H. C. FOSTER & COMPANY
Retirement and Welfare Plan Actuaries
P.O. Box 99, Belle Rive, Illinois 62810 ▪ (618) 244-1850
hcfoster@mvn.net ▪ www.hcfoster.com ▪ Deliveries to 8252 North Program Lane

Pension Cost Mechanics – Summer 2019

Pension contributions differ dramatically from other employer expenses that are not eventually returned to employees with tax deferred investment earnings. The projections below per $125,000 of annual pension contributions for a ten-year period illustrate the mechanics of diverting some Form W-2 Wages through a tax qualified pension plan with a 40% withholdings rate on top-dollar earnings from Form W-2 Wages that would otherwise apply for the employee group. The results follow:

The employer's total contributions are $1,250,000, but this is not the "cost" to fund benefits.

The employer's Out-of-Pocket cost net of tax deferrals is $750,000.

The employer never held the tax deferrals totaling $500,000 over ten years, so is not part of "cost".

Shown below, accumulations of $949,863 plus $633,242 equals $1,583,105 for a single rate investment and tax deferral return of 17.4% per year compounded annually on $750,000 of actual cost.

With no plan, the employer's Out-of-Pocket cost of $750,000 returns $870,786 for a single rate investment return of 3.66% per year compounded annually after taxes.

	With a Tax Qualified Retirement Plan						With No Plan	
Column-->	(1)	(2)	(3)	(4)	(5)	(6)	(1a)	(4a)
Plan Year	IRR	Funding Costs	Out-of-Pocket	Accumulated Value of (3)	Tax* Deferral	Accumulated Value of (5)	IRR	Accumulated Value of (3)
1	4.00%	$ 125,000	$ 75,000	$ 76,500	$ 50,000	$ 51,000	2.520%	$ 75,945
2	4.20%	125,000	75,000	156,288	50,000	104,192	2.646%	153,947
3	5.00%	125,000	75,000	240,977	50,000	160,652	3.150%	234,977
4	6.00%	125,000	75,000	332,686	50,000	221,791	3.780%	320,277
5	(5.50%)	125,000	75,000	387,326	50,000	258,217	(3.465%)	382,880
6	8.00%	125,000	75,000	496,312	50,000	330,875	5.040%	479,067
7	5.40%	125,000	75,000	600,138	50,000	400,092	3.402%	571,641
8	3.40%	125,000	75,000	696,817	50,000	464,545	2.142%	659,689
9	7.00%	125,000	75,000	823,220	50,000	548,813	4.410%	765,435
10	6.00%	125,000	75,000	*949,863*	50,000	*633,242*	3.780%	*870,786*
Totals		*$1,250,000*	*$750,000*	*$ 949,863*	*$500,000*	*$ 633,242*		*$870,786*

*Withholdings from top-dollar Form W-2 Wages diverted to pension funding would otherwise include Social Security costs, insurance premiums and other associated Wage costs, plus the employer's Workers' Compensation and unemployment insurance costs. A 30% tax withholding rate on top-dollar earnings easily translates to 40% total withholdings and other costs on those dollars avoided through pension contributions. With no plan, the Internal Rate of (investment) Return (IRR) is 63% of the tax deferred IRR under a 37% marginal tax rate for highly-paid employees and business owners. IRR rates and some other values are rounded.

Investment returns and other advantages are measured against Out-of-Pocket costs, not the plan contributions otherwise paid as Wages. Additional savings result from reductions in Form W-2 Wages diverted to pension funding to align each employee's total compensation cost with his production.

The assumptions applied for the above projections include: (a) the IRR represents a sample pattern for a self-administered plan where a professional investment advisor meets the employer's investment

Continued, next page.

return objectives under its ERISA Funding Policy through individually selected investment sources avoiding retail consumer investment products; (b) annual funding costs shown in Column (2) are held constant for simplicity but will vary with total Form W-2 Wages, changes in the employee group, changes in IRS mandated assumptions for minimum funding and Lump Sum Distributions present values, changing total withholding rates, plan amendments, and other factors; (c) the withholding rate from Form W-2 Wages varies by employee, but is assumed as an aggregate rate for this example; (d) contributions are assumed at mid-year, and greatly affect investment return yields; employers may skip contributions to a well funded plan in lean years, and deposit more than the minimum required contributions in higher profit years; and, (e) a Floor-offset Plan arrangement that reduces defined benefit plan funding requirements and liabilities through a defined contribution plan is not assumed.

Employers usually direct their pension funding costs to the business owners and the longer-service, non-owner employees to the extent permitted under IRS regulations. Two distinct approaches apply to measure allocations of employer funding costs between Core Employees, i.e., owners and management, and non-Core Employees, i.e., rank and file employees:

Approach I, compare Core and non-Core Employee allocated pension costs – depending on the concentration of higher-paid, longer-service Core Employees to lower-paid, shorter-service non-Core Employees, a larger portion of the annual funding costs will naturally allocate to Core Employees under plan designs that more rapidly accrues benefits for longer service and greater compensations. Higher-age, shorter-service Core Employees may willingly enter into Salary Withholding Agreements that reimburse the employer for their funding costs upon earlier employment termination, or at Normal Retirement Age. Form W-2 Wage adjustments for all employees will help meet the Approach I objectives in combination with an efficient compensation design that rewards each individual employee's production value.

Approach II, compare Core and non-Core net allocated costs with LSD present values - this approach compares accumulated costs with LSD present values. Proportional present values tend to shift towards LSD present values with increased funding from accumulating tax deferrals and reducing Out-of-Pocket costs paid by the employer. A 10% allocation of annual minimum funding costs does not produce 10% of total LSD present values because the IRS mandated assumptions for minimum funding and LSD present values currently differ dramatically. The accumulated value of tax deferrals shown in Column (6) will exceed the non-Core Employees' total LSD present values under an Efficient Compensation Design for any sized group. LSD present values are independent of investment returns.

The steps to achieve the above objectives include:

Structure an Efficient Compensation Design - our Fall 2016 Newsletter on our website under that title illustrates how to align total compensation costs with plan objectives and the economic value of each employee's work product that is a fair value exchange.

Determine the employer's reasonable cost for its benefit programs – see the Bureau of Labor Statistics (BLS) reports showing how other employers allocate their total compensation costs.

Develop plan designs that meet the above objectives – the IRS pension regulations permit an unlimited array of plan designs based on age, service, and compensation so long as the plan design satisfies the IRC Section 401(a)(4) General Test for Nondiscrimination. Categorize employees into subsets representing their value of production and whom to benefit under a plan design.

Please call or e-mail any questions or comments.