Journal of Economic Perspectives—Volume 3, Number 3—Summer 1989—Pages 37–40

Auctions as an Allocation Mechanism in Academia: The Case of Faculty Offices

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A six-story addition to Arizona State University's College of Business was completed in 1983, causing entire departments to be uprooted and relocated. Faculty offices had to be reassigned as a result. What seemed to be a trivial problem, the allocation of offices, turned out to be a very complex one. This is the story of how that problem was resolved.

In the new facility each suite of offices contains an equal number of internal and external offices. The internal offices are windowless while the external offices each have one wall of windows, making the differences between internal and external offices quite significant. In addition to the potential for claustrophobia in the internal offices, the topography of Phoenix turns anything above two stories into a terrific vantage point. And since many faculty view their offices in a manner similar to how middle management in private industry views the size of desks—a symbol that signals their importance to others in the organization—the assignment of offices took on a flavor of a crucial decision.

Given the importance of the offices and the relative scarcity of choice locations, administrators faced a problem of allocation: How were the offices to be assigned? One of the most interesting aspects of observing management in an academic setting is the difficulty the system has with such decisions. Reliance on the market system in academia is virtually nonexistent. The incentives run counter to those of a private market; even in the case of the budgeting process it is common to find non-fungibility from year to year and often from line item to line item, thus ensuring a lack of incentives for spending anything less than the entire budget allocation before the end

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of the fiscal year. Not unexpectedly, then, the departments in the College of Business at ASU became a microcosm of the world of alternative allocative systems in their attempt to reassign offices.

The Management Department had no doubts about how to allocate its offices. Viewing itself as the decision-making leader of the College of Business, the department's chairman immediately ordained that offices would be assigned on the basis of "seniority"—defined as the length of time spent at ASU. The member of the Management Department with the longest ASU employment would have first choice, the second longest the second choice and so on until new incoming assistant professors received the remaining offices. The Marketing and Accounting Departments quickly followed the lead of the Management Department and adopted seniority as their allocation mechanism.

As might be expected, not all faculty members in these departments were satisfied with the outcomes. Some professors, who through luck or successful rent-seeking had obtained the best offices in the old facility, ended up with poorer offices in the new facility and complained vehemently. Assistant professors argued that given the demands to do research, they had to spend long hours in the office; therefore they deserved the better locations far more than older professors who rarely used their offices.

The chairman of the Finance Department noticed the squabbling that occurred in the Accounting, Marketing, and Management Departments and decided to forego the seniority mechanism. Instead, he posted a sign-up sheet outside his office one day without any warning. Faculty offices were chosen in order of signature on the sign-up sheet. In theory, nobody would be excluded *a priori* from getting one of the better offices. In reality, the system was biased toward those who walked past the chairman's bulletin board most often. Those professors sequestered in their offices carrying out research failed to see the sign-up sheet. Those faculty out of town, on sabbatical, on leave of absence, or ill ended up with the last choices. After the allocation, many argued that the system favored those "homeless" professors who simply wander the halls looking for distractions.

The chairman of the Statistics Department, realizing the deficiencies with the seniority mechanism and the problems with the "shock" technique of arbitrarily posting a sign-up sheet, decided to roll dice. This was initially met with excitement since everyone would start with an equal chance for the best offices. However, grumbling soon developed as those with the better offices in the old building began to fear a welfare loss through no fault of their own and with no way to offset the loss. The actual outcome of the dice experiment confirmed the fears. A recall of the initial allocation occurred and the use of the seniority system resulted.

The Economics Department was also affected by the reassignment. (In fact, the systems were put in place nearly simultaneously rather than the sequential order we're discussing in this paper). The chairman, Boyes, wanted to minimize rent-seeking by individual faculty members and recognized that rationing by price would achieve this as well as lead to efficiencies not associated with other allocative mechanisms. Consequently, he decided to create a market environment for the sale of offices. But without private property rights to the offices, and faced with the political constraints of an academic institution, it was necessary to step carefully into a situation where a market system could be used.

A request for suggestions on how to allocate the offices was sent to the department faculty. Perhaps not surprisingly, given that academics (even economists) are not used to thinking of allocations within their institutions in terms of a market system, none of the suggestions included rationing by price. The "serious" schemes proposed included one from the senior member of the department who said that there was only one way to allocate the offices, the way it had been done at great institutions for centuries, on the basis of seniority. Other proposals, some made with tongue in cheek, were to base the allocation on research productivity, teaching effectiveness, height, weight, race, sex, and religion. One member even suggested a brawl—called office wrestlemania. With no suggestions related to the creation of a market and with no information regarding the value of an office, the chairman decided to rely on an auction as the allocation mechanism.

The question then became the kind of auction to undertake. The literature suggested a number of possibilities, including oral auctions (English or Dutch) and sealed-bid auctions (single or repeated bids). Since the main concern of the chairman was to minimize transaction costs and rent-seeking rather than to maximize revenue, a single sealed-bid auction was chosen as the allocation mechanism.[1]

Faculty were informed that three weeks hence, every faculty member in the department could submit a single sealed bid. The highest bid would receive the first choice, and so on down the line. Those who chose not to submit a bid would be guaranteed an office, but they would choose last. Ties would be broken by random selection. After an office was "purchased," the faculty member owned the property rights to that office as long as he or she remained at ASU. If the faculty member was away from campus for leave or sabbatical, the office could be rented but would not be confiscated (previously offices could be and often were reassigned). In addition, offices could be subleased to other faculty or visitors as opportunities arose.

The proceeds from the auction were used to create a fund for graduate student scholarships, travel, and dissertation support. Although most faculty members saw this as worthwhile, there was very little expressed interest in where the money actually went as long as the chairman didn't pocket it. Half of the proceeds from subsequent rents or subleases would also go to the scholarship fund, but the remaining 50 percent would be returned to the faculty member in the faculty member's budget allocation.[2]

The three-week interval gave members of the department the opportunity to seek information regarding the elasticity of demand for window offices and to attempt to form cartels. Once the 24 bids were submitted and opened, the allocation went

[1]Given that there were no untenured faculty in the department at the time and that only two members were within six years of retirement, the expected lives at ASU of all participants was about the same. The auction, therefore, was not biased against specific groups of faculty.

[2]The same year of the auction an annual budget allocation was begun. Each faculty member was assigned a fund from which travel, copying, journal subscriptions, and so on could be financed. Any funds remaining at year end could (at some rate less than one) be carried over to the next year.

smoothly. The highest bid was $500, the next highest bid was $250, the cut-off for a window office was $75, and a total of $3200 was raised. The only *ex post* complaint came from the highest bidder who, in a winner's curse, paid twice what the second place bidder paid.

The experiment was a raging success until one of the authors, Happel, decided to relay the allocation process and its subtleties to his principles courses. The auction provided valuable lessons regarding the incentives for not allowing a market environment to arise in academic settings as well as the standard lessons on the efficiency of the market process. Students readily grasped the idea that the price mechanism undermines the power of university administrators and realized that how the money was actually spent is irrelevant in terms of achieving an efficient allocation scheme. One of the students, who happened to be a reporter from the ASU campus newspaper, published the story on the front page of the newspaper. The story was picked up by the Phoenix media and then by media elsewhere. While the department seemed to enjoy the outcome and notoriety that accompanied the experiment, the chairman had to face the onslaught of the central administration and the local public. This was exactly the type of publicity that an administration reeling from a series of problems with the athletic program wanted to avoid. They were not able to deflect the allegation that public property had been sold. During the ensuing weeks, a great deal of energy was devoted to pointing out the costs and benefits of the market mechanism and other allocation mechanisms to these administrators and to the general public. Yet, it was due only to the fact that the money collected had gone into a scholarship fund that the controversy eventually dissipated without serious recriminations.

Since the initial reallocation in 1983, the negative aspects of the experiment have virtually disappeared and even the central administration now appears to think it novel and interesting. Since the first auction, three window offices have been vacated. Sealed bids for these offices have yielded much higher prices than did the initial auction, with the average final sale price of $350. For those faculty members with a strong desire for a window office, the acquisition of such an office in 1983 appears to be one of the better spending decisions that they made the past five years as the average price increase has been about 25 percent per year. And while the purchase price is rising steadily, those of you passing through Arizona for a short stay may wish to inquire about rental rates. They are quite reasonable, especially during the low-tourism season.