



Is degeneration present in the cooperative realm? Evidence from Portugal.

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Motivation



- Many authors tried to understand if cooperatives were a good alternative to capitalistic firms and the answer was: **apparently, yes**

(Jones and Backus, 1977; Cable and Fitzroy, 1980; Thomas and Logan, 1982; Jones and Sevjnar, 1985; Ben-Ner, 1988; Bartlett et al., 1992; Craig and Pencavel, 1993; Burdín and Dean, 2009; Arando et al., 2012; Clemente et al., 2012; Fakhfakh et al., 2012; Pérotin, 2012; Alves et al., 2014; Burdín, 2014; Burdín, 2016)

- However, what is the Horizon Problem's influence on Coops' Governance?
- Is it promoting Coops' rarity? Why do they represent **on average** only **3-4% of total firms, employment and sales** (Dow, 2018), and in Portugal less than 1%?



Our question



Do Portuguese cooperatives degenerate?



Dataset (2010-2019)



- Statistics Portugal:
 - *Quadros de Pessoal*: employees' wages, personal characteristics, promotions and total workers;
 - *Sistema de Contas Integradas das Empresas*: firms' reserves.



Contributions



- Empirically studies degeneration in a constitutional and organizational perspective;
- First work to explain degeneration through the membership fee;
- First work for Portugal.



Do Portuguese cooperatives degenerate?

Empirical methodology



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- Fractional response models using membership fee and promotions as the core explanatory variables of the hired ratio as well as schooling, experience, size, women and wages;
- Other variables controlling for region and time effects are added to the logit, probit and cloglog forms;
- For the specific case of labour-intensive industries, a dummy variable is built to test H7. All the other variables allow testing the other hypotheses.



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Hypotheses



- H1: **Constitutional degeneration is positively related with the cooperative membership fee** (Economic success=>high reserves=> high membership fees)=> **validated**;
- H2: **As cooperative firm size increases, degeneration increases in a first stage and then decreases** (Economic success=>more non-members up to the point where they become influencers)=> **validated**;
- H3: **A higher proportion of employee's promotions mitigates overall degeneration** (workers' promotions=> more participation=> higher productivity=> less hiring)=> **not confirmed**;



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Hypotheses



- H4: **Higher average wages in cooperatives increase degeneration** (higher wages=>non-membership status quo acceptance)=> **validated**;
- H5: **Both higher average schooling and experience decrease the degeneration level of cooperatives** (schooling+experience=>higher productivity=>less hiring)=> **validated**;



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Hypotheses



- H6: **Cooperative degeneration is potentiated as women's average weight on firm's employment increases** (women lower earnings+significant employment representativity=>unaffordable membership fees=>acceptance of non-member status)=> **validated**;
- H7: **Labour-intensive industries tendentially potentiate cooperative degeneration** (Presence in labour-intensive industries=> low skilled workers+competitive equilibria in labour market=> more hiring)=> **not confirmed**.



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Main conclusions



- Constitutional degeneration (membership fee is an obstacle for membership status);
- Size induces degeneration but regeneration may be possible (beyond 100 workers);
- Non-members' wages induce degeneration.
- Experience and education reduce degeneration while more women does the opposite;
- Workers' promotions and labour-intensive industries non-significant;



Recommendations



- Increase and improve the data available for the cooperative sector;
- Create a program to disseminate and explain the cooperative sector;
- Create the foundations for a membership market compatible with the cooperative principles (mitigate the Horizon Problem).
- Legally establish and limit the membership fee.



Limitations



- The data did not allow to examine members' wages and personal characteristics;
- The member status is not available for all coops;
- Not possible to distinguish coops.



Future research



- If our results hold when considered the specificities of different types of cooperatives;
- If members' wages and personal characteristics are producing degeneration;
- If our results hold in an expanded timespan, namely the pandemic period.

Grateful for your attention.

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