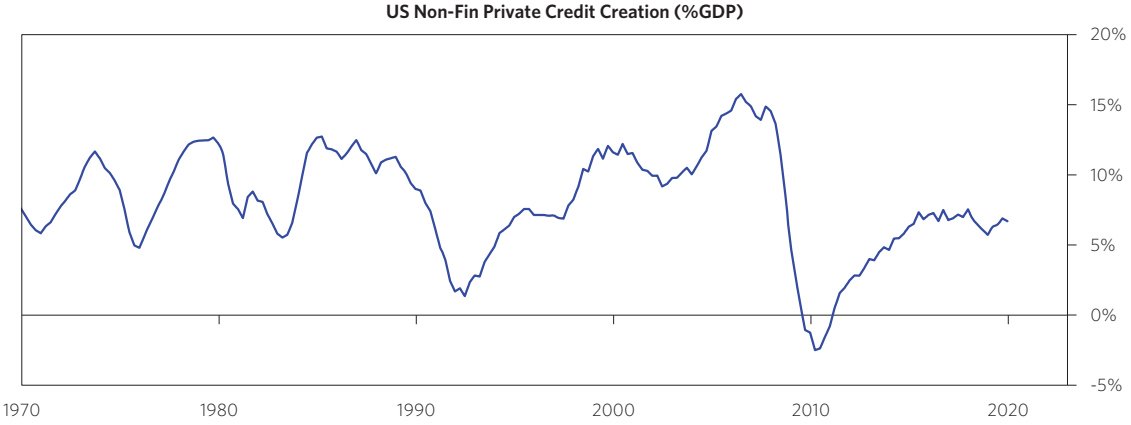
These losses are significant, but they are unlikely to put the US financial system at risk. Today, financial leverage is relatively low, balance sheets are not overextended, and banks have fewer asset-liability mismatches and are generally well-capitalized. Zeroing in on the banks, which hold about one third of the implies losses, they can absorb the losses currently priced in with their excess capital, but if the situation worsens and the policy response isn't adequate, they may need to cut back more meaningfully.

Bank Losses vs Earnings and Capital (USD, Bln)

Implied Bank Losses	-271
Earnings Hit from Rate Moves	-40
Losses + Earnings Hit	-311
US Bank Earnings (Prior Year)	211
Implied Hit to Bank Capital	-100
Current Level of Bank Capital	1,200
Current Excess Capital	280



Though the financial system is less likely to crack as it did in 2008, these losses will weigh on lenders willingness to extend new credit. This is because the change in risk/default expectations has left lenders holding more risk of default than they intended before the virus. Their response is logical—pulling back. This response adds to the self-reinforcing nature of a downturn because even healthy lenders with plenty of capital don't want to make loans that they think will default (e.g., if the borrower is facing a sudden/uncertain income shock). Even though credit growth has been much more muted during this expansion, it could decline materially from here, which would be a significant downward pressure on growth.



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