Administrators vs. the Faculty: Promotion, Tenure, & Hiring Decisions

by

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# Abstract

I consider the likelihood academic administrators overrule faculty recommendations on hiring, promotion, and tenure. Administrators and faculty value power. For administrators, more power is a greater likelihood of overturning faculty recommendations. Faculty have greater power the less likely their recommendations are overturned. The accuracy of assessment of candidates by administrators and faculty, the value for power, and the value placed on correct decisions (approving good candidates and rejecting bad candidates) affect the likelihood administrators overturn faculty recommendations. Robert Hutchins, president and later chancellor of the University of Chicago, is discussed because he apparently had a high value for power.

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# **1. Introduction**

Most universities allow a great deal of discretion to the faculty (Lazear, 1995). Hamermesh (2018) finds evidence that faculty are underpaid. A survey of faculty shows that independence of new ideas is important to them, and that job security and flexibility of time are not relatively important. Faculty were not asked how they valued power in terms of appointment, promotion, and tenure of their colleagues. However, faculty generally care a great deal about the quality of their colleagues. As Robert Lucas noted:

"Certainly in our profession, the benefits of colleagues from whom we hope to learn are tangible enough to lead us to spend a considerable fraction of our time fighting over who they shall be, and another fraction travelling to talk with those we wish we could have as colleagues..."<sup>1</sup>

I do not consider the value to faculty of some aspects of their jobs such as broad freedom in terms of research and teaching. What I am interested in is the value faculty and administrators have for power over hiring, promotion, and tenure decisions. I consider power in terms of whether the administration overrules faculty recommendations in those decisions. A value for power by the faculty could be one reason faculty are underpaid.

The first analysis by economists of the value for power of which I am aware is Becker (1991).<sup>2</sup> Becker assumes individuals value power. He analyzes promotion tournaments in which

<sup>&</sup>lt;sup>1</sup> Lucas (1988), p. 38.

<sup>&</sup>lt;sup>2</sup> Becker's paper was unpublished, and apparently was not distributed to others. It will be published in a volume of his unpublished papers (Becker, 2023, forthcoming).

power is fixed and rises at higher levels in a firm. I propose to treat power as a choice variable, and I do not consider a tournament.<sup>3</sup>

The higher the probability administrators overrule a faculty personnel recommendation, the more power for administrators and the less power for faculty. Perri (2018) considers the potential tradeoffs in errors---favorably recommending bad candidates, and unfavorably recommending good candidates---when using only a department personnel committee or also using an outside committee. In his model, the probability administrators overrule faculty recommendations is exogenous. Assuming faculty and administrators value power yields an optimal choice of this probability by administrators. The tradeoff in errors considered by Perri (2018) is ignored herein because the administrative structure is fixed with one recommending faculty body.

In Section 2, I develop a model in which an administrator decides how often to overrule a faculty recommendation on hiring, promotion, or tenure. The reasons administrators may differ from faculty in how they evaluate individuals in personnel decisions are considered in Section 3.

 $<sup>^{3}</sup>$  Labor economists and industrial relations specialists have considered the gains to a firm from worker empowerment---managers shifting power or authority to subordinates. Gibbs *et al.* (2010) note the evidence of a trend in recent decades towards more multi-tasking, which implies more worker discretion and productivity. Gibbs (2023) considers how worker autonomy enhances learning, and how that relates to intrinsic motivation. Lazear (2012) argues that leaders choose the right direction for an organization, and then delegate authority. Freeman and Lazear (1995) analyze the effect on profit from power sharing with workers. The question then is how much power should be given to workers over decisions that affect the entire firm (Lazear, 1995). Prendergast and Topel (1996) argue that supervisors value their power to affect the welfare of their subordinates. They do not consider the allocation of power in an organization. Two recent experimental papers that deal with what can be called power are those of Owens *et al.* (2014) and Bartling *et al.* (2014). The former paper finds evidence individuals prefer to control their own payoffs and will sacrifice earnings to maintain control. The latter paper finds that principals value decision rights.

In Section 4, I illustrate a particularly meddlesome administrator, former University of Chicago president and chancellor Robert Hutchins. Section 5 has a summary of the results.

# 2. The model

I normalize faculty size to one. I also assume one administrator. The fraction of the time the administrator will overrule a faculty recommendation when the administrator and the faculty disagree is *p*. Thus, *p* is power for the administrator and 1-*p* is power for the faculty. Power is valued by  $v(\bullet)$ , with  $v(p) \equiv v_A$  and  $v(1-p) \equiv v_F$ . I do not assume the administrator values power any differently than does the faculty. I wish to see what results occur without relying on differences in the value for power. Allowing for differences in the value of power is straightforward and is discussed in Section 4.

Suppose there are bad and good candidates. I assume that the probability of either the faculty or the administrator correctly assessing a candidate is the same whether the candidate is good or bad, and the costs of Type One and Type Two errors are the same. Thus, the fraction of either type of candidate is irrelevant for my analysis. In the Appendix, I show that the results of the model are essentially unchanged if there are different values for recommending good candidates and rejecting bad candidates.

I define the following terms.

•  $\phi_A$  is the value of a correct decision to the administrator.

•  $\phi_F$  is the value of a correct decision to the faculty.

 $\bullet f$  is the probability the faculty accurately assesses the candidate.

- *a* is the probability the administrator accurately assesses the candidate.
- *r* is the probability of a correct decision.
- $w_F$  is the faculty salary.
- *w<sub>A</sub>* is the administrator salary.
- $\omega$  is the alternative salary for the faculty.
- $\Omega$  is the administrator's objective function.
- $B = w_A + w_F$  is the budget constraint.

The administrator and faculty assessments of candidate quality are assumed to be independent. There are two justifications for this assumption. First, as argued in Section 3, administrators may use different criteria than the faculty in judging candidate quality. Second, the administrator's choice of the likelihood of overturning a faculty recommendation, p, means the administrator does not ignore the faculty assessment of a candidate when the administrator makes a decision---unless p = 1.

The administrator cares about own power and pay<sup>4</sup> and the expected value of a correct decision. Thus, we have:

$$\Omega = v_A + r\phi_A + w_A = v_A + r\phi_A + B - w_F, \tag{1}$$

<sup>&</sup>lt;sup>4</sup> Although it appears the administrator's pay is controlled by that individual, administrator pay is limited by the budget and faculty application constraints.

substituting in for *w*<sup>A</sup> from the budget constraint.

The application constraint for the faculty is:

$$w_F + r\phi_F + v_F \ge \omega. \tag{2}$$

Assuming the application constraint holds as an equality, and substituting into  $\Omega$  for  $w_F$ , the administrator maximizes:<sup>5</sup>

$$\Omega = v_A + v_F + r\phi + B - \omega, \tag{3}$$

with  $\phi \equiv \phi_A + \phi_F$ . Thus, via the application constraint for the faculty, the administrator cares for the total value (to the administrator and the faculty) of both a correct hire and power.

To determine r, there are three ways to get a correct decision.<sup>6</sup>

1) The faculty gets it right and the administrator agrees; this probability is fa.

2) The faculty gets it right, the administrator gets it wrong but does not overturn the faculty; this probability is f(1-a)(1-p).

<sup>&</sup>lt;sup>5</sup> If there is a cost of *c* for every incorrect decision, then the term -(1-r)c would be included in  $\Omega$ . Then, in the FOC, instead of having the term  $\phi \frac{\partial r}{\partial p}$ , there would be the term  $(c + \phi)\frac{\partial r}{\partial p}$ , with  $\frac{\partial r}{\partial p} = a - f$ . A higher cost of an incorrect decision has the same effect as a greater benefit of a correct decision.

<sup>&</sup>lt;sup>6</sup> In the Appendix, I consider the case when the benefit of recommending a good candidate or rejecting a bad candidate is not the same. If we considered a problem as in Perri (2018), where a tradeoff exists between accepting bad candidates and rejecting good candidates, then differences in benefits and costs of those decisions would be important.

3) The faculty gets it wrong, the administrator gets it right, and the administrator overturns the faculty decision; this probability is (1*-f*)*ap*.

Adding the three ways to get a correct decision and simplifying, we have r = f(1-p) + ap. Thus, the probability of a correct decision is the weighted sum of the accuracy of the administrator and the faculty in making a correct decision. The weights are the probabilities the administrator does and does not overturn the faculty recommendation when the administrator and the faculty disagree. If the administrator never overturns the faculty, r = f---only the faculty assessment of candidate quality matters. If the administrator always overturns the faculty, r = a---only the administrator assessment of candidates matters.

**Proposition 1.** Suppose faculty and the administrator value power equally. Then the administrator will overturn a faculty recommendation less (resp. more) than 50% of the time if the faculty is more (resp. less) accurate than the administrator in evaluating candidate quality.

**Proof.** The proof comes from the first order condition.

**Proposition 2.** The more (resp. less) accurate is the faculty (resp. the administrator) assessment of a candidate for promotion or tenure, the more power is given to the faculty.

**Proposition 3.** The more the faculty and the administrator value power, the more power is shared (i.e. p approaches  $\frac{1}{2}$ ).

**Proposition 4.** The more a correct decision is valued, the more power is given to whoever is a more accurate assessor of candidate quality.

**Proofs.** The proofs of Propositions 2 - 4 come from comparative static analysis.

Maximizing  $\Omega$  w.r.t. p yields:

$$\frac{\partial\Omega}{\partial\nu} = \phi(a-f) + \nu'_A - \nu'_F = 0. \tag{4}$$

$$\frac{\partial^2 \Omega}{\partial p^2} = v_A^{"} + v_F^{"} \equiv \text{SOC.}$$
(5)

If there is no value for power, so v = v' = 0, then  $\frac{\partial \Omega}{\partial p} = \phi(a - f)$ . Then the FOC holds only if f = a but the SOC does not hold. In that case,  $\frac{\partial \Omega}{\partial p} < 0$  if f > a, and  $\frac{\partial \Omega}{\partial p} > 0$  if a > f. If the faculty is more accurate than the administrator in judging candidate quality, p = 0. If the opposite is true, p = 1. If power is valued, but v'' = 0, then  $v'_A = v'_F$ , so again  $\frac{\partial \Omega}{\partial p} = \phi(a - f)$ , and either p = 0or p = 1.

Horowitz *et al.* (2007) find strong experimental evidence for diminishing marginal value of goods. It is not clear why power should be any different. Thus, let v'' < 0. If a = f, the FOC implies  $v'_A = v'_F$ , or  $p = \frac{1}{2}$ . If a > f, the FOC implies  $v'_A < v'_F$ , or  $p > \frac{1}{2}$ . If a < f, the FOC implies  $v'_A > v'_F$ , or  $p < \frac{1}{2}$ . Thus, Proposition 1 is proved.

To prove Propositions 2 - 4, let  $v(\bullet) = \theta u(\bullet)$ , with  $\theta > 0$ , u' > 0, and u'' < 0. Totally differentiate the FOC w.r.t. *p*, *a*, *f*,  $\theta$ , and  $\phi$ :

$$\frac{dp}{da} = \frac{\phi}{-SOC} > 0,\tag{6}$$

$$\frac{dp}{df} = \frac{\phi}{SOC} < 0,\tag{7}$$

$$\frac{dp}{d\theta} = \frac{u'_A - u'_F}{-SOC},\tag{8}$$

$$\frac{dp}{d\phi} = \frac{a-f}{-SOC}.$$
(9)

Not surprisingly, the more accurate the administrator or the faculty is, the more power is allocated to that entity (*eqs.*(6) and (7)).

Clearly  $\frac{dp}{d\theta} > 0$  if a < f ( $p < \frac{1}{2}$ ), and  $\frac{dp}{d\theta} < 0$  if a > f ( $p > \frac{1}{2}$ ). A greater value for power implies more power sharing. Why? Suppose a < f so  $p < \frac{1}{2}$ ,  $v'_A > v'_F$ , and  $u'_A > u'_F$ . The FOC requires  $\theta(u_A - u_F) = \phi(f - a)$ . Given  $\phi$ , f, and a, a larger  $\theta$  means the marginal value for power is increased more for the administrator than it is for the faculty. Thus, p increases towards  $\frac{1}{2}$ . If a > f, the opposite happens.<sup>7</sup> Thus, regardless of who is the more accurate assessor of candidate quality, a greater value for power means less of a difference in power between the administrator and the faculty---p moves towards  $\frac{1}{2}$ .

If a > f, so  $p > \frac{1}{2}$ , a greater value for making a correct decision (a larger  $\phi$ ) means an even larger value for p. Conversely, if a < f, so  $p < \frac{1}{2}$ , a greater value for making a correct decision means an even smaller value for p. More power goes to the more accurate judge of a candidate the more valuable a correct decision is. Thus, Propositions 2 - 4 are proved.

Using *eqs*. (8) and (9), assume the faculty and the administrator have the same value for power and ability to assess candidate quality. Then neither the amount by which power is valued nor the importance of a correct decision on hiring, promotion, and tenure affects *p*:

 $\frac{dp}{d\theta} = \frac{dp}{d\phi} = 0.$  In that case,  $p = \frac{1}{2}$  always.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Then  $p > \frac{1}{2}$  and  $u_A < u_F$ . A greater value for power then means p is reduced towards  $\frac{1}{2}$ .

<sup>&</sup>lt;sup>8</sup> The fact  $p = \frac{1}{2}$  if f = a and the administrator and faculty have the same value for power is also evident from the FOC (eq.(4)).

Casual empiricism suggests that administrators infrequently go against faculty recommendations on appointments, promotion, and tenure. This suggests that p is low, which would be true if a < f. Are there reasons to believe that administrators are less accurate judges of candidate quality than the faculty?

# 3. Are administrators different?

As considered above, administrators may differ from faculty in the accuracy of assessment of candidates for hiring, promotion, and tenure. In an analysis of the effects of either one or two faculty personnel committees, one in a department and the other outside the department, the evidence is that almost all of the universities with top seventy-five economics departments have outside committees. As shown in Perri (2018), this means it is likely that the outside committee is more accurate than the department committee. The reason that can be so is the outside committee sees what the department committee has recommended before the former committee makes a recommendation. This point was made by Lazear and Gibbs (2015) in the context of evaluating projects in a business.

Should one not expect the administrator to be more accurate than the faculty, given that the administrator has seen the faculty recommendation? I argue that administrators behave differently than faculty for two reasons. First, administrators are less likely to be active researchers than faculty, and thus are less capable of judging research quality. Second, and possibly of more importance, administrators are more likely to consider issues faculty may consider extraneous.<sup>9</sup> Thus, assuming the faculty uses the correct criteria to judge candidates---

<sup>&</sup>lt;sup>9</sup> If administrators place less value on a correct decision, then  $\phi_A < \phi_F$ , which is of no consequence for my analysis since what matters is  $\phi \equiv \phi_A + \phi_F$ .

an argument with which administrators might not agree---administrators would tend to be less accurate judges of a candidate's quality than would the faculty.

# 4. The case of Robert Hutchins

In the model developed in Section 2, administrators and faculty are assumed to have an identical value for power. I now consider when that is not the case. Plausibly administrators may value power more than faculty. It may be that some individuals become administrators *because* they have a relatively high value for power.

Consider the case of the University of Chicago when Robert Hutchins was president (1929-1945) and later chancellor (1945-1952), the latter a position created for Hutchins that left him as the senior administrator but with fewer direct responsibilities with the faculty.<sup>10</sup> Hutchins ignored many department requests for appointments and promotions, sometimes offering his own candidates for appointments. He seldom explained his judgments about scholarly quality.<sup>11</sup>

In 1938, Hutchins vetoed the promotion to full professor and tenure of Harry Gideonese, despite unanimous support for Gideonese in the Department of Economics.<sup>12</sup> Gideonese was a vocal critic of Hutchins. There is more information about appointments in the economics department under Hutchins because of the important article by Mitch (2016*a*) that details hiring in that department in 1946. Jacob Viner was about to leave Chicago for Princeton, and the Department of Economics (UCDE) sought good candidates to replace him. The UCDE chair was

<sup>&</sup>lt;sup>10</sup> E-mail to the author from David Mitch, February 7, 2020.

<sup>&</sup>lt;sup>11</sup> Dzuback (1991), p. 160.

<sup>&</sup>lt;sup>12</sup> Ebenstein (2015), p. 132. Gideonese had been at the University of Chicago since 1928, and was an associate professor who had previously been turned down for tenure by Hutchins. Note, the AAUP seven year rule for tenure was proposed in 1940.

Theodore Schultz, a future Nobel *laureate*, as were four of the individuals considered by the UCDE for appointment: John Hicks, Paul Samuelson, George Stigler, and Milton Friedman.

Samuelson visited UCDE in April, 1946, but was not offered a position then. Frank Knight opposed Samuelson, and Hutchins, who interviewed Samuelson, found him to be "vicious."<sup>13</sup> In September, Schultz met with University of Chicago president Robert Colwell, and indicated that a majority of the UCDE supported hiring Samuelson. Schultz had waited to make Samuelson an offer because he wanted the support of Frank Knight.<sup>14</sup> It is not clear if Schultz had obtained Knight's support, or whether Schultz had decided to make the offer anyway. The administration supported the offer<sup>15</sup> for Samuelson to begin in the fall of 1947, but the offer was declined.

It does not appear that Hutchins vetoed Samuelson's appointment. Rather, Knight's opposition delayed an offer to Samuelson. However, Hutchins opinion of Samuelson was not shared by a majority of the UCDE, and did not seem to be based on scholarly promise. Samuelson was well known and regarded at that time.

In the spring of 1946, the UCDE wished to make an offer to George Stigler. Hutchins was ill, and Stigler met with President Colwell, who vetoed the appointment saying he did not think Stigler was brilliant, and that he lacked the drive of Viner or Schultz.<sup>16</sup> This was the judgment of a Biblical scholar on a future Nobel *laureate* in economics.

These examples illustrate my argument that academic administrators often lack the ability to judge faculty quality, or base personnel decisions on criteria that are not related to quality.

<sup>&</sup>lt;sup>13</sup> Backhouse (2017), pp. 606-607.

<sup>&</sup>lt;sup>14</sup> Mitch (2016*b*), p. 48.

<sup>&</sup>lt;sup>15</sup> Presumably the offer was for a tenured position given Samuelson's reputation, the fact that the next candidate, Stigler, already held the rank of professor at Minnesota, and that the person actually hired---Friedman, with less of a scholarly record at that time than Samuelson or Stigler---was appointed with tenure. I thank David Mitch for his insights on this (e-mail to the author February 7, 2020).

<sup>&</sup>lt;sup>16</sup> Mitch (2016*a*), p. 1722.

Thus, I suspect that f > a, which is why we do not often see academic administrators go against faculty personnel recommendations.<sup>17</sup>

What might explain Robert Hutchins relatively frequent overruling of faculty recommendations on hiring, promotions, and tenure? Hutchins appeared to have been quite smitten with his own expertise on many academic issues. He lectured at other universities on his philosophy of higher education, wanted to reorganize the groupings of departments at the University of Chicago (UC), and was viewed as an autocrat by faculty at UC and elsewhere. In 1938, the Chicago Daily News described a war at UC between Hutchins and the faculty over the former's power.<sup>18</sup> Hutchins argued as if he explained "...obvious things to the wrong-headed."<sup>19</sup> Finally, Hutchins enjoyed a great deal of attention in the popular press. Stories on him appeared in the New York Times and Time Magazine.<sup>20</sup>

Thus, there is evidence that Hutchins was particularly interested in power. There is no reason to believe the UC faculty shared such a preference for power, so this may be a situation in which  $\theta$  was not the same for all. With  $\theta_A$  the administrator's value for power, then, using eq.(8),  $\frac{dp}{d\theta_A} = \frac{u'_A}{-soc} > 0$ . Even if f > a, so  $p < \frac{1}{2}$ , and if there were a relatively large value for making good tenure decisions ( $\phi$ ), a big enough value for power by the administrator could raise p above the relatively low value that generally seems to exist in academia today.

#### 5. Summary

<sup>&</sup>lt;sup>17</sup> Harvard's administration made news recently when it vetoed a tenured appointment for economist Gabriel Zuckerman in the Kennedy School of Government (Magness, 2020, and Tankersley and Casselman, 2020). The provost at Harvard at that time, Alan Garber, has a PhD in economics (and an MD), and has a strong publication record. Thus, in this case, it is difficult to argue that he is incapable of judging the scholarly quality of an economist. <sup>18</sup> Ashemore (1989), pp. 160-163, 176, and 554.

<sup>&</sup>lt;sup>19</sup> Shils (1990), p. 214.

<sup>&</sup>lt;sup>20</sup> Dzuback (1991), p. 162.

I consider the likelihood administrators overturn faculty recommendations on hiring, promotion, and tenure. I assume both administrators and the faculty value power. A greater likelihood of overturning a faculty recommendation means more power for the administration and less power for the faculty. One result is, if faculty are more accurate than the administration in assessing candidate quality, the administration will overturn faculty recommendations less than fifty percent of the time if the administration and the faculty have the same value for power. Anecdotal evidence suggests administrators do not frequently overturn faculty personnel recommendations.

Another result is that a greater value of correct personnel decisions reduces the likelihood of administrators overturning faculty recommendations if faculty are more accurate than the administration in judging quality of those considered for hiring, promotion, or tenure. It may be that schools with a significant emphasis on research have a greater value for correct recommendations, particularly in tenure decisions. Then a test of the model would be to obtain data that show whether there is an inverse relation between research emphasis and the frequency of administrators overturning faculty recommendations on, for example, tenure.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Robert Hutchins behavior at a premier research institution contradicts the hypothesis that a greater value for research implies less likelihood of administrators overturning faculty recommendations on hiring, promotion, and tenure. However, his behavior might well have not been the norm, possibly because he had a relatively high value for power.

# Appendix

Now consider the possibility there is a different impact of recommending good and bad candidates.

Let *g* be the probability a candidate is good,  $C_A$  be the cost to the administrator of recommending a bad candidate (alternatively, the benefit of not recommending a bad candidate), which happens with a probability of (1-r)(1-g), and  $C_F$  be the corresponding cost to the faculty.

The administrator again wishes to maximize  $\Omega$ . Using the budget constraint:

$$\Omega = v_A + w_A + rg\phi_A - (1-r)(1-g)C_A = v_A + B - w_F + rg\phi_A - (1-r)(1-g)C_A.$$
(A1)

The faculty application constraint is now:

$$w_F + rg\phi_F - (1-r)(1-g)C_F \ge \omega. \tag{A2}$$

Assume the application constraint holds as an equality and substitute in  $\Omega$  for  $w_F$ :

$$\Omega = v_A + v_F + B - \omega + rg\phi - (1 - r)(1 - g)C, \tag{A3}$$

with  $\phi \equiv \phi_A + \phi_F$  as before, and  $C \equiv C_A + C_F$ . Maximizing  $\Omega$ :

$$\frac{\partial\Omega}{\partial p} = [\phi g + C(1-g)][a-f] + \nu'_A - \nu'_F = 0.$$
(A4)

If the cost of recommending a bad candidate is the same as the benefit of recommending a good candidate, then  $\phi = C$  and the FOC is the same as in the text---*eq*.(4):  $\phi(a - f) + v'_A - v'_F = 0$ .

The first term in brackets in the FOC is positive. Thus, we again have the result that  $p = \frac{1}{2}$  if

$$f = a, p > \frac{1}{2}$$
 if  $f > a$ , and  $p < \frac{1}{2}$  if  $f < a$ .

With the FOC essentially the same as in the text, comparative statics are also similar.

# References

- Ashmore, Harry S., 1989. Unseasonable Truths: The Life of Robert Maynard Hutchins. Boston: Little, Brown and Company.
- Backhouse, Roger E., 2017. *Founder of Modern Economics: Paul A Samuelson*, Vol. 1. Oxford, UK: Oxford University Press.
- Bartling, Björn, Fehr, Ernest, and Herz, Holger, 2014. "The Intrinsic Value of Decision Rights." *Econometrica* 82 (November): 2005-2039.
- Becker, Gary S., 1991. "Promotion Tournaments, Power, Earnings, and Gambling." Working paper, University of Chicago.
- \_\_\_\_\_, 2023, forthcoming. *The Economic Approach: Unpublished Writings of Gary S. Becker*. Edited by Elias, Julio J., Mulligan, Casey B., and Murphy, Kevin M. Chicago: University of Chicago Press.
- Dzuback, Mary Ann, 1991. Robert M. Hutchins: Portrait of an Educator. Chicago: University of Chicago Press.
- Ebenstein, Lanny, 2015. *Chicagonomics: the Evolution of Chicago Free Market Economics*. New York: St. Martin's Press.
- Freeman, Richard B., and Lazear, Edward P., 1995. "An Economic Analysis of Works Councils." Chapter 2 in Works Councils: Consultation, Representation, and Cooperation in Industrial Relations. Edited by Joel Rogers and Wolfgang Streeck. Chicago: University of Chicago Press: 27-50.
- Gibbs, Michael, 2023. "Job Design, Learning and Intrinsic Motivation." Working paper, University of Chicago (February).
- Gibbs, Michael, Levenson, Alec, and Zoghi, Cindy, 2010. "Why Are Jobs Designed the Way They Are?" In *Research in Labor Economics: Jobs, Training and Worker Well-Being*, Volume 30. Edited by Solomon W. Polachek and Konstantinos Tatsiramos. United Kingdom: Emerald Publishing Limited: 107-154.
- Hamermesh, Daniel S., 2018. "Why are Professors 'Poorly Paid'?" *Economics of Education Review* 66 (October): 137-141.
- Horowitz, John, List, J., and McConnell, K. E., 2007. "A Test of Diminishing Marginal Value." *Economica* 74 (November): 650-663.
- Lazear, Edward P., 1995. Personnel Economics. Cambridge, MA: MIT Press.
- \_\_\_\_\_, 2012. "Leadership: a Personnel Economics Approach." *Labour Economics* 19 (January): 92-101.
- Lazear, Edward P., and Gibbs, Michael, 2015. *Personnel Economics in Practice*, 3<sup>rd</sup> ed. New York: Wiley.
- Lucas, Robert E., 1988. "On the Mechanics of Economic Development." *Journal of Monetary Economics* 22 (July): 3-42.

- Magness, Phillip W., 2020. "Harvard Finally Stands up to Academic Duplicity." *American Institute of Economic Research* (February 25).
- Mitch, David, 2016a. "A Year of Transition: Faculty Recruiting in Chicago in 1946." *Journal of Political Economy* 124 (December): 1714-1734.
- \_\_\_\_\_, 2016b. Online Appendix for "A Year of Transition: Faculty Recruiting in Chicago in 1946." *Journal of Political Economy* 124 (December): 1-59.
- Owens, David, Grossman, Zachary, and Fackler, Ryan, 2014. "The Control Premium: A Preference for Payoff Autonomy." *American Economic Journal: Microeconomics* 6 (November): 138-161.
- Perri, Timothy, 2018."Economics of Evaluation (with Special Reference to Promotion and Tenure Committees)." *Economics of Governance* 19 (February): 1-19.
- Prendergast, Canice, and Topel, Robert H., 1996. "Favoritism in Organizations." *Journal of Political Economy* 104 (October): 958-978.
- Shils, Edward, 1990. "Robert Maynard Hutchins." The American Scholar 59 (Spring): 211-235.
- Tankersley, Jim, and Cassleman, Ben, 2020."The Team Behind the Wealth Tax Fight." *New York Times* (Late edition, February 20): B.1.