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Accelerating Corporate Performance: Stock Buybacks with Zip

Paul D. Kimmel and Terry D. Warfield

ABSTRACT: Like many companies, Caravan International occasionally repurchases its shares in the open market. With a traditional stock repurchase program, Caravan and other companies sometimes are unable to maximize the financial reporting benefits of stock buybacks. However, the "Accelerated Share Repurchase" (ASR) agreement, recently introduced by the investment banking industry, allows companies to execute their treasury stock programs and take some of the uncertainty out of share repurchase transactions. This case provides a context for examining the specific benefits of these plans as well as the potential risks. It will help you understand earnings per share (EPS) calculations and the accounting for financial instruments used in ASRs. The case illustrates how managers sometimes structure transactions to take advantage of favorable accounting treatment, and thus achieve EPS targets.

INTRODUCTION

It is December 15, 2006. Phillip Groth, CFO, and Carver Smith, Controller, both employees of Caravan International, are seated in a conference room with Hank Weatherspoon, an investment banker for the firm of Waynesboro and Franklin. Weatherspoon requested the meeting to discuss a proposal for Caravan's stock buyback program. Caravan has engaged in a number of previous large stock buybacks to make shares available for its employee stock option plan and for use as currency in acquisitions of other companies. Caravan has a large number of employee stock options that will most likely be exercised in the near future. Therefore, Weatherspoon is anticipating that Caravan will soon initiate a large stock buyback to minimize outstanding shares and thus avoid diluting its earnings per share. Because Weatherspoon believes that he can structure Caravan's stock buyback in a more beneficial fashion, he scheduled a meeting with Groth and Smith.

On the date of the meeting, Weatherspoon began his presentation after a brief exchange of pleasantries:

> *Weatherspoon*: In your past stock repurchases you have typically announced your intentions to repurchase anywhere from 500,000 to 1,000,000 shares over the subsequent 12-month period. You then repurchased the shares in two to four open-market repurchases scattered throughout the year. This approach enabled you to repurchase the shares when you thought the price was advantageous. However,

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this approach has the disadvantage of delaying some of the stock buyback's beneficial aspects.

Groth: What do you mean by that?

Weatherspoon: One of the primary benefits of a stock buyback is that it reduces the number of outstanding shares, and thus increases reported earnings per share. Suppose that you plan to purchase 1,000,000 shares in the coming year. Under your usual approach, your stock repurchases are scattered throughout the year; therefore, the beneficial impact on earnings per share that results from reducing shares is much reduced. Using our approach, you would instead record a 1,000,000-share reduction in the number of outstanding shares immediately after executing the buyback plan, all at a pre-agreed price.

Groth: That does sound good.

Weatherspoon: An additional benefit of a stock buyback is that, by executing the transaction at the beginning of the buyback period, you send a more credible signal to the market by actually acting on your stated intentions. Otherwise, in some past instances, due to either cash shortfalls or increases in the cost of shares, you have only partially executed your announced share repurchase plan. For example, two years ago you only repurchased half as many shares as you had originally stated that you would. By not fulfilling your originally stated plan, you potentially left some investors skeptical about your real intentions.

Groth: How does your plan work?

Weatherspoon: Our approach, a fairly common one, is called an "accelerated share repurchase." Let me explain the steps. After you announce your share repurchase plan, you buy all of the shares at a pre-agreed price from our firm. For example, Caravan's stock is currently selling for $45 dollars. If we arranged for a repurchase of 1,000,000 shares today, then you would give us $45,000,000, and we would give you 1,000,000 shares.

Groth: I didn't realize that you are holding so many of our shares.

Weatherspoon: We aren't, but our institutional clients are. We simply borrow the shares from them, and then sell them to you. This process enables you to purchase more shares than are currently available in the market, and you do so without driving the price up. However, as a result of borrowing shares from our clients, we are in a short position on your shares. So, to protect us against loss on this short position, we require that you agree to a forward sale contract. Under this forward contract, you agree to sell our firm shares at a price equal to the price at the initiation of the transaction, or in this case, $45. Any difference between the market price and the agreed price at the date of settlement is payable in either cash or additional shares, at your discretion. Throughout the buyback period, we close out our short position by buying shares in the market to replace the shares we borrowed from our clients. For example, suppose that we purchase 1,000,000 shares at an average price of $60. You would either pay us $15,000,000 [($60 − $45) × 1,000,000] or 250,000 additional shares ($15,000,000/$60). On the other hand, if we only pay $30 for the shares, then we would pay you $15,000,000.

Smith: What about the accounting? What is the accounting treatment for this transaction? It would seem that Caravan's forward sale contract would be treated as a derivative. If that's the case, then the gains and losses on the contract that result from changes in Caravan's stock price would flow directly into net income, negating much of the earnings per share benefit.

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Weatherspoon: That's the beauty of it. By using an accelerated share repurchase plan, you get an immediate boost to EPS because of the immediate reduction in shares outstanding. Furthermore, under an Emerging Issues Task Force (EITF) ruling issued in the late 1990s, the forward sale contract does not get derivative treatment because the contract is an instrument indexed to Caravan's own stock. In fact, Caravan has the option of settling in shares. As a result, gains or losses on the contract are recorded as adjustments to equity, rather than as a component of income. In other words, if the gain or loss is paid in cash, then the amount directly increases or decreases stockholders' equity. Just so you know, for diluted EPS calculations, if your intent is to pay the difference in cash, then the numerator of EPS is adjusted for the gain or loss. On the other hand, if you intend to settle by issuing additional shares, then the additional shares increase the shares outstanding. Thus, if your share price changes, then the initial EPS improvement gained at the inception of the deal may change to some extent.

I have prepared the following example for a hypothetical company to illustrate the accounting treatment. Suppose that XYZ Company engages in an accelerated share repurchase (ASR) on January 2, 2007 for 20,000 shares at an initial price of $20 per share. XYZ makes the following entry to record the ASR:

Treasury Stock	400,000	
Cash		400,000

Assume XYZ had 2006 net income of $360,000 and that earning per share for 2006 was $1.80 ($360,000 net income ÷ 200,000 shares outstanding). If XYZ estimates that 2007 net income will also be $360,000, then its EPS for 2007 will increase to $2 [$360,000 ÷ (200,000 − 20,000) shares outstanding]. If XYZ's share price decreases to $15 during the settlement period, ending June 30, 2007, then the company will receive a $100,000 [($20 − $15) × 20,000 shares] cash payment from Waynesboro and Franklin on settlement of the forward sale agreement. This payment reduces the net cost of the share repurchase program to XYZ and is reported as a direct increase to stockholders' equity.

Groth: Thank you for your presentation. We would like to do some additional analysis before we make a decision. I will call you within a week.

After Weatherspoon departs, Groth and Smith meet to discuss the ASR proposal.

Groth: I am still concerned that this opportunity might be too good to be true. Even if the transaction is legal and the accounting is in accordance with GAAP, I'm not sure that it will be perceived positively by our shareholders. I'm afraid the transaction may be perceived as an artificial mechanism to boost EPS. I would like you and your staff to determine the impact of an ASR on Caravan's financial statements and to verify the GAAP treatment that Weatherspoon presented.

REQUIREMENTS

Using the projected 2007 comparative financial statements presented below, you are to prepare responses to the following questions for Smith. These responses will form the basis of Smith's report to Groth.

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1. Using the financial statement data presented in Exhibit 1, compute the following for 2007 and 2006 (You may assume that the December 31, 2006 balance sheet balances are representative for December 31, 2005):
   a. Basic Earnings per Share
   b. Debt-Equity Ratio
   c. Return on Assets
2. Assume that Caravan buys back 250,000 shares on March 31, 2007, and 750,000 shares on September 30, 2007, at a price of $45 on each date, using a traditional repurchase program.
   a. What entry is made on each of the dates that treasury stock is repurchased?
   b. What is the total amount paid to execute the share repurchase program?
   c. Repeat the analysis for Requirement 1 and discuss the impact of a traditional share repurchase on basic earnings per share, the debt-equity ratio, and ROA.
3. Assume that Caravan enters into an ASR agreement to repurchase 1,000,000 shares on January 2, 2007 at a price of $45, and settles the forward contract on September 30, 2007.
   a. Prepare the journal entries at January 2, 2007 and September 30, 2007. Assume that Caravan's share price holds steady such that the average settlement price at September 30, 2007 is $45 per share.
   b. What is the total amount paid to execute the share repurchase program?
   c. Repeat the analysis for Requirement 1 and discuss how the results differ among the base case, the traditional repurchase, and the ASR with respect to basic earnings per share, the debt-equity ratio, and ROA.
4. Repeat the analysis for Requirement 3, assuming the difference is paid in cash at an average settlement price of $50.
5. Assuming the ASR in Requirement 3, if Caravan prepares financial statements on June 30, 2007, when its share price is $50, is the value of the ASR reflected in Caravan's financial statements on that date? Explain. What risk does the ASR create for Caravan that it would not face under a traditional plan, and are the potential consequences of this risk adequately reported under the current standards?
6. Conduct research of the authoritative accounting literature to verify the accounting for ASRs as articulated by Weatherspoon. Explain the accounting (with citations to the literature) for the basic earnings per share treatment for the ASR and the accounting for the forward sale contract.
7. What does Groth (Caravan's CFO) mean when he says the ASR may be "an artificial mechanism" to increase EPS? Is it possible that a transaction could be both legal and in accordance with GAAP, but not be considered ethical? Discuss.
8. Should Caravan execute the share repurchase using the ASR arrangement? Prepare a memorandum to Groth that briefly summarizes the accounting, discusses the pros and cons of the ASR, and includes consideration of ethical implications.

ADVANCED REQUIREMENTS

9. Diluted Earnings per Share Effects of ASRs
   a. Describe the basic rules for computing basic and diluted earnings per share, and explain the key difference between the two approaches.
   b. To calculate diluted EPS when there is a loss on the ASR forward contract, one must consider management's intent with respect to settling the forward sale contract. If the intent is to settle in shares, then the treasury stock method is used, with

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adjustment to the shares in the denominator equal to the amount owed, based on average prices during the year. If the intent is to settle in cash, then the "if converted" method, similar to convertible bonds, is used. Any losses on the forward contract (again, based on average prices during the period) are included as a numerator adjustment to net income.

Assume that Caravan enters into an ASR agreement to repurchase 1,000,000 shares on January 2, 2007, at an agreed price of $45 per share. The forward contract will be settled on February 1, 2008. Assume that Caravan's stock price on December 31, 2007 is $49 per share and the average share price during 2007 is $48. Shares used to compute diluted EPS—before consideration of the ASRs—are 10,200,000 for 2007.

i. Calculate diluted EPS for 2007, assuming that Caravan intends to settle in shares.

ii. Calculate diluted EPS for 2007, assuming that Caravan will settle in cash. (Assume a tax rate of 35 percent.)

c. The FASB and IASB are evaluating the implications of ASRs for the calculation of diluted EPS. Under one approach, a company with the choice between cash or share settlement would not be allowed to assume that the forward contract will be settled in cash, even if that option is available, and even if the company has always used this option. Instead, the company must assume that the contract will be settled in shares. Under this assumption, the company uses the treasury stock method to incorporate the effects of any unrealized losses on the ASR into diluted EPS. Assume that the FASB changes the rules in this fashion. Referring to the analysis in Requirement 9.b, discuss the implications of this approach. In your response, discuss whether a company's intent should affect the accounting it uses to record a transaction.

EXHIBIT 1
Caravan International
Financial Statements

Balance Sheets at December 31 (dollars in thousands)	**2007 (Estimated)**	**2006**
Cash	$195,006	$110,768
Accounts Receivable	295,993	263,087
Inventory	80,756	102,892
Other Current Assets	20,696	25,169
Total Current Assets	592,451	501,916
Property, Plant, and Equipment, net	263,849	288,127
Other Assets	84,162	97,945
Total Assets	$940,462	$887,988
Accounts Payable	$107,943	$105,656
Notes Payable	58,761	63,250
Unearned Revenue	38,315	54,700
Total Current Liabilities	205,019	223,606
Long-Term Debt	146,743	144,001
Total Liabilities	351,762	367,607

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EXHIBIT 1 (continued)

Balance Sheets at December 31 (dollars in thousands)	**2007 (Estimated)**	**2006**
Common Stock ($1 par; 10,000,000 shares issued and outstanding)	10,000	10,000
APIC: Common Stock	41,454	41,454
Retained Earnings	651,292	582,973
Treasury Stock	(114,046)	(114,046)
Total Stockholders' Equity	588,700	520,381
Total Liabilities and Stockholders' Equity	$940,462	$887,988

Income Statements for the Year Ended December 31	**2007 (Estimated)**	**2006**	**2005**
Sales	$1,543,927	$1,424,184	$1,318,126
Cost of Sales	1,200,487	1,115,761	1,033,281
Gross Profit	343,440	308,423	284,845
Selling Expenses	124,422	97,638	114,212
General and Administrative Expenses	113,962	102,278	101,094
Operating Income	105,056	108,507	69,539
Interest Expense	5,472	6,248	9,486
Other Expense (Income)	(3,975)	(2,612)	(2,353)
Income Before Income Taxes	103,559	104,871	62,406
Income Taxes	35,240	33,413	23,237
Net Income	$68,319	$71,458	$39,169

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CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE

Case Background

Accelerated Share Repurchases (ASRs) represent the latest approach used by companies to avoid the dilution of earnings per share that results from stock option exercises. Recently, previously used approaches to avoid dilution (such as writing put options on the company's own stock) became unpopular because of the accounting changes that resulted from SFAS No. 150.

An ASR is a transaction arranged by an investment banking firm for a fee. Under an ASR, a company purchases a block of shares from an investment banking firm, which borrows the shares from its clients. The company agrees to a forward purchase contract for its shares to protect the investment banking firm from the exposure created by the short position on the shares. With respect to put options, companies consider the accounting treatment of ASRs desirable for a number of reasons. An ASR is accounted for as two separate transactions: a treasury stock repurchase (which immediately reduces the number of shares outstanding for the calculation of earnings per share) and a forward contract on the company's own stock.

The primary accounting advantage of ASRs over put options is that, unlike put options, ASRs do not have to be marked to market and, therefore, fluctuations in the underlying stock price do not affect net income. This treatment is allowed because the company has the choice of satisfying the contract with either shares or cash. This case provides an ideal setting for students to see how financial instruments can be used, sometimes inappropriately, to manage earnings per share. The case also demonstrates a situation where management can change an accounting result by simply changing its stated intent regarding a transaction (in this case, by changing the stated intent to satisfy the contract with either cash or stock).

Further, the case helps students develop analytical skills in the context of stock repurchases and in the application of EPS calculations to complex financial arrangements. The case also has a substantive written component. In addition, students are required to conduct research of the authoritative literature, an important professional competency also tested on the computerized CPA exam. Finally, the advanced requirements on diluted EPS can be used to examine management's intent as a determinant of the accounting treatment. Instructors may wish to use the case to examine the impact of intent-based standards on accounting reports.

Case Objectives and Use

The case provides a vehicle to facilitate an integrative discussion of earnings per share, earnings management, and financial instruments. The purpose of the case is to provide a context for students to apply treasury stock accounting, apply EPS rules to simple and complex stock repurchase arrangements, to conduct research of the authoritative literature, and to communicate the results of their analysis and research in a written memorandum. The case can be used in intermediate or advanced financial accounting at either the undergraduate or graduate level and can be covered in a 95-minute time frame, with advance preparation by students. The requirements of the case are designed to increase students' understanding of financial instruments and their use in managing earnings per share. Also, the requirements are based on transactions and disclosures similar to those used by actual companies. The case encourages students to think analytically about how the structure of the stock repurchase can affect the accounting and reporting and they are asked to critically evaluate the pros and cons of the alternative structures presented. The sequence of the case requirements demonstrates the financial statement and earnings per share effects of ASRs.

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The subject of the case is timely because even relatively small companies are increasingly using more complex financial arrangements, such as ASRs, for a variety of purposes. Because of these arrangements' complexity, companies must ensure that external stakeholders understand the risks and benefits associated with ASRs and their impact on reported results. In the aftermath of Enron, and as a result of Sarbanes-Oxley, many companies have made public statements stating that they would no longer engage in transactions whose sole purpose was the management of earnings. Therefore, the use of ASRs represents a transaction whose merits can be questioned because of their potential use to artificially reduce shares outstanding and increase earnings per share.

Overview of Case Requirements

We presented the case from the perspective of an accounting/finance staff person of a company that is considering the use of an ASR. The staff person is to evaluate the impact of the ASRs and report back to top management. The case comprises multiple requirements that are sequenced to build the students' understanding of ASRs, enabling them to proceed to subsequent case requirements. The requirements are classified as basic and advanced (for those faculty who might not want to address diluted EPS issues).

The first requirement asks students to determine the base-line financial position and earnings per share of the company, prior to any form of stock repurchase transaction. Next, the second requirement asks students to review the accounting entries and financial statement impact of a traditional repurchase program. To complete the third, fourth, and fifth case requirements, students must review the accounting entries and financial statement impact of an ASR, first assuming the stock price remains constant from initiation of the ASR until settlement, and then with an increase in the stock price prior to settlement. The sixth requirement asks students to perform a basic review of the authoritative literature related to ASRs. The seventh and eighth requirements ask students to evaluate the use of ASRs both in terms of financial merits as well as its potential ethical implications.

To meet the ninth (advanced) requirement, students delve into the alternative dilutive EPS effects under different settlement assumptions. As revealed in the case, management's stated intent to settle the forward contract with cash, as opposed to stock, can have a significant effect on diluted EPS computations. This last requirement provides an opportunity to discuss whether management's intent should be used as a basis for financial reporting. Also, this last requirement illustrates the difficulty of accomplishing consistent reporting in different contexts.

Background Readings/References

For additional background and possible reading assignments for students, see "Buyback Boomlet" by Bernard Condon, *Forbes* (May 22, 2006; pages 52–53). This short article provides information about recent trends in treasury stock transactions. Also, see "Stock Buyback Now May Spur a Big Bill Later," by Mark Maremont and Serena Ng, *Wall Street Journal* (January 31, 2006; page C1) for a very accessible discussion of ASRs (also titled "Buybacks Via Loophole Can Have Hidden Costs.")

Possible Teaching Approaches

1. Class Discussion

The case material can be used to motivate class discussion of conceptual issues related to ASR accounting. For example, prior to the class session, students can conduct the basic analysis of Requirements 1 through 8. The instructor can then lead a single class-period

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discussion of the case, including the more advanced requirements related to Requirement 9.

2. In-Class Team Learning

A second approach for covering the material in the case employs team-learning techniques.[1] If small groups are already being employed within the course, then the case materials can be used effectively as a "mini-test" in which students are graded individually and in groups on case requirements. On an individual basis and prior to class, students can be assigned the base analysis. During the class period, groups of four to five students can be formed and assigned the subsequent case requirements to work through during the class period. A lively discussion should ensue as student groups present and defend their solutions. The instructor can help guide the discussion and introduce the more advanced concepts as the discussion unfolds. Students should be challenged to critically present their arguments, as well as evaluate the arguments of other classmates.

Student Survey Instrument

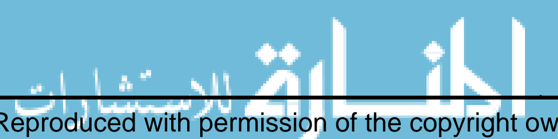
The case was piloted in a senior-level Accounting Topics course. A survey was distributed after students worked on the case individually and in groups. Students were asked to provide feedback on the following questions, using a five-point scale with the following response categories: (1) Strongly Disagree, (2) Disagree, (3) Neither agree or disagree, (4) Agree, and (5) Strongly Agree. Mean (median) responses for the 70 (out of 75) students completing the survey are reported below.

	Mean (Median) Response
1. The case helped me understand the difference between a standard stock repurchase and an Accelerated Stock Repurchase.	4.1 (4)
2. The case helped me understand the financial statement impact of an Accelerated Stock Repurchase relative to a standard stock repurchase.	3.9 (4)
3. The case helped me understand the economic motivations that management might have for employing an Accelerated Stock Repurchase rather than a standard share repurchase.	4.1 (4)
4. The case helped me understand the required accounting for an Accelerated Stock Repurchase.	3.8 (4)
5. The case familiarized me with the issues faced by the FASB as it tries to develop new financial accounting standards for Accelerated Stock Repurchases. (Advanced Requirement only)	3.5 (4)*

* Responses by 35 students. The advanced requirement was addressed only in a follow-up in-class discussion.

Students were also given the opportunity to comment on the case's realism and clarity. All students felt the case was clear and, for the most part, realistic. We incorporated students' suggestions for improving the clarity of the instructions (eight comments) in the final version of the case. All but one student recommended that instructors at other universities use this case.

[1] See, for example, Johnson et al. (1991) and Warfield (2007).



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In summary, the case was well received by students. A number of students commented on the positive aspects of learning about this real-world accounting issue.

TEACHING NOTES

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