

0 Question: Is it possible that wages went up from 1950 to 1960, but went down for both men and women? Assume that the proportion of men to women can change. (This is not a historical example.)

A1: Probably not

A2: Yes

#### Arguments for A1

1 Question: Is the total change in wages a weighted average of the change in wages for women and the change in wages for men?

A1: Probably

A2: No

3 Question: Is it possible for a weighted average of two negative things to be positive?

A1: No

A2: No

#### Arguments for A2

2 Question: Can different groups of data produce a different trend when combined together?

A1: It's unclear

A2: Yes

4 Question: Is it possible that men and women can have significantly large gaps in wages between the two of them that can affect the balance of the average?

A1: It's unclear

A2: Yes

6 Question: Is there a situation in which the wages for both men and women goes down, but the average of the wages goes up?

A1: Maybe

A2: Yes