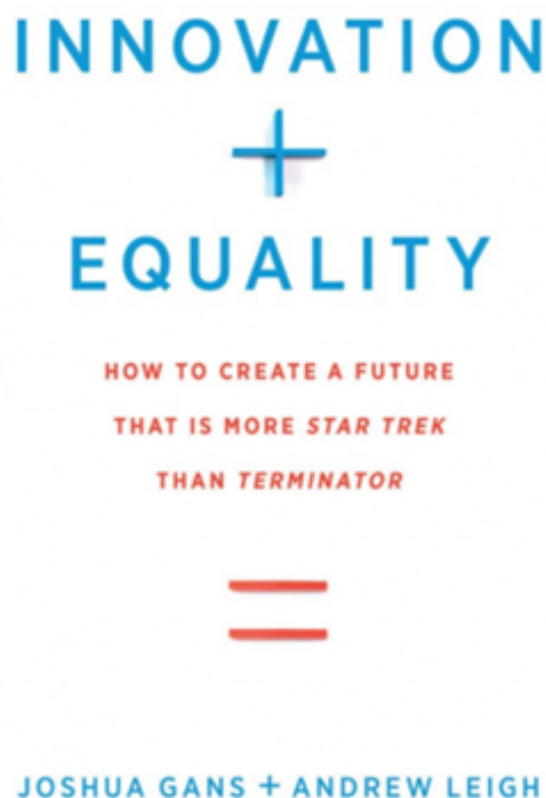


Baking a bigger pie and eating it, too: the false tradeoff between innovation and equality

Innovation + Equality: How to Create a Future That Is More Star Trek Than Terminator. By Joshua Gans and Andrew Leigh. Massachusetts and London: The MIT Press, 2019, 192 pp., \$24.95 hardcover, \$19.95 paperback.

In January 2016, Paul Graham, a cofounder of startup accelerator Y Combinator, briefly made headlines for a personal blog post that contended that increasing income inequality is necessary and beneficial to society because it is inextricably linked to startup formation. In response, Joshua Gans, the chief economist of another startup accelerator, penned an essay to rebut Graham's, arguing that "the notion that entrepreneurship and inequality go hand in hand is I suspect a myth. There is no theoretical reason for this to be the case, certainly no moral reason, and, if I had to guess, it isn't empirically true." It seems that Gans was not content with mere guessing, so now, joining with Australian parliamentary representative and economist Andrew Leigh, he can say that he has written the book on the subject. In *Innovation + Equality: How to Create a Future That Is More Star Trek Than Terminator*, Gans and Leigh explain that the supposed tradeoff between encouraging innovation and promoting equality is a false choice, presenting policy ideas that could benefit society on both dimensions.

The authors' primary argument—that a supposed tradeoff between innovation and equality is a false choice—relies on two central, well-established concepts. First, the authors frequently differentiate between risk and uncertainty, using a framework proposed by Frank Knight in 1921. In this framework, a chance taken with quantifiable odds is risky, but a chance taken with fundamentally unknowable odds is uncertain. Second, the authors cite a 1942 work by Joseph Schumpeter, according to which society pays two



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prices for every new innovation: a creation price and a destruction price. The creation price is the compensation paid directly to the successful inventor, while the destruction price is paid by those who are harmed by the innovation. Combining the ideas of Knight and Schumpeter, the authors conclude that the creation and destruction prices of any new innovations are both fundamentally uncertain, but that many current theories and policies erroneously treat them as risky.

On the creation side, Gans and Leigh explore others' discussions about whether the pace of innovation will accelerate or decelerate in the future. If innovations are created more quickly and easily, the prices paid to successful entrepreneurs would fall. If, on the other hand, new breakthroughs become asymptotically more difficult to find, would-be inventors would need greater and greater rewards for their increasing efforts. However, since this trajectory is unknowable (and likely varies by industry and technology), policies that attempt to spur innovation by bluntly increasing the creation price are unlikely to succeed. Examples of such policies include lowering top tax rates or strengthening patents. The authors explain that, to a potential new inventor, the effects of such policies, which benefit only successful inventors, are fundamentally uncertain and thus play little to no role in the decision to attempt to innovate. Therefore, the authors maintain that altering tax codes and patent laws in ways that favor equality will not damp innovation. Instead, reducing market-entry barriers and costs for all new inventors, especially those who are less privileged in society, will spur more innovation while simultaneously decreasing inequality.

On the destruction side, Gans and Leigh again summarize others' varying hypotheses on whether future technological change will spur job growth or lead to widespread job destruction. While the authors try to present these alternatives objectively, they do seem to side with the argument of "job optimists." One aspect of this argument is that job forecasts, such as those made by the U.S. Bureau of Labor Statistics, consider risk but not uncertainty. Because it is easier to quantify the risk of jobs disappearing than to envision the creation of new classes of jobs, the inherent difficulty of incorporating uncertainty leads to a more pessimistic job outlook. For example, Gans and Leigh note that, at one time, it was easier to predict that the automation of elevator operation would put lift operators out of work than it was to envision that this same invention would spur new jobs in skyscraper construction. The authors never quite address the sort of questions of equality in a postscarcity society that the book's *Star Trek*-referencing subtitle perhaps suggests. Rather, they skirt around the topic by declaring that they do not believe that a condition of postscarcity will ever be achieved.

Despite their optimism about the future of jobs in the wake of technological change, Gans and Leigh firmly believe that, at present, innovation is worsening inequality. Internet-based companies are becoming near-monopolies by operating in a winner-take-all environment and by increasing the pace of acquisitions. The authors explain that these dynamics, while enriching investors with greater returns on capital, have made workers worse off by contributing to the decline in the share of revenue that goes to wages and by driving higher consumer prices. Similar dynamics have made three index-fund companies the largest shareholders of almost 90 percent of all top 500 U.S. companies. As the largest shareholders of direct competitors, these index-fund firms have less interest in companies competing with one another. The authors point to studies suggesting that, in some sectors, common ownership of companies has driven prices up by as much as 10 percent, benefiting shareholders who already have above-average wealth.

The book concludes with two chapters jam-packed with suggestions to improve innovation and/or reduce inequality, rejecting the need for a tradeoff between those two goals. In my view, the book is somewhat overambitious in scope, which is most apparent in the over 25 distinct policy proposals presented in the short span of the last two chapters. Some of these proposals, such as fixing the student loan system, expanding the Earned Income Tax Credit, growing vocational training, and mandating paid parental leave, are mainstays of American policy debates. Others, such as reducing occupational licensing requirements for nonsafety occupations, introducing a variable-length patenting system, and developing personal profiles that are interoperable across social networks, are less familiar to me. Still, by electing for a broad and highly accessible survey of many potential policies, rather than a thorough review of any single policy, the authors offer a compelling introductory text for a nontechnical audience.

In *Innovation + Equality: How to Create a Future That Is More Star Trek Than Terminator*, Gans and Leigh present a wide range of research and policy perspectives relating to the book's two titular goals. They consistently ground abstract concepts in clear examples, eschewing jargon and overly technical writing. I recommend this book for people looking for a highly accessible introduction to key debates and fresh ideas that could map the path to a future that is both more prosperous and more equitable. I feel that some of the authors' ideas for the future are a tad too optimistic, especially in light of their pessimistic take on the current state of affairs. Yet, these two pop culture aficionados might reply that *Star Trek's* Captain Picard would support their aspirational vision and say, "things are only impossible until they're not."