

A Bridge Past COVID-19

The path for the economy

April 1, 2020

KPMG Economics

Constance L. Hunter, CBE Chief Economist @constancehunter constancehunter@kpmg.com

Henry Rubin Economic Analyst henryrubin@kpmg.com Kenneth Kim, CBE Senior Economist kennethkim2@kpmg.com



The Economic Impact of COVID-19

- As the world economy balances mitigating the health risks of COVID19 with the economic risks, unprecedented measures are being taken. This includes quarantines and the closure of non-essential businesses as well as the fiscal and monetary measures aimed at cushioning the economic blow.
- We anticipate unprecedented U.S. job losses of nearly 20 million in Q2 (this compares to 8.6 million jobs lost over 23 months during the financial crisis.) Many firms have simply not been able to hold out until fiscal assistance arrives.
- The ripple effects of job losses of this magnitude will take time to recover from, even with the significant size of the CARES Act. Ripples are being felt in capital markets where fixed income has so far borne the brunt of the fallout. While unprecedented and swift action from the Federal Reserve has helped, we believe more fallout is yet to come in both fixed income and equity markets as the reality of job losses and the health tragedy play out.
- A complicating factor is the level of debt in certain sectors of the economy, many of which are highly impacted, such as the consumer discretionary sector. Additionally, the steep fall in oil prices, exacerbated by a supply glut from Saudi Arabia and Russia, will likely hobble portions of the highly levered energy sector.
- The unwind of leverage always creates collateral damage. As investors sell good assets to fund non-performing assets, the prices of all assets decline. The role of the Federal Reserve as lender of last resort will be a critical component of mitigating the damage from this unwind, but it will not prevent the unwind from happening. The sharp decline in growth will result in bankruptcies and all of the spillovers from debt unwinding episodes of the past can be expected this time around as well.
- We expect the best case scenario will be a "U" shaped recovery and we assign a 50% probability to this scenario at this time.
 However, the magnitude of the collateral damage from the debt unwind and interconnectivity of the capital markets and the global economy will ultimately determine if the recession turns into an "L" shape.



A bridge is required to get past COVID-19's economic impact



- This schematic shows the circular flow of different factors of the economy which all interact simultaneously.
- Each country in the world is experiencing the health and economic shocks from COVID-19.
- In order to prevent overwhelming the health system from an explosion of cases, many countries are temporarily taking drastic measures to flatten the case curve and reduce the long-term economic impact of the virus.
- Social distancing restrictions and behavioral shifts have led to sharp declines in business activity and consumer spending worldwide.

KPMG

CARES Act prevents depression not recession

Real GDP

% Change, Annual Rate



 Modeling COVID-19's impact on the economy is multifaceted. Critical factors include:

- The Global Economy
- Domestic Job Losses
- Domestic Business Closure
- Oil/Commodity Prices
- Capital Markets
- Fiscal Measures
- Monetary Measures
- Multipliers for the CARES Act
- We forecast GDP will decline by 4.9-5.5% in 2020.
- As there is no single historic example, we are drawing from multiple sources of research including past economic crises, natural disasters, and pandemics.
- We assume in this model that the U.S. economy will begin to re-open on June 15th and the magnitude is not fully priced into the equity market yet.

© 2020 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG Internation. Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

Job losses to rise to unprecedented levels, decimating demand

U.S. Employment and Consumption 3 Month Average Change in Jobs (RHS) Y/Y% Thous —Consumption (LHS) Forecast 10% 5000 Recession 0% 0 -10% -5000-20% -10000Note: Forecasts are inherently time sensitive and projections are dated as of March 31, 2020. Source: Source: KPMG Economics, BEA (Q4 2019), BLS (Feb 2020), Haver Analytics

- Consumption can be thought of in two distinct buckets: discretionary spending and non-discretionary spending.
- Non-discretionary spending is consumption for necessities such as housing, utilities, food, and health care. In a severe downturn such as the one we expect, nondiscretionary spending will fall along with discretionary spending.
- Discretionary spending is planned purchases as well as all optional consumption which includes everything from car purchases and vacations, to eating out and buying clothes.
- This spending will fall by more than 75% in April with a slow recovery into Q4.

The CARES Act prevents economic depression

CARES Relief Act					
	\$billion				
Direct Support for Hospitals/Health Care Providers	\$130 bn				
Direct Support for State and Local Governments	\$130 bn				
One-Time Payment to Individuals	\$250 bn				
Enhance Unemployment Benefits (April-July)	\$260 bn				
Direct Lending to Distressed Industries	\$75 bn				
Small Business Loans & Grants	\$380 bn				
Other Spending: Education, Food Assistance, Tax Deferrals	\$425 bn				
Sub Total	\$1,650 bn				
Funding for Fed 13(3) - Leveraged 10x by the Fed	\$450 bn				
Grand Total	\$2,100 bn				

Source: KPMG Economics, MacroPolicyPerspectives, CARES Act For research on multipliers see the following:

Leeper et al CBO

- Support for healthcare and states
- Support for households
- Support for businesses
- Support for markets
- Other
- Economic multipliers for each category are impacted by the use of monetary and fiscal policy together. They can range from 0.12-3.5 depending on multiple factors including the modeling technique.
- Research by Correia, et al. of the 1918 flu shows that geographies that used aggressive social distancing early showed faster growth after the pandemic passed.



The CARES Act can be broken into five parts.

Fiscal stimulus targets the bottom 80% of incomes

Distribution of Household Benefits Under the \$2 trillion CARES Act

Income group	receiving	Share		Distribution of income			
		Share of benefit	Average Annual Income	Percent change in after tax income	Share of National Income		
Bottom quintile	\$1,385	100.0%	24.1%	\$21,000	46.2%	7.7%	
Second quintile	\$1,665	100.0%	22.2%	\$45,000	7.3%	11.1%	
Middle quintile	\$1,765	100.0%	22.7%	\$72,000	4.1%	14.7%	
Fourth quintile	\$1,945	92.3%	21.6%	\$110,000	2.5%	20.3%	
80-90%	\$1,970	80.8%	8.9%	\$160,000	1.6%		
90-95%	\$295	35.2%	0.6%	\$218,000	0.2%	35.1%	
95-99%	\$0	0.0%	0.0%	\$360,000	0.0%	-	
99-99.9%	\$0	0.0%	0.0%	- \$1,789,000 -	0.0%	- 12.5%	
Top 0.1%	\$0	0.0%	0.0%	- φι,789,000 -	0.0%	12.0/0	

Note: "Income" is defined as AGI plus: above-the-line deductions, nontaxable interest income, nontaxable Social Security benefits, nontaxable pensions and annuities, employer-side payroll taxes, and corporate liability. Note that this definition excludes transfer income and thus understates low-income tax units' income.

Source: KPMG Economics, Penn-Wharton Budget Model

- Because of the severe job losses expected for the bottom two quintiles, the CARES Act targets lower income quintiles.
- While pain will be felt economywide, safe guarding those with little discretionary income is key to preventing economic depression.
- This one-time payment will help families meet expenses, though there are concerns it will reach some too late to prevent missed payments.
- The Fed is encouraging banks to utilize their liquidity and capital buffers to be flexible with customers experiencing financial challenges related to COVID-19.

KPMG

Fifth quintile

Bridge to recovery may come too late for some sectors

	Leisure and	d Hospitality	Retail Trade Ex. Food, Beverage, and Drug Stores		
Establishment Size (Employees)	Total Employees (Thous)	Share of Employment (%)	Total Employees (Thous)	Share of Employment (%)	
<5	547	3%	718	6%	
5-9	970	6%	1,422	12%	
10-19	2,448	15%	1,870	16%	
20-49	5,349	34%	2,063	18%	
50-99	3,063	19%	1,464	12%	
100-249	1,745	11%	2,396	20%	
250-499	638	4%	1,431	12%	
500-999	458	3%	180	2%	
1,000+	629	4%	193	2%	
<50	9,314	59%	6,074	52%	
50-999	5,904	37%	5,471	47%	
1000+	629	4%	193	2%	
Total	15,847	-	11,738	-	

Source: KPMG Economics, Bureau of Labor Statistics (Q1-2019), Quarterly Census of Employment and Wages (QCEW), Haver Analytics

- Retail Trade and Leisure and Hospitality are the two sectors likely to see the most severe impact.
- While other industries are hard hit, these two sectors are dominated by small and medium sized firms with razor thin margins.
- Evidence is mounting that small firms have already had to shutter their doors, lay off workers, and hope they can re-open after the economy returns to normal.
- Separating workers from firms makes restarting longer and more costly, but for many small firms the assistance to bridge them to the other side did not come quickly enough.



46% of U.S. workers are at a high risk of being impacted



 Our model estimates that close to 20 million people will lose their jobs in Q2 due to businesses closing their doors and/or laying off workers.

- For firms that must let workers go, the best case is for workers to be temporarily laid off because those workers receive health care benefits. It will also be easier to call them back to work once social distancing ends.
- The speed and magnitude of the decline is truly unprecedented. These estimates compare to 8.6 million jobs lost over 23 months during the GFC.

Source: Source: KPMG Economics, BLS, Occupational Employment Statistics (2018), St. Louis Fed, Gascon (Mar 2020)



Bank capital buffers are a point of strength for the financial system

Liquidity of Largest U.S. Banks



- Capital buffers built up after the global financial crisis are necessary as firms draw down on credit lines provided by banks.
- Bloomberg estimates firms will draw down at least \$700 billion in credit lines.
- Bloomberg estimates this will entail selling "liquid" assets; this will no doubt cause continued strain in the bond market, both treasuries and corporate fixed income.
- Assets assumed to be liquid are experiencing widening bid/offer spreads as liquidity dries up in some markets.
- The Fed's liquidity support is essential to keep markets functioning.

KPMG

Federal Reserve balance sheet to expand into 2021



- The Fed has announced numerous programs aimed at getting liquidity flowing in the system.
- It is estimated that the Fed's balance sheet could easily increase to over \$9 trillion by the 3rd quarter of 2020 as the Fed uses Special Purpose Vehicles (SPVs) to push out money to firms.
- The Fed is also purchasing Treasuries, Mortgage Backed Securities (MBS), and highgrade corporate bonds, including high-grade bond ETFs.
- Early data points show that the corporate bond market calendar has reopened with sizable issuance for the week of March 30th.

© 2020 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG Internation Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

Low oil prices and liquidity constraints hurt high yield most

Change High Yield Credit Spreads vs. Corporate Leverage



 High yield (HY) corporate bond yields have surged YTD, rising 538 basis points (bps) since January 1st, 2020.

- Rising HY spreads versus U.S.
 Treasury yields reflects market expectations of higher default risks as a result of the COVID-19 outbreak.
- Consumer discretionary, energy, and industrial companies carry the highest default risk relative to their peers, representing approximately \$500 billion in outstanding HY debt.
- Plunging oil prices put the already highly leveraged energy sector at a particularly high risk of default, as evidenced by the 1454 bp rise in HY energy spreads.

Note: Bubble size represents total outstanding high yield debt by par value. Source: KPMG Economics, Bloomberg LLP (March 27, 2020)



Sustained low oil prices to be an issue for the highly leveraged



 The firms with the highest leverage will experience the most long-term fallout from the combination of low prices and low demand.

- Under normal circumstances low prices would cause some demand increase which would help raise prices, but with social distancing being practiced the world over, demand will remain suppressed at least until Q3.
- A price war to maintain market share by Russia and Saudi Arabia is compounding the negative economic impact for oil producers.

Note: EBITDA = Earnings before interest, taxes, depreciation, and amortization; EV (Mar 30, 2020), Net Debt (Q4-2019) Source: KPMG Economics, Bloomberg LLP, Haver Analytics

Post COVID-19 recovery will occur over 4-6 quarters



Source: KPMG Economics, Baldwin (2020)

KPMG

- Economic repair will take time and will not happen all at once even if it begins in certain sectors.
- For example, the current stimulus is not set up to directly help large high-yield retailers that have temporarily laid off workers.
- Because many firms will fall through the cracks initially, we anticipate a longer recovery than some forecasters.
- The large sum of federal reserve assets deployed are showing signs of easing liquidity constraints in most markets.
- Additional stimulus is likely in the offing to bridge the economy past COVID-19.



Thank you

https://www.kpmg.us/insights/2020/covid-19-resiliencereadiness.html



Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

У in f 🔿 🗖

kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2020 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.