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# ARTICLES

## MECHANICS OF APPORTIONMENT OF RECEIPTS FROM SHARES OF STOCK

BY RICHARD GROSSMAN\*

### INTRODUCTION

The "Pennsylvania Rule of Apportionment," applicable to interests created prior to May 3, 1945,<sup>1</sup> the effective date of the Principal and Income Act of 1945, has been the subject of countless reported opinions and of many informative articles.<sup>2</sup> However, there have been few articles on this subject which have undertaken to deal with the methods of making apportionments, or analyzing apportionments made by others.<sup>3</sup> This article represents an attempt to illustrate the step-by-step calculation of apportionments in the case of each of the situations which have been held to be apportionable events in Pennsylvania.

Perhaps some of the calculations will be thought to be so simple as to negate any need for their publication, while others will be characterized as occurring so rarely as to present no substantial need for this attempted clarification. However, it is hoped that the attempt to deal with all apportionable events will find some champions among those who deem completeness a virtue. Further, it will be seen that even the relatively complex and commonly-occurring apportionments have their roots in an essentially simple calculation, for example, a sale of decedent-owned shares of stock.

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1. Crawford Estate, 362 Pa. 458, 67 A.2d 124 (1949), annot. in *FID. REV.* (July 1949); *FID. REV.* (Aug. 1955).

2. Prominent among the latter are Brigham, *Pennsylvania Rules Governing the Allocation of Receipts Derived by Trustees from Shares of Stock*, 85 U. PA. L. REV. 358 (1937) and Cohan and Dean, *Legal, Tax and Accounting Aspects of Fiduciary Apportionment of Stock Proceeds: The Non-Statutory Pennsylvania Rules*, 106 U. PA. L. REV. 157 (1957).

3. In Damrau, *Apportionment of Stock Dividends in Trusts Created Prior to 1945* 15 U. PRT. L. REV. 34 (1953) several mathematical illustrations are set forth. Brigham, *Some Problems of Principal and Income* 56 *DICK. L. REV.* 337 (1952) also contains several illustrations of the mathematical intricacies of apportionment.

It is hoped that this article will be of some use to those who are called upon to review apportionment calculations, whether they be trust officers of corporate fiduciaries or attorneys representing persons beneficially interested in trust estates. Before beginning the actual calculations of apportionment, it should be pointed out that in *Catherwood Trust*,<sup>3a</sup> it was held that there could be no apportionment of the proceeds of the sale of stock placed in an inter vivos trust when the proceeds were less than the market value of the stock at the time the trust was created. The court arrived at that conclusion regardless of the fact that such proceeds exceeded intact value (book value at the time of the creation of the trust) and earnings had been accumulated by the corporation during the existence of the trust. The opinion also contained a discussion which was critical of the Pennsylvania Rule of Apportionment and expressed the view that it would be well if the supreme court were to reconsider the position it adopted in *Crawford Estate*.<sup>3b</sup>

*Catherwood Trust* is now being appealed to the supreme court. The calculations presented in this article uniformly treat the intact value of decedent-owned stock as book value at the date of death, and illustrate consequent apportionments without regard to whether the proceeds of the apportionable event exceed the market value of the stock at the date of death.

The reader will undoubtedly follow the progress of *Catherwood Trust* upon appeal with great interest, and will recognize that the supreme court's decision in that case may necessitate the starting point in some of the following calculations, where market value is greater than book value at the date of death, to be the computation of "actual gain" over market value at date of death, without which an apportionment cannot be made.

It is understood that some corporate fiduciaries presently follow such procedure, and to the extent that they do, the following calculations are not wholly in accord with such practice.

#### I. SALE OF DECEDENT-OWNED STOCK

At death, decedent owned 100 shares Alpha Corporation common, par \$100; trustee sold the shares on 10/31/60 for \$15,000.

##### 1. *Intact value* (Alpha Corporation balance sheet at death) :<sup>4</sup>

Capital (100,000 shares)	\$10,000,000
Earned surplus	3,000,000
	<hr/>
Total book value common	\$13,000,000

3a. 10 Fid. Rep. 425, 11 Fid. Rep. 1 (1960).

3b. See note 1, *supra*.

4. Intact value of decedent-owned shares is presumptively the book value thereof

Book value per common share	\$ 130
Book value, 100 shares	\$ 13,000
Intact value, 100 shares	\$ 13,000

2. *Sales proceeds*:<sup>5</sup> 100 shares @ \$150 per share = \$15,000.
3. *Maximum apportionable to income* (if supported by earnings) :  
Proceeds (\$15,000) less intact value (\$13,000) = \$2,000.
4. *Accumulated earnings* (Alpha Corporation balance sheet at sale 9/30/60<sup>6</sup>) :

Capital (100,000 shares)	\$10,000,000
Earned surplus <sup>7</sup>	<u>4,500,000</u>
Total book value common	\$14,500,000
Book value per common share	\$ 145
Book value, 100 shares	\$ 14,500

5. *Apportionable to income* (lesser of gain between (a) gain and (b) earnings) :

Proceeds	\$15,000		
		(a)	
Intact value	<u>13,000</u>	\$2,000	
			\$1,500 <sup>8</sup>
Book value at sale	\$14,500		
		(b)	
Book value at acquisition	<u>13,000</u>	\$1,500	

## II. SALE OF TRUSTEE-PURCHASED STOCK

Trustee purchased 100 shares Beta Corporation common, par \$100, on 1/1/50 for \$11,500,<sup>9</sup> and 50 additional shares on 6/30/55 for \$6,000.<sup>10</sup> On 10/15/60, the trustee sold 100 shares for \$13,000 and 50 shares for \$6,450.

at death. However, it may in some circumstances include unrealized appreciation: Harvey Est., 395 Pa. 62, 149 A.2d 104 (1958), annot. in *FID. REV.* (Feb. 1959); or be revised due to capital losses: Cohan and Dean, *supra* note 2 at 161-162; or factors not reflected in the corporate books: *e.g.* Baird Est., 299 Pa. 39, 148 Atl. 907 (1930); Flinn Est., 320 Pa. 15, 181 Atl. 492 (1935). But see Catherwood Trust, 10 *Fiduc. Rep.* 425 (1960), 11 *Fiduc. Rep.* 1 (1960) (same trust), regarding possible preservation of the date of death *market* value.

5. The proceeds are net, after expenses of sale.

6. Although book value may be calculated on a per diem basis (averaging the earnings for the year of acquisition and adding the portion thereof accruing up to the apportionable event to the last reported surplus of the preceding year: Flinn Est., 310 Pa. 206, 212, 165 Atl. 31, 33 (1932), it is often the current practice to pro-rate the annual statement on a quarterly basis. In the case of stock dividends or rights, book value is determined on the record date of such apportionable event.

7. The earnings calculation should also include, in calculating book value, any capital surplus and any reserve considered as surplus. See Cohan and Dean, *supra* note 2 at 163-165.

8. Subject to diminution by a pro-rata share of income tax on the sale.

9. The purchase price includes any expenses of purchase.

10. *Ibid.*

1. *Intact value*:<sup>11</sup>

(a) Lot "A"	(100 shares)	\$11,500.00
(b) Lot "B"	( 50 shares)	<u>6,000.00</u>
		\$17,500.00 <sup>12</sup>

2. *Sales proceeds*:

(a) Lot "A"	(100 shares @ \$130)	\$13,000.00
(b) Lot "B"	( 50 shares @ \$129)	<u>6,450.00</u>
		\$19,450.00 <sup>13</sup>

3. *Maximum apportionable to income* (if supported by earnings) :  
Proceeds (\$19,450) less intact value (\$17,500) = \$1,950.4. *Accumulated earnings*

	1/1/50	6/30/55	9/30/60 <sup>13a</sup>
Capital (100,000 shares)	\$10,000,000	\$10,000,000	\$10,000,000
Earned surplus	<u>3,000,000</u>	<u>4,000,000</u>	<u>6,000,000</u>
Total book value common	\$13,000,000	\$14,000,000	\$16,000,000
Book value per common share	\$ 130	\$ 140	\$ 160
Book value, trust shares	\$ 13,000 (100 shares)	\$ 7,000 ( 50 shares)	\$ 24,000 (150 shares)

5. *Apportionable to income* (lesser of gain between (a) earnings and (b) gain) :

Proceeds	\$ 19,450		
		(a)	
Intact value	<u>17,500</u>	\$ 1,950	
			\$ 1,950 <sup>14</sup>
Book value at sale	\$ 24,000		
		(b)	
Book value at acquisition	<u>20,000</u>	\$ 4,000	

## III. STOCK DIVIDEND

Decedent died 1/1/40 leaving 100 shares Gamma Corporation common, par \$100; trustee purchased 100 additional shares 6/30/50 for \$11,200; and trust received 20 shares as 10% stock dividend on 10/30/60.

11. Intact value of trustee-purchased shares is the purchase price: Arrott Est., 383 Pa. 228, 118 A.2d 187 (1955), annot. in *FID. REV.* (Dec. 1955). But cf. opinion of Bell, J., in *Cunningham Est.*, 395 Pa. 1, 149 A.2d 72 (1958), annot. in *FID. REV.* (Feb. 1959), re intact value of trustee-purchased shares as the *higher* of cost or book value, and see p. 185, *infra*.

12. Where the several lots were acquired other than at nearly concurrent dates, averaging of intact value may not be advisable, particularly where the last acquisition was just shortly prior to the event. Where one lot is decedent-owned and the other trustee-purchased, there should be no averaging: *Jones v. Int. Trust Co.*, 292 Pa. 149, 140 Atl. 862 (1948).

13. See note 5, *supra*.

13a. See note 6, *supra*.

14. Contrast this result, where earnings exceeded the gain on the sale, with that in calculation I above, where the gain exceeded earnings. See note 8, *supra*.

1. *Intact value:*

Capital				
(100,000 shares prior to 10/15/60)	Lot A—1/1/40	Lot B—6/30/50	10/15/60 <sup>15</sup>	10/15/60 <sup>16</sup>
Earned surplus	\$10,000,000	\$10,000,000	\$10,000,000	\$11,000,000
	1,000,000	300,000	1,500,000	500,000
Total book value	\$11,000,000	\$10,300,000	\$11,500,000	\$11,500,000
Book value per common share	110	103	115	104.54
Book value, trust shares	11,000	10,300	23,000	23,000
Cost, trust shares	—	11,200	—	—
Market value per share <sup>17</sup>	—	—	\$ 120	\$ 120

2. *Possible maximum apportionable to income* (if supported by earnings):<sup>17a</sup>

Capitalized earnings<sup>18</sup> (20 shares @ \$100) ÷ market value<sup>18a</sup> (\$120) = 16⅔ shares

3. *Preservation of intact value:*<sup>19</sup>

	Lot A	Lot B
Intact value <sup>20</sup>	\$11,000	\$11,200 <sup>21</sup>
Number shares to preserve	105.22 <sup>22</sup>	107.13 <sup>23</sup>

15. The record date of the stock dividend, rather than the date of its receipt, is employed for apportionment purposes.

16. After giving effect to the stock dividend, the trust then owning 220 of the 110,000 outstanding shares.

17. Market value is significant in that conservatism may lead the trustee to use the *lower* of book or market in ascertaining whether intact value is preserved, and the *higher* of book or market in computing the number of shares to be awarded to income: cf. *FID. REV.* (Feb. 1959), and *O'Neill Est.*, 11 *Fiduc. Rep.* 11 (1960). However, the current practice of many corporate fiduciaries is to use book values in regard to decedent-owned stock and market values in regard to trustee-purchased stock.

17a. The first step is of course to determine whether there is an "apportionable" gain. The market value of 220 shares after the stock dividend (\$26,400) exceeds the intact value (22,200) by 4,200, and it is therefore apparent that capitalized earnings of \$2,000, if supported by retained earnings, may be allocated to income. But cf. *O'Neill Est.*, *supra* note 17.

18. Note that the stock dividend has been supported solely by a transfer from earned surplus and is a dividend of shares identical with those upon which it was declared: see *Cunningham Est.*, 395 Pa. 1, 149 A.2d 72 (1958) annot. in *FID. REV.* (Feb. 1959). If any part of the transfer is from capital or capital surplus, there is no apportionment.

18a. See note 17, *supra*.

19. Each acquisition is to be treated separately, *i.e.* as though the 20 dividend shares were declared as follows: 10 on Lot "A" and 10 on Lot "B".

20. See note 4, *supra*.

21. A conservative approach to prevent overdistribution would be to use the *higher* of cost or book value in ascertaining intact value of trustee-purchased shares: *FID. REV.* (Feb. 1959); see also note 11, *supra*. This is thought by some to be appropriate because cases relying upon cost in such situations have evidently involved securities having a lower book value. Here, however, cost exceeds book value.

22. This is intact value divided by the book value of the shares after the dividend (\$11,000 ÷ \$104.54): see *Harvey Est.*, 395 Pa. 62, 149 A.2d 104 (1959), annot. in *FID. REV.* (Feb. 1959). Note that adjustment may sometimes be appropriate: see note 4, *supra*.

23. This is intact value divided by the *lower* of book or market after the dividend (\$11,000 ÷ \$104.54): see note 17, *supra*.

Number shares in trust <sup>24</sup>	110	110
Number shares available for income, if earnings	4.78	2.87

4. *Accumulated earnings:*

	Lot A	Lot B
Book value 10/15/60 <sup>25</sup>	\$11,500	\$11,500
Book value, acquisition	11,000	10,300
Accumulated earnings	\$ 500 <sup>26</sup>	\$ 1,200

5. *Apportionment:*

(a) <i>To income</i>	Lot A	Lot B
Accumulated earnings	\$500	\$1,200
÷ Value of shares	\$104.54 <sup>27</sup>	\$ 120 <sup>28</sup>
Number of shares <sup>29</sup>	4.78	2.87 <sup>30</sup>
(b) <i>To principal</i>		
Total dividend shares	10.00	10.00
To income	4.78	2.87
To principal	5.22	7.13
Total original shares	100.00	100.00
Total	105.22	107.13

6. *Revised intact value:*<sup>30a</sup>

	Lot A	Lot B
Intact value	\$11,000	\$11,200
÷ Number of shares	105.22	107.13
Intact value per share	\$ 104.54 <sup>28</sup>	\$ 104.54 <sup>57</sup>

7. *Adjusted book value:*<sup>30b</sup>

	Lot A	Lot B
Book value 10/15/60	\$11,500	\$11,500
Awarded to income:		
Market value, 4.78 shares		\$573.60
Book value, 4.78 shares		500.50
	\$11,500	73.10
		\$11,573.10

24. This is the original number of shares in each Lot plus a pro rata part of the dividend shares: see note 19, *supra*.

25. See note 15, *supra*.

26. Even if intact (here book) value has been adjusted for unrealized appreciation (see notes 4 and 22, *supra*), no such appreciation is included in calculating accumulated earnings: Harvey Est., 395 Pa. 62, 149 A.2d 104 (1959), annot. in *FID. REV.* (Feb. 1959).

27. This is the book value of the new shares: see note 22, *supra*.

28. See note 17, *supra*.

29. Although the receipt of 20 shares as a stock dividend by the trustee was free of income tax, such shares assume a portion of the basis of the original shares, thus increasing the trusts capital gain on a future sale.

30. Although  $\$1200 \div \$120 = 10$  shares, it has already been calculated that, using book value (see note 23, *supra*), a maximum of 2.87 shares are available to income.

30a. See note 40, *infra*.

30b. See note 39, *infra*.

## IV. STOCK RIGHTS—SUBSCRIPTION

Trustee purchased 100 shares Delta Corporation common, par \$100, on 8/31/54, for \$14,000, and an additional 100 shares on 7/10/55, for \$14,500. An additional 20 shares were subscribed on 10/15/60 at \$100 per share.<sup>30c</sup>

1. *Intact value:*<sup>31</sup>

Lot "A"	\$14,000
Lot "B"	14,500
Subscribed	2,000
Intact value	<u>\$30,500</u>

2. *Balance sheets:*

	9/30/54 <sup>32</sup>	6/30/55 <sup>33</sup>	9/15/60 <sup>34</sup>
Capital (100,000 shares)	\$10,000,000	\$10,000,000	\$11,000,000 (110,000 shares)
Earned surplus	<u>3,000,000</u>	<u>3,200,000</u>	<u>4,900,000</u>
Total book value common	\$13,000,000	\$13,200,000	\$15,900,000
Book value per share common	\$130	\$132	\$144.55 <sup>35</sup>
Book value, trust shares (100 shares)	\$13,000	\$ 13,200	\$ 31,801 (220 shares)
Market value per share	—	—	\$155

3. *Preservation of intact value:*

Intact value <sup>36</sup>	\$30,500
Number shares to preserve <sup>37</sup>	196.77
Number shares in trust	220
Number shares available for income, if earnings	20

30c. Note that the rights are to subscribe to common and are issued upon common held by the trust. The exercise or sale of rights to subscribe to debentures in consequence of common ownership would not be an apportionable event. *Chamberlain Trust*, 10 Fid. Rep. 97 (1959).

31. See note 11, *supra*.

32. See note 6, *supra*.

33. *Ibid*.

34. This is the record date of the issuance of the subscription rights; the balance sheet reflects the issuance of additional shares by subscription. However, some larger corporate fiduciaries use the date of expiration of the rights as the controlling record date for apportionment purposes.

35. The fact that the new shares are issued for less than book value is not the occasion for adjustment of intact value of the old shares: *Willcox Est.*, 66 Pa. Super. 182 (1917). But the accumulated earnings calculation must be adjusted for such dilution of book value: see notes 37b, 48b, *infra*.

36. See note 11, *supra*.

37. This is intact value divided by the market value of the original and subscribed shares ( $\$30,500 \div \$155$ ). Query whether book value, being lower than market value, should be the divisor: see footnote 17, *supra*. If so, then 211 shares ( $\$30,500 \div \$144.55$ ) will be needed to preserve intact value and there will be nine shares potentially available for apportionment.

4. *Maximum available to income:*

	Lot A	Lot B
Book value before subscription <sup>37a</sup>	\$14,900	\$14,900
Less adjustment <sup>37b</sup>	445	445
	<u>14,455</u>	<u>14,455</u>
Book value, acquisition	13,000	13,200
Earnings	\$ 1,455	\$ 1,255

5. *Apportionment:*

(a) <i>To income</i>	Lot A	Lot B
Accumulated earnings	\$1,455	\$1,255
÷ Value of shares <sup>38</sup>	\$ 155	\$ 155
Number of shares	9.39	8.10
(b) <i>To principal</i>		
Total subscribed shares	10	10
To income	<u>9.39</u>	<u>8.10</u>
To principal	0.61	1.90
Total original shares	<u>100.00</u>	<u>100.00</u>
Total shares in trust after apportionment	100.61	101.90

6. *Adjusted book value—after apportionment:*<sup>39</sup>

Book value 9/15/60 (220 shares)		\$28,910 <sup>39a</sup>
Awarded to income:		
market value (17.49 shares)	\$2,710.95	
book value (17.49 shares)	<u>\$2,528.18</u>	182.77
		<u>\$29,092.77</u>

7. *Adjusted intact value—after apportionment:*<sup>40</sup>

	Lot A	Lot B	Subscribed	Total
Original intact value	\$14,000	\$14,500	\$2,000	\$30,500
Number of shares	100	100	20	220
Less apportionment to income	0	0	17.49	17.49
Principal shares	100	100	2.51	202.51
Intact value per share <sup>41</sup>	—	—	—	\$ 150.61

37a. Immediately before the issuance of an additional 10,000 subscribed shares, the book value per share was \$149 (capital, \$10,000,000, plus surplus, \$4,900,000 divided by 100,000).

37b. Book value has been diluted as a result of the subscription by \$4.45 per share. Before the subscription, book value per share was \$149 (see note 37a, *supra*) and after the subscription it was \$144.55 per share.

38. See note 17, *supra*.

39. This will have to be known for purposes of earnings calculations in future transactions.

39a. This is the sum of the adjusted book values of both lots, after the adjustment made in paragraph four above.

40. This will have to be known for purposes of calculating preservation of the intact value in future transactions.

41. See note 12, *supra*.

## V. STOCK RIGHTS—SALE

Trustee purchased 100 shares Gamma Corporation common, par \$100 on 10/15/58, for \$12,000, and an additional 100 shares, on 6/15/59, for \$12,200. Rights to subscribe to 10 shares (at \$100 each) were sold on 10/15/60 for \$120.<sup>42</sup>

1. *Intact value*:<sup>43</sup>

Lot "A"	\$12,000
Lot "B"	12,200
Total intact value	<u>\$24,200</u>

2. *Balance sheets*:

	9/30/58 <sup>44</sup>	6/30/59 <sup>45</sup>	9/15/60 <sup>46</sup>
Capital (75,000 shares)	\$ 7,500,000	\$ 7,500,000	\$ 7,875,000 (78,850 shares)
Earned surplus	<u>2,600,000</u>	<u>2,700,000</u>	<u>3,000,000</u>
Total book value common	\$10,100,000	\$10,200,000	\$10,875,000
Book value per share	\$ 101	\$ 102	\$ 138.10 <sup>47</sup>
Book value trust share	\$ 10,100	\$ 10,200	\$ 27,620
	(100 shares)	(100 shares)	(200 shares)
Market value per share	—	—	\$ 140

3. *Preservation of intact value*:

Intact value	\$24,200
Number shares to preserve	172.86 <sup>48</sup>

4. *Maximum available to income*:

	Lot A	Lot B
Book value, before subscription <sup>48a</sup>	\$14,000	\$14,000
Less adjustment <sup>48b</sup>	190	190
	<u>13,810</u>	<u>13,810</u>
Book value, acquisition	10,100	10,200
Earnings	\$ 3,710	\$ 3,610

42. Note that the subscription price is less than the book value of the shares outstanding after the subscription; had the subscription price exceeded such book value, the rights would then have no book value, the subscription would not dilute book value, and it may be argued that there should be no apportionment, for any value of the rights would be attributable to the enhanced market value of the stock itself. Similarly, the position is taken by some that in a situation where the subscription does dilute book value, income may be awarded no more than such dilution (which may be termed the "book value" of the rights) even though the proceeds of sale of the rights (or value of the subscribed shares) and accumulated earnings both exceed the book value of the rights.

43. See note 11, *supra*.

44. See note 6, *supra*.

45. *Ibid.*

46. See note 34, *supra*.

47. See note 35, *supra*.

48. This is the intact value divided by the market value of the original shares (\$24,200 ÷ \$140). Query, whether book value, being lower than market value, should be the divisor: see note 17, *supra*. If so, then 175¼ shares (\$24,200 ÷ \$138.10) will be needed to preserve intact value.

48a. Immediately before the issuance of an additional 3750 subscribed shares, book value per share was \$140 (capital, \$7,500,000, plus surplus, \$3,000,000 ÷ 75,000).

48b. Book value has been diluted as a result of the subscription by \$1.90 per share. Before the subscription, book value per share was \$140 (see note 48a, *supra*) and after the subscription it is \$138.10 per share.

5. *Apportionment:*

(a) To income

Lesser of proceeds of sale	\$ 120	\$120 <sup>49</sup>
or		
Accumulated earnings	\$7,320	\$100

6. *Adjusted book value:*<sup>50</sup>

Book value 9/15/60 (200 shares)	\$27,620 <sup>51</sup>
Earnings awarded to income	120
	\$27,740
Adjusted book value	\$27,740

The following two examples deal with the problem presented by cumulative preferred stock with accrued dividend arrearages, where the corporation through merger and recapitalization discharges the arrearages by stock distributions. The first example concerns a trust which originally held only preferred shares, the second a trust which originally held both common and preferred shares.

It should be noted that neither the merger and recapitalization nor the trustees' receipt of the new stock are the apportionable events in this situation; it is the sale of any of the new shares received in the transaction which constitutes the apportionable event.<sup>52</sup>

## VI. CUMULATIVE PREFERRED STOCK—ARREARAGES—SALE

At death (1/1/40) decedent owned 100 shares Omega Corporation 6% cumulative preferred stock, par \$100, then in arrears as to dividends to the extent of \$15 per share. Effective 6/30/52 (the preferred dividend arrearages having risen to \$30 per share) Omega Corporation merged with its subsidiary to form Theta Corporation, the trust exchanging its preferred for 130 shares of Theta Corporation 5% cumulative preferred, par \$100 (common shareholders exchanged their \$100 par common for \$25 par Theta Corporation common on a share-for-share basis). On 7/10/52, trust sold 30 of the preferred shares for \$3500.

1. *Intact value* (Omega Corp. balance sheet (12/31/39)):

	Preferred	Common
Common stock (100,000 shares)	—	\$10,000,000
Preferred stock (100,000 shares)	\$10,000,000	
Earned surplus	—	(1,500,000)
Book value	\$10,000,000	\$ 8,500,000

49. See note 8, *supra*.50. See note 39, *supra*.

51. This is the sum of the adjusted book values of both lots, after the adjustment made in paragraph four above.

52. Fisher Estate, 344 Pa. 607, 26 A.2d 192 (1942); King Estate, 349 Pa. 27, 36 A.2d 504 (1944); 355 Pa. 64, 48 A.2d 858 (1946) (same estate); 361 Pa. 629, 66 A.2d 68 (1949) (same estate).

Book value per share (common)	—	\$ 85
Intact value, trust shares	\$10,000 <sup>53</sup>	

2. *Balance sheet:*

	Omega Corporation 6/30/52 <sup>54</sup>	Theta Corporation 6/30/52 <sup>55</sup>
Common stock (100,000 shares)	\$10,000,000 <sup>56</sup>	\$ 2,500,000 <sup>57</sup>
6% preferred (100,000 shares)	10,000,000	—
5% preferred (130,000 shares)	—	13,000,000
Earned surplus	(1,000,000)	—
Capital surplus	—	3,500,000

3. *Preservation of intact value—preferred:*

Intact value (6% preferred)	\$10,000
Number 5% preferred shares needed to preserve <sup>58</sup>	100
Number preferred shares in trust	130
Number shares potentially available for income	30

4. *Apportionment to income—sale of preferred:*

Lesser of (a) or (b)		
(a) Arrearages—5% preferred	\$3,000	
(b) Proceeds of sale—5% preferred	3,500	\$3,000 <sup>59</sup>

5. *Adjusted intact value—preferred:*

Intact value (6% preferred)	—	\$10,000
Proceeds of sale (5% preferred)	\$3,500	—
Apportionment to income	3,000	500
Adjusted intact value		\$ 9,500 <sup>60</sup>

53. Intact value of cumulative preferred stock is normally its par value: Fisher Est., 344 Pa. 607, 26 A.2d 192 (1942) (where the stock is trustee-purchased, however, intact value would presumably be its cost, as in the case of common stock). But where the preferred stock is participating, intact value would presumably also include a pro rata portion of earned surplus based upon the preferred-common ratio of participation in dividends in excess of the guaranteed preferred dividend. The intact value does *not* include pre-death arrearages: Fisher Est., *supra*. Query, however, whether such rule is realistic and whether the court's holding might differ were the question to be presented today. However, in the case of trustee-purchased shares having arrearages, it would seem that income should be limited to post-acquisition arrears. See generally the article by Brigham in *FID. REV.* (Nov. 1946).

54. Before the merger.

55. After the merger.

56. \$100 par.

57. \$25 par.

58. In dealing with preferred stock, intact value is preserved by applying the new preferred at par, regardless of its book value: Fisher Est., 344 Pa. 607, 26 A.2d 192 (1942); King Est., 361 Pa. 629, 633, 66 A.2d 68 (1944). But query whether actual book value, in terms of assets available to meet the liquidation preference (which may be par value, or something in excess of par value) should not be relevant for these purposes.

59. In this situation, it is not necessary that there be earned surplus to support the apportionment; the balance sheets and the merger situation clearly show that the common shareholders have made a capital contribution (reduction of common par from \$100 to \$25 per share) to create a fund out of which the preferred arrearages may be paid, and this is sufficient to support an apportionment: Fisher Est., 344 Pa. 607, 26 A.2d 192 (1942); King Est., 361 Pa. 629, 66 A.2d 68 (1949). See also note 8, *supra*.

60. Although the cases do not expressly indicate that such adjustment is in order,

VII. COMMON STOCK AND CUMULATIVE PREFERRED STOCK—  
ARREARAGES—SALE

At death (1/1/40) decedent owned 100 shares Sigma Corporation 6% cumulative preferred stock, par \$100, then in arrears as to dividends to the extent of \$15 par share. He also owned 100 shares Sigma Corporation common stock, par \$100. Effective 6/30/52, Sigma Corporation merged with its subsidiary to form Zeta Corporation (the preferred dividend arrearages having risen to \$30 per share), the trust exchanging its preferred for 100 shares of Zeta Corporation 5% cumulative preferred and 50 shares of Zeta Corporation common par \$25,<sup>60a</sup> and exchanging its common stock for 100 shares of Zeta Corporation common, par \$25. On 7/10/52, trustees sold the 150 shares of Zeta Corporation common for \$12,000.

1. *Intact value* (Sigma Corporation balance sheet (12/31/39)) :

	Preferred	Common
Common stock (100,000 shares)	—	\$10,000,000
Preferred (100,000 shares)	\$10,000,000	
Earned surplus	—	(1,000,000)
	\$10,000,000	\$ 9,000,000
Book value	\$10,000,000	\$ 9,000,000
Book value per share (common)	—	\$ 90
Book value, trust shares (common)	—	\$ 9,000
Intact value, trust shares	\$ 10,000 <sup>61</sup>	\$ 9,000 <sup>62</sup>

2. *Balance sheet*:

	Sigma Corporation <sup>63</sup> (6/30/52)	Zeta Corporation <sup>64</sup> (6/30/52)
Common stock	\$10,000,000 <sup>65</sup>	\$ 3,750,000 <sup>66</sup>
6% preferred	\$10,000,000	—
5% preferred	—	\$10,000,000
Earned surplus	\$ 1,000,000	—

it would seem appropriate inasmuch as principal has recouped \$500 from its ownership of preferred stock. If the remaining 100 shares were later sold for an amount in excess of their new intact value, it would seem appropriate to award the excess to income. Any increase in the market value of non-participating preferred would seem to be attributable more to attractiveness and stability of the dividend than to security of principal, for it is only upon liquidation (generally an unlikely possibility) that the latter factor would assume significance. Query, however, whether these considerations are relevant only where proceeds exceed liquidation preference (here \$10,000) rather than the proposed adjusted intact value (liquidation preference less earlier apportionment to principal, or \$9500) ?

60a. See note 66, *infra*.

61. See note 53, *supra*.

62. See note 4, *supra*.

63. See note 54, *supra*.

64. See note 55, *supra*.

65. 100,000 shares par \$100.

66. There are 150,000 shares par \$25 common stock of Zeta Corporation after the merger.

Capital surplus	—	\$ 7,250,000
Book value common		\$11,000,000
Book value, per common share <sup>67</sup>		\$ 73.33
Book value, trust common shares <sup>68</sup>		\$ 10,999.50

3. *Preservation of intact value—common:*

Intact value	\$9,000
Number shares to preserve <sup>69</sup>	122.73
Number shares in trust	150
Shares potentially available for income	27.27

4. *Apportionment:*

Proceeds of sale, 150 shares	\$12,000.00
Principal ( $122.73/150 \times \$12,000$ ) <sup>70</sup>	9,818.40 <sup>70a</sup>
Balance to income <sup>71</sup>	\$ 2,181.60 <sup>71a</sup>

### VIII. LIQUIDATING DIVIDEND

At death (2/5/40) decedent owned 100 shares Kappa Corporation common stock, par \$100; on 9/30/58, trust received \$19,200 as a dividend in complete<sup>72</sup> liquidation of its interest in Kappa Corporation.

1. *Balance sheets (Kappa Corporation):*

	12/31/39	9/30/58
Capital (100,000 shares)	\$10,000,000	\$10,000,000
Earned surplus	4,500,000	7,000,000
Total book value common	\$14,500,000	\$17,000,000
Book value per common share	\$ 145	\$ 170
Book value, 100 shares	\$ 14,500	\$ 17,000
Intact value <sup>73</sup> trust shares	\$ 14,500	—

2. *Maximum apportionable to income (if supported by earnings):*

Liquidating dividend (\$19,200) less intact value (\$14,500) = \$4,700.

67.  $\$11,000,000 \div 150,000$ .

68.  $\$73.33 \times 150$ .

69. At the new book value of \$73.33. Where the trust held both common and preferred before the merger and recapitalization, the trust's investment in the corporation is treated as a single integrated one, and no apportionment is made with respect to preferred arrearages until consideration is given to impairment of intact value of the old common: King Est., 361 Pa. 629, 633, 66 A.2d 68, 70 (1949). Intact value of the old preferred is not impaired because the new preferred consists of a like amount of shares with the same par value: see note 58, *supra*.

70. The fraction applied to the proceeds is the fraction earlier employed in determining the number of shares of new common needed to preserve the intact value of the old common: King Est., 361 Pa. 629, 634, 66 A.2d 68, 70 (1949).

70a. See note 8, *supra*.

71. Although the arrearages on the 100 shares of old preferred were \$3000, preservation of the intact value of the old common results in income receiving less. The apportionment to income is not limited to arrearages accruing since the testator's death. See note 53, *supra*.

71a. See note 8, *supra*.

72. If the dividend were one in a series of liquidating dividends, caution would seem to dictate making no apportionment of any of such dividends until their total has equalled intact value.

73. See note 4, *supra*.

3. *Accumulated earnings:*

Book value, 9/30/58	\$17,000
Book value, 12/31/39	<u>14,500</u>
	\$ 2,500

4. *Apportionable to income:*

Lesser of gain (\$4700) or accumulated earnings (\$2500) = \$2,500.<sup>74</sup>

IX. SUCCESSIVE INCOME BENEFICIARIES<sup>75</sup>

Assume the facts in I above (Decedent-owned stock-sale), with decedent dying 1/1/40, creating a trust for A for life (A died 1/1/50), then B for life, with B still living at the sale on 10/31/60.

1. *Apportionable to income:* \$1,5002. *Earnings accumulated by corporation:*

1/1/40 to 12/31/49	\$ 850,000
1/1/50 to 10/31/60	<u>\$ 650,000</u>
	\$1,500,000

3. *Apportionable to first income beneficiary's estate:*

Gross amount apportionable (\$1,500) ÷

Proportionate earnings accumulation during life estate (850/1500ths) = \$850

4. *Apportionable to second income beneficiary:*

Gross amount apportionable (\$1,500) less apportionable to preceding income beneficiary's estate (\$850) = \$650.

---

The following calculations demonstrate how a trust holding of 399 shares of Delta Corporation, common, which have their origin in 100 decedent-owned shares of another corporation arising from a combination of a stock dividend, stock split, sale of fractional shares, and a merger, may unravel retroactively the several components of the trust holdings after all of such events have occurred. It also involves a corporation which adjusts its earned surplus

74. See note 8, *supra*.

75. See Chalfant Trust, 10 Fiduc. Rep. 645 (1960); Coxe Trust, 10 Fiduc. Rep. 633 (1960); Bamberger Trust, 10 Fiduc. Rep. 297 (1960), annot. in *FID. REV.* (July 1960); Cohan & Dean, *supra* note 2, at 181.

annually to reflect unrealized gain or loss in its investment portfolio. The following is a summary of the events which have occurred:

- 1/1/45—Death of decedent owning 100 shares Epsilon Corporation
- 3/20/50—Receipt of 33 1/3 % stock dividend
- 4/1/50—Sale of 1/3 share
- 2/21/56—"2 for 1" stock split
- 6/30/59—Merger of Epsilon into Delta Corporation involving an exchange of 1 share of Epsilon Corporation for 1½ shares of Delta Corporation stock.

#### X. STOCK DIVIDEND, STOCK SPLIT, MERGER—UNREALIZED APPRECIATION

Decedent died 1/1/45, leaving 100 shares Epsilon Corporation (an insurance company) common, par \$10.

##### 1. *Intact value* (Epsilon Corporation balance sheet at death):<sup>76</sup>

Capital (300,000 shares)	\$3,000,000
Earned surplus	6,000,000
	<hr/>
Total book value common	\$9,000,000
Book value per common share	\$ 30
Book value, 100 shares	\$ 3,000
Intact value, 100 shares	\$ 3,000

Trustee received 33 1/3 shares as stock dividend on 3/20/50.

##### 2. *Balance sheet*:

	1/1/45	2/28/50 <sup>77</sup>	2/28/50 <sup>78</sup>
Capital (300,000 shares)	\$3,000,000	\$3,000,000	\$ 4,000,000 (400,000 shares)
Earned surplus	6,000,000 <sup>79</sup>	20,000,000 <sup>80</sup>	19,000,000 <sup>81</sup>
	<hr/>	<hr/>	<hr/>
Total book value	\$9,000,000	\$23,000,000	\$23,000,000
Book value per share	\$ 30	\$ 76.66	\$ 57.50
Book value, trust shares	\$ 3,000	\$ 7,666	\$ 7,666.00
Market value per share	—	—	\$ 75.00 <sup>82</sup>

##### 3. *Possible maximum apportionable to income* (if supported by earnings):

Capitalized earnings<sup>82a</sup> (33 1/3 shares × \$10) ÷ market value<sup>83</sup> = 4.445 shares

##### 4. *Preservation of intact value*:

Intact value	\$3,000 <sup>84</sup>
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76. See note 4, *supra*.

77. See note 15, *supra*.

78. After giving effect to the stock dividend, the trust then owning 133 1/3 of the 400,000 outstanding shares.

79. This includes unrealized appreciation on corporate investments of \$2,500,000: Harvey Est., 395 Pa. 62, 149 A.2d 104 (1959) annot. in *FID. REV.* (Feb. 1959).

80. This includes unrealized appreciation on corporate investments of \$9,501,000: Harvey Est., *supra* note 79.

81. *Ibid.*

82. See note 17, *supra*.

82a. See note 18, *supra*. But cf. O'Neill Est., 11 *Fid. Rep.* 11 (1960).

83. See note 17, *supra*.

84. See note 4, *supra*.

Number shares to preserve <sup>85</sup>	52.173
Number shares in trust <sup>86</sup>	133.3

5. *Accumulated earnings:*

Book value, 2/28/50 <sup>87</sup>	\$7,666	
Less adjustments due to unrealized gain on investments <sup>88</sup>	3,167	\$4,499
Book value, acquisition <sup>89</sup>		<u>\$3,000</u>
Accumulated earnings		\$1,499

6. *Apportionment:*

To income: Retained earnings (\$1,499) exceed capitalized earnings (\$333.33) and the 4.445 shares, representing capitalized earnings at the market value of the shares are therefore apportioned to income—4.445<sup>90</sup>

<i>To principal</i>		
Total dividend shares		33.333
To income		<u>4.445</u>
Balance		28.888
Total original shares		<u>100.000</u>
Total shares after apportionment		128.888

7. *Revised intact value:*

Intact value	\$3,000
÷ Number of shares	128.888
Intact value per share	\$ 23.276

Trust sold the "1/3 share" on 4/1/50 for \$23.

8. *Revised intact value:*

		Number shares:
Intact value	\$3,000.000	128.888

85. This is intact value divided by the book value of the shares ( $\$3,000 \div \$57.50$ ). See note 22, *supra*.

86. Including the dividend shares.

87. See note 15, *supra*.

88. The \$20,000,000 surplus includes \$9,501,000 of unrealized appreciation (note 80, *supra*), which must be disregarded in ascertaining accumulated earnings although it forms a part of the calculation of intact value: see note 26, *supra*. The \$12,000,000 arose as follows:

1945	\$ 5,000,000
1946	( 2,500,000)
1947	5,500,000
1948	4,701,000
1949	( 3,200,000)
	<u>\$ 9,501,000</u>

In per share terms, the unrealized gain is  $\$12,000,000 \div 300,000$ , or \$40 per share, and is therefore \$4000 on the trust's 100 shares.

89. The \$6,000,000 surplus at date of acquisition includes \$2,500,000 of unrealized appreciation (see note 79, *supra*) which must be disregarded in ascertaining accumulated earnings although it forms a part of the calculation of intact value: see note 26, *supra*. However, such adjustment is included in that described in note 88, *supra*.

90. See note 29, *supra*. But cf. O'Neill Est., 11 Fid. Rep. 11 (1960).

Intact value 1/3 share <sup>91</sup>	\$ 7.681	.333
Intact value of remain- ing 128.555 shares	\$2,992.399	128.555

Effective 2/21/56, the par value was reduced from \$10 to \$5 and the stock split "2 for 1."<sup>92</sup>

9. *Trust holdings:*

Principal	128.555 shares × 2 = 257.110 <sup>93</sup>
Income	4.445 shares × 2 = 8.890
	<u>133.000</u> <u>266.000</u>

On 6/30/59, Epsilon Corporation was merged into Delta Corporation, each share of Epsilon Corporation stock being exchanged for 1.5 shares of Delta Corporation common par \$5 stock. Thus, the trust received 399 shares of Delta Corporation stock in exchange for its 266 shares of Epsilon Corporation stock.<sup>94</sup>

10. *Trust holdings:*

Principal	257.110 shares × 1.5 = 385.665 <sup>95</sup>
Income	8.890 shares × 1.5 = 13.335
Total	<u>266.000</u> shares × 1.5 = <u>399.000</u>

*Summary of apportionments:*

Principal <sup>96</sup>	385.665 shares
Income	13.335 shares
Total	399.000

XI. APPORTIONMENT WORK SHEET

The foregoing calculations have been organized in a manner believed to follow chronologically the steps taken in making an apportionment, so that the mechanics of so doing may be presented in a step-by-step manner. However, the attorney will not often be called upon to actually calculate the apportionment; he will generally be reviewing the calculations made by others, and those calculations will often not be set forth in the manner adopted above. Rather, they will generally deal with a succession of apportionable events as to which no prior calculations have been made. Therefore, there is set forth below an actual apportionment work sheet of the type often prepared by a corporate fiduciary; explanatory notes have been added thereto to clarify the often cryptic entries.

91. \$23.276 × .33.

92. This is *not* an apportionable event: see *Pew Trust*, 398 Pa. 523, 158 A.2d 552 (1960) annot. in *FID. REV.* (April 1960).

93. Intact value remains \$2992.399.

94. This is *not* an apportionable event: *Jones Est.*, 377 Pa. 473, 105 A.2d 353 (1954).

95. Intact value remains \$2992.399, for 385.665 shares.

96. Principal has also received in cash the \$23 proceeds of sale of 1/3 share.



(A) This is the nearest quarterly date to a purchase or sale, which may be either before such event (e.g. the 10/19/38 purchase) or after such event (e.g., the 11/23/56 purchase). See footnote 6, *supra*. Actual record dates are shown for stock dividends and rights.

(B) Principal shares  $\times$  book value per share.

(C) Upon an earlier accounting, 28 shares were apportioned to income. While the chart shows all transactions since original purchase of the stock, it is actually the entries appearing from and after 1951 (the date of the schedule of distribution) which reflect the apportionment to be made upon the accounting at the end of 1957.

(D) This reduction in book value arises from issuance of additional shares through subscription at \$31 per share when the book value per share was greater. This adjustment compensates for the resulting dilution in the book value per share, and assures the proper determination of accumulation of earnings.

(E) Since the trustee holds cash not yet apportioned to income, it reduces, and upon later apportionment to income increases, the intact value.

(F)  $1400 \times \$41.91 = \$58,674$ .

(G) Accumulated earnings (\$26,544) exceed the proceeds, hence the proceeds are apportionable to income.

(H) This increase in book value arises from the change in consolidation basis of the company's annual statements.

(I)  $1750 \times \$44.59 = \$78,032$ .

(J) Using the higher of book or market to preserve intact value, only 294 shares are required. But query whether book value rather than purchase price should be preserved: see footnote 17, *supra*.

(K) The fractional .52 share may be allowed to remain in principal as a purely practical matter; since book value is adjusted only for the shares actually apportioned, principal is not thereby permanently enriched.

(L) Since the distribution of dividend shares to income is on the basis of market value, which exceeds book value, such excess will have to be deducted in computing accumulated earnings upon the next apportionable event; hence, such excess is treated as an addition to adjusted book value.

(M) This reduction in book value arises from the same factors as noted in note (D), *supra*, the adjustment being smaller because the excess of book value over subscription price was smaller.

(N) Adjusted book value must of course be increased by the cash allocated to income, so that the calculation of accumulated earnings upon the next apportionable event will not be overstated.

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