Factors Impacting the Rate Environment – Implications for Illinois Public Funds Investors

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REVIEW

Where are we today and how have capital markets reacted?

AGENDA

OUTLOOK

What is the Federal Reserve telling us?

KEY TRENDS

What are we watching?



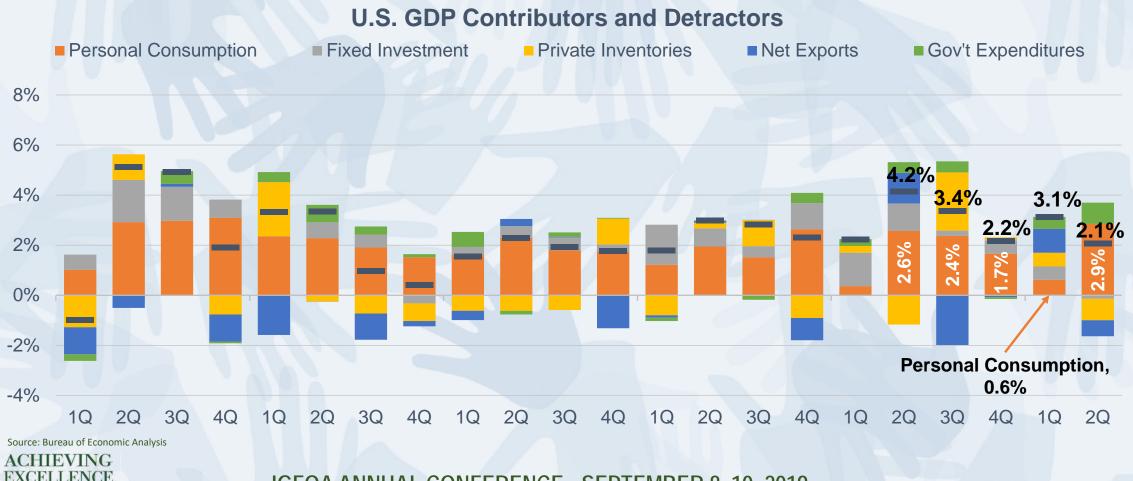
Where are we today and how have capital markets reacted?

Economic Growth Slowed Down in the Second Quarter





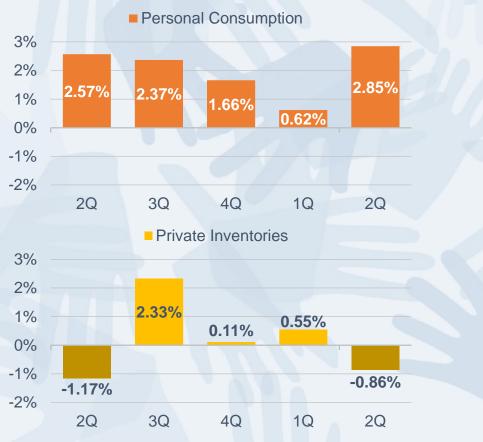
Second Quarter GDP Slows But Still Beats Expectations

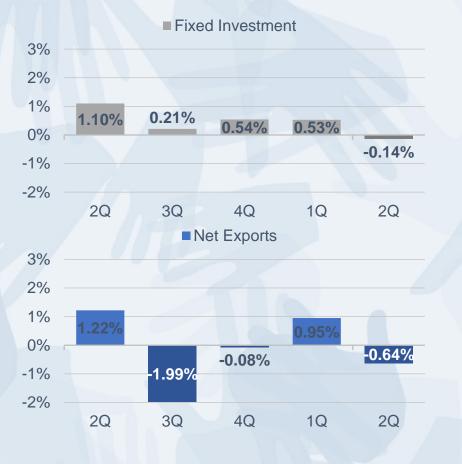


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Breaking Down the GDP Contributors and Detractors

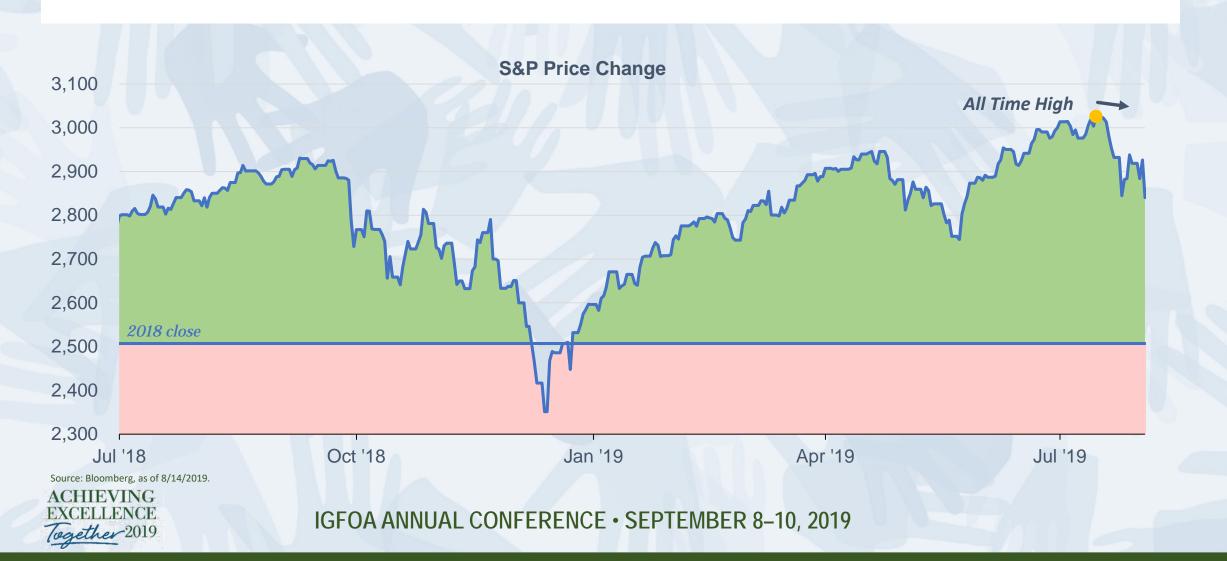




Source: Bureau of Economic Analysis

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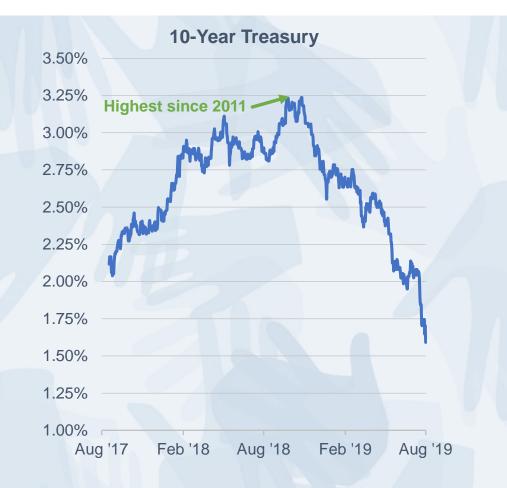
Stock Market Reflects Market Uncertainty



Treasury Yields Continue to Fall

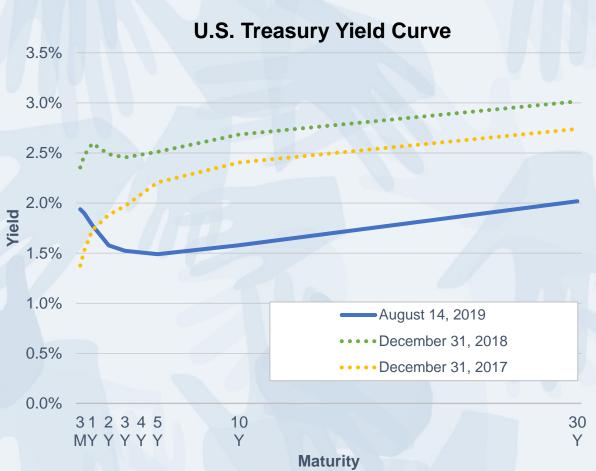


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Yield Curve Inversion Persists

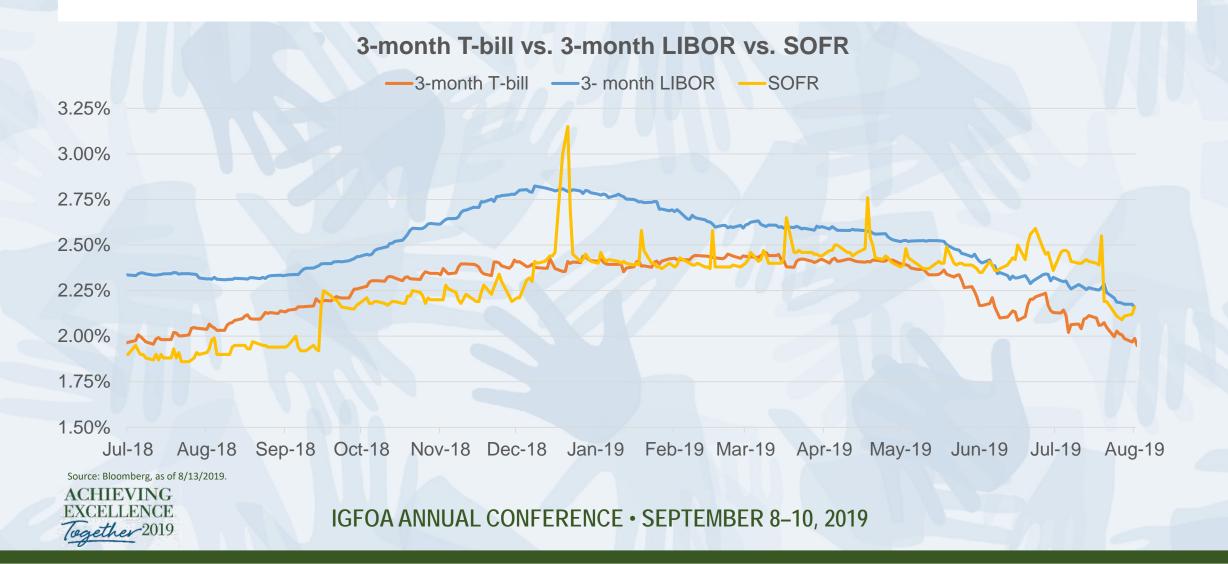
Tenor	8/14/19	Quarter- End 6/30/19	Year-End 12/31/18	
3 month	1.94%	2.09%	2.35%	
1 year	1.78%	1.93%	2.60%	
2 year	1.58%	1.75%	2.49%	
3 year	1.52%	1.71%	2.46%	
5 year	1.49%	1.77%	2.51%	
10 year	1.58%	2.01%	2.68%	
30 year	2.02%	2.53%	3.01%	



Source: Bloomberg, as of 8/14/2019.

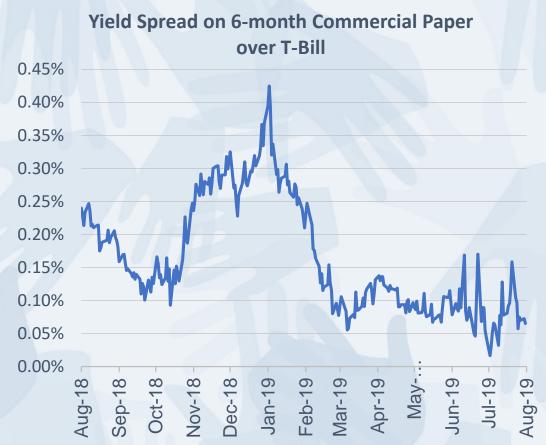


Short-Term Yield Relationships Have Realigned



Short-Term Credit Remains Viable Option

Maturity	Treasury	Federal Agency	Commercial Paper
3-Month	1.91%	2.03%	2.10%
6-Month	1.82%	1.97%	2.01%
9-Month	1.76%		1.93%
1-Year	1.74%	1.85%	1.88%
2-Year	1.66%	1.70%	
3-Year	1.60%	1.64%	
5-Year	1.58 <mark>%</mark>	1.65%	
10-Year	1.68%	1.90%	



Source: Bloomberg BVAL yield curves for Treasuries. TradeWeb for Federal Agency yields. 3-, 6-, and 9-month commercial paper yields from A-1 issuers. Yields are for indicative purposes only; actual yields may vary by issue. Yields as of 08/14/2019.



Forward Curve Reflects Expectations For Lower Rates

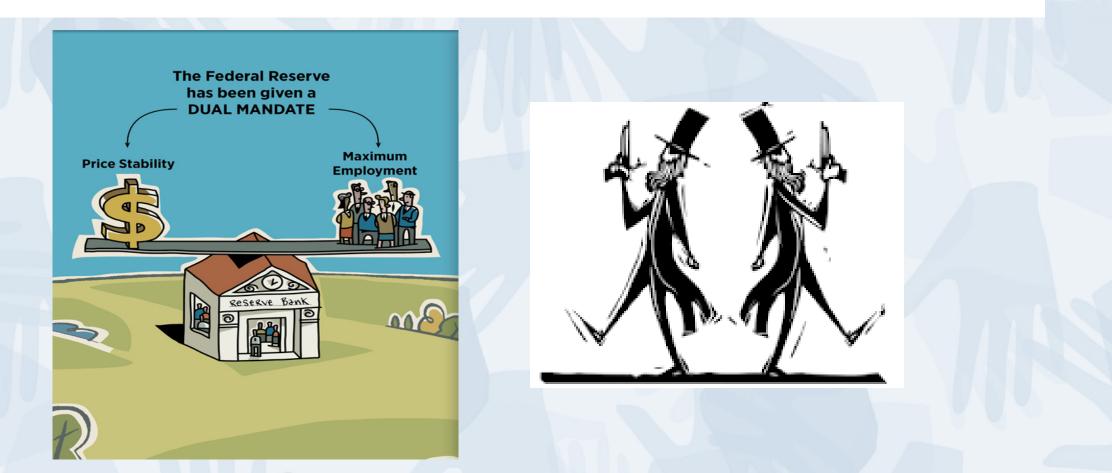
Current Yield	1-year Forward	2-year Forward	3-year Forward	5-year Forward
1.95%	1.38%	1.44%	1.43%	1.67%
1.78%	1.37%	1.43%	1.42%	1.66%
1.58%	1.40%	1.44%	1.43%	1.66%
1.53%	1.41%	1.51%	1.43%	1.67%
1.49%	1.46%	1.57%	1.52%	1.68%
1.54%	1.52%	1.61%	1.57%	1.85%
1.58%	1.63%	1.81%	1.72%	1.98%
2.02%	2.04%	2.11%	2.08%	2.18%
	1.95% 1.78% 1.58% 1.53% 1.49% 1.54% 1.58%	Current YieldForward1.95%1.38%1.78%1.37%1.58%1.40%1.53%1.41%1.49%1.46%1.54%1.52%1.58%1.63%	Current YieldForwardForward1.95%1.38%1.44%1.78%1.37%1.43%1.58%1.40%1.44%1.53%1.41%1.51%1.49%1.46%1.57%1.54%1.52%1.61%1.58%1.63%1.81%	Current fieldForwardForwardForward1.95%1.38%1.44%1.43%1.78%1.37%1.43%1.42%1.58%1.40%1.44%1.43%1.53%1.41%1.51%1.43%1.49%1.46%1.57%1.52%1.54%1.52%1.61%1.57%1.58%1.63%1.81%1.72%

Source: Bloomberg, as of 8/14/2019.

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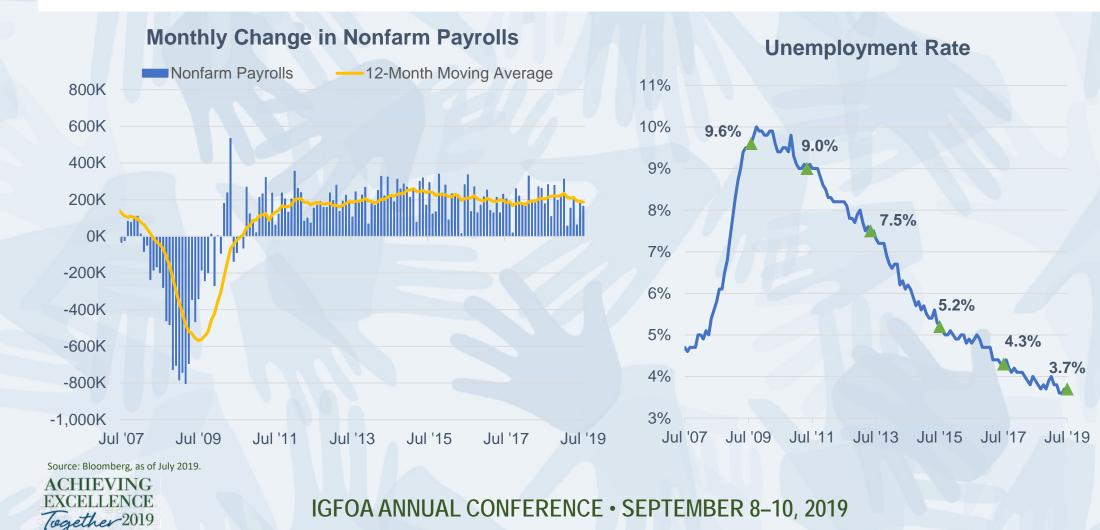
What is the Federal Reserve telling us?

Dual Mandate... Dueling Mandates

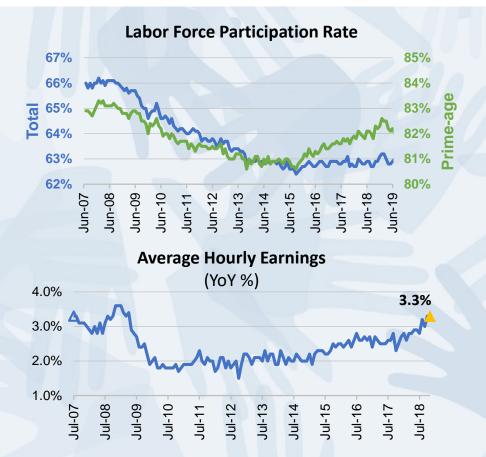


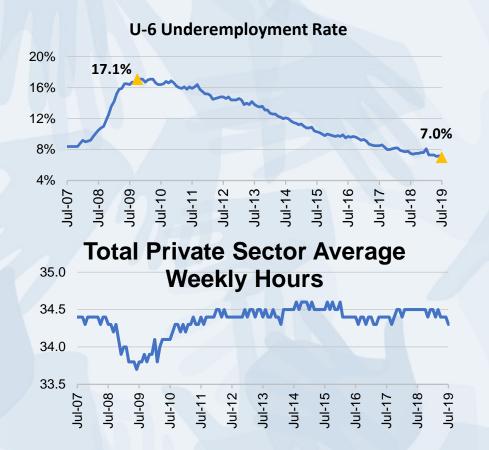


Unemployment Rate Remains at 49-Year Low in July



Employment Indicators





Source: Bloomberg, most recent data as of July 2019. BLS defines "prime-age" as individuals ranging from 25 - 54 years of age.



Core Inflation Falls Below the Fed's 2% Target



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Fed Cuts Rates in a "Mid-Cycle Adjustment to Policy"

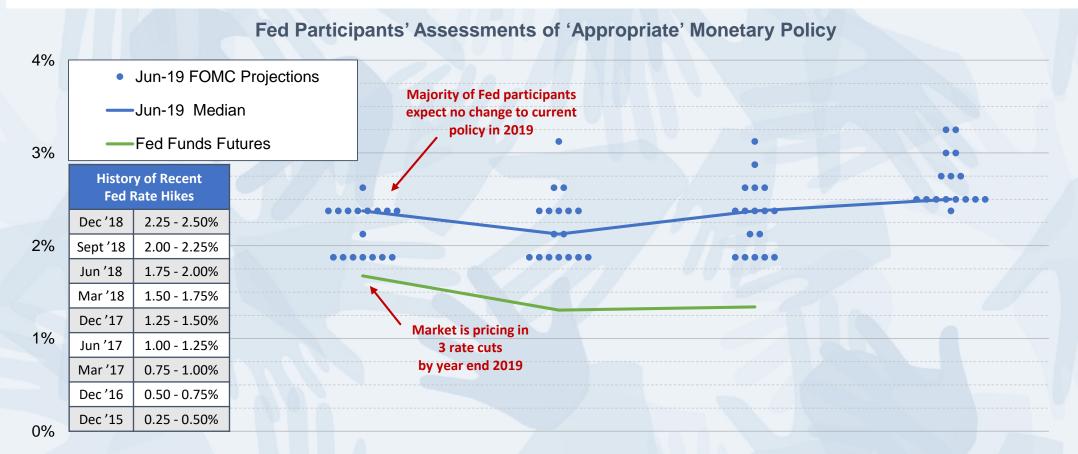
July 31

- Information received since the FOMC met in June indicates that the labor market remains strong and that economic activity has been rising at a moderate rate.
- Job gains have been solid, on average, in recent months, and the unemployment rate has remained low. Although growth of household spending has picked up from earlier in the year, growth of business fixed investment has been soft.
- On a 12-month basis, overall inflation and inflation for items other than food and energy are running below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed.
- In light of the implications of global developments for the economic outlook as well as muted inflation pressures, the Committee decided to lower the target range for the federal funds rate at 2 to 2¼ percent.
- This action supports the Committee's view that sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective are the most likely outcomes, **but uncertainties about this outlook remain**.
- The Committee will **conclude the reduction of its aggregate securities holdings** in the System Open Market Account in August, two months earlier than previously indicated.

Source: Federal Reserve.



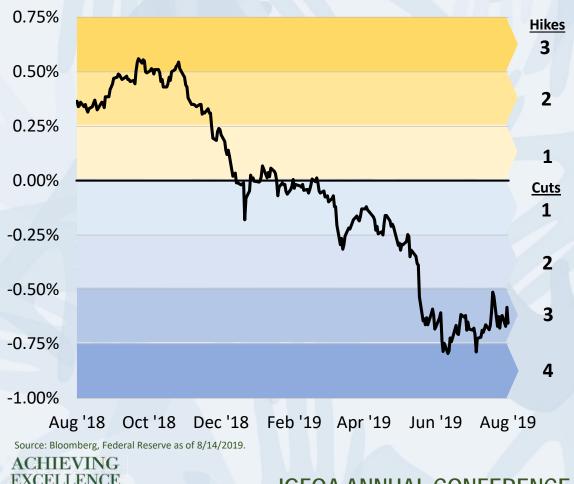
Market Projects 3 Rate Cuts by Year End; First Cut Expected in July



Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the federal funds rate at each year-end. Fed funds futures as of 6/19/19.



Market Expectations Adjust to FOMC Guidance



"The Committee judges that some further gradual increases in the target range for the federal funds rate with be consistent with sustained expansion of economic activity..."

- December 2018

"In light of global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target ranged for the federal funds rate may be appropriate..." - January 2019

"The Committee will closely monitor the implications of incoming information for the economic outlook and will act as appropriate to sustain the expansion..."

- June 2019

Months Between Fed Hikes and Cuts Over Last Five Cycles

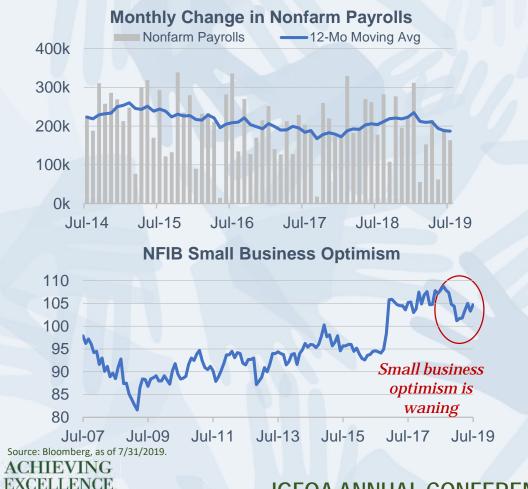
10% Months Between Last Months Between Last **Rate Hike and First** Rate Cut and First 9% **Rate Hike Rate Cut** Minimum 4 month 8 month 8% Average 10 months 27 months 7% Maximum 18 months 85 months Last Cycle 85 months 15 months 6% 5% 4% 3% 2% 1% 0% Jan-17 Jan-89 Jan-91 Jan-93 Jan-95 Jan-97 Jan-99 Jan-01 Jan-03 Jan-05 Jan-07 Jan-09 Jan-11 Jan-13 Jan-15 Jan-19 Months Between Last Hike and First Cut Months Between Last Cut and First Hike

Federal Funds Target Rate - Midpoint

Source: Bloomberg, as of July 31, 2019. ACHIEVING EXCELLENCE Tagether 2019

What are we watching?

Economic Data Shows Signs of Weakening



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Global Growth Outlook Weaker



IMF GDP Growth Projections July 2019				
Region	2019	2020		
World	3.2% 🖊	3.5% 🖊		
U.S.	2.6%	1.9%		
Euro area	1.3%	1.6%		
China	6.2% 🖊	6.0% 🖊		
Emerging Markets	4.1% 🖊	4.7% 🖊		

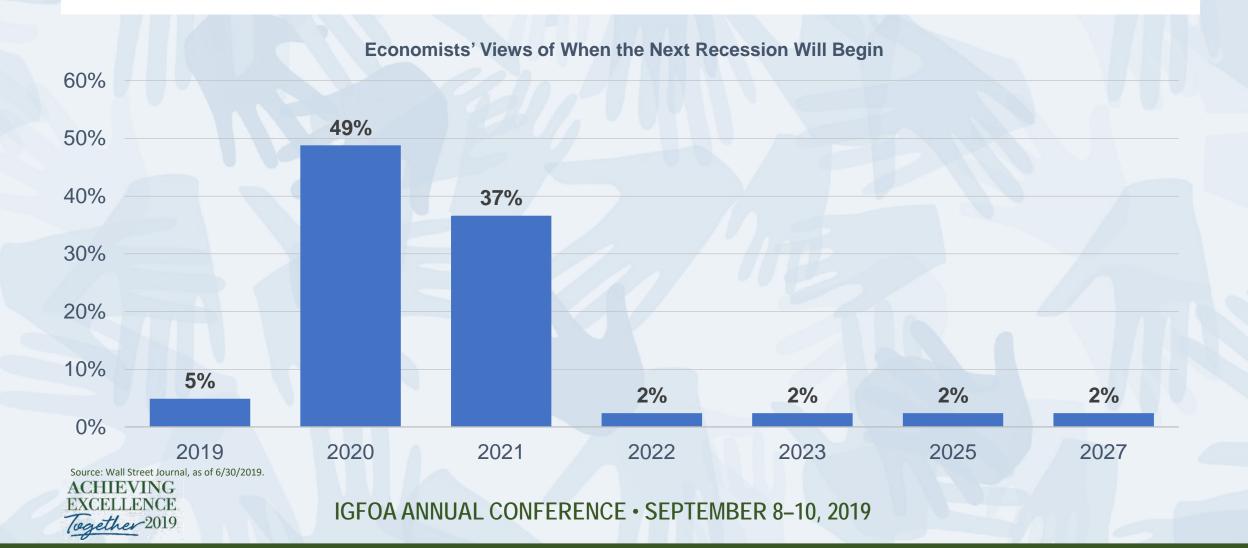
"Risks... are mainly to the downside... **trade and technology tensions** that dent sentiment and slow investment; a protracted **increase in risk aversion** that exposes the **financial vulnerabilities** continuing to accumulate after years of low interest rates; and **mounting disinflationary pressures** that increase debt service difficulties, constrain monetary policy space to counter downturns, and make adverse shocks more persistent than normal."

-The IMF World Economic Outlook, July 2019

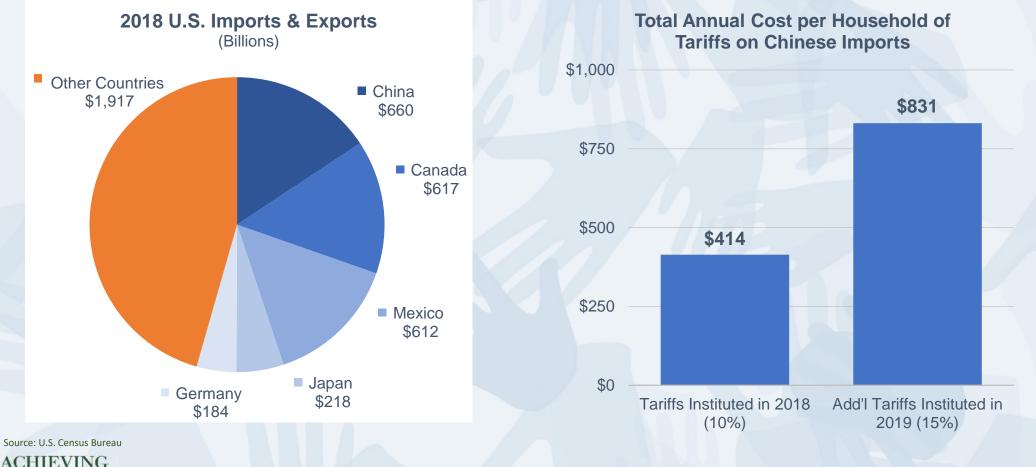
Source: World Bank and IMF. Arrows indicate change from prior projection.



When is the Next Recession?

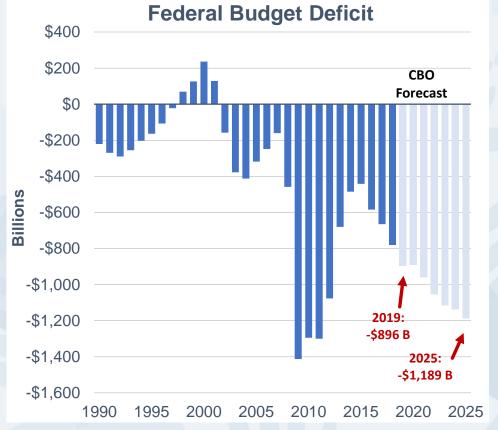


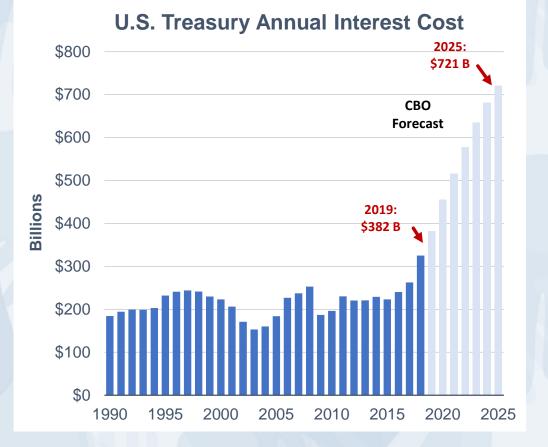
Trade Tensions with the U.S.'s Largest Trading Partners Increases



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U.S. Federal Budget Deficit and Interest Cost Projected to Soar





Sources: Bureau of Fiscal Service, Congressional Budget Office. Data as of May 2019.



Will the U.K. and the E.U. Reach a Withdrawal Agreement Before Brexit?

September 20

Informal EU leaders met to discuss Brexit. The UK's proposal was opposed due to the fact it would have them stay in the single market for goods but not for services.

Early-Mid February

2019

Brexit negotiations will be restarted with the EU over the backstop with the bloc's leaders. And assuming a revised deal with Brussels is agreed upon, May will still have to try to win a so-called meaningful vote in the Commons. May 24

Theresa May announces resignation after missing the April 12th deadline.



March 29 **Brexit Day** October 31 ...

November

U.K. Prime Minister secured cabinet approval for her Brexit deal and European Union leaders formally agreed upon the Brexit deal. The stage is set for a tougher vote in Parliament on the U.K.'s exit from the bloc

March 21-22 The final EU Summit that the UK will

attend as a member country will be held.

January 2019

British politicians rejected the Brexit agreement, complicating the UK's departure from the EU. Members of parliament voted 432 to 202 to rebuff the deal.

July 24

Boris Johnson becomes Prime Minister; commits to October 31st deadline even if no agreement has been reached





Geopolitical Risks Persist Around the Globe



Questions?

Thank You