

Territorial and Economic Evolution of Retail in Flanders: Post-Pandemic Suburbanisation and Dispersion?

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1 ABSTRACT

In this study, we study a short period (2009-2023) where detailed and (more or less) consistent data are available for publicly accessible functions.

"Locatus" database data for Flanders are made available from 2009 until the end of 2023. Initial analyses show that not all data are kept for the full period, so we need to make the right selection and correction first. In consultation with the members of the working group, a conversion table was made between the Locatus branches and the categories from the IHB decree

In the spatial analysis, we compare the datasets with the historical version of land use plans from 2009, 2013, 2016, 2019 and 2022. For the combination with other functions, we will use the building block typology from 'Segmentation VI' (Zaman, De Mulder & Pennincx, 2022) in addition to the land use map. Following area typologies are screened for their usefulness in function of this study: Urban centers, ribbon development, dispersed development, Urbanised, peripheral, rural, Land use plan categories, Mobility score (public transport, walking cycling) of retail locations.

Based on the findings and critical success factors, an analysis of planning permits (Socio-economic/ environmental permit for retail) will be carried out in the final phase.

The urban development policy stems from the observation that certain functions move from the core to the periphery. The current behaviour of network densification could be at the root of the sprawl of activities. The network dweller, or polycentric urbanite, (Grünfeld, 2010) uses a 'pallet of places' in everyday life. At every moment of the day and for every activity, the network dweller seeks maximum gain according to the goals of the moment. Self-interest and comfort is central. He is multi-connected and has complete freedom to shape his choices. Not surprisingly, this freedom is strongly linked to the mobility options available today. The reasons to go out somewhere, go shopping, or walk school,... are based less and less on proximity than on other characteristics such as where friends live, the quality of the offer, 'something new', on the way to school or work.... Even the choices of place of residence are less definitive than before. The polycentric urbanite lives in a network of connected cores and places. Since the Covid-19 pandemic, the widespread use of e-commerce comes on top of this: ordering and paying online, delivered a few days or even hours later, at home or at work. Within this context, we collectively want the centers of our cities and towns to remain vibrant, to have 'something to do'. The general trends towards "pleasant", "fast", "on the way from A to B", "digital",.... often play to the disadvantage of the urban center, because it is easier (and cheaper) to offer this in places that are less complex and easier to control. Within this context, we collectively want the cores of our cities and towns to remain vibrant, to be dynamic and lived in; but there is little well-documented knowledge. While the impact of peripheral developments on the core has been widely depicted, there is little visibility on the opportunities to avoid the negative impact 'ex ante'.

The behaviour of network urbanisation per se does not seem to be a sufficient explanation of the declining attractiveness of town centers and high streets. Rather, the polycentric urbanist uses in a non-traditional way the opportunities offered by the distribution of activities in the polycentric network, the nebulous city, Città Diffusa (Francesco Indovina), carpet metropolis (W-J Neutelings) the horizontal metropolis (Secchi & Viganò), or the Zwisschenstadt (Thomas Sieverts). To explain the distribution of publicly accessible functions outside the cores, we look more closely at the forces behind it.

Keywords: GIS-analysis, territorial analysis, Retail evolution, Inner city suburbanisation, post-pandemic

861

2 INTRODUCTION

In recent decades, retail in Flanders has undergone increasing spatial dispersion, following a development trajectory characterized by ribbon development and suburban expansion rather than consolidation in historically vibrant urban and town centers. In response, the Flemish government introduced the Decree on Integrated Retail and Commercial Establishment Policy in 2016, aiming to support local planning authorities in strengthening urban cores and counteract spatial fragmentation.

To assess the effectiveness of this policy, we examined the spatial evolution of retail (and other commercial and non-commercial publicly accessible functions) in Flanders between 2009 and 2023. Specifically, we have asked: To what extent has the 2016 Decree on Integrated Retail and Commercial Establishment Policy influenced spatial retail dynamics? To what extent does mobility influence the success or decline of retail? How has the COVID-19 pandemic accelerated pre-existing spatial trends?

We conducted a spatial analysis, comparing the detailed and consistent Locatus datasets with historical versions of the land-use accounting system (ruimteboekhouding) from 2009, 2013, 2016, 2019, and 2022. In addition, we incorporated functional classifications, such as the land-use map and the Segmentatie VI building block typology (Zaman, De Mulder & Pennincx, 2022). The following spatial typologies were assessed for their relevance to this research:

- Urban centers, ribbon developments, and dispersed buildings
- Urban, peri-urban, and rural zones
- Total land take
- Urban centers lacking a sufficient mix of essential services
- Service functions located within ribbon developments
- Mobility accessibility index (Mobiscore per hectare)

Beyond spatial patterns, mobility and (car) accessibility was considered a key factor influencing the vitality of retail. To assess its role, we conducted a qualitative study of ten mobility-related case studies, examining how specific interventions – such as pedestrianisation, parking policies, circulation plans, and bicycle infrastructure – influence commercial dynamics. Each case was analyzed through a mixed-methods approach, integrating quantitative data (e.g., retail floor space changes, business occupancy rates, and footfall) with qualitative insights from surveys and interviews with local business owners and visitors.

However, while mobility interventions are often framed within broader urban regeneration strategies, the spatial dispersion of retail cannot be explained solely by changing consumer preferences or urban mobility trends (e.g. polycentric urbanite (Grünfeld, 2010)). Drawing on concepts such as Città Diffusa (Indovina et al. 1990), the patchwork metropolis (Neutelings 1991; Pisano 2018), the horizontal metropolis (Secchi & Viganò 2010), and the Zwischenstadt (Sieverts 1998; 2003), we argue that "urban sprawl" reflects deeper structural and long-term drivers, including economic restructuring, infrastructure investments, and policy incentives. In this light, enhanced dynamics of dispersion, which we have witnessed since the COVID19-pandemic, merely constitute a new phase in the era of "secular suburbanisation".

3 SETTING THE SCENE: SECULAR SUBURBANISATION

3.1 The emergence of the Zwischenstadt

Urban sprawl and the decentralisation of retail are among the defining spatial transformations of the past decades in Flanders – and more broadly, in Western Europe. The concept of the Zwischenstadt, introduced by Thomas Sieverts (1998) provides a valuable framework for understanding these transformations, as it challenges the traditional dichotomous understanding of the city as a dense, functionally diverse environment, surrounded by a primarily agricultural, sparsely populated countryside. Rather, as Sieverts describes, the 20th century has seen the rise of the Zwischenstadt or "in-between city": an intermediate urban condition, characterized by dispersed density, functional mixing, a strong car-dependence. In contrast to classical suburbanisation, which implies a linear outward expansion from city centers, the Zwischenstadt concept captures a more complex reality. Here, urban functions have dispersed beyond historic cores, forming polycentric networks of economic activity, housing, and mobility flows. Flanders and the Ruhrgebiet are prime examples of this phenomenon, where retail, service-oriented businesses, and

recreational functions have increasingly located in ribbon developments, suburban nodes, and peripheral commercial clusters rather than traditional, recognizable town (or district) centers.

3.2 Three waves of suburbanisation

Rather than a single, uniform wave, suburbanisation has unfolded in successive waves, each shaped by distinct yet interrelated forces. Three main waves can be identified, broadly aligning with wider global trends (Sieverts 2003).

The first wave, occurring in the early to mid-20th century, was primarily driven by industrialisation and Fordist economic restructuring. As cities had already undergone massive metamorphoses, mass production expanded and cities became industrial powerhouses. Increased car ownership, rising incomes, and the widespread adoption of 'zoning policies' led to the emergence of early suburban housing developments. This led to a decrease in the relative importance of historic centers.

The second wave occurred in the 1970s, when many cities witnessed a decline in employment. Residents followed jobs to open spaces outside the city. The 'rural exodus' of the 1960s came to a halt, and for the first time since the onset of industrialisation, as Johann Jessen, Stefan Siedentop (2018) state, rural areas benefited from migration out of more densely populated regions. Jessen and Siedentrop analyzed this dynamic in West Germany and identified key explanatory factors: shifting location needs of businesses and subsequently private households; rising disposable income; increasing car availability; homeownership as a new residential ideal; skepticism toward the 'metropolitan reality', particularly among social elites; and fiscal and urban development policies encouraged decentralisation.

The third wave, from the 1990s onward was as marked by increased urban flight, particularly in Germany, with suburban belts absorbing a growing share of both population and economic activity. While employment in West-Germany increased by 5.5% between 1980 and 1997, this growth was concentrated in the outer metropolitan zones (+11%) and beyond (+9.9%), whereas core cities experienced a 3.1% job decline. This shift was not only due to the erosion of traditional industrial networks but also to a weakening position in emerging sectors, particularly the service industry. By 1998, suburban areas accounted for 56.17% of all jobs within agglomerations and housed 66.68% of the population, further reinforcing the decentralisation of both work and living spaces (Brake, Einacker & Mäding 2005).

3.3 Driving forces

Behind these waves lies a complex interplay of causal processes-differing between the three waves. Einacker and Mäding distinguish between (1) demographic and housing changes, (2) economic transformations and changes in leisure preferences, (3) changes in mobility patterns and policy, (4 &5) other federal (in the case of Germany), regional and local policies. Demographic changes, including household fragmentation and rising affluence, have increased housing demand, while homeownership aspirations and preferences for more spacious, green living environments have encouraged relocation from urban cores to suburban zones. Meanwhile, economic transformations, particularly the shift toward a service-based economy, have spurred the decentralisation of employment, making suburban areas more attractive for both businesses and residents. Increased car ownership and road infrastructure investments have further enabled suburban living, reinforced by tax incentives, housing subsidies, and urban planning policies.

The interplay between these factors has led to a self-reinforcing cycle of suburban expansion: as businesses relocate, residential demand in suburban areas grows, which in turn justifies further infrastructure development and policy support. The result of this is a long-term, multifactorial process of secular suburbanisation - a spatial evolution unfolding over decades, driven so extensively by structural factors, changing preferences, market forces, investments and policies that counteracting policy interventions have become largely ineffective.

The suburbanising consequences of specific policy decisions has been extensively documented. In Centro Oberhausen. Die verschobene Stadtmitte (2009), Walter Brune and Holger Pump-Uhlmann illustrate the unintended socio-economic consequences of large-scale commercial developments outside traditional city centers—intended as a catalyst for urban renewal and revitalisation—often drained economic activity out of the historic center instead. This exacerbated vacancy rates and congestion while shifting consumer footfall away from traditional retail districts. This pattern, they argue, is widespread across Europe, where urban planning has often reinforced rather than mitigated suburbanisation by adapting to new consumer and mobility trends.

863

This analysis aligns with Verhetsel and Beckers (2021), who describe the development of regional shopping centers in the 1990s as the third phase of retail decentralisation. Since the 1960s, retail has evolved "from local and small-scale to peripheral and large-scale". This shift began with the rise of supermarkets selling food products, followed by a second wave of peripheral retail parks in the 1970s and 1980s, offering non-food products such as furniture, carpets, DIY supplies, electronics, and garden equipment. Already at this stage, competition between traditional inner-city retail and peripheral retail strips intensified. By the 1990s, large suburban shopping malls were not only reshaping consumer behavior but also influencing urban planning itself – rather than resisting decentralisation, city centers began to adopt similar commercial concepts.

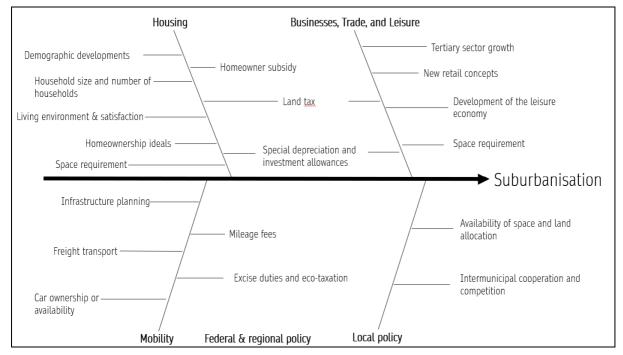


Figure 1: Driving forces and processes of suburbanisation (Einacker & Mäding 2005)

3.4 Suburbanising urban cores

As Hartenstein (2021) notes, urban planners did not merely react to suburban retail siphoning purchasing power and footfall away from city centers; they actively integrated suburban formats into the urban core. This led not to the immediate decline of inner-city retail but rather to its transformation: city centers increasingly mirrored the periphery, with large-scale retail concepts, a stronger focus on car accessibility, and a shift toward 'runshopping' over leisurely retail experiences.

Today, Verhetsel and Beckers identify three areas where this transformation is most visible: (1) regional and small-town centers, (2) secondary shopping streets in larger cities, and (3) dispersed retail locations. These areas, now resembling suburban retail environments, struggle to offer unique value to consumers. Lacking both the experience-driven appeal of traditional shopping and the convenience of suburban retail hubs, they are increasingly bypassed in favor of more accessible, comprehensive alternatives (Beckers & Verhetsel, 2021, p.71).

4 THE CASE OF FLANDERS: DID COVID19 CHANGE EVERYTHING?

While theoretical frameworks on suburbanisation and polycentric development offer essential insights into the underlying mechanisms shaping the Flemish retail landscape, the empirical evidence reveals a complex and uneven reality. In this chapter, we present the results of our spatial analysis, tracing the evolution of retail between 2009 and 2023. Three key dimensions emerge from our findings: the contraction of the retail landscape, the continued spatial dispersion of commercial functions, and the structuring role of mobility in shaping retail success and failure.

4.1 The Shrinking Retail Landscape

Over the past decade, the retail sector in Flanders has significantly contracted. Between 2009 and 2023, the total number of retail establishments declined by approximately 6,200 units, representing a decrease of 10%. More strikingly, in the already shrinking landscape, the number of vacant retail spaces has nearly doubled over the study period. In 2009, approximately 12% of retail units were unoccupied; by 2023, this figure had risen to 23%. This steady increase in vacancy rates suggests that closures are not being offset by the arrival of new retailers, leading to an increasingly fragmented retail fabric.

The contraction is particularly evident in specific retail segments, with businesses in the "plants, flowers, and gardening supplies" sector experiencing a decline of 28%, while the "other non-voluminous goods" category has seen an even sharper decline of 34%. Conversely, some segments, such as "health and beauty retail," have remained relatively stable, demonstrating that not all retail categories are equally affected.

Also, the reduction is not occurring evenly across the territory. Larger cities (+80.000 inhabitants) have been able to maintain their role as commercial hubs, but other urban centers have faced mounting pressures, with vacancy rates exceeding 25% in many smaller cities. At the same time, peripheral retail zones – typically large-format commercial clusters located near major transportation corridors – have shown relative resilience, maintaining a stable presence despite broader market shifts. In contrast, individual retail units located outside of structured shopping environments, particularly those in dispersed locations without clear agglomeration benefits, have been vulnerable to closure.

4.2 Growing floor space: food retail thrives

In contrast to the decline in the number of retail outlets, the total retail floor space in Flanders increased by 9% between 2009 and 2023. The floor space actually in use also grew more modestly, by 4%. This expansion was mainly realized between 2009 and 2013, after which total retail floor space stagnated. When vacant spaces are excluded, a slight reduction of -1.4% in retail floor space is observed from 2013 onwards.

The most notable exception to this trend is food retail, which has experienced a significant expansion of +22% over the same period. Unlike other retail categories, which have seen fluctuations in floor space usage, food retail has been on a steady rise, with an increase of 508,000 m² since 2009. This growth can be attributed to a highly competitive supermarket sector, characterized by an influx and of international chains and an ongoing so-called "supermarket war" (see for instance Cardinaels et al. 2023; Van Lier 2023; Fockedey 2025).

The number of supermarkets per 10,000 inhabitants in Belgium has grown by 50% in the past decade, reaching an average of 3 per 10,000 inhabitants. The most densely covered region, Mesen, now has one supermarket per 1,074 inhabitants. The rapid expansion of supermarket chains is largely driven by two factors: spatial planning and consumer behavior (De Smet 2023). In contrast to the Netherlands and France, where urban areas are denser, Belgium's more dispersed population means that 6.72% of households still need to drive more than five minutes for groceries, compared to just 4.40% in the Netherlands. This reflects an opportunity for further expansion. Additionally, Belgian consumers tend to shop at multiple supermarkets, fostering the clustering of different chains in close proximity. The strategic positioning of supermarkets as "perfect neighbors" (Dumont 2015, Husslage 2021) can boost store's revenue by up to 20%.

However, while food retail continues to thrive, the supermarket sector is under increasing economic pressure. The fierce price competition, marked by discount wars and aggressive expansion strategies, has resulted in narrowing profit margins. Reports indicate that net profit margins in Belgian supermarkets have halved since 2018, dropping to 0.9% in 2024. This "race to the bottom" has led to bankruptcies (Makro), takeovers (Mestdagh), and financial struggles for multiple chains, highlighting the unsustainable nature of continued expansion in an already saturated market and a shrinking retail landscape.

4.3 A More Dispersed Spatial Pattern

Although the Flemish government introduced the Decree on Integrated Retail and Commercial Establishment Policy in 2016 with the aim of consolidating retail functions within designated commercial areas, our findings suggest that the process of retail decentralisation has continued unabated. The period between 2009 and 2023 was characterized by (a shrink of retail and) a steady outward shift of retail activity. Rather than concentrating in well-defined urban cores, commercial functions have increasingly spread across

865

the landscape, finding new footholds in suburban developments, peripheral retail clusters, and mixed-use peri-urban environments outside traditional shopping streets.

One key driver of dispersion seems to be that establishing a new location is often cheaper and more attractive than reusing vacant retail spaces in core areas. High vacancy rates in traditional commercial centers suggest that many businesses prefer moving to peripheral locations rather than adapting existing spaces. Additionally, a significant share of new establishments has emerged in areas that were not commercial zones in 2009 but have become so by 2022. These areas tend to be well-connected by car, reinforcing the role of car accessibility in business location decisions.

While urban sprawl in Flanders is a long-term trend, retail continues to expand into areas that were classified as open space in 2013. Our analysis shows that particularly small-scale commercial and service points have increasingly located in areas that were previously not part of the urban footprint but were nevertheless classified as buildable. The slow but steady expansion into these areas contributes to a more dispersed pattern, making it harder to reverse the trend of land consumption.

4.4 The Role of Mobility

A key consequence of retail dispersion is the expansion of service areas, with businesses attracting customers from greater distances. Data shows that travel distances for essential services like food retail have increased, with more people traveling over 5 km to reach a store. This trend is even stronger for businesses specialising in personal and voluminous goods, where service areas exceed 10 km. Car dependency remains a major factor, undermining sustainable urban planning efforts.

To assess mobility's role in retail evolution, we combined spatial analysis with case studies of mobility interventions across various urban contexts. Regression models confirmed car accessibility as a dominant structuring factor, correlating with service area size and retail floor space. We also analyzed multimodal accessibility indices (Mobiscore) and mobility policies to evaluate their impact on commercial dynamics.

The findings highlight that retail dispersion remains closely tied to car dependency. Over the past decade, service areas have expanded significantly, particularly for food retail and voluminous goods. Peripheral retail locations continue to attract a regional customer base, often exceeding expected retail floor space based on local population density. While urban cores still concentrate retail functions, suburban and peripheral clusters are growing faster.

A case study of 10 mobility interventions in Flanders revealed mixed results. In large urban centers, measures like pedestrianisation, cycling infrastructure, and circulation plans improved accessibility but had limited impact on consumer behavior, as car access remains crucial. Secondary urban centers and suburban shopping areas show even stronger reliance on automobiles, with mobility policies having minimal effect on footfall. In peripheral retail zones, car-based accessibility dominates, and policies primarily focus on optimising road infrastructure rather than promoting alternative transport modes.

These findings suggest that while mobility measures can enhance urban retail environments, they are insufficient to counteract broader structural trends driving retail expansion in suburban areas. The persistent reliance on car access underscores the need for integrated spatial and mobility planning, where accessibility policies align with land-use regulations and economic incentives. Without such coordination, mobility measures risk reinforcing retail dispersion rather than reversing it.

4.5 COVID-19 and its consequences

Since 2019, retail dynamics in Flanders have accelerated, with vacant retail space increasing by 45%, peaking in 2020-2021. Core retail areas saw a 6% decline in total floor space, while peripheral retail zones remained stable, indicating that commercial losses have primarily impacted urban centers.

So arguably, the COVID-19 pandemic played a critical role in amplifying ongoing trends. First, the rapid expansion of online shopping, combined with shifting consumer routines, accelerated the decline of physical retail in dense urban areas. Lockdowns and social distancing measures in 2020-2021 triggered an unprecedented surge in e-commerce, reinforcing behavioral changes that persisted even after restrictions were lifted. The convenience of digital platforms, coupled with the rise of hybrid work arrangements, further reduced footfall in traditional retail districts. As a result, many businesses closed, unable to justify the high fixed costs of a physical storefront in locations that no longer guaranteed the same level of customer flow.

Second, the resilience of peripheral retail areas suggests that the pandemic reinforced an existing spatial imbalance. While core districts lost floor space, suburban and outlying retail zones remained stable, benefiting from car accessibility and proximity to residential areas. The rise of hybrid shopping models, particularly the adoption of Buy Online, Pick Up In Store (BOPIS), has also favored retailers in suburban locations with ample parking and logistical advantages.

The hospitality sector presents a more complex pattern. Initially, restaurant and bar openings continued their growth trajectory post-lockdown, contributing to a perception of resilience. However, from 2022 onward, the number of hospitality venues has started to decline. While overall revenues in the sector increased by 13,2% in 2023, this expansion has not translated into sustained business growth. Rising costs, shifting spending patterns, and teleworking's impact on lunch and after-work dining likely contributed to this correction.

While the exact causal impact of COVID-19 on these developments remains difficult to quantify, the pandemic clearly acted as a catalyst for pre-existing retail and spatial trends. The contraction of urban retail, stability of peripheral zones, and hospitality sector volatility were already underway but became more pronounced after 2020. These shifts highlight the need for strategic planning that addresses decentralisation and evolving consumer behavior. The long-term implications remain uncertain, but the observed patterns suggest a continued need for strategic planning that takes into account the reinforced dynamics of decentralisation and changing consumer behavior.

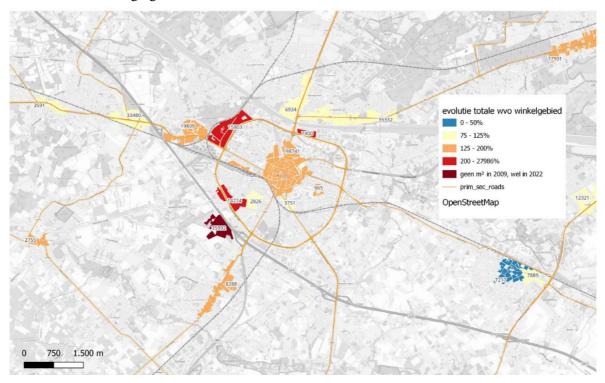


Figure 2: Evolution of Retail Floor Space in Shopping Areas 2009-2022 (Locatus, Adjusted) - Hasselt

5 CASES

5.1 Hasselt's Blue Boulevard

Hasselt is a mid-sized city Flemish city (+80,000 inhabitants) and the capital of the Belgian province of Limburg (900,000 inhabitants). The city has a commercial mix of retail, service industries, and education as economic drivers. Furthermore, it is known for its low-traffic historic city center (area inside the Green Boulevard (R70), see Figure 2), which enhances the pedestrian-friendly environment. In 2020, the city of Hasselt opened the residential and retail development Quartier Bleu just outside the historic city center–designed as "a vibrant waterfront district", combining 412 residential units, 22,500m² of retail floor space, and 3,000 m² of hospitality space. The aim of the project was, as stated by one deputy mayor, 'to attract shoppers and tourists, so they can enjoy not only the city center but also Quartier Bleu' (Donné, 2020). The opening of the underground, multi-storey car park Blauwe Boulevard (Blue Boulevard) was also part of the development. With three levels and 1,801 parking spaces, Parking Blauwe Boulevard was constructed as the

867

largest parking facility in Hasselt, designed to serve as a parking area for visitors to the entire city center. Favorable relative prices were intended to support this function of the Blauwe Boulevard. The hourly rate was set at $\notin 1.50$, with a maximum daily rate of $\notin 10$, far below the price of the four other parking garages in and around the city center, where the daytime rate is $\notin 2$ per 45 minutes and $\notin 16$ per day.

The impact on the city was apparent even before opening: AS Adventure, Media Market, C&A, H&M, JBC and Pronti all anounced they would leave the city center in favour of the Quartier Bleu, where they found larger retail units and 'could install innovative retail concepts.' The City did not fear increased vacancy rates, as (a few) newcomers had already announced their arrival in the newly available spaces in the city center. However, they had not accounted for the overall contraction of the retail sector.

Our data analysis revealed the following evolutions inside the city center (over the period 2009-2023):

Product category	2009	2013	2016	2019	2023	Difference (%)
Vacancy	58	105	121	128	169	+191.4%
Food	48	52	54	46	47	-2.1%
Personal Equipment	315	311	285	256	225	-28.6%
Plants, Flowers, and Agricultural Goods	4	3	3	3	4	0.0%
Transport Equipment	1	0	0	1	2	+100.0%
Other Voluminous Goods	8	5	6	4	7	-12.5%
Other Non-Voluminous Goods	105	101	83	66	76	-27.6%
Fuels	0	0	0	0	0	0.0%
Services	107	140	159	164	174	+62.6%
Hospitality	142	167	183	206	224	+57.7%
TOTAL OCCUPIED	730	779	773	746	759	+4.0%
TOTAL (VACANT + OCCUPIED)	788	884	894	874	928	+17.8%

Table 1: Evolution of Retail Units per Product Category, Hasselt City Center (2009-2023)

While the total number of outlets increased by 17.8%, the number of occupied retail points remained nearly stagnant, showing only a minor growth of 4.0%. At the same time, the number of vacant properties saw a dramatic rise of 191.4%. Certain product categories, such as food (-2.1%), personal equipment (-28.6%), other voluminous goods (-12.5%), and other non-voluminous goods (-27.6%), experienced a decline. Conversely, there was notable growth in transportation and transport equipment (+100%), services (+62.6%), and hospitality (+57.7%), particularly after 2021. Categories such as plants, flowers, and agricultural goods, as well as fuels, remained stable.

Product Category	2009	2013	2016	2019	2023	Difference (%)
Vacancy	5,594	12,386	16,807	20,329	32,099	+473.8%
Food	5,025	4,000	4,719	4,812	7,167	+42.6%
Personal Equipment	48,394	52,786	59,839	58,094	54,385	+12.4%
Plants, Flowers, and Agricultural Goods	200	165	269	269	409	+104.5%
Other Voluminous Goods	1,055	2,979	3,038	1,225	1,309	+24.1%
Other Non-Voluminous Goods	20,432	19,950	15,959	11,994	16,809	-17.7%
TOTAL OCCUPIED	75,106	79,880	83,824	76,394	80,079	+6.6%
TOTAL (VACANT + OCCUPIED)	80,700	92,266	100,631	96,723	112,178	+39.0%

Table 2: Evolution of Retail Floor Space per Product Category, Hasselt City Center (2009-2023)

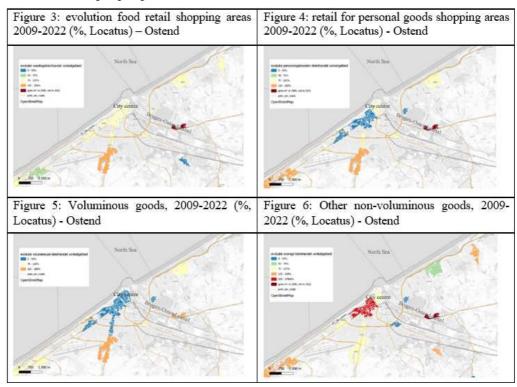
The total retail floor area in Hasselt's city center expanded by 39.0%, with occupied space increasing by 6.6%. The number of vacant square meters grew even more significantly than the number of vacant properties, rising by 473.8%, indicating that larger retail spaces remained empty, particularly after 2017 and during the COVID-19 pandemic (2019-2021). In terms of retail floor space, food (+42.6%), personal equipment (+12.4%), plants, flowers, and agricultural goods (+104.5%), and other voluminous goods (+24.1%) saw increases, despite some experiencing a decline in the number of outlets, suggesting a trend toward larger retail units. Meanwhile, other non-voluminous goods showed a decrease in floor space (-17.7%), with fewer but larger outlets persisting.

Overall, the increase in retail units and floor space has led to an enhanced pressure on the city's retail structure. Most product groups have remained stable or grown slightly since 2020. Hospitality remains a key strength in Hasselt, growing steadily since 2013, and since 2020 supported by the new major hospitality strip at Quartier Bleu. However, despite the significant retail space expansion at Quartier Bleu, modest growth in most sectors has resulted in a significant vacancy increase since 2020–a trend which was probably strengthened by COVID 19 and its consequences (see 3.5). As passerby counts from 2021 and 2023 (Locatus) indicate increased foot traffic around Hasselt's major parking lots (Blauwe Boulevard and

Molenpoort) and slight declines in other shopping streets, the impact of the Quartier Bleu development cannot be ignored.

5.2 Core-periphery dynamics in the city of Ostend

The case of Ostend clearly illustrates core-periphery dynamics per product group for the period 2009-2022. Ostend is a very didactic example, because due to its hard borders north- (the North Sea) and eastside (the Bruges-Ostend canal) of the city, it has only one large peripheral retail cluster. So, in this case, the competitive dynamic between urban districts and single peripheral location remains unaffected by competition between multiple peripheral retail concentrations.



While food retail remains stable in urban areas, it has experienced significant growth in the periphery. In the city center, food retail covers 1,900m², whereas in the periphery, this figure reaches 8,700m². Personal care retail remains strong in the city center (18,368 m²), shrinks significantly in peri-urban shopping areas, and grows in the periphery (21,769 m²). Retail in voluminous goods has almost entirely disappeared from the city center and peri-urban shopping areas, while it has expanded to 32,118 m² in the peripheral cluster. The product category 'other non-voluminous goods' remains stable in the city center (5,208 m²) and the periphery (8,692 m²) but shows strong growth in peri-urban shopping areas (7,139 m²). In other larger cities, we saw similar patterns, with peripheral retail growing while the city center stagnates or contracts.

5.3 Shifting retail dynamics

The cases of Hasselt and Ostend both show a shift in retail dynamics between city centers, peri-urban areas and periphery. The city center remains relatively stable in both cases, despite challenges such as vacancy and changing shopping behavior. The differences lie mainly in the growth of the secondary peri-urban areas and periphery. In Hasselt, crowds are shifting to parking zones, while some shopping streets are becoming less popular. Ostend has a different dynamic: the core remains stable, but the periphery is growing strongly in food and personal retail, partly due to geographical features such as the coast and the canal.

6 CONCLUSION

Despite regional (Decree on Integrated Retail and Commercial Establishment Policy) and local (mobility interventions) policy efforts to strengthen urban cores, our findings indicate that core-reinforcement policies have had little to no impact on reversing retail decentralisation – in some cases, they may have even accelerated it. The case of Hasselt, where the Quartier Bleu development and associated mobility interventions ultimately drained retail activity from the city center rather than reinforcing it, closely mirrors

869

the Oberhausen experience in Germany. This highlights the structural limitations of policies aimed at revitalizing historic retail centers in the face of powerful suburbanizing forces. Notably, the rapid evolution of retail dynamics over a relatively short period (2009–2023) suggests that spatial transformations are accelerating, further challenging the effictiveness of existing interventions.

These trends can largely be explained by three interrelated mechanisms: (1) the long-term decentralisation of economic activity, which has progressively shifted commercial functions away from historic centers (cf. secular suburbanisation); (2) the cost, logistic and regulatory advantages of peripheral retail locations; and (3) shifting consumer mobility patterns, where car accessibility remains a key determinant of retail success (e.g. BOPIS). While policymakers advocate for a renewed strengthening of urban cores, contemporary retail concepts no longer prioritize such urban locations. Instead, businesses seek sites that maximize convenience, logistical efficiency, and consumer accessibility, thus reinforcing suburban expansion rather than reversing it.

For core-reinforcement strategies to be effective, they must fundamentally shift the cost-benefit calculus for businesses and consumers in favor of central locations. This requires not only incentives for urban retail but also targeted disincentives and restrictions on peripheral expansion. Given the structural drivers of suburbanization, addressing the challenges of suburban retail decentralisation requires a multifaceted approach, integrating spatial planning, economic incentives, and mobility strategies. Without coordinated action, urban core revitalisation efforts risk being undermined. Future research should explore policy interventions that proactively tilt the cost-benefit equation in favor of central retail locations ex ante.

7 REFERENCES

Atelier Romain & IDEA Consult (2024). Woonstudie Leuven (Study commissioned by the City of Leuven).

- Brake, K., Einacker, I. & Mäding, H. (2005). Kräfte, Prozesse, Akteure zur Empirie der Zwischenstadt. Wuppertal: Müller + Busmann
- Brune, W. & Pump-Uhlmann, H. (2009). Centro Oberhausen Die verschobene Stadtmitte. Ein Beispiel verfehlter Stadtplanung. Immobilien Zeitung.
- Cant, J; Smets, V. & Vandevijvere, S. (2022a). Naar gezonde voeldselomgevingen in Vlaamse buurten: Voedselwoestijnen en voedselmoerassen onder de loep (Study commissioned by Sciensano).
- Cant, J.; Smets, V. & Vandevijvere, S (2022b). The Changing Landscape of Food Deserts and Swamps over More than a Decade in Flanders, Belgium. International Journal of Environmental Research and Public Health, 19(21), 13854. https:// doi.org/10.3390/ ijerph192113854
- Cardinaels, J.; Cockx, R. & Verhaeghe, O. (2023, May 12). Supermarktoorlog met losse flodders: prijsverlagingen blijven reclamestunts. De Tijd. https://www.tijd.be/dossiers/de-verdieping/supermarktoorlog-met-losse-floddersprijsverlagingen-blijven-reclamestunts/10467261.html
- De Smet P. (2023, April 7). Zijn er nu echt te veel supermarkten in België? Retailsonar.
 - https://retailsonar.com/nl/blog/post/supermarkten-belgie
- Donné, M. (2023, July 06). Vernieuwde kanaalkom Hasselt officieel ingehuldigd. VRT NWS.
 - https://www.vrt.be/vrtnws/nl/2023/07/06/vernieuwde-kanaalkom-hasselt-officieel-ingehuldigd/
- Dumont, R. (2015, January 15). Do your neighbours determine part of your shop's revenue? Retailsonar. https://retailsonar.com/en/blog/post/do-your-neighbours-determine-part-of-your-shop-revenue
- EuroCommerce (2024). European E-Commerce Report 2023. https://www.eurocommerce.eu/app/uploads/2023/11/2023-european-ecommerce-report-light-version-nov-update-v2.pdf
- Flanders Innovation & Entrepreneurship (2024, September 6). Decreet Integraal Handelsvestigingsbeleid: leidraad voor steden en gemeenten. https://www.vlaio.be/nl/vlaio-netwerk/lokale-besturen/handelsvestigingsbeleid/leidraad-voor-steden-en-gemeenten
- Fockedey, S. (2025, January 14). 'De supermarktoorlog in België is nog niet toe aan een wapenstilstand'. Trends. https://trends.knack.be/opinie/de-supermarkt-a-la-belge-is-verleden-tijd/
- Galle, C., Thijskens, D. (2022, September 28). De Belg en zijn 'baksteen in de maag' was een bewuste politieke strategie: 'Zorg dat er geen alternatief is'. De Morgen. https://www.demorgen.be/het-grote-woonrapport/de-belg-en-zijn-baksteen-in-demaag-was-een-bewuste-politieke-strategie-zorg-dat-er-geen-alternatief-is~b4cb533b/
- Grünfeld, J. (2010). De polycentrische stedeling centraal: een onderzoek naar het veranderende palet van plekken in een polycentrische stedelijke regio. [Thesis, Universiteit van Amsterdam].
- Hartenstein, F. (2021). The No-Retail City: New Concepts for City Centers. In: Kleilein D. & Meyer F. (eds.), Post-pandemic Urbanism (pp. 34-48). JOVIS.
- Husslage, M. (2021, Octobre 4). Dit zijn de meest voorkomende buren in de Belgische retailsector. Retailsonar. https://retailsonar.com/nl/blog/post/buren-belgische-retailsector
- Indovina, F. (Ed.). (1990). la città diffusa. Daest.
- Jessen, J & Siedentop, S. (2018). Reurbanisierung. In Akademie für Raumforschung und Landesplanung (Hrsg.). Handwörterbuch der Stadt- und Raumentwicklung (pp. 2073-2084). ARL Verlag.
- Mutschier, M. (2007). Suburbanisierung als Problem gegenwärtiger Stadtentwicklung. In: Baum, D. (eds) Die Stadt in der Sozialen Arbeit. VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-90725-3_25
- Neutelings, W.J. (1991). Willem Jan Neutelings, Architect; Uitgeverij 010



- Pisano, C. (2018). The Patchwork Metropolis: Between Patches, Fragments and Situations. In: Viganò, P., Cavalieri, C., Barcelloni Corte, M., (Eds.). The Horizontal Metropolis Between Urbanism and Urbanization (pp. 93–100). Springer International Publishing. https://doi.org/10.1007/978-3-319-75975-3_2
- Sieverts, T. (1998). Zwischenstadt: Zwischen Ort und Welt, Raum und Zeit, Stadt und Land. Vieweg+Teubner Verlag Wiesbaden
- Sieverts, T. (2003). Cities without Cities: An Interpretation of the Zwischenstadt; Routledge
- Summers, L. H. (2014). U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound. Business Economics, 49(2), 65-73.
- Van Lier, R. (2023, June 2). OVERZICHT. De supermarktoorlog in Vlaanderen: "Wat Albert Heijn doet, is extreem marktverstorend". Het Laatste Nieuws. https://www.hln.be/economie/overzicht-de-supermarktoorlog-in-vlaanderenwat-albert-heijn-doet-is-extreem-marktverstorend~aa203cee/
- van Dongen, F. A. M., Breedijk, M., & Buitelaar, E. (2013). Leegstand detailhandel herbezien. Real Estate Research Quarterly, 12(2), 52-58. http://www.pbl.nl/sites/default/files/cms/publicaties/PBL_2013_leegstand-detailhandel-herbezien.pdf
- Verhetsel, A. & Beckers, J. (2021). Eindeloos shoppen? Hoe verhouden internetshoppen en winkelen langs de grote baan zich tot de 15 minutenstad? Ruimte: Journal of the Flemish Association for Space and Planning, 50, 70-73
- Viganò, P., Cavalieri, C., Barcelloni Corte, M. (eds.) (2018). The Horizontal Metropolis Between Urbanism and Urbanization. Springer. https://doi.org/10.1007/978-3-319-75975-3_2
- Vloebergh G., Renard P. en Coppens T. (2022). Met voorbedachten rade: De sluipmoord op de open ruimte. Lannoo
- Wauters E. (red.), Boussauw K., Poelmans, L., Steenbergen Th., Vermander M., Janssen, L., Beckx, C. Broekx, S., Tindemans H. (2021). Monetarisering urban sprawl in Vlaanderen (Study Commissioned by Environment Department of the Flemish Government)/
- Zaman, J., De Mulder, S., Pennincx I. & Van Haute, G. (2022). Segmentatie VI: typering van gebieden met economische activiteiten (Study commissioned by Environment Department of the Flemish Government).
- Zaman, J., Bervoets, W., Verresen, V., Bouckaert, A., Verbestel, K. (2023). Beleid, Planning en Vergunning van Detailhandel op Bedrijventerreinen (Study commissioned by Flanders Innovation & Entrepreneurship).

