



JÖNKÖPING INTERNATIONAL  
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# Experience in Shopping Centers

An Accessibility Analysis of Swedish Shopping Centers

Master's thesis within Economics and Management of Entertainment and Art Industries

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### **Abstract**

This study aims to investigate how market size impacts the level of economic success, diversity, entertainment, arts, and experience of shopping centers in Sweden. More specifically the paper uses regression analyses to test the relation between different forms of shopping center performance and market size. The results show that the municipality market size plays an important role in all analyzed cases. The results also showed that local labor market size does not have a significant impact on the dependent variables.

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# I Introduction

*“The truth, I don't go to the malls to shop. Sure I might buy something, but it's not opportunity or need that brings me to a mall -it's the glitter and glitz, the chance to mingle...A good mall is like a good man: it offers excitement and enlightenment.”*

*Gershman (1988)*

Members of the younger generation are born into the “world of shopping centers”. In their world, it is not uncommon to set up a meeting at the food court of one of the malls, which is nowadays accessible regardless of where they live. Recreational activities such as going to a mall to see a movie, or having fun at the amusement park within the shopping centers became a part of daily life. It might seem remarkable that people started to be attached to shopping centers, even without the motivation or necessity to shop. As a result, the centers turned into the spaces where communities spend a significant percentage of their spare time in today's world (Bloch, Ridgway, & Dawson, 1994).

The transformation of consumption created a new shopping landscape almost in every region during the last decades. “Consumption for needs” transformed into “Need for Consuming” due to the rise in hedonic consumption over the years (Langrehr, 1991). In other words, people do not just shop to buy a certain good for utilitarian purposes but go shopping for the benefits of the purchasing activity itself. The way consumption transformed into another meaning made it important to know “how” and “where” people consume. Previous literature deeply discussed the declining importance of location due to the globalization and the rise of technology based industries (Cairncross,1997; Friedman, 2005). However, many other studies have shown that industries keep clustering in certain areas. The importance of where industries locate, and where people locate and consume remains the same. (Jacobs, 1969; Krugman, 1996; Glaeser, 2000; Glaeser,Kolko, & Saiz, 2001; Florida, 2008; Mellander, 2008)

More recently, the question why and how ‘experience industries’ cluster, which is well-known with producing intangible products, has also been investigated (Lloyd & Clark, 2001; Florida, 2008; Florida, Mellander, & Stolarick, 2009). Following Jacob's argument on the need of ‘concentration of people’ in the cities (Jacobs, 1993), Glaser (2001) brought up the rising importance of cities, as they have an increasing importance in terms of acting as consumption nodes rather than production nodes. In his recent work, Florida (2008) also pointed out the importance of where people locate by highlighting the fact that today's key economic factors are not distributed evenly across the world.

Experience industries play an important role in today's creative world. A big body of literature emerged to analyze the dynamics of, and the factors behind the experience economies. Vogel (2001) focused on categorizing different characteristics of major entertainment enterprises within the entertainment industry, whereas Caves (2002) focused on the industrial organization of the creative industries. Finally, Andersson (2006) brought up the subject of economics of scale & scope in order to investigate the required market conditions for the existence of certain branches of the experience industry. Among all the branches of experience industries shopping centers are unique mediums in combining shopping with experience and entertainment, which makes them important for an experience industry analysis.

In previous research, different fields of social sciences have argued the use of shopping centers as entertainment and experience nodes, since they provide the combination of dif-

ferent experience elements within the same planned physical structure (Crawford, 1992; Babin, Darden, & Griffin, 1994; Denniz, 2005; Langrehr, 1991; Dawson, 1983). Some other studies discuss that, regardless of the existence of active entertainment and arts facilities such as: movie theatres, amusement parks, bowling halls, concert halls, and galleries, a shopping center could be considered a recreational consumption space. The transformed meaning of shopping from having a utilitarian value to having a hedonic value is pointed out to be the reason of this (Goss, 1993).

## **1.1 Purpose of the study**

The purpose of this study is to examine how the market size impacts the level of economic success, diversity, entertainment, arts, and experience of shopping centers in Sweden.

## **1.2 Disposition**

The first part of the thesis will be reserved for the historical background of shopping centers, and transformation of consumption and shopping behavior in order to provide a better framework. The next part will be reviewing the previous theories and concepts that are linked to the purpose of the study. The hypotheses of the study are explained in the successive part. The following section will be reserved for the empirical study with methodology, data and model descriptions, and regression analyses. The study comes to an end with the conclusion part and further research suggestions.

## 2 Historical Background

### 2.1 Shopping Centers

An early definition of a “shopping center” is: “*A group of architecturally unified commercial establishments built on a site which is planned, developed, owned, and managed as an operating unit related in its location, size, and type of shops to the trade area that the unit serves*” (Urban Land Institute, 1977, p. 1).

The early footprints of shopping centers can be traced back to the 15<sup>th</sup> century bazaars of the Eastern world<sup>1</sup>, and to the 18<sup>th</sup> and 19<sup>th</sup> century shopping terraces and arcades of the Western world. What we refer to today as “shopping centers” is different than from the past, this change is related to the significant growth of shopping centers as an industry after the Second World War.

In previous literature, shopping centers are considered to be different spatial structures than shopping districts. This different categorization is based on the fact that shopping centers emerged as unified architectural spaces and that they are usually owned by the same owner, whereas earlier forms of shopping districts emerged without a planning process due to clustering of individual shops that are owned by different owners (Dawson, 1983).

Over the years the transformation of the shopping center concept, the architectural forms, and the organizational structures of the shopping centers have experienced a significant change. Due to increasing competition among a large number of shopping centers, the concern for aesthetics and creativity of architectural forms started to capture the attention of developers. Therefore, categorizing different types of shopping centers on the basis of architectural forms has become a difficult task. The organizational structure of shopping centers as well became more complex over the years due to an increasing number of parties getting involved in the shopping center development process. In this complex process retailers, architects, designers, engineers, lawyers and tax consultants, policy makers, environmental planners and many other agents started to take part (Dawson, 1983).

### 2.2 Shopping Center Industry in Sweden

Since 1960, Scandinavian and European countries have experienced an emergence of different types of shopping centers. With the planning of new housing districts in Sweden, neighborhood shopping centers and municipality centers developed as complimentary facilities to those new living areas. The decentralization process of the Stockholm district led the emergence of the first examples of the Swedish shopping center industry. Due to the rapid expansion of urban regions during the 50’s many new neighborhoods were established outside of central Stockholm. Private enterprises were encouraged by the government to develop shopping centers within these suburban communities. Examples of these shopping centers are Farsta and Vällinby, which were opened in 1954. Other cities followed the same trend over the years. (Dawson, 1983)

It can be observed that there was no planning process or government initiative in the examples of early North-American shopping center development. The centers were not part

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<sup>1</sup> Isfahan’s Grand Bazaar from 10<sup>th</sup> century and Grand Bazaar of Istanbul from 15<sup>th</sup> century are the early examples of covered markets in the world.

of an urban planning process in North-America. The Swedish shopping center industry differs from the North-American examples since it experienced a planning process, where different types of shopping centers were allocated to different sized locations depending on population and market potential:

- a) *Local Centers, serving 4000-7000 people;*
- b) *Neighborhood Centers, serving 15 000 people;*
- c) *District Centers, serving 120000 people;*
- d) *Regional Centers, serving 500 000 people.*

With the participation of the government as an active player in the planning process of shopping centers, following the Stockholm example, many other Swedish cities experienced the emergence of shopping centers from the 1960's onward. According to Dawson the Swedish case can be labeled a commercial success as the main idea behind the government initiative was to increase the level of accessibility to retail and other services (Dawson, 1983). In other words government initiative played an important role in terms of having the shopping centers develop in approximate locations to the emerging neighborhoods to create new market places.

### **2.3 Transformation of Consumption and Shopping Behavior**

The emergence of shopping centers as consumption and recreational areas is highly dependent on the transformation of the meaning of consumption and shopping. Countries, specifically those which have advanced economies, have experienced a significant shift in the value, and consequently in the concept of shopping over the years. Central postmodern theory proposes that symbolic meaning has taken over the importance of material utility of products (Baudrillard, 1981).

Back in the 1950's one of the biggest discussion topic among researchers was the change in meaning of products and consumption. Levy notes that "*People buy products for not only what they do, but also for what they mean*" (Levy, 1963, p. 118). As the importance of the symbolic meaning<sup>2</sup> of products rose, the meaning of consumption went through a significant change over the last century. Regarding those changes contemporary social theorists proposed that consumption plays an important role in how the social world is constructed (Campbell, 1991; Featherstone, 1991).

Over a hundred years ago, the "*Theory of the Leisure Class*" of Veblen (1899) introduced the concept of conspicuous consumption. Veblen was criticizing '*consumerism*' by arguing that individuals highlight their situation in the hierarchical relationship by following conspicuous consumption patterns. The term "leisure class" refers to those who are not required to work due to a surplus that is produced by the "working class". Veblen argues that the power relation in society is based on this surplus, which makes it possible to accumulate private property. He notes that someone's position in social hierarchy, status, and honor are associated with the amount of the property one has. The core idea behind the theory is that economic life is driven by social vestiges rather than utilitarian purposes. (Veblen, 1973 [1899])

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<sup>2</sup> Symbolic meaning refers the perceived image of a specific product. In previous literature symbolic meaning of the products has taken into account as commodity signs (Baudrillard, 1981).

The theory of conspicuous consumption is being opposed by main stream economics starting from the late 80's. The theory was found to be restrictive in defining hierarchical relationships by only pointing out the consumption patterns of those who are situated at the top of the hierarchy (Lears, 1993 ). Moreover, it has been argued that the way consumers display their wealth has changed over the years and turned out to be more sophisticated and subtle rather than conspicuous (Canterbery, 1998). Another proposal is that the social class no longer shapes consumer behavior. Instead, lifestyles took over the social hierarchy in terms of shaping consumption patterns (Featherstone, 1991; McIntyre, 1992).

The discussion on the symbolic values of products in the 50's was followed by the notion of congruence between the lifestyles the consumer chooses, and the symbolic meaning of the product during the 60's. The hedonic consumption concept, as referred to in the literature, started to be investigated more accurately during the early 80's (Levy, 1980; Hirschman, 1980a).

Hirschman and Holbrook (1982) introduce the different aspects on the 'hedonic consumption concept': "*Hedonic consumption designates those facets of consumer behavior that relate to the multisensory, fantasy and emotive aspects of one's experience with products*" (Hirschman & Holbrook, 1982, p. 92) What they underline is that hedonic consumption refers to consumer experience in using a product through multisensory images, fantasies, and emotional arousals. The hedonic approach differs from the traditional approach as it focuses more on artistic or cultural products rather than packaged goods or major durables.

## **2.4 Emergence of Shopping Centers as Entertainment Playgrounds**

The concept of hedonic consumption is important in order to understand the changing retail environment and how it changed over time. The transformation of shopping centers into experience nodes is highly related to shopping behavior itself, as the mall became a part of the experience of the product.

*"Retail mall' could replace 'product' and hedonic consumption can be directly linked with the mall shopping experience in and of itself."* says Langrehr in his study where he relates hedonic consumption to the function of shopping malls (Langrehr, 1991, p. 428). As mall environments provide a setting which makes it possible to capture multiple senses of sight, tactile, and even taste of food, all become a part of the hedonic consumption activity (Campbell, 1987).

The way shopping centers are conceptualized differs from other architectural spaces. They are enclosed and they have a unique way of creating experience in that sense. The enclosed structure makes it possible to diversify the mall from the outside world. Moreover the enclosed architecture provides multiple possibilities to create an attractive space through specific elements of experience such as: music, colors, temperature, and even smell (Langrehr, 1991). The replacement of traditional consumption spaces with organized shopping centers lies within these specific elements of experience. Kowinski (1985) also highlights the experience potential of shopping centers by mentioning that the shopping mall is a space where people can outlive their fantasies like they are on the stage of a theatre:

*"Then suddenly I knew why, or anyway I started to find my way to why. My next perceptual jolt was the sudden realization that this space (Greengate Mall in US) was special, that it could break so many rules and preconceptions because it was separated from the rest of the world, pulled out of time and space, but not only by windowless walls and a roof, or by the neutral zone of the parking lot between it and the highway, the asphalt moat around the magic castle. It was enclosed in an even more profound sense- and certainly*

*more than any other buildings – because all these elements, and others, psychologically separated it from outside and created a special domain within its embrace. It meant to be its own special world with its own rules and reality. That was first and most essential secret of the shopping mall.”* (Kowinski, 1985, p. 197)

After the boom of the industry during the 60's, shopping centers also became economic entities which serve as community centers for social and recreational activities. Previous research drew the conclusion shopping centers function as consumer habitats. In those studies it is mentioned that the malls are offering a high potential for social interaction in a favorable climate, where consumers perceive the setting as a safe environment with a large selection of consumable goods and experiences (Bloch, Ridgway, & Dawson, 1994). Moreover, previous studies also indicate that 75 percent of Americans go to a mall at least once a month. Time budget analysis shows that they spend more of their leisure time in malls than anywhere else (Kowinski, 1985; Bloch, Ridgway, & Dawson, 1994).

### 3 Theory and Concepts

In this section, theories and concepts, and previous studies from different fields which are relevant to the study purpose will be reviewed.

#### 3.1 The Experience Economy

The question “*How do economies change?*” leads us to the broad historical story of economics. Pine and Gilmore (1998) point out the different stages of a ‘*birthday cake*’; it provides the outline of the transformation to experience economies in a couple of sentences.

The shift of the economy, as is referred to in “*Welcome to the Experience Economies*”;

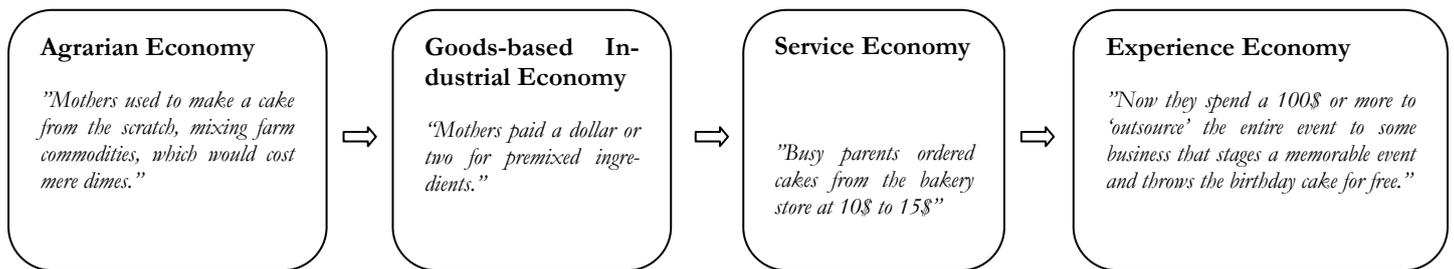


Figure 3-1 Transformation of Economies; Source: “*Welcome to the Experience Economy*” (Pine II & Gilmore, 1998)

Figure 3-1 shows how economies have transformed from agrarian to experience over the years. The raw commodities coming from nature to the traditional farm markets used to be the basis of the economy. Following this stage, rapid industrialization introduced a goods-based economy where consumers started to consume processed and packed goods that are sold in modern day market places. The third stage is the service economy, which is another milestone in the transformation process. The raw commodities of the agrarian economy became mere parts of other products which are used to be produced by the consumers themselves in the past. Finally, the experience economy emerged as a relatively new concept in economics. In experience economies the way how the product is consumed became a part of the product, as it is shown in the ‘*birthday cake*’ example. At each new stage estimated price of the product multiplies due to the values that are added, such as: technology in goods-based economy, extra labor force in service economy, and finally the experience.

Florida (2002) defines today’s economy as a “*Creative Economy*”, referring to the shift in advanced nations towards information-based and knowledge driven economies during the last century, particularly since 1950 (Florida, 2002). Creativity is an important driving force within the economic structure as it drives the experience element in consumption. As a result of the boom of manufacturing based production due to the industrial revolution, the level of competitiveness urged firms to differentiate under free market circumstances in order to survive.

Earlier definitions of ‘*experience*’ were highly associated with entertainment and arts industries. However, the historical transformation of commodities, as they started to generate other values than what they used to in the traditional sense, altered the meaning of experience. According to the work of Pine and Gilmore (1999), a ‘*coffee bean*’ is a delightful ex-

ample of the shift from a commodity to a good, to a service, and finally to what is defined as an *'experience'*. The way experience adds value to the commodity is explained in 4 stages based on the pricing of coffee offerings:

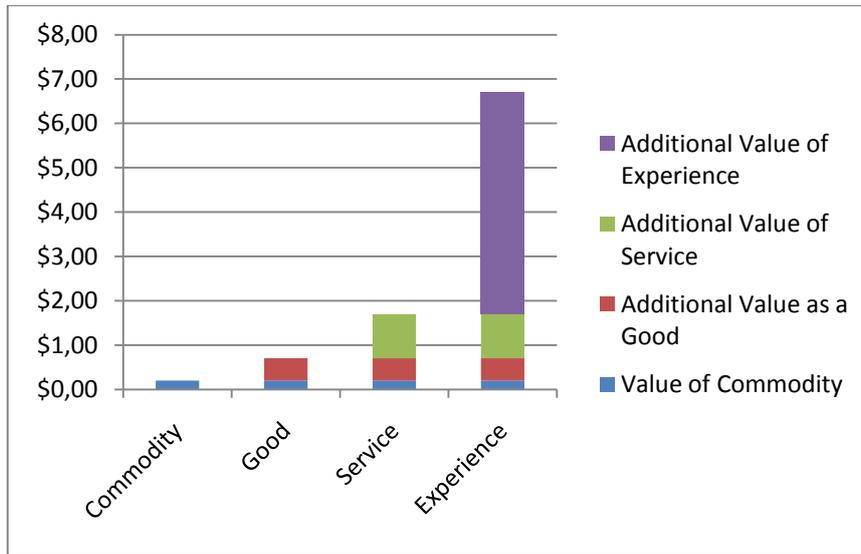


Figure 3-2 Pricing of Coffee Offerings; Source: *“The Experience Economy: Work is Theatre & Every Business a Stage”* (Pine II & Gilmore, 1999)

The case of coffee provides a good example for the additional values which one can observe by looking at the different stages of economy. The consumers only needed to pay a couple of cents for a cup of coffee by purchasing the rough coffee beans that came from harvest to the market place as a *'commodity'*. After the manufacturer got involved in the process, the commodity became grinded, packed, and sold in the grocery store; which increased the price as the commodity became a *'good'* in the market. The next stage is the service industry's value addition, as a cup of coffee is offered for a ten times higher price in the neighborhood coffee shop. The very last stage, provides us insight into the dynamics of what we refer today as experience economies and how much impact it can create in terms of additional value. Via the ambiance, aesthetics, music, flavor, and many other intangible elements; a cup of coffee can now be consumed as an experience good in a place like Café Florian in St. Mark's Square in Venice costing more than 15 dollars (Pine II & Gilmore, 1999).

Because of the concept of experience economy it is important to investigate the transformation of shopping centers into experience nodes. It may provide new insights into what drives people to visit. Sure, the motivation of shopping plays a significant role, after all it is the core idea behind a shopping space; but behind the motivation to shop the theatrical experience one might gain during ones stay in a region mall or a thematic city gallery plays an important role. As discussed in the previous part, the characteristics of a shopping center make it possible to count it as a recreational space. Via the experience economy concept, the intent of this study is to provide an in depth overview on the change of the structure of the economy, which led to the use of such kinds of spaces as experience areas.

Over the years, the rising income and leisure time spending have also been found to play an important role in the transformation of economic activities. Therefore this topic will be discussed in the next part.

## 3.2 Income and Leisure Time

Demand is a concept of consumption planning and consumers tend to follow a consumption pattern based on their budget. Common neoclassical assumptions suggest that individuals are likely to take actions which would maximize their utility. Budget constraints are the fundamental issue lying behind the decision making process since it is one of the most important determinants of consumption patterns.

Two main factors behind “budget constraint” are: ‘*Income and wealth*’ and ‘*Prices of different goods and services*’. The general classification of consumer goods as ‘*necessities, normal goods and luxuries*’ has been created based on the fact that income is sensitive towards different goods and services, “*Income Elasticity*” is therefore used as the measurement of this sensitivity (Andersson & Andersson, 2006), while “*Price elasticity*” is another measurement to estimate the expected change in the demand. This indicates that if the demand would change, price or income would change with 1 percent.

The characteristics of demand towards recreational goods have been a topic of investigation in previous literature (Andersson & Andersson, 2006; Vogel, 2001). Andersson (2006) highlights that the demand and supply of recreational products, such as entertainment, arts, and other cultural goods, depend on the development of the total real disposable income of households, and on other macroeconomic conditions.

Economics literature on growth of country economies suggests that the countries with high savings rates are expected to grow faster than economies with a lower tendency to save (*ceteris paribus*). Sweden ranked second after Japan in long term growth rates of real GDP per capita between 1870-1979 and 1870-2002. (Andersson & Andersson, 2006)

The expected increase in recreational expenditures comes along with the growth of advanced economies and rates of real per capita GNP. Moreover, historical empirical data shows that the share of total disposable income allocated to the arts, entertainment, and leisure consumptions have experienced an increase in advanced economies over the years. Regarding the historical change of recreation expenditures, it is expected that the relative shares of recreation expenditures would exceed 15 per cent of the consumption by the year 2030 (Andersson & Andersson, 2006, p. 42).

According to data from 2002, Sweden with a 12.5 per cent share of recreational expenditures, is ranked third after Norway and the UK (Andersson & Andersson, 2006). In that sense, it is not wrong to predict that the Swedish market is likely to hold its importance in terms of a possible increase of the share of recreational expenditure in the future as well.

The impact of leisure time and wage levels on recreational industries has also been an important factor that was investigated in previous literature. Before going deeper into the geographical distribution of leisure time and its relation with experience consumption, it would be delightful to make a definition for it. Although it has always been problematic for different fields of science to describe “*leisure*”, in this particular study the term refers to the definition described by Vogel (2007):

*“Leisure has recently been conceptualized either as a form of activity engaged in by people in their free time or, preferably, as time free from of any sense of obligation or compulsion. As such the term ‘leisure’ is now broadly used to characterize time not spent at work (where there is an obligation to perform.)”* (Vogel, 2001, p. 4)

Due to time constraints every individual has to make a decision on the allocation of time for leisure purposes. This has been referred to as “*leisure time constraint*” in previous literature. Andersson and Andersson (2006) mentions that: “*leisure time will be steadily increasing with increasing real wage rates*” due to the increase in labor productivity. (Andersson & Andersson, 2006)

The world economies have experienced a significant increase in leisure time consumption over the years. Andersson and Andersson (2006) point out a dramatic change in annual working hours in selected OECD countries between 1870 and 1979. Sweden has been observed as one of the most outstanding nations among other Western European and North American countries in terms of decreased number of working hours. During the given time period the working hours in Sweden went down from 2,945 to 1,461. (Andersson & Andersson, 2006)

The dramatic change in working hours leads to the increase in leisure time consumption in return. In the case of the shopping center industry in Sweden, the increasing leisure time allocation can be taken into account as a driving force for the historic emergence of the shopping center industry. One can draw the conclusion that due to the increase of wages over the years, the tendency of people to ‘shop’ has increased. However, the transformation of the use of shopping centers for experience purposes seems to depend, not only on the increase in wages, but also on the increase in leisure time. Nevertheless, as mentioned earlier, increasing wages and leisure time allocation are complementary factors, they are dependent on each other.

Both the historical change of income and leisure time once again highlight the fact that the industry has evolved through several stages over the years. At the core of this study lies the assumption that shopping centers are expected to become more important in the future as a recreational space.

### **3.3 Location and Experience Economy**

The question “*why do certain industries locate where they do?*” has been a subject for a big body of literature. Early researchers of classical location theorists like Von Thünen (1826), Weber (1909), Christaller (1933) and Lösch (1940) discussed the reasons behind the clustering of manufacturing and agricultural industries. They proposed that certain industries locate in clusters in order to minimize transportation costs. Within “*The New Economic Geography*” the importance of urbanization and its relation with economic development and growth has been investigated (Krugman, 1996; Glaeser, 2000).

The tendency of entrepreneurs to co-locate or cluster in approximate locations has been opposed in recent literature. It is argued that the importance of location is weakened due to the decreasing transportation costs as a result of rapid shift to advanced technology (Cairncross, 1997; Friedman, 2005).

Although we have experienced a rapid change in distribution technologies and an increase in consumption and production of intangible products over the last century, certain industries keep clustering in certain locations, consequently the question on why the industries keep clustering holds its importance. Vernon (1963) highlights that firms tend to locate in big cities like New York instead of locating by source, relative wage, and transportation advantaged places. Limited demand for space and the need of quick adjustments, due to an uncertain future, were common among those firms locating in New York City in the 1950’s. Those companies are in general pointed out to be emerging firms during that pe-

riod of time. Vernon (1966) later proposed in his “*product life cycle theory*” that during the early stages of a product’s life cycle, the product is associated with the location where it was invented, because the inputs originate from the same region. In later stages the product will be transferred away due to the change in regional advantages. An empirical study done by Artle (1959) regarding the six retail activities for the Stockholm metropolitan region regards the same issue. He highlights the importance of proximity between the suppliers and purchasers.

Previous research confirms that companies operating in the creative industries and creative individuals cluster (Florida, 2002; Mellander, 2008; Florida, Mellander, & Stolarick, 2009). In the study where the authors highlight the importance of clustering of experience industries as a ‘*spatial manifestation*’, Andersson and Andersson (2006) argue that the agglomeration process plays an even more important role in creative industries than the others. In the same literature reasons to ‘why the location is important for both producers and consumers’ pointed out to be ‘*the existence of spatial friction*’ and ‘*property rights ambiguity*’.

From an entrepreneurial point of view, Andersson proposes that: “*Clusters tend to be attractive to the entrepreneurs who are capable of exploiting cluster advantages. This attractiveness of clusters at the regional level derives from the effects of pecuniary and non-pecuniary external economies that benefit firms that belong to such clusters.*” (Andersson & Andersson, 2006, p. 66)

Pecuniary external economies are described as accessibility opportunities, which would help to reduce the transportation and transaction costs of service and goods deliveries; whereas non-pecuniary externality refers to “productivity-enhancing effects that are not easily measured in money terms” (Andersson & Andersson, 2006, p. 72)

In their paper “Consumer Cities”, Glaeser, Kolko, and Saiz (2001), review the attractiveness factor and highlight the importance of urban locations as they generate demand for consumption. They mention that clustering has an important effect on the urban density, which leads to an area’s attractiveness. The importance of the attractiveness of the urban locations is pointed out as a driving force behind the agglomeration of consumers in certain locations. In order to attract individuals, who would generate consumption and flourish the future of an urban area, they propose that a city should provide a variety of service industries, amenities, aesthetics, and physical settings. Glaeser et al (2001) discuss that it is the attractiveness of the city which drives the talented human capital. Factors such as amenities and aesthetics play an important role in attracting human capital to the city. This is of importance as the city gains economic vitality via the consumption of human capital (Glaeser, Kolko, & Saiz, 2001). In his paper “*Smart Cities: Quality of Life and the Growth Effects of Human Capital*”, Shapiro (2005) highlights that direct measures of quality of life are associated with “*consumer city*” amenities such as bars and restaurants (Shapiro, 2005).

More than a half century ago, Jacobs (1969) discussed that it is the city that brings diversity via different human talents, which leads to innovation and thriving power for location (Jacobs, 1969). Following Jane Jacobs’ attention to the importance of talent and creativity in urban regions, recent years have experienced a literature emergence on the role of human capital within an experience economy context. One of the most significant concepts is “*The Creative Class*”, introduced by Florida (2002), where he suggests that the location matters in terms of attracting human capital, and especially those who are associated with creative jobs as well as those who hold talent and knowledge as an important asset in terms of aggregate return to the economy. The idea behind “*creative people tend to cluster*” lies within certain characteristics of urban regions. The study done by Mellander and Florida (2006)

provides insight on the distribution of human capital and regional development in Sweden. It is argued that there are different measurements for human capital in previous researches. Moreover they mention that occupationally-based measures that are associated with knowledge-based and creative occupations are taken into account for regional development. The conclusion they draw through empirical research suggests that: “*service diversity is significantly related to the distribution of conventional human capital, the creative class, creative professionals, and several permutations of super creative core*” p.29. (Mellander & Florida, 2006).

Lloyd and Clark (2001) as well discuss the importance of cities as spaces of production and consumption: “*Size and density are not in themselves essential to new rankings of cities...Rather what matters is the continuing influence which the city as a socially structured space exerts in the conduct of human life.*” (Lloyd & Clark, 2001, p. 1) In that sense, they also highlight the necessity of attention to a city as an ‘*entertainment machine*’ as it produces consumption by cultural and recreational advantages. After all the consumption potential is considered to be the competitive power for emerging new cities and centralizing older ones (Lloyd & Clark, 2001).

### 3.4 Agglomeration Economies

In the earlier part the ‘*clustering force*’ in creative industries was reviewed and the importance of ‘*agglomeration economies*’ emphasized. Before going any deeper in agglomeration economies, it can be useful to provide an overview on the concept of ‘*economies of scale and scope*’.

Andersson and Andersson (2006) mention that as a result of goods and services of experience industries being durable and suitable to be adapted to different end products, it is likely to observe exploitation of ‘*Economies of Scope*’. The Disney Corporation for instance, is given in the literature as an example of such kind of exploitation; the firm purchases the total copyrights of a novel to produce differentiating products such as: booklets, magazines, and movies.

The economies of scope concept is relevant in a shopping center industry investigation since the concept suggests that specialization of one product might not be profitable due to insufficient regional demand. The concept suggests that in order to reduce the average costs, additional products might be offered via the same product line. (Andersson & Andersson, 2006) In this sense shopping centers are uniquely available for offering various additional services and products within the same retail environment by using the same infrastructure. The centers are used for multiple purposes such as: temporary events, various marketing activities, exhibitions, sport facilities, and many other additional offerings. As a matter of fact, those offerings can generate additional profits, which can reduce the average cost of production by driving more consumers in, more frequently. Therefore, this study investigates whether the ‘*diversity*’ of shopping centers in Sweden<sup>3</sup> and recreation specific facilities<sup>4</sup> has a significant relationship with the market size.

The experience industries are well-known for having large fixed costs. As can be seen from the example given by Andersson and Andersson (2006) of a symphony orchestra, there are

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<sup>3</sup> ‘*Diversity*’ is referring the total number of shops and commercial services within a shopping center in this particular study.

<sup>4</sup> Such as: active entertainment facilities (movie theatre, bowling hall, and amusement park), art and sport facilities.

certain requirements to fulfill such as: the number of artists that should exceed seventy, and the orchestra should have a proper concert hall with the required quality of infrastructure. In the symphony orchestra example; to see whether the fixed costs are going to be covered or not, measurement is done by investigating the *'numbers of performances'* and the *'total size of audience'*. Moreover, as mentioned in the literature, these two variables are dependent on each other. (Andersson & Andersson, 2006)

In a more general sense, the main determinants of scale are pointed out to be the total numbers of units produced and the final market size. It is proposed that the fixed cost of production leads to an increasing return to the scale whereas the distribution cost have the opposite impact as a result of consumers creating transport costs as they relocate themselves to the place of production of good or service. (Andersson & Andersson, 2006)

In short, economies of scale will increase with the size of the region. As a result only a certain size of regions are capable of generating sufficient demand for a single product line, which would make it possible to cover the costs. On the other hand, most of the experience industries hold the potential to benefit from exploitation of scope economies such as: concert halls, amusement parks, shopping centers, sports arenas, and film studios. The advantages of economies of scope are that they have the tendency to decrease with an increase in the size of a region due to administrative difficulties. (Andersson & Andersson, 2006)

The scale economies are divided into two sub categories. First of all there is the *'internal scale economies'*, which relates to production efficiency. It proposes that increasing the total output decreases the average production cost. Therefore, in the long-run a firm in a competitive market is expected to reach an efficiency level where its average cost would be the lowest. The other concept is the *'external scale economies'*, or in other words the *'agglomeration economies'*. This is more focused on the spatial dynamics, which makes it important for this particular study. Earlier, the importance of location decision for firms has been reviewed by emphasizing the benefits of agglomeration, due to decreasing transportation costs and networking advantages.

Agglomeration economies are defined in previous literature as: *"the economic benefits of collocating individuals or firms."* (Andersson & Andersson, 2006, p. 179) The agglomeration economies in the retail industry have been under investigation in earlier literature. Central place theory proposed that the tendency to cluster in the center of the market is occurring due to heterogeneity of shops (Christaller, 1933). Based on the central place theory, Hotelling (1929) introduced retail agglomeration economies by proposing the principle of minimum differentiation. The study proposes that the competing firms selling the same products tend to cluster in the center of the market to benefit from the scale of the market (Hotelling, 1929).

The *'agglomeration economies'* is a complex concept since it is also generally divided into two categories in literature: *'Localization Economies'* and *'Urbanization Economies'*. Localization of economies relates to the clusters occurring in local areas as specialized industrial districts. Urbanization of economies is a concept regarding *'diversity'* as a key element of location decision; it is counted to be the driving force behind innovation and economic development (Jacobs, 1969). As mentioned in the previous part, the clustering force of human capital is found to be important in terms of leading diversity.

Johansson et al (2002) points out that it is observed in Sweden that over the past 40-50 years the size of local labor market regions has grown, whereas the numbers of those re-

gions have declined. That means that the local labor markets remained 'local'. Due to geographical expansion, the time distances between locations declined simultaneously. (Johansson, Klaesson, & Olsson, 2002) Concerning the urbanization theories on the relationship between the economic growth and clustering force of human capital due to diversity; previous empirical studies also confirm that the size of the location and diversity is very strong in Sweden (Johansson & Kjellgren, 2000).

## 4 Hypotheses of the Study

In the light of previous theories and concepts on shopping centers, experience economies, and external economies of scale, this study investigates the following relationships:

1. The economic success of the shopping centers in Sweden is expected to be positively affected by the market size, where total turnover of the shopping centers are taken into account as an indicator of success. The impact of municipality market size is expected to be higher than the impact of local labor market size and the size of the market outside of the local labor market.
2. The diversity within shopping centers in Sweden is expected to be positively affected by the market size of the municipality where they locate as diversity is found to be highly associated with the size of a location in previous studies.
3. The existence of shopping center facilities that serve directly for (a)entertainment and (b)arts purposes are expected to be positively affected by the market size. Due to the consumption of the entertainment and arts being sensitive to transportation and time costs, these facilities are expected to be affected more by the municipality market size, and the local labor market size than the market size outside of local labor market.

## 5 Empirical Study

Using 'Köpcentrumkatalogen' 06-07 of *Centrumutveckling*, a database has been constructed on different types of shopping centers in Sweden. Today's shopping center industry landscape in Sweden was captured through this data set.

It can be observed from Table 5-1 that the total number of shopping centers in Sweden is 338. *City Malls* are the ones that are represented most with 136, whereas there are only 2 *Factory Outlets*, and 2 *Thematic Centers* in total. Although the number of *City Malls* is significantly higher than the rest of the categories, the highest turnover with 32908 million kronor is being generated by *Trading Centers* which are 34 in total.

Table 5-1 Shopping Centers in Sweden

TYPE OF CENTER	TOTAL	TOTAL TURNOVER (mkr)	RENTABLE AREA (m2)	COMMON AREA (m2)	NON-DURABLE RETAIL STORES	DURABLE RETAIL STORES
Residential Center	25	7536	358978	104970	138	384
City Mall	136	28668	1152889	222085	473	2033
Community Center	21	9052	370501	60603	167	533
External Center	49	20958	853957	58837	132	648
Factory Outlet	2	510	30303	6000	7	85
Large Retail Center	12	5646	305739	400	19	96
Neighborhood Center	31	5376	226332	12965	148	185
Regional Center	26	29350	1011741	196540	226	1324
Thematic Center	2	140	64045	24600	14	16
Trading Center	34	32908	1172937	7900	112	618
<b>TOTAL</b>	<b>338</b>	<b>140144</b>	<b>5547422</b>	<b>694900</b>	<b>1436</b>	<b>5922</b>

Source: (Köpcentrumkatalogen 06/07)

As would be expected, in terms rentable area, *Trading Centers* rank first with 1,172,937 m2 total space. Right after *Trading Centers*, *City Malls* come second with 1,152,889 m2. However *City Malls* differentiate from the *Trading Centers* as they provide 222,085 m2 of common area for consumers, whereas common area is scarce in *Trading Centers* with only 7,900 m2 in total.

Coming to the internal elements of shopping centers, active entertainment facilities such as: movie theatres, amusement parks, and bowling halls are 31 in total with the highest representation in *City Malls* with 7. As can be observed in Table 5-2, existing *Factory Outlets* and *Large Retail Centers* do not provide active entertainment facilities in Sweden. The total number of art facilities is 15 and the total number of sport facilities within these centers is 30.

In the following parts the hypotheses of the study and the information on data and methodology will be presented and the empirical analysis will be discussed.

Table 5-2 Internal Elements of Shopping Centers in Sweden

Type of Center	Total	Entertainment	Art	Sport	Library	Pharmacy	Systembolaget	Restaurants	Services
Residential Center	25	4	4	5	5	19	12	118	183
City Mall	136	7	3	5	3	25	26	347	420
Community Center	21	4	2	3	8	18	18	124	238
External Center	49	4	1	4	0	11	9	94	126
Factory Outlet	2	0	0	0	0	0	0	6	1
Large Retail Center	12	0	0	0	0	1	2	3	3
Neighborhood Center	31	1	3	3	10	20	8	90	203
Regional Center	26	5	2	4	3	22	14	195	253
Thematic Center	2	2	0	1	0	1	1	26	27
Trading Center	34	4	0	5	0	2	11	93	60
<b>TOTAL</b>	<b>338</b>	<b>31</b>	<b>15</b>	<b>30</b>	<b>29</b>	<b>119</b>	<b>101</b>	<b>1096</b>	<b>1514</b>

Source: (Köpcentrumkatalogen 06/07)

## 5.1 Methodology, Data & Models

Multiple-source secondary data collection has been used in the empirical part of this study and two different data sets have been combined to form the data set that has been used to run the multiple regression analysis. The data, which is used in the regression analysis, has been retrieved from two major sources. The first source is *Köpcentrumkatalogen* of the year 06/07, published by 'Centrumutveckling'. It is a 'Shopping Center Directory' published by the Development Center, which regards all retail and commercial areas in the Swedish market during the given time period. The directory 06/07 contains of facts about 338 shopping centers in Sweden. In the directory each center is presented with details about shops, surface, turnover, facilities, and information about the architecture. These details on different types of shopping centers are gathered within a data set in order to be used for Swedish Shopping Center Industry analysis.

The second source is the accessibility measurements for the Swedish municipalities which is constructed by Johansson et al (2002). In their study *accessibility* is measured in terms of number of jobs, labor supply, and supply of service functions. The investigation done through the data set is: "how time distances within and between municipalities determine the spatial extent of local and regional labor markets" (Johansson, Klaesson, & Olsson, 2002). The accessibility measurements for Swedish municipalities were converted into market size indicators by using the population data from Statistics Sweden for the year 2006.

Multiple regression analysis is being used to analyze how much of the variance in the dependent variable can be explained by the independent variables, how much the relative contribution of each independent variable is and what the significance is for the models proposed for the hypotheses. Moreover log transformation is applied to some variables to address skewness problem. Since the impact of different types of shopping centers on dependent variables would differ, dummy variables for each category of shopping center have been created in order to normalize the results of the regression. Furthermore the data for shopping centers, consisting 338 shopping centers in total, has been aggregated on the municipal level where in total 99 Swedish municipalities were represented.

### 5.1.1 Models

Following regression models are proposed in order to test the hypotheses of the study;

$$\text{Hypothesis 1: } Success = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

$$\text{Hypothesis 2: } Diversity = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

$$\text{Hypothesis 3.a: } Entertainment = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

$$\text{Hypothesis 3.b: } Arts = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

### 5.1.2 Dependent Variables

#### (1) *Economic Success*

In the first regression model the total turnover of the shopping center is used as an indicator of *Success*. Focusing on the recreational use of shopping centers, total turnover is expected to be sensitive towards the market size. The *Success* data is log transformed and aggregated into municipalities.

#### (2) *Diversity*

In the second regression model total number of units within shopping centers is used as an indicator of *Diversity*. The units mainly include the shops that are selling durable and non-durable goods, commercial services, and restaurants. The total number of shops and services have been perceived as an indicator for variety within a shopping center. *Diversity* variable has been log transformed and aggregated into municipalities.

#### (3) *Entertainment & Arts*

The third hypothesis tested via two different regression models where *Entertainment* and *Arts* variables are dependent variables. The data on entertainment facilities indicates the number of the shopping centers which have at least one facility, eg. movie theatre, bowling hall, amusement park. Whereas the data on arts facilities refers to the facilities such as art galleries, dance studios and concert halls. Both data are grouped into municipalities based on each shopping center's location.

### 5.1.3 Explanatory Variables

For all four regression models the same explanatory variables are used.

#### *InMun*

*InMun* is the variable which indicates the market size of the municipality where a shopping center is located. With respect to the previous study done by Johansson et al. (2002), municipalities refer to the geographical units which have administrative boundaries and a local government. The average time distances for municipalities is pointed out to be between 8-15 minutes. Although there are approximately 280 municipalities in Sweden, only 99 municipalities have been a subject for the study due to the spatial distribution of shopping centers. The original data for municipality market size has been log transformed.

#### *InLLM*

'*InLLM*' is the variable which indicates the accessible market size within the local labor market, excluding the market size of an individual municipality. In the previous research by Johansson et al. (2002) it is mentioned that local labor markets evolve due to the location and commuting decisions. These market places are defined as urban areas within which an individual makes the decision on how long to commute and where to reside simultaneously (Johansson, Klaesson, & Olsson, 2002). A set of municipalities together form a local labor market. A region that refers to a local labor market is considered to have an average time distances of 20-50 minutes. The original local labor market size data has been log transformed.

#### *OutLLM*

'*OutLLM*' is the variable which indicates the accessible market size of outside of the local labor market, excluding the market size and local labor market size of an individual municipality. Johansson et al. (2002) mention that those *extra-regional* areas have an average time distances longer than 60 minutes. Like the other two explanatory variables, the original data of market size outside of the local labor markets has been log transformed.

#### *Shopping Center Categories*

Different type of shopping centers are expected to have different impact on the dependent variables. Therefore for each type of shopping center a categorical variable, expressed as a dummy variable, has been applied to normalize the results of the regression analyses.

## 5.2 Findings & Analysis

In this section the descriptive statistics and correlations will be presented. Moreover the information on methodology, data and model will be provided. The section will be finalized with the regression analyses and findings.

### 5.2.1 Descriptive Statistics

The descriptive data presented below provides an overview of the minimum and maximum values, the mean values, and the standard deviations of the variables.

Table 5-3 Descriptive Statistics

	Obs.	Mean	Standard Deviation	Minimum	Maximum
Success	97	2.7873	0.59550	1.60	4.20
Diversity	99	1.7149	0.48764	0.60	3.20
Entertainment	99	0.31	0.695	0	5
Arts	99	0.15	0.482	0	3
InMun	99	9.6307	0.68339	7.99	11.75
InLLM	92	9.5742	0.99336	6.57	11.43
OutLLM	99	10.7950	0.49551	8.85	11.84
Residential Center	99	0.11	0.316	0	1
City Mall	99	0.64	0.483	0	1
Community Center	99	0.19	0.396	0	1
External Center	99	0.39	0.491	0	1
Factory Outlet	99	0.02	0.141	0	1
Large Retail Center	99	0.10	0.303	0	1
Neighborhood Center	99	0.16	0.370	0	1
Regional Center	99	0.23	0.424	0	1
Trading Center	99	0.27	0.448	0	1
Valid N (listwise)	91				

(Log transformed variables: Success, Diversity, InMun, InLLM, OutLLM  
Control Variable for Shopping Center Categories: Thematic Center)

The size of the observations in total is satisfactory for the regression analysis. Due to the availability of the data, the regressions are conducted only for the year 06/07. There are differences in the numbers of observations due to missing values.

### 5.2.2 Correlations

The correlations between the dependent and explanatory variables that are used in the regression models are shown in the appendix in detail, which has been summarized via table 5-4.

Table 5-4 Correlations

	Success	Diversity	Entertainment	Arts
<b>InMun</b>	<b>0.818**</b>	<b>0.808**</b>	<b>0.504*</b>	<b>0.471**</b>
<b>InLLM</b>	<b>0.383**</b>	<b>0.421**</b>	<b>0.326**</b>	<b>0.279**</b>
<b>OutLLM</b>	<b>0.490**</b>	<b>0.476**</b>	<b>0.208*</b>	<b>0.209*</b>

\*Correlation is significant at the 0.05 level; \*\*Correlation is significant at the 0.01 level

As can be observed via the table presented above, *InMun*, the accessible market size within municipality, is highly correlated with *Success* (0.818) at a 0.01 significance level. Same strength of correlation is observed between *Diversity* and *InMun* (0.808) at a 0.01 signific-

ance level. Both *Entertainment* and *InMun* (0.504), and *Entertainment* and *InLLM* (0.326) are correlated at a 0.01 significance level. Moreover, the correlation between *InMun* and *Arts* is 0.471 at a 0.01 significance level.

The correlation between *Arts* and *Entertainment* is 0.558 at a 0.01 significance level. There is as well a correlation (0.412) between *InLLM* and *Diversity*, and between *InLLM* and *Entertainment* (0.504) at a 0.01 significance level. Although the correlation is not strong, *InLLM* and *OutLLM* are found to be positively correlated with *Arts*, where the correlation between *Arts* and *InLLM* is 0.279, and the correlation between *OutLLM* and *Arts* is 0.209 at a 0.01 significance level.

### 5.2.3 Regression Analysis

The multiple regression tells how much of the variance in the dependent variable can be explained by the independent variables. The significant relationships and the relative contribution of each independent variable can be observed by looking at the outputs of the multiple regression. Below the results for all four regression equations that are tested based on the three hypotheses are represented.

Table 5-5 Regression Results

Variables	Success Eq 1	Diversity Eq 2	Entertainment Eq 3	Arts Eq 4
<b>InMun</b>	<b>0.527**</b> (0.000)	<b>0.434**</b> (0.000)	<b>0.445*</b> (0.073)	0.192 (0.266)
<b>InLLM</b>	-0.087 (0.115)	-0.045 (0.361)	0.150 (0.224)	0.119 (0.171)
<b>OutLLM</b>	-0.028 (0.761)	-0.060 (0.467)	-0.252 (0.231)	-0.228 (0.122)
<b>Residential Center</b>	-0.110 (0.323)	0.088 (0.375)	-0.006 (0.982)	<b>0.468**</b> (0.009)
<b>City Mall</b>	<b>-0.223*</b> (0.057)	-0.023 (0.822)	0.155 (0.552)	0.245 (0.181)
<b>Community Center</b>	<b>0.279**</b> (0.013)	<b>0.339**</b> (0.001)	0.017 (0.943)	0.013 (0.938)
<b>External Center</b>	<b>0.192**</b> (0.011)	0.053 (0.425)	-0.110 (0.512)	-0.023 (0.844)
<b>Factory Outlet</b>	0.279 (0.179)	0.290 (0.117)	-0.111 (0.811)	0.327 (0.316)
<b>Large Retail Center</b>	<b>0.208**</b> (0.049)	0.029 (0.759)	0.121 (0.607)	0.024 (0.884)
<b>Neighborhood Center</b>	-0.019 (0.851)	0.089 (0.318)	<b>0.410*</b> (0.070)	0.097 (0.538)
<b>Regional Center</b>	<b>0.364**</b> (0.000)	<b>0.335**</b> (0.000)	-0.205 (0.283)	0.142 (0.289)
<b>Trading Center</b>	<b>0.333**</b> (0.000)	<b>0.153*</b> (0.064)	0.115 (0.577)	-0.043 (0.764)
<b>Observations</b>	91	92	92	92
<b>R<sup>2</sup></b>	0.825	0.794	0.366	0.362

\*\* significant at the 0.05 level , \* significant at the 0.1 level

- (1) The regression model that has been constructed to test the first hypothesis is shown below. In the first hypothesis market size was expected to have a significant impact on the *Success* of shopping centers.

$$Success = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

Total turnover is taken into account as an indicator of ‘*Success*’ for shopping centers. The regression model gives an  $R^2$  value of 0.825. The result of the first model is indicating that the accessible municipality market size *InMun* is significantly associated with the *Success*. Looking at the shopping center categories, the results show that shopping centers other than *Residential Center*, *Factory Outlet*, and *Neighborhood Center* significantly contribute to the model. The local labor market size *InLLM* and the market size outside of the local labor *OutLLM* are not significantly associated with *Success*.

According to the first hypothesis economic success of the shopping centers in Sweden is expected to be positively affected by accessible market size. The first regression analysis confirmed that the accessible market size within municipality has a significant and positive impact on *Success*, whereas such kind of an impact cannot be observed for local labor market size or market size outside of the local labor market. This can be explained by the fact that almost every municipality has its own shopping centers, which indicates more accessible alternatives for the consumers than the other shopping centers that are located in other municipalities within the same local labor market or outside of the local labor market. Having insignificant results for the categories of shopping centers that are specific for a neighborhood or a residential area can be interpreted as a support to this idea. Another reason can be that shopping centers within the same local labor market might not differ significantly in terms of size and function. *Ceteris paribus*, individuals might make the decision to go to a shopping center based on the time distance factor since they are expected to choose the closest shopping center where they reside.

- (2) The second hypothesis predicts diversity to be dependent on market size. Total number of units within a shopping center has been used as an indicator of *Diversity* for the regression model;

$$Diversity = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

The regression model gives an  $R^2$  value of 0.794. This means that approximately 80 percent of dependent variable variation can be explained by the explanatory variables that are significantly associated with *Diversity*. Those variables are accessible market size within the municipality *InMun* and *Community Center*, *Regional Center*, and *Trading Center* categories. However, the market size outside of the local labor market *OutLLM* and the local labor market size *InLLM* are not significantly associated with *Diversity*.

The results indicates that the bigger a municipality market is, the more units a shopping center is likely to provide. The findings for the local labor market size and the market size outside of the local labor market does not have a significant impact on *Diversity*. One reason can be that time distance differences are aversive to an individual when it comes to making a decision of going to a shopping center based on the diversity. The shopping centers in Sweden are not likely to have notable differences in diversity, which would make the local labor market size and the market size outside of local labor market insignificant for the diversity of the shopping centers.

- (3) The third hypothesis has been tested by two different regression models. The first regression model is built to see whether or not there is a significant impact of market size on the presence of facilities that serve directly for *entertainment* purposes.

The impact of market size on the presence of facilities serving directly for *arts* purposes has been tested by the second regression model likewise.

$$Entertainment = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

$$Arts = \beta_0 + \beta_1 InMun + \beta_2 InLLM + \beta_3 OutLLM + D_{categories} + e_i$$

- (a) The third regression model of the study, which explains the impact of market size on the existence of entertainment facilities generates an  $R^2$  value of 0.366. Looking at the significance of the predictors *InMun* and *Neighborhood Center* are the only predictors which have significant contribution to the model at a 0.1 significance level. Both *InLLM* and *OutLLM* are not found to be significantly associated with the presence of entertainment services in shopping centers.
- (b) The fourth regression model has been built to test whether or not there is an impact of market size on the existence of the shopping center facilities that serve directly for arts purposes. None of the explanatory variables are significant in this case.

The third hypothesis stated that both entertainment and arts facilities of shopping centers are dependent on market size. Moreover, it was expected that the municipality market size and local labor market size would have more impact on the existence of these facilities than what market size outside of the local labor market has. According to the results from both of regression models municipality market size is the only predictor which has a significant impact on the existence of the facilities that serve directly for entertainment purposes. The positive impact of municipality market size on the presence of entertainment related facilities in a shopping center tells us that the emergence of these facilities is dependent on the concentration of consumers within the municipal borders. It is not surprising to see a positive relationship between municipality market size and these facilities, since the consumption of experience goods is known to be sensitive towards time distances. A reason why market size on a municipal level does not have a significant impact on facilities that are serving directly for arts purposes can be that most of the Swedish municipalities provide facilities for arts outside of the shopping centers. This study disregards the substitution effect of infrastructures for arts and entertainment consumption other than what is provided in shopping centers. As it has been pointed earlier, the number of shopping centers where arts facilities are present is significantly lower compared to the other types of units. Therefore the importance of shopping centers as a location for arts services is not significant for the Swedish case other than *Residential Center*.

## 6 Conclusion

Although the historical roots of shopping centers can be traced back to centuries ago, countries have experienced a boom of shopping center development after the Second World War (Dawson, 1983). Due to the change in the meaning of consumption and the rise of hedonic purposes in consumption patterns, the role of shopping centers as experience spaces became more important recently (Langrehr, 1991). Previous researchers found that people spend more leisure time in the malls than they do anywhere else. Some of the most important reasons are pointed out as increased leisure time and income over the years in advanced countries (Andersson & Andersson, 2006).

What is considered as experience earlier was highly associated with entertainment and arts goods. Today however, the meaning of experience is altered and it is likely to observe the experience value in many goods and services. The transformation of the economy from agrarian to industrial and then to the service economy reached another phase with the rise of the experience economies (Pine II & Gilmore, 1999). The concentration of people led the city to become important in terms of being consumption nodes. The importance of location for experience economies have been investigated recently. The advantages of agglomeration economies and concentration of people hold their importance in order to understand the location decision of people and firms.

In the light of previous research, the findings of this empirical study showed that municipality market size has a significant impact on success, diversity, and the presence of entertainment facilities in shopping centers in Sweden. Whereas the local labor market size and the market size outside of local labor market were not found to have a significant impact. Following the theories on agglomeration economies and location, the empirical findings of the study once more confirmed that the market size closer to both the supplier and the consumer is important in terms of understanding the spatial dynamics behind success and diversity of shopping centers.

The findings also showed that the existence of entertainment facilities is sensitive towards the municipality market size whereas it is not possible to draw the same conclusion for the arts facilities. Following the previous researches on experience industries, this study confirms that the size of the closer market is important in creating an impact on the emergence of shopping center facilities that serve directly for entertainment purposes. The findings might differ from country to country since each has its own regulations on retail industry and as well consumption habits, and spatial dynamics vary due to location and culture specific factors. A broader conclusion can be drawn by further studies for different countries.

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Appendix

Table 6 Correlation Chart

	Success	Diversity	Ent.	Arts	InMun	InLLM	OutLLM	Residen.	City Mall	Community	External	Factory	Large R.	N.hood	Regional	Trading
Success	1															
Diversity	<b>.920**</b>	1														
Ent.	<b>.471**</b>	<b>.513**</b>	1													
Arts	<b>.420**</b>	<b>.494**</b>	<b>.558**</b>	1												
InMun	<b>.818**</b>	<b>.808**</b>	<b>.504**</b>	<b>.471**</b>	1											
InLLM	<b>.383**</b>	<b>.421**</b>	<b>.326**</b>	<b>.279**</b>	<b>.350**</b>	1										
OutLLM	<b>.490**</b>	<b>.476**</b>	<b>.208*</b>	<b>.209*</b>	<b>.636**</b>	<b>.240*</b>	1									
Residen.	<b>.361**</b>	<b>.453**</b>	<b>.212*</b>	<b>.425**</b>	<b>.485**</b>	<b>.280**</b>	<b>.346**</b>	1								
City Mall	<b>-.063</b>	<b>-.032</b>	<b>.008</b>	<b>.064</b>	<b>.180</b>	<b>-.647**</b>	<b>.077</b>	<b>.000</b>	1							
Community	<b>.066</b>	<b>.133</b>	<b>.113</b>	<b>.006</b>	<b>-.047</b>	<b>.585**</b>	<b>-.035</b>	<b>-.009</b>	<b>-.645**</b>	1						
External	<b>.371**</b>	<b>.244*</b>	<b>.113</b>	<b>.047</b>	<b>.332**</b>	<b>.068</b>	<b>.235*</b>	<b>.044</b>	<b>-.035</b>	<b>-.130</b>	1					
Factory	<b>.141</b>	<b>.162</b>	<b>.039</b>	<b>.104</b>	<b>.053</b>	<b>.191</b>	<b>.066</b>	<b>-.051</b>	<b>-.190</b>	<b>.112</b>	<b>-.116</b>	1				
Large R.	<b>.262**</b>	<b>.212*</b>	<b>.188</b>	<b>.104</b>	<b>.286**</b>	<b>.018</b>	<b>.225*</b>	<b>.095</b>	<b>.184</b>	<b>-.078</b>	<b>-.064</b>	<b>-.048</b>	1			
N.hood	<b>.499**</b>	<b>.543**</b>	<b>.476**</b>	<b>.319**</b>	<b>.562**</b>	<b>.410**</b>	<b>.327**</b>	<b>.194</b>	<b>-.124</b>	<b>.204*</b>	<b>.151</b>	<b>.132</b>	<b>.217*</b>	1		
Regional	<b>.566**</b>	<b>.574**</b>	<b>.131</b>	<b>.325**</b>	<b>.492**</b>	<b>.190</b>	<b>.389**</b>	<b>.338**</b>	<b>.068</b>	<b>-.207*</b>	<b>-.003</b>	<b>.091</b>	<b>.133</b>	<b>.213*</b>	1	
Trading	<b>.685**</b>	<b>.610**</b>	<b>.346**</b>	<b>.280**</b>	<b>.663**</b>	<b>.155</b>	<b>.437**</b>	<b>.289**</b>	<b>.086</b>	<b>-.126</b>	<b>.203*</b>	<b>.073</b>	<b>.096</b>	<b>.347**</b>	<b>.361**</b>	1

\*Correlation is significant at the 0.05 level; \*\*Correlation is significant at the 0.01 level

## Appendix

Figure 3 Definitions for Shopping Center Types

Type of Center in Swedish	Type of Center in English	Definition
Bostadsområdescentrum	Neighborhood Center	A "neighborhood center", also known as the "near center", is a type that is providing daily goods and personal services for the daily needs of the closest existing residential areas. In larger neighborhood centers, there may also be a post office, bank and a limited supply of durable goods retailers. Main store is a larger grocery store (supermarket). A typical neighborhood center is approximately 5,000 square meters, but can vary in size from 3000 to 7000 square meters. Number of stores are in between 7 to 15 and number of inhabitants in the market area can be up to the 15000.
Stadsdelcentrum	Residential Center	It refers to the town centers of similar size and content of municipal center, especially in larger cities (e.g Stockholm, Gothenburg and Malmo), in larger districts, or groups of districts. The center can be sized to the surface through a large base near town and have an extensive content without having a regional influence.
Kommuncentrum	Community Center	In addition to what is in the residential center a municipal center provides a range of durable goods stores. Range of services are substantially larger than in the residential center. Usually there exists some form of café / restaurant. There exist almost always a regular post service, bank and liquor shop. A typical municipal center has approximately 10000 square meters of rentable space, but can vary in size from 7000 up to 20000 square meters. Number of stores is between 16 and 35 and residents of the market area is 30,000 to 60,000.
Externcentrum	External Center	"External Center" is a general term used in everyday speech to indicate a mall-like facility, located outside residential areas and city centers, in an easily accessible location in terms of traffic for visitors who drive. If they are located in large areas, with at least 20000 square meter rentable space, they can also be classified as "Regional Center". Traditionally they are external centers, which is not regional in nature and often they have a large store such as ICA Kvantum, Willy's, etc. or supermarket (e.g Coop Forum and ICA Maxi Hypermarket) as an anchor, usually between 10000 and 20000 square meters. An external center can become too large, so-called retail centers and factory outlets, which are described in separate section.
Regioncentrum	Regional Center	A "Regional Center" is bigger than an external center, a municipality center or residential centers, and is addressed to a wider hinterland which also may consist of several municipalities. Regional center may also be in down town or near a large residential area, when the other functional requirements are met. There also can exist different recreational services, such as entertainment, events or/and activities. In the regional center, there exist anchors, which are most often one (or more) like a large department store retailers such as supermarket (or several large grocery stores), along with several large chain stores within industry

## Appendix

		groups, clothing and home / leisure, etc. A regional center has at least 20 000 square meters of rentable surface. The largest one in Sweden is currently about 50 000 square meters. The number of stores are at least 50 units and there are at least 100 000 inhabitants in the market area.
Storbutikcentrum	Large Retail Center	A special variant of the external center which is a big shop center (Power Center in the U.S. Retail Park in Great Britain), which consists of a number of very large stores of various types. Shops are located together with a common parking area. The element of additional stores and service establishments can vary greatly according to the local conditions but is not a prerequisite for the center's existence. The number of stores in a large retail center varies widely, from only four to five and upwards. Center's size is usually between 8 000 and 15 000 square meters.
Factory Outlets	Factory Outlets	Factory Outlets is a 15-20 years old international phenomenon. Four to five of them have been established in Sweden. A pure Factory Outlet consists of manufacturer- or designer-owned stores, which sell discounted goods from the previous season or with minor defects to an inextricably lower rates, up to 30-70 percent off of the regular retail price. The range is approximately 70 percent for clothing, the rest consisting of other industries. Centers size differs from 10 000 square meters and up. From the beginning, they were far outside the major urban areas, so as not to disturb the traditional trade, but has progressively got closer to center.
Temacentrum, City Centrum och City Galleria	Thematic Center, City Center or City Mall	A special variant of the regional mall is the thematic center, which focuses on a niche in the retail market, such as apparel, home, recreation, dining or entertainment. These centers are located where there is already a high level of customer traffic, such as in the city center. Although, a special class of customers, such as air travelers in major airports, can form a basis for a thematic center. By concentrating on a narrow but deep catalog section, the center can become an attractive destination in the region in its industry niche, even if the center is the areal types of thematic centers, which have a wider range profile. The number of stores is about 15 and upwards. The market base is at least 50 000 inhabitants.
Handelsområden	Trading Center	A "trading area" is a spontaneous emergence of agglomeration of retail, in the consumers driving distance therefore easily accessible area, that originally were not serviced by the retail trade. These "trade areas" are often unstructured in both retail mix plan of the area. Known examples are, for example Segeltorp in Stockholm, Gothenburg and Backaplan Knalleland in Borås. In a number of trade areas, there are also shopping centers at some separate units. These venues are often large and have a clear regional characteristic.

*Source: (Köpcentrumkatalogen 06/07)*