The Lewis Journals-to-Gas-Price Inflation Index, Chemistry and Physics 2015

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What would a gallon of gas cost if gas prices increased at the same rate as subscriptions to scholarly journals? In 2008, David Lewis offered this analogy for journals in Chemistry and Physics. It goes like this:

1. "Between 1975 and 2005 the average cost of journals in chemistry and physics rose from $76.84 to $1,879.56. In the same period, the cost of a gallon of unleaded regular gasoline rose from 55 cents to $1.82. If the gallon of gas had increased in price at the same rate as chemistry and physics journals over this period it would have reached $12.43 in 2005, and would be over $14.50 today" (Lewis).

2. The average price for online subscriptions to Chemistry and Physics journals in 2015 was $4,276 (Chemistry: 4,326; Physics: 4,226) (Bogart 2015, p. 442-443).

3. .55/x = 76.84/4,276.00

4. x = 30.61

5. If "the gallon of gas had increased in price at the same rate as chemistry and physics journals" from 1975 to 2015, today's gas prices would be over $30.60 per gallon (Figure 1).

Imagine how $30.00 a gallon would change how we live our lives? Isn't about time that universities adopted a more sustainable approach to disseminating the research?

Notes: This is an update of a prior analogy that looked at 2013 prices for Chemistry journals (Odell 2013).

References

Bogart, D. (2015). Library and Book Trade Almanac 2015. Medford, NJ.

Lewis, D. W. (2008). Library Budgets, Open Access, and the Future of Scholarly Communication. College & Research Libraries News, 69(5), 271–273. Available from: http://hdl.handle.net/1805/1167

Odell, J. (2014). Lewis Journals to Gas Price Inflation Index, Chemistry 2013. http://doi.org/10.6084/m9.figshare.1026336.v1

Figure 1. What would a gallon of gas cost if gas prices increased at the same rate as subscriptions to Chemistry and Physics journals?