

# **Accounting for Inventory**

---

Steven M. Bragg

# Table of Contents

---

<b>Chapter 1 – Overview of Inventory .....</b>	<b>1</b>
Learning Objectives .....	1
Introduction.....	1
The Definition of Inventory .....	1
Accounting for Inventory .....	2
Inventory Transactions.....	5
Inventory Flow in a Push Environment.....	6
Inventory Flow in a Pull Environment .....	6
Summary.....	7
Review Questions.....	8
Review Answers .....	9
 <b>Chapter 2 – Periodic and Perpetual Inventory Systems .....</b>	 <b>10</b>
Learning Objectives .....	10
Introduction.....	10
The Periodic Inventory System .....	10
The Perpetual Inventory System .....	11
Summary.....	12
Review Questions.....	13
Review Answers .....	14
 <b>Chapter 3 – Inventory Record Accuracy.....</b>	 <b>15</b>
Learning Objectives .....	15
Introduction.....	15
Inventory Record Errors.....	15
Environmental Factors Impacting Record Accuracy.....	16
Employee Factors Impacting Record Accuracy .....	17
Labeling Issues Impacting Record Accuracy .....	17
Inventory Naming Conventions Impacting Record Accuracy .....	18
Excessive Data Recordation .....	19
Inventory Data Collection Methods.....	19
The Data Entry Backlog Problem .....	21
Backflushing .....	21
Controls over Record Accuracy.....	22
Inventory Review Reports .....	23
The Negative Inventory Balance .....	23
Inventory Auditing .....	24
The Corrective Action System.....	24
Summary.....	25
Review Questions.....	26
Review Answers .....	27
 <b>Chapter 4 – Inventory Counting and Reconciliation .....</b>	 <b>28</b>
Learning Objectives .....	28
Introduction.....	28
How to Set Up Inventory Record Keeping .....	28
The Physical Inventory Count .....	29
Concerns about the Physical Inventory Count .....	30
Physical Count Improvements.....	31
Cycle Counting .....	32
Control Group Analysis .....	35
100% Count Analysis.....	35
Inventory Reconciliation.....	35

Summary .....	38
Review Questions .....	39
Review Answers .....	40
<b>Chapter 5 – Estimating Ending Inventory.....</b>	<b>41</b>
Learning Objectives .....	41
Introduction.....	41
The Gross Profit Method.....	41
The Retail Inventory Method .....	42
The Effect of Overstated Ending Inventory .....	43
Summary .....	43
Review Questions .....	44
Review Answers .....	45
<b>Chapter 6 – Inventory Cost Layering.....</b>	<b>46</b>
Learning Objectives .....	46
Introduction.....	46
Inventory Cost Layering Overview.....	46
The Last in, First Out Method.....	48
The Dollar-Value LIFO Method .....	49
The Link-Chain Method.....	51
The Weighted Average Method.....	53
The Specific Identification Method.....	54
Summary .....	54
Review Questions .....	55
Review Answers .....	56
<b>Chapter 7 – Standard Costing of Inventory.....</b>	<b>57</b>
Learning Objectives .....	57
Introduction.....	57
Overview of Standard Costing.....	57
How to Create a Standard Cost .....	57
Historical, Attainable, and Theoretical Standards .....	58
How to Account for Standard Costs .....	58
Overview of Variances .....	60
The Purchase Price Variance.....	60
Material Yield Variance .....	61
Labor Rate Variance.....	61
Labor Efficiency Variance .....	62
Variable Overhead Spending Variance .....	63
Variable Overhead Efficiency Variance .....	63
Fixed Overhead Spending Variance.....	64
Problems with Variance Analysis .....	65
The Controllable Variance.....	65
The Favorable or Unfavorable Variance .....	65
Where to Record a Variance .....	66
Which Variances to Report .....	66
How to Report Variances .....	67
Summary .....	68
Review Questions .....	69
Review Answers .....	70
<b>Chapter 8 – Job Costing.....</b>	<b>71</b>
Learning Objectives .....	71
Introduction.....	71
Overview of Job Costing .....	71

When Not to Use Job Costing .....	72
Accounting for Direct Materials in Job Costing .....	72
Accounting for Labor in Job Costing.....	73
Accounting for Actual Overhead Costs in Job Costing.....	74
Accounting for Standard Overhead Costs in Job Costing .....	75
The Importance of Closing a Job.....	76
The Role of the Subsidiary Ledger in Job Costing .....	76
Summary.....	77
Review Questions.....	78
Review Answers .....	79
<b>Chapter 9 – Process Costing .....</b>	<b>80</b>
Learning Objectives .....	80
Introduction.....	80
Overview of Process Costing .....	80
The Weighted Average Method.....	81
The Standard Costing Method .....	82
The First In, First Out Method .....	83
The Hybrid Costing System .....	85
Process Costing Journal Entries .....	85
Problems with Process Costing.....	86
Summary.....	87
Review Questions.....	88
Review Answers .....	89
<b>Chapter 10 – Overhead Allocation .....</b>	<b>90</b>
Learning Objectives .....	90
Introduction.....	90
Overhead Allocation .....	90
Averaging of Overhead Rates.....	93
Summary.....	93
Review Questions.....	94
Review Answers .....	95
<b>Chapter 11 – Obsolete Inventory .....</b>	<b>96</b>
Learning Objectives .....	96
Introduction.....	96
Expected Dispositions Method.....	96
Reserve Method .....	98
Expensing Method.....	99
Issues with Obsolete Inventory Recognition .....	99
Summary.....	100
Review Questions.....	101
Review Answers .....	102
<b>Chapter 12 – The Lower of Cost or Market Rule .....</b>	<b>103</b>
Learning Objectives .....	103
Introduction.....	103
The Lower of Cost or Market Rule.....	103
Practical Application .....	105
Summary.....	105
Review Questions.....	106
Review Answers .....	107

<b>Chapter 13 – Inventory Spoilage, Rework, and Scrap.....</b>	<b>108</b>
Learning Objectives .....	108
Introduction.....	108
Definition of Spoilage .....	108
Accounting for Normal Spoilage .....	108
Accounting for Abnormal Spoilage .....	109
Accounting for the Sale of Spoilage .....	110
Cost Allocation to Spoilage .....	110
Definition of Rework.....	111
Reporting Rework.....	111
Accounting for Rework.....	111
Definition of Scrap .....	112
Accounting for Scrap .....	112
Summary.....	113
Review Questions.....	114
Review Answers .....	115
<b>Chapter 14 – Joint and By-Product Costing.....</b>	<b>116</b>
Learning Objectives .....	116
Introduction.....	116
Split-Off Points and By-Products.....	116
Why We Allocate Joint Costs .....	117
Joint Cost Allocation .....	117
Joint Product and By-Product Pricing .....	118
Special Concerns with By-Product Costing .....	118
Summary.....	119
Review Questions.....	120
Review Answers .....	121
<b>Chapter 15 – Inventory Disclosures .....</b>	<b>122</b>
Learning Objectives .....	122
Introduction.....	122
Inventory Disclosures.....	122
Summary.....	123
Review Questions.....	124
Review Answers .....	125
<b>Chapter 16 – Inventory Transactions.....</b>	<b>126</b>
Learning Objectives .....	126
Introduction.....	126
Initial Cost Recognition .....	126
Acquired Inventory Transactions .....	127
Backflushing Transactions .....	127
Bill and Hold Transactions .....	127
Consignment Transactions .....	128
Cross Docking Transactions .....	128
Drop Shipping Transactions .....	128
Engineering Change Order Transactions .....	129
Goods in Transit Transactions .....	129
Kitting Transactions .....	129
Lower of Cost or Market Adjustments.....	130
Obsolete Inventory Adjustments.....	130
Overhead Allocation Transactions.....	130
Physical Count Adjustments .....	131
Receiving Transactions.....	131
Sale Transactions .....	132

Scrap and Spoilage Adjustments .....	132
Summary .....	132
Review Questions.....	133
Review Answers .....	134
<b>Chapter 17 – Internal Revenue Code for Inventory.....</b>	<b>135</b>
Learning Objectives .....	135
Introduction.....	135
IRC Section 471 – General Rule for Inventories .....	135
IRC Section 472 – Last In, First Out Inventories .....	135
IRC Section 473 – Qualified Liquidations of LIFO Inventories.....	137
IRC Section 474 – Simplified Dollar-Value LIFO Method .....	139
IRC Section 1504(a) – Affiliated Group .....	141
Summary .....	142
Review Questions.....	143
Review Answers .....	144
<b>Chapter 18 – Inventory Transfer Pricing.....</b>	<b>145</b>
Learning Objectives .....	145
Introduction.....	145
Overview of Transfer Pricing .....	145
Market Price Basis for Transfer Pricing .....	146
Adjusted Market Price Basis for Transfer Pricing .....	147
Negotiated Basis for Transfer Pricing .....	147
Contribution Margin Basis for Transfer Pricing .....	148
Cost Plus Basis for Transfer Pricing .....	148
Cost Anomalies in a Cost-Based Transfer Price .....	149
Pricing Problems Caused by Transfer Pricing .....	149
The Tax Impact of Transfer Prices .....	150
Summary .....	151
Review Questions.....	152
Review Answers .....	153
<b>Chapter 19 – Inventory Controls.....</b>	<b>154</b>
Learning Objectives .....	154
Introduction.....	154
Purchasing Process Overview .....	154
In-Process Purchasing Controls .....	155
Additional Purchasing Controls – Fraud Related .....	157
Additional Purchasing Controls – Periodic Actions .....	158
Receiving Process Overview.....	158
In-Process Receiving Controls.....	161
Additional Receiving Controls – Fraud Related .....	162
Additional Receiving Controls – Periodic Actions.....	163
Shipping Process Overview .....	163
In-Process Shipping Controls.....	166
Additional Shipping Controls – Fraud Related .....	166
Additional Shipping Controls – Periodic Actions .....	167
Intercompany Controls.....	168
Inventory Valuation Controls .....	168
Warehouse Controls .....	170
Production Controls .....	170
Summary .....	171
Review Questions.....	172
Review Answers .....	173

<b>Chapter 20 – Fraudulent Inventory Transactions.....</b>	<b>174</b>
Learning Objectives .....	174
Introduction.....	174
Those Who Commit Fraud.....	174
Financial Statement Fraud – Labor Component .....	174
Financial Statement Fraud – Materials Component .....	175
Financial Statement Fraud – Overhead Component.....	177
Revenue Fraud.....	178
Inventory Theft.....	179
Common Fraud Risk Factors .....	180
Fraud Prevention Tactics .....	181
Pressures .....	181
Detection .....	182
Centralization.....	182
Summary.....	182
Review Questions.....	184
Review Answers .....	185
<b>Chapter 21 – Inventory Policies.....</b>	<b>186</b>
Learning Objectives .....	186
Introduction.....	186
Inventory Policies.....	186
Receiving Policy .....	186
Point of Ownership Policy .....	186
Responsibility for Inventory Policy.....	187
Inventory Access Policy .....	187
Inventory Owned by Third Parties Policy .....	187
Consigned Inventory Identification Policy .....	187
Physical Count Policy .....	188
Cycle Counting Policy .....	188
Inventory Record Access Policy .....	188
Bill of Material Updates Policy .....	188
Standard Costing Updates Policy.....	188
Lower of Cost or Market Updates .....	189
Obsolete Inventory Updates.....	189
Bill and Hold Policy .....	189
Collections Take-Back Policy .....	189
Summary.....	190
Review Questions.....	191
Review Answers .....	192
<b>Chapter 22 – Inventory Budgeting.....</b>	<b>193</b>
Learning Objectives .....	193
Introduction.....	193
The Production Budget .....	193
Other Production Budget Issues .....	194
Budgeting for Multiple Products .....	195
Ending Inventory Concepts.....	196
Impact of Changes in Ending Inventory.....	197
The Ending Finished Goods Inventory Budget .....	197
Direct Materials Budgeting Overview.....	199
The Direct Materials Budget (Roll up Method) .....	199
The Direct Materials Budget (Historical Method).....	201
The Direct Materials Budget (80/20 Method) .....	202
Anomalies in the Direct Materials Budget .....	203
The Role of the Direct Materials Budget.....	203

Summary .....	204
Review Questions .....	205
Review Answers .....	206
<b>Chapter 23 – Inventory Measurements.....</b>	<b>207</b>
Learning Objectives .....	207
Introduction.....	207
Overview of Inventory Measurements .....	207
Average Inventory Calculation .....	207
Inventory Turnover Measurements.....	208
Inventory Turnover Ratio.....	209
Raw Materials Turnover .....	209
Work-in-Process Turnover .....	210
Finished Goods Turnover.....	211
Inventory Accuracy Percentage .....	211
Excess Inventory Measurements .....	212
Obsolete Inventory Percentage .....	212
Percent of Inventory Greater than XX Days.....	213
Returnable Inventory Valuation .....	214
Opportunity Cost of Excess Inventory.....	214
Summary.....	215
Review Questions.....	216
Review Answers .....	217
<b>Glossary.....</b>	<b>219</b>
<b>Index .....</b>	<b>223</b>