What's New! ProVal

ProVal version 2.21 | **August 2004**

ProVal version 2.21 introduces **PFEA 2004 funding rules, benefit payment projections** in a pension valuation, and more control over the **Schedule of Active Participant Data** used for the IRS Form 5500 Schedule B. You'll find details about these and other enhancements below.

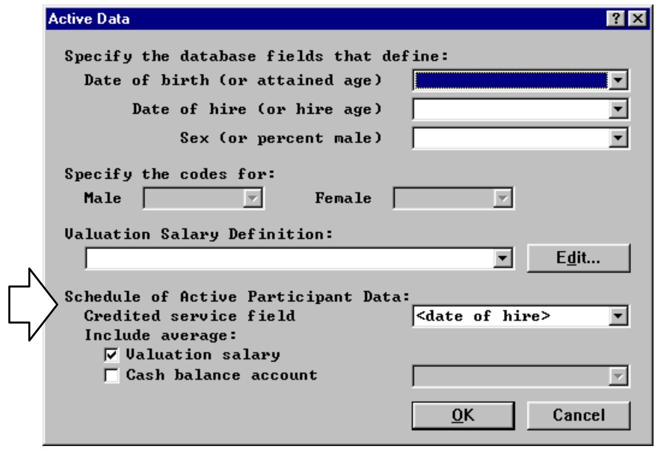
Pension Plans

- The Pension Funding Equity Act of 2004 is now reflected in ProVal, including:
  - 2004 and 2005 relief (with the opportunity to model "no sunset"),
  - Corporate bond index for RPA Current Liability (90% - 100% of 4/3/2/1 average) and PBGC Variable Premium (85% of prior months' rate) interest rates,
  - Interest rate lookback rules,
  - Old law option for maximum tax deduction,
  - Alternative Deficit Reduction Contribution, and
  - §420 Retiree Health Transfers paid through 2014 (ProVal actually has no time limit).

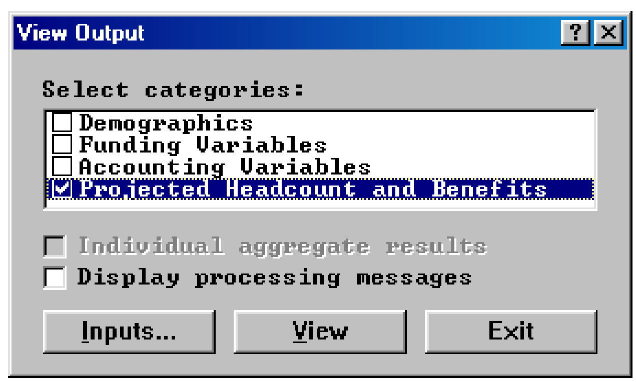
  See PFEA 2004, page 5

- New parameters in Census Specifications let you control the "Schedule of Active Participant Data" exhibit used for the IRS Form 5500 Schedule B, including:
  - Specifying the credited service field,
  - Adding an average cash balance amount (new with the 2003 Form 5500) to the schedule, and
  - Omitting the valuation salary from the schedule (useful for flat dollar plans).

If a cash balance account field is specified, active participants with missing values will be excluded from a valuation, but not from a core projection. This could lead to first year forecast results differing from valuation results.



- Valuations now automatically project benefit payments, headcount, and salary. This eliminates the need to run a core projection to satisfy the revised FAS 132 disclosure requirements. To view the projection, click View from within a Valuation or Valuation Set. (Already available in OPEB mode).



- The 415 maximum benefit limit has been revised for PUC and UC liabilities pursuant to 2002 IRS Graybook, Question 11. To review, the

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maximum benefit is equal to the [Minimum of (1) and (2)] x (3), but not less than (4)], where

(1) Dollar maximum
x commencement age reduction/increase
x participation proration;

(2) Highest 3-year average salary
x service proration;

(3) Adjustment by Benefit Definition
(usually for payment form); and

(4) $10,000 exemption
x service proration.

For benefits using accrual rate proration for PUC and/or UC, the participation and service proration fractions for (1), (2), and (4) are now "frozen" at the valuation date. In addition, the highest 3-year average salary for (2) is now "frozen" at the valuation date for UC.

These changes are most likely to affect small plans and SERP plans. For small plans, it eliminates the need to set up a special accrual definition component using #MAXBEN to properly calculate UC liabilities.

- The identification of liabilities in pay status (for FAS 35, Current and PBGC liabilities) has been improved for participants receiving both immediate and deferred benefits. Now, if a participant has any benefits in payment status, ProVal will categorize their entire liability as "in payment status".

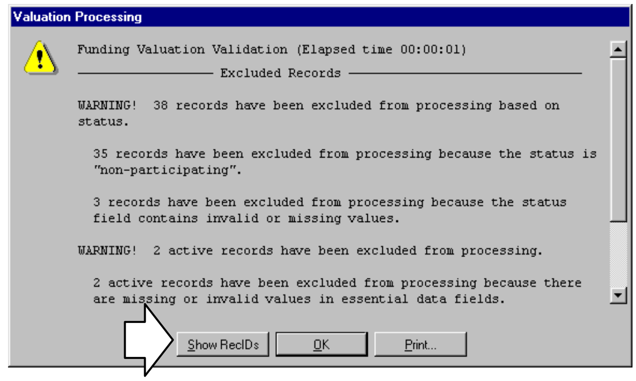
- A new valuation set and deterministic forecast exhibit develops the plan's contribution policy (e.g. 7% of pay, normal cost + supplemental cost, etc.). This is particularly useful for public plans.

OPEB Plans

- The labeling of "valuation number fully eligible" and "valuation salary fully eligible" has been changed to "number fully eligible" and "number active fully eligible" and "total salary fully eligible" to be more accurate and avoid confusion.

All Plans

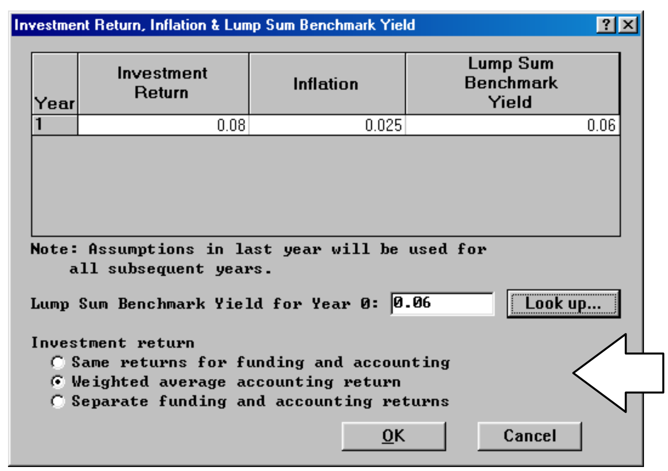
- After running (or validating) a valuation or core projection, a new Show RecIDs button lets you see the RecIDs of excluded records or data defaults. This works even when running (or validating) through Batch Execution.



You can still see the RecIDs after saving the run by clicking the View button and checking:

Deterministic & Stochastic Forecasts

- ProVal now supports a different accounting return when the accounting measurement date differs from the valuation date. For deterministic forecasts, you can use a weighted average of valuation year returns or specify completely distinct returns. For stochastic forecasts, you can generate separate, but consistent, funding and accounting returns based on a simulation of monthly (rather than annual) asset class returns.



Tools

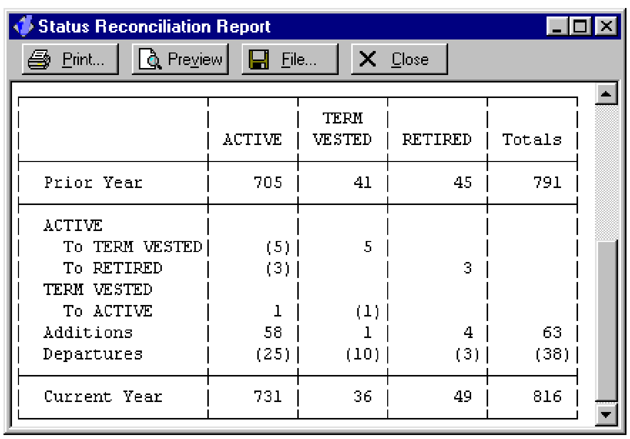
- Administration Factors:
    - A new Certain & Joint Life payment form is available.
    - Column labels for commutation factors are now properly aligned with the data when saving to an Excel file.

- Nondiscrimination Tests:

- You can now turn off banding so that each HCE (with a unique accrual rate) represents a separate rate group.
- Reports now appear in a consistent order, with NHCEs followed by HCEs.
- You can now write individual results back to the database for HCEs: normal and most valuable midpoints of rate group, number of HCEs and NHCEs in rate group, ratio percentage, and pass/fail indicator.

Census Data

- For status reconciliations:
  - You can specify selection expressions for each database, making it possible to reconcile two or more groups separately.
  - ProVal remembers the most recent setting (per client), so you don't have to start from scratch every time.
  - The report follows a standard "flow of lives" format for easier reading, similar to the Gain/Loss Analysis command:


Status Reconciliation Report

Print... Preview File... Close

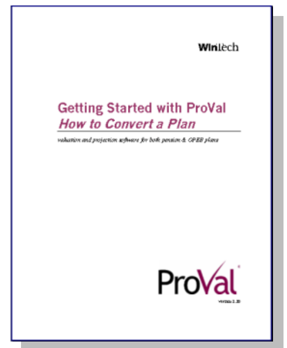
	ACTIVE	TERM VESTED	RETIRED	Totals
Prior Year	705	41	45	791
ACTIVE				
To TERM VESTED	(5)	5		
To RETIRED	(3)		3	
TERM VESTED				
To ACTIVE	1	(1)		
Additions	58	1	4	63
Departures	(25)	(10)	(3)	(38)
Current Year	731	36	49	816

General & Interface

- Dialog boxes with a "select the entry to edit" list are now resizeable (look for the in the bottom right hand corner). This is especially useful if you've used long names for the entries.
- When typing in an expression with *, /, or ** (multiplication, division, or exponentiation), ProVal will offer to add parentheses as necessary to make ProVal's left-to-right rule clear and prevent user errors while leaving the meaning of the expression unchanged. For example, "A+B*C" would become "(A+B)*C".
- When encountering an "error evaluating user formula" (fairly rare), ProVal will now identify the source (e.g., which benefit) of the formula and the problem it is having with it.
- Multiple ProVal sessions can now be run on a single computer (without having to set up separate shortcuts pointing to separate PVCOM.SF and PROVALW.INI files). Simply double-click on the ProVal icon to start another session. This facilitates working on case B while case A runs, copying information from client A to client B, and more.

ProVal

- The "Getting Started with ProVal" manual has been completely rewritten. It now contains practical step-by-step instructions on how to convert a plan using ProVal, including how to code common pension and OPEB plan designs. What's more, the "Getting Started with ProVal" manual is now distributed with ProVal. You can access it through Help > Help Topics > Getting Started with ProVal (or usersgd.doc in the ProVal directory).



Changes Log

- Be sure to read the changes log (see What's New in Help or the CHANGES.LOG file in the ProVal directory) about updates to certain calculations that may change results.

New Member of the ProVal Team

Bill Martin recently joined the ProVal team with over 25 years of experience in benefits consulting. He's an experienced ProVal user, ProAdmin user, and manager of ProVal conversions. Be sure to say hello to him if you reach him at ProVal support or attend a ProVal training session.

WinTech's Virtual Back Office

Need help bringing up new clients, converting cases or experienced help in a ProVal area that's new to you? Why not call upon WinTech's experienced actuaries to fill in? Contact **Mark Ruloff** at (203) 861-5530 for details or to request a quote.

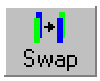
ProVal^PS

ProVal PS, a desktop toolkit for sponsors of defined benefit and medical plans, continues to be developed parallel to ProVal. The following new features have appeared in ProVal PS since the last release of ProVal:

Disclosure & Budgeting

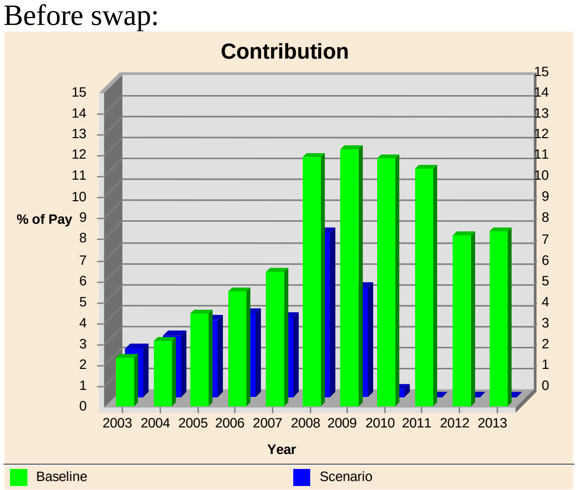
- The expected return and amortization are now shown rather than actual return on assets, consistent with SFAS 132's modifications to SFAS 87.

Financial Sensitivities

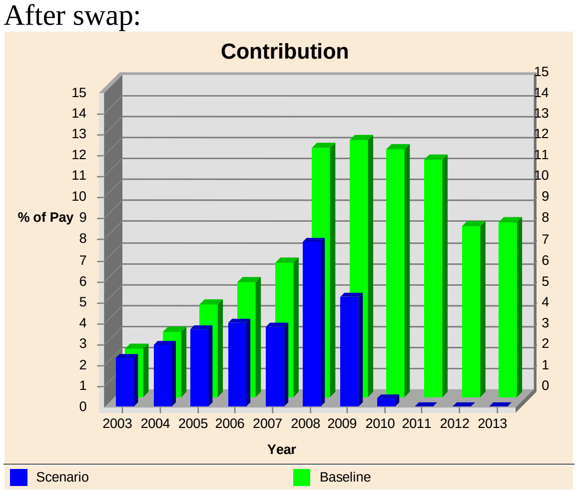
- For 3D Bar and Wave charts, a 

button swaps the green and blue data series, allowing you to move larger values to the back.

Before swap:



After swap:

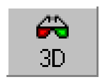


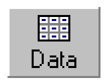
- Just like in ProVal, additional contributions can be specified to control future contribution patterns.
- A new exhibit develops the plan's contribution policy (e.g. 7% of pay, normal cost + supplemental cost, etc.). This is particularly useful for public plans. This exhibit also appears in Disclosure & Budgeting.

Asset Allocation

- You can set goals and view results based on additional variables:
  - Market Assets (Funding)
  - Compound Nominal Return
  - Reduction to Equity

General & Miscellaneous

- A 

button lets you turn off 3D chart effects for easier reading.
- A 

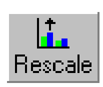
button opens a floating data window that allows you to see the graph data "live".

FAS 87 Expense

Copy

	Measurement Year Ending 12/31/2003	Measurement Year Ending 12/31/2004
Expense	3,885,201	4,057,342
Service Cost	2,222,807	2,377,644
Interest Cost	3,301,274	3,553,599
Expected Return	-2,527,252	-2,651,129
Net Amortization	900,017	777,228
Other	-11,645	0

- The 

button for viewing detailed calculation exhibits has moved to the main toolbar.
- The 

button for charts has moved to the main toolbar.

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Pension Funding Equity Act of 2004

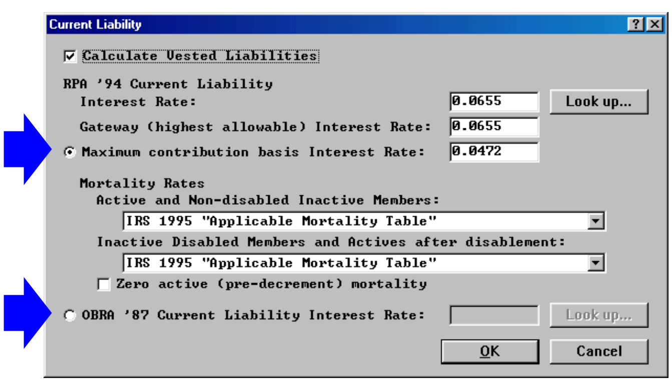
ProVal has been enhanced to allow users to model the impact of the Pension Funding Equity Act of 2004 (PFEA), including:

- 2004 and 2005 relief (with the opportunity to model "no sunset"),
- Corporate bond index for RPA Current Liability (90% - 100% of 4/3/2/1 average) and PBGC Variable Premium (85% of prior months' rate) interest rates,
- Interest rate lookback rules,
- Old law option for maximum tax deduction,
- Alternative Deficit Reduction Contribution, and
- §420 Retiree Health Transfers paid through 2014 (ProVal actually has no time limit).

Serendipitously, we were able to make these changes on a timely basis by taking advantage of the fact that the OBRA Current Liability (from the Omnibus Budget Reconciliation Act of 1987) is not relevant for post-2003 valuations (except potentially for §420 transfers), while the new Maximum Contribution Basis Current Liability is relevant only for post-2003 valuations.

Valuation Assumptions

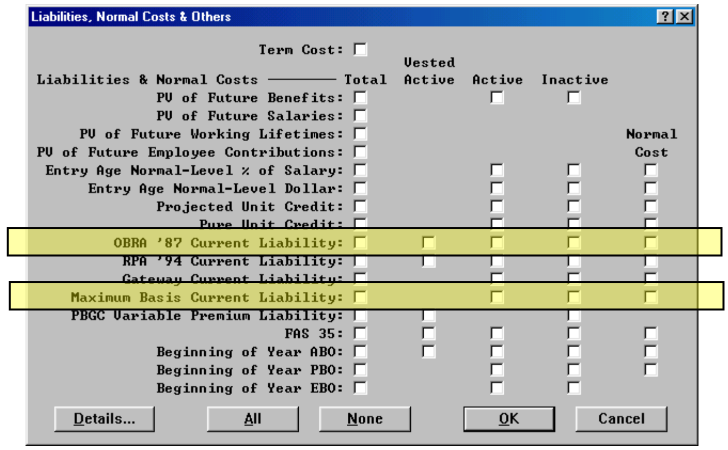
The Valuation Assumptions > Current Liability topic now determines whether a valuation is pre- or post-PFEA. The user selects, via a radio button, either the OBRA '87 current liability (for a "pre-PFEA valuation") or the maximum contribution basis current liability (for a "PFEA valuation")



Your choice of current liability on this dialog box has several implications:

1) The mortality assumptions reflected in the liability varies: if maximum contribution basis is selected, RPA mortality is used; but if OBRA '87 is selected, the valuation mortality assumptions are used.

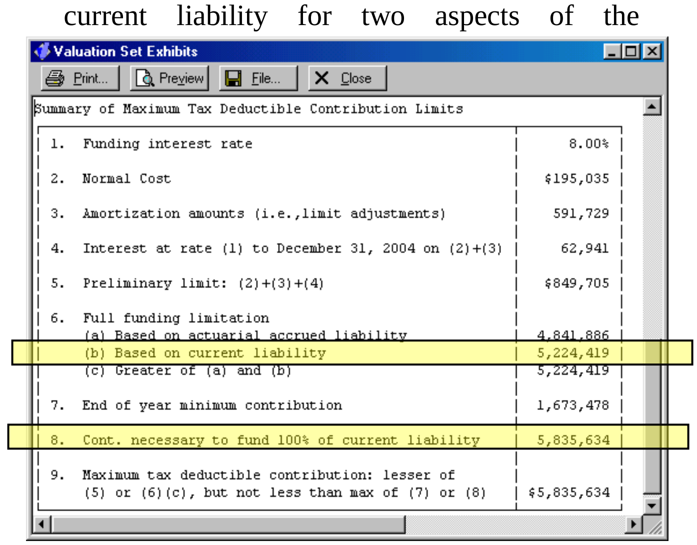
2) The valuation current liability output will be labeled "maximum contribution basis" or "OBRA" depending on your choice. Where available (e.g., under the Output menu), values for the non-applicable basis will be displayed as blank.



3) To be combined in a Valuation Set or forecast, valuations and core projections must reflect the same current liability types and valuation interest rates.

4) Valuation Set and Deterministic Forecast Exhibits will no longer include OBRA terminology if the underlying runs are post-PFEA.

5) If you have a PFEA valuation and the RPA and maximum contribution basis interest rates differ, the maximum tax deduction will be calculated by using the maximum contribution basis current liability for two aspects of the

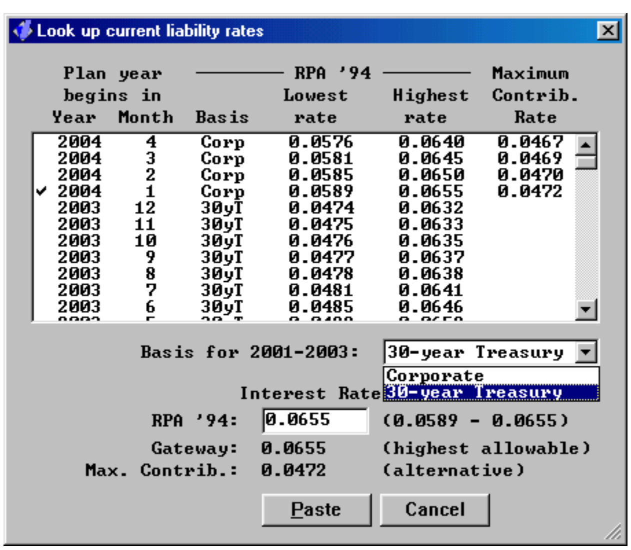


calculation: the full funding limit and the 100% of unfunded current liability minimum. No change was made with respect to the minimum contribution as it impacts the maximum because any change would, by definition, not be more than the 100% of unfunded current liability limit that already applies.

6) If you have a PFEA valuation, you can choose to reflect the Alternative Deficit Reduction Contribution, and you can choose among the various PFEA options in Stochastic Assumptions. PFEA parameters are not available for non-PFEA valuations.

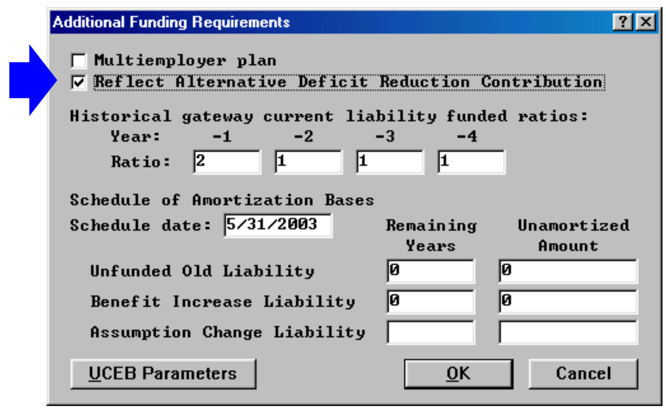
7) If you start with a PFEA valuation but the plan year is pre-2004, the maximum contribution basis current liability will be used as if it's the OBRA liability. Note that this feature allows you to forecast PFEA provisions even when your starting valuation is pre-2004. (A revised first year interest rate may be needed to generate the correct 2003 liability, and other adjustments may also be necessary. Please call ProVal support if you need help with this issue.)

An enhancement has also been added to the Valuation Assumptions to facilitate valuation under the revised **lookback rules.** When you click the interest rate look up button, you will have the choice of viewing either the 30 year Treasury or the Corporate Bond rate limits for the 2001-2003 RPA current liability. The default selection (30-year Treasury rates for 2001-2003) is appropriate for valuations to determine all liabilities and costs for the plan year, while the alternative would be used if a prior year valuation is being re-run solely to determine the appropriate current liability funded ratio basis for quarterly contributions and/or the additional funding charge.



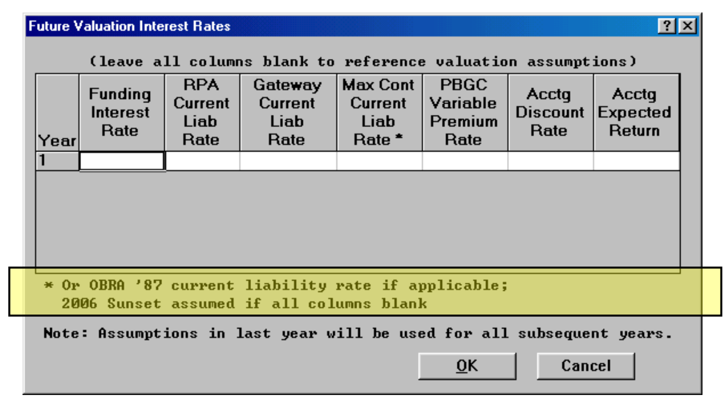
Asset & Funding Policy

With the advent of PFEA, the Asset & Funding Policy > Additional Funding Requirements parameters have been enhanced to reflect the Alternative Deficit Reduction Contribution option under the law for eligible electing plans. The dialog box has also been streamlined to eliminate some now obsolete parameters relative to prior law changes (the Optional and Transition Rules under RPA '94, and the OBRA '87 unfunded current liability amounts). Note that we have taken these parameters off the screen just for clarity; if you have a need to re-run an old valuation for which these parameters were relevant, they will still work as they used to and they will still be displayed the same way as in the Asset & Funding Policy view.



Deterministic Assumptions

Inasmuch as PFEA sunsets in 2006, Deterministic Assumptions are designed such that the default forecast assumptions follow the law. Thus, the default assumption with respect to determining the maximum tax deduction at a lower current liability interest rate than used for the minimum contribution is that this law will sunset. Accordingly, as footnoted on the screen, if a user leaves the Deterministic Assumptions > Future Valuation

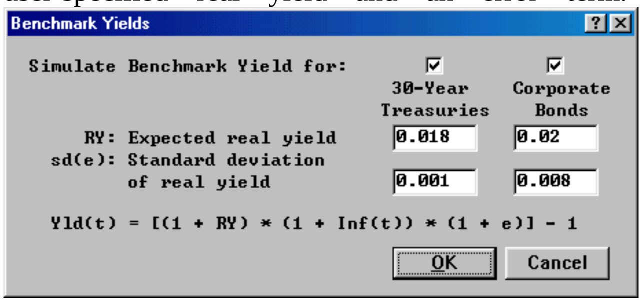


Interest Rates dialog box blank, then the maximum contribution liability interest rate will be set equal to the RPA current liability rate for forecast plan years after 2005. Users can elect to ignore the law's sunset provision by explicitly entering future valuation interest rates (that differ).

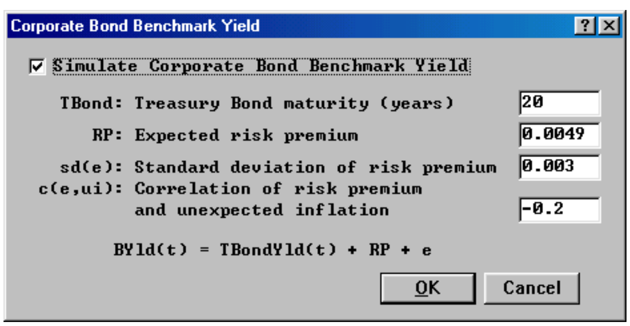
Capital Market Simulations

In order to allow reasonable stochastic forecasts of the PFEA provisions, it was necessary to add explicit support for corporate bond rates to each of ProVal's three capital market simulation types. In each case, the 30-year Treasury rate yield must be simulated if a corporate bond yield is to be simulated so that the law's sunset provision can be valued.

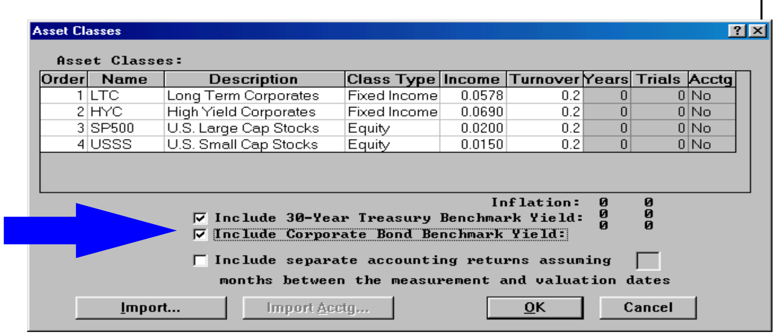
In the **Classic Mean/Variance** simulator, corporate bonds are valued comparably to 30-year Treasury yields: as the geometric combination of inflation, a user-specified real yield and an error term.



In the **Multi-Factor Term Structure** simulator, corporate bond yields can now be modeled based on a specified Treasury yield from the simulated yield curve. The user enters a maturity representing the starting point from the Treasury yield curve. Then the corporate bond yield is built up from that by adding an expected risk premium and an error term.



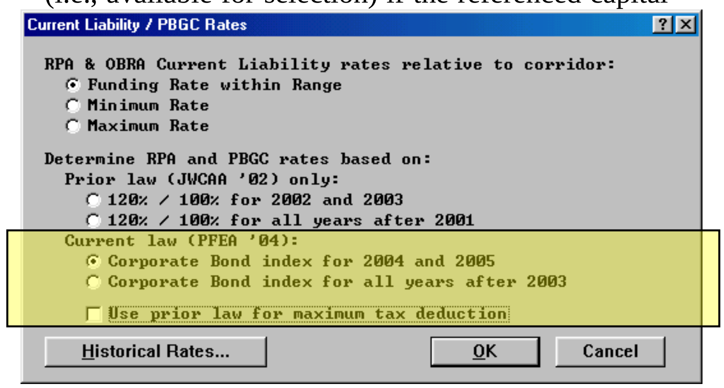
For the **custom** simulator, users can elect to import a corporate bond yield in addition to a 30-year Treasury yield.



To give you a head-start parameterizing the capital market simulators, a **new illustrative simulation**, which includes corporate bond yields, has been added. The capital market simulation is called "1926-2003 Illus. Multi-Factor Term Structure Params." and will be included automatically in the five universe projects of any client files created under version 2.21 (or later).

Stochastic Assumptions

Several parameters have been added to the Stochastic Assumptions > Current Liability / PBGC Rates dialog box to facilitate analysis of the implications of PFEA. These options are unghosted (i.e., available for selection) if the referenced capital market simulation includes corporate bond yields. Users may model the law with or without sunset, and with or without the new maximum tax deduction provisions. ProVal will maintain the 4/3/2/1 weighted average yield of both indices to properly value the sunset.



Please note that if the "use prior law for maximum tax deduction" option is checked, ProVal's current behavior is to pick the 30-year Treasury rate that is the same place within the range as selected for the RPA liability.

Users also now have a choice as to which benchmark should be used when interest rates vary during a stochastic forecast.