

Corrigendum for "Space, the Final Frontier"

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Shortly after the publication of my article "Space, the Final Economic Frontier," in the Spring 2018 volume of *Journal of Economic Perspectives*, I was made aware that I had regrettably omitted some relevant citations in the literature and incorrectly dated another citation in my discussion of the problem of space debris. In this brief letter, I wish to apologize for and redress those oversights.

Here are three works of which I was unfortunately unaware while writing my paper:

1. Adilov, N., Alexander, P. and Cunningham, B., (2014). "Earth orbit debris: an economic model." This article was posted to SSRN in 2013 and published in *Environmental and Resource Economics* in 2014. The authors model the space debris externality problem in private satellite launch and design activity, and they discuss how the idea of the tragedy of the commons relates to the space debris threat. It is a trenchant, valuable, and innovative contribution to the literature, and I regret not having found it prior to writing my own piece.
2. Macauley, M.K., (2015) "The economics of space debris: Estimating the costs and benefits of debris mitigation," *Acta Astronautica*, 115, pp.160-164. In this paper, a model of the economics of policies to address debris is carefully calibrated to compare the efficacy of the options.
3. Adilov, N., Alexander, P.J. and Cunningham, B.M., (2018). "An economic "Kessler Syndrome": A dynamic model of earth orbit debris." *Economics Letters*, 166, pp.79-82. Here, the authors point out (via a formal model) that the collapse of economically viable activity in space due to debris will precede the physical realization of the Kessler syndrome (in which debris accumulation becomes unstoppable).

Please note that these papers contain additional citations that readers particularly interested in the economics of space debris will find useful.

As for the incorrect dating of a citation, the paper concerned is Ward Hanson's "Pricing Space Debris" from *New Space*, volume 2(3), pp. 143–44. In my published paper, I incorrectly stated that the publication date was 2016; it is 2014 instead. I regret the mistake. The readers who noticed this mistake also pointed out that Prof. Hanson never explicitly uses the term "Pigouvian" when describing his ideas in this short paper. My interpretation of his argument as including a Pigouvian motivation comes from a personal conversation I had with Prof. Hanson at a conference in November 2017.

To the authors whose work I did not cite, I apologize for not being sure to find your work and acknowledge your contributions to this important field. And to the readers of *JEP*, I apologize for not bringing these works to your attention in the originally published article.