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Chronological Analysis of Bank Branch Operating Environment Factors: The Case of the Ortigas Central Business District, Metro Manila, Philippines

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Abstract

The global effort to ensure financial products and services are accessible to populations in unserved and underserved regions has posed inherent difficulties for banks and financial institutions. This challenge arises from inadequate information about suitable locations for establishing physical branch office operations that are both viable and sustainable. Focusing on the Ortigas commercial business district (CBD) in Metro Manila, Philippines, as the case study area, the key operating environment factors, particularly the presence of anchor institutions, land use commercial potential, and fully developed road network, were identified through the key informant interviews. A chronological analysis spanning different periods was conducted to examine and confirm the influence of the mentioned factors on the entry, expansion, and concentration of bank branches in the CBD. Additionally, the study explored the contribution of central bank policies, specifically liberalization measures, to location-specific restrictions regarding branch expansion in key cities within Metro Manila. The findings highlight the significance of these location-decision factors and policy interventions in informing the planning of financial districts at the local government unit level, irrespective of their financial inclusion status. Furthermore, the research elucidates the interconnections between these operating environment factors and their role in shaping the urban form of the CBD. The influx of anchor institutions or customers, driven by these factors, serves as primary sources of branch deposits, underscoring the importance of strategic planning and policy framework development in promoting financial inclusion and urban development.

Keywords: bank branches, bank branch location, chronological analysis, commercial business districts, financial inclusion

1. Introduction

1.1 Background and Rationale

At the turn of the 21st century, the spatial distribution of bank branches has received increased attention among central banks in the global pursuit of financial inclusion. In 2006, the United Nations (UN) led this drive by establishing the advisory group on inclusive financial sectors to advise the UN system and member states on global issues related to inclusive finance (BSP, 2015). Since then, various initiatives have been implemented to foster financial inclusion, with the primary focus on ensuring that financial services are easily accessible to the population, especially in underserved and unserved areas.

Recognizing the crucial presence of banks for economic expansion, the Bangko Sentral ng Pilipinas (BSP) implemented the National Strategy on Financial Inclusion (NSFI) in July 2015. It aims to ensure an accessible financial system responsive to the needs of the flourishing and financially viable population.

The reports from the BSP showed that the number of bank branches has been consistently rising since 2011, reaching a total of 12,316 banking offices nationwide by the end of 2018. While the physical branch network of banks continues to experience sustained growth, regional disparities persist due to the natural and economic tendencies of bank branches to concentrate in highly urbanized regions like Metro Manila (BSP, 2015).

The liberalization policy implemented by the BSP in 2012 and 2018 contributed to the uneven regional distribution of banks. It allowed banks to set up branches at their preferred locations within the previously restricted cities in Metro Manila, namely, Makati, Mandaluyong, Manila, Parañaque, Pasay, Pasig, Quezon City, and San Juan (BSP, 2016a). This bank branch liberalization carried out by the BSP is hinged on the following agenda: (1) promote competition and efficiency in the banking sector; (2) increase financial access and inclusion by expanding banking services to underserved areas within the metropolitan districts; and (3) stimulate economic growth by facilitating greater access to financial services for businesses, institutions, and individual customers. The implementation of the liberalization agenda was without specifications about the operating environment factors that are essential for banking institutions to plan their location and contribute to financial inclusion effectively.

Although previous research has explored various aspects on branch location, such as financial efficiency indicators (Min, 1989; Abassi, 2003; Cinar, 2009), spatial analysis (Ansong, D. *et al.* 2015), herding behavior (Chang, A. *et al.* 1997), and location-allocation modeling (Ahmad, N. *et al.* 2016), chronological examination seems not evident in terms of the operating environment factors that could explain the motivations of banks in locating within metropolitan CBDs. The operating environment factors refer to the surrounding spatial environment settings or features including the BSP policy measures on liberalization that contributed to the entry of bank branches in the CBDs.

In this paper, the surrounding spatial environment landscape relates to the following operating factors within and around the vicinity of the CBD: (1) land use commercial potential prevailing during a particular period; (2) fully developed road network that eases customers' access; and the (3) presence of anchor institutions or major customers of products and services offered at the branch.

The selection of the operating environment factors was based on related studies. It was further motivated by the availability of verifiable records/data from the public domain, access to archives of photos and maps, information from individuals involved in the planning and development of the CBD, and information from individuals who lived, stayed or worked through various periods in the CBD.

The other factors discussed in the literature that are not descriptive of the surrounding environment were excluded. Several of these factors are found in the comprehensive study by Başar *et al.* (2014), which focused on customer service preferences, socio-demographic characteristics, proximity to competitors, or local economic indicators (i.e., employment, home ownership, and income levels).

Generally, the paper examined the evolution of bank branch entry and growth in one of the major CBDs of Metro Manila in the Philippines. Specifically, it intended to explore and describe the surrounding environment and regulatory policy decision factors that led to the entry of bank branches and their concentration behavior (i.e., increasing presence within the study area across different periods) across time in an urban setting. The study also recommends location factors that can be considered in land use planning and establishing an operating environment for a financial district.

1.2 Significance of the Study

The research provides a factual basis and significant inputs for planning financial districts at the local level. The operating environment factors generated from the analysis of bank branch entry and concentration in the CBD are potential decision factors that can be considered by the central banks, urban planners and professionals, and the local government units (LGUs) in planning financial districts.

This research also sheds light on the spatial dynamics and regulatory influences driving the growth of bank branches in urban centers. By examining these factors alongside the evolution of bank branches, the study can offer insights into and input to identifying land use planning strategies and establishing an optimal operating environment within a financial district. Ultimately, the findings of this research can inform policymakers, urban planners, other professionals, and financial institutions about promoting sustainable urban development and financial inclusion.

2. Review of Related Literature

2.1 Regulatory and Operating Definition of a Bank Branch

The BSP refers to a branch as "any permanent office or place of business in the Philippines other than the head office where a bank may perform activities and provide products and services that are within the scope of its authority and relevant licenses." Universally recognized as branches, bank branch offices are vital in servicing individuals, entities, and the economy's daily deposit and withdrawal requirements (including bills payment). The other services that bank branches perform include issuing checks, storing excess money in the region, and back-office accounting. These cannot be done through online platforms based on risk management and accounting rules and regulations.

In any country, the central bank regulates banks or financial institutions, including the business segment for branch banking operations.
In the Philippines, the local practice among banks in establishing a bank branch office is generally governed either through leasing of space, owning a building, or acting as a bank agent through entities with existing facilities for the collection of cash deposits, remittances, and facilitating withdrawals.

With respect to spatial distribution, a bank is usually organized with a central or head office and its network of field offices. The head office of a bank provides back-end support and the overall management of field office operations in the areas of human resources management, enterprise-level finance and accounting, legal services, corporate affairs, information and technology, lending support, product and programs development, strategic directions, investment banking, among other things that the central bank would allow.

2.2 Capitalization Requirements for Bank Branch Entry and Expansion within Metro Manila

According to the General Banking Law (Republic Act No. 8791), banks are "entities engaged in the lending of funds obtained in the form of deposits." They are generally classified as universal, commercial, thrift, rural, cooperative, Islamic, and other classifications by the Monetary Board (BSP, 2000b).

The implementation of the law grouped the banks into three broad tiers and authorized the expansion of their branch network based on specific capitalization levels (BSP, 2014). Tier 1 comprises universal banks (UBs) and commercial banks (KBs) with the largest assets. Banks falling under Tier 1, with over 100 branches, including their head office, are mandated to maintain a capital of 20 billion pesos for UBs and 15 billion pesos for KBs.

Tier 2 consists of thrift banks (TBs), including savings and mortgage banks, private development banks, stock savings and loan associations, and microfinance thrift banks with medium-sized assets. TBs with branch networks exceeding 50 branches, including their head office in Metro Manila, must maintain a minimum capital of 2 billion pesos.

Tier 3 comprises relatively less-capitalized financial institutions, such as rural banks (RBs) and cooperative banks (CBs), predominantly in rural areas. These banks are crucial in promoting and expanding the rural economy by providing essential financial services to rural communities. RBs and CBs often serve as channels for UBs to support farmers and fisherfolks throughout the production process by offering loans for inputs and irrigation to intensify production.

The minimum capitalization required for Tier 3 banks (RBs and CBs) operating within Metro Manila with up to 10 branches is 75 million pesos, while it is 30 million pesos for all cities up to third-class municipalities and 15 million pesos for municipalities categorized as fourth to sixth income class. Despite the substantial capitalization requirements, the factors driving the entry and concentration behavior of Tier 1 and Tier 2 bank branches in Metro Manila remain largely unexplored.

2.3 Drivers of Spatial Concentration of Bank Branches in CBDs

The neo-classical theory on agglomeration economies, espoused by Smith, *Ed. Soares* (2007) and Marshall (1920) demonstrates that large, medium, and small-sized financial service firms are inclined to cluster in CBDs within metropolitan regions.

These are attributed to the need to access large pools of specialist labor and support services (e.g., accounting, actuarial, legal, security, insurance, brokerage houses, among others.), to be near their core markets, and to develop and innovate intrinsic skills through the sharing of knowledge and practice (Andersen, 2000).

Pandit & Cook (2003) characterized financial service firms that are strongly clustered or concentrated to exhibit faster growth with respect to the average concentration…thus "benefitting from the attraction of a disproportionate volume of new firm entry."

In the study of Chang et al. (1997) in New York City and other metropolitan areas, bank branches follow a herding behavior or tend to be spatially concentrated. Rational herding becomes apparent where agents/firms mirror the behavior of others to generate rationale and aggregate efficient outcomes, individually and socially.

Several economic activities exhibit rational herding, where retail stores exemplify the same clustering or concentrated behavior. As Isard (1956) described, herd behavior in certain areas is a factor in the location decisions of bank branches alongside theoretical characteristics of localization economies. Porter (1998) described this concentration based on his "economic cluster theory" concept, which emphasizes the availability of complementary resources, specialized suppliers, and skilled workforce within a geographic area.

Furthermore, the theory emphasizes the importance of anchor customers, which are large, influential companies that attract and support a network of related businesses within the same geographic space. These anchor customers drive economic activity and foster innovation within the cluster.

CBDs can be viewed as physical manifestations of an economic cluster, as they often represent concentrations of businesses that are similar, related, or complementary in nature. Rosenfeld's (1997) definition of a cluster as a "geography-bounded concentration" aligns with the spatial concentration of bank branches and anchor customers or institutions typically found in CBDs.

Within CBDs, businesses often share specialized infrastructure, such as office buildings, transportation networks, and communication systems.

Additionally, CBDs serve as hubs for labor markets and services, providing a centralized location for businesses to access skilled workers, private and government institutions, and support services.

Moreover, CBDs facilitate active channels for business transactions, communications, and dialogue among firms operating within the district. This interaction fosters collaboration, knowledge sharing, and innovation, all of which are characteristic elements of clusters as defined by Rosenfeld (1997). Furthermore, businesses within CBDs face common opportunities and threats, such as changes in market demand, regulatory policies, and competitive pressures.

Table 1 summarizes the factors contributing to the geographical concentration of branches in CBDs based on firm location theories established by several economists.

Table 1 Factors that Contribute to Geographical Concentration of Bank Branches in a CBD

Firm Location Theories/Concepts	Proponents/Sources	Factors Contributing to Geographical Clustering of Industry/Workers
Agglomeration of Firms in Space	Smith, *Ed. Soares* (2007) and Marshall (1920)	• Specialization, knowledge sharing, and sharing of intermediate suppliers • Benefits are more significant than the added costs of rent, wages, and transportation • A complex process involving agglomeration (or centripetal) forces and dispersion (or centrifugal) forces.
External Economies	Isard (1956)	• *Localization* economies or gains from proximity to *similar* firms, especially firms in the *same* industry • *Urbanization* economies or gains from proximity to *dissimilar* firms, especially in *other* industries.
Locational Interdependence	Hotelling (1929)	• Market space with uniform production cost, uniform product selection, and uniform demand, firms of like products to situate next to each other to maximize profits.
Concentration Inside and Outside the Centers	Giuliano et al. (2019)	• Different types of industry participants were more concentrated *inside* centers than outside centers, and the degree of clustering was *higher* for the larger, relatively dense centers. • Interactions of centers were enhanced by the presence of a higher regional transport network which was supportive of specialized services, i.e., education, information/media, public health, and business (financial, retail, professional), all of which were undertaken by service centers.
Evolution of Cluster Patterns	Krugman (1992), Brown (2000), Yamawaki (2002), and Basant (2006)	• Firm-level decisions leading to the evolution of cluster patterns were attributed to variables such as technology transfer, chance factor, availability of input supplies, and historical circumstances (Krugman, 1992); conducive government policies (Brown, 2000); the existence of related industry cluster, presence of supporting industries like research and development institutions or universities, and favorable infrastructure (Yamawaki, 2002), and availability of human capital (Basant, 2006).
Technological Progress	Gaspar and Glaeser (1998)	• Innovative activities by firms led to technological progress, advancing agglomeration and clustering in already developed areas. • An increase in business *trips* occurred despite the improvements in telecommunications technologies. • Telecommunications became *complementary to*, rather than substitute for, face-to-face meetings, and cities function as information centers.

2.4 Empirical Factors Related to Bank Branch Operating Environment

Various empirical studies (Table 2) associate entry and concentration of financial services firms with one or a combination of the following location criteria: (1) presence of customer demand (population, household size, number of firms or potential customers); 2) presence of competitor branches; 3) socio-demographic factors (demographic characteristics, state of employment, home ownership rate); 4) cultural norms related to financial habits; 5) local economic circumstances (income levels, deposit amounts, and commercial viability); 6) ease of access of travel through a fully developed transport network; and 7) the commercial potential within the current land use.

The synthesis of these studies confirms that the land use commercial potential, fully developed road network accessibility, and dependable/core customer demand appear to be the most important spatial features of a branch operating environment from the perspective or preference of bank management.

Table 2 Location Criteria for Banks

Criteria	Sources
Population and population growth rate	Clawson, 1974; Olsen and Lord, 1979; Doyle *et al.* 1981; Meidan, 1983; Boufounou, 1995; Abassi, 2003; Zhao *et al*. 2004; Cinar, 2009
Average per capita domestic income	Clawson, 1974; Boufounou, 1995; Cinar, 2009
Home ownership rate	Clawson, 1974; Olsen and Lord, 1979;
Commercial potential	Meidan, 1983; Cinar, 2009
Location of competitive branches	Doyle *et al*. 1981; Meidan, 1983; Boufounou, 1995; Abassi, 2003; Zhao *et al*. 2004; Cinar, 2009
State of employment	Olsen and Lord, 1979; Doyle *et al*. 1981; Meidan, 1983; Zhao *et al*. 2004; Cinar, 2009
Demographic characteristics	Olsen and Lord, 1979; Doyle *et al*. 1981; Min 1989; Kaufman and Mote, 1994; Ravallion and Woodon, 2000; Rahgan and Mirzazadeh, 2012
Ease of access	Doyle *et al*. 1981; Min 1989; Zhao *et al*. 2004; Rahgan and Mirzazadeh, 2012
Business operations	Min, 1989
Average household size	Boufounou 1995; Cinar 2009
Number of firms or potential customers	Doyle *et al*. 1981; Boufounou, 1995; Abassi, 2003; Zhao *et al*. 2004; Cinar, 2009
Income levels	Abassi, 2003; Zhao *et al*. 2004
Total deposits	Abassi, 2003
Cultural characteristics	Abassi, 2003
Literacy rate	Cinar, 2009
Deposit credit per bank branch person	Cinar, 2009

Source: Başar *et al*. (2014)

2.5 Chronology of Bank Branching Restrictions and Liberalization in Metro Manila

In the Philippine context, research on location factors that stimulate the entry of branches is very few. Existing literature on bank and branch entry has focused largely on policy-based studies. These academic works are directed toward competition, encouraging the formation of bigger banks, and considering past economic and political events that affected corporate-level efficiency.

The scholarly investigations concerning Philippine banking and branch establishment have focused on several key themes. These include inquiries into competition and efficiency (Hapitan, 2012; Dacanay, 2010), analyses of financial liberalization (Milo, 2001), and examinations of the moratorium on branch expansion, crisis, consolidation, profit efficiency, and cost inefficiency (Lamberte & Manlagnit, 2004). While bank firms are allowed to decide and select location for their new branches, the overarching route of approval reveals a highly regulated environment. This is evident from several general liberalization policies issued by the BSP beginning 1993 until August 1999.

Stringent entry requirements exogenous to the firms were imposed. This ensures that only potentially viable banks will be granted permission (BSP, 1994; BSP, 1998a; BSP, 1998b; BSP, 1998c).

The phased lifting of branching restriction in eight (8) “restricted areas” of Metro Manila started in June 2011 based on the BSP Monetary Board Resolution No. 789 (BSP, 2011). The two-phased liberalization approach in the cities of Makati, Mandaluyong, Manila, Parañaque, Pasay, Pasig, Quezon, and San Juan were meant to foster a competitive market environment aimed at enhancing the quality and efficiency of financial services delivery, emphasized in the BSP Circular 759 (BSP, 2012).

In line with these approvals, private domestically incorporated universal and commercial banks (Tier 1 U/KBs) and thrift banks (Tier 2 TBs) that had less than 200 branches in the "restricted areas" as of December 2010 were allowed to apply for new branches in the restricted areas under Phase 1 which ended in June 2014. This development has set into motion the importance of matching the cap (limit) in the number of branches with the bank’s financial capital.

Phase 2 took effect on 01 January 2018, which entirely lifted the moratorium on establishing new domestic banks and locational restrictions. The BSP allowed bank firms to establish as many branches as their minimum capital requirements could support.

3. Conceptual Framework

The structure and content of this chapter can be encapsulated by highlighting the methodological gap in analyzing bank branch entry and their concentration in CBDs, as well as the synthesis of the literature review. The decision-making process regarding the location of financial service facilities is typically discretionary for banks and firms, conforming to BSP regulations and various theories on firm location from the literature.

Firm location theories suggest market players, such as services and retail firms, are drawn to "city-center" or "business district" areas due to market-related motivations, firm behavior, agglomeration economies, and locational interdependence. These factors explain the tendency of firms to cluster near each other and concentrate on CBDs.

However, the operating environment factors in CBDs, particularly in terms of the surrounding spatial features, have received less attention from studies on bank branch location.

The conceptual framework for the research (Figure 1) identifies three (3) equally significant spatial features of the operating environment crucial to establishing bank branches, specifically: land use commercial potential, presence of anchor institutions, and a fully developed road network. Additionally, the framework incorporates the policy on branch liberalization as a regulatory factor exercised by the central bank to authorize the expansion of bank branches in key cities of Metro Manila as a metropolitan center. Each feature is informed by factors from empirical studies involving bank firm-level location decisions.

The conceptual framework illustrates the logical progression of the researcher's insights regarding the relationship between these key operating environment decision factors and their respective implications for planning financial districts.

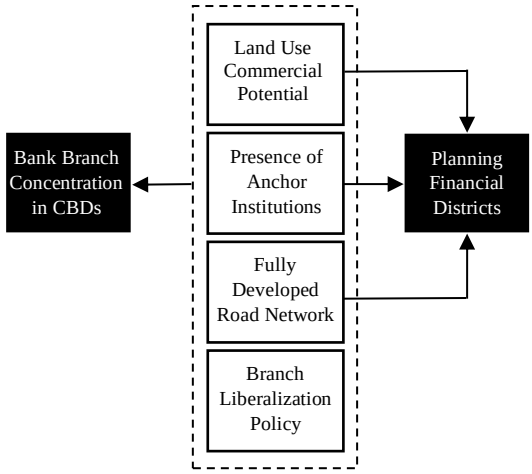

Figure 1 Conceptual Framework

Source: Authors' construct

4. Approach and Methodology

Based on the conceptual framework of the study, the research design was methodically structured to encompass both descriptive and exploratory methodologies. The descriptive phase focused on identifying key operating environment decision factors through interviews with senior bank executives representing the majority of the top 10 financial institutions in the Philippines, particularly those with significant deposit volumes.

The exploratory aspect of the research primarily entailed documenting and validating the key decision factors pertaining to the operating environment as identified by bank management representatives. This documentation process involved conducting a chronological analysis of the decision factors.

Chronological analysis addresses the methodological gap that mapping and other visualization techniques could not account for because the concentration pattern of branches take time to be discovered or realized (Anselin *et. al*, 2007). Past studies using Geographic Information Systems (GIS) supported this claim by emphasizing the need for a prior understanding of location factors as input attributes in exploratory spatial data analysis. Through a chronological analysis, the entry and concentration of branches in the CBD can be explained alongside the operating environment that supported their location in the economic space.

Subsequently, validation was achieved through separate interviews with individuals possessing relevant expertise, including a former head of the government's public works department, a former chief operating officer of the estate management firm in charge of the study area masterplan, and private individuals who have resided or worked within the study area during different periods.

Historical archives containing photographs and related information from the public domain were utilized to complement the interview data. These archival materials provided visual context and enhanced the triangulation of information obtained from the key informant interviews (KII).

4.1 The Study Area

Metro Manila is the capital region of the Philippines, which has a homogenous urban condition and a clear visualization of the spatial concentration of branch banking. It contributes 30 percent to branch offices which constitute 67 percent or 8.5 trillion pesos in total cash deposits of the entire Philippine banking system (PDIC, 2018). Thus, the region is an appropriate case study area representing branch concentration.

Narrowing down Metro Manila as the universal research locale, the spatial frame focused on the "Hacienda de Mandaloyon" Estate where the Ortigas CBD is located and selected as the micro unit of analysis. Situated within Metro Manila, the Mandaloyon estate is bounded by the Diliman Creek to the north, the Pasig River to the south encompassing much of Mandaluyong City and parts of Pasig City, the Marikina River to the east, and the San Juan River to the west (Figure 2).

In January 1920, Dr. Frank W. Dudley and Don Francisco Ortigas acquired approximately 4,033 hectares of land known as the "Hacienda de Mandaloyon" from the Augustinian order friars. The intention behind this acquisition was to develop the area into both a commercial and residential zone. Subsequently, ownership of the land transitioned from Dr. Dudley to Phil C. Whitaker, who eventually sold his shares to Ortigas, Madrigal y Cia, S. en C. (a limited partnership by shares).

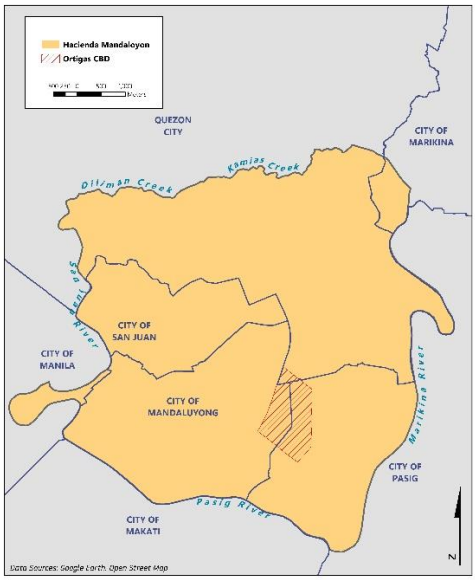

Figure 2 Hacienda de Mandaloyon Estate

Source: Authors' Construct

The research focuses on the Ortigas CBD and its fringe area. The CBD covers the segment of the Mandaloyon estate delimited by Epifanio delos Santos Avenue (EDSA) to the west, Ortigas Avenue to the north, Manila Electric Rail and Light Company (MERALCO) Avenue to the east, and Shaw Boulevard to the south (Figure 3). The fringe area refers to the surrounding land area based on a 2-kilometer buffer reckoned around the CBD periphery.

Figure 3 Ortigas CBD Vicinity Map

Source: Asian Development Bank (2013)

The selection of Ortigas CBD and the surrounding fringe was predicated upon several factors, specifically: (a) abundance of historical data regarding land use transformation, which could be corroborated through KII, as well as through published and publicly available resources; and (b) the site is characterized as a meticulously planned area and served as a pivotal district for various financial, institutional, and economic activities. This inherent attractiveness of the identified unit of analysis is appropriate for establishing the decision factors motivating bank branch entry, expansion, and concentration.

4.2 Collection of Evidence and Descriptive Analysis of Branch Operating Environment Factors

The collection of descriptive information primarily focused on identifying factors related to the operating environment that influence banking decisions regarding the location of branches in the CBDs. This data collection process involved conducting interviews with senior-level management who are responsible for or have been involved in branch banking decisions. Specifically, the interviews were conducted with representatives from Tier 1 and Tier 2 Philippine banks, which are mainly from the top 10 banks in terms of deposit volume.

This non-probabilistic purposive approach was employed to ensure that the selected banking institutions would provide a representative sample of industry behavior, given their significant presence in the spatial distribution of branches in major CBDs within Metro Manila. In addition to seeking expertise in branch banking operations and/or involvement in branch policy decisions, the bank experts' track records and brief profiles were also considered for this study (Table 3).

Table 3 Profile of Bank Management Level Interview

Name of Bank a/	Industry Rank on Deposits	Management Representative Position	Years in Banking
A	1	Department Manager	>20
B	2	Senior Vice President	>20
C	3	Department Manager	20
D	4	Asst. Department Manager	15
E	7	Senior Vice President	>20
F	8	Senior Vice President	15
G	10	Executive Vice President	15
H	12	First Vice President	>20
I	45	Asst. Vice President	5
J	Not Ranked	Senior Vice President	>20

a/ Code applied to maintain confidentiality of the institutions

During the interviews, decision-makers provided insights into internally established guidelines and unique mandates issued by the bank's board of directors or regulatory authorities pertaining to branch entry and expansion. These discussions helped clarify the decision-making process within the banks.

Subsequently, the identified location factors were ranked by the bank experts based on their perceived relative importance, using the Multi-Attribute Utility Technique (MAUT) Pairwise method. This ranking facilitated the visualization, isolation, and establishment of the relative significance of the operating environment factors, specifically: (1) land use commercial potential, (2) presence of anchor institutions, and (3) fully developed road network.

4.3 Exploratory Approach and Chronological Analysis of Operating Environment Factors and Branch Entry in the CBD

The investigation of the key operating environment factors for bank branches involved a comprehensive profiling of the study area, tracing its development from its acquisition and establishment in the 1930s to the year 2019. This exploratory approach also documented the proliferation of bank branches over the study period. The research utilized publicly available information from online platforms and social media communities comprising individuals with expertise in history, cultural anthropology, urban planning, banking industry, and human society to gather relevant data.

The diverse perspectives of professionals and experts were instrumental in assessing the conditions in the CBD and the operating environment of bank branches. The chronological analysis as a methodology facilitated the validation and elucidation of the following operating environment factors for bank branches in each time period or era:

a) *Factor 1: Land use commercial potential*. Information was acquired through interview of the Chief Operating Executive of the CBD land holding. Additionally, vintage photographs from the official website of the Ortigas estate founder, report archives of the American chamber of commerce in the Philippines, the Philippine Supreme Court jurisprudence, and other public domain platforms pertaining to the estate's history including the Ortigas Foundation Library, were utilized. These sources provided valuable insights into the historical transformation of land use, complementing the information from LGU records.

In recent years, an analysis of the prevailing official zoning map from the LGU's comprehensive land use plans was conducted. This information and details about commercial features in the CBD were cross-referenced and visualized using open-source software and websites such as Google Open Street Map and Google Earth. This approach enabled the researchers to verify the current status of the operating environment and validate the discussions regarding the CBD's land use commercial potential.

The analysis considered factors such as the land use types based on the functional areas indicative of commercial activities that support branch banking services.

b) *Factor 2: Presence of anchor institution*. Information from various sources, including disclosures on the social media page of the Ortigas Foundation Library and other public domain platforms were carefully reviewed and cross-referenced with the results of the KII. Additionally, actual site visits and observations were conducted to validate information from the public domain regarding the composition of anchor institutions established in the 1990s.

The anchor institutions crucial to bank branches include government and major private offices, shopping malls, mixed-use high-rise buildings, and essential facilities such as hospitals, schools, and churches. These institutions are considered significant in the banking industry due to their high demand for physical branch facilities to cater to their substantial volume of daily cash transactions. This demand is crucial in sustaining the viability of branches within the CBD.

c) *Factor 3: Fully developed road network access.* The information on significant changes in the physical landscape related to road infrastructure enhancements was primarily obtained through KIIs. The findings from these interviews were subsequently validated using databases and reports from official development assistance partners of the Department of Public Works and Highways (DPWH) in the Philippines.

The research focused on historical inventory and construction records of major infrastructure within and surrounding the Ortigas CBD, including roads, flyovers, underpasses, road widening or improvement projects, and mass transport railways linking the CBD. Additionally, site visits and observations were conducted to verify the presence of these major infrastructure and confirm their contribution to accessibility within the CBD.

d) *Factor 4: Branch liberalization policy*. The banking circulars, monetary board resolutions, and country-level financial situation reports were obtained, reviewed, and analyzed from the online disclosures and databases through the BSP's official website.

The BSP policy on bank liberalization and restrictions imposed in the key cities of Metro Manila were then compared to the economic working papers and articles published by the government think-tank, authoritative local literature about the Philippine financial system, and legislative reports from the congress' economic planning office.

The policy review focuses on the historical policy guidelines on branch location, requirements for opening new branches, and branch construction moratoriums.

5. Results and Discussions

5.1 Identification of Operating Environment Factors for Bank Branches

Results of the characterization at the level of bank management indicated that, aside from the volume or size of deposits available within the CBD, two significant operating environment factors emerged: *land use commercial potential* and *access to a fully developed transportation road network* (Table 4). The bank level perspective also marked the *presence of anchor customers (institutions or firms)* as the second most important factor in the operating environment.

Table 4 Highlights of Bank Management Level Interview on Branch Location Factors

Rank	Branch Location Factors
1	• Size/Volume of market deposit • Land use commercial potential • Access to a fully developed road network
2	• Availability of prospective markets/anchor institutions
3	• Presence of competitors
4	• Presence of a residential area • Operating standards (security/rent)
5	• Site standards (lot area/parking/flooding)

These bank branch location-decision factors which were corroborated in literature, underwent re-ranking through weights assignment by the 10 bank representatives following the Multi-Attribute Utility Technique (MAUT). The application of this technique aimed to formulate an enhanced list of branch location and operating environment factors in terms of their relative importance. To achieve this goal, the factors were listed in both rows and columns in a pairwise matrix illustrated in Table 5.

Table 5 Pairwise Matrix of Branch Location Factors

Branch Location Factors	Branch Location Factors/Attributes						Calculations		
	Average Volume of Deposit	Presence of Anchor Institutions	Land Use Commercial Potential	Access to Developed Road Network	Near Residential Areas	Presence of Competitors	Total	∑ Summation of Column "G"	Weights
	A	B	C	D	E	F	G	H	I
A Average Volume of Deposit	0	1	1	1	1	1	5	15	33.3
B Presence of Anchor Institutions	0	0	1	1	1	1	4	15	26.7
C Land Use Commercial Potential	0	0	0	1	1	1	3	15	20.0
D Access to Developed Road Network	0	0	0	0	1	1	2	15	13.3
E Near Residential Areas	0	0	0	0	0	1	1	15	6.7
F Presence of Competitors	0	0	0	0	0	0	0	15	0.0

Starting from the top row, each factor was examined against every location factor in the column and was rated according to the order of preference by the bank experts who participated in the ranking exercise. A factor deemed more important was assigned a value of "1", while a factor of lesser importance received a value of "0". Individual weights (column "I") for each location factor were then calculated by dividing the row total (column "G") by the sum of row totals under column "H".

The results of the MAUT indicated that the volume of deposits remained the most highly ranked factor in relative importance. Following this, the presence of anchor institutions, land use commercial potential, and access to developed road networks were ranked second, third, and fourth, respectively (Figure 4). These findings underscore the relative significance of operating environment factors in the decision-making preferences of banks regarding branch entry and expansion.

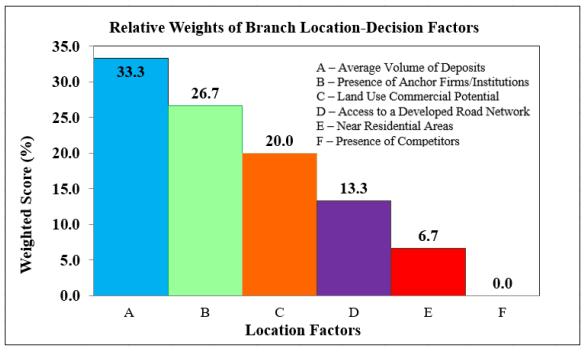

Figure 4 Rank of Branch Location Factors from Firm Level Perspective

5.2 Chronological Analysis of the Operating Environment Factors for Bank Branches and Transformation of Ortigas CBD Urban Form

A chronological analysis of the factors of the bank branch operating environment in relation to their establishment and concentration in the Ortigas CBD validates the factors identified by bank management experts. The evolution of these operating environment factors has led to the emergence of distinct urban forms, reflecting the CBD's transition into an economic hub. This urban metamorphosis aligns with agglomeration theories in existing literature, shedding light on the motivations behind banks' decisions to extend their branch network within the CBD. The findings of the chronological analysis over time are elaborated in the subsequent subsections, highlighting the major milestones that occurred during the periods covered by the research.

5.2.1 Circa 1930 – 1950: Residential Estate Development as an Offshoot of Business Partnership

In 1931, the ownership share of *Hacienda de Mandaloyon* was reorganized among Francisco Ortigas, Vicente Madrigal, B.C.M. Johnston, Fulgencio Borromeo, Clyde A. Dewitt, and Manuel L. Quezon, leading to reconceptualizing the establishment of an industrial, commercial, and residential estate. The reconceptualized plan envisioned a central area for commercial and residential development which is now the Ortigas Center or CBD.

Surrounding the CBD is a fringe area that serves as an extension of the residential and commercial development including industrial zones. The area occupied by Ortigas CBD fringe encompasses parts of Pasig City, Mandaluyong City, and Quezon City.

Residential estate development commenced with developing the properties in Little Baguio in San Juan, Barangay Plainview, and Addition Hills in Mandaluyong City, with land prices ranging from P1.00 to P3.00 per square meter for lot sizes between 700 and 5,000 square meters (Manila Nostalgia, 2023; Ortigas Foundation Library, 2022).

During this time, the Ortigas CBD underwent minimal development, while the CBD fringe at the Mandaluyong City area experienced residential growth due to migrants from Manila City, seeking a cooler and rural atmosphere. The establishment of the Wack Wack Golf and Country Club also contributed to the attractiveness of the area.

In 1935, the Philippine government established Camp Murphy, a military base located north of the Mandaloyon Estate (Lakansining, 2019). The camp was divided by Avenida 19 de Junio, with around 178 hectares used by the Philippine Army and Zablan Airfield, and 42 hectares by the Philippine Constabulary (now Camp Crame). Ortigas & Company donated approximately 50 hectares of the army camp to the government in 1935.

During war time (1942 – 1945), the American 248th Infantry established a general hospital at the intersection of Shaw Boulevard and Avenida 19 de Junio occupying a substantial block of land in the present location of Greenfield district towards the direction of Barangay Oranbo and Barangay Kapitolyo in Pasig City.

Improved accessibility to the Ortigas CBD started in 1940 with the development of a comprehensive network of major roads (Figure 5). A key artery, Avenida 19 de Junio, facilitated north-south connectivity within the CBD. This circumferential road was intersected by two perpendicular radial roads, facilitating east-west connections to other municipalities in Metro Manila. Shaw Boulevard, formerly known as Jose Rizal Avenue for the Mandaluyong City segment and Pasig Boulevard for the Pasig City segment, served as a significant radial road, demarcating the Ortigas CBD from the industrial zone at the fringe. Ortigas Avenue, previously named Rosario Highway, served as another radial road, delineating the northern side of the CBD from areas designated for high-end residential subdivisions.

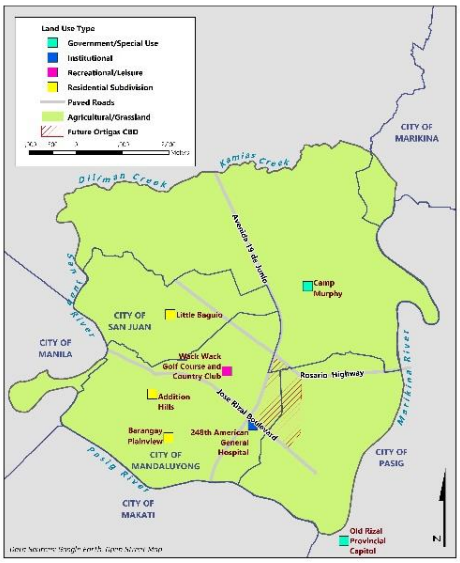

Figure 5 Ortigas CBD/Fringe Major Developments (1930 – 1950)

Source: Authors' Construct

Despite residential expansion, records of banking facilities within the CBD was lacking, with banking activities predominantly concentrated in the City of Manila Binondo-Sta.Cruz-Intramuros area. Although foreign bank presence initially increased nationwide, growth was stunted by a moratorium imposed by the BSP (then Central Bank of the Philippines). The moratorium was lifted in 1949, allowing the entry of new foreign banks into the region (Milo, 2001).

5.2.2 Circa 1951 – 1960: Expansion of Spatial Development Orientation through the Development of Residential Subdivisions, Pioneer Anchor Institutions, and Banking System

The reconstruction of Ortigas Avenue was finished in 1956, spanning from its junction with Highway 54 (new name given to Avenida 19 de Junio in 1950) to its intersection with Carretera de Santolan (now Colonel Bonny Serrano Avenue). Formerly, Carretera de Santolan included the segment towards Rosario Highway junction with Circumferential Road 5 or C5 (refer to Figure 6).

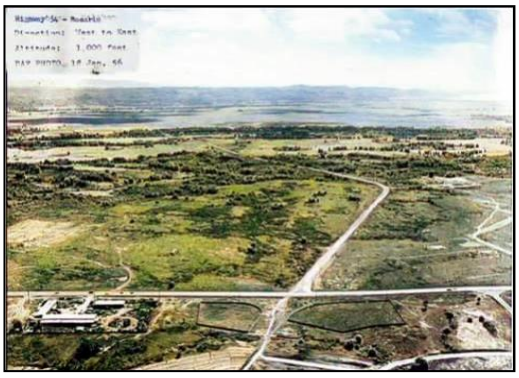

Figure 6 Highway 54 (EDSA) Junction with Ortigas Avenue in the direction of C5, Circa 1956

Source: Memories of Old Manila & Beyond (2019)

The development of these roads by the government motivated Ortigas and Company, the Mandaloyon real estate firm, to strategically planned the north and eastern fringe of the present Ortigas CBD for elite residential subdivisions accessible to schools, hospitals, churches, military camps, water supply, and private golf course.

Notable developments include the Wack-Wack subdivision in Mandaluyong, alongside other upscale residential areas in the late 1950s catering to World War II veterans like Blue Ridge A, and Blue Ridge B along Katipunan Avenue Extension in Quezon City (Lakansining, 2020a; Manila Nostalgia, 2015). The influx of institutions and residences led the transformation of grasslands into a mix of residential subdivisions and institutional zones. About the same time, the south and southeastern portion of the Ortigas CBD fringe were planned for industrial land use alongside the pivot to import substitution industry (ISI) policy of the Philippine government in the 1950s (Figure 7). This paved way for the shifting of nationwide priorities from agricultural to capital-intensive industrial development between 1947 to 1960 (Sicat, 1968; Takagi, 2014). The United Laboratories (UNILAB) in 1954 was among the industries that established the first pharmaceutical factory at the southern fringe of the Ortigas CBD (MLHG, 2022).

As domestic industries expand to produce goods previously imported, they require bank financing for facilities, working capital, and trade finance. This demand favored bank branch entry in and around the CBD area, where cash transactions of domestic industries and workers is high. The government supported the ISI policy by relaxing entry restrictions for domestic banks in the early 1950s and 1960s, while the Central Bank of the Philippines played a key role in developing the banking system to meet the economy's financing needs after the war (Milo, 2001).

Aligned with the industrialization policy, the Local Autonomy Act (RA 2264) was enacted in 1959, bestowing city and municipal governments with enhanced fiscal, planning, and regulatory authority (Supreme Court e-library, n.d.). Emboldened by this legislative directive, the Municipal Council of Mandaluyong delineated the southern portion of the Ortigas CBD fringe, extending from Shaw Boulevard towards the Pasig River, as an industrial and commercial zone through Resolution No. 27, series of 1960 (lawyerly.ph, n.d.).

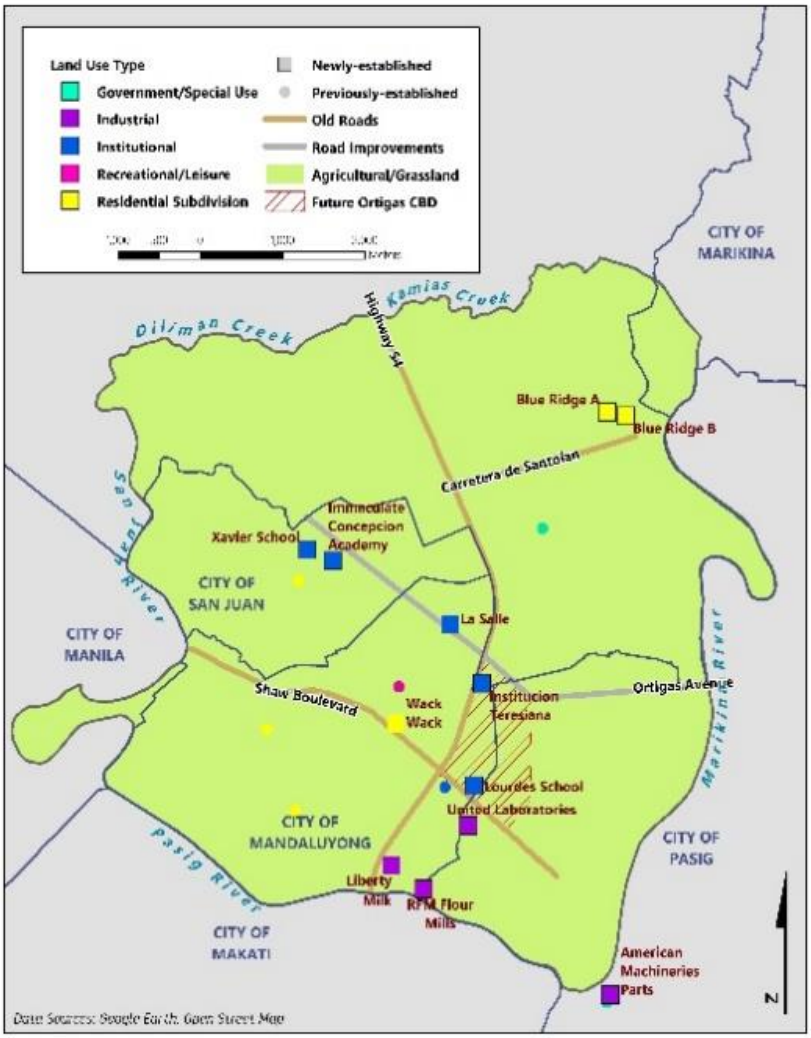

Figure 7 Ortigas CBD/Fringe Major Developments (1951 – 1960)
Source: Authors' Construct

Table 6 Pioneer Anchor Institutions Close to Ortigas CBD, 1951 to 1960

Institutions	Year of Establishment	Features
Lourdes School of Mandaluyong	1959	Built facilities at the southern border of the Ortigas CBD
La Salle Greenhills	1959	Main building was completed in 1959[1] northeast of the CBD
Xavier School Greenhills	1960	Held classes beginning 1960 on a 7.5-hectare property of what was then a sparsely covered rice field and grassland[2]
Immaculate Concepcion Academy Greenhills	1960	Elementary department and kindergarten opened in 1960[3]
Institucion Teresiana (present name is Saint Pedro Poveda School)	1960	Donated by the Ortigas family along Highway 54 (present name is EDSA)

Source: [1]https://lsgh.edu.ph/history-of-la-salle-green-hills/; [2]https://xs.edu.ph/index.php/about-xavier/; [3]https://icagh.edu.ph/about-ica/history/

Residential development in the post-war era shifted towards eastward spatial expansion from the City of Manila. This shift was prompted by the reconstruction efforts of the residential and commercial districts in the inner core of Manila (Lakansining, 2020b). It resulted to the migration of affluent Manila City residents and establishments of institutions in and around the Ortigas CBD (Table 6).

5.2.3 Circa 1961 – 1970: Further Expansion of Demand for Residential Land by the Elite and Attraction of Private Investments as Triggers of Urban Primacy and Economic Dynamism

The demand for residential land by the elite continued in the early and late 1960s with the development of White Plains Village by the Quezon City Development and Financing Corporation (QCDFC) along the Katipunan Avenue extension in the direction of Ortigas CBD (Lakansining, 2020a).
Residential development attracted private investments, increasing the supply of workers in the surrounding environment.

The construction of the Manila Electric Company (MERALCO) office in 1964 marked the first major development along Ortigas Avenue. Acquired by the Lopez family from its American owners, MERALCO inaugurated a new building complex in 1969, featuring a world-class theater, a tennis court, the John Cotton hospital facility, and a restaurant. Another significant addition to the CBD fringe was the Greenhills Shopping Center owned by Ortigas and Company, which commenced operations in 1969.

The late 1960s aerial view in Figure 8, captured at the intersection of Epifanio delos Santos Avenue (EDSA) and Ortigas Avenue, illustrates enhanced accessibility due to road network upgrades along EDSA, Ortigas Avenue, and Shaw Boulevard. This transformation facilitated a shift in land use from grasslands to a diverse blend of residential, institutional, and commercial areas.

Figure 8 EDSA – Ortigas Avenue Intersection in the 1960s

Source: Memories of Old Manila & Beyond (2015a)

The Ortigas CBD fringe (Figure 9) from Shaw Boulevard towards the southern direction of Pasig River depicted an industrial land use where major industrial plants are added from the prior 1950s period. Among the industries reported by the Mandaluyong Local Historians Guild (MLHG, 2022) include Union Carbide, Atlantic Gulf & Pacific Company (AG&P), Ricoa Chocolate, Liberty Milk, Reynolds Aluminum, Park and Davies Pharmaceutical, Bonifacio Motors, Abbott Laboratories, Menzi Zipper, and Puyat Steel.

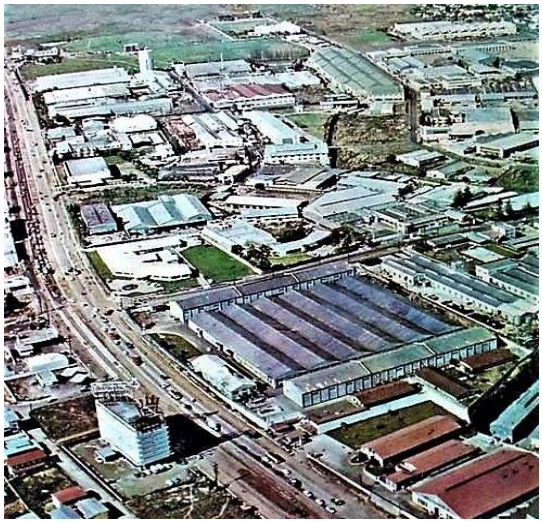

Figure 9 Industrial Complex along EDSA, Mandaluyong City Northbound

Source: Memories of Old Manila (2020)

The latter part of the 1960s demonstrated a primacy of population and increased economic activities, including banking in Metro Manila (Mercado, 2002). The Central Bank of the Philippines observed a particular growth of small banks, which prompted it to raise the minimum capital requirements to effectively manage the liquidity risks typically associated with less capitalized banks (Emery, 1976, as cited by Milo, 2001).

In 1963, *FEATI bank* established a bank branch at the Ortigas CBD fringe near the junction of EDSA and Shaw Boulevard. This was followed by the *Philippine Commercial and Industrial (PCI) Bank* which opened a branch within the Ortigas CBD in 1970 located at the lobby of the MERALCO building. Additional bank branch anchor customers increased since 1967 with the establishment of The Medical City (formerly AB Sison Hospital), Saint Paul School of Pasig, Ortigas Land and Company office building located at the corner of Ortigas Avenue and MERALCO Avenue, and EDSA Central Mall at the junction of EDSA and Shaw Boulevard (www.philstar.com, 2003). Figure 10 illustrates the emergence of a sprawling residential, business, and institutional area at the Ortigas CBD and fringe area.

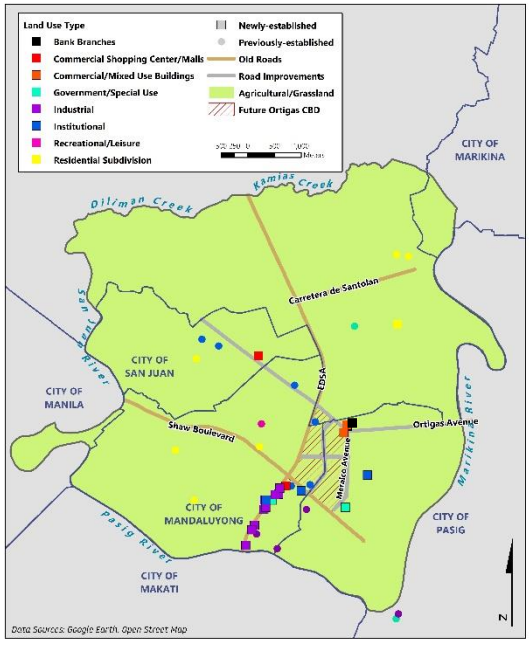

Figure 10 Ortigas CBD/Fringe Major Developments (1961 – 1970)

Source: Authors' Construct

5.2.4 Circa 1971 – 1980: Reinforcement of the Center of Economic Gravity and Surge in Commercial Activity Creating Venues for New Bank Branches

The Ortigas Center area emerged as a burgeoning residential hub within Metro Manila, also gaining recognition as an emerging market center with development increasingly concentrated towards the region's east side. The construction of the Manila Chronicle Building in 1971, later renamed the BENPRES Building, catalyzed the growth of the CBD's economic nucleus. Major anchor institutions established in 1975 included the National Economic and Development Authority (NEDA) headquarters and the ULTRA sports stadium. Additionally, the Greenhills Shopping Center area underwent enhancements with the construction of the new Virra Mall.

Public investments in infrastructure, notably the EDSA – Shaw tunnel, bolstered spatial interaction. The influx of anchor institutions attracted commercial activities within and around the CBD, prompting the development of high-rise structures like Strata 100 and the Padilla Building in 1977. In 1978, the PHILCOMCEN building was erected along Ortigas Avenue, followed by establishing the Integrated Bar of the Philippines (IBP) near Julia Vargas Avenue and San Miguel Avenue in 1979.

These buildings accommodated new bank branches, including the *Philippine National Bank (PNB)* at the PHILCOMCEN building, the *Bank of the Philippine Islands (BPI)* at the Chronicle building, the *PCI Bank* at Strata 100 (Figure 11), and the *Metrobank and Hong Kong and Shanghai Banking Corporation (HSBC)* branches, which opened in 1980, at the Ortigas Building.

Figure 11 Strata 100 and Padilla Building along Emerald Avenue in the 1970s

Source: Memories of Old Manila & Beyond (2015b)

Also in the 1970s, new high-end residential subdivisions were developed. Valle Verde Subdivision expansion and Saint Ignatius Village were completed around 1978 (Figure 12). Following in 1980 were the Corinthian Gardens Village and Green Meadows Village (Lakansining, 2020a).

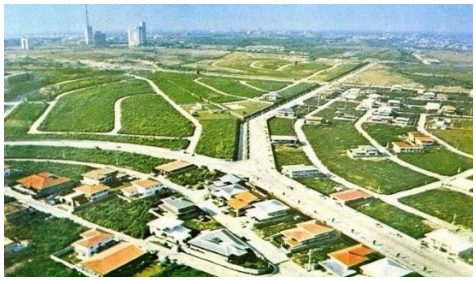

Figure 12 Ortigas CBD Skyline from Valle Verde Lanuza and Martin Street

Source: Manila Nostalgia (2014b)

These major land developments depicted in Figure 13, both within and surrounding the Ortigas CBD, received substantial backing in 1975 through the implementation of the Integrated Reorganization Plan (IRP). This initiative led to the establishment of the Metro Manila Commission (MMC) and the delineation of four municipalities and 13 cities within Metro Manila, including Pasig (Presidential Decree 824, 1975). The IRP, introduced by the NEDA, was formulated in accordance with the "Growth Center Strategy."

The design and approach of the IRP were structured to align with the framework of "concentration-decentralization" of the Ministry of Human Settlements. The framework emphasized growth centers such as CBDs as the focal points for both public and private development endeavors and investments (Corpuz, 1987).

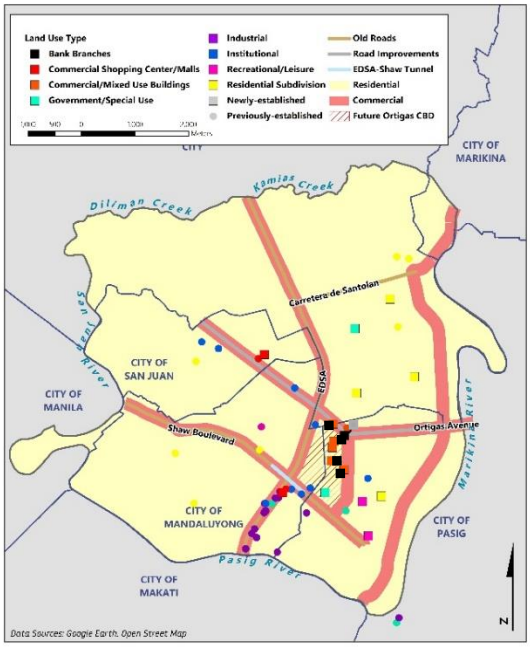

Figure 13 Ortigas CBD/Fringe Major Developments (1971 – 1980)

Source: Authors' Construct

In 1972, significant banking policies were enacted with the approval of the New Central Bank Act and the General Banking Law, marking pivotal developments in the banking sector. These policies aimed to advance the merging and consolidation of banks to enhance intermediation efficiency. Emphasizing the notion that larger banks contribute to a more stable banking system, the government concurrently raised the minimum capital requirements. Additionally, provisions were made to permit foreign equity participation of up to 30 percent of the voting stock in existing domestic banks (Lamberte, 1989).

These policy shifts precipitated notable transformations within the financial landscape, leading to the growth and fortification of financial institutions. Introduction of novel financial instruments such as commercial papers and movable asset mortgage-backed securities further diversified the financial toolkit. Concurrently, a comprehensive five-year roadmap was instituted to facilitate the establishment of regional bank branches. Moreover, in 1970, the BSP introduced a foreign currency deposit system, laying the groundwork for offshore banking, which was formally established in 1976, thereby broadening the scope of financial services available within the banking sector.

5.2.5 Circa 1981 – 1990: Growth in Bank Branches Amidst Financial Industry Crisis

During the period spanning from 1983 to 1986, marked by the EDSA People Power Revolution, the financial sector grappled with a crisis that reverberated through bank branches from 1980 to 1982, owing to a confluence of domestic political and economic upheavals (IMF, 1991). Moreover, the global recession in the early 1980s exerted additional pressure on the Philippine financial system, characterized by inadequate savings mobilization, inefficient resource allocations, and high intermediation costs attributed to limited competition and small-scale banking operations during the early part of the decade (Okuda, 1990).

The establishment of new bank branches faced unfavorable conditions amid the series of coup d'état in 1987, 1989, and 1990. Between 1981 and 1987, three commercial banks, 32 thrift institutions, and two private banks came under intervention, with two other government financial institutions requiring bailouts from the BSP (IMF, 1991). Consequently, anchor institutions, such as shopping centers, hospitals, schools, churches, entertainment venues, and multinational corporations, remained limited in and around the CBD fringe at the turn of the century.

Notable establishments during this period included the Center for Research and Communication (later renamed as University of Asia and the Pacific) in 1982, the Hanston Building constructed in 1982, the Securities and Exchange Commission (SEC) in 1983, the Asian Development Bank and Benguet Mining Center in 1983, the San Miguel Corporation Headquarters in 1984, and the SM Megamall and Robinsons Galleria Mall in 1989 (Figure 14).

Figure 14 EDSA - Ortigas Avenue Intersection South Bound towards Makati City

Source: Manila Nostalgia (2014a)

Government offices began to occupy spaces within the CBD during this period, including the Ministry of Human Settlements (MHS) at Strata 100, the Kilusang Kabuhayan at Kaunlaran (KKK) office under MHS at Hanston Building along Emerald Avenue, the Ministry of Transportation and Communications at the PHILCOMCEN building, and an office under the Ministry of Trade and Industry at the Chronicle building. In 1986, infrastructure development spearheaded by the Ministry of Public Works, Transportation, and Communication (MPWTC) further fueled the commercial growth of the Ortigas CBD, particularly on its eastern side.

This initiative involved the expansion and connection of the north and south ends of Circumferential Road 5 (C5), forming a geometric quadrangle road network with Ortigas Avenue and EDSA surrounding the Ortigas CBD (Figure 15). This infrastructure enhancement facilitated economic and physical movement among Parañaque, Taguig, Makati, Pasig, Marikina, and Quezon City. Subsequently, the Ortigas Center Association was established, leveraging the collaborative efforts of Ortigas Land and Company and other lot/building owners to strategically plan the Ortigas CBD's development.

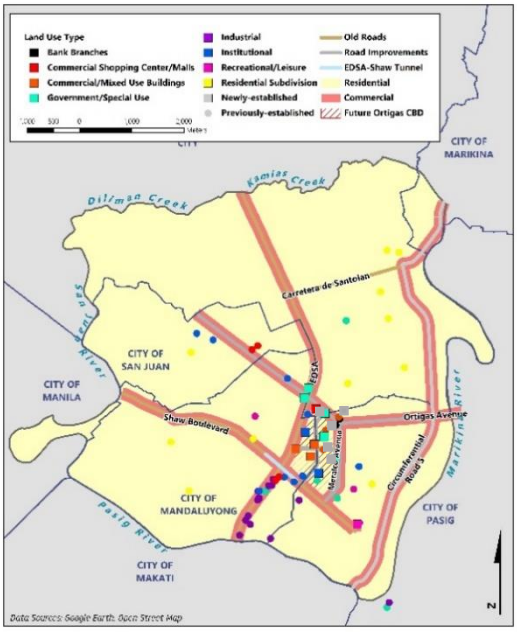

Figure 15 Ortigas CBD/Fringe Major Developments (1981 – 1990)

Source: Authors' Construct

5.2.6 Circa 1991 – 2000: Lifting of the Geographical Restrictions on Establishing New Bank Branches

As of June 1999, the BSP's data indicated that Metro Manila's banking office ratio to the number of LGU reached 155, accounting for approximately 2,635 branches, including head office branches (Milo, 2001). The early 1990s brought about market optimism for economic recovery and political stability, leading to the BSP's lifting of geographical restrictions on establishing new bank branches in 1993. However, specific prudential requirements regarding capital adequacy, liquidity, profitability, and management soundness were enforced (Paderanga, 1996).

This regulatory shift favored the business sector and spurred a surge in real estate acquisition, resulting in the construction of new high-rise office buildings, corporate offices, and hotels within the CBD. Notable anchor institutional landmarks completed during this period include the *Bank of Commerce Corporate Office* (1991), Shangri-La Hotel (1992), Jollibee Center Building (1993), The Medical Plaza and the Renaissance 2000 Building (1995), Tektite Towers which housed the Philippine Stock Exchange (1995), and Taipan Place where the World Bank Manila hold their office (1996).

The Asian financial crisis from 1997 to 1998 slowed down prospective high-rise developments and projects, affecting the property and banking sectors. Ongoing leisure and office projects that were able to complete their buildings include, Robinsons Equitable Office Tower and *Robinsons Bank* (1997), Linden Suites Hotel (1998), Discovery Suites Hotel (1999), and The Orient Square (1999). These facilities (Figure 16) opened new employment, sustaining economic and commercial activity in the CBD, albeit resulting in traffic congestion.

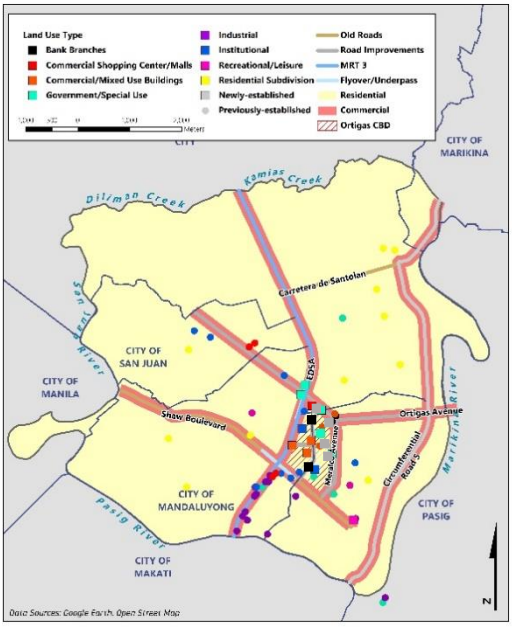

Figure 16 Ortigas CBD/Fringe Major Developments (1991 – 2000)

Source: Authors' Construct

To cushion the economy within the CBD by keeping the area accessible to the public, the government constructed the EDSA-Ortigas Interchange in 1991 and completed the expansion of C5 (E. Rodriguez Jr. Avenue) southern road segment in 1996. New infrastructure improvements also included the Edsa-Shaw Flyover (1998) and the commissioning of the Metro Rail Transit 3 (1999) provided convenience and increased alternative public access to the CBD.

Residential development also persisted, catering to the demand for high-end residential villages like Corinthian Hills, Acropolis Subdivision, Queensville Court, and the Enclave Villages (Lakansining, 2020a).

The number of banking offices in Metro Manila rose to about 1,904 in 1990, reflecting a growth distribution from 9.8 percent in 1990 to 112 offices per LGU in response to the favorable BSP regulatory environment and increasing commercial investments. Although there is no available archive of bank branch addresses that were opened in the CBD during this period, the 160 bank branches reported by Pasig City government (Pasig City, 2014) imply that these are mostly located within the CBD given the high economic activity relative to the other areas of the city.

By the end of 2000, the number of bank branches reached 2,529 out of the country's total of 6,561, equating to a density of 155 branch offices per local government unit (LGU). Pasig City alone has 197 banking offices by 2000. The high concentration of bank branches in Metro Manila prompted the BSP to declare an indefinite moratorium on establishing new banks and branch expansion of existing banks, excluding microfinance-oriented banks, in August 1999 (BSP, 2016).

5.2.7 Circa 2001 – 2010: Creation of Foreign Demand for Office Spaces in the Information Technology – Business Process Outsourcing Sector

From 2001 to 2010, foreign investors created demand for office spaces in the information technology sector (www.philstar.com, 2012) business process outsourcing (IT-BPO) and Philippine offshore gaming operations (POGO) driving the entry of corporate office high-rise buildings.

Data extracted from the online platforms of various property developers between 2000 and 2010 revealed an expanding anchor customer base with the completion of 18 new buildings within the CBD and immediate CBD fringe (Figure 17).

These include Wynsum Corporate Plaza (2000), Prestige Tower (2000), St. Francis Square (2000), Raffles Corporate Center (2000), One San Miguel Avenue (2001), The Podium (2002), Galleria Regency (2003), Union Bank Plaza (2004), Crowne Plaza (2004), The Medical City (2004), Orient Square (2006), The Malayan Plaza (2006), Metrowalk (2006), Lancaster Suites 1 (2007), One Corporate Center (2009), St. Francis Tower 1 (2009), St. Francis Tower 2 (2009), and Joy-Nostalg Center (2009).

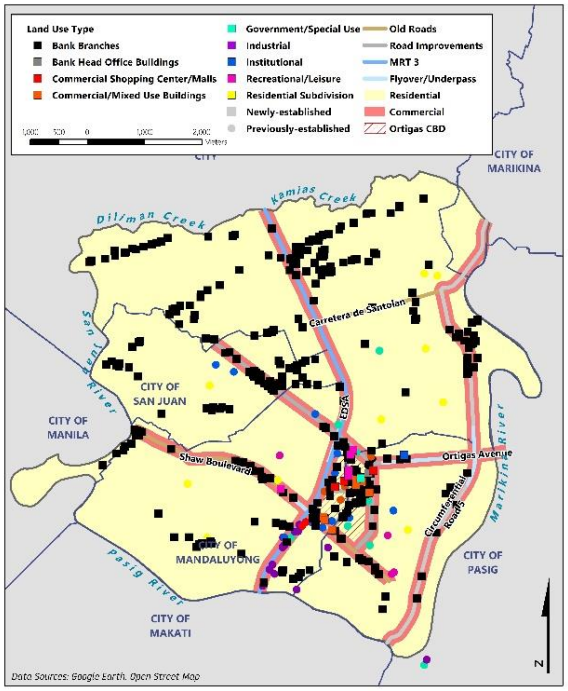

Figure 17 Ortigas CBD/Fringe Major Developments (2001 – 2010)

Source: Authors' Construct

Bank branches in Pasig City (Pasig City, 2014) decreased from 197 in 2000 to 167 in 2005 due to the General Banking Law imposing a three-year moratorium on new bank entries. However, the CBD saw economic growth driven by IT-BPO and POGO sectors (Ortigas Land, n.d.). By 2010, the CBD had 107 branches, with 96 more within a two-kilometer radius. This led to traffic pattern changes, prompting infrastructure improvements like the Julia Vargas – MERALCO flyover and the Mandaluyong-Shaw Boulevard Flyover. Additionally, residential expansion required upgrades such as widening Ortigas Avenue Extension and building the C5 – Ortigas Interchange in 2004, enhancing connectivity and highlighting the interaction between urban expansion, transportation, and economic growth.

5.2.8 Circa 2011 – 2019: Expansion of Bank Branch Concentration

Between 2011 and 2019, there was a noticeable increase in the proportion of bank branches located within the Central Business District (CBD) compared to the total number of branches in Pasig City. This proportion rose from 50 percent in 2011 to 66 percent by 2019. These findings were derived from the total count of bank branch addresses collected from various online directories of different banks and cross-validated with year-end records from the Philippine Deposit Insurance Corporation (PDIC).

In 2019, it was observed that there were approximately 139 branches operating within the CBD, with an additional 137 branches located within the two-kilometer fringe area surrounding the CBD. Notably, a significant portion of these branches, comprising 72 within the CBD and 59 within the fringe area, had remained in the same location since 2010.

This growth in branch presence has been driven by the consistent increase in newly opened branches over the years, which grew from 203 branches in 2010 to 276 branches in 2019 when considering both the CBD and the fringe area combined (Figure 18).

During this period, several significant anchor institutions/customers or commercial buildings were constructed in Ortigas CBD (Ortigas Land, n.d.), including BSA Twin Tower (2011), Exchange Regency (2011), Capitol Commons (2011), Lancaster Suites 2 (2012), Ateneo School of Medicine (2012), Asia United Bank (2012), Estancia Mall (2014), ADB Avenue Tower (2014), One Shangri-La Place 1 (2014), One Shangri-La Place 2 (2014), Cyberscape Beta (2014), Marco Polo Hotel (2014), AIC-Burgundy Empire Tower (2015), Avant-Garde Residences (2015), The Currency (2015), BDO Corporate Center (2016), Ayala Malls The 30th (2017), Royalton (2019), Jollibee Tower (2019), and Imperium (2020).

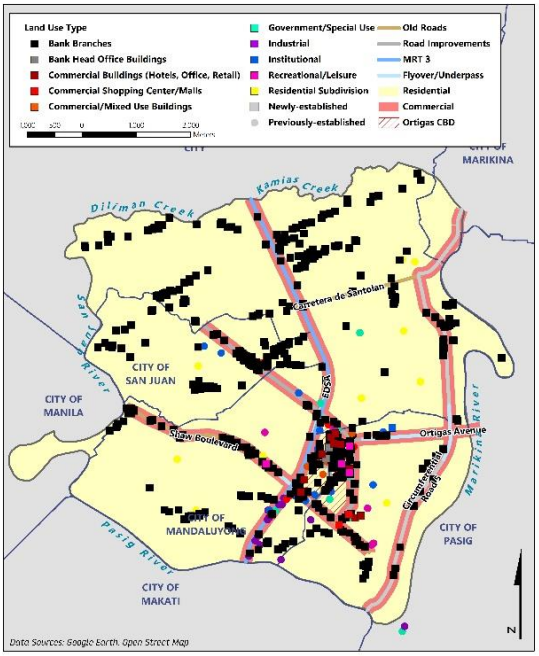

Figure 18 Ortigas CBD/Fringe Major Developments (2011 – 2019)

Source: Authors' Construct

5.3 Triggers of Bank Branch Entry and Concentration based on Chronological Analysis of Bank Branch Operating Environment Factors

The transformation of land use from grassland to the mix uses of residential, commercial, and institutional triggered the development of the banking system that capitalized on urban primacy and growth of economic activities. This evolution pattern serves as the anchor of this research on establishing the entry of branches in the CBD and its intersection with bank location decisions. Based on the chronological analysis, the following are the identified triggers of bank branch entry, expansion, and concentration.

Growth in the Number of Anchor Customers/Institutions. The entry and growth of new bank branches were attributed to the presence of more anchor institutions. This scenario was also triggered by the lifting of the BSP moratorium on the establishment of new branches in 2016. Added to this was the emerging and growing IT-BPO management sector and the Philippine Offshore Gaming Operations (POGO) operations in 2019. As of December 2018, the establishments within the Ortigas CBD occupied approximately 16 percent of the 10.6 million square meters of leasable office spaces in Metro Manila (Abad, 2019).

Between 2010 and 2015, there was a 28 percent increase in bank branches in Pasig City, followed by a 14 percent increase from 2015 to 2019 (Table 7).

Table 7 Bank Branch Count and Growth Rates

No.	Metro Manila LGU	Branch Count			Branches Growth Rates (%)	
		2019	2015	2010	2016 - 2019	2010 - 2015
1	Quezon City	859	767	628	12	22
2	Manila City	642	599	546	7	10
3	Makati City	530	493	407	8	21
4	Pasig City	262	229	179	14	28
5	Taguig City	199	147	78	35	88
6	Parañaque City	198	165	135	20	22
7	Mandaluyong City	142	129	111	10	16
8	Pasay City	131	101	80	30	26
9	Caloocan City	125	113	99	11	14
10	Muntinlupa City	124	111	90	12	23
11	San Juan City	118	102	86	16	19
12	Marikina City	89	84	70	6	20
13	Las Piñas City	82	81	66	1	23
14	Valenzuela City	81	70	61	16	15
15	Malabon City	51	49	41	4	20
16	Navotas City	24	24	20	0	20
17	Municipality of Pateros	14	13	13	8	0
		3,671	3,277	2,710	12	21
			TOTAL		AVERAGE GROWTH RATE	

Source: Authors' construct from the Philippine Deposit Insurance Corporation data on bank branches in Metro Manila

As of 2019, Pasig City ranked fourth in Metro Manila in terms of the total number of bank branches. Despite adopting alternative banking technologies such as automated teller machines (ATMs), internet banking, and mobile banking, there was a notable expansion in the branch network within the city.

Expansion in the Magnitude of Demand for Financial Services. The growth in bank branches indicates the rise in the demand for financial services attributed to the agglomeration of economies within the CBD. The IT-BPO sector created a demand for office spaces in hotels, residential condominiums, and other services that require forward and backward linkages from the other economic sectors (OCAI, n.d.).

Commercial Potential Enhanced by Area Development for New Buildings and Facilities Construction. The upswing in the demand for office spaces led to the construction of 21 new buildings and facilities in 2019. The development caused the conversions to mixed uses of around 80 hectares of land in 2012 complementing the spatial strategy of densification and pedestrian-friendly district (Pasig City, 2014).

Improvement of Road Networks for Access and Connectivity. The development plan for Ortigas Center aimed to position it as a leading business and financial hub, which is in line with the Comprehensive Land Use Plan (CLUP) of Pasig City. This strategic objective was consistent with the goals of the National Spatial Strategy (NSS), which emphasized agglomeration, connectivity, and resilience to enhance efficiency and maximize the benefits of scale.

5.4 Emerging Bank Branch Operating Environment Factors in Planning for Financial Districts

In both the Philippines and other localities, there is a notable absence of local planning standards specifically tailored for financial districts. Local planning initiatives should incorporate key considerations to foster the establishment and concentration of branches within these districts. These include proximity to, or integration with, a well-developed national primary (similar to EDSA and E. Rodriguez Avenue/Circumferential Road No. 5) or national secondary (such as Ortigas Avenue and Shaw Boulevard) road network. Additionally, the physical layout of these districts should be strategically designed to facilitate accessibility to anchor institutions, thereby promoting branch entry and expansion.

While deliberate plans to position the Ortigas CBD adjacent to or enveloped by a developed road network may not have been formally established, empirical data derived from branch addresses indicate that areas benefiting from such accessibility are favored locations for branch entry.

In addition, the key to the survival of a financial or CBD is the continuous revisions or updating in land use plan as unveiled in the chronological analysis of location factors for Ortigas Center CBD. Amidst the recurrence of political, economic, and financial crises that have struck the Philippines, the Ortigas CBD can continuously entice entry of anchor customers/institutions through time.

The expansion of commercial areas within the CBD is attributed to planning interventions led by the CBD business locators association, in collaboration with the property owner and developer of the Ortigas estate. These interventions aimed to promote mixed-use development, thereby diversifying and expanding the commercial landscape. The local government planning office supported these initiatives by updating local land use plans and zoning ordinances. Consequently, this facilitated the alignment of spatial development direction at the city level.

6. Conclusions

For bank branch entry, expansion, and concentration to occur, the surrounding environment has to evolve accordingly. An important impetus in the evolution of branch banking environment is improving road networks within and around a planned area like a CBD. This condition has been observed in the Ortigas CBD beginning with the completion of EDSA, the expansion of Ortigas Avenue, the extension of circumferential road number 5 (C5)/E. Rodriguez Avenue, and the interconnection with the metro rail line including key flyovers and interchanges. These road improvements have encouraged the development of residential villages, the entry of vital institutions, and the inducement of customers, workers, and the general public. This group of individuals and institutions are the key anchor customers needed by the bank branches to remain viable and sustainable in space.

The Ortigas CBD case also underscores the role of area development planning in ensuring that land use changes are introduced and adapted to the requirements of existing bank firms including those considering entry into the CBD space. The creation of the Ortigas Center Association for the purpose of advancing the land use planning for the business district development from the 1980s to the 1990s and conversion of certain areas to mixed-used development by the LGU have allowed the creation of vertical spaces which bodes well for real estate value and commercial investments.

The identified operating environment factors have ushered the entry of branches through time even as financial, political, and economic crises threatened bank expansion. Lifting of the moratorium for bank and branch entry in 2012 and again in 2016 also demonstrated the precept that regulation plays a vital role in shaping market sentiments and investments of anchor customers/institutions within a CBD which is, in turn, auspicious for branch spatial concentration. Policies regulating entry and/or expansion do not depend on fixing the number of branches nor on establishing levels of saturation, but rather on strengthening the financial sector by increasing the firm-level capitalization.

The regulatory approach adhered to in 2012 and 2016 made sense as shown by the evolution of the Ortigas estate into a CBD when domestic and external economic events were dynamic and market forces tended to gravitate towards such events. This observation is aligned with industry operational practices where the decision to close or maintain an unprofitable branch rests with the firm and not with the central bank such as the BSP.

Overall, chronological analysis established the interconnections of factors where change in land use commercial potential and continuous development of road network for transport access had encouraged influx of anchor institutions which were the primary sources of branch deposits. The results of chronological analysis proved that regulation had an undeniably central role in forming market attitudes and investments of anchor institutions who were the definitive attraction of branches toward CBDs.

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