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Accumulated Earnings Tax: An Appeal for Flexibility

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COMMENTS

Accumulated Earnings Tax: An Appeal for Flexibility

A principal incentive for the incorporation of a business is the differential in the tax rates imposed upon individuals and corporations. Currently the federal income tax imposed upon individuals is graduated to a maximum rate of seventy percent,\(^1\) while that on corporations is twenty-two percent on the first 25,000 dollars of taxable income and an effective forty-eight percent on the balance over 25,000 dollars.\(^2\) Due to this differential,\(^3\) the high income taxpayer is induced to use the corporate form for the accumulation of wealth. As long as the taxpayer is able to control the dividend-paying policy of the corporation, and thus avoid the double taxation of corporate income,\(^4\) earnings may be accumulated and subsequently realized at the lower capital gains rate upon liquidation or the sale of his stock.\(^5\) If the taxpayer retains his shares throughout his lifetime, he will be able upon his death to pass on the accumulated gain relatively cheaply as a result of the stepped-up basis that the shares will then acquire under section 1014.\(^6\)

Since the Revenue Act of 1913,\(^7\) Congress has provided a statutory scheme designed to meet this tax avoidance technique. Although several different schemes have been enacted over the years,\(^8\) the current approach, while not without its shortcomings, appears to counter this tax avoidance incentive and to prompt corporations to distribute their earning and profits.\(^9\) The 1954 Internal Revenue Code imposes a severe penalty tax\(^10\) on a corporation\(^11\) that allows earnings and prof-

\(1. \) INT. REV. CODE OF 1954, § 1.
\(2. \) Id. § 11.
\(3. \) The introduction of a maximum tax on earned income, reduced by certain tax preferences, has taken some of the inequality out of this differential. Id. § 1348.
\(4. \) The income will be taxed once when it is received by the corporation and again upon receipt by a shareholder in the form of a dividend. Id. § 301.
\(5. \) Id. §§ 1201-02.
\(6. \) Id. § 1014.
\(8. \) Int. Rev. Code of 1939, ch. 1, § 102(a), 53 Stat. 47 (now INT. REV. CODE OF 1954, § 531). In addition to the accumulated earnings tax penalty, Congress has imposed a "personal holding company" tax on certain corporations that are used merely to collect "passive income." INT. REV. CODE OF 1954, § 541.
\(10. \) Id. § 531 provides:
In addition to other taxes imposed by this chapter, there is hereby imposed for each taxable year on the accumulated taxable income (as defined in section
its to accumulate beyond the "reasonable needs of the business" when this accumulation is "for the purpose of avoiding the income tax" on its shareholders. Section 532 imposes this penalty on all corporations except domestic and foreign personal holding companies and those exempt from taxation under Subchapter F of the Internal Revenue Code.

Although section 532 makes the presence of a tax avoidance purpose the ultimate test for applying the penalty tax under section 531, the central controversy in the vast majority of section 531 cases has been whether a business has accumulated its earnings and profits "beyond the reasonable needs of the business." Section 533 states that the presence of an unreasonable accumulation is "determinative of the purpose to avoid the income tax with respect to shareholders, unless the corporation by the preponderance of evidence shall prove to the contrary." In analyzing an accumulated earnings tax problem, three issues are of primary importance: who is to have the burden of proof?

535) of every corporation described in section 532, an accumulated earnings tax equal to the sum of—

(1) 27½ percent of the accumulated taxable income not in excess of $100,000, plus
(2) 38½ percent of the accumulated taxable income in excess of $100,000.

11. As a practical matter, section 531 is applicable only to closely held corporations since shareholder tax savings is not likely to be the reason for the accumulation where the stock is widely held in small lots. In 1954 a proposal was made to exempt corporations with more than 1,500 shareholders, none of whom owned more than 10% of the stock. This proposal was rejected on the ground that it would be too difficult to administer. S. REP. No. 1623, 83d Cong., 2d Sess. 69 (1954).

12. INT. REV. CODE OF 1954, § 532 provides:
(a) GENERAL RULE.—The accumulated earnings tax imposed by section 531 shall apply to every corporation (other than those described in subsection (b)) formed or availed of for the purpose of avoiding the income tax with respect to its shareholders or the shareholders of any other corporation, by permitting earnings and profits to accumulate instead of being divided or distributed.
(b) EXCEPTIONS.—The accumulated earnings tax imposed by section 531 shall not apply to—

(1) a personal holding company (as defined in section 542),
(2) a foreign personal holding company (as defined in section 552),

or

(3) a corporation exempt from tax under subchapter F (section 501 and following).

13. Id.
14. See, e.g., Sears Oil Corp. v. Commissioner, 359 F.2d 191 (2d Cir. 1966); Smoot Sand & Gravel Corp. v. Commissioner, 274 F.2d 495 (4th Cir. 1960).

15. INT. REV. CODE OF 1954, § 533(a) provides:
(a) UNREASONABLE ACCUMULATION DETERMINATIVE OF PURPOSE.—For purposes of section 532, the fact that the earnings and profits of a corporation are permitted to accumulate beyond the reasonable needs of the business shall be determinative of the purpose to avoid the income tax with respect to shareholders, unless the corporation by the preponderance of the evidence shall prove to the contrary.

16. Id. § 534 provides:
whether a tax avoidance purpose is present;\textsuperscript{17} and whether the earnings and profits have been accumulated beyond the reasonable needs of the business.\textsuperscript{18} The practical purpose in the reasonableness test of section 533 rather than the other two factors becomes apparent when sections 535(c)\textsuperscript{19} and 534(c) are examined. In theory a court could find that earnings were accumulated for a tax avoidance purpose despite the presence of a reasonable need for the accumulation; however, the tax credit provision of section 535(c) provides that any reasonable need will operate to reduce the accumulated income that is subject to the tax.\textsuperscript{20} As a result, a corporation may have been formed or availed of for the purpose of avoiding income tax, but will still not be subject to liability under section 531 if the credit under section 535(c) equals or exceeds the taxable base for imposition of the accumulated earnings tax under section 535(a) and (b).

\textsuperscript{17} See id. § 532, quoted in note 12 supra.
\textsuperscript{18} See INT. REV. CODE OF 1954, § 533, quoted in note 15 supra.
\textsuperscript{19} INT. REV. CODE OF 1954, § 535 provides:

(a) DEFINITION.—For purposes of this subtitle, the term "accumulated taxable income" means the taxable income, adjusted in the manner provided in subsection (b), minus the sum of the dividends paid deduction (as defined in section 561) and the accumulated earnings credit (as defined in subsection (c)).

(c) ACCUMULATED EARNINGS CREDIT.—

(1) GENERAL RULE.—For purposes of subsection (a), in the case of a corporation . . . the accumulated earnings credit is (A) an amount equal to such part of the earnings and profits for the taxable year as are retained for the reasonable needs of the business, minus (B) the deduction allowed by subsection (b)(6). For the purposes of this paragraph, the amount of the earnings and profits for the taxable year which are retained is the amount by which the earnings and profits for the taxable year exceed the dividends paid deduction (as defined in section 561) for such year.

(2) MINIMUM CREDIT.—The credit allowable under paragraph (1) shall in no case be less than the amount by which $100,000 exceeds the accumulated earnings and profits of the corporation at the close of the preceding taxable year.

\textsuperscript{20} See, e.g., Dielectric Materials Co., 57 T.C. 587 (1972).
Section 534 provides that a corporate taxpayer can shift the burden of proving whether earnings and profits have been accumulated beyond the reasonable needs of the business by following certain simple procedures. Nevertheless, some of the earliest decisions severely limited the usefulness of this section by holding that regardless of a shift in the burden, the ultimate burden of proving the absence of a tax avoidance purpose remained with the corporation.\textsuperscript{21} Only recently have several commentators indicated that this provision can be of substantial benefit to the taxpayer.\textsuperscript{22} The taxpayer, though, should not rely on a shift in the burden of proof, but should only view it as another tool in proving his case.

As stated above, the imposition of the accumulated earnings tax will hinge upon an estimation of what are "reasonable business needs." The "needs" basically are twofold: requirements for a business' current operations and requirements for its extraordinary needs.\textsuperscript{23} A business' current operational needs, often loosely referred to as working capital needs, include such items as payroll, overhead, inventory, and taxes. Extraordinary needs include such items as replacement of plant or equipment, retirement of bona fide indebtedness, expansion of business, and self-insurance.

A set of examples illustrating the computation of accumulated taxable income and the accumulated earnings credit are reproduced in the footnote.\textsuperscript{24} Wide variations in accumulated taxable income are

\begin{table}[h!]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
& \textbf{Co. A} & \textbf{Co. B} & \textbf{Co. C} \\
\hline
(1) Current Assets & $1,700,000 & $1,700,000 & $2,700,000 \\
\hline
(2) Current Liabilities & 1,600,000 & 600,000 & 600,000 \\
\hline
(3) Net Liquid Assets & $100,000 & $1,100,000 & $2,100,000 \\
\hline
(4) Net Liquid Assets (Line 3) & 100,000 & 1,100,000 & 2,100,000 \\
\hline
(5) Subtract: & & & \\
(1) operating expenses during the cycle & 490,000 & 490,000 & 490,000 \\
\hline
(2) anticipated extraordinary expenses & 500,000 & 500,000 & 500,000 \\
\hline
(6) Excess (or shortage) of working capital & $(890,000) & $110,000 & $1,110,000 \\
\hline
\end{tabular}
\caption{Examples of reasonable and unreasonable grounds for accumulations.}
\end{table}

\textsuperscript{21} See, e.g., Pelton Steel Casting Co., 28 T.C. 153 (1957), aff'd, 251 F.2d 278 (7th Cir. 1958).
\textsuperscript{24}
achieved depending on variations in the reasonable needs and liquid position of the business. As the reasonable needs increase, the amount achieved depending on variations in the reasonable needs and liquid position of the business. As the reasonable needs increase, the amount

| (7) Earnings and Profits accumulated at end of prior year | 1,400,000 | 1,400,000 | 1,400,000 |
| (8) Earnings and Profits accumulated at end of current year | 2,000,000 | 2,000,000 | 2,000,000 |
| (9) Increase in earnings and profits (Line 8 less Line 7) | $600,000 | $600,000 | $600,000 |
| (10) Unreasonable Accumulation (1) working capital (Line 6) | (890,000) | 110,000 | 1,110,000 |
| (2) investments in unrelated property (given) | 100,000 | 100,000 | 100,000 |
| (11) Total unreasonable accumulation | (790,000) | 210,000 | 1,210,000 |
| Accumulated Earnings Credit | $600,000 | $390,000 | $0 |

If the unreasonable accumulation exceeds the increase in the earnings and profits for the year, then the corporation is entitled to no accumulated earnings credit. When the unreasonable accumulation is less than the earnings and profits for the year, then the accumulated earnings credit is the difference between the earnings and profits and the unreasonable accumulation to a maximum of the amount of the increase in the earnings and profits.

**FORM 2**

| Gross Profit | $1,000,000 |
| Less Business deductions | 200,000 |
| Net Profit from Operations | 800,000 |
| Dividends Received | 200,000 |
| Less Dividends Received deduction | 170,000 |
| Net Long-term capital gain | 40,000 |
| Net Short-term capital loss (includes $5,000 capital loss carry forward) | 20,000 |
| Total Income | 850,000 |
| Charitable deduction (contribution of $60,000) 5% of $1,020,000 (Line 7 plus Line 4) | 51,000 |
| Taxable Income | $799,000 |
| Corporate Income Tax (based on 1965 rates) | 
| 22% of $25,000 | 5,500 |
| 48% of 754,000 | 361,920 |
| 25% of 20,000 (capital gains tax) | 5,000 |
| Total tax | $372,420 |
| Taxable Income (Line 9) | 799,000 |
| Plus: Dividend Received Deduction (Line 4) | 170,000 |
| Less: Nondeductible contributions | 9,000 |
| Federal income taxes accrued | 372,420 |
| Excess of net long-term capital gains over net short-term | 969,000 |
of the credit will increase to reduce the accumulated taxable income. As the liquidity (the excess of current assets over current liabilities) of the corporation increases, the amount of the accumulated earnings credit is reduced.

Since the area of extraordinary needs has been well covered in the literature, this comment will focus principally on the problems of computing the current operational needs of a business. Currently, the courts, the Treasury, and taxpayers seem to rely on the "operating cycle" computation approach, which was introduced by Bardahl Manufacturing Corp. in 1965. An attempt will be made to identify the strengths and limitations inherent in this formula, and certain refine-

<table>
<thead>
<tr>
<th>Capital Loss (excluding capital loss carry-over)</th>
<th>40,000 less 15,000</th>
<th>25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Tax on such excess (including capital loss carry-over)</td>
<td>25% of 20,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Total</td>
<td>20,000</td>
<td>401,420</td>
</tr>
</tbody>
</table>

(14) Net 567,580

(15) Less: Dividends paid deduction

<table>
<thead>
<tr>
<th>Paid during last 9 months of yr.</th>
<th>15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid during first 2 months of next yr.</td>
<td>8,000</td>
</tr>
<tr>
<td>Total</td>
<td>23,000</td>
</tr>
</tbody>
</table>

(16) Net $544,580

(17) Accumulated Earnings Credit (§ 535(c))

<table>
<thead>
<tr>
<th>Form 1, Line 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co. A</td>
</tr>
<tr>
<td>Co. B</td>
</tr>
<tr>
<td>Co. C</td>
</tr>
</tbody>
</table>

(18) Less: Excess of net long-term capital gain over net short-term capital loss

<table>
<thead>
<tr>
<th>20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
</tr>
<tr>
<td>20,000</td>
</tr>
</tbody>
</table>

(19) Net 580,000 370,000 20,000

(20) Accumulated Taxable Income (Line 16 less Line 19)

| $ -0- | $ 174,580 | $ 544,580 |

(21) Accumulated Earnings Tax

| 27 1/2% of 100,000 | 27,500.00 |
| 38 1/2% of balance | 28,713.30 |
| Total Tax | 56,213.30 |


ments will be suggested that may be usefully adopted in applying the formula.

I. DEVELOPMENT OF THE CYCLE APPROACH

The search for a method of computing the reasonable daily operational needs of a business has perplexed the courts since the inception of the penalty tax in 1913.27 The commentators, taxpayers, and courts have advanced several tentative approaches, none of which has received universal acceptance. The struggle has been to discover some guide or standard by which those needs can be accurately determined. As a by-product of this effort, the courts had developed prior to 1965 several rules of thumb to aid them in this determination. During this period the few successful applications of a rule of thumb could be attributed to the facility of application of the "rule" and the ability of these "rules" to meet the individual characteristics and needs of the business under attack by the Commissioner.28

One of the earliest rules of thumb to gain wide use was the so-called "current ratio" test.29 The ratio test involves a comparison of current assets to current liabilities of the corporation under scrutiny. The relationship thus obtained had been employed in a variety of ways by the courts. Several taxpayers had urged that a 2:1 ratio be acknowledged as a justifiable accumulation of working capital,30 while other taxpayers urged that a 2.5:131 or 3:132 ratio be adopted. However, the courts have been extremely reluctant to adopt such a rigid

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28. See, e.g., J.L. Goodman Furniture Co., 11 T.C. 530 (1948) (inventory was not replaceable due to the war-time situation, thus the accumulation of working capital to meet the expenses of one year was reasonable).
test\textsuperscript{33} since the strict application of a "per se" rule would fail to compensate for the individual characteristics of a business. As a result the courts have stated on several occasions that the rule of thumb "should not be given any greater weight than a rule of administrative convenience."\textsuperscript{34}

Although the current ratio test has come under severe attack as a valid measure of reasonableness, it appears to retain some significance when used to compare similar firms within an industry.\textsuperscript{35} Thus when a taxpayer's ratio compares favorably with those of comparable firms, the courts have tended to scrutinize the needs of the business more leniently. Despite this lenient attitude, the taxpayer should not substitute a favorable ratio for a more detailed analysis of the individual working capital needs of the business.\textsuperscript{36} The prudent taxpayer should view the current ratio test solely as another tool to impress upon the court the merits of his case.\textsuperscript{37}

Another rule of thumb that achieved recognition was formulated in 1948 by the Tax Court in \textit{J. L. Goodman Furniture Co.}\textsuperscript{38} The court permitted the taxpayer to accumulate working capital sufficient to meet one year's operating expenses including the cost of goods sold. The so-called "one year rule" was particularly appropriate to the facts in that case since the corporation was unable to assure a constant supply of inventory due to wartime exigencies. Despite taxpayer attempts to apply this test as a per se rule, courts, in recognition of its limitations, have viewed it also only as a rule of thumb.\textsuperscript{39} The major criticism of the "rule" is that it fails to consider the funds generated


\textsuperscript{36}. Faber, supra note 33, at 274.


\textsuperscript{39}. See, e.g., United States v. McNally Pittsburg Mfg. Corp., 342 F.2d 198 (10th Cir. 1965); Dixie, Inc. v. Commissioner, 277 F.2d 526 (2d Cir. 1960).
through the normal operations of the business and thus available to meet current operational expenses. In an attempt to meet this limitation, the courts began to modify and then erode this rule. Subsequent modifications by the courts have included: (1) an exclusion of the cost of goods sold and (2) an inclusion of only the excess of the cost of goods sold over the cash generated from operations. In addition, it has been contended that the rule should apply where surplus is less than three-fourths, or in the alternative, two-thirds, of operating costs, or that it should apply to at least six months, two months, or thirty-seven days of operating expenses. However, in Dixie, Inc. v. Commissioner the Second Circuit, by refusing to apply the "one year rule" even as a rule of thumb, has so seriously eroded the rule and its suggested modifications that its present validity is open to serious question.

In an effort to meet the obvious deficiencies of the "one year rule," an operating cycle approach was proposed in Bardahl Manufacturing Corp. The operating cycle may be described as the time it takes a manufacturing business to convert cash into raw materials, raw materials into inventory, then to convert inventory into accounts receivable, and to convert accounts receivable back to cash. This new objective


42. United States v. McNally Pittsburg Mfg. Corp., 342 F.2d 198 (10th Cir. 1965). The court commented that including cost of goods sold as an expense for the year precluded proper consideration of the funds generated from sales during the course of the year.

43. James M. Pierce Corp. v. Commissioner, 326 F.2d 67 (8th Cir. 1964); Sterling Distribs., Inc. v. United States, 313 F.2d 803 (5th Cir. 1963); Bremerton Sun Publishing Co., 44 T.C. 566 (1965); John P. Scripps Newspapers, 44 T.C. 453 (1965).


48. 34 P-H Tax Ct. Mem. 1123 (1965). Bardahl was only the culmination of a trend toward this type of analysis that started several years earlier. See Barrow Mfg. Co. v. Commissioner, 294 F.2d 79 (5th Cir. 1961); Smoot Sand & Gravel Corp. v. Commissioner, 274 F.2d 495 (4th Cir. 1960); Harrison Bolt & Nut Co. v. United States, 14 Am. Fed. Tax R.2d 5360 (D. Md. 1964).

49. "For a trading business, such as a wholesaler or retailer, the cycle would be the average period of time in which the corporation converts: (a) cash into the product to be resold; (b) product inventory into sales and accounts receivable; and (c) accounts receivable into cash." S. Weithorn & R. Noall, supra note 22, at 71 n.2.
formula was urged upon the court by both the Commissioner and the taxpayer and was subsequently accepted as a useful method of computing the operational needs of the business. Even though the operating cycle is not a new concept and previously had been utilized by the Internal Revenue Service, it apparently had never been argued in the courts prior to *Bardahl*. The rule of thumb adopted in *Goodman* failed to recognize that cash will be generated by the operation of most businesses during the year and that this cash will then be available to meet current operational expenses. In contrast, the operating cycle approach recognizes this fact while also recognizing that there are periods of time, unique for each business, during which cash will be tied up in the operation of the enterprise and therefore unavailable for current needs.

Under *Bardahl* a corporation should be entitled to retain a working capital reserve sufficient to carry it through one operating cycle. The operating cycle is computed as follows:

**Step I:** A corporation's peak inventory balance during the year is divided by the cost of goods sold for the year and then multiplied by 365 to determine the number of days needed to convert raw materials into inventory. That figure is the inventory turnover rate.

**Step II:** A corporation's peak balance of accounts receivable for the year is divided by sales for the year and then multiplied by 365 to arrive at the number of days necessary to convert accounts receivable into cash. That figure is the receivables turnover rate.

**Step III:** The inventory turnover rate is added to the receivables turnover rate in order to obtain the number of days in one operating cycle.

**Step IV:** The amount of working capital reserve necessary to carry the corporation through one operating cycle is determined by the following formula: the cost of goods sold plus its operating expenses (less depreciation and federal income taxes) for a year is multiplied

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52. There appears to be some controversy as to whether *Bardahl* used peak or average figures in its computation. See Trethewey, Justifying Retention of Cash to Meet Working Capital Needs: The Problem of Section 531, N.Y.U. 27TH INST. ON FED. TAX. 737, 745 (1968) (peak); Zeigler, supra note 40, at 93-95 (average). The utility of this distinction is discussed at note 156 infra.

53. Trethewey, supra note 52, at 745; Zeigler, supra note 40, at 95-97.
by a fraction, the numerator of which is the number of days in the operating cycle and the denominator of which is 365.\textsuperscript{54}

Through the use of the operating cycle approach, it is theoretically possible to determine the exact amount of working capital needed to finance a going concern through its daily operations. However, a major difficulty with this approach stems from the fact that cycles are continuously taking place, and therefore at any given time, there will be many cycles in different stages of completion.\textsuperscript{65} The aim of the Bardahl approach is to find the greatest length of time for which the greatest amount of capital is invested in the working operations of the business. The search, therefore, is for that cycle among the many cycles of the year that will generate the greatest need for cash or liquid assets.\textsuperscript{66}

Although Bardahl was only a memorandum decision of the Tax Court, the operating cycle it adopted has been widely recognized in subsequent decisions. For example, the First Circuit in Apollo In-

\textsuperscript{54} The Bardahl formula is computed as follows:

\begin{itemize}
  \item \textbf{Step 1: Determine Business operating cycle:}
    \begin{itemize}
      \item \textbf{Material inventory turnover cycle}
        \begin{itemize}
          \item \textit{Cost of materials used} $800,000
          \item \textit{Average of beginning and ending inventories} 80,000
          \item \textit{Percentage material inventory turned over per year} 10%
          \item \textit{Months per material inventory turnover (12 x 10%)} 1.2 mos.
        \end{itemize}
      \item \textbf{Receivables conversion cycle}
        \begin{itemize}
          \item \textit{Net sales} $2,400,000
          \item \textit{Trade receivables at end of year} 600,000
          \item \textit{Percentage of year's sales uncollected} 25%
          \item \textit{Average number of months' sales uncollected (25% x 12)} 3 mos.
        \end{itemize}
    \end{itemize}
  \item \textbf{Operating Cycle}
    \begin{itemize}
      \item \textit{Total months (1.2 plus 3)} 4.2
      \item \textit{Total percentage for year (10% plus 25%)} 35%
    \end{itemize}

\textbf{Step 2: Determine annual operating costs—excluding depreciation and federal income taxes:}

\begin{itemize}
  \item \textit{Cost of sales} $1,000,000
  \item \textit{Expenses (other than federal income taxes)} 500,000
  \item \textit{Annual operating expenses} 1,500,000
\end{itemize}

\textbf{Less: depreciation}

\begin{itemize}
  \item \textit{Annual operating expenses} 1,400,000
\end{itemize}

\textbf{Step 3: Determine ordinary operating expenses during business cycle (working capital needs):}

\begin{itemize}
  \item \textit{Operating cycle percentage} 35%
  \item \textit{Annual operating expenses} $1,400,000
  \item \textit{Cycle operating needs} $490,000
\end{itemize}


\textsuperscript{55} Trethewey, supra note 51, at 80.

\textsuperscript{56} Id.
dustries, Inc. v. Commissioner reversed a section 531 decision of the Tax Court, finding that in this instance the lower court had failed to analyze adequately the working capital needs of the corporation. Although the court of appeals cited the Bardahl decision with approval, it adopted an operating cycle formula that differed substantially from the Bardahl formula despite the court’s declaration that its analysis was similar to Bardahl. Rather than combining the inventory cycle and the accounts receivable cycle and multiplying the total against the total annual expenses as was done in Bardahl, the Apollo court separately found the “costs” of the inventory cycle (the cost of materials multiplied by the inventory turnover rate) and added it to the operating “costs” of an accounts receivable cycle (operating expenses multiplied by the receivables turnover rate). The approach suggested by the Apollo court will lead to a result more favorable to the Commissioner when applied to the same facts as a Bardahl formula.

57. 358 F.2d 867 (1st Cir. 1966).
58. Id. at 871. Several commentators have tried to explain the deviation from Bardahl on the grounds that the court did not have sufficient information to make a Bardahl computation. See, e.g., Trethewey, supra note 52, at 747.
59. 358 F.2d at 872. The court used costs of materials rather than costs of goods sold as labor and overhead expenses were minor; see, e.g., Zeigler, supra note 40, at 97.
60. An example of the Apollo formula and a comparison of the Bardahl and Apollo formulas are reproduced below:

The Apollo Formula:

Step I: Cost of material tied up for inventory period:
- Annual costs of materials: $800,000
- Average of beginning and ending material inventories: 80,000
- Turnover frequency: 10 times/year
- Days of cost of materials in inventory: 36.5 days
- Average daily costs of materials: $(800,000 ÷ 365) = $2,191.78
- Days’ cost of materials in inventory: (36.5 x $2,191.78) = $80,000

Step II: Operating costs during collection period:
- Annual net sales: $2,400,000
- 1 day’s sales: ($2,400,000 ÷ 365) = $6,575.34
- Accounts receivable: 600,000
- Days’ sales tied up in accounts receivable: (91.25 days = $6,575.34)
- Annual operating costs (excluding depreciation and amortization): 1,400,000
- Daily operating costs tied up in accounts receivable: (91.25 x $3,835.62) = 350,000

Step III: Operating cycle costs (working capital needs):
- Materials costs: 80,000
- Operating costs during collection period: 350,000
- Working capital needs: 430,000

Comparisons of Bardahl and Apollo formulas:
- Compare Bardahl formula working capital needs determination: $490,000
- with Apollo formula working capital needs determination: $430,000
- Allowance is less under Apollo formula by 60,000
Under the *Apollo* approach, no operating costs are allocated to the inventory cycle, and no materials purchases are allocated to the collection cycle. The fallacy in this approach lies in the fact that a corporation will certainly incur operating costs during its manufacturing or inventory cycle and, similarly, will incur the expense of merchandise or raw materials during the receivable collection cycle. Thus the view of the court would appear to ignore the fact that every business is a "going concern" and as a result will have inventory and receivable cycles in varying stages of completion throughout the year. It has been suggested that the *Apollo* court was aware of its deviation from *Bardahl* since it emphasized that its formula need not be used by the Tax Court on remand so long as the approach used "is set forth with clarity and is responsive to the realistic needs of a functioning business enterprise."

The Tax Court in the companion case to *Bardahl Manufacturing Co.*, *Bardahl International Corp.*, which was decided after *Apollo*, apparently accepted the suggestion of the First Circuit that the "Apollo formula" need not be utilized. The Tax Court returned to the original formula adopted in *Bardahl Manufacturing* without discussing the merits or limitations of either approach. The speedy return to the operating cycle computation of *Bardahl Manufacturing*, however, should not be interpreted to imply that this approach has been readily accepted as the ultimate test by all the courts or commentators. As was stated in *Delaware Trucking Co.*: "[t]he single operating cycle (or *Bardahl*) method has often been applied, but this court has never held that this

The difference is attributable to the failure of the First Circuit's formula to allow (a) labor and overhead in inventories ($20,000) and (b) operating expenses (exclusive of inventory costs) during inventory turnover period ($40,000):

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating expenses</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>% inventory turned over per year</td>
<td>10%</td>
</tr>
<tr>
<td>Operating expenses during inventory turnover period (attributable)</td>
<td></td>
</tr>
<tr>
<td>$80,000 (10%) to material costs, $20,000 (10%) to other expenses in cost of sales, and $40,000 (10%) to other expenses</td>
<td>$140,000</td>
</tr>
<tr>
<td>Less materials costs allowed by <em>Apollo</em></td>
<td></td>
</tr>
<tr>
<td>$80,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Difference</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

Horvitz, *supra* note 54, at 329.

62. 358 F.2d at 875 n.14; accord, Magic Mart, Inc., 51 T.C. 775, 794 (1969) (Government urged an *Apollo* analysis on the court, but it was rejected).
method has the force of law or should automatically be applied in every section 531 case . . . . Likewise, here, the single cycle method, or any other 'should rise to no higher level' than 'administrative convenience.'” And although the First Circuit remanded Apollo to the Tax Court for failing to demonstrate its working capital findings objectively, the court cautioned that this cannot be read as an absolute acceptance of the Bardahl approach: “We therefore pursue the approach used in Bardahl, not to sanctify it as applicable in all cases, nor to substitute our own determination of working capital needs for that of the Tax Court, but to test the reasonableness of the findings below.”

The opinion does, however, imply that the court would prefer an operating cycle test or similar test substituted for the less analytical “rules of thumb” that have been used in the past.

II. CRITICISMS OF THE CYCLE APPROACH

The hesitancy of the courts to apply automatically the operating cycle approach of Bardahl may be in part explained by the courts’ doubts about the reliability of the formula for computing the working capital needs of particular businesses. Although the courts have not expressed a basis for distrust of the formula, commentators have been quick to point out several possible inherent weaknesses of the operating cycle formula.

Both the Bardahl and Apollo approaches utilized an inventory and accounts receivable turnover computation. The turnover rate for computing the inventory cycle is obtained by dividing the cost of goods sold by the inventory, while the turnover rate for the accounts receivable cycle is obtained by dividing the net sales by the accounts receivable. If a corporation expects to increase its inventory balance or its accounts receivable balance, this will result in a lower turnover rate but will increase the number of days in the cycle. As a result there will be an increase in the amount of the working capital reserve that can be accumulated safely. At least one commentator has suggested that since the figures from which these turnover rates are derived are in many cases taken without analysis from the books of the offending corporation, these figures may be susceptible of manipulation. He suggests that with respect to inventories, “a corporation which is in a

67. 358 F.2d at 872.
68. See Horvitz, supra note 54, at 329.
69. Hamel, supra note 22, at 57.
position to accumulate wealth is likely to be able to increase its average inventories, at least if it deals in a relatively stable market.

As to the possibility of manipulation of receivables, he has suggested that at least where collection is assured, there may be a relaxation of collection policies. This would have the effect of lengthening the collection cycle. He also suggested that not only is the rate susceptible of manipulation, but also the expenses against which this rate is applied may be inflated in order to allow a more favorable accumulation. The possibility of inflating salaries as a means of increasing these costs has been pointed out as one means of manipulating the formula.

Since the definition of a "reasonable business need" is imprecise and therefore subject to varying degrees of manipulation by the wary taxplanner, it is understandable why the cycle formula has been criticized. In Smoot Sand & Gravel Corp. v. Commissioner, the Fourth Circuit stated that "to the extent the surplus has been translated into plant expansion, increased receivables, enlarged inventories, or other assets related to its business, the corporation may accumulate surplus with impunity." However, subsequently in Sears Oil Co. v. Commissioner the court indicated that there exists a limitation on such accumulations: "It is somewhat of an oversimplification to say as a generality that to the extent that surplus has been translated into inventory or other assets related to the business, 'the corporation may accumulate surplus with impunity.' The inventory must be needed in the business; to the extent that it is not, it cannot be accumulated with impunity." Apparently, where inventory and possible accounts receivable are found to be accumulated beyond the reasonable needs of the business, the court may be willing to entertain the suggestion that only that accumulation which it finds to be reasonable will be used in the operating formula. Only in an extreme case of manipulation, how-

70. Id.
71. This is to say that, in those instances where a corporation has extended credit and is reasonably certain that these debts will be repaid, the corporation may decide to allow its debtors a longer period of time in which to repay. This would, of course, have the effect of increasing the accounts receivable balance.
73. 274 F.2d 495 (4th Cir. 1960).
75. 359 F.2d 191 (2d Cir. 1966).
76. Id. at 196-97.
77. See text accompanying note 193 infra for the same discussion in another context.
ever, will the court be likely to deviate from the balance sheet presentation of the business assets. To do so would be to substitute the court's judgment for the judgment of the corporate directors, an approach highly unfavored by the courts. Therefore, criticisms of the Bardahl test should not be construed as an attack on the viability of the Bardahl operating cycle approach but rather as a comment on the vagueness of the term "reasonable needs" of the business.

Another objection to the operating cycle is that it fails to take into account such business risk factors as growth, increased expenses, increased competition, increased sales, and other unknown events of the marketplace which are not readily reducible to a numerical figure. In utilizing the operating cycle approach, the corporation is able to measure the actual working capital required to carry the business through one complete business cycle. However, it must be kept in mind that this is a measurement of only the minimum working capital requirement. The statutory test under section 531 is one of "reasonableness," and thus a businessman should be allowed to maintain a cushion over and above this minimum. This would give the corporation leeway to accumulate reserves for unexpected contingencies or risk elements of the business. One author found that, while some courts have recognized this fact in the course of their general discussions, they have all too often failed in their specific determinations to make allowances for anything over and above specifically identifiable needs.

It has been suggested that in order to cure this deficiency in the operating cycle approach, projected figures for sales, cost of goods sold, inventory, and receivables should be utilized instead of the figures for the taxable year in question. The viability of this argument will be discussed in conjunction with refinements of the cycle approach later in the text.

It has also been proposed that the Internal Revenue Service adopt as a part of its rule-making powers an allowance for the retention of an amount equal to "'(a) 120 percent, for example, of that determined

79. S. Weithorn & R. Noall, supra note 22, at 81; Faber, supra note 33, at 257; Hamel, supra note 22, at 58; Trehewey, supra note 52, at 748; Zeigler, supra note 40, at 82.
80. Trehewey, supra note 51, at 84.
81. Faber, supra note 33, at 275.
83. See Part IV infra.
under the operating cycle formulas, plus (b) the amount of its current liabilities.' Such an approach could create a "safe harbor" for a taxpayer. However, this proposal has been received with some reservation since it is without any greater analytical basis than the Goodman rule or any of the other "rules of thumb." Both the "projected figures" approach and the "120 percent rule" are expressions of the idea that each business has its own individual needs and problems. A strict cycle approach may "operate with an unnatural precision" that may not be attuned to the real world. Thus commentators seek to compensate for this false precision by allowing a reserve in the form of (1) a twenty percent leeway over the computed working capital needs or (2) giving the directors some discretion by allowing them to meet their unexpected risks through the use of projected operational expenses and income.

It has also been pointed out that the Bardahl formula fails to recognize the actual timing of expenses and income during the year. The formula presupposes that income as well as expenses will be received ratably during the year. This in fact is rarely the case. To the extent that the income of the business is not ratably received over the year, the operating cycle will adjust itself through the mechanism of the collection cycle in order to prevent any distortion from occurring. Thus if income is slow coming in, the collection cycle will be lengthened, and the company will be allowed to accumulate additional working capital. If the income is collected quickly, then the collection cycle is shortened, and the company will be allowed to accumulate less.

However, to the extent that the expenses of the business are not expended uniformly throughout the year, the operating cycle is unable to adjust itself. For example, in Bardahl International the company incurred large advertising expenses that were contracted for prior to the beginning of the taxable year and were paid for in a period other than the peak period. It was suggested to the court that these items be treated separately from the operational needs of the business. To do otherwise, the taxpayer argued, will leave the company short of necessary working capital when all these expenses become due in one

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84. S. Weithorn & R. Noall, supra note 22, at 81, quoting Zeigler, supra note 40, at 102.
85. See Hamel, supra note 22, at 58.
87. See note 84 supra.
88. Faber, supra note 33, at 275; Trehewey, supra note 52, at 748.
89. Trehewey, supra note 52, at 748.
90. Id. at 749.
91. 35 P-H Tax Ct. Mem. at 1064.
period. The trial court refused to accept this argument on the grounds that by including these expenses in the operating cycle, a substantial portion of the advertising expenses were being provided for in the working capital reserve. The view taken by the court toward these unusual expenses fails to provide the company with sufficient reserves to cover all the expenses that will be incurred in the cycle in which these unusual expenses will have to be paid. In order to solve this problem, one commentator has suggested that the unusual expense be eliminated from the operating cycle computation and be treated as an extraordinary need. Alternatively, a system of weighted averages has been suggested "to bring the expenses into uniform application with the cycle." By adoption of either of these methods, it is felt that this criticism of the cycle may be met.

The fourth difficulty raised by the commentators centers on the fact that the cycle allegedly ignores the receipt of income from the subsequent cycles. Except in the case of a new business, which will be starting its first cycle, it has been observed that:

In fact, there are many cycles, not just one, and there will be a continual flow of cash both into and out of the corporation throughout the measuring period. Amounts received during this period will be available to finance operating costs and should not be ignored by the courts in determining the taxpayer's resources. The Bardahl approach does precisely this, however, to the extent that such amounts are not represented by receivables at the end of the taxable year (and, hence, are not treated as liquid funds available to defray the costs of the first measuring period of the next year).

One commentator has suggested a modification to the Bardahl formula to meet this deficiency. In Mr. Skinner's estimation, a corporation should be allowed to accumulate assets sufficient to provide for its maximum "cash cycle" requirements. The "cash cycle" is de-
fined as "the amount of costs and expenses . . . that is likely to be incurred during the procurement, production, and delivery period [inventory period] under which the corporate enterprise operates. Ordinarily, it would not include the collection period . . . ."98 This rationale is based on the premise that there is a constantly recurring accounts receivable collection cycle that will be continually generating cash for the corporation.

This approach fails to recognize that cash generated by the collection cycle will not always be available to meet the costs of the current production or inventory cycle. Presumably, this cash will be needed to pay for expenses incurred in the previous production cycles. However, it has been argued that the prior operating cycles during the year will generate a profit in most normal situations, a profit that would be available for future cycles.99 This profit generated during the year should supply an extra cushion for the corporation in meeting its future operating needs. The courts to date have ignored this additional cushion in computing the reserve necessary to meet the needs of the business.

When analyzing a company's operational needs, the crucial viewpoint is that of the directors and management immediately prior to the beginning of the year in which the profits are to be earned.100 Generally, management cannot be assured that the following year will be a profitable one. The fact that the company earned a profit in one year should not bear on the determination of what reserves will be allowed to meet the operational needs of the business in the future. Therefore, the profit earned from previous or ongoing cycles should not be included as another source of funds.101

Although the preceding four criticisms by no means exhaust the field, they do show that the cycle approach is susceptible to attack.

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98. Id. "If, however, the collection cycle of an enterprise is longer than its procurement-production-delivery period, then the cash cycle for that enterprise should take into account the longer collection period." Id.
99. Trethewey, supra note 52, at 753-54; Zeigler, supra note 40, at 92.
100. Trethewey, supra note 52, at 753-54.

[T]he fact that income is realized in an account in excess of expenses does not mean that cash is available to pay the expenses. For example, the income may be reflected, in part, by accounts receivables. Moreover, a portion of the income realized in cash may have been used to buy additional fixed assets rather than to pay for current deductible expenses. Finally, even assuming that all income is immediately realized in cash, a reserve must nevertheless be retained to meet expenses in an orderly fashion as they come due. The corporation cannot wait for a dollar of income to be received in order to pay a dollar of expenses.

Zeigler, supra note 40, at 92.
However, by careful analysis and understanding of the problems inherent in the cycle approach, many of the objections can be met by variations or refinements in the application of the formula.

III. VARIATIONS ON THE CYCLE APPROACH

The legal commentators since *Bardahl* have suggested new approaches and variations to the cycle approach. One of the most interesting commentaries to date has agreed with the *Bardahl* court that the cycle approach is a proper mode of analysis for the problem.\(^\text{102}\) However, while the author found the *Bardahl* approach "systematic and reliable,"\(^\text{103}\) his approach differs in several important respects.

Mr. Luria suggests a computation very similar to *Bardahl*, but he differs on the focus of the analysis. Like the *Bardahl* court, Mr. Luria uses a production cycle (inventory cycle) and a collection cycle (accounts receivable cycle) in computing the reserves that will be needed to carry the business through production, sale, and collection. The production cycle is described as follows:

The volume of costs which mature into expenses during the gap between production and sale is generally proportional to the length of the gap. The working capital needed for this gap may be computed by calculating the average daily production and operating expenses of a corporation, then multiplying by the number of days between production and sale.\(^\text{104}\)

As to collection cycle needs, Mr. Luria finds these to be in a direct relationship to the production cycle, and thus they should be computed as follows:

Adding a carrying period [for receivables] has the same effect on the corporation's working capital needs as lengthening the production period—as the period is extended, finance needs grow in proportion.

This relationship provides a method of calculating fund needs due to the extension of credit. One determines the average collection period for accounts receivable, and compares it with the production period. Needs arising from the extension of credit bear the same relationship to those arising from production . . . as the carrying period does to the production period.\(^\text{105}\)

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103. *Id.* at 795.
104. *Id.* at 796.
105. *Id.* at 798. "Thus, if production needs amount to $100,000, the production period is ten days, the carrying period is thirty days, and the carrying needs come to $300,000." *Id.*
The analysis adopted by the court in *Bardahl* concerning the length of time in an inventory or receivable cycle or turnover is an objective one. It is based on an historical statistical analysis of the relationship between cost of goods sold and inventory or between sales and accounts receivable, which, through the use of hindsight of the current year, shows what the business may need for the following year. However, Mr. Luria's approach is purely subjective. It requires a study of the various cycles for the individual business in question, rather than a statistical analysis, in order to determine the number of days between production and final sales for cash. This points up an important problem with this approach because it would be difficult if not impossible for a court to establish criteria that could be uniformly applied for measuring this period. In addition, the use of a subjective analysis for the computation of the cycle periods may tend to penalize a business that fails to retain sophisticated accounting records, and thus would be unable to compute the number of days in the "gap" with any degree of certainty.

Mr. Luria proposes a variation to his formula in the case of a business with seasonal variations in expenses and income. He concludes that a business has an affirmative duty\(^\text{106}\) to predict the pattern of such items in advance in order to be entitled to additional cash reserves to meet these fluctuations.\(^\text{107}\) Again, this subjective approach to the problem of fluctuations is deficient in several major respects. First, there are no assurances that a pattern can ever be established for such expenses and income. For example, in *Shaw-Walker Co. v. Commissioner*\(^\text{108}\) the high receivable cycle not only occurred in the same month, but also before and after the production cycle period in the years under analysis.\(^\text{109}\) Thus no relationship or pattern could be ascertained. Secondly, this approach places the business in a position of predicting what will happen in the future, but nevertheless, if there is a miscalculation, the subjective approach may result in the imposition of the penalty tax because "in fact" the taxpayer did not need such a large reserve. At least with the objective approach, if it is found that the actual needs are not the same as the statistically computed needs, the corporation will not be penalized. Apparently aware of the position in which his subjective approach will place a taxpayer, Mr. Luria suggests that in the

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106. *Id.* at 800.
107. *Id.* at 801.
108. 390 F.2d 205 (6th Cir. 1968).
event of a miscalculation there is an escape period two and one-half months after the end of the year in which the company can still pay a dividend and avoid the penalty tax.\textsuperscript{110} This reasoning by the author "squarely brings into focus the disparity between subjectivity and objectivity in the measurement of working capital."\textsuperscript{111}

Although the collection cycle formula quoted above initially appears to differ from the Bardahl formulation, the working capital reserve computed under both approaches will be the same.\textsuperscript{112} The only objection to it is academic. Mr. Luria's formula assumes some relation between the receivables cycle and the inventory cycle. Thus he makes the working capital reserve computed under the accounts receivable cycle bear the same relation to the reserve under the inventory cycle as the number of days in the receivable cycle bears to the inventory cycle.\textsuperscript{113} As noted earlier,\textsuperscript{114} Shaw-Walker clearly indicates that there is normally no relationship between the receivable cycle and production period as a measurement of time. One does not necessarily occur after the other. The Bardahl approach finds the two cycles that will require the greatest financial investment and combines them. This does not mean that the two are related, only that since the two are unrelated they could conceivably occur at the same time, thus requiring a greater cash reserve than normal.

Another commentary on the Bardahl formula suggests an additional variation on the cycle approach that upon analysis appears to be somewhat contradictory.\textsuperscript{115} The writer advocates the use of a peak inventory cycle but feels that the collection cycle should not be included because "funds from the collection of receivables . . . are being converted into cash and reinvested in inventories."\textsuperscript{116} This approach has already been suggested by one writer and was criticized previously.\textsuperscript{117} However, the author recognizes that this approach creates a problem

\textsuperscript{110} Luria, supra note 23, at 800 n.13.
\textsuperscript{111} Trethewey, supra note 51, at 85.
\textsuperscript{112} If the inventory cycle is one month and the collection or receivables cycle is two months long then the total expenses will be multiplied by one-fourth of a year to compute the necessary working capital. Those expenses attributed to the receivable cycle will be twice those in the inventory cycle. This is the same result reached in note 105 supra where the receivable cycle was found to be three times that of the production cycle. Thus, three times the expenses were allowed to carry the business through this cycle.
\textsuperscript{113} See note 105 and accompanying text supra.
\textsuperscript{114} Id.
\textsuperscript{115} Monyek, supra note 96, at 767.
\textsuperscript{116} Id.
\textsuperscript{117} See notes 96-99 and accompanying text supra.
when the taxpayer’s accounts receivable fluctuate significantly during the year from their “normal balance,” thus creating an additional drain on cash to carry the costs incurred to create these increased receivables.\textsuperscript{118} To meet this problem, the commentator suggests that one should add the costs of generating these additional receivables to the costs of the peak inventory cycle.\textsuperscript{119} “For example, using . . . a 75 percent cost ratio . . . , a taxpayer having receivables at the balance sheet date of $1,000,000, expected to increase as of the beginning of the peak period to $1,500,000 would treat . . . an additional $375,000 as needed to generate and carry the expected increase in receivables.”\textsuperscript{120} As a result, it is reasoned that this approach will permit sufficient accumulations of working capital to cover the expenses of the business during its most costly inventory cycle as well as any fluctuations in receivables when that period arises.

The contradiction appears when it is pointed out that the author has removed the “collection cycle” from the computation but in effect has compensated for its absence by adding back the costs necessary to generate an increase in accounts receivable. The theory behind the use of the collection cycle is that there is a delay in converting a credit sale into cash.\textsuperscript{121} The business has money invested in the product or service sold, but due to the extension of credit it has not been able to convert that investment into cash that can then be used to pay for the investment. In the meantime, a business will continue to incur additional expenses as an ongoing business until the receivables are collected. The cycle computation of Bardahl recognized this fact by adding to the inventory cycle a peak collection cycle to represent the time it takes to finally realize cash on the sale.

When a peak collection cycle is added to the statistical analysis, it accomplishes two things. First, it compensates for the problem of increases or fluctuations in the receivable balance during the year, and secondly, it reflects the idea that to extend credit to a customer ties up a business’ cash reserves. Mr. Monyek recognized that his approach was deficient in this respect and as a result attempted to compensate for these fluctuations by adding to the working capital reserve additional costs necessary to generate the sales that produced the increased or fluctuating receivables. By doing so, however, he has only attacked

\textsuperscript{118} Monyek, supra note 96, at 770.
\textsuperscript{119} Id. at 770-71.
\textsuperscript{120} Id.
\textsuperscript{121} Luria, supra note 23, at 798.
half the problem. What of the costs incurred that are now represented by the "other" receivables, not just the receivables that fluctuate over the norm? It would appear that Mr. Monyek has ignored the fact that it is expensive for a business to extend credit to customers even if the level of such credit is constant and does not fluctuate. To justify this result he argues that since cash is being generated by other collection cycles, this cash is available as a source of additional funds for the business. As noted earlier, this argument ignores the fact that there are also at any one time numerous production cycles in progress or about to begin. These cycles along with the "extraordinary needs" most businesses incur will generally utilize this cash. As a result, there is usually no additional source of funds that can be counted on by the business to finance the credit represented by its receivables. This fact is aptly shown by the common practice in business of factoring receivables through financial institutions.

The courts also have readily accepted the challenge of formulating variations to the cycle approach. An early method suggested by the Tax Court to determine whether accumulations met the test of reasonableness was formulated in *National Yarn Corp.* The taxpayer had accumulated at the end of the year under examination 499,000 dollars worth of liquid assets exclusive of receivables and inventory. The court restricted its analysis to the reasonableness of this accumulation without regard to the effect the receivables or inventory might have had on available working capital. The court held that a taxpayer should be allowed to deduct from this accumulation a sum equal to one year's operating expenses exclusive of materials purchased. In addition, a deduction was allowed for cash needed to increase the inventory balance to normal levels as well as for other "extraordinary needs" found by the court. Current liabilities were then deducted from this excess cash figure to yield the excess or deficiency in working capital.

The most striking departure between this formulation and the current method employed under *Bardahl* is the analysis of the "cash assets" without regard to "other" current assets. Therefore, this "formula"

122. See note 94 and accompanying text supra.
123. See, e.g., Zeigler, supra note 40, at 92, quoted in note 101 supra.
125. As this case was brought during the heyday of the now defunct Goodman rule, the present deduction allowable under the court's reasoning should be ordinary operating cycle expenses less cost of materials.
126. 19 P-H Tax Ct. Mem. at 557-58; see Horvitz, supra note 54, at 332 n.22.
may be interpreted by some as an attempt to equalize the position of those corporations which pay off their current liabilities at year end with those corporations which carry these liabilities forward into the next year.\textsuperscript{127} The facts of the particular case, however, belie this reasoning and indicate that the court was most concerned with making proper provisions for the exigencies facing the particular taxpayer. The taxable year in question was 1944, during the severest part of the war, when inventory and accounts receivable were sharply reduced.\textsuperscript{128} The court probably determined that these assets, which were at an unusually and undesirably low level, were not available to meet current operating expenses or current liabilities without severe hardship to the continuance of the business. Therefore, they were not to be included in the accumulation the reasonableness of which was to be tested.\textsuperscript{129}

The \textit{National Yarn} computation is unlikely to be a viable alternative to the sophisticated operating cycle approach due to its age and the readily distinguishable facts on which it was promulgated. However, it should remain useful for the premise that reasonableness is a vague standard peculiar to each taxpayer, and that any formulation should be closely scrutinized when the particular facts seem to warrant a highly individual analysis.

In 1964 the Second Circuit, in \textit{Electric Regulator Corp. v. Commissioner},\textsuperscript{130} adopted yet another means of determining the reasonableness of an accumulation. The court, taking the case on appeal by the taxpayer from an adverse judgment in the Tax Court, focused on the ability of the taxpayer to pay the dividends that the lower court determined the taxpayer should have paid.\textsuperscript{131} The court, therefore, changed its focus from the reasonableness of the accumulation to the reasonableness of the dividends suggested.

The court's review focused on the source of these suggested dividends. The Tax Court had based its finding of an ability to pay dividends on the total accumulated earnings of the corporation. The Second Circuit rejected the use of accumulated earnings as a source of dividends when an analysis had not been made of the use to which these earnings had been put.\textsuperscript{132} The court reasoned that such earnings

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\textsuperscript{127} Horvitz, \textit{supra} note 54, at 332.
\textsuperscript{128} 19 P-H Tax Ct. Mem. at 558.
\textsuperscript{129} \textit{Id.}
\textsuperscript{130} 336 F.2d 339 (2d Cir. 1964).
\textsuperscript{131} \textit{Id.} at 344-46.
\textsuperscript{132} \textit{Id.} at 343-44.
\end{flushright}
were not a readily available source of liquid funds with which to satisfy corporate obligations and pay dividends. This reasoning was based on the belief that earnings had been translated into a cross section of assets many of which were reasonable and necessary to the business and therefore not in a position to be paid out to meet expenses.\textsuperscript{133} The taxpayer argued, and the Second Circuit agreed, that only the cash account should be considered. A determination was to be made whether the corporation was in a liquid position to pay dividends. The court believed that cash, and presumably marketable securities, were the only assets that may not be reasonably accumulated to the extent that they were not applied to the reasonable needs of the business. Further, these assets were the only ones available to meet expenses of the business and to pay dividends.

The formula derived from this analysis begins with the cash balance at the end of the year in question. Current liabilities are subtracted to yield cash available. To this figure is added the net income for the following year to obtain the net cash available. Then anticipated, extraordinary expenses are subtracted to yield cash available to pay dividends.\textsuperscript{134} It should be noted that the amount of dividends which the Tax Court determined should have been paid by the corporation would have created a cash deficit. The Second Circuit noted this fact and reversed, yet the court never attempted to determine what dividends could have been paid without adversely affecting the cash balance needed by the business.

The court's reasoning with respect to retained earnings is entirely sound and will be discussed below.\textsuperscript{135} However, the approach advanced is one entirely based on hindsight since it looks to the net income for the following year.\textsuperscript{136} The court made no analysis of funds available in the current year. As such this approach has no utility as a planning device or as an objective measure of evaluating accumulations at year end. Thus, to the extent the approach uses figures that

\textsuperscript{133} \textit{Id.} at 344.

\textsuperscript{134} \textit{Id.} at 345. \textit{See also} Horvitz, supra note 54, at 330. An earlier case providing a variant of the same approach is Barrett Hamilton, Inc. v. United States, 4 Am. Fed. Tax R.2d 5612 (E.D. Ark. 1959). In that case the court considered current assets exclusive of building fund assets and inventory from which it subtracted current liabilities plus need for increase in inventory to arrive at an asset balance available for other (dividend) purposes. Against this figure the court compared the 3 year total of dividends urged by Commissioner to be paid. This comparison yielded a potential cash deficit so that the judgment was rendered for the taxpayer. If inventory had been included in current assets a substantially different result would have obtained.

\textsuperscript{135} \textit{See} text accompanying note 190 \textit{infra}.

\textsuperscript{136} Electric Regulator Corp. v. Commissioner, 336 F.2d 339, 344 (2d Cir. 1964),
are unknown to the taxpayer at the end of the year under attack, it may severely penalize the corporation if such figures exceed the figures projected by the taxpayer when the decision was made not to pay dividends, regardless of how reasonable the decision was at that time.

Although the approach is unsound as a means of objectively evaluating accumulations, it may have some continuing validity as a means of testing the Commissioner's determination of reasonableness. The facts of Electric Regulator indicate that the court devised the test to determine whether the taxpayer actually could have paid the dividends that the Commissioner determined the corporation should have paid.\(^{137}\) For this purpose it may remain a useful tool of the court but should rise to no higher level.

The suggested alternative formulas discussed above do not appear to be better solutions to the problem of determining the reasonable needs of the business than the Bardahl approach. In fact they often appear to be of less viability. However, there should be nothing to forestall a taxpayer from urging them or even an original formulation on the court when the circumstances appear to lend themselves to such an argument.

IV. REFINEMENTS ON THE CYCLE APPROACH

A. Operating Costs: Current or Projected

Since the current year's working capital reserve for the operational needs of the business is accumulated to meet the expenses to be incurred in the following year, a controversy has arisen over whether the costs and expenses to be used in the cycle analysis should be the expenses of the current year, those projected for the following year, or some other measure. The controversy is yet to be resolved.

The controversy over when to measure the costs and expenses of the business for the purpose of the operational cycle first arose in Bardahl Manufacturing\(^ {138}\) and Bardahl International.\(^ {139}\) The court in Bardahl Manufacturing used the costs and expenses of the current year in computing the reasonable working capital reserve for the end of that year. The First Circuit in Apollo,\(^ {140}\) following Bardahl, also utilized

\(^{137}\) See text accompanying note 132 supra.


\(^{140}\) Apollo Indus., Inc. v. Commissioner, 358 F.2d 867 (1st Cir. 1966), remanding 44 T.C. 1 (1965).
the current cost approach. However, in *Bardahl International* the court computed the working capital needs by using actual expenses for the subsequent year. This change in approach is not discussed in the *Bardahl International* opinion, but it may be explained on the ground that in the previous decisions only the current costs approach was urged on the court.

The argument for the projected cost approach is based on the premise that only by the use of projected expense figures will a growing company have sufficient working capital to finance its operations for the following year. "Current cost" computations do not provide a cushion for overall growth of the company or inflationary increases in expenses. Likewise, for a company that is undergoing a financial contraction, the use of current costs rather than the lower projected figures would create an excess of working capital.

The real objection to the use of projected figures is that there is no accurate and reliable method available that would not be subject to abuse. This fact may explain why *Bardahl International* used the actual expenses in the following year rather than projected figures for that year. Although this approach may be criticized on the ground that it allows the court to use a hindsight test, which is generally condemned in a "reasonable needs" analysis, it would tend to cure the inherent defect in using projected figures. If the court takes into account actual expenses when asked to decide an accumulated earnings tax case, the court is in a good position to determine the reasonableness of the projected expense figures which were relied upon by the taxpayer when he decided to accumulate working capital rather than distribute it.

One of the most interesting approaches to the "projected cost" variation of the operating cycle computation of *Bardahl Manufacturing* is found in the recent case of *Delaware Trucking Co.* In that case the taxpayer, faced with increasing expenses due to inflation and labor demands, successfully argued that it should be allowed to retain "working capital as of the end of each of the taxable years involved at least in an amount sufficient to cover its reasonably anticipated costs of operating for a single operating cycle, plus an additional amount approxi-

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142. Some writers suggest that the use of hindsight analysis should be limited to determining the "intent" of the taxpayer and not the "reasonableness" of the need. S. Weithorn & R. Noall, *supra* note 22, at 49. However, where an abuse is alleged it may constitute a proper measuring stick of the reasonableness of the need.

mately seventy-five percent thereof.” The court compared the expenses incurred in the current year with those in a prior year and found a substantial increase. As a result, the court reasoned that such an increase in expenses could be reasonably expected in future periods, and thus the taxpayer should be allowed to accumulate sufficient working capital to meet these increased costs. By examining the growth of the business and the rate of inflation over a period of time, a reasonable projection of future increases in costs arguably can be made.

Since the cases that use the “current cost” approach can be explained on the ground that the litigants failed to argue to the court the theory of projected costs or to supply the court with sufficient information to make such computations, it is not surprising that the court adopted the easiest method in computing the costs of the business. The better approach would appear to be the projected cost theory, a theory that the courts are likely to accept upon reflection since it affords a more realistic approach to the question of what are the reasonable operational needs of the business.

B. Peak or Average Cycles

As has been noted above, the court in Bardahl Manufacturing used the peak balances for inventory and accounts receivable in computing the operating cycle. However, it has been urged that average levels provide a sufficient measure of working capital needs. The importance of utilizing peak or average levels is evident to a taxpayer whose business undergoes fluctuations in its inventory and accounts receivable balances over the year. A computation of working capital needs based on average turnover rates is almost certain to be inadequate to carry the business through a period of peak activity. “Since the ultimate question is how much working capital constitutes a ‘reasonable need of the business,’ it seems clear that determining the amount necessary to cover peak operating needs is entirely appropriate.” This would correspond with the expectations of prudent man-

144. Id. at 113.
145. Id. at 118.
146. See note 52 and accompanying text supra.
147. See note 52 supra.
148. C. PARK & J. GLADSON, supra note 101, at 29-32. Even though this book is concerned with the financial management of publicly held companies by strengthening internal controls, the analysis is similar. See, e.g., Faber Cement Block Co., 50 T.C. 317, 331 (1968); Luria, supra note 23, at 796.
149. See, e.g., Perfection Foods, Inc., 34 P-H Tax Ct. Mem. 68, 73 (1965) (“Thus . . . we recognize that reasonable needs of a business include needs of the business during the peak of its operations . . . .”)
agement to be able to meet the peak demands of his business rather than just the average ones.

Although the courts that have accepted the "peak" rationale have measured the peak balances on the basis of month-end figures, it has been suggested as a further refinement that the taxpayer utilize a peak week or even a high day balance within the high month, provided the information is available. The use of a high day or week figure will allow the taxpayer to compute more accurately the maximum amount of time funds will be invested in the business not subject to other use, and therefore, a more accurate reflection of the working capital needs will be obtained.

If one accepts the validity of the peak cycle approach, a controversy still remains about how the peak period is to be measured. The focus of this controversy is aptly shown in the case of Kingsbury Investments, Inc. in which the court agreed that the peak cycle was an appropriate measure of time. However, the court refused to accept the contention of the taxpayer that it should be able to measure this period based on peak inventory and peak receivables determined at separate times during the year. The court reasoned that since peak inventory and peak receivables did not necessarily occur in conjunction with one another, the use of these figures would yield "an unreasonably inflated needs figure." Instead the court made its computation by using "the month in which the sum of inventory plus accounts receivables exceeds the sum of those figures for any other month."

In contrast, the court in Alabama Coca-Cola Bottling Co. indicated that it considered the proper approach to be a consideration of the peak inventory and receivables cycles no matter where they may fall during the year.

In situations where it can be shown that the peak periods can never occur in conjunction with one another, the Kingsbury approach probably reaches a proper result. However, as was discussed earlier, there is generally no relationship between the levels of peak receivables and inventory. Therefore, it is theoretically possible for these peak

152. Id. at 1180 n.4.
153. Id. at 1181 n.4.
155. See note 112 and accompanying text supra.
periods to occur at the same time, thus creating a greater need for working capital than provided for under the *Kingsbury* approach. To preserve the principle of allowing the management of the corporation to accumulate working capital to meet their maximum needs, it seems proper to allow the taxpayer to compute its peak cycle based on separate peaks.

C. **Credit Cycle**

In *Bardahl International Corp.* the Tax Court departed somewhat from the cycle computation in *Bardahl Manufacturing* by adding another stage to the analysis. The operating cycle was reduced by the average period during which accounts payable remained outstanding and thus were unpaid throughout the year. The argument for this reduction is based on the theory that if the taxpayer is entitled to delay payment of its bills, some reduction in working capital is required. This credit cycle may be computed in one of two ways. One can use either the average lag period in payment of raw material inventory, which will mean a subjective analysis of the business cycle or the following formula, which eliminates the need for subjective analysis and the problems inherent in it:

\[
\text{average accounts payable} \times 365 - \frac{\text{average accounts payable}}{\text{materials purchased}} \times 365
\]

The time period determined under this computation is subtracted from the total of the receivables and inventory cycle to determine the net cycle for the business. This modification of the original *Bardahl* formula has been the subject of wide controversy. However, the better reasoned view would appear to be that a credit cycle should not be subtracted from the cycle computation.

When a business pays its creditors promptly, there is no lag between receipt of raw materials or goods and the payment for the goods.

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156. Of course, if a relationship between receivables and inventory can be found, then it may be proper to pick the "peak month" rather than the "peak periods" and combine them. The *Kingsbury* approach would be correct where it was impossible for the peak inventory and peak receivables to occur at the same time.


159. Trethewey, *supra* note 52, at 749.


In such a case there is very little justification for the use of a credit cycle in the operating cycle computations. However, it is conceivable that the Commissioner could urge such a result just the same. He has argued in the past that a business with a good credit standing should finance its operations by borrowing rather than accumulating reserves to pay for such expenses. Thus the company should take advantage of the credit extended by its suppliers. The courts when presented with this argument have uniformly taken the position that "the accumulated earnings tax provisions cannot be understood to require a corporation to resort to debt financing rather than operating on a strictly cash basis, even if this means accumulating considerable liquid assets." 

Although most of the courts that have dealt with this attack have done so in the area of "anticipated future needs," the one case that has squarely faced the issue in dealing with the operational needs of the business reached a similar result. In *Schenuit Rubber Co. v. United States* the court stated that:

[T]he government argues that taxpayer might have borrowed money for current operations. The Courts, however, have generally considered a taxpayer's historic policy to finance current operations and expansions with its own funds, and have not penalized a taxpayer whose experience and bona fide policy justified self-financing.

It is apparent that . . . [the government's] figures contemplated that the Company would keep one step ahead of the sheriff if everything went right; they would result in prompt insolvency if anything went wrong.

The decisions above would seem to indicate that a corporation with no credit cycle is in a very strong position to resist the imposition of one by the Commissioner.

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165. *Id.* at 290 & n.14.

166. Recent cases indicate that the credit cycle is not a proper element in the operating cycle, since they failed to utilize such an element; *see, e.g.*, Minmac Corp., 41
For a business that does utilize the credit extended by its suppliers, the use of the credit cycle as a part of the statistical analysis would appear to have some justification. However, the use of the credit cycle is based on the premise that the credit extended by suppliers will continue in the future uninterrupted and unchanged. In addition, the inclusion of a credit cycle mandates that the taxpayer will not have to pay, and under this approach may well not be able to pay, its suppliers more quickly than it has been paying them in the past.

A taxpayer faced with this problem has several arguments at his disposal. First, it is unreasonable to lock a taxpayer into a financial position in which he has to rely on the credit of his suppliers in order to operate. It is a valid and reasonable business objective to avoid debt. Yet this is exactly what the credit cycle prevents a taxpayer from doing.

The court in *Bardahl International* utilized a thirty day credit cycle in computing the operating cycle for the business. The primary supplier of Bardahl International was the related Bardahl Manufacturing Co. which extended credit for thirty day periods to International almost as a matter of right. Thus *Bardahl International* may be distinguished on this ground since generally management does not have any control over the credit policies of its suppliers. This lack of control over credit makes continued reliance on the credit of suppliers, through the use of the credit cycle, a questionable and dangerous practice at best. However, the use of the credit cycle may have continuing validity in those instances in which the taxpayer voluntarily chooses to remain in debt through its control or influence over the credit policies of its suppliers.

In addition, it would appear to be well within sound business judgment for a business to refuse to rely on the credit extended by suppliers and to plan its resources for the worst possible credit picture. Generally, a court should not disturb such a "business judgment": "We


168. Sears Oil Co. v. Commissioner, 359 F.2d 191 (2d Cir. 1966), where the court stated: "We do not think taxpayer's ability to finance its business by borrowing by itself indicates the presence of the prohibited purpose. Section 531 does not bar taxpayer from endeavoring to reduce its borrowing and to become self-financing." Id. at 196.

169. Trethewey, supra note 150, at A-17. It is also important to note that the court in *Bardahl Int'l Corp.*, when it utilized the credit cycle, only included the payables to its related corporation and not third-party payables. Id.
are not unmindful that in the first instance it is for the corporate officers and directors to determine the reasonable needs of the particular business. Consequently, we are reluctant to substitute our business judgment for that of corporate management . . . ."170 The Commissioner, therefore, should not force a company to continue utilizing the credit of suppliers if the company wishes to protect its financial standing from a possible cut-off or tightening of credit.

Paradoxically, the business with the weakest financial picture will probably have the largest accounts payable and thus the longest credit cycle. The financially strong business that pays its bills promptly will have no accounts payable and, therefore, no credit cycle. Thus by the use of a credit cycle the company in the weaker financial position will not be allowed to accumulate as much working capital as the company in the stronger financial position. As a result, the use of a credit cycle may create results which are less than logical.171

One of the most interesting attacks172 on the use of the credit cycle has centered on a concept, developed in Smoot Sand & Gravel Corp. v. Commissioner,173 that every business should be treated as a "going concern." Every business will incur operational expenses in the first part of an operational cycle which may not require a working capital reserve because the payment of those expenses was deferred as a result of credit extended by suppliers. However, if a business is an ongoing one, it will be faced with the payment of the expenses incurred at the end of the previous cycle. Thus there will always be an outflow of cash needed to meet purchases except in the case of a new business beginning its first production cycle. "Thus, in actuality, the business has a cash need for the full cycle, partly to finance new production and sales and partly to cover prior costs, and it ought to receive credit for all such needs."174

Even in light of the above analysis, the credit cycle is not without its proponents. Since the thirty day credit period of most industries may represent a significant percentage of a corporation's operating cycle, it is felt that the Bardahl formula really cannot be an objective measure of the needs of the business unless the statistical analysis rec-

171. Monyek, supra note 96, at 766.
172. Libin, supra note 25, at 1152.
173. 274 F.2d 495 (4th Cir. 1960).
174. Libin, supra note 25, at 1153.
ognizes this delay in cash outflow. However, even proponents of the use of the credit cycle feel that unless some further adjustment is made to the formula, the corporation's working capital reserve will not be sufficient to cover all its expenses during the operating cycle. Thus they urge that when the credit cycle is utilized, the corporation should be permitted to add its current liabilities to the amount of its working capital reserve. This variation on the analysis is deficient since working capital is defined as the excess of current assets over current liabilities.

Indeed, it has been suggested, in light of the reduction of current liabilities in computing the working capital of the business, that if an adjustment for the credit cycle is not made in the working capital computations, the company would theoretically enjoy a double benefit. This observation is based on the idea that the credit cycle and current liabilities represent the same item. "[T]hus if the credit cycle is not eliminated from the computation and the current liabilities are still used to reduce current assets, then the company is allowed to accumulate for the same outlay twice." Even if it is assumed that they represent the same concept, they do not represent the same expense since one represents past credit extended while the credit cycle is a projection of the future credit that will be available to the business. The current liabilities of the business represent a separate need of the business, which bears no relationship to the needs of the business yet to be incurred.

D. Taxes

Over strong objection by counsel the court in Bardahl Manufacturing Co. and Bardahl International Corp. excluded federal taxes paid by the corporation from the operational expenses of the business. The justification for the exclusion was aptly stated in Bardahl International:

175. S. Weithorn & R. Noall, supra note 22, at 77; Zeigler, supra note 40, at 99.
176. S. Weithorn & R. Noall, supra note 22, at 77; Zeigler, supra note 40, at 99; cf. Hamel, supra note 22, at 58, who finds this approach as appealing conceptually as the one year rule of J.L. Goodman.
177. See Libin, supra note 25, at 1150.
178. Id. at 1153.
179. Current liabilities represent those costs accruing before a stated point in time (usually the end of a fiscal year) which become expenses subsequent to this point in time. Working capital, however, measures expenses not at a point in time but over a period of time. Since costs incurred in a given period but becoming expenses afterward will offset costs incurred prior to the period but becoming expenses within its duration, working capital need not take into account current liabilities.

Luria, supra note 23, at 803.
First, with reference to the inclusion of income tax for the following year as a cost of operating during the cycle, we agree with respondent that it should not be included, and we have not included it in our computations. In its computations petitioner has added to the costs of goods sold and other operating expenses the income tax actually incurred by petitioner in the subsequent year as taken from the corporate return for the subsequent year. Federal income taxes would be incurred in the following year only if there are sufficient earnings from future profitable operations to require their imposition and we do not believe that this is the kind of operating expense for which cash is needed in advance. These taxes would not normally have to be paid until after the profits are earned and, for the most part, received.\textsuperscript{180}

When viewed with the fact that in 1966 corporations paid no tax until their returns were filed, the result reached by the court was a proper one. However, since that time Congress passed an estimated corporate income tax effective for the years beginning after December 31, 1967.\textsuperscript{181} As a result of this change, all the commentators agree that the holding of \textit{Bardahl} as to taxes is no longer applicable and that the federal income taxes should be reflected in the computations.\textsuperscript{182} Therefore, the only question left unanswered is how to properly reflect these expenses in the analysis.

The writers who have touched on the problem of federal taxes have assumed without much analysis that these expenses should be treated like any other costs of the business.

At the moment a product is sold the company becomes liable for a proportional part of the federal income tax, despite the fact that it may not receive the funds for some time. Nevertheless, it is necessary to spin off from the net cycle sufficient funds to provide for this "cost" as it accrues during the year . . . . Because of the change in the collection of federal income taxes which will be accelerated, it follows that they are a "cost" to which the net cycle decimal should be applied in the same manner as cost of goods sold and any other expenses.\textsuperscript{183}

Although the above analysis is appealing, it fails to consider an important aspect in the payment of taxes that has been raised in another context.

Several of the same authors who found the \textit{Bardahl} formula deficient for failure to deal with expenses that are not uniformly incurred

\textsuperscript{180} 35 P-H Tax Ct. Mem. at 1062-66.
\textsuperscript{181} Int. Rev. Code of 1954, § 6154(a).
\textsuperscript{182} Horvitz, \textit{supra} note 54, at 331; Trethewey, \textit{supra} note 52, at 751.
\textsuperscript{183} Trethewey, \textit{supra} note 52, at 751.
during the year urge that the payment of federal taxes be treated as any other "cost."

Corporations are required under the new estimated tax payment sections of the Internal Revenue Code to pay their estimated tax liability in four quarterly installments. Therefore, it would appear that these taxes should also be viewed as expenses not uniformly incurred. During the cycle in which a quarterly installment becomes due, there will be an extraordinary cash need which must be satisfied. The only way to meet this need is to recognize the extraordinary nature of the expense and treat it as a separate item. If the tax is included with the other costs of the business to which the net cycle decimal is applied, a working capital shortage may result. If the operating cycle is shorter than the installment quarter, the taxpayer will be allowed only enough working capital to pay for that portion of the tax due in that cycle.

The court in Bardahl International Corp. refused to recognize the problem of sporadic expenditures incurred during the year. The court rejected the argument that large cash outlays for advertising, which were expected to be expended in the early part of the following

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184. See, e.g., Faber, supra note 33, at 275; Trethewey, supra note 52, at 749.
186. Under this analysis only the amount of the projected quarterly installment should be treated as an extraordinary expense.
187. Even if the operating cycle is longer than the installment quarter, the estimated quarterly payment should be treated as an extraordinary expense rather than an expense to which the decimal is applied. Since only one installment can possibly come due during the operating cycle, unless it is longer than six months in which case two installments would be the proper amount, then to use the decimal amount is to provide an excess of working capital for taxes.

In the alternative, it could be argued that the entire estimated tax liability should be treated as an extraordinary expense and thus should be provided for in the available working capital. Every dollar of income theoretically contains a percentage of potential tax liability, thus the argument goes that the business will be able to pay its estimated tax as it falls due out of this income. However, for a business that is seasonal in nature or has very unsophisticated accounting records, this may not be true. A business with poor accounting records may well be paying the tax when in fact it may or may not be making a profit. Due to the nature of its record keeping it will not be able to tell until the end of the year when the final audit is performed, exactly what its liability was, if any. Since it is reasonable for a taxpayer to wish to avoid the estimated tax penalty, especially when it does not know what its tax liability will be, then it will naturally be prone to pay all its expected tax liability based on the income of the previous year. Thus during the following year it will "incur" an expense that the cash flow of the business will be able to cover. A seasonal business, when one or more of the tax installments comes due, may not have earned a profit from which these taxes may be paid. As a result the business will be forced to borrow in order to pay its estimated tax liability. Both situations described above call for a working capital reserve large enough to carry the business' tax liability for the entire year and not just a quarterly installment.

188. 35 P-H Tax Ct. Mem. at 1063.
year, should be excluded from the formula. The court reasoned that
the taxpayer was still protected from working capital deficiencies by the
inclusion of a pro rata part of its annual advertising costs in the compu-
tation of the company's working capital needs. The court failed to real-
ize that this approach would still leave the company short of working
capital to meet these costs. When federal taxes are included in the
computation, likewise, only a pro rata portion is represented by the
working capital accumulated. The whole purpose of a statistical anal-
ysis is to provide sufficient working capital to cover all the operating
costs that may be incurred in an entire operating cycle. Since the
quarterly installment will certainly fall within an operating cycle, the
pro rata portion of the tax provided under the Bardahl International
approach will not be sufficient to meet the full needs of the business
during that cycle.

It should be kept in mind that the Bardahl court did not ignore
corporate income taxes altogether. "We have provided for payment
of the lump sum taxes due with the returns by including them in cur-
rent liabilities in computing the excess of net liquid assets available as
working capital."189 In effect the taxpayer received a dollar-for-dollar
reduction in excess working capital for his tax liability. This fact pre-
sents an interesting situation. By treating the federal taxes as a part
of the operating expenses, only a portion, a small portion in most cases,
will be used in determining reasonable working capital levels. How-
ever, a corporation that fails to pay its estimated tax would presumably
be allowed to offset working capital by the resulting liability as in
Bardahl on a dollar-for-dollar basis. Therefore, it is theoretically pos-
sible to have a case in which a company which complied with the esti-
mated tax requirements might be subject to the accumulated earnings
tax penalty, while the same company, if willing to pay the smaller esti-
mated tax penalty, might avoid such a result.

V. LIQUIDITY AND EARNED SURPLUS

The statutory provisions providing for the accumulated earnings
tax penalty require an objective analysis of whether "earnings and prof-
its" have been allowed to accumulate beyond the reasonable needs of
the business.190 Following the literal language of the statute, many of
the early decisions focused their analysis on the amount of the corpo-

189. Id. at 1062.
190. INT. REV. CODE OF 1954, § 533; see note 15 supra.
ration's undistributed earnings for the year in question and the accumulated earnings or surplus.\textsuperscript{191} This analysis failed to recognize that a corporation cannot distribute "earnings" since accumulated earnings "are merely the result received by subtracting the corporation's liabilities and capital stock from the amount of its assets."\textsuperscript{192} Therefore, since accumulated earnings are reflected by an increase in value of all the corporation's assets, the proper focus of the court's analysis should be on the size and character of those assets rather than the mere size of the "surplus."\textsuperscript{193}

The first decision to recognize this fact appeared in 1957 in \textit{Smoot Sand & Gravel Corp. v. Commissioner}.\textsuperscript{194} This decision and subsequent ones\textsuperscript{195} recognized that a corporation should generally not be subject to the penalty tax to the extent that accumulated earnings have been translated into business-related assets. As a result, an analysis should be made of the nature of the asset and its relation to the business. In keeping with this reasoning, the court held that "to the extent the surplus has been translated into plant expansion, increased receivables, enlarged inventories, or other assets related to its business, the corporation may accumulate surplus with impunity."\textsuperscript{196} Since these assets constitute an active part of the operations of the business, it is not generally considered feasible for a corporation to pay dividends in kind out of such assets.

As a result of the \textit{Smoot} analysis, the recent decisions tend to indicate that the basic test should be whether the corporation has sufficient liquidity in "non-operating liquid assets" sufficient to meet its business needs.\textsuperscript{197} Thus, accumulation of non-operating liquid assets "such as cash and marketable securities have to be justified as necessary for business related needs."\textsuperscript{198} However, a uniform position has

\begin{itemize}
  \item 191. Zeigler, supra note 40, at 84; see, e.g., World Publishing Co. v. United States, 169 F.2d 186 (10th Cir. 1948); W.H. Gunlocke Chair Co. v. Commissioner, 145 F.2d 791 (2d Cir. 1944), affg 12 P-H Tax Ct. Mem. 1424, 1432 (1943); F.E. Watkins Motor Co., 31 T.C. 288, 299 (1958).
  \item 192. Zeigler, supra note 40, at 84.
  \item 193. Faber Cement Block Co., 50 T.C. 317 (1968).
  \item 194. 241 F.2d 197 (4th Cir. 1957).
  \item 195. See, e.g., Mead's Bakery, Inc., 364 F.2d 101 (5th Cir. 1966); Electric Regulator Corp. v. Commissioner, 336 F.2d 339 (2d Cir. 1964); John P. Scripps Newspapers, 44 T.C. 453 (1965); Carolina Rubber Hose Co., 34 P-H Tax Ct. Mem. 1268 (1965); Sandy Estate Co., 43 T.C. 361 (1964).
  \item 196. 274 F.2d at 301.
  \item 197. See, e.g., Faber Cement Block Co., 50 T.C. 317, 329 (1968).
  \item 198. Zeigler, supra note 40, at 85. See Electric Regulator Corp. v. Commissioner, 336 F.2d 339 (2d Cir. 1964).
\end{itemize}
not been achieved on the types of assets that should be combined with cash in computing available working capital or "non-operating liquid assets."

Several decisions have indicated that a taxpayer must justify not only the accumulation of cash and marketable securities but also inventory and accounts receivable. The courts advocating this position have treated inventory and accounts receivable as liquid assets and thus a part of the analysis in determining whether there has been an improper accumulation. This is a direct contradiction to the holding of Smoot that such assets should be treated as a business application of funds, which may be accumulated with "impunity." Since such assets are in fact a business application of funds and thus are not generally available for the payment of dividends, the only explanation for the position taken by these courts is that they feared abuse of the liberal rule of Smoot. One such suggested abuse is that a corporation could convert its cash liquid assets into inventory by stockpiling its inventory in amounts far in excess of the level necessary for the operation of the business. In addition, a company that utilizes speculative commodities such as gold, copper, or zinc in its manufacturing operations could abuse the rule by purchasing sufficient quantities of these commodities to constitute an investment rather than a normal business acquisition.

The fears of potential abuse of the Smoot decision were dealt with in Sears Oil Corp. v. Commissioner in which the court specifically qualified the decision in Smoot by stating that "[t]he inventory must be needed in the business; to the extent that it is not, it cannot be accumulated with impunity." The Sears court ruled that the corporation is required to show that its inventory level was not in excess of the needs of its business. This position requires a subjective analysis of the individual needs and problems of the business in meeting its inventory demands. Because of the tremendous burden which this may put on a taxpayer, such an approach may lead to the automatic conclusion that the business has unreasonably accumulated its inventory and therefore that the inventory should be treated as a liquid asset. Even though this approach by the court is a step in the right direction,

201. Id. at 88-89.
202. 359 F.2d 191 (2d Cir. 1966).
203. Id. at 197.
the ultimate result is not much different than that taken in the Bardahl and Bates cases.

A more enlightened approach is reflected in the opinions of Carolina Rubber Hose Co.\(^{204}\) and Eberle Tanning Co.\(^{205}\) With a slight variation, the courts in these cases continued to follow the "impunity" rule of Smoot. Under their approach inventory and accounts receivable are presumed to be related to the needs of the business and thus unavailable as working capital to meet the other anticipated needs of the business or for the payment of dividends. To the extent that the Commissioner can prove that there has been a deliberate build-up beyond the reasonable needs of the business, the excess should be treated as a liquid asset available for the payment of dividends.\(^{206}\)

One writer argues that if inventory is excluded from working capital as proposed here, the taxpayer will be permitted to accumulate twice that which is necessary to meet the needs of the business.\(^{207}\) By excluding the inventory from working capital, the operating cycle formula through the production subcycle permits an accumulation of sufficient cash or other working capital to cover the costs of raw materials and all other costs needed to carry the corporation through its operating cycle even though it already has on hand inventory adequate to provide in full the materials needed during that cycle.\(^{208}\) Theoretically, the argument goes, the company is allowed to provide for the same need twice, once represented in the inventory and once again represented by the cost provided for in the operating cycle, which is now represented by other working capital. The fallacy in this analysis is that the costs for which there is an accumulation in the operating cycle are not represented by the inventory balance. The operating cycle attempts to provide for the costs that will carry the business through a complete cycle. This is based on the premise that the business will be able to regenerate its inventory balance as the old inventory is sold. Thus totally

\(^{204}\) 34 P-H Tax Ct. Mem. 1268 (1965).


\(^{206}\) See, e.g., Faber Cement Block Co., 50 T.C. 317, 329-30 (1968). See generally United Block Co. v. Helvering, 123 F.2d 704 (2d Cir. 1941) where the court stated:

> Accounts receivable are, to say the most, a questionable quick asset; for although merchants do at times assign them in regular course and perhaps manufacturers also, the practice is not common, as far as we know; and at best is an expensive way to raise money, and one not calculated to improve the credit of him who has recourse to it.

*Id.* at 706.

\(^{207}\) Monyek, *supra* note 96, at 765.

\(^{208}\) *Id.*
new raw materials need to be provided for in the working capital reserve in order to produce the new inventory.

The controversy has not stopped with inventories and accounts receivable; it has flowed over into other areas. For example, in Sterling Distributors, Inc. v. United States the government argued that the value of bonds owned by the taxpayer should be included in its computation of liquid assets. The court found that quick or liquid assets are those assets that can be quickly converted into cash with very little sacrifice, and since the bonds in question were pledged to governmental agencies for the payment of taxes, and thus not available for the payment of dividends, they should not be included in liquid assets. Also in John P. Scripps Newspapers the government argued that petitioner's investment in preferred stock should be considered a current asset. The court stated that:

While we agree that the preferred stock was readily convertible into cash, we do not agree that it should be considered a current asset in this case. Petitioner purchased the stock in order to provide a return equal to the return it was required to pay the employees covered by its profit-sharing plan. At the same time, petitioner intended to partially "fund" its fixed liability under the profit-sharing plan. An asset used to fund a fixed liability can no longer be considered as a current asset.

One conclusion that can be drawn from the above decisions is that a current or liquid asset for accounting purposes may or may not be treated as a current asset and thus as part of working capital for purposes of an accumulated earnings tax penalty computation.

The treatment of prepaid expenses has been another topic of considerable controversy in this area. Although prepaid expenses are considered a current asset for accounting purposes, the question exists whether these should properly be considered a current asset for section 531 purposes. Faced with the question of how to treat prepaid expenses, the court in Bardahl International felt that they should be properly included in current assets since these expenses were included in the

209. 313 F.2d 803 (5th Cir. 1963).
210. Id. at 808.
211. 44 T.C. 453 (1965).
212. Id. at 472.
214. See, e.g., Empire Steel Castings, Inc., 43 P-H TAX CT. REP. & MEM. DEC. (43 P-H Tax Ct. Mem.) ¶ 74,034 (Feb. 16, 1974); Faber, supra note 33, 274-75; Monyek, supra note 96, at 767.
costs of running the business during the operating cycle.\textsuperscript{215} This approach seems highly questionable.\textsuperscript{216} To include prepaid expenses in working capital is tantamount to requiring them to be available for the payment of dividends. Also, since by definition a prepaid expense represents a cost of doing business in the subsequent year which would normally give rise to a need for cash in the following year, it would seem inappropriate to include a provision for such expenditure in the operating expenses to which the net cycle decimal is applied. As a result, prepaid expenses should be excluded from net liquid assets and the expenditure should also be excluded from the operating expenses in computing the ordinary working capital needs of the business cycle.\textsuperscript{217}

Due to the importance of the net liquid asset figure in the determination of whether there has been an unreasonable accumulation of earnings, an alert taxpayer would be well advised to make a careful analysis of its entire balance sheet. Such an analysis may reveal the existence of "non-current" current assets which should not be properly considered available for the payment of dividends or to meet future expenses.\textsuperscript{218}

VI. Conclusion

The determination of the reasonable needs of the business has emerged as the most important element in avoiding the imposition of the accumulated earnings tax. The reasonable needs of a business are comprised of two elements, the operational needs and the future extraordinary needs.\textsuperscript{219} In many instances courts have ignored the operational needs of the business in their analysis.\textsuperscript{220} This deficiency in an-

\textsuperscript{215} 35 P-H Tax Ct. Mem. at 1061-62.
\textsuperscript{217} See, e.g., Faber, supra note 33, at 275.
\textsuperscript{218} See, e.g., Sandy Estate Co., 43 T.C. 361, 377 (1964); Wean Eng'r Co., 12 P-H Tax Ct. Mem. 1082, 1085 (1943) (The court excluded certain investments held by the taxpayer from working capital. These investments were in companies that the taxpayer hoped to make customers or retain as customers). Another area of controversy is whether marketable securities which are reflected on the balance sheet should be valued at cost or fair market value or some variation of the two for the purpose of computing available working capital. See Comment, Accumulated Earnings Tax: Should Marketable Securities Be Valued at Cost or at Fair Market Value in Determining the Reasonableness of Further Accumulations of Income?, 40 BROOKLYN L. REV. 192 (1973); Comment, The Accumulated Earnings Tax: The Smoot Analysis and Valuation of Marketable Securities, 30 WASH. & LEE L. REV. 507 (1973).
\textsuperscript{219} See note 23 and accompanying text supra.
\textsuperscript{220} See, e.g., Hardin's Bakeries, Inc. v. Martin, 19 Am. Fed. Tax R.2d 647 (S.D. Miss. 1967) (an extreme example even though the taxpayer was victorious).
alysis is regrettable. The use of the operating cycle approach has made the computation of the operational requirements of a business far easier than that required for determining the extraordinary future needs.221

The widespread acceptance of the operating cycle by courts and commentators may be attributed to its sophistication, objectivity, and simplicity. The Bardahl opinion marked the first use of a statistical analysis based on generally accepted accounting principles in determining the reasonable operational requirements of a business. Until that time court opinions were devoid of any meaningful analysis. Instead, they relied on some questionable "rules of thumb." The Bardahl formula appears to be at least a step in the right direction.222 The statistical analysis achieved through the operating cycle approach adds an objective element to the analysis. Since financial data is readily available to the court and, generally, the statistical analysis involves only a pure mathematical computation, the court is not required to second-guess the management of the corporation about what in fact are the "reasonable needs" of the business. In addition, it can be used as a valuable planning tool by the taxpayer in avoiding section 531 attacks.

Although the Bardahl formula appears to be highly valuable, it is not without its faults.223 However, if one is aware of the limitations of the Bardahl approach, the objections raised to the formula are substantially diminished. These limitations can be eliminated in many cases through the use of various refinements and variations which can result in substantial increases in the working capital reserve.224

Although the Bardahl formula has been applied in a somewhat uniform fashion, courts should retain a flexible approach in applying the formula in order to meet the individual needs of the business. Each individual fact and circumstance of the company should be studied in depth to determine the effect these unique features will have

221. In the majority of cases the business will have to make only a relatively easy mathematical computation to determine its operational needs. As contrasted with "other anticipated needs" there is no problem in proving that the earnings are being accumulated for a particular purpose, that the purpose is a legitimate activity of the corporation or that such needs were planned for at the end of the year in question. S. WERTHORN & R. NOALL, supra note 22, at 49.

222. See, e.g., Hardin v. United States, 461 F.2d 865 (5th Cir. 1972). "This technique represents an attempt to avert inflexibility and imprecision that results from seeking to define a 'reasonable' accumulation in terms of anticipated operating expenses for a fixed period of time . . . regardless of the nature of the business under consideration." Id. at 870 n.8.

223. See Part IV supra.

224. See notes 147-49 and accompanying text supra, as to the utility of a peak versus an average receivable or inventory cycle.