

COMERICA INCORPORATED: THE VALUATION DILEMMA

Sitting at his computer on September 8, 2008, Jack Wilson, a member of the 2008 Darden Capital Management (DCM) student investment club,¹ was curious about how much the ongoing credit crunch had affected the values of financial-services businesses. The business model for originating and securitizing loans/mortgages and then selling them appeared to be broken and its potential significantly diminished. Wilson had recently learned how to employ multiples to value a company and was wondering how he could apply this methodology to analyze a banking business. He also had learned the dividend-discount model for valuing equities, but he was not sure if the methodology was applicable in this situation. He was specifically looking at Comerica Incorporated (CMA), a financial-services company headquartered in Dallas, Texas.

CMA's Background

Under the name Detroit Savings Fund Institute, CMA opened its doors for business on August 17, 1849. The bank had six customers that day with total receipts of \$41.² Over the years, the company grew significantly and expanded its operations to provide financial services in four geographic markets: the midwestern, the western (primarily California), Texas, and Florida. At the end of 2007, CMA was among the 20-largest banking companies in the United States with total assets of \$62.3 billion, total deposits of \$44.3 billion, and total loans of approximately \$50.7 billion (company financials are shown in **Exhibit 1**). Although historically the company had concentrated on the state of Michigan, by 2006, it had started a strong push to diversify its geographical operations to other parts of the country. **Exhibit 2** presents a comparison of the company's geographic presence between 1997 and 2006, in terms of business conducted outside of the state of Michigan.

¹ DCM was a student-run organization at the Darden School of Business at the University of Virginia that managed a small portion of Darden's endowment.

² Information found on Comerica's Website at <http://www.comerica.com/vgn-ext-templating/v/index.jsp?vgnextoid=c1a9788635bd2010VgnVCM1000004302a8c0RCRD>.

This case was prepared by Baijnath Ramraika (MBA '09) and Professor Yiorgos Allayannis. It was written as a basis for classroom discussion rather than to illustrate effective or ineffective handling of a situation. Certain information including the protagonist's name has been modified specifically for this case. Copyright © 2009 by the University of Virginia Darden School Foundation, Charlottesville, VA. All rights reserved. *To order copies, send an e-mail to sales@dardenbusinesspublishing.com. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of the Darden School Foundation.*

Industry: Troubled Times

Between 2001 and 2006, the U.S. commercial banking industry recorded its strongest five-year performance since 1984. FDIC data showed that the total assets and total loans of the industry had grown at a CAGR of 9.0%, while net income had grown at a CAGR of 11.6%. The total loan book of the industry had increased from \$3.88 trillion in 2001 to \$5.98 trillion in 2006. Real-estate-related loans including residential mortgages and construction loans had grown at a CAGR of 13.9% and accounted for 77% of the total incremental lending during this period. This was the fastest five-year growth since the S&L crisis. Interestingly, the pace of growth was faster in the later part of this period.

During this time-frame, the industry aggressively pursued the business model of originate and securitize, which meant that banking companies originated the loans and then sold them in a securitization transaction.³ This model allowed the originator to transfer the credit risk to the buyer of these securities, resulting in a decoupling between the lender and the credit-risk bearer. This decoupling meant that as long as the lenders were able to offload these loans to investors in securitized loans, they did not have to worry about the credit quality of the loans, and in turn, created an environment ripe for lending with lower credit standards. But growth in the housing market slowed toward the end of 2006.

As the delinquencies on subprime loans increased, one of the biggest subprime lenders in the United States, New Century Financial, filed for Chapter 11 bankruptcy protection. In June 2007, two hedge funds managed by Bear Stearns, one of the prominent Wall Street firms at that point in time, announced losses as the bets they had made on securities backed by subprime loans turned sour, reducing the value of the funds to almost nothing. On July 10, 2007, the credit-ratings firm Standard & Poor's warned it might cut ratings on \$12 billion of subprime debt. On July 19, Standard & Poor's slashed ratings on some top-rated mortgage bonds by eight notches. By the end of the month of July, the iTraxx Crossover Index, a widely watched barometer of credit sentiment that served as a gauge for credit spreads, shot above 500 bps, up from 250 bps at the beginning of the month. The credit crunch had arrived.

During the following months, the banking industry recorded large losses related to the markdown of subprime assets, some prominent Wall Street firms collapsed, and several financial institutions had to resort to raising new capital to stay afloat. In a series of rate cuts, the Federal Reserve cut the federal funds' rate to 2.0% on April 30, 2008, bringing it down from the 5.25% level that had prevailed in July 2007.⁴

³ A securitization produced a security out of underlying loans that could then be sold off to investors. Loans were put together in bundles creating a hierarchy from risky to less risky loans. In theory, diversification and liquidity were among the benefits touted by the advocates of securitization.

⁴ From the Federal Reserve Board's Website at <http://www.federalreserve.gov/fomc/fundsrate.htm>.

CMA's Business Strategy

CMA's primary business was lending *to* and accepting deposits *from* businesses and individuals. The company's primary source of revenue was net interest income (interest income *less* interest expense), which was derived from the difference between interest earned on loans and investment securities and interest paid on deposits and other funding sources. The company also provided other products and services that met the financial needs of customers and generated noninterest income, the corporation's secondary source of revenue. Growth in loans, deposits, and noninterest income was affected by many factors, including the economic growth in company markets, the financial requirements and health of customers, and the successful addition of new customers and/or increase in the number of products used by current customers.

CMA operated under three business segments: the Business Bank, the Retail Bank, and Wealth and Institutional Management.

The Business Bank consisted of the middle market, commercial real estate, national dealer services, international finance, global corporate, leasing, and financial-services businesses. This segment catered to the needs of medium-sized businesses, multinational corporations, and governmental entities by offering various products and services, including commercial loans and lines of credit, deposits, cash management, capital-market products, international-trade finance, letters of credit, foreign-exchange-management services, and loan-syndication services.

The Retail Bank included small-business banking and personal financial services, consisting of consumer lending, consumer-deposit gathering and mortgage-loan origination. In addition to a full range of financial services provided to small-business customers, this business segment offered a variety of consumer products, including deposit accounts, installment loans, credit cards, student loans, home-equity lines of credit and residential mortgage loans.

Wealth and Institutional Management offered products and services consisting of fiduciary services, private banking, retirement services, investment-management and advisory services, investment banking, and discount securities-brokerage services. This business segment also offered the sale of annuity products, as well as life, disability, and long-term-care insurance products. **Exhibit 3** provides a break-up of the company's net income and assets among the various segments.

Other Issues

The company was exposed to risks related to the residential real-estate-development industry, specifically in Michigan (midwestern market) and both northern and southern California (western market). Poor economic conditions could result in decreased demand for residential housing, which, in turn, could adversely affect the development and construction efforts of residential real-estate developers. Consequently, such economic downturns could adversely affect the ability of the residential real-estate-developer borrowers to repay these loans.

Furthermore, the value of the property used as collateral for such loans could decline. These risks could have a material adverse impact on the financial results of CMA.

Jack Wilson's Dilemma

Wilson carefully considered the various issues surrounding the company. CMA stock was trading at \$33.36 as of September 8, 2008, having declined from \$63.89 in June 2007. He was watching a stock-price chart of CMA for its last few years (**Exhibit 4**) on his monitor screen and wondering if the stock represented a good investment opportunity at these prices. The senior portfolio manager of the Cavalier Fund at Darden Capital Management seemed to be interested in the stock; however, he did not offer his views as to whether he thought of it as a long- or short-investment opportunity. Still, he wanted Wilson to get back to him with an investment thesis.

Wilson wanted to apply both a valuation methodology using multiples as well as a dividend-discount model, but he was not sure how exactly to apply them to value CMA in the current environment. And he had other questions. Was the stock undervalued? What was the price at which he should buy this stock? If it was not undervalued, was it appropriate to think of it as a short? What was the appropriate valuation methodology? What other issues were relevant for his analysis? How should he assess the impact of the deterioration in the credit environment on the value of CMA?

Exhibit 5 summarizes some of the data points that Wilson had gathered in his preparation for the investment thesis. He started putting together a spreadsheet with an outline of how he would go about performing a valuation via multiples (**Appendix**). Wilson did not have much time; the Cavalier fund's meeting at which he had to make a recommendation about the stock was taking place the next day.

Exhibit 1

COMERICA INCORPORATED: THE VALUATION DILEMMA

	2005	2006	2007	Mar-08	Jun-08
Balance Sheet					
Investments					
Cash and due from banks	1,609	1,434	1,440	1,929	1,698
Federal funds sold and securities purchased under agreements to resell	-	2,632	36	45	77
Other short-term investments	1,159	327	373	356	249
Investment securities available-for-sale	<u>4,240</u>	<u>3,662</u>	<u>6,296</u>	<u>8,563</u>	<u>8,243</u>
Total Investments	7,008	8,055	8,145	10,893	10,267
Loans					
Commercial loans	23,545	26,265	28,223	29,475	28,763
Real estate construction loans	3,482	4,203	4,816	4,769	4,684
Commercial mortgage loans	8,867	9,659	10,048	10,359	10,504
Residential mortgage loans	1,485	1,677	1,915	1,926	1,879
Consumer loans	2,697	2,423	2,464	2,448	2,594
Lease financing	1,295	1,353	1,351	1,341	1,351
International loans	<u>1,876</u>	<u>1,851</u>	<u>1,926</u>	<u>2,034</u>	<u>1,976</u>
Total loans	43,247	47,431	50,743	52,352	51,751
Allowance for loan losses	<u>516</u>	<u>493</u>	<u>557</u>	<u>605</u>	<u>663</u>
Net loans	42,731	46,938	50,186	51,747	51,088
Other Assets					
Premises and equipment	510	568	650	670	674
Customers' liability on acceptances outstanding	59	56	48	28	15
Accrued income and other assets	2,705	2,384	3,302	3,679	3,959
Total assets	53,013	58,001	62,331	67,017	66,003

Exhibit 1 (continued)

	2005	2006	2007	Mar-08	Jun-08
<u>Deposits</u>					
Noninterest-bearing deposits	15,666	13,901	11,920	12,792	11,860
<i>Money market and NOW deposits</i>	<i>26,765</i>	<i>15,250</i>	<i>15,261</i>	<i>15,601</i>	<i>14,506</i>
<i>Savings deposits</i>	-	<i>1,365</i>	<i>1,325</i>	<i>1,408</i>	<i>1,391</i>
<i>Customer certificates of deposit</i>	-	<i>7,223</i>	<i>8,357</i>	<i>8,191</i>	<i>7,746</i>
<i>Institutional certificates of deposit</i>	-	<i>5,783</i>	<i>6,147</i>	<i>7,752</i>	<i>5,940</i>
<i>Foreign office time deposits</i>	-	<i>1,405</i>	<i>1,268</i>	<i>1,075</i>	<i>879</i>
Total interest-bearing deposits	<u>26,765</u>	<u>31,026</u>	<u>32,358</u>	<u>34,027</u>	<u>30,462</u>
Total deposits	42,431	44,927	44,278	46,819	42,322
<u>Other Liabilities</u>					
Short-term borrowings	302	635	2,807	2,434	4,075
Acceptances outstanding	59	56	48	28	15
Accrued expenses and other liabilities	1,192	1,281	1,260	1,679	1,651
Medium- and long-term debt	<u>3,961</u>	<u>5,949</u>	<u>8,821</u>	<u>10,800</u>	<u>12,858</u>
Total Other Liabilities	5,514	7,921	12,936	14,941	18,599
Total shareholders' equity	5,068	5,153	5,117	5,257	5,082
Total liabilities and shareholders' equity	53,013	58,001	62,331	67,017	66,003
<u>Goodwill and Tangible Net Worth</u>					
Goodwill and intangibles	213	150	150	150	150
Tangible net worth	4,855	5,003	4,967	5,107	4,932

Exhibit 1 (continued)

	<u>2006</u>	<u>2007</u>	<u>Mar-08</u>	<u>Jun-08</u>
Income Statement				
Interest income	3,424	3,730	863	737
Interest expense	<u>1,439</u>	<u>1,727</u>	<u>387</u>	<u>295</u>
Net interest income	1,985	2,003	476	442
Noninterest income	<u>898</u>	<u>888</u>	<u>237</u>	<u>242</u>
Total income	2,883	2,891	713	684
Provision for credit losses	<u>42</u>	<u>208</u>	<u>163</u>	<u>177</u>
Gross income	2,841	2,683	550	507
Noninterest expense	<u>1,708</u>	<u>1,695</u>	<u>399</u>	<u>416</u>
PBT	1,133	988	151	91
Provision for income taxes	<u>353</u>	<u>306</u>	<u>41</u>	<u>35</u>
Net income before extraordinary	780	682	110	56
Cumulative effect of change in accounting principle, net of tax	(6)	—	—	—
Income/loss from discontinued operations, net of tax	119	4	1	—
Net income	893	686	111	56

Exhibit 1 (continued)

	2005	2006	2007	Mar-08	Jun-08
Interest Income					
Interest and fees on loans	2,554	3,218	3,501	770	633
Interest on investment securities	148	174	206	88	101
Interest on short-term investments	<u>24</u>	<u>32</u>	<u>23</u>	<u>5</u>	<u>3</u>
Total interest income	2,726	3,424	3,730	863	737
Interest expense					
Interest on deposits	548	1,005	1,167	253	182
Interest on short-term borrowings	52	130	105	29	19
Interest on medium- and long-term debt	<u>170</u>	<u>304</u>	<u>455</u>	<u>105</u>	<u>94</u>
Total Interest Expense	770	1,439	1,727	387	295
Non-Interest Income					
Investment advisory revenue, net	51	36	—	—	—
Service charges on deposit accounts	218	218	221	58	59
Fiduciary income	177	183	200	52	51
Commercial lending fees	63	65	68	17	21
Letter of credit fees	70	64	70	15	18
Foreign exchange income	37	38	40	10	12
Brokerage fees	36	40	43	10	10
Card fees	39	46	54	14	16
Bank-owned life insurance	38	40	35	10	8
Net income from principal investing and warrants	2	(6)	11	—	—
Net securities gains	55	-	5	22	14
Other noninterest income	<u>156</u>	<u>174</u>	<u>141</u>	<u>29</u>	<u>33</u>
Total noninterest income	942	898	888	237	242

Exhibit 1 (continued)

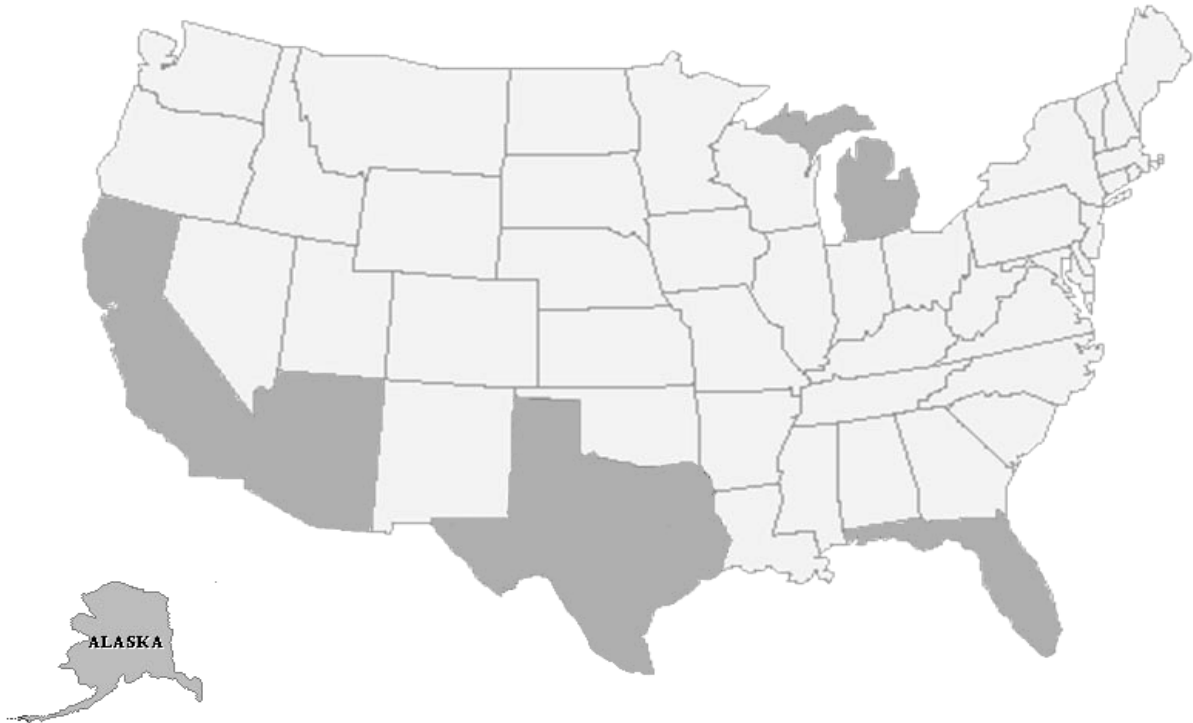
	2005	2006	2007	Mar-08	Jun-08
Noninterest Expenses					
Salaries and employee benefits	1,004	1,036	989	247	250
Net occupancy expense	121	126	138	38	36
Equipment expense	56	56	60	15	16
Outside processing fee expense	78	85	91	23	28
Customer services	70	47	53	6	3
Other noninterest expenses	246	289	242	59	60
Software expense	55	56	56	19	20
Litigation and operational losses	11	13	66	(8)	3
Total noninterest expenses	1,641	1,708	1,695	399	416
Nonperforming assets	162	232	423	560	748
Number of shares	163	158	150	151	151
Diluted number of shares	166	160	151	151	151

Source: 10K, 10Qs, Yahoo finance.

Exhibit 2

COMERICA INCORPORATED: THE VALUATION DILEMMA

Diversifying Geographical Presence



*Shaded states signify Comerica's presence.

Source: Clipart provided by www.worldatlas.com; <http://www.worldatlas.com/clipart.htm>.

Geographical Presence

Western, Texas, and Florida as a % of Overall Comerica

	<u>1997</u>	<u>2006</u>
Loans	27%	50%
Deposits	27%	45%
Revenues	27%	44%
Net income	30%	46%
Banking centers	90	152

Source: 2007 annual meeting of shareholders.

Exhibit 3

COMERICA INCORPORATED: THE VALUATION DILEMMA

Segmental Breakup

Net Interest Income

	2007	% of total	2006	% of total
Business Bank	1,326	66.1%	1,315	66.2%
Retail Bank	627	31.3%	637	32.1%
Wealth and Institutional Management	145	7.2%	147	7.4%
Finance	(69)	-3.4%	(100)	-5.0%
Other	<u>(23)</u>	<u>-1.1%</u>	<u>(13)</u>	<u>-0.7%</u>
Total	<u>2,006</u>	<u>100.0%</u>	<u>1,986</u>	<u>100.0%</u>

Net income

	2007	% of total	2006	% of total
Business Bank	503	73.3%	589	66.0%
Retail Bank	99	14.4%	144	16.1%
Wealth and Institutional Management	70	10.2%	61	6.8%
Finance	4	0.6%	(18)	-2.0%
Other	<u>10</u>	<u>1.5%</u>	<u>117</u>	<u>13.1%</u>
Total	<u>686</u>	<u>100.0%</u>	<u>893</u>	<u>100.0%</u>

Total average assets

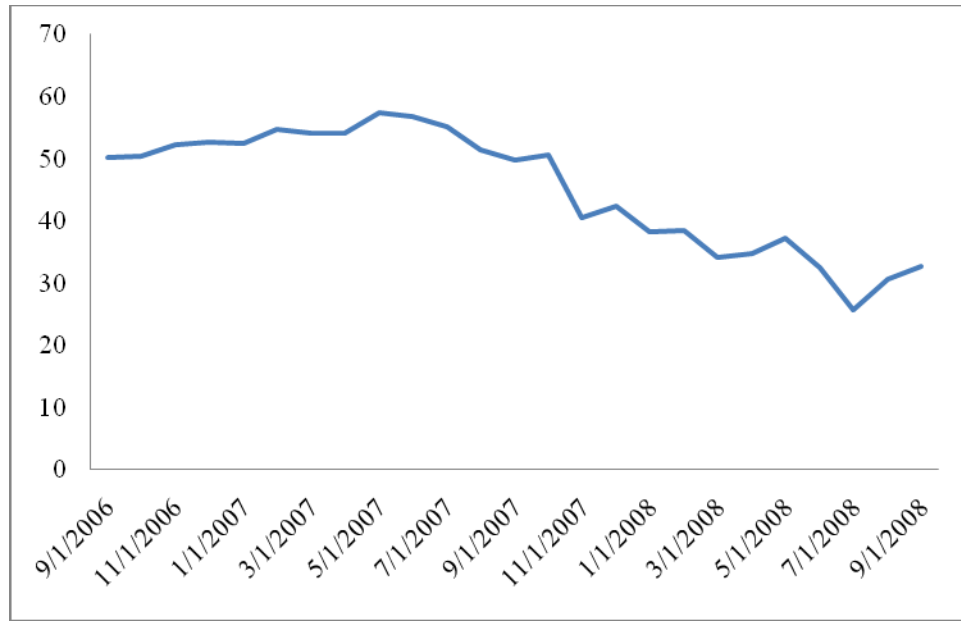
	2007	% of total	2006	% of total
Business Bank	40,762	69.6%	39,263	69.4%
Retail Bank	6,880	11.7%	6,786	12.0%
Wealth and Institutional Management	4,096	7.0%	3,677	6.5%
Finance	5,669	9.7%	5,271	9.3%
Other	<u>1,167</u>	<u>2.0%</u>	<u>1,582</u>	<u>2.8%</u>
Total	<u>58,574</u>	<u>100.0%</u>	<u>56,579</u>	<u>100.0%</u>

Source: 10K, 10Q, and case writer.

Exhibit 4

COMERICA INCORPORATED: THE VALUATION DILEMMA

Comerica Stock Price Chart



Source: Yahoo finance and case writer.

Exhibit 5

COMERICA INCORPORATED: THE VALUATION DILEMMA

Profitability and Credit Quality Analysis

	<u>2006</u>	<u>2007</u>	<u>Mar-08</u>	<u>Jun-08</u>
BV per share	\$ 32.70	\$ 34.12	\$ 34.93	\$ 33.77
Tangible BV per share	\$ 31.75	\$ 33.12	\$ 33.93	\$ 32.77
Diluted EPS	\$ 4.87	\$ 4.52	\$ 0.73	\$ 0.37
DPS	\$ 2.36	\$ 2.56	\$ 0.66	\$ 0.66
Profitability				
Noninterest income as a % of total income	31.1%	30.7%	33.2%	35.4%
Credit loss provisions as a % of PBT <i>plus</i> credit losses	3.6%	17.4%	51.9%	66.0%
Efficiency ratio	59.2%	58.6%	56.0%	60.8%
NPM	27.1%	23.6%	15.4%	8.2%
RoE	15.14%	13.33%	8.37%	4.41%
Tangible RoE	15.59%	13.73%	8.62%	4.54%
RoA	1.34%	1.09%	0.66%	0.34%
Net interest inc as a % of earning assets	6.53%	6.82%	5.84%	4.86%
Net interest exps as a % of interest bearing liabilities	3.89%	4.22%	3.32%	2.45%
Spread	2.64%	2.60%	2.52%	2.41%
Net interest margin	3.79%	3.66%	3.22%	2.91%
Noninterest inc as a % of earning assets	1.71%	1.62%	1.60%	1.60%
Noninterest exps as a % of earning assets	3.26%	3.10%	2.70%	2.74%
Credit Quality				
Annual credit loss provisions as a % of total loans	0.1%	0.4%	0.3%	0.3%
Credit loss reserves as a % of total loans	1.0%	1.1%	1.2%	1.3%
NPA as a % of total loans	0.5%	0.8%	1.1%	1.4%
Reserve coverage (loss reserves as a % of NPA)	212.5%	131.7%	108.0%	88.6%
Commercial loans as a % of total loans	55.4%	55.6%	56.3%	55.6%
Commercial RE loans as a % of total loans	29.2%	29.3%	28.9%	29.3%
Residential RE loans as a % of total loans	3.5%	3.8%	3.7%	3.6%
Tier 1 ratio	8.02%	7.51%	7.35%	7.36%
Leverage ratio	9.76%	9.26%	8.86%	8.55%
Total risk-based capital ratio	11.63%	11.20%	11.00%	11.11%

Source: Company 10-Ks, Yahoo finance, and case writer.

Exhibit 6

COMERICA INCORPORATED: THE VALUATION DILEMMAPeer Data
(\$ in millions)

Company	Comerica Inc	Sovereign Bancorp	M&T Bank Corp	Keycorp	U.S. Bancorp
Period ended	Dec. '07	Dec. '07	Dec. '07	Dec. '07	Dec. '07
Stock price—Sept. 8, 2008	\$ 33.4	\$ 8.7	\$ 76.0	\$ 13.7	\$ 33.9
Price to earnings	7.34	7.56	12.78	5.92	13.99
Price to book value	0.98	0.60	1.29	0.70	2.84
Price to tangible book value	1.01	1.30	2.75	0.85	5.79
Price to total income	1.74	1.88	3.00	1.09	4.29
Dividend yield	7.67%	3.68%	3.42%	13.36%	4.79%
Return on assets (net inc/total assets)	1.10%	0.65%	1.01%	0.92%	1.91%
Return on equity	13.30%	7.88%	10.08%	11.86%	20.31%
Leverage (total assets/equity)	12.18	12.12	10.00	12.91	10.6
NPA/total loans	0.83%	0.63%	0.92%	1.08%	0.45%
Reserve for credit losses/total loans	1.10%	1.24%	1.57%	1.69%	1.34%
Reserve for credit losses/NPA	132%	196%	170%	157%	298%
Tier 1 capital ratio	7.51%	7.54%	6.84%	7.44%	8.30%
Net-interest income	2,003	1,864	1,850	2,769	6,764
Noninterest income	888	354	933	2,229	7,157
Total income	2,891	2,218	2,783	4,998	13,921
Net income	686	551	654	919	4,264
Total loans	50,743	57,232	48,352	70,823	153,827
Total assets	62,331	84,746	64,875	99,983	223,621
NPA	423	362	447	764	690
Reserve for credit losses	557	709	759	1,200	2,058
Shareholders' equity	5,117	6,992	6,485	7,746	20,997
Intangibles	150	3,798	3,444	1,375	10,690
Tangible shareholders' equity	4,967	3,194	3,041	6,371	10,307
Number of shares (diluted)	151	479	110	396	1,758
Diluted EPS	4.54	1.15	5.95	2.32	2.43
Book value per share	34.12	14.60	58.95	19.57	11.94
Tangible book value per share	33.12	6.67	27.65	16.10	5.86
Dividend per share	2.56	0.32	2.60	1.84	1.63

Source: Company 10-Ks, Yahoo finance, and case writer.

Exhibit 7

COMERICA INCORPORATED: THE VALUATION DILEMMA

	<u>Existing Estimates</u>	Avg c/o 1%	Avg c/o 1.25%	Avg c/o 1.5%	Avg c/o 2%
<u>Book value sensitivity</u>					
Tangible net worth (June 30, 2008)	4932				
Estimated earnings (in millions)					
Q3 '08	82				
Q4 '08	86				
Q1 '09	88				
Q2 '09	105				
Q3 '09	120				
Q4 '09	127				
Dividends					
Q3 '08					
Q4 '08					
Q1 '09					
Q2 '09					
Q3 '09					
Q4 '09					
Estimated tangible BV at the end of 2009					
Estimated TBV per share					
P/share (assuming P/TBV of 1.0x)					

Source: Case writer.

Appendix

Jack Wilson's initial valuation methodology was using multiples. Banks often were valued as a multiple of tangible book. He needed to estimate CMA's tangible book at the end of next year and then apply a reasonable multiple. To estimate the tangible book he needed quarterly earnings' estimates that were provided by some reputed analyst sources as well as dividend estimates; currently CMA was paying 0.66 per share quarterly and there were approximately 151 million shares outstanding. He thought these two sources (earnings and dividends) would be the most important ones for his estimate of tangible book. Tangible book at the end of 2009 would simply be the current figure plus the accumulated earnings minus the accumulated dividends. Of course, it was unclear in this environment whether CMA would keep paying dividends at the same level, and this is something that Wilson needed to run some sensitivity analysis for. Also, in this very tumultuous environment, more charge-offs were possible. Based on historical experience, he believed that charge-offs could be anywhere between 1% and 2% (in the extreme, it could even exceed 2%). Management indicated that it expected the net credit-related charge-off to be between \$425 and \$450 million. On a total loan book of \$51.75 billion, this turned out to be about 0.85% charge-offs. Hence, the analysts' future earnings estimates already included such a level of charge-offs for 2008. For 2009, Wilson thought that the estimates included the same level of charge-offs. He assumed that the loan book would remain the same going forward—an assumption that he may need to sensitize on. Once he had an estimate of the tangible book at the end of 2009, he would pick a multiple; this was easier said than done given these unprecedented times. What would be the right multiple? He knew that the valuation and the resulting recommendation critically depended on this assumption. He checked some peer data to gauge his assumptions (**Exhibit 6**). His initial spreadsheet looked like the one in **Exhibit 7**. If he completed it, he would have a good first-cut analysis of CMA's valuation.

A second valuation methodology that he could employ was the known dividend-discount model. He felt that he could defend that methodology; however, he needed very sound dividend estimates as well as data to estimate an appropriate discount rate. Wilson saw that T-bonds were approximately 4.3%, and for market-risk premium, a 5% rate was commonly used; CMA had a beta around 0.9.