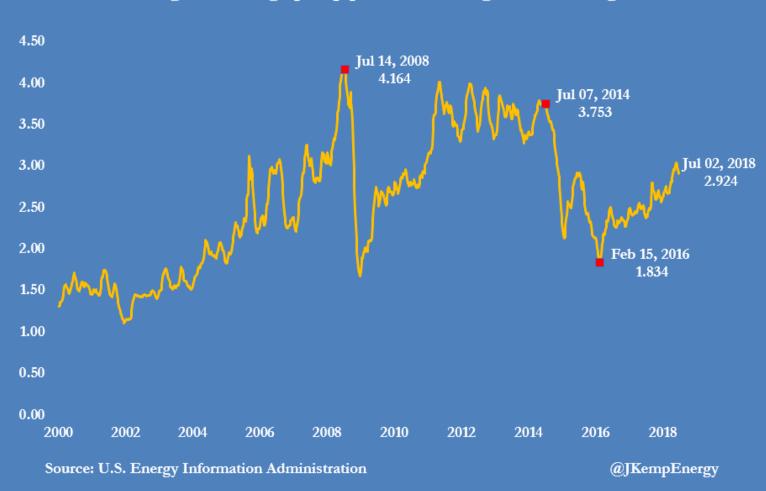
U.S. gasoline consumption Selected indicators

JOHN KEMP REUTERS 3 Jul 2018

U.S. retail gasoline prices are at highest level since 2014 Politically sensitive and impact on vehicle choices/driver behaviour

U.S. gasoline prices, 2000-2018
Weighted average pump prices, including taxes, U.S.\$/gal

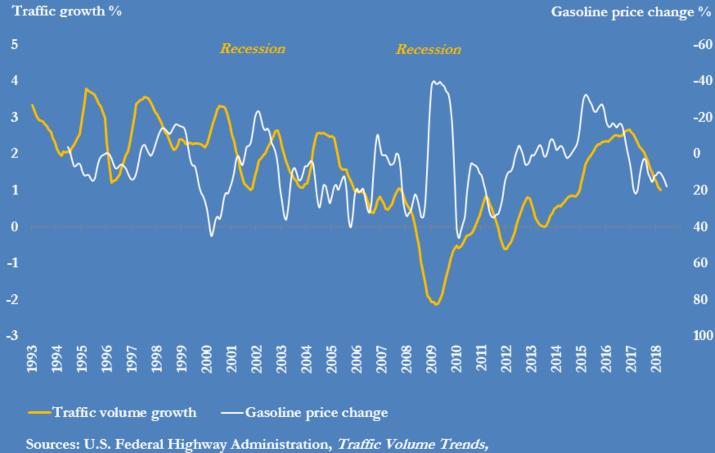


U.S. traffic volumes growing more slowly as price stimulus fades Rapid increase in driving volumes coincided with oil price slump in 2014-2016

7.00 Traffic volume in the United States (seasonally adjusted) Percent change compared with prior year (and 3-month average) 5.00 3.00 -1.00 -3.00-5.00 2006 2005 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Percent change compared with prior year Source: U.S. Federal Highway Administration -3-month moving average @JKempEnergy

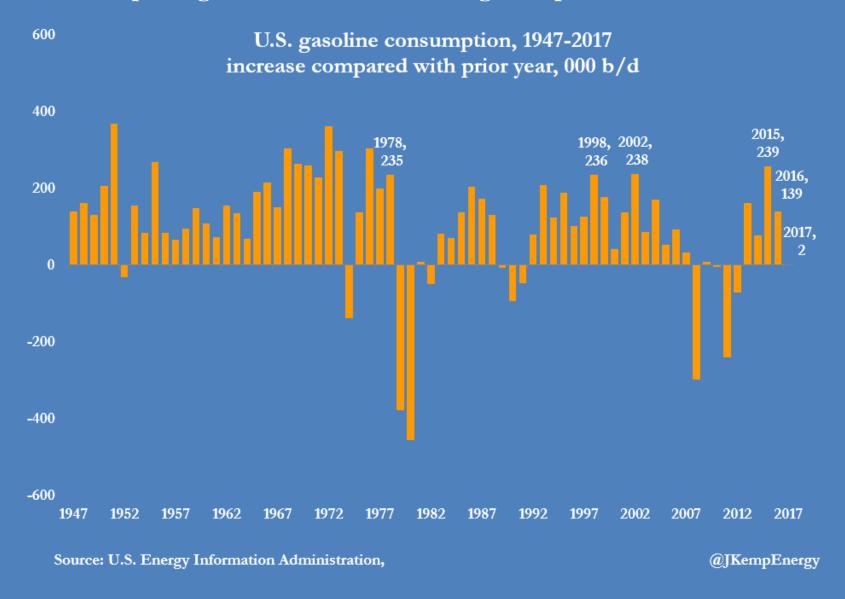
U.S. traffic volumes are correlated with gasoline prices Traffic volumes grow faster when gasoline prices are low and falling

Traffic growth on U.S. highways compared with change in gasoline prices

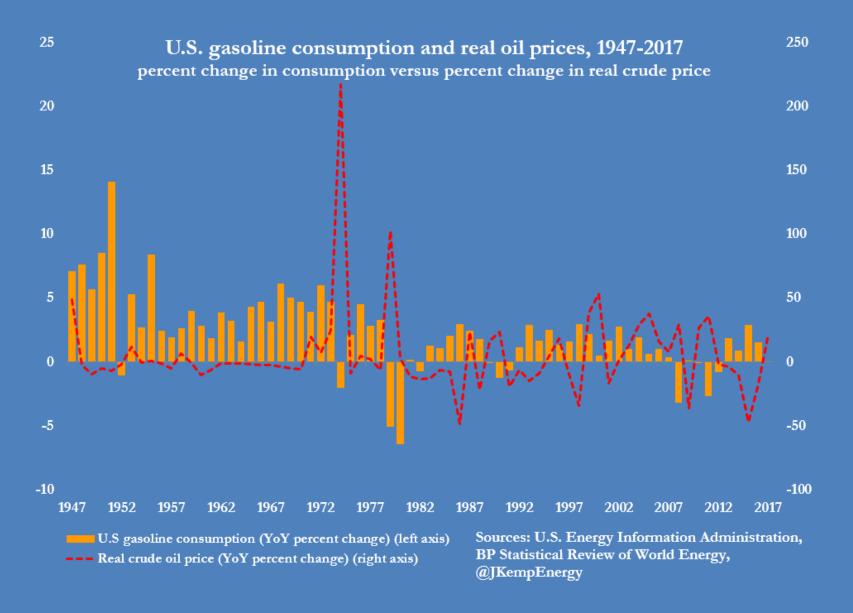


Sources: U.S. Federal Highway Administration, *Traffic Volume Trends*, U.S. Energy Information Administration, *Petroleum Supply Monthly* @JKempEnergy

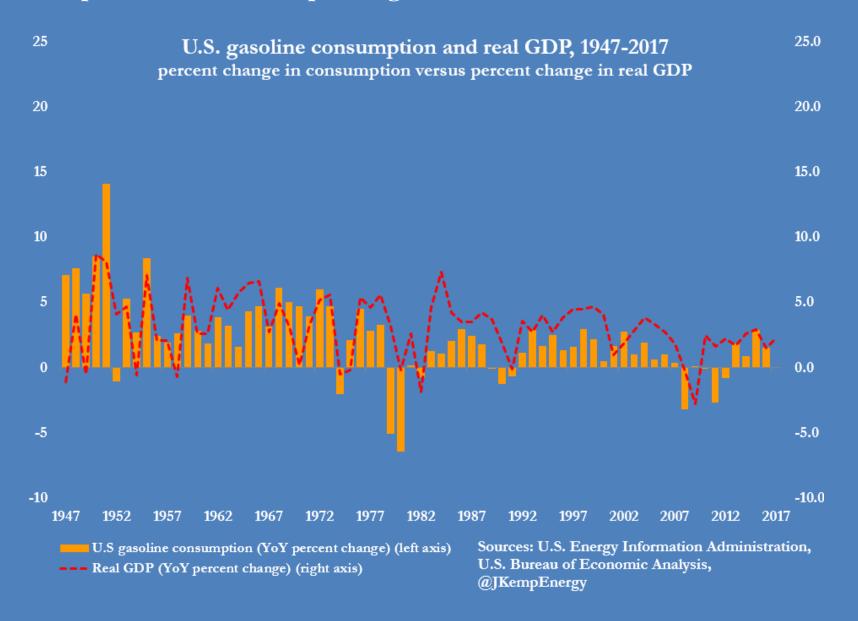
U.S. gasoline consumption is responsive to oil prices Consumption growth accelerated during slump but now close to zero



Gasoline consumption has always responded to big price changes Low responsiveness to price changes is not no responsiveness



Gasoline consumption is responsive to economic growth But price is critical in explaining short-term deviations around trend

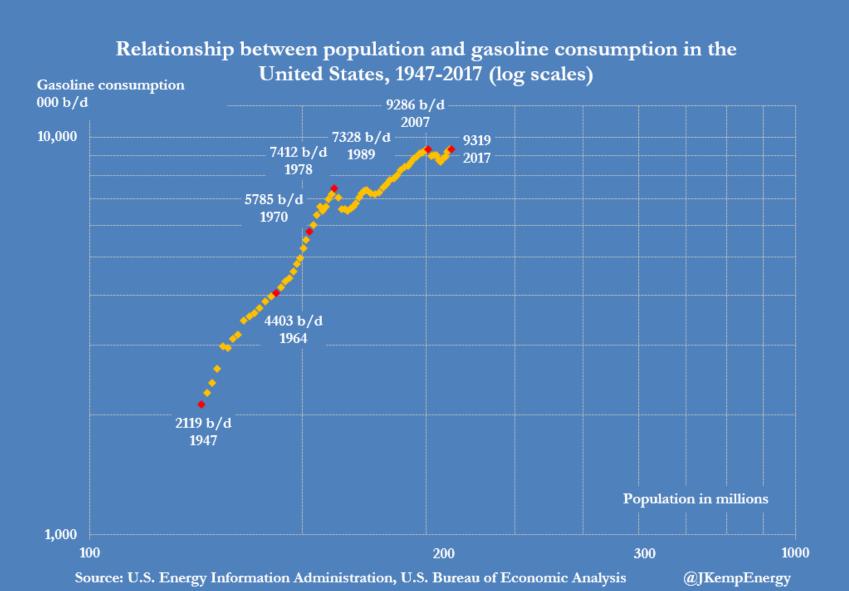


U.S. gasoline consumption growth slowed after the oil shocks Evident impact from both oil prices and recessions

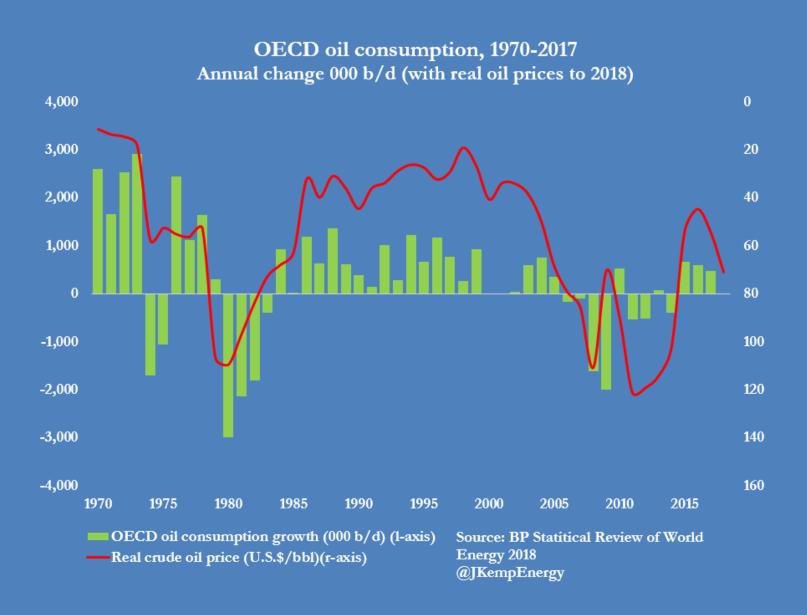
Relationship between real GDP and gasoline consumption in the United States, 1947-2017 (log scales)



U.S. gasoline consumption trajectory slowed after oil shocks Evident impact from both oil prices and recessions



OECD oil consumption has proved flexible to big price changes Consumption in advanced economies plays important market-balancing role



Global oil consumption growth is responsive to prices Especially in the advanced economies

