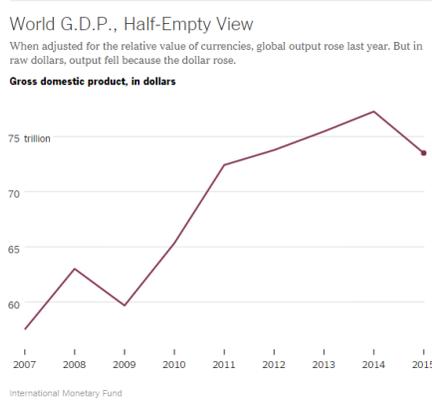


Q3 GDP\_IMF\_PPP <https://thinkingquantitatively.wordpress.com/>

1. The article, *The World's Economy Soared Last Year (or Plunged)*<sup>1</sup>, is all about the relative value of currency.
  - a. They say that global GDP declined from \$77.3 trillion to \$73.5 trillion as indicated in the chart below. Compute the ratio of the 2105 world GDP to 2014 world GDP and scale the second quantity to 1. How is this ratio related to their stated 5% decline?



- b. The graphic above says the “output fell because the dollar rose”. How does the graphic below show the dollar “rising”?



- c. Use the graphic above to convert the \$77.3 trillion in 2014 into EUR, and the \$73.5 trillion into 2015 EUR. Use the conversion rate at the **start** of each year.

<sup>1</sup> <http://www.nytimes.com/2016/02/09/upshot/the-worlds-economy-soared-last-year-or-plunged.html>

- d. Now calculate the percentage change from 2014 to 2015 using the EUR values you just computed from **part c**.
  
  - e. Lots of acronyms in this one! What does GDP, PPP, and IMF stand for?
- 
2. In DLS Joel Best discusses organizational practices and how choices must be made that affect the statistics computed.
    - a. Give 1 specific example of such a choice and the statistic that would be affected.
- 
3. Joel Best discusses how big numbers confuse people.
    - a. Compute how long 1 thousand seconds is in minutes.
  
    - b. Compute how long 1 million seconds is in days.
  
    - c. Compute how long 1 billion seconds is in years.
  
    - d. Compute how long 1 trillion seconds is in years.
  
    - e. Complete the following analogy: A penny is to \$10,000 as \_\_\_\_\_ is to \$1 trillion. The value you just put in the blank is like a penny to the U.S. government's budget.