The Equity Challenge: Alternative Approaches

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Presented by

David Barton

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ACCC

K-STATE Kansas State University Research and Extension

ACCC Arthur Capper Cooperative Center

General Agenda

- Principles of cooperative finance
- Model co-op results for different profit levels and income distribution choices
- Challenges and Conclusions

Principles of Cooperative Finance

- Co-op business model
- Finance decision framework
- Income distribution strategic choices
- Equity management strategic choices

Cooperative Description: Focus on Benefits and Responsibilities

A cooperative is a business operated primarily to provide *benefits* to members through marketing transactions and through a distribution of patronage earnings from these transactions; in return, members have a *responsibility* to provide ownership capital and exercise member control (governance).

Four Unique Roles

Roles	Function	Action
1. Customer	Marketing or Profit Generation	Buy/Sell Transactions
2. Patron	Profit Distribution	Patronage Refunds Per Unit Retains
3. Owner	Ownership	Investment & Redemption
4. Member	Control	Vote

Which role is predominant in members' minds?

Most say the customer role is predominant. Serving customers is the <u>end</u> and the roles of patron, owner and member are <u>means</u> to the end.

Challenge: Inherent conflict of interest between customer, patron and owner roles.

Finance Decision Framework

Finance involves making three critically important and interrelated decisions:

- **Investment decision**
  - **Assets needed to support business strategy**
- **Financing decision**
  - **Debt and equity to finance assets**
- **Income decision**
  - **Distribution of income to patrons and owners as cash or increased ownership**

Finance Decisions and Interrelationships

1. Investment
   - Assets

2. Financing
   - Liabilities or debt
   - Equity
     - Investment
     - Redemption

3. Income
   - Generation
   - Distribution

Balance Sheet

Income Statement

Challenge: Access to equity capital - most co-ops get almost all equity investment by retaining some of the income generated by operations.

Balance Sheet Issues

1. **Asset Investment**
   - Total assets, intended growth rate
   - Asset type, profitability and risk
     - Regional Investment
     - Joint venture investment
     - "Local" current and fixed assets
2. **Debt and Equity Financing**
   - Liquidity: Working capital
   - Solvency: Equity to assets & debt to equity
   - Equity Structure
     - Allocated: three basic types (redemption expectation)
       - Permanent: NGC Stock or Preferred Stock
       - Semi-permanent: Common Stock
       - Revolving: Retained patronage refunds
     - Unallocated: permanent retained earnings
   - **Challenge: non-permanent co-op equity is like debt! Owners expect redemption.**

Philosophy: **(1) Use proactive Balance Sheet Management**
(2) Protect the co-op, then redeem excess equity

Model Co-op: Case 1 (S1) 2007 Beginning Balance Sheet ("snapshot")

Assets	%	$
Current Assets	30%	$3,000,000
Cash	10%	$1,000,000
Receivables	5%	$500,000
Inventories	15%	$1,500,000
Investments	20%	$2,000,000
Regional Stock	20%	$2,000,000
Other Stock	0%	$0
Net Fixed Assets	50%	$5,000,000
Land	15%	$1,500,000
Buildings	15%	$1,500,000
Equipment	20%	$2,000,000
Total		$10,000,000

Liabilities and Members Equity	%	$
Current Liabilities	20%	$2,000,000
Accounts Payable	10%	$1,000,000
Loans Payable	10%	$1,000,000
Patronage Refunds Payable	0%	$0
Equity Redemptions Payable	0%	$0
Long-Term Liabilities	20%	$2,000,000
Bank Loans Payable	18%	$1,750,000
Contracts Payable	3%	$250,000
Members Equity	60%	$6,000,000
Allocated		
Common Stock	10%	$1,000,000
Preferred Stock	0%	$0
Retains (RPR & PUR)	40%	$4,000,000
Unallocated		
Retained Earnings	10%	$1,000,000
Total		$10,000,000

Financial Structure

Liquidity	
Working Capital (CA-CL)	$1,000,000
Current Ratio (CA/CL)	1.50

Solvency	
Equity to Assets (ME/A)	60%
Debt to Equity (LTL/ME)	33%

Income Statement Issues

1. **Income Generation**
   - Revenues – Expenses = Total Income
2. **Income Distribution**
   - Non-patronage income ("non-member")
     - Dividends on stock
     - Retained earnings (unallocated)
     - Income taxes
   - Patronage income ("member")
     - Qualified
       - Cash patronage refunds
       - Retained patronage refunds
       - Per unit retains
     - Nonqualified
       - Dividends on Stock
       - Retained earnings (P)
       - Retained patronage refunds (NQ)
       - Per unit retains (NQ)
       - Income taxes

Philosophy and Challenge :

(1) Be competitive, make as much profit as possible

(2) Choose income distribution alternatives that maximize benefits to patron-owners

Model Co-op: Case 1 (S1) 2007 Income Statement ("annual flow")

Income Generation:	
Sales	$40,000,000
- Cost of Sales	$36,000,000
= Gross Margins	$4,000,000
+ Other Operating Income	$1,000,000
= Gross Income	$5,000,000
- Operating Expenses	$4,700,000
= Net Operating Income	$300,000
+ Regional Income	$300,000
+ Other Investment Income	$0
= Total Income (Before Taxes)	$600,000
- Income Taxes	$13,600
= Net Income (After Taxes)	$586,400

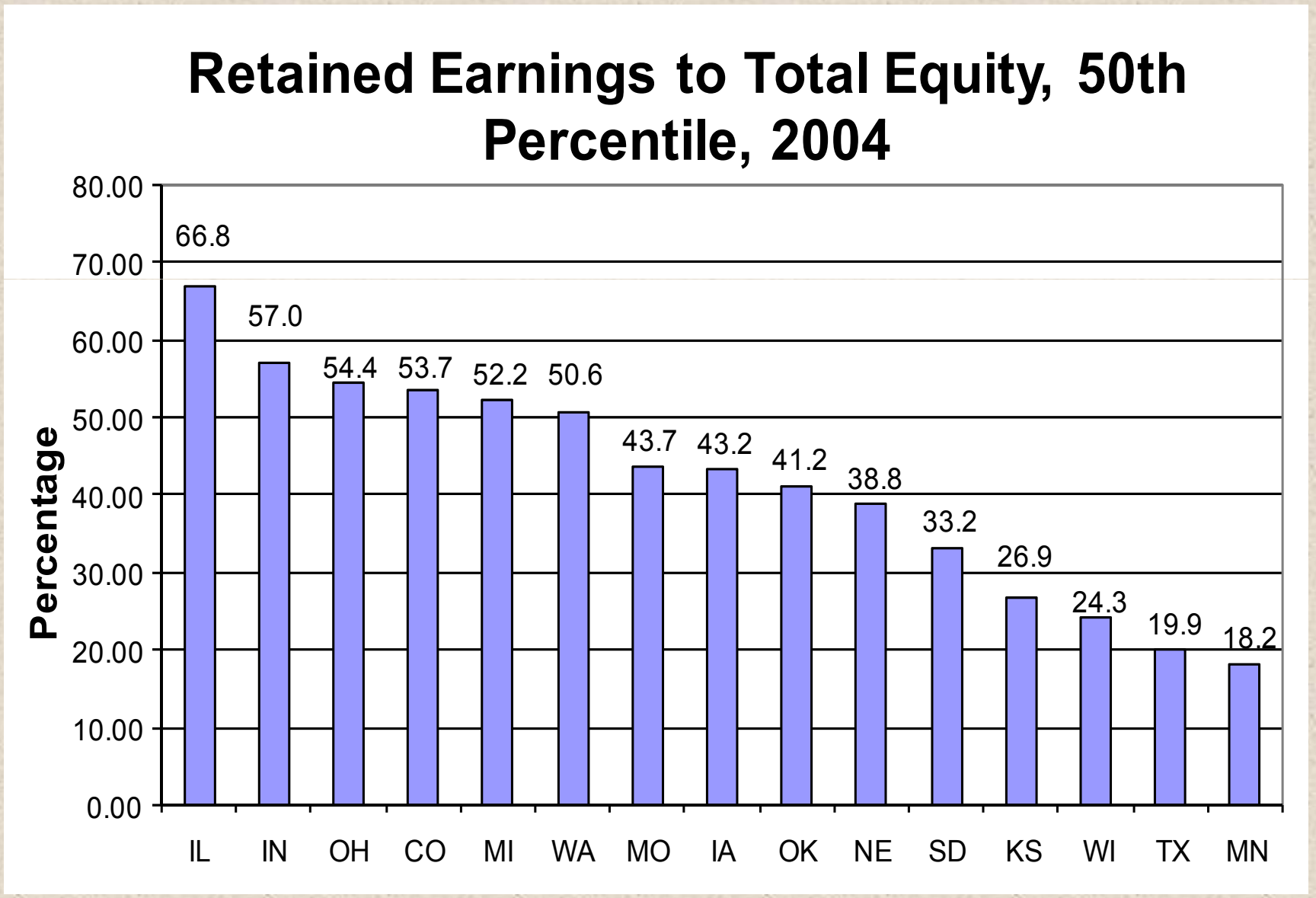
Income Distribution:	
Patronage Refunds	$540,000
+ Per Unit Retains	$0
+ Dividends on Equity	$0
+ Retained Earnings	$46,400
+ Income Taxes	$13,600
= Total Income (Before Taxes)	$600,000

Patronage Refund Distribution:	
Cash Patronage Refunds (40%)	$216,000
+ Retained Patronage Refunds	$324,000
= Patronage Refunds	$540,000

Income Distribution: Selected Strategic Choices

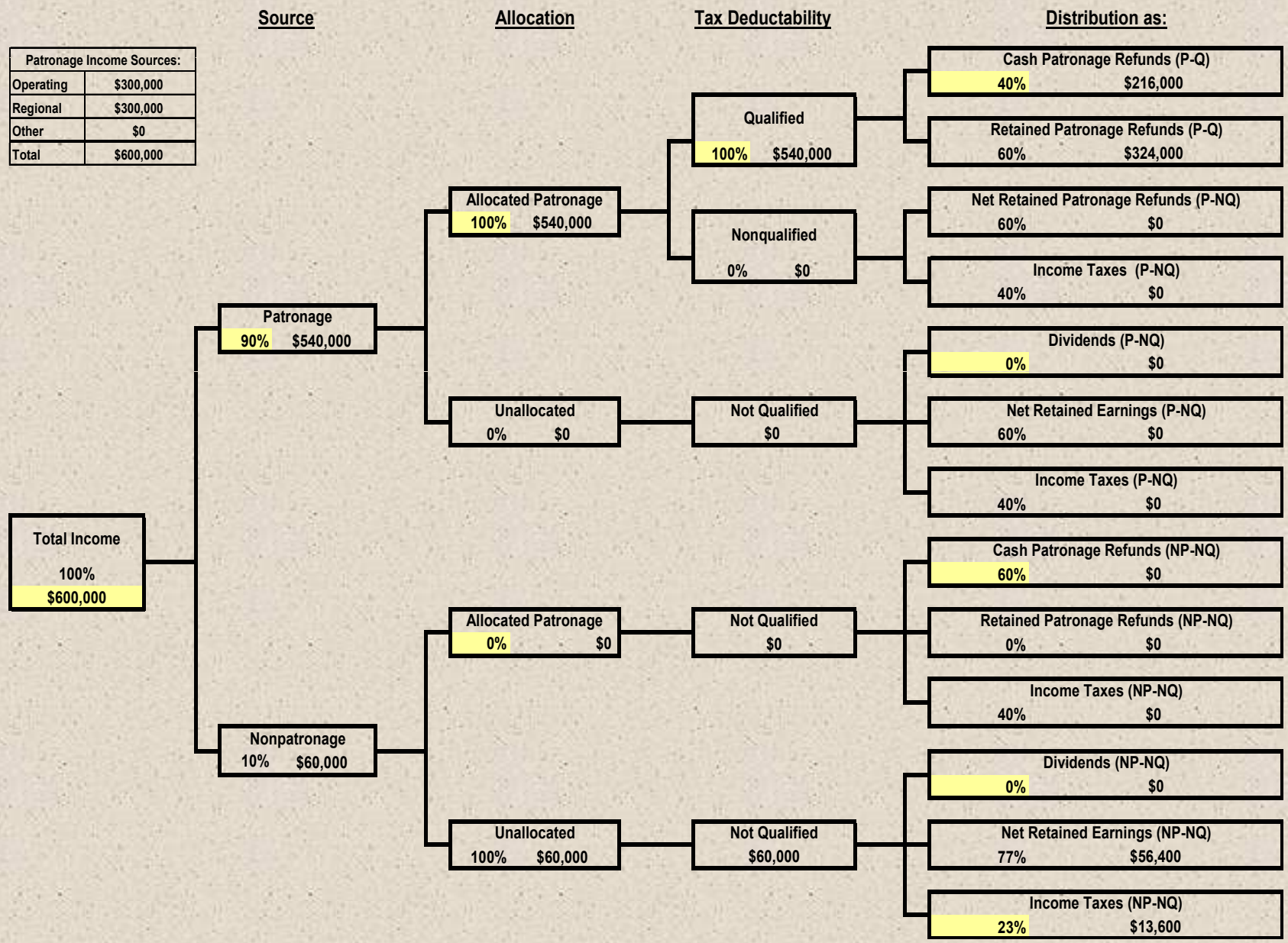
1. Patronage income allocation goal: high customer-patron ownership (high allocated) versus high retained earnings, high unallocated or low allocated.
2. Patronage income distribution by source: allocated versus unallocated
   a. "Local" operating income
   b. Regional (other) cooperative income
   c. Other income (investment, etc.)
3. Patronage refund taxability to co-op: qualified versus nonqualified.
4. Qualified cash patronage refund rate

Equity structure, measured by retained earnings to total equity, varies widely from state to state and co-op to co-op. It is highest in CO, IL, IN and OH.



Barton Co-op Income Distribution Model: Model Co-op Case 1 (S1): High Allocation and Moderate Cash Patronage

Patronage Income Sources:	
Operating	$300,000
Regional	$300,000
Other	$0
Total	$600,000



Model Co-op Case 1 (S1): 2007 Balance Sheet After Income Distribution

Assets	%	$
Current Assets	34%	$3,586,400
Cash	15%	$1,586,400
Receivables	5%	$500,000
Inventories	14%	$1,500,000
Investments	19%	$2,000,000
Regional Stock	19%	$2,000,000
Other Stock	0%	$0
Net Fixed Assets	47%	$5,000,000
Land	14%	$1,500,000
Buildings	14%	$1,500,000
Equipment	19%	$2,000,000
Total		$10,586,400

Liabilities and Members Equity	%	$
Current Liabilities	21%	$2,216,000
Accounts Payable	9%	$1,000,000
Loans Payable	9%	$1,000,000
Patronage Refunds Payable	2%	$216,000
Equity Redemptions Payable	0%	$0
Long-Term Liabilities	19%	$2,000,000
Bank Loans Payable	17%	$1,750,000
Contracts Payable	2%	$250,000
Members Equity	60%	$6,370,400
Allocated		
Common Stock	9%	$1,000,000
Preferred Stock	0%	$0
Retains (RPR & PUR)	41%	$4,324,000
Unallocated		
Retained Earnings	10%	$1,046,400
Total		$10,586,400

Financial Structure

Liquidity	
Working Capital (CA-CL)	$1,370,400
Current Ratio (CA/CL)	1.62

Solvency	
Equity to Assets (ME/A)	60.18%
Debt to Equity (LTL/ME)	30.14%

Note: New equity totals $370,400.

Equity Management Strategic Choices and Process

- Selected strategic choices
- Equity capitalization alternatives
- Equity management process and balance sheet management

Equity Management: Selected Strategic Choices

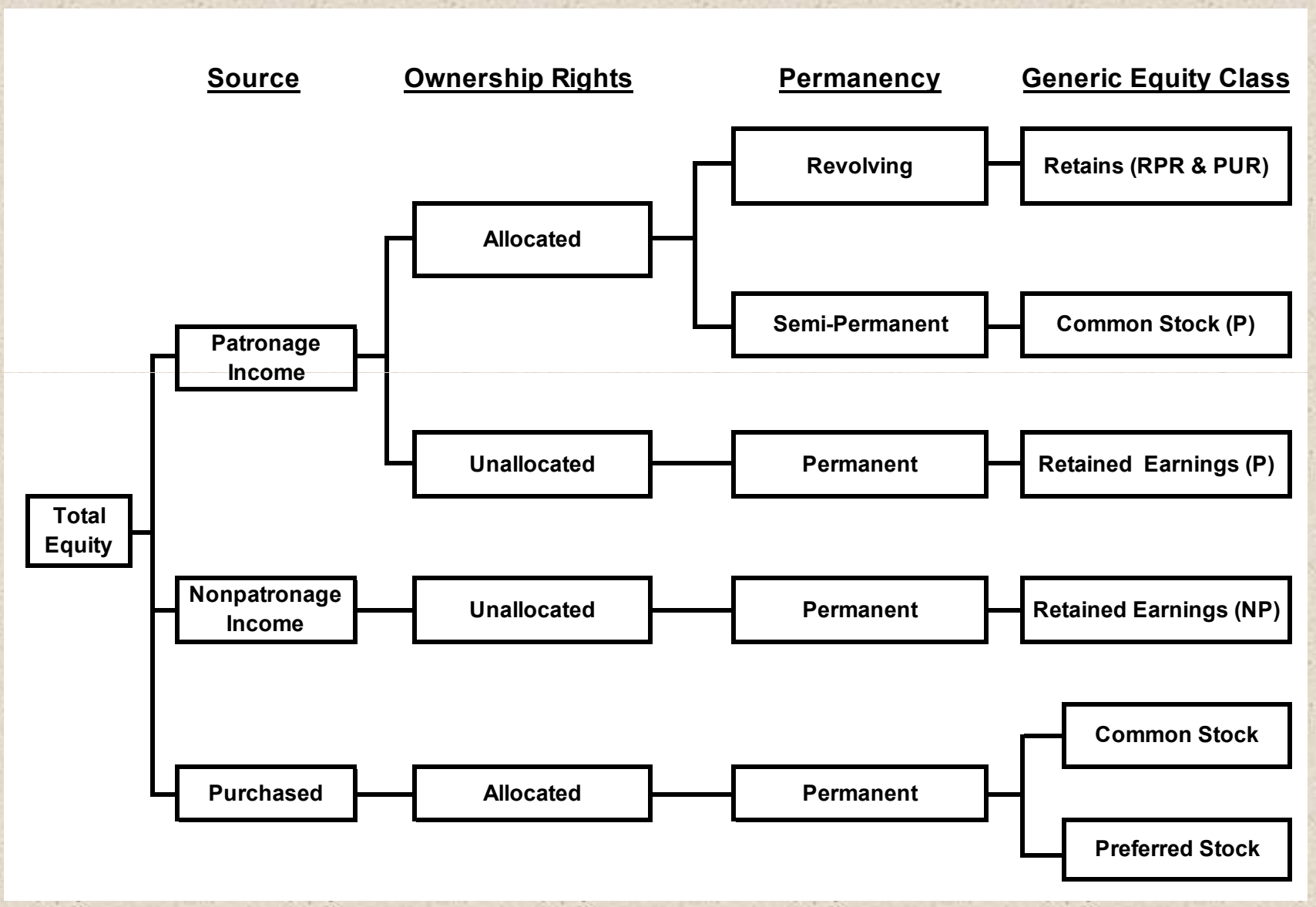
1. Asset growth trend: high, low, none or negative
2. Liquidity target and resulting trend: high, moderate or low
3. Solvency target and resulting trend: high, moderate or low
4. Equity structure:
   a. High allocated *versus* high unallocated
   b. Many allocated equity classes *versus* few (especially applies to mergers)

Equity Management: Selected Strategic Choices

5. **Redemption budget: First manage the balance sheet, then determine budget and redeem "surplus" equity *versus* first manage patron accounts with set targets like AP/O age or RF length to determine budget**

6. **Redemption program and methods:**
   a. **High proportionality of investment (AP/P, RF, BC) *versus* other goals (AP/O, PP)**
   b. **Simple program *versus* complex program for each equity class**
   c. **Same program for all equity classes *versus* unique program for each class**

Equity Capitalization Alternatives



Balance sheet management assumes all equity is permanent until authorized for redemption.

Model Co-op Case 1 (S1): 2007 Balance Sheet After Paying Cash Patronage

Assets	%	$
Current Assets	33%	$3,370,400
Cash	13%	$1,370,400
Receivables	5%	$500,000
Inventories	14%	$1,500,000
Investments	19%	$2,000,000
Regional Stock	19%	$2,000,000
Other Stock	0%	$0
Net Fixed Assets	48%	$5,000,000
Land	14%	$1,500,000
Buildings	14%	$1,500,000
Equipment	19%	$2,000,000
Total		$10,370,400

Liabilities and Members Equity	%	$
Current Liabilities	19%	$2,000,000
Accounts Payable	10%	$1,000,000
Loans Payable	10%	$1,000,000
Patronage Refunds Payable	0%	$0
Equity Redemptions Payable	0%	$0
Long-Term Liabilities	19%	$2,000,000
Bank Loans Payable	17%	$1,750,000
Contracts Payable	2%	$250,000
Members Equity	61%	$6,370,400
Allocated		
Common Stock	10%	$1,000,000
Preferred Stock	0%	$0
Retains (RPR & PUR)	42%	$4,324,000
Unallocated		
Retained Earnings	10%	$1,046,400
Total		$10,370,400

Financial Structure

Liquidity	
Working Capital (CA-CL)	$1,370,400
Current Ratio (CA/CL)	1.69

Solvency	
Equity to Assets (ME/A)	61.43%
Debt to Equity (LTL/ME)	31.40%

Issue: What is best equity capitalization?

Capital Structure Factors: Debt versus Equity

Factor	Amount of Equity
1. Least cost financing - equity costs more than debt	Higher cost, lower equity
2. Risk - ag co-ops have high risk	Higher risk, higher equity
3. Profitability - ag co-ops have low profitability	Higher profit, lower equity
Conclusion: Minimize equity, given risk and profitability because of opportunity cost of equity	

Equity Management Process: Balance Sheet Management

Equity management involves making five critically important and interrelated decisions:

1. **Determine income generation and income distribution**
2. **Determine desired assets**
3. **Determine desired financial structure**
   - **Liquidity: Cash, Working capital, Current ratio**
   - **Solvency: Equity to assets, Debt to equity**
4. **Determine desired equity investment and structure**
5. **Determine desired equity redemption**
   - **First, manage balance sheet: Total redemption budget is "surplus" equity**
   - **Second, manage patron accounts: Redemption program distributes budget.**
   - **Don't let the tail wag the dog!**

Philosophy: Protect the company; owners get what's left over

Challenge: Implement balance sheet management philosophy.

Model Co-op Case 1 (S1): 2007 Balance Sheet After Paying Cash Patronage

Assets	%	$
Current Assets	33%	$3,370,400
Cash	13%	$1,370,400
Receivables	5%	$500,000
Inventories	14%	$1,500,000
Investments	19%	$2,000,000
Regional Stock	19%	$2,000,000
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Buildings	14%	$1,500,000
Equipment	19%	$2,000,000
Total		$10,370,400

Liabilities and Members Equity	%	$
Current Liabilities	19%	$2,000,000
Accounts Payable	10%	$1,000,000
Loans Payable	10%	$1,000,000
Patronage Refunds Payable	0%	$0
Equity Redemptions Payable	0%	$0
Long-Term Liabilities	19%	$2,000,000
Bank Loans Payable	17%	$1,750,000
Contracts Payable	2%	$250,000
Members Equity	61%	$6,370,400
Allocated		
Common Stock	10%	$1,000,000
Preferred Stock	0%	$0
Retains (RPR & PUR)	42%	$4,324,000
Unallocated		
Retained Earnings	10%	$1,046,400
Total		$10,370,400

Financial Structure

Liquidity	
Working Capital (CA-CL)	$1,370,400
Current Ratio (CA/CL)	1.69

Solvency	
Equity to Assets (ME/A)	61.43%
Debt to Equity (LTL/ME)	31.40%

Issue: How much equity should we redeem?

Redemption Budget Calculation

	Beginning Assets	$10,000,000
+	Change in Cash (current assets)	$0
+	Change in Investments	$0
+	Change in Fixed Assets	$0
=	Ending Assets	$10,000,000
	Beginning equity to assets	60%
	Ending equity to assets desired	60%
	Beginning Equity Balance	$6,000,000
+	New Retained Equity (Allocated)	$324,000
+	New Retained Earnings (Unallocated)	$46,400
+	New Common Stock Sales	$0
+	New Preferred Stock Sales	$0
=	Maximum Equity Available	$6,370,400
-	Ending Equity Desired	$6,000,000
=	Redemption Budget	$370,400

Note: New equity allows co-op to redeem old equity, increase solvency or finance growth.

Model Co-op: Case 1 (S1) 2007 Ending Balance Sheet ("snapshot")

Assets	%	$
Current Assets	30%	$3,000,000
Cash	10%	$1,000,000
Receivables	5%	$500,000
Inventories	15%	$1,500,000
Investments	20%	$2,000,000
Regional Stock	20%	$2,000,000
Other Stock	0%	$0
Net Fixed Assets	50%	$5,000,000
Land	15%	$1,500,000
Buildings	15%	$1,500,000
Equipment	20%	$2,000,000
Total		$10,000,000

Liabilities and Members Equity	%	$
Current Liabilities	20%	$2,000,000
Accounts Payable	10%	$1,000,000
Loans Payable	10%	$1,000,000
Patronage Refunds Payable	0%	$0
Equity Redemptions Payable	0%	$0
Long-Term Liabilities	20%	$2,000,000
Bank Loans Payable	18%	$1,750,000
Contracts Payable	3%	$250,000
Members Equity	60%	$6,000,000
Allocated		
Common Stock	10%	$1,000,000
Preferred Stock	0%	$0
Retains (RPR & PUR)	40%	$3,953,600
Unallocated		
Retained Earnings	10%	$1,046,400
Total		$10,000,000

Financial Structure

Liquidity	
Working Capital (CA-CL)	$1,000,000
Current Ratio (CA/CL)	1.50

Solvency	
Equity to Assets (ME/A)	60.00%
Debt to Equity (LTL/ME)	33.33%

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Equity Redemption Methods

- **SP: Special (estate settlements, etc.)**
- **AP/O: Age of patron - oldest first**
- **AP/P: Age of patron - prorate**
- **PP: Percentage pool**
- **RF: Revolving fund**
- **BC: Base capital**

Challenge: Select the combination of redemption methods that provide the right balance between (1) simplicity, (2) highest proportionality of investment and (3) highest cash flow to patron-owners.

Model Co-op Analysis: Purposes

1. To illustrate the application of co-op finance principles in simple and complex situations using a comprehensive financial model and analysis.

2. To illustrate the application of "best financial practices" such as balance sheet management.

3. To illustrate the impact of alternative "outcomes" like low to high profitability, and "decision trade-offs" like high versus low allocation of patronage income.

Model Co-op Analysis: Assumptions

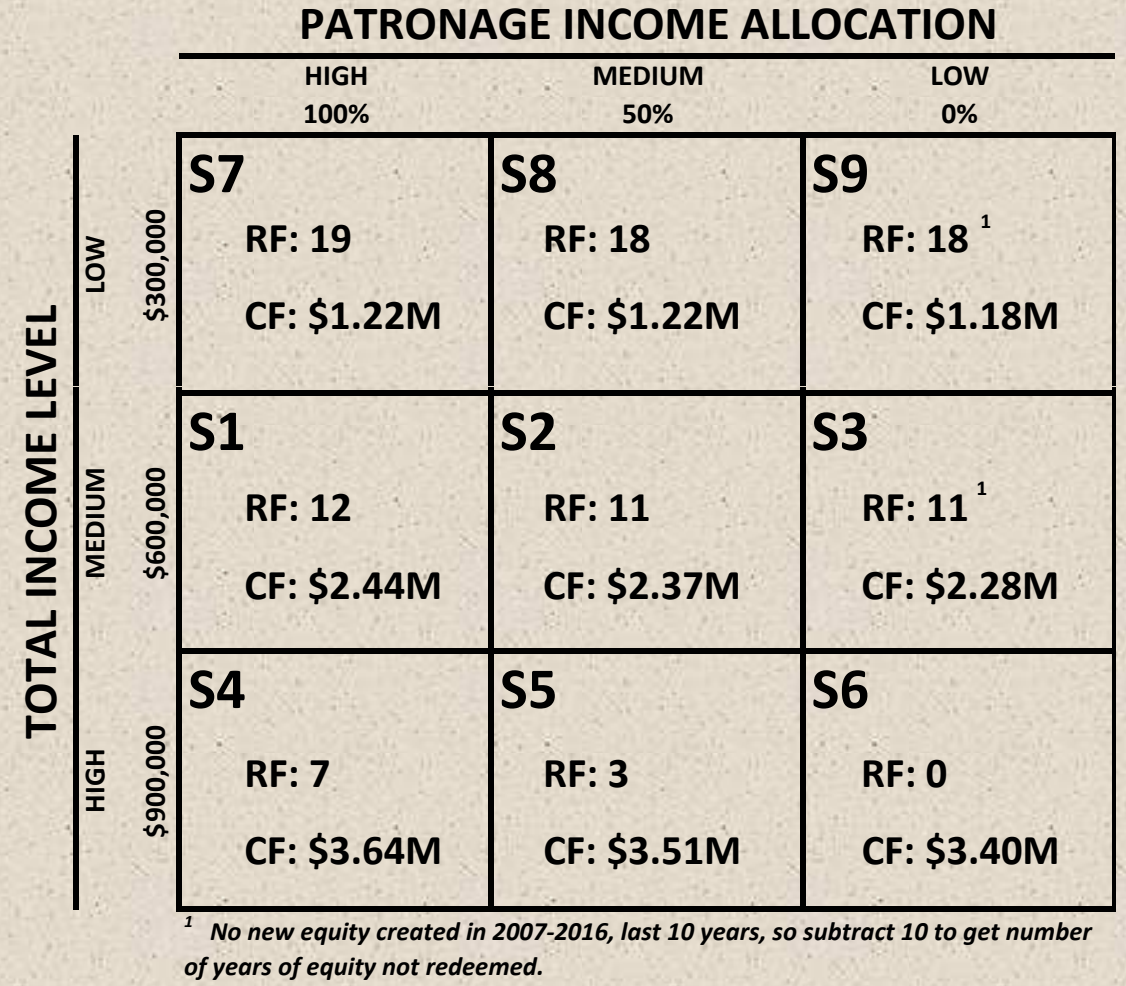
1. **Medium-sized co-op with typical financial structure for WI co-ops.**

2. **Simple past and future to illustrate dynamics of finance outcomes and decisions:**
   - **Past is same as S1 future**
   - **S1 co-op has nine possible futures: S1-S9 as described in slide 29, projected for 10 years, 2007-2016.**

3. **Simple assumptions:**
   - **Same annual total income each year (no sales growth)**
   - **Income level and income distribution like S1 except as changed in slide 29**
   - **No asset growth**
     - **Regional investment constant**
     - **Fixed asset investment constant**

4. **See attached financial statements for S1**

Model Co-op Analysis: RF and CF for Alternative Combinations of PI Allocation and TI Level



[1] *No new equity created in 2007-2016, last 10 years, so subtract 10 to get number of years of equity not redeemed.*

RF is ending revolving fund length in 2016. Starting length in 2007 is 14 years.
CF is the present value of after-tax cash flow to patron-owners, 10 year period, 2007-2016.

Implications of Model Co-op Analysis

1. Biggest driver of equity management performance is profitability.
2. Cash flow to patron-owners varies little with alternative patronage income allocation strategies.
3. High, medium and low patronage income allocation strategies are all sustainable if growth rate is linked to profitability and cash flow. You can't enjoy a champagne diet on a beer budget.

Challenges and Conclusions

1. The biggest financial challenges are:
   a. Inherent conflict of interest between roles of customer, patron and owner.
   b. Access to equity capital – most co-ops get almost all equity investment by retaining some of the income generated by operations.
   c. Non-permanent co-op equity is like debt!
   d. Be competitive for customers' business and make as much profit as possible.
   e. Choose income distribution alternatives that maximize benefits to patron-owners.
   f. Implement balance sheet management philosophy by protecting co-op solvency and liquidity and calculating a redemption budget.
   g. Select a redemption program that balances simplicity, proportionality of investment and cash flow to patron-owners.

Challenges and Conclusions

2. A co-op should practice balance sheet management by setting liquidity and solvency objectives to protect the company. This implies the derivation of a redemption budget to redeem the "surplus" equity. This provides a discipline and guideline for equity management easily defendable by the board and management. This is an element in the value proposition.

3. The biggest driver in equity management performance is profitability. Performance can be measured by revolving fund length or cash flow to patrons. When co-ops perform poorly in equity management measures or getting cash to patrons, it is primarily due to poor profitability, not income distribution and equity structure choices.

Conclusions

4. **Income distribution choices, like high or low allocation, have little differential impact on net cash flow to patron-owners or on the sustainability of the co-op long run (i.e., ability to service allocated equity and manage liquidity and solvency). In other words, high allocation is sustainable if growth is wisely managed.**

5. **Co-ops need to make choices in co-op finance and equity management based on sound financial analysis and their philosophy or value proposition with patron-owners. Each choice has advantages and disadvantages, or consequences, that need to be fully understood. Exploring all the options is encouraged as is innovation and new practices that protect the co-op and serve patron-owner needs.**

“Destiny is no matter of chance…

it is a matter of choice.”

William Jennings Bryan

Questions and Discussion