

Example 4: Advance Funding with a Lump Sum Window and Annuity Purchase to Reduce PBGC Premiums

Level Funding Scenario	2018	2019	2020	2021	2022	2023	2024
Remaining Plan Deficit (beginning of year)	\$50,000,000	\$43,669,519	\$37,085,819	\$30,238,771	\$23,117,841	\$15,712,074	\$8,010,076
Level Amortization of Shortfall (end of year)	\$8,330,481	\$8,330,481	\$8,330,481	\$8,330,481	\$8,330,481	\$8,330,481	\$8,330,481
PBGC Per Participant Premium	\$74	\$80	\$82	\$84	\$86	\$88	\$90
Total Participants	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Per Participant Premium	\$296,000	\$320,000	\$328,000	\$336,000	\$344,000	\$352,000	\$360,000
PBGC Variable Premium Per Year (Rate per \$1,000)	\$38	\$42	\$43	\$44	\$45	\$46	\$47
PBGC Variable Premium	\$1,900,000	\$1,834,120	\$1,594,690	\$1,330,506	\$1,040,303	\$722,755	\$376,474
Total Before-Tax Cash Flow	\$10,526,481	\$10,484,601	\$10,253,171	\$9,996,987	\$9,714,784	\$9,405,236	\$9,066,955
Tax Deduction	(\$3,684,268)	(\$2,201,766)	(\$2,153,166)	(\$2,099,367)	(\$2,040,105)	(\$1,975,100)	(\$1,904,061)
Total After-Tax Cash Flow	\$6,842,213	\$8,282,835	\$8,100,005	\$7,897,620	\$7,674,679	\$7,430,136	\$7,162,894
Present Value of After-Tax Cash Flow (at cost of capital rate)	\$6,335,382	\$7,101,196	\$6,430,045	\$5,804,986	\$5,223,258	\$4,682,246	\$4,179,480
Net Present Value of After-Tax Cash Flow	\$39,756,593						

Borrow-to-Fund Scenario	2017 Start	2018	2019	2020	2021	2022	2023	2024
Loan Proceeds Paydown Shortfall (Unfunded Vested Benefits + Estimated Group Annuity Premium)	(\$60,000,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remaining Plan Deficit (beginning of year)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Balance		\$60,000,000	\$49,772,613	\$38,727,035	\$26,797,811	\$13,914,249	\$0	\$0
Principal and Interest Payment on Loan		\$15,027,387	\$15,027,387	\$15,027,387	\$15,027,387	\$15,027,387	\$0	\$0
Deductible interest on Loan		\$4,800,000	\$3,981,809	\$3,098,163	\$2,143,825	\$1,113,140	\$0	\$0
Additional Plan Contribution		\$0	\$0	\$0	\$0	\$0	\$0	\$0
PBGC Per Participant Premium		\$74	\$80	\$82	\$84	\$86	\$88	\$90
Total Participants		4,000	1,400	1,400	1,400	1,400	1,400	1,400
Per Participant Premium		\$296,000	\$112,000	\$114,800	\$117,600	\$120,400	\$123,200	\$126,000
PBGC Variable Premium Per Year (Rate per \$1,000)		\$38	\$42	\$43	\$44	\$45	\$46	\$47
PBGC Variable Premium		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Before-Tax Cash Flow	(\$60,000,000)	\$15,323,387	\$15,139,387	\$15,142,187	\$15,144,987	\$15,147,787	\$123,200	\$126,000
Tax Deduction	(\$21,000,000)	(\$1,111,600)	(\$859,700)	(\$674,722)	(\$474,899)	(\$259,043)	(\$25,872)	(\$26,460)
Total After-Tax Cash Flow	(\$39,000,000)	\$14,211,787	\$14,279,687	\$14,467,465	\$14,670,088	\$14,888,744	\$97,328	\$99,540
Present Value of After-Tax Cash Flow (at cost of capital rate)	(\$39,000,000)	\$13,159,062	\$12,242,530	\$11,484,740	\$10,782,953	\$10,133,029	\$61,333	\$58,081
Net Present Value of After-Tax Cash Flow	\$18,921,728							
After-Tax Net Present Value Savings/(Cost)	\$20,834,866							

