

# Watson Enterprises: Accounting for Marketable Equity Securities: Instructor Guide

**Title:**

Watson Enterprises: Accounting for Marketable Equity Securities

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**Discipline:**

Accounting

**Target Audience**

Intermediate, accounting majors and finance majors

**Keywords**

Investments, mark-to-market

**Length of Time/Staging**

The problem takes two fifty minute sessions.



## **Abstract**

Watson Enterprises is a Problem-Based Learning unfolding problem designed to engage the students with the topic of accounting for a portfolio of equity securities under FASB 115. This problem contains considerably more detail than the typical coverage in an Intermediate Financial Accounting text. In addition, the teaching note explains the use of a cooperative learning structure called Within-Team Jigsaw. This structure, explained in greater detail by Millis and Cottell, promotes deeper student learning by motivating them to teach one another.

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## **Format of Delivery**

The problem is delivered in a cooperative learning setting with mini-lectures interspersed. The problem is particularly suited to the cooperative learning structure, Within-Team Jigsaw. The teaching note explains the use of this structure. The problem may be effectively delivered without the use of Within-Team Jigsaw.

## **Student Learning Objectives**

1. Introduce students to accounting for minority passive investments.
2. Enable students to define trading securities and available for sale securities.
3. Teach students the journal entry for entering purchases of equity securities.
4. Teach students how to account for dividend revenue from minority passive investments.
5. Teach students to account for unrealized gains and losses for trading securities.
6. Teach students to account for unrealized gains and losses for available-for-sale securities.
7. Teach the students how to account for realized gains and losses for trading securities.
8. Teach the students how to account for realized gains and losses for available-for-sale securities.
9. Teach the students the disclosure requirements for available-for-sale securities.
10. Teach the students the proper accounting when securities are reclassified.

## **Student Resources**

FASB 115 is an excellent student resource for this problem. Students may also use an intermediate financial accounting text.

## **Instructor Resources**

Millis, B. J. and Cottell, P. G. (1998). Cooperative Learning for Higher Education Faculty.



## Author's Teaching Notes

1. Pass out Phase 1 of the unfolding problem.
  - a. Students should discuss the problem in their small groups. Provide the students with a PBL worksheet to guide them in their deliberations. They should list what they know and how that information will be used. They should also list what they need to know and how that information will help them solve the problem.
  - b. Having given students time to discuss the problem, call forth a full class discussion. List the items students have come up with as known items and need to know items along with their used. Do not be concerned if students do not get all the points or if they list irrelevant points. Let them find their way through the problem. You may use Think-Pair-Share as a way to encourage students with points.
2. The first four learning objectives are to introduce students to accounting for minority passive investments, to have them define trading securities and available-for-sale securities, to teach them to make the journal entry to record an investment in securities, and to teach them the accounting for dividend revenue from minority passive investments. Students who successfully negotiate Phase 1 will have met these objectives.
  - a. Minority passive investments: When a firm holds less than 20% interest in another firm, it must classify its investment as either trading securities or available-for-sale securities.
  - b. In both trading securities and available for sale securities, when the securities are sold, realized gains and losses are reported on the income statement.
    - i. Trading securities
      1. Securities expected to be held on a short-term basis.
      2. Mark-to-market reporting. A market adjustment account is used as an adjunct/contra account to the investment account. The balance sheet approach is used to cause the net of the two accounts to be at fair market value.
      3. Unreported gains and losses are reported on the income statement.
    - ii. Available-for-sale securities
      1. Securities expected to be held on a long-term basis.
      2. Mark-to-market reporting. The market adjustment account used here is similar to the one used for trading securities.
      3. Unrealized gains and losses are reported on the balance sheet in the owners' equity section.
  - c. Accounting for the acquisition of the securities. Students should note that they do not have sufficient information to make the journal entry because they have not yet been classified as trading securities or available-for-sale securities. The simple, but essential point is that both types are recorded at cost. Call on a student to give the journal entry in each case.

Cost basis of stocks

AVP	\$20,000
BA	\$70,000
PEP	<u>\$30,000</u>
Total Cost	\$120,000

*[letters] below are "keyed" to entries made in the ledger.*

Journal entry for trading securities:

<b>[a]</b> Investment in stocks-trading	\$120,000
Cash	\$120,000

*To record investment in securities classified as trading.*

Journal entry for available-for-sale securities:

<b>[A]</b> Investment in stocks-AFS	\$120,000
Cash	\$120,000

*To record investment in securities classified as available-for-sale.*

- d. Accounting for dividend revenue. This is quite straightforward for the minority passive investment. Nevertheless, it should be taught to contrast it with the equity method, which is usually also covered in an intermediate accounting course.

Dividend revenue = 2,000 shares \* \$1.50 = \$3,000

Journal Entry:

Cash	\$3,000	
	Dividend revenue	\$3,000

*To record dividend revenue for a minority passive investment.*

3. Pass out Phase 2 of the unfolding problem. This Phase provides a great opportunity to use a cooperative learning structure called Within-Team Jigsaw. Basically, two students in a group of four work on one part of a problem while other students work on the remaining part. Then the two pairs teach each other their portion. Within-Team Jigsaw is described in greater detail in Millis and Cottell (1998). Instructors using playing cards, as suggested by Millis and Cottell (1998), may assign trading securities to the black suits and available-for-sale securities to the red suits as suggested in the directions for the phase. Instructors not wishing to use Within-Team Jigsaw may simply have the small group work out the solution for both types of securities.

- a. Having completed Phase 2, students will have fulfilled Learning Objectives 5 and 6.
- b. The solution for the year-end 2002 is below:

Year 2002 Unrealized Gains and Losses:

Security	Cost	Market	Unrealized Gain	Unrealized Loss
AVP	\$20,000	\$15,000		\$5,000
BA	\$70,000	\$60,000		<u>\$10,000</u>
PEP	<u>\$30,000</u>	<u>\$35,000</u>	<u>\$5,000</u>	
Totals	\$120,000	\$110,000		
Unrealized Gains			\$5,000	
Unrealized Losses				\$15,000

- i. The journal entries for trading securities (black suits) are shown below (*[letters]* are "keyed" to the ledger).

*[b]* Unrealized holding loss on stocks \$10,000

Market Adjustment-trading securities      \$10,000

*To record unrealized holding gains and losses at net.*

*The net of these appear on the income statement.*

- ii. The ledger for the trading securities is shown below:

	Investment in Stocks-Trading	Market Adjustment-Trading
Entry <i>[a]</i>	\$120,000	
Entry <i>[b]</i>		\$10,000
Balance-2002	<u>\$120,000</u>	<u>\$10,000</u>

	Unrealized Holding
	Gain      Loss
Entry <i>[b]</i>	\$10,000
Closing entry	\$10,000
Balance-2002	\$0

- iii. The journal entries for available-for-sale securities (red suits) are shown below (*[letters]* are "keyed" to the ledger).

[B] Contra equity unrealized holding loss on stocks \$10,000

Market Adjustment-AFS \$10,000

*To record unrealized holding gains and losses.*

*Changes to the contra equity account appear on the balance sheet in owners' equity as comprehensive income.*

iv. The ledger for available-for-sale securities is shown below:

	Investment in Stocks-AFS	Market Adjustment-AFS
Entry [A]	\$120,000	
Entry [B]		\$10,000
Balance-2002	<u>\$120,000</u>	\$10,000

	Contra Equity or Equity
Entry [B]	\$10,000
Balance-2002	\$10,000

4. Pass out Phase 3 of the unfolding problem. Once again initiate the Within-Team Jigsaw cooperative learning structure, but this time mix it up to ensure the students are learning both types of securities. That is, students holding red suits will work on the problem assuming the securities are trading securities while the student holding the black suits assume that the securities are available-for-sale. Instructors who do not use the playing card classroom management technique may simply have the pairs switch. In either case, once both pairs have completed their portion, they teach it to each other. Of course, instructors not wishing to use Within-Team Jigsaw, may simply have the groups work out the solution for both types of securities.

a. In Phase 3 students will have completed Learning Objectives 7 and 8 and reinforced Learning Objectives 5 and 6.

b. The solution for the year-end 2003 is below:

Year 2003 Unrealized Gains and Losses

First note that BA has been sold at an additional \$5,000 loss. In the case of available-for-sale, the \$5,000 of the unrealized loss has become realized and will be moved to the income statement.

Security	Cost or 2002 Market	Current Market	Unrealized Gain	Unrealized Loss
AVP	\$15,000	\$25,000	\$10,000	

BA <sup>1</sup>	\$30,000	\$30,000		\$0
PEP	\$35,000	\$45,000	\$10,000	
JNJ	<u>\$85,000</u>	<u>\$95,000</u>	<u>\$10,000</u>	
Totals	\$165,000	\$195,000		
Unrealized Gains			\$30,000	
Unrealized Losses				\$0

- i. The journal entries for trading securities (now red suits) are shown below ([letters] are "keyed" to the ledger).

**[c]** Investment in stocks-trading      \$85,000

    Cash      \$85,0000

*To record purchase of JNJ*

**[d]** Cash      \$25,000

Loss on sale of stocks      \$5,000

Market adjustment-trading      \$5,000

    Investment in stocks-trading      \$35,000

*To record realized loss on the sale of stocks.*

*This must be reported separately on the income statement.*

**[e]** Market adjustment-trading      \$30,000

    Unrealized holding gains      \$30,000

*To record unrealized holding gains and losses at net.*

*The net of these appear on the income statement.*

- ii. The ledger for trading securities is shown below:

	Investment in Stocks-Trading	Market Adjustment-Trading
Balance-2002	\$120,000	\$10,000
Entry <b>[c]</b>	\$85,000	
Entry <b>[d]</b>	\$35,000	\$5,000
Entry <b>[e]</b>		\$30,000
Balance-2003	<u>\$170,000</u>	<u>\$25,000</u>

<sup>1</sup> Excludes the 1000 shares sold.

	Unrealized holding gain	loss	Realized loss
Entry <i>[d]</i>			\$5,000
Entry <i>[e]</i>		\$30,000	
Closing entries	<u>\$30,000</u>		<u>\$5,000</u>
Balance-2002	\$0		\$0

- iii. The journal entries for available-for-sale securities (now black suits) are shown below (*[letters]* are "keyed" to the ledger).

*[C]* Investment in stocks-AFS \$85,000

Cash                      \$85,000

*To record purchase of JNJ*

*[D]* Cash                      \$25,000

Loss on sale of stocks    \$10,000

Market adjustment-AFS   \$5,000

Investment in stocks-AFS                      \$35,000

Contra equity unrealized holding loss on stocks      \$5,000

*To record unrealized holding gains and losses.*

*Changes to the contra equity account appear on the balance sheet in owners' equity as comprehensive income.*

*[E]* Market adjustment-AFS   \$30,000

Equity unrealized holding gain on stocks<sup>2</sup>                      \$30,000

*To record unrealized holding gains and losses at net.*

*The net of these appear on the income statement.*

- iv. The ledger for available-for-sale securities follows:

	Investment in Stocks-AFS	Market Adjustment-AFS
Balance-2002	\$120,000	\$10,000
Entry <i>[C]</i>	\$85,000	

<sup>2</sup> When the balance shifts to a credit one the account becomes an equity account reflecting unrealized holding gains.



Entry <b>[D]</b>	\$35,000	\$5,000
Entry <b>[E]</b>		\$30,000
Balance-2003	<u>\$170,000</u>	<u>\$25,000</u>

	Contra Equity or Equity	Realized loss	
Balance-2000	\$10,000		
Entry [D]	\$5,000	\$10,000	
Entry [E]	\$30,000		
Closing Entry	_____	_____	\$10,000
Balance-2001	\$25,000	\$0	

- v. Note to the students the timing difference between the two kinds of securities. There were \$5,000 more in losses this year for the available-for-sale securities because those losses were on the income statement in a prior year for trading securities.
5. Pass out Phase 4 of the unfolding problem. Give the students some time to prepare their report in groups.
  - a. The report could take on many forms but it must contain the following information for available-for-sale securities:
    - i. The aggregate fair value of the securities.
    - ii. The gross unrealized holding gains and the gross unrealized holding losses.
    - iii. The proceeds from the sale of the securities and the gross realized and losses on those sales. The cost basis used to determine the gross realized gains and losses must also be shown. The way the cost basis was determined—FIFO, or specific identification—should also be disclosed.
    - iv. The change in net unrealized holding gain or loss on available-for-sale securities that is included in stockholders' equity for the period.
  - b. As time permits, have a group present its report and allow other groups to critique it.
  - c. The report below fulfills the disclosure requirements for available-for-sale securities. It may be made available on line or as a hard copy handout.

Watson Enterprises	
Investments in Available-for Sale Securities	
For the Year Ended December 31, 2003	
Current market value	\$195,000
Cost basis	<u>\$170,000</u>



Unrealized holding gains	\$25,000
Beginning balance-gross equity in holding gains	
\$5,000	
Holding gains for the current year <sup>3</sup>	<u>\$25,000</u>
Ending balance-Equity in holding gains	
\$30,000	
Beginning balance-gross contra equity in holding loss	(\$15,000)
(determined on the specific identification method)	
included in beginning contra equity <sup>4</sup>	\$5,000
Recovery of previously recognized unrealized holding loss	<u>\$5,000</u>
Ending balance-gross contra equity in holding loss	<u>(\$5,000)</u>
Net holding gains	\$25,000

- d. At the completion of Phase 4, students will have fulfilled Learning Objective 9.
6. Pass out Phase 5 of the unfolding problem. The directions given assume another Within-Team Jigsaw. Instructors not wishing to use this Cooperative Learning structure may have the groups solve the reclassification in both directions.
- a. Solution for the black suits (reclassification from trading to available-for-sale). In this case the available-for-sale securities are placed on the books at the current market value. The trading securities and their related market adjustment account are taken off the books at their book value. The difference is recorded as an unrecognized gain or loss, which will appear on the income statement. The journal entry is shown below.

Investment in stocks-AFS	\$50,000
Investment in stocks-trading	\$30,000
Market Adjustment-trading securities <sup>5</sup>	\$15,000
Unrealized gain on reclassification of securities	\$5,000

*To record reclassification of securities*

- b. Solution for red suits (reclassification from available for sale to trading). In this case there is the added complication of the equity account, which must be removed from the books along with the investment in available-for-sale securities (at cost), and the market adjustment account (at book value). The difference

<sup>3</sup> Pass out Phase 4 of the unfolding problem. Give the students some time to prepare their report in groups.

<sup>4</sup> This is from entry **[D]**.

<sup>5</sup> This is the sum of the gains for the previous two years.

between these amounts and the current value of the transferred security an unrealized gain or loss (income statement accounts). The entry is shown below.

Investment in stocks-trading	\$50,000
Equity unrealized holding gain on stocks <sup>6</sup>	\$15,000
Investment in stocks-AFS	\$30,000
Market Adjustment-AFS <sup>7</sup>	\$15,000
Unrealized gain on transfer of securities	\$20,000

- c. Having completed Phase 15, students will have fulfilled Learning Objective 10.
7. To record reclassification of securities. Time permitting, answer student questions and review the principles of accounting for minority passive investments.

## Assessment Strategies

The PBL Worksheet that is included contains a block at the bottom of the second page that asks students what they have learned. Throughout the process, the instructor may use student responses on the worksheet to assess learning (formative assessment). Having worked through this problem, students should be able to successfully take traditional accounting tests containing problems and questions about the equity method of accounting. Instructors may wish to write more challenging questions to deal with the joint venture aspects of the problem (summative assessment).

## Solution Notes

The problem solution is contained within the author's teaching notes.

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<sup>6</sup> This is the sum of the gains for the previous two years.

<sup>7</sup> This is the sum of the gains for the previous two years.