

Compensation, Diversity and Inclusion at the World Bank Group

Executive Summary

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Foreword

The Development Research Group, Gender Cross-Cutting Solution Area (CCSA), Diversity and Inclusion Office (D&I) and the Human Resources (HR) Compensation Unit at the World Bank Group (WBG) have been delighted to collaborate to produce this report, the first time ever that such an effort has been undertaken in this institution. The study shows that the gender pay gap continues to narrow and the career framework has been strengthened. Achieving even higher levels of gender pay parity will require a more diligent focus on pay setting and broadening gender and country party representation across all grade groups.

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That women earn considerably less than men, even for the same job, is well established at the level of countries and industries.¹ The focus is now moving to the corporate world and individual firms. Large companies and institutions are looking within themselves and asking whether their diversity and inclusion policies are sufficient to guarantee pay equality: Equality both in terms of ensuring that workers who perform similar jobs receive the same pay and that different people have an equal shot at different jobs.²

In order to determine how the World Bank Group fared in this context, we examined these compensation issues, focusing on differences between men and women and between citizens of Part 1 and Part 2 countries at the World Bank Group (WBG).³ Using a unique database that contains information on all employees (excluding short-term consultants) between 1987 and 2015, we were able to look at both pay differentials and job composition within the institution for those staff who were hired on the U.S. salary based plan.⁴ We call this new database the Human Resource Longitudinal Database.

To conduct this analysis, we examined two characterizations of salary differences across employee subgroups at the WBG: The **aggregate gap** and the **career gap**.

Aggregate Gap: We define the **aggregate gap** as the mean salary difference between the average male and average female (or average Part 1 and average Part 2) employee at the WBG. Frequently used in the literature on gender pay gaps, this gap is sensitive to both occupational sorting and differences in salaries within occupations. In the context of the WBG, the aggregate

¹ For recent reviews of the gender earnings gap in the United States, see for instance, Juhn and McCue (2017) and Blau and Kahn (2016). For international data and comparisons see the World Development Report (2012) on Gender Equality and Development.

² Examples include a recent report by the London School of Economics Equity, Diversity and Inclusion Taskforce (2016) and Facebook's report on diversity, accessed on March 2017 at <https://newsroom.fb.com/news/2016/07/facebook-diversity-update-positive-hiring-trends-show-progress>. In addition, Gobillon et al. (2014) and Takao et al. (2013) focus on single large firms.

³ Part 1 countries do not borrow from the WBG whereas Part 2 countries are eligible to borrow, a decision that was made by each country upon entering the WBG. As such, the country part classification roughly separates low and middle from high-income economies. This is necessarily a rough classification since a country's economic status could have changed considerably over time. Appendix Table 1 in the report presents a list of Part 1 and Part 2 countries represented at The WBG.

⁴ Short-Term Consultants can range from people working exclusively at the WBG to those on short contracts with permanent jobs at other institutions. Although there is considerable movement of staff from consultancy to staff contracts, the data on consultants is too limited for inclusion in our analysis. The U.S. salary based plan includes all international hires, regardless of their duty station, observed between 1987 and 2015. In theory we could conduct the analysis for all staff at the World Bank Group. However, salaries paid in local country currency would have to be converted to dollars over a long historical period, which requires a separate collaborative exercise.

gap will reflect, in part, the extent to which men and women are hired into different professional positions (“grades” at the WBG) that are highly correlated with their salaries.⁵ There are two reasons for focusing on the aggregate gap. First, summary statistics such as “*the average woman makes 70 cents on the dollar for the average man*” are statements about such gaps, without any conditioning on profession or grade. Second, if productivity distributions are identical for men and women, then any difference in the aggregate gap reflects discrimination either in hiring grades or in salaries conditional on the hiring grade.

Career Gap: Reducing the aggregate gap is an important goal for the WBG, but equally important is examining the career growth of different groups who were hired into the same grade at the same time. For instance, one frequently voiced concern from staff consultations was the imbalance in staffing at different grade-levels within the WBG, with particular concern about the lack of representation of women at the grade GH. Therefore in addition to the aggregate gap, we also examined how salaries of different groups of staff hired into the *same* grade evolved over time, reflecting raises and promotion rates. We label these salary differences the **Career Gap**.

Approach

This paper builds on the previous analysis by Filmer, King and Van de Walle (2005), who examined salary differences by sex and nationality among World Bank staff in 1997. Filmer et al. (2005) used a cross-section of salaries among what were in 1997 known as professional staff. They identified salary deficits for women and Part 2 employees at the World Bank, only half of which could be explained by differences in staff characteristics.

Relative to the cross-sectional data used by Filmer et al. (2005), the Human Resource Longitudinal Database allows us to examine mechanisms, such as employee turnover and pipeline effects, that could mask or artificially amplify salary gaps in cross-sections. For instance, pipeline effects imply that even if the institution is equal *today* in the way it hires, promotes and pays different groups,

⁵ WBG grades run from GA to GL. Grades GA-GD are the grade levels for Administrative and Client Services (ACS) staff. GE corresponds to analyst-level staff. GF and GG contain the bulk of professional technical staff. Staff in the GH level, the first leadership position at the WBG, can be either in a technical or managerial role. GI (Director) through GK (Vice President) refers to increasingly senior management positions. GL is the president of the WBG.

the actual distribution of jobs and salaries will reflect the historical pipeline and therefore be sensitive to past hiring decisions.

To exploit the longitudinal nature of these data fully, we developed and implemented a novel dynamic simulation approach that relates current salary gaps to hiring, promotion and attrition patterns from 1987 to the present. After documenting patterns in the aggregate and career gaps, we then used the dynamic simulation approach to decompose the gaps into differences arising from the following four factors:⁶

- Staff Composition effects: Are women hired in systematically different grades relative to men? This is relevant only for the aggregate gap, as the career gap is conditioned on the grade at entry.
- Entry Salaries: For the same position, are women hired at lower salaries relative to men?
- Attrition: Is the distribution of salaries among women who leave different from that of men? If so, it would potentially alter the salary distribution of those who remain due to selection effects.
- Salary Growth: Do the salaries of women grow at different rates relative to those of men?

Results

Aggregate Gap

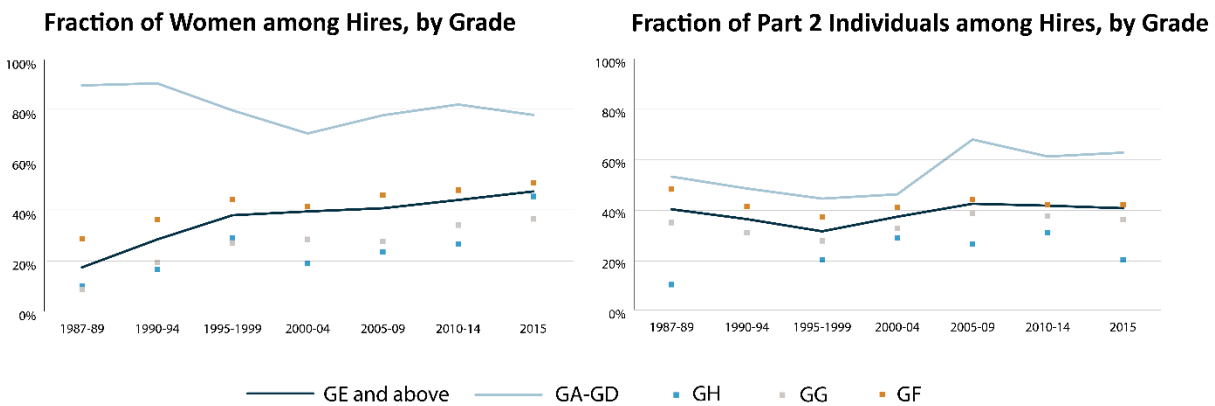
Our first result is that there has been substantial catch-up over time, although aggregate salary gaps persist. In 1987, the average woman employee earned 52 cents on the dollar compared to the average man at the WBG; in 2015 this had increased to 77 cents. The average Part 2 employee earned 84 cents on the dollar compared to the average Part 1 employee in 1987 and this increased to 87 cents in 2015.

The aggregate gap reflects, in part, how women and men (and Part 1 versus Part 2) are hired into different grades. Figure 1 shows that the fractions of men and women hired at each grade have converged significantly over the period covered by our data. However, in 2015 women were still

⁶ The pay gaps observed in 1987, the first year of our data, reflect pre-1987 HR policies and thus cannot be decomposed. This “legacy” pay gap shows up as a residual in our decomposition.

hired into lower grades on average: 78.1% of GA-GD hires are female whereas 62.3% of GG hires are male. Further, the historical differences in hiring have created a pipeline to higher paid jobs that contains more men. Compositional differences between Part 1 and Part 2 are qualitatively similar to those between men and women. Hires at GE and above are 40.4% Part 2 employees, while hires at GA-GD are 62.5% Part 2. In contrast to the gender differences, however, there is no pattern of convergence toward parity over time in the shares of Part 1 and Part 2 staff hired at different grades.

Figure 1: Changes in the Composition of Hires over Time

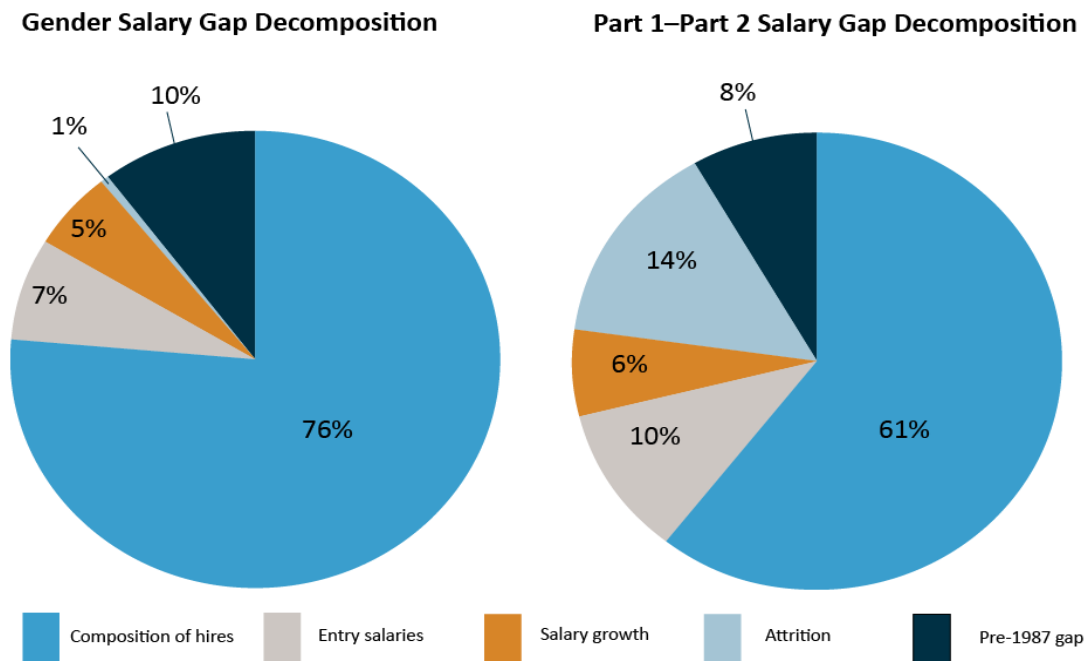


These graphs show the proportion of women (respectively Part 2 employees) among employees hired at each given grade over time. Gender equity has improved significantly as the fractions of men and women hired at each grade have converged over time. However, women are still hired into lower grades, for instance, 78.1% of GA-GD hires are female whereas 62.3% of GG hires are male. Hires at GE and above are only 40.4% Part 2 employees, while hires at GA-GD are 62.5% Part 2. There is no pattern of convergence toward parity over time in the shares of Part 1 and Part 2 hired at different grades.

Consistent with these patterns, the decomposition of the aggregate gap in Figure 2 shows that:

- Seventy six percent (76%) of the aggregate gender gap in 2015 and sixty one (61%) of the aggregate country part gap in 2015 can be attributed to differences in grade composition at entry (Figure 2).
- Differences in salary growth and differences in entry salaries account for 12% of the aggregate gap across men and women and 16% across Part 1 and Part 2 staff
- Finally, attrition is a more important contributor (14%) for the aggregate gap across Part 1 and Part 2 employees, relative to the aggregate gap across women and men (1%).

Figure 2: Decomposition of the Aggregate Gender and Country Part Salary Gaps



The graph shows the relative importance of four reasons behind the salary differences between men and women and between Part 1 and Part 2 employees. The four reasons are hires (grades at which employees are hired), entry salaries (conditional on the grade), salary growth (raises and promotions), and attrition (the propensity to leave the WBG).

** Our data start in 1987 so there is a residual gap that cannot be decomposed.*

Career Gap

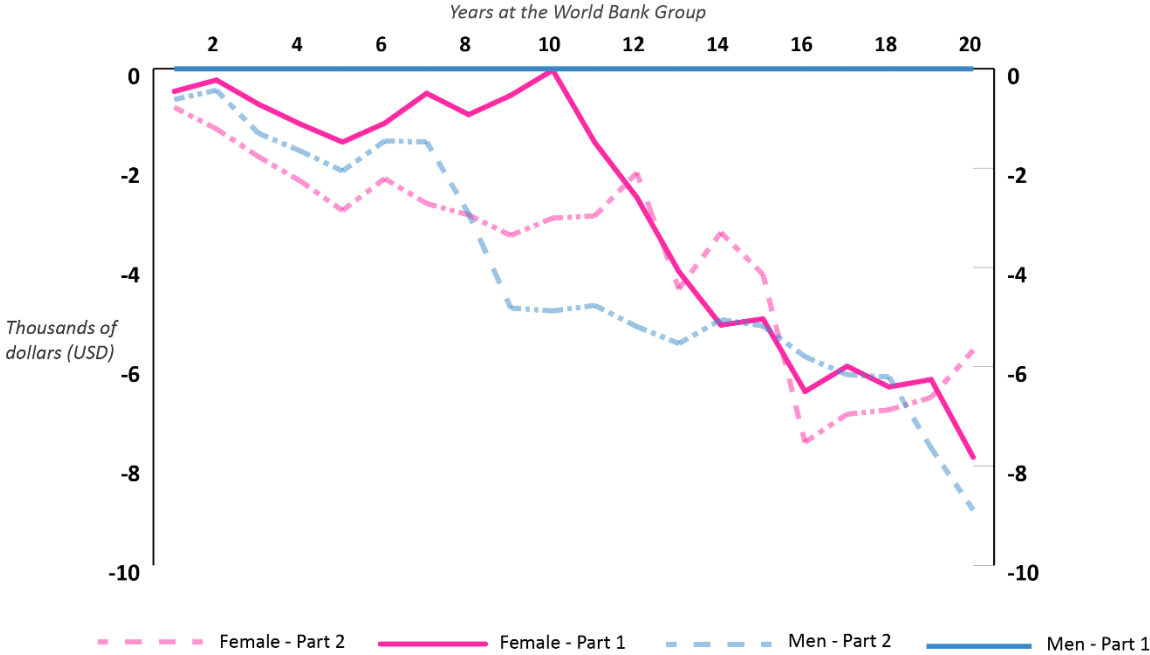
The data on the career gap shows that it varied across entry grades, which is an important finding in itself. In grades GE and GG, 15 years after joining the WBG any existing gaps in salaries by sex or nationality are small. In all other grades besides GF, there are insufficient hires in each year for every subgroup to offer meaningful estimates. For instance, the largest number of men in the GA-GD cohort were hired in grade GB. But even there, only 209 men were hired (an average of 8 men per year) over the duration of our data and there are 12 years with 3 or fewer men hired into this grade.

Similarly, for grades GH, there were 11 years with fewer than 5 women hired into the grade; for higher grades, the numbers are smaller. For employees who entered at GF, there are both sizeable salary differences and a large sample to examine career gaps and we therefore perform

our decomposition of the career pay gap for staff in that group who joined the organization between the years of 1987 and 1996. Limiting coverage to employees hired at GF results in a sample of 702 staff in 2015 who had been hired as a GF in 1996 or earlier; these represent 53.3 percent of the total staff in grades GE+ among those cohorts.

Figure 3 shows the career salary gaps for staff who entered as GF between 1987 and 1996. After 15 years at the WBG, compared to male Part 1 employees, female Part 1 employees earn 5,036 dollars less annually, male Part 2 employees earn 5,178 dollars less, and female Part 2 earn 4,139 dollars less on average. That is, for every dollar that male Part 1 employees (who entered as a GF) earned after 15 years, female Part 1 employees earned 96.52 cents, male Part 2 employees earned 96.42 cents and female Part 2 employees earned 97.14 cents. Our decomposition results indicate that the bulk of these differences is explained by differences in salary growth, which reflects a longer lead time for promotions to grades GG and GH.

Figure 3: The Career Salary Gap for Employees Hired at GF Level, relative to Men - Part 1.



The graph shows how the salary gap between Men - Part 1 employees hired at grade GF and the other groups of employees changes over their careers at the World Bank Group. For example, after 15 years at the WBG, the average female Part 1 employee earns 5,036 dollars less annually than the average male Part 1 employee. Men Part 2 and female Part 2 employees face a similar salary gap compared to men Part 1.

Attrition from the WBG has the potential to confound our interpretation of career gaps. About 8-10 percent of staff leave the WBG every year, and therefore within 7-9 years, half of original staff hires exit the sample. The decomposition analysis assumes that, had they not left the WBG, leavers and stayers in the same cohort would receive the same salaries, conditional on their last salary and entry grade. Our analysis did not find differences—in the means or distributions of either performance or salaries—of stayers versus leavers, but it could be sensitive to that assumption.⁷

The relatively modest career gaps we found are somewhat surprising given the previous analysis by Filmer et al. (2005), which showed a consistent salary premium for Part 1 men compared to women and Part 2 employees. It also runs contrary to the assumptions voiced by staff at the institution. To address this concern, we first re-examined the Filmer et al. (2005) results and found that the gender salary gap becomes small in their analysis once starting grades are accounted for—information that was not incorporated in the Filmer et al. (2005) salary decomposition. The results presented here are consistent with those of Filmer et al. (2005) as both our analysis and theirs points to entry grades as a critical determinant of current salary gaps.

Do Salaries Reflect Performance?

We then examined whether the smaller contributions of entry salaries and salary growth to the aggregate gap reflects a flat compensation system with a strong preference for equity that seeks to close gaps where they exist. For instance, at the WBG, the compensation methodology seeks to promote equity within each grade by accelerating increases for those staff positioned below the midpoint and moderating for staff positioned above the midpoint, so that over time, equal performance is compensated in an equitable way. This is supported by the 2015 introduction of a four-zone salary band.

In fact, we found that salary responds strongly to performance ratings at the WBG. Among the cohort of GF entrants between 2000 and 2005, staff in the lowest performance decile gained 26 percent in real salaries over a 10-year period while those in the highest performance decile

⁷ In addition to examining compensation metrics prior to staff leaving the WBG, we also tried to follow-up a small group of (randomly) selected staff who had left the Bank and tracked down where they were currently employed using Social Networks such as Facebook and LinkedIn. Current employment appears to be very diverse, with some staff employed in other international organizations, academia, the public or private sector, or staying on in a consultancy role at the WBG.

gained 83 percent. We also did not find evidence for the systematic application of informal rules and guidance that could limit performance-related pay increases (such as not awarding staff the highest performance rating in two successive years). The hiring and compensation system at the WBG is thus reasonably successful at restricting average sub-group differences among staff hired in the same grade, while maintaining salary incentives for high performance.

Policy

Our study bridges a large literature on sub-group differences in the broader labor market and a growing literature on the organization of large firms. The current approach, when it comes to Diversity and Inclusion in large firms, is often that individual cases are examined on the basis of cross-sectional data to ensure compliance with equal pay policies. Our attempt here is to apply tools available in the labor literature to the internal labor market of a single firm, in the hope that these tools provide valuable insights into compensation policies in such environments.

As a research paper, the objective is to establish basic facts that can inform discussion and debate at the WBG. One general theme that emerges from this line of work is that pay distributions today are linked in complex ways to historical hiring and compensation patterns. Conversely, policies today will have long-run effects that need to be carefully considered. For instance, attempts to increase the number of women at the GH level through greater hiring at the GF level and promotions would have to account for the fact that men tend to leave the institution at a faster rate than women and that overall exits are highly cyclical. Consequently, boosting hiring at the bottom of an exit-cycle can have very different long-term effects relative to additional hiring at the peak of the cycle. Similarly, one-time salary raises to staff who are below a benchmark would have to be evaluated both in terms of their effects on the balance between pay and performance as well as the design of the compensation system.

Issues for Further Study

Two specific issues stand out for further attention. First, compositional differences continue to affect the distribution of staff at the WBG. We do not know whether these differences emerge at the point of hiring (equally qualified men and women have applied, but men are chosen more often) or at the point of job applications (fewer qualified women apply relative to men). Data on

job applicants are currently not available in the HR system and further, even for those who are successfully hired into the WBG, data on personal characteristics are incomplete: For instance, education levels are missing for 25 percent of our data. If compositional differences arise at the application stage, a very different kind of policy would be required (such as an outreach program) relative to compositional differences that arise at the hiring stage given an equal application pool across all subgroups.

Second, exit rates from the institution are such that 50% of staff leave within 7-9 years. Little is known about why staff leave the institution and what jobs they receive outside the WBG. Further, managers may have flexibility to negotiate, but new tools may need to be leveraged better to retain staff who plan to leave. Our analysis revealed that those who leave and those who stay look very similar on their performance at the WBG prior to their exit. Therefore, the institution loses both high and low performing staff whenever the number of exits rise. Appropriate actions that can be taken to retain high-performing staff—especially women and Part 2 staff—may be a useful new area for policy or simply be an area that needs to be better managed within the institution.

References

Blau, Francine D., and Lawrence M. Kahn. 2016. "The Gender Wage Gap: Extent, Trends, and Explanations." IZA Working Paper 9656, January

Deon Filmer, Elizabeth King, Dominique van de Walle. 2005. "Testing for pay and promotion bias in an international organization", *International Journal of Manpower*, Vol. 26 Issue 5, pp.404 – 420

Gobillon, Laurent, Marion Leturcq, Dominique Meurs and Sebastien Roux. 2014. Elite Institutions, fields of study and the gender wage gap: case study of a large firm. File downloaded on March 13, 2017 from <http://lagv2015.idep-fr.org/submission/index.php/LAGV2015/LAGV14/paper/viewFile/1653/376>

Juhn, Chinhui and Kristin McCue. 2017. Specialization Then and Now: Marriage, Children, and the Gender Earnings Gap across Cohorts. *Journal of Economic Perspectives*. Vol. 31 (1): pp. 183-204

Takao, Kato, Daiji Kawaguchi and Hideo Owan. 2013. Dynamics of the Gender Gap in the Workplace: An econometric case study of a large Japanese firm. The Research Institute of Economy, Trade and Industry Discussion Paper Series 13-E-038.

The LSE Equity, Diversity and Inclusion Taskforce. 2016. The Gender and Ethnicity Earnings Gap at LSE.

The World Bank. 2012. World Development Report: Gender Equality and Development.