Exploring Salary Difference among Non-Tenure Track Faculty

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Study Aims

• Understand the diversity of non-tenure track faculty (NTTF) in the aspects of

  • Demographic composition

  • Salary distribution

  • Salary equity across job and between gender
Literature Review

• Two thirds of US faculty positions are NTT (Kezar, 2012).

• Clarity in contract renewal and rewards, such as promotion and recognition contribute to NTTF work satisfaction (Crick, Larson, & Seipel, 2020).

• Satisfaction with resources and rewards were associated with higher levels of workplace commitment (Ott & Cisneros, 2015).
Data Source

University of Central Florida Faculty data as of November 1st, 2020.

Percentage of Faculty Distribution
(N= 1,906)

- Non-Tenure Track: 42%
- Tenure Track: 58%
- Tenure Earning: 17%
- Tenured: 41%
Sample Selection

• Selection Criteria
  • Non-Tenure Track Faculty (NTTF)
  • Full Time
  • Not an administrator
  • Not in three specific medical programs

• The final sample contains 672 NTTF
Job Category Distribution of NTTF (n= 672)

- Lecturers: 41%
- Instructors: 29%
- Scholars: 7%
- Specialized Faculty: 5%
- Professors: 8%
- Instructional Designer: 5%
- Librarian: 5%
- Instructors: 29%
Outcome Variable

• Reported 9-month salary as of Nov. 1\textsuperscript{st}, 2020.

• 9-month or equivalent annual salary.

• All 12-month employee salaries were multiplied by 81.82\% to calculate the 9-month equivalent annual salary.

• The natural logarithm of the annual salary is used.
Explanatory Variables

• Demographic variables
  • Gender (female, male- reference group)
  • Race/Ethnicity (Asian, International, Underrepresented Minority, White- reference group)

• Structural factors
  • College, Job code, Doctoral degree, Visiting status
  • Rank (lecturer/instructor regression model only)

• Rewards
  • Number of TIP, RIA, and SoTL awards
  • Total number of merit due to Administrative Discretionary Increase (ADI)
  • Total number of merit due to across the board increases

• Interaction terms
  • Gender by rank
Analytical Methods

• Variable Selection
  • Correlation
  • Stepwise Regression (Forward and backward)

• Regression Models
  • M1: All NTTF, gender x job code interaction terms
  • M2: All lecturers/ instructors
  • M3: Lectures/ instructors by job code, gender x rank interaction terms
Results
NTTF by Job Category and Gender (n= 672)

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Female</th>
<th>Male</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Designer</td>
<td>6</td>
<td>31</td>
<td>6%</td>
</tr>
<tr>
<td>Instructors</td>
<td>120</td>
<td>73</td>
<td>29%</td>
</tr>
<tr>
<td>Lecturers</td>
<td>147</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Librarian</td>
<td>8</td>
<td>23</td>
<td>5%</td>
</tr>
<tr>
<td>Professors</td>
<td>28</td>
<td>25</td>
<td>8%</td>
</tr>
<tr>
<td>Scholars</td>
<td>12</td>
<td>33</td>
<td>7%</td>
</tr>
<tr>
<td>Specialized Faculty</td>
<td>8</td>
<td>29</td>
<td>6%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>369</td>
<td>303</td>
<td>100%</td>
</tr>
</tbody>
</table>
NTTF by Race (n= 672)

- **Instructional Designer**
  - Asian: 3
  - International: 9
  - Underrepresented Minority: 25
  - White: 29

- **Instructors**
  - Asian: 6
  - International: 1
  - Underrepresented Minority: 29
  - White: 157

- **Lecturers**
  - Asian: 17
  - International: 9
  - Underrepresented Minority: 45
  - White: 205

- **Librarian**
  - Asian: 5
  - International: 3
  - Underrepresented Minority: 23
  - White: 40

- **Professors**
  - Asian: 4
  - International: 4
  - Underrepresented Minority: 5
  - White: 30

- **Scholars**
  - Asian: 7
  - International: 5
  - Underrepresented Minority: 3
  - White: 30

- **Specialized Faculty**
  - Asian: 5
  - International: 2
  - Underrepresented Minority: 6
  - White: 24
Instructors and Lecturers (n= 469)

- Lecturers (n= 276)
  - Lecturer, 142
  - Associate Lecturer, 107
  - Senior Lecturer, 27

- Instructors (n= 193)
  - Instructor, 101
  - Associate Instructor, 67
  - Senior Instructor, 25
Salary Boxplot by Job Category for NTTF (n= 672)
Salary Boxplot by Rank for Instructors and Lecturers (n= 469)
Results from Regression Models
Highlights of M1 Results in Salary Equity

- **Structural factors**
  - Salary differ by job code and college
  - Salary for regular employment is higher than visiting

- **Awards**
  - Awards and Merits (ADI and across the board) contribute to significant increase

- **Gender and job code Interaction terms**
  - Female scholars earn less than male scholars
Highlights of M2 Results in Salary Equity

• Structural factors
  • Lecturers earn more than instructors
  • Salary for regular employment is higher than visiting

• Awards
  • Awards and Merits (ADI and across the board) contribute to significant increase
Highlights of M3 Results in Salary Equity

• Structural factors
  • Instructor rank has the lowest salary comparing to all other ranks in Instructors/Lecturers
  • Salary for regular employment is higher than visiting

• Awards
  • Awards and Merits-ADI contribute to significant increase
Conclusion and Discussion
• **Demographic Variation**
  • Gender difference in scholars’ salaries might be contributed from variance in colleges.

• **Structural Variations**
  • Macro and structural factors such as college, job category, employment type, rank all contribute to difference in salaries.
  • Current study results support Hilmer and Hilmer (2020) study finding that teaching assignment rather than research performance determines full-time NTTF salaries.

• **Rewards**
  • For lecturers/ instructors, having more performance related awards (TIP, RIA, SoTL awards, and Merits-ADI) is associated with higher salary.
Questions?
Thank you!

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