# AN ECONOMIC EXPLANATION FOR THE CHANGING NATURE OF UNIVERSITY FACULTY

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## ABSTRACT

This paper makes a significant twofold contribution to the study of the economics of education.  First, it uses industrial analysis to identify market groupings in American higher education.  Second, it uses a variant of the Rothschild and White model to explain why the growing market for nontraditional education has resulted in (i) the entry of for-profit institutions and (ii) the diminishing of full-time teaching.

## INTRODUCTION

American higher education has been extensively analyzed by economists. Perhaps the seminal work in this area was edited by Hoenack and Collins [5].  Since then some, including Winston [18, 19], and Bok [2], have flatly stated that market models (characterized as "for profit") are inappropriate for analyzing American higher education.  Others, including Horton [6], have taken a different view, that even nonprofit colleges and universities are ultimately subject to the profit motive.  In this paper, American higher education is characterized as consisting of several different markets.  A brief introduction to the historical development of American higher education is followed by the analysis of the markets of American higher education. Then, a model is developed for institutions of higher education in which the development of two related phenomena are cited in particular: for-profit higher education, particularly in nontraditional programs, and the movement toward part-time faculty.

## ECONOMIC APPROACHES TO HIGHER EDUCATION

The idea of market mechanisms permeating higher education is not new. David Starr Jordan, president of Stanford during the 1890s, wrote that

> It is not for the university to decide on the relative values of knowledge.  Each man *makes his own market*, (italics added) controlled by his own standards.  It is for the university to see that all standards are honest, that all work is genuine. (Quoted in Versey [16] p. 14.)

A century later, the idea that faculty members are entrepreneurs dealing in academic content rankles many scholars, particularly those in liberal arts.  Mangan [8] cites two history professors at the University of Rochester who not only questioned the awarding of entrepreneurship grants in liberal arts, but used such a grant to characterize Gandhi and Hitler as entrepreneurs.  Said one of the professors, "The focus on entrepreneurship detracts from teaching about lasting values like wisdom and humanity that don't have any commercial value." (Ibid)  To see why some

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institutions venture into areas such as nontraditional education for working adults while others do not, it is instructive to classify institutions according to market characteristics.
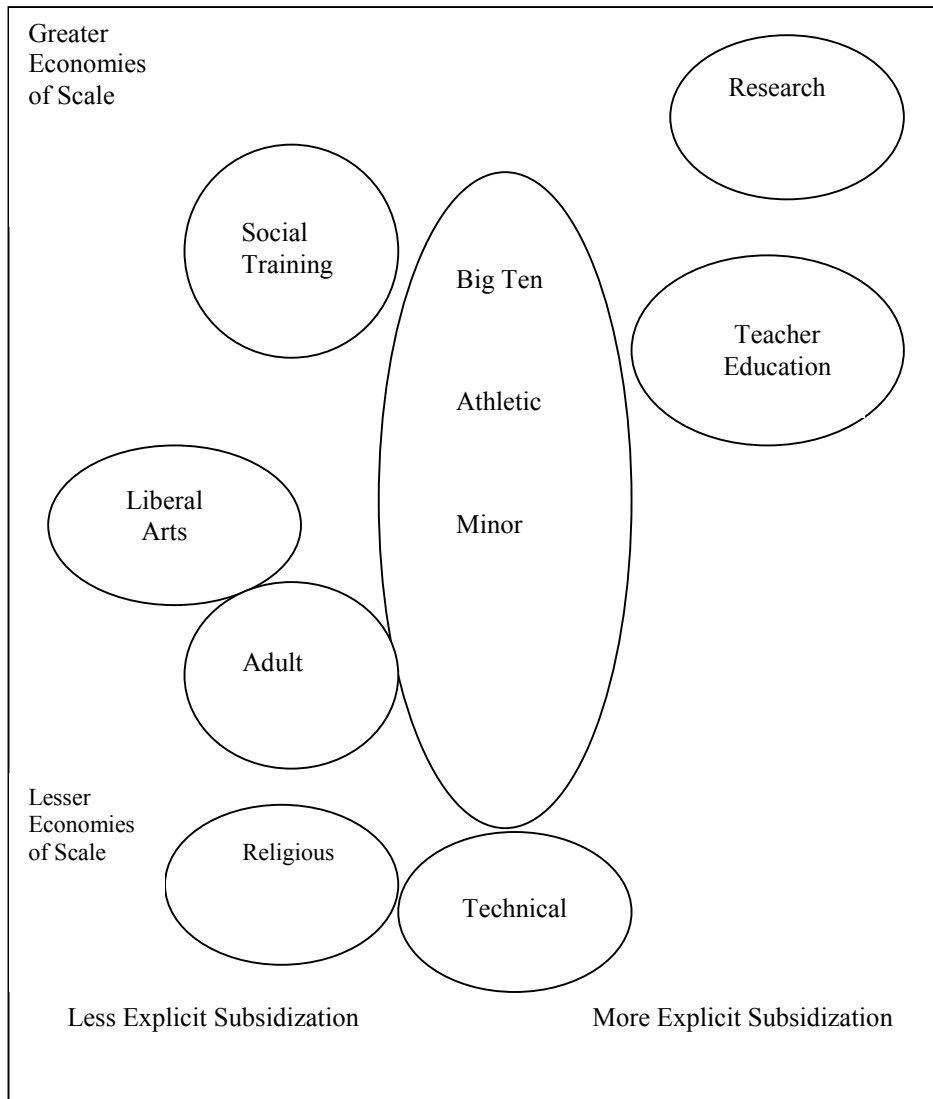
The current Carnegie classification system for institutions of higher education evolved from the differing missions and stakeholders of colleges and universities. Research institutions, for example, generally seek grant funding at higher frequencies and levels than do doctoral institutions. Comprehensive institutions are likelier to offer master's degrees in a variety of areas than are liberal arts institutions, and so on. The development of prominent institutions in each area is detailed in Versey [16].

The chief initial conditions for the formation of colleges and universities may be characterized as follows: religious, land grant, teacher education ("normal" schools), liberal arts, and technical training.[1] Although institutions may change missions over long periods of time, most American colleges and universities today can be classified in rough groups without much loss of generality. (see Miller, [10]).

The classification of institutional function by primary focus was suggested by Oster [11]. She proposed grouping activities for a given educational institution using an organizational form matrix in two dimensions: complexity of goals and extent of economies of scale. Figure 1 performs such an analysis in slightly different dimensions by grouping *type of institution* by economies of scale, with the complexity of goals approximated by explicitness of government subsidies to the type of institution.[2] It shows broad categories that are roughly correlated with the Carnegie classifications. These classifications have been grouped according to likely economies of scale. For example, research institutions and universities with high profile ("Big Ten" type) athletic programs are likely large, because research and high profile athletic programs require enormous outlays of capital investment and high degrees of operation leverage (substantial fixed cost). On the other hand, institutions specializing in religious mission require few laboratories. Liberal arts programs require more books, but still deliver primarily lecture. Technical institutes require machinery, computer software, etc., so that some economies of scale are present, but this is somewhat offset by the fact that technological equipment ages fast and places large institutions at a relative disadvantage.

Oster's approach is an application of the transactions cost approach to economics. She has written extensively of the functions that colleges and universities can profitably outsource. According to the transactions cost literature (Williamson, [17], Simon [13], and others), firms exist largely to save on transactions costs. Situations in which individual inputs can be hired and coordinated externally tend to give rise to markets. Situations in which contracting costs for individual inputs would be greater than those incurred by organizing inputs, give rise to firms, in a situation similar to that mentioned above by Starr. Abstracted from related issues, such as uncertainty and bounded rationality, firms as well as organizations exist because they are more efficient than complicated and costly networks of individual contracts. Presumably, colleges and universities will grope toward a long-run steady state in which they have offloaded those functions which they are most inefficient in providing and embraced those functions in which they are efficient.

**Figure 1**
**Institution Type Grouped by Function, Economies of Scale, and Explicitness of Subsidization**

Greater
Economies
of Scale

Research

Social
Training

Big Ten

Teacher
Education

Athletic

Liberal
Arts

Minor

Adult

Lesser
Economies
of Scale

Religious

Technical

Less Explicit Subsidization                    More Explicit Subsidization

Thus far, the discussion of outsourcing in higher education has concentrated on ancillary services, such as food service, security, course management, etc. There does not appear to have been a serious discussion of outsourcing *teaching*. Such a thought might strike some as being akin to brain transplantation. After all, teaching is what most institutions claim to be about.

But there *is* a substantial literature on the role of adjunct instructors. *The Chronicle of Higher Education* has run articles for the past several years on the growing use of adjuncts. Gappa and Leslie [4] and a recent American Federation of Teachers report [1] have both highlighted the use of part-time faculty by colleges and universities in an effort to save money. Smallwood [14] has written of debates on campuses throughout the U.S. on whether or not full-time and part-time faculty should work together or oppose one another. It is the central thesis of this paper that outsourcing of inputs for American colleges and universities is taking place in teaching, which can explain the rapidly changing professorate and increasingly important role of part-time faculty.

**The Preoccupation with Traditional Education**

In a pathbreaking paper, Rothschild and White [12] succinctly characterized the markets for traditional higher education. Starting with a competitive model in which students were regarded as inputs and human capital the output in higher education, Rothschild and White noted that

> ...if increasing returns to scale are combined with unique attributes of individual universities, the standard problem of Chamberlinian monopolistic competition – with the possibility of either too much or too little variety provided – can arise. (p. 584)

In their model of colleges and universities, each type of institution faced a different technology:

$$Y^t = G^t(s^t_1, \ldots, s^t_n; H^t_1, \ldots H^t_N), \ t = 1, \ldots, T, \qquad \text{(i)}$$

where $Y^t$ is the amount of resources used in each technology (or university, indexed by t), $s^t_n$ is the number of students of type n attending university t, and $H^t_n$ is the aggregated amount of human capital of type n produced by university t. The $G^t$ functions are assumed convex.

The model is a good tool for analyzing the conditions under which scholarships arise, as well as explaining some of the market structure anomalies of higher education. Acknowledging that classroom experiences and extracurricular activities lead to significant positive externalities, Rothschild and White investigated circumstances under which competitive prices internalize those externalities.

Fundamental to the Rothschild and White approach is the assumption that students are both inputs and customers. While some might agree with the latter half of the assumption, others would surely take issue with the former. According to the andragogical method, to be discussed later, adult learners need only be pointed in the right direction and then let go. Most of such students are already working in industry

and therefore need no complex degree plans or career counseling. Consequently, there is no scope for full-time content experts (professors) in adult learning.

The basic Rothschild and White model assumed constant returns to scale. While Figure 1 above implies that adult degree completion programs experience diseconomies of scale, that is only a partial equilibrium condition. In reality, there is ample evidence that small institutions can replicate their adult degree completion operations indefinitely (Carnevale, [3]). The pattern has thus far been for an institution to start such a program on its main campus, and then use the proceeds to subsidize the replication of the program at remote sites, typically large cities with untapped student potential (Horton, [6]). While this effectively shuts large institutions out, it has proven a gold mine for small schools, particularly those previously specialized in religious or technical education.[3]

The key result is Rothschild and White's equation (13), reproduced here as equation (ii):

$$- \quad \partial G^t / \partial s_n^t = w_n, \text{ if } s_n^t > 0, \qquad\qquad (ii)$$

where $w_n$ are Lagrangean multipliers.

This result has the following interpretation: "The optimal allocation of students must be such that the marginal rate of substitution of a student of type n with respect to the general input is the same at all universities that students of type n attend," for the optimal allocation of students to obtain.

While the Rothschild and White approach is of value in explaining why universities self-select into a monopolistically competitive market structure, it does not consider specific problems and opportunities arising from the movement toward nontraditional adult degree completion programs.

The class of institutions specializing in adult degree completion programs is growing and somewhat homogeneous. Pioneered by Malcolm S. Knowles (Knowles, [7], such programs have been a very fast growing area for many smaller colleges and universities. At the heart of the *andragogical* (adult-learning) method espoused by Knowles is the idea that adult learners are not to be molded by traditional pedagogical methods, but rather are savvy customers who know what they want and only need to be guided by *facilitators*. The role of the faculty in Knowles' approach is subsequently severely limited.

It may be that the reason why traditional educators like Rothschild and White, Winston [18, 19], and Bok [2] have concentrated so closely on traditional education is that nontraditional adult degree completion programs are simply "off their radar screens." It is no coincidence that Winston and Bok both lament the growth of for-profit universities and the movement away from full-time faculty. Winston's primary criticism of the market model for higher education is that upper tier and research institutions tend to subsidize instruction, implying that smaller institutions that tend to be tuition-driven face a limited future because they compete head-to-head in the same marketplace as highly subsidized institutions.

**A Model Incorporating Nontraditional Adult Programs**

Perhaps a more appropriate specification for those institutions (technologies) that cater to adult students is that the output is a credential, or degree, rather than human capital. While this may fly in the face of traditional educators, who may view themselves as important factors in making each student a "whole person,' the andragogical method of teaching nontraditional, adult, students presumes that each student teaches him or herself, with a minimum of classroom and institutional externalities. Therefore, the only input in the adult learning program is the facilitator (faculty) and the only output is the degree earned. Since the other factors of production, such as physical plant and library, do not substantially contribute to the institution's marginal cost of entering the adult market, they are assumed constant.

The working adult student, a different market niche target than traditional college-age students, is charged a different rate of tuition at most private institutions. The Consortium for the Advancement of Adult Higher Education (CAAHE) is a nonprofit organization which has as members private institutions that have Knowles-type programs for adult higher education. Many of these institutions are religious in nature, but offer professional degree programs in areas such as business in which the institution has not been traditionally strong.

The students in these programs are already working in their chosen fields and need a credential for advancement in their firms or organizations. Defense contractors, airlines, hospitals, municipalities and financial institutions are but a few of the types of employers whose employees enter the nontraditional programs. These employers do not care whether their employees obtain a degree from Harvard or from Harding. So long as the degree is from a regionally accredited institution, it is eligible for federal financial aid.

Consider a small, highly specialized institution that sees a niche market in a different, highly specialized area. How does that institution enter the niche market? The cheapest and most efficient way is to obtain accreditation by a recognized body. If an institution is already regionally accredited to offer degrees in religion, for example, then the marginal cost of achieving regional accreditation to offer, say, business degrees is quite low. The library and physical resources are in place. The primary obstacle is having faculty who will pass muster with the accreditation standard.[4] The primary ingredient, then, other things the same, is faculty. With the minimum faculty resource requirements in place, much of which can be adjunct, the institution is highly likely to be successful in providing a positive signal in the marketplace for each of its graduates. Without the minimum faculty resources in place, the program is assured of failure.

For an institution with large economies of scale, such as a research institution, the specification for "profit" (borrowing the term from Rothschild and White), is as follows:

$$\pi^i = \Sigma \; \Sigma p^i_j \; s^i_j - \Sigma\Sigma a^i_j f^i_j, \qquad\qquad (1)$$

where p is "price," or tuition rate, s is enrollment, a is faculty compensation per hour, and f is the number of hours of faculty employed. The i indexes the institution, and

the j indexes the type of student served. In the simple case of interest, the problem reduces to a two by two case:

$$\pi^1 = p^1_A s^1_A + p^1_B s^1_B - a^1_A f^1_A - a^1_B f^1_B \text{ , and} \qquad (2a)$$

$$\pi^2 = p^2_A s^2_A + p^2_B s^2_B - a^2_A f^2_A - a^2_B f^2_B. \qquad (2b)$$

If, furthermore, institution 1 is designated as the traditional institution with greater economies of scale, then we assume that both traditional students (type A, indexed by j) and nontraditional students (type B, indexed by j) are charged the same tuition, resulting in equation (3a)

$$\pi^1 = p^1 [s^1_A + s^1_B] - a^1_A f^1_A - a^1_B f^1_B. \qquad (3a)$$

Keeping in mind that institution 1 is the larger institution, it is assumed that traditional students (type A) choose institutions based on many factors, including faculty (f), library facilities, (L), mission (M), and a host of other variables, including athletic programs, music, location, etc. Nontraditional students (type B), however, are assumed to make their selection based only on faculty, in particular, teaching faculty. These two assumptions may be summarized by the enrollment functions:

$$s^1_A = s^1_A(p^1; f^1_A, L^1, M^1, \ ) \qquad (4)$$

$$s^1_B = s^1_B(p^1; f^1_B) \qquad (5)$$

$$s^2_A = s^2_A(p^2_A; f^2_A, M^2, \ ) \qquad (6)$$

$$s^2_B = s^2_B(p^2_B; f^2_B) \qquad (7)$$

Substituting the behavioral equations (4) and (5) into equation (3a) yields

$$\pi^1 = p^1 [s^1_A(p^1; f^1_A, L^1, M^1, \ ) + s^1_B(p^1; f^1_B)] - a^1_A f^1_A - a^1_B f^1_B, \qquad (8)$$

and substituting (6) and (7) into (2b) yields

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$$\pi^2 = p^2_A \, s^2_A(p^2_A; f^2_A, M^2, \ ) + p^2_B \, s^2_B(p^2_B; f^2_B) - a^2_A f^2_A - a^2_B f^2_B. \quad (9)$$

The choice variable for each type of institution is faculty hiring, f. The first order conditions for a maximum are

$$\partial \pi^1 / \partial f^1_A = p^1 \, \partial s^1_A / \partial f^1_A, + a^1_A = 0 \quad\quad\quad (8a)$$

$$\partial \pi^1 / \partial f^1_B = p^1 \, \partial s^1_B / \partial f^1_B + a^1_B = 0 \quad\quad\quad (8b)$$

$$\partial \pi^2 / \partial f^2_A = p^2_A \, \partial s^2_A / \partial f^2_A, + a^2_A = 0 \quad\quad\quad (9a)$$

$$\partial \pi^2 / \partial f^2_B = p^2_B \, \partial s^2_B / \partial f^2_B, + a^2_B = 0 \quad\quad\quad (9b)$$

The second-order conditions for a maximum, that the appropriate bordered Hessian matrix of second partial derivatives is negative semidefinite, is assumed to be met through quasiconcavity of the objective function. Equations (8a) and (8b) can be solved for the following conditions:

$$a^1_B / a^1_A = (\partial s^1_B / \partial f^1_B) / (\partial s^1_A / \partial f^1_A) \quad\quad\quad (10a)$$

Since the tuition rate paid by both traditional and nontraditional students in institution type 1 is identical, then the faculty pay differential in the first type of institution depends only on the degree to which traditional students value the credentials of faculty more than do nontraditional students. Since faculty pay per hour is demonstrably less for part-time faculty in such institutions, condition (10a) would seem to imply that nontraditional students, for whom the lion's share of part-time faculty are used, value the faculty role less than do traditional students.

In institution type 2, however, a different situation occurs. In this setup, we assume that nontraditional students are charged a significantly higher rate of tuition than are traditional students $(f^2_A > f^2_B)^5$ and that traditional faculty within the institution are paid more than nontraditional faculty $(a^2_A > a^2_B)$ from equations (9a) and (9b), the following condition obtains:

$$(\partial s^2_A / \partial f^2_A) > (\partial s^2_B / \partial f^2_B) \quad\quad\quad (10b)$$

or, that in type 2 institutions, there is even a greater gulf between the expectations traditional students have of faculty and the expectations that nontraditional students have.

From equations (8b) and (9b),

$$\partial s^1_B / \partial f^1_B = a^1_B / p^1 \tag{11a}$$

$$\partial s^2_B / \partial f^2_B = a^2_B / p^2_B \tag{11b}$$

Winston, Bok, and others stress the stratification of higher education markets into tiers based on traditional education. According to this view, direct competition between high tier institutions, such as those concentrating on research or liberal arts, and lower tier institutions, such as those focusing on religious or other missions, is unlikely. This is because traditional colleges and universities enjoy greater subsidies for enrollment as they branch out into other activities, such as athletics, research, and other ventures. (Winston, [19]). Therefore, it would seem that "the deck is stacked" in favor of type 1 institutions and against type 2 institutions.

Equations (11a) and (11b), however, indicate where competition between the types of institutions is very likely: in the market for adjunct faculty.[6] If type 2 institutions charge differing tuition rates between traditional and nontraditional students, as assumed, then they have the deeper pockets to compete for the largely homogeneous pool of adjunct faculty. Since the demand for faculty is a derived demand and nontraditional education as a good exhibits diseconomies of scale, then, as might be expected from standard labor market theory, type 2 institutions dominate and subsidize their traditional programs to compete more effectively with the larger, type 1 institutions. That this very phenomenon is occurring at present is documented in Carnevale [3].

Data from the U.S. Department of Education [15] bear this out. Table 1 shows the percentages of (i) total revenues from tuition, and (ii) total expenditures on instruction by institution type, as well as the percentage of full-time faculty employed by institution type. The Winston claim, that "higher level"

**Table 1**
**Percentage of Revenues and Expenditures Due to Teaching (Tuition and Instruction)**
**and Percentage of Full-time Faculty – U.S. Institutions, 1999-2000**

| Type of Institution | Percentage of Revenue from Tuition | Percentage of Expenditure for Instruction | Difference | Percentage of Faculty Full-time |
|---|---|---|---|---|
| Public Research | 17.1 | 25.5 | 8.1 | 79.3 |
| Public Doctoral | 21.9 | 32.8 | 10.9 | 44.8 |
| Public Comprehensive | 26.7 | 35.8 | 9.1 | 63.1 |
| Public 2-yr. | 20.3 | 43.7 | 23.4 | 37.6 |
| Private Research | 12.9 | 30.1 | 17.2 | 72.5 |
| Private Doctoral | 42.1 | 38.1 | - 4 | 53.5 |
| Private Comprehensive | 53.1 | 38.1 | - 15 | 50.5 |
| Private Liberal Arts | 32.5 | 34.2 | 1.7 | 59.1 |
| For-Profit | 83.8 | 30.5 | - 53.3 | 50.7 |

Source:                        NSOPF, U.S. Department of Education, 1999

institutions tend to subsidize instruction are borne out by the fact that percentage of expenditure for instruction exceeds percentage of revenue from tuition for both private and public research institutions, as well as for all public institutions. Presumably, grants and government subsidies enable these institutions to compete with private doctoral and masters institutions. At the other extreme are for-profit institutions, which earn tuition revenues far in excess of the cost of instruction. The degree to which the institution is subsidized by teaching is positively correlated with its reliance on part-time faculty. Treating "other" institutions as private, for-profit, as reported in the table, leads to the conclusion that slightly over half the faculty at private, for-profit institutions are full-time. Such a percentage translates into a Pearson product moment correlation coefficient of 56.2 percent. If, however, as Horton [6] and others claim, "full-time faculty" in for-profit institutions are actually administrators with few actual teaching duties, then the coefficient of correlation rises to as high as 98.8 percent.[7]

An anomaly leaps out. Public institutions tend to rely heavily on part-time faculty, yet heavily subsidize teaching. Part of this phenomenon may lie in the perception that community colleges frequently take on the residual students from other institutions and therefore have to staff many more sections of classes per full time student equivalent enrollment (FTE). More importantly, however, large state government subsidies for most public institutions do not come at the cost of sacrificing other activities. In other words, most state institutions do not have to "rob Peter to pay Paul" in shifting resources between full-time and part-time faculty to the extent as do private institutions.

Such resource shifting, predicted by the model above, may also be present in data contained in Table 2.

**Table 2**
**Percentage of Workweek Misallocated to Teaching,**
**According to Faculty, Fall 1992 and Fall, 1999**

| Type of Institution | Full-time Faculty | | Part-time Faculty | |
|---|---|---|---|---|
| | 1992 | 1998 | 1992 | 1998 |
| All | 5.5 | 1 | 2.1 | .6 |
| Public Research | 3.8 | 3.6 | .2 | 2.5 |
| Public Doctoral | 5.1 | 3.4 | 2.6 | 1.3 |
| Public Comprehensive | 7.9 | 6.1 | 4.5 | 1 |
| Public 2-yr. | 4.7 | 3.3 | 2 | 0 |
| Private Research | **1.5** | **3.8** | **1.2** | **-5** |
| Private Doctoral | **5.1** | **3.7** | **2.2** | **-2.2** |
| Private Comprehensive | **6.6** | **5.8** | **.5** | **1.1** |
| Private Liberal Arts | 7.6 | 5.7 | 2.7 | .5 |
| Other | 6.7 | 5.5 | 2.9 | 1.9 |

Source:  NSOPF, U.S. Department of Education, 1999

Table 2 depicts faculty estimates of how much of their workweek is devoted to teaching versus how much they think should be devoted to teaching. It is noteworthy that for every type of institution, full-time faculty think that more of their time is "misspent" on teaching then do part-time faculty. For example, for all institutions,

full-time faculty sampled by the U.S. Department of Education in the Fall of 1992 thought that teaching received 5.5 percent more of their time than it should have, whereas part-time faculty thought that teaching received 2.1 percent more of their time than it should have.  It is also interesting to note that, in 1998, faculty of both types thought that more of their time was being well spent on teaching.

The great exceptions are for most private institutions and for public research institutions.  Both private research and doctoral part-time faculty thought that they spent *too little* time teaching in Fall, 1998.  Both public research and private comprehensive institution part-time faculty thought that , in 1998, they were misspending *more* time teaching.  This indicates that those institutions use part-time faculty in fundamentally different ways than do other institutions.  Presumably, some of the part-time faculty in research and doctoral institutions are graduate students at those institutions.  Why they should respond differently for private institutions is not clear.

More evidence that the use of part-time faculty is affecting the use of full-time faculty comes from the Association to Advance Collegiate Schools of Business (AACSB).  According to Mangan [9],  the new accreditation standards for business schools has given rise to the following change:

> A part-time instructor who advises students outside the class and serves on committees could qualify as a "participating" faculty member, while an adjunct who simply shows up to teach a class would not.  Under the old standards, at least 75 percent of instruction had to be offered by full-time professors, most of whom were expected to have doctorates.

Milton R. Blood, accreditation director with the AACSB explained, "Instead of just looking at whether faculty members are full time or part time, we want to know how engaged they are in the life of the school."  If what is true for business schools is true for other departments in general, then it becomes clear that teaching is no longer valued as highly as are the trappings of academe, such as committee work, advising, and other ancillary activities.  After all, if the institution can hire a teacher for a few thousand dollars, but is compelled by the faculty labor market to spend tens of thousands for a professor, then it appears that the role of classroom teaching in American colleges and universities is declining in value.

## CONCLUSIONS AND EXTENSIONS

American higher education has been analyzed using traditional economic analysis, with at least one important aspect neglected:  The role of different higher education marketplaces, in particular, that for nontraditional adult education, in shaping relative demands for full-time and part-time faculty, has been ignored.  The andragogical approach of teaching nontraditional adult students has played a significant role in the growth of adjunct, or part-time, faculty in many different types of institutions.

A simple model in which a smaller type of institution that hires part-time faculty co-exists alongside a traditional university, indicates the standard labor market result that part-time faculty will dominate in the latter type of institution.  This allows

the smaller institution to effectively compete in the traditional student markets from which they would otherwise be excluded because of economies of scale.

Many important related questions need to raised and addressed. For example, to what degree are part-time faculty substitutable between institution type? It seems clear that full-time faculty wanting to switch markets between religious mission and, say, research, would have a very hard time recasting themselves. But is it relatively easy for a part-time teacher to switch between such markets? We suspect that the answer is "yes," but the issue needs further empirical study, particularly in light of changing expectations accreditation agencies such as the AACSB have of faculty. Such a determination is important, because it can be used to explain the success or failure of alternative compensation schemes for faculty.

Ultimately, the consumer is responsible for the quality of faculty teaching. For full-time and part-time faculty to see each other as opponents in a zero-sum game, or for them to regard administration as an enemy, is likely too simple a strategy to achieve optimality. Rather, rationally analyzing markets for faculty services and higher education, as this paper has attempted to do, is far more likely to produce optimal results.

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## ENDNOTES

[1] Miller [10] makes a compelling case for aligning the current Carnegie classification system with the historical evolution of cohort institutions.

[2] It is assumed that all institutions receive some type of government subsidy. Large, research institutions, especially "state-supported" universities, are obvious recipients of government subsidy, but other institutions, including most adult and religious schools, receive government assistance in the form of student loans. The two most notable exceptions are Grove City College and Hillsdale College.

[3] Gappa and Leslie [4] outline a commonly seen scenario in their pages 117 through 118. They tell of small, primarily rural, institutions that start up off campus sites and centers in urban areas in order to attract new students in those markets. Frequently, such programs are geared toward working adults, *vis-a-vis* the andragogical method. It appears that virtually all faculty hired at such sites and centers are part-time.

[4] This requirement can be as little as one full-time faculty member per program. The rest, one hundred or more, can all be adjuncts.

[5] This is the case for most of the CAAHE institutions, for example.

[6] Gappa and Leslie [4] cite studies that indicate virtually no difference in teaching quality between full-time and part-time faculty. While the result is debatable, it is important to realize that *real* differences in teaching quality between the two classes of faculty is less important than the *perceived* difference in the minds of students who

base their decision on which institutions to attend largely on their own subjective perceptions.

[7] To be sure, with advising, registration, and other functions, full-time faculty in most institutions of all types may be turn out to be primarily administrative, with diminished emphasis placed on teaching.