

# Measuring Employment Impact: Applications and Cases

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Working Paper 21-082



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# Measuring Employment Impact: Applications and Cases

Katie Panella and George Serafeim\*

## Abstract

Applying the Impact-Weighted Accounts Initiative's employment impact methodology, on eight leading companies, we document wide variability in employment impacts as a percentage of salaries paid, ranging between 59 and 80 percent. We identify opportunities for improvement and discuss transition plans for companies to create more positive employment impact. We conclude with a call for disclosure of Equal Employment Opportunity Commission EEO-1 reports, paid leave, childcare and healthcare benefits, which would greatly facilitate the comparable and reliable measurement of employment impact in the future.

**Keywords:** impact measurement, accounting, employees, well-being, diversity, opportunity, wages

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## 1. Introduction

Employment impact-weighted accounting statements quantify the positive and negative impacts of firm practices for direct employees and the broader labor community.<sup>1</sup> This paper analyzes 2018 employment impact for eight firms with a combined annual US-based revenue of over \$218 billion, \$76 billion in EBITDA, an estimated \$45 billion in annual salary spend and over 600,000 employees.<sup>2</sup> In doing so we use the methodology described in Freiberg, Panella, Serafeim and Zochowski (2020) to calculate employment impact.<sup>3</sup> The total estimated employment impact amounts to \$31 billion. The sample companies are members of the information technology, financials, consumer discretionary, consumer staples, and communication services sectors signaling broad cross-sectoral applicability of the methodology. The analysis illuminates several observations that suggest a need for further analysis and demonstrate the potential power of impact-weighted accounting statements to determine organizational impact on direct employees and the broader labor community. **Exhibit 1** describes the impact dimensions analyzed in this paper.

### Exhibit 1: Description of Employment Impact Dimensions

Stakeholder	Impact Dimension	Description
<i>Employee</i>	<b>Wage Quality</b>	<i>Quality of wages provided, including living wage and marginal utility impact</i>
	<b>Opportunity</b>	<i>Employee demographics across job categories</i>
	<b>Health and Wellbeing</b>	<i>Impact of organization on employee health and wellbeing, including access to healthcare, paid sick leave, and family friendly workplace practices (parental leave, childcare support, and backup childcare access).</i>
<i>Labor Community</i>	<b>Diversity</b>	<i>Employee demographics as compared to local population</i>
	<b>Location</b>	<i>Relative impact of employment based on local employment levels</i>

## 2. Measurements of Employment Impact

Despite challenges and opportunities for improvement, each company analyzed in this paper creates a net positive impact through their employment practices. This simple take-away begins to shift the narrative

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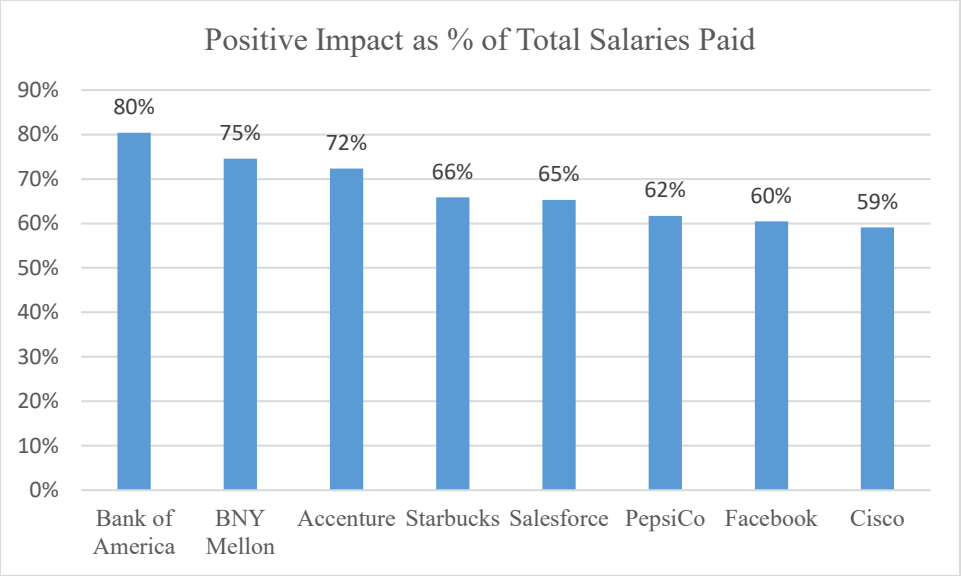
<sup>1</sup> Forthcoming expansion of the Impact-Weighted Accounts methodology will include monetization of impacts across the broader workforce (e.g. workers within a company's supply chain), as well as the impact of employment-related practices for stakeholders beyond the workforce (e.g. the community-level economic impact of earning a living wage).

<sup>2</sup> For the two financial firms we use EBIT, given EBITDA is not available.

<sup>3</sup> Freiberg, D., Panella, K., Serafeim, G., and Zochowski, R., 2020. Accounting for Organizational Impact. *Harvard Business School Impact-Weighted Accounts Research Report*.

from a company’s workforce practices as a cost-center, to an engine of positive value creation.<sup>4</sup> Analysis of the impact created as a percentage of total salaries paid is a powerful bellwether for this transition. Companies that pay fair wages, maintain health and wellbeing-promoting practices, hire, retain, and promote a workforce that represents their local population, and create employment opportunities in areas of low or underemployment will achieve positive impact that meets or exceeds their payroll costs. In **Exhibit 2**, the performance of each company in our sample demonstrates the wide variation in quality, and the opportunity for increased value creation. According to our calculations, Bank of America had the highest employment impact as a percentage of total salaries paid.

**Exhibit 2: Employment Impact as a Percentage of Total Salaries Paid**



These cases begin to show the power of impact-weighted accounting statements, both at an aggregate level, and in specific impact dimensions. A feature of the methodology worth noting is the use of wages for monetization across most of the framework (with exceptions in selected Health and Wellbeing dimensions, including the Subjective Wellbeing analysis). The common measurement base allows for comparison across impacts, as well as companies, and highlights the potential for broad application. Moreover, the use of wages as a measurement base makes employment impact numbers both verifiable and as a result assurable, increasing the faithful representation of the substance of employment impact. As

<sup>4</sup> Positive value creation within the IWA framework refers to value for a broad range of stakeholders across different types of capital (rather than the more common analysis of the relationship between a firm’s workforce and the creation of shareholder value).

previously described, however, it does not imply that increased wages are sufficient to increase employment impact; rather, it provides a consistent methodological foundation for interpretation and analysis.

### 3. Insights

Impact-weighted accounting figures are embedded within fundamental financial metrics to enable comparison across companies, industries, and geographies. The group of companies below shows the importance of this step. Consider Salesforce and PepsiCo. While each have similar profit margins of approximately 20%, Salesforce creates significantly higher employment impact as a % of EBITDA (109%, compared to 71% at PepsiCo in **Exhibit 3**). PepsiCo's lower relative performance may be attributed to poor gender diversity within the workforce, as well as over twice the negative Opportunity impact due to a lack of representation of race and ethnic groups within the higher-salary positions at the company. Over 50% of PepsiCo's negative Opportunity impact is derived from the firm's misrepresentation of Black male workers, who comprise over 16% of the total workforce, but hold only 6% of positions in the top salary tiers.<sup>5</sup>

Initial scanning of the cohort of companies below draws attention to the large positive impact in the Wage Quality dimension. A reader may be inclined to conclude that impact can be increased by simply increasing the average salary paid to each employee. While the methodology does ensure that every employee earns a living wage, the incremental positive impact begins to decline after the income satiation level (approximately \$105,000 in the United States).<sup>6</sup> This becomes apparent by comparing two of the companies below, Bank of America and Facebook. We find that Bank of America produces twice the impact as a percentage of revenue than Facebook, at 12% compared to 6%, respectively, despite a lower average salary of \$77,597 compared to \$126,028 (**Exhibit 3**). Bank of America also surpasses Facebook in impact as a percentage of EBITDA and of salaries paid, at 30% to 12% and 80% to 60%, respectively. Therefore Facebook, with an average salary of over \$125,000 per employee, could not simply increase its employment impact by raising salaries.<sup>7</sup>

Analysis of the same two companies, Bank of America and Facebook, generate additional insights. It is possible that a reader may see the higher employment impact at Bank of America as a result of its larger workforce, considering it employed nearly eight times the number of employees as Facebook did in 2018. However, when considering the *per employee* impact at each company (therefore eliminating the effect of workforce size), we find that Bank of America created a per employee impact of \$62,618 (80% of the total salary figure), while Facebook produced a per employee impact of \$76,219 (only 60% of the total salaries paid) as shown in **Exhibit 2**. Bank of America also stands out in the sample as the only firm creating positive Health and Wellbeing impact, driven by the company's family friendly workplace practices (**Exhibit 3**).

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<sup>5</sup> Analysis conducted using demographic data from PepsiCo 2018 EEO-1 Report and salary data from Glassdoor and Payscale.

<sup>6</sup> For further explanation of the methodology applied in the Wage Quality impact dimension, see Appendix 1 in "Accounting for Organizational Impact" released in October 2020.

<sup>7</sup> Facebook salary data from Glassdoor and Payscale.





**Exhibit 3: Application of Employment Impact-Weighted Accounting Methodology**

	<b>Accenture</b>	<b>Bank of America</b>	<b>BNY Mellon</b>	<b>Cisco</b>
<b>GICS Sector</b>	Information Technology	Financials	Financials	Information Technology
<b>Number of Employees</b>	51,856	161,675	27,561	37,209
<b>US Revenue</b>	\$ 17,016,390,000	\$ 81,004,000,000	\$ 10,326,960,000	\$ 25,500,000,000
<b>US EBITDA</b>	\$ 2,895,993,670	\$ 33,392,092,753	\$ 2,687,580,000	\$ 12,082,000,000
<b>US Total Salaries Paid</b>	\$ 4,772,264,391	\$ 12,545,504,557	\$ 1,911,133,981	\$ 4,017,280,562
<i>Employee Impact</i>				
Wage Quality	\$ 4,768,927,093	\$ 12,513,400,955	\$ 1,910,863,197	\$ 4,004,397,021
Opportunity	\$ (212,122,543)	\$ (1,702,139,984)	\$ (139,118,835)	\$ (200,557,158)
Health and Wellbeing	\$ (64,690,957)	\$ 109,079,684	\$ (70,389,710)	\$ (9,499,298)
<b>Subtotal</b>	<b>\$ 4,492,113,592</b>	<b>\$ 10,920,340,655</b>	<b>\$ 1,701,354,653</b>	<b>\$ 3,794,340,565</b>
<i>Labor Community Impact</i>				
Diversity	\$ (1,232,503,437)	\$ (1,366,223,197)	\$ (341,671,924)	\$ (1,566,723,375)
Location	\$ 191,988,999	\$ 457,436,563	\$ 64,877,866	\$ 139,543,986
<b>Subtotal</b>	<b>\$ (1,040,514,438)</b>	<b>\$ (908,786,634)</b>	<b>\$ (276,794,058)</b>	<b>\$ (1,427,179,389)</b>
<b>Total Impact</b>	<b>\$ 3,451,599,155</b>	<b>\$ 10,011,554,021</b>	<b>\$ 1,424,560,595</b>	<b>\$ 2,367,161,176</b>
Impact % Revenue	20%	12%	14%	9%
Impact % EBITDA	119%	30%	53%	20%
Impact % Salaries	72%	80%	75%	59%

Exhibit 3, cont.

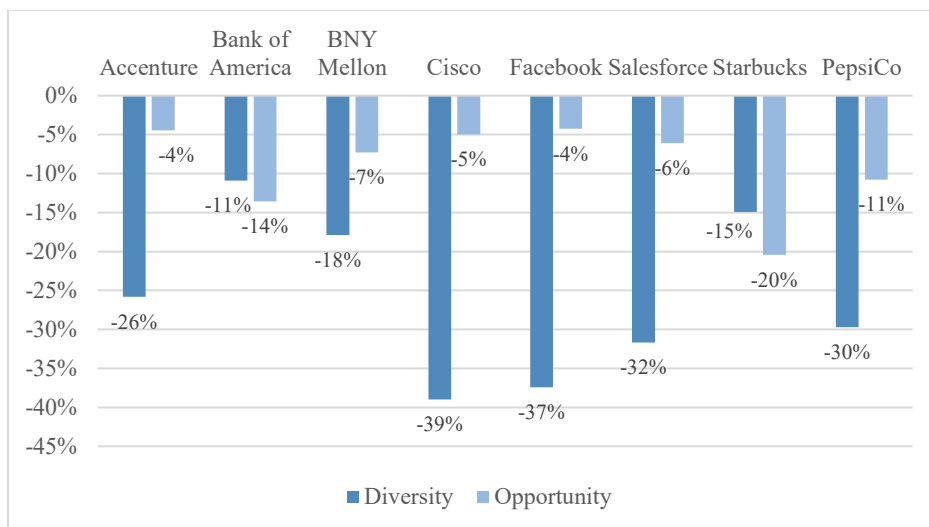
	Facebook	Salesforce	Starbucks	PepsiCo
<b>GICS Sector</b>	Communication Services	Information Technology	Consumer Discretionary	Consumer Staples
<b>Number of Employees</b>	19,679	21,148	191,287	114,260
<b>US Revenue</b>	\$ 24,100,000,000	\$ 7,275,951,360	\$ 16,809,260,000	\$ 36,856,770,000
<b>US EBITDA</b>	\$ 12,615,000,000	\$ 1,457,000,000	\$ 4,286,100,000	\$ 7,133,550,000
<b>US Total Salaries Paid</b>	\$ 2,480,099,212	\$ 2,432,029,913	\$ 8,505,904,138	\$ 8,186,016,445
<i>Employee Impact</i>				
Wage Quality	\$ 2,464,102,038	\$ 2,418,533,192	\$ 8,488,921,179	\$ 8,183,585,366
Opportunity	\$ (105,149,756)	\$ (148,239,872)	\$ (1,738,544,298)	\$ (881,355,971)
Health and Wellbeing	\$ (24,817,807)	\$ (3,048,977)	\$ (135,481,752)	\$ (113,565,652)
<b>Subtotal</b>	<b>\$ 2,334,134,475</b>	<b>\$ 2,267,244,343</b>	<b>\$ 6,614,895,129</b>	<b>\$ 7,188,663,743</b>
<i>Labor Community Impact</i>				
Diversity	\$ (928,445,067)	\$ (770,076,824)	\$ (1,267,683,813)	\$ (2,432,281,323)
Location	\$ 94,215,698	\$ 86,677,007	\$ 256,716,923	\$ 291,492,914
<b>Subtotal</b>	<b>\$ (834,229,369)</b>	<b>\$ (683,399,818)</b>	<b>\$ (1,010,966,890)</b>	<b>\$ (2,140,788,409)</b>
<b>Total Impact</b>	<b>\$ 1,499,905,106</b>	<b>\$ 1,583,844,525</b>	<b>\$ 5,603,928,239</b>	<b>\$ 5,047,875,334</b>
Impact % Revenue	6%	22%	33%	14%
Impact % EBITDA	12%	109%	131%	71%
Impact % Salaries	60%	65%	66%	62%

Notes:

1. All data are for fiscal year 2018.
2. US EBITDA is calculated by assuming the percentage of global EBITDA/US EBITDA is equal to global Revenue/US Revenue.
3. EBIT (Operating income) is used in place of EBITDA for Bank of America and BNY Mellon.
4. Salaries are calculated for each company using publicly available data from Glassdoor and PayScale.
5. Workforce locations are determined through company disclosure and public professional profile data.
6. Health and Wellbeing impact monetization is conducted based on best available data, and uses company sources whenever possible. The positive value of PepsiCo's childcare support, a sub-dimension of Family Friendly Workplace impact, may be underestimated due to data availability. While PepsiCo reports that it provides childcare support to employees, we were unable to determine a comprehensive monetary value based on data disclosed by the company. Bright Horizons, a national provider of employer-based childcare, disclosed a partnership with PepsiCo in Purchase, NY that shows approximately 70 employees, or less than 1% of eligible employees at PepsiCo, are enrolled in their services.
7. Due to insufficient data, certain analyses were excluded from this company cohort that are important to understanding organizational employment impact. These dimensions are illuminated in "Accounting for Organizational Employment Impact" (Freiberg et al, 2020), and include: Wage Equity, Career Advancement, Safety, Culture, and Workplace Wellness.

Organizational diversity (or lack of) creates negative impact within the labor community at each of the firms below, however with great variation in relative scale. At Cisco and Facebook, both companies erase over 60% of their total positive impact due to the significant misalignment between their workforce and local demographics. PepsiCo’s negative Diversity impact is (\$2.4 billion), 48% of their total impact of \$5 billion (the workforce was over 80% male in 2018). There is great potential for improvement in this dimension, including among those that initially appear as laggards. Notably, every company in the sample below has already taken an important first step towards growing their Diversity and Opportunity impact by publicly releasing standardized workforce demographic information through their EEO-1 reports. Five of the companies in the sample (Accenture, Bank of America, Cisco, Merck, and PepsiCo) also committed to the OneTen initiative that will create 1 million opportunities for Black Americans in family-sustaining careers by 2030.<sup>8</sup> **Exhibit 4** shows Diversity and Opportunity impact at each firm, calculated as a percentage of total salaries paid. These figures have decision-making implications regarding recruitment, hiring, promotion, and retention of talent.

**Exhibit 4: Diversity and Opportunity Impact as % of Total Salaries Paid**



#### 4. Transition Plans

All companies can improve their employment impact. Preparing a transition plan to create more positive employment impact is important for every company independent of how poor its employment impact might be presently. For example, PepsiCo has strong Family Friendly Workplace practices, including provision of backup childcare support and onsite childcare at select locations, creating an estimated positive impact of over \$40 million in 2018. However, the company provided only 4 weeks of paid parental leave, resulting

<sup>8</sup> See initiative website for other participants and additional information: <https://www.oneten.org>.

in (\$92 million) impact for employees.<sup>9</sup> Increased access to parental leave, striving to the best-in class standard of 16 weeks, is an actionable step to improve overall employment impact at PepsiCo (see **Exhibit 5** below for 2018 data).

### **Exhibit 5: PepsiCo Health and Wellbeing Impact**

<b>PepsiCo Health and Wellbeing Impact</b>	
Family Friendly Workplace Impact	\$ (50,913,085)
Value Gained (Lost) through Parental Leave	\$ (91,606,264)
Value Gained (Lost) through Backup Childcare	\$ 39,997,053
Value Gained (Lost) through Childcare Support	\$ 696,126
Sick Leave Impact	\$ -
Healthcare Impact	\$ (62,652,567)
<b>Total HWB Impact</b>	<b>\$ (113,565,652)</b>

At Starbucks, demographics across occupational categories are misaligned with the overall workforce, creating an opportunity for the firm to create positive value. Hispanic females, for example, account for 16% of the company workforce, which exceeds the local population demographic benchmark of 11%.<sup>10</sup> While this is a sign of the firm providing job opportunities to a minority group, there is a significant gap between Hispanic female representation within the High Salary group, and the Low Salary group, resulting in a negative impact of (\$872 million) in 2018, over 50% of the company’s overall Opportunity impact. Efforts to hire, retain, and promote Hispanic females across all job categories, not just those at the lower end of the wage spectrum, could improve employment impact at Starbucks. At Cisco, lagging gender diversity (with a total of only 27% female workers in 2018) is a clear driver of the firm’s poor Diversity impact, with implications for significant change that would reduce the negative externality of over (\$1.5 billion).<sup>11</sup>

Further analysis of firm employment impact will provide the opportunity to benchmark performance within industries and geographies, and will illuminate additional variation across impact dimensions. For example, the Wage Quality analysis ensures that all employees earn a living wage, and provides only incremental positive impact for wages paid above minimum wage. However, all companies included in this paper cohort have an average salary well above the national living wage in the United States, therefore we see only small negative impact from companies with poor wage quality. The national average wage in the United States is lower than the living wage, therefore we will undoubtedly see

<sup>9</sup> Information from employee crowdsourced data at Glassdoor.com and FairyGodBoss.com.

<sup>10</sup> Starbucks 2018 EEO-1 report and US Census Bureau population data.

<sup>11</sup> Cisco 2018 EEO-1 report.

additional negative Wage Quality impact as our sample broadens to be fully representative of the range of employment in the country.

## **5. Conclusion**

The application of the employment impact methodology to eight leading companies across different sectors of the economy demonstrates the feasibility of using impact-weighted accounting statements to identify meaningful values that are comparable across firms. The statements can be analyzed concurrent with financial performance, to create a more comprehensive picture of value creation, and identify opportunities for growth. We note that the analysis was made possible for these companies because of their disclosure of EEO-1 reports. Therefore, efforts for companies to disclose their EEO-1 reports will meaningfully assist in measuring employment impact. The same applies to public disclosures about companies' sick leave, parental leave, childcare, and healthcare benefits.