Are Portuguese cooperatives income-appealing?

CIRIEC Portugal/UAL

Ricardo Borges dos Santos

rsantos@autonoma.pt

São Paulo, Outubro 2024

UNESP

Social Economy in Portugal

- Economic Social Sector vs the whole economy (2020 – SESA/INE):

  i - Gross Value-Added (GVA) growth rate (**0,4% vs -5,8%**);

  ii - Employment (**0,3% vs -2,2%**);

  iii - Wages (**1,8% vs 0%**);

  iv - 2016: funding capacity: - **598,4 million euros** whereas the whole economy **1 951,6 million euros** (SESA/INE).

Portuguese cooperatives’ performance

- In 2020:

  i) SE sector: cooperatives were **second** in **number** and **GVA** after Associations with Altruistic Goals (AAG), overcoming the latter on **average** retributions by almost **6000 euros** (INE-CASES);

  ii) 2 153 cooperatives; 725 million euros in GVA; 23 530 jobs; 610 million euros in wages (INE-CASES).

Motivation

- Last 30 years: Several studies tried to understand if cooperatives were a good alternative to capitalistic firms and the answer was: **apparently yes** (namely, Craig and Pencavel, 1993; Estrin and Jones, 1998; Pencavel et al., 2006; Dow and Skillman, 2007; Podivinsky and Stewart, 2007; Fakhfakh et al., 2012;, Arando et al., 2012; Pérotin, 2012; Alves et al., 2014; Burdín, 2014; Dean, 2019);

- Nevertheless, cooperatives represent only **3-4% on average of total firms** (Dow, 2018). Why are they rare?

Are Portuguese cooperatives income-appealing?

Are Portuguese cooperatives income-appealing?

Framework

- Wages are profoundly studied in capitalistic firms (Mincer, 1958; Oaxaca, 1973;…);

- Contradictory empirical research in cooperatives: are coops income-appealing (Clemente et al., 2012; Burdín, 2016) or not (Pencavel et al., 2006)?

- What is the case for Portuguese cooperatives?

Are Portuguese cooperatives income-appealing?

Research problem and assumptions

- We investigate if cooperatives' rarity is propelled by its wage reality when compared to capitalistic firms;

- We assume that firms may have different goals; capital and labour are asymmetric and; economically, cooperatives behave as capitalistic firms do.

Are Portuguese cooperatives income-appealing?

Hypotheses

- H1: **Cooperatives pay higher wages to workers than capitalistic firms do** (horizon problem + labour intensive industries);

- H2: **Cooperatives pay higher binding wages (base salaries) to workers than capitalistic firms do** (legal nature of cooperatives);

- H3: **Returns to education are higher in cooperatives than in capitalistic firms** (horizon problem + labour intensive industries => higher bargaining power strengthen by education);

Are Portuguese cooperatives income-appealing?

Hypotheses

- H4: **The effect of firm size on wages is higher for cooperatives than for capitalistic firms** (large coops pay higher wages+profit-sharing nature among members+trade-off reserves for wages+workers' participation in the economic process);
- H5: **The gender wage gap is lower in cooperatives than in capitalistic firms** (coops principles+labour-women intensive industries+more women with executive responsibilities);

Are Portuguese cooperatives income-appealing?

Hypotheses

- H6: **The CLRI effect on wages is lower in cooperatives than in capitalistic firms** (coop workers’ higher bargaining power);
- H7: **In the SE sector, cooperatives pay higher wages than AAG, HHM and Foundations** (coop workers have both higher motivation and productivity).

Are Portuguese cooperatives income-appealing?

Dataset

- Unbalanced panel from the QP database, collected and managed by Statistics Portugal, in the timespan 2010-2019:

  i) Employees: 18-75 years old, full-time workers earning at least the minimum wage;

  ii) Firms: cooperatives, limited liability and share-owned companies (¾ of total employees);

  iii) More than 3,5 million observations.

Are Portuguese cooperatives income-appealing?

Empirical methodology

- Mincerian-based models using schooling, experience and other individual characteristics as the core explanatory variables of wages;
- Other variables controlling for region, industry and time effects are added to the models;
- For the specific case of cooperatives, a dummy variable identifying the nature of the firm (cooperative or not) has also been included in the models to test H1 and H2, interaction variables with this dummy variable to test H3-H6 and dummy variables for AAG, HHM and Foundations to test H7.

Are Portuguese cooperatives income-appealing?

Results

- Models 1 and 2 (total income): coops pay 4,2%-4,4% more than capitalistic firms do thus **H1 validated**;
- Models 3 and 4 (base salaries): coops pay 5,5%-9,7% more than capitalistic firms do thus **H2 validated**;
- Models 5 and 6: coops reward schooling more 1,5%-1,7% thus **validating H3**; firm size effect is higher up to 4,4%-5% in cooperatives thus **validating H4**; the gender wage gap is reduced in coops up to 2,2%-2,4% thus validating H5; CLRI results **contradict H6**. Education sector bias?

Are Portuguese cooperatives income-appealing?

Results

- Models 7 and 8 (= to 5 and 6 without the education sector):

i) CLRI's **results in line with H6** (significantly lower for coops in model 7 and similar in model 8);

ii) Gender wage gap reduction is even more pronounced (gap of 5 p.p.) in favour of coops;

- Models 9 and 10 (models 1 and 2 for the SE sector with AAG, HHM and Foundations): AAG, HHM and Foundations pay less than coops thus **H7 validated**.

Main conclusions

Are Portuguese cooperatives income-appealing?

Main conclusions

- Cooperatives are income-appealing;

- Education is better rewarded;

- Scale has a higher effect;

- Lower gender wage gap;

- Lower effect of CLRI (except when the State intervenes);

- Higher wages in the SE sector (except financial firms);

Grateful for your attention.

UNIVERSIDADE AUTÓNOMA DE LISBOA

Ricardo Borges dos Santos

rsantos@autonoma.pt