Brown Sugar:
Deriving Satisfaction through Data Analysis

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Sage Policy Group, Inc.

On Behalf of
WWEMA
Washington Forum

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Disclaimer: Any resemblance between the presentation’s title and the speaker is purely coincidental.
Get off of My Cloud
IPSOS Global Confidence Index, March 2018

Global Average: 50.5
(3-month change: +0.4)
Highest (over 60) in:
China, India, Sweden, U.S.
Lowest (below 40) in:
Italy
Up in 9 countries:
South Africa, Turkey, Hungary, Brazil, France, US, Belgium, Great Britain, Poland
Down in 4 countries:
Argentina, Russia, Saudi Arabia, Spain

Largest gains
South Africa
Turkey
Hungary

Largest drops
Argentina
Russia
Saudi Arabia

Country Index/3-month change
High
Low
Change 0 - 1.5

Based on data from Thomson Reuters/Ipsos Primary Consumer Sentiment Index (PCSI).

© 2018 Ipsos

Source: IPSOS
The business confidence index (BCI) is based on enterprises’ assessment of production, orders and stocks, as well as its current position and expectations for the immediate future. Opinions compared to a “normal” state are collected and the difference between positive and negative answers provides a qualitative index on economic conditions. Source: OECD
Estimated Growth in Output by Select Global Areas

2018 Projected

<table>
<thead>
<tr>
<th>Region</th>
<th>2018 Proj. Global Output Growth: +3.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Economies</td>
<td></td>
</tr>
<tr>
<td>Euro Area</td>
<td>2.5%</td>
</tr>
<tr>
<td>Spain</td>
<td>2.4%</td>
</tr>
<tr>
<td>Germany</td>
<td>2.1%</td>
</tr>
<tr>
<td>France</td>
<td>2.5%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.5%</td>
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<tr>
<td>Italy</td>
<td>2.8%</td>
</tr>
<tr>
<td>Japan</td>
<td>1.2%</td>
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<tr>
<td>Australia</td>
<td>1.6%</td>
</tr>
<tr>
<td>Canada</td>
<td>2.1%</td>
</tr>
<tr>
<td>United States</td>
<td>3.0%</td>
</tr>
<tr>
<td>Emerging Market &amp; Developing Economies</td>
<td>2.9%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>4.9%</td>
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<tr>
<td>Emerging &amp; Developing Europe</td>
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<tr>
<td>Russia</td>
<td>4.3%</td>
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<tr>
<td>Emerging &amp; Developing Asia</td>
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<tr>
<td>China</td>
<td>6.5%</td>
</tr>
<tr>
<td>India</td>
<td>6.6%</td>
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<tr>
<td>Middle East, North Africa, Afghanistan, &amp; Pakistan</td>
<td>7.4%</td>
</tr>
<tr>
<td>Latin America &amp; the Caribbean</td>
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</tr>
<tr>
<td>Mexico</td>
<td>2.0%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund: World Economic Outlook Database, April 2018
Global Monetary Policy Tightening/Easing

As of March 2018

The CFR Global Monetary Policy Tracker covers fifty-four large countries—mainly those that target inflation in some manner. Tightening policy is indicated in red, loosening in blue. The more a country has raised (lowered) rates, in percentage points, from the most recent trough (peak) in its policy rate, the darker the shade of red (blue). Generally, the policy rate target is the overnight interbank rate, with exceptions indicated.
Conference Board Consumer Confidence Index
2005 – March 2018

March 2018 = 127.7
where 1985 = 100

Source: Conference Board
NFIB Index of Small Business Optimism, 1986-2018

Mar. 2018: 104.7

Source: National Federation of Independent Business (NFIB)
Paint It Black – Corporate Profits

U.S. Corporate Profits After Tax*

$ Billions

2017Q4: $1.77 Trillion

Source: U.S. Bureau of Economic Analysis  *With Inventory Valuation Adjustment (IVA) and Capital Consumption Adjustment (CCAdj); Seasonally Adjusted Annual Rate
U.S. Job Openings
February 2001 through February 2018

Job Openings (Millions)

Feb. 2018: 6.05M Openings

Source: U.S. Bureau of Labor Statistics
Net Change in U.S. Jobs
March 2002 through March 2018

Source: U.S. Bureau of Labor Statistics

March 2018:
+103K
National Nonfarm Employment
by Industry Sector, March 2017 v. March 2018

Professional and Business Services: 502,000
Education and Health Services: 443,000
Leisure and Hospitality: 312,000
Trade, Transportation, and Utilities: 295,000
Manufacturing: 232,000
Construction: 228,000
Financial Activities: 136,000
Other Services: 88,000
Mining and Logging: 62,000
Government: 12,000
Information: -49,000

All told 2,261K jobs gained

Source: U.S. Bureau of Labor Statistics
# Employment Growth, U.S. States (SA)

**February 2017 v. February 2018 Percent Change**

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>%</th>
<th>Rank</th>
<th>State</th>
<th>%</th>
<th>Rank</th>
<th>State</th>
<th>%</th>
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<td>3.4</td>
<td>18</td>
<td>HAWAII</td>
<td>1.4</td>
<td>34</td>
<td>ILLINOIS</td>
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<td>2</td>
<td>NEVADA</td>
<td>3.2</td>
<td>18</td>
<td>NEW HAMPSHIRE</td>
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<td>OHIO</td>
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<td>IOWA</td>
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<td>6</td>
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<td>23</td>
<td>RHODE ISLAND</td>
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<td>MAINE</td>
<td>0.6</td>
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<td>MICHIGAN</td>
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<td>41</td>
<td>CONNECTICUT</td>
<td>0.5</td>
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<td>24</td>
<td>MISSISSIPPI</td>
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<td>41</td>
<td>KANSAS</td>
<td>0.5</td>
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<td>ARKANSAS</td>
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<td>GEORGIA</td>
<td>2.0</td>
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<td>MONTANA</td>
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<td>NEBRASKA</td>
<td>0.2</td>
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<td>12</td>
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<td>29</td>
<td>INDIANA</td>
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<td>46</td>
<td>MARYLAND</td>
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<td>13</td>
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<td>MISSOURI</td>
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<td>VERMONT</td>
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<td>WEST VIRGINIA</td>
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<td>14</td>
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<td>DISTRICT OF COLUMBIA</td>
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<td>DELAWARE</td>
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<td>16</td>
<td>NEW JERSEY</td>
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<td>VIRGINIA</td>
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<td>ALASKA</td>
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<tr>
<td>16</td>
<td>TENNESSEE</td>
<td>1.5</td>
<td>34</td>
<td>ALABAMA</td>
<td>0.8</td>
<td>51</td>
<td>NORTH DAKOTA</td>
<td>-1.6</td>
</tr>
</tbody>
</table>

**U.S. Year-over-year Percent Change: +1.5%**

Source: U.S. Bureau of Labor Statistics
<table>
<thead>
<tr>
<th>Rank</th>
<th>MSA</th>
<th>UR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>San Francisco-Oakland-Hayward, CA MSA</td>
<td>2.9</td>
</tr>
<tr>
<td>2</td>
<td>Denver-Aurora-Lakewood, CO MSA</td>
<td>3.1</td>
</tr>
<tr>
<td>3</td>
<td>Minneapolis-St. Paul-Bloomington, MN-WI MSA</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>Orlando-Kissimmee-Sanford, FL MSA</td>
<td>3.4</td>
</tr>
<tr>
<td>4</td>
<td>San Antonio-New Braunfels, TX MSA</td>
<td>3.4</td>
</tr>
<tr>
<td>6</td>
<td>Boston-Cambridge-Nashua, MA-NH Metro NECTA</td>
<td>3.5</td>
</tr>
<tr>
<td>6</td>
<td>San Diego-Carlsbad, CA MSA</td>
<td>3.5</td>
</tr>
<tr>
<td>8</td>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV MSA</td>
<td>3.6</td>
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<tr>
<td>8</td>
<td>Tampa-St. Petersburg-Clearwater, FL MSA</td>
<td>3.6</td>
</tr>
<tr>
<td>10</td>
<td>Dallas-Fort Worth-Arlington, TX MSA</td>
<td>3.7</td>
</tr>
<tr>
<td>11</td>
<td>St. Louis, MO-IL MSA (1)</td>
<td>3.8</td>
</tr>
<tr>
<td>12</td>
<td>Portland-Vancouver-Hillsboro, OR-WA MSA</td>
<td>4.0</td>
</tr>
<tr>
<td>13</td>
<td>Miami-Fort Lauderdale-West Palm Beach, FL MSA</td>
<td>4.1</td>
</tr>
<tr>
<td>14</td>
<td>Los Angeles-Long Beach-Anaheim, CA MSA</td>
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</tr>
<tr>
<td>15</td>
<td>Atlanta-Sandy Springs-Roswell, GA MSA</td>
<td>4.3</td>
</tr>
<tr>
<td>15</td>
<td>Charlotte-Concord-Gastonia, NC-SC MSA</td>
<td>4.3</td>
</tr>
<tr>
<td>15</td>
<td>Seattle-Tacoma-Bellevue, WA MSA</td>
<td>4.3</td>
</tr>
<tr>
<td>18</td>
<td>Phoenix-Mesa-Scottsdale, AZ MSA</td>
<td>4.4</td>
</tr>
<tr>
<td>18</td>
<td>Riverside-San Bernardino-Ontario, CA MSA</td>
<td>4.4</td>
</tr>
<tr>
<td>20</td>
<td>Baltimore-Columbia-Towson, MD MSA</td>
<td>4.6</td>
</tr>
<tr>
<td>20</td>
<td>Detroit-Warren-Dearborn, MI MSA</td>
<td>4.6</td>
</tr>
<tr>
<td>20</td>
<td>New York-Newark-Jersey City, NY-NJ-PA MSA</td>
<td>4.6</td>
</tr>
<tr>
<td>23</td>
<td>Houston-The Woodlands-Sugar Land, TX MSA</td>
<td>4.7</td>
</tr>
<tr>
<td>24</td>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA</td>
<td>4.9</td>
</tr>
<tr>
<td>25</td>
<td>Chicago-Naperville-Elgin, IL-IN-WI MSA</td>
<td>5.2</td>
</tr>
</tbody>
</table>

**U.S. Unemployment Rate: 4.1%**

1. Area boundaries do not reflect official OMB definitions.
Gimme Shelter
15-Year & 30-Year Fixed Mortgage Rates

April 1995 through April 2018*

*Week ending 4/12/2018

Source: Freddie Mac
From 2006-2017 the number of households headed by owners remained relatively flat.

At the same time, the number of households renting their home increased significantly (+26%).

The share of renter households also increased—from 31.2% of households in 2006 to 36.1% in 2017.

Source: U.S. Census Bureau; Pew Research Center
U.S. Homeownership (NSA)

1980Q4-2017Q4

Source: U.S. Census Bureau  *NSA: not seasonally adjusted
U.S. Private New Multifamily Construction
February 1993 through February 2018

Source: U.S. Census Bureau
S&P/Case-Shiller Home Price Indices for Select Metros

January 2018, 12-Month Percentage Change

Source: Standard & Poor's
U.S. Single-Family Housing Starts
March 1999 through March 2018

March 2018: 867K

Source: U.S. Census Bureau
Water Supply Construction Put-in-Place

February 2002 through February 2018

Source: U.S. Census Bureau


SAAR ($ Billions)

July 08 to February 18:
-$6.5B (-36.1%)  

Feb. 17 to Feb. 18:
+$0.5B (+4.4%)
Sewage & Waste Disposal Construction Put-in-Place

February 2002 through February 2018

Source: U.S. Census Bureau

August 10 to February 18:
-$7.1B (-25.8%)

Feb. 17 to Feb. 18:
+$0.3B (+1.5%)

SAAR ($ Billions)

Cross-border investment remained elevated in 2016: 
Although down relative to a record 2015, offshore investment levels still exceeded the pre-2015 high in 2007.

Source: Jones Lang LaSalle; Real Capital Analytics; Note: Among transactions larger than $5.0 million.
Foreign Investment in U.S. Commercial Real Estate

Top Destination Markets, 2017H1

Foreign Investment by Destination Market (as a % of Total)

- New York: 17.4%
- Washington, D.C.: 9.7%
- Boston: 7.6%
- Los Angeles: 6.9%
- San Francisco: 4.2%
- Chicago: 3.4%
- Dallas-Ft. Worth: 3.0%
- Seattle-Bellevue: 2.6%
- Houston: 2.3%
- Austin: 2.2%

Source: Jones Lang LaSalle; Real Capital Analytics
Note: Among transactions larger than $5.0 million; includes portfolio, entity-level transactions.
19th Nervous Breakdown

THE ROLLING STONES
Conference Board Leading Economic Indicators Index

August 2007 through February 2018

One-month Percent Change

February 2018: 108.7
where 2016: 100

Source: Conference Board
U.S. Saving Rate, February 2005 – February 2018
(Savings as Percentage of Personal Disposable Income)

Source: U.S. Bureau of Economic Analysis

February 2018: 3.4%
According to the International Institute of Finance (IIF), global debt has reached an all-time high in 2016; at $215 trillion, global debt—including household, government, and corporate—from now represents 325% of global GDP.

Last year the IMF warned of risks to the global economy:

- “sheer size of debt could set the stage for an unprecedented private deleveraging process that could thwart the fragile economic recovery”
Shiller Price-Earnings Ratio, 1980-2018

Mar. 2018: 32.77

Shattered! — Bitcoin Price, 2014-2018

Source: CoinMarketCap.com

4/16/2018: $8.1K
Time is on My Side, at least in the Near-Term

- U.S. setting up for best year since ’05 . . .;
- Global economy also picking up momentum, in large measure due to policymaking;
- Job opportunities are abundant;
- Corporate profitability elevated;
- Consumer and business confidence has been surging. . .;
- And now tax cuts, including major reductions in corporate taxes . . .

What could go wrong?

- A lot can go wrong – that’s always true – first there are the Black Swan threats:
- “I’m forever blowing bubbles, pretty bubbles in the air, they fly so high, nearly reach the sky, and like my dreams, they fade and die”;
- Where are all the pretty bubbles? Equity markets? U.S. bond market? Commercial real estate? Bitcoin?
- 2018 will be fine – better than fine – 2019 might be, too, but beyond that, potential deleveraging cycle prompted by a repricing of assets – Bad!!!!
Thank You

Please follow me on Twitter -- @sageanirban


Please contact us when you require economic research & policy analysis.