

GUGGENHEIM

Macroeconomic and Investment Research

El Niño Could Add \$30 Billion to U.S. Economy

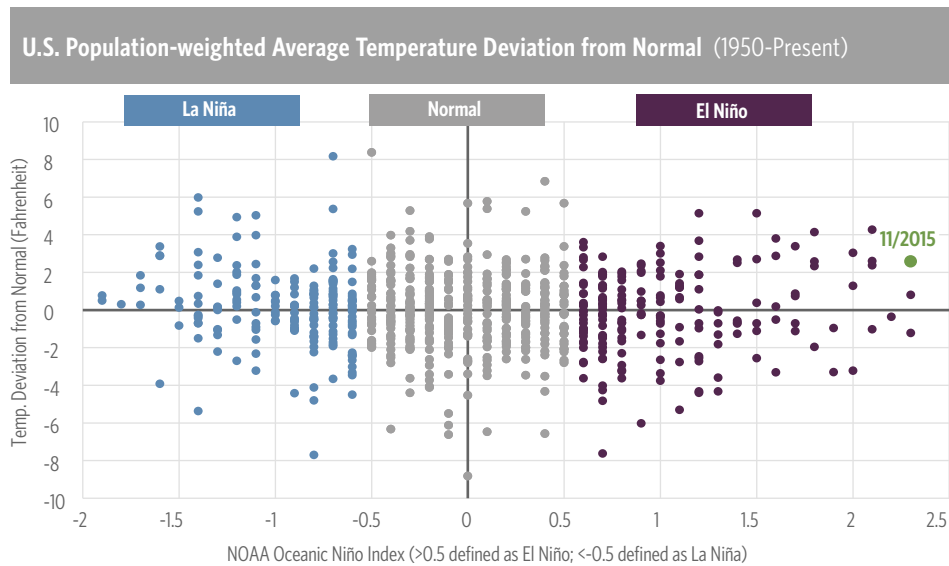
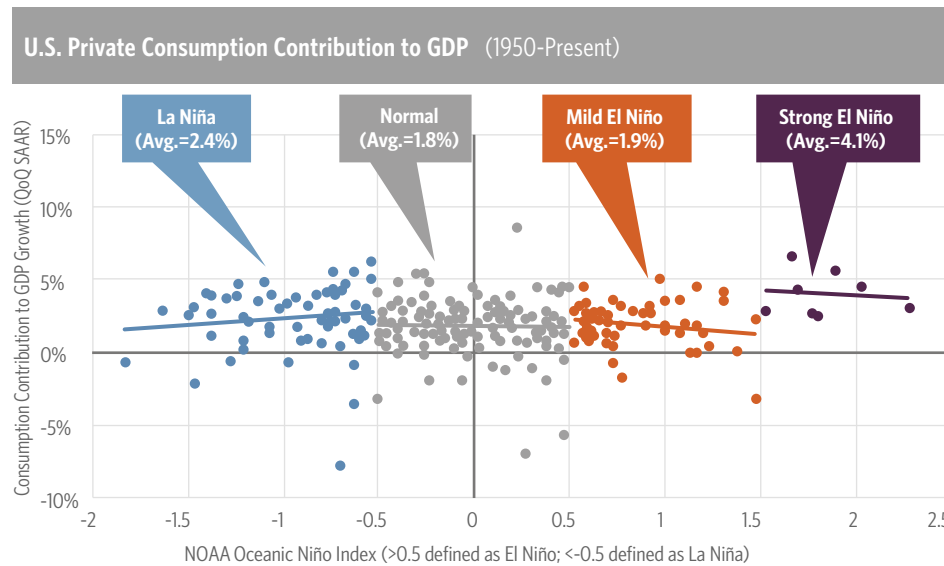
January 2016

Innovative Solutions. **Enduring Values.**[®]

El Niño Could Add \$30 Billion to U.S. Economy

- A strong El Niño reduces the chance of harsh winters in the U.S., according to American Meteorological Society research.
- The result has historically included lower heating costs, increased consumer spending, reduced travel costs, more jobs, and less storm damage.
- The powerful El Niño of 1997 boosted the U.S. economy by almost \$18 billion, equivalent to 0.8% of real 4Q GDP at the time. Our projections indicate that the current El Niño could add \$30 billion to the economy in 2015-2016.

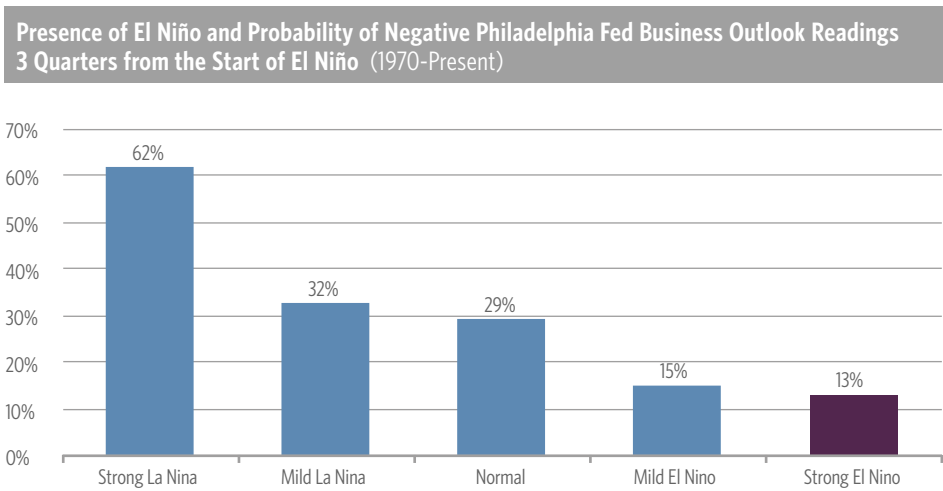
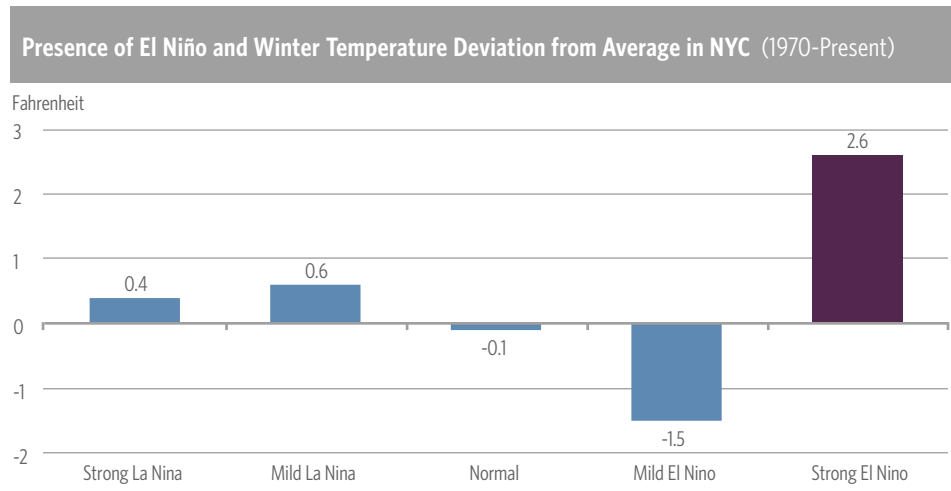
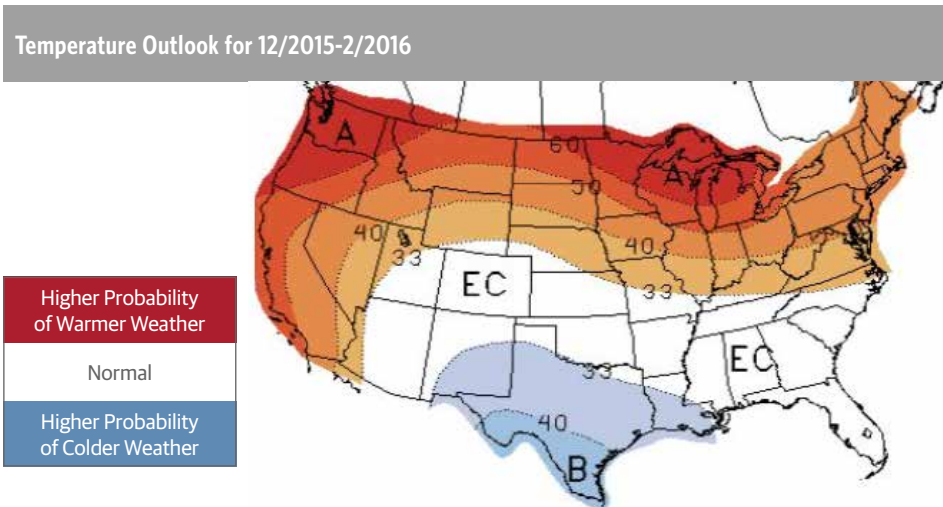
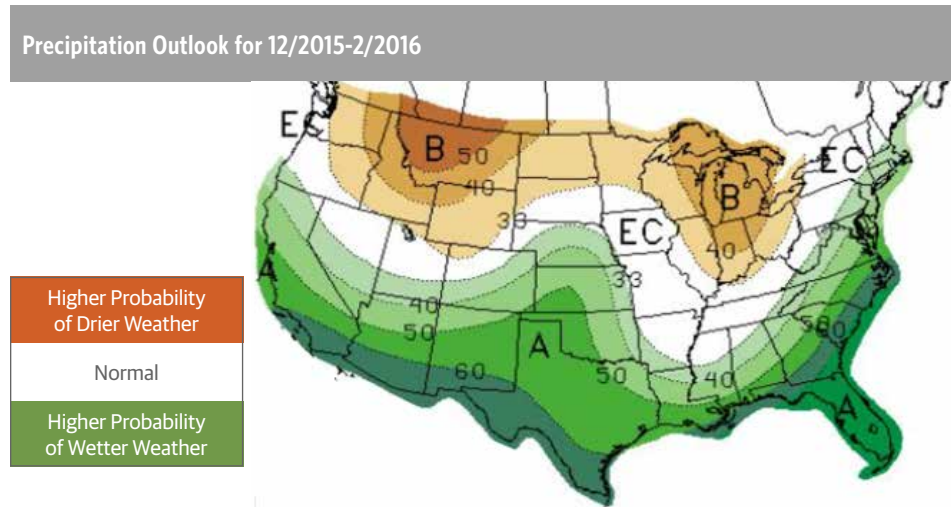
Estimated El Niño Impact on U.S. (\$ Billions)		
Benefits	1997-1998	Inflation-Adjusted for 2015
Savings due to the absence of floods and Atlantic hurricanes	6.9	9.5
Savings from less Heating Costs	6.7	9.2
Increase in Consumer Spending	5.6	7.7
Reduce Operating Costs from Airlines and Ground Transportation	1.8	2.5
Income from Increased Construction and Employment	0.5	0.7
Savings from less Highway Snow Removal	0.4	0.5
Total Benefits	21.9	30.0
Losses	1997-1998	Inflation-Adjusted for 2015
Property Losses from El Niño related Storms	2.8	3.8
Agricultural Losses	0.7	1.0
Federal Government Relief	0.4	0.5
Lost sales from Snow Removal and Tourist Industry	0.2	0.3
State Assistance Costs	0.1	0.1
Total Losses	4.2	5.8
Net Benefits	17.7	24.3



Source: American Meteorological Society, NOAA, Haver, Bloomberg, Guggenheim Investments. Data as of 11.30.15

What Will El Niño Do to Weather in the U.S.?

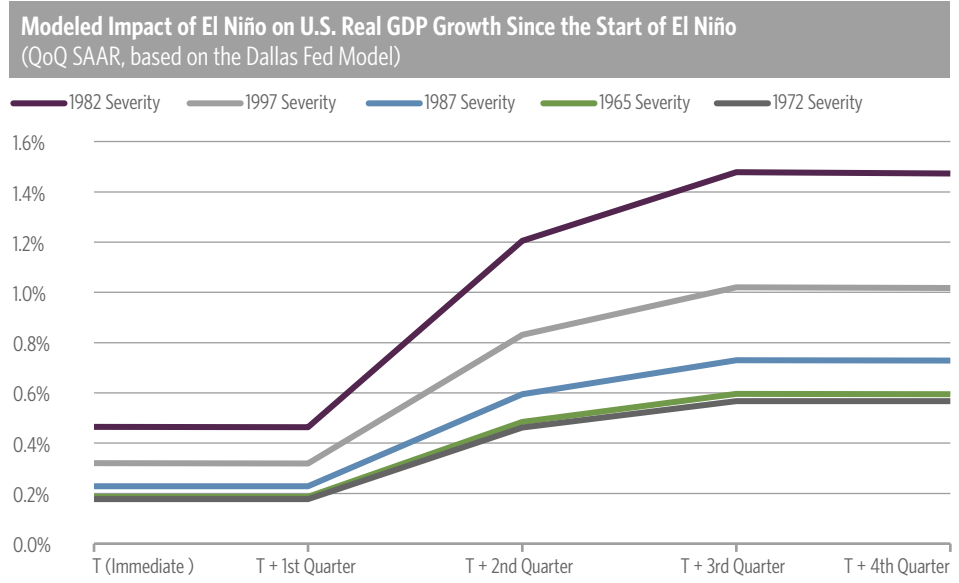
- In the Northeast, strong El Niños reduce cold and disruptive weather and lead to better business outlook readings.
- The National Oceanic and Atmospheric Administration (NOAA) predicts that this year's El Niño will continue through the Northern Hemisphere's winter, gradually weakening through spring 2016.



Source: Bloomberg, Haver, NOAA. Data as of 11.19.15.

How Will El Niño Impact U.S. GDP?

- Guggenheim Investments' Macroeconomic and Investment Research team believes that as the massive El Niño weather pattern gains strength, it should become a boon to the U.S. economy, potentially adding 1 percent to U.S. gross domestic product (GDP) in the first quarter.
- Milder winters resulting from the El Niño storm pattern have historically boosted consumer spending and manufacturing activity.
- El Niño's influence on U.S. GDP should reach its peak in the storm cycle's third quarter, which corresponds to the end of 2015 and into the first quarter of 2016.
- Over the past five strongest El Niño weather events, the average total shock to U.S. real GDP growth from the start of the weather pattern to its third quarter was 1 percent, with the largest historical shock of 1.5 percent occurring in 1982.
- This El Niño is among the largest in recent decades, roughly on par with the El Niño of 1997. Based on the economic impact of that episode, we estimate as high as a 1 percent boost to Q1 2016 GDP, all else equal.



Severe El Niño Events		Shock to U.S. GDP Growth (QoQ SAAR)				
Year	Severity Measured by SOI (Negative Indicates More Severe)	T (Immediate)	T + 1st Quarter	T + 2nd Quarter	T + 3rd Quarter	T + 4th Quarter
1982	-2.3	0.5%	0.5%	1.2%	1.5%	1.5%
1997	-1.6	0.3%	0.3%	0.8%	1.0%	1.0%
1987	-1.1	0.2%	0.2%	0.6%	0.7%	0.7%
1965	-0.9	0.2%	0.2%	0.5%	0.6%	0.6%
1972	-0.9	0.2%	0.2%	0.5%	0.6%	0.6%

Source: Federal Reserve Bank of Dallas, IMF, NOAA, Haver, Bloomberg, Guggenheim Investments. Data as of 12.31.15.

Important Notices and Disclosures

This material presented herein has been prepared for informational purposes only and should not be considered as investing advice or a recommendation of any particular security, strategy or investment product. This material contains opinions of the author but not necessarily those of Guggenheim Partners, LLC or its subsidiaries. The author's opinions are subject to change without notice. Forward looking statements, estimates, and certain information contained herein are based upon proprietary and non-proprietary research and other sources. Information contained herein has been obtained from sources believed to be reliable, but are not assured as to accuracy. Past performance is not indicative of future results. There is neither representation nor warranty as to the current accuracy of, nor liability for, decisions based on such information.

© 2016 Guggenheim Partners, LLC. All Rights Reserved. No part of this content may be reproduced, stored, or transmitted by any means without the express written consent of Guggenheim Partners, LLC.

Guggenheim Funds Distributors is an affiliate of Guggenheim Partners, LLC. For more information, visit guggenheiminvestments.com or call 800.345.7999.

CP-ELNINO 20336