renewable energy sources) rather than downstream in the supply chain (e.g. electricity companies that use these sources to generate electricity). The reason is that downstream subsidies increase the demand for renewable energy sources, which increases the price of them. This causes lower income countries to switch to comparatively cheaper nonrenewable sources, which offsets the savings in carbon emissions. In contrast, subsidizing the production of renewable energy sources results in a lower price for these sources, which makes lower income countries more likely to adopt them. The economics and political economy of renewable energy sources could be further investigated as well.

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The Downsizing of Economics Professors: How It Will Happen, and Why It Will Succeed. PAYSON, STEVEN. Lanham, MD: Lexington Books, 2017. Pp. 182. \$90.00.

Purdue University, a traditional mid-sized public university in Indiana, in 2017 acquired the large online and for-profit Kaplan University to create a new university named Purdue University Global. Many in academia viewed the merger negatively because they feared that changes will be made to the traditional university. Many in the business and public policy communities viewed the merger skeptically because they are accustomed to change being slow or non-existent in higher education. The Chancellor of Purdue University, Mitch Daniels, has been a controversial figure given his efforts to graduate students in three rather than four years and for efforts to use Kaplan's technology to expand the use of distance education. Daniels himself remarked "In a sector that so slow to change, or even recognize the threats it's facing, you don't have to move very far to be seen as different.^{1*}" The slowness of change in the structure and processes in the academy is only one reason why higher education is so costly. The other reason why higher education is costly is that economists often refrain from participating in many restructuring

¹Ratnesar, Romesh (2017, December 25). "Intro to Mitchonomics." *Bloomberg Businessweek*, 4552, 66-71.

of the academy conversations.

Steven Payson, in *The Downsizing of Economics Professors*, explores one reason why economists have consciously decided not to frequently discuss college costs and how to control these costs through the use of online education and massive open online courses (MOOCs) – it is in their self-interest not to. While economists, especially those of a neoclassical persuasion, acting in a self-interested fashion is hardly newsworthy, there is a hypocrisy that is present as well when economists speak because economists typically encounter the impact of technology on professions and advocate for the Schumpeterian 'creative destruction' of certain occupations. A notable exception to this is for economics professors who advocate for less online education based on the idea it is inferior to the in-person lecture.

Payson intends that the book will lobby to economists "...in their own language, and in reference to their own subject matter" that embracing distance education and accepting the technology-fueled reduction of their professional ranks is in their own and in society's best interest. Payson begins by exploring other industries that have been altered by technology and the support that economists have shown for workers in these industries to retrain and seek employment elsewhere. Payson argues that technology applied to the higher education industry ought to have a similar impact on workers. Economics professors, as described by Payson, have historically served the following roles:

- stores of knowledge
- independent and objective creators and evaluators of ideas and theories
- participants in debates over paradigm shifts

These roles however have been altered by technology with the result that there should be fewer teaching economists courtesy of lectures delivered to the masses. This larger 'restructuring' of the economics professor occupation however has been slow to emerge because economists have a vested interest in diminishing the value of technological change (through research that shows inferior learning outcomes) and instead advocating for in-class lectures.

Payson chose not to engage in an extensive discussion of the scholarly literature to motivate his understanding. Instead, Payson focused on a series of papers that were presented on the effectiveness of MOOCs at the 2014 American Economic Association Annual Meeting. These papers, while not exhaustively covering the literature, provided Payson with an opportunity to highlight the typical misunderstandings of MOOCs and provide a template, perhaps unintentionally, for critiquing research on MOOCs. These misunderstandings include MOOCs being understood as failing to have an impact because of the high student failure rate and MOOCs undermining the existence of elite programs.

Payson uses the remainder of the text to highlight the advantages to using MOOCs. These benefits include an ability for campuses to permit families to modularize what high education services they receive (housing, campus amenities, and laboratories), a better classroom experience as students can replay lectures, better instruction as faculty members prepare better and balance their discussion, and more engaged students as impassioned faculty inspire. The MOOC also offers benefits to taxpayers in the form of lower tuition costs and potentially a better educational output. Payson concludes that change for the economics profession is inevitable and that change will be slow because of the organized resistance to it. Payson however believes that economists can better prepare for this inevitability by finding other suitable employment.

Payson's strong advocacy for MOOCs is a necessary complement to the strong resistance to MOOCs that is typically encountered in the scholarly literature. With that said, there are a number of areas of caution concerning the book. First, this book is engaged in advocacy with space devoted to how to engage in a letter writing campaign to public officials and the use of impassioned language (such as 'deceive' and 'cheated') to dismiss or diminish those that call for no change in higher education. Second, this book is not a traditional scholarly text and by lacking a literature review, the reader may wonder whether Payson's advocacy is misplaced. However, the content of Payson's arguments remains convincing for those who are steeped in the literature in the way that it highlights the lack of impartiality in the literature and the frequent jumping to conclusions that occurs. An example of a questioning of the literature that is inspired by Payson can be found when one reads something like the American Economic Review article "Virtual Classrooms: How Online College Courses Affect Student Success."2*

²Bettinger, Eric P., Lindsay Fox, Susanna Loeb, and Eric S. Taylor. 2017. "Virtual Classrooms: How Online College Courses Affect Student Success." *American Economic Review* 107 (9): 2855-2875.

The authors conclude that students who learn online instead of in-person receive lower grades and are less likely to stay enrolled in school. If one were not to have read Payson and simply pored over the data in the *American Economic Review* article, one might possibly be convinced that online education is, in fact, inferior. The strength of Payson's text is that the reader becomes more skeptical of the generalizability of such conclusions.

It is critical nature of Payson's text that inspires criticism about the strength of the in-person lecture and merits the attention of readers who, if they are economists, must confront the changing nature of their profession. But perhaps the understated strength of reading Payson's text is that it distinguishes the free college initiatives that emphasize a transfer of the expense to taxpayers from initiatives where college tuition costs are free for students because the cost of education has been reduced through the use of technology. When economists advocate for only the former rather than the latter, they seem preoccupied with stalling change in higher education. Payson's text encourages readers to reconsider the roles attributed to faculty members, rethink how faculty members teach, and redesign the research agenda and expectations of faculty members.

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The Theory of Competition and Collusion Policy. JOSEPH E. HARRINGTON, JR. Cambridge, MA: The MIT Press, 2017. Pp. x, 133. \$35.00.

This monograph covers illegal collusion, and how antitrust laws and litigation impact the incentive to collude. While the book centers on examining these issues mostly in a game-theoretic manner, it does offer interesting insights into competition policy both in the United States and elsewhere, especially the European Union (EU). Harrington teaches at the University of Pennsylvania.

Harrington in Chapter 1 defines collusion when "firms in market *coordinate* their behavior....to [create] a *supracompetitive outcome*" in terms of price, relative to what would be seen in a Nash equilibrium of an oligopoly game (p. 1). The author notes that the resulting collusive agreements could also allocate quantities, geographic markets, or other