

Problem 1-1

The Unidentified Financial Institutions Exercise

As described above, the various classes of financial intermediaries perform economically similar functions. As a matter of public perception, however, there is a substantial difference between categories of financial intermediaries. Most people and most politicians perceive mutual funds, for example, in a very different light than commercial banks. Insurance companies are thought to differ in material respects from thrift institutions. Reality falls somewhere between economic theory and popular sensibilities.

As a step towards understanding the differences among the different classes of financial intermediaries to be touched upon in this course, work your way through the following exercise and try to address these questions:

- 1) Analyze as best you can the financial statements given for Unidentified Institution A. How profitable was this institution in 1997? Where did the institution's income come from? What were its expenses? How might management go about improving profitability?
- 2) Match the following financial statements of Unidentified Institution A and those of the other institutions provided on the following pages with the different types of financial institutions listed below.
- 3) If you have time, compare the relative profitability of these institutions. Within the financial services industry, one important measure of profitability is return on assets (ROA), which is defined to be the ratio of net income to total assets. How does ROA vary from institution to institution? What other financial ratios offer a meaningful basis of comparison?

The institutions depicted in the following financial statements are:

1. *A Commercial Bank:* Commercial banks are the most diversified and numerous of all United State financial institutions; they are intermediaries that attract funds largely through deposits and invest money in consumer and business loans, state and local government bonds, and United States governments.

2. *A Savings Bank:* Savings banks traditionally have been organized in mutual (as opposed to stock) form. Savings banks are primarily depository institutions that invest their funds in securities, bonds, and various other types of loans.

3. *A Finance Company:* Finance companies have traditionally supplied installment loans to consumers and various types of business credit. In recent years, many finance companies, including the one in this exercise, have diversified into other areas of intermediation.

4. *A Life Insurance Company:* Life insurance companies accumulate savings for individuals and insure people against death, accidents, illness, and other misfortunes.

5. *A Broker-Dealer:* These companies underwrite and otherwise facilitate the issuance of securities and also promote the exchange of securities in the secondary markets.

6. *An Investment Company:* Investment companies, which in certain forms are also known as mutual funds, offer individual and corporate investors pools of diversified marketable instruments, such as stocks or bonds, which are selected by professional money managers according to predetermined investment guidelines.

7. *A Money Market Mutual Fund:* A money market mutual fund is a special form of investment company that limits itself to high-quality, short-term investments.

Institution A
Balance Sheet as of October 31, 1997

<u>Assets</u>	<u>\$Million</u>	<u>% of Assets</u>
Cash and Due From Banks	\$15.08	1.37%
Short Term Investments	\$32.14	2.93%
Investment Securities	\$249.36	22.71%
Mortgage/Commercial Real Estate Loans	\$561.25	51.12%
Commercial and Industrial Loans	\$173.27	15.78%
Other Loans	\$19.93	1.82%
Allowance for Possible Loan Losses	(\$3.31)	-0.30%
Total Loans	\$751.45	68.44%
Premises and Equipment	\$28.28	2.58%
Other Assets	\$21.90	1.99%
Total Assets	\$1,097.91	100.00%

<u>Liabilities and Surplus</u>	<u>\$Million</u>	<u>% of Assets</u>
Deposits	\$984.40	89.66%
Other Liabilities	\$21.09	1.92%
Retained Earnings	\$92.361	8.41%
Unrealized Gain on Securities Available for Sale	\$0.06	0.01%
Total Liabilities and Surplus	\$1097.91	100.00%

Income Statement for Year Ending October 31, 1997

	<u>\$Million</u>
Interest on Short-Term Investments and Investment Securities	\$18.69
Interest on Total Loans	\$54.85
Interest Expense on Deposits	(\$40.25)
Provision for Possible Loan Losses	(\$0.40)
Net Income After Provision for Possible Losses	\$33.32
Non-Interest Income	\$2.32
Salaries and Benefits	(\$12.98)
Office Occupancy and Equipment	(\$4.54)
Other Expenses	(\$7.32)
Total Non-Interest Expense	(\$24.84)
Income Before Taxes	\$10.80
Taxes	\$4.11
Net Income	\$6.69

Institution B**Balance Sheet as of December 31, 1997**

<u>Assets</u>	<u>\$Million</u>	<u>% of Assets</u>
Cash	\$291.4	1.27%
Investment Securities	\$1,723.8	7.52%
Home Equity Receivables	\$6,953.1	30.32%
Visa/Mastercard Receivables	\$4,105.0	17.90%
Other Receivables	\$2,354.0	10.26%
Private Label	\$3,365.2	14.67%
Net Receivables	\$17,667.8	77.04%
Advances to parent Company and Affiliates	\$10.5	0.05%
Acquired Intangibles	\$1,734.2	7.56%
Properties and Equipment	\$337.8	1.47%
Other Assets	\$1,159.2	5.05%
Total Assets	\$22,934.7	100.00%
<u>Liabilities and Shareholders Equity</u>	<u>\$Million</u>	<u>% of Assets</u>
Commercial Paper, Bank and Other Borrowings	\$4,962.0	21.64%
Insurance Policy and Claim Reserves	\$1,057.1	4.61%
Senior and Senior Subordinate Debt	\$12,022.0	52.42%
Other Liabilities	\$862.2	3.76%
Total Liabilities	\$18,903.3	82.42%
Common Shareholders= Equity	\$4,031.4	17.58%
Total Liabilities and Shareholders= Equity	\$22,934.7	100.00%

Institution B**Income Statement for Year Ending December 31, 1997**

	<u>\$Million</u>
Interest and other Income from Securities	\$22.1
Finance Income from Receivables	\$2,131.3
Interest Expense	(\$998.5)
Provision for Credit Losses on Receivables	(\$801.1)
Net Interest Margin	\$1,154.9
Securitization, Fee, and Other Income	\$1,474.0
Insurance Premiums and Contract Benefits	\$175.1
Total Other Revenues	\$1,758.1
Salaries and Fringe Benefits	(\$479.5)
Other Operating Expenses	(\$681.2)
Policyholders= Benefits	(\$165.2)
Total Costs and Expenses	(\$1,326.2)
Income Before Taxes	\$785.7
Taxes	(\$272.3)
Net Income	\$513.4

Institution C**Balance Sheet as of December 31, 1997**

<u>Assets</u>	<u>\$Million</u>	<u>% of Assets</u>
Cash and Demand Balances Due From Banks	\$1,304.4	6.48%
Money Market Assets	\$678.9	3.37%
Portfolio Securities	\$5,229.4	25.97%
Trading Account	\$53.2	0.26%
Domestic Loans, Net of Unearned Income	\$10,868.3	53.98%
Allowance for Possible Credit Losses	(\$130.9)	0.65%
Premises and Equipment	\$314.6	1.56%
Customers= Liability on Acceptances	\$46.5	0.23%
Other Assets	\$1,769.1	8.79%
Total Assets	\$20,133.5	100.00%
	<u>\$Million</u>	<u>_____</u>
<u>Liabilities and Shareholders= Equity</u>		
Deposits in Domestic Offices: Interest bearing	\$8,489.7	
Non-Interest bearing	\$4,192.5	
Deposits in Foreign Offices: Interest bearing	\$1,731.4	
Non Interest bearing	\$18.4	
Total Deposits	\$14,432.0	
Federal Funds Purchased and Securities sold under Agreement		12.18%
Short-Term Borrowings & Commercial Paper		4.25%
Senior and Long-term Notes		2.38%
Other Liabilities		1.41%
Total Liabilities		91.89%
Stockholders Equity	\$1,632.6	
Total Liabilities and Stockholders= Equity		100.00%

Institution C**Income Statement for Year Ending December 31, 1997**

	<u>\$Million</u>
Interest on Loans Including Fees	\$927.1
Interest on Money Market Assets	\$44.1
Interest on Portfolio Securities	\$298.4
Total Interest Income	\$1,269.6
Interest Expense on Deposits	(\$475.7)
Interest Expense on Short-term Borrowings and Commercial Paper	(\$156.6)
Interest Expense on Senior and Long-term notes	(\$66.4)
Total Interest Expense	(\$698.7)
Provision for Credit Losses	(\$58.4)
Net Interest Margin	\$512.5
Trust and Investment Management Fees	\$133.7
Trading Account, Foreign Exchange, Charge Card & Service Fees	\$159.0
Securities gains (losses)	\$13.2
Other Noninterest Income	\$71.8
Total Other Revenues	\$377.7
Salaries, benefits & other compensation	(\$372.1)
Net Occupancy and Equipment	(\$104.7)
Deposit Insurance	(\$3.0)
Other Expense	(\$183.9)
Total Noninterest Expenses	(\$663.7)
Income Before Taxes	\$226.7
Taxes	(\$70.1)
Net Income	\$156.6

Institution D**Balance Sheet as of December 31, 1997**

<u>Assets</u>	<u>\$Million</u>	<u>% of Assets</u>
Certificates of Deposits and Bank Notes	\$1,621.7	23.10%
Commercial Paper and Corporate Notes	\$4,353.8	62.00%
U.S. Government, Agency, & Instrumentality Obligations	\$739.0	10.52%
Repurchase Agreements	\$250.0	3.56%
Other Assets	\$57.2	0.81%
Total Assets	\$7,021.7	100.00%
<u>Liabilities and Shareholders Equity</u>	<u>\$Million</u>	<u>% of Assets</u>
Payable for Investments Purchased	\$79.2	1.13%
Other Liabilities	\$2.1	0.03%
Total Liabilities	\$75.0	1.07%
Shareholders Equity	\$6,946.7	98.93%
Total Liabilities and Shareholder Equity	\$7,021.7	100.00%

Income Statement for year Ending December 31, 1997

	<u>\$Million</u>
Investment Income	\$412.4
Investment Advisory Fee	(\$25.8)
Transfer Agent Fee	(\$11.4)
Distribution Fees	(\$8.2)
Printing and Shareholder Reports	(\$0.3)
Trustees and Custodian Fees and Expenses	(\$0.4)
Other Expenses	(\$1.0)
Total Expenses	(\$47.2)
Net Investment Income	\$365.2
Realized Gain on Investments	\$0.2
Change in Unrealized Appreciation on Investments	\$0.3
Net Increase in Shareholders= Equity from Operations	\$365.7

Balance Sheet as of December 31, 1997

<u>Assets</u>	_____	<u>% of Assets</u>
Bonds		36.21%
Stocks		3.41%
Mortgage Loans		6.17%
Investment Real Estate		0.59%
Policy Loans		2.63%
Cash and Short-term Investments		6.07%
Other Invested Assets		6.58%
Premiums Deferred and Uncollected		2.31%
Investment Income Due and Accrued		0.74%
Separate Account Assets		28.54%
Other Assets		6.76%
Total Assets		100.00%
<u>Liabilities and Shareholders Equity</u>		
	<u>\$Million</u>	<u>% of Assets</u>
Reserves for Life and Health insurance and Annuities	\$65,581	25.27%
Policyholders' Account Balances	\$32,941	12.69%
Dividends due to Policyholders	\$1,269	0.49%
Securities Sold under Agreements to Repurchase	\$12,347	4.76%
Cash Collateral for Loaned Securities	\$14,117	5.44%
Other Policy Liabilities	\$6,659	2.57%
Short-term Debt	\$6,774	2.61%
Long-term Debt	\$4,273	1.65%
Liabilities Related to Separate Accounts	\$73,658	28.39%
Other Liabilities	\$22,146	8.53%
Total Liabilities	\$239,764	92.40%
Surplus	\$19,718	7.60%
Total Liabilities and Surplus	\$259,482	100.00%

Institution E**Income Statement for Year Ending December 31, 1997**

	<u>\$Million</u>
Premiums, annuity considerations and deposit funds	\$18,534
Consideration for supplementary contracts and dividend accumulations	\$2,979
Net Investment Income	\$12,050
Other Income	\$6,489
Total Income	\$37,073
Benefit Payment (other than dividends)	(\$20,251)
Sales Practice Remediation Costs	(\$1,640)
Insurance Expenses and Taxes	(\$11,926)
Dividends to policyholders	(\$2,429)
Total Benefits and Expenses	(\$36,246)
Net Gain from Operations	\$827
Income Taxes	(\$217)
Net Income	\$610

Institution F**Balance Sheet as of December 31, 1997**

<u>Assets</u>	<u>\$Billion</u>	<u>% of Assets</u>
Cash and Interest-Bearing Equivalents	\$17.3	5.91%
U.S. Government and Agency Securities	\$9.8	3.35%
Foreign Government and Agency Securities	\$9.7	3.31%
Corporate Debt	\$32.5	11.10%
Options and Contractual Commitments	\$21.2	7.24%
Equity Securities	\$23.6	8.06%
Mortgage Loans/Collateralized Mortgage Securities	\$7.3	2.49%
Other	\$16.9	5.77%
Receivables	\$145.4	49.66%
Property, Plant and Equipment	\$2.1	0.72%
Other Assets, including Intangibles	\$6.9	2.36%
Total Assets	\$292.8	100.00%
<u>Liabilities and Shareholders Equity</u>	<u>\$Billion</u>	<u>% of Assets</u>
Short-Term Borrowings	\$44.9	15.33%
Payables under Repurchase Agreements	\$77.9	26.61%
Trading Liabilities	\$70.1	23.94%
Other	\$47.8	16.33%
Long Term Borrowings	\$43.1	14.72%
Total Liabilities	\$283.9	96.96%
Redeemable Preferred Stock, Series A	\$0.4	0.14%
Stockholders= Equity	\$8.5	2.90%
Total Liabilities and Stockholders= Equity	\$292.8	100.00%

Institution F**Income Statement for Year Ending December 31, 1997**

	<u>\$Million</u>
Revenues	
Interest and Dividends	\$17.1
Principal Transactions	\$3.8
Investment Banking	\$2.7
Commissions	\$4.7
Other	\$3.5
Total Revenues	\$31.8
Interest Expense	(\$16.1)
Revenues, Net of Interest Expense	\$15.7
Non-Interest Expenses	
Compensation and Employee-Related	(\$8.0)
Other	(\$4.6)
Total Non-Interest Expenses	(\$12.6)
Income (Loss)	\$3.1
Income Tax Expense	(\$1.2)
Net Income (Loss)	\$1.9

Institution G**Balance Sheet as of March 31, 1997**

<u>Assets</u>	<u>\$Million</u>	<u>% of Assets</u>
Equity Securities	\$33,909.4	85.21%
Corporate Notes	\$2,029.9	5.10%
U.S. Treasury Obligations	\$3,643.5	9.16%
Investment in Securities	\$39,428.1	99.08%
Other Assets	\$356.3	0.90%
Cash	\$9.1	0.02%
Total Assets	\$39,793.5	100.00%
<u>Liabilities and Shareholders Equity</u>	<u>\$Million</u>	<u>% of Assets</u>
Payable for Investments Purchased	\$75.9	0.19%
Total Liabilities	\$75.9	0.19%
Shareholder Equity	\$39,717.6	99.81%
Total Liabilities and Shareholder Equity	\$39,793.5	100.00%

Income Statement for Year Ending March 31, 1997

	<u>\$Million</u>
Revenues	
Dividends	\$600.5
Interest	\$279.1
Total Income	\$879.6
Basic Management Fee	(\$90.4)
Distribution Expense	(\$79.7)
Transfer Agent Fees	(\$20.1)
Other Expenses	(\$11.1)
Total Expenses	\$201.30
Net Investment Income	\$678.2
Net Realized Gain on Investments	\$3,800.2
Net Unrealized Appreciation on Investments	\$4,685.6
Net Increase in Shareholders Equity From Operations	\$9,164.0