

Investing in Equities

Some Issues from the Islamic Perspective

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ABSTRACT

If the *shari'a*'s prohibition on interest were taken literally, one would have to pluck all feathers in an attempt to find Islamically acceptable stocks because most publicly traded firms engage in paying and/or receiving interest, whether on short-term or on long-term debt. *Shari'a* boards have broadened the scope of *halal* investment by defining allowable levels of debt, receivables, and interest income an investable company may have. This study draws on the principles laid down by some *shari'a* boards and explores how they could be put into practice. It also analyzes the relative performance of companies with varying levels of debt. This will show the extent to which investors gain or lose by not investing in companies with high debt levels. Other issues discussed include permissible and impermissible businesses and speculative stocks.

I. INTRODUCTION

The *shari'a* lays down principles to govern economic and financial operations and decision-making. One of its cardinal economic principles is that of profit-and-loss sharing in ownership, which at the same time prohibits interest-bearing debt as a means of financing. Given the widespread use of interest-bearing debt by companies around the world, Islamic investors would be interested in finding companies that do not use debt. Even if companies do not use long-term debt, they rely heavily on bank borrowing to meet their working-capital requirements. In other words, publicly traded companies, with few exceptions, engage in paying interest. Many companies, even if they do not have interest-bearing loans, may invest their idle cash in short-term interest-bearing instruments. If the prohibition of interest were taken literally, one would have to turn over every stone in an effort to find Islamically investable stocks.

Shari'a boards have come to the aid and have broadened the scope for Muslims to invest in equities, by defining allowable levels of debt, receivables, and interest-income a company may have. This paper draws on some of the principles and explores empirically how such principles may be put into practice. Among other issues, the performance of companies based on varying levels of debt in their capital structure is also explored.

II. THE DOW JONES ISLAMIC MARKET INDEX

Dow Jones recently created the Dow Jones Islamic Market Index (DJIM). The DJIM is a subset of the Dow Jones Global Index (DJGI) family. Of the more than 2,700 stocks in the DJGI, over 2,000 are excluded, leaving the DJIM with about 600 stocks from 30 countries, with a total market capitalization of nearly \$7.5 trillion. The exclusion criteria are drawn from *shari'a* laws. The purpose of the DJIM is "to provide a definitive standard for measuring stock market performance for Islamic investors on a global basis following both Dow Jones' well-established index methodology and the Islamic investment guidelines established by the index's *Shari'a* Supervisory Board. The methodology used to construct and maintain the index aims to produce an investable index in which all constituent stocks are readily accessible and well traded."

DJIM investable stocks are selected from DJGI stocks by applying two types of screens. First, a company's primary business must be Islamically acceptable; second, certain financial ratios must be acceptable. Appendix 1 lists the businesses and industries that are deemed inconsistent with the *shari'a* by the DJIM's *Shari'a* Supervisory Board. These include alcohol, tobacco, pork- and poultry-related products; financial services; defense; and entertainment.

After companies in the DJGI are filtered based on primary business activities, the remaining stocks are filtered to ensure that they adhere to certain financial ratios, listed in Appendix 2. These ratios seek to identify companies with unacceptable levels of debt or impure interest income. Companies are to be excluded if:

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1. total debt as a proportion of total assets is 33% or more;
2. accounts receivable as a proportion of total assets is 47% or more; or
3. non-operating interest income as a proportion of operating income is 9% or more.

It is to be noted that *sharī'a* scholars have not unconditionally endorsed the use of debt. In their *fatāwā* (pronouncements), they declare:

“It must be stated emphatically at this point that the above mentioned formula is one that applies to investors interested in companies offering shares on international market on which Muslims have no control. It should in no way be understood as an endorsement of the practice, by Muslim owned businesses, of interest based borrowing.”

III. THE USE OF DEBT BY COMPANIES

It may appear to a layman investor that very few companies are debt free. Fortunately, that is not the case. A screening of about 7,000 companies in a database (found online at <http://www.hoovers.com>) produced 1,777 companies with no long-term debt. Over 3,800 of them have debt-to-asset ratio of 33% or less. In other words, the universe of companies with an acceptable level of debt is large. However, that does not mean that this group does not contain any members with short-term interest-bearing debt, for even if companies do not use long-term debt, they rely on bank borrowing to meet their working-capital needs. In other words, dealing in interest is pervasive. Companies may also invest idle cash in short-term instruments that earn interest. If the prohibition of interest were taken literally, then it would be very difficult to find Islamically investable companies. At least for the present, *sharī'a* boards, like the one of the DJIM, have enabled practicing Muslims to invest in wide range of equities by raising the allowable level of debt.

Appendix 2 shows how Dow Jones has defined total debt: the sum of short-term debt, the current portion of long-term debt, and long-term debt. Total debt can also be expressed as the sum of current and long-term liabilities, which equals total liabilities. In other words, the way in which total debt is defined can lead one to consider it to be total liabilities, interest-bearing plus non-interest-bearing. If the intent is that non-interest-bearing debt is not to be included in total debt, it can be made unambiguous.

First, we use the definition of total debt as being all liabilities, and find the ratio of total debt to total assets for selected companies in the DJIM. Then we define total debt as interest-bearing debt, and recalculate the ratio of total debt to total assets for the same companies.

About 100 of the 600 stocks in the DJIM are listed on the Web page of Dow Jones. Based on that list, one can conduct some research to determine to what extent the listed stocks meet the financial-ratio filters mentioned above. Appendix 3 lists two types of ratios for 28 U.S. stocks in the DJIM. Only five of these had ratios of total debt to total assets of less than 33%—the level deemed acceptable by the DJIM's *Sharī'a* Supervisory Board. Twenty-three out of 28—or 82%—had debt levels higher than that approved by the Board. All companies had acceptable ratios of accounts receivable to total assets.

Accounts payable—a component of total liabilities—is non-interest-bearing. If accounts payable is excluded from total liabilities, and only interest-bearing debt is compared to total assets, we find that nine of the 28 companies have debt-to-asset ratios of less than 33%; 19 had unacceptable levels of debt.

The DJIM component companies listed on the Dow Jones Web page feature data presumably current as of December 31, 1998. The debt and accounts-receivable ratios are calculated from balance sheets as of the same date for nearly all the companies. To provide a more up-to-date analysis, Appendix 4 provides the debt ratios for the 28 U.S. companies from balance sheets for the quarter ending March 31, 1999. The numbers do not change: five companies had total-liabilities-to-asset ratios of less than 33%; nine companies had interest-bearing-debt-to-asset ratios under 33%; and all had acceptable ratios of accounts receivable to total assets.

Of the 72 non-U.S. DJIM companies listed in the Dow Jones web page, the balance sheets of 27 of them were available. Only three firms had ratios of total liabilities to total assets of less than 33% (Appendix 5). If accounts receivable is excluded from total liabilities, the number increases to nine. Thus, out of a sample of 28 U.S. and 27 non-U.S. companies, only 18 had acceptable levels of debt; the remaining 37 had unacceptable levels of debt. However, all these companies met the accounts receivable criterion of Dow Jones' *Sharī'a* Supervisory Board.

Assume that the term “total debt” in Appendix 2 refers only to interest-bearing debt. Appendix 6 shows the resulting ratios of total debt to total assets for the 28 U.S. companies. Only one firm (Caterpillar) now has an unacceptable ratio of more than 33%. As shown in the last two rows of the table, even in 1996 and 1997, Caterpillar had a debt ratio of more than 33%.

The total interest-bearing debt to total assets ratios of Caterpillar as of June 1998, September 1998, December 1998, March 1999, and June 1999 were also calculated. The ratio increased slightly from 0.49 to 0.52 over this period. Clearly, Caterpillar should not have been in the DJIM.

However, discerning interest-bearing debt of a company from published balance sheets is not a simple matter. Appendix 7 seeks to make that point using liabilities figures for Pfizer as of December 31, 1998. The following items in the balance sheet are presumably non-interest-bearing:

- accounts payable
- dividends payable
- income taxes payable
- accrued compensation
- post-retirement benefit obligations

The following items are presumably interest bearing:

- short-term borrowing and current portion of long-term debt
- long-term debt

But the following items may or may not be interest-bearing:

- other current liabilities (\$1,431 million)
- other non-current liabilities (\$1,217 million)

The amounts are significant enough for the items to contain at least some interest-bearing portion, given that non-interest-bearing items are given above rather exhaustively. Therefore, to be on the safe side, one would include other liabilities (current and non-current) as part of interest-bearing debt. With this definition of total debt, the total debt to total assets ratio is recalculated for the 28 U.S. companies. The ratios are shown in the last column of Appendix 6. Now we have eight companies (emboldened in the appendix) with debt ratios over 33%. In other words, they would be Islamically non-investable.

Appendix 8 shows the number of companies in the Hoovers database in various debt ranges. It also shows average and median 5-year growth rates of revenues, earnings, and prices for companies that have grown by at least 15%. The purpose of this chart is to explore the relationship, if any, between debt level and corporate performance. No relationship can be discerned from the appendix. Companies with higher debt do not appear to exhibit higher growth rates.

Though no salient pattern can be identified, companies with no long-term debt have comparatively high 5-year growth rates. Out of the 1,777 companies with no long-term debt, 86 had 5-year growth rates of 15% or more. The average 5-year revenue, earnings, and price growth rates of these firms are between 31% and 35%. The growth rates are somewhat lower as the level of debt increases, but no clear pattern can be discerned after that. This implies that investors do not necessarily lose if they invest in companies that have no long-term debt. Companies that use debt do not exhibit clearly superior performance.

Companies that have no long-term debt are from various industries, so diversification can be achieved by investing in them. Some, such as Microsoft and Cisco, are large firms, while many others are small growth companies. Some are profitable enough to not require debt; their retained earnings can finance their growth. Some may be risky, which may not allow them to raise debt capital. Many (in the high-tech sector) do not have enough tangible assets to support the use of debt. Examples are software companies, whose assets are largely human resources.

Appendix 8 also shows that there is no visible relationship between debt level and market value. There may be a pattern between debt level and asset size (although this aspect is not explored in this study). Corporations with greater assets are likely to have more debt.

IV. PERMISSIBLE BUSINESS

Sharī'a supervisory boards identify companies that are permissible for investing purposes. A company is deemed permissible if its primary business is Islamically acceptable. However, some uncertainty can arise when considering a firm such as Amazon.com, whose primary business is selling books, but may also have significant

sales of prohibited CDs and videos. Should some proportion of impermissible to permissible be spelled out, or should such companies be avoided altogether? *Shari'ah* boards must resolve this issue.

V. SPECULATION

Islam prohibits speculation. It also prohibits a risk-free or a pre-fixed rate of return, even if some risk is involved; and it does not allow excessive risk-taking. Hence, speculative stocks—those of highly risky companies, of companies whose prospects are uncertain, or of companies about which sufficient information is not available—are unacceptable. Investing in such stocks would border on gambling. Examples of such stocks are those of Internet-related and biotechnology firms.

The process of trading may also be speculative. For example, very short-term investing, such as day trading (investing to realize profits within minutes or hours), would possibly fall under speculation. However, it is not clear whether it would be speculative (and thus prohibited) to invest in stocks that are highly risky in the short-run (because of high volatility) but may not be so in the long run. *Shari'ah* boards have a responsibility to throw light on this and other questions.

VI. CHANGING FINANCIAL RATIOS

Companies change their capital structure over time as their prospects change. Sometimes, the capital structure can change dramatically within a short period. Hence, investors need to continually monitor the debt levels of stocks in their portfolios. They also need to monitor the level of interest income (and the levels of other ratios that *shari'ah* boards have deemed relevant) to ensure that they are acceptable.

VII. CONCLUSION

Islam lays down certain economic principles. It is unambiguous about the prohibition of interest. Taken literally, that would mean that companies that deal in interest would be unacceptable for investing. However, *shari'ah* boards have given pronouncements that allow Muslims to invest in companies that have some debt. For those Muslims who wish to adhere to the prohibition of debt in the strictest sense, even then hundreds of companies are available that have no long-term debt. Many of these have attractive histories of performance and have generated handsome returns. However, firms in general do borrow from banks to finance working-capital needs. Furthermore, many firms invest idle cash in short-term interest-bearing instruments. Therefore, strictly speaking, it would be very hard, if not impossible, to find companies that do not engage in interest at all. One compromise could be to consider the payment of taxes as coming from interest income or from income that a company earns using debt capital.

Investments in Islamic index funds have to be made with care, as these funds may not strictly adhere to guidelines laid down by *shari'ah* boards. It also must be borne in mind that the screening of companies done by an index fund is based on historical data: a company's ratios may have changed in the meantime, and publicly available information may not reflect the change(s). One solution is for *shari'ah* boards to prescribe acceptable levels of ratios. Investors need to continually monitor the financial ratios that *shari'ah* boards have prescribed for companies to be investable to ensure that these ratios are within acceptable levels, since ratios can change suddenly.

The determination of interest-bearing debt is not a trivial exercise. To be accurate, the debt figures must be found by examining the liabilities items in the balance sheets contained in annual reports. Such reports are often available on the Internet.

APPENDIX 1. ACCEPTABLE INDUSTRIES

The following businesses are deemed inconsistent with the *shari'ah* by the *Shari'ah* Supervisory Board of the Dow Jones Islamic Market Index. Companies whose primary business is in these areas are not suitable for Islamic investment purposes and are excluded.

1. alcohol
2. tobacco
3. pork- and poultry-related products
4. financial services (banking, insurance, etc.)
5. defense/weapons
6. entertainment (hotels, casino/gambling, films, pornography, music, etc.)

The following industry-group codes and definitions of the DJGI cover the above businesses.

- I/DST distillers and brewers
- I/TOB tobacco
- I/OFD other food (note: pork- and poultry-related products are excluded from this group)
- I/BAK banks, including major international banks (BAN) and regional banks (BAR)
- I/INS insurance companies, including full-line insurance companies (INF); life-insurance companies (INL); and property- and casualty-insurance companies (INP)
- I/FIS diversified financial companies
- I/SCR securities brokers
- I/SAL savings-and-loan associations
- I/ARO aerospace and defense companies
- I/ENT entertainment and leisure, including casinos (CNO); restaurants (RES); and recreational products and services (REC), which includes entertainment and movies (MOV) and other recreational products and services (REQ)
- I/LOD lodging if engaged in gambling operations

Companies classified in other industry groups may also be excluded if they are deemed to have material ownership or revenues from the above prohibited business activities.

Source: <http://indexes.dowjones.com>

APPENDIX 2. ACCEPTABLE FINANCIAL RATIOS

These ratios screen out companies with unacceptable levels of debt or impure interest income. A company is to be excluded if any of the following are true:

1. $(\text{total debt} \div \text{total assets}) \geq 33\%$
total debt = short-term debt + current portion of long-term debt + long-term debt
2. $(\text{accounts receivable} \div \text{total assets}) \geq 47\%$
accounts receivable = current receivables + long-term receivables
3. $(\text{non-operating interest income} \div \text{operating income}) \geq 9\%$
If a company has positive non-operating interest income but negative net income, it is excluded. However, a company with negative net income and no non-operating interest income may be included.

Source: <http://indexes.dowjones.com>

APPENDIX 3. DEBT RATIOS OF SOME U.S. STOCKS IN THE DJIM: DECEMBER 31, 1998

Company	Total Assets (TA)	Total Liabilities (TL)	Accounts Receivable (AR)	TL/TA	(TL-AP)/TA	AR/TA
3M	14,153	8,217	2,666	58.06%	51.93%	18.84%
Abbott Labs.	13,216,213	7,502,552	1,950,058	56.77%	48.77%	14.76%
Allied Signal	15,560	10,263	1,933	65.96%	56.81%	12.42%
AT&T	59,550	34,028	8,652	57.14%	46.69%	14.53%
Caterpillar	25,128	19,997	7,176	79.58%	65.42%	28.56%
Chevron	36,540,000	19,506,000	2,813,000	53.38%	47.44%	7.70%
Cisco Systems	8,916,705	1,810,087	1,297,867	20.30%	17.51%	14.56%
Compaq Computer	23,051,000	11,700,000	6,998,000	50.76%	32.38%	30.36%
Coca Cola	825,228	89,442	75,305	10.84%	1.41%	9.13%
Dell Computer	6,877,000	4,556,000	2,094,000	66.25%	31.39%	30.45%
Dow Jones	1,491,322	918,982	236,928	61.62%	56.53%	15.89%
DuPont	38,536	24,582	4,201	63.79%	58.78%	10.90%
Exxon	92,630	48,880	9,512	52.77%	37.84%	10.27%
Gateway	2,890,380	1,546,005	558,851	53.49%	28.64%	19.33%
Goodyear Tire	10,589,300	6,843,500	1,770,700	64.63%	53.94%	16.72%
Hewlett Packard	33,673	16,754	7,752	49.75%	40.24%	23.02%
Intel	31,471	8,094	3527	25.72%	21.77%	11.21%
Johnson & Johnson	26,211	12,621	3,661	48.15%	41.05%	13.97%
Lucent Technologies	23,811	20,424	6,939	85.78%	77.67%	29.14%
Merck	31,853,400	19,051,600	3,374,100	59.81%	48.25%	10.59%
Microsoft	22,357,000	5,730,000	1,460,000	25.63%	22.23%	6.53%
Oracle	5,819,011	2,861,453	1,857,480	49.17%	45.05%	31.92%
Pfizer	18,302,000	9,492,000	2,914,000	51.86%	46.56%	15.92%
Procter & Gamble	30,966,000	18,730,000	2,781,000	60.49%	53.86%	8.98%
Sun Microsystems	5,711,062	2,197,434	1,845,765	38.48%	29.80%	32.32%
Tellabs	1,627,591	250,999	480,620	15.42%	11.55%	29.53%
Union Carbide	7,291	4,842	993	66.41%	62.79%	13.62%
United Technologies	18,375,000	13,161,000	3,993,000	71.62%	59.45%	21.73%

APPENDIX 4. DEBT RATIOS OF SOME U.S. STOCKS IN THE DJIM: MARCH 31, 1999

Company	Total Assets (TA)	Total Liabilities (TL)	Accounts Receivable (AR)	TL/TA	(TL-AP)/TA	AR/TA
3M	14,153	8,217	2,666	58.06%	51.93%	18.84%
Abbott Labs.	13,216,213	7,502,552	1,950,058	56.77%	48.77%	14.76%
Allied Signal	15,560	10,263	1,933	65.96%	56.81%	12.42%
AT&T	59,550	34,028	8,652	57.14%	46.69%	14.53%
Caterpillar	25,128	19,997	7,176	79.58%	65.42%	28.56%
Chevron	36,540,000	19,506,000	2,813,000	53.38%	47.44%	7.70%
Cisco Systems	8,916,705	1,810,087	1,297,867	20.30%	17.51%	14.56%
Compaq Computer	23,051,000	11,700,000	6,998,000	50.76%	32.38%	30.36%
Coca Cola	825,228	89,442	75,305	10.84%	1.41%	9.13%
Dell Computer	6,877,000	4,556,000	2,094,000	66.25%	31.39%	30.45%
Dow Jones	1,491,322	918,982	236,928	61.62%	56.53%	15.89%
DuPont	38,536	24,582	4,201	63.79%	58.78%	10.90%
Exxon	92,630	48,880	9,512	52.77%	37.84%	10.27%
Gateway	2,890,380	1,546,005	558,851	53.49%	28.64%	19.33%
Goodyear Tire	10,589,300	6,843,500	1,770,700	64.63%	53.94%	16.72%
Hewlett Packard	33,673	16,754	7,752	49.75%	40.24%	23.02%
Intel	31,471	8,094	3,527	25.72%	21.77%	11.21%
Johnson & Johnson	26,211	12,621	3,661	48.15%	41.05%	13.97%
Lucent Technologies	23,811	20,424	6,939	85.78%	77.67%	29.14%
Merck	31,853,400	19,051,600	3,374,100	59.81%	48.25%	10.59%
Microsoft	22,357,000	5,730,000	1,460,000	25.63%	22.23%	6.53%
Oracle	5,819,011	2,861,453	1,857,480	49.17%	45.05%	31.92%
Pfizer	18,302,000	9,492,000	2,914,000	51.86%	46.56%	15.92%
Procter & Gamble	30,966,000	18,730,000	2,781,000	60.49%	53.86%	8.98%
Sun Microsystems	5,711,062	2,197,434	1,845,765	38.48%	29.80%	32.32%
Tellabs	1,627,591	250,999	480,620	15.42%	11.55%	29.53%
Union Carbide	7,291	4,842	993	66.41%	62.79%	13.62%
United Technologies	18,375,000	13,161,000	3,993,000	71.62%	59.45%	21.73%

APPENDIX 5. DEBT RATIOS OF SOME NON-U.S. STOCKS IN THE DJIM: DECEMBER 31, 1998

Country	Company	Total Assets (TA)	Total Liabilities (TL)	Accounts Receivable (AR)	TL/TA	AR/TA
Australia	Howard Smith	1,320,507	722,608	25,594	54.72%	1.94%
Belgium	Petrofina	9,635	5,654	1,581	58.68%	16.41%
Canada	Alcan Aluminum	9,901	4,382	1,401	44.26%	14.15%
	Barrick Gold	4,578,000	1,042,000	62,000	22.76%	1.35%
	Magna Intl.	8,620,700	3,675,300	1,801,900	42.63%	20.90%
Chile	Gener	1,375,813	639,904	24,390	46.51%	1.77%
Finland	Rauma	6,846	3,894	1,683	56.88%	24.58%
France	Alcatel Alsthom	251,772	207,818	22,959	82.54%	9.12%
Greece	Hellenic Telecom	1,554,757	581,819	203,033	37.42%	13.06%
Hong Kong	Hong Kong Telecomm.	54,177	17,231	3,775	31.81%	6.97%
Ireland	Waterford Wedgwood	480,400	321,700	93,100	66.97%	19.38%
Japan	Canon	2,720,597	1,572,519	412,375	57.80%	15.16%
	Honda Motor	4,815,265	3,207,351	422,642	66.61%	8.78%
	Toyota Motor	13,854,335	7,832,459	1,169,982	56.53%	8.44%
Netherlands	Akzo Nobel	26,358	22,348	6,222	84.79%	23.61%
	Royal Dutch Petroleum	66,040	33,064	8,332	50.07%	12.62%
New Zealand	Fletcher Challenge Energy	3,421	1,859	255	54.34%	7.45%
Norway	Norsk Hydro	115,336	69,619	17,321	60.36%	15.02%
Portugal	Portugal Telecom	1,000,343	599,101	139,344	59.89%	13.93%
Spain	ENDESA	4,371,525	2,859,137	239,429	65.40%	5.48%
	Repsol	2,858,955	1,853,520	299,510	64.83%	10.48%
Sweden	Astra AB	62,280	16,265	6,851	26.12%	11.00%
Switzerland	Nestle	56,441	32,845	10,991	58.19%	19.47%
Taiwan	Taiwan Semiconductor	123,173,526	40,857,285	8,805,902	33.17%	7.15%
United Kingdom	British Petroleum	32,877	18,765	6,947	57.08%	21.13%
	Shell Transport & Trading	45,821	21,666	8,304	47.28%	18.12%
	Unilever	19,247	11,831	4,176	61.47%	21.70%

APPENDIX 6. INTEREST-BEARING DEBT TO TOTAL ASSET RATIOS FOR 28 U.S. COMPANIES IN THE DJIM

Company	Short-term Debt	Long-term Debt	Assets	Debts ÷ Assets	Other Current Liabilities	Other Liabilities	(Debts + Others) ÷ Assets
3M	1,492	1,614	14,153	0.22	1,278	2,217	0.47
Abbott Labs.	2,011	1,476	15,560	0.22	0	1,075	0.29
Allied Signal	1,759	1,340	13,216	0.23	0	1,091	0.32
AT&T	1,171	5,556	59,550	0.11	5,478	3,322	0.26
Caterpillar	3,048	9,404	25,128	0.50	1,339	2,648	0.65
Chevron	3,165	4,128	36,540	0.20	265	2,560	0.28
Cisco Systems	0	0	8,917	0.00	0	0	0.00
Compaq Computer	0	0	23,051	0.00	5,104	0	0.22
Coca Cola	4,462	687	19,145	0.27	0	991	0.32
Dell Computer	0	512	6,877	0.07	0	349	0.13
Dow Jones	0	150	1,491	0.10	153	34	0.23
DuPont	6,629	4,495	38,536	0.29	0	7,640	0.49
Exxon	4,248	4,530	92,630	0.09	1,339	24,938	0.38
Gateway	11	3	2,890	0.00	117	113	0.08
Goodyear Tire	789	1,187	10,589	0.19	352	176	0.24
Hewlett Packard	1,245	2,063	33,673	0.10	0	1,218	0.13
Intel	159	702	31,471	0.03	0	0	0.03
Johnson & Johnson	2,747	1,269	26,211	0.15	0	874	0.19
Lucent Technologies	2,231	2,409	26,720	0.17	3,459	1,969	0.38
Merck	624	3,221	31,853	0.12	0	0	0.12
Microsoft	0	0	14,387	0.00	0	809	0.06
Oracle	3	304	5,819	0.05	0	57	0.06
Pfizer	2,729	527	18,302	0.18	3,492	1,773	0.47
Procter & Gamble	2,281	5,765	30,966	0.26	0	3,287	0.37
Sun Microsystems	47	0	5,711	0.01	17	0	0.01
Tellabs	0	3	1,628	0.00	0	0	0.00
Union Carbide	426	1,796	7,291	0.30	780	1,576	0.63
United Technologies	612	1,575	18,375	0.12	0	1,961	0.23
Caterpillar – 1997 (3)	1,626	6,942	20,756	0.41	1,395	2,756	0.61
Caterpillar – 1996 (4)	2,372	5,087	18,728	0.40	1,228	3,067	0.63

APPENDIX 7. PFIZER, INC., LIABILITIES: DECEMBER 31, 1998

Current Liabilities	
Short-term borrowing + current portion of long-term debt	\$2,729
Accounts payable	971
Dividends payable	285
Income taxes payable	1,162
Accrued compensation	614
Other current liabilities	1,431
<i>Total current liabilities</i>	<i>\$7,192</i>
Long-term Liabilities	
Long-term debt	527
Post-retirement benefit obligations	359
Deferred taxes on income	197
Other non-current liabilities	1,217
<i>Total long-term liabilities</i>	<i>\$2,300</i>
Total liabilities	\$9,492