



*WASTE REPORT for June 13, 2016*

**NSF: Funding Research to Research Funding**

It seems kind of circular, getting federal research funding to study the importance of federal research funding. Well, that is exactly what the National Science Foundation (NSF) is doing, spending \$375,000 on a 2-year study to determine what effects the availability of federal funding for research has on scientists' career choices and scientific outcomes. One can only imagine what the findings will be...

The grant synopsis reads in part:

Young life science researchers... **may elect to begin their careers by either entering academia, or by joining biotechnology or pharmaceutical firms... career choice is also affected by external constraints such as the availability of, and competition for, [federal] research funding.**<sup>1</sup>

Though the *Waste Report* has reported on federal research shenanigans like how to have [the perfect first date](#) and the [gambling habits of Ugandans](#) (and many more), is it actually budget unpredictability that is putting critical research in jeopardy? Just how volatile is federal funding for research?

We decided to look and what we found makes funding this project all the more unnecessary. Looking at federal research funding (adjusted for inflation) since the year 2000 for NSF, the National Institutes of Health (NIH), and overall, we found that since 2000, funding has increased 197%, 198% and 176% respectively. Further, we found that on average, funding for scientific research in these areas increased, again in real terms, 7.23 %, 7.3%, and 6.7% per year.<sup>2</sup>

But since, **"Historically the amount of public research funding has changed over time reflecting congressional priorities..."** and this project hopes to identify, **"reforms that create more certainty in the budget allocation process could generate greater social benefits at lower costs..."** We thought we look even farther back, say 50 years, to see just how uncertain federal research funding might be. To find out if there was some real year-to-year volatility we looked at a three and five year moving average.

What we found is, over 50 years, funding for federal research (in real terms) has increased on average about 8.7 percent a year, and the two moving averages both hold within a half a percentage point. Similar results were found for NSF and NIH, which itself saw an average increase of 13.54% and a five year moving average of 12.33%

In other words, federal research funding does not show uncertainty, in fact it shows stable and constant growth; and it did not take us two years and \$375,000 to figure that out.

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<sup>1</sup> Zivin, Joshua Graff; *Early Career Choice, Funding Variation and Scientific Output*; University of California at San Diego; San Diego, CA; April 2015. Award Number: 1460344

<sup>2</sup> FSO Staff Calculation using from OMB's 2016 Historical Tables.