Chapter 4

Establishing New Banks, Branches, ATMs, Telephone Services, and Websites

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Contents from the textbook Peter & Sylvia

Agenda

- Basic concepts
- Charter new financial service institution
- The Performance of new banks
- Establish full service branches and in-store branching
- Establish limited service facilities
- ATMs and Telephone centers
- The Internet and online Banking

Introduction

- Businesses and households prefer to buy the services supplied by a financial firm located in the same community or neighborhood rather than from a firm situated in another town or region.

Basic concepts

- Chartering:

It is a legal process to form a new bank.

Basic concepts

- Convenience:

  Timely access to financial services, sometimes in business, it means "location"

Basic concepts

- Depository institutions:

  They are: banks, credit unions, and savings associations

Basic concepts

- Outsourcing:

  The contracting out of a business process or function to an independent firm, and this is when financial firms look carefully for ways to cut costs and take full advantage of technological advances

  Ex: Visa, Master cards

Basic concepts

- In-store branches:

  The branches located inside supermarkets, shopping centers, and other retail establishments, selling loans/cashing checks, credit and debit cards . Ex: located in Wal Mart super store

Basic concepts

- Branchless banking:

  services carried out through limited services facilities: POS terminals, ATMs, telephone banking (customer call centers), Internet supplied services

  Ex: online banking serves > 35 m customers today

Basic concepts

- POS terminal:

  computer facilities in store that permit a customer to instantly pay for goods and services electronically by deducting the cost of each purchase directly from his or her account

Basic concepts

- ATMs:

  Combines a computer terminal, recordkeeping system, and cash vault in one unit.

Basic concepts

- Variance:

  Describes how far a set of numbers lie from the mean (expected value).

Basic concepts

- COVariance:

  Describes how much 2 random variables change together.

  Can be positive if the greater or smaller variables move together

  Or negative if the variables move in opposite

Types of financial service outlets

- Chartering new corporate service providers
- Establishing new full service branch offices
- Setting up limited-service facilities, such as ATMs, POS terminals, internet service channels, telephone centers, electronically coded cards

Chartering a new financial service Institution

- Conditions:
- Public's need for a new bank
- Sufficient equity capital (often in the $2 m to $10 m range)
- Cover several years (initial 3 years)

The bank chartering process in the US

- Benefits of applying for a federal charter:
- Prestige, Stricter regulatory standards, and attract larger deposits
- Better quality technical assistance in times of trouble
- Federal rules can pre-empt state laws

The bank chartering process in the US

- Benefits of applying for a state charter:
- The bank need not join the FRS
- Easier and less costly
- Some states allow a bank to lend a higher percentage of its capital to a single borrower
- State-chartered banks may offer services that national banks may not

Factors weighing on the Decision to Seek a New Charter

- External factors
- The level and growth of economic activity
- The need for a new financial firm
- The strength and character of competition in supplying financial services

Factors weighing on the Decision to Seek a New Charter

- Internal factors
- Adequate experience, Strong reputation
- Management quality
- Sufficient equity capital to meet the initial capital requirements, consulting fees

Factors influence chartering activity

- Reducing chartering activities
- The expansion of existing branch office networks
- The great recession of 2007-2009

Ex: bank charters of incorporation fell from almost 100 to only about 30 in the US b.t 2008-2009

The Performance of new bank

- Serve a solid niche in the community that differentiates it from other financial service providers in the minds of customers
- Experience, financial strength and market contacts
- The growth of household income and business sales

Establish full service branches and in-store branching

- Benefits
- Cheaper than chartering new financial service corporations
- Less capital required
- The application for new branch offices less detailed

Establish full service branches and in-store branching

- Ex:
- Bank of America, the branching leader in the US, has > 6000 US offices while
- Citigroup, with a wider global focus, has about 3300 operating branches
- JP Morgan ranks 3rd in full service branches

Establish full service branches and in-store branching

- Choosing locations and designing new branches depends upon:
- Preferences of customers (confidentiality, privacy, traditional, ex: loans and deposits, and specialized products, ex: investment for retired)
- Preferences of management and employees

Desirable sites for New branches

- Heavy traffic (ex: 30,000 to 40,000 cars or more per day)
- Large no. of retail stores (a substantial volume of loan and deposit business)
- Populations that are of above-average age (45 or older)
- Substantial no. of business owners, managers, and professional men and women at work or in residence

Desirable sites for New branches

- A declining/steady no. of service facilities operated by financial service competitors
- Above-average population growth
- Above-average population density
- Above-average levels of household income
- A relatively high target ratio of population per branch (= total population in the area/no of branch offices in the area)

Desirable sites for New branches

- Expected rate of return E(r) from the opening of a new branch:

(4-2) Cash outflow to fund the establishment of a new branch office $= \dfrac{NCF1}{(1+E(r))^1} + \dfrac{NCF2}{(1+E(r))^2} + \ldots + \dfrac{NCFn}{(1+E(r))^n}$

- Branches created if future net cash inflows (NCF) will be large enough to ensure the financial firm an acceptable E(r) on invested capital

Desirable sites for New branches

- E(r) >= k: minimum acceptable return to stock holders . Ex:

$$\$3,000,000 = \dfrac{600,000}{(1+E(r))^1} + \dfrac{600,000}{(1+E(r))^2} + \ldots + \dfrac{600,000}{(1+E(r))^{10}}$$

- T = 10 years, cost $3 m to acquire the site and installation
- Using financial calculator or PC, find E(r) = 15,1%. If k = 10%, then fine.

Geographic Diversification

Possible locations for new branches depend:
- $E(r)$
- The variance around that expected return due to fluctuations in economic conditions in the area
- The covariance of $E(r)$ from the proposed new branch, existing branches, and other assets previously acquired by the offering institution

Geographic Diversification

- The impact of $E(Rb)$ on the firm's total return (Rt) from its current branches and other assets (Ra) can be found:

$$E(Rt) \quad = \quad W \times E(Rb) + (1-W) \times E(Ra) \quad (4\text{-}3)$$

- W = the proportion of total resources to be invested in new branch B and $(1-W)$ = proportion of the firm's resources invested in all of its other assets

Geographic Diversification

- The marginal impact of a new branch on overall risk, measured by the variance of total return (Rt) is:

$$\sigma^2(Rt) \quad = \quad W2 \times \sigma^2(Rb) + (1-W)2 \times \sigma^2(Ra) + \qquad (4\text{-}4)$$
$$2W(1-W)COV(Rb,Ra)$$

- where
- $COV(Rb, Ra) = \rho b,a \qquad x \sigma b \quad x \sigma a \qquad (4\text{-}5)$

Geographic Diversification

- Where
- $\rho b,a$: Correlation coefficient b.t expected return from the proposed new branch and the returns from other assets of the firm
- σb: the S.D of the proposed new branch's expected return
- σa: S.D of return from other assets held by the firm

Geographic Diversification

- Example: E(Rb) = 15%, E (Ra) = 10%
- σ b: the S.D of the proposed new branch's expected return = 3%
- σ a: S.D of return from other assets held by the firm = 3%

Geographic Diversification

- Suppose the proposed new branch present 25% of total assets (W = 0,25), meaning the other assets represent the remaining 75% of all assets (1-W)
- The new branch's returns are presumed to be negatively related to the returns from other assets, specifically:
- ρ b.a = -0,4

Geographic Diversification

- Equation 4-3:
- $E(Rt) = 0,25(15\%) + 0,75(10\%) = 11,25\%$
- Total risk carried by the bank after adding the new branch would be:
- $\sigma^2(Rt) = 0,25^2 \times (3\%)^2 + 0,75^2 \times (3\%)^2 +$
  $2(0,25)(0,75)(-0,4)(3\%)(3\%) = 4,28\%$

OR

$\sigma(Rt) = 2,07\%$

Geographic Diversification

- So, not only the new branch increases this bank's total return from all assets (increasing Rt from 10% to 11,25%)
- But also the new branch's negative return correlation with existing branch offices and other assets lowers the bank's S.D of its total return from 3% to just 2%:
- Producing a geographic diversification effect that reduces overall risk exposure

In-store branching

Advantages:

- Much less costly to build and maintain
- Tend to become profitable about 12 months earlier than stand-alone facilities
- Deposit volumes may be heavier

In-store branching

- Challenges:
- Compete to the rise of the Internet and Point of sale terminals as alternative customer service channels
- May require more aggressive marketing strategies than normally
- Depend on close cooperation with store owners and employees

Discussion

- Continue to answer case 1A "BIDV". Questions 3 and 6.

Establish limited service facilities

- Point-of-sale terminals:
- Customer presents an encoded debit card to the store clerk who inserts it into a computer terminal connected to the financial firm's computer system
- Customer's account is charged for the purchase and funds automatically transferred to the store's deposit account

ATMs and Telephone centers

- ATMs
- Customer enter a financial firm's bookkeeping system either with a plastic card with PIN, or by punching a special code no. into a computer terminal linked to the financial firm's computerized records 24 hrs per day
- Began at a branch office of Britain's Brclays Bank in 1967

ATMs and Installation

- ATMs
- Adv:
+ Reduce staff cost
- Disadv:
+ Frequently attract crime

ATMs and Installation

- Suppose ATMs cost $50,000 each and $30,000 to install
- It will save $1 for each check not written because customers will use the machine instead
- Suppose ATM expected to last for 10 yrs and handle 30,000 cash transactions per year

ATMs and Installation

- At $1 in savings per transaction, the annual savings is $30,000
- Cost of capital to raise fund to finance ATMs is 14%. We have

NPV of the new ATM	=	PV of the stream of cash savings from the new ATM discounted at 14%	-	The total cash outlay for the new ATM

$$= 156{,}483 - 80{,}000 = \$76{,}483$$

(4-6), page 116

Telephone banking and Call centers

- Telephone
- The most popular channel b.t customers and financial service providers
- Personal, "human touch"
- Low cost, high convenience to market services

Telephone banking and Call centers

- Call centers:
- Assist customers with account information, avoid walking to a branch or ATM
- Mobility

Cell phone:
- Easily transportable
- Revolutionized communications

Exercise 1

- A new bank plan have data:

Initial cost of banking facility	$2.700.000,00
Initial other organizing expenses	$500.000,00
Year 1 revenue	$410.000,00
Year 1 operating expense	$180.000,00
Annual growth rate in revenues	5,00%
Annual growth rate in expenses	3,00%
Required annual rate of return	10,00%

Using Excel, calculate and decide: are they likely to proceed with the new bank?

Exercise 1

- Answer:

IRR	9,57%
NPV	($115.130,58)

Exercise 2

- A bank plan have data:

Expected return: New branch office	12,00%
Expected return: Existing facilities	10,00%
Standard Deviation: New branch office	10,00%
Standard Deviation: Existing facilities	3,00%
Correlation coefficient with other services	0,20
% of total assets: New branch office	15,00%
% of total assets: Existing facilities	85,00%

Calculate total combined rate of return

And S.D of combined returns.

Exercise 3

- A new bank plan have data:

Initial cost of property	$1.750.000,00
Initial construction costs	$2.650.000,00
Year 1 revenue	$1.600.000,00
Year 1 operating expense	$795.000,00
Annual growth rate in revenues	0,00%
Annual growth rate in expenses	0,00%
Required annual rate of return	12,00%

Using Excel, calculate and decide: are they likely to proceed with the new bank?

The Internet and online Banking

- Services provided through the Internet
- Need a card reader and internet access
- Can verify account balances at any time
- Confirm deposit received, check cleared, online transactions completed
- Print images of check
- Submit application for loans
- Carry out online bill

The Internet and online Banking

- Challenges in providing Internet services
- Customer safety and security
- The growth of Internet based crimes

Financial services facilities of the future

- Include information-accessing equipment that is so portable
- Expand mobile service delivery, including cell phone

Summary

- Traditional branches are stand alone facilities that provide most of the same services
- ATMs, Internet sites become less costly to operate but may be the least effective at cross-selling additional services

Multiple Choice Question

1. Geographic diversification can reduce overall risk exposure:
   a. True
   b. False

Multiple Choice Question

2. Challenge in providing internet service involves customer inability to speak with 'real live" service representatives for their problems:
   a. True
   b. False

MCQ-Answers

1. A
2. A

Terminologies

- Prestige (n): thanh thế, uy tín
- Pre-empt(v): ưu tiên trước
- Scrutiny (n): xem xét kỹ lưỡng