

Chapter 5 Estimation Valuation Method

2. 1) 30% of Sales

Sales	175,000	
<u>Less Sales Return</u>	<u>(10,000)</u>	
Net Sales		165,000
<u>Cost of Goods Sold</u>		
Beginning INV		25,550
<u>Add Purchase</u>	120,000	
<u>Less Purchase Return</u>	<u>(5,000)</u>	
Net Purchase		115,000
<u>Add Freight in</u>		<u>6,000</u>
Goods for Sales		146,550
<u>Less Ending INV</u>		<u>(31,050)</u>
Cost of Goods Sold		<u>115,500</u>
Gross profit		<u>49,500</u>
		(165,000 * 30%)

2) 20% of CGS

Sales	175,000	
<u>Less Sales Return</u>	<u>(10,000)</u>	
Net Sales		165,000
<u>Cost of Goods Sold</u>		
Beginning INV		25,550
<u>Add Purchase</u>	120,000	
<u>Less Purchase Return</u>	<u>(5,000)</u>	
Net Purchase		115,000
<u>Add Freight in</u>		<u>6,000</u>
Goods for Sales		146,550
<u>Less Ending INV</u>		<u>(9,050)</u>
Cost of Goods Sold		<u>137,500</u>
Gross profit		<u>27,500</u> *

* Note: (x = CGS)

$$165,000 - x = 0.2x$$

$$x = 137,500$$

$$\text{Thus, } 0.2x = 27,500$$

4. 1) Cost Method

	Retail Price	Cost
Beginning INV	4,620	2,500
<u>Add Purchase</u>	19,180	<u>12,000</u>
<u>Add Additional Markup</u>	1,200	
<u>Less Markdown</u>	(380)	
Goods for Sales	24,620	14,500
<u>Less Sales</u>	(19,000)	
Ending INV	5,620	

$$\begin{aligned} \% \text{ Cost / Retail Price} &= (14,500 / 24,620) * 100 \\ &= 58.90\% \end{aligned}$$

$$\begin{aligned} \text{Thus, Ending INV (Cost)} &= 5,620 * 58.90\% \\ &= 3,310.18 \end{aligned}$$

2) Lower Cost or Market

	Retail Price	Cost
Beginning INV	4,620	2,500
<u>Add Purchase</u>	19,180	<u>12,000</u>
<u>Add Additional Markup</u>	<u>1,200</u>	
Goods for Sales	25,000	14,500
<u>Less Sales</u>	(19,000)	
<u>Less Markdown</u>	(380)	
Ending INV	5,620	

$$\begin{aligned} \% \text{ Cost / Retail Price} &= (14,500 / 25,000) * 100 \\ &= 58\% \end{aligned}$$

$$\begin{aligned} \text{Thus, Ending INV (Cost)} &= 5,620 * 58\% \\ &= 3,259.60 \end{aligned}$$

11.

$$\begin{aligned}\% \text{ Cost / Retail Price (Beginning INV)} &= (351,000 / 540,000) * 100 \\ &= 65\%\end{aligned}$$

$$\begin{aligned}\% \text{ Cost / Retail Price (25x5)} &= (930,000 / 1,500,000) * 100 \\ &= 62\%\end{aligned}$$

$$\begin{aligned}\text{Ending INV (Retail Price)} &= 660,000 \\ \text{Base Year} &= 660,000 * (100/110) = 600,000 \\ \text{Ending INV (Cost)} &= (540,000 * 65\%) + \{60,000 * (110/100) * 62\% \} \\ &= 351,000 + 40,920 \\ &= 391,920\end{aligned}$$

$$\begin{aligned}\% \text{ Cost / Retail Price (25x6)} &= (871,200 / 1,320,000) * 100 \\ &= 66\%\end{aligned}$$

$$\begin{aligned}\text{Ending INV (Retail Price)} &= 556,500 \\ \text{Base Year} &= 556,500 * (100/116) = 525,000 \\ \text{Ending INV (Cost)} &= (525,000 * 65\%) \\ &= 341,250\end{aligned}$$

$$\begin{aligned}\% \text{ Cost / Retail Price (25x7)} &= (936,000 / 1,560,000) * 100 \\ &= 60\%\end{aligned}$$

$$\begin{aligned}\text{Ending INV (Retail Price)} &= 615,600 \\ \text{Base Year} &= 615,600 * (100/108) = 570,000 \\ \text{Ending INV (Cost)} &= (525,000 * 65\%) + \{45,000 * (108/100) * 60\% \} \\ &= 341,250 + 29,160 \\ &= 370,410\end{aligned}$$

$$\begin{aligned}\% \text{ Cost / Retail Price (25x8)} &= (1,209,600 / 1,920,000) * 100 \\ &= 63\%\end{aligned}$$

$$\begin{aligned}\text{Ending INV (Retail Price)} &= 705,600 \\ \text{Base Year} &= 705,600 * (100/112) = 630,000 \\ \text{Ending INV (Cost)} &= (525,000 * 65\%) + \{45,000 * (108/100) * 60\% \} \\ &\quad + \{60,000 * (112/100) * 63\% \} \\ &= 341,250 + 29,160 + 42,336 \\ &= 412,746\end{aligned}$$

12.

$$\text{Ending INV (25x5)} = 75,000$$

Ending INV (25x6)

$$\begin{aligned}\text{Base Year} &= 100,000 * (100/125) \\ &= 80,000\end{aligned}$$

$$\begin{aligned}\text{Thus, Ending INV} &= 75,000 + \{5,000 * (125/100)\} \\ &= 81,250\end{aligned}$$

Ending INV (25x7)

$$\begin{aligned}\text{Base Year} &= 140,000 * (100/140) \\ &= 100,000\end{aligned}$$

$$\begin{aligned}\text{Thus, Ending INV} &= 75,000 + \{5,000 * (125/100)\} \\ &\quad + \{20,000 * (140/100)\} \\ &= 109,250\end{aligned}$$

Ending INV (25x8)

$$\begin{aligned}\text{Base Year} &= 110,400 * (100/115) \\ &= 96,000\end{aligned}$$

$$\begin{aligned}\text{Thus, Ending INV} &= 75,000 + \{5,000 * (125/100)\} \\ &\quad + \{16,000 * (140/100)\} \\ &= 103,650\end{aligned}$$

Ending INV (25x9)

$$\begin{aligned}\text{Base Year} &= 78,000 * (100/120) \\ &= 65,000\end{aligned}$$

$$\text{Thus, Ending INV} = 65,000$$