## Appendix A: Tax-Equivalency Worksheet

This work sheet can be used to replicate the Uniform Bank Performance Report tax-equivalency adjustment.

## General Information

This Tax-Equivalency Worksheet is divided into four parts. Part I determines the amount of tax-exempt income that is available for tax benefit by comparing it to taxable income. Part II estimates the tax benefit for this amount of available tax-exempt income by determining the bank's marginal tax rate and multiplying by a percentage based on that tax rate. Part III describes the usage of this estimated tax benefit in the UBPR, in earning ratios, dollar amounts, and asset yield ratios. The "Definition of Preliminary Calculations" section describes the calculation of items for Part I using Report of Income items.

## PART I: Determine the Amount of Tax-Exempt Income Available for Tax Benefit

## Preliminary Calculations

Calculate the following items according to the definitions in the last section of the Appendix:
i. tax-exempt income (write the amount here and at "Final Part I Calculation," line b: $\qquad$ ;
ii. pretax taxable income:
iii. total pretax income, including tax-exempt income:
iv. total applicable income taxes:
v. $100 \%$ nondeductible interest expense:

Alternatives for Part I-(Only one alternative is possible for any bank.)

## Alternative 1

If the bank does not have any tax-exempt income, the tax-equivalent adjustment equals zero (0) and no further calculations are necessary. Otherwise, proceed to the next alternative.

## Alternative 2

If pretax taxable income (preliminary calculation ii) exceeds tax-exempt income, or if pretax taxable income is greater than or equal to zero (0), write the amount of tax-exempt income here and at "Final Part I Calculation," line a, and proceed from there; otherwise, proceed to the next alternative.

## Alternative 3

If pretax taxable income (preliminary calculation ii) is less than zero (0) and total pretax income (preliminary calculation iii) exceeds zero (0) and total applicable income taxes (preliminary calculation iv) is less than zero (0) (e.g., the bank reports tax credits), perform the following calculation; otherwise, proceed to the next alternative.
Multiply the total applicable income taxes (preliminary calculation iv) by negative $1.67(-1.67)$. Add the result to total pretax income (preliminary calculation iii). Write the amount here and at "Final Part I Calculation," line a, and proceed from there.

## Alternative 4

If total pretax income (preliminary calculation iii) is less than or equal to zero (0) and total applicable income taxes (preliminary calculation iv) is less than zero (0), then perform the following calculation; otherwise, proceed to the next alternative.

Multiply the total applicable income taxes (preliminary calculation iv) by negative $1.67(-1.67)$. Write the result here and at "Final Part I Calculation," line a, and proceed from there.

## Alternative 5

If total pretax income (preliminary calculation iii) is less than or equal to zero (0) and total applicable income taxes (preliminary calculation iv) are greater than or equal to zero (0), then the bank receives no calculated tax benefit. Enter a zero (0) in Final Part I Calculation, line a.

## Final Part I Calculation

a. Amount calculated using one of the five above alternatives:
b. Amount of tax-exempt income (preliminary calculation I):

Write the lesser of a. or b. here:
Subtract the amount of nondeductible interest expense (preliminary calculation vi):

If the result is zero (0) or less, there is no tax-exempt income available for tax benefit. If the result is greater than zero (0), proceed with Part II using that amount.

## PART II: Estimate the Tax Benefit for Available Tax-Exempt Income from Part I.

The tax benefit for the amount of tax-exempt income available for such benefit is estimated by: Calculating the annualized amount of net taxable income plus available tax-exempt income; determining the marginal income tax rate for this adjusted income figure; calculating the tax benefit based on the marginal tax rate.
A. Calculating Annualized Taxable Income Plus Available Tax-Exempt Income

In order to estimate the tax benefit of tax-exempt income, it is first necessary to calculate what the annalized taxable income would be if available tax-exempt income were included. Up to this point, all figures have been on a year-to-date basis. Perform the following calculation to determine annualized taxable income for tax-equivalency purposes:

1. Add: pretax taxable income (preliminary calculation ii):

Plus: available tax-exempt income from Part I:
Equals: year-to-date adjusted income:
2. Multiply the above result by the appropriate annualization factor:

| Reporting Period Ending | Annualization Factor |
| :--- | :--- |
| March 31, YYYY | 4 |
| June 30, YYY | 2 |
| September 30, YYYY | 1.333 |
| December 31, YYYY | 1 |

Equals: annualized amount of taxable income plus available tax-exempt income
B. Calculating Estimated Tax Benefit:

1. Find the appropriate tax benefit factor in the table below, based on the annualized income calculated above.

## Tax Rates and Tax Benefit Factors

| Annualized <br> Income from <br> Part II A | Marginal <br> Tax Rate <br> (Percent) | Tax Benefit <br> Factor | Marginal <br> Tax Rate <br> (Percent) | Tax Benefit <br> Factor | Marginal <br> Tax Rate <br> (Percent) | Tax Benefit <br> Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | .18 | 15 | .18 | 15 | .18 |
|  | 18 | .22 | 16.5 | .20 | 15 | .18 |
| $50-75$ | 30 | .43 | 27.5 | .38 | 25 | .33 |
| $75-10,000$ | 40 | .67 | 37.0 | .59 | 34 | .52 |
| over 10,000 | 46 | .85 | 40.0 | .67 | 35 | .54 |

2. Enter the available tax-exempt income from Part I here:

Multiply by the tax benefit factor from the above table:
X $\qquad$
Estimated Tax Benefit (year-to-date):

## PART III: Using the Estimated Tax Benefit in the UBPR

The estimated tax benefit calculated in Part II, which is based on total tax-exempt income, is allocated back to tax-exempt loan \& lease income and tax-exempt securities income.
The tax benefit is then added to pretax income and used in earnings presentations and yield ratios in the UBPR.
A. Allocating Tax Benefit to Loans \& Leases and Securities:

Assign the estimated tax benefit from Part II back to the two sources of tax-exempt income as follows:

1. Calculate the ratio of tax-exempt loan \& lease income to total tax-exempt income:

Tax-exempt loan \& lease income (see "definitions of Preliminary Calculations", Paragraph i):
Divided by total tax-exempt income (preliminary calculation I):
Equals: ratio of tax-exempt loan \& lease income:
2. Multiply the estimated tax benefit:

By the ratio calculated in 1 .:
Equals estimated tax benefit for tax-exempt loan \& lease income:
$\qquad$
$\qquad$
$\square$
. From the total estimated tax benefit:
Subtract: loan \& lease tax benefit from 2. :
Equals: estimated tax benefit for tax-exempt securities income:
B. Using and Presenting Tax Benefits in the UBPR

1. The tax benefits allocated loans and securities allocated in A. above, are also presented separately on UBPR Page 02. For other than December reporting periods, these figures must be de-annualized by dividing by the annualization factor in Part II. Tax benefits are included in various sub-totals that appear on page 2 such as Total Interest Income (TE) and Pre Tax Net Operating Income (TE). Computed tax benefits are reversed or subtracted out to allow after tax net income to reconcile properly. Tax benefits are reversed by including them as Current Tax Equivalent Adjustment in Applicable Income Taxes (TE).
2. The tax-equivalent income amounts, annualized, are used in the earnings ratios that appear on UBPR Page 01.
3. The book and tax-equivalent income figures for loans \& leases and securities that appear on page 2 are used in selected yield ratios that appear on UBPR Pages 03 and 12.

## Definitions of Preliminary Calculations

I. Tax-exempt income:

Add:
Tax-exempt loan \& lease income:
(Report of Income Memoranda section item 3):
Tax-exempt securities income:
(Report of Income Memoranda item 4):
Equals: Total tax exempt income:
These figures are presented on UBPR Page 02.
ii. Pretax Taxable Income

Income (loss) before income taxes, extraordinary items and other adjustments (Report of Income item 8):

Plus: Interest expense incurred to carry tax-exempt obligations acquired after August 7,1986 , that is not deductible for federal income tax purposes (Report of Income item M1):

Less: Tax-exempt income (preliminary calculation I.):
Equals: total pretax taxable income:
iii. Total Pretax Income

Tax-exempt income (preliminary calculation I.):
Plus: Pretax taxable income (preliminary calculation ii.):
Equals: Total pretax income:
iv. Total Applicable Income Taxes:

Applicable income taxes (Report of Income item 9):
Plus: Applicable income taxes on extraodinary items and other adjustment (Report of Income item 11a):
Equals: Total applicable income taxes:
v. $100 \%$ Nondeductible Interest Expense:

Interest expense incurred to carry tax-exempt obligations acquired after August 7, 1986, that is not deductible for federal income tax purposes (Report of Income item M1).

## Appendix B: UBPR Data Tapes and Ordering Information

In addition to the individual bank UBPR, the FFIEC makes available data tapes derived from UBPR data. Reports are available on line at www.ffiec.gov. These items are:

## UBPR Data Tapes

The data items presented in UBPR's peer group reports and state average reports are available in bulk format on magnetic tape. These tapes may be of use to requestors who wish to select or analyze data for large numbers of banks or peer groups. A typical UBPR edition would include a maximum of 17 tapes: eight unique tapes for bank data, eight unique tapes for bank rank data, and one tape for peer group and state average data. UBPR tapes will be available only for the current edition.
The types of UBPR data that will be available on tape are:

- R1—Bank-level ratio and dollar values:

Each tape will contain a record for each insured commercial bank for
one data date. Each record will contain approximately 700 ratio or dollar values.

- R2-Peer group averages:

Each tape will contain a record for each of the 25 UBPR peer groups plus a record for all banks, for all of the data dates for that edition. Each record will contain approximately 330 average ratio values.

- R3-Bank percentile ranks:

Each tape will contain a record for each insured commercial bank for one data date. Each record will contain approximately 330 percentile rank values.

- R4 and R5-State and state/asset group averages:
Each tape will contain a record for each state plus a record for all banks. The same tape will also contain a record for each of three asset size groups in each state, plus a record for all banks in each of these asset sizes ( $\$ 0-25$ million, $\$ 25-100$ million and over $\$ 100$ million); these size group records are
present only for the latest data date for the edition. Each record will contain approximately 33 ratio averages, plus total assets and total net income.
All of the above items, as well as individual bank UBPRs, are available for purchase by the general public.


## UBPR Data Tapes

Requests for or inquiries about UBPR data tapes should be made to:

Federal Financial Institutions Council
UBPR Coordinator
3501 Fairfax Drive
Room D8073a
Arlington, VA 22226-3550
Phone number 703-516-5732
E-MAIL: jsmullen@fdic.gov

