

AGENDA ITEM

A-3. Faculty Compensation Study MethodologyMatthew Brody/Daniel Cohen-Vogel

Situation: The Committee on Personnel and Tenure has requested that General Administration Staff prepare a study that summarizes the competitiveness of faculty compensation and identifies any gaps in comparison to the broader labor market in which the University competes for faculty talent.

Background: There has been data provided to the Board of Governors in the past with respect to faculty compensation. However, these have been more limited with respect to taking into account specific faculty and institutional characteristics such as faculty discipline, research intensity, and degrees offered. The goal for this new study was to prepare an analysis that provides a more accurate and consistent representation of market by faculty discipline and specific institutional characteristics and for this study to be easily replicable to enable tracking ongoing progress.

Assessment: The attached presentation is intended to provide an introduction to the Committee on the approach and methodology used for this study and to introduce the type of data that will be provided when the study is fully completed. There are systemic limitations to the types of data available nationally on faculty salaries and this presentation provides information on how these limitations impact our study so the Committee has sufficient context when reviewing the final study results. A follow-up presentation with the final study results will be presented to the Committee at the March 2017 Board meeting.

Action: For informational purposes only.

UNC System Faculty Compensation Analysis

Part 1: Methodology and Approach

Update to Personnel & Tenure Committee
November 29, 2016

Dr. Daniel Cohen-Vogel, Data & Analytics
Matthew Brody, Human Resources

Why are we looking at faculty salary data?

Moving beyond the anecdotal...

- Data-informed advocacy
- Deeper analysis of specific focal



Analysis should include, at a minimum...

- Faculty and institutional characteristics
- Replicable analysis
- Broad coverage of institutions and disciplines
- More accurate and consistent market representation

More rigorous approach.

Greater degree of accountability and flexibility.

Best Available Data Sources

- College and University Professional Association for Human Resources (CUPA-HR) faculty salary survey
 - Limited information on research/doctoral universities and private universities
- Oklahoma State University (OSU) faculty salary survey
 - Research/doctoral, public universities only

What we can account for in the analysis

Market factors included in the analysis:

- Tenure status (tenure-earning, non-tenure-earning)
- Rank (assistant, associate, full)
- Type of university (research intensity, degree levels offered)
- Discipline area (e.g., business, health, education)

Market factors not accounted for in the analysis:

- Private competitors
- Cost of living
- Benefits
- Degrees offered within the discipline

Improvements over previous analyses

What we can account for in the analysis:

Tenure Status details

Market factors included in the analysis:

- Tenure status (tenure-earning, non-tenure-earning)
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- Discipline area (e.g., business, health, education)

Market factors not accounted for in the analysis:

- Private competitors
- Cost of living
- Benefits
- Degrees offered within the discipline

What we can account for in the analysis:

Market factors not accounted for

- Private data
 - Little or no representation of private institutions in data sources
 - Private institutions represented are not the appropriate competitors
 - However, private sector institutions affect the UNC labor pool
- Cost of living
 - Cost data do not reflect many geographic variations
 - Cost of living differences do not always align with comp differences
 - Benefits sometimes compound and sometimes mitigate cost differences

Methodology:

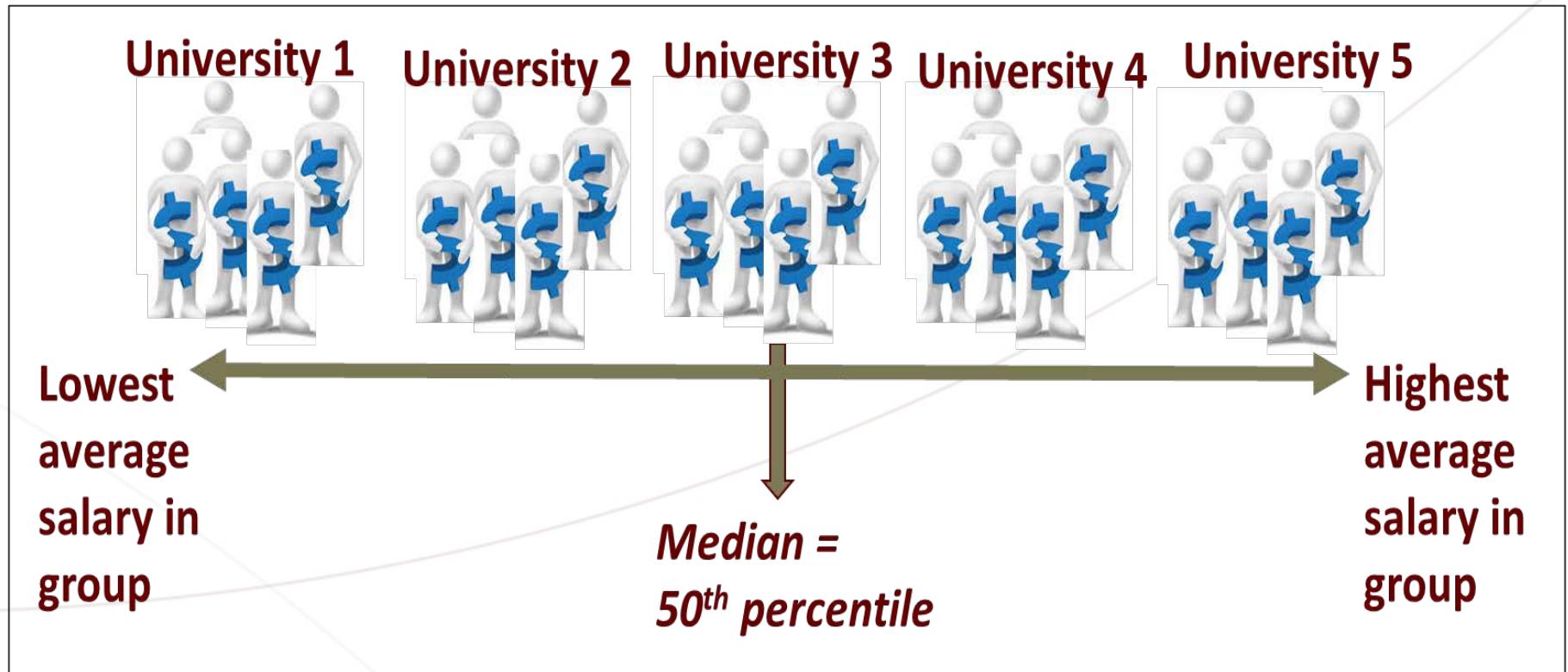
Reflect Institution and Faculty Differences

Salary ranges for tenure-earning faculty are grouped by:

- Type of university (Carnegie classification)
- Rank (assistant, associate, full)
- Discipline (e.g., business, health, education)

Methodology:

UNC in Comparison to Group Median



Implications of Using Group Median

- Median eliminates impact of “outliers”
- Median is not always the right market comparison
 - Strategic goals and strengths
 - Peers may not be distributed around the median
 - Supply and demand – basic labor economics
 - Geography, cost of living, benefits, etc.
 - Affordability

Methodology: Adjusting for Inflation

Data will be “aged,” which is the HR term for inflated.

- The College and University Personnel Association (CUPA) publishes inflation rates based on prior year increases in U.S. university salaries.
- From 2015 to 2016, the inflation rate from CUPA is 2%.



Methodology:

Dealing with Imperfect Data Sources

Data source choices

- Combine data sources
 - Oklahoma State University (OSU) for research/doctoral universities
 - College and University Professional Association (CUPA) for master's and liberal arts universities
- Comparisons only include public universities



Methodology:

Dealing with Imperfect Data Sources

Will need to adjust for incomplete data

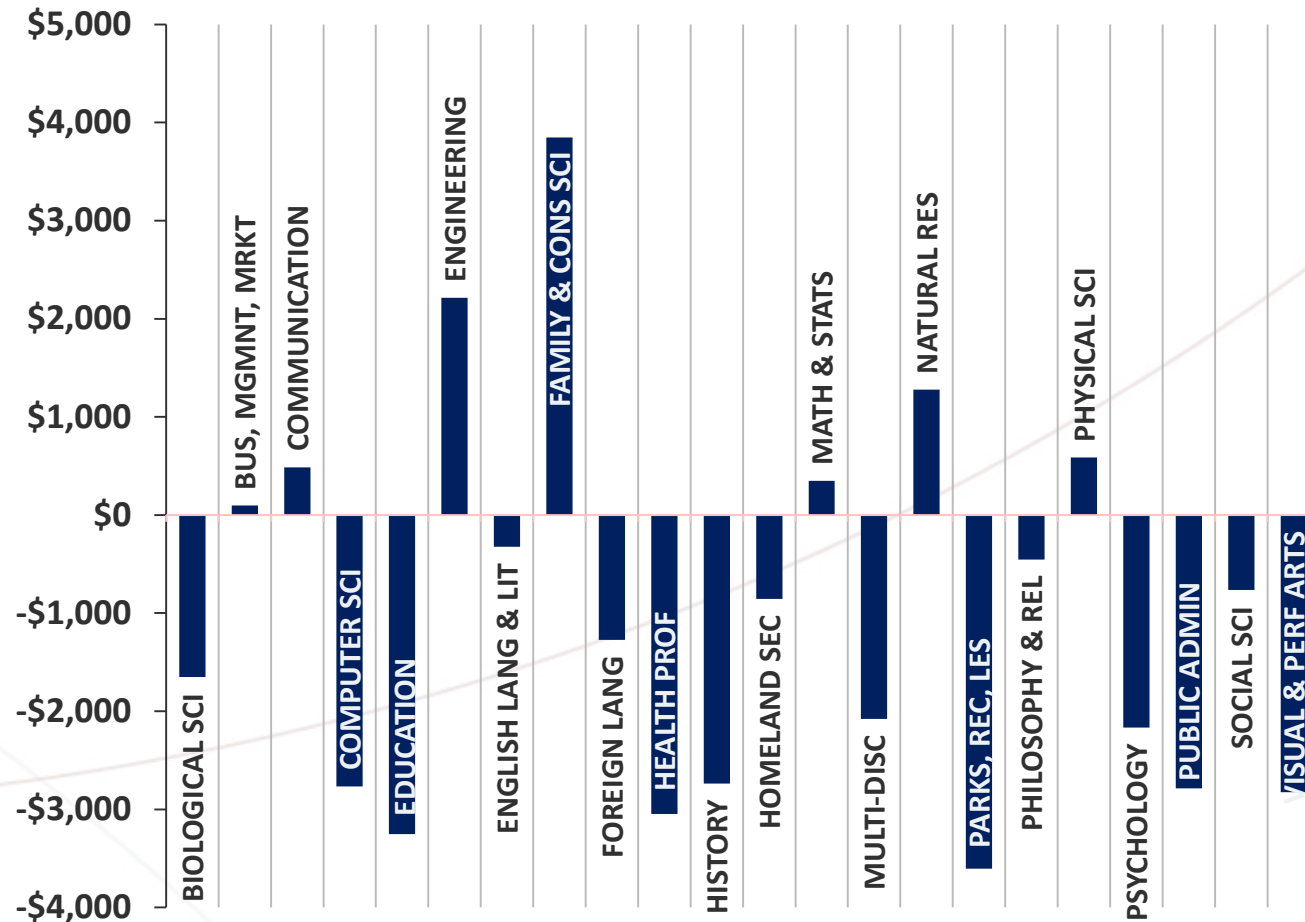
- Sometimes incomplete rank or discipline data
- Sometimes too few comparison institutions (or “small cell size”)

➤ Look at *similar* data to “impute” the missing data



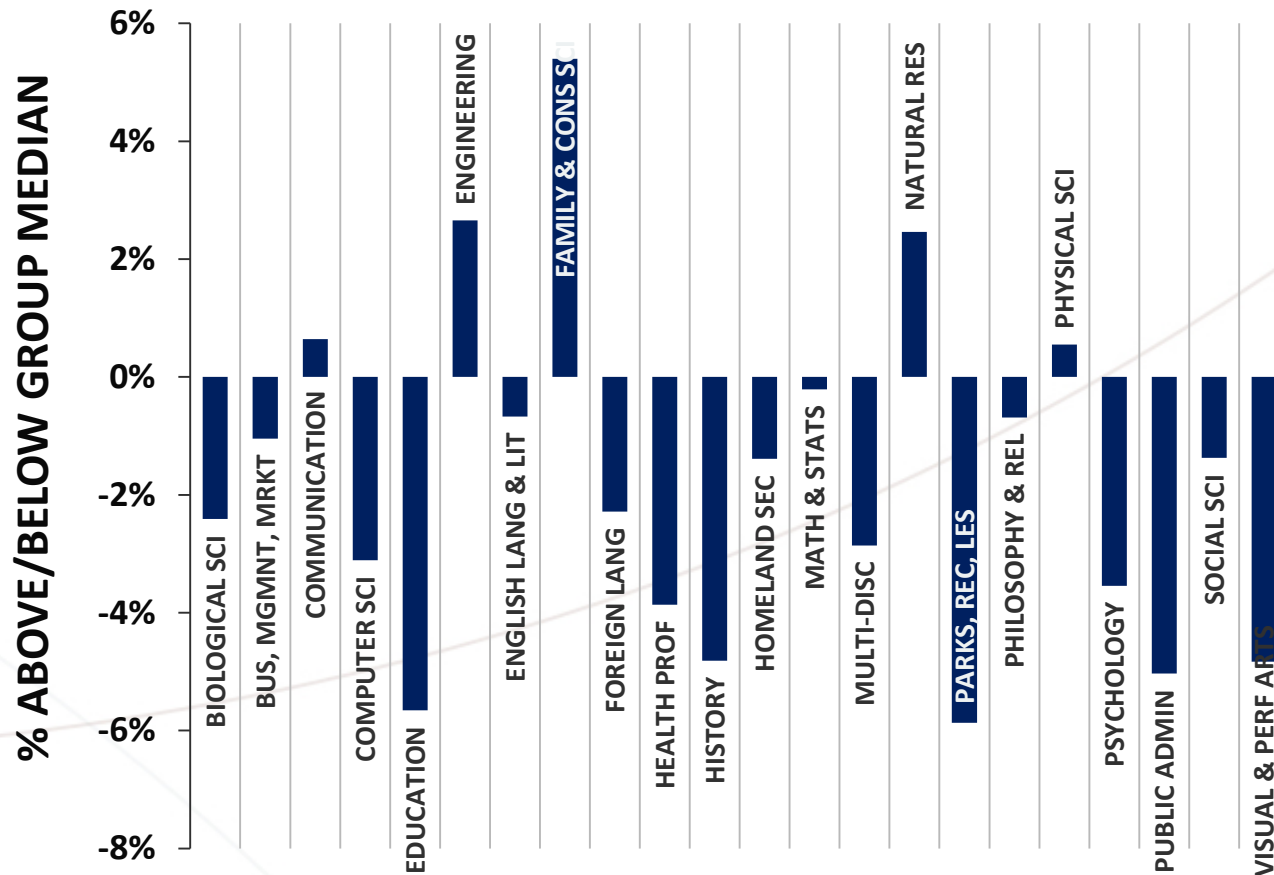
Summary of Assistant Professors Comparisons

UNC ASSISTANT PROFESSORS COMPARED TO GROUP MEDIANS, BY DISCIPLINE, 2015



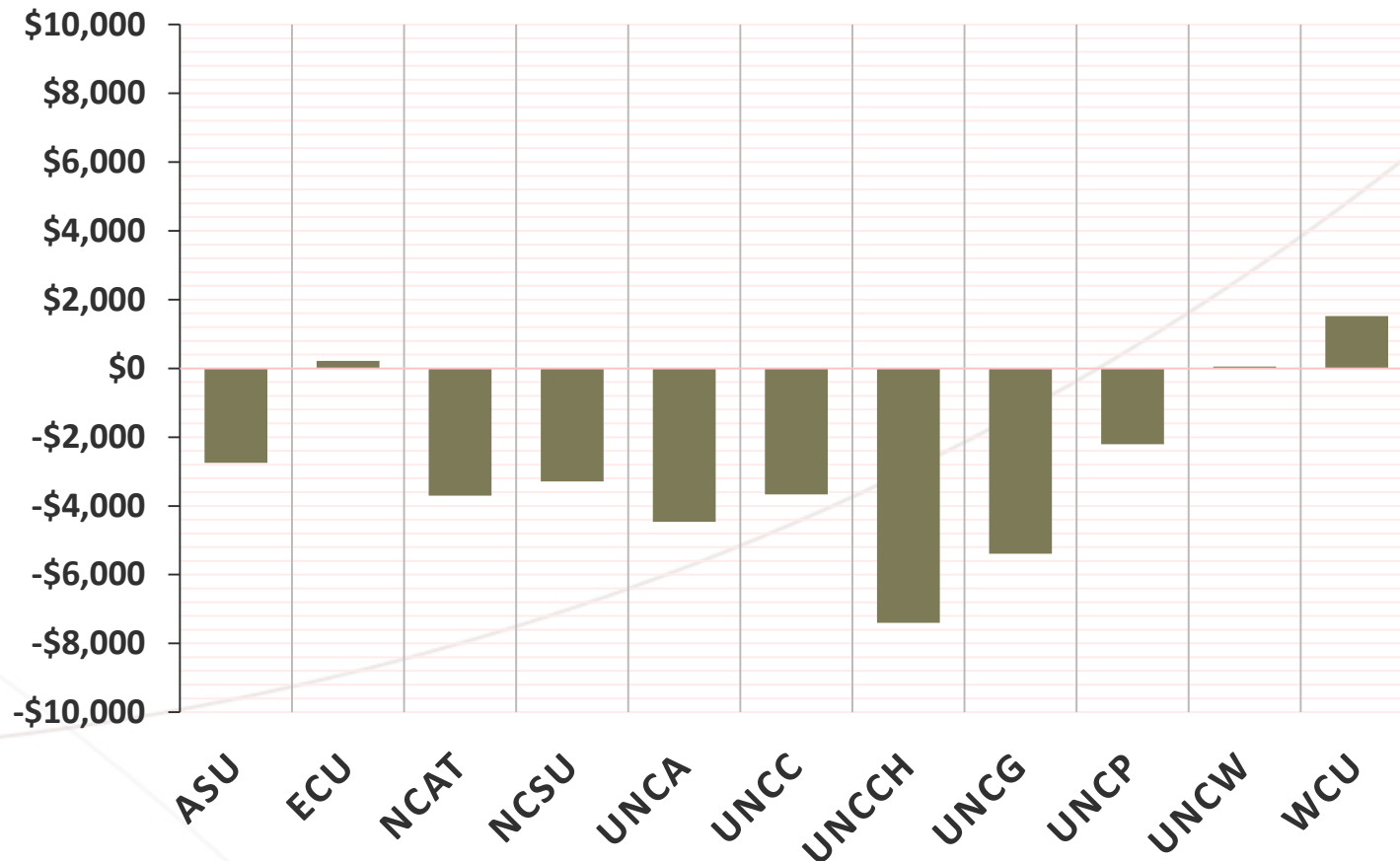
Summary of Assistant Professors Comparisons (in % rather than \$)

UNC ASSISTANT PROFESSORS COMPARED TO GROUP MEDIANS, BY DISCIPLINE, 2015



Data Allow for a Deeper Dive

SALARY DIFFERENCE FROM GROUP MEDIANS, ASSISTANT PROFESSORS IN THE VISUAL AND PERFORMING ARTS, 2015



Next Steps

- Presentation of detailed data
- Analysis forthcoming on fixed-term faculty (non-tenure-earning)