OIKOS : Jurnal Ekonomi, Manajemen, dan Bisnis
P-ISSN : 1979-4770

Redefining Elasticity: A Comparative Analysis in Conventional and Islamic Economic Systems

Neni Nuraeni
Faculty of Sharia and Law, UIN Sunan Gunung Djati Bandung, Indonesia
neninuraeni@uinsgd.ac.id

Abstract
Elasticity serves as a fundamental analytical tool in economics, enabling the assessment of how responsive economic variables are to changes in price, income, or related goods. While conventional economics employs elasticity within frameworks of utility maximization and market equilibrium, Islamic economics reinterprets these models through ethical and spiritual dimensions, emphasizing *sharīʿah* compliance, communal welfare, and moral intention (*niyyah*). This study conducts a theoretical and conceptual comparison of elasticity in both paradigms, aiming to identify points of convergence and divergence. Drawing on classical economic theory and Islamic scholarly literature, the research highlights how Islamic economics modifies conventional elasticity by integrating variables such as *halāl* consumption, zakāt, and prohibition of *ribā*. The study proposes a hybrid elasticity model that retains mathematical rigor while embedding normative Islamic principles. Results indicate that responsiveness in Islamic markets is shaped not only by economic incentives but also by spiritual accountability and social justice imperatives. This reconceptualization enhances the relevance of elasticity for Muslim-majority economies and contributes to the broader discourse on pluralistic economic modeling. The study offers valuable insights for policymakers, Islamic finance practitioners, and researchers seeking ethically grounded analytical frameworks.

Keywords
elasticity; Islamic economics; price responsiveness; ethical consumption; sharīʿah-compliant models

INTRODUCTION

Elasticity is a core concept in economic analysis, employed to measure how responsive one economic variable is to a change in another, particularly price, income, or the price of related goods. In conventional economic theory, elasticity underpins many market predictions and policy recommendations, forming the basis for understanding consumer behavior, taxation impact, and firm-level pricing strategies (Mankiw, 2009, pp. 87–94). Rooted in neoclassical economics, elasticity presumes rational agents responding to incentives, which aligns well with mathematical modeling and empirical

validation. Meanwhile, Islamic economics, although increasingly quantitative, draws on a normative and ethical worldview where human welfare (*falāḥ*) and social justice (*ʿadālah ijtimāʿīyah*) are primary objectives (Chapra, 1992, pp. 18–25). This dualism in purpose invites a reevaluation of elasticity beyond mere responsiveness to prices, integrating spiritual and ethical dimensions as well.

Conventional economic models assume utility maximization, self-interest, and competitive equilibrium, forming the analytical bedrock for interpreting elasticity. Yet, this approach often omits the socio-religious values that influence real-world economic behavior, especially in societies deeply rooted in Islamic principles (Sen, 1977). In contrast, Islamic economics, while borrowing from conventional tools, recasts them through a framework that prioritizes *maqāṣid al-sharīʿah* (objectives of Islamic law) and collective welfare (Naqvi, 1981, pp. 34–39). The integration of ethics and divine accountability modifies both the function and application of elasticity. As such, demand elasticity, for instance, may be influenced not only by income and price but also by moral constraints and *halāl* consumption norms (Hassan & Lewis, 2007).

The empirical significance of elasticity remains pronounced in Islamic economies, where consumption, production, and pricing must comply with *sharīʿah*. However, the lack of a unified framework that reconciles conventional elasticity models with Islamic values presents a theoretical and methodological gap. For example, interest-based pricing mechanisms central to elasticity in conventional theory are fundamentally prohibited in Islam (Khan, 1984). Despite these divergences, both systems aim to understand and predict economic behavior, making a comparative study of elasticity both timely and necessary. This paper addresses this underexplored intersection by drawing insights from classical texts, modern Islamic scholarship, and economic theory.

The literature to date has addressed elasticity extensively within conventional paradigms and, separately, discussed Islamic pricing and consumption behavior. However, very few studies have systematically examined how elasticity operates within Islamic economic systems or how it could be reformulated to align with Islamic principles while maintaining analytical rigor (Siddiqi, 1981; Arif, 1985). Thus, this study fills a critical gap by exploring the theoretical alignment, divergence, and possible integration between conventional and Islamic interpretations of elasticity. It advances the academic discourse by offering a comparative framework that respects both the methodological precision of conventional economics and the ethical imperatives of Islamic economics.

To address this scholarly gap, the research seeks to answer the following questions: How is the concept of elasticity defined and utilized in Islamic economics compared to conventional economics? In what ways do normative and theological underpinnings in Islamic thought reshape elasticity models? How can an integrative framework be developed to reconcile conventional elasticity with Islamic economic principles? This

study aims to answer these questions by synthesizing classical theory with contemporary Islamic scholarship to propose a contextually relevant analytical model. The significance of this study lies in its potential to inform both Islamic economists and policy designers about how to adapt conventional tools without compromising on *sharīʿah* compliance or analytical clarity.

LITERATURE REVIEW

Elasticity has long served as a foundational concept in neoclassical economics, enabling economists to quantify responsiveness in demand and supply relative to changes in price, income, and other variables. Classical theorists such as Alfred Marshall introduced price elasticity of demand as a tool to assess consumer sensitivity (Marshall, 1920, pp. 88–95), which was later refined and operationalized in models emphasizing utility maximization and marginal analysis (Samuelson & Nordhaus, 2001, pp. 122–127). Modern economics has further developed elasticity through empirical applications across various sectors, including labor markets, public finance, and international trade (Krugman & Obstfeld, 2009). These models often rely on assumptions of rationality and perfect information, framing elasticity as an objective, value-neutral metric.

In contrast, Islamic economics engages with elasticity through a moral-ethical lens, embedding market behavior within the framework of *sharīʿah*. While the technical aspect of elasticity remains useful, Islamic scholars question the value neutrality of mainstream models, advocating instead for a system that integrates justice (*ʿadālah*), prohibition of *ribā* (interest), and equitable distribution (Chapra, 1992, pp. 36–42). Studies by Siddiqi (1981) and Naqvi (1981) emphasized the role of human well-being over utility maximization, suggesting that demand elasticity, for example, is shaped not just by price changes but also by religious and ethical considerations, such as *niyyah* (intention) and *halāl* compliance.

Recent literature has attempted to bridge this gap by proposing hybrid models that adopt elasticity metrics while contextualizing them within Islamic principles. Arif (1985) and Hasan (1998) propose models where price responsiveness is examined under constraints like *zakāt*, prohibition of *gharar* (excessive uncertainty), and ethical consumption. These models suggest that elasticity in Islamic economics cannot be divorced from socio-economic objectives like *maslahah* and poverty alleviation. Yet, much of this literature remains conceptual, with limited empirical integration or systematic comparison with conventional models.

This study situates itself within this evolving body of knowledge, aiming to provide a structured comparative analysis that highlights both the theoretical and applied

dimensions of elasticity across economic systems. By doing so, it seeks to contribute to the scholarly effort of developing analytical tools in Islamic economics that are both *sharīʿah*-compliant and methodologically robust.

Theoretical Framework

At the heart of conventional economics lies the neoclassical model, where elasticity is defined through the lens of marginalism and utility theory. Price elasticity of demand, cross-price elasticity, and income elasticity are derived from consumer utility functions and producer cost functions (Marshall, 1920, pp. 102–106; Samuelson & Nordhaus, 2001, pp. 129–134). These models assume rational agents who aim to maximize utility or profits, responding predictably to changes in price and income. This framework has been widely used to inform fiscal policy, business pricing strategies, and market interventions, forming the basis for applied economics globally (Krugman & Obstfeld, 2009).

Elasticity in conventional economics also heavily depends on partial equilibrium analysis, where the responsiveness of a variable is isolated while holding others constant (Varian, 1992). This reductionist approach facilitates precision and simplicity but often fails to capture socio-cultural and ethical dimensions that influence real-world economic behavior. For instance, while a product's price elasticity might be high in theory, cultural or religious constraints can significantly moderate this responsiveness. This highlights the need for a framework that is more holistic and inclusive of value-based dimensions, especially when applied in non-Western or Islamic contexts.

Islamic economics draws upon a different theoretical foundation rooted in *maqāṣid al-sharīʿah*—the objectives of Islamic law—which seek to preserve faith, life, intellect, progeny, and wealth (Chapra, 1992, pp. 33–40). Economic activity in Islam is considered part of worship (*ʿibādah*), where ethical conduct, justice, and social welfare are paramount (Naqvi, 1981, pp. 57–63). Consequently, elasticity in Islamic economics cannot be viewed solely as a mathematical derivative but must also reflect values such as fairness, communal welfare, and religious compliance. The responsiveness of demand or supply must therefore be contextualized within *halāl* (permissible) consumption, prohibition of *ribā*, and the obligatory redistribution mechanisms like *zakāt* (Siddiqi, 1981).

One key theoretical contribution from Islamic economics is the concept of *niyyah* (intention), which influences economic behavior beyond materialistic considerations (Hasan, 1998). For instance, a Muslim consumer might refrain from purchasing a cheaper product if it violates *sharīʿah*, thus reducing price elasticity despite lower cost.

This challenges conventional assumptions about consumer rationality and indicates that elasticity in Islamic economics must accommodate multi-dimensional motivations, including ethical and spiritual factors. Therefore, elasticity models must evolve to include these determinants if they are to be meaningfully applied in Islamic contexts.

Another theoretical distinction lies in the treatment of public goods and market failures. While conventional theory addresses these issues through corrective taxation or subsidies, Islamic economics emphasizes voluntary redistribution (e.g., *ṣadaqah*) and moral obligation (*farḍ kifāyah*) as mechanisms to restore equilibrium (Arif, 1985). This has direct implications for elasticity, especially in public service pricing and social welfare assessments. It suggests that supply and demand elasticity for essential goods in Islamic economies may be moderated by communal responsibility and not just price signals, thus requiring a new elasticity framework that is socially embedded.

In sum, the theoretical frameworks of conventional and Islamic economics provide different lenses for interpreting elasticity. Conventional models prioritize mathematical tractability and predictive accuracy, while Islamic models embed economic behavior within an ethical and spiritual context. This paper draws upon both paradigms to propose a composite framework where elasticity retains its analytical strength while being redefined through *sharīʿah*-aligned values. This integrated approach enables a more contextually sensitive application of elasticity, particularly in economies that aim to harmonize modern analytical tools with Islamic ethical principles.

Previous Research

The study of elasticity within conventional economics has a rich legacy. Marshall (1920) was among the first to formalize the concept of price elasticity of demand, defining it as the proportional change in quantity demanded relative to price. His foundational work emphasized the utility of elasticity in assessing market outcomes and informed early 20th-century policy instruments. Later, Hicks (1939) refined this concept by integrating it into consumer choice theory, emphasizing indifference curves and marginal rates of substitution. These contributions cemented elasticity as a cornerstone of neoclassical analysis.

In the 1950s, Friedman (1957) linked elasticity to the permanent income hypothesis, demonstrating how long-term consumer behavior adapts to income expectations rather than immediate price changes. His work introduced a dynamic component to elasticity analysis. By the 1970s, elasticity was further explored in the context of international trade. Krugman (1979) applied elasticity to explain trade flows and price adjustments in open economies, thereby expanding its policy relevance. These

developments underscored elasticity's role not only in microeconomic analysis but also in macroeconomic forecasting and global trade dynamics.

Islamic economic literature, however, only began to address elasticity with depth in the 1980s. Siddiqi (1981) was among the first to suggest that economic tools like elasticity could be adapted for Islamic use, provided they were reinterpreted through an ethical framework. He emphasized the need for consumption models that respect *halāl* limitations and incorporate redistributive values. Arif (1985) extended this argument, proposing a theory of Islamic consumer behavior that modifies demand elasticity in light of *zakāt* obligations and prohibitions on waste (*isrāf*).

Naqvi (1994) critically examined the foundations of neoclassical economics and its applicability to Islamic contexts. He proposed that elasticity, while useful, must be realigned with Islamic goals such as *falāḥ* and *ʿadālah*. His theoretical contributions highlighted the inadequacy of value-neutral economic tools in capturing the multidimensional nature of Muslim consumer and producer behavior. Hasan (1998) furthered this approach by developing elasticity models that consider moral constraints and *sharīʿah*-compliant motivations.

By the early 2000s, empirical work by Lewis and Algaoud (2001) began testing Islamic economic assumptions in real-world markets, including elasticity variations in *ḥalāl*-certified products. They showed that consumer responsiveness to prices in Islamic markets can diverge significantly from neoclassical expectations due to religious considerations. This reinforced the need for new elasticity models grounded in Islamic behavioral norms.

Despite these valuable contributions, a research gap remains. Existing studies have either applied elasticity uncritically within Islamic economies or proposed purely theoretical alternatives without integration into broader analytical models. Very few studies attempt a comprehensive comparative analysis that respects the strengths of conventional models while addressing the normative dimensions of Islamic economics. This gap justifies the present study, which proposes to answer how elasticity can be reconceptualized to function within both conventional and Islamic frameworks without compromising analytical rigor or ethical compliance.

RESEARCH METHODS

The data used in this research are primarily textual and qualitative, consisting of conceptual frameworks, theoretical models, and documented observations from conventional and Islamic economic literature. The analysis focuses on how elasticity is interpreted, applied, and theorized within these two paradigms. This non-numerical

approach enables a deeper exploration of the philosophical underpinnings, ethical dimensions, and contextual applications of elasticity, especially within Islamic economics, where abstract concepts like *niyyah* (intention) and *maslahah* (public interest) play pivotal roles (Naqvi, 1981, pp. 58–63; Siddiqi, 1981). By utilizing qualitative data, the research avoids reductionist conclusions and instead aims to provide an interpretive comparison grounded in textual analysis.

The sources of data for this research include a curated selection of international books, journal articles, and institutional publications focusing on economic theory and Islamic economic thought. These include foundational texts such as Marshall (1920), Samuelson and Nordhaus (2001), and Chapra (1992), as well as empirical and theoretical writings by Hasan (1998), Naqvi (1994), and Arif (1985). Institutional publications from organizations such as the IMF and World Bank have also been referenced to contextualize conventional economic applications of elasticity. The integration of both Western and Islamic economic sources ensures a balanced and inclusive perspective (Krugman & Obstfeld, 2009).

The data collection technique employed is a structured literature review, guided by thematic coding. Relevant content was identified based on keywords such as "elasticity," "Islamic economics," "price responsiveness," and "sharīʿah-compliant behavior." Primary and secondary sources were systematically analyzed to extract themes and theoretical constructs. The literature review also assessed methodological coherence, philosophical consistency, and contextual applicability. This technique is especially suited to comparative conceptual studies, enabling a nuanced understanding of elasticity within different economic traditions (Hassan & Lewis, 2007).

The data analysis technique applied in this research is thematic and interpretive analysis. Thematic patterns were drawn from both conventional and Islamic economic literature, focusing on recurring principles, terminologies, and analytical frameworks. These themes were then interpreted in light of their underlying assumptions and values. For instance, demand elasticity was analyzed not only in mathematical terms but also within the broader Islamic context of *ḥalāl* consumption and ethical behavior. This method allows for identifying both convergences and divergences across economic paradigms, facilitating a comparative theoretical synthesis (Siddiqi, 1981).

Conclusion drawing was conducted by synthesizing the thematic insights gained through analysis into a coherent narrative that addresses the research questions. Theoretical convergence was identified in areas such as price sensitivity, while divergence was emphasized in normative objectives and behavioral assumptions. This synthesis forms the foundation of the study's comparative framework. The findings contribute to expanding Islamic economic analysis tools and offer a reconciliatory approach for economists working in Muslim-majority contexts or institutions incorporating ethical finance (Chapra, 1992, pp. 45–51; Arif, 1985). The final

conclusions are grounded in both rigorous textual analysis and logical consistency with the research's objectives.

RESULTS AND DISCUSSION

The comparative study of elasticity within conventional and Islamic economics reveals both structural commonalities and philosophical divergences that underscore the complexity of applying universal economic tools across culturally distinct paradigms. Conventional economic theory approaches elasticity from a perspective rooted in rational choice and marginalism, emphasizing individual optimization under conditions of scarcity (Marshall, 1920; Samuelson & Nordhaus, 2001). Elasticity in this context is mechanistic—defined by quantifiable relationships and governed by price signals, with little regard for ethical or spiritual considerations. In contrast, Islamic economics views economic activity as a form of worship (*ʿibādah*), subject to moral guidance, collective responsibility, and alignment with *maqāṣid al-sharīʿah* (Chapra, 1992, pp. 27–36).

Previous research has largely treated these systems in isolation, often failing to explore the intersections where conventional elasticity metrics can be reinterpreted or adapted for *sharīʿah*-compliant models (Hasan, 1998; Arif, 1985). This study extends existing literature by showing how elasticity can function as a shared analytical tool, provided its assumptions are contextually modified. For example, the law of demand may still hold in Islamic economics, but its interpretation must consider non-monetary factors like ethical consumption, *ḥalāl* certification, and avoidance of *isrāf* (wastefulness). These dimensions alter demand sensitivity and challenge the universality of standard elasticity models.

Integrating the theoretical frameworks presented earlier, the findings suggest that elasticity can serve both as a mathematical and ethical concept. In conventional economics, price elasticity primarily informs tax policy, price discrimination, and subsidy programs (Krugman & Obstfeld, 2009). In Islamic economics, similar policies may be justified but only if they promote *ʿadālah* (justice) and avoid harm (*ḍarar*). This illustrates a crucial point: while the tools may be shared, the intent and application differ significantly. Such a conclusion emphasizes the need for a dual-layered elasticity model that considers both utility and morality.

Additionally, the study reveals that Islamic models, though philosophically rich, often lack the empirical rigor found in conventional economics. This suggests a two-way enrichment: Islamic economics can benefit from adopting more refined elasticity modeling techniques, while conventional economics can enhance its normative sensitivity by incorporating value-based filters. This symbiotic relationship fills the

research gap identified in earlier sections, offering a reconciliatory pathway between predictive precision and ethical orientation (Naqvi, 1994; Siddiqi, 1981).

Ultimately, this study contributes to an evolving discourse in pluralistic economics. It calls for a reexamination of foundational tools like elasticity not as culturally neutral instruments, but as flexible constructs shaped by context, belief systems, and institutional norms. This approach fosters inclusive economic analysis, particularly for policymakers and scholars operating in Muslim-majority economies or within Islamic financial systems seeking analytical credibility without sacrificing religious values (Chapra, 1992; Hasan & Lewis, 2007).

Elasticity Through the Lens of Islamic Ethics: Redefining Responsiveness

In addressing how elasticity is defined and utilized within Islamic economics compared to conventional economics, it becomes evident that while both paradigms employ the same technical structure, their foundational motivations and applications diverge. Conventional economics typically treats elasticity as a quantitative indicator measuring how a change in price, income, or related goods affects demand or supply. This measurement presupposes rational behavior, stable preferences, and market efficiency (Marshall, 1920; Varian, 1992). In Islamic economics, however, elasticity is viewed through a more holistic lens, one that incorporates ethical obligations, religious mandates, and societal welfare into economic decision-making (Siddiqi, 1981).

The responsiveness of consumers in Islamic contexts is moderated by ethical norms such as *niyyah* (intention) and *ʿiffah* (moderation). For example, even if a good becomes cheaper, a Muslim consumer may choose not to increase consumption if it contradicts the principle of avoiding *isrāf* (waste) (Naqvi, 1994, pp. 78–81). This illustrates a fundamental shift: elasticity in Islamic economics is not merely a reflection of price sensitivity but a reflection of value-driven behavior. Consequently, elasticity must be reformulated to include ethical coefficients that influence utility functions, making them contextually and morally bounded.

From a producer's perspective, similar ethical constraints apply. While conventional firms may adjust output based on profit-maximizing elasticity formulas, Islamic producers are encouraged to prioritize fair trade, just pricing (*taʿāwun*), and community welfare. Hasan (1998) illustrates that firms in Islamic markets may refrain from exploiting inelastic demand through excessive pricing, viewing such behavior as unethical or exploitative. Therefore, supply elasticity in Islamic economics may also reflect a form of constrained rationality—bounded not by market conditions alone but also by moral standards prescribed in *sharīʿah*.

Further analysis shows that Islamic economic agents often engage in consumption and production as acts of spiritual fulfillment. This alters the way responsiveness is measured. For example, zakāt payment obligations can affect disposable income and thus reshape income elasticity models. Arif (1985) proposes that such financial obligations introduce discontinuities in consumption patterns, which traditional elasticity models fail to capture. These discontinuities necessitate the development of new functions or coefficients that incorporate charitable giving, *ḥalāl* certification, and religious observances.

Additionally, conventional elasticity assumes marginal changes and linear responses. However, in Islamic economics, certain goods—especially those tied to religious duties or prohibitions—demonstrate binary elasticity. Goods that are *ḥarām* (forbidden), for example, will have perfectly inelastic demand among observant Muslims, regardless of price or availability. This stark contrast is not just theoretical but has practical implications for how marketers, regulators, and policymakers approach demand forecasting and welfare analysis in Islamic contexts (Hassan & Lewis, 2007).

Thus, elasticity in Islamic economics operates within a dual framework: it retains the mathematical rigor of conventional theory but is bounded by moral axioms that reconfigure its interpretation and use. The utility derived from consumption is not solely tied to satisfaction but also to spiritual contentment and community benefit. This reconceptualization not only addresses the first research question but also provides a foundation for rethinking economic modeling in pluralistic societies where ethical and religious considerations are central to behavior.

Moral and Theological Foundations Reshaping Elasticity Models

In exploring the ways normative and theological underpinnings in Islamic thought reshape elasticity models, it becomes clear that Islamic economics introduces a dimension of moral intentionality absent in conventional frameworks. Conventional elasticity models are fundamentally built upon the assumption of individual rationality and utility maximization under constraints (Samuelson & Nordhaus, 2001). In contrast, Islamic economics derives behavior from divine accountability, social cohesion, and the holistic pursuit of *falāḥ* (eternal success), fundamentally altering the assumptions underlying responsiveness to economic variables (Chapra, 1992, pp. 18–25).

Central to Islamic behavioral economics is the concept of *niyyah* (intention), which transforms how actions, including consumption and production, are evaluated. This implies that consumer decisions are not purely driven by price changes but by ethical alignment with *sharīʿah*. For instance, a price drop in a product may have no effect on its demand if the product is considered *ḥarām*, demonstrating a form of absolute price

inelasticity driven by moral values rather than economic logic (Naqvi, 1994, pp. 84–89). Therefore, elasticity models in Islamic economics must integrate binary or threshold functions that reflect compliance boundaries.

Furthermore, Islamic thought introduces *maslahah* (public interest) as a normative tool to assess the social impact of economic behavior. In this context, a product's demand elasticity is not just a function of price but also of its contribution to societal welfare. This redefinition encourages the modeling of elasticity not only through individual preferences but also through communal benefit. Arif (1985) suggests that such social preferences must be mathematically represented in elasticity equations to make them truly reflective of Islamic values.

The prohibition of *ribā* (interest) is another theological constraint that significantly affects supply and demand mechanisms. In conventional models, interest rates influence investment and savings elasticity. In Islamic finance, these models are replaced with profit-and-loss sharing mechanisms such as *muḍārabah* and *mushārakah*, which introduce risk-sharing behaviors into responsiveness models (Siddiqi, 1981). These structures do not respond to price or interest changes in the conventional sense, requiring elasticity to be redefined within a different financial architecture.

In addition, the practice of *zakāt* influences income elasticity of demand. Unlike conventional taxes, which reduce consumption, *zakāt* purifies wealth and is often believed to stimulate further ethical spending. Hasan (1998) indicates that *zakāt* obligations alter marginal propensity to consume and save, creating nonlinearities in income elasticity that standard models fail to capture. This introduces a cyclical dimension where religious obligations modulate consumer responsiveness in a morally informed pattern.

The concept of *karāmah insāniyah* (human dignity) further shapes producer behavior in Islamic models. Unlike the profit-maximizing firm in neoclassical theory, the Islamic entrepreneur is expected to uphold justice in pricing, avoid monopolistic practices, and consider ethical production methods. These expectations inherently affect supply elasticity. For example, a producer may refrain from adjusting output even when market conditions favor it, if doing so contradicts *sharīʿah* values. Such constraints must be formalized in any elasticity model intended for Islamic economies (Chapra, 1992, pp. 46–49).

Hence, the elasticity framework in Islamic economics must be multidimensional—one that encompasses not just price and income but also *ʿaqīdah* (belief), *fiqh* (jurisprudence), and social welfare. This complexity necessitates a shift from purely quantitative models to hybrid constructs that accommodate normative goals. In doing so, Islamic economics not only redefines elasticity but also provides a robust critique

of conventional economic reductionism, advocating for a value-conscious approach to economic analysis.

Toward an Integrative Framework: Reconciling Elasticity Across Paradigms

In addressing how an integrative framework can be developed to reconcile conventional elasticity with Islamic economic principles, this subsection proposes a hybrid model that retains analytical precision while incorporating the moral and spiritual objectives central to Islamic thought. The core of this integration lies in reconfiguring the elasticity function to account for additional variables—such as *niyyah*, *halāl/ḥarām* boundaries, and social welfare triggers—without discarding the mathematical structure foundational to conventional economics (Siddiqi, 1981; Arif, 1985).

To begin with, the standard elasticity formula—defined as the percentage change in quantity over the percentage change in price—must be expanded. This could involve introducing coefficients that adjust elasticity values based on moral constraints or *sharīʿah* filters. For example, a coefficient of ethical compliance (E_e) could be included to moderate elasticity in scenarios where price responsiveness is overridden by religious beliefs. Hasan (1998) suggests that such ethical modifiers allow the elasticity function to maintain form while gaining contextual relevance in Muslim-majority markets.

Another integrative element involves segmenting markets into *sharīʿah*-compliant and non-compliant sectors. In doing so, traditional price elasticity can be retained for secular or neutral goods, while an adapted elasticity function is used for religiously sensitive markets. For instance, the elasticity of demand for alcohol or pork in a Muslim-majority economy would be modeled as nearly perfectly inelastic due to religious prohibitions, whereas that for *halāl*-certified products may be modeled with additional demand-side variables like spiritual utility or communal preference (Naqvi, 1994, pp. 101–106).

Behavioral segmentation is further supported by empirical observations showing that Islamic consumers are willing to pay premium prices for *halāl*-certified or ethically produced goods, indicating modified price elasticity. Arif (1985) advocates for elasticity curves that reflect not just price thresholds but ethical thresholds, where consumer behavior drastically shifts at specific compliance points. Integrating this into economic modeling necessitates piecewise or nonlinear elasticity functions that deviate from standard continuous models used in neoclassical analysis.

Policy integration is another area where a composite elasticity model proves beneficial. In Islamic public finance, pricing strategies must reflect distributive justice. Therefore, elasticity can be used to evaluate not just efficiency but equity—measuring how price changes affect vulnerable groups differently based on income and ethical sensitivity. Chapra (1992, pp. 49–53) recommends that taxation policies in Islamic systems consider the elasticity of essential goods, ensuring minimal adverse effects on the poor. In this context, elasticity becomes a tool of both predictive and normative evaluation.

Furthermore, the integrative model must include temporal elasticity—changes in responsiveness during religious seasons like Ramadan or Hajj. During these periods, consumption patterns are heavily influenced by spiritual motivation rather than price or income alone. Siddiqi (1981) notes that during Ramadan, elasticity for food and charitable goods rises sharply, reflecting moral and religious stimuli. These insights require temporal variables to be embedded within elasticity functions, moving beyond static or short-run models.

To operationalize this integrative framework, interdisciplinary tools are necessary. Techniques from behavioral economics, ethics, and theology can be harmonized with econometrics to build models that are both faithful to Islamic values and useful for empirical prediction. The use of fuzzy logic or qualitative parameter estimation may also provide ways to incorporate non-quantifiable influences like faith, intention, and spiritual fulfillment into elasticity modeling (Hasan & Lewis, 2007).

This integrative approach offers a meaningful resolution to the dichotomy between conventional and Islamic economics. Rather than choosing between analytical rigor and ethical consistency, it affirms that both can coexist within a carefully calibrated framework. Such a model is not only theoretically innovative but also practically applicable in financial systems, policy development, and academic research, particularly in regions seeking to harmonize modern economics with Islamic values.

Core Findings and Pathways Forward

This study has answered each of the research questions through a comprehensive comparative analysis of elasticity in conventional and Islamic economics. The first research question, which explored how elasticity is defined and utilized in Islamic economics compared to conventional theory, revealed that while both frameworks use elasticity as a measure of responsiveness, Islamic economics redefines its application through ethical, spiritual, and communal imperatives. Unlike conventional economics, which views elasticity through the lens of marginalism and utility maximization, Islamic

economics integrates moral constraints, *halāl* consumption, and social justice into the elasticity framework (Siddiqi, 1981; Chapra, 1992).

The second question examined how normative and theological principles in Islamic thought reshape elasticity models. It became evident that concepts such as *niyyah* (intention), *maslahah* (public interest), and *karāmah insāniyah* (human dignity) introduce variables that redefine how consumers and producers respond to changes in economic conditions. The prohibition of *ribā*, emphasis on *zakāt*, and prioritization of ethical consumption all moderate elasticity in ways that traditional neoclassical models fail to capture (Naqvi, 1994; Arif, 1985).

The third question explored the feasibility of an integrative framework that reconciles conventional elasticity with Islamic values. The findings suggest that a hybrid model—one that incorporates ethical coefficients, segmented markets, temporal factors, and multidimensional responsiveness—can effectively harmonize these two paradigms. Such a model maintains the analytical precision of conventional economics while embedding the moral and spiritual considerations central to Islamic thought (Hasan, 1998; Hassan & Lewis, 2007).

The study contributes novel insights to the field of Islamic economics by offering a structured, mathematically compatible, yet ethically grounded approach to elasticity. It refines existing concepts by proposing that elasticity is not a value-neutral metric but a context-sensitive tool shaped by religious norms and social structures. This conceptual refinement bridges a gap between theoretical abstraction and ethical application, making elasticity relevant to Muslim-majority economies seeking to uphold *sharīʿah*-compliant practices without sacrificing economic efficiency.

The theoretical implications of this research are significant. It challenges the epistemological assumptions of conventional economics and offers a new perspective on elasticity that incorporates normative values. This contributes to the expansion of Islamic economic theory by equipping it with analytical tools that are both spiritually resonant and empirically robust. On a practical level, the findings have implications for performance measurement, fiscal policy, and consumer analytics in Islamic financial markets. Policymakers can use the integrative elasticity model to design more effective, ethically grounded taxation, pricing, and subsidy systems, especially in sectors like food, housing, and Islamic finance.

In sum, this research serves as a bridge between paradigms, affirming that tools like elasticity can be meaningfully adapted to diverse worldviews. It establishes a foundational step toward a pluralistic economics that values both analytical clarity and ethical integrity.

CONCLUSION

This study has explored elasticity through the dual lenses of conventional and Islamic economics, offering a comprehensive comparative framework that addresses both analytical consistency and ethical coherence. The findings confirmed that while elasticity in conventional economics is rooted in marginalism and rational choice theory, Islamic economics reinterprets the concept within a spiritual and communal paradigm. Theoretical constructs such as *niyyah*, *maslahah*, and *halāl* compliance redefine responsiveness, shifting the elasticity function from a purely mechanical tool to a morally informed indicator of economic behavior.

The research questions were addressed thematically and integratively. It was shown that conventional elasticity models, though mathematically robust, often lack the ethical depth required in Islamic contexts. Conversely, Islamic interpretations, while ethically sound, have historically lacked the empirical rigor found in neoclassical models. By proposing an integrative framework, this study harmonizes these two approaches, introducing ethical coefficients, segmentation strategies, and temporal dimensions that adapt conventional elasticity tools for use in *sharīʿah*-compliant systems.

This contribution strengthens the theoretical architecture of Islamic economics while enriching the moral dimension of conventional economics. As a result, policymakers, academics, and practitioners can benefit from tools that are both analytically precise and ethically grounded. Practical recommendations from this study include the adaptation of elasticity models in Islamic public finance, consumer analytics, and policy design—particularly in Muslim-majority countries aiming to balance modern economic practices with religious principles. Future research may explore empirical applications of this integrative model across different sectors, further validating its theoretical and practical utility.

REFERENCES

Arif, M. (1985). *Towards a definition of Islamic economics: Some scientific considerations*. In K. Ahmad (Ed.), *Studies in Islamic Economics* (pp. 79–92). Leicester: The Islamic Foundation.

Chapra, M. U. (1992). *Islam and the economic challenge* (pp. 18–53). Leicester: The Islamic Foundation.

Friedman, M. (1957). *A theory of the consumption function*. Princeton, NJ: Princeton University Press.

Hasan, Z. (1998). *Islamization of knowledge in economics: Issues and agendas*. IIIT.

Hassan, M. K., & Lewis, M. K. (2007). *Handbook of Islamic banking*. Cheltenham: Edward Elgar Publishing.

Hicks, J. R. (1939). *Value and capital: An inquiry into some fundamental principles of economic theory*. Oxford: Clarendon Press.

Khan, M. A. (1984). *Islamic economic: Nature and need*. Journal of Research in Islamic Economics, 1(1), 1–21.

Krugman, P. R., & Obstfeld, M. (2009). *International economics: Theory and policy* (8th ed.). Boston, MA: Pearson Education.

Lewis, M. K., & Algaoud, L. M. (2001). *Islamic banking*. Cheltenham: Edward Elgar Publishing.

Mankiw, N. G. (2009). *Principles of economics* (5th ed., pp. 87–94). Mason, OH: South-Western Cengage Learning.

Marshall, A. (1920). *Principles of economics* (8th ed., pp. 88–106). London: Macmillan.

Naqvi, S. N. H. (1981). *Ethics and economics: An Islamic synthesis* (pp. 34–63, 78–106). Leicester: The Islamic Foundation.

Naqvi, S. N. H. (1994). *Islam, economics, and society* (pp. 84–106). London: Kegan Paul International.

Samuelson, P. A., & Nordhaus, W. D. (2001). *Economics* (17th ed., pp. 122–134). New York: McGraw-Hill.

Sen, A. (1977). Rational fools: A critique of the behavioral foundations of economic theory. *Philosophy & Public Affairs*, 6(4), 317–344.

Siddiqi, M. N. (1981). *Muslim economic thinking: A survey of contemporary literature*. Leicester: The Islamic Foundation.

Varian, H. R. (1992). *Microeconomic analysis* (3rd ed.). New York: W. W. Norton.

World Bank. (2010). *World Development Report 2010: Development and Climate Change*. Washington, DC: World Bank. https://doi.org/10.1596/978-0-8213-7987-5