UNIVERSITÀ POLITECNICA DELLE MARCHE

FACULTY OF ECONOMICS "GIORGIO FUÀ"

Master's Degree Programme in International Economics and Business

LUXURY DEMAND AND MACROECONOMIC FLUCTUATIONS: A GROWTH CYCLE ANALYSIS WITH EVIDENCE FROM GUCCI

Supervisor: Prof. Marco Gallegati

Candidate: Anna Piaggesi

Academic Year 2025/2026

To every woman who said their dreams are too big:

they are not.

To all Iranian women whose freedom has been stolen, and to the victims of the genocide in Palestine.

May the privilege of our education, culture, and emancipation become a voice for those who have been silenced, and a path toward freedom for those to whom freedom has been denied.

Index:

Introduction

The luxury industry represents one of the most distinctive sectors of the global economy. Traditionally associated with craftsmanship, exclusivity, heritage, and symbolic value, luxury has evolved from a narrow elite market into a global industry characterized by multinational groups, international consumers, and diversified demand. This transformation has increased the economic relevance of the sector, making luxury an important field of analysis for understanding the relationship between consumption, income, wealth, and macroeconomic fluctuations. From an economic perspective, luxury goods are commonly classified as superior goods, since their demand tends to increase more than proportionally as income rises (Deaton, 1992; Varian, 2014). This implies a high income elasticity of demand and suggests that luxury consumption should be particularly sensitive to changes in economic conditions. During periods of economic expansion, rising income and wealth are expected to support higher expenditure on luxury goods. Conversely, during recessions or slowdowns, luxury demand should theoretically contract more sharply than demand for necessities. However, the behavior of the luxury market is more complex than this theoretical prediction. Historically, luxury demand has often shown a certain degree of resilience, partly because consumption

is concentrated among high-income individuals with greater smoothing capacity (Friedman, 1957; Deaton, 1992). This apparent stability can be explained by several factors, including the concentration of consumption among high-income individuals, the role of wealth rather than current income alone, the symbolic and status-related value of luxury goods, traditionally discussed through the concept of conspicuous consumption (Veblen, 1899). In addition, the strong pricing power of luxury brands is closely related to exclusivity, brand equity, and controlled distribution strategies (Kapferer and Bastien, 2012).

At the same time, recent structural changes in the industry may have altered the foundations of this traditional resilience. The democratization of luxury, the expansion of aspirational consumers, the globalization of demand, and the increasing financialization of major luxury groups may have made the sector more exposed to macroeconomic fluctuations. For this reason, the relationship between luxury demand and the economic cycle requires a more refined analytical perspective. In particular, this thesis focuses on the concept of the growth cycle, rather than only on the classical business cycle. While the classical business cycle emphasizes absolute expansions and contractions in economic activity, the growth cycle focuses on deviations from the long-term trend of output. This distinction is especially relevant for the luxury sector, since both global GDP and the luxury market tend to display a long-run upward trend. Therefore, the key issue is not only

whether luxury demand falls during recessions, but also how it behaves during phases of acceleration, slowdown, and deviation from trend growth. The objective of this thesis is to analyze the relationship between luxury demand and the growth cycle, with particular attention to the extent to which the luxury market is pro-cyclical and whether its sensitivity to macroeconomic fluctuations has changed over time. The central hypothesis is that luxury demand remains strongly connected to income and wealth dynamics, but recent transformations in the sector have increased its exposure to cyclical fluctuations. In other words, while luxury has traditionally appeared relatively resilient, the growing importance of aspirational and upper-middle-income consumers may have introduced new forms of vulnerability. Methodologically, the thesis combines theoretical analysis, descriptive evidence, and simple econometric techniques. The theoretical part examines the economic characteristics of luxury goods, focusing on income elasticity, consumption smoothing, status consumption, inequality, and pricing power. The macroeconomic part introduces the relationship between luxury demand, income distribution, financial markets, and business cycle dynamics. The empirical section then compares the evolution of the global luxury market with key macroeconomic and financial indicators, including world GDP, the MSCI World Index, income concentration, and recessionary episodes, using data from the World Bank, MSCI, and the World Inequality Database. Finally, the Gucci case is used to provide a firm-level perspective on how cyclical conditions, changes in consumer

demand, and strategic positioning can affect the revenue performance of a major luxury brand. The thesis is structured as follows. Chapter 1 introduces the luxury sector from an economic perspective, defining luxury goods and examining the mechanisms that have historically supported the resilience of luxury demand. Chapter 2 develops a macroeconomic framework for analyzing the determinants of luxury demand, with particular attention to income distribution, wealth effects, financial cycles, and effective income elasticity. Chapter 3 presents the empirical evidence on luxury demand by describing the dataset, the main variables, descriptive statistics, correlation analysis, econometric results, and robustness checks. Chapter 4 interprets these empirical findings through the growth-cycle perspective, focusing on long-term expansion, slowdowns, major crisis episodes, and recovery dynamics. Chapter 5 focuses on Gucci as a firm-level case study, showing how the revenue performance of a leading luxury brand can be interpreted in relation to both sector-wide macroeconomic conditions and firm-specific factors. Overall, the findings suggest that luxury demand cannot be interpreted either as fully insulated from macroeconomic fluctuations or as a simple income-elastic category of consumption. Rather, it reflects the interaction between economic cycles, consumer composition, financial wealth, brand strategies, and structural transformations. The growth cycle perspective provides a useful framework for interpreting this interaction and for understanding whether the luxury sector is moving from traditional resilience toward greater cyclical sensitivity.

CHAPTER 1

Economic Foundation of Luxury Demand

1.1 Economic Definition of Luxury Goods

A brief Introduction to the Luxury Goods

The luxury industry has deep historical roots, closely linked to European craftsmanship, artisanal traditions, and localized production systems. For centuries, luxury goods were produced in small workshops, often concentrated in specific regions known for their specialized skills — such as leather goods in Tuscany, haute couture in Paris, or watchmaking in Switzerland. These early forms of production were characterized by limited scale, high levels of craftsmanship, and strong connections between producers, local culture, and identity. In this context, luxury was not simply defined by price, but by rarity, quality, and the mastery of specialized techniques. Access to such goods was restricted to aristocratic elites and later to emerging industrial and financial upper classes. As a result, luxury consumption was inherently exclusive, both in economic and social terms. In countries such as Italy, the development of industrial districts played a crucial role in sustaining high-quality production. These districts combined small and medium-sized enterprises, specialized suppliers, and skilled labor within geographically concentrated areas, allowing for flexibility, innovation, and the preservation of artisanal knowledge. From the late twentieth century onward, however, the luxury

sector underwent a profound transformation. The emergence of multinational conglomerates, the expansion of global markets, and the rise of new consumer segments reshaped the industry. What was once a relatively small, elite-oriented sector became a global industry characterized by complex supply chains, international demand, and increasing integration into financial markets. The transition from localized craftsmanship to globalized production, and from elite consumption to broader market participation, has important implications for how demand responds to income, how firms compete, and how the sector interacts with the broader economy. Against this background, luxury goods can be examined through the lens of economic theory.

The Luxury sector in Economic Perspective

Luxury goods occupy a distinctive position within economic analysis. While they are often associated with sociological dimensions such as status, identity, and symbolism, they also represent a significant and persistent component of aggregate demand, particularly in advanced economies. Beyond their cultural relevance, the luxury sector has evolved into a structurally important segment of modern economic systems, influencing production structures, trade patterns, and national competitiveness. From an economic perspective, luxury goods are typically defined by their income elasticity of demand. In *Understanding Consumption*, Deaton (1992) explains that goods can be classified according to the responsiveness of

demand to changes in income. Similarly, Varian (2014), in *Intermediate Microeconomics* distinguishes between inferior, normal, and superior goods on the basis of income elasticity. Luxury goods fall into the category of superior goods, characterized by an income elasticity greater than one, meaning that expenditure increases more than proportionally as income rises. However, this definition gives rise to an important analytical tension. Despite their theoretical sensitivity to income fluctuations, luxury goods have often displayed a degree of stability at the aggregate level, even during periods of economic downturn. This apparent divergence between theoretical expectations and observed behavior constitutes a central issue in the economic analysis of the sector. Over the past decades, the luxury industry has also gained considerable macroeconomic relevance. It contributes significantly to output, employment, international trade, and firm-level competitiveness. Countries such as Italy, France, and Switzerland have developed strong comparative advantages in luxury-related industries, making the sector a strategic component of their economic structures. At the same time, the expansion of global wealth, the rise of new high-income consumers, and the gradual democratization of luxury have reshaped demand patterns. As highlighted by Kapferer and Bastien (2012), luxury firms increasingly face a structural tension between exclusivity and growth — a trade-off with important implications for pricing strategies, demand dynamics, and long-term sustainability. These developments raise broader macroeconomic questions. If the composition of luxury

consumers changes, can the historical stability of demand be maintained? Or does the expansion toward more income-sensitive segments increase exposure to economic fluctuations?

This chapter develops the economic framework necessary to address these questions. It first clarifies the theoretical definition of luxury goods and the role of income elasticity within consumer theory. It then examines the mechanisms that have historically supported the relative insulation of luxury demand from income fluctuations. Finally, it explores the structural evolution of the luxury industry and its implications for demand dynamics.

Income Elasticity and the Classification of Goods

In economic theory, luxury goods are primarily defined through the concept of income elasticity of demand. A good is classified as a luxury when its income elasticity exceeds one, implying that consumption increases more than proportionally as income rises (Deaton, 1992; Varian, 2014). This classification distinguishes luxury goods from necessities, whose income elasticity lies between zero and one, and from inferior goods, whose demand declines as income increases. Within the standard framework of consumer theory, such distinctions emerge from utility maximization under a budget constraint, where consumers reallocate expenditure toward goods that provide higher marginal utility as their income rises. In principle, this framework implies that luxury goods should exhibit pronounced

cyclical behavior. Demand is expected to expand rapidly during periods of economic growth and contract significantly during downturns. However, this prediction does not always align with empirical observations. Luxury markets have often shown a degree of resilience that appears inconsistent with their income-elastic nature. This discrepancy suggests that income elasticity alone is insufficient to explain aggregate demand dynamics. Several factors complicate this relationship.

First, income elasticity is not necessarily constant across income levels. Empirical research based on Engel curves suggests that expenditure patterns often display non-linear relationships with income. In their study on consumer demand, Banks, Blundell, and Lewbel (1997) show that expenditure responses vary across income levels, implying that income elasticity is not necessarily constant throughout the income distribution. Luxury consumption may grow rapidly among households entering higher income brackets, but increase more slowly among ultra-wealthy individuals whose marginal propensity to consume additional luxury goods is relatively low. Second, it is important to distinguish between individual and aggregate behavior. Even if luxury goods are highly income-elastic at the micro level, aggregate demand may appear stable if consumption is concentrated among high-income households with relatively stable earnings. Wealthier individuals often derive income from diversified assets, reducing exposure to short-term economic fluctuations.

Third, the time horizon matters. In the short run, consumers may adjust savings rather than consumption in response to temporary income changes. Over longer periods, however, sustained shifts in income can lead to more substantial changes in consumption patterns. This distinction, emphasized in intertemporal consumption theory (Friedman, 1957), helps explain why short-term stability does not necessarily contradict the income-elastic nature of luxury goods.

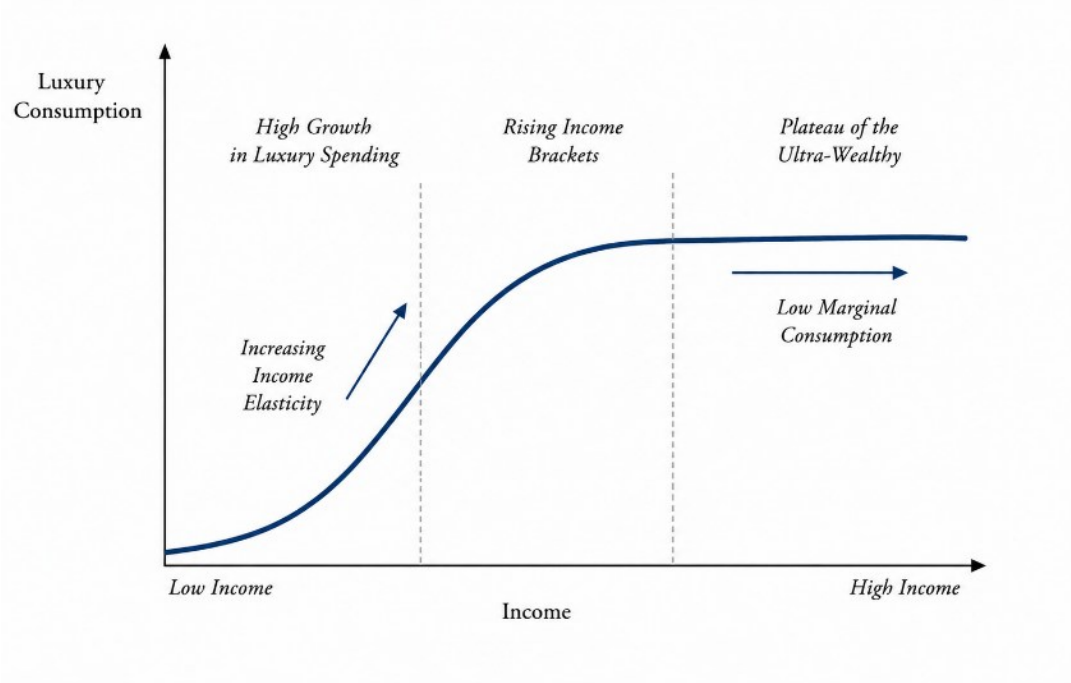
Taken together, these considerations highlight a key insight: income elasticity is a necessary but not sufficient condition for understanding the behavior of luxury demand at the aggregate level.

Engel Curves and Distributional Effects

A more refined understanding of luxury demand can be obtained by examining Engel curves, which describe the relationship between income and expenditure on a given good. In their simplest form, Engel curves assume a linear relationship, implying constant income elasticity across income levels. Under this assumption, luxury goods would exhibit a stable elasticity greater than one regardless of the consumer's position in the income distribution. However, empirical evidence suggests that this assumption is often unrealistic. Banks, Blundell, and Lewbel (1997), in *Quadratic Engel Curves and Consumer Demand*, show that quadratic Engel curves provide a more accurate representation of household expenditure

patterns. Income elasticities tend to vary systematically across income levels rather than remaining constant.

Figure 1.1. Stylized Engel Curve for Luxury Goods



Source: Author's elaboration based on Banks, Blundell and Lewbel (1997).

For luxury goods, this non-linearity is particularly important. At lower income levels, expenditure on luxury products may be negligible. As income rises beyond a certain threshold, consumption increases rapidly, generating high measured elasticities. At very high income levels, however, additional income may not translate into proportionally higher luxury consumption, leading to a flattening of the Engel curve. This implies that the aggregate behavior of luxury demand depends

on the distribution of consumers across income groups. When consumption is concentrated among very high-income individuals, demand may appear relatively stable. Conversely, a broader participation of middle-income consumers may increase the sensitivity of demand to macroeconomic fluctuations, a point that will be further discussed in the following sections. Distributional dynamics therefore play a crucial role. As income inequality increases, the purchasing power of high-income groups expands, supporting demand for luxury goods. At the same time, the expansion of aspirational consumers may increase the sensitivity of demand to economic conditions. Luxury demand thus reflects both structural strength and potential fragility: it is supported by concentrated wealth but increasingly influenced by income-sensitive segments.

1.2 Social and Behavioral Foundations of Luxury Demand

Intertemporal Consumption and Smoothing

Another important dimension of luxury demand concerns intertemporal decision-making. According to the Permanent Income Hypothesis developed by Friedman (1957) in *A Theory of the Consumption Function*, consumers base their spending not only on current income but on expectations about lifetime resources. As a result, they tend to smooth consumption over time, adjusting savings rather than expenditure in response to temporary income fluctuations. This interpretation is also consistent with Deaton's (1992) analysis of consumption smoothing in

Understanding Consumption. This framework helps explain the historical resilience of luxury markets. High-income individuals are better able to smooth consumption. Temporary shocks may lead to adjustments in savings or portfolio allocation rather than immediate reductions in luxury spending. However, this mechanism is conditional. The ability to smooth consumption depends on access to financial resources and credit markets. If a growing share of luxury demand originates from consumers with more limited financial buffers, such as upper-middle-income households, the effectiveness of consumption smoothing may decline. In this case, temporary income shocks — including inflation, employment uncertainty, or financial instability — may translate more directly into changes in consumption. As a result, the apparent stability of luxury demand may weaken as the composition of consumers evolves. Intertemporal consumption theory therefore suggests that the resilience of luxury markets is not inherent, but depends on the financial characteristics of the consumers driving demand.

Limits of the Elasticity-Based Definition

While income elasticity provides a useful starting point for identifying luxury goods, it does not fully capture the qualitative dimensions that distinguish them from other superior goods. Luxury products are characterized not only by high income responsiveness, but also by intangible attributes such as heritage, craftsmanship, exclusivity, and symbolic value. In *A New Approach to Consumer*

Theory, Lancaster (1966) argues that consumers derive utility not from goods themselves, but from the bundle of characteristics they embody. Luxury goods can therefore be understood as complex combinations of functional, aesthetic, and symbolic attributes that justify significant price premia. Consumers derive utility not from goods themselves, but from the bundle of characteristics they embody. Moreover, informational asymmetries further complicate the analysis. In his analysis of quality signaling, Stiglitz (1987) argues that prices can serve as signals of quality in markets where product attributes are not fully observable. In the luxury sector, high prices are not merely a reflection of production costs; they are part of the product's value, reinforcing perceptions of exclusivity and desirability. This implies that standard demand mechanisms may not apply in the usual way. Price reductions, which typically stimulate demand in conventional markets, may instead weaken the perceived value of luxury goods. Demand is therefore shaped not only by income, but also by signaling dynamics, brand reputation, and social meaning. These limitations highlight the need for a broader analytical framework that incorporates both economic and social dimensions of consumption.

Why Luxury Demand Has Traditionally Appeared Income-Insensitive

Although luxury goods are theoretically income-elastic, empirical evidence suggests that their aggregate demand has often appeared less volatile than expected. This apparent discrepancy highlights the importance of considering structural and

behavioral factors beyond standard income effects. This interpretation is consistent with the idea that luxury demand is shaped not only by income elasticity, but also by social and institutional mechanisms. The following sections examine these mechanisms in greater detail, focusing on consumption smoothing, status-driven behavior, signaling dynamics, inequality, and industrial structure.

1.3 Industrial Structure and Market Evolution

Conspicuous Consumption

The concept of conspicuous consumption, introduced by Thorstein Veblen (1899) in *The Theory of the Leisure Class*, provides a foundational explanation for the persistence of luxury demand. According to this perspective, individuals consume certain goods not only for their functional utility but also to signal wealth and social status. Luxury goods, in this sense, derive part of their value from their visibility and exclusivity. Consumption decisions are therefore influenced by social comparison. Individuals evaluate their position relative to others and adjust their behavior accordingly. Luxury goods function as markers of status, and their utility is partly relational, depending on how consumption is perceived within a given social context. This mechanism helps explain why luxury demand may remain stable even when income growth slows. Reducing visible consumption can signal a decline in social status, which may carry implicit social costs. As a result, individuals may maintain luxury expenditure even during periods of moderate

economic uncertainty. However, this stability is conditional. The ability to sustain status-driven consumption depends on available resources and expectations about future income. When economic conditions deteriorate significantly, even status-motivated consumption may decline, particularly among households with limited financial buffers.

Signaling and Status Competition

Building on Veblen's intuition, modern economic theory formalizes these insights through signaling and status-competition models. In their article *Veblen Effects in a Theory of Conspicuous Consumption*, Bagwell and Bernheim (1996) develop a framework in which luxury goods serve as signals of unobservable characteristics such as income or wealth. High prices act as a separating mechanism: only individuals with sufficient resources can sustain the cost of purchasing such goods, making the signal credible. In this context, price is not simply a market outcome but an integral component of the product's value. Reducing prices would weaken the signaling function, as lower-income consumers could mimic higher-income individuals. This helps explain why luxury firms avoid aggressive discounting, even during downturns. Similarly, models of status competition emphasize that individuals derive utility from their relative position within a social hierarchy. Consumption choices are influenced by positional concerns, leading to strategic behavior in which individuals adjust expenditure in response to others. Luxury

consumption thus becomes part of a competitive dynamic rather than a purely private decision. These mechanisms can stabilize demand in the short run, as individuals maintain consumption to preserve status. However, they also introduce potential volatility. When income constraints become binding, particularly for aspirational consumers, the same dynamics may amplify contractions during downturns.

Inequality and Relative Income

Income inequality plays a central role in shaping luxury demand. In *Capital in the Twenty-First Century*, Piketty (2014) documents that the concentration of income and wealth at the top of the distribution has increased significantly in many advanced economies. This trend has expanded the purchasing power of high-income households, supporting sustained demand for luxury goods. At the same time, relative income considerations influence behavior across broader segments of the population. In their article *Conspicuous Consumption and Race*, Charles, Hurst, and Roussanov (2009) show that visible consumption is strongly affected by social comparison within local reference groups. Households may increase expenditure on conspicuous goods to signal status or avoid downward comparison. This dual dynamic generates both expansion and fragility. While inequality supports demand by strengthening high-income consumption, it also encourages aspirational spending among more income-sensitive households. During economic expansions,

this can amplify growth. During downturns, however, these same households may reduce discretionary expenditure more sharply. Luxury demand is therefore shaped not only by absolute income levels but also by distributional structure and relative positioning within society.

Industrial Structure and Pricing Power

The industrial organization of the luxury sector further contributes to its distinctive demand dynamics. Luxury markets are characterized by strong brand differentiation, high entry barriers, and substantial investments in intangible assets such as brand equity, design, and communication. In *Sunk Costs and Market Structure*, Sutton (1991) argues that industries with high endogenous sunk costs tend to exhibit persistent concentration. Firms compete primarily through differentiation rather than price reductions. In the luxury sector, this takes the form of brand narratives, exclusive retail environments, and controlled distribution networks. Because competition is based on quality and symbolic value, price reductions can undermine brand positioning. This logic is consistent with Kapferer and Bastien's (2012) view in *The Luxury Strategy*, where exclusivity and controlled scarcity are presented as central elements of luxury brand management. Luxury firms therefore tend to maintain stable prices even during downturns, adjusting instead through quantities, product mix, or distribution strategies. This pricing rigidity contributes to the perception of demand stability. However, it may mask

underlying adjustments in sales volumes. When demand weakens, the absence of price flexibility can lead to sharper quantity fluctuations, suggesting that apparent resilience may partly reflect strategic pricing rather than true insulation from economic cycles.

Structural Evolution of the Global Luxury Market

While the mechanisms discussed above help explain the historical resilience of luxury demand, structural changes in the industry have progressively altered its foundations. This transformation is analyzed in the following sections. What was once a relatively small, elite-oriented market has evolved into a global industry characterized by multinational conglomerates, integrated supply chains, and diversified demand. This transformation is consistent with Kapferer and Bastien's (2012) analysis in *The Luxury Strategy*, which emphasizes the tension between global expansion and the preservation of exclusivity. The rise of emerging markets, particularly in Asia, has shifted the geographic center of consumption, while financial integration and corporate consolidation have transformed firm strategies. These changes have important implications for demand dynamics. As the composition of consumers shifts toward more income-sensitive segments, the effective income elasticity of luxury demand may increase. Understanding this transformation requires examining the evolution of the industry in greater detail.

From Elite Niche to Global Industry

Historically, luxury consumption was concentrated among a narrow elite, and production was limited in scale and rooted in artisanal traditions. Over time, however, the emergence of multinational conglomerates transformed the industry into a global system. Large groups such as LVMH, Kering, and Richemont consolidated numerous brands, introducing managerial coordination, financial discipline, and global expansion strategies. This process is consistent with the transformation of luxury into a globalized and financially organized industry described by Kapferer and Bastien (2012) in *The Luxury Strategy*. This process increased scale, standardized operations, and facilitated entry into new markets. The shift toward a global industry altered the economic logic of luxury. Growth, financial performance, and shareholder expectations became increasingly central, intensifying the tension between exclusivity and expansion. While scale enabled broader market reach, it also raised questions about the preservation of brand identity and long-term positioning.

Democratization and Aspirational Consumers

A key feature of this transformation has been the democratization of luxury. Firms introduced entry-level products — such as accessories, fragrances, and small leather goods — that maintained brand association while lowering the threshold of access. This strategy expanded the consumer base beyond traditional elites,

incorporating aspirational and upper-middle-income households. Kapferer and Bastien (2012), in *The Luxury Strategy*, identify this expansion toward aspirational consumers as one of the defining transformations of the modern luxury industry. While this supported revenue growth and global expansion, it also altered the composition of demand. Aspirational consumers are typically more sensitive to macroeconomic conditions, as their income depends more heavily on labor markets and credit availability. As a result, their consumption is more responsive to economic fluctuations. This shift introduces both opportunities and risks. While broader access increases market size, it may also increase aggregate demand volatility, particularly during periods of economic stress.

Financialization and Growth Imperatives

Another important transformation concerns the increasing financialization of the luxury sector. Many major brands are now part of publicly listed conglomerates, subject to shareholder expectations and financial market pressures. This has reinforced growth-oriented strategies, emphasizing revenue expansion, global presence, and continuous performance improvements. This tension between financial growth imperatives and the preservation of exclusivity is consistent with Kapferer and Bastien's (2012) analysis in *The Luxury Strategy*. While these strategies support scale and profitability, they may also lead to tensions with traditional principles of exclusivity and scarcity. As firms rely more on volume

growth and aspirational consumers, their exposure to macroeconomic fluctuations may increase. Financialization thus introduces an additional layer of cyclical sensitivity, linking product markets with financial dynamics.

Global Diversification and Emerging Markets

The globalization of luxury demand initially contributed to stability, as growth in emerging markets offset stagnation in mature economies. This pattern is consistent with the international expansion of luxury markets discussed by Kapferer and Bastien (2012) in *The Luxury Strategy*. However, it also introduced new vulnerabilities. Dependence on specific regions exposes firms to local economic conditions, policy changes, and exchange rate fluctuations. In many emerging markets, luxury consumption is driven by upper-middle-income households, whose purchasing power is closely tied to domestic economic performance. As a result, global diversification does not guarantee stability. In the presence of synchronized global downturns, demand may contract across multiple regions simultaneously, reducing the buffering effect of geographic expansion.

From Traditional Resilience to Emerging Fragility

The analysis developed in this chapter suggests that the historical resilience of luxury demand has been the result of specific structural conditions rather than an inherent property of luxury goods. Concentrated wealth, consumption smoothing, status-driven behavior, and strong market differentiation have supported relative

stability. However, structural transformations — including democratization, globalization, and financialization — have altered the composition of demand. As a growing share of consumption originates from income-sensitive consumers, the effective income elasticity of luxury demand may have increased. This shift raises the central hypothesis of this thesis: that luxury demand, while still income-elastic by definition, may be becoming more exposed to macroeconomic fluctuations due to changes in its underlying structure.

CHAPTER 2

Macroeconomic Determinants of Luxury Demand

2.1 Luxury Goods in Aggregate Demand Theory

The previous chapter demonstrated that the apparent resilience of luxury demand has historically depended on specific structural and behavioral mechanisms, including wealth concentration, status competition, industrial organization, and global diversification. However, assessing whether luxury markets are becoming more income-sensitive requires moving from qualitative structural analysis to a formal macroeconomic framework. Income elasticity, in aggregate terms, is not merely a microeconomic parameter derived from individual preferences. This perspective is consistent with heterogeneous-agent approaches to consumption, which emphasize that aggregate outcomes depend on the distribution of income, wealth, and liquidity constraints across households. Rather, it is an emergent

property of the interaction between income distribution, consumption smoothing behavior, industrial structure, and business cycle dynamics. As emphasized by Deaton (1992) in *Understanding Consumption* and by Carroll (2001) in his work on heterogeneous consumption behavior, aggregate consumption patterns depend critically on heterogeneity across households. When consumption is concentrated among wealthier agents with strong smoothing capacity, aggregate volatility may be dampened. Conversely, when demand originates from income-sensitive households, macroeconomic shocks may transmit more directly to sectoral expenditure. Luxury goods represent a particularly relevant case within this macroeconomic perspective. Their classification as income-elastic goods suggests strong cyclical responsiveness. Yet historical evidence has often indicated relative stability. Reconciling this apparent contradiction requires integrating insights from aggregate demand theory, income distribution dynamics, and business cycle analysis. This chapter develops a macroeconomic framework to analyze luxury demand within the broader context of income growth, income dispersion, and cyclical volatility. It first situates luxury goods within aggregate consumption theory. It then examines how changes in income distribution alter sectoral demand sensitivity. Finally, it formalizes the concept of “effective income elasticity” as a dynamic and structurally evolving parameter.

Luxury Goods and Aggregate Consumption Theory

In standard macroeconomic models, aggregate consumption is typically represented as a function of disposable income, wealth, and expectations about future income. The Permanent Income Hypothesis developed by Friedman (1957) in *A Theory of the Consumption Function* and the Life-Cycle Hypothesis proposed by Modigliani and Brumberg (1954) both emphasize forward-looking behavior. Within this framework, goods characterized by high income elasticity should display pronounced cyclical variability. When aggregate income increases, expenditure on superior goods rises more than proportionally; conversely, during downturns, consumption of such goods should contract disproportionately relative to overall income. From a purely theoretical standpoint, luxury goods — defined as goods with income elasticity greater than one — would therefore be expected to exhibit strong pro-cyclical behavior. In expansions, rising incomes and improving expectations should fuel accelerated growth in luxury expenditure. In recessions, declining income prospects and increased uncertainty should lead to amplified contraction. Under representative-agent assumptions, the relationship between income fluctuations and luxury consumption would be relatively straightforward and mechanically elastic. However, empirical observation has often revealed a more nuanced pattern. Luxury markets have at times displayed relative resilience during

moderate downturns, appearing less volatile than standard elasticity-based predictions would suggest. This apparent divergence between theoretical pro-cyclicality and observed stability indicates that aggregate outcomes cannot be fully understood within a homogeneous-agent framework. Similar arguments are developed by Deaton (1992) and Carroll (2001), who emphasize the importance of household heterogeneity in determining aggregate consumption dynamics. To reconcile theory and evidence, it is necessary to move beyond representative-agent models and incorporate heterogeneity across households, differences in wealth exposure, expectations, and financial constraints. The cyclical behavior of luxury demand may depend not only on its intrinsic income elasticity, but also on who consumes luxury goods, how their income is generated, and how they respond to risk and uncertainty. In this sense, aggregate luxury elasticity emerges from the interaction between heterogeneous consumers and evolving macroeconomic conditions rather than from a fixed structural parameter.

Permanent vs Transitory Income Shocks

According to the Permanent Income Hypothesis developed by Friedman (1957) in *A Theory of the Consumption Function* responds primarily to changes in permanent income rather than to temporary fluctuations in current earnings. Households form expectations about their lifetime resources and adjust consumption accordingly. If income shocks are perceived as transitory, rational consumers smooth consumption

by adjusting savings rather than reducing expenditure. This intertemporal smoothing mechanism implies that short-lived income downturns should not necessarily translate into proportional declines in discretionary consumption. In *The Analysis of Household Surveys*, Deaton (1997) further emphasizes that the ability to smooth consumption is not uniform across households. Wealthier individuals, with substantial asset holdings and better access to credit markets, are particularly capable of insulating their consumption from temporary shocks. Their expenditure decisions depend more on long-term wealth trajectories than on short-term income volatility. In this context, luxury demand may appear relatively stable when it is concentrated among high-wealth households. Temporary income declines — such as short-lived recessions or cyclical slowdowns — may lead these consumers to adjust savings portfolios or asset allocations rather than reduce visible luxury expenditure. The smoothing capacity associated with wealth buffers and financial flexibility can therefore dampen aggregate volatility in luxury markets. However, the distinction between temporary and permanent shocks is crucial. If income disruptions are perceived as persistent, structural, or accompanied by significant asset price declines, consumption adjustments become more pronounced. Expectations about the duration and depth of economic downturns shape discretionary behavior. Luxury demand is therefore sensitive not only to realized income changes, but also to forward-looking assessments of economic stability. This distinction becomes particularly relevant in the presence of structural change

in consumer composition. If luxury markets increasingly depend on households with limited wealth buffers, greater exposure to labor income risk, and more constrained access to credit, even transitory shocks may produce stronger consumption responses. For such households, the capacity to smooth expenditure is reduced, and precautionary motives may dominate more quickly. As a result, the aggregate stability historically associated with elite-based luxury consumption may weaken as participation broadens toward income-sensitive segments.

Heterogeneous Agents and Aggregate Elasticity

Representative-agent models obscure distributional dynamics. More formally, aggregate luxury consumption can be expressed as the weighted sum of group-specific consumption functions:

$$C_L = \sum_{i=1}^{n} w_i \cdot C_{L,i}(Y_i)$$

This formulation highlights a central insight of this thesis: aggregate elasticity is not fixed, but evolves with the distribution of consumption weights across income groups. If high-income households with low marginal propensities to adjust consumption dominate the market, aggregate volatility may be limited. Conversely, if upper-middle-income households with higher marginal propensities to consume

out of current income account for a growing share of demand, the aggregate elasticity may increase. In their heterogeneous-agent model of consumption responses to fiscal stimulus, Kaplan and Violante (2014) emphasize that marginal propensities to consume differ significantly across households depending on wealth, liquidity constraints, and income risk. Applying this intuition to luxury markets suggests that structural changes in the composition of consumers can modify sectoral responsiveness to macroeconomic shocks.

Precautionary Behavior and Asymmetric Cycles

In *A Theory of the Consumption Function, With and Without Liquidity Constraints*, Carroll (2001) highlights the central role of precautionary saving in the presence of income uncertainty. When households face elevated risk regarding future earnings, employment stability, or macroeconomic conditions, they tend to increase savings as a buffer against potential adverse shocks. This behavioral response implies that consumption adjustments may occur even before actual income declines materialize. Luxury goods, being non-essential and highly discretionary, are particularly sensitive to precautionary motives. Because their purchase can be postponed without affecting basic welfare, they often represent the primary margin of adjustment when uncertainty rises. Importantly, precautionary behavior does not operate uniformly across consumption categories. Essential goods display relatively low responsiveness to uncertainty, as their consumption is constrained by

necessity. Discretionary and semi-durable goods, by contrast, are far more elastic with respect to perceived risk. Luxury consumption thus becomes highly expectation-driven: changes in confidence, perceived job security, or anticipated asset returns may significantly affect demand independently of current income levels. Moreover, consumption responses may be asymmetric across the business cycle. Research on life-cycle consumption and household responses to income shocks, particularly Browning and Crossley (2001) and Parker (1999), suggests that contractions often generate sharper adjustments than expansions generate increases. Positive income shocks tend to produce gradual and sometimes incomplete increases in discretionary expenditure, particularly when households are uncertain about the permanence of the shock. Negative shocks, however, may trigger rapid and disproportionately strong reductions, as precautionary motives intensify and liquidity constraints become binding. This asymmetry is especially relevant in the context of luxury markets. If aspirational luxury consumption is partly driven by expectations of upward mobility and social signaling, negative income shocks may undermine not only purchasing power but also the symbolic incentives to consume. During expansions, rising income and optimism may fuel rapid growth in luxury expenditure, supported by improving expectations and easier credit conditions. During downturns, however, precautionary behavior, tightening financial constraints, and deteriorating expectations may interact to produce abrupt contractions. The degree of asymmetry therefore depends on consumer

composition. When luxury demand is anchored primarily in ultra-wealthy households with substantial financial buffers, precautionary responses may be limited. But as participation broadens toward upper-middle-income consumers whose budgets are more sensitive to labor income volatility and credit conditions, cyclical contractions may become sharper and more synchronized with macroeconomic downturns. In this sense, precautionary saving and asymmetric adjustment mechanisms reinforce the central hypothesis of this thesis: structural transformations in the composition of luxury demand may have increased the sector's exposure to cyclical amplification, particularly during adverse macroeconomic regimes.

Dynamic Effective Income Elasticity

Taken together, these mechanisms suggest that the effective income elasticity of luxury demand should not be interpreted as a fixed structural coefficient attached to a category of goods. Rather, it emerges as a dynamic macroeconomic parameter shaped by multiple interacting forces:

- Income distribution and the evolution of top income shares
- Wealth concentration and asset price dynamics
- Consumer heterogeneity across income groups
- Expectations, uncertainty, and precautionary behavior

- Financial constraints and credit conditions

Elasticity is therefore not a structural constant but an aggregate outcome evolving over time. It reflects the weighted interaction between heterogeneous households whose consumption decisions respond differently to income and wealth fluctuations. In formal terms, changes in the distribution of income and wealth alter the weights w_i(t), which in turn modify the aggregate elasticity $\varepsilon_L^{agg}(t)$. Structural transformations in the luxury industry — including democratization of access, financialization of firms, and globalization of demand — may further amplify this process. As the composition of consumers broadens beyond ultra-high-net-worth individuals toward upper-middle-income and aspirational segments, the relative contribution of income-sensitive households increases. Even if group-specific elasticities remain unchanged, shifts in consumer weights alone can generate a rise in aggregate responsiveness. This dynamic perspective reframes the central question of the thesis. The issue is not whether luxury goods are income-elastic in theory — they are — but whether the effective aggregate elasticity of contemporary luxury markets has increased due to structural transformation. If the weight of upper-middle-income consumers has risen over the past decades, and if these households exhibit stronger cyclical responsiveness due to labor income exposure, financial constraints, and precautionary motives, then aggregate luxury demand may display rising income sensitivity. In that case, what once appeared as structural

resilience may in fact have been conditional upon a specific historical distributional configuration. This hypothesis provides the conceptual foundation for the empirical investigation that follows. The next chapter therefore tests whether luxury demand exhibits evidence of time-varying or regime-dependent income elasticity, and whether structural shifts in consumer composition have altered the cyclical profile of the sector.

2.2 Income Distribution and Luxury Demand

Income Distribution and Aggregate Demand Dynamics

Understanding the cyclical behavior of luxury demand requires moving beyond aggregate income growth and examining the distributional structure of the economy. Traditional macroeconomic analyses often focus on average income dynamics, implicitly assuming that aggregate consumption responds proportionally to changes in total disposable income. Such representative-agent frameworks treat households as homogeneous units, thereby abstracting from differences in income sources, wealth holdings, risk exposure, and credit access. As emphasized by Deaton (1992) in *Understanding Consumption* and by Carroll (2001) in his analysis of heterogeneous consumption behavior, aggregate outcomes may differ substantially from the behavior of a representative household. While analytically convenient, this approach obscures the heterogeneity that characterizes real-world consumption behavior. Income elasticity at the sectoral level does not depend solely

on average income growth, but on how income and wealth are distributed across households and on which income groups drive expenditure. When income gains are concentrated among households with high propensities to consume luxury goods, sectoral demand may expand disproportionately relative to aggregate income growth. Conversely, when income fluctuations primarily affect households with limited participation in luxury markets, aggregate luxury demand may remain relatively stable, even in the presence of macroeconomic volatility. Crucially, income dispersion influences not only the level of demand but also its transmission mechanism. If luxury consumption is anchored in a narrow segment of high-wealth households with strong consumption-smoothing capacity, cyclical income shocks may have muted effects. If, however, participation broadens toward income-sensitive households, shocks to labor income, credit conditions, or expectations may propagate more directly to sectoral demand. As a result, changes in income dispersion can alter not only the size but also the composition and volatility of aggregate demand. Distributional dynamics shape both the relative weight of different consumer segments and their marginal responses to macroeconomic shocks. The effective income elasticity of luxury demand should therefore be understood as an emergent macroeconomic outcome — the product of heterogeneous household behavior interacting with evolving income and wealth structures — rather than as a fixed structural parameter. This distributional perspective is essential for assessing whether structural transformations in income

and wealth dispersion have modified the cyclical properties of contemporary luxury markets. If the composition of income shifts toward groups with higher or more volatile luxury expenditure, the aggregate responsiveness of the sector may evolve accordingly. Understanding this mechanism is central to evaluating whether luxury demand is transitioning from historical resilience toward greater cyclical sensitivity.

Income Concentration and Structural Demand Expansion

Over the past four decades, advanced economies have experienced a marked increase in income concentration at the top of the distribution. In *Capital in the Twenty-First Century*, Piketty (2014) documents the long-term rise in top income shares and wealth accumulation among high-net-worth individuals, particularly in the United States and several European countries. This structural transformation reflects changes in capital returns, labor market dynamics, and financial globalization, leading to a growing share of aggregate resources accruing to a relatively small segment of the population. From a macroeconomic perspective, this redistribution has important sectoral implications. Luxury goods, by definition, exhibit income elasticity greater than one. Consequently, when a disproportionate share of income accrues to households located at the upper tail of the distribution, aggregate demand for high-end goods may expand even in the absence of strong median income growth. In such contexts, sectoral growth is driven not by broad-based improvements in purchasing power, but by intensified concentration of

wealth and income among consumers with a high propensity to purchase premium goods. Redistribution toward top earners therefore acts as a structural demand amplifier for luxury industries. Unlike sectors dependent on mass consumption, luxury markets may benefit directly from rising inequality, since marginal increases in income at the top translate into disproportionately large increases in expenditure on high-end products. This mechanism helps explain the sustained expansion of global luxury markets during periods characterized by increasing income concentration and capital income growth. However, the implications of income concentration extend beyond demand expansion; they also affect demand stability. If luxury consumption remains predominantly anchored among ultra-high-net-worth individuals with diversified asset portfolios and strong consumption-smoothing capacity, aggregate volatility may remain limited. Wealthy households are typically less constrained by short-term labor income fluctuations and can absorb temporary shocks through portfolio adjustments or savings. Yet this stabilizing effect is conditional. Income concentration at the top may reinforce structural demand only if luxury consumption remains concentrated within that group. If democratization processes simultaneously broaden the consumer base toward upper-middle-income households, the volatility-reducing effect of top-income concentration may weaken. In such a scenario, inequality may increase the size of the market while altering its cyclical sensitivity. Thus, income concentration plays a dual role: it supports structural expansion of luxury demand, but its

stabilizing properties depend critically on the composition of consumers and their relative exposure to macroeconomic risk. Understanding this interaction between inequality, wealth concentration, and demand composition is central to evaluating whether luxury markets are transitioning from structural resilience toward greater cyclical responsiveness.

Consumption Inequality and Expenditure Patterns

While income inequality has increased substantially over recent decades, the relationship between income dispersion and consumption patterns is neither mechanical nor uniform across sectors. In their article *Has Consumption Inequality Mirrored Income Inequality?*, Aguiar and Bils (2015) provide detailed empirical evidence showing that consumption inequality closely tracks income inequality over time, particularly when measured using comprehensive expenditure data. Their findings indicate that higher-income households not only consume more in absolute terms, but also allocate a larger share of their budgets to goods characterized by high income elasticity. Importantly, their analysis highlights that expenditure patterns differ systematically across income groups. Lower-income households allocate a larger fraction of spending to necessities, such as housing, food, and basic services, whereas higher-income households devote a disproportionately greater share to discretionary and status-related categories. Luxury goods fall squarely within this latter group. This heterogeneity in

expenditure composition has direct macroeconomic implications. Aggregate demand is not simply the sum of individual consumption levels; it reflects the weighted contribution of distinct income groups with different spending structures. If luxury goods account for a significantly larger share of total expenditure among upper-income households, then changes in income shares will mechanically affect the aggregate weight of luxury consumption within total demand. Aggregate luxury consumption can be represented as a weighted combination of consumption across income groups, where both group-specific behavior and their relative weights determine overall demand dynamics.

This representation emphasizes that aggregate dynamics depend on two dimensions:

1. Group-specific consumption responses to income changes
2. The evolution of consumption weights over time

As income dispersion evolves, the relative weight of different income groups in total consumption may shift. If the share of high-income households increases, and if these households allocate a larger portion of their spending to luxury goods, aggregate luxury demand may expand even without broad-based income growth. However, the implications extend beyond levels to volatility. The cyclical properties of aggregate luxury demand depend not only on the individual income elasticities across income groups, but also on how consumption weights respond to

macroeconomic shocks. If luxury demand is dominated by households with strong consumption-smoothing capacity, volatility may remain limited. Conversely, if a growing share of consumption originates from households whose spending is more tightly linked to current income or credit conditions, aggregate luxury demand may become more responsive to cyclical fluctuations. Thus, changes in inequality influence both the size and the cyclical sensitivity of luxury markets. Rising inequality may initially support structural expansion through increased purchasing power at the top. Yet, when combined with democratization processes that broaden the consumer base, it may simultaneously alter the composition of demand in ways that increase aggregate volatility. From this perspective, consumption inequality is not merely a distributional outcome; it is a structural determinant of sectoral demand dynamics. Understanding how expenditure patterns differ across income groups is therefore essential for evaluating whether luxury demand is transitioning from historically stable elite-based consumption toward a more income-sensitive and potentially volatile configuration.

2.3 Wealth, Financial Markets, and Transmission Channels

Wealth Inequality and Asset Price Channels

Income inequality represents only one dimension of distributional dynamics. Wealth concentration plays an equally — and in many cases more — significant role in shaping luxury demand. This perspective is consistent with the literature on

wealth effects, particularly Case, Quigley, and Shiller's (2005) article *Comparing Wealth Effects: The Stock Market versus the Housing Market*, which shows that changes in asset values can influence household consumption. While income determines short-term purchasing power, wealth determines long-term consumption capacity, access to financial markets, and the ability to smooth expenditure over time. Luxury markets, particularly at the high end, are deeply intertwined with wealth dynamics rather than with labor income alone. High-net-worth households derive a substantial portion of their resources from capital income, including dividends, capital gains, business ownership returns, and real estate appreciation. In *Capital in the Twenty-First Century*, Piketty (2014) documents how wealth accumulation at the top of the distribution has accelerated in recent decades, reinforcing the structural concentration of financial assets. Because luxury consumption is strongly associated with high-wealth individuals, fluctuations in asset values can directly influence demand for high-end goods. This introduces a distinct transmission channel: the asset price effect. In their article *Comparing Wealth Effects: The Stock Market versus the Housing Market*, Case, Quigley, and Shiller (2005) show that increases in housing and equity prices tend to stimulate household expenditure, particularly among asset-holding households that increases in housing and equity prices tend to stimulate household expenditure, particularly among asset-holding households. Conversely, asset price declines can reduce consumption through negative wealth effects. For consumers with

substantial exposure to financial markets, changes in portfolio valuation may influence discretionary spending decisions even in the absence of labor income shocks. In the context of luxury markets, wealth effects may be particularly pronounced. Luxury goods are often purchased by individuals whose consumption decisions are influenced by fluctuations in equity markets, private business valuations, or real estate prices. When asset markets expand, capital gains may translate into higher spending on high-end goods, reinforcing pro-cyclical dynamics. During asset price corrections or financial crises, the contraction of wealth may generate sharp reductions in discretionary expenditure. Importantly, wealth inequality interacts with income composition. If luxury demand is concentrated among ultra-high-net-worth individuals with diversified portfolios, volatility may be partially dampened by asset reallocation and long-term capital buffers. However, if democratization extends luxury consumption toward households whose wealth is less diversified and more sensitive to specific asset classes — such as housing — volatility may increase. Real estate downturns, for example, may disproportionately affect upper-middle-income households whose net worth is concentrated in property rather than diversified financial assets. Moreover, financialization of the global economy has strengthened the link between asset markets and consumption behavior. As luxury brands expand in global financial centers and rely increasingly on investor confidence and capital market performance, asset cycles may synchronize luxury demand across regions. The

luxury sector may therefore become more exposed not only to income cycles but also to financial cycles. Luxury demand can be understood as a function of both income and wealth, reflecting the combined influence of labor income, asset values, and expectations about future economic conditions.

$$C_L = f(Y, W, \mathbb{E}[Y], \mathbb{E}[W])$$

where income, wealth, and expectations jointly determine consumption decisions.

This formulation highlights that effective income elasticity cannot be analyzed independently of wealth dynamics. If wealth volatility increases — due to financial market fluctuations or real estate cycles — the responsiveness of luxury demand may also increase, even if income inequality remains stable. Thus, wealth concentration plays a dual role. It supports structural expansion of luxury demand through asset accumulation at the top, but it also exposes the sector to asset price cycles. Understanding the interaction between wealth inequality and financial volatility is therefore essential for assessing the evolving macroeconomic sensitivity of contemporary luxury markets.

Distributional Transmission Mechanism and Dynamic Effective Elasticity

The preceding analysis suggests that income distribution, wealth concentration, and heterogeneous consumption patterns jointly determine the macroeconomic

behavior of luxury demand. Rather than treating income elasticity as a fixed structural parameter, it is more appropriate to conceptualize it as the outcome of a distributional transmission mechanism.

This mechanism operates through three interconnected channels:

1. Income Concentration Channel

   Changes in the distribution of income alter the relative purchasing power of different income groups. When top income shares rise, the structural size of the luxury market may expand due to the higher propensity of affluent households to consume high-end goods.

2. Wealth and Asset Price Channel

   Fluctuations in asset values affect discretionary consumption through wealth effects. In highly financialized economies, asset price cycles can reinforce or amplify income-driven fluctuations, particularly among asset-rich consumers.

3. Composition and Heterogeneity Channel

   The volatility of aggregate demand depends on the relative weight of income groups with different marginal propensities to consume and varying exposure to macroeconomic risk. As the composition of consumers shifts toward income-sensitive segments, sectoral responsiveness to shocks may increase.

Formally, aggregate luxury consumption can be represented as:

$$C_L(t) = \sum_i w_i\,(t) \cdot C_{L,i}(Y_i(t), W_i(t), \Omega_t)$$

where:

- $w_i(t)$denotes the time-varying consumption weight of income group i,
- $Y_i(t)$represents income,
- $W_i(t)$represents wealth,
- $\Omega_t$captures macroeconomic conditions (uncertainty, credit constraints, expectations).

The effective aggregate income elasticity can therefore be expressed as:

$$\varepsilon_L^{eff}(t) = \sum_i w_i\,(t) \cdot \varepsilon_{L,i} + \frac{\partial w_i(t)}{\partial Y_t}$$

This formulation emphasizes two critical insights:

- Elasticity depends on group-specific responsiveness
- Elasticity evolves as the weights $w_i(t)$change over time

In other words, aggregate income sensitivity is dynamic and distribution-dependent. Structural transformations — such as democratization of luxury consumption, financialization, and rising participation of upper-middle-income households — modify the composition of demand and therefore the cyclical properties of the sector.

This dynamic perspective resolves the apparent contradiction identified in Chapter 1. Luxury goods may remain income-elastic in theory, yet exhibit varying degrees of cyclical responsiveness depending on who consumes them and how their income and wealth evolve over time. The distributional transmission mechanism thus provides the theoretical bridge between structural market transformation and empirical volatility. It implies that the historical resilience of luxury demand was contingent upon a specific distributional configuration — one characterized by concentrated wealth and strong consumption-smoothing capacity. As that configuration changes, effective elasticity may increase. The following section extends this framework by integrating business cycle theory and examining whether luxury goods exhibit asymmetric or amplified responses during macroeconomic downturns.

2.4 Business Cycles and Conditional Fragility

Business Cycles, Discretionary Consumption, and Asymmetric Volatility

The previous section highlighted the role of income distribution in shaping aggregate demand. This section extends the analysis by explicitly incorporating business cycle dynamics and examining how luxury consumption behaves across different macroeconomic regimes. In macroeconomic theory, consumption categories are often distinguished according to necessity, durability, and substitutability. Essential goods — such as food, utilities, and basic housing services — exhibit relatively low income elasticity and limited short-term responsiveness to economic shocks. Their consumption is constrained by subsistence needs and cannot be substantially postponed without affecting basic living standards. Discretionary goods, by contrast, are characterized by higher income elasticity and greater intertemporal flexibility. Browning and Crossley (2001) show that households facing adverse income shocks tend to adjust consumption primarily through reductions in discretionary expenditure rather than through cuts in essential goods. This pattern reflects the role of discretionary spending as a margin of adjustment in response to uncertainty and income volatility. Luxury goods fall squarely within this discretionary category. Their purchase is not required for subsistence; rather, it reflects surplus purchasing power, social signaling motives, and confidence in future economic conditions. Because luxury

consumption is often postponable, households may delay or scale back high-end purchases during periods of economic stress without compromising basic welfare. In addition, many luxury goods possess characteristics of durable or semi-durable consumption. High-end fashion items, leather goods, jewelry, and accessories are not consumed immediately but provide utility over extended periods. As a result, their demand is subject to intertemporal substitution effects. When households anticipate income uncertainty or deteriorating economic conditions, they may defer purchases to future periods, amplifying cyclical contraction. Conversely, in expansionary environments characterized by rising confidence and asset appreciation, consumers may accelerate discretionary purchases. This postponability introduces an important amplification mechanism. Because luxury goods can be deferred without immediate welfare loss, they become highly sensitive to expectations. Changes in consumer confidence, perceived job security, or asset valuations may influence luxury demand even before measurable income changes occur. However, the magnitude of this cyclical responsiveness depends critically on the composition of consumers. If luxury consumption is dominated by ultra-high-net-worth households with diversified wealth portfolios and strong consumption-smoothing capacity, discretionary adjustment may be limited. For these households, temporary income or asset fluctuations may not significantly alter high-end spending patterns. In contrast, if demand originates increasingly from upper-middle-income or aspirational segments whose consumption is more closely

tied to labor income, credit access, and expectations about future stability, cyclical contractions may be more pronounced. For such households, discretionary expenditure represents a flexible but vulnerable component of the budget. During downturns, it becomes the primary margin of adjustment. Thus, the discretionary nature of luxury goods does not necessarily imply extreme volatility, but rather reflects the interaction between consumer heterogeneity and macroeconomic conditions.

Asymmetric Responses Over the Business Cycle

Consumption responses are not necessarily symmetric across expansions and recessions. Traditional linear models often assume that positive and negative income shocks produce proportional adjustments in consumption. However, empirical evidence suggests that discretionary expenditure categories frequently exhibit asymmetric dynamics. Parker (1999) highlights that positive income shocks tend to generate gradual and often partial increases in consumption, particularly when households perceive such shocks as temporary. In contrast, negative income shocks may produce sharper and more immediate contractions, especially in categories characterized by postponability and discretionary content. This asymmetry reflects both behavioral and structural mechanisms embedded in household decision-making. A central explanation lies in precautionary behavior. Carroll (2001) emphasizes that when households face heightened income risk or

increased uncertainty about future earnings, precautionary saving motives intensify. Under such conditions, consumers reduce non-essential expenditure in order to build buffers against potential adverse outcomes. Because luxury goods are discretionary and postponable, they represent a natural margin of adjustment. Importantly, asymmetry may emerge even before actual income declines materialize. Expectations and forward-looking behavior play a crucial role. If households anticipate worsening labor market conditions, declining asset prices, or tightening credit availability, they may reduce luxury expenditure preemptively. In this sense, luxury demand may be sensitive not only to realized income shocks but also to anticipated macroeconomic deterioration. Moreover, luxury goods often involve elements of irreversibility or commitment. High-end purchases may entail substantial outlays and signal long-term economic confidence. During downturns, households may avoid making such visible commitments, preferring liquidity and financial flexibility. This behavioral response reinforces the contractionary phase.

Luxury markets may therefore display asymmetric cyclical behavior:

- During expansions: increases in income and asset values gradually translate into higher luxury spending, supported by improving confidence and rising expectations.

- During downturns: heightened uncertainty, precautionary saving, and credit constraints may generate disproportionately sharp reductions in discretionary purchases.

The degree of asymmetry depends critically on consumer composition. If luxury consumption is dominated by ultra-wealthy households with diversified wealth portfolios and strong liquidity buffers, contractionary responses may be muted. For such consumers, temporary macroeconomic fluctuations may not significantly alter high-end consumption patterns. However, if the consumer base includes a substantial share of upper-middle-income households with limited financial buffers and greater exposure to labor income risk, asymmetric dynamics may be amplified. Declines in employment expectations, asset values, or credit availability can rapidly translate into reduced discretionary spending. Because aspirational consumption is often linked to perceived upward mobility, negative shocks may not only reduce purchasing power but also weaken the symbolic incentives to engage in status-driven expenditure. From a formal perspective, this asymmetry implies that the effective income elasticity of luxury demand may differ across phases of the business cycle:

$$\varepsilon_L^{expansion} \neq \varepsilon_L^{recession}$$

In particular, elasticity during downturns may exceed elasticity during expansions if precautionary motives and financial constraints become binding.

This asymmetric framework reinforces the central hypothesis of the thesis. Even if luxury goods are theoretically income-elastic under normal conditions, structural changes in the composition of consumers may increase the likelihood of amplified responses during adverse macroeconomic regimes. Luxury markets may thus transition from apparent stability in expansions to pronounced sensitivity in recessions, reflecting a shift from structural resilience toward conditional fragility.

Financial Cycles and Amplification Mechanisms

Business cycles in modern economies are increasingly intertwined with financial cycles. Periods of economic expansion are often accompanied by credit growth, rising asset prices, and wealth accumulation, which reinforce consumption through balance sheet effects. Conversely, financial tightening, asset price corrections, and credit contractions frequently amplify downturns. The interaction between real economic activity and financial conditions plays a central role in shaping aggregate demand dynamics. Luxury consumption is particularly sensitive to financial conditions for structural reasons. First, high-net-worth individuals — who represent a significant segment of the luxury market — are deeply exposed to capital market fluctuations. A substantial portion of their resources derives from equity markets, private business ownership, real estate holdings, and other financial assets. When

asset prices rise, capital gains increase perceived and realized wealth, stimulating discretionary expenditure. Conversely, declines in equity or real estate markets may reduce consumption through negative wealth effects. Empirical research on wealth effects (Case, Quigley, and Shiller, 2005) demonstrates that changes in asset values significantly influence household expenditure, particularly among asset-owning households. In the context of luxury markets, these wealth effects may be amplified because high-end consumption is strongly correlated with financial prosperity and asset appreciation. Second, aspirational or upper-middle-income consumers may rely more heavily on credit access to finance discretionary purchases. Luxury consumption among these segments may depend not only on current income but also on borrowing conditions, consumer credit availability, and expectations about future earnings. During periods of credit expansion, easier financing conditions can support growth in discretionary spending. When credit markets tighten — as observed during financial crises — liquidity constraints may bind more strongly, leading to abrupt reductions in luxury expenditure. The coexistence of these two channels — wealth exposure among elites and credit dependence among aspirational consumers — creates a powerful amplification mechanism. When financial conditions deteriorate, both high-end and aspirational demand segments may contract simultaneously. Asset price declines reduce perceived wealth at the top, while credit tightening constrains middle-income households. The combined effect may produce sharper contractions in luxury demand than would be predicted

by income dynamics alone. Moreover, globalization has increased the synchronization of financial cycles across regions. Luxury markets are highly international, with demand originating from multiple financial centers. Global asset price corrections or systemic financial shocks may therefore transmit rapidly across geographic markets, reducing the stabilizing benefits of diversification. Financial volatility may thus translate into sector-wide demand volatility. This interaction implies that the cyclical sensitivity of luxury markets cannot be evaluated solely through income measures. Financial variables — including asset price indices, credit spreads, consumer credit growth, and financial market volatility — may exert independent and significant effects on luxury consumption.

Formally, luxury demand can be expressed as a function not only of income and wealth, but also of financial conditions:

$$C_L(t) = f(Y_t, W_t, Credit_t, AssetPrices_t, Uncertainty_t)$$

This extended formulation underscores that effective income elasticity may be conditional on financial regimes. In financially stable environments, income changes may dominate. In financially stressed regimes, wealth losses and credit constraints may amplify cyclical responses. Thus, financial cycles introduce an additional layer of conditional fragility. Even if income growth remains relatively stable, financial market turbulence may generate volatility in luxury demand. As

luxury markets become increasingly globalized and financially integrated, their exposure to financial amplification mechanisms may intensify.

State-Dependent Elasticity and Conditional Fragility

Integrating distributional and cyclical perspectives leads to the concept of state-dependent elasticity. The responsiveness of luxury demand to income changes cannot be assumed to be constant across time or macroeconomic environments. Instead, effective income elasticity may vary depending on the prevailing economic regime, financial conditions, and expectations about future stability. In stable growth environments characterized by rising asset prices, low unemployment, expanding credit, and strong consumer confidence, effective income elasticity may appear moderate. Under such conditions, even income-sensitive consumers may feel sufficiently secure to maintain discretionary expenditure. Asset appreciation reinforces perceived wealth, precautionary saving motives remain subdued, and credit constraints are relaxed. Luxury demand may therefore exhibit steady, confidence-driven expansion without extreme volatility. In contrast, recessionary or high-uncertainty environments may generate a qualitatively different response. Heightened income risk, declining asset prices, tightening credit conditions, and deteriorating expectations can simultaneously influence discretionary spending decisions. Precautionary behavior intensifies, liquidity constraints become binding, and postponable purchases are deferred. In such regimes, the same sector that

appeared relatively insulated during expansions may exhibit amplified responsiveness to income shocks. This regime-dependent behavior implies that elasticity is not merely a parameter attached to a good, but a conditional outcome shaped by macroeconomic states. Formally, effective elasticity can be expressed as:

$$\varepsilon_L^{eff}(t) = \varepsilon_L(Y_t \mid S_t)$$

where $S_t$denotes the prevailing macroeconomic regime, incorporating uncertainty, financial stress, and credit conditions. Structural transformations in consumer composition may increase the probability of high-elasticity regimes. As the share of upper-middle-income households in luxury markets grows, aggregate demand becomes more exposed to labor income volatility, credit constraints, and confidence shocks. These consumers are more likely to adjust discretionary expenditure when macroeconomic conditions deteriorate, thereby amplifying downturn responses. Importantly, state dependence also implies asymmetry over time. Luxury markets may display apparent stability during prolonged expansions, reinforcing the perception of structural resilience. However, when adverse shocks occur, the interaction between precautionary motives, wealth effects, and consumer heterogeneity may generate disproportionately strong contractions. Historical resilience does not guarantee structural immunity; it may simply reflect the macroeconomic regimes experienced during previous periods. Thus, luxury

markets may transition from apparent insulation to conditional fragility: resilient during stable expansions, but increasingly responsive — and potentially volatile — during downturns and financial stress episodes. This transformation is not driven by changes in the intrinsic nature of luxury goods, but by evolving distributional structures and macroeconomic environments. The concept of state-dependent elasticity therefore provides the final theoretical link between structural transformation and empirical volatility. It implies that testing whether luxury demand has become more income-sensitive requires examining not only average elasticity over time, but also how responsiveness varies across macroeconomic regimes.

2.5 Implications for Empirical Analysis

The theoretical framework developed in this chapter yields a set of concrete and testable implications regarding the evolving macroeconomic behavior of luxury demand. By integrating distributional dynamics, wealth concentration, financial cycles, and regime-dependent elasticity, the analysis moves beyond static definitions of income elasticity and instead conceptualizes responsiveness as a dynamic and structurally contingent parameter. First, if the composition of consumers has shifted over time toward upper-middle-income and aspirational segments, the aggregate income elasticity of luxury demand should not remain constant. Instead, elasticity should evolve alongside changes in income distribution

and consumer participation. This implies that empirical analysis should allow for time variation, structural breaks, or regime shifts in estimated elasticity parameters. Second, the presence of precautionary behavior and state-dependent responses suggests that luxury consumption may exhibit asymmetric sensitivity across business cycle phases. In particular, responsiveness to negative income shocks may exceed responsiveness to positive shocks. Empirical models should therefore test for nonlinearities or differential effects between expansionary and recessionary periods. Third, financial variables are likely to play an independent role in shaping luxury demand. Asset price movements, credit conditions, and measures of financial stress may exert significant influence beyond income measures alone. Empirical specifications should therefore incorporate financial indicators to capture wealth effects and credit channels, especially given the high exposure of luxury consumers to financial market dynamics. Fourth, countries with strong sectoral specialization in luxury production — such as Italy — may exhibit heightened macroeconomic exposure if global effective income elasticity increases. This implies that export performance and domestic output in luxury-related industries may become more sensitive to global income and financial fluctuations. The empirical analysis should therefore consider both global demand indicators and country-level exposure. More broadly, the framework suggests that the question is not simply whether luxury goods are income-elastic in theory, but whether their

effective aggregate elasticity has increased over time and across regimes. Testing this hypothesis requires examining:

- Time-varying elasticity estimates
- Regime-dependent or asymmetric responses
- The role of income distribution and financial conditions
- Sectoral sensitivity to global shocks

These implications provide the foundation for the empirical strategy developed in the next chapter. The analysis will assess whether luxury markets are indeed becoming more responsive to income and financial fluctuations, and whether structural transformations in consumer composition have altered the cyclical profile of the sector.

CHAPTER 3

Empirical evidence on Luxury demand

3.1 Data Description

The empirical analysis is based on annual data covering the period 1995–2023. The dataset combines information on the global luxury market with macroeconomic, financial, and distributional variables. The objective is to examine whether luxury demand is associated with aggregate economic conditions, financial market dynamics, and income concentration.

The dependent variable is global luxury market revenues. These data are taken from Bain & Company's Luxury Goods Worldwide Market Study, published in collaboration with Fondazione Altagamma (https://www.bain.com/insights/topics/luxury-goods-worldwide-market-study/). The series measures the evolution of the global personal luxury goods market and is expressed in billions of euros. This variable is used as a proxy for aggregate luxury demand, since it captures the size and evolution of the market over time.

The first macroeconomic variable is world GDP, obtained from the World Bank World Development Indicators, using the series "GDP, current US$" (https://data.worldbank.org/indicator/NY.GDP.MKTP.CD). World GDP captures the overall expansion of the global economy and provides a measure of the aggregate income environment within which luxury demand evolves. Since luxury goods are generally classified as superior goods, world GDP is expected to be positively associated with luxury revenues.

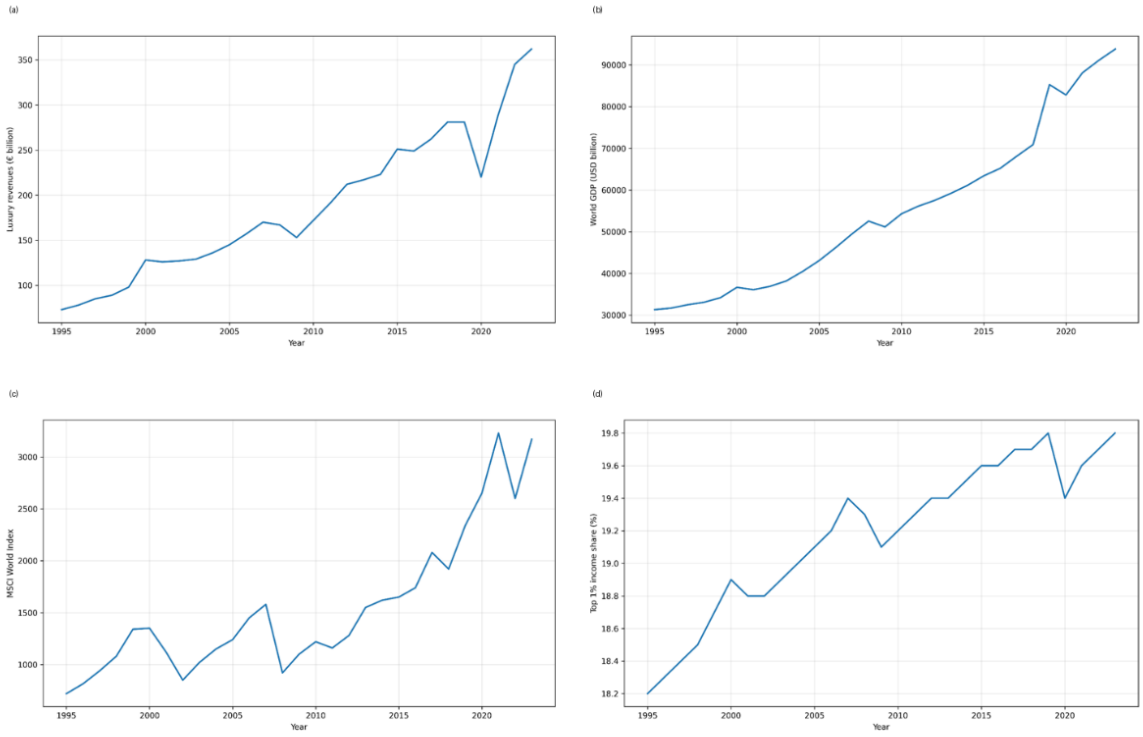
The second variable is the MSCI World Index, taken from MSCI data (https://www.msci.com/indexes/index/990100). The MSCI World Index captures the performance of large- and mid-cap companies across developed markets and is used as a proxy for global financial market conditions. This variable is included because luxury consumption may be influenced not only by current income, but also by wealth effects, asset prices, and financial confidence. In addition to the

contemporaneous MSCI World Index, a lagged specification is also considered in the robustness analysis, in order to examine whether financial market effects may influence luxury demand with some delay.

The third variable is the top 1% income share, obtained from the World Inequality Database (https://wid.world/world/). This variable measures the share of national income accruing to the richest 1% of the population and is used to capture income concentration. Its inclusion is particularly relevant for the analysis of luxury demand, since luxury consumption is strongly concentrated among high-income consumers. An increase in the income share of top earners may therefore support luxury revenues even when average income growth is more moderate.

Finally, a recession dummy is constructed by the author to capture the main crisis episodes in the sample. The dummy takes the value of 1 in 2009 and 2020, corresponding respectively to the global financial crisis and the COVID-19 shock, and 0 otherwise. The dummy is not represented graphically because it is a binary variable and is used only in the econometric specification to isolate the effect of major recessionary episodes.

Figure 3.1. Main Variables Used in the Empirical Analysis: (a) Global Luxury Market Revenues, (b) World GDP, (c) MSCI World Index, and (d) Top 1% Income Share.



Source: Author's elaboration based on Bain & Company, World Bank, MSCI, and WID data.

The historical evolution of the main variables is shown in Figure 3.1, while the next section presents the correlation analysis to examine the relationships among the variables more formally. The four panels show global luxury market revenues, world GDP, the MSCI World Index, and the top 1% income share. Presenting the variables together allows the long-term evolution of the series to be compared more clearly, while keeping the descriptive part of the chapter compact.

The empirical analysis uses the variables in nominal terms. They are not transformed into real terms because inflation is relatively low and stable over most of the period considered and should not substantially alter the relationships examined in the analysis. Moreover, the focus of the thesis is not on estimating real purchasing power, but on assessing the relationship between luxury revenues, aggregate economic expansion, financial market dynamics, income concentration, and major crisis episodes.

3.2 Descriptive Statistics

This section presents the descriptive statistics of the main variables included in the dataset. Table 3.1 reports the mean, standard deviation, minimum, and maximum values for luxury revenues, world GDP, the MSCI World Index, and the Top 1% income share over the period 1995–2023.

Table 3.1: Descriptive Statistics, 1995-2023

Variable	Mean	Std. Dev.	Min	Max
Luxury Revenues (€ bn)	186.72	79.12	73.00	362.00
World GDP (USD bn)	54,849.17	19,421.18	31,329.00	93,798.00
MSCI World Index	1,547.76	679.14	720.00	3,230.00

Variable	Mean	Std. Dev.	Min	Max
Top 1% Income Share (%)	19.18	0.46	18.20	19.80

Table 3.1 reports the descriptive statistics of the variables employed in the empirical analysis. Luxury market revenues display substantial variability over the sample period, reflecting the wide range of values observed between the minimum and maximum. World GDP exhibits comparatively lower dispersion, consistent with the smoother behavior of aggregate economic activity. By contrast, the MSCI World Index shows greater volatility, highlighting the more cyclical nature of financial markets. The Top 1% income share presents the lowest variability, suggesting that changes in income concentration occur more gradually than changes in output, financial markets, or luxury revenues. While descriptive statistics provide useful information regarding the distribution and variability of the variables, they do not capture their historical evolution or the strength of the relationships among them. The historical evolution of the main variables is shown in Figure 3.1, while the next section presents the correlation analysis to examine the relationships among the variables more formally.

3.3 Correlation Analysis

Before estimating the econometric model, it is useful to examine the pairwise relationships among the variables included in the analysis. Correlation analysis provides a preliminary assessment of the degree of association between luxury revenues and their potential determinants, namely world GDP, the MSCI World Index, and the Top 1% income share. Although correlation does not imply causation, it offers useful insights into the strength and direction of the relationships among the variables.

Table 3.2: Correlation Matrix of Main Variables

Variable	Luxury Revenues	World GDP	MSCI World	Top 1% Share
Luxury Revenues	1.000	0.959	0.863	0.927
World GDP	0.959	1.000	0.848	0.878
MSCI World	0.863	0.848	1.000	0.745
Top 1% Share	0.927	0.878	0.745	1.000

To obtain a preliminary assessment of the relationships among the variables, Table 3.2 reports the correlation matrix for luxury revenues, world GDP, the MSCI World Index, and the Top 1% income share. The results reveal strong positive correlations between luxury revenues and all explanatory variables. The highest correlation is

observed between luxury revenues and world GDP (0.959), suggesting a close association between the expansion of global economic activity and the growth of the luxury market. This finding is consistent with the idea that luxury consumption benefits from rising incomes and increasing economic prosperity. Luxury revenues also exhibit a strong positive correlation with the Top 1% income share (0.927). This result supports the hypothesis that high-income consumers play a central role in driving luxury demand. Since luxury goods are predominantly purchased by affluent consumers, changes in income concentration may have a substantial impact on the sector. The correlation between luxury revenues and the MSCI World Index is also positive and relatively strong (0.863). This finding is consistent with the wealth effect hypothesis discussed throughout the thesis. Rising asset prices increase financial wealth and consumer confidence, encouraging discretionary spending on luxury products. The correlations among the explanatory variables are also relatively high. In particular, world GDP and the MSCI World Index display a correlation of 0.848, reflecting the tendency of financial markets to perform well during periods of economic expansion. Similarly, the Top 1% income share is positively associated with both GDP and financial market performance. This suggests the possible presence of multicollinearity, which should be considered when interpreting the regression results. Overall, the correlation analysis provides preliminary evidence that luxury demand is closely linked to economic growth, financial wealth, and income concentration. However, correlation alone does not

establish causality or identify the independent contribution of each variable. For this reason, the next section applies regression analysis to evaluate the relative importance of each determinant while controlling for the effects of the others.

3.4 Econometric Analysis

To investigate the determinants of luxury demand, an Ordinary Least Squares (OLS) regression model was estimated. The dependent variable is the logarithm of global luxury revenues, while the explanatory variables include world GDP, the MSCI World Index, the Top 1% income share, and a recession dummy variable.

The model is specified as follows:

$$ln(Luxuryt) = \beta 0 + \beta 1 ln(GDPt) + \beta 2 ln(MSCIt) + \beta 3 Top1t + \beta 4 Recessiont + \varepsilon t$$

where Luxury_t denotes global luxury market revenues in year t; GDP_t represents world gross domestic product; MSCI_t represents the value of the MSCI World Index; Top1_t denotes the income share held by the top 1% of the population; Recession_t is a dummy variable equal to 1 during major recessionary periods and 0 otherwise; and ε_t is the error term. The logarithmic specification was adopted for two main reasons. First, it reduces the influence of the strong upward trends characterizing the variables over time. Second, it allows the coefficients associated with GDP and MSCI to be interpreted as elasticities, providing a meaningful

economic interpretation of the relationship between luxury demand and its determinants.

Table 3.3: Baseline OLS Regression Results

Variable	Coefficient	Std. Error	p-value
Constant	-11.520	0.599	<0.001
ln(World GDP)	0.553	0.124	0.000
ln(MSCI World)	0.010	0.064	0.872
Top 1% Income Share	0.552	0.075	<0.000
Recession Dummy	-0.099	0.050	0.060

Model Statistics	Value
Observations	29
R^2	0.983
Adjusted R^2	0.980
F-statistic	346.584
Prob(F)	7.55e-21
Durbin Watson	1.155491

Source: Author's calculations using Gretl.

Table 3.3 reports the results of the OLS regression. The estimated model explains a substantial proportion of the variation in luxury revenues, with an R^2 of 0.983 and an adjusted R^2 of 0.980. The coefficient associated with ln(World GDP) is positive and statistically significant at the 1% level, indicating that global economic growth is strongly related to the expansion of the luxury market. Similarly, the Top 1% Income Share exhibits a positive and highly significant coefficient, suggesting that income concentration plays an important role in supporting luxury demand.

By contrast, the coefficient associated with ln(MSCI World) is not statistically significant. This result suggests that, once overall economic activity and income concentration are taken into account, fluctuations in financial markets do not exert an independent effect on luxury revenues. The recession dummy displays the expected negative sign and is marginally significant at the 10% level, indicating that major economic shocks such as the Global Financial Crisis and the COVID-19 pandemic had a temporary negative impact on luxury demand. Overall, the results provide evidence that luxury revenues are closely associated with macroeconomic growth and the purchasing power of affluent consumers. These findings are consistent with the theoretical framework discussed in the previous chapters and support the view that both aggregate economic conditions and income concentration are key determinants of luxury demand.

3.5 Robustness Check: Lagged Financial Effects

The previous regression analysis evaluated the contemporaneous relationship between luxury demand and its main determinants. However, luxury consumption may not react immediately to changes in financial wealth. High-income consumers often adjust their spending decisions with a delay, particularly when changes in asset prices affect wealth perceptions over time. To account for this possibility, an additional specification was considered by replacing the contemporaneous MSCI World Index with its one-year lagged value. This approach allows the analysis to investigate whether financial market performance anticipates future luxury demand.

The lagged specification can be expressed as follows:

$$\ln(\text{Luxury}_t)=\beta_0+\beta_1\ln(\text{GDP}_t)+\beta_2\ln(\text{MSCI}_{t-1})+\beta_3\text{Top1}_t+\beta_4\text{Recession}_t+\varepsilon_t$$

where $MSCI_{t-1}$represents the value of the MSCI World Index in the previous year. The rationale behind this specification is that changes in financial wealth may require time to influence consumer behavior. Investors may not immediately adjust luxury expenditures following fluctuations in asset prices, but rather respond after observing persistent changes in their financial position. Comparing the results of the contemporaneous and lagged specifications provides additional evidence regarding the transmission mechanism linking financial markets and luxury demand. If the lagged MSCI variable exhibits a stronger effect than the

contemporaneous one, this would suggest that wealth effects operate gradually rather than instantaneously.

Table 3.4 – Lagged OLS Regression Results

Variable	Coefficient	St. Error	t-ratio	p-value
Constant	-11.1668	0.6772	-16.480	<0.001
ln(World GDP)	0.512	0.1314	3.896	0.001
ln(MSCI World) $_{t-1}$	0.067	0.0685	0.979	0.338
Top 1% Income Share	0.536	0.0843	6.335	0.000
Recession Dummy	-0.093	0.0523	-1.773	0.0894

Model Statistics	Value
Observations	28
R^2	0.9814
Adjusted R^2	0.9781
F-statistic	302.95
Durbin-Watson	1.143

Source: Author’s calculations using Gretl.

The lagged specification confirms the main results of the baseline model. World GDP and the Top 1% Income Share remain positive and statistically significant, while the lagged MSCI World Index is not statistically significant. This suggests that, even when financial market performance is allowed to affect luxury demand with a one-year delay, its independent explanatory power remains limited once aggregate economic activity and income concentration are included in the model. The recession dummy maintains the expected negative sign and is marginally significant at the 10% level. Overall, the results reinforce the view that luxury revenues are primarily associated with macroeconomic growth and income concentration rather than with financial market fluctuations alone.

The evidence therefore indicates that global economic growth and income concentration represent the most important determinants of luxury revenues within the sample period.

3.6 Summary of Empirical Findings

The empirical analysis developed in this chapter provides a first quantitative assessment of the relationship between luxury demand and macroeconomic conditions. The descriptive evidence shows that the global luxury market expanded strongly over the period considered, although this expansion was not linear. Luxury revenues increased together with world GDP and with the rise in income

concentration, while periods of macroeconomic stress were associated with temporary slowdowns or contractions in luxury demand.

The correlation analysis indicates that luxury revenue growth is positively associated with world GDP growth and, more strongly, with changes in the top 1% income share. This result is consistent with the theoretical framework developed in the previous chapters, according to which luxury demand is closely linked to income dynamics and to the distribution of purchasing power across income groups. The correlation with the MSCI World Index is weaker in contemporaneous terms, while the lagged correlation suggests a possible delayed association between financial market dynamics and luxury demand.

The econometric results confirm this general interpretation. In the baseline OLS model, world GDP and the top 1% income share are positive and statistically significant predictors of luxury revenues. This suggests that luxury demand is supported both by aggregate economic expansion and by the concentration of income at the top of the distribution. By contrast, the MSCI World Index is not statistically significant once GDP and income concentration are included in the model. This indicates that the independent role of financial markets is weaker when broader macroeconomic and distributional conditions are controlled for.

The recession dummy has a negative coefficient and is marginally significant at the 10% level. This result suggests that major crisis episodes, such as 2009 and 2020,

are associated with a reduction in luxury revenues, even after controlling for GDP, financial markets, and income concentration. The negative sign is consistent with the idea that luxury demand remains exposed to adverse macroeconomic conditions, although the effect appears less central than the role of income growth and income concentration. The lagged specification reinforces these findings. When the MSCI World Index is introduced with a one-year lag, world GDP and the top 1% income share remain positive and statistically significant, while the lagged financial market variable is not statistically significant. This robustness check therefore supports the conclusion that financial markets may be related to luxury demand, but their independent explanatory power is limited once the model accounts for aggregate income and distributional factors. Overall, the empirical evidence suggests that luxury demand cannot be interpreted as fully insulated from macroeconomic fluctuations. At the same time, its dynamics cannot be reduced to a simple reaction to financial market movements. The results point instead to a combined mechanism in which aggregate growth and income concentration play the central role, while recessions generate negative but more episodic effects. These findings provide the empirical basis for the next chapter, which interprets the evolution of luxury demand through the perspective of the growth cycle.

CHAPTER 4

Growth Cycles and Luxury Demand

4.1 Aggregate Conditions and Luxury Market Dynamics

The empirical evidence presented in the previous chapter shows that luxury demand is closely connected to the evolution of aggregate economic conditions. World GDP and the top 1% income share emerge as the main variables associated with luxury revenues, while the independent role of financial markets appears weaker once income growth and income concentration are taken into account. These results suggest that the luxury market should be interpreted within a broader macroeconomic framework, where demand is shaped by the interaction between aggregate growth, distributional dynamics, and crisis episodes.

This chapter develops this interpretation by focusing on the relationship between luxury demand and the growth cycle. The distinction between the classical business cycle and the growth cycle is important for the luxury sector. A classical business cycle approach focuses mainly on absolute expansions and contractions in economic activity. However, both world GDP and the global luxury market display a clear long-term upward trend over the period considered. For this reason, the most relevant issue is not only whether luxury revenues decline during recessions, but also how they behave during phases of acceleration, deceleration, stagnation, and recovery. The luxury market rarely experiences prolonged contractions. More often,

cyclical adjustment takes the form of slower growth, temporary stagnation, or short-lived declines during severe macroeconomic shocks. This pattern is particularly visible in the years surrounding the global financial crisis and the COVID-19 pandemic. These episodes show that luxury demand is not insulated from macroeconomic instability, but they also confirm that its cyclical behavior differs from that of ordinary consumption categories. Luxury revenues tend to recover rapidly after major shocks, especially when aggregate income, wealth, and high-income consumption conditions improve. The growth-cycle perspective is therefore more suitable for interpreting the empirical evidence. It allows the analysis to consider both long-term expansion and short-term deviations from that expansion. In this framework, luxury demand is not treated as simply recession-proof or mechanically pro-cyclical. Instead, it is understood as a sector whose growth depends on favorable aggregate conditions, income concentration, and the resilience of affluent consumers, but whose performance can weaken when economic uncertainty, income shocks, or disruptions to global consumption channels become severe.

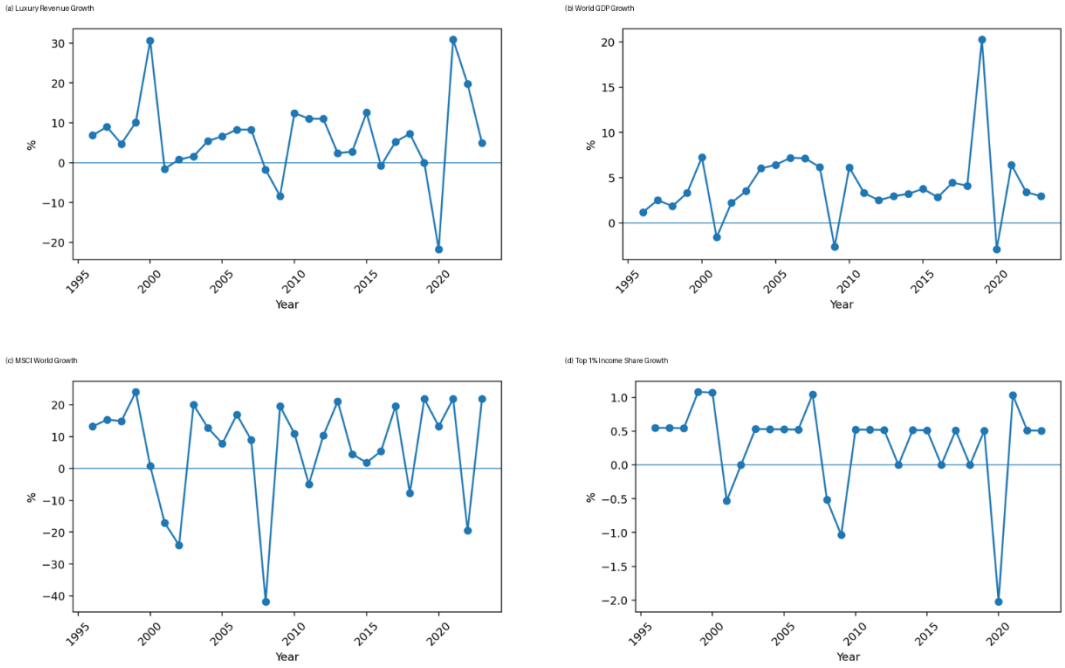
The following sections examine this relationship in greater detail. First, the chapter analyzes the variables in transformed form and estimates the relationship between luxury revenue growth, GDP growth, financial market growth, and changes in income concentration. It then discusses the role of slowdowns and recessionary

episodes, with particular attention to the 2008–2009 crisis and the COVID-19 shock. Finally, it interprets the recovery phases in light of the growth-cycle framework, showing how luxury demand combines structural expansion with conditional cyclical fragility.

4.2 Growth-Rate Analysis and Short-Term Luxury Dynamics

After examining the baseline relationship in levels, the analysis now considers the variables in transformed form. Luxury revenues, world GDP, and the MSCI World Index are expressed as annual growth rates, while the top 1% income share is expressed as an annual change. This transformation makes it possible to focus more directly on short-term fluctuations and on the evolution of luxury demand around phases of acceleration, slowdown, and crisis.

Figure 4.1. Transformed Variables Used in the Growth-Rate Analysis: Luxury Revenue Growth, World GDP Growth, MSCI World Growth, and Annual Change in Top 1% Income Share.



Source: Author's elaboration based on Bain & Company, World Bank, MSCI, and WID data.

The figure shows that luxury revenue growth is more volatile than world GDP growth and displays sharper movements around major crisis episodes. The MSCI World Index also exhibits considerable short-term volatility, while Annual changes in the top 1% income share are smaller but more closely related to the empirical results discussed below.

Table 4.1. Estimated Relationship Using Growth Rates and Changes in Top 1% Income Share

Variable	Coefficient	Std. Error	t-ratio	p-value
Constant	4.045	1.653	2.447	0.022
GDP Growth	-0.258	0.323	-0.799	0.432
MSCI World Growth	-0.126	0.074	-1.705	0.101
Δ Top 1% Income Share	13.956	2.072	6.735	0.000

Observations	28
R^2	0.692
Adjusted R^2	0.654
F-statistic	17.982
Prob(F)	0.000
Durbin-Watson	1.697

Source: Author's calculations based on Bain & Company, World Bank, MSCI, and WID data.

Table 4.1 reports the estimated relationship using transformed variables. Luxury revenue growth is used as the dependent variable, while world GDP growth, MSCI World growth, and the annual change in the top 1% income share are included as

explanatory variables. The results show that the annual change in the top 1% income share is positively associated with luxury revenue growth, while GDP growth and MSCI World growth are not statistically significant in this specification. This suggests that, once the analysis focuses on short-term changes, the distributional component remains central, whereas contemporaneous movements in aggregate GDP and financial markets play a weaker role. These results are important for the growth-cycle interpretation. The luxury market does not simply follow the level of GDP. Rather, it reacts to changes in the pace and composition of growth. Periods of sustained global expansion create favorable conditions for luxury consumption because they increase income, improve expectations, support wealth accumulation, and strengthen consumer confidence. However, when growth slows down, even without a prolonged recession, luxury demand may lose momentum.

This is why a growth-cycle approach is more suitable than a purely classical business-cycle approach. A classical business-cycle perspective would focus mainly on years of absolute contraction, such as 2009 and 2020. These years are clearly important because they correspond to sharp disruptions in luxury demand. However, they do not capture the full cyclical behavior of the sector. Luxury revenues can also be affected by phases in which GDP continues to grow but at a slower pace. Therefore, the long-term increase in luxury revenues should be read together with short-term deviations from trend growth. The sector has expanded

strongly over time, but this expansion has not been linear. It has been interrupted by episodes of slowdown, contraction, and subsequent recovery. These movements show that luxury demand combines structural growth with cyclical sensitivity.

4.3 Slowdowns, Recessions, and Luxury Demand

The growth-cycle perspective is particularly useful because luxury demand is not affected only by years of absolute contraction. In many cases, cyclical pressure appears through a deceleration of growth rather than through a persistent decline in revenues. This distinction is central for the luxury sector, whose long-term trajectory is strongly upward but whose short-term performance can weaken when aggregate conditions deteriorate. A recession represents the most visible form of macroeconomic stress. During recessionary episodes, income growth slows or becomes negative, uncertainty increases, financial conditions often tighten, and consumers become more cautious. Since luxury goods are discretionary and postponable, these conditions can reduce demand more rapidly than in essential consumption categories. Consumers may delay purchases, reduce the frequency of high-end spending, or shift toward less expensive products within the same brand or sector. However, luxury demand may also weaken during periods that are not classified as full recessions. A slowdown in GDP growth can still affect the luxury market if it reduces confidence, weakens expectations, or limits the expansion of disposable income among relevant consumer groups. This is especially important

because the luxury market depends not only on average income, but also on high-income consumers, wealth accumulation, and aspirational demand. When the macroeconomic environment becomes less favorable, even if GDP remains positive, the pace of luxury revenue growth may decline. This mechanism helps explain why the classical business-cycle approach is not sufficient. If the analysis focused only on recession years, it would capture the most severe shocks but would miss the broader pattern of cyclical sensitivity. Luxury demand may remain positive in level terms while still showing signs of fragility through slower growth, weaker momentum, or temporary stagnation. In this sense, the relevant question is not only whether luxury revenues fall, but whether they grow less than expected relative to their long-term trend. The role of consumer composition is also important. Ultra-high-income consumers may be able to maintain luxury expenditure even during moderate downturns because they have greater wealth buffers and stronger consumption-smoothing capacity. By contrast, aspirational and upper-middle-income consumers are more exposed to labor income, credit conditions, inflationary pressure, and uncertainty. When this second group becomes more relevant for the sector, luxury demand may become more sensitive to slowdowns, even before a recession occurs. The empirical results of Chapter 3 are consistent with this interpretation. The recession dummy has a negative coefficient, suggesting that major crisis years are associated with lower luxury revenues. At the same time, the positive and statistically significant role of world GDP indicates that the broader

growth environment matters continuously, not only during recessions. Luxury demand therefore appears to be linked both to severe shocks and to the general pace of macroeconomic expansion. For this reason, slowdowns and recessions should be interpreted as different degrees of the same cyclical mechanism. Recessions generate sharper and more visible contractions, while slowdowns may reduce the speed of expansion. Both are relevant for a sector that grows over the long run but remains dependent on favorable aggregate conditions. This confirms the usefulness of the growth-cycle approach: luxury demand is best understood by examining deviations from trend growth, rather than by focusing only on the presence or absence of formal recessions.

4.4 The 2008–2009 Crisis and the COVID-19 Shock

The global financial crisis of 2008–2009 and the COVID-19 shock of 2020 represent two important interruptions in the long-term expansion of the luxury market. Although these episodes differ in origin and transmission mechanisms, both show that luxury demand is vulnerable when the macroeconomic environment deteriorates sharply. The 2008–2009 crisis was primarily a financial and macroeconomic shock. The collapse of financial markets, the contraction of credit, and the decline in confidence affected both households and firms. For the luxury sector, this meant a worsening of the conditions that normally support high-end consumption: rising income, wealth accumulation, financial confidence, and

optimistic expectations. Even affluent consumers were affected by the decline in asset values and by the uncertainty surrounding the duration of the crisis. At the same time, aspirational consumers were more likely to postpone discretionary purchases, since luxury goods can be delayed more easily than essential consumption. This episode is particularly relevant because it shows that luxury demand is not driven only by current income. Financial wealth and expectations also matter. During a financial crisis, consumers may remain relatively wealthy in absolute terms, but they can still reduce luxury expenditure if they perceive their future income or wealth position as less secure. In this sense, the crisis weakened luxury demand through both economic and psychological channels. The COVID-19 shock operated in a different way. It was not initially caused by a financial imbalance, but by a health emergency and by the restrictions introduced to contain it. Its impact on luxury demand was therefore more direct and more unusual. Lockdowns, store closures, travel restrictions, and the collapse of international tourism disrupted the usual channels of luxury consumption. This was especially damaging for a sector that depends heavily on physical retail, flagship stores, tourism flows, and international mobility.

Unlike the 2008–2009 crisis, the COVID-19 shock affected not only consumers' willingness to spend, but also their ability to access luxury products and experiences. Even consumers with sufficient purchasing power faced restrictions

that limited shopping opportunities. For this reason, the decline in luxury revenues in 2020 cannot be interpreted only as a standard income effect. It also reflected a disruption in the organization of global consumption. Despite these differences, the two crises lead to a common conclusion. Luxury demand is not fully protected from severe shocks. Its long-term trend is strongly positive, but this trend can be interrupted when macroeconomic uncertainty, financial instability, or restrictions to consumption become intense. At the same time, the recovery after these shocks confirms that the sector also retains strong structural drivers, including high-income demand, brand equity, global market expansion, and the concentration of purchasing power among affluent consumers.

These episodes therefore support the growth-cycle interpretation. The luxury market does not follow a simple pattern of expansion and recession. Rather, it tends to grow over the long run, while experiencing temporary deviations from its trend during periods of severe stress. The 2008–2009 crisis and the COVID-19 shock are not only moments of contraction; they are cases in which the underlying growth path of the sector was temporarily disrupted and then gradually restored.

4.5 Recovery Dynamics and the Growth-Cycle Interpretation

The recovery of the luxury market after major shocks is an essential element for understanding its cyclical behavior. The 2008–2009 crisis and the COVID-19 shock show that luxury demand can be affected by severe disruptions, but they also show

that these contractions do not necessarily produce a permanent break in the long-term expansion of the sector. After both episodes, luxury revenues gradually returned to growth, supported by the improvement of aggregate conditions, the recovery of consumer confidence, and the persistence of high-income demand.

This pattern confirms that luxury demand should not be interpreted only through the presence or absence of recessions. If the analysis focused exclusively on years of absolute contraction, it would capture only the most visible part of the adjustment. The luxury market is better understood as a sector that follows a long-term upward trajectory but periodically deviates from that trajectory when macroeconomic conditions weaken. These deviations may take the form of slower growth, temporary stagnation, or sharper contractions during exceptional shocks.

The speed and strength of recovery depend on several factors. First, the recovery of aggregate income creates a more favorable environment for discretionary consumption. When GDP growth resumes, expectations improve and consumers become more willing to undertake non-essential purchases. Second, the recovery of financial wealth can support luxury spending, especially among consumers whose purchasing power is linked to asset values and capital income. Third, income concentration at the top of the distribution provides a structural basis for demand, since affluent consumers continue to represent a central component of the luxury market. At the same time, recovery dynamics are not purely macroeconomic.

Luxury brands often react to crises by adjusting distribution strategies, product mix, communication, and geographic focus. These strategic responses can help firms capture demand when conditions improve. Strong brands may therefore recover more rapidly because they benefit from established reputation, pricing power, loyal consumers, and international visibility. This explains why the sector can experience sharp short-term disruptions without losing its long-term growth potential. The growth-cycle perspective captures this combination of fragility and resilience. Luxury demand is fragile because it can weaken when uncertainty rises, when financial wealth declines, or when consumers postpone discretionary purchases. However, it is also resilient because its structural drivers remain strong: global income growth, concentration of purchasing power, brand equity, and the social value attached to luxury consumption. The same sector can therefore show sensitivity in the short run and strength in the long run. This interpretation is particularly important for the thesis because it avoids two opposite simplifications. Luxury demand should not be described as recession-proof, since both historical evidence and empirical results show that it reacts to severe downturns. At the same time, it should not be treated as a simple cyclical consumption category that mechanically follows GDP. Its behavior depends on the interaction between aggregate growth, income distribution, wealth effects, expectations, and firm-level strategies. From this point of view, the growth cycle provides a more appropriate framework than the classical business cycle. The classical approach distinguishes

mainly between expansions and contractions. The growth-cycle approach allows the analysis to examine whether the luxury market grows faster or slower than its long-term path. This is more consistent with a sector that rarely experiences prolonged decline but frequently shows changes in the pace of expansion. Overall, the recovery dynamics of the luxury market suggest that crises should be interpreted as temporary deviations from a structural growth path. The luxury sector remains exposed to macroeconomic shocks, but its long-term expansion is supported by forces that are not eliminated by individual downturns. This combination of cyclical vulnerability and structural strength provides the central logic for interpreting luxury demand within a growth-cycle framework.

4.6 Discussion

The analysis developed in this chapter shows that the relationship between luxury demand and macroeconomic fluctuations cannot be reduced to a simple distinction between expansion and recession. The luxury market has followed a strong long-term growth path, supported by rising global income, income concentration, wealth accumulation, and the international expansion of consumption. However, this growth has not been linear. Periods of slowdown, financial instability, uncertainty, and disruption have produced temporary deviations from the long-term trajectory.

This interpretation helps clarify why the growth-cycle perspective is more appropriate than a purely classical business-cycle approach. A classical approach

would mainly identify years of absolute contraction, such as 2009 and 2020. These years are clearly relevant, but they do not fully capture the behavior of luxury demand. The sector can weaken even when GDP remains positive, because slower growth, lower confidence, or reduced expectations may affect discretionary spending before a formal recession occurs. For this reason, changes in the pace of growth are as important as contractions in absolute levels. The evidence discussed in the chapter also suggests that luxury demand combines resilience and fragility. Its resilience derives from the concentration of demand among affluent consumers, the persistence of brand value, the social and symbolic role of luxury goods, and the ability of major brands to maintain pricing power. These factors help explain why the luxury market often recovers after major shocks and why temporary contractions do not necessarily interrupt its long-term expansion. At the same time, luxury demand remains fragile because it depends on favorable macroeconomic and financial conditions. When uncertainty increases, when asset values decline, or when consumers become more cautious, luxury purchases can be postponed or reduced. This is especially true for aspirational and upper-middle-income consumers, whose participation has become increasingly important in the modern luxury market. The expansion of the consumer base has therefore supported growth, but it may also have increased the sensitivity of the sector to slowdowns and adverse shocks. The comparison between the 2008–2009 crisis and the COVID-19 shock reinforces this conclusion. The first episode mainly affected luxury demand through

financial instability, declining confidence, and negative wealth effects. The second disrupted consumption channels more directly through lockdowns, travel restrictions, and store closures. Despite these different mechanisms, both episodes interrupted the growth path of the sector and revealed its exposure to severe macroeconomic stress. At the same time, the subsequent recovery confirmed the persistence of strong structural drivers. Overall, the growth-cycle framework allows luxury demand to be interpreted as a sector characterized by long-term expansion and short-term cyclical sensitivity. Luxury is not completely insulated from macroeconomic fluctuations, but it is also not a standard cyclical category that mechanically follows aggregate output. Its dynamics depend on the interaction between aggregate growth, income distribution, wealth effects, expectations, consumer composition, and brand strategies. This discussion provides the bridge to the firm-level analysis developed in the next chapter. If the global luxury market reacts to the growth cycle through a combination of structural strength and cyclical vulnerability, individual brands may experience these dynamics in different ways depending on their positioning, consumer base, geographic exposure, and strategic choices. The Gucci case therefore offers a useful opportunity to examine how macroeconomic fluctuations and sectoral transformations appear at the level of a major luxury brand.

CHAPTER 5

Gucci: A case study of luxury demand

5.1 Introduction to the Gucci Case

This chapter examines the Gucci case as a practical application of the analytical framework developed throughout the thesis. As one of the most influential and internationally recognized luxury brands, Gucci represents a particularly relevant case for analyzing the relationship between luxury demand, macroeconomic fluctuations, and financial market dynamics. Founded in Florence in 1921, Gucci has evolved from a traditional Italian leather goods company into a global luxury fashion house operating across multiple product categories, including fashion, leather goods, accessories, jewelry, and cosmetics. Over the last decades, the brand has become one of the leading players in the global luxury industry and one of the main contributors to the revenues of the Kering Group. The relevance of the Gucci case derives not only from the economic importance of the brand, but also from its strong exposure to global luxury demand dynamics. Gucci's revenue performance is closely connected to changes in consumer confidence, financial wealth, tourism flows, and the spending behavior of high-income consumers. As a result, the brand provides an effective case study for observing how macroeconomic and financial conditions influence luxury consumption at the firm level. In addition, Gucci operates in a highly globalized market characterized by a strong dependence on

international consumers, particularly in Asia and China. Over the last decade, Chinese consumers have become one of the most important drivers of growth for the global luxury industry, significantly influencing the performance of major luxury brands. This increasing exposure to Asian demand has also amplified the sensitivity of Gucci to global economic slowdowns, financial market volatility, and geopolitical uncertainty. The Gucci case is particularly useful because it combines structural growth with cyclical sensitivity. On the one hand, the brand has benefited from the long-term expansion of the luxury market, supported by globalization, rising wealth, and the growth of high-income consumer segments. On the other hand, Gucci has also been affected by major economic disruptions, including the global financial crisis, the slowdown in Chinese demand, and the COVID-19 pandemic. For these reasons, the analysis of Gucci provides a valuable framework for evaluating whether the cyclical patterns identified at the aggregate level are also reflected at the company level. The following sections therefore examine the evolution of Gucci's revenue performance and its behavior across different economic and financial phases.

5.2 Gucci Revenue Performance and Market Evolution

The evolution of Gucci's revenue performance over recent years reflects many of the structural and cyclical dynamics characterizing the global luxury market. In particular, the brand's revenues reveal the combined influence of macroeconomic

conditions, financial wealth, consumer confidence, and sector-specific factors. Before the COVID-19 pandemic, Gucci experienced a phase of strong expansion supported by favorable market conditions, growing demand from Asian consumers, and successful brand repositioning strategies. The company benefited from the broader growth of the global luxury industry, driven by rising financial wealth, globalization, and increasing consumption among high-income individuals. However, the outbreak of the COVID-19 pandemic in 2020 generated a severe disruption for the luxury sector. Restrictions on mobility, the closure of physical retail stores, and the collapse of international tourism had a substantial impact on luxury consumption worldwide. Gucci's revenues declined significantly during this period, reflecting the sensitivity of the brand to global economic shocks and travel-related demand. Despite the sharp contraction observed in 2020, the recovery phase was relatively rapid. In 2021 and 2022, Gucci benefited from the rebound in global luxury demand, supported by expansionary economic policies, accumulated savings, and strong spending among high-income consumers. The reopening of economies and the gradual recovery of international mobility further contributed to the recovery of the sector. At the same time, the post-pandemic environment also revealed new structural challenges. Starting from 2023, the luxury market experienced a phase of normalization characterized by slower growth and increasing uncertainty. Gucci's revenue performance was negatively affected by weaker demand in China, changing consumer preferences, and intensifying

competition within the luxury industry. These factors contributed to the slowdown observed in 2023 and the more significant decline recorded in 2024. The evolution of Gucci's revenues across these years highlights the coexistence of long-term growth and cyclical sensitivity. While the brand benefited from the structural expansion of the luxury market over time, its revenue performance also remained strongly influenced by changes in macroeconomic conditions, financial wealth, and global consumer dynamics.

Table 5.1 summarizes the evolution of Gucci's revenues between 2019 and 2024.

Year	Revenues (€ billion)	Annual Growth (%)	Annual Dynamics
2019	9.63	Base year	Strong pre-pandemic revenue level
2020	7.4	-23.2%	Sharp contraction due to Covid-19
2021	9.7	+31.1%	Rapid recovery phase
2022	10.5	+8.2%	Peak post-pandemic expansion
2023	9.9	-5.7%	Market normalization and weaker growth
2024	7.65	-22.7%	Significant slowdown linked to weaker demand

As shown in Table 5.1 and Figure 5.1, Gucci's financial performance closely reflects the cyclical dynamics characterizing the global luxury industry. The sharp decline observed in 2020 (-23.2%) coincides with the COVID-19 shock, which severely affected international tourism, retail activity, and consumer confidence. The subsequent rebound in 2021 (+31.1%) and continued growth in 2022 (+8.2%) illustrate the resilience of luxury demand and the strength of the post-pandemic recovery. However, the period following 2022 reveals a different pattern. Revenue growth weakened in 2023 (-5.7%) and deteriorated further in 2024 (-22.7%). Unlike the pandemic-related contraction, this slowdown cannot be attributed to a single global shock. Instead, it reflects a combination of factors, including weaker demand in China, changing consumer preferences, increased competition within the luxury sector, and challenges related to brand positioning. These dynamics suggest that while Gucci remains strongly influenced by macroeconomic conditions and luxury market cycles, firm-specific factors have become increasingly important in explaining recent revenue performance. Consequently, the Gucci case provides a useful example of how structural industry trends interact with company-level strategic decisions.

Figure 5.1: Evolution of Gucci revenues, 2019–2024 (€ billion).

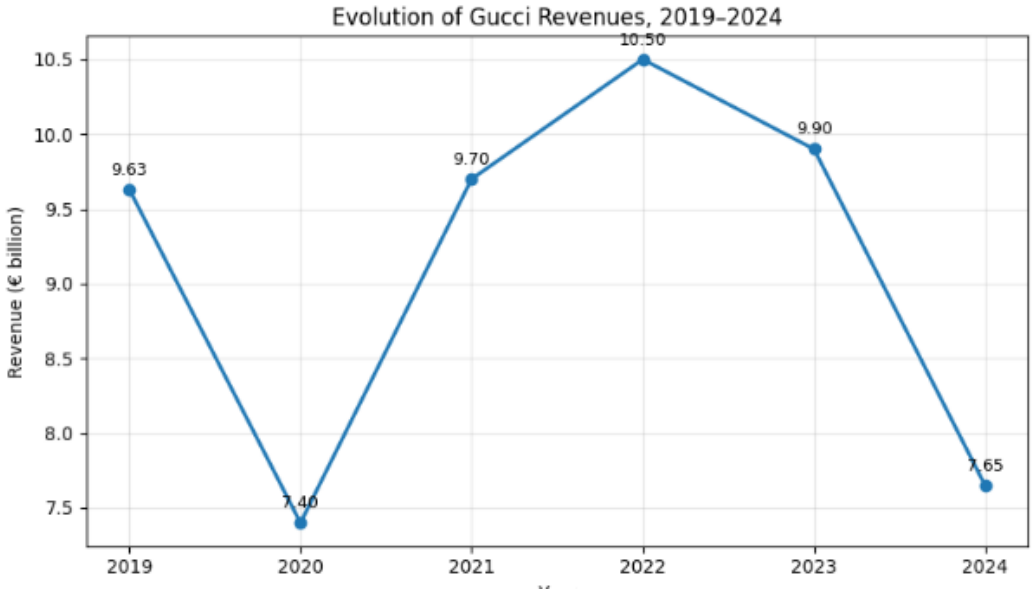


Figure 5.1 clearly illustrates the sharp contraction experienced during the COVID-19 pandemic, the rapid recovery observed in 2021–2022, and the subsequent slowdown in 2023–2024.

Given the limited number of annual observations available for Gucci, the firm-level analysis is not developed through a separate regression model. Instead, Gucci is examined through a descriptive-comparative approach, comparing the brand's revenue dynamics with the evolution of the global luxury market. This choice avoids overinterpreting statistically weak estimates and allows the analysis to focus on the interaction between sector-wide conditions and firm-specific factors.

In this chapter, the analysis focuses specifically on Gucci's revenue performance. The term performance is therefore used with reference to revenue dynamics and revenue growth, rather than to profitability, margins, or other financial indicators. The following sections therefore examine the evolution of Gucci's revenue performance and its behavior across different economic and financial phases.

5.3 Gucci Across Economic and Luxury Cycles

The evolution of Gucci across recent economic phases provides further evidence of the relationship between luxury demand, macroeconomic conditions, and financial market dynamics. The brand's revenue performance reflects many of the cyclical patterns identified in the broader luxury market, while also highlighting the importance of firm-specific and structural factors. The COVID-19 pandemic represented the most severe disruption affecting Gucci during the period considered. In 2020, the sharp decline in revenues reflected the collapse of international tourism, the temporary closure of physical retail stores, and the reduction in discretionary spending associated with increased uncertainty. As highlighted in the previous chapters, luxury consumption is highly dependent on consumer confidence and mobility, particularly among international high-income consumers. Gucci's strong exposure to travel-related purchases amplified the effects of the pandemic shock. However, the recovery observed in 2021 and 2022 was equally significant. The rapid rebound in revenues reflects the broader recovery

of the luxury sector following the reopening of economies and the normalization of consumer activity. Expansionary fiscal and monetary policies, together with accumulated savings and strong demand from high-income consumers, contributed to the resurgence of luxury spending. Gucci particularly benefited from the resilience of affluent consumers and from the growing importance of digital channels during the post-pandemic recovery. At the same time, the slowdown observed in 2023 and 2024 reveals the increasing complexity of the global luxury environment. Unlike the COVID-19 shock, this phase was not characterized by a sudden collapse in economic activity, but rather by weaker growth and a normalization of luxury demand after the exceptional post-pandemic expansion. Gucci's weaker performance reflects several interconnected factors. One of the most important drivers of the slowdown was the moderation of Chinese demand. Over the last decade, Chinese consumers have become central to the growth of the global luxury industry, making brands increasingly dependent on the economic conditions and consumption dynamics of the Chinese market. Slower economic growth, weaker consumer confidence, and uncertainty in China negatively affected luxury demand and contributed to Gucci's declining revenues. In addition, changing consumer preferences and increasing competition within the luxury industry also played an important role. The luxury market has become increasingly dynamic and consumer expectations have evolved rapidly, particularly among younger generations. In this context, brand positioning, product innovation, and creative

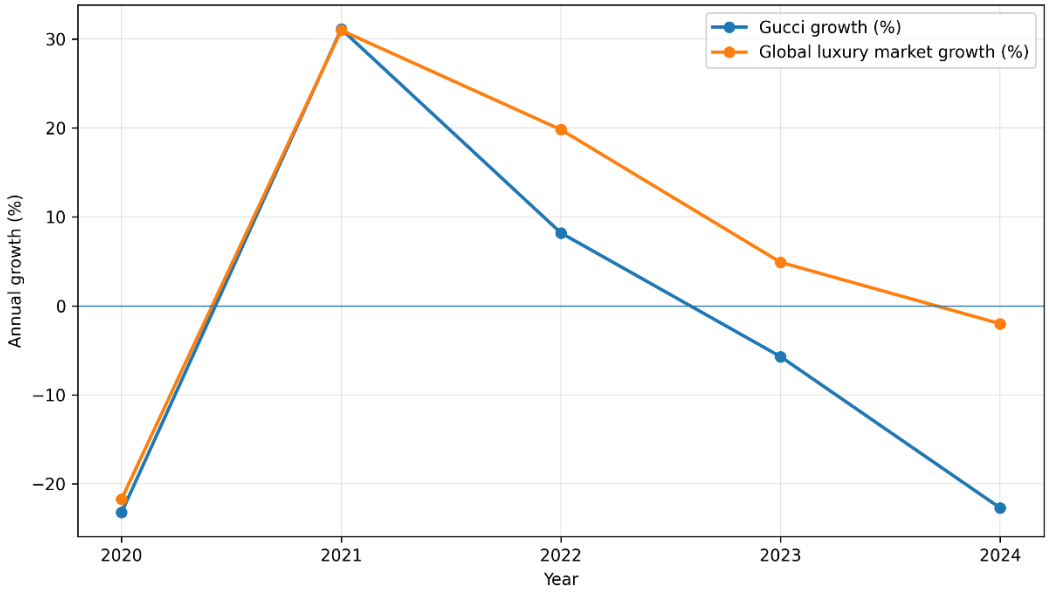
direction have become critical determinants of revenue performance. The Gucci case therefore illustrates how luxury brands are influenced by both macroeconomic conditions and firm-specific factors. Major crises tend to amplify the role of wealth effects and consumer confidence, while periods of slower growth reveal the importance of strategic adaptation and brand desirability. Overall, Gucci confirms many of the cyclical dynamics identified throughout the thesis. The brand exhibits a strong long-term growth trajectory, but also remains sensitive to financial conditions, consumer expectations, tourism flows, and global economic uncertainty. This evidence reinforces the idea that the luxury sector combines structural resilience with cyclical sensitivity, making it strongly connected to both macroeconomic and behavioral dynamics.

Table 5.2: Gucci Revenue Growth versus Global Luxury Market Growth

Year	Gucci Growth (%)	Global Luxury Market Growth (%)	Relative Performance
2020	-23.2%	-21.7%	Slightly underperformed
2021	+31.1%	+30.96%	In line with market
2022	+8.2%	+19.8%	Underperformed
2023	-5.7%	+ 4.9%	Underperformed

Table 5.2 compares Gucci's revenue growth with the evolution of the global luxury market. The results show that Gucci broadly followed market dynamics during the COVID-19 shock and the subsequent recovery. However, beginning in 2022, the brand increasingly underperformed the broader luxury sector. This divergence became particularly evident in 2024, when Gucci's revenues declined by 22.7% while the global luxury market experienced only a modest contraction.

Figure 5.2: Gucci Revenue Growth versus Global Luxury Market Growth



Source: Author's elaboration based on Kering annual reports and Bain & Company data.

Figure 5.2 visually confirms the divergence already reported in Table 5.2. While Gucci moved broadly in line with the global luxury market in 2020 and 2021, the

gap widened from 2022 onward, indicating that Gucci's recent decline reflects firm-specific factors in addition to sector-wide conditions.

Table 5.3: Gucci Revenue Dynamics Across Recent Economic Phases

Phase	Main driver	Impact on Gucci
COVID-19 (2020)	Mobility restrictions and tourism collapse	Strong revenue contraction
Recovery (2021-2022)	Pent-up demand and wealth effects	Rapid revenue growth
Slowdown (2023-2024)	Weak Chinese demand and brand-specific factors	Revenue decline

Table 5.3 summarizes the main phases of Gucci's recent revenue dynamics. The table shows that the 2020 contraction was mainly linked to the pandemic shock, the 2021–2022 recovery reflected the broader rebound of luxury demand, and the 2023–2024 decline was associated with weaker Chinese demand and brand-specific difficulties. This result is consistent with the econometric evidence presented in Chapter 3, where macroeconomic variables explain a substantial share of luxury demand but do not fully account for differences in revenue performance across individual firms.

5.4 Empirical Interpretation of the Gucci Case

The empirical evidence discussed in the previous chapters provides a useful framework for interpreting Gucci's revenue dynamics relative to the broader luxury market. However, the Gucci case also makes it possible to distinguish between sector-wide macroeconomic conditions and firm-specific factors. This distinction is important because individual luxury brands may react differently to the same aggregate environment, depending on their positioning, geographic exposure, creative direction, and ability to adapt to changing consumer preferences.

As shown in Table 5.2 and Figure 5.2, Gucci broadly followed the evolution of the global luxury market during the COVID-19 shock and the subsequent recovery. In 2020, the decline in Gucci's revenues was close to the contraction experienced by the overall luxury market. Similarly, in 2021 the brand recovered strongly, broadly in line with the rebound of the sector. This suggests that, during the first phase of the pandemic shock and the immediate recovery, Gucci's revenue performance was mainly driven by common macroeconomic and sector-wide conditions.

The divergence became more evident from 2022 onward. While the global luxury market continued to expand strongly in 2022, Gucci grew at a slower pace. In 2023, the brand recorded a decline, whereas the broader luxury market still showed positive growth. In 2024, the gap widened further, as Gucci experienced a sharp contraction while the global luxury market declined only moderately. This pattern

suggests that Gucci's recent revenue performance cannot be explained solely by macroeconomic conditions or by the general slowdown of the luxury sector.

The underperformance observed after 2021 points to the growing importance of firm-specific factors. These include brand positioning, creative direction, product attractiveness, competitive pressure, changing consumer preferences, and exposure to Chinese demand. In particular, the moderation of Chinese luxury consumption appears relevant, since Chinese consumers have represented a central source of growth for major luxury brands over the last decade. A weaker demand environment in China may therefore have amplified Gucci's difficulties, especially in a phase in which the brand was already facing challenges related to desirability and strategic repositioning. This interpretation does not imply that macroeconomic conditions are irrelevant. Rather, the Gucci case shows that macroeconomic factors define the general environment in which luxury brands operate, while firm-level characteristics determine how each brand performs within that environment. The growth cycle affects the luxury sector through changes in income growth, consumer confidence, financial wealth, tourism flows, and uncertainty. However, the intensity of these effects differs across firms, depending on their consumer base, brand strength, market exposure, and strategic choices.

Overall, Gucci confirms the central argument of the thesis. Luxury demand is shaped by aggregate income, wealth effects, income concentration, and

macroeconomic fluctuations, but firm-level revenue performance cannot be reduced to these variables alone. The case shows that a brand may initially move in line with the sector during major shocks and recoveries, but later diverge when company-specific weaknesses become more relevant. For this reason, Gucci represents a useful case for understanding how the growth-cycle framework operates at the firm level, while also highlighting the limits of a purely macroeconomic explanation.

5.5 Discussion and Strategic Implications

The Gucci case confirms that luxury demand is shaped by the interaction between macroeconomic conditions, financial market dynamics, and firm-specific factors. The evidence presented in this chapter shows that broader economic cycles influence luxury brands through several channels, including consumer confidence, tourism flows, financial wealth, and discretionary spending. Periods of expansion tend to support luxury demand, while episodes of uncertainty and financial instability can reduce consumption, especially when consumers perceive negative shocks as persistent.

At the same time, Gucci's recent revenue performance highlights the limits of a purely macroeconomic explanation. The sharp contraction in 2020 and the recovery in 2021 were largely consistent with the dynamics of the global luxury market. However, the underperformance observed from 2022 onward suggests that

company-level factors became increasingly relevant. Brand positioning, creative direction, product attractiveness, competitive pressure, and changing consumer preferences all contributed to explaining why Gucci diverged from the broader sector. The analysis also reinforces the importance of China and Asian consumers within the global luxury industry. Gucci's exposure to Chinese demand has represented an important source of growth, but also a source of vulnerability during periods of weaker consumer confidence and slower economic expansion in the region. This confirms that geographic diversification does not eliminate cyclical sensitivity when demand becomes highly dependent on specific markets.

Overall, the Gucci case supports the broader argument of the thesis. Luxury demand is influenced by income growth, income concentration, financial wealth, and macroeconomic uncertainty, but firm-level performance also depends on strategic adaptation and brand desirability. Macroeconomic conditions define the environment in which luxury firms operate, but they do not fully determine the success of individual brands. Therefore, understanding luxury demand requires an integrated perspective that combines macroeconomic analysis, financial dynamics, consumer behavior, and firm-specific strategy.

Conclusion

This thesis has examined the relationship between luxury demand and macroeconomic fluctuations, with particular attention to the extent to which the

luxury market can be interpreted through the lens of the growth cycle. While luxury goods are traditionally classified as superior goods characterized by high income elasticity, historical evidence has often suggested a degree of resilience that appears inconsistent with standard economic predictions. This apparent contradiction provided the starting point for the analysis.

The theoretical framework developed throughout the thesis highlighted that luxury demand is shaped by a combination of economic, social, and structural factors. The concentration of consumption among high-income households, the role of wealth effects, consumption smoothing behavior, status-related motivations, and the strong pricing power of luxury brands all help explain the historical resilience of luxury demand. This pricing power is closely related to exclusivity, brand equity, and controlled distribution strategies (Kapferer and Bastien, 2012). At the same time, the analysis emphasized that recent transformations in the luxury industry may have altered the foundations of this resilience. The expansion of aspirational consumers, the globalization of demand, and the increasing financialization of luxury firms have potentially increased the sector's exposure to macroeconomic conditions. The empirical section then compares the evolution of the global luxury market with key macroeconomic and financial indicators, including world GDP, the MSCI World Index, income concentration, and recessionary episodes, using data from the World Bank, MSCI, and the World Inequality Database.

The analysis revealed a close relationship between luxury market revenues and indicators such as world GDP, financial market performance, and income concentration. Economic expansions have generally been associated with sustained growth in luxury demand, while major shocks such as the Global Financial Crisis and the COVID-19 pandemic generated significant contractions. The results therefore confirm the pro-cyclical nature of luxury consumption and suggest that macroeconomic conditions continue to play a central role in shaping the evolution of the sector. At the same time, the findings indicate that macroeconomic variables alone are not sufficient to explain all variations in luxury demand. Historical episodes and the Gucci case study demonstrate that firm-specific factors, including brand positioning, strategic decisions, product attractiveness, and adaptation to changing consumer preferences, can substantially influence performance. The recent difficulties experienced by Gucci, despite relatively stable macroeconomic conditions, illustrate the limits of purely aggregate explanations and highlight the importance of managerial and competitive factors.

Overall, the evidence suggests that luxury demand should not be interpreted either as completely insulated from economic fluctuations or as a standard income-elastic category of consumption. Rather, it reflects the interaction between macroeconomic conditions, financial wealth, consumer composition, and firm-level strategies. The growth cycle perspective provides a useful framework for understanding this

interaction because it focuses on changes in the pace of economic growth rather than only on periods of recession and expansion.

The central hypothesis of the thesis receives partial support. The luxury sector continues to display characteristics that differentiate it from many other consumer markets, yet there are indications that its sensitivity to macroeconomic fluctuations may be increasing. As a growing share of demand originates from aspirational and upper-middle-income consumers, luxury consumption may become more exposed to changes in income, confidence, and financial conditions than in the past. This suggests a gradual transition from traditional resilience toward greater cyclical sensitivity. Future research could extend the analysis by employing longer time series, more sophisticated econometric techniques, and firm-level datasets covering a broader range of luxury brands. Such approaches would make it possible to investigate in greater detail the mechanisms through which macroeconomic conditions, financial markets, and strategic decisions jointly influence the evolution of luxury demand. In conclusion, the luxury industry remains a distinctive sector characterized by strong long-term growth potential, but it is also increasingly interconnected with the broader macroeconomic environment. Understanding the balance between resilience and cyclical sensitivity is therefore essential for interpreting the future evolution of luxury markets and the strategic challenges faced by luxury firms.

Bibliography

Aguiar, M., & Bils, M. (2015). Has Consumption Inequality Mirrored Income Inequality? American Economic Review, 105(9), 2725–2756.

Bagwell, L. S., & Bernheim, B. D. (1996). Veblen Effects in a Theory of Conspicuous Consumption. American Economic Review, 86(3), 349–373.

Bain & Company. Various years. Luxury Goods Worldwide Market Study.

Banks, J., Blundell, R., & Lewbel, A. (1997). Quadratic Engel Curves and Consumer Demand. Review of Economics and Statistics, 79(4), 527–539.

Browning, M., & Crossley, T. F. (2001). The Life-Cycle Model of Consumption and Saving. Journal of Economic Perspectives, 15(3), 3–22.

Carroll, C. D. (2001). A Theory of the Consumption Function, With and Without Liquidity Constraints. Journal of Economic Perspectives, 15(3), 23–45.

Case, K. E., Quigley, J. M., & Shiller, R. J. (2005). Comparing Wealth Effects: The Stock Market versus the Housing Market. Advances in Macroeconomics, 5(1), 1–34.

Charles, K. K., Hurst, E., & Roussanov, N. (2009). Conspicuous Consumption and Race. Quarterly Journal of Economics, 124(2), 425–467.

Deaton, A. (1992). Understanding Consumption. Oxford: Oxford University Press.

Deaton, A. (1997). The Analysis of Household Surveys: A Microeconometric Approach to Development Policy. Baltimore: Johns Hopkins University Press.

Deloitte. Various years. Global Powers of Luxury Goods.

Friedman, M. (1957). A Theory of the Consumption Function. Princeton: Princeton University Press.

Kapferer, J. N., & Bastien, V. (2012). The Luxury Strategy: Break the Rules of Marketing to Build Luxury Brands. 2nd ed. London: Kogan Page.

Kaplan, G., & Violante, G. L. (2014). A Model of the Consumption Response to Fiscal Stimulus Payments. Econometrica, 82(4), 1199–1239.

Kering. Various years. Annual Reports and Financial Statements.

Kering. (2024). Annual Report 2024. Paris: Kering.

Lancaster, K. J. (1966). A New Approach to Consumer Theory. Journal of Political Economy, 74(2), 132–157.

Modigliani, F., & Brumberg, R. (1954). Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data. In K. Kurihara (Ed.), Post-Keynesian Economics. New Brunswick: Rutgers University Press.

MSCI. MSCI World Index Historical Data.

OECD. OECD Data Portal.

Parker, J. A. (1999). The Reaction of Household Consumption to Predictable Changes in Social Security Taxes. American Economic Review, 89(4), 959–973.

Piketty, T. (2014). Capital in the Twenty-First Century. Cambridge, MA: Harvard University Press.

Stiglitz, J. E. (1987). The Causes and Consequences of the Dependence of Quality on Price. Journal of Economic Literature, 25(1), 1–48.

Sutton, J. (1991). Sunk Costs and Market Structure. Cambridge, MA: MIT Press.

Varian, H. R. (2014). Intermediate Microeconomics: A Modern Approach. 9th ed. New York: W. W. Norton & Company.

Veblen, T. (1899). The Theory of the Leisure Class. New York: Macmillan.

World Bank. World Development Indicators Database.

World Inequality Database (WID). Top 1% Income Share Dataset.

Con la conclusione di questa tesi si chiude un importante capitolo della mia vita.

Se mi guardo indietro, vedo una ragazza di 19 anni, con pochi sogni e tante speranze. Un diploma conseguito con poco meno di settanta al Liceo delle Scienze Umane, poca voglia di alzarsi la mattina per sedersi in un banco, testa altrove e la fantasia che mi portava in un areo, posto finestrino, diretta ad una metropoli collegata da 11 linee metropolitane, per un totale di oltre 400 km di rete ferroviaria e ben 272 stazioni. Ben presto, quella città sarebbe diventata la mia casa per oltre sei mesi.

Ti innamori della bellezza, della vita frenetica, inizi ad osservare la vita altrui e comprendi che il mondo è tanto altro, e non è confinato solo all'interno di un piccolo paesino nelle Marche.

Poi la vita cambia, quella fantasia si trasformata in stimoli e quegli stimoli in ambizioni.

La prima laurea a Forlì, la prima volta che mi sono sentita al passo con gli altri, con la società, che purtroppo scandisce i tempi di tutti noi.

Pochi mesi dopo, intraprendevo questo percorso, con il dubbio della difficoltà di affrontarlo in lingua inglese.

A chi è andato via dalla mia vita: ha liberato spazio, luce e pace.

A chi mi è stato vicino, a chi mi ha teso la mano quando ne avevo bisogno, a chi mi ha donato un sorriso, a chi mi ha messo alla prova.

A mia nonna Anna, la mia migliore amica. Perché la memoria dei ricordi felici possa riportarci sempre ai Bagni Irma a Senigallia, mentre io salto nel tappetone elastico e tu mi aspetti sotto l'ombrellone, con la borsa frigo piena di frutta fresca. Perché il tuo affetto resterà per sempre la forma più sincera d'amore.

Un pensiero va a nonno Cesare, che sicuramente ci starà guardando sorridendo.

A miei nonni Sara ed Emilio, per avermi ricordato la bellezza delle cose semplici, l'essenza delle piccole cose e per l'amore che vi lega anche dopo periodi bui.

A mio padre Gianluca, per aver creduto in me prima di tutti, per non lasciarmi mai la mano, per avermi insegnato che la forma d'amore più grande non è solo la vicinanza, ma la costanza.

A mia madre Luciana, perché la vita possa unirci incondizionatamente, ricordandoci che è breve e fantastica; perché il passato possa essere chiuso in bagaglio da tenere accantonato, così da riaprirne uno nuovo fatto di amore e condivisione di sogni.

A mio fratello Enrico, per essere così, semplice e autentico. All'amore che ci lega e al silenzio che ci unisce. Perché il futuro possa farci camminare sempre fianco a fianco.

Al mio fidanzato Federico, perché senza di lui non sarebbe stato lo stesso. Per la pazienza, il supporto e la forza. Per aver adattato la tua vita alla mia senza compromessi. Per la sincerità e l'amore indiscusso.

A mio cugino Arrigo, pilastro fondamentale di questo percorso. Per i consigli, l'attenzione, l'affetto, la disponibilità e per aver creduto in me anche quando era difficile farlo.

A mio cugino Riccardo, perché nonostante la distanza ci separi, niente potrà mai rimuovere i ricordi di quando eravamo piccoli e i consigli di quando ci riuniamo ancora oggi.

A zia Rossella, perché tramite la vita altrui, a volte capiamo anche noi stessi quanto questa sia importante. Per la tua tenacia e perché questa esistenza posso regalarti solo sorrisi.

A mia cugina Caterina, perché due cuori possano sempre ritrovare a confidarsi nel momento del bisogno, mentre mangiamo caramelle gommose.

A zia Gigliola, per non mollare mai.

A Giulia, perché il futuro posso sempre tenerci unite, come ora, da 26 anni. Per essere stata parte di questo cammino e per avermi ascoltato quando ne avevo bisogno.

A Giada, perché a volte la vita ti dona un'amica, non per bisogno ma per necessità; perché la tua spensieratezza e positività possano accompagnarmi sempre e ovunque.

Alla mia Ezgi, per essere la mia confidente preferita, per tutti i momenti felici condivisi anche con Kemal, e per tutti quelli che trascorreremo. Per aver custodito questo legame con cura anche a km a distanza. Per le risate e i discorsi profondi.

Al mio gattino Leo, perché il tuo amore possa essere la cornice della mia vita.

A tutti i ragazzi della Chiusa, per aver reso possibile il mio desiderio, quello di avere la mia piccola indipendenza. Per l'umanità, la dignità e la professionalità che vi contraddistingue. Vi porterò per sempre nel mio cuore.

A Christian, per esserci sempre anche con una sola chiamata. Per ricordarmi che nella vita l'amicizia va custodita con cura.

Ad Angelica, per essere così come sei: allegra e sensibile e per non voltarti mai dall'altra parte nel momento del bisogno.

Al professor Gallegati, per avermi affiancata e guidata nella stesura di questa tesi. Per la pazienza, la dedizione e la disponibilità.

A me stessa, perché è stato viaggio sorprendente e fantastico. Perché i miei desideri posso diventare la mia quotidianità. Perché possa continuare a volare fino a raggiungere la vetta più alta.

Grazie a tutti,

Anna.