Print ISSN: 1738-3110 / Online ISSN 2093-7717
http://dx.doi.org/10.15722/jds.12.9.201409.5

Do Retail Regulations Protect Traditional Markets as Well as Independent Stores in Korea?*

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Received: May 26, 2014. Revised: August 03, 2014. Accepted: September 15, 2014.

Abstract

Purpose –This study is to measure the effects of retail legislations on small retailers and traditional markets.

Research Design, Data, and Methodology - The authors have developed a questionnaire with five hypotheses on the basis of previous research results and six constructs: the improvement of sales volume, the number of customers, the improvement of store traffic, the increase of store staff, business expansion and retail regulation. Furthermore, the research has adopted a five-point Likert-scale technique. In order to increase research reliability as well as validity, the authors have adopted a few different research techniques such as exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

Results - Although existing retail regulations might be better than nothing for now, the degree of retail constraints on large retailers should be strengthened. Furthermore, different legal methods to protect mom and pops are needed.

Conclusions – In order to improve the effects of retail restrictions on large retailers, the research indicates that the central government should change a retail policy, that is, introduce new technical ways to keep mom and pops and conventional markets.

Keywords: Retail Regulations, Retail Policy, Small and Medium-Sized Retailers, Traditional Market, Customer Shopping Pattern.

JEL Classifications: K23, L52, L81, O25, P47.

1. Introduction

With the increasing buying power, large retailers have rapidly expanded their own business cross country, at the expense of independent retailers. Political interest in the declining small stores started in 2005. As evidence, Korea established the governmental body to protect small- and medium-sized retailers located in conventional markets in particular, so-called the "Centre of Traditional Market Administration". At that time, rather than regulating multiple retailers to open their shops, the Korean government has decided to support traditional markets, in terms of finance. As a representative example, Korea has considerably invested budget in modernizing the atmosphere of the conventional markets with an aim of taking competitive advantages.

Furthermore, in 2006, unlike other foreign countries such as the UK, Japan, Italy, Germany, Spain, France, and so on, in which have introduced retail restrictions on large retailers at the early stage (e.g. Francois and Leunis, 1991; OECD, 2000; Burt and Sparks, 2003; Sadun, 2008 Viviano, 2008; Kanakura, 2009), Korea for the first time tried to legally keep small shops in 2006, since market liberalization in 1996. Due to the lack of political agreement, the first proposed law to protect mom and pops was talked to death. Finally, Korea started to regulate big box retailers not to open their new retail outlets within a five hundred meter radius of the conventional markets registered to the central government and close their shops two days per month in 2010, according to the Retailing Industry Development Law". This law was amended from a five hundred meter to a one kilometer in 2011.

What is important is that the law has not covered all of small- and medium-sized retailers in Korea, in respect of the opening of new stores. In other words, independent retailers within legally limited radius are able to be protected. Indeed, small shops near to residential areas have nothing to do with the limited store opening, although retail giants close stores twice a month.

It is, therefore, worthwhile exploring whether traditional markets and small stores are well protected under the regulations.

* This research was funded by the research grant of Kong-Ju National University in 2013. The authors acknowledge the support of the three anonymous referees and the two discussants of 2014 KODISA International Conference

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Compared with other countries where many researchers have paid considerable attention to the effect of retail legislations on a retail sector from different angles(e.g. Freathy and Sparks, 1995; Gradus, 1996; Colins et al., 2001; Griffith and Harmgart, 2005; Colla, 2006; Viviano, 2008; Cheshire et al., 2011), there is little literature in Korea. It might be able to say that it would be earlier to measure its effects, because the law has been made in recent. Given the period of three years taken action, it is right time to consider its influence on a retailing industry in Korea.

This study is, thus, to investigate whether the RIDL (Retailing Industry Development Law) protects or revitalize small retailers and traditional markets, as policy makers expect in Korea. The second section will review the existing literature concerned about the results of retail regulations and policy, and then, present research methodology in the third section. After gathering data, the authors analyze them. The research findings will be noted in the fourth part. Finally, this study will draw a conclusion with research limitations and future research directions.

2. Literature review and hypothesis development

Over the world, there are many different retail regulations to protect mom and pops, save the earth, improve the quality of life, effectively use land, keep human rights and develop or boost a retail sector, as noted by Hollander and Boddewyn (1974) and Cho (2014). Many authors have, therefore, made a considerable effort to measure the degree of their influences, in terms of labour market outcomes or retail employment (e.g. Blanchard, 2005; Viviano, 2008 Senftleben-Konig, 2014), retail productivity (e.g. Thurik, 1984; Griffith and Harmgart, 2005 Reynolds et al., 2005), retail competition (e.g. Collins et al., 2001 Guy and Bennison, 2002), and the protection of small businesses (e.g. Nooteboom, 1983; Bertrand and Kramarz, 2002 Sadun, 2008).

Although there are the contradicted debates associated with the effects of retail restrictions in the retiling academic world, whether retail constraints have protected small stores in Korea should be illustrated. To date, rather than positive results as expected, more negative effects have been found by many researchers over a retail sector, irrespective of the objectives of retail policy. As evidence, Viviano (2008) highlighted that regulations can play a negative role in generating new jobs, that is to say, deregulations can improve unemployment rates in the Italian retail sector, whereas Gradus (1996) argued that shop opening legislations are related to price increase or decrease.

It is, thus, necessary to look at the results of each regulation to better understand whether the Korean retail restrictions have worked in market.

2.1. Effects of store size limitation

In order to protect directly mom and pops, many countries have limited store sizes, because large retailers tend to enlarge store scale to take customers away from their competitors (OECD, 2000). This idea is widely accepted by many countries such as Japan, Italy, France, and Austria (e.g. Cho, 2014). Consequently, many researchers have been interested in measuring its effects on the number of small stores (Sadun, 2008).

It is interesting to note the case of Japan which is one of the strictest countries concerned about retail policy, in terms of store size limitation particularly (Kenzi and Masamori, 1997). Although the Japanese government tightened large retailers by reducing the scale of store size, it has been witnessed that the number of small- and medium-sized retailers has decreased (e.g. Kenzi and Masamori, 1997). In this respect, how multiple retailers have rapidly grown should be illustrated. The stronger the government regulates, the more retailers have developed retail formats, avoiding the legal guidelines made by governments (e.g. Sadun, 2008). As a representative case, when the Japanese government limited store size to 1,500㎡ in local areas, large retailers speed up opening new stores with less than 1,500㎡ (Kenzi and Masamori, 1997). As one of the reasons why hard discount stores like Aldi as well as Lidl have so much fast grown in Germany, restrictions on store sizes have stimulated big box retailers to diversify their business models from hypermarket/discount stores to conveniences stores (e.g. Kreimer and Gerling, 2006). Similarly, avoiding legal standards associated with the opening of new retail outlets, large retailers like Tesco UK have allocated considerable resources to develop new innovative business (e.g. Burt et al., 2010).

As a result, it should be noted that store size limitation to protect mom and pops from the competition with retail giants is not panacea, as demonstrated by the above researchers. Even though many countries have introduced retail constraints on store sizes, the number of small stores has commonly decreased. Compared with the market without such a restriction, it should be born in mind that its declining speed has been reduced or saturated.

When it comes to the measurement of its effects, most of studies (e.g. Kenzi and Masamori, 1997; Kreimer and Gerling, 2006 Burt et al., 2010) are based on the difference between before and after, in terms of store numbers.

2.2. Effects of opening and closing times, including Sunday trading

Principally, over the European countries, Sunday trading was prohibited, owing to the religious freedom and the protection of a human right to take a rest once a week (e.g. Halsall, 1994; Pilat, 1997). Nevertheless, many European countries such as the UK, France, Italy and the forth, are likely to partially or completely deregulate this legislation to boost a retail sector (e.g. Freathy and Sparks, 1995; Allen, 2009).

Accordingly, the researchers are interested in measuring whether allowing retailers to operate on Sunday contributes to the economic development, as expected (e.g. Morrison and Newman, 1983; Meza, 1984). By using a spatial circular model, together with Morrison and Newman (1983) who found that lift-

ing shop opening restriction would make a contribution to the sales volume improvement of large stores, Meza (1984) pointed the negative side that Sunday opening is able to encourage retailers to increase product prices.

By contrast, some studies conducted by Thurik (1984) who used the French data and Kay and Morris (1987) who explored the UK retail context, argued that extending opening hours can give rise to positive effects on a retail industry, in terms of retail productivity and job creation. Moreover, Clemenz (1993) found that customers are able to enjoy searching lower prices, because they can have a lot of options to choose a store due to extended opening hours. Basically, in order to extend shopping hours, retailers need more employees. This results in the improvement of unemployment. These research results encourage governments to deregulate opening hours.

2.3. Effects of other retail regulations

As one of the methods to restrict large retailers, many countries like the UK, Belgium, Germany, and Japan have adopted land use planning policy or zoning policy to effectively use land cross the country (e.g. Fancois and Leunis, 1991; Burt and sparks, 2003 Kalhan and Franz, 2009; Kanakura, 2009). Before the introduction of this restriction, as seen in the Table 1, many retail giants dramatically increased their market shares, making small retailers close their shops (e.g. Burt and Sparks, 2003).

<Table 1> Market concentration of top five retailers (%)

Country	1993	1996	1999	2006
Austria	54.2	58.6	60.2	74.2
Belgium	60.2	61.6	60.9	77.0
France	47.5	50.6	56.3	70.0
Germany	45.1	45.4	44.1	70.0
Netherlands	52.5	50.4	56.2	63.0
Sweden	79.3	77.9	78.2	81.8
UK	50.2	56.2	63.0	63.0

Source: adapted from estimates based on data from Corporate Intelligence on Retailing's European Retail Handbook and Global retail concentration, 2006.

As a result of adopting retail planning policy, the UK witnessed the declining rates of development of retail parks since 1996 and experienced earlier entrants in local areas to strengthen their market shares (Guy and Bennison, 2002). Similarly, Cheshire et al (2011) highlighted that land use planning was led to the significant reduction in retail productivity and further, the increasing number of small stores. Rather than positive influences, this policy has negatively affected a retail sector.

In addition, many European countries such as Ireland, Belgium, Portugal, Spain, Greece, Italy, and Luxembourg, have prohibited below-cost pricing to directly protect mom and pops (e.g. Cho, 2014). With respect to its effects, as noted by Colla (2003) and Allain and Chambolle (2011), this tends to distort competition structure and increase consumer inflation rates.

Beyond the above restrictions on a retail sector, governments have developed many ways to keep independent retailers, although they have negatively affected a retail industry, in terms of retail productivity. Nevertheless, what is important is that many governments have actively introduced retail legislations to keep small retailers. On the other hand, avoiding legal guidelines, large retailers have expended their own business, diversifying retail formats.

2.4. Korean retail regulations

There is little attention to the measurement of the effects of existing restrictions on a retail sector from an academician's as well as a practitioner's point of view in Korea. Based on prior research, it would be difficult to discuss its effects, due to different retail regulations from those of foreign countries, and further, the lack of literature. Apparently, the RIDL has been enacted to protect small stores and traditional markets from the aggressive shop opening of large retailers, as mentioned earlier.

It is, thus, necessary to look at what kind of regulation has been introduced to keep mom and pops in Korea in more detail, although there is no such a case over the world. Unlike the restrictions of other advanced countries on a large retailer, Korea emphasized the three points: (1) the distance between the new store location of retail giants and conventional markets, and (2) store closing twice a month, and (3) the delegation of authority to allow retailers to operate their stores from 0:00 to 10:00 am to local governments.

2.4.1. Limitation of store location

First of all, it should be mentioned here that it would be very difficult to find out the case that a government has made an effort to maintain a traditional market over the world, except for Korea. Rather than trying to keep conventional markets, most of countries have allocated their resources to protect small stores, irrespective of store locations.

According to the RIDL, large retailers cannot open new retail outlets within one kilometer radius from the traditional markets listed, according to the law built in 2011. Given that retail giants tend to open new supermarkets near to the place in which has higher store traffic, it would be expected that the government regards the new stores being operated by them as one of the strongest competitors against traditional markets. In other words, the Korean government strongly believes that the decline of conventional markets is because of the opening of new stores near to them, issuing the opening license of large stores on the outskirts of cities. Compared to the countries that have regulated big box retailers to open new stores in the downtown or in the suburb areas, such as Germany, the UK, Italy and Japan (Pilat, 1997), the Korean government has focused on protecting conventional markets, rather than small- and medium-sized retailers.

In fact, whether the limitation of store location is able to keep mom and pops or not should be doubtful, considering that the

result of introducing many different retail restrictions on retail giants is not sufficient. Even though the Korean retail policy is essentially different from those of foreign countries, it might be expected that the effect of retail regulations in Korea should be weaker than that of advanced countries.

Due to lack of previous research related to the effect measurement of the Korean retail policy, it is difficult to discuss its effects. Nonetheless, the authors have made considerable efforts to measure its effects on small retailers, including traditional markets.

2.4.2. Limitation of closing days

As opposed to European countries restricting Sunday trading, Japan regulated retailers to close their shop some days per year in the past, according to the "Large-scale Retail Shops Law", which was deregulated in 2000 (Kanakura, 2009). However, there has been a tendency of deregulating closing times. As an example, Japan abolished the law and western countries have begun to allow retailers to completely or partially open their shops on Sunday (e.g. Burt et al., 2010; Wenzel, 2010; Asensio, 2012; Katou, 2012). It is, therefore, not easy to look at the literature exploring whether small stores were protected or not, after regulating retailers to close their shops. Similarly, many authors illustrated the effects of deregulations concerned about the Sunday trading (e.g. Samuel, 2009; Khan et al., 2011; Wenzel, 2010).

On the other hand, notwithstanding there were the legal conflict arguments between policy-makers and large retailers, Korea has required multiple retailers to ban Sunday trading twice a month to boost traditional markets as well as independent stores in 2010. In that this law has introduced in recent, authors might be less interested in measuring its effects.

Associated with the limitation of closing days, many researchers (e.g. Thurik, 1984; Griffith and Harmgart, 2005; Blanchard, 2005; Viviano, 2008; Senftleben-Konig, 2014), have pointed negative sides, in terms of employment and retail productivity. Nevertheless, little effort has been paid to identify the relationship between the protection of small shops and the legislation of closing days.

2.4.3. Delegation of authority

According to the RIDL, the central government has given the right to permit opening hours from 0:00 to 10:00 am to local authorities in 2010. Given the opening and closing time, it is doubtful whether this issue is closely related to the protection of independent retailers. Indeed, many countries like Spain and Germany have transferred the power to issue an opening license and decide operation hours to local authorities, as pointed by Viviano (2008) and Matea and Mora (2009). Even though Korea has delegated its authority to regional governments, compared with other countries, its degree is too weaker than expected.

Surprisingly, researchers have not paid their attention to whether the delegation of authority affects a retail sector, and further, how it influences a retail industry over the world. It is, therefore, difficult to analyse its effects, comparing Korea with foreign countries.

As a consequence, given the unique retail regulation, it should be noted that it would be difficult to discuss the effects of the Korean regulations on the degree of the protection of mom and pops by reviewing literature.

Based on existing literature, nevertheless, it has become apparent that most of countries have made significant efforts to protect independent stores, discouraging large retailers to open new shops. In spite of such efforts, the number of small retailers has decreased, due to the aggressive expansion of the retail giants who have avoided legal restrictions. This kind of trend has been seen over the world, as pointed by Table 1.

2.5. Hypothesis development

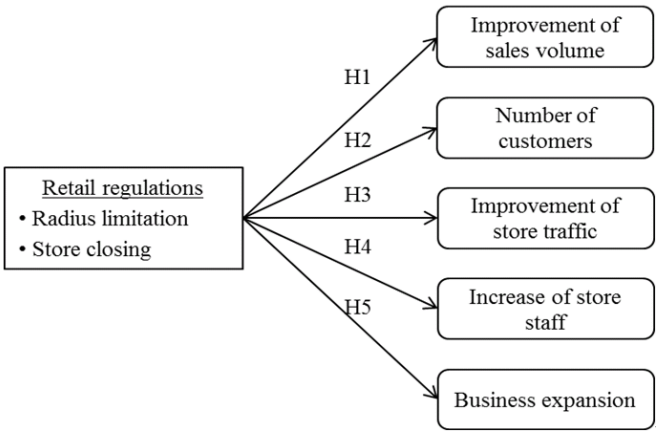
Based on the above discussion, it would be expected that the current retail legislations do not contribute to the protection of traditional market and independent stores in Korea. Accordingly, as seen in Figure 1, the researchers propose the following hypotheses:

- H1: The current retail regulations do not contribute to the improvement of sales volume.
- H2: The current retail regulations do not contribute to the increasing number of customers.
- H3: The current retail regulations do not contribute to the improvement of store traffic.
- H4: The current retail regulations do not contribute to the increase of store staff.
- H5: The current retail regulations do not contribute to the business expansion.

3. Research methodology

With regard to the measurement methods of the effects of retail regulations on a retail sector, there exist many different arguments, because of measurement errors (e.g. Reynolds et al., 2005 Griffith and Harmgart, 2005). Moreover, due to many different factors at work in the retailing industry and lack of data availability, assessment of the effects of retail regulations is a very difficult job (e.g. Collins et al., 2001 Viviano, 2008). Likewise, although many researchers have suggested many different methods to evaluate the effects of regulations on different economic outcomes, whether the number of small retailers increases or decreases particularly has been based on the statistic data announced by the government. Given the short term from 2010 to 2013, it is not easy to gain right data. Furthermore, it is a complicated job to analyse the reasons affecting its results.

In this research, consequently, how to measure the effects of retail restrictions on small retailers should be identified to minimise errors.



<Figure 1> Conceptualized research model

3.1. Measurement method

Rather than using the economic statistic data which has been collected by governmental bodies and reported by 2012, the authors have adopted a questionnaire method to investigate to some extent which each regulation type affects traditional markets and independent stores. In order to increase data availability at real time, it should be kept in mind that reflecting the current retail context is the better way to analyze their effects on a retail sector.

Accordingly, the authors have developed a questionnaire on the basis of previous research results and delivered to shop owners in traditional markets and independent stores. With respect to questionnaire design, the authors have categorised questions into six groups, including demographic factors, that is to say, focused on gathering real data from on-site. As a variable to measure the impacts of regulations, this study has introduced five concepts: (1) the improvement of sales volume, (2) the number of customers, (3) the improvement of store traffic, (4) the increase of store staff, and (5) business expansion. Given the existing empirical literature to explore the effects of retail regulations on a retail industry, furthermore, the research has adopted a five-point Likert-scale technique.

Survey questionnaire method for data collection has been used. Before field research, pretest was conducted to correct the developed questionnaire based on previous studies at earlier stage. In order to gain accurate research data, the researchers visited small- and medium-sized retailers located at traditional markets, and further had an interview with 10 shop owners. Consequently, the interview results have been reflected on the questionnaire.

3.2. Research population profile

With the finalised questionnaire, the authors visited the respondents who have run their own business within or near to public markets.

A total of 335 questionnaires were delivered to the shop keepers at the two of high streets in Cheonan city as well as one of traditional markets in Cheongju city in Chungnam province during April in 2014. Although the research has received 305 questionnaires, available questionnaires are 277, that is to say, its respondent rate is 82.68 %. To increase research reliability, the authors have selected the shop owners who have operated their shops more than 5 years at the same location as a respondent.

With respect to socio-demographic characteristics, 77.62 % of respondents are more than 50s, whilst 3.2 % are less than 40s. In terms of education levels, 16.7 % of the respondents are highly educated, whilst the majority of the research samples, that is, 50.5 %, are graduated from high school. Likewise, approximately 49 % of the 277 samples who responded to sales volume per month have achieved less than 10 million Won, and about 47 % less than 20 million Won.

3.3. Test of dimensionality

Considering that different research techniques might be able to give rise to different research results, it is very important to choose right analysis methods. Accordingly, in order to increase research reliability as well as validity, the authors have adopted a few different research techniques such as exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

As a preliminary step, the research used a factor analysis method to explore the relationship between the constructs and variables developed through literature review by using the principal components model with the oblique rotation technique. Oblique rotation was applied, given that the goal of the EFA was to obtain theoretically meaningful factors, and not to reduce the number of variables. First of all, the research explores the effects of retail restrictions on mom and pops and traditional markets.

The authors found that the collected data passed the thresholds for sampling adequacy (KMO 0.929, Bartlett's Test of Sphericity 6,063.359, $p < 0.000$). In relation to the KMO value, the figure, 0.929, is higher than 0.7 recommended by Kaiser (1974). It means that its measure of sampling adequacy test is available. As a result of adopting EFA method, amongst the six constructs developed, the researchers demonstrated high cross-loadings, as seen in the Table 2. Consequently, of 23 observed variables under 6 constructs, the research has totally removed 4 items which are not exceeding the threshold: (1) a central government transfers the authority associated with shop opening hours into local governments, (2) neighbor shops plan to open new stores, (3) the number of customers who visit my shop on Sunday increases, and (4) store traffic on Sunday increases. On the other hand, the accumulated variance value reached to 87.95%, which means that the data gathered and analyzed were reliable to examine the research model. In other words, the unidimensionality of construct as well as variable measures was confirmed since each item loaded highest on its intended factor.

3.4. Research reliability and validity

It is necessary to look at what kind of an analysis method should be used in the research. As a stage of measuring the constructs suggested, the authors adopted a factor analysis technique to evaluate the constructs related to the effects of retail restrictions on independent stores and public markets. It was found that the values of Bartlett's Test of Sphericity of the construct were significant (P-value=0.000), thereby making the factor analysis meaningful.

<Table 2> Factor Analysis and Reliability

	Factor loading	Mean	Cronbach α
Sales Volume (eigen value= 7.51, %of variance=37.76%)			
SV1	0.850	1.627	0.944
SV2	0.857	1.308	
SV3	0.853	1.330	
SV4	0.896	1.460	
Number of Customers (eigen value= 3.23, %of variance=16.98%)			
NC1	0.834	1.478	0.940
NC2	0.850	1.453	
NC3	0.851	1.638	
Store Traffic (eigen value= 2.06, %of variance=10.85%)			
ST1	0.451	2.108	0.929
ST2	0.478	2.076	
ST3	0.787	3.652	
Store Staff (eigen value=1.74, % of variance=9.15%)			
SS1	0.815	1.159	0.934
SS2	0.856	1.181	
SS3	0.783	1.228	
SS4	0.665	1.264	
Business Expansion (eigen value=1.34, % of variance=7.05%)			
BE1	0.900	1.022	0.823
BE2	0.476	1.043	
BE3	0.939	1.018	
Regulation (eigen value=1.17, % of variance=6.16%)			
Radius limitation	-0.885	3.942	0.751
Store closing	-0.797	3.178	
Cum %=87.95			

These results accordingly indicated that the constructs have satisfactory fit and are meaningful to conduct the research. Furthermore, the authors found that the eigenvalues for the six constructs were in excess of 1.0, and explained 87.95% of the total variance respectively, which means that the model is significant and incorporates as many reliable factors as possible, in parallel with the above results.

With regard to the research reliability which means the extent to which the constructs used are free from errors and are able to yield consistent results, the researchers have used Cronbach's Alpha to measure the internal consistency of the multi-items used in this study. Through reviewing the reliability tests for various dimensions of the effects of retail restrictions on small retailers and traditional markets, the research confirmed that the Cronbach's alpha values of all of the dimensions range from 0.751 to 0.944, as shown in the Table 2. All instruments exceeded the preferable criterion of 0.70, as pointed by Nunnally (1978) who emphasized that the values of Cronbach's alpha should be used as a guideline to improve research reliability. It can consequently be claimed that they were all reliable.

<Table 3> Correlation matrix

	1	2	3	4	5
Sales Volume	1				
Number of Customers	.821**	1			
Store Traffic	.824**	.835**	1		
Store Staff	.722**	.718**	.591**	1	
Business Expansion	.242**	.234**	.178**	.392**	1
Regulation	-.461**	-.455**	-.516**	-.318**	-0.1**

*: P<0.05, ** : P< 0.01 (two tailed).

<Table 4> Regression analysis on the traditional market performance

Dimensions	R^2	standardized β	t value	Prob.
Sales Volume	0.461	-0.461	-8.642	0.000
Number of Customers	0.455	-0.455	-8.499	0.000
Store Traffic	0.516	-0.516	-10.038	0.000
Store Staff	0.318	-0.318	-5.577	0.000
Business Expansion	0.102	-0.102	-1.699	0.090

*: P<0.05, ** : P< 0.01

Moreover, as part of efforts to increase or improve the reliability of the research, most of the variables used in previous studies as well as the questionnaire design were validated by the professional staff of KNU, before being administered. As a result, it should be noted here that the content validity of variables can be acceptable. We have, furthermore, analyzed convergent and discriminant validity by examining the cross-loadings computed from the correlation between each construct's component score and the indicators of other constructs. In the same vein, the Table 3 presents the matrix of correlations for the six dimensions. All satisfy this criterion.

The regression method was employed with the regulation as an independent variable influencing on the five dependent variables in terms of the performance of independent retailers and

traditional markets. We set the significance level for this empirical study at 5 percent, based on the results of statistical tests.

As seen in the Table 4, the R2 of regression model is 0.461. Given this figure, the hypothesis(H 1) that the current retail legislations do not contribute to the improvement of sales volume is supported, as the regression model is significant at $p<0.01$. Accordingly, H 1 is accepted, as shown in the Table 5.

<Table 5> Detailed hypotheses results

Parameter	Description	Hypothesis supported
Hypothesis 1	Regulation -\-> Sales Volume	Accepted
Hypothesis 2	Regulation -\-> Number of Customers	Accepted
Hypothesis 3	Regulation -\-> Store Traffic	Accepted
Hypothesis 4	Regulation -\-> Store Staff	Accepted
Hypothesis 5	Regulation -\-> Business Expansion	Rejected

Notes: The " -\->" symbol means "do not contribute".

With respect to the contribution of retail regulations to stimulating customers to mom and pops and public markets, consistently, the R2 of regression model is the 0.455which is significantly at $p<0.01$. As the researchers has hypothesized, it is found that the retail restrictions to boost small stores as well as traditional markets do not have an contribution to the increase of customers, as seen in the Table 5. As a consequence, this hypothesis is accepted.

As seen in the Table 4, the R2 of whether retail legislations improve store traffic is 0.516. It means that the regulations introduced in 2010 do not have any attraction to take away customers from multiple retailers. In other words, although the South Korean government has regulated large retailers to close their shops twice a month, it would be difficult to say that customers have switched to independent stores and traditional markets. The hypothesis 3 is, thus, supported, as shown in the Table 5.

In order to measure the effect of the current retail constraints on independent retailers and public markets, the researcher asked respondent whether they increased their store staff or not. Given that the R2 of regression model was 0.318, as seen in the Table 4, the hypothesis 4 is significantly accepted (see the Table 5).

By contrast, with regard to the degree of influence of retail regulations on the business expansion of mom and pops, as shown in Figure 1 and Table 4, the R2 of regression model is 0.102.Considering that the regression model is significant at $p<0.05$, the hypothesis 5 is rejected, as seen in Table 5. This result can be interpreted in a way that retail legislations have nothing to do with the business expansion of independent retailers.

4. Findings

In an attempt to explain why the factor loading indexes of retail regulations are minus, as shown in the Table 2, research analysis results can be interpreted that current retail legislations do not make contribution to the protection of independent retailers and traditional markets, although respondents think them as one of the most important vehicles to avoid competing with multiple retailers in itself.

Despite the fact that the South Korean government has introduced retail constraints on big box retailers to keep small- and medium-sized retailers and public markets, the research found that it has been apparent that its effects is lower than expected through an empirical research. In a word, it would be wise to say that the current legislations do not regulate large retailers at all.

In addition, amongst the above three regulations, it is found that respondents want the government to severely tighten the frequency of closing stores per month and the permission of opening new shops. By contrast, they have not paid considerable attention to the limitations of opening and closing hours during a day. This might be because most of respondent tend to close their shops during the time from 0:00 to 10:00 am. This regulation is, thus, more likely to be ignored.

As an important criterion to measure the effects of retail restrictions on independent stores and traditional markets, the authors have proposed dependable variables such as sales volume, number of customers, store traffic, number of store staff, and business expansion. Although research samples said that current retail regulations have nothing to do with business expansion activities, it is evident that they do not contribute to any of the rest variables. Adversely, it can be said that there are many rooms to open new retail outlets or develop new retail formats from a large retailer's point of view, avoiding legal limitations in a retail sector. At the expense of mom and pops and public markets, multiple retailers such as E-Mart, Tesco Korea and Lotte-Mart have continuously expanded their own business (Korea Chain stores Associations, 2012)

From a shop owner's perspective, although existing retail regulations might be better than nothing for now, the degree of retail constraints on large retailers should be strengthened. Furthermore, the authors have found that different legal methods to protect mom and pops are needed in reality, taking into account customer rights.

5. Conclusions

As pointed by Cho (2014), it should be kept in mind that the retail regulations in Korea are very different from those of advanced countries like Japan, Germany, France, and the UK, in terms of technical methods to restrict large retailers. Over the world, it is difficult to find out the similar cases to the Korea retail constraints, in terms of the protection of independent stores.

As mentioned earlier, compared with the large retailers who

have consistently grown since the introduction of retail restrictions into a retail industry in 2010, small shops are in decline. In order to improve the effects of retail restrictions on large retailers on independent retailers and traditional markets, the results of the research indicate that the central government should change a retail policy, that is, introduce new technical ways to keep mom and pops and conventional markets, to some extent considering customer rights. At the same time, shop keepers have to make considerable efforts to take away customers from their competitors.

Through the research, what is evident is that the current retail regulations do not protect traditional markets as well as independent stores in Korea. Moreover, it should be noted that retail regulations are not a panacea to protect them. Although the above countries have strongly regulated multiple retailers to open new stores with many various methods in the domestic market, it is true that a small shop sector is in decline (Coca-Stefaniak et al., 2005). Given this circumstances, it is difficult to expect that the Korean retail legislations do contribute to the protection of small retailers.

Like other research, with regard to research limitations, small research sample size and coverage area should be noted here. These limitations warrant some caution when extending research results cross country. Additionally, to measure the effects of regulations, the authors have used a questionnaire method, based on the gut feeling of respondents, rather than comparing the current with the past performance with exact data such as sales volume, customer numbers, store staff, and store traffic.

Future research directions should, accordingly, be in attempting to undo the above research limitations. There is, also, a need to measure the different effects of retail constraints on a retail sector, such as job creations, the development of a retail industry and the forth.

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