

# The Spatial Structure and Vertical Specialization of Commercial Stores in Irbid City

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## 1. Introduction

Central places and service centers developed as a result of several factors, including the transportation revolution that began in the middle of the nineteenth century. This helped to create regularity and arrangement of these centers within their urban system in particular, and regularity, arrangement and spacing of cities and countries in general. In this context, Walter Christaller, 1933, discussed in his Central Place theory, about the role of cities as service centers where residents gather to exchange goods, services and ideas among themselves (Abu Sabha, 2010).

The nature of land use in cities is regulated to serve human interest as different areas are allocated to fill these interests, reflecting the function and type of use. This includes residential, industrial, recreational use, land uses for transportation purposes, services (educational, financial, religious, health) and commercial land use. The latter is characterized as intensive, where the unit area of land is exploited by a large number of merchants, and the number of users per unit area of city land is small and includes: wholesale and retail trade, and other service activities, which consume about (3.7%) of city land (Abu Sabha, 2010).

The central areas of cities are formed in the oldest areas of the city, and they continue to expand at the expense of neighboring areas (horizontal expansion) relatively slowly on one hand, and the rate of vertical expansion therein accelerates more on the other hand. Which makes the general landscape tend to vary in building heights (Abu Sabha, 2010).

This study aimed to identify the pattern of commercial use in the center of the city of Irbid through the vertical specialization of stores, and to attempt to uncover the factors that contributed to their regularity on their current form. In addition to determining the size of the demand for these spaces by answering the following questions

1. How are commercial activities distributed spatially in Irbid City?
2. What is the relationship between activity type and floor level?
3. What is the relationship between rental price and store height?

Commercial land use is at the forefront of urban land uses of central importance. No city in the world, regardless of its size, is devoid of a commercial function. Although it consumes only 3.7% of city land, it is very dense due to its occupancy of places with high prices, due to its highly competitive nature.

Therefore, cities resort to the policy of vertical expansion of urbanization as innovative solutions to meet the increasing demand for providing spaces within their urban space in light of the shortage of available land and increased competition in it. Land prices rise; this made the buildings in the city center (the business district) distinguished in their height from the rest of the areas, and more intensive in use. The city of Irbid, like the rest of the cities of Jordan and as an integral part of the world, followed a policy of vertical specialization in the business district as it witnessed an increase in demand for urban spaces.

Therefore, it is importance to study the activities associated with commercial land use: such as financial activities,

corporate management, and business, and that it chooses the best locations in cities to occupy its main center. Yet a closer look at this body of work reveals a gap that the present study seeks to fill. Most of the international literature on vertical development, including the studies of Mualam, Salinger and Max (2019) in Israel, Zhang, Li, Hanink and Liu (2018) across Beijing, Seoul and Tokyo, and Akristiniy and Boriskina (2017), has approached the subject from the standpoint of the high-rise tower or the city as a whole, asking how much land a city converts to vertical use rather than how individual floors within an ordinary commercial building come to be occupied by one activity rather than another. The Jordanian studies, for their part, have looked at the problem from a different angle altogether: Al-Hayari, Khawaldeh and Al-Zobun (2019) and Al-Zayyoud and Barham (2015), for instance, examined how commercial activity spreads across Amman horizontally, street by street and district by district, but neither they nor the studies that followed asked what happens once a customer walks through the door and starts climbing the stairs. The floor itself, as a unit of commercial space with its own rent, its own accessibility, and its own logic of specialization, has essentially gone unstudied in the Jordanian context. This gap is compounded by the fact that Irbid, despite being Jordan's second city, has rarely featured in this literature at all, most of which gravitates toward Amman. No published study, to the researcher's knowledge, has mapped how commercial activity in Irbid's historic core is distributed floor by floor, or examined how rent, accessibility and the type of activity interact as one moves from the ground floor upward. It is this specific, and so far unaddressed, question that the present study takes up: by surveying three of Irbid's oldest and busiest commercial streets floor by floor, it offers what is, as far as can be determined, the first systematic account of vertical commercial specialization in the city, and in doing so brings the study of vertical urban development down from the scale of the tower to the scale of the individual floor.

### 1.2 Materials and Methods

The data sourcing included the following:

**Primary data:** This includes data obtained based on a field study of shops in the study area.

**Secondary data:** This includes data obtained from the following:

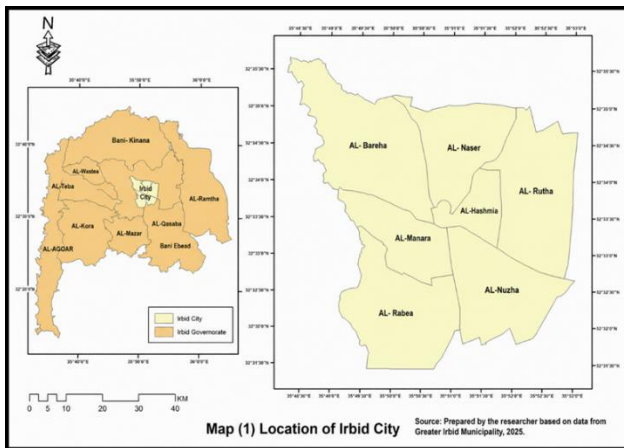
1. Ministries, official and government departments.
2. Published or unpublished data and statistics issued by the Greater Irbid Municipality.
3. Scientific books that focused on the geography of cities and urban land uses.
4. Shape file data for the city of Irbid, which is also sourced from the Greater Irbid Municipality.
5. Scientific research and studies published in international journals
6. Websites

### 1.3 Methodology

This study relied on the descriptive analytical approach, for the purpose of identifying vertical specialization in shops and its relationship to other variables, as well as using some simple statistical methods (arithmetic averages, percentages, iterations). The social survey method was used to identify the volume of demand for services in the central business district, and to measure the relationship between the volume of demand and the type of service on the one hand, and the floor height on the other hand.

### 1.4 Study Area

The city of Irbid is located in northern Jordan within the scope of Irbid Governorate and its center. It is separated from the capital, Amman, by a distance of approximately (71 km) to the north, and occupies a location close to the Jordanian-Syrian border on the northern front. They are separated by a distance of (20 km), south of the border (Jordanian Ministry of Interior, 2020), and it ranks second in the Kingdom in terms of population according to the Department of General Statistics for the year 2018 (542,884) people and (111,930) families. The total area of the city reaches (30 km<sup>2</sup>) and the topography of the city of Irbid gives it an advantage derived from the plains and the wide spread of valleys. The city includes seven main areas: Al-Hashimiyeh, Al-Rawda, Al-Barha, Al-Nasr, Al-Manara, Al-Nuzha, and Al-Rabieh, and it takes the hexagonal shape in its representation (Figure 1).



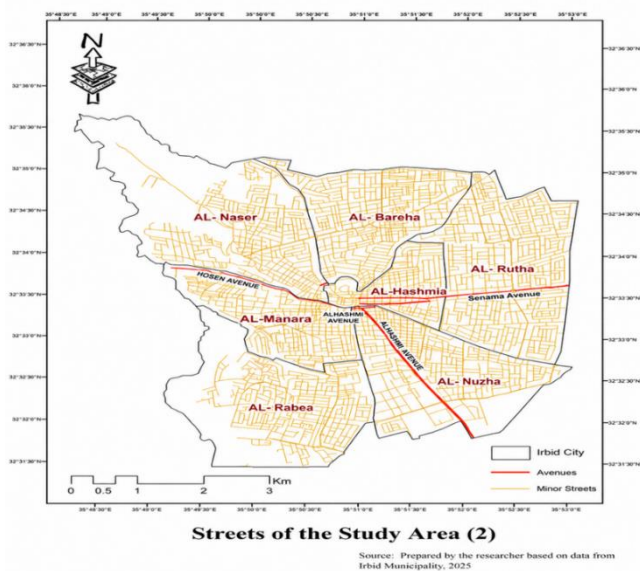
## 1.5 Study Population and Study Sample

### 1. Study Population

The spatial boundaries of the study community: It is the center of Irbid city and all the commercial activities located in it, which are distributed among seven main streets.

### 2. The Study Sample

For the purposes of this study, shops were chosen located on three main commercial streets, starting from the city center towards the east and south of the centre, which are: Al-Hashemi Street, Martyr Wasfi Al-Tall Street, known locally as Cinema Street, and King Abdullah II Street (Al-Husun). The researchers have seen these three streets as the oldest and most heavily used and frequented by merchants and consumers in the Old Center of Irbid City, as far as researchers know. The total number of commercial activities reached (1,352) activities out of (10,387 activities) in the city as a whole. That is, 13% (Figure 2).



## Limitations of the Study

A few limitations of this study are worth noting, mainly because they bear directly on how far its findings can be pushed. The most important concerns scope: the survey covered three streets, Al-Hashemi, Cinema, and Al-Husun, which together account for 1,352 of the 10,387 commercial activities registered in Irbid, or roughly 13 percent of the total. These are admittedly the oldest and busiest commercial arteries in the city, so they capture the historic core reasonably well, but they say little about how floors are used in the newer commercial areas that have grown up on the city's edges, where parking is easier to find and customers are more likely to arrive by car than on foot. Whether the same floor-by-floor logic holds in those areas is, frankly, an open question that this study cannot answer. A related point, and probably the more consequential one, is that everything reported here describes a single city at a particular moment. Irbid has its own history of growth, its own building stock, and its own municipal rules about height and land use, and there is no reason to assume that another Jordanian city, let alone a city elsewhere, would reproduce the same relationships between rent, floor level and activity type. Differences in car ownership, in how far online shopping has taken hold, or simply in how old a city's commercial core is, could easily push the pattern in a different direction. Generalizing beyond Irbid would require comparable studies in other cities, ideally using the same floor classification adopted here, before any claim of that kind could be made with confidence. Finally, the analysis itself relied on descriptive tools, averages, percentages and a simple weighting scheme, rather than on regression or other inferential methods, so while the relationships described between floor, rent and activity type are clear in the data, their statistical strength was not formally tested. A natural next step would be to apply more rigorous statistical modelling to a wider set of cities, which would put these findings on firmer ground and clarify how much of what was observed in Irbid is local idiosyncrasy and how much reflects a more general pattern.

## 2. Theoretical Framework and Previous Studies

### 2.1 Theoretical Framework

land in city centers becomes increasingly scarce and high growth pushes cities to their borders, allocating land for public uses becomes more difficult and requires new solutions (Hartmann & Gerber 2018). In response, cities around the world have begun to allocate land space to public institutions and functions necessary for the well-being of their residents within the versatile high-rise towers. (City of Toronto, 2017; Camden City Council, 2010; Coupland, 1997). A postmodern approach has gradually developed in the face of modernist planning, claiming that there are advantages to diversity and mixing of uses in buildings and built-up areas (Coupland, 1997). This shift has arisen from the apparent failure of modernist planning with its reliance on single-use zoning to deal with the need to encourage diversity and urban vitality (Slessor, 2014). public investment or support is combined with private resources to create public facilities, institutions, resources and services (Frieden and Sagalyn, 1991; Osborne and Gaebler 1992; Rowley, 1996; Sadik-Khan and Solomonov, 2017). This can be done through various means such as “build and operate transportation” projects or mixed-use developments that combine public and private facilities.

### 2.2 Previous Studies

1. (Mualam, Salinger and Max, 2019) found that the public floor space allocation in Israel goes hand in hand with the trend of high-rise construction, and is mainly promoted in major urban areas where land is scarce, and land values are usually much higher than in non-core peripheral areas.
2. (Zhang, Li, Hanink and Liu, 2018) found that horizontal and vertical urban expansion was occurring in the three major cities, during the study period, especially with regard to vertical urban expansion. During the study period, there was an increase in area of 20.7 km<sup>2</sup>, 11.3 km<sup>2</sup> and 6.8 km<sup>2</sup> in Beijing, Seoul and Tokyo, respectively, with difference in growth patterns among these cities.
3. (Akristiniy and Boriskina, 2017) concluded that the concept of vertical cities differs in size, the presence of large areas of public space, tendencies towards self-sufficiency and

sustainability, and the opportunity to offer a new and unique comfortable environment for the residents who live in it.

4. In (Al-Hassan, 2017) solutions were developed for all urban problems for the study area, which suffers from chaos in urban formation due to the lack of consideration of economic, social and environmental factors in the urban design of the urban fabric.

5. (Huston and Babiano, 2013) showed a slow but increasing trend towards the development of VMUs within the Brisbane CBD as a result of legal policies that encourage the integration of mixed-use areas within activity centers, and the presence of a prevalence of single-function vertical structures (86% of 418) within the Brisbane CBD. Finally, the results showed that only 1.7% of the identified vertical structures accommodated three and 11.9% two uses.

Some local researchers have reviewed some studies on the subject of retail trade, and they can be highlighted as follows:

1. (Al-Hayari, Khawaldeh and Al-Zobun, 2019) showed that the phenomenon of chains dominates the large supermarket sector in the local market. On the other hand, the characteristics of shoppers (the study sample) and their shopping patterns are related to a set of variables such as the number of family members, the average monthly income, and the rate of spending on goods and supplies and car ownership. The study recommended providing a database for commercial centers in terms of their area and parking space, as well as the economic and social characteristics of the population in the city of Amman in order to activate the use of spatial interaction models in modeling shopping flows for commercial centers.
2. The study showed that there is a spatial disparity of commercial activities within the city, and that the Hashemite region is the stage of formation and birth within the city. The study recommended the necessity of creating a complementary nature between the regions through the exchange of experiences and labor.
3. (Khawaldeh, Abu Rukba, and Barham, 2016) showed the development of the entertainment function of shopping centers and the basic function of shopping for various goods. In light of the previous results, the study recommended further research on some topics specific to retail trade, such as the

supermarket sector, or the economic, social and environmental impacts of major shopping centers.

4. The study (Al-Zayyoud, Barham, 2015) showed that with the expansion of the city of Amman and the rise in its population density above consumers, the old commercial center became far away from consumers, especially in the field of services for short and medium-term uses. Given that shopping is limited to one main pattern, which is the consumer going to the product, it has become necessary for the producer to move to the consumer. This is done by establishing or a branch that covers some of the needs of consumers, which led to branching out and the establishment of new shops in modern commercial areas.

### 3. Results and Discussion

#### 3.1 The site structure for commercial uses in the city of Irbid

The three streets of the study area have special economic importance, especially as they are the main artery and nerve linking the city center to its south on the one hand, and the city center to its east on the other hand. Not to mention that these streets have attracted, thanks to their distinguished location, a large number of commercial activities since the establishment of the city center at the end of the eighteenth and early nineteenth centuries. Because such locational features are attractive points for repeat consumers to fulfill their biological and psychological needs in these locations, this has been a strong incentive for investors to increase their commercial activity on both sides of these streets, especially if this is coupled with the high accessibility that characterizes these streets. It has become necessary for these investors to cover the needs of the residents and visitors of these areas, provide a great diversity in the nature of commercial activities there, and provide a variety of services and goods to meet their growing needs.

Anyone who observes the prevailing commercial activities in these streets finds that there is a great diversity in them, as a large group of them was monitored, especially for services with continuous and daily demand. Some of them pertained to goods of intensive use such as clothes and shoes, and some

of them pertained to goods related to human needs and necessities with daily demand: grocery stores, bakeries, fruits and vegetables...etc.

Likewise, it is clear from Table (1) that the number of commercial shops in the study area (1,352 licenses) was distributed over several floors, from the ground floor to the eighth, with a total occupancy rate that reached 95%. The floor occupancy rates varied, with the highest being the first floor and decreasing as the height went up. The number of shops on floor 0 (basement floor) reached 29 shops, with a percentage of (2.14%), all of which are storehouses. Storehouses are defined as places or stores used to keep assets in appropriate quantities until they are requested in stores or warehouses close to the point of use, provided that these stores have the appropriate storage method for the stored materials. The reason for the low percentage of use can be explained by the lack of need for storehouses in light of the changes that have occurred in the modern shopping system and the emergence of new types of marketing, the most important of which is electronic marketing or the Internet market. It is the exchange of goods, services, information and experiences through electronic means of communication. The merchant displays on the pages of websites the physical goods and services that he trades without the need for large stores (Al-Deeb, 2010).

It is also noted that the prevailing commercial use on the first floor level is mostly textile goods (trade in clothes and shoes), amounting to 312 stores, representing (43%) of the total commercial activities on the first floor, where customer orders can be directed after they are fulfilled directly from the importers. It is followed by consumer goods, amounting to (253), representing (34.9%). The high occupancy rate on this floor with such goods (clothes and daily consumer goods) is explained by the strong demand for them, as they are considered among the necessary and biological human needs. Therefore, the places where the service is provided must be characterized by very high accessibility. There is another role in increasing their numbers, as these commercial activities contain a wide variety in their characteristics and forms (intensive to use), as the abundance of diversity and increasing numbers in shops for these goods created strong competition

among investors, which reflected positively on consumers. This led to a reduction in the prices of these goods, which required investors in these commercial activities to rely on economies of scale, by reducing the profit margin through selling more units of goods, and economies of scope, through diversifying the sources of the commodity to meet the daily needs of consumers. Especially since these floors are the most expensive to rent. The first floor also includes shops: general services, office services: the most important of which are tourism and travel companies, banks, and insurance companies, educational services such as libraries, construction services, professional services, handicraft workshops, and household tools, not to mention empty shops and apartments. The percentage of all stores reached (22.1%) of the total stores on the first floor.

The uses of the second floor varied. Commercial use for office and public service activities had the largest share of floor occupancy at a rate of (89.3%) out of the total floor occupancy amounting to 224. The floor unoccupancy rate reached 12.5%, and it fell under the classification of office services (general, office, educational, construction, and vocational), as such offices need to be close to the consumer and far from the noise created by the visitors of these areas to meet their different needs, especially since they are characterized by the density of visitors. Therefore, these offices were located on the second floor in a more suitable place to reduce exposure to noise or disturbance. These offices also require greater attention to the level of cleanliness, which is often not available on the first floor due to its direct contact with pedestrians. The floor also included construction and office services and handicraft workshops, as well as textile and consumer goods, which were stores on two floors (first and second). Office services occupancy extended up to the third floor, where it reached (152), representing (70.6%) of the total jobs on the floor. It also included educational, construction, vocational, and other services.

Regarding floors (4-8), the functional use of office services was dominant, reaching a percentage on the fourth floor (62.7%), the fifth (81.3%), the sixth (83.3%), the seventh (45.4), and the eighth (76.9%). It must be noted that all of them are non-intensive services.

As shown in Table 1, the higher we go in the building, the fewer the number of occupied shops. The highest percentage of stores was on the first floor (54.2%), followed by the second floor (18.6%), followed by the third floor (15.9%), and the lowest on both the seventh and eighth floors was (0.81%) and (0.96%), respectively. This is due to two reasons: The first is because buildings with more than five floors are very few, as they do not exceed a maximum of three buildings, and they were in the form of large complexes such as (Al-Fanek Complex) on Cinema Street. The second reason is that both the investor and the consumer do not prefer high-rise buildings due to the difficulty of access, especially with the possibility of the elevator being disabled at any time. Here it must be noted that there were either sports clubs (GYM) or architecture offices in high floors, in the study area.

Table 1. Relationship Between the Functional Use of Economic Activities and Floor Level

Functional Use	F0	F1	F2	F3	F4	F5	F6	F7	F8	Total	Percentage
Warehouses	29	-	-	-	-	-	-	-	-	29	2.144
Textile Goods	-	312	5	3	-	-	-	-	-	221	16.34
Daily Consumer Goods	-	253	6	3	4	-	-	-	-	266	19.67
Public Services	-	61	29	16	8	5	3	3	3	124	9.71
Office Services	-	50	148	152	64	83	35	5	10	502	37.13
Educational Services	-	13	5	4	8	3	-	-	-	33	2.44
Construction Services	-	9	14	8	7	5	-	-	-	43	3.18
Professional Services	-	12	10	10	4	-	-	-	-	36	2.66
Workshops/Handicrafts	-	5	7	3	-	-	-	-	-	15	1.11
Household Items	-	11	-	-	-	-	-	-	-	11	0.81
Vacant Shops/Apartments	-	8	28	16	7	6	4	3	-	72	5.33
<b>Total</b>	<b>29</b>	<b>734</b>	<b>252</b>	<b>215</b>	<b>102</b>	<b>102</b>	<b>42</b>	<b>11</b>	<b>13</b>	<b>1352</b>	<b>100%</b>

Source: Prepared by the researcher based on data from the Greater Irbid Municipality (2025) and the field survey.

The increasing demand for services provided in the streets of the study area required great activity, which led to an increase in the number of activities provided to consumers. These activities expanded on both sides of these streets and to a linearly increasing degree along their length. As this demand continued, it prompted investors and building owners to expand vertically to meet the growing needs. Multi-storey buildings were built on both sides of these sites. However, it should not be forgotten by any of us that there is a strong relationship between the type of activity and the floor number. Many studies have indicated this, and perhaps a set of facts

have been observed related to the forms of the relationship between the type of activity and the floor number as follows:

- ✓ Activities on the lower floors are mostly of daily demand, or consumer-intensive goods.
- ✓ The costs of obtaining the service increase as we go up.
- ✓ Goods or services located on higher floors are more expensive than goods located on lower floors.
- ✓ The number of people visiting services decreases as the number of floors increases.

Table (2) represent the functional use of each floor by street (Al-Hashemi Street, Cinema, and Al-Husun), noting that the study classified activities based on the International Standard Industrial Classification of All Economic Activities ISIC4. The following is a breakdown of the functional use in each street.

Table 2. Functional Use of Each Floor by Street

Floor	Functional Use	Hashmi Street	Senima Street	Al-Hosen Street	Total Shops	Percentage (%)
F0	Warehouses	19	4	6	29	2.144
F1	Public Services / Textile and Leather Goods / Consumer Goods / Household Items / Handicraft Workshops	350	126	233	709	52.44
F2	Public Services / Textile Goods / Consumer Goods / Household Items / Handicraft Workshops / Office Services / Professional Services	113	42	78	233	17.23
F3	Office Services / Public Services / Construction Services / Educational Services / Vacant Apartments	90	29	79	198	14.64
F4	Public Services / Office Services / Construction Services / Educational Services / Vacant Apartments	36	13	38	87	6.43
F5	Public Services / Office Services / Construction Services / Educational Services / Vacant Apartments	29	10	5	44	3.25
F6	Vacant Apartments / Apartments Under Construction / Office Services	19	7	10	36	2.66
F7	Office Services / Public Services	5	0	2	7	0.51
F8	Office Services / Public Services	9	0	0	9	0.66
<b>Total</b>	—	<b>658</b>	<b>245</b>	<b>449</b>	<b>1352</b>	<b>100</b>

Source: Prepared by the researcher based on data from the Greater Irbid Municipality (2025) and the field survey.

### 3.2 First: Vertical Allocation of Shops on Al Hashemi Street

Al-Hashemi Street extends from the city center (the clock tower) to the east of the city. It is 3.12978 km long. It is located within the Al-Hashimiyah and Al-Rawda areas. The number of shops in it reached (658), representing (48.6%) of the shops in the study area, with a number of seven floors, including 19 commercial shops. It consists of storehouses on

the 0th floor (the basement), with a percentage of (2.88%), and (350) commercial stores on the first floor, with a percentage of (53.19%), which were shoe stores (leather) and furniture stores, which needed larger storage places than other stores, so it controlled three or four floors in addition to stores. The first floor also included herbalist shops, in addition to some supermarkets, clothing stores, medical device stores, and pharmacies. As for the second floor on the same street, the number of commercial stores in it reached (113), at a rate of (17.17%). They were also furniture stores and some offices (law). The floor also included the same services provided in the first due to its need for more than one floor. With regard to the third floor, the number of stores was (90), with a percentage of (13.67%), including also home furniture stores and some offices (engineering or law). As for the fourth floor, it included (36) commercial stores, with a percentage of (5.47%) that consisted of (office and general services, construction and residential apartments). as for floors 5, 6, and 7, all of them (7.85%) were public services, office services, and residential apartments that were empty or under construction. As for floors 5, 6, and 7, all of them (7.85%) were public services, office services, and residential apartments that were empty or under construction.

### 3.3 Second: Vertical Allocation of Shops on Cinema Street

Its first name was “Al-Jamil Street” and in the 1950s, it became “Gamal Abdel Nasser Street”, and after the martyrdom of Wasfi Al-Tal in 1971, the street was named after him. However, the popular name “Cinema Street” remained present, in reference to Al-Zahraa Cinema, which was the first cinema established in Irbid in 1942. (Salama, 2015). The length of the street is (1.0433279 km) and is located within the Hashemite area, and it is the largest concentration of office services in the city of Irbid .

As shown in Table (2) above, the number of commercial stores reached (245), representing (18.1%) of the total stores in the study area, while the number of floors in it reached 8, the highest of which was in the Al-Fanek complex located on the street. Floor 0 (basement) included 4 Stores (1.63%) of the total stores on the street. As for the first floor, it contained 126 commercial stores (51.4%), most of which were clothing and leather (shoes) stores, in addition to the presence of some

consumption-intensive services such as pharmacy, supermarket, jewelery shops, restaurants, banks.

The remaining floors, from 2 to 8, were all office services, including: doctors' clinics, dental clinics, beauty centers, law offices, engineering offices, and medical laboratories. The majority of offices are clustered on this street to benefit from the savings of agglomeration, which means the presence of a group of services in a specific area where locational advantages are available, such as: transportation network, population densities, central building services, mutual benefit between customers, and social relations.

### 3.4 Third: Vertical Allocation of shops on Al Husun Street

Al-Hosn Street is located in Irbid Governorate within the Irbid Qasaba District, which is King Abdullah bin Al-Hussein Street, in the Al-Nuzha area, near many neighborhoods: Al-Jami' neighborhood, Al-Abrar neighborhood, Al-Nuzha neighborhood, Al-Nazif neighborhood, and Al-Tall neighborhood. Its length is (3.327211 km) to the south of the city. There are many landmarks and service places on the street, distributed as follows: As shown in Table (2) above, the number of commercial shops reached (449), representing (33.21%) of the total shops in the study area, and the number of floors in it reached six floors. The number of stores on the 0th floor (basement) was 6 stores, with a percentage of (1.33%), all of which were storehouses. As for the first floor, the number of stores was (233), with a percentage of (51.89%), which consisted of clothing and leather stores (shoes), banks, pharmacies, supermarkets, restaurants, accessories and sundries stores. The first floor also included lighting and electricity stores and some optical stores. As for the second floor, the number of commercial stores there reached (87), with a percentage of (17.3%), which included law offices, women's beauty salons, insurance offices, engineers' offices, and some clothing and leather stores that need more than one floor. The number of commercial shops on floors 4-6 reached 53 (11.79%), all of which were offices, in addition to gyms and residential apartments.

### 3.5 Relationship between floor and space and rental allowance

Some researchers have indicated that there is a relationship between the type of use, rental allowance, floor level, and

ease of access to the central business district. Because cities grow from the center point, from a commercial point of view, city centers constitute the highest values in rental prices. Since the streets of the study area were commercial strips linking the east and south of the city of Irbid to its old center, they were characterized by varying store values, and the results showed the following:

What is observed in the study area is that there is a relationship between floor level, area, and the rental allowance for shops in the three streets of the study area. Table (3) indicates this relationship, as the average monthly rent allowance for shops on the first and second floors per square meter is estimated at (0.46) dinars. It decreases as we go up the floor, so the rental allowance for floors 3-4 reaches (0.43) dinars, and finally less than (0.43) for floors of more than four per square meter. There is also a direct relationship between rent and space. The rent value increases as the occupancy area increases, knowing that the need for space decreases as we rise in floor level. Table (3).

Table (3): Relationship Between Floor Level, Area, and Rental Value

Floor Level	Area (m <sup>2</sup> )	Monthly Rental Value (JOD)	Annual Rental Value (JOD)	Average Monthly Rent per m <sup>2</sup> (JOD)
0 – 2	150 – 200	333.3 – 416.6	4000 – 5000	0.46
3 – 4	50 – 80	116.6 – 175	1400 – 2100	0.43
4+	< 50	83.3 – 100	1000 – 1200	> 0.43

Source: Prepared by the researcher based on data from the Greater Irbid Municipality (2025) and the field survey.

Optimal use of the floor:

Based on the field study and monitoring of commercial activity sites, the researchers found that there is an optimal location for each activity. This location affects, and is affected by a wide range of variables. Perhaps the most important of which were observed: (1) ease of access, (2) nature of the commodity, (3) Price of the commodity, (4) extent of need for the commodity, (5) distance from sources of nuisance, (6)

distance from sources of pollution, (7) area, (8) sales volume, (9) ability to afford rental prices.

Weights were placed for these variables according to their importance and their relationship to the problem, and then these weights were weighted according to the level of presence or degree of gradation of the criterion through the weighting method represented in Table (4). In this regard, a set of indicators and their weights were adopted that reflect the level of floor specialization and the degree to which goods reach higher levels. Table (4).

Table (4): Weighting Scores

Variable	Weighting Index Score	F0		F1		F2		F3	
		Weight	Score	Weight	Score	Weight	Score	Weight	Score
Accessibility	4	1	4	5	20	3	12	3	12
Nature of the Good	3	1	3	4	12	3	9	2	6
Price of the Good	5	1	5	2	10	4	20	5	25
Need for the Good	3	1	3	5	15	3	9	2	6
Distance from Nuisance	2	2	4	2	4	5	10	5	10
Distance from Pollution	2	2	4	2	4	5	10	5	10
Area	1	5	5	5	5	2	2	2	2
Sales Volume	1	1	1	5	5	1	1	1	1
Rental Allowance	3	1	3	3	9	2	6	2	6
<b>Total</b>		<b>32</b>		<b>84</b>		<b>79</b>		<b>78</b>	

F4		F5		F6		F7		F8	
Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score
2	8	1	4	1	4	1	4	1	4
3	6	3	9	2	6	2	6	1	3
5	25	5	25	5	25	5	25	5	25
1	3	1	3	1	3	1	3	1	3
5	10	5	10	5	10	5	10	5	10
5	10	5	10	5	10	5	10	5	10
2	2	2	2	1	1	1	1	1	1
1	1	2	2	1	1	1	1	1	1
2	6	2	6	2	6	1	3	1	3
<b>71</b>		<b>71</b>		<b>66</b>		<b>63</b>		<b>60</b>	

#### 4. Conclusion

The influence of the combined factors influencing the choice of floor decreases as we rise to the top, as the first floor is among the floors, which gives these variables the most importance, and their importance decreases with the height of the floor level. On the other hand, accessibility is of great importance on the first and second floors among these variables. Accessibility is reflected by the high pedestrian flow in the city centre, where the majority of pedestrians are shoppers. In a study (HASS, 1993), which indicated that

accessibility and traffic configuration for shoppers contributed to an increase of between 20-40% in pedestrian flows in European city centers. Also linked to the importance of access is a group of sub-variables that can be placed in five groups: (pedestrian characteristics, original spatial location, destination spatial location, destination characteristics, path characteristics between origins and destinations). The characteristics of the street, such as walking space, street width, crowding, and sidewalk width, also play a role in this. It was found that the variable (price of the commodity) has a very large impact on floors (3-8). The general average of the weights affecting the choice of floors (67), which was obtained by dividing the sum of the weighted values by the number of floors ( $604/9 = 67$ )

The predominant commercial activity in the study area is textile goods at a rate of 19.6%, followed by textile goods at a rate of 16.3%. These percentages indicate the commercial diversity existing in the commercial area. The greatest use of activities was on the first floor, and the use decreases as we go up. The highest use on Al Hashemi Street was for the first floor, which was furniture stores and herbalist shops. The highest usage in Cinema Street was also on the first floor and the predominant usage was consumption-intensive goods (textile). The highest usage in Al Hosn Street is on the first floor and the predominant usage was consumer intensive goods and consumer goods. Store rental values decrease as we move higher, and the area of the stores also decreases

Based on the previous results, it is recommended to:

1. Work to create a vertical allocation for land uses to benefit from agglomeration savings on one hand, and to create a kind of competition between them on the other hand.
2. Renovating old buildings in the study area to accommodate a larger number of floors.
3. Creating secondary centers in the city to contribute to relieving pressure on the main center.

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