## 2011 Survey of Differential Tuition at Public Higher Education Institutions

American colleges and universities have historically charged the same tuition levels for all of their undergraduate majors (with the exception perhaps of laboratory fees). However, economists have long suggested that academic institutions might plausibly seek to charge different tuition levels for different majors based upon the cost of providing an education in each major and the income earning prospects that the major offers. Similarly, institutions might plausibly charge higher tuition levels for students who are further along in their programs, because the cost of educating advanced students (smaller classes) is often higher and because advanced students are more likely to complete their programs and thus to achieve the economic rewards from their programs. Faced with financial cutbacks, a growing number of public academic institutions are adopting differential tuitions by college or major, or by year of enrollment in the program.

To gauge how prevalent this trend has become, from November 2010 to March 2011 CHERI research assistants poured through the web pages of virtually all public academic institutions that offer bachelor's degrees searching for information on differential tuitions. Table 1 summarizes their findings.<sup>2</sup> In total, they found 143 public academic institutions with some from of differential tuition. The percentage of public institutions with differential tuition in 2010-2011 was highest, at 41 percent, at the doctoral institutions. If one further narrows the doctoral category to flagship doctoral institutions, the percentage increases to over one half.

Differential tuition for these doctoral institutions is typically by college, or by major, although a smaller percentage of them have differential tuition by year of enrollment, with upper-level students being charged more per credit hour than lower-level students. At the public master's institutions, differential tuition is almost always by college or major. In contrast, at the public bachelor's institutions, when differential tuition policies arise they are equally likely to be by college or major as by year of enrollment.

The most common majors for which differential tuition charges occur are business, engineering, and nursing. The CHERI research assistants also collected data from institutional web pages on the magnitudes of the differential tuition charges. Examples in 2010-2011 include a \$75 per engineering course fee at the University of Maine (a 9.4% increase over the in-state tuition of \$801 for a three credit course) and a

Employment, Education, Training and Youth Affairs, 1997)

<sup>&</sup>lt;sup>1</sup> See, for example, Stephen A Hoenack and William C. Weiler, "Cost Related Tuition Policies and University Enrollments", *Journal of Human Resources* 10 (3, 1975): 332-360 and John Siegfried and David Round, "Differential Fees for Degree Courses in Australian Universities" in John Pincus and Paul Miller eds. *Funding Higher Education: Performance and Diversity* (Canberra, Australia: Department of

<sup>&</sup>lt;sup>2</sup> An earlier version of table 1, which appeared in Ronald G. Ehrenberg, "American Higher Education in Transition: *Journal of Economic Perspectives* 26 (Winter 2012), contained slightly different numbers than appear in the current version because we discovered some coding areas in our data after the earlier version had been published.

\$460 per semester nursing program fee at the University of Kentucky (a 10.7% increase over the in-state lower-division semester tuition of \$4,305).

The process by which differential tuition policies have arisen and been have spread across American public higher education institutions has not been examined. Neither has there been any research on the possible consequences of differential tuition policies. For example, does differential tuition by major influence students' choice of majors? Do higher tuition levels for upper-level students affect students' persistence and graduation rates? If such effects exist, are they larger for students from lower-income families and how do such effects interact with state and institutional financial aid policies?

To help provide information necessary to answer these questions, during the summer of 2011 CHERI surveyed the 120 public institutions or public systems that our search of institutional web pages indicated had differential tuition in 2010-2011. Under the condition that their individual responses would not be made public, we asked them to provide us with information on the year that they first instituted differential tuition and the dollar levels of their differential tuition in each year.

Seventy eight of the 120 public institutions or systems responded to our survey for a 65% response rate. While these are the institutions for which we have good data on the magnitude of differential tuition levels over time, we were able to obtain data on the presence of differential tuition each year for all but 14 of the institutions from information contained in several years of the Integrated Postsecondary Education Data System (IPEDs). We emailed these 14 institutions, and 5 responded with the year they first started charging differential tuition. Thus, of the 143 institutions that had a form of differential tuition in 2010-2011, as of February 15, 2012 we have information on the year of first adoption of differential tuition for 134 of them.

Figure 1 illustrates how the number of institutions adopting differential tuition per year has changed over time. The height of the bar for each year is the number of the 143 institutions that adopted a form of differential tuition in the year. Figure 2 shows the total number of institutions that had a form of differential tuition in each year. While there are year to year variations in the share that first adopted in each year, peaks in the adoption rate occur in 1980 (1980-81 academic year), 1987, 1997 and 2002. These figures treat each campus as an observation, even if tuition is the same for the entire system. The later spikes are then due to several campuses from a university system all adopting differential tuition at the same time. The earlier spikes (1980 and 1987) may be statistical artifacts caused by the wording of the questions about differential tuition found in IPEDs.

A list of the institutions that we determined had a form of differential tuition in 2010-11 from our search of the institutional web pages appears in Table 2.

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<sup>&</sup>lt;sup>3</sup> This number is less than the 143 institutions with differential tuition for two reasons. First, in some state systems, for example, the California State College system, tuition policies are uniform at all institutions within the system. Second, at others, for example the Pennsylvania State System, tuition levels may differ across institutions but there was a single Institutional Research contact for the whole system.

Table 1

Percentages of 4-Year Public Institutions with Differential Undergraduate Tuition in 2010-2011

	Doctoral	Masters	Bachelors
Number of Institutions	174	271	126
Percent with any			
Differential Tuition	41	11	29
Percent with Differential			
Tuition by College or			
Major	39	10	21
Percent with Differential			
Tuition by Year Enrolled	10	4	21

Source: Author's calculations from search of institutional web pages during the November 2010 to March 2011 period. Bachelors institutions exclude public colleges that offer primarily associates degrees.

Figure 1

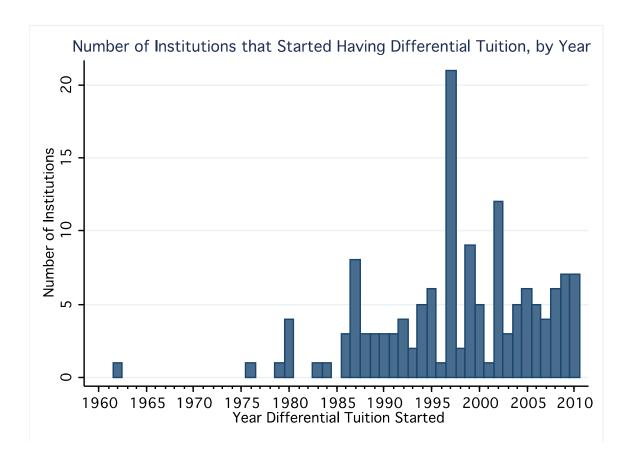
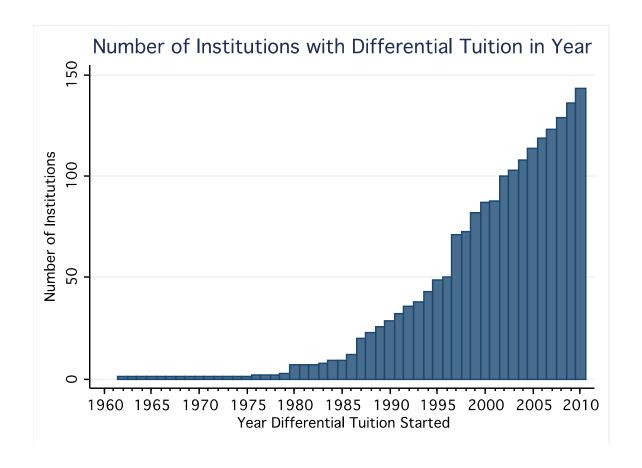


Figure 2



## Table 2

## Public 4-Year Universities which charged differential fees or tuition for students in a particular year (lower division or upper division) or major (or for selected classes in a major) in 2010-2011

(Source: Search of institutions' tuition/fees webpages)

University of Alabama in Huntsville

University of Alabama

University of South Alabama

University of Alaska Anchorage

University of Alaska Fairbanks

University of Alaska Southeast

Arizona State University

University of Arizona

University of Arkansas at Little Rock

University of Arkansas

Arkansas State University-Main Campus

California Polytechnic State University-San Luis Obispo

University of Colorado Denver

University of Colorado at Colorado Springs

University of Colorado at Boulder

Colorado State University

University of Northern Colorado

Colorado State University-Pueblo

University of Georgia

University of Hawaii at Hilo

University of Hawaii at Manoa

University of Idaho

University of Illinois at Chicago

University of Illinois at Urbana-Champaign

**Ball State University** 

Indiana University-Purdue University-Indianapolis

Indiana University-Kokomo

Indiana University-South Bend

Indiana University-Bloomington

Indiana University-Southeast

Indiana University-East

Iowa State University

University of Iowa

University of Northern Iowa

University of Kansas

Kansas State University

Pittsburg State University

Washburn University

Wichita State University

University of Kentucky

Louisiana Tech University

University of Louisiana Monroe

University of Maine at Augusta

University of Maine

University of Massachusetts-Lowell

University of Massachusetts-Dartmouth

Eastern Michigan University

Grand Valley State University

Lake Superior State University

University of Michigan-Ann Arbor

Michigan State University

Michigan Technological University

University of Michigan-Dearborn

University of Michigan-Flint

Northern Michigan University

Oakland University

Saginaw Valley State University

Wayne State University

Western Michigan University

Bemidji State University

Metropolitan State University

University of Minnesota-Twin Cities

University of Minnesota-Duluth

Saint Cloud State University

Montana Tech of the University of Montana

The University of Montana

Montana State University-Northern

The University of Montana-Western

Great Basin College

University of New Hampshire-Main Campus

Rowan University

Rutgers University - Camden

Rutgers University - Main Campus

Rutgers University - Newark

University of New Mexico-Main Campus

Northern New Mexico College

University of North Carolina at Charlotte

University of North Dakota

North Dakota State University-Main Campus

University of Cincinnati-Main Campus

Cleveland State University

Kent State University Salem Campus

Ohio State University-Lima Campus

Ohio State University-Mansfield Campus

Ohio State University-Marion Campus

Ohio State University-Newark Campus

Ohio State University-Main Campus

Ohio University-Eastern Campus

Ohio University-Chillicothe Campus

Ohio University-Southern Campus

Ohio University-Lancaster Campus

Ohio University-Main Campus

Ohio University-Zanesville Campus

University of Toledo

University of Central Oklahoma

University of Oklahoma Norman Campus

Oregon State University

Portland State University

Pennsylvania State University-Penn State Erie-Behrend College

Pennsylvania State University-Penn State New Kensington

Pennsylvania State University-Penn State Shenango

Pennsylvania State University-Penn State Wilkes-Barre

Pennsylvania State University-Penn State Worthington Scranton

Pennsylvania State University-Penn State Lehigh Valley

Pennsylvania State University-Penn State Altoona

Pennsylvania State University-Penn State Beaver

Pennsylvania State University-Penn State Berks

Pennsylvania State University-Penn State Harrisburg

Pennsylvania State University-Brandywine

Pennsylvania State University-Penn State Dubois

Pennsylvania State University-Penn State Fayette- Eberly Campus

Pennsylvania State University-Penn State Hazleton

Pennsylvania State University - University Park

Pennsylvania State University-Penn State Greater Allegheny

Pennsylvania State University-Penn State Mont Alto

Pennsylvania State University-Penn State Abington

Pennsylvania State University-Penn State Schuylkill

Pennsylvania State University-Penn State York

University of Pittsburgh-Bradford

University of Pittsburgh-Johnstown

University of Pittsburgh-Pittsburgh Campus

Temple University

Clemson University

Francis Marion University

South Dakota State University

University of Memphis

University of Tennessee

University of Houston

Texas A & M University

The University of Texas at Arlington

The University of Texas at Austin

Texas Woman's University
Utah State University
University of Utah
Castleton State College
Virginia Commonwealth University
Marshall University
West Virginia University Institute of Technology
West Virginia University
University of Wisconsin-Oshkosh
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
Purdue University-Main Campus