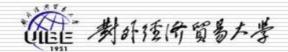


### **Chapter 3**

# Managing Noninterest Income and Noninterest Expense

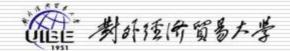
#### **Trend of Non-interest income**

- A common view among bank managers and analysts is that banks must rely less on net interest income and more on noninterest income to be more successful.
- The highest earning banks will be those that generate an increasing share of operating revenue from noninterest sources.
- The fundamental issue among managers is to determine the appropriate customer mix and business mix to grow profits at high rates, with a strong focus on fee-based revenues.



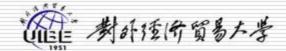
### Composition of noninterest income: For all FDIC-insured banks

Service Charges on Deposit Accounts	17.00%
Fiduciary Income	13.00%
Net Securitization Income	11.00%
Net Servicing Fees	8.50%
Trading Gains & Fees	7.60%
Investment Banking/Brokerage Fees	5.10%
Net Gains/Losses On Loan Sales	4.40%
Insurance Commissions & Fees	2.00%
Venture Capital Revenue	0.10%
Other Noninterest Income	31.40%
safe deposit boxes, bank drafts, etc.	



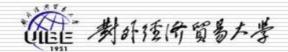
### Non-interest income in large banks v.s. small banks

- Increasing amount of fees from investment banking and brokerage activities at the larger banks.
- Investment and brokerage activities contribute a far greater portion of noninterest income at the largest banks.
  - This explains why noninterest income is a much higher fraction of their operating revenue.
  - These fees are highly cyclical in nature and depend on the capital markets.
  - In late 1998, many large banks reported large trading losses on activities in Russia and Asia.
- Community banks generated most of their noninterest income from deposit account fees, trust fees, mortgage fees, insurance product fees and commissions and investment product fees.



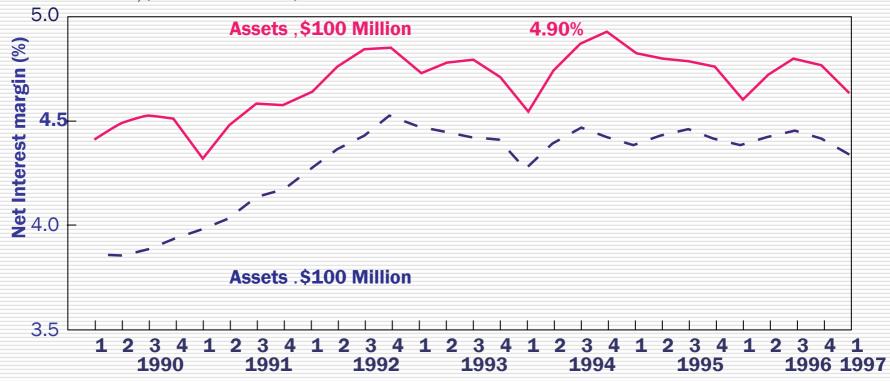
### Less on *net interest income* and more on *noninterest income*

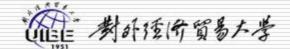
- The highest earning banks will be those that generate an increasing share of operating revenue from noninterest sources.
  - A related assumption is that not all fees are created equal.
  - Some fees are stable and predictable over time, while others are highly volatile because they derive from cyclical activities.
- □ The fundamental issue among managers is to determine the appropriate customer mix and business mix to grow profits at high rates, with a strong focus on fee-based revenues.



## Trends in net interest margin and noninterest income: 1990 - 1997

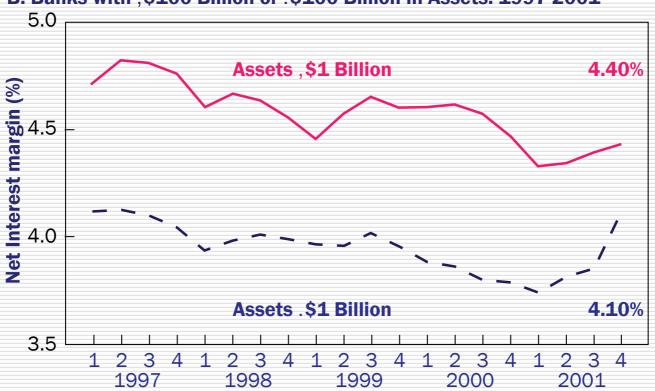
A. Banks with ,\$100 Million or .\$100 Million in Assets: 1990-1997\*

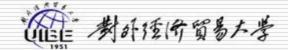




### days of record-breaking net interest margins for banks are long gone

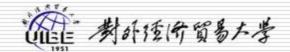






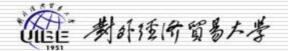
### **Pressure on margins**

- □ The growth in inexpensive, core deposits at banks has slowed because customers have many alternatives, such as mutual funds and cash management accounts, that offer similar transactions and savings services and pay higher
- Loan yields have similarly fallen on a relative basis because of competition from nonbank lenders, such as commercial and consumer finance companies and leasing companies, and other banks that compete for the most profitable small business loans, credit card receivables, and so on.

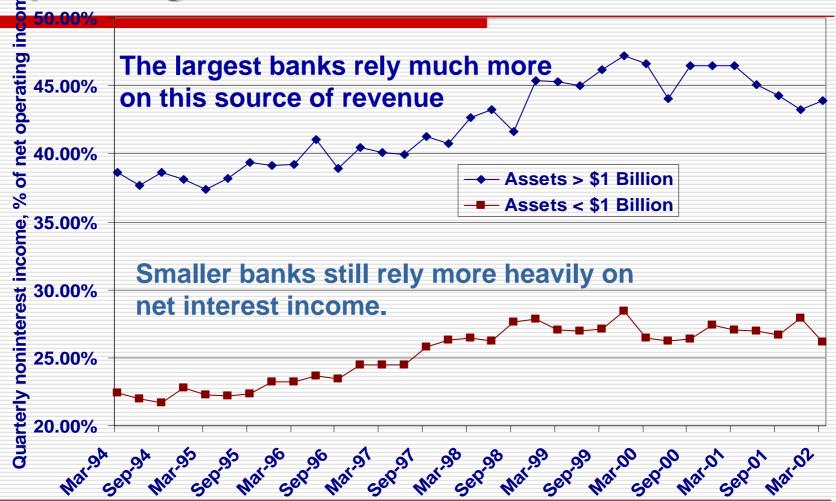


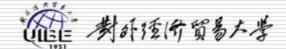
#### Over-reliance on net interest margin?

- □ Potential earnings difficulties are compounded by the fact that asset quality was quite strong during the late 1990s, such that loan loss provisions were low and not likely to show much improvement.
- Problem loans are often made at the peak or end of the business cycle.
  - The U.S. economy fell into a modest recession in March 2001, around which loan quality worsened.
- The impact is that banks must grow their noninterest income relative to noninterest expense if they want to see net income grow.



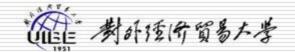
# Sustained increase in all banks' noninterest income as a fraction of net operating revenue





### Average Fees Charged By U.S. Banks on Transactions Accounts

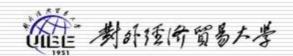
Average Fees	Large	Small
	Banks	Banks
Noninterest checking	\$ 91.50	\$ 73.56
NOW accounts	121.44	90.72
Overdrafts	20.45	15.01



#### Minimum balance requirements

B. Selected checkable accounts at banks and savings associations, average low-balance fees, and balance requirements, 1994–99 Dollars except as noted

Account	1994	1995	1996	1997	1998	1999	Percent change, 1994–99
BANKS							
Noninterest checking							
Single balance and fee <sup>1</sup>							
Percent offering	36.4	29.4	32.9	39.3	35.6	40.6	+
Monthly low-balance fee	6.14	6.61	6.34	6.09	6.43	6.15	.2
Minimum balance							
To avoid fee	503.62	479.22	480.26	479.41	498.61	515.62	2.4
To open	109.45	_	123.33	123.96	115.01	103.65	-5.3
Fee only <sup>2</sup>							
Percent offering	35.4	45.7	34.2	33.3	36.3	38.9	+
Monthly low-balance fee	4.39	4.61	5.02	4.49	4.73	5.17	17.8**
Minimum balance to open	79.88	81.62	82.15	61.43	76.34	65.20	-18.4**
NOW account							
Single balance and fee <sup>1</sup>							
Percent offering	40.2	43.9	44.0	56.7	50.8	54.2	<b>†**</b>
Monthly low-balance fee	8.02	8.49	8.11	7.81	8.07	8.39	4.6
Minimum balance							
To avoid fee	1,055.43	1,069.54	1,078.78	1,051.51	1,109.02	1,060.37	.5
To open	701.45	_	653.72	662.67	616.12	641.34	-8.6



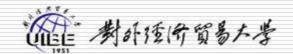
#### Change in fees

C. Fees for selected special actions—incidence and average level at banks and savings associations, 1994–99 Dollars except as noted

Account	1994	1995	1996	1997	1998	1999	Percent change 1994–99
BANKS							
Stop-payment orders							
Percent charging	99.8	99.0	99.4	99.2	99.7	99.9	+
Fee	13.29	13.68	13.68	13.97	14.35	15.29	15.0**
NSF Checks							
Percent charging	100.0	100.0	100.0	100.0	100.0	99.9	+
Fee	15.33	15.71	16.36	16.55	16.96	17.71	15.5**
Overdrafts							
Percent charging	99.4	98.4	100.0	97.6	98.0	99.9	+
Fee	14.92	15.67	16.28	15.73	16.65	17.45	17.0**
Deposit items returned							
Percent charging	81.7	59.0	59.3	55.7	61.7	57.1	<b>†*</b> *
Fee	6.89	4.95	5.50	5.15	5.49	6.28	-8.9

NOTE: NSF (not sufficient funds) checks are those written without sufficient funds in the account to cover them; they are not honored by the paying bank or savings association. Overdrafts are checks written without sufficient funds but are honored by the paying institution.

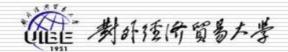
<sup>&</sup>lt;sup>2</sup>A monthly fee, no minimum balance to eliminate the fee, and a charge per check in some cases.



<sup>&</sup>lt;sup>1</sup>A monthly fee for balances below the minimum, no monthly fee for balances above the minimum, and no other charges.

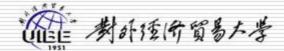
# Not all banks report all types of fees

Noninterest Income Source	Percent of Total Noninterest Income	Number of Banks Reporting Non-Zero Balances	Percent of All Banks
Fiduciary Income	13.00%	1,505	18.60%
Service Charges on Deposit Accounts	17.00%	7,829	96.70%
Trading Gains & Fees	7.60%	149	1.80%
Investment Banking/Brokerage Fees	5.10%	1,948	24.00%
Venture Capital Revenue	0.10%	42	0.50%
Net Servicing Fees	8.50%	1,582	19.50%
Net Securitization Income	11.00%	80	1.00%
Insurance Commissions & Fees	2.00%	3,449	42.60%
Net Gains/Losses On Loan Sales	4.40%	1,568	19.40%
Net Gains/Losses On OREO Sales	0.00%	1,155	14.30%
Assets	-0.10%	1,174	14.50%
Other Noninterest Income	31.40%	7,841	96.80%
Total Noninterest Income	100%	7,972	98.40%
Net Gains On Asset Sales	4.20%	2,774	34.20%



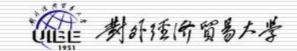
# Increasing amount of fees from investment banking and brokerage activities at the larger banks.

- Investment and brokerage activities contribute a far greater portion of noninterest income at the largest banks.
  - This explains why noninterest income is a much higher fraction of their operating revenue.
- These fees are highly cyclical in nature and depend on the capital markets.
- In late 1998, many large banks reported large trading losses on activities in Russia and Asia.



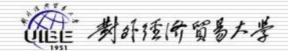
### Community banks generated most of their noninterest income from

Percent of Average Assets	< \$100 mill 12/31/2001	> \$1 bill 12/31/2001
Number of institutions reporting	4486	400
Total noninterest income	1.02%	2.63%
Fiduciary activities	0.05%	0.34%
Service charges on deposit accounts	0.43%	0.41%
Trading account gains & fees	0.00%	0.23%
Investment banking, advisory, brokerage, and underwriting fees and commissions	0.01%	0.16%
Venture capital revenue	0.00%	-0.01%
Net servicing fees (servicing real estate mort., credit cards, and	0.14%	0.19%
Net securitization income	0.00%	0.29%
Insurance commission fees and income	0.03%	0.05%
Net gains(losses) on sales of loans	0.03%	0.07%
net gains (losses) on sales of other real estate owned	0.00%	0.00%
Net gains (losses) on sales of other assets (excluding securities)	0.01%	0.04%
Other noninterest income	0.29%	0.83%
Securities gains (losses)	0.03%	0.08%



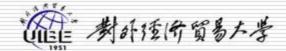
### Noninterest expense

- The Uniform Bank Performance Report lists three components of noninterest expense:
  - 1. Personnel expense
    - wages, salaries, and benefits
  - 2. Occupancy expense
    - rent and depreciation on buildings and equipment
  - 3. Other operating expenses,
    - general overhead, data processing and other expenses not listed

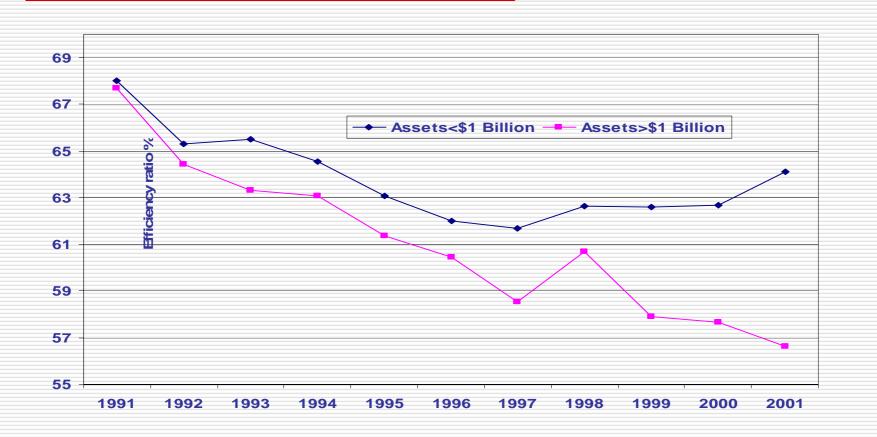


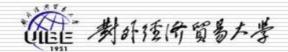
### Bankers and analysts typically measure performance over time and versus peer

- □Key ratios measuring noninterest expense and income performance are:
  - ■Burden = nonint. exp. minus nonint. inc.,
  - Net overhead expense = burden / total assets,
  - Efficiency ratio
    - = nonint. Exp. ÷ (net int. inc. + nonint. inc.)
- □Better performance is indicated by a smaller figure or percentage.



#### Annual efficiency ratios 1991 - 2001

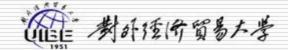




#### **Operating risk ratios**

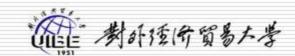
- The lower is the operating risk ratio, the better is the bank's operating performance
  - because it generates proportionately more of its revenues from fees, which are more stable and thus more valuable.
- The ratio subtracts fee income from noninterest expense and divides the total by NIM:

$$Operating risk ratio = \frac{Nonint exp-Fee inc.}{Net interest margin}$$



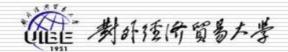
### Operating risk ratio signals the benefit of fee income

Ratio	Bay Bank	River Bank
Return on Assets (ROA)	1.40%	1.40%
Net Interest Margin (NIM)	4.00%	4.50%
Fee (Noninterest) Income	1.25%	0.75%
Operating Revenue	5.25%	5.25%
Noninterest Expense	3.25%	3.25%
Efficiency Ratio:	$\frac{3.25\%}{4.00\% + 1.25\%} = 61.9\%$	$\frac{3.25\%}{4.50\% + 0.75\%} = 61.9\%$
Operating Risk Ratio:	$\frac{3.25\% - 1.25\%}{4.00\%} = 50.0\%$	$\frac{3.25\% - 0.75\%}{4.50\%} = 55.6\%$



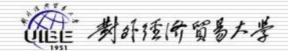
#### **Productivity ratios**

- Two commonly cited ratios are:
  - 1. Assets per full time employee and
  - 2. Average personnel expense.
- The more productive bank typically has fewer employees per dollar of assets held and often controls personnel expense per employee better.
- The second ratio is often high for high performance banks because they operate with fewer people but pay them more.



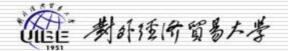
### Community banks also typically examine two additional ratios

- □ Since loans are often an the largest asset held, community banks examine:
  - Loans per full time employee
- A ratio of net income per employee generally indicates the productivity and profitability of a bank's workforce:
  - = Net income / Number of full time employees



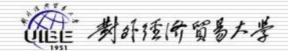
### Customer profitability and business mix

- Typical analyses of customer profitability profiles suggest that banks make most of their profit from a relatively small fraction of customers.
- The traditional view is that up to 80 percent of a bank's customers are unprofitable when all services are fully costed.
- Such figures support the increase in fees assessed by most banks over the past few years.

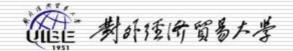


#### Which customers are profitable?

- The first step in identifying profitable growth is to determine which of the bank's customers and lines of business are profitable.
  - RAROC / RORAC framework can be used to assess the risk-adjusted return on allocated capital for a specific product or line of business.
  - Data on customer profitability are beneficial in helping management target niches, develop new products, and change pricing.



**Debit Cards Residential Mortgages Product Credit Life ACH Origination** offerings at **Online Banking Credit Cards** community Life Insurance **Cash Management** banks **Annuities Mutual Funds Stock Brokerage Financial Planning Accounts Receivable Financing** ■ Currently offer **Personal Trust** ■ Plan to offer **Business Property and Casualty Insurance\*** Personal Property and Casualty Insurance\* **Equipment Leasing Online Brokerage Title Insurance** Real Estate Brokerage/ Management\* **Auto Leasing Factoring Municipal Bond Underwriting Travel Agency** 10 20 **50 60** 0 30 70 80 90 100 Percentage offering various products

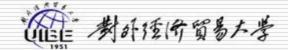


# Aggregate results from total customer account profitability

- A small fraction of customers contribute the bulk of bank profits.
- Many customer profitability models show that a significant difference between profitable and unprofitable accounts is that profitable customers maintain substantial loan and investment business with the bank.

# Strategies to manage noninterest expense

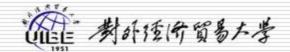
- □ Four different strategies are:
  - 1. expense reduction,
  - 2. increase operating efficiency,
  - 3. changing product pricing, and
  - 4. pursuing contribution growth whereby noninterest revenues rise by more than noninterest expense.



### Cost management strategies

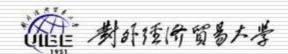
#### ...expense reduction

- Many banks begin cost management efforts by identifying excessive expenses and eliminating them.
- Given that noninterest expenses consist primarily of personnel, occupancy, and data processing costs, these are the areas where cuts are initially made.



# Cost management strategies ...increase operating efficiencies

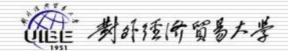
- Another strategy is to increase operating efficiency in providing products and services.
- □ This can be achieved in one of three ways:
  - reducing costs but maintaining the existing level of products and services,
  - increasing the level of output but maintaining the level of current expenses, or
  - 3. improving work flow.
- All these approaches fall under the label of increasing productivity because they involve delivering products at lower unit costs.



### Cost management strategies

#### ...revenue enhancement

- This strategy involves changing the pricing of specific products but maintaining a sufficiently high volume of business so that total revenues increase.
- It is closely linked to the concept of price elasticity.
- Here, management wants to identify products or services that exhibit price inelastic demand.



# Cost management strategies ...contribution growth

- With this strategy, management allocates resources to best improve overall long-term profitability.
- Increases in expenses are acceptable, but they must coincide with greater anticipated increases in associated revenues.
- An example might be investing in new computer systems and technology to provide better customer service at reduced unit costs once volume is sufficiently large.

