RETIREMENT PLANNING & EMPLOYEE BENEFITS FOR FINANCIAL PLANNERS
4TH EDITION UPDATES

CHAPTER 5

Example 5.3, Page 188

Assume that Tantalus Inc. sponsors an integrated plan that provides for a 10 percent base contribution percentage and an excess contribution percentage of 15.7 percent. If Dave earns $50,000, he would receive a contribution of $5,000 (10% x $50,000). If Mike earned $200,000 and the Social Security wage base was $102,000, then Mike would receive a contribution of $25,586 [10% x $102,000 plus 15.7% x ($200,000 - $102,000), rounded to the nearest dollar]. It is important to understand that integration has increased Mike's contribution by $5,586 ($25,586 - $20,000) over a straight 10 percent plan. This higher contribution is a result of the higher excess contribution rate for compensation above the integration level. An illustration of an integrated profit sharing plan is provided in Example 5.4.

Example 5.4, Page 189

Consider the same facts as Example 5.2 (they want to contribute about $52,000), except with an integrated profit sharing plan and a base contribution rate of 9.6% (the excess rate is 15.30% (9.6 + 5.7 = 15.3)).

INTEGRATED PROFIT SHARING PLAN

Employee	Covered Comp	Base Comp	Excess Comp	Base Cont 9.6%	Excess Cont 15.3%	Total Cont	Percent of Comp	Percent of Total Cont
A (Owner)	$200,000	$102,000	$98,000	$9,792	$14,994	$24,786	12.39%	48.42%
B	$60,000	$60,000	$0	$5,760	$0	$5,760	9.60%	11.25%
C	$60,000	$60,000	$0	$5,760	$0	$5,760	9.60%	11.25%
D	$50,000	$50,000	$0	$4,800	$0	$4,800	9.60%	9.38%
E	$40,000	$40,000	$0	$3,840	$0	$3,840	9.60%	7.51%
F	$35,000	$35,000	$0	$3,360	$0	$3,360	9.60%	6.56%
G	$30,000	$30,000	$0	$2,880	$0	$2,880	9.60%	5.63%
Totals	$475,000	$377,000	$98,000	$36,192	$14,994	$51,186		100.00%

**Figures are rounded to the nearest dollar.*

Base compensation ($)– represents compensation up to the integration level, $102,000 for 2008.

Excess compensation ($)– represents compensation above the integration level, (over $102,000 for 2008) but below the covered compensation limit ($230,000 for 2008).

Base contribution ($)– represents the contribution for compensation up to the integration level (9.6% in this example).

Excess contribution ($)– represents the contribution for compensation above the integration level (rate of 15.30%) and below the covered compensation limit.

Total contribution ($)– represents the sum of the base contribution and the excess contribution. The total amount contributed ($51,186) is close to what would have been contributed using a standard allocation of 11% ($52,250). This amount was chosen by management as what they could afford to contribute to the plan.

In this example, the base rate equals 9.6%. Therefore, all employees will receive a contribution of 9.6% of compensation earned up to $102,000, the integration level for 2008. Notice that the column "Percent of Comp" is the same for employees B through G; all have a contribution of 9.6% of their compensation. None of them have compensation above the integration level, so none will have a contribution at the higher excess contribution rate of 15.3%.

Because employee A has compensation in excess of the integration level, he will have a contribution for the base compensation and an additional contribution for the excess compensation. His base contribution equals $9,792 ($102,000 x 9.6%), while his excess contribution equals $14,994 [($200,000 - $102,000) x 15.30%]. His excess contribution is for the $98,000 of compensation over the integration level.

Notice that in this example, the company has contributed $51,186 to the plan and the owner A receives an allocation of $24,786; whereas in the first example, the total contribution was $52,250 and A received $22,000. Integration has allowed the owner to reduce the overall contribution to the plan by $1,064 and to increase his contribution by $2,786. The $2,786 has come from reducing the contributions of B-G from 11% to 9.6% each to reflect that the employer contribution to Social Security is part of the overall retirement plan. Without using integration, the excess earnings over the wage base would not be considered.

Example 5.5, Page 191

There are seven employees (A-G), ages 25-55 and with compensation ranging from $30,000 to $200,000.

AGE-BASED PROFIT SHARING PLAN

Employee	Age	Covered Comp	PV of $1	Allocation Factor (age-weighted compensation)	Percent of Total Contribution	Dollar Contribution
A (Owner)	55	$200,000	0.4423	$88,457	0.755305	$39,465
B	45	$60,000	0.1956	$11,737	0.100218	$5,236
C	40	$60,000	0.1301	$7,806	0.066650	$3,482
D	35	$50,000	0.0865	$4,326	0.036937	$1,930
E	30	$40,000	0.0575	$2,302	0.019652	$1,027 *
F	25	$35,000	0.0383	$1,339	0.011436	$598 *
G	25	$30,000	0.0383	$1,148	0.009802	$512 *
		$475,000		**$117,114**	**1.000000**	**$52,250**

** Note that this plan is most likely a top-heavy plan. Therefore, employees E, F, and G would have to be allocated 3% of their salary ($1,200, $1,050, and $900 respectively). This would reduce the amount available to the owner or increase the overall cost of the plan.*

The initial step in calculating the contribution under an age-based profit sharing plan is to determine the present value of one dollar of benefit at the normal retirement age, usually age 65. For example, to determine this present value factor for employee A, the following calculation is performed:

FV = 1.0
N = 10 (65–55) difference in age from normal age retirement 65
i = 8.5 (employer selected interest rate)
Pmt = 0
PV = 0.44229 (the contribution factor for this employee)

The term (N) is determined by subtracting the current age from the normal retirement age. In this case, the employee (A) has 10 years until he attains the age of 65. The interest factor is generally permitted by the IRS to be between 7.5% and 8.5%. This calculation results in a present value of 0.4423, which means that for employee A to receive a benefit of $1.00 at age 65, the plan sponsor would have to contribute $0.4423 today.

Notice that the factor decreases for younger age participants reflecting the longer period until retirement. For example, employee C's factor is 0.1301 whereas employee E's factor is 0.0575. The result is that contributions will be higher for those employees who are older because the factor will increase each year for each employee as they approach retirement.

The next step in the calculation is to weight the present value factor by the employee's compensation to arrive at an age-weighted compensation. For employee A, the allocation factor equals $88,457 ($200,000 x 0.4423). Once this process is completed for each employee, the resulting allocation factors are used to prorate the total contribution to the plan to the individual employees. Employee A's allocation factor over the total age-weighted compensation equals 75.53 percent ($88,457 ÷ $117,114), a significantly higher contribution percentage relative to the other employees. The percentage of total contribution is then multiplied by the total dollar contribution to the plan ($52,250).

The age-weighted profit sharing formula provides an amazing result. The owner, employee A, increases his allocation of the $52,250 contribution from $22,000 in our first example to $39,465 (recall that the 2008 limit for any particular employee is $46,000). This method of allocating contributions works extremely well when the owner is older than the other employees and when his compensation is relatively high. We could even calculate the total amount of employer contribution to the plan necessary to give A the maximum contribution for profit sharing plans in 2008 of $46,000 ($46,000 ÷ 75.5305% = $60,902.55). As illustrated in Exhibit 5.2, the owner employee can allocate a high percentage of the total contribution to his account balance utilizing the two available options illustrated if the census data were as presented.

Example 5.10, Page 203

Andrea, age 50, has a salary of $125,000. She chooses to defer $20,500 for 2008 into the 401(k) plan. The employer may also contribute up to $31,250 ($125,000 x 25%) to the plan. However, the employer's contribution will be limited to $30,500 due to the maximum annual contribution limit. In

total for the year, Andrea would have contributions to qualified plans totalling $51,000 ($46,000 + $5,000 catch-up).

Example 5.12, Page 207

Assume that each employee wants to maximize his employee deferral contributions and the employer is already making a 25% of employee compensation contribution to a profit sharing plan on behalf of each employee.

Consider Employees A through D with compensation ranging from $30,000 to $230,000. Also assume that each employee is over the age of 50.

PROFIT SHARING, ELECTIVE DEFERRALS, AND CATCH-UP CONTRIBUTIONS

	Employee A	Employee B	Employee C	Employee D
Salary	**$30,000**	**$100,000**	**$150,000**	**$230,000**
Catch-up contribution	$5,000	$5,000	$5,000	$5,000
401(k) deferral	$15,500	$15,500	$8,500	$0
P/S contribution (25%)	$7,500	$25,000	$37,500	$46,000
Total Contributions	**$28,000**	**$45,500**	**$51,000**	**$51,000**

Notice if you assume the employer is going to make a 25% contribution, that will limit the elective deferral for C and D but will not affect the catch-up contribution.

The profit sharing contribution is assumed to be 25% of the employee's salary limited to the annual additions limit of $46,000, as in the case of Employee D. The 401(k) deferral is assumed to be limited to the lesser of the difference between the annual additions limit or the maximum deferral for the year. In the case of Employee A, he cannot reach either the $46,000 limit or 100% of his annual compensation because of how the limits work together. Notice that because the profit sharing contribution for Employee C is so high, he is only allowed to defer $8,500 in the 401(k) plan. In the case of Employee D, the profit sharing contribution is limited to the $46,000 limit and thus he is unable to contribute to the 401(k) plan with the exception of the catch-up contribution.

Example 5.13, Page 208

Now assume that each employee maximizes his employee deferral contributions, and then the employer makes the maximum profit sharing plan contribution allowed after the deferral.

	Employee A	Employee B	Employee C	Employee D
Salary	**$30,000**	**$100,000**	**$150,000**	**$230,000**
Catch-up contribution	$5,000	$5,000	$5,000	$5,000
401(k) deferral	$15,500	$15,500	$15,500	$15,500
P/S contribution	$7,500	$25,000	$30,500	$30,500
Total Contributions	**$28,000**	**$45,500**	**$51,000**	**$51,000**

In this case, the profit sharing contributions are limited for C and D rather than the employee deferral contributions, but each employee (C and D) still reaches the maximum contribution to qualified plans for the year.

Example 5.15, Page 215

Recall Alternative A of the Boo Company example above in which the ADP for the HC was 7.5% while the ADP for the NHCs was 4.5%. With the NHC's ADP equal to 4.5%, the ADP for the HCs must equal 6.5%. Therefore, the plan would have to distribute enough from the HCs to reduce the ADP to 6.5% from 7.5%. The leveling method is used to determine the total excess contributions based on the dollar amount of the deferrals.

	Employee A	Employee B	Employee C	Total
Initial deferral	**$11,000**	**$9,800**	**$10,600**	
First reduction <1>	-$400	$0	$0	-$400
Net	$10,600	$9,800	$10,600	
Next reduction <2>	-$800	$0	-$800	-$1,600
Net	$9,800	$9,800	$9,800	
Final reduction <3>	-$710	-$710	-$710	-$2,130
Corrected deferral (level)	**$9,090**	**$9,090**	**$9,090**	**-$4,130**
Initial deferral – corrected deferral = Corrective distribution	$1,910	$710	$1,510	$4,130*

** Rounded*

Under the leveling method, the elective deferral of the HC employee with the highest deferral, Employee A is reduced by the amount, <1>, necessary to reduce the deferral to the highest deferral to the next highest dollar deferral, $10,000. The process continues to reduce to the next highest deferral, <2>. If the total excess contribution is not fully allocated, the process continues, <3>, until the full amount is distributed.

HC Employees	Compensation	Elective deferral	Corrective distribution	Corrected deferral	ADR
A	$200,000	$11,000	$1,910	$9,090	4.55%
B	$140,000	$9,800	$710	$9,090	6.49%
C	$106,000	$10,600	$1,510	$9,090	8.58%
Total			$4,130		

This process results in Employee A reducing his deferral by $1,910, Employee B reducing his deferral by $710, and Employee C reducing his deferral by $1,510. Averaging the ADR for each HC employee results in an ADP of 6.54% rounded to 6.5% – a deemed acceptable level.

Multiple Choice #5, Page 232

5. Kathi's Cheerleading Uniforms has 4 employees. The company has a profit sharing plan that has made contributions every year. The plan is designed to maximize the contribution to Kathi and has reached Kathi's 415(c) limit each year. The company made a 20 percent contribution yesterday on behalf of all employees. The employee census and account balances are as follows:

Employee	Ownership	Covered Compensation	Current Balance	Nonvested Plan Balance	Vested Plan Balance
Kathi	100%	$230,000	$201,000	$0	$201,000
Darrin	0%	$30,000	$15,600	$10,800	$4,800
Carroll	0%	$20,000	$8,000	$6,400	$1,600
Lee	0%	$20,000	$8,000	$6,400	$1,600
Total	100%	$300,000	$232,600	$23,600	$209,000

Today, after a huge blow up, Kathi fired Carroll. Which of the following statements regarding forfeitures is correct (assume the plan meets all necessary testing requirements)?

a. If the plan document permitted allocation of forfeitures based on compensation, then Kathi would receive $4,906.67 of Carroll's unvested plan balance.

b. If the plan document permitted reduction of plan contributions for forfeitures, Carroll's $8,000 balance could be used to offset future plan contributions.

c. Since Kathi fired Carroll, Carroll becomes 100 percent vested in her plan assets and there is no forfeiture of plan assets.

d. Given the company census and plan information, the appropriate plan choice for forfeitures is to use them to reduce future plan contributions.

The correct answer is d.

The most appropriate plan choice would be to use plan forfeitures (in the amount of $6,400) to reduce plan contributions. The facts state that the plan is designed to maximize the benefits to Kathi. Allocating the contributions would not maximize the benefit to Kathi because Kathi has already maximized her contribution to the plan ($230,000 x 20% = $46,000). The plan could not allocate any of the forfeitures to Kathi (thus answer a is incorrect).

Multiple Choice #17, Page 237

17. ABS Company has three employees: Ann, Brenda, and Curtis. Their compensations are $50,000, $150,000, and $200,000 respectively. ABC is considering establishing a straight 10% profit sharing plan or an integrated profit sharing plan using a 10% contribution for base compensation and 15.7% for excess compensation. Which of the following statements are correct?

a. If the integrated plan is selected, then the total contribution for all employees is $48,322.

b. The effect of the integrated plan results in an increase in Brenda's contribution of $5,586.

c. If the integrated plan is selected, the base contribution for all employees is $46,000.

d. If the integrated plan is selected, Curtis's total contribution is $37,270.

The correct answer is a.

If ABC selected the 10% profit sharing plan, the amount for the employer contributions would be $5,000 for Ann, $15,000 for Brenda, and $20,000 for Curtis. Alternatively, if ABC established an Integrated Plan using a 10% base contribution and a 15.7% excess contribution, more benefit could be allocated to Brenda and Curtis. Using an integrated plan, Brenda would receive an $17,736 contribution ($2,736 more than with a straight 10% profit sharing plan) and Curtis would receive an $25,586 contribution ($5,586 more than with a straight 10% profit sharing plan).

10% PROFIT SHARING VS. INTEGRATED PROFIT SHARING PLAN

Employee	Comp	Wage Base	Excess Comp	Straight 10% Profit Sharing	Base Cont 10%	Excess Cont 15.7%	Integrated Cont	Effect of Permitted Disparity
Ann	$50,000	$102,000	$0	$5,000	$5,000	$0	$5,000	$0
Brenda	$150,000	$102,000	$48,000	$15,000	$10,200	$7,536	$17,736	$2,736
Curtis	$200,000	$102,000	$98,000	$20,000	$10,200	$15,386	$25,586	$5,586
Totals	$400,000	$254,000	$146,000	$40,000	$25,400	$22,922	$48,322	$8,322

Rounded to the nearest dollar.