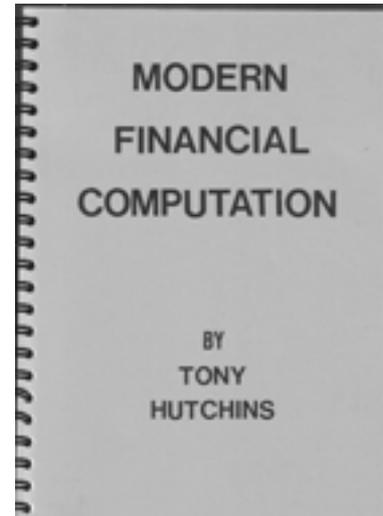


# Short Review of Tony Hutchins' book "Modern Financial Computation"

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*"Examples, references, examples, indexes, examples, tables, examples, and examples should be the message!"*—Richard Nelson (PPCCaJ V9N1p5d)

Despite the lack of a comprehensive index (there is an extensive summary of contents instead), Richard's words really fit in with Tony's book: lots of examples cover the full range of financial transactions with a constant rate of interest, including the most complex ones. This 270-page book written in 1983 is an extension of the articles in the PPC Calculator Journal describing Tony's own FIN program for the 41C,<sup>1</sup> which is a vastly improved version of the FI program in the PPC ROM module. As proven by the many comparisons between FIN and HP's financial calculators available at the time, namely the 37E, 38C and 12C, and also between the innovative though earlier 92, his work represented a clear advancement of the state of the art in financial computation, which makes this book a historical reference in this field. Just make sure you take your time studying it: you'll be amazed at how complex the analysis of a single<sup>2</sup> financial equation can be, since every input or result needs to be carefully interpreted. I particularly enjoyed reading the mathematical details of the novel approach to Newton's method along with the algorithm to produce initial guesses, for being explained clearly and concisely. FIN is used by many useful applications throughout the text: bonds, coupon dates, amortization, rule of 78, add-on rates and loans, simple interest during compounding periods, odd period transactions and especially the generalized IRR and its applications which is actually the subject of the last fifty pages. For details on how to get the book, contact the author directly (tony.hutchins@attglobal.net) or visit <http://homepages.paradise.net.nz/th/mfc.htm>



<sup>1</sup> Anthony G. Hutchins, "FIN - FI Improved" PPCCaJ V10N1p22c; "Comparison of FIN with HP Financial Calculators" V10N5p17a; related letters in V10N4p2d and V10N7p3b.

<sup>2</sup> Though not that simple: here's a compact version of FIN as an equation for the HP48 SOLVR menu that Tony has just sent me:

```
<< 'IFTE(Cf==0,I/100/PF,Cf*LNP1(I/100/Cf)/PF)' → j 'IFTE(j==0,
      N*PMT,EXPM(N*j)*(PMT/IFTE(BcE==0,j,BcE*EXPM(BcE*j))+PV))+PV
      +FV' >>
```

"CFIN: Same as HP TVM for  $I\%YR=I$ ,  $PYR=PF$  and  $BcE=1$  for END and  $BcE=-1$  for BEGIN, and  $Cf=PF$ . CFIN introduces a  $Cf$  independent of  $PF$ . For a yearly  $I$ ,  $Cf=12$  means  $I$  compounds 12 times per year.  $Cf=0$  means  $I$  is a continuous rate. Negative  $Cf$  is for interest in advance (discount).  $Pf$  must be positive.  $I$  must be greater than  $-100*Cf$ . Valid values for  $BcE$  are: -1 (BEGIN), 0 (Continuous PMT) and +1 (END). Must be explicitly input by user. Any other value of  $BcE$  produces meaningless results."