

La valutazione dell'impatto di interventi pubblici: metodi e
studi di caso

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Entry regulations and labour market outcomes: Evidence from the Italian retail trade sector

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Introduction:

- Regulation not only of the labour market, but also the product market affects employment growth
- In this paper I focus on the relationship between entry barriers (a type of product market regulation) and employment.
- Entry barriers are rules that prevent the entrance of new firms in a given sector.
- Retail trade sector in Italy

Introduction:

The theory:

- Increasing competition (lower barriers) have ambiguous effects on sectoral employment (e.g. Blanchard 2005).
- Competition increases productivity, and this implies lower employment for a given level of output

But:

Higher productivity may lead to lower prices, higher demand and higher employment.

Policy makers:

Entry barriers supports the level of employment.

Consequence:

The effects of entry barriers on employment is an empirical question

Introduction:

Increasing empirical literature:

Newmark & Zhang & Ciccarella S., (2005), ``The effects of Wal-Mart on local labour markets'', NBER Working paper Series No. 11782.

Burda & Weil , (2005), ``Blue Laws'', Working paper.

Bertrand & Kramarz (2002): ``Does entry deterrence hinder job creation? Evidence from the French Retail Industry'' QJE.

Introduction:

The focus:

The effects of entry barriers on employment in the Italian retail trade sector, which is currently regulated by the Bersani law issued in 1998.

What's new?

1. Evidence on the effects of increasing competition on the “incumbents”;
2. Evidence for Italy

The plan of the presentation:

1. The Bersani Law
2. Evidence for Italy
3. The strategy for identifying the effects of regulations
4. Results
5. Robustness checks

1. The Bersani Law

The Bersani Law (BL) was issued in 1998

Before the BL

Opening both small and large-sized outlets required obtaining a permit issued by the municipality governments

After the BL

3 types of shops:

- (1) small: not exceeding 150 sq. m. floor space
- (2) medium-sized, i.e. between 150 and 1,500 sq. m.,
- (3) large establishments (in cities of over 10,000 inhabitants the thresholds are raised respectively to 250 and 2,500 sq. m.).

3 types of regimes:

1. Free entry
2. No changes (authorized by the municipality authorities)
3. Large store promoters have to apply to the regional authority.

I. The Bersani Law

- The national law established that authorizations/rejections are must be issued according to a commercial zoning plan aimed at coordinating the development of large stores with environmental and urban considerations.
- In practise, 17 out of 20 regions in their zoning plans imposed quantitative restrictions to large store openings, i.e. entry barriers.
- Only Marche, Piemonte, Emilia Romagna initially set general guidelines.
 - At the end of 2002 Marche stopped new entries until 2006
 - At the end of 2005 Piedmont stopped new entries and in 2006 imposed barriers.

2. Evidence

- Regional and time variation in regulation can be used to study the association between entry barriers and employment in the retail trade sector.

Estimating differences in trends

Dependent variable:

The share of people employed in the retail trade sector at the province level from 1996 to 2005

Data:

Quarterly data from the LFS. The size of the establishments in square meters is proxied by the number of workers in the retail trade unit.

Time:

Assume that large store openings occur after 1 year from authorization (i.e. 2001-III in Piedmont, 2001-I-IV 2003 in Marche, I-2002 in Emilia R.)

DID estimator:

Define a dummy equal to 1 if data refer to provinces of the 3 regions with no barriers and to periods after large store openings

Italy: Differences in trends in the regions with no barriers.

	Coeff.	St. err.(1)	
Model (1)			
--Total retail trade employment	.0017	.0017	
Model (2)			
--Large store employment	.0032	.0007	(***)
Model (3)			
--Small shop employment	-.0021	.0015	(*)
Model (4)			
--Small shop owners	-.0012	.0010	(*)
Model (5)			
--Small shop salaried workers	-.0004	.0006	
Model (6)			
--Small shop, salaried worker full time	-.0001	.0005	
Model (7)			
--Small shops, 1 worker	-.0023	.0007	(***)

The models also includes: Individual characteristics, Year dummies, Seasonal dummies, Province dummies. Standard errors are clustered.

3. The identification strategy

The DID estimates may have causal interpretation when

1. The liberalizing and restrictive regions must be similar before the treatment
2. Changes observed after the treatment must be due to the treatment and not to other economic factors.

I can compare employment in two close and similar regions before and after the inception of the regional regulations

However:

How to find similar regions with different regulation? If the regions are similar why they should adopt different policies?

Remember: After 2002 Marche stopped entries. The policies of Marche do not differ in the long run from the policy of other liberalizing regions!

Comparing regions

	Retail trade empl. over population	Large store empl. over pop.	Small shop empl. over pop.	Regional pop. over Italian pop.
Marche	9.0	1.0	6.8	2.5
Abruzzo	7.8	0.6	5.9	2.2
Umbria	9.2	1.6	6.4	1.4

	Pop. Density	Value added p. c. (year 1995)	Pop. in cities > 10,000 over total pop.	Pop. in seacoast cities over total pop.
Marche	14.9	15.1	25.2	12.5
Abruzzo	11.8	12.9	23.0	11.6
Umbria	9.7	14.9	47.5	0.0

The stringency of local regulation: 2000—2002

	Number	Sq. m.	Sq. m./pop.	Number	Sq. m.	Sq. m./pop.
	Marche					
Pesaro	4	41,700	12.4	0	0	0.0
Ancona	4	40,300	12.0	1	34,000	7.6
Macerata	1	6,600	2.2	2	36,000	11.9
Ascoli Piceno	4	104,900	28.3	2	6,000	1.6
Total	13	193,500	13.4	5	76,000	5.2
	Abruzzo					
Teramo	2	24,500	8.5	2	12,000	4.2
Pescara	2	31,500	10.7	0	0	0.0
Chieti	4	42,200	11.0	2	48,000	12.6
L'Aquila	0	0	0.0	1	8,000	2.7
Total	8	98,200	7.7	5	68,000	5.4

The stringency of local regulation: 2003--2005

	Approved applications			Rejected applications		
	Number	Sq. m.	Sq. m./pop.	Number	Sq. m.	Sq. m./pop.
	Marche					
Total	0	0	0	0	0	0
	Abruzzo					
Teramo	1	8,000	2.8	2	16,000	5.6
Pescara	1	5,000	1.7	0	0	0.0
Chieti	3	19,200	5.0	0	0	0.0
L'Aquila	6	47,400	16.0	1	5,200	1.8
Total	8	79,600	6.2	5	21,200	1.7

3. The identification strategy

To improve identification

Two sub-samples

- Sample 1: People living in Ascoli Piceno (treated) and Teramo (non-treated)

This sample is very homogeneous, however:

To control for endogeneity of location

- Sample 2: People living in Pesaro--Ancona (treated) and Pescara--Chieti (non-treated)

This sample is less homogeneous, however:

No endogeneity of location

Sample 1



Sample 2



Sample 1: some descriptive statistics

	Treated		Non-treated	
	Before	After	Before	After

Labour market status (%of total population)

Employed	55.7	57.3	48.9	51.5
Unemployed	4.3	4.1	5.5	2.7
Out of the labour force	40.0	38.6	45.6	45.8

Sectoral composition of employment (% of total population)

Industry	20.1	22.1	13.2	14.5
Building and construction	4.2	4.1	4.9	5.3
Retail trade	8.3	9.8	8.1	7.8
Other services	19.0	18.6	20.3	21.8

Sample 1 : some descriptive statistics

	Treated		Non-treated	
	Before	After	Before	After
	Share of trade sector employees			
Large establishments	0.9	1.0	0.8	0.4
Small establishments	6.0	7.0	6.4	6.3
of which: <i>shop owners</i>	3.8	3.5	4.4	4.3
<i>Men</i>	71.0	69.8	74.7	71.7
<i>Women</i>	33.9	30.2	25.3	28.3
of which: <i>salaried workers</i>	1.7	2.9	1.6	1.5
<i>Men</i>	54.4	43.7	52.6	50.0
<i>Women</i>	45.6	56.3	47.4	50.0
Number of observations	15,565	6,114	15,324	5,975

4. Sample 1 and Sample 2: DID estimates of the policy effect

	Sample 1			Sample 2		
	Coeff.	St. err.		Coeff.	St. err.	
Model (1)						
--Total retail trade employment	.0080	.0001	(***)	.0077	0.0002	(***)
Model (2)						
--Large store employment	.0051	.0001	(***)	.0084	.0001	(***)
Model (3)						
--Small shop employment	.0026	.0002	(***)	-.0008	.0001	(***)
Model (4)						
--Small shop owners	-.0063	.0000	(***)	-.0049	.0001	(***)
Model (5)						
--Small shop salaried workers	.0086	.0001	(***)	.0039	.0001	(***)
Model (6)						
--Small shop, salaried worker full time	.0060	.0000	(***)	.0041	.0001	(***)
Model (7)						
--Small shops, 1 worker	-.0054	.0001	(***)	-.0033	.0001	(***)

The models also includes: Individual characteristics, Year dummies, Seasonal dummies, Province dummies. Standard errors are clustered.

5. Robustness checks:

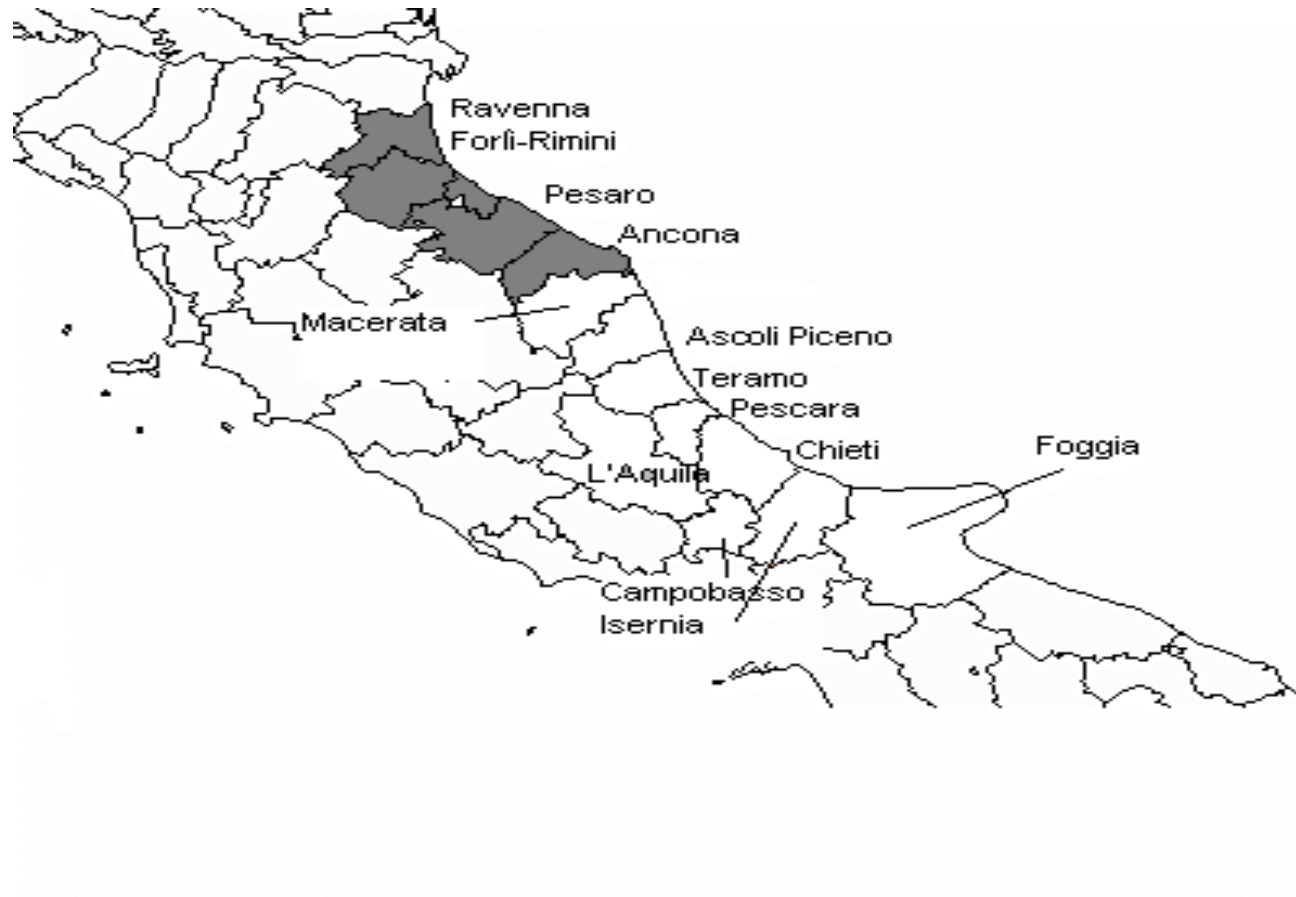
1. The increase in the share of employees in total population might be driven by a rise in total employment;
2. If differences are due to regulations, comparing provinces with similar regulation would produce a zero DID estimate
3. If differences are due to regulations and not to other trends, after the stop imposed by Marche in 2003 would produce a non-positive DID estimate.

Robustness check 1: Retail trade employment over total employment

	Sample 1			Sample 2		
	Coeff.	St. err.		Coeff.	St. err.	
Model (1)						
--Total retail trade employment	.0210	.0003	(***)	.0196	.0007	(***)
Model (2)						
--Large store employment	.0330	.0008	(***)	.0293	.0000	(***)
Model (3)						
--Small shop employment	.0196	.0017	(***)	.0222	.0003	(***)
Individual characteristics	Yes			Yes		
Year dummies	Yes			Yes		
Seasonal dummies	Yes			Yes		
Province dummies	Yes			Yes		

Standard errors are clustered.

Sample 1*: similar liberalizing provinces



Sample 2*: similar restrictive provinces



Robustness check 2: Comparing provinces with similar regulations:

	Sample 1*			Sample 2*		
	Coeff.	St. err.		Coeff.	St. err.	
Model (1)						
--Total retail trade employment	.0040	.0050		.0008	.0086	
Model (2)						
--Large store employment	.0046	.0030		-.0001	.0004	
Model (3)						
--Small shop employment	-.0006	.0069		.0009	.0083	
Individual characteristics	Yes			Yes		
Year dummies	Yes			Yes		
Seasonal dummies	Yes			Yes		
Province dummies	Yes			Yes		

Standard errors are clustered.

Robustness check 3: Comparing Marche and Abruzzo after 2002

	Sample 1*			Sample 2*		
	Coeff.	St. err.		Coeff.	St. err.	
Model (1)						
--Total retail trade employment	.0001	.0004		-.0052	.0001	***
Model (2)						
--Large store employment	.0001	.0001		-.0072	.0000	***
Model (3)						
--Small shop employment	.0001	.0001		-.0032	.0030	***
Individual characteristics	Yes			Yes		
Year dummies	Yes			Yes		
Seasonal dummies	Yes			Yes		
Province dummies	Yes			Yes		

Standard errors are clustered.

5. Conclusions:

- Evidence that barriers negatively affect sectoral employment;
- Rising competition may produce a recomposition effect in favour of full-time dependent employment
- Some evidence that small shops increase their size