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Trade Liberalization and Food Retail Structure: The Italian Case

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Paper prepared for presentation at the 3rd AIEAA Conference "Feeding the Planet and Greening Agriculture: Challenges and opportunities for the bio-economy"

> 25-27 June, 2014 Alghero, Italy

Summary

In this paper we assess the impact of the LD 114/1998 on the structure of the Italian food retailing industry. We use difference-in-difference technique, comparing the level of concentration, number of stores, average store size and level of service offered to consumers in regions enacting mandated consistent with the LD 114/1998, versus those that did not. Results show that, once the endogenous nature of policy changes is controlled for, the policy appears more effective than expected, in terms of its impact on concentration, consumers' access, store size and level of service to consumers. While the decree overall seems to have help the consumer to have more access and more in-store services, our analysis suggests food retailing became more concentrated in response to the implementation of the LD 114/1998. Further, the effect of the liberalization seems to have stronger effects in regions where the level of liberalization implemented is "low".

Keywords: *Food Retailer Structure, Trade Liberalization* JEL Classification codes: *L*81 *L*22 *L*52

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1. INTRODUCTION

In the last decades food retailing in developed countries has experienced rising concentration levels and industrial consolidation (e.g. Dobson and Waterson, 1999; Hewitt, 2000). Along with "traditional" barriers to entry and the push for larger sizes, needed to reach economies of size and to acquire bargaining power with respect to suppliers (Dobson 2005), additional barriers may arise because of strict trade regulations (Boylaud and Nicoletti, 2001). In spite of the ongoing harmonization process of EU Member Countries' regulatory schemes, considerable disparities still exist with regard to the liberalization of the retail sector, in terms of zoning laws, opening days and hours,1 as well as other restrictions (Boylaud and Nicoletti, 2012).

Until the last decade of the twentieth Century, Italy presented an obsolete and rigid retail trade regulation, based on decades-old laws (Law 426/71, and the Commerce law of 1927), which resulted in one of the most restrictive regulation among OECD members (Boylaud and Nicoletti, 2001). Due to the capillary control systems of supply and demand, administrative barriers (all retail establishment had to register to the "Registro Esercenti il Commercio" – REC - (Registry of retailers) working as a means to control the number of stores in an market), and the economic disparities among the regions, at the moment of the 2001 Census of Industry and Services (ISTAT, 2001), the Italian food retailing presented itself as highly fragmented. Food stores in the Northern Italian regions had an average selling area exceeding 1,200 square meters /1,000 residents, while the average store size was much smaller in many southern provinces, ranging between 620 and 750 square meters /1,000 residents. Structural differences in food stores presence, resulting in potential access disparities for the population were the outcome of consolidation at the local level and structural and macro-economic factors, including economic growth, income and infrastructures presence (Cozzi, 2008), as well as heavily polarized retail policies.

With the Law Decree N. 114, of 31 March 1998, also called "Bersani Decree", after Minister Pier Luigi Bersani, Italy begun a process of liberalization which would continue through the next decades (Heimler, 2009). The LD 114/1998 ("Riforma della disciplina relativa al settore commercio" – Trade sector reform) did not propose a full liberalization, but the removal of competition constrains, and the replacement of barriers to entry with a set of rules to ensure fair access to market (for example abolishing the REC). Other changes implemented by the Decree were: administrative definition of supply and demand; introduction of a regional authorization for the opening of large surfaces; and partial

¹ Difference in shopping hours/days restrictions are particularly marked across European Countries. While Sweden has had unrestricted opening hours since 1972, countries, like Denmark, Germany and the Netherlands, more connected to specific interest groups, presented opening weekend and evening opening hours restrictions (Gradus, 1996). In Ireland, Sweden, Portugal and United Kingdom there are almost no legal restrictions on Sunday shopping (Dijkgraaf and Gradus, 2005).

liberalization of opening hours.² The decree was criticized and ostracized by incumbent retailers and their lobbies, fearing that an increased competition may result in a decrease in their profitability (Heimler, 2009).

The implementation of the LD 114/1998, was dissimilar across regions (Viviano et al. 2012). Many regions appeared to be very sensitive to pressure from retailing interest groups, and therefore resisted the liberalization process, while others responded promptly modifying substantially their regulation embracing a more liberal approach. Some regions left their regulations *de facto* unchanged for almost a decade, until the Law Decree 223/2006 pushed further towards de-regulation.³

All in all, the LD 114/1998 decree was considered an important step in the direction of pushing towards more deregulation; however, it was, per se only partially successful for the reasons illustrated above. Despite the relevance of this law, only few economic analyses of its impact on the structure of retail trade (or in particular of food retailing) exist (see AGCM, 2007; Viviano et al, 2012), and no rigorous econometric treatment has been given to assess the extent to which it was successful in its goals.

In this paper we assess the impact of the LD 114/1998 on the structure of the Italian food retailing industry. Our empirical strategy is a difference-in-difference technique, comparing the level of concentration, number of stores, average store size and level of service offered to consumers in regions enacting mandated consistent with the LD 114/1998, versus those that did not. We take into account the non-random nature of the *treatment* (as the timing of adoption and the nature of the intervention was endogenously decided by the regions) using a control function approach (Cameron and Trivedi, 2005) and a set of exogenous variable impacting both policy implementation and food retail structure. Such variable include socio-economic and macro-economic indicators as well as the results of regional elections to assess the political climate in each of the areas considered. Also, the regulation was implemented differently by different groups of regions, we allow the impact of the Besrsani Decree to differ by regions and across regions classified according to their level of liberalization, using a classification provided by the Italian Antitrust Authority (AGCM, 2007). Results show that, once the endogenous nature of policy changes is controlled for, the policy appears more effective than expected, in terms of its impact on concentration, consumers' access, store size and level of service to consumers. While the decree overall seems to have help the consumer to have more access and more in-store services, our analysis suggests food retailing became more concentrated in response to the implementation of the LD 114/1998. Further, the effect of the liberalization seems to have stronger effects in regions where the level of liberalization implemented is "low".

2. EMPIRICAL APPROACH, DATA AND ESTIMATION

We consider a province as the (local) geographic market of interest. Assume there are *K* food-store formats in a province, indexed by k = (1, ..., K) and consider a measure y_{kpt} of market structure for the store-type *k* in province p (p=1,...,P) and year t (t=1,...,T). Let B_{pt} , be an indicator variable capturing whether a

² The LD 114/1998 allowed stores to be open for a maximum of 13 hours daily (in working days) and in between the hours of 7 am and 10 pm with additional restrictions (e.g. holiday closing) that could be exempt for municipalities with touristic denomination and allowed for a full liberalization of the opening of small shops up to 250 m².

³ A final push came with the implementation of the *Bolkestein* Directive 12/12/2006, 06/123/CE which was implemented with the LD n.59 26/3/2010.

province p belonged to a region having enacted, at time t, a law to conform with the requirements of LD 114/1998. From a timing perspective, the implementation of the Bersani Decree came in two waves: Friulia Venezia Giulia, Tuscany, Calabria and Aosta Valley enacted regional laws in 1999, while other regions except Sardinia (which enacted its first trade law in 2006) implemented it in 2000 (AGCM, 2007). Thus, one can isolate the effect of the law estimating:

(1a)
$$y_{kpt} = \alpha_0 + \alpha_B B_{pt} + \sum_{1}^{T} \beta_t^T D_t + \sum_{1}^{P} \beta_p^F F_p + \varepsilon_{kpt}$$

where the average effect of the law is capture by the parameter α_B ; the indicator variables D_t and F_p , are time and area fixed effects, respectively, which will account for structural and economic difference across market and years, through the β parameters, and ε_{kpt} is an error term.

One empirical issue emerges in estimating equation 1a via Ordinary Least Squares. As the group of "treated" regions, that is, those enacting laws in response to the Bersani Decree, is not randomly assigned over time, it may be inappropriate to consider the implementation of LD 114/1998 as a natural experiment. As each Italian region decided autonomously when (and how) to implement the changes, the use of a Difference-in-difference approach would be inappropriate (Cameron and Trivedi, 2005). In other words, if unobserved factors impact policy adoption, one has $E(B_{pt}\varepsilon_{kpt}) \neq 0$, leading to biased OLS estimates of α_B

Assume we observe a vector of socio- and macro-economic variables (X) and one of variables capturing the political preferences in a given area (Z), both likely to impact the (local) structure of the food retailing industry as well as policy implementation. Assume that the error term in equation (1a) takes the form $\varepsilon_{kpt} = \sum_{1}^{L} \gamma_l X_{lpt} + \sum_{1}^{N} \delta_n Z_{npt} + u_{kpt}$ where $E(B_{pt}u_{kpt}) = 0$. Thus, we have

(1b)
$$y_{kpt} = \alpha_0 + \alpha_B B_{pt} + \sum_{1}^{T} \beta_t^T D_t + \sum_{1}^{P} \beta_p^F F_p + \sum_{1}^{L} \gamma_l X_{lpt} + \sum_{1}^{N} \delta_n Z_{npt} + u_{kpt}$$

Under weak exogeneity of the vectors X and Z and $E(B_{pt}u_{kpt}) = 0$, one can obtain unbiased estimates of α_B via OLS. This method, referred to as the "control function"⁴ allows to "expunge" part of the correlation between the treatment variable and the error term ε_{kpt} (Cameron and Trivedi, 2005; pg 869).

Assuming that we can properly identify the effect of LD 114/1998, the estimation of an average treatment effect in the parameter α_B , may however not be economically meaningful given the different ways that regions implemented it (see Appendix D, Viviano et al. 2012). One can however group the Italian regions according to their rankings in terms of level of liberalization, as indicated by the Italian Antitrust Authority (Autorità Garante della Concorrenza e del Mercato – AGCM, 2007) and assess the impact of the LD on regions that show different levels of liberalization. According to the criteria adopted

⁴ See Heckman and Hotz (1989) and Besley and Case (2000) for a discussion of the control function as well as other methods and criteria to evaluate the impact of a policy when the conditions of a natural experiment do not subsist.

by the AGCM,⁵ the Italian regions can be divided in those with a high-level of liberalization (H): Piedmont, Aosta Valley, Lombardy, Emilia-Romagna, Marche, Campania and Molise; medium-level of liberalization (M): Veneto, Tuscany, Abruzzo, Calabria and Basilicata; and a low level of liberalization (L): Liguria, Friuli Venezia Giulia, Trentino Alto Adige, Umbria, Lazio, Apulia and Sicily. Thus, allowing the impact of the Bersani Decree to vary for these three groups of regions one has:

(2)
$$y_{kpt} = \alpha_0 + B_{pt} \sum_{1}^{M} \alpha_{Bm} R_m + \sum_{1}^{T} \beta_t^T D_t + \sum_{1}^{P} \beta_p^F F_p + \sum_{1}^{L} \gamma_l X_{lpt} + \sum_{1}^{N} \delta_n Z_{npt} + u_{kpt}$$

Where R_m is an indicator variable capturing the group of regions region $m = \{H, M, L\}$ and each α_{Bm} captures the effect of the Bersani Decree for all the provinces in regions with High, Medium and Low liberalization.

<u>Retail Data</u>

The main database used in the estimation of equations 1a, 1b, and 2,come from Nielsen and it contains yearly location records (at the province-level)⁶ of every food retail store operating in Italy from 1990 to 2012, by banner and store format (hypermarket, supermarket, discount stores and superette). The information also includes total store selling area in square meters, number of scales, checkouts, horizontal and vertical meters of refrigerator and deli counters. Given the focus of this analysis our sample covers until the year 2007 (included) for a total of eighteen years of data. The decision to exclude the more recent years available was due to our inability to properly identify the effects of Law Decree 223/2006 from those of the financial crisis which started two years after. After eliminating banners exiting the market, the data was aggregated at the province-year-format level obtaining, for each of the format, a balanced panel.

We computed a proxy of the Herfindahl–Hirschman Index (HHI) of industrial concentration for each of the four store formats in our data by treating selling area as a proxy of the amount of retailing output of each firm. Let s_{ik} be a proxy for the market share of food retail firm *i* in store format *k*, defined as $s_{ik} = \frac{\sum_j SM_{jik}}{\sum_i \sum_j SM_{jik}}$ where SM_{ijk} is the selling area, in square meters of store *j*, belonging to firm *i*, of store type *k*. Thus, the proxy for HHI_k is $HHI_k = \sum_{ik}^{I^k} s_{ik}^2$. If the liberalization resulted in ease of entry, one should see the number of establishment to increase in each one of the market considered.

Other measures related to market structure, are the number of stores per province and the average size of store, which constitute proxies for the additional level of access to food provided to consumers. Also, in order to assess whether the liberalization process resulted in an increase to services and convenience to consumers we combined the number of checkouts, scales and meters of deli and refrigerators (vertical and horizontal) in a Service Index varying from 0 (capturing the province-year pair presenting the lowest level of these five variables) to 100 (province-year pair with the highest level)

⁵ The nine metrics considered were: supply planning or restrictions to restrain stores presence in the territory; Zoning laws and urban planning; Extraordinary sales' discipline; Opening days and hours; Excessive bureaucracy; Restriction (or suspension) of the release of licenses for proximity stores; Determination of touristic municipalities exempt to the mandates of store closing during Sundays, holidays and rest days; the simplification of burdensome regional regulations; the possibility to perform both wholesale and retail trade.

⁶ The data are disaggregated at the province level for a total of 110 provinces which belongs to 20 regions and four different geographical areas (North-West, North-East, Center and Sardinia, South and Sicily).

combined using a Principal Component Factor Analysis as in Bonanno and Lopez (2009). Table 1 shows the descriptive statistics of the dependent variables.

Figure 1 shows instead data plots of the Herfindahl Index by store format and intensity of liberalization. These plots show a certain level of heterogeneous variation in the level of concentration over time. For example, in the case of Hypermarkets and Superettes, the trends may seem to indicate, after 1998, a decrease in concentration in those regions characterized by high liberalization, while an increase in concentration seems to occur for low and medium liberalization regions, respectively.

Variable	Mean	sd	Min	Max
Discount				
Number	21.81	27.22	0.00	291.00
Herfindahl index	0.29	0.21	0.00	1.00
Average selling area (sq.m)	416.31	180.55	0.00	2000.00
Service Index	33.27	16.06	0.00	100.00
Hypermarkets				
Number	3.43	5.77	0.00	72.00
Herfindahl index	0.40	0.36	0.00	1.00
Average selling area (sq.m)	3228.02	2450.18	0.00	14476.00
Service Index	26.42	20.22	0.00	100.00
Superette				
Number	50.35	48.60	0.00	380.00
Herfindahl index	0.20	0.09	0.00	0.63
Average selling area (sq.m)	257.91	77.87	0.00	348.11
Service Index	44.60	15.02	0.00	74.43
Supermarkets				
Number	56.29	58.30	0.00	563.00
Herfindahl index	0.18	0.09	0.00	0.68
Average selling area (sq.m)	712.70	238.31	0.00	1252.86
Service Index	50.39	18.90	0.00	100.00

Table 1. Sample Statistics by Store Format

Source: Our elaboration on Nielsen data

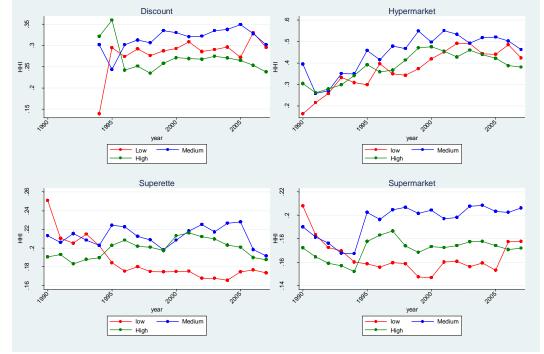
Province-level controls

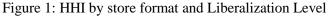
As indicated above, in all the different specifications of our model we include two sets of variables to help identifying the impact of the Bersani Decree on food retail structure. In the first place, consistent with entry literature, and literature on the structure of the supermarket industry (e.g. Berry 1992, Bresnahan and Reiss 1991, Ellickson, 2006, 2007; Jia 2008) we include measures of market size and market growth (from population data retrieved from ISTAT "Noi Italia"). As disparities in food retail diffusion in Italy indicates that stores tend to locate in areas with better macro-economic conditions (Beltramini and Taylor 1993; Cozzi 2008) we also included unemployment rate and per-capita income; last, as presence of infrastructure and population density are important determinants of store location (the

former particularly for supermarkets and hypermarkets, the latter from smaller stores) we included the length of highways (in Km) and population density. All the data is retrieved from the Italian Institute of Statistics (ISTAT).

We also control for differences in political preferences across regions, as they may capture variation in the attitude towards liberalization which may, in turn, impact how different Italian regions implemented LD 114/1998. To this end, we collected data on the results of all regional elections which took place during the period of our data (1995, 2000, 2001, 2005 and 2006) by provincial voting district from the Italian Ministry of Internal Affairs (*Ministero dell'Interno*). In particular, we collected the number of seats that were assigned to each major political party belonging to a left wing or a right wing coalition, as well as the share of seats earned by the "green", federalist parties and "other" parties. For Sicily, Sardinia and Trentino Alto Adige, this information was collected from regional governments' websites. Also, not all regions held elections in the same year: thus, we create indicator variables to indicate every election year for a given region in order to capture changes in attitude toward policy implementation likely to occur during an election year.⁷

Equations 1a, 1b and 2 are estimated via OLS with clustered standard errors (by region) using STATA v 10.





Source: Our elaboration on Nielsen data

 $^{^{7}}$ The intuition behind using this variable is similar to Levitt's (1997), who used election cycles as an instrument for the size of the police force, in attempting to assess the impact of police presence on crime rates.

3. EMPIRICAL RESULTS AND DISCUSSION

Table 2 contains the estimated parameters capturing the effect of the Bersani Decree (that is, α_B) for equation (1a) and (1b) for the four metrics of food retail structure considered.⁸ The top panel contains estimates obtained without using the control variables while those in the bottom panel are obtained including the control variables, whose estimated parameters are excluded for brevity and available upon request.⁹

The results in the top panel indicate that, treating the implementation of the Bersani Decree as a natural experiment, the LD had no impact on the concentration of discount stores, even though both the number of stores and the selling area increases (along with the service index, +7 points). As the Decree may have facilitated the expansion of incumbent Hypermarkets (for an increase, on average of 65 square meters per store), leading to an increase in concentration, no statistically significant changes in number of firms or service index occurred, indicating that, overall the impact for this store format was minimal. The impact seems to be larger for the smallest store format (Superette): these stores have experienced a decrease in store numbers (circa 8.7 per province); also we find a statistically significant effect of the LD on Superette's concentration, indicating the closing of smaller units. This result is supported by the increase in store size (+37 square meters). As for supermarkets, the Bersani Decree resulted in less entry, however, as incumbents have become larger we also find a positive and statistically significant impact on both HHI and Selling area.

The results in the bottom panel show that, accounting for structural and political controls, the effect of the LD 114/1998 appears larger. Overall the results indicate that as a result of the Decree, and considering all store formats, there has been an increase in concentration, as the HHI coefficients are all positive and statistically significant. Interestingly enough, once confounding factors are taken into account, the increase in consolidation for hypermarkets appears more marked, as all estimated coefficients increase. The estimated patterns for Superette and supermarkets seem similar to those in the top panel.

The necessity of including market level and political affiliation's controls, emerges more clearly when the impact of the LD 114/1998 is allowed to vary by level of liberalization of the regions. Furthermore, the results show that the averages presented in Table 2 mask considerable differences regarding the impact of the policy, across regions and store formats.

Focusing on the results on the bottom panel only (those obtained using the control function) for discount and hypermarkets we observe an across the board increase in store size, which is accompanied by an increase in market concentration in regions with low liberalization. Thus, at least for the largest stores in our data, regions that did not embraced liberalization facilitated higher market concentration.

⁸ Detailed model performance statistics are omitted for brevity: however, it is worth mentioning that the econometric specification used seems to fit the data well. All the R^2 corresponding to the models whose coefficients are reported in tables 2 and 3 are greater than 0.5. The only exception is for the model explaining the Herfindahl index for discount stores and hypermarket formats, where any of the specifications adopted gives an R^2 between 0.3 and 0.5.

⁹ Overall, for both sets of controls (macroeconomics and demographic controls and political preference controls) coefficients hem are highly significant, as expected, to indicate also that they constitute relevant variables to be controlled for in equations 1b and 2. We omit their discussion for brevity, however they are available upon request.

	HHI	Number	Average selling area	Service index
(1) without con	ntrol variables			
Discount	0.0343	4.8430***	65.1574***	7.0053***
	(0.0312)	(1.2284)	(15.155)	(1.8115)
Hypermarket	0.1247***	0.6330	617.3707**	5.7999
	(0.0321)	(0.6313)	(258.3347)	(4.0675)
Superette	0.0604***	-8.6899**	37.0459***	7.3672***
	(0.0116)	(3.1388)	(8.1908)	(1.0448)
Supermarket	0.0333**	4.1194	103.5578***	6.5651***
	(0.0132)	(2.9763)	(23.7650)	(0.8714)
(2) with control	ol variables			
Discount	0.0651*	5.5229***	65.3397***	7.9940***
	(0.0324)	(1.8494)	(10.9664)	(1.9404)
Hypermarket	0.1398***	0.1524	841.2491***	7.0336*
	(0.0387)	(0.2725)	(289.9568)	(3.6069)
Superette	0.0632***	-9.1407***	33.1497***	6.8686***
	(0.0123)	(2.5449)	(6.6574)	(0.9137)
Supermarket	0.0355***	3.5619	90.5562***	6.2599***
	(0.0105)	(2.4842)	(20.1227)	(0.9933)

Table 2: Estimated impact of the Bersani Decree on food retail structure by store formats. DID coefficients of specifications without (top panel) and with (bottom panel) control variables.

Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01

As for superettes, an increase in concentration is more marked in regions characterized by high liberalization than in other regions; however, as store number does not seem to be affected by the DL in a statistically significant way, such increase in concentration was likely to be the result of an expansion of the exiting establishment. For the low and medium liberalization regions instead, the increase in concentration is likely to have occurred at the expenses of small storeowners: in both cases we observe a statistically significant decline in store number (-9.6 and -12.2 units) respectively, and increase in average store size (+33 and +37.5 square meters). As the store grow larger, consumers seem to benefit from more service in all cases.

Last, for supermarkets, we observe interesting patterns: in high and medium liberalization regions we observe higher concentration levels due to the appearance of larger stores, and a non-statistically significant change in store numbers; whereas in low liberalization regions, the increase in concentration has occurred with an increase in store numbers, and store size (+98 square meters). Thus, in the case of supermarkets, regions characterized by low liberalization have experienced more consolidation than areas which were instead more receptive of the policy.

Thus, our findings indicate that consumers store access may not have increased across all stores format as a result of the regulation. Also, consumers seem to have benefitted from higher services level and larger stores (which Viviano et al. (2012) show to provide larger assortment), but they are faced with a more concentrated food retailing industry, which, especially in areas with low liberalization levels, may have occurred at the expenses of smaller stores.

vith (bottom par	nel) control varial	bles.		_	
	Liberalization	HHI	Number	Average	Service
	Level			selling area	index
(1) without con	trol variables				
Discount	Low	0.0563	8.9291***	87.6228***	8.1434***
		(0.0445)	(2.9699)	(29.9446)	(2.8424)
	Medium	0.0176	-0.8974	36.3437	6.2528**
		(0.0469)	(4.0702)	(30.8630)	(2.1876)
Н	High	-0.0073	-1.2180	30.1247	4.7903*
	• •	(0.0318)	(2.7582)	(25.9508)	(2.3067)
Hypermarket	Low	0.1798***	-0.3896	766.1217**	7.0393
		(0.0488)	(0.6979)	(315.7247)	(4.3707)
	Medium	0.0751	0.8558	707.8218	6.6358
		(0.0687)	(0.8053)	(474.9046)	(4.4436)
	High	0.0579	2.3028*	298.0160	3.0877
	5	(0.0465)	(1.2541)	(327.6324)	(4.4096)
Superette	Low	0.0487***	-2.3351	37.0492**	7.6872***
	2011	(0.0166)	(5.1628)	(16.4822)	(2.5043)
	Medium	0.0645**	-19.3083***	38.0774***	8.0032***
		(0.0249)	(6.2413)	(11.3471)	(2.1365)
	High	0.0785***	-13.3215	36.3983***	6.4056***
	111,511	(0.0267)	(7.7361)	(7.1822)	(1.6434)
Supermarket	Low	0.0315	7.4186	103.9185**	6.8358**
Bupermarket	Low	(0.0188)	(5.0422)	(45.1819)	(2.4465)
	Medium	0.0396***	-4.6565	90.6478***	5.8919**
	meann	(0.0110)	(5.1988)	(26.8546)	(2.6168)
	High	0.0325**	3.7454	110.9528***	6.5051***
	ш <u>д</u> п	(0.0135)	(5.2283)	(26.7053)	(2.1796)
(2) with control	variables	(0.0155)	(3.2203)	(20:1055)	(2.17)0)
Discount	Low	0.0847**	9.0733***	67.5594***	7.0388***
Discount	Low	(0.0397)	(2.5884)	(16.5911)	(2.4142)
	Medium	0.0387	1.4165	51.1109**	8.6657***
	meanum	(0.0436)	(2.6281)	(21.8668)	(2.3099)
	High	0.0408	0.4072	73.7496***	9.8015***
	ш <u>д</u> п	(0.0308)	(2.2366)	(20.2085)	(2.4009)
Hypermarket	Low	0.1746***	-0.1500	862.5557**	7.5726*
	LOW	(0.0410)	(0.2852)	(336.7380)	(3.7830)
	Medium	0.0905	0.5686	896.9607**	7.3027*
	wicdfulli	(0.0594)	(0.3786)	(373.0366)	(3.9045)
	High	0.1112	0.4120	739.5339*	5.5788
	Ingn	(0.0647)	(0.4506)	(355.0257)	(3.9606)
Superatta	Low	0.0507***	-9.6352***	33.1511***	6.7476***
Superette	LUW	(0.0090)	(3.1624)	(10.8698)	(1.5812)
	Medium	0.0749***	-14.2291**	37.4581***	8.3628***
	Ivicululli				
	Uigh	(0.0224) 0.0793***	(5.6103)	(7.8217)	(1.2996) 5.6703***
	High		-3.0571	28.9202***	
Supermarket Standard errors in p	Law	(0.0236)	(7.4113)	(6.1452)	(1.1329)
	Low	0.0337**	6.7205**	97.8782***	6.1975***
	Matha	(0.0142)	(2.8090)	(28.4226)	(1.4333)
	Medium	0.0418***	-2.9035	87.0561***	6.5436***
	TT' 1	(0.0101)	(6.0483)	(20.5753)	(1.6222)
	High	0.0333**	2.9267	77.8152***	6.1195***
		(0.0128)	(5.3058)	(24.8502)	(1.6741)

Table 3: Estimated impact of the Bersani Decree on food retail structure by store formats in regions with low, medium and high level of liberalization. DID coefficients of specifications without (top panel) and with (bottom panel) control variables.

4. CONCLUSIONS

With the Law Decree N. 114, of 31 March 1998, also called "Bersani Decree", Italy begun a process of trade liberalization which is still ongoing. However, as a first attempt to modernize the existing trade laws, the Decree was received with resistance from many regional authorities which wanted to maintain the status quo and favour retail lobbies.

In this paper, we investigate the effect of the LD 114/1998 on the structure of Italian Food retailing. Our analysis shows, despite the positive effect on access and service to the consumers, that the liberalization process has led, at least in some cases to an increase in market concentration. Given the different levels at which the policy has been embraced by the different regional authorities, the effect on concentration has been more marked for regions less receptive to the law, perhaps at the expenses of smaller stores.

This study is the first measuring the effect of the Bersani decree using an econometric approach; further analysis is needed to understand the different potential impacts of the law. For instance, even considering some of the positive effects linked to the liberalization shown in this analysis (increased service levels and store size), the impact of the regulation on food prices, as well as issues of price transmission along the food supply chain, should be investigated in future analysis.

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