

## COMPANY ARTICLES Resource Manual



*Realistic and  
Innovative  
Business English  
Learning*

**Business:** the purchase and sale of goods and services in an attempt to make a profit.

**Simulation:** training by imitating the behavior of some situation or process by means of a reasonably accurate model.



 **DVBE**  
DAVE VOLEK'S BUSINESS ENGLISH

w w w . d v b e . b z



# CONTENTS

<b>EXERCISE 3: DESCRIBING THE SECURITIES</b>	<b>1</b>
<i>Bonds</i>	1
<i>Common Stock</i>	2
<i>Common Stock (Non-voting)</i>	2
<i>Preferred Shares</i>	3
<i>Convertible Preferred Shares</i>	3
<i>Leveraging</i>	5
<b>EXERCISE 4: LIQUIDATION, DISSOLUTION, AND PROFITS</b>	<b>7</b>
<i>Scenario A, Exercise #4</i>	7
<i>Scenario B, Exercise #4</i>	8
<i>Scenario C, Exercise #4</i>	9
<i>Scenario D, Exercise #4</i>	10
<i>Scenario E, Exercise #4</i>	11
<i>Scenario F, Exercise #4</i>	12
<b>EXAMPLE SOLUTION TO EXERCISE #4, SCENARIO A</b>	<b>13</b>
<i>Solution to Liquidation, Scenario A</i>	13
<i>Solution to Dissolution, Scenario A</i>	17
<i>Solution for Profit, Scenario A</i>	18
<i>Answers to Vocabulary Quiz</i>	19



## EXERCISE 3: DESCRIBING THE SECURITIES

### Bonds

#### Investor

An investor buying bonds has two advantages: 1) a high guaranteed income and 2) lower risk. Usually, bond interest is higher than the investor can earn with a bank term deposit. This interest payment is almost guaranteed and only severe company financial problems will prevent the company from fulfilling its obligations. If the problems are severe enough to force liquidation of the company, bondholders are usually one of the first investors to get paid out. Hence, they rarely lose all of their original investment.

The main disadvantage of bonds is that if the company does extremely well, the bondholders do not share in this success.

#### Company

By issuing bonds, the company gains several financial advantages. The interest rate on bonds\* is usually lower than the company would pay by borrowing from banks. Bank loans also require regular principal and interest payments which put a continual drain on company cash flow while bonds require only regular interest payments.

The major disadvantage is that the bonds have to be paid in full on their maturity dates. As these dates get closer, the company has to set aside funds to fulfill these obligations regardless of the company's financial state or desired plans at that time.

*\* This is true for "quality" bonds, which are issued by well established companies with a good reputation. Companies with a higher perceived risk can only issue "junk" bonds which usually pay a higher interest rate.*



## Common Stock

### Investor

Common shareholders share the benefits of the company's prosperity, which is shown in the form of dividend payment or higher share prices. They also have the right to select the company's management. The main disadvantage to the investor is risk: if the company does poorly and fails, the shareholder gets nothing or very little.

### Company

When a company issues common stock, there is no legal obligation to these security holders other than the rights of ownership. There are no interest payments or mandatory dividend payments. By obtaining financing through common stock as opposed to bank loans or bonds, there are no interest or principal payments to be made, thereby improving the company's cash flow during the startup phase or through difficult times. Common stock also gives management the choice of either reinvesting the profits back into the company or to paying them out to shareholders as dividends.

There is small disadvantage to the company financing itself by favoring common stock over loans and bonds. By not leveraging itself, the company earns a lower return on equity capital. The instructor can provide a fuller explanation on leveraging if you want.

## Common Stock (Non-voting)

The voting and non-voting common shares have similar advantages and disadvantages. The only difference is that non-voting shares have no say in the management of the company. They still have the same ownership and entitlement to dividends.

Non-voting shares are used when the founders of a company need equity financing to expand their operations. If they end up with a minority of voting stock, they can be easily replaced by another management team. And this team may have better political skills to win board elections than they have management skills to run a business.

### Investor

The investor buying non-voting shares is certain that the founding management of the company stays as management because this management holds a majority of the voting shares. However, if this management turns bad—as sometimes happens when the company is passed to the younger generation—the investors have no effective way of replacing the management.



## Company

By keeping most of the voting stock to themselves, the founding management ensures that it will be in control of the company for many years. They can look further into the future instead of creating short-term value so the shareholders don't fire them. The disadvantage is that it is becoming more difficult to attract new investment by selling non-voting shares—and stock market regulators are becoming less inclined to let a company issue non-voting stock.

## Preferred Shares

### Investor

The advantage to the investor of preferred shares over bonds is mainly a tax advantage. In most countries, earnings from dividends are taxed at a lower rate than interest earnings from bonds. So a preferred share giving the same nominal rate of return as a bond will actually put more money in the investor's pocket after taxes are considered. Preferred shares usually offer high security in case of company financial failure, but not as high as bonds.

The disadvantage is that dividend payments are dependent on the good fortunes of the company. If the company runs into financial problems, it is not obligated to pay preferred shareholders. Preferred shareholders also do not share in the "extra" profits if the company becomes very successful because their dividend is predetermined as part of the preferred share offering.

### Company

The main advantage for the company of issuing preferred shares over bonds is that dividend payments are non-obligatory. If the company runs into problems, it doesn't have to pay preferred share dividends until its finances get better.

However, unlike bond interest payments, preferred dividend payments are not tax deductible from the corporation expenses. In other words, dividend payments to preferred shares have to come out of post-tax earnings.

## Convertible Preferred Shares

### Investor

With convertible preferred shares, the investor has the best of both worlds: low risk and sharing of profits. However, this flexibility usually means that returns are lower. If the convertible remains as a



preferred share, the dividend payment is lower than that of the regular preferred. If the convertible is converted into common stock, the profit per equity invested is lower than what the investor would have received had he invested in common stock originally.

## Company

By issuing convertible shares, the company is able to attract a certain type of investor that it couldn't attract with other investment offerings. The disadvantage is that common shareholders may not like the idea the convertible preferred shareholder getting a free ride until the company becomes profitable: the value of their own investment is somewhat uncertain as new shares could be converted quite quickly, thereby diluting the common stock value.

Practice Your **Business English** with Native Speakers!



Make big oil deals in this business simulation using e-mail and instant messaging.

Gain finance and negotiation experience.

**oil**  
**financier**  
.com

Visit [www.OilFinancier.com](http://www.OilFinancier.com) to take advantage of this valuable opportunity!



## Leveraging

Consider two similar companies that need to raise \$1m for their capital projects:

- Company One finances its project by selling 100,000 shares at \$10.00 a share.
- Company Two finances its project by selling 50,000 shares at \$10.00 a share. It finances the other \$500,000 from a five-year bank loan at 7% interest.

Both companies get their capital projects up and running. They both earn \$100,000 in profits in their first year. Corporate taxes on profits are 30% of profits. Which shareholders got more for their money, Company One or Company Two?

Here is the breakdown for Company One:

Earnings Before Taxes and Interest		\$100,000
Taxes	$\$100,000 \times 0.30$	<u>30,000</u>
Post-Tax Earnings		<u>\$70,000</u>
Earnings per share	$\$70,000 \div 100,000$	\$0.70

Here is the breakdown for Company Two:

Earnings Before Taxes and Interest		\$100,000
Interest	$\$500,000 \times 0.07$	<u>35,000</u>
Pre-Tax Earnings		65,000
Taxes	$\$65,000 \times 0.30$	<u>19,500</u>
Post-Tax Earnings		<u>\$45,500</u>
Earnings per share	$\$45,500 \div 50,000$	\$0.91

Because of using debt, Company Two brought a better return to its shareholders than Company One.

Leveraging—using more debt to finance a capital project—is a common business strategy to increase profits. The more debt a company has, the larger the profits per share.



To show this concept further, let's assume that Company Three has all the same circumstances as the other two companies except that it financed itself with 90% debt (\$900,000) and only 10% equity (10,000 shares at \$10.00 each).

Earnings before Interest and Taxes		\$100,000
Interest	$\$900,000 \times 0.07$	<u>63,000</u>
Pre-Tax Earnings		37,000
Taxes	$\$37,000 \times 0.30$	<u>11,100</u>
Post-Tax Earnings		<u>\$25,900</u>
Earnings per share	$\$25,900 \div 10,000$	\$2.59

Because it seems leveraging is such a good thing for increasing earnings, why don't more businesses carry more debt to increase the per share profit? The problem with debt is that it requires more cash outflow. Company One had no debt so there are no principal or interest payments to make. Company Two would have had to pay to its bank \$135,000 ( $\$500,000 \div 5 + \$35,000$ ) each year. Company Three's obligation would have been \$243,000 ( $\$900,000 \div 5 + \$63,000$ ).

If times were bad (and nearly all business go through times of profits and times of losses), Company One would be in a much better position to weather a storm. Companies Two or Three may not make it through a tough time to enjoy the profitable time that could come later.

There is a trade off between debt and equity financing. Debt increases the earnings on the money invested in good times. But debt makes keeping a company alive during tough times more difficult. All business financiers must strike that right balance between debt and equity to get the best of both.





## EXERCISE 4: LIQUIDATION, DISSOLUTION, AND PROFITS

### Scenario A, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series A)	40,000	40
Preferred Shares (Series A)	100,000	10
Convertible Preferred (Series B)	160,000	16
Common Stock (Series A)	5,500,000	55

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$2.5 m. Right now, there is \$55.5m in the liquidator's hands and their fees will be \$200,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$200,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$75 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## Scenario B, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series B)	15,000	15
Preferred Shares (Series A)	20,000	2
Convertible Preferred (Series B)	1,600,000	160
Common Stock (Series A)	2,200,000	22

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$1.7 m. Right now, there is \$14.8m in the liquidator's hands and their fees will be \$100,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$250,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$198 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## Scenario C, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series A)	52,000	52
Bonds (Series B)	20,000	20
Convertible Preferred (Series B)	50,000	5
Common Stock (Series A)	10,500,000	105

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$4.1 m. Right now, there is \$75.1m in the liquidator's hands and their fees will be \$300,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$410,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$87 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## Scenario D, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series A)	5,000	5
Preferred Shares (Series A)	1,100,000	110
Convertible Preferred (Series B)	230,000	23
Common Stock (Series A)	1,800,000	18

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$1.7 m. Right now, there is \$68.5m in the liquidator's hands and their fees will be \$75,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$500,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$175 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## Scenario E, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series B)	70,000	70
Preferred Shares (Series A)	1,800,000	180
Convertible Preferred (Series B)	30,000	3
Common Stock (Series A)	7,400,000	74

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$6.2 m. Right now, there is \$105.5m in the liquidator's hands and their fees will be \$375,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$185,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$285 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## Scenario F, Exercise #4

Business often requires discussing calculations with other business people. These next three accounting problems give you this practice. For these problems, assume the company has the **capitalization structure** below and use the articles to make the calculations.

Security	Number Issued	Capitalization (\$m)
Bonds (Series B)	45,000	45
Preferred Shares (Series A)	130,000	13
Convertible Preferred (Series B)	40,000	4
Common Stock (Series A)	800,000	8

### Liquidation

The company ran into severe problems and the creditors have succeeded in getting a **liquidator** to **wind up** the company. The liquidator has converted all the assets into cash. Secured creditors took their rightful amounts when the assets were sold. Unsecured creditors are still owed \$2.5m. Right now, there is \$17.8m in the liquidator's hands and their fees will be \$295,000. The official liquidation date has been set for August 31. Calculate how much the various security holders will be paid.

### Dissolution

The company's products have gone past the **decline stage** of the **market cycle** and the Board has decided that the best value for the shareholders would be to sell all the company's assets and **dissolve** the company.

At the July 31 Board meeting, it was reported that all assets had been converted to cash and all secured and unsecured liabilities had been paid off. The company solicitor and accountant agreed that their final dissolution fees would be \$250,000. The Board decided that the official dissolution date would be August 31, after which all funds will be paid out.

If the cash holdings are currently \$114 m, what will each common shareholder receive?

### Profit

Company profits before any payments to security holders for the next fiscal year are estimated to be \$15,000,000. Calculate the estimated earnings per common share for **fully diluted** and **non-diluted** positions.



## EXAMPLE SOLUTION TO EXERCISE #4, SCENARIO A

### *Solution to Liquidation, Scenario A*

#### Liquidation Table

All funds expressed in million dollars, except payment per preferred share.

			Funds in million \$
Total Funds Available			\$55.500
Liquidator's Fees ❶			0.200
Subtotal			\$55.300
Bond Interest ❷	40,000 bonds × \$57.50 per bond × (164 ÷ 182.5)		2.067
Subtotal			\$53.233
Redeem Bonds ❸	40,000 bonds × \$1065		42.600
Subtotal			10.633
Unsecured Creditors ❹			2.500
Subtotal			8.133
Dividends to A Preferreds ❺	100,000 × \$7 × (77 ÷ 365)	0.148	
Dividends to B Preferreds ❻	160,000 × \$4 × (46 ÷ 365)	0.081	0.229
Subtotal			\$7.904
Total Number of Series A and B Preferreds ❼	100,000 + 160,000 = 260,000		
Payment per preferred share (\$)	\$7,904,000 ÷ 260,000	\$30.40	



❶ When a court appoints a liquidator, it is commonly understood that the liquidator is going to be paid in full—and not be one of the other creditors waiting in line. Otherwise it would be rather silly for a liquidator to accept this position.

Under a liquidation, the secured creditors have already taken their assets because they had a lien on them. So we need not deal with them here.

Under the company articles in this module, the bondholders are to be paid out before the unsecured creditors. Although some courts—and depending on the legal situation—may give preference to the unsecured creditors over all security holders, we will stick to the articles: bondholders are ahead of the unsecured creditors.

❷ But before we can pay the bondholders, we must first calculate the interest they are owed. Assuming they were paid their rightful interest on March 20, we need to calculate the time from this date to the liquidation date of August 31. The number of days in each month, from March to August is  $11+30+31+30+31+31=164$  days of unpaid interest. So we prorate this 164 days for the half-year period of 182.5 days.

❸ So we have \$53,233,000 available for bondholders. Under article III.A.5.a, a liquidation or dissolution requires the company to pay the redeemable amount of \$1065 per bond. There is enough money to pay the bondholders their rightful amount.

Please note that for Series B bonds, article III.B.5.a provides for only the nominal—not redemption—value for liquidation and dissolution. So when working with Series B bonds in the other scenarios, the students must take this into consideration. Listen to how your students are applying bond payment to their scenario. If they are doing it incorrectly, ask them to read the articles more carefully.

❹ Next come the unsecured creditors. They have proven their claim for \$2,500,000. They will get all their money in this scenario.

There is a little more than \$8,000,000 to pay the next-in-line: the preferred shareholders. First, we have to calculate the dividends owed to them. We can assume their dividends have been paid in full.

❺ For the Series A preferreds, the last dividend payment was on June 15. The accrued time from June 15 to August 31 is  $15+31+31=77$  days, to be prorated over the year.

❻ For the Series B preferreds, the last dividend payment was on July 15. The accrued time from July 15 to August 31 is  $15+31=46$  days, to be prorated over the year.

❼ There's \$7,904,000 left for the preferred shareholders. Because this amount does not cover the preferred shareholders' original value, each shareholder will share equally in this amount. Note that under article III.D.3, Series B preferreds have the same priority as Series A. So each preferred share gets \$30.40 ( $\$7,904,000 \div 260,000$ ).

In this liquidation scenario, the bondholders and unsecured creditors got paid in full. The preferred shareholders received about 30% of their original investment. The common shareholders got nothing.

The other scenarios will have different results.





## A Few Arguments

In real business, such a liquidation would be a lot messier than this scenario. Secured creditors—even if they seize the assets they have liens on—would still want full payment if the asset is not worth the balance of the loan. And if the asset is worth more than the balance of the loan, they, legally speaking, have to return the excess to the liquidation process (and the liquidator would likely have to chase them down). Unsecured creditors have to prove their unpaid bills to the court. And if a company ever gets to the liquidation stage, it is quite likely it has not kept its bond interest and preferred dividend payments up to date, and this will factor into the calculations. And all sides will have their lawyers trying to bend the rules to their favor—and expect the liquidation process to somehow pay for their legal fees. A real mess indeed!

So this exercise has been watered down considerably to provide some good business English practice. I believe it will be enough challenge for many BE students. Perhaps a future DVBE module will provide a more realistic liquidation exercise.

Here is a question the students might bring up. Given that there is not enough money to cover the preferred shareholders, why is it necessary to calculate the preferred dividend payments at all—just give the shareholders a prorated amount of funds—based on the number of shares? There are two reasons for this:

- (1) The different payment dates and dividend rates means that Series A gets a little more dividend than Series B so the calculation must be applied to be fair. Otherwise, the Series B preferred will get a little more than they legally deserve.
- (2) The shareholders will be taxed differently on their dividend and capital loss. So it is quite important—as far as paying taxes—how much of the final payment is dividend and how much for “selling” the preferred shares.

And some students might figure out this next loophole. Given that the preferred shareholders have a buyback provision of \$85.00, wouldn't it make sense for some shareholders to demand the buyback during the liquidation process?

Under the current articles, it would seem that the first preferred shareholders to force the buyback would be the first to get their \$85.00 per share. And the liquidator would continue to pay out that \$85.00 per share until the \$7,904,000 is gone. Some preferred shareholders would get most of their investment back because they were quick to act; the rest would get nothing.

Again, the real world is a little more complicated than this simulation. Real company articles would likely have some provisions for shareholders to share equally under a liquidation. Or a court may rule that situation is somewhat extraordinary and may impose fairness on all shareholders, and disallow the buyback provision.

And if this situation were in the real world, some preferred shareholders would have recognized the company's financial troubles quite early and got their \$85.00 per share. Other shareholders may have asked for the buyback a little later, but the company was not in a position to pay it out. So should this second group of shareholders get their \$85.00 because they asked for the buyback before the liquidation started? It's hard to say, and I guess this why we need lawyers—but more importantly, why



we need lengthy and well written articles to anticipate situations such as this liquidation. Such articles make it easier for courts and contesting parties to come to solutions that are somewhat fair and based on much corporate experience.

So when most small businesses are incorporated, they assume the articles written by the government as the rules this business will abide by, without much consideration as to the nature of these articles are and how they can be applied.

I have had a little experience with company articles. I incorporated my first small business under the “Business Corporations Act of Alberta.” This business assumed the 150-page manual written by the government of Alberta many years previously. I had no idea of this manual’s significance until later.

To finance my business, I sold some shares in my company. Two years later, some of the shareholders were causing some problems, and we headed into litigation. Looking for a way around this uncertain and lengthy process, I read the “Act” from front to back. I found the section that allowed a company to transfer assets and operations to another company in such a way that would have left my problem-making shareholders with about 30% of their original investment. I told them the other shareholders would be given free shares in the new company when I made this transfer.

My lawyer said this was a little dirty, but it was legally acceptable. I and the dissenting shareholders reached a reasonable settlement quite quickly after that.



## Solution to Dissolution, Scenario A

To conduct the dissolution calculation, you can use much of the same table as the liquidation problem.

### Dissolution Table

All funds expressed in million dollars, except payment per common share

			Funds in million \$
Total Funds Available			<b>\$75.000</b>
Fees			0.200
Subtotal			\$74.800
Bond Interest	40,000 bonds × \$57.59 per bond × (164 ÷ 182.5)		2.067
Subtotal			\$72.733
Redeem Bonds	40,000 bonds × \$1065		42.600
Subtotal			30.133
Unsecured Creditors			<b>0</b>
Subtotal			30.133
Dividends to A Preferreds	100,000 × \$7 × (77 ÷ 365)	148,000	
Dividends to B Preferreds	160,000 × \$4 × (46 ÷ 365)	81,000	0.229
Subtotal			\$29.904
Repurchase of Preferred Shares ⑧	(100,000 + 160,000) × \$100		26.000
Funds available for Common Shares			\$3.904
Number of Common Shares	5,500,000		
<b>Payment per Common Share</b>	<b>\$3,904,000 ÷ 5,500,000</b>	<b>\$0.71</b>	

All the blue shading was from the liquidation table. I changed the number for *Total Funds Available* and *Unsecured Creditors* to reflect the different facts of the dissolution story, and then I redid the calculations.

⑧ The preferred shareholders, under article III.C.4.a, are entitled to \$100 per preferred share—if the funds are available. And there are sufficient funds to pay this out. Hence, there is no need to prorate the payment for the preferred shareholders in this case.

The remainder is divided equally among the common shareholders. They get less than 10% of the nominal value of their shares. The dissolution is complete.



## Solution for Profit, Scenario A

Fully diluted assumes that all convertible preferred shareholders convert all their CPS to common stock. Non-diluted means no conversion takes place.

In the tables below, all funds are expressed in millions of dollars, except earning per share.

NON-DILUTED			
Estimated Profit (\$m)			\$15.00
Bond Interest	$(40,000 \times \$57.50 \times 2)$ ❶	\$ 4.60	
Preferred 'A' Dividend	$(100,000 \times \$7)$ ❷	0.70	
CPS 'B' Dividend	$(160,000 \times \$4)$ ❸	<u>0.64</u>	<u>5.94</u>
Profit for Common Stock			<u>\$ 9.06</u>
Earnings per share:	$\$ 9.06 \text{ m} \div 5.5 \text{ m shares outstanding} = \$1.65 \text{ per share}$		

In the diluted case below, the CPS no longer receives a preferred dividend because it has been converted into common shares.

DILUTED			
Estimated Profit (\$m)			\$15.00
Bond Interest	$(40,000 \times \$57.50 \times 2)$	\$ 4.60	
Preferred 'A' Dividend	$(100,000 \times 7)$	0.70	
CPS 'B' Dividend ❹	0	<u>0.00</u>	<u>5.30</u>
Profit for Common Stock			<u>\$ 9.70</u>
Total shares = Original Common Stock + CPS Conversion ❺			
	$= 5,500,000 + 160,000 \times 5$		
	$= 6,300,000$		
Earnings per share = $\$9.70\text{m} \div 6.3\text{m shares} = \$1.54/\text{share}$			

- ❶ There are two payments made each year for Series A bonds.
- ❷ If the company is running profitably, it is obligated to pay this annual dividend to the Series A preferred shareholders.
- ❸ If the Series B preferred shareholders do not convert their preferred into common stock, the company must pay them this annual dividend.
- ❹ The diluted case assumes all CPS have been converted into common stock. Hence there is no Series B dividend.
- ❺ When a CPS shareholder decides to convert, the total number of shares in the company increases. If all CPS shareholders make this conversion, this is called "fully diluted."

### Notes

As mentioned in the "Advantages and Disadvantages," convertible preferred shares cause some uncertainty for the investors of the common stock. When making whatever financial decisions they need to make, such investors just assume that, if the company becomes profitable, all the holders of the convertibles will change their safer holdings into common stock. Hence, most corporate reports have the fully diluted calculations available so that a more accurate (and a lower) value of the common stock is stated. In this way, the effects of a fully diluted situation are made readily known.



## Answers to Vocabulary Quiz

1-a	29-c	57-b	85-e	113-e	167-n	195-j	141-l	223-o
2-e	30-h	58-j	86-l	114-f	168-l	196-r	142-h	224-m
3-b	31-f	59-k	87-g	115-i	169-k	197-p	143-i	225-u
4-h	32-e	60-h	88-m	116-m	170-p	198-l	144-p	226-p
5-c	33-d	61-e	89-h	117-j	171-o	199-o	145-o	227-t
6-j	34-l	62-i	90-j	118-r	172-m	200-u	146-q	228-w
7-g	35-g	63-g	91-k	119-o	173-u	201-q	147-n	229-q
8-d	36-k	64-l	92-o	120-q	174-t	202-t	148-r	230-s
9-f	37-i	65-p	93-p	121-n	175-w	203-x	149-u	231-x
10-n	38-p	66-n	94-t	122-v	176-q	204-s	150-w	232-v
11-i	39-m	67-m	95-n	123-q	177-v	205-a	151-s	
12-l	40-j	68-o	96-v	124-t	178-r	206-w	152-t	
13-p	41-n	69-r	97-s	125-w	179-s	207-v	153-y	
14-o	42-s	70-u	98-q	126-s	180-x	208-b	154-v	
15-k	43-o	71-w	99-w	127-y	181-c	209-y	155-b	
16-m	44-t	72-q	100-r	128-a	182-z	210-z	156-x	
17-u	45-r	73-v	101-z	129-u	183-a	211-f	157-z	
18-q	46-q	74-s	102-u	130-x	184-y	212-c	158-a	
19-t	47-w	75-t	103-c	131-e	185-g	213-i	159-d	
20-r	48-z	76-y	104-x	132-z	186-b	214-e	160-h	
21-x	49-v	77-c	105-b	133-c	187-e	215-g	161-c	
22-v	50-u	78-b	106-y	134-b	188-d	216-d	162-j	
23-s	51-x	79-x	107-a	135-g	189-k	217-j	163-e	
24-a	52-c	80-z	108-h	136-d	190-f	218-n	164-i	
25-w	53-y	81-f	109-g	137-f	191-h	219-h	165-f	
26-z	54-f	82-a	110-d	138-k	192-n	220-l	166-g	
27-y	55-a	83-i	111-k	139-m	193-i	221-k		
28-b	56-d	84-d	112-l	140-j	194-m	222-r		