Legal barriers to entry in retailing. Sleeping with the enemy?[♦]

Raquel Insa-Ciriza[*], University of Barcelona (PPRE-IREA[¥])

Preliminary version (Do not quoted without permission)
January 2008

Abstract:
Retail market is an important issue for consumers and a key sector of OECD economies. In Spain, in 2005, commerce represented the 4.8 per cent of the Gross Value Added and the 9.4 per cent of employment. It has been a market characterised with low entry barriers, high entry and exit rates and a large number of competitors whose size is relatively small (Scherer, 1979). Recent changes, mostly in food retail, suggest a move towards rising concentration and retailer power. In order to defend competition and traditional commerce (small shops) from the increasing of concentration, legislators have created strong retail legislation. In Spain, there is a wide variety of retail regulation in the different Autonomous Communities (CCAA) and in some cases, those have become as barriers to entry. I analyse in this paper if the strictness of regulation in some of the Autonomous Communities in Spain affects the variation in number of retail establishments. Moreover, I want to see how affects to hypermarkets and traditional commerce the strictness definition of how a large firm is in the different CCAA. From the results, I can see that strictness regulation is helping the traditional commerce and hypermarkets incumbents making them stronger and acting as a barrier to entry not only for large firm but also for small ones.

JEL: L51, L13, L81
Key words: Regulation, Market structure, Retailing, Supermarkets

---

[*] Correspondence address: Departament de Política Económica. Avda. Diagonal, 690. Barcelona 08034. raquel.insa@ub.edu

1. Introduction

Retail market is an important issue for consumers and a key sector of OECD economies. In Spain, in 2005, commerce represented the 4.8 per cent of the Gross Value Added and the 9.4 per cent of employment. It has been a market characterised with low entry barriers, high entry and exit rates and a large number of competitors whose size is relatively small (Scherer, 1979). But, in the last decade it has been producing a lot of changes in society, the increase of woman participation in labor has generate a change in the shopping behavior. Nowadays, people have less time to shop and they have to do it in a fix time out of working hours. Also they have move its residence out of the city center, mostly because of house prices, this means that retail shops has to adapt to all this changes and need to be flexible and diverse. This diversity and flexibility might be in location, size, shopping hours and opening in festivities days. Those changes, mostly in food retail, suggest a move towards rising concentration and retailer power (Dobson and Waterson, 1999; Hewitt, 2000).

We can say now that it is a market that is becoming difficult to entry because of legislation. In order to defend competition and traditional commerce (small shops) from the increasing of concentration, legislators in Europe and specifically in Spain (in some Autonomous Regions) have created strong retail legislation. In Spain there is a wide variety of retail regulation in the different Autonomous Communities and in some cases legislation have become as barriers to entry.

Most of the papers analyze the effects of regulation in prices and economic performance. Some of them evaluate the impact of market concentration in prices. Most of this studies estimate for the analysis the random effects model, as Asplund and Friberg (Asplund and Friberg; 1999 and 2000) estimated for the Swedish case. Although other authors, as McFall Lamm (McFall, 1981) also estimate the ordinary less squared model (OLS). Most of these studies utilize 4-firm concentration ratios as a measure of firm share distribution. In fact, Marvel (1978), Marion et al. (1979a), Cotterill (1986) and Bresnahan and Reiss (1991) confirmed the existence of a correlation between retail prices and concentration, Yagüe (1993 and 1995), Méndez and Yagüe (1998) Méndez (1999) and Insa (2000 and 2002) among others. Recently, we can find some studies like Pita, Brito and Lucena (2003) for the Portuguese food retailing market, Hoffmaister (2006) that analyze the effect of retail barriers on prices in

Spain, Gomez-Lobo and Gonzalez (2007) that have found a positive relation between market concentration in local food retail and prices in Chile.

Other studies that do not evaluate market concentration and prices are Bertrand & Karamtaz (2002) that have study planning regulation versus employment; they have found that regions with more restrictive regulation had lower levels of employment. And, finally, Griffith and Harmgart (2008) that have studied the effects of planning regulation to in town and out of town supermarkets in UK. They have found that restrictive planning regulation is related with higher prices.

I want to see in this paper if the strictness of retail regulation in some of the Autonomous Communities (CCAA) in Spain affects hypermarkets and traditional shops. We want to see if they are affected by one or more of the different kinds of regulation that CCAA have such as extension (square meters) and location of commercial premises, opening times and festivities or legal impediments to the establishment of large shops. Moreover, I want to see if legislation establishing and determining whether a firm is large helps traditional commerce as legislators say.

In the empirical section, we estimate entry threshold for two types of retail shops – traditional commerce- (small) and –hypermarkets- (large). We obtain these estimates from cross-section data on the number of firms in 3204 municipalities (bigger than 1000 inhabitants) of Spain that belong to the 17 Autonomous regions. We follow Bresnahan and Reiss (1991), we develop a OLS regression of the equilibrium number of market entrants. Our empirical results suggest that large firm regulation is statistically significant on market outcomes and that represents a barrier to entry.

2. Market structure and regulation in Spain

Retail is an industry that used to have a competitive structure with a large number of firms. But, lately market structure has change a little bit and concentration has been increasing. If we have a look to graphic 1 we can see the evolution of market share in Spain from 1996 to 2005. Hypermarkets from 1996 have been experienced a decrease in number. Traditional commerce it is also decreasing but lately it seems to be approximately constant.

Graphic 1: Evolution of market structure (%) from 1996 to 2005).
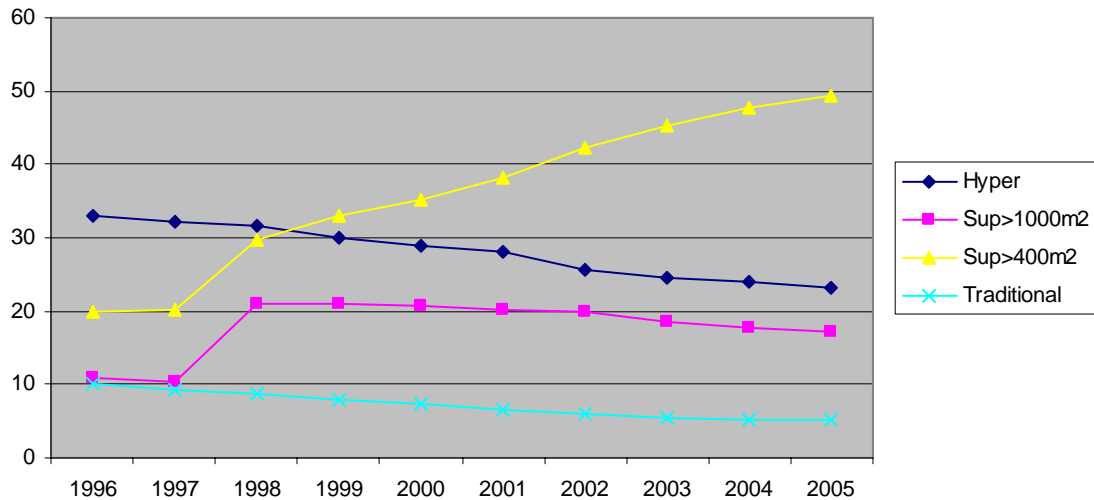
Source: Self-elaborated from AC Nielsen

In contrast, medium supermarkets (more than 400 m^2 but less that 1000 m^2) have been increasing spectacularly. As we can deduce from the graphic above is that traditional commerce is decreasing in benefit of medium and large supermarkets.

From 1996 to nowadays, in Spain, regulation has been becoming more restrictive in some Regions at some issues as opening of large firms (big supermarkets and hypermarkets). This has made an increase in retail concentration, as big companies can not open new shops they buy or merge with the existing ones. This situation seems that is helping to corporate retailers to become powerful actors in the regulatory process.

Barriers to entry in retailing constitute a controversial issue lately in Spain. There is a big heterogeneity in regulation because every Autonomous Community has developed its own legislation from the general one (Law 7/1996). Some of the regions have created a very restrictive law for firms to build new large firms. Those Autonomous governments argue that these barriers were created to protect traditional commerce from large retail establishments. Some of the legal barriers that have identify the Spanish Tribunal for the Defense of Competition[1] (TDC, 2003) at the regional level are:

     a. Defining a large retail firm based on its location

     b. Establishing multiple criteria to determine whether a firm is large

     c. Shopping hours

---

[1] Actually is known as National Commission of Competition (CNC).

d. Establishing a moratoria to open large firms

e. Requiring a tax for large firms

f. Considering large a shop if 25per cent of its capital belongs to a big company

Table 1: List of barriers to entry in the Autonomous Communities

	a	b	c	d	e	f
AND	Yes		Yes	Yes		
AR	Yes		Yes	Yes	Yes	
AST			Yes	Yes	Yes	
BAL	Yes	Yes	Yes	Yes		Yes
CAN	Yes		Yes	Yes		
CANT			Yes	Yes		
CL	Yes			Yes		
CM			Yes			
CAT	Yes		Yes	Yes	Yes	
CV	Yes					
EXT	Yes		Yes			
GAL	Yes		Yes			
MAD	Yes					
MUR	Yes		Yes			
NAV	Yes			Yes	Yes	
PV	Yes	Yes	Yes	Yes		Yes
RIO	Yes					

Source: Self-elaborated from different data

As the Commission of Competence says those barriers hinder competence and limit the development of those retail firms that are growing. Establishing a criterion to determine whether a firm is large is one of the biggest issues. In 1996 it was introduced a second license requirement for large stores to operate.

We define as an hypermarket those shops with more than 2500 m^2, a medium supermarket the ones between 1000 and 2500 m^2, small supermarket those that are between 400 and 1000 m^2, and finally self-service shops with less than 400 m^2. Traditionally shops are identifying with those shops that have less than 400 m^2.

Law, at state level, defines large store as those shops that have more than 2500 m^2 of selling surface but this definition has been reduced in some Autonomous regions. If we have a look in the different regulation of the Spanish regions we can see that only Asturias (AST), Cantabria (CANT) and Galicia (GAL) follow the national rule of large firm definition. In Aragón (AR: 96,49 per cent), Baleares (BAL: 98,33 per cent), C.

Valenciana (CV: 94,27 per cent), and Extremadura (EXT: 92,06 per cent) most of the municipalities define large firm as shops of less than 1000 m^2.

Table 2: Definition of large firm based on its location in the Autonomous regions (percentages of villages).

REG	Large Firm's legislation (m^2)			Mean LF
	LF<1000	1000≤LF<2500	LF≥2500	
1. AND	0,00	91,54	8,46	1.175,65
2. AR	96,49	3,51	0,00	622,81
3. AST	0,00	0,00	100,00	2.500,00
4. BAL	98,33	1,67	0,00	465,83
5. CAN	76,74	23,26	0,00	866,28
6. CANT	0,00	0,00	100,00	2.500,00
7. CL	0,00	100,00	0,00	1.060,22
8. CM	89,31	10,69	0,00	814,66
9. CAT	75,68	23,87	0,45	996,40
10. CV	94,27	5,73	0,00	622,93
11. EX	92,06	7,94	0,00	817,46
12. GAL	0,00	0,00	100,00	2.500,00
13. MAD	0,00	78,86	21,14	1.772,36
14. MUR	51,16	41,86	6,98	1.220,93
15. NAV	0,00	92,86	7,14	1.571,43
16. PV	72,41	27,59	0,00	737,93
17. RIO	0,00	96,30	3,70	1.111,11

Source: Self-elaborated

As we can see from above (table 2), Baleares is the region that have a restrictive definition of large firm (average of 465.83 m^2). Eight regions restrict the large firm to those shops with less than 1.000 m^2 of selling surface.

3. Empirical model

Our empirical model provides information about the consequences of entry by relating regulations in market to changes in the equilibrium number of firms; we present a regression model. We follow Bresnahan and Reiss (1991). We consider a market with N entrants and consider homogeneous product market.

The basic model to be estimated is:

$$N_m = f(D_m, W_m, R_m) + \varepsilon_m \tag{1}$$

where N_m is the number of retail establishments in the different municipalities m (they belong to the 17 Autonomous Communities), D_m represents the demand, W_m correspond to demand and variable cost, R_m is the variable that represents the legal barriers to entry and finally ε_m is a noise term that captures any unobserved factor in market m that can impact in market structure.

Following Griffith and Harmgart (2008), that extends Bresnahan and Reiss (1991) model to two types of stores small (traditional commerce) and big (hypermarkets). We consider that consumers buy a large portion of their groceries in what is called one shopping trip and then forgotten or last minute items in short trips. For one shopping trip they prefer a large variety of different goods for that reason they normally buy products in hypermarkets (more than 2500 m^2) or medium size supermarkets (between 400 and 1000 m^2). On the other hand, they prefer small shops or supermarkets (less than 400 m^2) for short trips rather than large. For that reason the European Commission view this kind of shops as complements instead of substitute formats.

The equation to be estimated relies on a theoretical model where firm entry is assumed as a three stage game. In the first stage retail chains decide whether to open a large firm[2] or not that they explain but introducing medium where big stores decide whether to enter by opening a large shop. After their decision, small and medium shops decide whether to enter in the market or not and compete for residual demand. Benefits of large stores do not depend on medium and small shops, but as we have said before small and medium have to take into account presence of large firms in their decision of enter or not into the market. They justify this assumption quoting one of the reports of the Competition Commission (Safeway-Morrison merger[3]). In the last stage, once firms have decided to entry it is determined a symmetric price in competition. We assume that profits are:

$$\Pi(Z_m, R_m, N_m, v_m; \vartheta) = Z_m \delta - \alpha R_m - \beta N_m + v_m \tag{2}$$

---

[2] We do not consider issues that come from chain strategic decision over opening a number of stores; this is beyond the aim of this paper.
[3] Appendix B of CC report.

Where $Z_m=(D_m, C_m)$ are demand and cost market factors that impact profitability in market m, R_m are factors that shift fixed costs as regulatory constrains and υ_m are unobserved factors in the market and $\theta=(\alpha,\delta,\beta)$ are unknown parameters of the profit function. We consider barriers to entry as a fixed cost that shifts the establishment's average cost structure.

We assume that firms have decided to enter whenever profits cover its entry cost[4]. We can obtain the final number of firms in the market from the zero-profit condition. We assume that all retail shops are equal for that reason the number of firm in equilibrium in market m is characterized by this equation:

$$\Pi(Z_m, R_m, N_m, \nu_m; \vartheta) = Z_m \delta - \alpha R_m - \beta N_m + \nu_m = 0 \tag{3}$$

From equation (3) we can get the endogenous number of firms in market m:

$$N_m = Z_m \delta' - \alpha' R_m + \varepsilon_m \tag{4}$$

We can see from equation (4) that barriers to entry reduce the number of firms in the market.

Some papers have estimated an ordered probit model as Bresnahan and Reiss (1991) or most recently Manuszak and Moul (2008) that have applied the same model analyzing the market structure for office supply superstores in US and Griffith and Harmgart (2008) that have analyze the relation of UK grocery retail with planning regulation. We estimate a simple equation of market structure like (4) because our local market is much larger than the one used in the studies mentioned above. But if the effect on latent profits of the number of firms is roughly linear we can state that both models would yield similar results.

We estimate equation (4) for two types of stores, the first are small supermarkets and traditional shops and the second one are hypermarkets.

We distinguish between small and large stores because they are affected by regional retail regulation. As we have said we assume in our estimations that large firms make decision about entry independently of the number of small and traditional shop but not

---

[4] This framework ignores the dynamics of entry and exit process in particular the simultaneous one that characterizes firm behaviour in some industries.

the other way around. Small and traditional shops decide to enter in the market taking into account the number of large firms.

4. Data and Methodology

The data that we have used for the empirical application was obtained from the *Anuario Económico de España* for 1996 and 2005, this is a dataset elaborated by *La Caixa*[5]. I analyze how regulation affects market structure in the 17 Autonomous regions (CCAA) of Spain. In the empirical application we use a dataset of the 3204 municipalities (over than 1.000 inhabitants) that belong to the different CCAA.

The demand size is measured by population (POP) registered in 2005, and by Tourism Index (TI) that represents the importance of tourism in this area also for 2005. in order to capture the differences in retail costs across municipalities we have included the real estate price (LAND PRICE) obtained from the Ministry of Housing at province level depending on the number of inhabitants. We suppose that prices are equal in every municipality of the province. It is used as a proxy to measure differences in fixed costs.

Regulation is measured through different variables that are the definition of large firm given by every Autonomous region (GS), a second license that impose the CCAA in order to open or enlarge its shop (LIC) taking value 1 if they need a second license and 0 if not, number of days that CCAA permit to open in holidays (FEST), shopping hours of each Autonomous region (HSEM) and regions that had establish a moratoria to open large firms (MAGS) taking value 1 those that have had a moratoria during the period and 0 the ones that do not.

The dependent variables in our models are the number of traditional commerce (CTRAD) in 2005, and the number of hypermarkets (HIP) in 2005.

One of the big issues is the definition of how a large firm can be, as we have seen, every Autonomous region has a different definition. For that reason, we will analyze this barrier to entry deeply in order to see how this regulation is affecting commerce under 500 m^2 and large than 2500 m^2.

For the empirical application, I have run an ordinary least square to analyse how legislation affects the different formats of retailing.

We define two models with different dependent variables and the same independent variables. In the first one we use as dependent variable the number of hypermarkets in 2005 (HIP). And, in the second one we use data corresponding to the traditional commerce (CTRAD). And finally, the third model corresponds to number of hypermarkets (HIP) in 2005.

The equations used are:

Model A.1

$$CTRAD_i = \beta_0 + \beta_1 POB_i + \beta_2 IT_i + \beta_3 LANDPRICE_i + \beta_4 GS_i + \beta_5 SUP_i + \beta_6 HIP_i + \beta_7 FEST_i + \beta_8 HSEM_i + \beta_9 MAGS_i + \beta_{10} MAGS_i + \varepsilon$$

Model A.2

$$CTRAD_i = \beta_0 + \beta_1 POB_i + \beta_2 IT_i + \beta_3 GS_i + \beta_4 REG_{ij} + \beta_5 LANDPRICE_i + \beta_6 SUP_i + \beta_7 HIP_i + \varepsilon$$

where CTRAD is the number of traditional commerce, –i– are the different municipalities of the Autonomous regions ($i=1,…,3204$)
and –j– are the Autonomous regions ($j=1,….,17$).

Model B.1

$$HIP_i = \beta_0 + \beta_1 POB_i + \beta_2 IT_i + \beta_3 LANDPRICE_i + \beta_4 GS_i + \beta_5 IGS_i + \beta_6 FEST_i + \beta_7 HSEM_i + \beta_8 MAGS_i + \varepsilon$$

Model B.2

$$HIP_i = \beta_0 + \beta_1 POB_i + \beta_2 IT_i + \beta_3 LANDPRICE_i + \beta_4 GS_i + \beta_5 REG_j + \varepsilon$$

where HIP is the number of hypermarkets, –i– are the different municipalities of the Autonomous regions ($i=1,…,3204$)
and –j– are the Autonomous regions ($j=1,….,17$).

5. Results

This study analyses 3204 municipalities (over 1.000 inhabitants) from the 17 Autonomous Communities of Spain.

Table 4: Dependent variable CTRAD

	Model A.1	Model A.2		Model A.1	Model A.2
POB05	0.0468 (7.62)***	0.00467 (7.62)***	CAN		-48.146 (-5.53)***
IT	0.012 (0.15)	0.0174 (0.22)	CANT		1.4711 (0.06)
LAND_PRICE	0.0542	0.0726	CL		29.706

10

	(1.01)	(1.05)	CM		(5.91)***
GS	0.0087 (1.71)	0.0196 (1.24)	CM		19.664 (2.73)**
SUP	2.2232 (1.69)	2.1988 (1.57)	CAT		22.832 (1.74)
HIP	`31.869 (2.22)*	28.986 (2.03)	CV		21.67 (1.22)
H_SEM	0.9452 (1.93)		EX		28.35 (4.74)***
FEST	-5.206 (-3.21)***		GAL		-20.465 (-0.96)
IGS	37.133 (2.62)**		MAD		-73.407 (-1.85)
MAGS	-15.2 (-1.01)		MUR		-12.4002 (-1.77)
AR		39.521 (3.18)***	NAV		25.465 (2.26)*
AST		16.729 (0.77)	PV		17.342 (0.93)
BAL		1.008 (0.05)	RIO		25.585 (1.37)
F	0.0000	-			
R^2	0.9318	0.9329			

Observations: 3204. t-stats in brackets
Signification: 1% (***), 5% (**), 10% (*)

Model A shows that population is significant and has a positive coefficient, this means that population is an important issue in the market structure as expected. In that model we assume the short trip behavior where consumers buy its large portion of groceries in a hypermarket and forgotten and last minute items in traditional or small shops. For that reason traditional commerce will take into account where hypermarkets (HIP) and how many are. As we can see from the results this variable (HIP) is significant and positive. If we have a look to the other regulation items we can see that number of festivities (FEST) that they can open is statistically significant and negative related, and that taxes that large firms (IGS) have to pay is significant and positive, this means that more taxes large firms has to pay more small shops will be open.

When we study only the legal barrier establishing criteria to determine whether a large firm is to see if this affects traditional commerce (model A.2) we can see that it is not significant. When we look to the different Autonomous regions we can see that only is significant and with a positive coefficient in four regions (Aragon, Castilla-León, Castilla-Mancha, Extremadura and Navarra). This means that as less restrictive regulation is more shops they can open. And, the only CCAA that seems that it is

working legislation is in Canarias that is statistically significant and has a negative coefficient.

Table 5: Dependent variable HIP

	Model B.1	Model B.2		Model B.1	Model B.2
POB05	6.02e-06 (5.04)***	5.84e-06 (5.72)***	CANT		-0.6046 (-6.7)***
IT	-0.00013 (-0.65)	-0.00016 (-0.9)	CL		0.0342 (3.04)**
LAND_PRICE	0.0008 (4.16)***	0.00043 (1.71)	CM		0.147 (6.24)***
GS	0.00012 (2.12)*	0.00053 (8.01)***	CAT		0.0801 (2.9)**
H_SEM	0.00021 (0.15)		CV		0.2601 (5.04)***
FEST	-0.0128 (-2.75)**		EX		0.1507 (6.18)***
IGS	-0.1003 (-2.14)*		GAL		-0.712 (-7.99)***
MAGS	0.1169 (2.28)*		MAD		-0.3834 (-7.03)***
AR		0.271 (7.21)***	MUR		-0.031 (-1.44)
AST		-0.633 (-7.27)***	NAV		-0.229 (-8.23)***
BAL		0.5916 (10.92)***	PV		0.227 (5.23)***
CAN		0.2638 (8.36)***	RIO		-0.0335 (-0.76)
F	0.0000	-			
R^2	0,5978	0.6324			
Observations: 3204. t-stats in brackets Signification: 1% (***), 5% (**), 10% (*)					

When we study the same effect in hypermarkets, model B, we can see from the results that population it is also statistically significant and has a positive coefficient. One important result is the way that Autonomous regions define large firm (GS) this variable is significant and positive related to the number of hypermarkets in both sub models (B.1 and B.2) as was expected. When we look the other legislation items, we can see that also festivities is significant and has a negative coefficient. The variable taxes that large firms have to pay (IGS) is also significant, but in that case, has a negative coefficient.

If we have a look to the regions, we can see that in Asturias, Cantabria, Galicia, Madrid and Navarra variable is significant but negative related. However, as we have said the first three regions follow the national rule of large firm definition and Madrid and Navarra are the less restrictive regions.

5. Concluding remarks

In the last decade regulation has been increasing in the different Autonomous regions in Spain (see Matea and Mora, 2007). This regulation has been designed in order to protect traditional commerce from large firms. In this paper we have studied if this strictness regulation that the different Autonomous regions have created is protecting traditional commerce and improving their market share.

As we have seen from the regression analysis the way that Autonomous regions have legislate the definition of large firm affect only the number of hypermarkets and corroborated the statement of the Spanish Competition commission that says that large retail firms are being hinder by regional legislation. We can say that strictness legislation do not affect in any way (increase or decrease) to traditional commerce.

We have found that legislation have not done any effect to traditional shops, on the contrary it has been protecting incumbents from competition. We have also found that the additional taxes that legislator make pay to large firms is acting as a barrier because increases the number of small shops and decreases the number of large firms in the market. One of the regulation rules that affects equally to hypermarkets and small commerce is the number of festivities and Sundays that they can open, this would be interesting to study deeply.

My primary conclusion from these results is that strategic legal barriers to entry do not seem to affect the number of small shops. Legal barriers to entry normally short-circuit the competitive process and leave consumers with fewer choices. They are harmful but sometimes they are not a real antitrust issue. Local governments restrict the opening of large surfaces that normally belong to big retail chains, or make them pay a tax for having them. For that reason, those chains instead of opening new large supermarkets open medium size ones.

Legislators argue that strictness of legislation is due to traditional commerce defense from large firms. But from the results and market structure we can say that legislators more than defending traditional commerce are protecting incumbents that belong to small (less than 400 m^2) and medium (less than 1000 m^2) commerce. This situation is

good for small shopkeepers because keeps them away from competitors as they can not get into the market. And also, it is good for medium supermarkets (between 400 and 1000 m^2) because they are growing faster than they might grow.

We have to have in mind all the time that we are not only talking about supermarket or shop size, we are also talking about retail chains. As we have seen the opening of big supermarkets or hypermarkets has becoming more restrictive since 1996. This makes an increase in retail concentration, as big companies can not open new shops they buy or merge with the existing ones. This situation seems that is helping to corporate retailers to become powerful actors in the regulatory process. Large retail chains can negotiate in really good terms with their suppliers; this provides to them a competitive advantage over smaller rivals (traditional commerce). We have to notice that some of those rules that defend small and medium supermarkets are not only defending traditional commerce are also defending large chains that have medium supermarkets (and also large ones). May be instead of limiting the entry of large firms we have to help traditional commerce to adapt itself to the new consumers.

6. References

Asplund, M. and R. Friberg (1999). Retail price levels and concentration of wholesalers, retailers and hypermarkets, Stockholm School of Economics.

Asplund, M. and R. Friberg (2000). Food prices and market structure in Sweden, Stockholm School of Economics.

Bain, J. (1951). "Relation of profit rate industry concentration: American manufacturing, 1936-1940." *Quaterly Journal of Economics* 65: 293-324.

Bain, J. (1959). *Industrial Organization*. New York, John Wiley & Sons, Inc.

Bertrand, M. and F. Kramarz (2002). "Does entry regulation hinder job creation?". *Quarterly Journal of Economics,* CXVII, 4, 1369-1414.

Bresnahan, T. and P. Reiss (1991). "Entry and competition in concentrated markets." Journal of Political Economy **99**(5): 977.

Cotterill, R. W. (1986). "Market power in the retail food industry: evidence from Vermont." Review of Economics and Statistics: 379-386.

Djankov, S. et al. (2002). "The regulation of entry". *Quaterly journal of economics*, vol.117, n.1-d, pp. 1-37.

Dobson, P. and M. Waterson (1999). "Retail power. How regulators should respond to greater concentration in retailing." *Economic policy* (April): 135.

Domowitz, I., R. G. Hubbard, et al. (1986). "The intertemporal stability of the concentration-margings relatioship." *The Journal of Industrial Economics* 35(1): 13-34.

Domowitz, I., R. G. Hubbard, et al. (1987). "Oligopoly supergames: some empirical evidence on prices and margins." *The Journal of Industrial Economics* 35(4): 379-398.

Domowitz, I., R. G. Hubbard, et al. (1988). "Market structure and cyclical fluctuations in US manufacturing." *The Review of Economics and Statistics* 70(1).

Gómez-Lobo, A and A. González (2007). "LA relación entre los precios de los alimentos y la concentración de los supermercados en Chile: evidencia de un modelo dinámico de panel y análisis de los impactos de las fusiones propuestas en la industria". Unpublished research paper.

Griffith, R. and H. Harmgart (2008). "Supermarkets and planning regulation". CEPR working paper, DP6713.

Hewitt, G. (2000). "Buying power of multiproduct retailers", Background note, *OECD Journal of Competition Law and Policy*, vol.2, n.1 Paris.

Hoffmaister, A.W. (2006). "Barriers to retail competition and prices: evidence from Spain". IFM, Working paper WP/06/231.

Inderst, R, and A. Irmen (2005). "Shopping hours and price competition". *European Economic Review*, vol.49 (July), pp.1105-24.

Insa-Ciriza, R. (2000). "Retail mergers: The power struggle in Spain." *European Retail Digest* (25).

Insa-Ciriza, R. (2002). "Concentración de la distribución comercial en España e Inglaterra: influencia sobre los precios". PhD Thesis.

Manuszak, M.D., and C.C. Moul (2008). "Prices and endogenous market structure in office supply superstores". *Journal of industrial economics,* 61(1), 94-112.

Marion, B. W. e. a. (1979 a). The food retailing industry. Market structure, profits and prices, Praeger Publishers.

Marion, B., W. Mueller, et al. (1979 b). "The price and profit performance of leading food chains." American Journal of Agricultural Economics(LXI): 420-33.

Marvel, H. P. (1978). "Competition and price levels in the retail gasoline market." The Review of Economics and Statistics **60**(2): 252-258.

Matea, M. LL. and J.S. Mora (2007). "Una aproximación a la regulación del comercio al por menor a partir de indicadores sintéticos". *Boletín Económico*, octubre, Banco de España, 91-100.

McFall Lamm, R. (1981). "Prices and concentration in the food retailing industry." Journal of Industrial Economics **30**(1): 67-78.

Méndez, J. L. and M. J. Yagüe (1998). "El efecto del poder de mercado de las empresas minoristas en la estructura competitiva de los sectores industriales". I Encuentro de Economía Aplicada, Barcelona.

Méndez, J. L. (1999). "Relación entre concentración y márgenes en el comercio minorista. Un análisis por líneas de productos." *Información Comercial Española* (779): 37-54.

Pita Barros, P., D. Brito and D. Lucena, (2003). "Mergers in the food retailing sector: an empirical investigation, November, unpublished research paper.

Salas, V. and M. Yagüe (1985). "Nucleo competitivo de la industria española: generalización y contraste empírico." *Boletin Económico de Información Comercial Española* Abril.

Scherer, F. M., (1979). "The Causes and Consequences of Rising Industrial Concentration", *Journal of Law and Economics*, 22, I (April

Tribunal de Defensa de la Competencia, (2003). "Informe sobre las condiciones de Competencia en el sector de la Distribución Comercial" I 100/02. Madrid: TDC.

Weiss, L. W. (1966). "Business pricing policies and inflation reconsidered." *Journal of Political Economy* (74): 177-187.

Weiss, L. W. (1989). *Concentration and price*, MIT Press.

Yagüe, M. J. (1993). "Estructura de mercado y márgenes precio-coste en los sectores industriales españoles." *Información Comercial Española. Revista de Economía* (716): 11-23.

Yagüe, M. J. (1995). "Relación entre concentración y precios en el comercio minorista." *Información Comercial Española* (739): 59-70.