

$$AB = \frac{f}{\text{NRA}} / \frac{L(0)}{I+S}$$

Alloc = f. } pay NRA
opt.

DC: Loan, min AB = \$50k

3 NHCE 10k 10k 10k

2 HCE 150k 150k

0
TG
NHCE

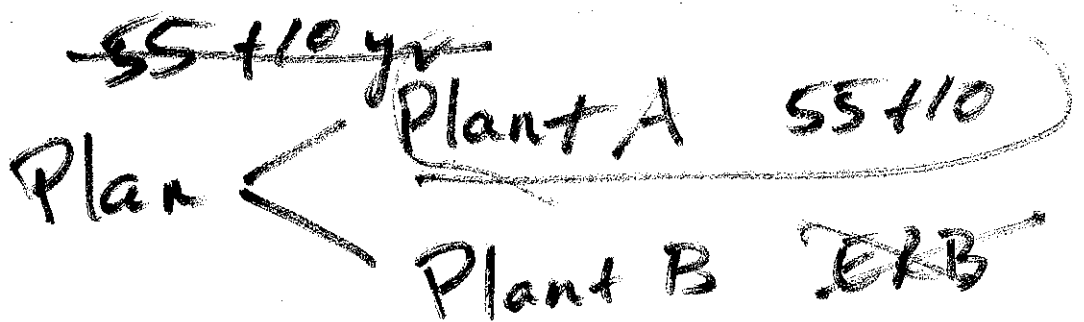
2
TG
HCE

0 Loan, min AB = \$1,000
TG NHCE 2 Loans, 2 HCE
TG HCE

Sub + age Ignore

DB ERB 55+10, 4%/yr

$$NRB = 75\% + FAE / 65 / \frac{L(0)}{I+S}$$

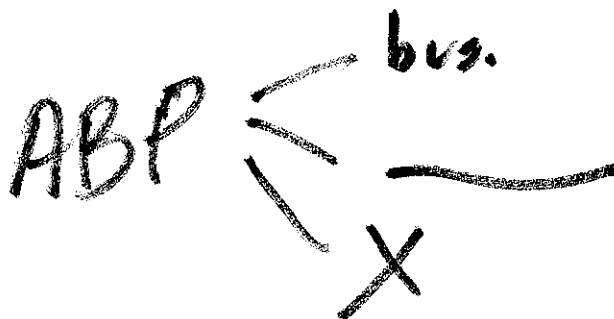


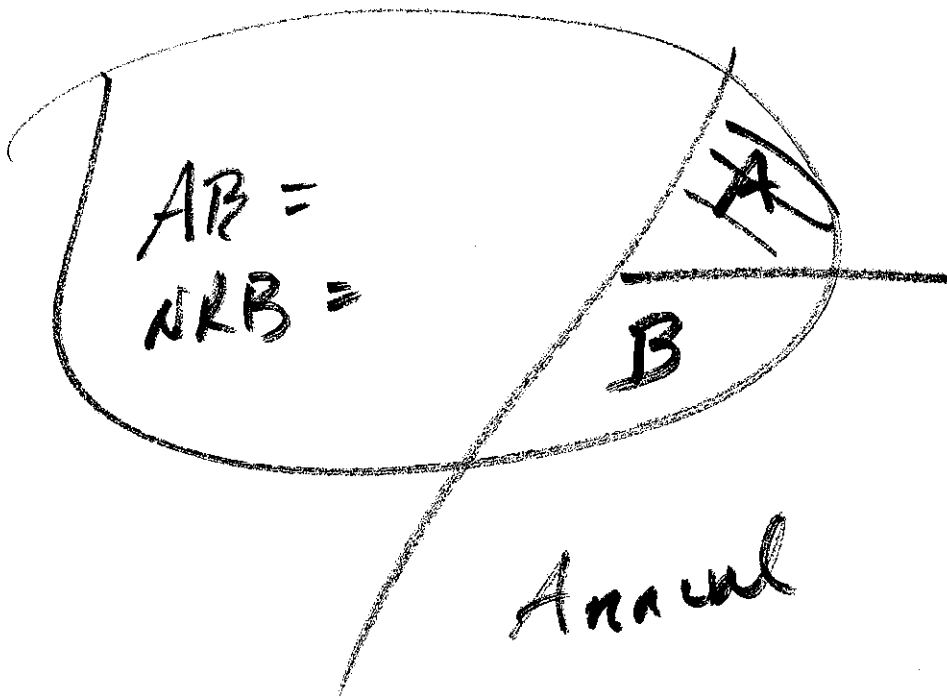
$$\frac{10}{\text{T.G. HCE}} = 20$$

$$\frac{2}{\text{T.G. HCE}} = 2$$

$$\frac{50\%}{100\%} = 50\%$$

Loani min \$1,000 ≠ 50,000





40/k. electivi
 match — 50%
 ~~~~~ — 100%  
 \_\_\_\_\_

40/k      50% ←

40/k      100% ↵



EE

ER

FICA  $\left\{ \begin{array}{l} 5.7 \rightarrow SS (OASDI) \\ 1.45 \rightarrow Medicare \end{array} \right.$

7.65%

$\frac{7.65}{15.30}$

MTWB = 106,800

Pay = 120,000

EE 7.65 x 106,800

ER 7.65 x 106,800

Pay 120,000

EE 5.7 x 106,800 + 1.45 x 120,000

$\rightarrow$  ER 5.7 x 106,800 + 1.45 x 120,000

ER = 5.7 x MTWB  $\Rightarrow$  SS

ER = 5.7 x (T.P. - MTWB)  $\Rightarrow$  ER

ER = 5.7 x T.P.

13

$$\text{all} = 5\% \times \text{TP}$$

Elig = everyone

$$\text{ER} = \text{alloc} = 5.7 \times (\text{T.P} - \text{MTWB})$$

\$30K



106,800

\$150K

5%

4%

3%

after  
year

NRB =

$$\text{AB} = 7\% (\text{T.P} - \text{MTWB})$$

$$+ 4\% (\text{T.P. to MTWB})$$

$$\text{AB} = 7\% \times \text{TP} \times \text{yrs} - 4\% \text{ SS}$$

6

DC Alloc = 5.7% (TP - MTWB)

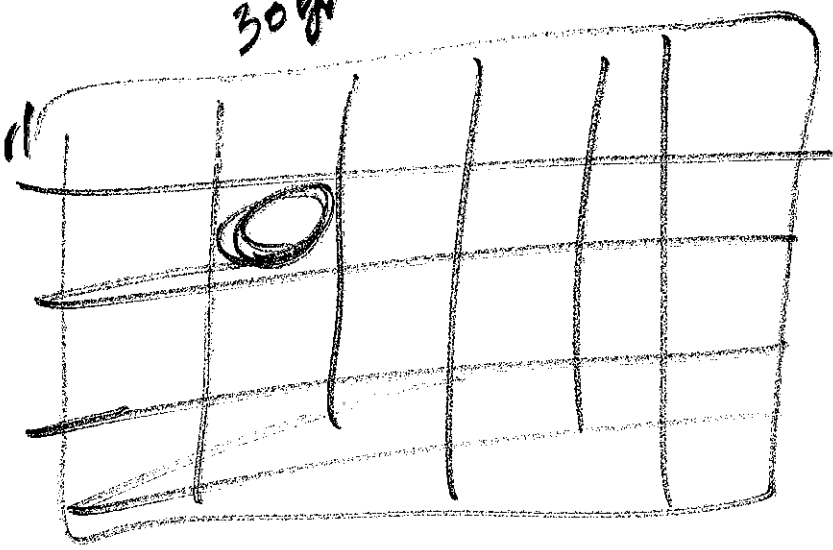
106,800

30K.

120K

30% CAE

Quall



2-1

Alloc  $2\% \times (\text{TP up to MTWB}) + 4\% (\text{TP over MTWB})$

3%  
0%

6%  
+ 5.7%

1%

+ 2%

2.85%

5.7%



$$\text{Alloc} = 2.85 (\text{pay top to MTWB})$$

$$+ 5.7 (\text{pay over MTWB})$$


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ABP

all plans NHCE %  
is 70% HCE %

~~401a4 ABP~~

DB

DC

~~x% x TP~~

↓

↓

CROSS  
test

DC

DB

Alloc  
\$10K  
-----  
TP

Alloc  
Rate

RR

9  
—  
10

1  
—  
1

90

5

100

10

5



# Establish

$$DB = AB = 5\% \times FAE \left| \begin{array}{l} 65 \\ L(0) \end{array} \right. \left| \begin{array}{l} \\ J+S \end{array} \right.$$

$\times 4V$

age 42

$$DC = 5\% \times TTP \quad 100\% \times TTP,$$

$$EE = 52$$

$$EE = 30$$

49K

$$\frac{195}{245}$$

80%

HCE

HCE  $\times$  75%  
HCE  $\times$  75%  
HCE  $\left\{ \begin{array}{l} \text{HCE attribut} \\ 5\% \text{ own} \\ > \$110K \end{array} \right.$

10)

## Computing EBAR

Actuarial Assumptions: 8.5% and UP-84 Mortality Table and NRA =65 and monthly annuity purchase rate is 95.3829

Owner: age 52 with \$245,000 comp

Profit sharing allocation % =  $\$22,050 \div \$245k = 9\%$

EBAR =  $[\$22,050 \times (1.085)^{13}] \div 95.3829 \times 12 =$

$\$8,011.35$  – annual annuity at 65

EBAR accrual rate =  $\$8,011.35 \div \$245,000 = 3.27\%$

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Here's an example as to how the actuary would make the computation.

We have a DC allocation of 9% for an owner-employee, age 52, with comp limited by the IRS §401(a)(17) limit of \$245k. The 9% allocation on \$245k produces an allocation of \$22,050. The actuary takes that allocation of \$22,050 and projects it to NRA of 65 using an interest rate of 8.5%, and then uses that amount to purchase a monthly life annuity at age 65. The annuity produced is an annual dollar amount of \$8,011.35. This amount divided by the owner's total pay of \$245k produces an accrual rate of 3.27%. We call that rate the EBAR (equivalent benefit accrual rate).

