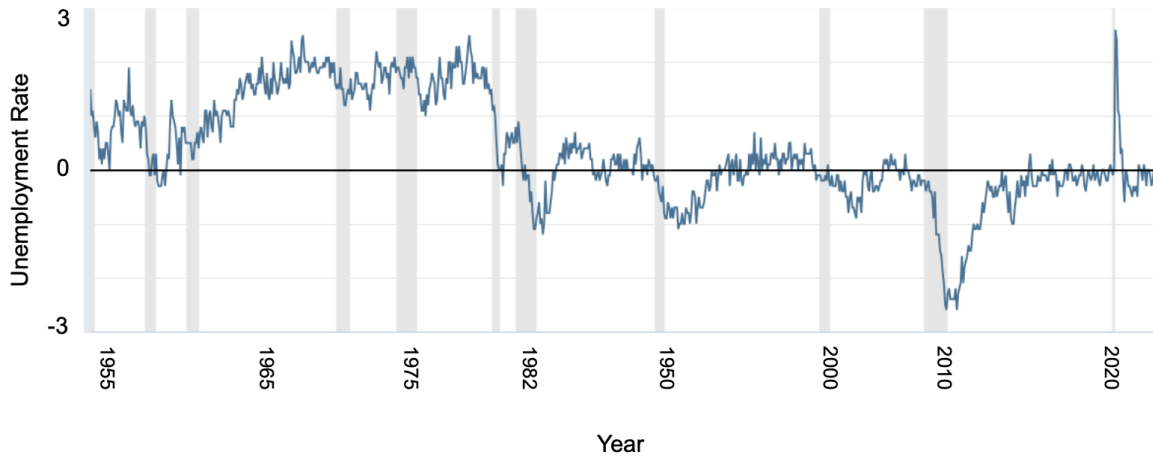


# Minimizing Gender Unemployment Gap

A UVA Data Science Case Study by Ayushi Ambhore, 2022



Graph of Unemployment Rate for Females - Unemployment Rate for Males

**Prompt:** The 20th century has seen a remarkable increase in the number of women participating in the workforce in the United States, with about 71.5 million women employed in the U.S. compared to 18 million in 1950 [1]. However, men are still more engaged in the workforce than women are. A previous Data Science study has predicted that in 2023, females will have around a 4% unemployment rate whereas men will have a 3% rate [2]. Unemployment rate refers to the share of workers in the labor force who do not currently have a job, thus it's a percentage of the people who are unemployed over the sum of those that are and aren't employed [3]. While this disparity is not that extreme, there's still an unbalance and it's important to figure out why. This issue impacts all people, those who are currently in the workforce, those that are in college that will want a job in the future, those that are unemployed, etc. The U.S. Bureau of Labor Statistics dictates April of 2020 being the highest unemployment rate, which is when COVID started [4]. Do the factors have to do with the pandemic? Is it because of traditional duties placed on women that cause them to be unable to work? When thinking of historical views of women being the ones staying at home and doing house duties, like cooking, cleaning, and taking care of children, it would make sense that they have a higher unemployment rate. But, it could get more complicated than this. Mental health from staying home for extended periods of time or workplaces not allowing remote work could be contributing to this unemployment disparity. Women and men should have equal opportunities in the workforce and reducing this gap is important. This is why it's important to figure out what factors are leading to this gap.

**Deliverable:** Produce a list of factors that are the most correlated and important with unemployment rate for females/males that would explain the disparity. Also produce a plan of action to reduce the disparity.

## References:

- [1] M. Toossi, Monthly Labor Review, rep., 2002.
- [2] mra4t, "MRA4T/Livemas-proj1," *GitHub*. [Online]. Available: <https://github.com/mra4t/LIVEMAS-proj1>. [Accessed: 25-Nov-2022].
- [3] "Useful definitions," *Economic Policy Institute*. [Online]. Available: [https://www.epi.org/newsroom/useful\\_definitions/](https://www.epi.org/newsroom/useful_definitions/). [Accessed: 25-Nov-2022].
- [4] "Unemployment rate," *FRED*, 04-Nov-2022. [Online]. Available: <https://fred.stlouisfed.org/series/UNRATE/>. [Accessed: 25-Nov-2022].