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. In total, they found 143 public academic institutions with some form 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

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2 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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3 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

<table>
<thead>
<tr>
<th></th>
<th>Doctoral</th>
<th>Masters</th>
<th>Bachelors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td>174</td>
<td>271</td>
<td>126</td>
</tr>
<tr>
<td>Percent with any</td>
<td>41</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>Differential Tuition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent with Differential Tuition by College or Major</td>
<td>39</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Percent with Differential Tuition by Year Enrolled</td>
<td>10</td>
<td>4</td>
<td>21</td>
</tr>
</tbody>
</table>

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.
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 Hawai'i at Hilo
University of Hawai'i 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