INTRODUCTION CHAPTER I

The fast-food sector is one of the most dynamic and competitive areas within the food service industry, characterised by constant innovation, rapidly changing consumer preferences, and strong rivalry between global and local brands. In this environment, pricing and brand strategy decisions are central to firms’ ability to attract and retain customers. A key concept underpinning these decisions is consumers’ willingness to pay (WTP), which represents the maximum price an individual is prepared to pay for a product or service. Understanding what drives WTP allows firms to position their offerings more effectively, optimise pricing strategies, and tailor communications to specific market segments. Although the literature provides valuable insights into demographic influences, product attributes, and branding effects, relatively little attention has been paid to the nuanced role of brand familiarity. Familiarity can be expressed in several ways, through brand recall, recognition, or actual prior use, yet it remains unclear to what extent these different dimensions translate into higher WTP. This thesis addresses that gap by analysing consumer behaviour in the Polish fast-food market through a discrete choice experiment (DCE) combined with survey data.

The purpose of this study is threefold. First, it seeks to identify the impact of consumer characteristics such as age, income, market awareness, and consumption frequency on WTP for fast-food products. Second, it evaluates how distinct dimensions of brand familiarity – recall, recognition, and prior usage shape consumers’ WTP, and whether these dimensions exert similar or divergent effects. Third, it investigates heterogeneity in consumer preferences, testing whether individuals can be grouped into segments that differ systematically in their valuation of brands, product attributes, and familiarity cues. By doing so, the thesis contributes to both the academic literature on consumer choice and to the practical challenges faced by firms entering or expanding in competitive food service markets.

To achieve these objectives, the research employs a survey-embedded DCE, in which respondents are presented with hypothetical fast-food purchase scenarios. Each scenario involves alternatives that vary systematically in brand, product type, price, and other attributes. In addition, the survey collects information on demographics, fast-food consumption frequency, and measures of brand familiarity. The dataset consists of 140 valid responses from Polish consumers, providing a basis for quantitative analysis. Econometric estimation is conducted using three modelling approaches: the Multinomial Logit (MNL), the Mixed Logit (MXL), and the Latent Class (LCM) model. The MNL and MXL models estimate average preferences and account for some heterogeneity in taste, while the LCM model explicitly identifies consumer segments that differ in their decision-making patterns.

The results demonstrate that prior usage of a brand consistently increases WTP, highlighting the strength of direct experience as a predictor of consumer valuation. Product bundles and, to a lesser extent, premium options also enhance WTP across the sample. However, the effects of recognition and recall are more nuanced. Recognition alone does not necessarily lead to higher WTP and, for some consumers, is associated with lower valuations, suggesting that awareness without positive associations may weaken a brand’s appeal. Recall has a positive effect only within certain consumer segments, pointing to the importance of segment-specific branding strategies. Importantly, the LCM model reveals two distinct segments and provides a better fit than the aggregate models, showing that consumer heterogeneity plays a decisive role in interpreting the relationship between brand familiarity and WTP. Segment membership is systematically related to income, age, consumption frequency, and awareness levels, which suggests that demographic and behavioural factors can help firms predict which strategies are most effective for which consumers.

In light of these findings, the thesis contributes to the literature by showing that not all aspects of familiarity are equally valuable in enhancing WTP. While prior usage remains the most robust predictor, recall matters only for certain groups, and recognition may even harm brand valuation in specific cases. From a managerial perspective, these insights underline the need for nuanced segmentation and caution against treating familiarity as a uniform driver of price premia. Established brands can benefit from leveraging usage experiences and targeted recall campaigns, while new entrants must be mindful that mere recognition does not guarantee higher valuations.

The structure of the thesis reflects these objectives. The first chapter reviews the theoretical foundations of consumer choice and WTP, with emphasis on decision-making processes, brand knowledge, and measurement methods. The second chapter presents the Polish fast-food market, highlighting its size, growth, major players, and key determinants of WTP as identified in prior studies. The third chapter explains the research design, including the survey, experimental setup, and econometric models. The fourth chapter presents the empirical results, discusses their implications, and connects them to broader debates on consumer behaviour and branding. The thesis concludes with a summary of findings, managerial recommendations, and suggestions for future research.

CHAPTER II

Theoretical framework of consumer choice and willingness to pay

2.1 Foundations of economic theory

Demand and supply are two economic forces that drive the market. The dynamic interplay between supply and demand determines the market-clearing price at which these forces balance (Economics 2020). This equilibrium is crucial for understanding market behaviour, as it reflects the interaction between sellers and consumers. On the seller’s side, the goal is to maximize profit; by charging higher prices, sellers can generate greater profits. Price equilibrium and profit maximization are closely linked to demand theory (Friedman 2017), which indicates that price influences the quantity of goods consumers are willing to purchase. Conversely, consumers aim to maximize their utility – that is, the satisfaction they derive from consuming goods. As prices rise, the quantity of goods that consumers can purchase with a limited budget decrease, leading to a reduction in overall utility. Thus, the relationship between price, demand theory, and utility theory forms the foundation of economic transactions. These three constructs will be discussed in the following sections.

*2.1.1* **Price mechanism and demand theory**

According to Kotler and Armstrong (Kotler et al. 2015), price is defined as “the amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service”. Market prices serve as indicators that guide the allocation of resources to areas with the highest demand (Landsburg 1999). Higher revenues result in a greater allocation of resources. Additionally, prices provide the necessary incentives for consumers to choose certain products, leading to efficient resource allocation and helping to balance supply and demand in the market. By using factor prices (the costs of resources used to produce a given good or service) to determine supply, it becomes easier to set product prices that organize the production process.

Another important function of prices is to transmit information that signals consumer preferences, resource distribution, and potential profitability (Friedman 2017). This information is crucial for producers and consumers to make informed decisions, facilitating coordination across the economy. Prices adjust to reflect changes in supply and demand, thereby allocating resources where they are most valued (Landsburg 1999).

Graphically, the relationship can be represented as a locus of points (see Figure 1.1), where each point indicates the maximum quantity of a commodity that can be purchased at a given price during a specific period. The demand curve divides the graph into two regions; points above the curve represent quantities that are unattainable under the prevailing demand conditions.

Figure 2.1 Demand and Supply curves with equilibrium point

A graph of a supply line

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*Source*: Own study, based on: N.G. Mankiw “Economics”, Cengage Learning, Andover, 2020.

The equilibrium point can shift significantly in response to changes in market conditions, such as fluctuations in production costs, government policy shifts, or changes in consumer preferences. Such shifts result in a new balance between market forces, leading to changes in prices and quantities sold (Landsburg 1999). For example, if production costs rise due to supply chain issues, the supply curve may shift to the left, resulting in higher prices and lower quantities available in the market. The interplay between supply and demand curves highlights the dynamic nature of the market and the continuous adjustments that tend to restore equilibrium.

Furthermore, the elasticity of demand and supply plays a crucial role in determining the extent of these changes (Houthakker 1965). For demand, elasticity measures the responsiveness of consumer demand to changes in price and similarly, the elasticity of supply measures how responsive the quantity supplied is to price changes. A higher elasticity indicates that changes in price will lead to more significant changes in quantity demanded or supplied. Overall, the interplay of supply, demand, and the equilibrium price forms the foundation for many economic theories. These assumptions follow logically from fundamental premises about human behaviour, which can be partially explained by utility theory.

*2.1.2* **Consumer utility theory**

When making a consumption decision, consumers are driven by the satisfaction and pleasure they derive from consuming a good or service. This satisfaction – often measured in “utils” – is used to explain how individuals prioritize their consumption based on the benefits they expect to receive (Barberà et al. 2004). Total utility represents the cumulative satisfaction obtained from consuming a specific quantity of a good, while marginal utility refers to the additional satisfaction gained from consuming one extra unit of that good (Kauder 2015).

To maximize their overall satisfaction, consumers aim to maximize their utility. This involves making decisions that provide the highest possible satisfaction within the constraints of their resources. The principle of utility maximization (Aleskerov et al. 2007) requires consumers to allocate their budget so that the last unit of currency spent on each good or service yields the same level of marginal utility. This ensures that, given their limited resources, no reallocation could further increase their total utility.

This relationship can be mathematically expressed as:

where:

MU – represents the marginal utility, and

P – represents the price of goods X and Y.

Under conditions of uncertainty, consumers cannot be sure of the actual satisfaction they will derive from consumption. Expected utility theory (Grant and Van Zandt 2007) is a mathematically structured approach that explains how consumers make decisions under uncertainty. The expected utility for each alternative is calculated as a weighted sum of the utilities associated with all possible outcomes, with each outcome weighted by its probability of occurrence. This approach aligns choices with consumer preferences and risk tolerance, accounting not only for potential outcomes but also for the individual's risk attitude. The theory assumes that individuals can rank their preferences consistently and that these preferences can be represented by a utility function (Grant and Van Zandt 2007). However, this is not the only perspective; behavioural economics offers an alternative view, which is discussed in the following section.

2.2 Consumer decision-making process

In economics, models often assume the existence of economic agents who make decisions by navigating through complex choices influenced by various factors such as preferences, prices, and social norms. These decisions vary based on how individuals perceive and evaluate their options, leading to diverse outcomes in understanding the world. A choice process can be defined as one where a set of alternatives, differing based on individual thought processes is available, and the final selection is the option that best aligns with the individual's view of the world (Earl 1986). In this context, each agent behaves uniquely as a consumer, shaped by personal preferences and the socio-economic environment in which they operate (Schwarz et al. 2020). In classical economic theory, the consumer is often depicted as an emotionless decision-maker who continuously optimizes resource use.

This perspective shifts when viewed through behavioural economics, which recognizes that consumers frequently base their decisions on emotions rather than pure calculation. In this framework, emotional factors significantly influence purchasing decisions, indicating that choices are not solely about utility but also about feelings and personal experiences. This approach relaxes the assumption of perfect rationality (Camerer 2014).

Since the beginning of economic thought, researchers have acknowledged that human behaviour deviates from purely rational models. However, early studies focused primarily on rational decision-making because exploring imperfect rationality was considered slow and challenging. Herbert Simon, a pioneer in behavioural studies, introduced the concept of satisficing (choosing an option that meets acceptable criteria rather than the optimal one), to counter the idea of strict utility maximization (Beatty 2023). Later, Kahneman and Tversky (1973) refined these ideas by breaking down decision-making into components such as judgments, framings, and reference dependences (Kahneman and Tversky 1973). Richard Thaler further advanced the field by integrating psychological concepts, such as mental accounting and the endowment effect into economic models, thereby challenging the idea of the fully rational consumer (Beatty 2023). Consequently, the study of decision-making now consists of both real choices with tangible outcomes and hypothetical choices that are not followed by actual actions.

*2.2.1* **Stated preferences**

Early approaches in economic research incorporated human behaviour by asking respondents to make choices in hypothetical situations. In these surveys, respondents are presented with a vignette outlining counterfactual conditions under which they must choose (Beatty 2023). Research by Brown et al. (1996) has demonstrated that choices made in hypothetical scenarios can differ significantly from real-life decisions (Brown et al. 1996). For example, respondents often state that they are willing to pay more for a good when there are no financial consequences, which is a phenomenon known as hypothetical bias (Halvorsen and Sœlensminde 1998). Without real consequences, respondents may not consider all aspects carefully, leading to answers that are sometimes inaccurate. Additionally, individuals may struggle to predict their future or hypothetical behaviours due to cognitive dissonance, adjusting their responses to fit into social norms rather than reflecting their true preferences. The challenge of fully simulating real-world scenarios can result in oversimplified decision-making processes, while the complexity of evaluating multiple factors in hypothetical settings may overwhelm respondents and distort the results.

*2.2.2* **Revealed preferences**

To overcome the limitations of hypothetical surveys, researchers developed methods in which respondents take real actions following their responses. The real consequences of these actions encourage more thoughtful answers and reduce hypothetical bias. Studies have shown that the results obtained from hypothetical scenarios can differ from those based on real, incentive-driven decisions. For example, Christensen et al. (1999) found that participants reported higher hypothetical buying prices for various goods compared to actual prices (Christensen et al. 1999). In contrast, O’Conor, Johannesson, and Johansson (1999) observed no significant difference between the two (O‘Conor et al. 1999). These varying outcomes suggest that the extent of hypothetical bias can differ across studies and industries, influencing the comparability of results from hypothetical versus real-world settings.

2.3 The role of brand knowledge in consumer choice

An important factor influencing consumer decision-making when choosing between different brands is how consumers perceive and feel about them. Each brand can be represented by a pyramid, where the base forms the foundation for subsequent levels (Keller 2001).

Figure 2.2 Pyramid representation of brand knowledge dimensions

A diagram of brand awareness

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*Source*: Own study, based on: L. K. Keller “Building customer-based brand equity”, Marketing Management, Chicago, 2001.

At the base of the pyramid is brand awareness, which measures how readily a brand is recalled from memory. Brand awareness comprises two components:

Brand Recognition: The ability of consumers to identify the brand when given cues (e.g., logos or slogans), indicating how well the brand stands out among competitors.

Brand Recall: The ability to remember the brand without any prompts, which reflects the brand’s positioning and influences purchasing decisions (Khurram et al. 2018).

Building on awareness, consumers form a brand image, which is a set of perceptions and associations about a brand. This image is shaped by past experiences, the brand’s reputation, and marketing communications. It encompasses both emotional and psychological attributes that affect consumer attitudes and purchase decisions. The brand image is typically composed of three elements:

Attributes: The various characteristics of the brand, both related and unrelated to the product.

Benefits: The functional advantages, such as quality and reliability.

Attitudes: The feelings or emotions that consumers experience after using the product, which influence their overall preferences (Bernarto et al. 2020).  
A strong brand image can distinguish a company in a competitive market, increasing customer loyalty and trust.

Brand value represents the financial worth associated with a brand or its products. It is defined as the perceived value that customers assign to the brand, reflected in their WTP for its products and their overall loyalty. Brands with strong value propositions can create deeper connections with consumers, turning one-time buyers into loyal advocates. Additionally, higher brand value can enhance competitive positioning and facilitate market entry for new products.

The final component of brand knowledge is brand attachment, which measures the emotional bond that consumers develop with a brand. Rooted in attachment theory from psychology, brand attachment is characterized by the strength of the connection between the brand and the consumer’s self-concept (Shimul 2022). This attachment is multifaceted and may be reflected in nostalgic memories or the perception of the brand as an extension of the consumer’s identity. Ultimately, brand attachment plays a vital role in shaping consumer loyalty and behaviour.

2.4 Understanding willingness to pay

All the above-mentioned theories converge on the concept of WTP, which reflects the maximum amount a consumer is prepared to spend on a product based on market forces, personal utility, and perceived value. This measure ultimately influences pricing strategies. For instance, merchants may use cost-based pricing (adding a margin to production costs) or set prices relative to competitors. However, these approaches have drawbacks that can leave significant profit potential unexploited (Garda and Marn 1993).

A more consumer-centric approach evaluates the value a product brings to its users by assessing the benefits it provides. This perceived monetary value is understood as WTP, so the maximum amount a consumer would pay to acquire a product (Gupta and Çakanyıldırım 2016). In other words, a consumer will consider purchasing a product only if the perceived utility exceeds its price (Simon and Fassnacht 2018). As noted by Philips, Whynes, and Avis (2006), market demand curves are essentially the sum of individual WTP values, reflecting the aggregated perceived value and utility derived from consumption (Philips et al. 2006). In this context, the terms “willingness to pay” and “reservation price” are often used interchangeably and will be understood in the same way for the purposes of this study.

Both researchers and practitioners agree that understanding WTP is essential for developing an optimal pricing structure (Diller and Herrmann 2003). By accurately measuring how much consumers are willing to pay for a product or service, companies can avoid under-pricing (leading to lost revenue) or over-pricing, which may discourage potential buyers. Additionally, insights into WTP enhance the accuracy of demand forecasting, leading to better strategic decisions regarding discounts, promotions, and price adjustments. A clearer understanding of demand elasticity also enables companies to optimize inventory levels, reduce waste, and improve overall supply chain efficiency (Monroe 2003). Thus, a deep understanding of WTP not only supports improved pricing strategies but also contributes to more effective and responsive market planning.

WTP can be categorized into two types: hypothetical and real. Hypothetical WTP (HWTP) is stated without any financial consequences. It represents a simple declaration of how much a consumer would pay for a product if given the opportunity (Schmidt and Bijmolt 2020). In contrast, real willingness to pay (RWTP) requires participants to pay the price they have stated, thereby creating actual financial incentives and a real-world context. The distinction between RWTP and HWTP, referred to as hypothetical bias arises when respondents indicate higher levels of hypothetical WTP than what they would spend using their own money. This bias occurs because, in hypothetical scenarios, respondents do not face the real financial consequences of their decisions, leading them to overstate their WTP. Although this bias does not appear in every stated preference survey, it can significantly affect the measured WTP (Loomis 2011).

2.5 Methodological approaches to willingness to pay measurement

Researchers and practitioners have identified various methods to measure WTP. One common classification distinguishes between measurements that yield hypothetical versus real responses. An alternative classification, as proposed by Diller and Herrmann (2003), differentiates estimations based on whether they capture individual or aggregated levels (Diller and Herrmann 2003). For this study, we focus on methods based on the way data are collected. The various methods are illustrated in Figure 1.3 (Breidert et al. 2006).

This representation separates all the methods into those which can be measured by surveying either with direct or indirect questions, and those which are based on real purchasing data from the past.

Figure 2.3 Willingness to pay measure methods based on revealed or stated preference

Obraz zawierający diagram, linia, Plan, Rysunek techniczny

Opis wygenerowany automatycznie

*Source*: Breidert, C, Hahsler, M & Reutterer, T 2006, 'A Review of Methods for Measuring Willingness-to-Pay', Innovative Marketing, vol. 2, no. 4, 2 (4), pp. 8-32.

*2.5.1* **Laboratory experiments**

Laboratory experiments offer a controlled method to measure individuals’ WTP. In these experiments, researchers manipulate variables and product attributes while observing participants’ behaviour under controlled conditions. Typically, each participant is provided with a fixed amount of money (Smith 1982) to spend on the product or service under investigation. This incentive-based approach helps reduce hypothetical bias by requiring participants to make actual spending decisions (Loureiro and Mccluskey 2003). However, a potential drawback is that participants are aware they are being observed in an artificial setting, which may lead them to make more rational decisions than they would in everyday shopping scenarios (Hanna and Dodge 1995).

*2.5.2* **Field studies**

Field studies are conducted in natural environments where participants make purchasing decisions in real or closely simulated market situations (Blumenschein et al. 2008). By placing the experiment in a real-world setting, respondents encounter genuine purchasing conditions, which minimizes the uncertainty and errors typically associated with hypothetical scenarios. Field studies also allow researchers to control product attributes to some extent, though the complexity of real market conditions can make it challenging to capture every relevant variable. Like laboratory experiments, field studies tend to be more costly and time-consuming due to the need to monitor actual market responses over extended periods (McMahon-Beattie 2002).

*2.5.3* **Auctions mechanism**

Auctions serve as an experimental method to reveal consumers’ true WTP. They can be conducted either in the laboratory or in field settings and are designed to encourage truthful bidding by incorporating real monetary incentives. In a typical auction, a seller presents a product to a group of potential buyers, who place bids based on their perceived value of the product. The highest bid wins, and the winning bidder purchases the product at that bid price.

A widely used method is the Becker-DeGroot-Marschak (BDM) procedure (Becker et al. 1964). In the BDM auction, participants state the maximum price they are willing to pay for a product without knowing the final selling price. After all bids are collected, a random price is generated by the experimenter. If a participant’s bid meets or exceeds this random price, they purchase the product at that price; otherwise, no transaction occurs. This mechanism encourages bidders to reveal their true valuation, since the bid determines only whether the purchase occurs, not the price paid.

Another format is the Vickrey auction, also known as the second price, sealed-bid auction, where each participant submits an anonymous bid. The highest bidder wins but pays the amount of the second-highest bid (Ausubel and Milgrom 2005). This format minimizes the incentive to misrepresent true valuation, as the winning bid does not affect the final price paid. Both auction methods effectively elicit near-real valuations, providing valuable insights into consumer preferences.

*2.5.4* **Direct surveys methods**

The simplest way to determine the value attached to a product is by asking consumers to state their WTP directly. According to Hofstetter et al. (2021), this method is among the most used approaches for measuring demand and assessing product-market fit due to its ease of implementation, low cost, and the rich customer data it provides (Hofstetter et al. 2021). Unlike other methods that observe actual behaviour, direct surveys rely on consumers stated valuations. These surveys typically involve questions regarding price or price thresholds and can be directed at either market experts or potential buyers.

When field experts, such as marketing managers or sales representatives are questioned, their specialized knowledge can yield more complex valuations that may go beyond what the public can provide. However, such surveys are generally applicable to smaller markets or more targeted customer groups (Breidert et al. 2006).

Direct surveys can also elicit a consumer’s reservation price. In these surveys, respondents are asked straightforward questions about their maximum WTP, such as “What is the maximum price you would pay for this product?” Researchers can use either hypothetical scenarios or predetermined price points to understand consumer valuation. Direct survey questions typically come in two formats: open-ended and closed-ended. In open-ended surveys, respondents provide their own price without constraints, whereas closed-ended surveys offer a specific price and ask whether the respondent would purchase the product at that price (Whynes et al. 2004).

One commonly used open-ended survey was developed by Stoetzel (1954), based on the idea that each consumer has a minimum and maximum price they would consider acceptable for a product. Examples of such questions (Stoetzel 1954; Marbeau 1987) include:

* “Above which price would you not buy a product because you cannot afford it or do not think it is worth the money?”
* “Below which price would you not buy the product because you would suspect its quality?”.

These questions directly target the reservation price by linking monetary value to perceived quality or affordability.

Another approach asks respondents to specify price points that represent different value perceptions (e.g., very good value, average value, and somewhat poor value). Literature suggests that the “somewhat poor” value often comes closest to the real WTP (Diller and Herrmann 2003), as consumers tend to default to a middle value when faced with multiple hypothetical scenarios (Lieven and Lennerts 2013). This method can be further refined using Price Sensitivity Meter (PSM) questions (Löffler 2015), which focus on identifying upper (U) and lower (L) thresholds as well as upper (u) and lower (l) bounds. Examples of PSM questions include:

* “At what price would you consider this product so expensive that you would not consider buying it?”
* “At what price would you consider this product so inexpensive that you would doubt its quality?”
  + “At what price would you consider the product to be becoming expensive, though not entirely out of question?”.
* “At what price would you consider the product a bargain – a great buy for the money?”
  + - “What would you expect the market price to be without any discounts?”.

The cumulative percentage values from these thresholds and bounds can then be used to determine an optimal price point (the intersection of U(p) and L(p)) as well as an acceptable price range (the intersection of cumulative PSM responses) (Löffler 2015).

Because direct surveys do not involve real monetary transactions, the responses are hypothetical and may exhibit significant hypothetical bias. Research has shown that WTP figures derived from direct surveys are often significantly higher than those obtained by other methods (Hoffman and Spitzer 1993). Therefore, while direct open-ended questions can capture initial consumer valuation, their results should be interpreted with caution and ideally corroborated with other measurement approaches.

*2.5.5* **Indirect surveys methods**

Traditional survey methods often rely on direct questioning, where respondents explicitly state their preferences and price points. However, such approaches can introduce biases and inaccuracies, as individuals may have difficulty articulating their true preferences. In contrast, indirect survey methods require respondents to reveal their preferences through choice-based scenarios rather than direct statements. In these surveys, respondents are presented with several product profiles each containing a set of attributes (e.g., price, quantity, etc.) and asked whether they would purchase the product (Marbeau 1987). By selecting a particular profile, participants implicitly indicate the price they are willing to pay for that combination of attributes (Alriksson and Oberg 2008). This indirect approach has evolved into more sophisticated choice experiments in pricing and marketing studies.

In real-world purchasing, consumers are often faced with multiple similar products differentiated by attributes such as price, colour, and brand. Rarely there is a single best product and instead, buyers evaluate all available options and choose the one that best fits their preferences (Alriksson and Oberg 2008). To simulate this behaviour, two primary methodological approaches have emerged: Choice-Based Conjoint (CBC) analysis (mostly used in marketing research) and DCE, which are widely applied in scientific studies. In both approaches, participants choose one option from a set of alternatives presented in multiple product profiles. Responses are then analysed to determine part-worth utilities, which represent the incremental value associated with each attribute level and quantify how each attribute contributes to overall satisfaction (Molin et al. 2017). Although the results can be expressed as a utility function, they are interpreted differently: in CBC, utility is calculated as the sum of part-worths for each attribute level, while in DCE, utility is modelled as components of random utility theory (Green and Rao 1971):

where:

yc – is the utility of profile c.

βal – represents the unknown part-worth (in CBC) or the utility parameter estimate

(in DCE) for level l of attribute a.

xal – equals 1 if profile c includes level l of attribute a, and 0 otherwise

After fitting the utility function, CBC is typically used for market share simulations and satisfaction assessments using an additive composition rule, whereas DCE estimates choice probabilities through probabilistic choice models (Louviere et al. 2010).

To mitigate information overload from full product profiles, trade-off methods have been implemented, presenting respondents with only a pair of attributes per product profile (Johnson 1974). Although this reduces the cognitive load, it may also limit the realism of the simulation compared to actual shopping environments, where consumers are exposed to multiple stimuli.

An adaptive choice-based conjoint (ACBC) approach further refines conjoint analysis by adapting the survey based on individual preferences and behaviours (Cunningham et al. 2010). This iterative process addresses extreme response behaviours, such as consistently choosing a no-choice option or always selecting the same alternative regardless of differences, by tailoring subsequent choices to each respondent. As a result, ACBC increases engagement and yields deeper insights into consumer decision making (Al-Omari et al. 2023).

*2.5.6* **Summary**

This chapter has explored the foundational economic theories underlying consumer choice and WTP, focusing on demand and utility concepts. It has demonstrated how these theories form the basis for understanding how consumers evaluate products and make purchasing decisions. In addition, the chapter reviewed a range of methodological approaches for measuring WTP from laboratory experiments and field studies to auction mechanisms and both direct and indirect survey methods. These diverse methodologies provide researchers with a robust toolkit for capturing the multifaceted nature of consumer preferences. The insights gained here will serve as a critical framework for the empirical investigations in subsequent chapters.

CHAPTER III

The fast-food market and willingness to pay determinants

With evolving consumer lifestyles, increasing urbanization, and changing consumption trends, every industry is constantly adapting. The restaurant industry, with fast-food is no exception. Over the past decade, this sector has experienced significant growth and transformation (Coherent Market Insights Pvt 2025). This chapter provides a detailed overview of the fast-food industry in Poland, examines consumer behaviours and trends, and highlights the key factors influencing food choices and consumers’ WTP.

3.1 Fast-food market overview in Poland

Fast-food is defined as a segment within the food service industry that specializes in the rapid preparation and service of food (Fantasia 1995). It is characterized by mass production, where recipes are standardized across multiple locations to speed up service and lower costs. Initially, this approach limited menu diversity, leading restaurants to focus on just a few items, which was a strategy that suited consumer preferences at the time (Penfold 2012). However, as consumer tastes evolved toward more refined meals and new food products emerged, restaurants were forced to adjust their strategies. Technological advancements further improved the standardization of food preparation processes, significantly impacting the globalization of the industry. The true beginning of fast-food in Poland is often traced back to the opening of the first McDonald’s in 1992.

Today, the fast-food market in Poland is saturated with options from diverse global cuisines. Burgers remain the sector’s cornerstone, available in beef, chicken, and vegetarian variations. Kebabs, influenced by Middle Eastern culinary traditions, have surged in popularity, as has pizza – long a consumer favourite. Additionally, cuisines such as sandwiches and Thai food have gained traction, reflecting the evolving tastes of Polish consumers.

Figure 3.1 Willingness to pay measure methods based on revealed or stated preference

Obraz zawierający diagram, linia, Plan, Rysunek techniczny

Opis wygenerowany automatycznie

*Source*: Breidert, C, Hahsler, M & Reutterer, T 2006, 'A Review of Methods for Measuring Willingness-to-Pay', Innovative Marketing, vol. 2, no. 4, 2 (4), pp. 8-32.