----Original Message-----

Sent: Tuesday, November 06, 2001 5:12 PM

Subject: TPTOOL documentation

This email explains the documentation available on TPTOOL.

An initial manual was completed in March, 1998. I am attaching here the text of that manual. That manual had three Appendices: a printout of the report template, a sample printout of results, and the thencurrent Compustat concepts file. I am attaching only the third of these items because I am not able to attach the others electronically.

The initial manual is outdated in various ways. Some of these ways are as follows:

- The manual describes three case types: inbound, maquiladora, and outbound. That has been changed. Now there are really just two case types, inbound and outbound, designated as case types 1 and 2 respectively.
- The asset intensity adjustment formulas given on pages 15-16 have some mistakes; correct formulas are given in the second APA annual statutory report to Congress.
- The instructions for how to run the software are somewhat outdated because Compustat has developed a new user interface, "Research Insight," that replaces the old "PCPlus" interface.
- The bug in Compustat's system software described on pages 4-5 has not been observed with the Research Insight interface, so that new interface probably fixed that problem.

There are also emails describing enhancements made to TPTOOL after the initial manual was written. The text of these emails is below. Before giving that text, I am attaching here various files referred to in these emails: the current concepts file (tptoolconc070500.txt), four supplemental concepts files (.txt files), a WordPerfect memorandum explaining the different versions of TPTOOL available, and a WordPerfect document that walks through some asset intensity adjustment calculations.

----Original Message----

Sent: Wednesday, July 05, 2000 3:36 PM

Subject: TPTOOL enhancements

- 1. In an email of May 22, 2000 (below), I announced a TPTOOL version, TPTOOLprintall.rpt, that prints out intermediate values. There is now another version, TPTOOLprintmega.rpt, that prints out still more intermediate values. I am attaching a memo that summarizes and explains the different versions available.
- 2. In an email of May 11, 2000 (below), I announced a TPTOOL version, TPTOOLtwoint.rpt, that allows one to use a different interest rate to adjust for "other operating assets" ("OOA") than one uses to adjust

for the rest of the assets. Both TPTOOLprintall.rpt and TPTOOLprintmega.rpt are now available in the two-interest-rate version, as described in the attached memo.

- 3. In case it is useful, I am also attaching a walkthrough of asset intensity adjustment calculations that I prepared for a taxpayer. (My taxpayer was not satisfied with the general description of our adjustments in the March, 2000 APA Report to Congress.) The walkthrough was based on the two-interest-rate version of TPTOOLprintmega.rpt. In my case, the mid term AFR was used for OOA, and the short term AFR for the other assets. The walkthrough used Hirsch Int'l Corp. as a comparable. This document may be useful as a model in case you need to prepare a similar document for other taxpayers.
- 4. For convenience, I attach below the series of emails that describe TPTOOL developments since the original software that was described in the March 5, 1998 documentation.
- 5. There have been several supplemental concepts files. (Some are described in the emails below; some were created to support the versions that print intermediate values.) To simplify things in case we need to reload the concepts, I have saved the current normal concepts state in file c:users\weissler\concepts\tptoolconc070500.txt. I believe that one would need to change the concepts only (1) to switch between using operating margin (the normal state) and Berry ratio, and (2) to switch between using one interest rate (the normal state) and two interest rates, both as described in the emails below.

----Original Message-----

Sent: Thursday, May 11, 2000 6:45 PM

Subject: TPTOOL

I have programmed a TPTOOL enhancement to allow a different interest rate to be used for PPE than for other assets. To use this enhancement, import the concepts file c:\users\weissler\concepts\twoint.txt. (Say yes, you want to overwrite the concepts.) With the new concepts loaded, the usual TPTOOL report will not run. You will need a report that includes more defined names (run-time inputs), to specify the PPE interest rate for each year. I have created such a report, called TPTOOLtwoint, under Research Insight. To restore the old concepts, so that the regular report will run, import the concepts file c:\users\weissler\concepts\oneint.txt. (Again, say yes, you want to overwrite the concepts.) If you use this enhancement, be sure to restore the old concepts for the next person. As always, you must call the report up again fresh after changing any of the concepts.

----Original Message-----

Sent: Monday, May 22, 2000 7:05 PM

Subject: TPTOOL enhancement

I have created a TPTOOL report version (under Research Insight) that prints out the unadjusted and adjusted sales, cogs, and operating expense for each year. The report file is TPTOOLprintall.rpt . (It uses supplementary concepts, which I have already loaded, in file c:\users\weissler\concepts\printall.txt .)

----Original Message-----

Sent: Wednesday, November 03, 1999 2:40 PM Subject: recapitulation of changes to TPTOOL

There are now six supplemental concept files:

cnberry.txt makes the "inbound" case (FLGADJTYPE=1) do Berry ratios cnopmar.txt makes the "inbound" case (FLGADJTYPE=1) do operating margins

cnintnew.txt fixes the formulas to treat interest correctly cnintold.txt restores the old, flawed interest formulas

cnmagnew.txt changes the flawed "maquiladora" (FLGADJTYPE=2) case to be a general

outbound case

cnmagold.txt restores the old, flawed "maquiladora" (FLGADJTYPE=2) case

These concept files are to be loaded after the basic concept file, tpconc.txt.

cnintnew.txt and cnintold.txt were written assuming that cnmaqnew.txt has been loaded.

One probably will have no need for cnintold.txt and cnmaqold.txt., which restore concepts to previous, flawed states.

----Original Message-----

Sent: Friday, September 17, 1999 10:45 AM

Subject: RE: TPTOOL

Laurie asked what "denominator" is used for the Berry ratio in paragraph 1 below. The denominator is sales. All adjustments are done the same as when operating margin is used, and at the last minute the PLI computed is a Berry ratio rather than an operating margin.

One could of course discuss what the best denominator would be, and I'm not claiming that I did it right. I'm just explaining how I did it. Also, I did this before our recent discussions on denominator issues.

-----Original Message-----

Sent: Thursday, September 02, 1999 6:10 PM

Subject: TPTOOL

This message reports a further enhancement to TPTOOL since the May 10 email below, reflecting work I did today and yesterday. This enhancement concerns asset intensity adjustment formulas.

TPTOOL was originally written so that the formulas for adjusting accounts payable and accounts receivable had a factor of i/(1+i), where i is the interest rate. Dave and I are now convinced that this formula, though used by many, is wrong. The correct factor seems to be i/(1+ih), where h is the holding period of the debt in question, expressed as a fraction of a year. For example, if a comparable has six months of payables, the factor for adjusting payables would be i/(1+.5*i).

I have created a supplementary concepts file, c:\users\weissler\concepts\cnintnew.txt, that changes certain concept definitions to fix the formula as stated above. Another file, c:\users\weissler\concepts\cnintold.txt, restores the old definitions. (These files conform to the changes made to case type 2 (originally called "maquiladora"), explained in paragraph 2 of the email below.) These files are ready for your use and further testing. After importing, you must call up TPTOOL fresh so that it loads with the new concept definitions. Also, remember that PCPlus and Research Insight each have their own separate concepts, so importing concepts in one program does not affect concepts for the other.

I have tested the software to the following extent, with all three case types. (For case type 1 ("inbound"), I did the test with operating margin rather than Berry ratio.) The report runs with the new concepts and yields results slightly different from the results with the old concepts. (Often, the margins or markups changed by roughly a tenth of a percent.) When I put back the old concepts, I got the old results back.

⁻⁻⁻⁻Original Message-----

Sent: Monday, May 10, 1999 4:26 PM

Subject: TPTOOL

This message recapitulates the results of the programming I did on May 7. This programming is ready for your further testing.

1. The "inbound" case is now switchable between operating margin and Berry ratio. To make TPTOOL compute Berry ratios, import the concepts in the file c:\users\weissler\concepts\cnberry.txt . To change TPTOOL back to computing operating margins, import the concepts in the file c:\users\weissler\concepts\cnopmar.txt . Switch back and forth as often as you like. However, after each switch, you must call TPTOOL up fresh.

The concepts under Research Insight are maintained separately from the concepts under PCPlus; so setting TPTOOL under Research Insight to use a Berry ratio or operating margin will not affect TPTOOL under PCPlus, and vice versa. However, within each application (PCPlus or Research Insight), importing the concepts as described above will affect all copies of TPTOOL (e.g., a copy you made to save your financial ratios).

- 2. The "maquiladora" case is programmed to be a general outbound case for maquiladoras and other manufacturers, computing markup on total costs with asset intensity adjustments using total costs as the "denominator".
- 3. The "outbound" case remains unchanged. It computes markup on total costs, but performs asset intensity adjustments using cogs as the "denominator." (Probably not too useful. If you wish this were something else, let me know; it might not be too hard to program.)