Narrative Economics and the Trump-COVID-19 Stock Market Boom

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Fall 2020 Seminar on Applied Economics via Zoom
The Graduate Center City University of New York
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Nobel Prize in Economic Sciences Announced Yesterday to Robert Wilson and Paul Milgrom
Real S&P Composite During 2020 Recession within Months Dropped and Quickly Set a New Record High (Chart is Monthly Jan 1871-Oct 2020)
Real Home Prices 1990-2019 and Real Rent of Primary Dwelling 1982-2019
Real Per Capita GDP and Real Personal Consumption Expenditures 1929-2019.
Outline

I. Economic fluctuations are substantially ultimately driven by changes in popular thinking that change economic behavior
   • To understand the fluctuations, we must study changing thinking of ordinary people, mostly not of famous economists
   • We must recognize that ideas go viral just as diseases, like COVID-19
   • We can now study viral changes in thinking with computer searches for popular economic narratives using digitized text
   • COVID-19 is less than a year old, interacts with popular narratives

II. Some initial hypotheses about economic narratives just before COVID-19

III. Some initial hypotheses about rising economic narratives during COVID-19, 2020
Parameters of this Talk


• Debt to George Akerlof, co-author of our book *Animal Spirits* 2009

• American Economic Association Presidential Address “Narrative Economics” January 2017
  [https://www.aeaweb.org/webcasts/2017/address](https://www.aeaweb.org/webcasts/2017/address)

• Book *Narrative Economics: How Stories Go Viral and Drive Major Economic Events*, Princeton, October 2019
  [https://press.princeton.edu/books/hardcover/9780691182292/narrative-economics](https://press.princeton.edu/books/hardcover/9780691182292/narrative-economics)
New York City Cases Jan 22-Oct 11, 2020
Source: CDC
Kermack-McKendrick SIR Disease Epidemic Model, 1927 (Compartmental or SIR Model)

$S$=fraction of population susceptible, $I$=fraction of population infected and now contagious, $R$=fraction of population recovered and now immune, $S+I+R=1$, $c=$contagion parameter, $r=$recovery rate

\[
\frac{dS}{dt} = -cSI
\]

\[
\frac{dI}{dt} = cSI - rI
\]

\[
\frac{dR}{dt} = rI
\]
Figure 2: Time Paths of S, I, and R in Kermack-McKendrick Model
$I(0)=.0001\%, c=0.28, r=0.14$
Google Ngrams for “fair wage” peaked in two depressions, 1920 and 1933
Google Ngrams for “labor union”
My 1997 Survey “Why Do People Dislike Inflation?”

Please evaluate which of the following theories about the effects of general inflation on wages or salary relates to your own experience and your own job: [Circle one number]

1. The price increase will create extra profits for my employer who can now sell output for more; there will be no effect on my pay. My employer will see no reason to raise my pay.

2. Competition among employers will cause my pay to be bid up. I could get outside offers from other employers, and so, to keep me, my employer will have to raise my pay too.

3. A sense of fairness and proper behavior will cause my employer to raise my pay.

4. None of the above or no opinion.

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<td>Economists</td>
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II. Narratives Just Before 2020
Relevant Periods for Longest U.S. Expansion

I. 2003-2007, the boom before Great Recession
II. 2007-2009, the great recession
III. 2009-2014, slow recovery start of expansion
IV. 2014-2019, U.S. unemployment rate falls to peacetime record low by 2019
Partial List of Narratives Economically Salient in Periods I, II, III and IV of Narratives that Might Soon Become Salient

Salient in Periods I, II, III, and IV
1. Trump IV
2. Strong economy I, IV
3. Fake News IV
4. Great Depression II
5. Trade war IV
6. Sustainability IV
7. Mortgage defaults and indebtedness II, III
8. New normal, secular stagnation II
9. Real Estate Bubble I, IV
10. Digital Age with its counts of likes, virtual reality & games, I, II, III, IV
1. Donald Trump Constellations of Narratives

Proquest News & Newspapers percent of articles mentioning U.S. presidents
2. “Strong Economy” vs. “Overspeculation” Narratives in books (Google Ngrams) since 1800
Trump Narrative Incorporates Strong Economy Narrative

• 62% of Proquest News & Newspapers hits for “strong economy” also mention Trump (2017-2019) (Trump slogan “Make America Great Again”)

Trump after Early Release from COVID-19 Hospitalization October 2020
4. Great Depression Narrative
Business Confidence vs. Consumer Confidence from *Narrative Economics*
5. Trade War vs. Retaliatory Tariff, Proquest News & Newspapers
6. Sustainability-Frugality Narratives
Greta Thunberg, 16, Sails across Atlantic 2019 for Publicity for Her Campaign for Climate Change

Greta Thunberg sets sail on zero-carbon ...
7. Debt & Default Narratives
Debt as “Bottomless Hole”: Stories of Defaulted Homes
WSJ Whelan Robbie, Dec 29, 2010

“Tired of feeling "strung along," they ultimately surrendered the home to the bank in what's known as a deed-in-lieu of foreclosure, and moved out in August. They now rent a three-bedroom ranch-style home in Deerfield, about 10 miles away.

Moving her family was a "very difficult choice, a very difficult transition," says Ms. Kobor, 43. She still takes her son to play with his best friend and former neighbor. "Every time I drop him off," she says, "I have to look at my house." The home was listed for sale last month at $749,000. [They originally paid $1.3 million]

Ms. Kobor and her husband are saving to buy another home, although this time they'll approach home ownership differently. They will take out a smaller loan, one they can repay within 10 or 15 years. "We will never leverage up like that again," she says.

But the biggest surprise over losing her house is that "our lives are so much better now," Ms. Kobor says. "The relief of knowing that we are not in a bottomless hole that we'll never be able to climb out of -- psychologically, it has been great."
“Chris Noblejas, a former real estate agent, got hit by a double whammy during the housing crisis. His income declined drastically, and so did the value of the Gaithersburg, Md., townhouse he bought for $480,000 in 2006. He ended up selling the townhouse in a "short sale" in 2010 for $320,000. A short sale occurs when a lender agrees to accept a sales price for a home that is less than the amount owed on the property.

But Noblejas was able to buy a single-family house in Silver Spring this year. He is part of a wave of "boomerang buyers" -- people who are reentering the housing market after a foreclosure or short sale.

"I wanted to buy a house again, but I was still nervous because I made such a bad mistake before," Noblejas says. "Even renting was hard when I first lost my house. I didn't even know if I could buy again, but I talked to a loan officer and was able to qualify for an FHA [Federal Housing Administration] loan."
8. New Normal, Secular Stagnation Narratives
9. Real Estate Bubble Narratives
A 1915 Assessment of Difference between “Real Estate Boom” and “Real-Estate Bubble”
James M. Guinn, History of California, 1915

“By the ‘boom’ is meant the great real-estate bubble of 1887. Boom, in the sense we use it, is intended to express a sudden inflation of values; and on the western side of our continent it has superseded the older used and more expressive word, bubble. Boom, ‘to rush with violence,’ is better suited to the dash, the impetuosity and the recklessness of western speculators than the more effeminate term, bubble. Boom has come into our literature to stay, however unstable it may be in other places.”
Automation and Artificial Intelligence Narratives

![Graph showing the percent of news articles related to Automation and Artificial Intelligence over time.](image-url)
III. COVID-19 Narratives
From Forthcoming Paper, Barclays Bank by Farouk Jivraj, Laurence Black, and me “CAPE and the Pandemic COVID-19 Effect”
Relevant Subperiods for COVID-19 Period

A. **PRE crisis** January 2020, before World Health Association WHO names the coronavirus as “a public health emergency of international concern” January 30

B. **COVID Expansion** January 30 to February 19 expansion amidst first coronavirus crisis news

C. **Crash** February 19 record-high real-March 23 bottom

D. **V-Shaped** Recovery March 23-present
Daily S&P 500 in 2020
3,516.59
+39.46 (+1.13%)
Partial List of Narratives Economically Salient in Periods A, B, and C

Salient in Periods I, II, and III
1. Trump polarization IV
2. Strong economy I,
3. Fake News IV
4. Great Depression II, B
5. Trade war IV
6. Sustainability IV
7. Mortgage defaults and indebtedness II, III
8. New normal, secular stagnation II
9. Real Estate Bubble I, IV
10. Digital Age with its counts of likes, stars, virtual reality and games, I, II, III, IV

Salient in 2020 Periods A Pre-Crisis B (COVID Expansion), C (Crash), D (V-Shaped Recovery)
1. Coronavirus
2. Pandemic
3. Donald Trump
4. American Dream
5. American greatness
6. Great Depression
7. Quantitative Easing
8. Trade war
Google Searches for “Coronavirus” Sep 2019-Sep 2020 (trends.google.com)

Note: This comparison contains both Search terms and Topics, which are measured differently.
2. “Pandemic” Proquest News & Newspapers Monthly January to August 2020 159,115 Hits
Human Interest Stories During Phase C, Dropping of the Market, this in *Wall Street Journal* during Crash Period C

Feb. 29, 2020 11:13 am ET

Mr. Tulett and his girlfriend's relatives looking for minnows and ragworms to eat during the lockdown. COURTESY OF DYLAN TULETT
Greta Thunberg in Jan-Aug 2020
5. American dream, 2,088 results
American Dream in books, Narrative with U.S. as Bastion of Capitalism, Google Ngrams
6. American Greatness 112 results
7. “Great Depression”
8. “V-Shaped Recovery” Strong throughout Period D. Except for End
9. “Quantitative Easing” from Federal Reserve
Peaks in Subperiod C, Crash
Human Interest Heroes at the Federal Reserve:
Jerome Powell, Janet Yellen, Ben Bernanke
9.“V-Shaped Recovery” Strong throughout Period D. Except for End
Methods to Make Study of Narratives More Rigorous in the Future

• More attention to databases design should start now
• Use methods, such as focus groups to directly evince narratives and the morals they lead to
• Integrate narratives into existing models