

Corporation Tax Simulation Model

- PC SAS Model
- Parameter Driven
- Modular Approach

Base Parameter File

- Contains parameters for the tax rates and flags used to calculate the corporate tax
- Separate parameter file each tax year to be simulated
- Acts as default values for the base and simulation calculations

Tax Calculator Program

- Calculates the tax for a given tax year based on the parameters in the Base Parameter file
- The same program calculates both the base tax and the simulated tax
- Uses a macro variable suffix (&X) to differentiate the base from the simulation variables

Simulation Parameter File

- Controls the simulation process
- Defines the type of output and the results to be included in the output
- Includes only parameter changes

Sample Simulation Parameter File

```
OPTIONS NOSOURCE2 NOSYMBOLGEN;  
FILENAME SIMMOD "S:\OTPA\SHARED\BISTEAM\SAS  
PROGRAMS\CORP1997\";  
LIBNAME CORPLIB "S:\OTPA\SHARED\ALLTEAM\Study File  
Input Procs & SAS Datasets\Article 9A\SASv8 Datasets\Simulation\" ;  
DATA CORP;  
SET CORPLIB.Corp&STUDYYEAR ;  
%LET X = 0 ; /*SUFFIX FOR BASE VARIABLE NAMES */  
%INCLUDE SIMMOD(FIX&STUDYYEAR) ;  
%INCLUDE SIMMOD(BASE&SIMMYEAR) ;
```

Sample Simulation Parameter File

```
*****  
*** SIMULATION CALCULATION PARAMETER CHANGES ***  
*****  
  
*****  
%INCLUDE SIMMOD(SIMMOD) ; /*RUN SIMULATION USING  
NEW PARAMETERS*/  
TAXDIFF&X = ROUND(TOTALTX&X - TOTALTX0) ;  
ABSDIFF&X = ABS(TAXDIFF&X) ;  
%INCLUDE SIMMOD(PROCFILE) ;  
RUN;
```

SAS - [Output - (Untitled)]

File Edit View Tools Solutions Window Help

CASES WHERE STUDYYR = 1997 15:39 Wednesday, September 12, 200

The MEANS Procedure

Variable	N	Minimum	Maximum	Sum
TAXDIFF1	81501	-1197481.00	2397462.00	43500641.00
ABSDIFF1	81501	0	2397462.00	128841315

Results Explorer Output - (Unfil... Log - (Untitled) Simshell.sas * simshell.sas

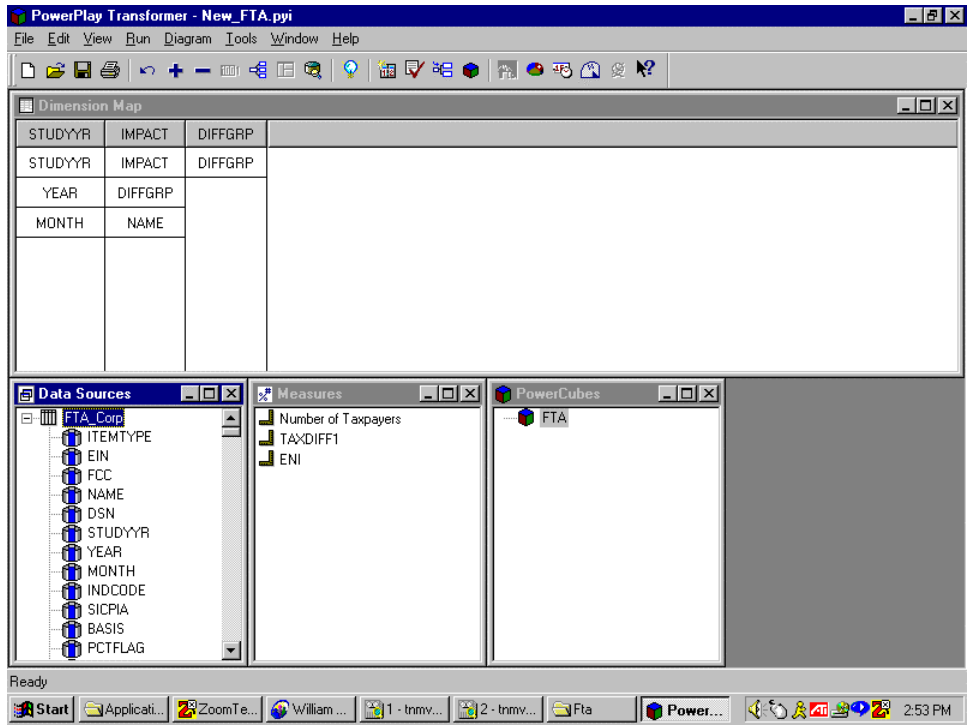
D:\My Documents\My SAS Files\VB8

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4:07 PM

```
IF TAXDIFF1 GT 0 THEN IMPACT = " LOSSER ";
ELSE IF TAXDIFF1 = 0 THEN IMPACT = " NEUTRAL ";
ELSE IF TAXDIFF1 LT 0 THEN IMPACT = " WINNER ";

IF TAXDIFF1 LT -10000000 THEN DIFFORD=-13;
ELSE IF TAXDIFF1 GE -10000000 AND
TAXDIFF1 LE -5000000 THEN DIFFORD=-12;
ELSE IF TAXDIFF1 GE -4999999 AND
TAXDIFF1 LE -1000000 THEN DIFFORD=-11;
ELSE IF TAXDIFF1 GE -999999 AND
TAXDIFF1 LE -500000 THEN DIFFORD=-10;
ELSE IF TAXDIFF1 GE -499999 AND
TAXDIFF1 LE -100000 THEN DIFFORD=-9;
ELSE IF TAXDIFF1 GE -99999 AND
TAXDIFF1 LE -80000 THEN DIFFORD=-8;
ELSE IF TAXDIFF1 GE -79999 AND
TAXDIFF1 LE -50000 THEN DIFFORD=-7;
ELSE IF TAXDIFF1 GE -49999 AND
TAXDIFF1 LE -10000 THEN DIFFORD=-6;
ELSE IF TAXDIFF1 GE -9999 AND
TAXDIFF1 LE -5000 THEN DIFFORD=-5;
ELSE IF TAXDIFF1 GE -4999 AND
TAXDIFF1 LE -1000 THEN DIFFORD=-4;
ELSE IF TAXDIFF1 GE -999 AND
TAXDIFF1 LE -500 THEN DIFFORD=-3;
ELSE IF TAXDIFF1 GE -499 AND
```

PowerPlay - (PPlay) of PTA (Explorer)

File Edit View Insert Format Database Format Tools Window Help

Database Wizard Reports

S:\OTPM\Shared\VANDE
 -> STUDY-R
 -> IMPACT
 -> MEASURES
 Number of Taxpayers
 TAXDIFF1
 etc

	Number of Taxpayers	TAXDIFF1
WINNER	8,287	-42,670,337
NEUTRAL	62,786	0
LOSER	10,426	86,170,978
IMPACT	81,501	43,500,641

For Help, press F1

Start Active Judge - k-box C:\WINDOWS\DCS Explorer - S:\OTPM PowerPlay - PTA Microsoft PowerPa 9/13/04

PowerPlay - [PowerPlay of An Explorer]

File Edit View Print Options Database Format Data Window Help

Standard Database Services Resources

S:\MTR\Shared\RAMD

- STUDYR
- IMPACT
- OFFICE
- MEASURES
 - Number of Taxpayers
 - TAXDIFF1
 - DA

	Number of Taxpayers	TAXDIFF1
BILL WITZLEBEN INC.	1	-1,197,481
-1,000,000 to -4,999,999	1	-1,197,481

File Help - press F1

Start Active Judge - 1 C:\WINDOWS\ Explorer - 21.0 Microsoft PowerPlay - ... 18:12 AM

The End