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**Effects of Organizational Structure and Governance on  
Retail Establishment Productivity**

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# Effects of Organizational Structure and Governance on Retail Establishment Productivity

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## Introduction & Background

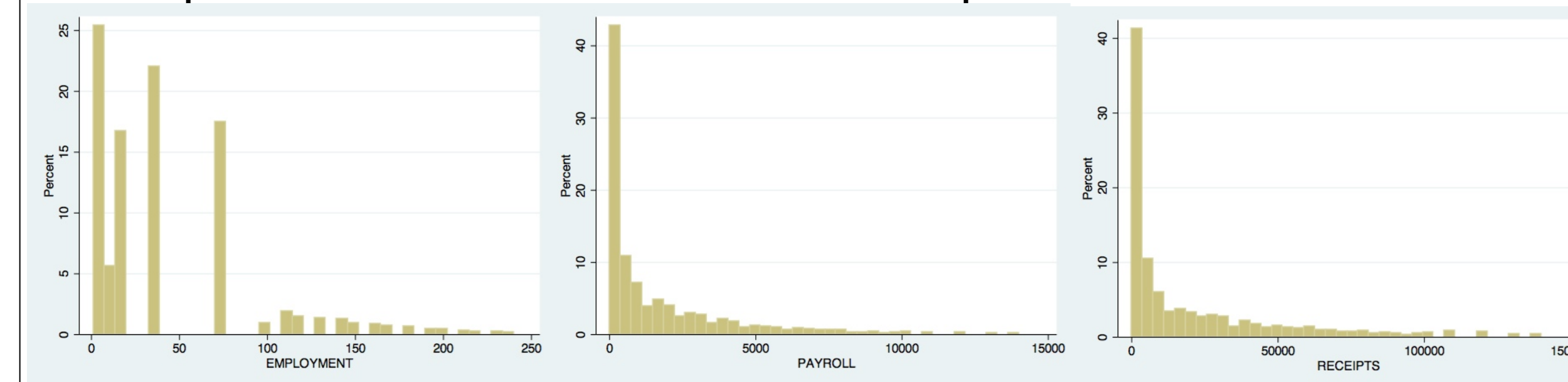
- Economic Theory suggests that owner-managers have a stronger incentive to efficiently use company resources than employee-managers. This is especially true when it is hard for the company to monitor the manager's actions (Affuso, 2002).
- The literature suggests that this is one of the key reasons for franchising (Blair & Lafontaine, 2005).
- By making the agent a principal they now benefit from actions that grow company profits. Since franchisees typically keep around 95% of revenues, doing things that increase revenue also increase the franchisee's income.
- There has been a lot of research on franchising, but no one has examined the effect franchising has on productivity.
- Data Envelopment Analysis (DEA) was developed as a way to measure efficiency relative to the best performers (Ray, 2004).

## Research Question

Are establishments that are operated by a franchisee more efficient than those operated by a franchisor?

## Method & Data

- Our method uses a two-step process. The first step is to run DEA on all franchise-related establishments in sector 44 (retail trade).
- The second step is to use the DEA output (an efficiency score between 0 and 1 and a ranking) as dependent variables in Tobit regressions. This follows Reynolds & Thompson (2007).
- The data come from the Census Bureau's Survey of Business Owners Public Use Microdata Sample (SBO PUMS). This is a publically-available version of the SBO. It removes establishment identifiers, such as name, address, and sub-sector ID numbers.
- Data are limited to those establishments in sector 44 that are either franchisee- or franchisor-operated. There are 7502 franchisee-operated establishments and 186 franchisor-operated establishments in our sample.



## Results

LHS Variable	Rank	Efficiency Score
Constant	5518.02 (188.66)	0.042 (0.003)
Franchisee-Owned	-982.26*** (168.42)	0.005^* (0.003)
Age	-17.87*** (2.55)	-0.0002*** (0.00006)
Ownership % of Largest Owner	-5.99*** (1.02)	0.0001*** (0.00002)
Pseudo R <sup>2</sup>	0.0009	-0.0011

- These results indicate that franchisee-operated establishments have a better rank and a higher efficiency score than establishments operated by franchisors.
- Older establishments and those with larger majority owners also have better ranks.
- The data set used does not allow us to separate sub-sectors within sector 44. This means that vastly different establishments are all included.
- There is a very high correlation between the DEA efficiency score and revenue per payroll dollar (0.95). There is a much lower correlation with revenue per employee (0.47).
- We get insignificant or incorrectly signed results when we use these traditional productivity measures in our Tobit regressions.
- Future research will use private Census data, which will allow us to include chain or sub-sector fixed effects.

### References

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