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Teaching Note

GENERAL MOTORS' PENSION PLANS

Janet Carter prepared this teaching note under the supervision of Professor Christine Wiedman as an aid to instructors in the classroom use of the case General Motors' Pension Plans, No. 9B05B019. This teaching note should not be used in any way that would prejudice the future use of the case.

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CASE SYNOPSIS

Ian Hamilton sat at his desk and opened his briefcase. He had just received the 2004 annual report for General Motors Corp. (GM), a company that he had loyally invested in for years. Lately, despite his past confidence, he had starting doubting the company's performance. It was April 2005, and Hamilton noticed that the headlines in the major financial papers were becoming increasingly negative regarding GM's business strategies and financial reporting. In particular, Hamilton noticed some articles surrounding GM's pension and a risk that some of the major credit companies would downgrade the company's bonds to junk status.

He decided that, in light of the most recent news, he should investigate GM's business and financial position more closely and decide whether or not it was a good time to sell his shares in the company.

TEACHING OBJECTIVES

This case is appropriate for students who have a solid grasp of the fundamentals of accounting for pensions. It is recommended for an intermediate accounting class at the undergraduate or master level.

This case can be used to facilitate a discussion about the implications of pensions on company operations and the potential burdens for corporations providing generous defined benefit plans. The case considers the issue of accounting for pensions and pension disclosure, including the reasonability of assumptions and their impact on operating income. The case can also be used to discuss the reasons for downgrading bonds and the implications downgrading can have on a company.

SUGGESTED ASSIGNMENT QUESTIONS

1. Examine the pension disclosure for GM in 2004. How significant is the pension to GM's financial position? What is the current funding status of the pension? Have there been any significant changes since 2003?
2. In the article "SEC Examining GM, Ford Pension Costs," John Porretto of Washingtonpost.com,[1] GM assumes a nine per cent expected return on plan assets for its U.S. plans Pension Benefits. Is this rate reasonable? How would *Income from continuing operations before income taxes, equity income and minority interests* be affected if the company has used eight per cent instead?
3. What are some of the most significant challenges for GM that Hamilton needs to consider in reviewing his investment in GM shares?

SUGGESTED TEACHING APPROACH

A suggested teaching approach for this case is to start the class with a broad discussion about the pension disclosure for GM and the significance and status of the pension to the financial position of the company. A discussion can follow on the reasonability of the assumptions used and a detailed quantitative analysis of the impact of the assumptions on operating income. Finally, the discussion should focus toward the current challenges facing GM, including the risk of the downgrade of its bonds.

The following is a lesson plan designed for an 80-minute class discussion

1. Examine the pension disclosure for GM in 2004. How significant is the pension to GM's financial position? What is the current funding status of the pension?

GM sponsors a number of defined benefit pension plans covering hourly, salaried and executive employees. Information for these plans is summarized in Note 16 of the company's 2004 financial statements, and is organized by jurisdiction as "U.S. Plans" and "Non-U.S. Plans." The company also provides other postretirement employee benefit (OPEB) plans that provide medical, dental, vision and life insurance benefits to most of its U.S. retirees and their eligible dependents. These plans are summarized under "Other Benefits."

Per the 2004 financial statements, the pensions represent very significant liabilities for the company. The accrued benefit obligation for all pensions and benefits of $184,914 million represents 39 per cent of the asset value for the entire company and 44 per cent of the company's

[1] *"Critics have suggested in recent years that some companies are using artificially high estimates of future rates of return on pension assets to lower their pension costs, thereby pumping up earnings."*

total liabilities. Therefore, the pensions are very significant relative to GM. Further, the funded status of the combined plans is in aggregate significantly under funded, largely because of the OPEB plans. The aggregate funded status, as shown in the chart below, is −$68,989 million or 14 per cent of the asset value of the firm. (Note that this funded status does not include a $4 billion contribution made to the OPEB plans in the last quarter of 2004.) The only status that is operating at a surplus is the U.S. Pension Plan, which is largely due to a large cash injection of $18,621 million made by the company in 2003. The most significantly under funded plans are the OPEBs. Because of tax rules, these plans are typically operated on a "pay-as-you-go" basis with few assets set aside for future obligations.

2004 (in $ millions)

Pension Plan	Benefit Obligation	Fair Value of Plan Assets	Funded Status
U.S. Pension Plans	89,384	90,886	1,502
Non-U.S. Pension Plans	18,056	9,023	−9,033
Other Benefits	77,474	16,016	−61,458
Totals	184,914	115,925	−68,989

2003 (in $ millions)

Pension Plan	Benefit Obligation	Fair Value of Plan Assets	Funded Status
U.S. Pension Plans	87,285	86,169	−1,116
Non-U.S. Pension Plans	15,088	7,560	−7,528
Other Benefits	67,542	9,998	−57,544
Totals	169,915	103,727	−66,188

As indicated above, the funded status deteriorated in 2004 relative to 2003, primarily because of the Non-U.S. Pension and OPEB plans.

Because of significant smoothing provisions permitted under Generally Accepted Accounting Principles (GAAP), much of the net liability position associated with the plans is not reflected on the balance sheet. In fact, GM reports an aggregate asset of $6,706 million on its balance sheet when, in fact, its plans are under funded in aggregate by −$68,989 million. It is important to take these off-balance sheet amounts of −$75,695 million into account when assessing the company's overall indebtedness, particularly when the company is financially distressed or when the average time to retirement is short. Credit and bond rating agencies (such as S&P and Moodys) typically adjust for these off-balance sheet amounts, removing reported figures and replacing them with funded-status amounts.

The chart below summarizes off-balance sheet amounts by plan type:

2004 (in $ millions)

Pension Plan	Funded Status	B/S Amounts	Off-B/S Amounts
U.S. Pension Plan	1,502	37,592	−36,090
Non-U.S. Pension Plans	−9,033	−2,775	−6,258
Other Benefits	−61,458	−28,111	−33,347
Totals	−68,989	−6,706	−75,695

2003 (in $ millions)

Pension Plan	Funded Status	B/S Amounts	Off-B/S Amounts
U.S. Pension Plan	−1,116	−38,968	−40,084
Non-U.S. Pension Plans	−7,528	−2,390	−5,138
Other Benefits	−57,544	−36,292	−21,252
Totals	−66,188	−286	−66,474

In summary, −$75,695 million of pension liability is recorded on the off-balance sheet in 2004 compared to −$66,474 in 2003. The 2004 liability increases the total liabilities of the company by 17 per cent and would negatively impact Hamilton's assessment of GM's financial condition.

2. In the article: "SEC Examining GM, Ford Pension Costs," John Porretto of Washingtonpost.com[2]. GM assumes a nine per cent expected return on plan assets for its U.S. plans Pension Benefits. Is this rate reasonable? How would *Income from continuing operations before income taxes, equity income and minority interests* be affected if the company has used eight per cent instead?

The return on plan assets estimate is important because it directly affects a company's operating income. (See, for example, C. Wiedman and D. Goldberg, "Pension Accounting — Coming to Light in a Bear Market," Ivey Business Journal, May/June 2002, pp. 38-41.) Ideally, this estimate is best assessed in light of a company's investment strategy and considering projected future rates of return across different asset classes, however, this assessment is a subjective one. Other factors to consider include historical performance of plan assets, accumulated past experience gains and losses, current long-term bond rates and current norms.

The rate assumed for the expected return on plan assets for its U.S. pension plans is nine per cent. GM argues that this estimate is reasonable since it was based on a study conducted in 2002 and a subsequent re-examination was made in 2004. The unrecognized actuarial loss for the U.S. pension plans in 2004 was $30.228 million. To the extent that this estimate relates to differences between expected and actual return on assets (ROA), it suggests that past assumptions were significantly too high and calls into question the validity of this assumption. The company asserts that the current ROA assumption is reasonable since the company has shifted its investment focus from equity markets and increased allocation to asset classes, which are not highly correlated with the market and where management has received attractive returns in the past.

Per the 2004 pension disclosure (note 16), the U.S. pension plan (which holds 78 per cent of total assets) has the following asset allocations in 2003 and 2004:

Asset Category	2004	2003
Equity Securities	47%	49%
Debt Securities	35%	31%
Real Estate	8%	8%
Other	10%	12%
Total	100%	100%

[2] *"Critics have suggested in recent years that some companies are using artificially high estimates of future rates of return on pension assets to lower their pension costs, thereby pumping up earnings."*

Based on the information provided in Exhibit 3 of the case, the nine per cent ROA assumption is likely still too high and, if anything, should have been reduced with a shift to more corporate bonds instead of equity investments. (The current long-term bond rate for high-quality corporate debt at the end of 2004 was approximately six per cent.) Further, a study by Mercer Human Resource Consulting released in June 2005 indicated that the mean ROA for S&P 500 plans in 2004 was 8.5 per cent, again indicating that the nine per cent is high.

Returns	Annual Total Returns (Geometric Means) 1926-2000	Compound Annual Returns 1986-2000
U.S. Equity — Large Company Stocks	11.0%	16.0%
U.S. Equity — Small Company Stocks	12.4%	11.6%
U.S. Long-term Corporate Bonds	5.7%	9.5%
U.S. Long-term Government Bonds	5.3%	10.4%

Below is a calculation of the impact if GM were to drop its expected return on assets from nine per cent to eight per cent:

Rate	Average FV Plan Assets	Pension Expense: ROA component
9%	88,527.50	7,967.5
8%	88,527.50	7,082.2
Difference		**885.3**

Therefore, the impact on income from continuing operations before income taxes, equity income and minority interest can be calculated as follows:

$= 885.3 \div 1{,}192 = 74.3\%$

This assumption and its reasonability therefore have an extremely high impact on operating income.

3. What are some of the most significant challenges for GM that Hamilton needs to consider in reviewing his investment in GM shares?

In 2005, GM is facing global overcapacity, a high debt load and recalls of several of its models. In addition, sales of sport utility vehicles (SUVs) and light trucks, which had been GM's most profitable product lines, are dwindling, due to higher oil and steel prices and increasing competition from foreign automakers. Simply put, GM is not producing cars that consumers want to buy at prices high enough that GM is able to make profit. In fact, some argue that GM has given discounts so large that the discounts themselves have hurt GM's brand image. While the pension issue contributes to GM's financial duress, the threat of the downgrade to the bonds is likely mostly related to GM's current operating structure and the competitive pressures.

In addition to the challenges posed by their cumbersome operations, GM is facing several risks related to its pension specifically, including:

- Cash flow risk — If GM is to sufficiently fund its pension plans in the future, it will require large amounts of cash, similar to the $18.6 billion injection in 2003. In 2004, GM did not make nearly as large of a contribution, likely due to its poor profitability from operations.
- Financing risk — Two of the three funds are under funded, which poses an additional risk if GM requires additional financing. In aggregate, the funds are under funded by almost $69 billion.
- Equity risk — If the equity markets continue to be weak, there is a risk that the funding deficit will continue to grow since the actual return on the GM pension will be poor, which will affect the funded status of the plan.

Finally, if the investment status of the bonds is downgraded it will impact GM in several ways:

- The value of GM's equity will decrease. (In reality, it dropped $1.94 to $30.86 following the announcement in May 2005.)
- It will be more expensive for GM to borrow additional funds since it will have to pay a higher rate of interest given the bonds' junk status (usually seven to eight per cent above government bonds).
- Large bond investors may be forced to reassess holdings by their investment guidelines since there may be restrictions on holding junk-status bonds. Therefore, a smaller group of investors will be eligible to lend money to the company.

WHAT HAPPENED

In May 2005, Standard and Poor's Corp. (S&P), a prominent credit agency, downgraded $292 billion of GM's debt from investment status to junk status (to a credit rating of BB). In addition, S&P left GM with a negative outlook, which meant another cut was possible in the future. S&P downgraded Ford's bonds at the same time, although to a higher status than GM's. Moody's, another large credit agency, followed suit shortly after.

The main reasons cited by S&P and Moody's for revising the ratings were GM's inability to produce cars that people will buy without significant incentives. In addition, both credit agencies felt that negative sales and earnings trends will continue for GM, especially in light of increased competition in traditionally U.S.-manufactured product lines, such as the SUV and pickup truck. High oil prices are also eroding SUV sales. Ford's bonds were also downgraded, although not as severely.

S&P also noted GM's soaring health care costs as a risk for the company. While DaimlerChrysler was able to reach a deal for concessions from the United Auto Workers, a similar deal is not an option for General Motors until at least 2007, and even then concessions are likely to be difficult to negotiate. If GM were not able to meet its pension obligation, the liability would likely overwhelm the Pension Benefit Guaranty Corporation.