Using IPEDS Data to Generate Estimates of Freshmen Discount Rates

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Suffolk University

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2007 ACT Enrollment Planners Conference
What is Tuition Discounting?

“Tuition Discounting is the practice of reducing the cost of attendance to individual students by replacing portions of their tuition with funded and unfunded institutional student aid.”

-Ronald Gage Allan
How is the Discount Rate Calculated?

Option One:

(a) Gross Tuition and Fee Revenue $20,067,060
(b) LESS Institutionally Funded Financial Aid - 2,604,340
(c) EQUALS Net Tuition Revenue $17,462,720

(b)/(a) EQUALS the Tuition Discount Percentage 13.0%
How is the Discount Rate Calculated?

Option Two:

- Total FT Freshmen: 1014
- Total Institutional Grant: $2,604,340
- Average Grant: $2,568
- Tuition: $19,790
- Discount Rate (avg grant/tuition): 13.0%
NACUBO Categories

• SCLT: “Small College Lower Tuition” Less than 850 full-time new freshmen, tuition less than $23,600
• SCHT: “Small College Higher Tuition” Less than 850 full-time new freshmen, tuition greater than or equal to $23,600
• LCU: “Large Colleges and Universities” 850 or more full-time new freshmen
Average Discount

Average Freshmen Discount

All Colleges

- 1996
- 2005

LCU

- 1996
- 2005
Percent of Students Receiving Aid

Percent of Freshmen Receiving Aid

- SCLT
- SCHT
- LCU
- All
Concerns About Tuition Discounts

• Limiting access to higher education
• Impacts on fiscal health
• Effectiveness an enrollment management tool
• Competition
Access to Higher Education

- Growth in aid to wealthy students has outpaced growth in aid to needy students.
- In the 1990s the average private school grant aid for higher-income undergraduate students rose from 39% of that for lower-income to 82% of the average grant for lower-income students.
- Aid at public colleges and universities has seen similar increases.
Impact on Fiscal Health

• Growth in discount rates has been negatively associated with growth in net revenue.

• Source of funding changing from endowment-based to tuition revenue based

• Criticism from bond agencies
Effective Enrollment Mgt. Tool?

• Above-average growth in the discount rate was also associated with a decline in first-time, full-time freshmen
Graduating Seniors

High School Graduates

2,000,000

2,500,000

3,000,000

3,500,000

1990-91
1992-93
1994-95
1996-99
2000-01
2002-03
2004-05
2006-07
2008-09
2010-11
2012-13
2014-15
2016-17
Suffolk University Enrollment

Trends in Fall Semester Headcount Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>3,748</td>
</tr>
<tr>
<td>1989</td>
<td>3,865</td>
</tr>
<tr>
<td>1990</td>
<td>3,993</td>
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<tr>
<td>1991</td>
<td>4,203</td>
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<td>1992</td>
<td>4,334</td>
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<td>1993</td>
<td>4,500</td>
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<tr>
<td>1994</td>
<td>4,471</td>
</tr>
<tr>
<td>1995</td>
<td>4,640</td>
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<td>1996</td>
<td>4,925</td>
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<td>1997</td>
<td>5,032</td>
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<td>1998</td>
<td>5,259</td>
</tr>
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<td>1999</td>
<td>5,314</td>
</tr>
<tr>
<td>2000</td>
<td>5,784</td>
</tr>
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<td>2001</td>
<td>6,236</td>
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<td>2002</td>
<td>6,660</td>
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<td>2003</td>
<td>6,919</td>
</tr>
<tr>
<td>2004</td>
<td>7,000</td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>
Suffolk Net Tuition

Average Net Revenue per Freshman - Suffolk University

82% aggregate growth
The Data Side

• Getting data from IPEDS
  – IPEDS Peer Analysis
  – Pulling the data into Excel
  – Creating new variables to generate estimates of the freshman discount rate.
The Data Side

• Freshman Discount Rates
  – By Carnegie Classification
  – By acceptance rates
  – By combinations of factors
If you are unfamiliar with IPEDS data – you can start at: www.airweb.org.
Clicking on the link to IPEDS brings you to this page where you have a number of options to learn more about IPEDS and IPEDS training.

- **Jobs**
- **Affiliates**
- **Annual Forum**
- **Events Calendar**

**IPEDS Data Collection Training Center** - The IPEDS Data Collection Training Center serves as the clearinghouse for all information and training materials related to the IPEDS Data Collection surveys.

**National IPEDS Training Calendar** - Information on IPEDS training workshops across the country.

**Online IPEDS Module Selection** - Schedule an IPEDS workshop for your conference. Choose from a variety of data collection and data retrieval modules for beginning and advanced users. For an overview of the modules view the **IPEDS Training Menu**.

**IPEDS On-Demand Webinar Training** - Materials and information from Webinars sponsored by AIR.

**Web-Based IPEDS Tutorials** - These pages provide a link to the AIR tutorials for IPEDS Data Collection.

**IPEDS Trainers** - List of IPEDS Trainers for 2006-2007

**Self-Paced and Mediated On-Line IPEDS Courses** - On-line education is one of the fastest growing industries within higher education. AIR has created self-paced courses, particularly for beginners. These courses will incorporate existing training materials such as Webinar recordings and PowerPoint presentations, along with lecture materials, exercises and recorded lectures developed specifically for the Blackboard (Bb) courses.
Clicking on the link to National IPEDS Training Calendar shows you what the up-coming training opportunities are and where they are offered.

National IPEDS Training Calendar

2007

**November 7 - 9, 2007.** Details of the Michigan AIR conference will be announced soon. **Hands-on IPEDS workshops will be offered.**

**July 24, 2007.** The **North East Association for Institutional Research (NEAIR)** will hold a Summer Drive-In in Albany, New York, featuring an Overview of IPEDS, Overview of IPEDS COOL Overview of IPEDS Data Feedback Reports (DFR) & Web-based Executive Peer Tool (ExPT) presented by Ira Tyszler.

**June 22, 2007.** The **Maryland Association for Institutional Research** will hold two IPEDS workshops at Anne Arundel Community College – Arundel Mills Campus. Cel Johnson will present the Dataset Cutting Tool and Amin Muhammad will present the Peer Analysis System. Contact **Kevin Sellers** for details.

**April 11, 2007.** The spring meeting of the **Georgia Association of Institutional Research, Planning, Assessment, and Quality (GAIRPAQ)**, will be held at the Downtown Marriott in Augusta, Georgia. **Pat DeWitt** will present an IPEDS workshop.
You can get access to IPEDS webinar tutorials.

AIR On-Demand IPEDS Webinars

The Association for Institutional Research provides on-demand professional development services to its memberships via Web-based seminars, or Webinars. Webinars are a combination of Internet and telecommunications technologies, which enable AIR to bring expert advice and information to the desktops of members in a timely fashion.

Keyholders, New Users & Updates

2006 New Keyholder (9/26/06)
Webinar Audio & Slides (5.07 mb WMV)
Webinar Slides (.743mb PDF)

Overview of IPEDS (11/15/06)
Webinar Audio & Slides (3.866 mb WMV)
Webinar Slides (2.2 mb PDF)

Data Collection Surveys

Fall Surveys

Completions (11/1/06)
Webinar Audio & Slides (2.0 mb WMV)
Webinar Slides (.454 mb PDF)

Institutional Characteristics for Academic Reporters (11/1/06)
Webinar Audio & Slides (2.49 mb WMV)
Webinar Slides (.289 mb PDF)

Institutional Characteristics for Program Reporters (11/1/06)
To start at NCES.ED.gov/IPEDSPAS, you click “institution level”.

**IPEDS Executive Peer Tool and Peer Analysis System**

**Executive Peer Tool**
Allows access to data presented in the 2006 IPEDS Data Feedback Report for your institution and a comparison group of institutions.

**Peer Analysis System (PAS) and Dataset Cutting Tool (DCT)**
If you are using this system for the first time, click here to read an introduction. If you have used this system before and are familiar with the levels of access to the system, click on the desired level to login.

- **Guest Level**: Allows access to adjudicated data.
- **Institution Level**: Includes access to guest level files plus early release data. The early release files are provided for peer analysis only, and should not be used to provide aggregate estimates.
- **Collection Level**: Available only to institutions that submitted data electronically using our data entry facilities.
- **Download Data Files**: IPEDS data files are available for downloading in zipped .csv format. Data dictionaries and read programs to import the data into SAS, SPSS and STATA statistical software packages are also available. To access these files, login at one of the levels above and click DATASET CUTTING TOOL.
You can find an introduction to the Peer Analysis System by selecting “click here” at NCES.ed.gov/IPEDSPAS

The Integrated Postsecondary Education Data System (IPEDS)
Statistical data and information on Postsecondary Institutions
Peer Analysis System

IPEDS Executive Peer Tool and Peer Analysis System

Executive Peer Tool
Allows access to data presented in the 2006 IPEDS Data Feedback Report for your institution and a comparison group of institutions.

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Enter your IPEDS ID # into the login and password.
If you don’t know your institution’s IPEDS #, click “School, Colleges, & Library Search” at NCES.ED.GOV.
Type in the name of the institution & select “Colleges” from the Institutions list on the right. Click “search”.

- You must enter a name, city, or zip code to begin searching.
- You must select at least one of the four types of institutions found on the right side of the search tool.
- In doing a name search keep it as simple as possible to make sure.
Click on the Institution you want.

<table>
<thead>
<tr>
<th>College Name</th>
<th>Type</th>
<th>Location</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaine the Beauty Career School-Boston</td>
<td>Private</td>
<td>30 West St., Boston, MA 02111</td>
<td>508-707-47113</td>
<td>(617) 262-3600</td>
</tr>
<tr>
<td>Boston Architectural College</td>
<td>Private</td>
<td>320 Newbury St, Boston, MA 02115</td>
<td>617-242-7898</td>
<td>(617) 364-5310</td>
</tr>
<tr>
<td>Boston Baptist College</td>
<td>Private, not-for-profit</td>
<td>930 Metropolitan Ave, Boston, MA 02136-4000</td>
<td>617-265-3915</td>
<td>(617) 364-3500</td>
</tr>
<tr>
<td>Boston College</td>
<td>Private, not-for-profit</td>
<td>140 Commonwealth Ave, Chestnut Hill, MA 02116</td>
<td>617-265-3915</td>
<td>(617) 364-3500</td>
</tr>
<tr>
<td>Boston Graduate School of Psychoanalysis Inc</td>
<td>Private, not-for-profit</td>
<td>1591 Beacon St, Brookline, MA 02146</td>
<td>617-265-3915</td>
<td>(617) 277-3915</td>
</tr>
<tr>
<td>Boston University</td>
<td>Private, not-for-profit</td>
<td>One Sherman St., Boston, MA 02215</td>
<td>617-353-2000</td>
<td>(617) 353-2000</td>
</tr>
<tr>
<td>Empire Beauty School-Boston</td>
<td>Private</td>
<td>867 Boylston St, Boston, MA 02116</td>
<td>617-265-3915</td>
<td>(617) 265-3915</td>
</tr>
<tr>
<td>Gibbs College-Boston</td>
<td>Private, not-for-profit</td>
<td>126 Newbury St, Boston, MA 02116</td>
<td>617-378-7100</td>
<td>(617) 378-7100</td>
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<tr>
<td>School of the Museum of Fine Arts-Boston</td>
<td>Private, not-for-profit</td>
<td>290 The Fenway, Boston, MA 02115-596</td>
<td>617-363-5300</td>
<td>(617) 363-5300</td>
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</table>
Your IPEDS # is on the right.

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<tr>
<th>Information</th>
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<td><strong>Institution Name:</strong> Boston College</td>
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<tr>
<td><strong>Institution Type:</strong> College</td>
</tr>
<tr>
<td><strong>Mailing Address:</strong> 140 Commonwealth Ave Chestnut Hill, MA 02467</td>
</tr>
<tr>
<td><strong>General information:</strong></td>
</tr>
<tr>
<td>(617) 552-8000</td>
</tr>
<tr>
<td><strong>Financial aid office:</strong></td>
</tr>
<tr>
<td>(617) 552-3320</td>
</tr>
<tr>
<td><strong>Admissions office:</strong></td>
</tr>
<tr>
<td>(617) 552-3100</td>
</tr>
<tr>
<td><strong>IPEDS ID:</strong> 164624</td>
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</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Private not-for-profit, 4-year or above</td>
</tr>
<tr>
<td><strong>Degrees offered:</strong> First-professional, Doctor's, Master's, Bachelor's</td>
</tr>
<tr>
<td><strong>Certificates offered:</strong> Post-Master's</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Library Information (2004 data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Material: 2,076,844</td>
</tr>
<tr>
<td>Serials: 32,936</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total enrollment:</strong> 14,829</td>
</tr>
<tr>
<td><strong>Undergraduate enrollment:</strong> 9,961</td>
</tr>
</tbody>
</table>

**Percent of Undergraduate enrollment**
- by gender:
  - Men: 48.0% |
  - Women: 52.0% |
- by race/ethnicity
Enter your IPEDS ID # into the login and password. At the Institution login the User ID and Password are the same.
When you enter the Peer Analysis System, you can access a user manual.
If you click on “User Manual”:

- Overview
- General Notes
- Login

Using the IPEDS Peer Analysis System
- Identify Focus Institution
- Master Variables List
  - What is a Master Variables List?
  - Maintaining Your Master Variables List
  - Save Master Variables List
  - Get Master Variables List
- Define Comparison Group
  - Add an Institution by Name
  - Add Institutions Based on Variables
  - Automatic Peer Group
  - Save List of Institutions
  - Get List of Institutions
- Define Calculated Variables
  - Summation Variables
  - Difference Variables
  - Ratio Variables
- Generate Reports And Stats - Download Files
  - Ranking Report
  - Institutions Data Report
  - Statistical Summary Report
  - Report Templates
  - Forms Facsimile

Using the IPEDS Dataset Cutting Tool
- Introduction
The next step is to create your comparison group.
We selected our peer group using the “institutions by variable” option.
Use your institution as the focus institution in your data gathering.
Using data from Institutional Characteristics/Admissions/Student Charges [Carnegie classification & Control of institution] - we selected private, non-profits, 4 year institutions which were Master’s –Larger Programs.
You can review the peer institutions and delete any you don’t want.
We will select data from Institutions Data Report category. In particular, data will be taken from the Student Financial Aid category.
Data are pulled on average amount of institutional aid and number of students receiving institutional aid.
At the same time, you may want to pull down other data that may be of interest.

Other data selected included:

• 2004-05 tuition rates
• 2004 new full-time, first-time cohorts
When you have finished selecting your variables, you just click on “finished selection”.

Data Report

- You can continue to create a report only after you have selected a comparison group
- Use the E to add or delete years for one variable
- Use the Add/delete years link to add or delete years for all variables in that section
- Use the link Select More Variables to choose from the list of surveys

You have 4 variables in the following list.

Finished Selection  Select More Variables  Help
You can choose to view on your screen or download as a csv file which will open in Excel.
The data are downloaded to Excel.
In Excel, the data look like this. Headers need to be shortened. Other variables can be created at this point.
We created 3 new variables- gross tuition (tuition X Cohort), totalinstaid (avg inst. Aid X # receiving this aid), and freshman discount rate (total inst aid/gross tuition).
## Estimated Freshman Tuition Discount Rates:
### 2000-01 & 2004-05

<table>
<thead>
<tr>
<th>Freshman Discount Rate</th>
<th>(n)</th>
<th>2000-01</th>
<th>(n)</th>
<th>2004-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% or less</td>
<td>15</td>
<td>13.0%</td>
<td>14</td>
<td>23.1%</td>
</tr>
<tr>
<td>21%-30%</td>
<td>27</td>
<td>25.1%</td>
<td>26</td>
<td>31.9%</td>
</tr>
<tr>
<td>31-40%</td>
<td>50</td>
<td>35.5%</td>
<td>46</td>
<td>37.1%</td>
</tr>
<tr>
<td>41%+</td>
<td>43</td>
<td>47.2%</td>
<td>50</td>
<td>45.7%</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td>34.7%</td>
<td></td>
<td>37.2%</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td>36.2%</td>
<td></td>
<td>38.3%</td>
</tr>
</tbody>
</table>

Data from IPEDS PAS & include selected private, 4-year institutions with Carnegie Classification of Masters- larger programs
## Freshman Tuition Discount Rate by Freshman Acceptance Rate

<table>
<thead>
<tr>
<th>Acceptance Rate</th>
<th>2000 Freshman Discount Rate</th>
<th>2004 Freshman Discount Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% or less</td>
<td>34.0%</td>
<td>34.1%</td>
</tr>
<tr>
<td>51-64%</td>
<td>30.4%</td>
<td>35.4%</td>
</tr>
<tr>
<td>65-75%</td>
<td>34.9%</td>
<td>35.6%</td>
</tr>
<tr>
<td>76-80%</td>
<td>35.1%</td>
<td>39.8%</td>
</tr>
<tr>
<td>81%+</td>
<td>36.4%</td>
<td>39.0%</td>
</tr>
</tbody>
</table>
## Freshman Tuition Discount Rate by Selected Carnegie Classification- Selected Private, 4-year Institutions

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>2000 Freshman</th>
<th>2004 Freshman</th>
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</thead>
<tbody>
<tr>
<td>(n)</td>
<td>Discount Rate</td>
<td>Discount Rate</td>
</tr>
<tr>
<td>Research U- very high</td>
<td>33</td>
<td>31.5%</td>
</tr>
<tr>
<td>Research U - high</td>
<td>25</td>
<td>38.1%</td>
</tr>
<tr>
<td>Doctoral/Research U</td>
<td>32</td>
<td>35.6%</td>
</tr>
<tr>
<td>Masters- larger programs</td>
<td>135</td>
<td>34.7%</td>
</tr>
<tr>
<td>Masters- medium programs</td>
<td>84</td>
<td>34.5%</td>
</tr>
<tr>
<td>Masters- small programs</td>
<td>57</td>
<td>35.9%</td>
</tr>
<tr>
<td>BA- arts &amp; sciences</td>
<td>195</td>
<td>39.0%</td>
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<tr>
<td>BA- diverse</td>
<td>159</td>
<td>32.9%</td>
</tr>
<tr>
<td>Total</td>
<td>720</td>
<td>35.5%</td>
</tr>
<tr>
<td>Acceptance Rate</td>
<td>2000 Freshman</td>
<td>2004 Freshman</td>
</tr>
<tr>
<td>-----------------</td>
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</tr>
<tr>
<td></td>
<td>(n)</td>
<td>Discount Rate</td>
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<tr>
<td>50% or less</td>
<td>121</td>
<td>31.1%</td>
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<tr>
<td>51-64%</td>
<td>118</td>
<td>34.8%</td>
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<tr>
<td>65-75%</td>
<td>193</td>
<td>36.7%</td>
</tr>
<tr>
<td>76-80%</td>
<td>109</td>
<td>35.9%</td>
</tr>
<tr>
<td>81%+</td>
<td>179</td>
<td>37.6%</td>
</tr>
</tbody>
</table>
Possible Uses for These Data

• Increasing knowledge about your institution’s financial aid strategies and how they compare with other institutions.

• As a category for selecting comparison groups – do you want institutions with similar discount rates (or with lower or higher rates).
Possible Uses for These Data

• As baseline data, because an institution should be tracking trends in its tuition discount rate.
Handouts of this session are available at:

http://www.suffolk.edu/offices/4371.html

Click on:

EPC Discounting

Questions: mduggan@suffolk.edu