

SOM Macro Strategies

State of The Markets: Macro Views—Potential Economic Impact From The
Coronavirus

February 26, 2020

Alan Brazil

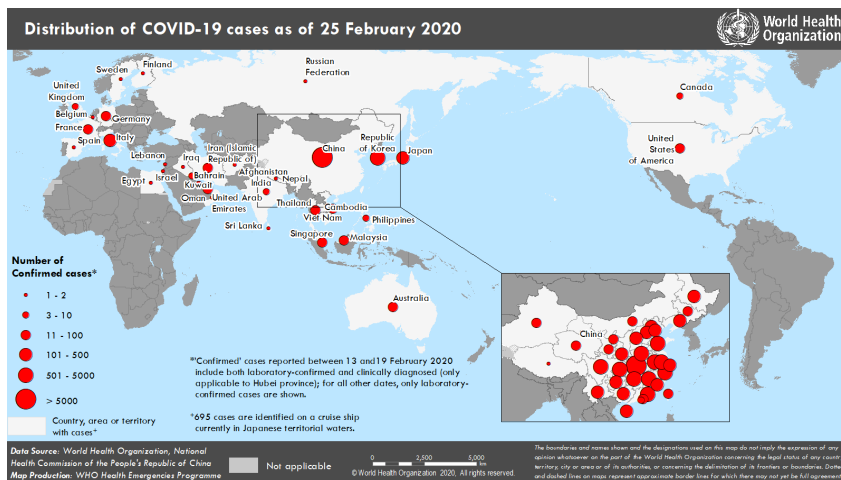
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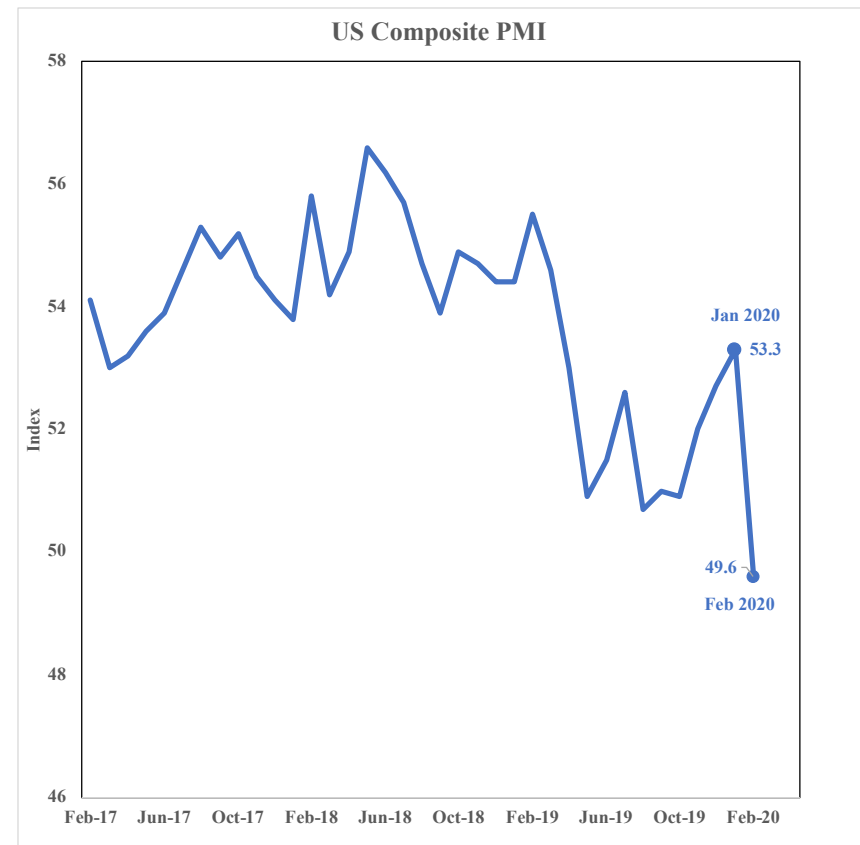
Step 2: Fundamental Economic Framework

What Is Driving Yields And The Curve To Historical Lows?... The Virus

The Coronavirus (COVID-19)¹



The US Economy Was Rebounding, Then There Came The Virus²



1. WHO Situation Report, February 21, 2020
2. Bloomberg

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Risk Of A Pandemic Is Rising As Efforts To Contain The Spread Is Failing

Impact of Strict Quarantine On Wuhan Is Not Effective¹

The Greens Are Growing: Non-China Sourced Infections In ROW²

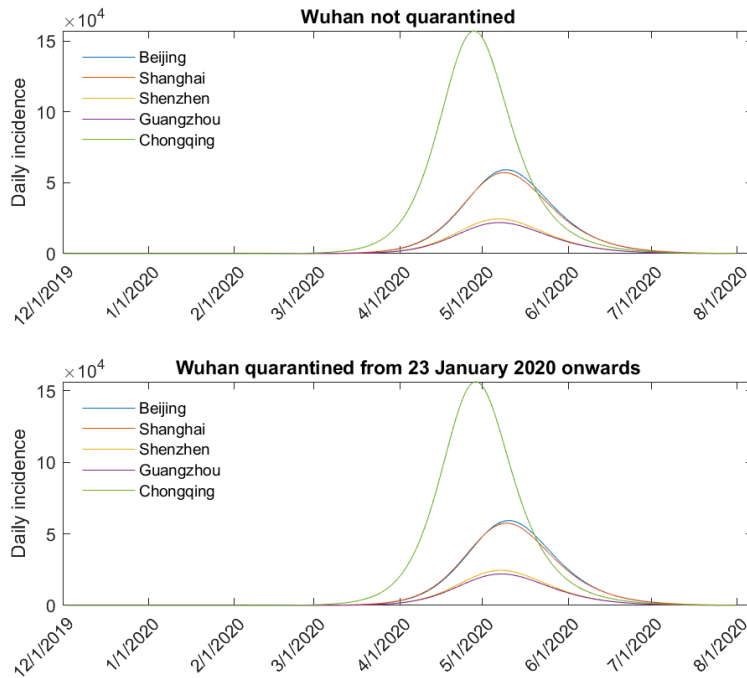
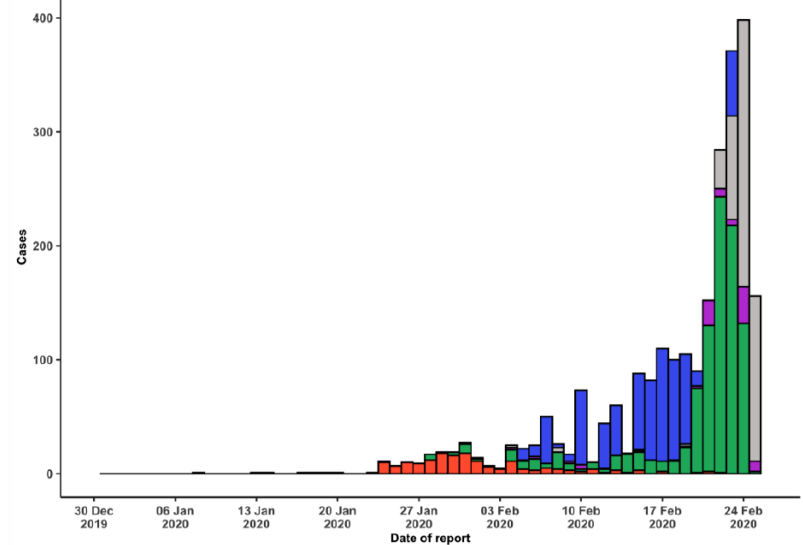


Figure 3. Epidemic curve of COVID-19 cases (n=2459) identified outside of China, by date of report and likely exposure location, 25 February 2020



1. Leung & Wu, "Real-time nowcast and nowcast on the extent of the Wuhan Cov Outbreak", LKS Faculty of Medicine, The University of Hong Kong, Media Conference, January 27, 2020
2. WHO Situation Report, February 21, 2020

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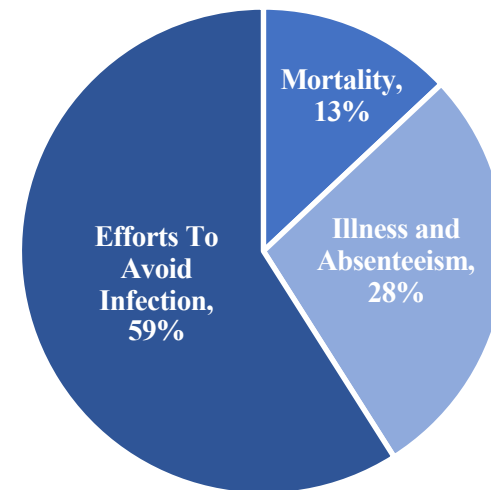
Step 2: Fundamental Economic Framework

Historical Impact On GDP From Pandemics: 60% of The Cost Is Tying To Avoid The Virus

Actual GDP Before And After Historical Influenza Pandemics¹

	Spanish Influenza 1918-9		Asian Infuenza 1957-8	
	Avg 1914-18	1919	Avg 1953-57	1958
Australia	0.9%	-1.8%	4.4%	4.8%
Canada	3.5%	-11.1%	1.7%	-3.5%
UK	3.0%	-13.9%	-0.2%	-3.3%
Japan	5.6%	7.9%	5.8%	-2.6%
USA	6.1%	-5.2%	-0.5%	-3.1%

Economic Impact By Source In Spanish Flu Pandemic²



1. Angus Maddison, Monitoring the World Economy, 1820-1992. Washington, DC: Organization for Economic Cooperation and Development, 1995.
2. Burns, Mensbrugge, Timmer, "Evaluating the Economic Consequences of Avian Influenza", World Bank's Global Development Finance, June 2006

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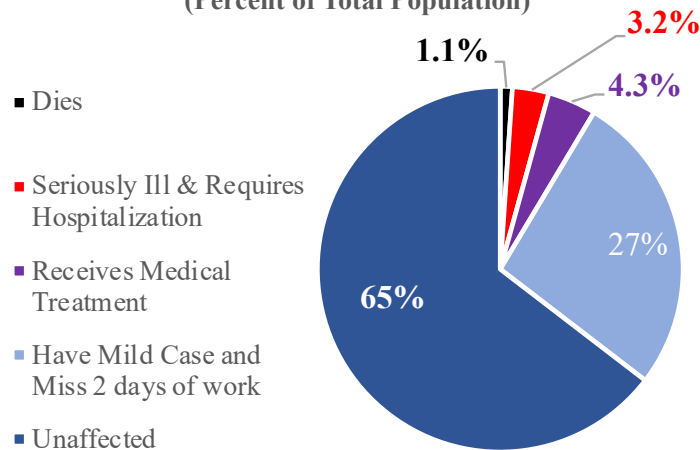
Step 2: Fundamental Economic Framework

The Impact On Economic Growth From The Virus Could Be Substantial: Think GFC

World Bank Projects Of The Economic Impact On World of -3.3%¹

An Econometric Analysis Of The Economic Impact²

Potential Impact of Spanish Flu
(Percent of Total Population)



Potential Impact On Real GDP Of An Avian Type Influenza Pandemic

	Mild	Moderate	Severe	Ultra Severe
	Hong Kong Flu 1968-9	Asian Flu 1958	Spanish Flu 1918-9	Spanish Flu But With Greater Impact on Elderly
World	-0.7%	-2.0%	-4.8%	-8.6%
USA	-0.6%	-1.4%	-3.0%	-5.5%
Japan	-1.0%	-3.3%	-8.3%	-15.8%
Uk	-0.7%	-2.4%	-5.8%	-11.1%
Europe	-0.7%	-1.9%	-4.3%	-8.0%
China	-0.7%	-2.2%	-4.8%	-9.1%
India	-0.6%	-2.1%	-4.9%	-9.3%
Korea	-0.9%	-3.2%	-7.8%	-15.1%
LDC	-0.6%	-2.4%	-6.3%	-12.2%
Deaths As % of				
Total Population	0.02%	0.20%	1.70%	2.33%
Deaths (MM)	1.6	16.0	136.0	186.4

1. Burns, Mensbrugge, Timmer, "Evaluating the Economic Consequences of Avian Influenza", World Bank's Global Development Finance, June 2006

2. McKibbin & Sidorenko, "Global Macroeconomic Consequences of Pandemic Influenza", Centre for Applied Macroeconomic Analysis, Australian National University, February 2006

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CBO Study Shows That The Impact Of A Pandemic On The US Would Be Equivalent To A Recession¹

Economic Impact On US GDP From Pandemics From CBO Study

	Mild	Severe
	1957 & 1968 Flus	1918 Spanish Flu
Infected Rate In Total Population (Attack Rate)	25%	30%
Case Fatality Rate	0.1%	2.5%
Death Rate Of Total Population	0.03%	0.67%
Number of Infected (MM)	70	90
Deaths	100,000	2,000,000
1st Year Impact on GDP	-1.0%	-4.1%

CBO Assumptions About Impact On Supply Side Of US Economy

Economic Sector	Gross Attack Rate (Percent)		Weeks Out of Work		Case Fatality Rate (Percent)	
	Severe	Mild	Severe	Mild	Severe	Mild
Nonfarm Business	30	25	3	0.75	2.5	1.14
Farm	10	5	1	0.25	2.5	1.14
Household	30	25	3	0.75	2.5	1.14
Nonprofit Institutions	30	25	3	0.75	2.5	1.14
Government	30	25	3	0.75	2.5	1.14

Source: Congressional Budget Office.

Note: The gross attack rate is the percentage of the population that is infected with a disease. The case fatality rate is the percentage of infected persons who eventually die from the disease or complications.

CBO Assumptions About Impact On Demand Side Of US Economy

	Assumed Declines in Demand, by Industry	
	Severe	Mild
Manufacturing	-10%	-3%
Transports	-67%	-17%
Finance	0%	0%
Education	0%	0%
Health	15%	4%
Entertainment/Accommodations/Food	-80%	-20%
Government	0%	0%

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