School of Management and Labor Relations

This report outlines data on ESOP employer contributions and plan income per year relative to industry pay averages, with comparisons to other defined contribution (DC) plans where employers make contributions (primarily 401k's).

This study uses the U.S. Department of Labor's Form 5500 research files with data on all pension plans over the 2010-2018 period, matched to yearly industry average pay data from 482 industries in the U.S. Bureau of Labor Statistics Current Employment Statistics database.

The study answers the question: How does the average employee come out when the employer contributions of ESOPs are compared to the employer contributions of other DC plans? The study looks at the experience of individual workers when the company takes responsibility for their retirement savings.

Key Findings:

1. Looking at all Federal records for 2010-2018, the dollar value of ESOP contributions plus plan income per employee is substantially higher for ESOP employees than for all other DC plan employees on average and at the median. See Table 1 and Figure 1.
2. This is also true as a percent of industry base pay on average and at the median. See Table 1 and Figure 1.
3. ESOP employees have higher industry average base pay compared to the employees of all other DC plans. See Table 1 and Figure 1.
4. Analyzing the data by year across the 2010-2018 period, the dollar value of ESOP contributions plus plan income per employee is higher for ESOP employees compared to the employees in other DC plans in every year, on average and at the median. See Table 2 and Figure 2.
5. Analyzing the data by industry, the dollar value of ESOP contributions plus plan income per employee is higher for ESOP employees than for the employees of other DC plans in every industry, on average and at the median. The combined industry base pay, employer contributions, and plan income are higher for ESOP participants than for other DC participants in each industry except retail and information. See Table 3 and Figure 3. (Note: Agriculture and mining are not included where ESOPs are not common and the sample size is too small.)
6. Analyzing the data by whether and what type of other pension plans are in the company, the dollar value of contributions plus plan income per employee is higher for ESOP employees where there is no other plan (i.e., standalone ESOPs) than for other DC employees where there is no other plan (i.e., standalone other DC plans), on average and at the median. This is also true as a percent of industry base pay on average and at the median. See Table 4 and Figure 4.

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7. When an ESOP is combined with other DC plans and defined benefit plans, the dollar value of ESOP contributions plus plan income per employee always increases in cases where it is combined with other DC plans. See Table 4 and Figure 4.
8. The dollar value of ESOP contributions plus plan income per employee is always higher than that value in other DC plans in every possible combination of ESOPs and DC plans. See Table 4 and Figure 4.
9. The total assets per participating employee in ESOPs is always higher than the total assets per participating employee in other DC plans across all years and in each individual year, on average and at the median, and as a percent of base pay. See Table 5 and Figure 5.
10. The annual rate of return on assets within ESOPs (counting just investment returns and excluding contributions and distributions) has a slightly higher mean and median among ESOPs than among other DC plans across the 2010-2018 period. See Table 5. The comparison, however, varies by year. As shown in Figure 6, the average annual rate of return among all ESOPs is less variable across years than among other DC plans. The overall yearly pattern matches the pattern of stock market returns over this period (Years of Stock Market Returns (thebalance.com).

Table 1: Base Pay and Plan Compensation for ESOPs and Other DC Plans, 2010-2018

|  | Industry avg. <br> base pay <br> $(2018 ~ \$)$ | Employer contribution + plan income per participant |  | \# of plan- <br> year obs |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dollar value (2018 \$) |  | Percent of base pay |  |  |
|  |  | Mean | Median | Mean | Median |  |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| ESOPs | $\$ 61,112$ | $\$ 14,072$ | $\$ 8,371$ | $23.0 \%$ | $12.9 \%$ | 45,909 |
| Other DC | $\$ 58,666$ | $\$ 5,614$ | $\$ 2,386$ | $9.0 \%$ | $4.4 \%$ | $4,465,740$ |

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.
Restricted to plans with any employer contributions over 2010-2018
All dollar values adjusted to 2018 values
Mean values have been winsorized at upper and lower 1\%
All values weighted by number of active plan participants

Figure 1: Base Pay and Plan Compensation Averages over 2010-2018


Table 2: Base Pay and Plan Compensation by Year

|  | Industry avg. base pay (2018 \$) | Employer contribution + plan income per participant |  |  |  | \# of obs <br> (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dollar value (2018 \$) |  | Percent of base pay |  |  |
|  |  | Mean (2) | Median <br> (3) | Mean <br> (4) | Median <br> (5) |  |
| ESOPs |  |  |  |  |  |  |
| 2010 | \$60,990 | \$16,001 | \$9,839 | 25.7\% | 17.0\% | 4,947 |
| 2011 | \$60,280 | \$6,563 | \$1,726 | 11.7\% | 4.4\% | 5,018 |
| 2012 | \$59,728 | \$15,047 | \$12,853 | 24.9\% | 19.0\% | 5,073 |
| 2013 | \$59,850 | \$21,788 | \$18,823 | 34.5\% | 25.6\% | 5,083 |
| 2014 | \$60,412 | \$14,625 | \$10,835 | 24.7\% | 18.2\% | 5,123 |
| 2015 | \$59,451 | \$7,651 | \$3,232 | 13.9\% | 4.8\% | 5,141 |
| 2016 | \$61,661 | \$16,111 | \$12,337 | 25.5\% | 18.0\% | 5,156 |
| 2017 | \$63,249 | \$23,654 | \$18,617 | 35.6\% | 28.0\% | 5,211 |
| 2018 | \$64,269 | \$5,508 | -\$175 | 11.4\% | -0.5\% | 5,157 |
| Other DC |  |  |  |  |  |  |
| 2010 | \$57,834 | \$7,275 | \$4,261 | 11.8\% | 7.6\% | 478,658 |
| 2011 | \$57,207 | \$1,729 | \$544 | 2.8\% | 1.0\% | 482,872 |
| 2012 | \$57,258 | \$6,960 | \$3,985 | 11.3\% | 7.2\% | 486,712 |
| 2013 | \$58,177 | \$10,589 | \$6,070 | 17.1\% | 11.0\% | 490,283 |
| 2014 | \$58,233 | \$5,676 | \$3,204 | 9.1\% | 5.7\% | 464,953 |
| 2015 | \$59,176 | \$1,939 | \$885 | 3.1\% | 1.6\% | 504,676 |
| 2016 | \$59,511 | \$6,078 | \$3,468 | 9.5\% | 6.0\% | 512,309 |
| 2017 | \$60,017 | \$11,493 | \$6,636 | 17.9\% | 11.5\% | 519,771 |
| 2018 | \$59,926 | -\$796 | -\$555 | -1.2\% | -1.1\% | 525,506 |

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Restricted to plans with any employer contributions over 2010-2018
All dollar values adjusted to 2018 values
Mean values have been winsorized at upper and lower 1\%
All values weighted by number of active plan participants

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Figure 2: Base Pay and Plan Compensation Averages by Year


Table 3: Base Pay and Plan Compensation by Industry, 2010-2018

|  | Industry avg. base pay (2018\$) | Employer contribution + plan income per participant |  |  |  | \# of planyear obs <br> (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dollar value (2018 \$ |  | Percent of base pay |  |  |
|  |  | Mean <br> (2) | Median <br> (3) | Mean <br> (4) | Median <br> (5) |  |
| Construction |  |  |  |  |  |  |
| ESOPs | \$60,597 | \$17,844 | \$10,393 | 29.6\% | 17.3\% | 5,544 |
| Other DC | \$59,980 | \$6,101 | \$3,518 | 10.1\% | 5.9\% | 368,174 |
| Manufacturing |  |  |  |  |  |  |
| ESOPs | \$58,413 | \$21,662 | \$13,709 | 36.6\% | 23.4\% | 9,658 |
| Other DC | \$54,494 | \$7,260 | \$3,873 | 12.9\% | 7.4\% | 475,175 |
| Wholesale |  |  |  |  |  |  |
| ESOPs | \$57,849 | \$22,731 | \$11,999 | 38.6\% | 21.6\% | 4,372 |
| Other DC | \$56,965 | \$5,952 | \$3,611 | 10.5\% | 6.4\% | 247,288 |
| Retail |  |  |  |  |  |  |
| ESOPs | \$32,096 | \$5,653 | \$1,726 | 18.1\% | 6.1\% | 2,657 |
| Other DC | \$38,673 | \$2,556 | \$1,368 | 6.6\% | 3.7\% | 269,245 |
| Transportation |  |  |  |  |  |  |
| ESOPs | \$47,465 | \$8,992 | \$3,876 | 18.5\% | 8.7\% | 957 |
| Other DC | \$48,904 | \$3,359 | \$1,296 | 6.5\% | 2.6\% | 87,408 |
| Information |  |  |  |  |  |  |
| ESOPs | \$68,370 | \$7,884 | \$8,104 | 11.5\% | 11.9\% | 769 |
| Other DC | \$70,640 | \$6,887 | \$3,770 | 10.1\% | 5.4\% | 72,918 |
| Finance |  |  |  |  |  |  |
| ESOPs | \$71,119 | \$13,920 | \$11,129 | 19.9\% | 18.7\% | 7,458 |
| Other DC | \$74,584 | \$7,952 | \$4,121 | 10.7\% | 5.9\% | 415,995 |
| Prof./tech. svcs. |  |  |  |  |  |  |
| ESOPs | \$81,020 | \$14,249 | \$9,920 | 17.5\% | 11.9\% | 9,145 |
| Other DC | \$77,860 | \$8,024 | \$3,124 | 10.1\% | 4.1\% | 957,081 |
| Other svcs. |  |  |  |  |  |  |
| ESOPs | \$57,559 | \$8,260 | \$1,866 | 12.8\% | 3.9\% | 4,418 |
| Other DC | \$54,082 | \$4,051 | \$1,535 | 6.6\% | 3.2\% | 1,481,051 |

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.
Restricted to plans with any employer contributions over 2010-2018
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Mean values have been winsorized at upper and lower 1\%
All values weighted by number of active plan participants

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Figure 3: Base Pay and Plan Compensation Averages by Industry over 2010-2018


Table 4: Base Pay and Plan Compensation by Presence of Other Company Plans, 2010-2018

|  | Industry avg. base pay <br> (1) | Employer contribution + plan income per participant |  |  |  | \# of planyear obs <br> (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dollar value Mean (2) | Median <br> (3) | Percent of base pay |  |  |
|  |  |  |  | Mean <br> (4) | Median (5) |  |
| ESOP values if: |  |  |  |  |  |  |
| Standalone ESOP | \$56,959 | \$11,333 | \$6,046 | 19.9\% | 11.4\% | 20,625 |
| Co. also has other DC | \$56,900 | \$13,527 | \$6,072 | 23.9\% | 11.0\% | 23,441 |
| Co. also has DB | \$72,963 | \$18,355 | \$13,882 | 25.7\% | 19.0\% | 807 |
| Co. also has other DC \& DB | \$58,546 | \$16,635 | \$10,465 | 28.0\% | 15.9\% | 1,036 |
| Other DC values if: |  |  |  |  |  |  |
| Standalone other DC | \$57,443 | \$4,970 | \$2,029 | 8.1\% | 3.8\% | 4,211,288 |
| Co. also has ESOP | \$55,306 | \$4,627 | \$2,225 | 7.8\% | 5.2\% | 23,774 |
| Co. also has DB | \$63,347 | \$8,018 | \$4,196 | 12.3\% | 7.0\% | 229,447 |
| Co. also has ESOP \& DB | \$61,495 | \$8,551 | \$5,146 | 13.4\% | 7.7\% | 1,231 |

The first four rows describe values for ESOPs broken down by what other plans exist in the company. The last four rows describe values for other DC plans broken down by what other plans are in the company.
Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.
Restricted to plans with any employer contributions over 2010-2018
All dollar values adjusted to 2018 values
Mean values have been winsorized at upper and lower 1\%
All values weighted by number of active plan participants

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Table 5: Plan Assets and Rates of Return, 2010-2018


Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.
Restricted to plans with any employer contributions over 2010-2018
All dollar values adjusted to 2018 values
Mean values have been winsorized at upper and lower 1\%
All values weighted by number of active plan participants


Figure 6: Average Annual Rate of Return on Plan Assets


