VNIVERSITAT DE VALÈNCIA Institut Universitari d'Economia Social i Cooperativa

A research on size and performance of F&V Cooperatives located in Mediterranean Central Arch

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CONTENTS

1. Introduction

- What is a F&V cooperative?
  - ✓ Fruit & Vegetable cultivation and commercialization cooperatives, as a type of agricultural cooperatives
  - ✓ This study refers to F&V cooperatives located in València and Catalonia, which creation dates from XIXth century
  - ✓ Their main activity are irrigated crops
  - ✓ This cooperatives are formed by small farmers

1. Introduction

Joint Cooperative marketing

↓

Bargaining Power

↓

Commercial Distribution Companies

- Low prices
- High Costs
- Concentration of Demand
- Traceability

2. Hypotheses

- H1: low F&V prices and high fixed production costs are worsening the financial and economic situation of F&V cooperatives
- H2: mergers would improve the performance of F&V cooperatives, larger size means better performance

3. Methodology

- Ratio analysis, why?
  - ✓ It is one of the most used tools to carry on economic and financial analysis of companies
  - ✓ There are over 17 studies from 1989 to 2009 that have applied the ratio analysis to agricultural cooperatives, agricultural producers organizations and agribusiness in general
  - ✓ Our contribution, to apply this technique in a different geographical area: Central Mediterranean Arc

3. Methodology

- Information sources
  - Financial statements (balace sheets, profit & loss accounts) obtained directly from Official Cooperative Companies Registers
- Analyzed period
  - From 2005 to 2009
- Geographical Area
  - Mediterranean Central Arc, where there are located a significant part of this companies in Spain

3. Methodology

Population and sample

- ✓ Balanced sample from a geographical point of view

	Population		Sample		
Source	Number	%	Number	%	Representation
València	102	68.46	52	68.42	50.98
Catalonia	47	31.54	24	31.58	51.06
Total	149	100.00	76	100.00	51.01

3. Methodology

- Variables in the analysis
  - ✓ Percentage composition on assets and liabilities using the average balance of all cooperatives in the sample (2005 - 2009)(H1)
  - ✓ Ratio analysis using a dynamic, one dimensional and descriptive analysis. To see the evolution of each ratio along the time period considered(H1)
    - We consider the Median of each ratio as a measure of central trend
  - ✓ Dispersion analysis by linear regression method, we try to analyze the relationship between each of the ratio considered and Total Assets (as a measure of size) (H2)

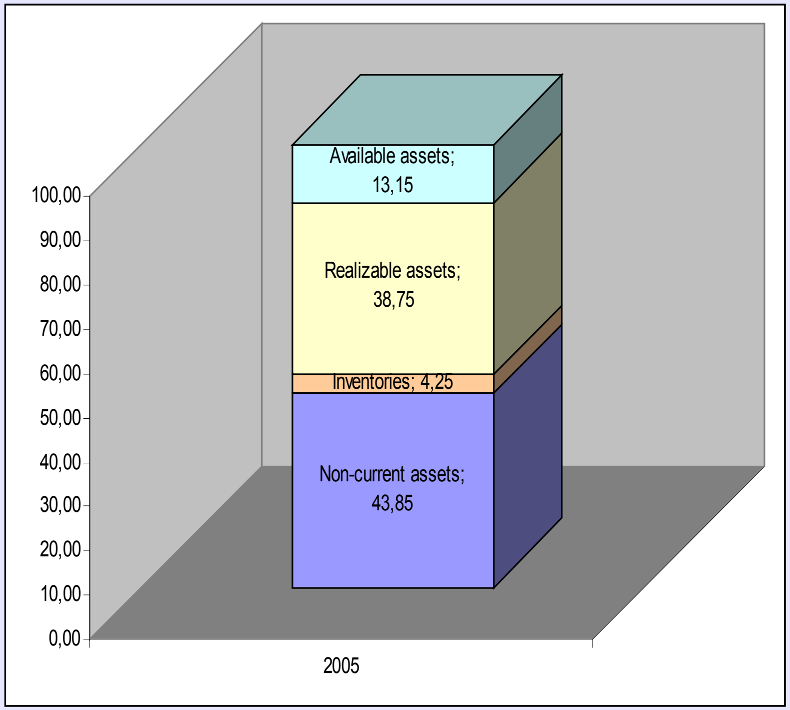
3. Methodology

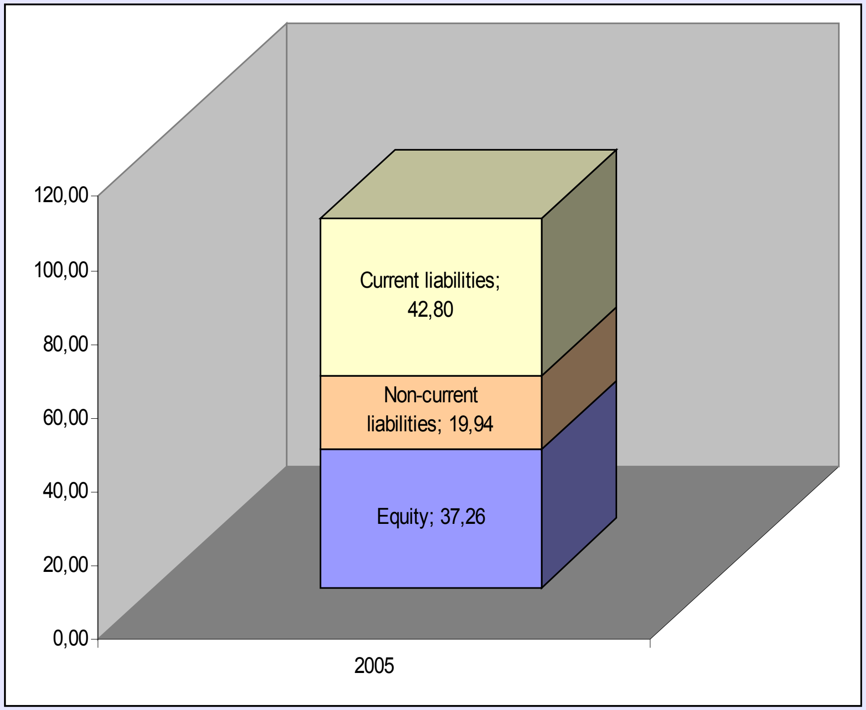
- Ratios used in the study

Type of ratio	Ratio
Financial	**Liquidity (L) = (CA – Inventories) / CL** Solvency (S) = TA / (CL + NCL) **Indebtedness (D) = (CL+NCL) / (TL+Eq)** Debt Structure (DS) = CL / TL
Economic	**Sales Margin (SM) = EBIT / Sales** Asset Turnover (AT) = Sales / TA **Efficiency (E) = Operating Expenses / EBIT**
Mixed	**ROA = EBIT / TA** **ROE = EBT / Equity**

4. Main Findings

Balance sheet composition 2005



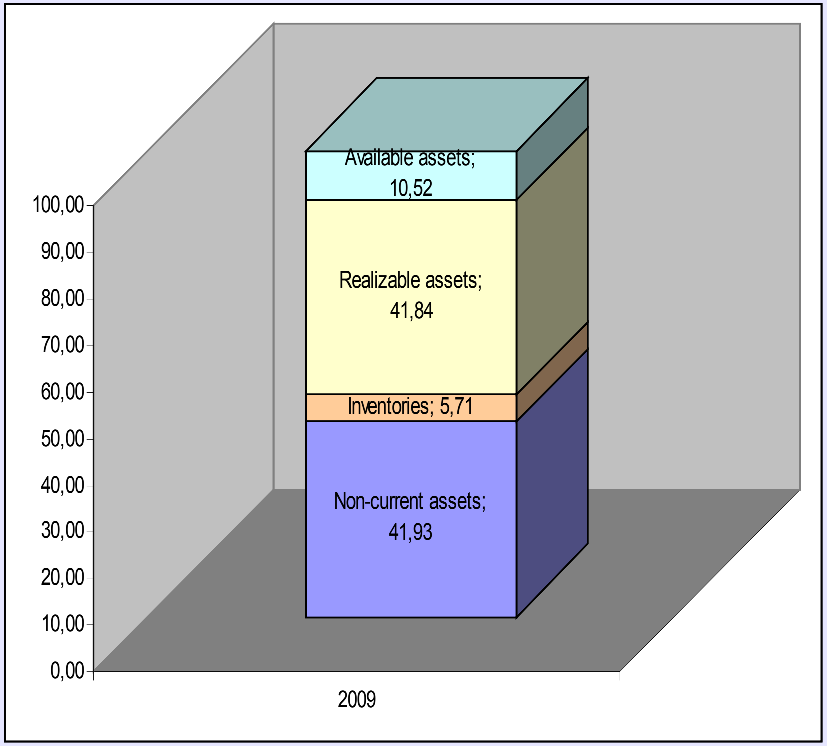


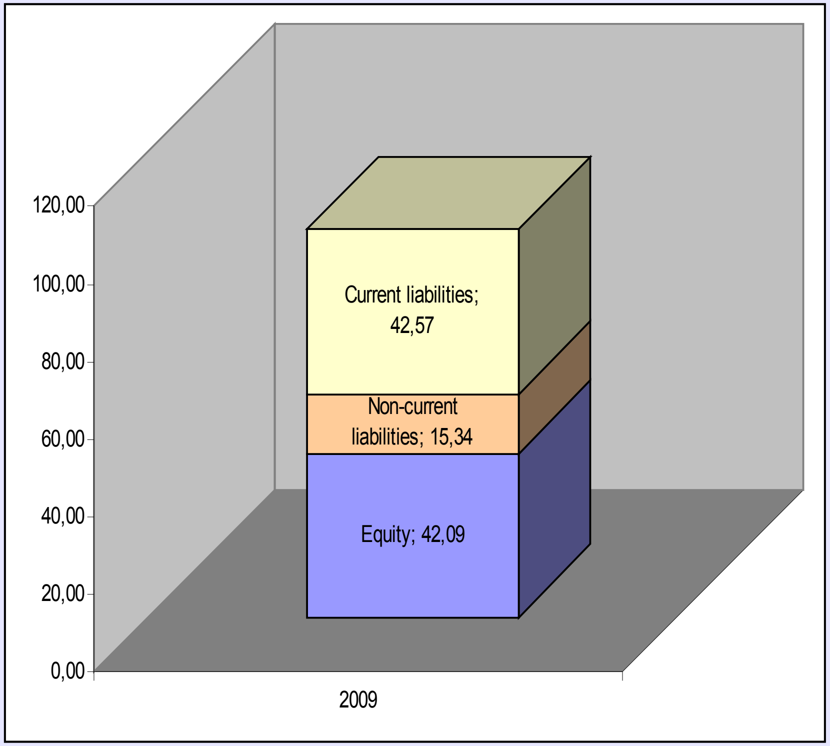
CA – Inventories > CL

51.90% > 42.80%

4. Main Findings

Balance sheet composition 2009



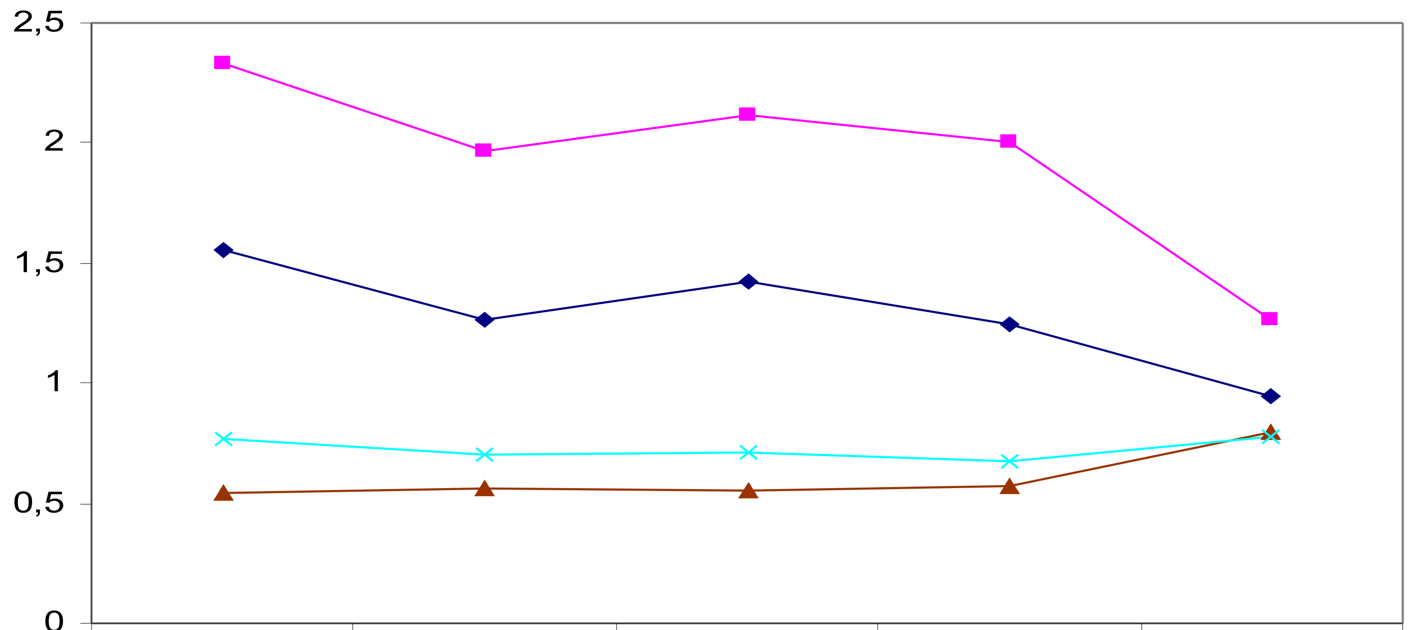


CA – Inventories > CL

52.36% > 42.57%

4.- Main Findings

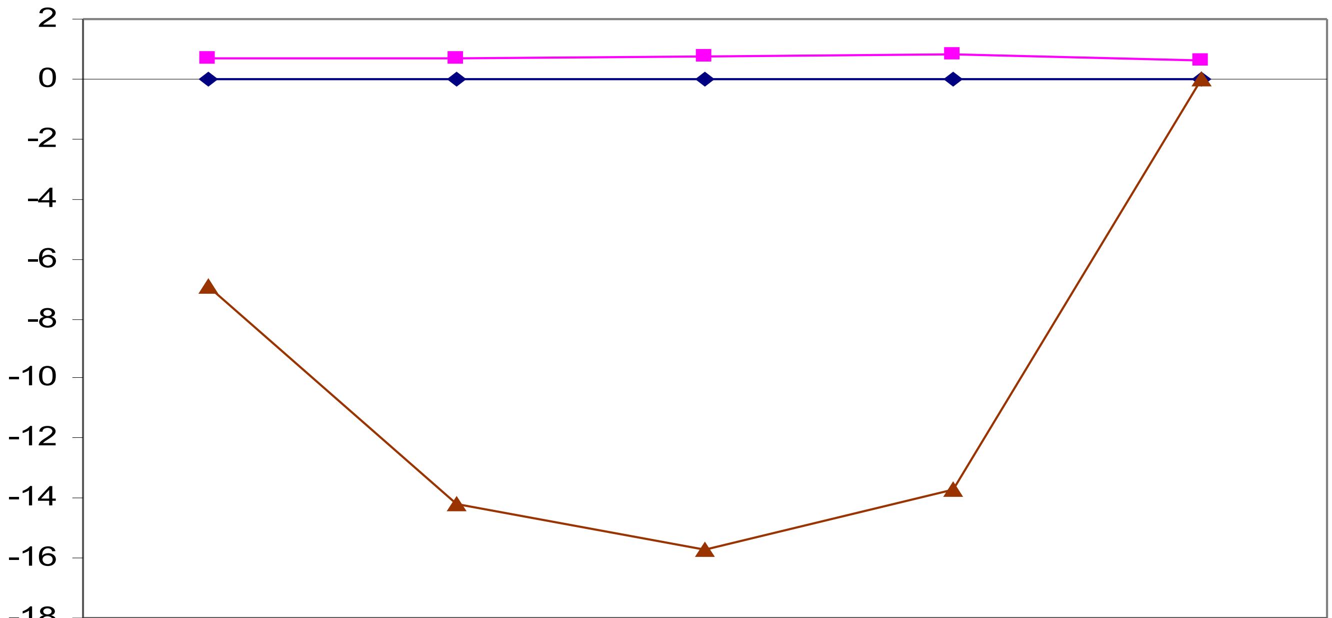
Financial ratios. F&V Coop 2005 - 2009



	2005	2006	2007	2008	2009
Liquidity	1,55	1,26	1,42	1,25	0,95
Solvency	2,33	1,97	2,12	2	1,26
Indebtedness	0,54	0,56	0,55	0,57	0,8
Debt structure	0,77	0,7	0,71	0,67	0,78

4. Main Findings

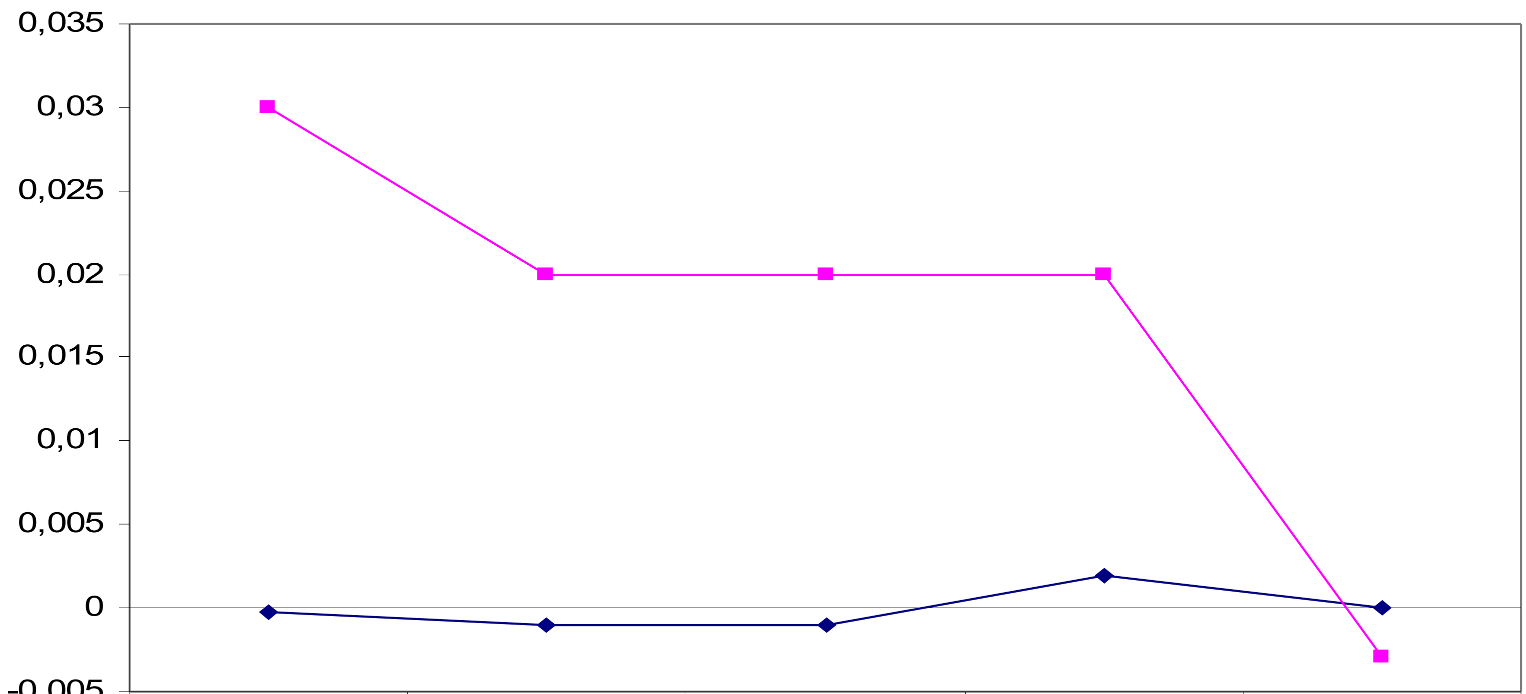
Economic ratios. F&V coop 2005-2009



	2005	2006	2007	2008	2009
Trade margin	0,01	0,01	0,007	0,009	0
Asset turnover	0,7	0,68	0,74	0,85	0,59
Efficiency	-6,95	-14,16	-15,71	-13,73	0

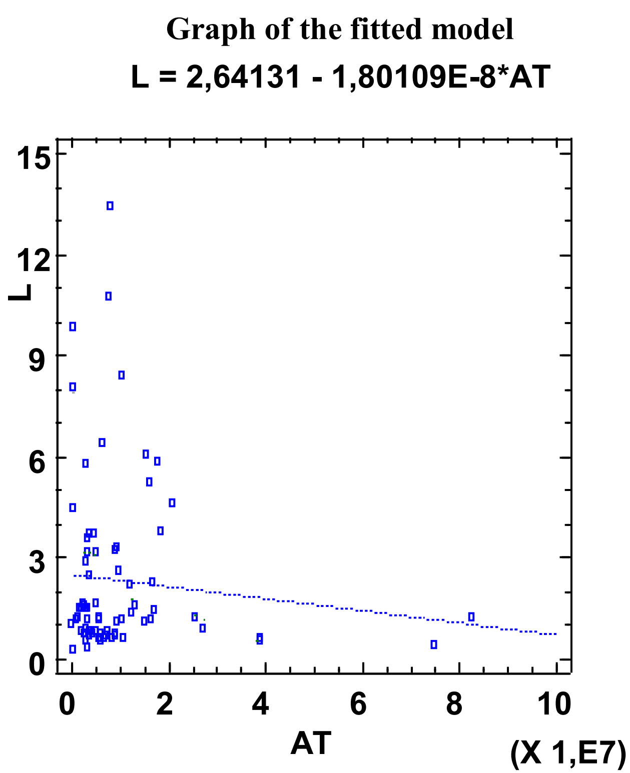
4. Main Findings

Mixed ratios. F&Vcoop 2005-2009

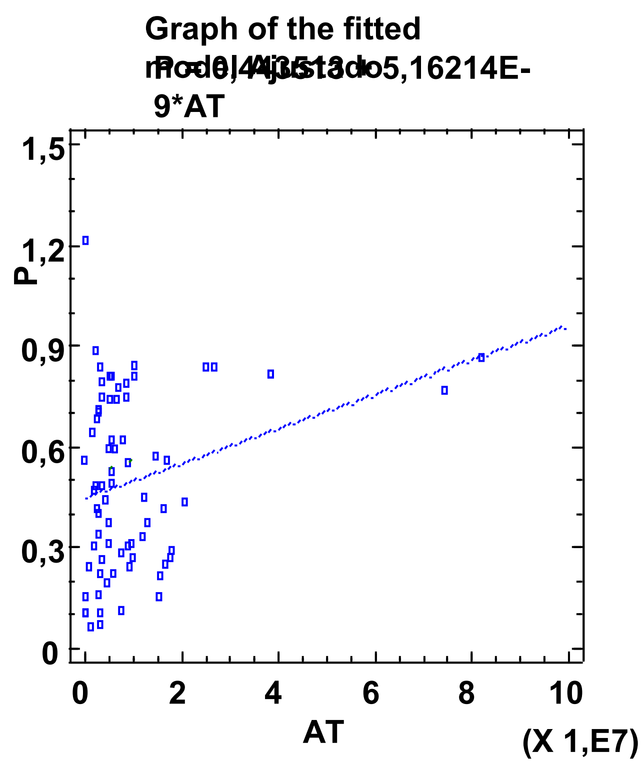


	2005	2006	2007	2008	2009
ROA	-0,0002	-0,001	-0,001	0,002	0
ROE	0,03	0,02	0,02	0,02	-0,003

4. Main Findings

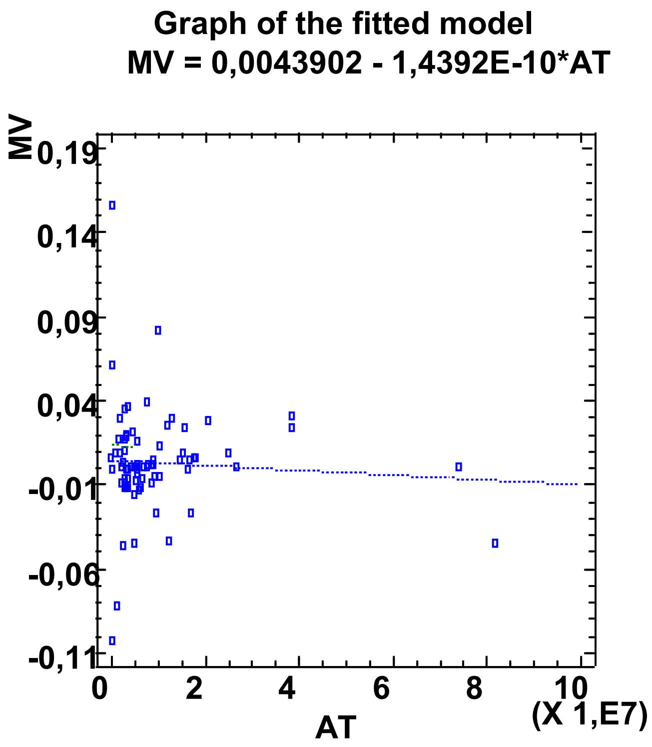


Liquidity

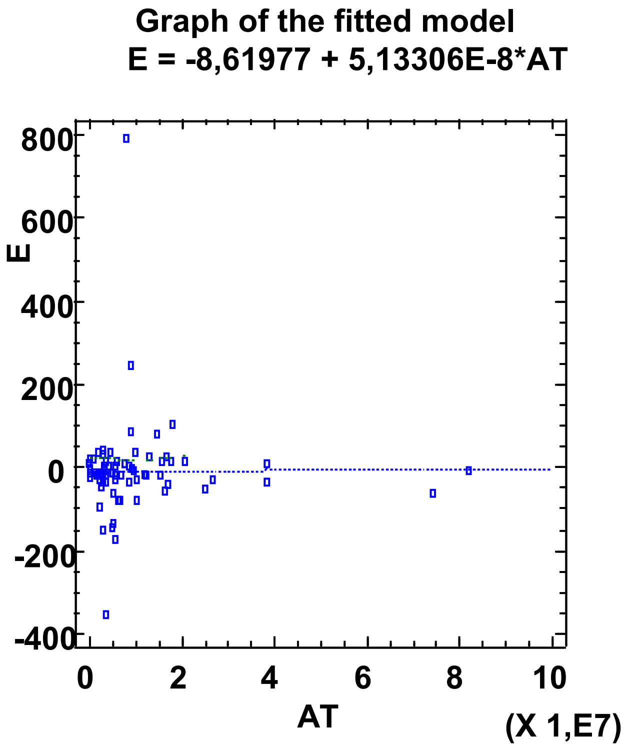


Solvency

4. Main Findings

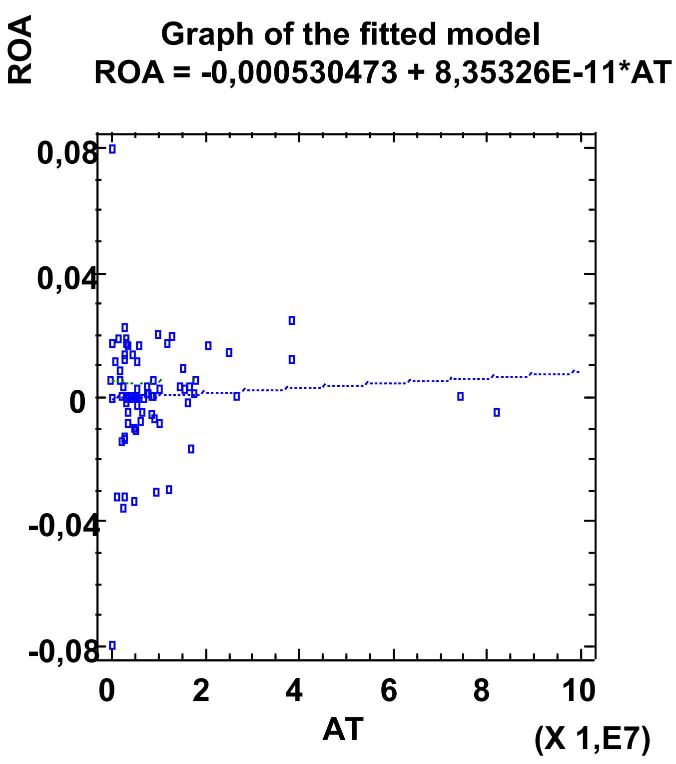


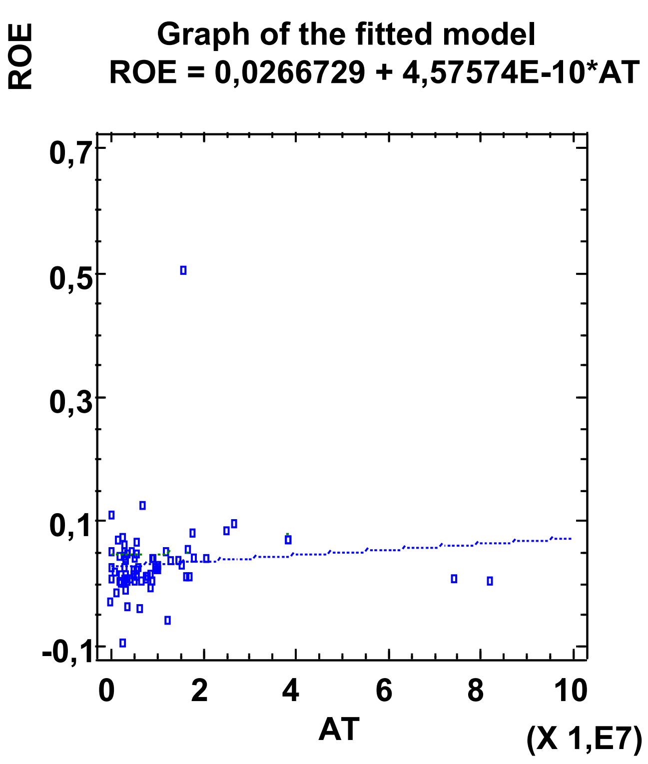
Sales Margin



Efficiency

4. main findings





5. Conclusions

- F&V cooperatives currently have a balanced funding structure, but it is getting worse due to:
  - ✓ The rise in production cost (mainly in labour and supplies)
  - ✓ Failing prices of F&V products
- All ratios studied show a tendency to worsen along the period considered, specially from 2008
  - H1 accepted
- A larger size of F&V cooperatives (TA) do not provide better performance (ratios).Thus, we can affirm that a strategy of mergers is not suitable
  - H2 refused
- We consider that the underlying problem of this companies is probably their management ability

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