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ECONOMETRIC MODELING OF THE MAIN DETERMINANTS OF HOUSING PROVISION LEVEL

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ABSTRACT	KEYWORDS
Housing is a fundamental human need and an essential component of economic and social development. It provides not only shelter but also contributes to health, education, labor productivity, and social welfare. The availability of adequate housing is often regarded as an indicator of national prosperity and institutional effectiveness. Countries with efficient housing markets generally experience stronger economic performance, greater social cohesion, and higher living standards.In recent decades, housing markets have undergone substantial transformations due to rapid urbanization, globalization, demographic changes, and technological development. Population growth has increased the demand for residential properties, while rising land prices and construction costs have limited the supply of affordable housing. These challenges are particularly evident in developing countries, where housing shortages continue to affect millions of households.	

Introduction

Econometric modeling has become one of the most widely used analytical tools for studying housing markets because it allows researchers to quantify relationships between housing provision and its determining factors. Unlike descriptive statistical analysis, econometric methods estimate causal relationships while controlling for multiple variables simultaneously. This makes econometric modeling particularly useful for evaluating the effectiveness of housing policies and predicting future housing demand.Housing provision depends on numerous economic, demographic, financial, and institutional factors. Economic growth increases household purchasing power and encourages investment in residential construction. Higher household incomes improve housing affordability, while lower unemployment rates increase mortgage eligibility and financial stability. Conversely, high inflation and elevated mortgage interest rates reduce purchasing power and discourage investment in housing projects.

Demographic variables also play an essential role in shaping housing demand. Population growth, migration, urbanization, household formation, and changing family structures significantly influence the quantity and quality of housing required. Rapid urbanization creates additional pressure on housing markets, requiring governments to expand residential infrastructure and improve urban planning.The construction sector represents another important determinant of housing provision. Increased public and private investment in residential construction directly expands housing supply, creates employment opportunities, and stimulates economic growth through multiplier effects. Efficient construction industries also contribute to lower housing prices and improved housing affordability.

Despite considerable research on housing markets, many previous studies have focused on only a limited number of explanatory variables or specific countries. Consequently, there remains a need for comprehensive econometric models that integrate macroeconomic, demographic, and financial determinants within a single analytical framework.

The primary objective of this study is to identify the major determinants affecting housing provision and evaluate their influence using multiple regression analysis. Specifically, the research seeks to:

- Identify the main economic and demographic determinants of housing provision;
- Develop an econometric regression model explaining housing provision levels;
- Evaluate the statistical significance of each explanatory variable;

Provide policy recommendations for improving housing accessibility and sustainable housing development.

The results of this research are expected to provide valuable information for policymakers, economists, urban planners, and housing developers seeking to improve housing provision and formulate effective housing policies.

Housing provision has long been a central topic in urban economics and development studies. Researchers have attempted to explain housing market performance by examining macroeconomic conditions, demographic changes, government policies, and financial market development. Econometric methods have become particularly valuable because they enable the estimation of quantitative relationships between housing indicators and their determinants.One of the earliest theoretical foundations of housing economics suggests that housing demand is primarily determined by household income, population size, housing prices, and borrowing costs. As household income increases, families tend to purchase larger and higher-quality homes. Similarly, lower mortgage interest rates improve access to housing finance and stimulate residential investment. These relationships have been confirmed in numerous empirical studies conducted in both developed and developing economies.

Several scholars have demonstrated that gross domestic product (GDP) per capita is positively associated with housing provision. Economic growth increases employment opportunities, raises disposable income, and expands government revenues that can be invested in housing infrastructure. Countries experiencing sustained economic growth generally report higher rates of residential construction and improved housing conditions.Urbanization is another factor frequently highlighted in the literature. Migration from rural to urban areas increases demand for residential housing in cities. If housing supply fails to keep pace with urban population growth, shortages arise, leading to higher property prices and declining affordability. Effective urban planning and infrastructure investment are therefore essential for maintaining balanced housing markets.Investment in the construction sector is widely recognized as one of the strongest drivers of housing supply. Public investment supports social housing and infrastructure, while private investment increases the stock of market-based housing. Econometric evidence indicates that increased construction investment contributes significantly to expanding housing availability and stimulating broader economic growth.

Financial variables also play an important role. High inflation increases the cost of building materials and labor, reducing the profitability of housing projects. Likewise, higher mortgage interest rates discourage borrowing and reduce demand for residential properties. Stable inflation and affordable credit conditions are therefore considered essential for sustainable housing development.Despite the extensive literature, previous studies often differ in terms of selected variables, estimation techniques, and geographical coverage. This study contributes to the literature by integrating macroeconomic, demographic, and financial determinants into a comprehensive econometric framework for evaluating housing provision.

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