# WACHOVIA CORPORATION: MANAGING LESS PROFITABLE LINES OF BUSINESS BEFORE A LOOMING RECESSION

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This case describes a situation in which a vice president at a major bank must decide what to do with a line of business that is not meeting the firm's standard of profitability. Several alternate scenarios are proposed and sensitivity analyses are performed for selected scenarios. The reader is asked to propose additional possible actions to manage this line of business, evaluate each scenario for viability, and decide upon the best course of action. Special considerations in the context of automobile financing include the probability of default, the quantification of risk, and the firm's culture. The reader has knowledge unknown to the manager at the time of this real-life situation: the booming economy will soon enter a major recession.

#### INTRODUCTION

On a bright morning in April 2005, Carlos Evans stared down from his Charlotte, NC, office window on the passersby below. As Wachovia's new head of commercial banking, he reflected on the role that his firm played in the community, and he knew that the decisions his team made would affect the lives of many. Wachovia's Senior Executive VP, Ben Jenkins had recruited Carlos because of his tremendous experience with running functional lines of business within commercial banking. Wachovia's CEO Ken Thompson and Ben Jenkins charged Carlos with evaluating their existing portfolio of businesses and determining which lines of business were worth expanding and which to curtail. Carlos understood that these were immense decisions that could affect the future profitability of the company and the well-being of its stakeholders (including 20,000 Charlotte employees).

Headquartered in Charlotte, Wachovia Corporation was the fourth largest bank in the U.S., with \$390B in assets and 3,190 branch offices as of Dec. 31, 2004 (Exhibit 1). Founded in Winston-Salem, NC, in 1879, Wachovia had a long history in the southeast. It had grown to its current stature through a series of regional acquisitions (Exhibit 2). In 1986, Wachovia acquired First Atlanta Bank; in 1991, they acquired

South Carolina National Corporation; in 1998, they acquired Jefferson National Bank and Central Fidelity Bank, both in Virginia; in 1997, they acquired First United Bancorp and American Bankshares; and in 2000, they acquired Republic Security Bank.

In 2001, First Union acquired Wachovia and continued operations under the Wachovia name. In November 2004, Wachovia acquired SouthTrust Bank for \$14.3B, making it the preeminent banking franchise in the southeast. Recently, Wachovia had expanded on a *de novo* basis into Texas and was hoping to establish a presence on the west coast. After the mergers, Wachovia was a leading bank holding company and was anxious to continue growth by leveraging the efficiency of diversified lines of business to drive profitability while continuing to expand the franchise.

Wachovia's growth by acquisition mirrored the industry as a whole, which had undergone a pattern of consolidation. According to the FDIC, "the number of commercial banks declined by 29 percent from 1994 through 2003, [while] the number of bank branches increased by 15 percent over the same period to almost 67,000." The five largest banks-- Bank of America, Citigroup, JP Morgan, Wachovia and Wells Fargo-- combined to hold more than 40% of the nation's deposits with approximately 15,000 branches (Exhibit 3).

#### WACHOVIA DEALER SERVICES (WDS)

Wachovia evaluated each line of business on its own merits and reported profitability information on the individual business level. Carlos's task was to assess the suitability and profitability of each individual unit within his Commercial Banking department. While reviewing Wachovia's Dealer Services (WDS) \$6B portfolio, he was immediately struck by its modest profitability (as measured by its return on assets).

WDS's portfolio consisted of loans for pre-owned vehicles, sourced indirectly through a network of dealers on Dealertrack, an online credit application system that allowed auto dealers to input their customer's credit applications, and quickly match them up with an approving lender based on the individual lender's credit criteria. Although customers would ultimately receive their loan through WDS, they would interact directly with their auto dealer and would rarely work directly with WDS.

Historically, WDS focused exclusively on what it considered the super-prime segment of the highly fragmented \$500B U.S. used auto-finance market (Table 1). Lenders categorize consumers into broad categories based on their FICO scores. The Fair Isaac Corporation calculates FICO scores based on an individual's

payment history, current level of debt, types of credit used and issuance of new credit. The scores, which range from 300-850, give lenders a quick method of analyzing borrowers and their ultimate propensity to either become delinquent or default. Lenders group customers into broad categories by score so that they can refer to similar credits in a single descriptive term. Super-prime borrowers are considered the least risky borrowers, followed by prime, near-prime, sub-prime and deep-prime.

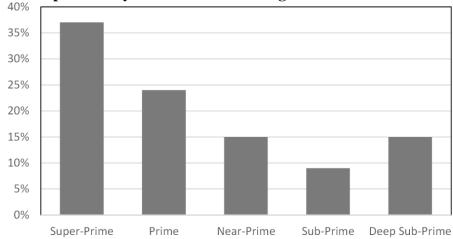
WDS lent exclusively to super-prime consumers. These customers had the lowest statistical probability of default, and because of their perceived low risk, they obtained financing on the most favorable terms (Exhibit 4). The lower levels of risk in these loans made them attractive to other lenders, which created stiff competition in this market and further reduced the cost of borrowing for these consumers.

TABLE 1
CONSUMER CREDIT LENDING CATEGORIES

		FICO Score	!
Super-Prime	740	-	850
Prime	680	-	739
Near-Prime	620	-	679
Sub-Prime	550	-	619
Deep Sub-Prime	300	-	549

## EXHIBIT 4

## U.S. Population by FICO Credit Ranking



#### LENDER ECONOMIC MODEL

Lenders earn income from their portfolio of loan receivables to the extent that the yield on their portfolio exceeds the cost of funds, operations, losses and taxes. For example, if a lender has issued a \$100 loan, with an annual interest rate of 5%, they will receive \$5 in revenue each year. Since the lender has to pay for the funds that they are lending, we reduce their revenue by the "cost of funds" which is analogous to cost of goods sold. In our current example, a lender's cost of funds may be 3%, and if they are lending to customers at 5%, we can say that the "spread" between what they pay for funds and what they receive from the borrower is 2%.

After reducing revenues by the cost of funds, the lender further reduces their revenues by the amount required to fund the organization's operations. Everything from salaries to equipment and any other costs of running the business are included in this category. An efficient lender with sufficient economies of scale may be able to keep the cost of operations to approximately 1%. Of course, not all loans that lenders extend are repaid in full. As a result, lenders must put aside funds to cover their eventual losses on the portfolio. A lender in the super-prime market might expect annual losses to be about .25%.

The table below illustrates this simplified example to provide a high-level view of a lender's economic model. In this example, a \$100 loan will produce \$5 of revenue, and after the lender pays \$3 for the cost of funds, \$1 for operations, \$0.25 for eventual losses, and \$0.25 for taxes, they are left with \$0.50, which represents their net income for the period. If we divide this 50 cents by the value of the \$100 loan (the firm's assets), we arrive at a Return on Assets (ROA) of .50%.

Sample Loan Economic Model				
Assets (loans)		\$	100.00	
Annual Interest Rate			5%	
Annual Revenue		\$	5.00	
Cost of Funds	3.00%	\$	(3.00)	
Operations	1.00%	\$	(1.00)	
Losses	0.25%	\$	(0.25)	
Taxes	0.25%	\$	(0.25)	
Net Income	•	\$	0.50	
Return on Assets (ROA):			0.50%	

In order to maximize profitability, lenders can focus on the expense side of the ledger by reducing the cost of operations, minimizing losses, or reducing cost of funds. Alternatively, lenders can increase profits by addressing the "spread" between their cost of funds and the yield that they offer customers. Due to the desirability of the low risk, super-prime loans, competition between lenders for

these loans was robust, keeping the spread they charged customers low. As a result, the super-prime auto finance business had very thin margins. Profitable

participation in this market was practical only for lenders with very high volumes and the most efficient operations.

Wachovia had a corporate ROA target of 1.5% for each line of business. Carlos noted that the WDS portfolio spreads were typically 1.75% to 2%, and that the unit's overall ROA was historically in the range of .50%-.75%, well below the 1.5% goal set by the company. Carlos began to formulate a strategy. As he saw it, the first decision was whether to continue participating in the super-prime auto finance space at all.

If Wachovia's leadership team decided to stay in the super-prime auto financing business, they identified three possible strategies to consider:

- Stay the course and maintain the current dealer finance program without making changes
- Expand the line of business using their existing internal resources.
- Expand the line of business by making a strategic acquisition.

If they decided to exit the business, there were three existing strategies available:

- Run-off the portfolio by ceasing new loan originations and continuing to collect existing loans as scheduled.
- Divest the unit by selling their loan origination platform and loan portfolio to a competitor
- Liquidate the loan portfolio by selling the pool of loans to another financial institution

#### MAINTAIN AUTO LENDING PLATFORM

Stay the Course – The first option was simply not to change anything. Based on the current operating metrics, Carlos felt that achieving the 1.5% target ROA would be extremely challenging. He charged his team with sharpening their pencils to see if they could wring any additional efficiency out of the model.

The marketing team noted that, due to intense market competition, it would be difficult to consistently fund loans with spreads in excess of the current 2% level. Choosing only to fund super-prime deals and simultaneously increasing spreads would greatly reduce overall loan origination volumes, and would cause the portfolio to shrink reducing the company's operational efficiency. When lenders

bid for a customer's loan on Dealertrack, there is no negotiation process; they only have one opportunity to bid with their lowest price.

Returns could also be improved by increasing the efficiency of the loan-processing group. The team examined the operations in detail and reached the conclusion that while some very slight improvements might be possible; they were currently operating at an extremely high level of efficiency, so it would be difficult to gain ground on this front.

Lastly, the portfolio's loss history was evaluated to see if improvements could be made in this area. Because they were serving the least risky group of borrowers, the portfolio's loss history of .25% was already excellent. While performance might vary slightly from year to year, there was not much room for consistent improvement in this area.

As Carlos understood it, the argument for continuing with the current strategy was that it generated some level of profit. Even if the returns did not exceed the target, they were still gains. Additionally, the market's future was uncertain. If there were a credit crisis, it would not be difficult to imagine lending spreads widening, even to the very best borrowers. If that were to occur, WDS might find themselves in the position of having an expert team lending to only the safest customers with enviable returns. Operational consistency was also desirable. After years of mergers and consolidations, there was something to be said for a smooth and steady department, albeit with lower-than-preferred returns.

Of course, there were cons to this course of action as well. The return profile was a major consideration for the bank. If uses that are more lucrative existed, there may be high opportunity costs associated with deploying the bank's capital in a low yielding unit. Beyond that, there was also sensitivity and some volatility in their model. The margins were thin and had very little room for error; in a certain sense, the model demanded impeccable execution. If losses were to spike, or if unforeseen operational issues caused the cost of doing business to rise, their small profit margin could erode quickly.

**Expanding WDS** - Searching for more options, Carlos' team immediately created projections and evaluated different avenues of growth. One opportunity to create favorable returns was to expand the scope of their lending program by offering loans to customers with different credit profiles. Though currently they lent exclusively to super-prime borrowers at 2% spreads, they knew that it would be possible to lend to other segments of the user auto space at higher spreads. For example, they could lend to near-prime customers and charge customers a 6% spread, or sub-prime customers for even greater spreads.

WDS understood that as one lends to lower levels of the credit spectrum, the risk of loan defaults and losses rises precipitously. So while they could demand much higher rates of interest from these borrowers, the resulting increase in revenue would be offset in part by higher losses inevitably incurred by the portfolio. There also might be a rise in operations costs, as staffing levels increased to handle the rising demands on the collections and legal departments.

The team created and evaluated several different modeling options to evaluate whether lending to other credit groups might provide an attractive opportunity. They "stressed" their model outputs by increasing the default rates and cost of operations, and even reduced spreads below what they felt would be typical. Carlos felt that even if expected default rates doubled, WDS could achieve an attractive return.

Expanded Loan Economic Models

Base	Case		Improve	d Case		
Assets (loans)		\$ 100.00	Assets (loans)		\$	100.00
Annual Interest Rate		12%	Annual Interest Rate			15%
Annual Revenue		\$ 12.00	Annual Revenue		\$	15.00
Cost of Funds	4.75%	\$ (4.75)	Cost of Funds	4.75%	\$	(4.75)
Operations	1.25%	\$ (1.25)	Operations	1.25%	\$	(1.25)
Losses	2.75%	\$ (2.75)	Losses	2.25%	\$	(2.25)
Taxes	1.08%	\$ (1.08)	Taxes	2.25%	\$	(2.25)
Net Income		\$ 2.17	Net Income		\$	4.50
Return on Assets (ROA):		2.17%	Return on Assets (ROA):			4.50%
Middle Stress Scenario - 2	X losses, 1.52		Heavy Stress Scenario - 3	X losses, 2X	•	
Assets (loans)		\$ 100.00	Assets (loans)		\$	100.00
Annual Interest Rate		17%	Annual Interest Rate			15%
Annual Revenue		\$ 17.00	Annual Revenue		\$	15.00
Cost of Funds	4.75%	\$ (4.75)	Cost of Funds	4.75%	\$	(4.75)
Operations	1.88%	\$ (1.88)	Operations	2.50%	\$	2.50
Losses	5.50%	\$ (5.50)	Losses	8.25%	\$	(8.25)
Taxes	1.63%	\$ (1.63)	Taxes	0.50%	\$	0.50
Net Income		\$ 3.25	Net Income		\$	1.00
Return on Assets (ROA):		3.25%	Return on Assets (ROA):			1.00%

The tables above outline several scenarios out of the array that the team evaluated. The "Base Case" scenario reflects the higher spreads considered likely plus increased loss and operational costs. The team used historic operating experience to project future results, but they also needed to be prepared for the unknown and

for abnormally adverse market conditions. They stressed their assumptions to develop a feel for the sensitivity of their ROA to different operational environments.

*Internal Growth* – If WDS decided that expanding their credit offerings and ramping up originations was the correct course of action, they could build up this department internally. This plan would very likely involve new hires to build out their existing team. Among other things, they must significantly supplement their credit, collections, processing, accounting, and administrative, documentation and legal departments.

The leadership team realized that expanding this line of business (particularly into new credit markets) might require specialized skills. Clearly, years of experience had made the WDS team experts in lending to the super-prime market. Their internal credit metrics and model had taken years to fine tune, and along the way, they had learned many lessons through experience. As it stood, they considered themselves industry leaders in super-prime lending. Each credit decision was based not only on the customer's credit score, but also on macro-economic data, detailed customer and dealer demographic information, information on types of collateral that customers were financing, plus years of loss history (acquired during a variety of economic cycles) that allowed them to "reality test" the sensitivity and interaction of each of their assumptions. This intellectual property was incredibly valuable to the firm.

The question was how applicable their current credit model was to other customer markets. For example, are credit and loan structuring assumptions regarding term, down payment amounts or collateral depreciation similar? Would the heuristic modeling assumptions developed in one geographic region be equally relevant in another? Certainly, there would be some level of overlap, but it might take a long time and some tough lessons to work out the kinks in their new markets.

There were also regulatory issues to consider. As this growing business expanded its geographic footprint and volume of originations, they must scrutinize all lending activity had to ensure that the bank did not inadvertently discriminate against any type or group of customers.

**Acquisition** – Wachovia could gain entrance into the lower levels of the credit spectrum by making a strategic acquisition. Across the country, there are numerous independent and bank run organizations that specialize in this market. By integrating their portfolios, and more importantly their credit and underwriting expertise into the firm, Wachovia could instantly gain market share and reap the benefits of the larger, higher yielding portfolio. If Wachovia was able to make an

additional bank acquisition, they could not only grow their loan origination platform, but simultaneously expand their banking footprint. If there was uneasiness or doubts about the learning curve, and how to analyze auto finance outside of the well-known super-prime space, making an acquisition would provide the company with a quick solution.

There were many drawbacks to this type of acquisition. For starters, it could be expensive. In addition to paying full price for a seasoned portfolio of receivables, one would also be paying a premium for the expertise and the knowledge transfer. In addition, as part of the acquisition process, the company would undertake an extensive due diligence process. They would send out teams of auditors and examiners to get to know the management and credit teams, to understand the company's lending processes, and to conduct a detailed examination of the portfolio of loans. They would need to remove as much uncertainty as possible from the transaction, to ensure that they understood the riskiness of the loans that they potentially would acquire.

Furthermore, the size and history of the company that Wachovia might acquire became a point of discussion on the team. Wachovia could purchase a small company for less than \$300 million, an almost insignificant sum for a firm of Wachovia's size. This approach would allow them to bolt on expertise from a competitor in the new market, while reducing the risk inherent in this type of acquisition. One such smaller company was available for sale. It was extremely profitable, but having been in operation for only 3 years, it had very little loss history, and could not demonstrate the ability of their credit model to perform through a recession. A larger company might have a longer, more detailed history, and therefore a more fully vetted model, but it would come with a much larger price tag. One such company was available for \$4 billion. Would it be wise to make such a large acquisition at a time when many experts predicted a decline in consumer lending?

The potential for cultural conflicts was also a serious concern. Would a presumably successful independent lender be able to replicate their performance under the corporate structure of a bank? The budgetary process, human resources, and capital restrictions involved with working in a bank could prove challenging for an independent team that was used to making all the operational decisions for their firm. Would the existing WDS team merge successfully with the newly acquired team, or would they bristle under the more formal hierarchy?

#### **EXIT THE MARKET**

All the prospects for continuing the auto finance business were certainly enticing, but the possible returns that they had modelled were far from certain. Based on

macro-economic trends, including household debt to income ratios, some Wachovia analysts believed that the economy was on the verge of recession, and that expanding a lending program into riskier consumer classes would be a tremendous mistake. Some were convinced that if the economy entered a negative period, auto finance to less-than-pristine credits might be particularly hard hit. Many of Wachovia's historic competitors, including Wells Fargo and First Union had exited the auto finance business, believing there was little money to be made in it.

In addition to credit concerns, there was also a potential opportunity cost. Taking a view of the big picture, Carlos wondered whether the individuals and resources supporting WDS could work in another division of the bank to generate higher or more consistent returns. Overall, maybe the best option was simply to exit the business.

**Run** Off – Gracefully exiting this line of business could be accomplished by ceasing new loan originations, and simply letting the portfolio of loans pay down, or "run-off" month-by-month. This would allow the company to continue earning the income on the loans that they had originated and had on the books. Based on the average portfolio life of the auto pool, it would take approximately 60 months to wind down and collect the final payments from borrowers.

The advantages to this plan were the continuation of the income stream and, like the "stay the course" option, operational consistency. It was also a flexible option, which could be reversed later, and it still allowed the management team to evaluate other options as market conditions changed. This plan would allow staffing reductions to be made in part through attrition and allow for a gradual and orderly transition out of this line of business. WDS had a large number of seasoned lending professionals whose skills would benefit the company enormously in other departments, so this transition strategy might best allow them to retain and deploy critical talent.

One disadvantage to running off the portfolio was erosion of operational efficiency over time. Many of the costs associated with servicing this portfolio remained fixed, regardless of the size of the portfolio. For example, office space, machinery, and to some extent staffing would all remain unchanged as the portfolio declined. As the assets decreased, these fixed costs would come to represent a higher percentage of the revenue, and eventually push the portfolio into a loss position due to operational inefficiency.

**Divestiture** – Wachovia could spin off their auto finance division into its own firm or sell the entire unit to a new market entrant or an existing competitor.

Management believed that this option would allow them to exit the market quickly and receive the highest valuation for the unit. A new buyer would not only be buying the portfolio of loan receivables, they would be buying the other assets of the division, including the proprietary credit models and other intellectual capital. As disruptive as this transaction would be, this plan would provide at least some level of continuity for their employees, as they would simply continue in their roles for the buying firm.

Some members of the team believed that it would be difficult to identify a buyer for this business since most of the larger banks already had successful super-prime loan origination capabilities, and newer market entrants might be willing to develop their own models in the low-risk super-prime segment. If a buyer could be identified, the premium that could be demanded for the unit was highly questionable due to the commoditized nature of this loan segment.

Liquidate Loan Portfolio – Wachovia considered selling their portfolio of superprime auto financings. Other banks, lenders or investors may be interested in purchasing a portfolio of super-prime, high-performing auto finance loans. This option would allow Wachovia to "rip off the bandage", terminate the line of business and move on to other more profitable opportunities. One potential problem with this approach was the effect on the bank's stakeholders, including employees and the surrounding community. There was a large processing center in Greenville, NC, that employed many people, and the sudden sale of this portfolio would immediately put them out of work.

Another issue was that the loans themselves were essentially a commodity. The super-prime market is very large and liquid, so rather than buying this portfolio, a lender could simply originate the assets themselves. In order to execute a sale, Wachovia would likely have to sell the portfolio at a considerable discount, and immediately absorb the losses. On a \$6B portfolio, a 5% discount would equate to a \$300M loss, which would be very difficult for the bank to justify. Another consideration is the redeployment of the proceeds from the sale. The bank must reinvest the sale proceeds in some other venture that immediately began earning a return, so the sale would be processed most efficiently in coordination with some new venture.

The group of investment bankers sat in Carlos' office awaiting his decision. What should he do with the Wachovia Dealer Services line of business?

## EXHIBIT 1

## Banks Ranked by Total Assets as of 2004-12-31

The following is a ranking of all banks in the United States in terms of "Total Assets". This comparison is based on data reported on 2004-12-31. (Top 10 shown)

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Rank	<b>Total Assets</b>	Bank Name
1	\$967,365,000,000	JP Morgan Chase Bank
2	\$771,594,340,000	Bank of America
3	\$694,529,000,000	Citibank
4	\$389,963,000,000	Wachovia
5	\$366,256,000,000	Wells Fargo Bank
6	\$272,927,502,000	Washington Mutual Bank
7	\$218,740,377,000	Fleet National Bank
8	\$194,436,638,000	U.S. Bank
9	\$138,296,274,000	HSBC Bank USA
10	\$130,780,100,000	SunTrust Bank
7 8 9	\$218,740,377,000 \$194,436,638,000 \$138,296,274,000	Washington Mutual Ban Fleet National Bank U.S. Bank HSBC Bank USA

(Source: <a href="http://www.usbanklocations.com/bank-rank/total-assets.html?d=2004-12-31">http://www.usbanklocations.com/bank-rank/total-assets.html?d=2004-12-31</a>)

#### **EXHIBIT 2**

### **Acquisition Timeline**

1879	Wachovia Founded in Winston Salem, NC
1986	Wachovia acquires First Atlanta Bank
1991	Wachovia acquires South Carolina National Corporation
1997	Wachovia acquires First United Bancorp and American Bancshares
1998	Wachovia acquires Jefferson National Bank and Central Fidelity
	Bank
2000	Wachovia acquires Republic Security Bank
2001	Wachovia is acquired by First Union Corp., and continues
	operating with Wachovia name
2004	Wachovia acquired SouthTrust Bank

EXHIBIT 3
Top Five Banks
Insured U.S.-Chartered Commercial Banks, ranked by consolidated assets
Federal Reserve Statistics – December 31, 2004

		Consolidated Assets	Domestic Assets	Domestic	Foreign
Ranking	Bank Name	(millions)	(millions)	Branches	Branches
1	JP Morgan Chase Bank	967,365	649,068	2,797	116
2	Bank of America	771,594	715,247	4,744	35
3	Citibank North America	694,529	299,961	388	324
4	Wachovia Bank	389,963	367,745	3,190	6
5	Wells Fargo Bank	366,256	364,715	3,667	2
	TOTAL:	3,189,707	2,396,736	14,786	483