Welcome to the Recession Dennis.Hoffman@asu.edu

- Comparisons with Great Depression
- 1929-1933 3 years and 7 months -26.7%
- 1937-1938 1 year and 1 month -18.2%
- 1945 8 months -12.7%
- Q2 GDP 2020 forecasts???
- Somewhere between -20% and -40%
- Duration, 3-9 months starting March 2020



V shaped vs. U shaped

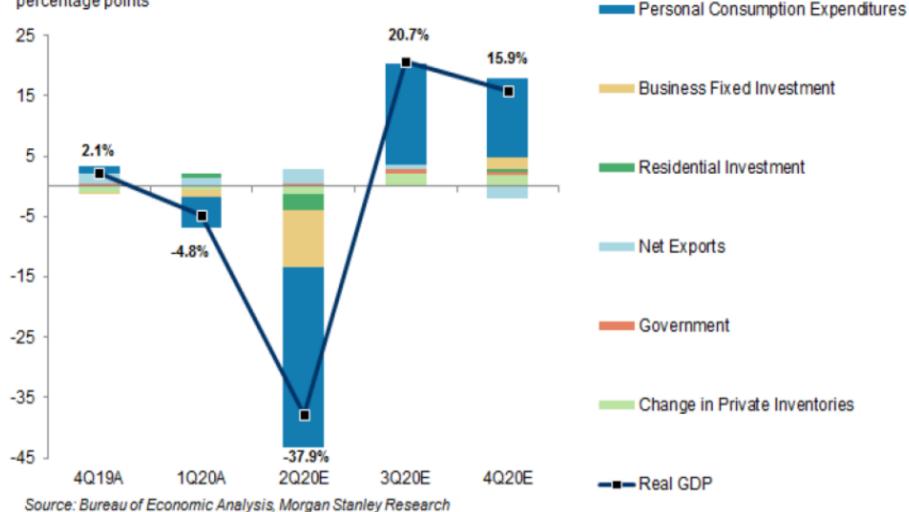
- Economists are divided as to what they believe the shape of the recession will look like
- In a V shaped scenario Q2 is very deep but it is immediately followed by a strong rebound
- In a U shaped scenario the downturn lasts several quarters but once the economy regains its footing growth accelerates quite rapidly



V shaped Example

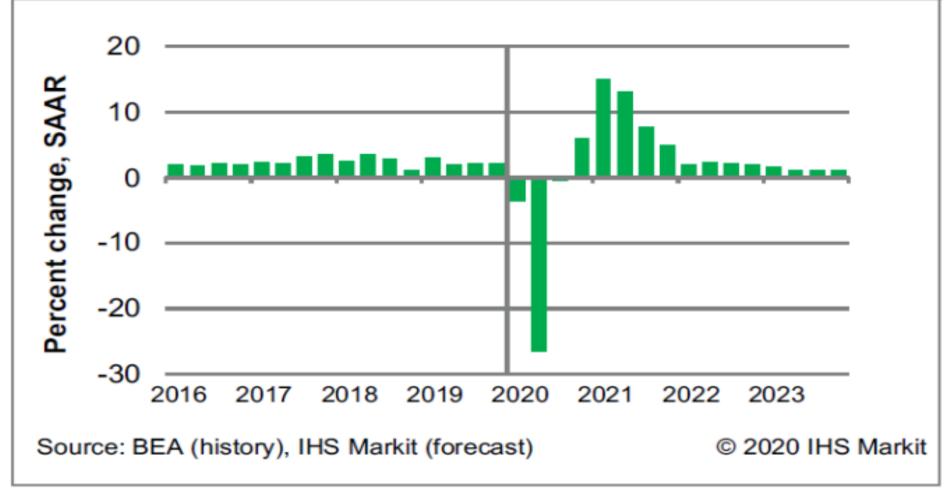


Contributions to % Change in Real GDP percentage points



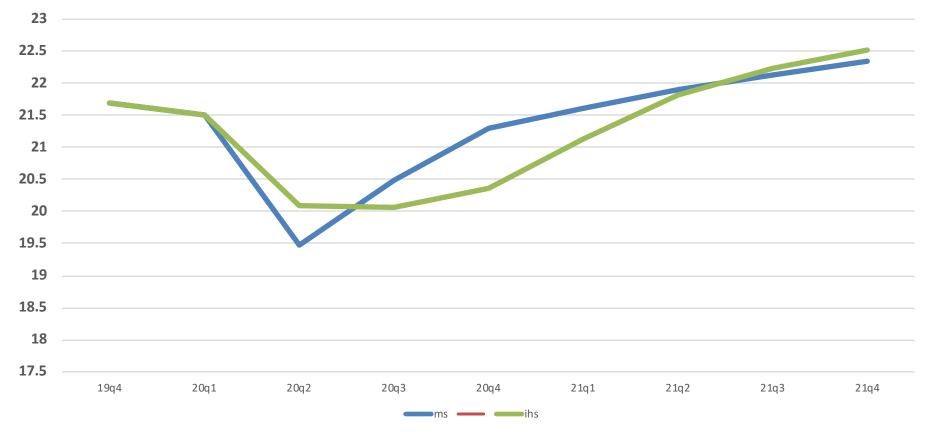
U shaped Example

Real GDP growth



Illustrations of V and U shaped trajectories for GDP

Two Economic Scenarios





Economic Club of Phoenix

Each get the US to about a 4% increase from Q1 2020 to Q4 2021

- I think both are simply illogical
 - L means a long long dark episode lasting years.
 - L is hard to envision without extended versions of mutated viruses with no remedy/vaccine for years
 - W means Q4 of 2020 looks like Q2.
 - W means we have failed to learn much of anything about how to respond to COVID-29, seems unlikely..



What do the current data suggest?

- Preliminary data has Q1 GDP down 4.8% slightly worse than many had predicted
- March labor report showed a loss of 700k jobs
- We know April will be worse and May certainly looks precarious at this point.



March Job Losses by State

	Job Growth March 2020		
State	Number	% Change	Initial Business
			Closure Order
Arizona	-7,200	-0.24	20-Mar-20
California	-99,500	-0.57	19-Mar-20
Colorado	-3,900	-0.14	17-Mar-20
Idaho	-1,000	-0.13	25-Mar-20
Montana	100	0.02	20-Mar-20
Nevada	-4,900	-0.34	21-Mar-20
New Mexico	1,700	0.2	16-Mar-20
Oregon	-4,800	-0.25	24-Mar-20
Texas	-50,900	-0.39	21-Mar-20
Utah	-1,000	-0.06	Varies by County
Washington	-11,100	-0.32	16-Mar-20
Wyoming	-100	-0.03	19-Mar-20
United States	-701,000	-0.46	

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So what might April Look like

- ASU survey analysis for the May 8 jobs report
- Conducted a survey during the labor market sampling week
- We know there are millions of people who have filed unemployment insurance claims so how may millions of jobs were lost from March to April
- ASU profs are forecasting big losses



April Job Losses by State, proj.

Job Growth April 2020 (Estimated)		
Arizona		-349,215
California		-4,825,963
Colorado		-189,158
Idaho		-48,502
Montana		na
Nevada		-237,660
New Mexi	со	82,454
Oregon		-232,810
Texas		-2,468,759
Utah		-48,502
Washington		-538,374
Wvoming		-4.850
United States		-34,000,000

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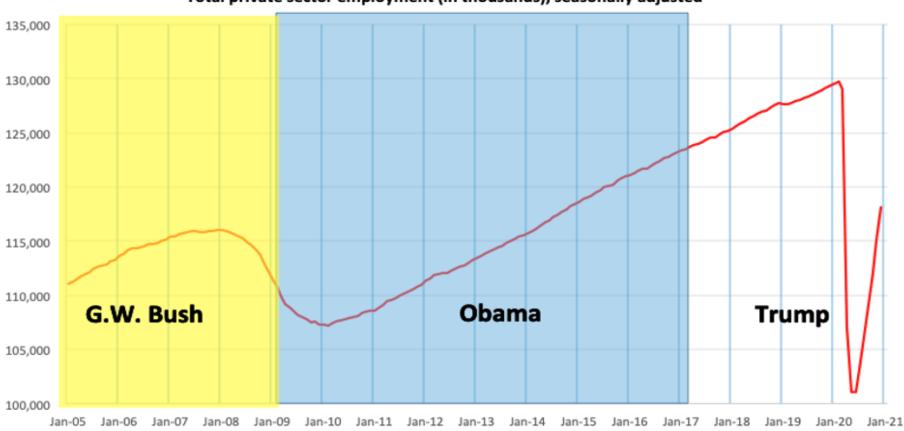
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- Job loss predictions range between 22 and 27 mill
- So Az losses could be anywhere from several hundred thousand to over half a million
- Regardless, losses today will be replaced by gains tomorrow under most likely scenarios



How will this look historically This reflects a partial U shaped recovery so by January 2022 (not shown), we are back on trend







Economic Club of Phoenix

From Forbes Magazine

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So was the Economy the "Best Ever" prior to COVID-19 ??

- Labor Market??
- GDP Growth ??
- Unemployment Level ??



Evidence on the "Best Ever" Economy So So So So

- Monthly job creation from 2017-2019 was slightly slower than job creation from 2013-2016
- GDP growth from 2017-2019 was about the same as GDP growth from 2013-2016
- Both GDP and job creation was much faster during several episodes in the 60s, 70s, 80s and 90s...
- Stock prices reached all time highs but the % growth from 2017 to 2019 was at about the same average annual clip as it was from 2013-2016.
- Unemployment rates continued to decline from 2013-2019 as they often due in late cycle expansions



The Economy was NOT growing Unsustainably prior to COVID-19

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- Setting political rhetoric aside, if the economy was not frothy prior to the onset of the virus that is probably a good thing
- When economies with excesses fall into recession it lasts until the excesses are exhausted.
- The 2020 recession occurred because the government shut the economy down. The absence of excesses coming into the downturn may lead to a shorter time to recovery.



But when will we recover and what will the newly of some second economy look like??

- If V, next spring in Arizona may look much like a "normal" spring
- If U, it will take until fall 2021 for us to achieve "normality."
- And timing matters for the State Budgets and then for the US in delivering support
- And of course there is considerable variance in the health of State Budgets across the Country pre COVID



Particular State Budget Challenges

- FY 20 will have no final payment periods for the IIT while 21 will have two and 22 will have one
- What will happen with capital gains income? It is currently 20b accounting for 800m per year in revenue
- If V sales tax recovers a lot in 2021.
- If U sales tax recovery occurs in 2022
- And how much will all of this cost in AHCCCS, DES, and DHS budget increases?



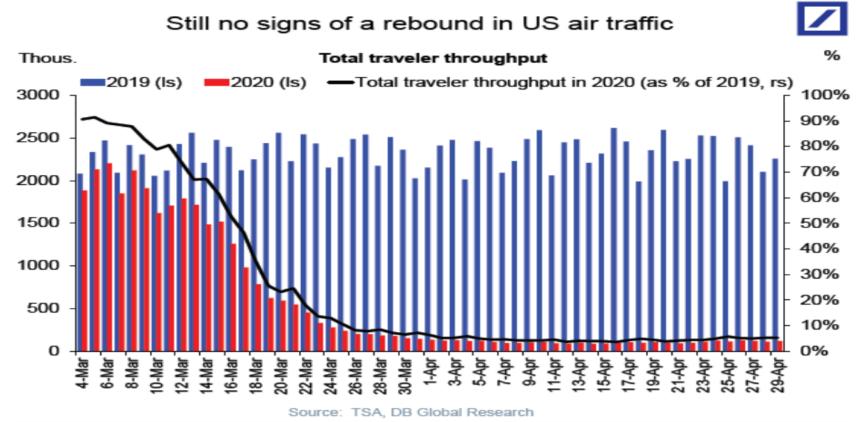
And of course questions will linger

- Will preferences for travel be permanently altered?.. Especially cruise ship, urban center, or Asian travel
- What is the future for live spectator attended sporting events or plans for any large gatherings?
- How will commercial (office/retail) fare vs. residential?
- Will preferences for senior living facilities be permanently altered?



How Long before this recovers??

178



Deutsche Bank Research

Torsten 8lok, torsten.slok@db.com +1 212 250-2155 April 2020

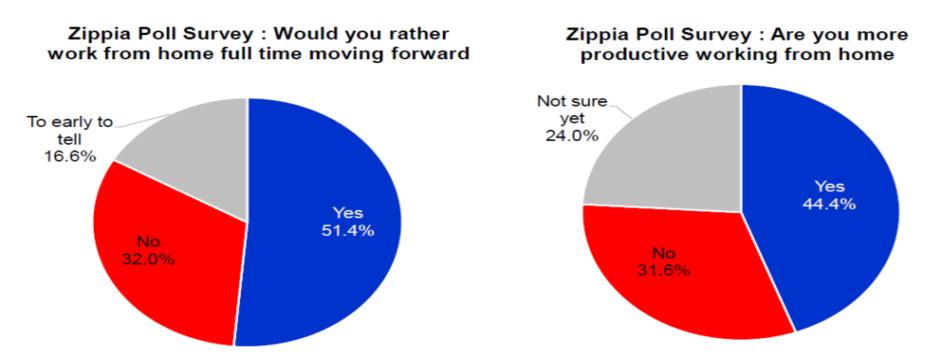


Is working remotely part of the new normal? So So So So So So

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More people would prefer to work from home permanently





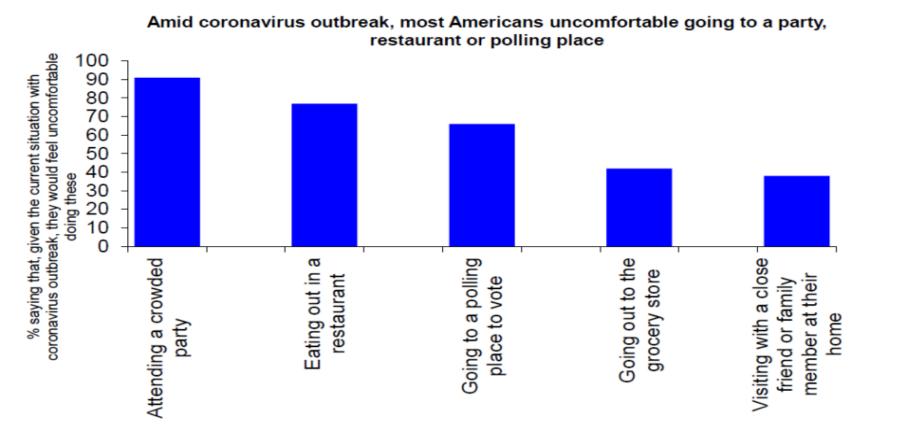
What about living/working trends

- Will Urban centers lose some of their luster?
- Will new domestic migration trends emerge?
- Will suburban "foody islands" pop up in Queen Creek, Casa Grande or Surprise to accommodate new suburban residents?
- Will this "lock down" experience coupled with advances in remote connectivity fuel the demand for remote "recreational" property?
- We will have to see what unfolds

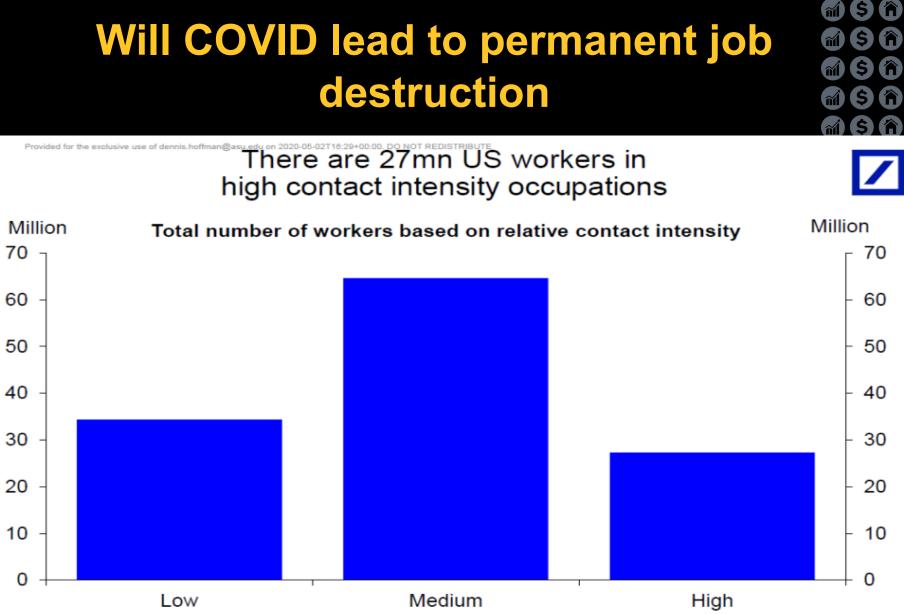




Consumer behaviors are changing

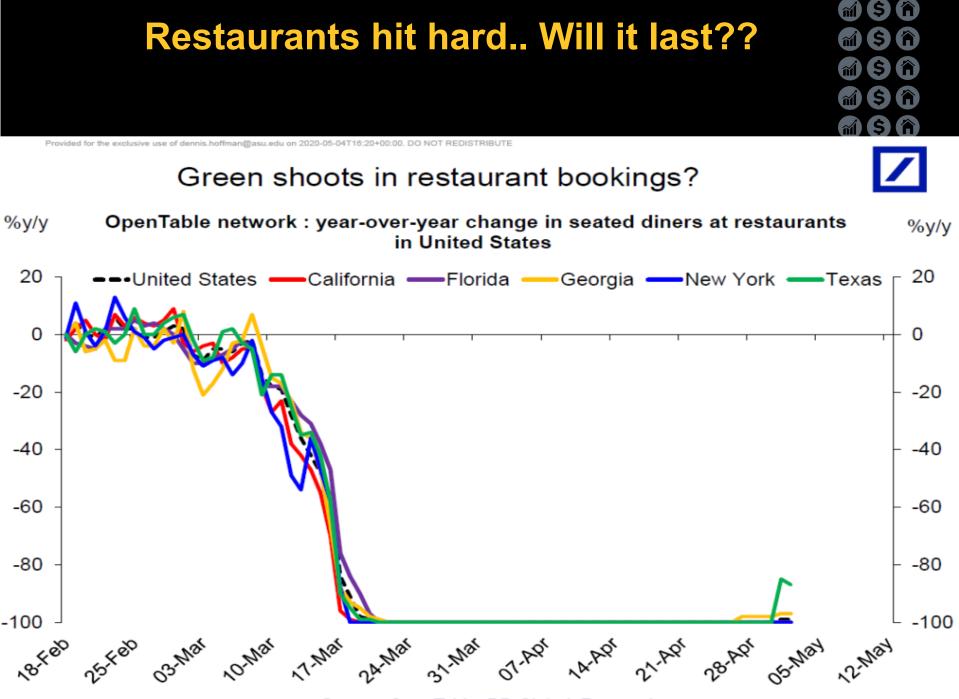


Source: Pew Research Centre- Survey of U.S. adults conducted March 19-24, 2020, DB Global Research

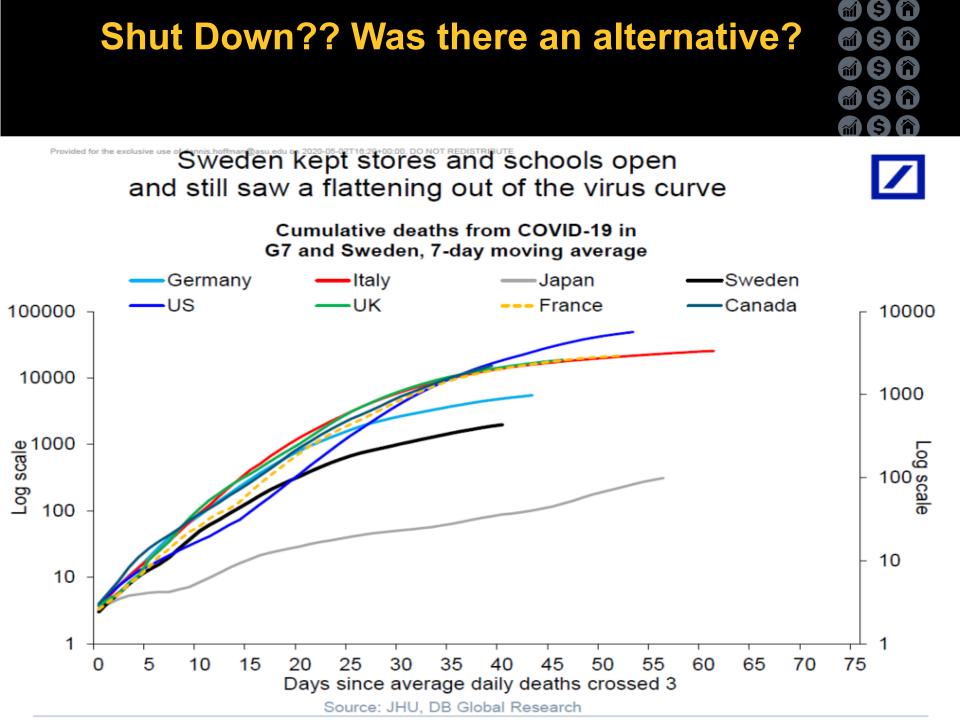


Note: Low, medium & high contact-intensity categories are classified according to index scores of 0 to 50, 50 to 75, and 75 and above. This index score is based on extent to which the job requires the worker to perform job tasks in close physical proximity to other people. The corresponding scores are defined as follows: •I don't work near other people (beyond 100 ft.): 0; •I work with others but not closely (e.g., private office): 25; •Slightly close (e.g., shared office): 50; •Moderately close (at arm's length): 75; •Very close (near touching): 100

Source: St. Louis Fed, 2017 American Community Survey, O*NET, DB Global Research



Source: OpenTable, DB Global Research



In the interim

- Stay safe and Be well!! And think about the future
- And for Arizonans, the future is always bright !!

• Next up is Lee for a look at Arizona

