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Demographic Transition and Economic Development: Theoretical and Empirical Analysis in Western and Islamic Perspectives

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Abstract

This study examines demographic transition and its implications for economic development from Western and Islamic perspectives through a comparative theoretical and empirical approach. The study is motivated by the limited integration between conventional demographic theories and Islamic economic perspectives in explaining demographic change and economic development. This research employs a qualitative approach using comparative content analysis and narrative literature review methods. Data were collected through library research from academic books, journal articles, institutional reports, and relevant official publications. The analysis was conducted using thematic coding and descriptive-comparative analysis. The findings show that Western perspectives emphasize modernization, industrialization, labor productivity, and institutional efficiency, while Islamic perspectives emphasize justice, social welfare, maqasid al-shariah, and ethical responsibility. Empirical evidence from Western countries, developing countries, and Muslim-majority countries indicates that demographic transition can promote economic growth through the expansion of the productive-age population, educational investment, and human capital development. However, the benefits of demographic dividends largely depend on institutional quality, labor-market absorption, equitable welfare distribution, and inclusive development policies. The originality of this study lies in its integrative comparative framework that combines structural-economic and ethical-humanistic approaches to provide a more comprehensive understanding of demographic transition and sustainable economic development.

Keywords: demographic transition, economic development

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1. INTRODUCTION

Changes in population structure through demographic transition, characterized by a gradual decline in birth and death rates, have become an important factor in the dynamics of economic development in developing and developed countries. This shift creates a significant change in the age composition of the population, which at some stage provides *a demographic dividend opportunity* for countries to increase economic growth through an increase in the proportion of the population of productive age. In the Indonesian context, the acceleration of demographic transition is largely driven by improved quality of health, family planning programs, and technological and educational advances, thus affecting the structure of the workforce and the direction of national development policies (Maulida et al., 2023; Farah & Sugiyanto, 2024). At the same time, demographic transformation also interacts with institutional quality and governance, which can determine whether demographic potential becomes an economic advantage or a development burden (Prasetyani et al., 2023). This phenomenon is not only relevant in the perspective of modern economics, but also in the framework of Islamic thought that emphasizes social justice, balanced distribution of resources, and the welfare of society as development goals.

The literature show that previous studies have examined the relationship between demographic transition and economic development from a conventional economic perspective, for example through Lewis' development model, Solow's growth theory, and Todaro & Smith's demographic analysis which confirms that declining fertility is part of the process of economic modernization. Contemporary studies have also linked demographic dynamics to sustainable development, such as Gbehe et al., (2024) who affirms the role of population structure to economic growth in Sub-Saharan Africa, or Thi Mai et al., (2024) who links population change to energy consumption and carbon emissions, as well as empirical studies showing the influence of demographic variables on long-term economic indicators including green GDP and sustainability (Hidayah et al., 2023). Meanwhile, the Islamic perspective on economic development emphasizes the values of maqashid sharia, the concept of *tazkiyah*, as well as Ibn Khaldun's thoughts on the cycle of justice that places humans as the main agents of development. However, empirical studies that integrate the sharia perspective with the phenomenon of demographic transition are still very limited.

Although the existing literature provides valuable insights, studies on demographic transition and economic development remain fragmented in several important respects. Most studies analyze demographic transition predominantly within the framework of conventional economics, while Islamic perspectives are often discussed separately and largely normatively. In addition, limited studies explicitly integrate Western and Islamic theoretical perspectives with empirical evidence from Western countries, developing countries, and

Muslim-majority countries regarding demographic transition and economic development. Consequently, the current literature has not yet provided a comprehensive understanding of how demographic transition can be interpreted and utilized across different economic paradigms. To address this gap, the present study develops a comparative and integrative analysis of Western and Islamic perspectives on demographic transition and economic development. Unlike previous studies that predominantly focus on a single perspective, this study proposes an integrative comparative framework that combines Western structural-economic approaches with Islamic ethical-humanistic perspectives to provide a more comprehensive understanding of demographic transition and sustainable economic development.

Accordingly, this study aims to comparatively examine demographic transition and its implications for economic development from both Western and Islamic perspectives through theoretical and empirical approaches. Specifically, this study seeks to: (1) analyze the comparative theoretical foundations of demographic transition and economic development from both perspectives; (2) review relevant empirical evidence across different socio-economic contexts; and (3) develop an integrative comparative framework linking theoretical and empirical insights.

2. RESEARCH METHOD

This study employs a qualitative research design using comparative content analysis and narrative literature review approaches to examine the role of demographic transition in economic development from both Western (conventional) and Islamic perspectives. The study focuses on analyzing theoretical foundations and empirical interpretations related to demographic change and its implications for economic development. The qualitative comparative approach is considered appropriate because it enables an in-depth exploration of conceptual differences, similarities, and possible integration between the two perspectives in understanding demographic dynamics and economic development processes.

The data in this study are collected through library research (documentary study) by examining various secondary sources. These sources include peer-reviewed academic books, journal articles indexed in reputable databases (Scopus and SINTA), institutional reports, and official publications relevant to demographic transition, economic development theory, and Islamic economic thought. The selection of literature is conducted purposively based on three main criteria: relevance to the research topic, academic credibility, and contribution to comparative theoretical analysis. In addition, priority is given to recent publications to ensure the updated relevance of the discussion, particularly in the context of developing countries such as Indonesia.

The data analysis is conducted using a thematic coding technique within a qualitative descriptive-comparative framework. The analytical process is carried out through several systematic stages: (1) comprehensive literature review, (2) identification of key concepts related to demographic transition and economic development, (3) open coding to categorize relevant concepts, (4) axial grouping of codes based on conceptual similarities, and (5) development of analytical themes that represent the core dimensions of comparison. This

process allows the study to systematically interpret and organize complex theoretical perspectives into comparable analytical structures.

Based on this analysis process, eight comparative dimensions are developed as the main analytical framework, namely: (1) rationale, (2) main focus, (3) stages of demographic transition, (4) views on fertility, (5) role of technology and modernization, (6) linkage between demographic change and economic development, (7) role of government, and (8) underlying philosophical values. These dimensions are used to systematically compare Western and Islamic perspectives in order to identify both convergence and divergence in understanding demographic transition and its implications for economic development.

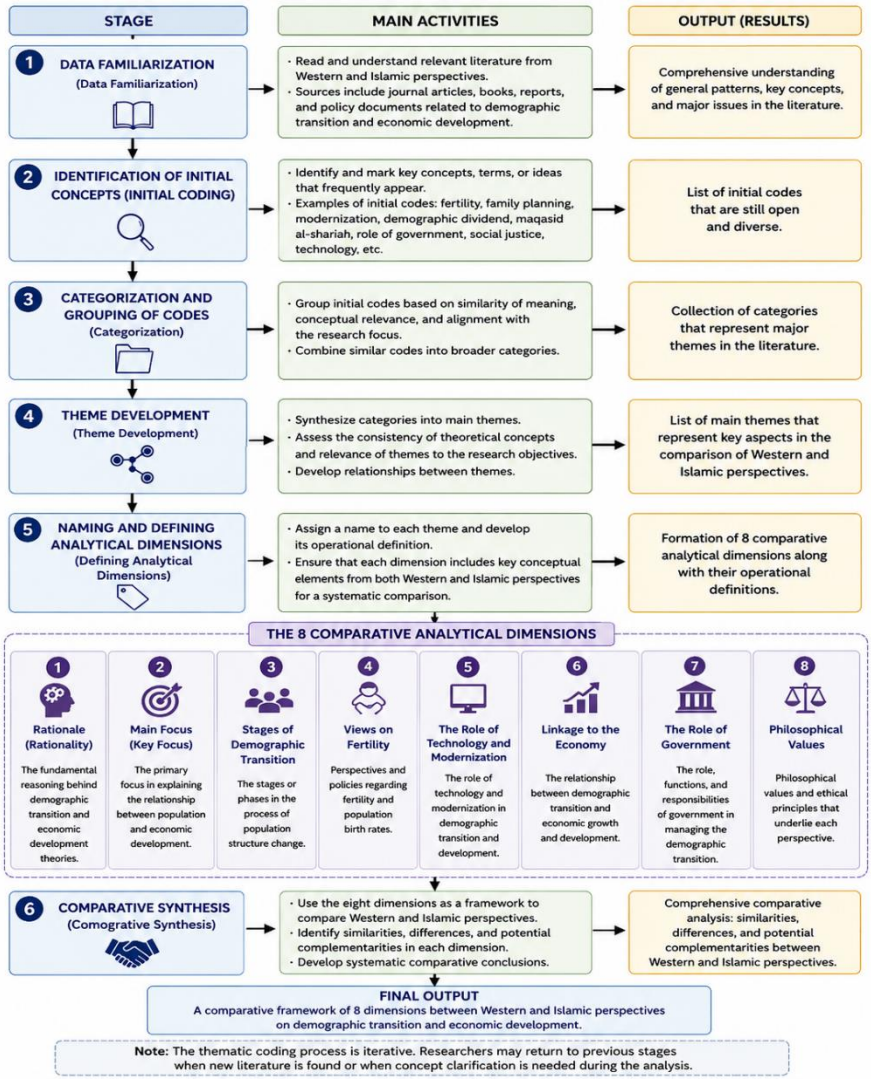

Figure 1. Methodology Flow Diagram
Thematic Coding and Development of 8 Comparative Dimensions

Through this structured comparative framework, the study aims to provide a more integrated understanding of demographic transition by bridging conventional economic theories and Islamic economic perspectives.

3. RESULTS AND DISCUSSIONS

3.1 Results

3.1.1 Western Perspectives on Demographic Transition and Economic Development Economic development

Todaro and Smith explained that development is a process aimed at enhancing the overall quality of human life and capabilities by improving living standards, fostering self-respect, and expanding individual freedom. The success of a country's economic development can be reflected through its core values, which include the community's ability to fulfill basic needs, the growth of people's self-esteem as human beings, and the increasing freedom of individuals to make their own choices, which is a fundamental human right (Todaro & Smith, 2020). These indicators remain central in contemporary development discourse, particularly for countries undergoing demographic transition to maximize human capital and institutional quality (Prasetyani et al., 2023). Economic development is interpreted very broadly, not just how to increase GNP per year. Economic development is multidimensional which includes various aspects of people's lives, not only economic aspects.

The theory of economic development was put forward by Arthur Lewis (1954) who stated that there is an abundant and unlimited population in developing countries. Although capitalism has experienced an increase in welfare, the workers continue to live mediocrely. Harrod Domar's (1957) theory that economic growth is determined by the high interest rate of ta Bungan. When the Savings interest rate is low, economic growth will also be weak and vice versa (Wibowo et al., 2023). These classical theories continue to influence development strategies today, particularly in economies where demographic changes increase labor supply. Empirical findings in Indonesia also show that demographic structure significantly contributes to economic growth, especially when supported by improvements in human capital (Farah & Sugiyanto, 2024).

According to the traditional development paradigm about development, the formation of capital is a condition for economic development. Therefore, the most appropriate development strategy is to accelerate economic growth by utilizing foreign capital and industrializing. Meanwhile, according to the new paradigm of development, there are developments, such as the paradigm of growth with distribution, basic needs for self-reliant development, sustainable development with ornaments to nature (*eco development*), development that pays attention to income inequality and demands ethnicity (ethno development). The following are some new paradigms that emerged after 1960: growth strategy with distribution, basic needs strategy, Human *Development Paradigm,* sustainable development strategy, ethnic dimension strategy, general *public participation paradigm*, and shari'ah paradigm (Tambunan, 2020)

Economic development, as explained by Todaro and Smith, is a multidimensional process that aims to improve the quality of human life, including the fulfillment of basic

needs, self-esteem, and freedom, so that it does not focus only on GNP growth. Economic theories such as Lewis' dualism (1954) highlight structural inequality due to labor surpluses in developing countries, while Harrod-Domar's (1957) theory emphasizes the importance of savings and investment in driving growth. Traditional approaches to development that focus on capital formation and industrialization through foreign capital often ignore social, environmental, and income distribution aspects. Since 1960, new paradigms such as sustainable development, growth strategies with distribution, and ethnicity-based approaches have emerged, emphasizing inclusive, humane, and sustainable development. This shift shows that development must consider social, environmental, and justice aspects to achieve holistic well-being.

Demographic transition

Shryock & Jacob (1976) divide the definition of demography into two meanings, namely (1) in a narrow sense called formal demography which emphasizes the problem of population's number, distribution, structure and growth, and (2) in a broad sense, demography includes all characteristics of the population, including cultural, social, political and economic. Related to this understanding, the analysis of population aspects in development concerns how the economic impact is caused by population dynamics. The definition of population dynamics itself includes changes in the number, structure and distribution of the population caused by variables of fertility, mobility and mortality. Changes in population dynamics can be observed based on the demographic transitions experienced by various countries (Panggabean, 2022) Empirical evidence in Indonesia shows that fertility decline, female education, and health improvements are key drivers of demographic transition (Maulida et al., 2023).

One of the unavoidable demographic phenomena is the increase in population. Population growth refers to the rise in the number of people, which occurs due to births and migration. The growing population can serve as a valuable asset for a country. This is because population growth is not only viewed from the perspective of the increasing number of people but also from changes in the population's age structure. The shift in the age structure is a consequence of the demographic transition, while population growth itself is one of the driving factors that accelerate this transition. This connection was highlighted at the 1994 International Conference on Population and Development (ICPD) in Cairo, Egypt, which stated that population growth can positively influence economic development and contribute to speeding up the demographic transition process. (Panggabean, 2022)

Demographic transition is a model that describes the change in population from high population growth to stable population growth. The term demographic transition was introduced by Warren Thompson in 1922. This theory describes four interconnected prepositions expressed according to stages according to population growth and change (Harahap, 2018).

According to (Todaro & Smith, 2020), The process of declining fertility rates until they reach a low and stable point is explained through a well-known concept in economic demography called the demographic transition. This concept seeks to illustrate why nearly

all modern developed countries have experienced a similar pattern consisting of three main stages in their population history. In the first stage, prior to economic modernization, these countries had relatively stable or very slowly growing populations for centuries. This condition was due to the balance between high birth rates and equally high death rates. Therefore, this initial stage is characterized by both high fertility and high mortality rates.

The second stage began when the process of modernization brought various improvements, such as advancements in public health, better nutrition, higher income levels, and overall improvements in living conditions. These changes contributed to a significant decline in mortality rates, which in turn gradually increased life expectancy from under 40 years to over 60 years. However, the reduction in mortality rates did not immediately lead to a decrease in fertility rates. Consequently, the gap between the still-high birth rates and the declining death rates caused population growth to rise sharply, surpassing the growth rates of previous centuries. This second stage marks the onset of the demographic transition, a shift from a stable or slow-growing population to one that grows rapidly before eventually declining. In essence, this phase is characterized by high birth rates alongside low mortality rates.

The third and final stage occurs when the effects of modernization and development begin to trigger a decline in fertility rates. Over time, the decreasing birth rates reach a point where they align with the already low mortality rates, resulting in minimal or even zero population growth. This stage indicates a shift from a relatively high birth rate per woman to a population replacement fertility rate, which is estimated at around 2.05 to 2.1 births per woman, assuming that nearly all women survive to the average childbearing age, as typically seen in developed countries. Meanwhile, in developing countries where survival rates are still relatively low, the replacement fertility rate tends to be higher, often exceeding 3 births per woman. This stage can also be identified by births decreasing and mortality also decreasing so that it becomes stable.

Demographic Transition and Economic Development

Population is an important factor in the development of a region. Thomas Robert Malthus's thoughts in his article entitled *Essay on The Participle of Population* in which Malthus describes a concept of *dimishing returns*. Malthus stated that generally the population of a country tends to increase according to a series of measurements (1,2,4,8,16,...) which will double every 30-40 years, unless there is a danger of famine. At the same time, due to the provision of decreasing yield increase from a fixed number of production factors (land and natural resources), food supplies will only increase according to the series of calculations (1,2,3,4,5,...). Besides that, humans need foodstuffs to live, while the growth rate of foodstuffs is much slower than the growth rate of the population. If there is no restriction on population growth, humans will experience food shortages. This is the source of human poverty and poverty (Tambunan, 2020).

According to Solow's growth theory, economic growth depends on the availability of factors of production (population, labor, capital accumulation) and the level of technological advancement (Todaro & Smith, 2020). Thus, changes in production factors, one of which is

population, will affect the rate of economic growth (Kurniawati & Sugiyanto, 2021). Demographic transition is related to the development process directly or indirectly. This is supported by the results of research Wang et al., (2024) and Pan et al., (2024) which state that "our study reinforces the importance of the impact of demographic resources for regional sustainable development".

From various other studies that link population growth with income growth and labor productivity per capita, it can be concluded that for the period of the sixties to the seventies does not show a meaningful statistical relationship, but after the eighties the relationship is statistically significant. The relationship remains variable between developing and developed countries. For developing countries, the higher the population growth rate, the worse the income growth and labor productivity per capita. For developed countries, the relationship is uncertain, namely from negative relationships to positive relationships (Wilopo, 2016)

Changes in socio-economic, cultural, and female behavior determine the process of decreasing fertility, especially the importance of social and cultural factors as determining factors in the acceptance of contraceptives and family planning. The first study to show a link between socio-cultural factors and fertility was conducted by Leisure (1962), when he wrote his dissertation on the level of marital fertility in Spain around 1910. From the results of the analysis of marital fertility rates in 49 provinces in Spain, it appears that several provinces with the same fertility rate tend not to be evenly distributed throughout Spain. Provinces with the same level of marital fertility, on the map are located very close to each other and even form certain groups. Provinces that have the same fertility rate, many do not have the same level of education, the number of workers in the agricultural sector, and the level of income Wilopo, (1995).

Western perspectives on demographic transition and economic development are often criticized for being too universalistic and ignoring the diversity of social, cultural, and political contexts in different countries. This theory assumes that all countries will go through the same stages, as developed countries experience, without considering local dynamics, such as global inequality due to colonialism, uneven distribution of resources, and other structural challenges facing developing countries. In addition, deterministic views of fertility as an obstacle to economic development often ignore women's reproductive rights and local cultural preferences, making them less relevant to apply globally.

This theoretical approach also oversimplifies the relationship between population growth and economic development by focusing on factors of production such as labor and technology, while ignoring interrelated social and ecological factors. For example, the impact of population growth on environmental degradation and sustainability is rarely a major concern, although it is important in long-term development. On the other hand, this theory tends to blame population growth on poverty without taking into account structural problems such as unequal distribution of resources and dependence on developed countries. These criticisms affirm the need for a more inclusive approach, which not only adapts Western theories but also takes into account the realities and needs of developing countries.

3.1.2 Islamic Perspectives on Demographic Transition and Economic Development

According to Ibn Khaldun, in order to achieve prosperity, a country must implement development by considering several components that are closely related and influence one another, forming a system known as the cycle of justice or the cycle of equality. These components, such as the power of the ruler (*al-mulk*), sharia (law), the people (*ar-rijal*), wealth (*al-mal*), development (*al-imarah*), and justice (*al-'adl*), work in a dynamic circular relationship that determines the progress of a civilization (Khaldun, 2015; Mafrudlo et al., 2024).

The uniqueness of Ibn Khaldun's concept lies in the interconnection of variables, where one factor may trigger another, influencing or not influencing the system in the same direction. Development is a crucial element in society; without it, progress cannot be achieved. However, development will not advance without justice, which forms the foundation of societal prosperity (Maliki & Arif, 2024; Khaldun, 2015).

According to Khurshid Ahmad, the philosophy of economic development consists of monotheism, justice, caliphate, and *tazkiyah*. *Tazkiyah* refers to the purification of human attitudes and relationships with the universe, and encourages not only material development but also moral and spiritual progress. Thus, the ultimate measure of development success is the moral quality of its actors (Chapra, 2008).

Using the Islamic worldview, which is built on tawhid, khalifah, and justice, as its foundation, human beings are considered the central actors of development. As servants of Allah and His vicegerents (*khalifah fi al-ardh*), humans are entrusted with the responsibility of prospering the earth in accordance with divine guidance. The outcomes of development depend largely on the path humans choose, which ultimately shapes the direction of societal progress (Chapra, 2001).

Development in Islam must also refer to the objectives of sharia (*maqasid al-shariah*), including the preservation of faith, life, intellect, progeny, and wealth, so that *falah*, prosperity in this world and the hereafter, can be achieved. To realize this, policy measures must prioritize justice and stability through ensuring human welfare, reducing wealth concentration, restructuring the economy and financial systems, and implementing strategic development planning (Mafrudlo et al., 2024).

Demographic Transition and Economic Development

From an Islamic perspective, discussions on population policy are generally framed within the distinction between birth regulation (*tanzim al-nasl*) and birth limitation (*tahdid al-nasl*), which carry different legal and ethical implications. Classical Islamic teachings emphasize the importance of family formation and procreation, while upholding the protection of life (*hifz al-nafs*) and lineage (*hifz al-nasl*). However, contemporary Islamic jurisprudence does not adopt a uniform position. Instead, it differentiates between temporary and permanent measures, as well as between voluntary and coercive policies, by taking into account their objectives, methods, and socio-economic contexts (Al-Qaradawi, 1960; International Islamic Fiqh Academy, 2024).

A number of contemporary scholars argue that temporary birth regulation may be considered permissible (*mubah*) when undertaken voluntarily by married couples and based on valid considerations such as maternal health, economic capacity, and family welfare. This permissibility is grounded in the principle of *maslahah* (public interest) and the avoidance of harm (*la darar wa la dirar*), provided that the methods used are safe and reversible (Al-Qaradawi, 1960; Tambunan, 2020). In contrast, permanent measures or coercive population control policies remain subject to scholarly debate, particularly when they may conflict with the protection of lineage and individual autonomy.

In this context, it is important to avoid generalization when discussing population policies in Islam. Contemporary Islamic thought tends to assess such policies contextually and conditionally, considering intention (*niyyah*), method, and surrounding circumstances, including situations of necessity (*darurah*) and broader public benefit. Accordingly, policies aimed at improving maternal health, child welfare, and household well-being may be considered acceptable, particularly when implemented in a non-coercive manner and aligned with Islamic ethical values.

Within the framework of economic development, the thought of Ibn Khaldun provides an important foundation regarding the role of human beings as the central agents of development. He emphasizes that economic progress is not solely determined by population size, but by the quality of human resources, including education, skills, and social cohesion (*asabiyyah*) (Mafrudlo et al., 2024.; Maliki & Arif, 2024). This suggests that, in the Islamic perspective, optimizing demographic potential depends largely on enhancing human capital as a driver of productivity and growth.

In line with this, modern Islamic economists such as (Chapra, 2001) and (K. Ahmad, 1994) argue that economic development must integrate material progress with ethical values, including justice, equity, and social welfare. Thus, managing demographic dynamics within an Islamic framework is not merely oriented toward economic growth, but also toward achieving *maslahah* and social balance.

However, despite its strong normative foundation, the Islamic perspective on population policy remains relatively underdeveloped in terms of empirical application. This indicates a gap between normative principles and practical implementation, highlighting the need for further efforts to operationalize Islamic economic concepts within contemporary demographic and development contexts.

3.2 Discussions

3.2.1 Theoretical Comparative Analysis - West vs. Islam on Demographic Transition and Economic Development

Based on the theoretical review presented in the previous section, this study comparatively analyzes Western and Islamic perspectives on demographic transition and economic development through eight main dimensions, namely rationale, main focus, stages of demographic transition, views on fertility, the role of technology and modernization, linkage to the economy, the role of government, and the underlying philosophical values. This analysis is conducted through a comparative analysis approach and thematic coding of

relevant theories and literature. The comparison demonstrates that Western and Islamic perspectives differ in terms of conceptual orientation, policy priorities, and development approaches; however, both perspectives share common concerns regarding human development and social welfare as central objectives of development. Furthermore, this study develops an integrative analytical framework that connects the structural-economic approach commonly found in Western theories with the ethical-humanistic approach emphasized in Islamic perspectives in order to provide a more comprehensive understanding of demographic transition and sustainable economic development.

This study theoretically contributes by developing an integrative comparative framework that combines structural-economic approaches commonly found in Western demographic theories with ethical-humanistic approaches emphasized in Islamic economic thought. Through this framework, demographic transition is understood not merely as a structural and economic transformation, but also as a social and moral process closely related to welfare, justice, human dignity, and sustainable development. This integrative perspective provides a broader understanding of how demographic change may influence economic development across different socio-cultural and institutional contexts.

To clarify the comparative framework developed in this study, Table 1 summarizes the main differences and complementarities between Western and Islamic perspectives regarding demographic transition and economic development.

Table 1. Comparative Theoretical Framework of Demographic Transition and Economic Development: Western and Islamic Perspectives

Comparative Dimension	Western Perspective	Islamic Perspective
Rationale	Demographic transition is driven by modernization, industrialization, and economic transformation	Demographic transition is linked to ethical development, justice, and social welfare
Main Focus	Structural transformation, labor productivity, and demographic management	Human welfare, moral responsibility, and social balance
Stages of Demographic Transition	Sequential demographic stages from high fertility and mortality toward demographic stabilization	No formal demographic stages; emphasis on *maslahah* and social welfare
Views on Fertility	Fertility decline supports economic efficiency and lower dependency burden	Birth regulation is permitted within ethical and sharia considerations
Technology and Modernization	Technology drives productivity and demographic change	Technology is accepted if aligned with ethical and social welfare principles

Table 1. (continued)

Comparative Dimension	Western Perspective	Islamic Perspective
Linkage to the Economy	Demographic dividend supports growth, savings, investment, and productivity	Economic development should achieve *falah* and distributive justice
Role of Government	Government manages demographic transition through economic and social policies	Government acts as regulator and moral guardian for public welfare
Philosophical Values	Rationalism, modernization, institutional development, and economic progress	*Tawhid*, justice, balance, *maqasid al-shariah*, and holistic welfare

Table 1 highlights that Western and Islamic perspectives differ in conceptual orientation and policy emphasis in responding to demographic transition and economic development. While Western theories tend to adopt a structural-economic approach, Islamic perspectives emphasize ethical and welfare-oriented considerations. Despite these differences, both perspectives acknowledge the importance of human development, institutional capacity, governance, and social welfare in managing demographic change.

Rationale

From the Western perspective, demographic transition is primarily understood as a structural consequence of modernization, industrialization, and economic transformation. Classical theories such as Lewis' dual-sector model, Harrod-Domar's growth theory, and Solow's neoclassical growth model explain demographic change through economic variables including labor supply, capital accumulation, productivity, and technological progress. Within this framework, demographic transition is viewed as a rational and natural process accompanying modernization, where declining mortality and fertility rates contribute to economic efficiency and long-term growth (Todaro & Smith, 2020). Empirical studies further support the argument that demographic structure can become a strategic economic asset when accompanied by strong institutions and effective governance (Farah & Sugiyanto, 2024; Gakpa & Kouadio, 2023).

In contrast, the Islamic perspective approaches demographic transition through a broader ethical and spiritual framework. Islamic economic thought emphasizes that development is not solely an economic process, but also a moral and social transformation aimed at achieving justice, welfare, and balance. Ibn Khaldun's concept of the "cycle of justice" illustrates the interdependent relationship between governance, sharia, human resources, wealth, and justice in shaping civilization and development (Khaldun, 2015). Likewise, Chapra, (2001) and Ahmad, (1994) argue that development should integrate material progress with ethical and spiritual values grounded in *tawhid*, *khalifah*, justice, and *tazkiyah*. Consequently, demographic dynamics are evaluated not only through economic productivity, but also through their implications for social harmony and collective welfare.

These differences reflect two distinct paradigms of development. Western theories generally interpret demographic transition through structural and economic transformation, while Islamic perspectives frame development within broader ethical, spiritual, and social responsibilities.

Main Focus

The Western perspective mainly focuses on changes in population structure and their implications for economic productivity, labor markets, and economic growth. Demographic indicators such as fertility rates, mortality rates, dependency ratios, labor-force participation, and population growth are considered strategic variables influencing development outcomes. Consequently, demographic policies are generally directed toward increasing labor productivity, reducing dependency burdens, and strengthening economic efficiency.

On the other hand, the Islamic perspective places greater emphasis on the quality of human beings and collective welfare rather than merely population quantity. Humans are viewed as *khalifah fi al-ardh* (vicegerents on earth) who are responsible for maintaining justice, social balance, and moral order. Development is therefore measured not only through economic growth, but also through welfare, fairness, and ethical prosperity in accordance with the objectives of sharia (*maqasid al-shariah*).

This divergence indicates that Western perspectives primarily focus on demographic dynamics as instruments for economic transformation, whereas Islamic perspectives place greater emphasis on the development of human welfare, social balance, and moral responsibility.

Stages of Demographic Transition

Western demographic transition theory explains population change through sequential stages, beginning with high fertility and mortality rates, followed by declining mortality due to modernization, and eventually declining fertility leading to population stabilization (Todaro & Smith, 2020). Improvements in healthcare, sanitation, nutrition, education, and technological development are considered the primary drivers of these transitions. This framework also explains the emergence of the demographic dividend, where an increasing proportion of productive-age population may accelerate economic growth.

Empirical evidence from developing countries further confirms that demographic transition can generate economic opportunities if supported by educational investment, employment absorption, healthcare systems, and institutional quality (Woldegiorgis, 2023; M'baye, 2023). However, unequal development and weak governance may instead transform demographic change into economic pressure, unemployment, and social inequality.

Unlike the Western framework, Islamic thought does not explicitly classify demographic transition into formal stages. Rather than emphasizing demographic phases, Islamic perspectives focus on how demographic dynamics should contribute to *maslahah* (public welfare). Population growth is not inherently viewed as a problem as long as human resources are strengthened through education, morality, social solidarity, and justice.

Such differences highlight that the Western framework provides a more systematic and empirical explanation of demographic stages, while the Islamic perspective contributes normative guidance regarding the ethical and social management of demographic change.

Views on Fertility

Western demographic theories generally regard fertility decline as an important mechanism for reducing dependency burdens and improving economic development. Family planning programs, contraceptive technologies, and reproductive health policies are therefore promoted to stabilize population growth and support economic modernization.

In contrast, Islamic perspectives distinguish between *tanzim al-nasl* (birth regulation) and *tahdid al-nasl* (birth limitation). Contemporary Islamic scholars generally permit temporary and voluntary birth regulation when based on maternal health, family welfare, and economic capability, provided that such measures align with the principle of *maslahah* and avoid harm (Al-Qaradawi, 1960; Tambunan, 2020). Nevertheless, coercive or permanent population control policies remain debated because they may conflict with the protection of lineage (*hifz al-nasl*) and individual rights.

This comparison demonstrates that the Western approach tends to interpret fertility through demographic management and economic efficiency, whereas the Islamic perspective evaluates fertility policies through ethical, legal, and social considerations.

The Role of Technology and Modernization

Within Western theories, technological advancement and modernization are considered primary drivers of demographic transition and economic development. Improvements in medical technology, sanitation, nutrition, and industrial systems contribute to lower mortality rates, increased life expectancy, and higher productivity. Modernization also influences family structures, female labor-force participation, and fertility behavior.

The Islamic perspective generally accepts modernization and technological progress as long as they support human welfare and remain within ethical and sharia boundaries. Technologies that improve healthcare, education, and quality of life are viewed positively, while technologies that potentially undermine morality, social stability, or distributive fairness are approached more critically.

These differences indicate that although both perspectives acknowledge the strategic importance of technology, Western approaches emphasize innovation and efficiency, whereas Islamic approaches stress ethical responsibility and moral accountability in technological utilization.

Linkage to the Economy

The Western perspective strongly associates demographic transition with economic growth through the demographic dividend mechanism. A growing productive-age population may increase labor supply, savings, investment, and productivity, thereby accelerating economic development. However, the realization of demographic dividends depends heavily

on investments in education, labor markets, and institutional quality (Solow, 2000; Gakpa & Kouadio, 2023).

Empirical studies also indicate that demographic transition contributes positively to sustainable development when accompanied by human capital improvement, technological progress, and effective governance (Pan et al., 2024;Wang et al., 2024). Nevertheless, many developed countries currently face new demographic challenges, including population aging, shrinking labor forces, and increasing social-security burdens, which may weaken long-term economic productivity.

Meanwhile, the Islamic perspective recognizes demographic advantage as an opportunity for development but places greater emphasis on distributive justice, social solidarity, and equitable welfare. Human capital development includes not only education and employment, but also moral formation and social responsibility. Economic development is therefore expected to achieve *falah* (holistic prosperity) rather than merely material accumulation.

These differences suggest that Western approaches mainly emphasize the macroeconomic implications of demographic change, while Islamic perspectives stress the importance of equitable welfare distribution and socially responsible development.

The Role of Government

In Western development paradigms, governments are expected to manage demographic transition through policies such as family planning, healthcare services, labor-market reform, and educational expansion. Effective governance is considered essential for maximizing demographic dividends and maintaining economic stability.

In contrast, the Islamic perspective views government not only as an economic regulator but also as a moral institution responsible for ensuring justice, welfare, and social balance. State policies should align with the objectives of sharia, including the protection of religion, life, intellect, lineage, and wealth. Consequently, demographic management should not solely pursue economic efficiency, but also protect human dignity and public welfare.

Islamic governance therefore emphasizes not only regulatory intervention, but also ethical accountability and distributive justice in managing population welfare. However, in practice, many Muslim-majority countries still face institutional limitations and policy inconsistencies that hinder the implementation of these normative principles.

Despite their different philosophical foundations, both perspectives recognize the strategic role of government in shaping demographic and economic outcomes.

Philosophical Values

The philosophical foundation of Western development theories is generally rooted in rationalism, modernization, institutional advancement, and economic progress. Economic success is commonly measured through indicators such as GDP growth, productivity, industrialization, and income expansion. Although this framework has contributed significantly to global economic transformation, critics argue that it often overlooks ethical, spiritual, social, and environmental dimensions of development.

Conversely, the Islamic perspective is based on the principles of *tawhid*, justice, balance, and *falah*. Development is interpreted as a process aimed at achieving holistic human welfare in both material and spiritual dimensions. Consequently, economic progress should remain aligned with morality, social justice, environmental responsibility, and collective well-being.

At the same time, the Islamic framework also faces practical challenges, particularly regarding the implementation of ethical-economic principles within modern institutional and policy systems. This indicates that normative values alone are insufficient without effective governance capacity and adaptive development strategies.

Overall, the comparative analysis demonstrates that Western and Islamic perspectives possess different analytical foundations but also complementary strengths in understanding demographic transition and economic development. Western approaches contribute systematic explanations regarding structural transformation, modernization, and institutional development, while Islamic perspectives enrich the discussion through ethical, social, and welfare-oriented dimensions. Therefore, integrating these two perspectives may provide a more comprehensive framework for promoting inclusive, balanced, and sustainable development amid ongoing demographic change.

3.2.2 Comparative Empirical Analysis of Demographic Transition and Economic Development: Western and Islamic Perspectives

Economic development is closely associated with economic growth, where both processes interact dynamically in shaping structural transformation and social welfare. Economic growth is commonly used as an aggregate indicator to measure development progress. Empirical evidence shows that Indonesia experienced substantial improvement in economic performance, increasing from 9th position among 93 countries during 1990–1994 to 5th position during 2005–2011, reflecting significant progress in national economic development (Purwati & Prasetyanto, 2022).

From a comparative perspective, demographic transition in developing countries such as Indonesia differs fundamentally from the historical experience of Western countries. In Western countries, demographic transition generally evolved gradually alongside industrialization, urbanization, modernization, and rising living standards. In contrast, Indonesia experienced a relatively accelerated demographic transition driven not only by economic development but also by state intervention through healthcare expansion, family planning programs, and improvements in science and public health (Ayu Arini et al., 2022).

According to Rajagukguk, (2021) Indonesia's demographic transition occurred in three major phases: an initial phase characterized by high birth and death rates, a second phase marked by declining mortality and expanding productive-age population, and a third phase beginning after 1985 characterized by declining fertility toward replacement-level fertility projected for the 2025–2030 period.

Figure 1 further illustrates Indonesia's demographic transformation during 1990–2025 through three major indicators: Total Fertility Rate (TFR), population growth rate, and working-age population structure. The figure demonstrates a consistent decline in fertility

and population growth accompanied by an increasing proportion of productive-age population. These patterns indicate that Indonesia has entered an advanced stage of demographic transition and is currently experiencing a demographic dividend period.

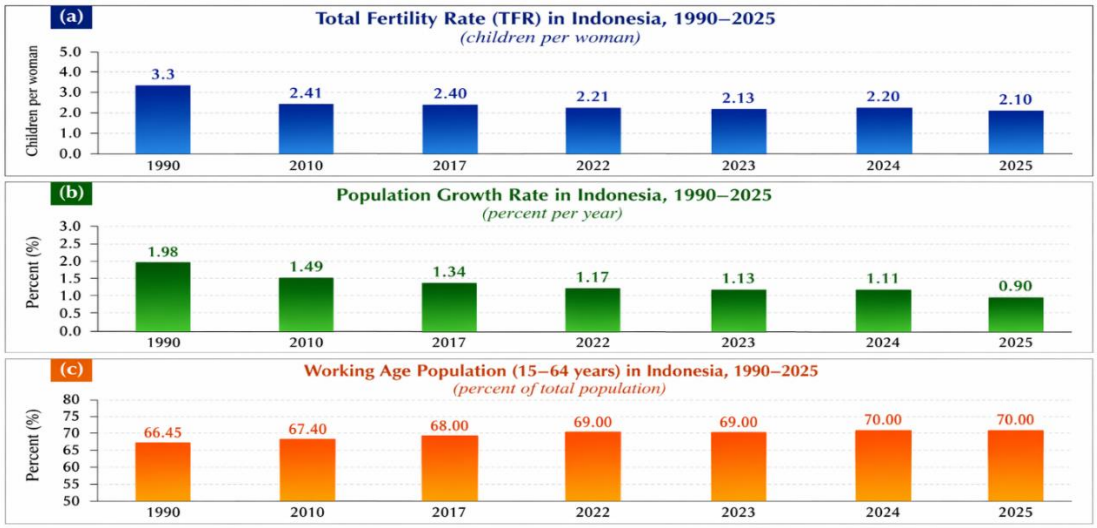

Figure 1. Trends in key demographic indicators in Indonesia, 1990–2025.

Notes: (a) Total Fertility Rate (TFR) refers to the average number of children born to a woman over her lifetime. (b) Population Growth Rate is the annual percentage change in mid-year population. (c) Working Age Population is the proportion of people aged 15–64 years.

Sources: *Badan Pusat Statistik (BPS), Proyeksi Penduduk Indonesia 2020–2050*; Bappenas, Rencana *Pembangunan Jangka Menengah Nasional 2020–2024; World Bank, World Development Indicators* (accessed May 2025).

Figure 2. Demographic Indicators in Indonesia

Figure 2 presents a three-panel visualization of Indonesia's demographic trends over the period 1990–2025. Panel (a) illustrates a steady decline in the Total Fertility Rate (TFR), indicating a transition toward replacement-level fertility. Panel (b) shows a consistent decrease in the population growth rate, reflecting a gradual shift toward demographic maturity. Meanwhile, panel (c) highlights an increasing proportion of the working-age population, signaling the presence of a demographic dividend. Taken together, these trends suggest that Indonesia has progressed into an advanced stage of demographic transition; however, the persistence of structural constraints—particularly in employment absorption and human capital development—implies that the potential economic benefits of this demographic shift have not yet been fully realized.

Empirical data further confirm that fertility decline has been significant, decreasing from 5.6 in 1971 to around 2.4 in 2017 (BAPPENAS, 2023) This decline has contributed positively to poverty reduction, particularly in the later stages of demographic transition (Wietzke, 2020). Population growth has also slowed from 1.49% during 2000–2010 to a projected 0.93% during 2020–2025, indicating increasing demographic maturity. These demographic changes potentially provide opportunities for accelerating economic growth through the expansion of productive-age labor force and increased household investment in education and health.

However, empirical findings consistently demonstrate that demographic dividends are not automatically transformed into economic growth. The realization of demographic benefits depends heavily on institutional quality, labor-market absorption, human capital development, and inclusive economic policies. Although Indonesia currently possesses a productive-age population exceeding 67% of total population, structural economic challenges remain substantial. The economy continues to be dominated by household consumption, contributing more than 57% of GDP, while labor absorption has not fully matched labor-force growth, resulting in the phenomenon of *jobless growth* (Febryanna, 2022; Farah & Sugiyanto, 2024). Furthermore, the contribution of demographic factors to GDP per capita growth declined substantially from 56.4% during 1971–1980 to only 1.8% during 2010–2020, indicating diminishing demographic returns in the absence of structural reform and human capital strengthening (Farah & Sugiyanto, 2024)

Cross-country empirical studies further reinforce the relationship between demographic transition and economic development. Studies in E-7 and developing countries demonstrate that declining fertility contributes positively to human capital accumulation, labor productivity, and long-term economic growth when supported by educational investment and healthcare improvement (Dogan et al., 2025; Ali & Rehman, 2024). Similar findings are observed in South Asia and the Middle East, where fertility decline, increasing life expectancy, and expanded access to education contribute positively to economic performance (N. Ahmad & Nayyab, 2021; Bawazir et al., 2020).

Empirical evidence from Muslim-majority countries also demonstrates that demographic transition is strongly influenced by socio-cultural adaptation, public policy, and family welfare considerations. Iran represents one of the most notable examples, where fertility decline accelerated significantly after the 1990s due to modernization, urbanization, female education, and nationally coordinated family planning policies integrated with religious and social values (Abbasi-Shavazi et al., 1999; Aghajanian & Merhyar, 1999). Similar patterns are observed in Bangladesh, where declining son preference, increased female education, and urbanization contributed to lower fertility and higher investment in child welfare (Niaz et al., 2020). These findings indicate that demographic management in Islamic countries can operate effectively when demographic policies are adapted to local socio-cultural and religious contexts.

At a broader level, comparative evidence from Africa and other developing regions further emphasizes the importance of institutional readiness in transforming demographic transition into economic opportunities. Studies in ECOWAS countries and Sub-Saharan Africa show that demographic dividends depend significantly on educational investment, employment creation, healthcare systems, governance quality, and inclusive institutions (Gakpa & Kouadio, 2023; (Woldegiorgis, 2023a; 2023b). Without sufficient institutional capacity and labor-market expansion, demographic transition may instead increase unemployment, inequality, and socio-economic instability. Similar conditions are observed in Mali and Sudan, where declining fertility may improve labor participation and economic opportunities for women, yet weak industrial structures and limited economic diversification reduce long-term demographic benefits (Mukhtar & Hassan, 2018; M'baye, 2023).

From the Western perspective, demographic transition is generally approached through economic modernization, labor productivity, technological advancement, and institutional efficiency. Western development models emphasize industrialization, educational expansion, and labor-market reform as instruments for maximizing demographic dividends and accelerating economic transformation. Historically, this approach contributed significantly to economic growth in Europe and East Asia. Nevertheless, many developed countries currently face new demographic challenges, including population aging, shrinking labor forces, rising social-security burdens, and persistently low fertility rates (Cilliers, 2020).

In contrast, the Islamic perspective places greater emphasis on social justice, distributive equity, collective welfare, and ethical responsibility in managing demographic change. Principles such as *maqashid al-shariah*, *maslahah*, and distributive justice emphasize that demographic transition should contribute not only to economic productivity but also to human dignity, family welfare, and social balance (Chapra, 2001; K. Ahmad, 1994). Within this perspective, population is not viewed solely as an economic variable but also as part of a broader moral and social framework. Consequently, demographic policies should balance economic objectives with social welfare, ethical considerations, and inclusive development.

Recent empirical studies additionally reveal that demographic transition is increasingly connected to sustainability and environmental challenges. Population growth and structural demographic changes contribute to rising energy demand, environmental pressure, and resource constraints, particularly in developing countries with limited technological capacity (Tomala et al., 2021). At the same time, demographic pressure may also stimulate industrial transformation and regional economic development, as observed in several rural regions in China (Huang et al., 2024). These findings suggest that demographic transition produces multidimensional impacts extending beyond economic growth toward broader sustainability concerns.

Overall, empirical findings indicate that the economic impact of demographic transition varies across countries and development stages depending on institutional quality, human capital capacity, governance effectiveness, labor-market conditions, and policy integration. Early stages of demographic transition tend to generate economic pressures due to high dependency ratios, whereas later stages may create demographic dividends if supported by quality education, healthcare access, employment creation, and institutional reform. Evidence from Indonesia, South Asia, the Middle East, Africa, and other developing regions consistently demonstrates that demographic transition alone is insufficient to ensure sustainable economic development.

More importantly, this study demonstrates that the success of demographic transition is determined not only by economic modernization and institutional efficiency, as emphasized in Western approaches, but also by ethical dimensions, distributive justice, and social welfare emphasized in Islamic perspectives. Thus, integrating Western approaches that prioritize institutional efficiency and technological advancement with Islamic principles emphasizing

justice, welfare, and ethical development may provide a more comprehensive framework for achieving inclusive and sustainable economic transformation.

To provide a comparative overview of previous empirical studies on demographic transition and economic development, Table 2 summarizes key findings from Western and Muslim-majority countries.

Table. 2 Comparative Empirical Studies on Demographic Transition and Economic Development in Western and Muslim-Majority Countries

No	Author & Year	Region/Country	Focus	Findings	Perspective
A. Islamic/Muslim-Majority Countries					
1	Dogan et al., (2025)	E-7 Countries/ Developing Countries	Unified Growth Theory and demographic transition	Decreased fertility contributes to human capital accumulation and long-term economic growth	Islamic
2	Ali & Rehman, (2024)	Muslim/ developing countries	Demographic and human capital transition	The demographic dividend is only effective if it is supported by investment in education and health	Islamic
3	Farah & Sugiyanto, (2024)	Indonesia	Contribution of the demographic dividend to economic growth	The contribution of demographic factors to GDP growth per capita decreases in the long term due to limited quality of human resources and institutional reforms.	Islamic
4	M'baye, (2023)	Mali	Women's fertility and work participation	A decline in fertility increases women's labour participation and economic opportunities, despite the limitations of weak industrial structures.	Islamic
5	Maulida et al., (2023)	Indonesia	Fertility factors	The decline in fertility is influenced by women's education, household welfare, access to health, and the success of family planning programs.	Islamic
6	Febryanna, (2022)	Indonesia	Demographic and labor market bonuses	Indonesia is experiencing the phenomenon of *jobless growth*, where economic growth is not fully followed by increased labor absorption	Islamic

Table 2. (continued)

No	Author & Year	Region/Country	Focus	Findings	Perspective
A. Islamic/Muslim-Majority Countries					
7	N. Ahmad & Nayyab, (2021)	South Asia/Developing Countries	Fertility, life expectancy, and economic growth	Increased fertility decreases economic growth, while increased life expectancy increases economic growth.	Islamic
8	Niaz et al., (2020)	Bangladesh	Boys' preferences and fertility	A decrease in preference for boys and an increase in women's education contribute to a decrease in fertility.	Islamic
9	Bawazir et al., (2020)	Middle East	Demographic transition and economic growth	Demographic transition has a positive impact on economic growth if supported by labor market reform and improved quality of education	Islamic
10	Mukhtar & Hassan, (2018)	Sudan	Fertility, mortality, and demographic dividend	A decline in fertility and mortality can result in a demographic dividend if supported by effective economic policies.	Islamic
11	Abbasi-Shavazi et al., (1999)	Iran	Population and fertility policy	Modernization, urbanization, women's education, and national family planning programs have succeeded in significantly reducing fertility.	Islamic
12	Aghajanian & Merhyar, (1999)	Iran	Contraception and family planning	Contraception contributes to a decrease in TFR	Islamic
B. Western / Non-Muslim Countries					
13	Huang et al., (2024)	China	Population pressure and industrialization	Population pressures can drive the development of rural industries and regional economic transformation	Western
14	Gakpa & Kouadio, (2023)	ECOWAS countries	Demographic transition and economic growth	Demographic transition has a positive impact on economic growth in countries with economic freedom and good institutional quality.	Western
15	Woldegiorgis, (2023a)	Sub-Saharan Africa	Demographic dividend and inclusive development	The demographic dividend depends on education, health, job creation, and inclusive governance.	Western

Table 2. (continued)

No	Author & Year	Region/Country	Focus	Findings	Perspective
B. Western / Non-Muslim Countries					
16	Woldegiorgis, (2023b)	Sub-Saharan Africa	Demographic dividend driving factors	Human capital investment and institutional quality are the main factors for the success of the demographic dividend.	Western
17	Crombach & Smits, (2022)	91 developing countries	Window of opportunity	Demographic dividends differ between regions	Western
18	Y. Wang et al., (2021)	China	Fertility and economic growth	Economic growth influences fertility behavior, suggesting a two-way relationship between economics and demographics.	Western
19	Tomala et al., (2021)	Sub-Saharan Africa	Demographics and sustainable development	Population growth increases energy and environmental pressures, necessitating sustainable development based on technology and institutions.	Western
20	Cilliers, (2020)	Africa	The future of Africa's demographics	Institutional failure to inhibit demographic dividend	Western
21	Açıkalın & Güngör, (2019)	Developing countries	Demographic transition challenges	Unemployment, high fertility, and weak public services are the main obstacles to the use of demographic dividends.	Western
C. Mix Islamic and Western					
22	Choudhry & Elhorst, (2010)	China, India, Pakistan	Demographic structure and GDP growth	Demographic factors contribute significantly to GDP growth per capita through demographic dividends and increased labor productivity.	Mix Islamic & Western

The empirical studies presented in Table 2 demonstrate that demographic transition outcomes are strongly influenced by institutional quality, human capital development, and policy effectiveness. While Western-oriented studies mainly emphasize productivity, industrialization, and institutional efficiency, studies in Muslim-majority countries place greater attention on social welfare, distributive justice, and socio-cultural adaptation. Despite these differences, both perspectives consistently highlight education, healthcare, employment creation, and institutional strengthening as key requirements for achieving sustainable economic development.

3.2.3 Integrative Comparative Framework Linking Theoretical and Empirical Insights

The comparative theoretical and empirical analyses presented in the previous sections demonstrate that demographic transition is a complex and multidimensional process that cannot be adequately understood through a single analytical perspective. Western approaches generally explain demographic transition through structural-economic mechanisms such as modernization, industrialization, labor productivity, technological advancement, and demographic dividend optimization. Meanwhile, Islamic perspectives emphasize ethical responsibility, distributive justice, human welfare, and social balance as essential foundations of development. Although both perspectives originate from different philosophical traditions, empirical findings indicate that they share several complementary concerns, particularly regarding the importance of education, institutional quality, healthcare systems, employment creation, and sustainable human development.

Based on these findings, this study develops an integrative comparative framework that connects structural-economic dimensions commonly emphasized in Western theories with ethical-humanistic dimensions emphasized in Islamic perspectives. Through this framework, demographic transition is understood not merely as a structural change in population composition, but also as a socio-economic and moral transformation closely related to welfare, justice, and sustainable development. This integrative approach positions demographic transition as a process that simultaneously involves economic productivity, institutional readiness, human capital formation, social responsibility, and ethical governance.

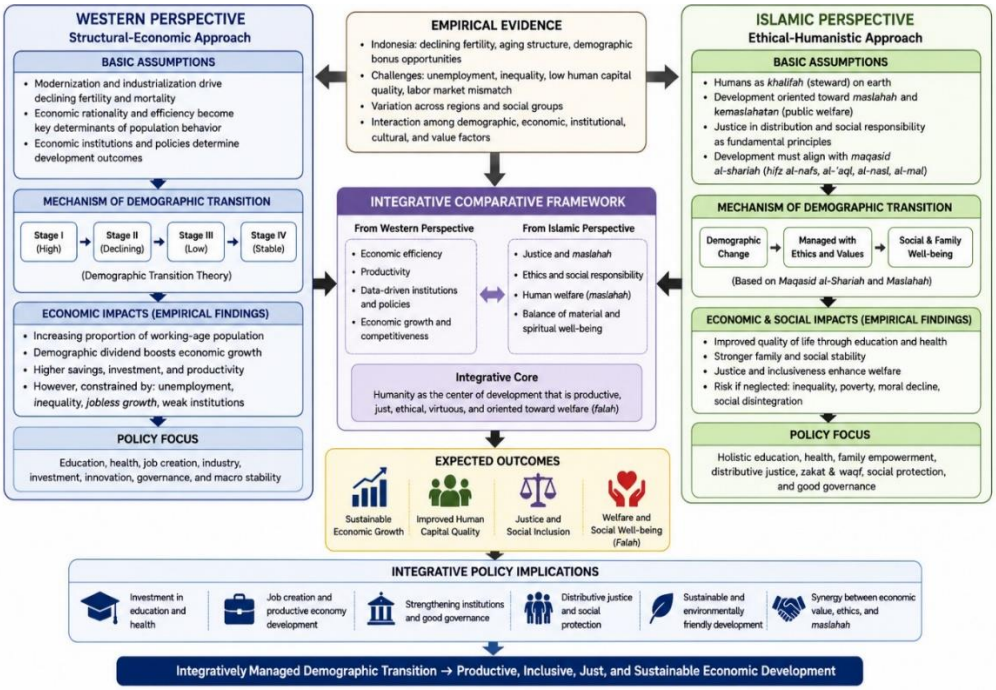

Figure 3. Integrative Comparative of Demographic and Economy Development (Western and Islamic Perspectives)

Figure 3 illustrates an integrative comparative framework linking theoretical and empirical perspectives on demographic transition and economic development from both Western and Islamic viewpoints. The framework demonstrates that demographic transition is a multidimensional process shaped not only by changes in fertility and mortality, but also by institutional capacity, governance quality, human capital development, socio-cultural adaptation, and ethical considerations.

From the Western perspective, demographic transition is primarily understood through a structural-economic approach emphasizing modernization, industrialization, technological progress, labor productivity, and institutional efficiency. Within this framework, declining fertility and mortality rates contribute to demographic dividends by increasing the proportion of productive-age population, encouraging savings, investment, and economic growth. However, empirical findings also reveal that demographic transition may generate structural challenges such as unemployment, inequality, jobless growth, and population aging when not supported by adequate institutional and labor-market capacity.

In contrast, the Islamic perspective approaches demographic transition through an ethical-humanistic framework grounded in maqasid al-shariah, maslahah, justice, and social welfare. Population dynamics are not viewed solely as economic variables, but also as part of broader moral and social responsibilities. Accordingly, demographic management should promote not only productivity and economic progress, but also family welfare, distributive justice, social balance, and human dignity. Within this perspective, demographic policies are expected to align with ethical principles and collective welfare objectives.

The central component of the framework is the integrative comparative model, which combines the structural-economic strengths of Western approaches with the ethical and welfare-oriented principles emphasized in Islamic perspectives. This integration suggests that successful demographic transition requires not only economic modernization, technological advancement, and institutional effectiveness, but also ethical governance, social inclusion, and equitable distribution of development outcomes.

The framework further highlights several strategic policy implications, including investment in education and healthcare, employment creation, productive economic transformation, institutional strengthening, distributive justice, environmental sustainability, and socially inclusive governance. These factors are considered essential for transforming demographic change into sustainable economic opportunities.

Overall, Figure 3 demonstrates that demographic transition should be understood not merely as a demographic or economic phenomenon, but also as a social, institutional, and ethical transformation process. Therefore, integrating Western structural-economic approaches with Islamic ethical-humanistic principles may provide a more comprehensive framework for achieving productive, inclusive, just, and sustainable economic development.

From the structural-economic perspective, demographic transition creates opportunities for economic growth through the expansion of productive-age populations, labor-force participation, savings, investment, and productivity improvement. However, empirical evidence from Indonesia and several developing countries demonstrates that demographic dividends cannot be automatically transformed into sustainable economic

growth without strong institutional capacity, labor-market absorption, educational investment, and effective governance. Structural constraints such as unemployment, jobless growth, inequality, and limited industrial diversification may instead weaken the long-term benefits of demographic change.

At the same time, the ethical-humanistic perspective contributes important normative dimensions often overlooked in conventional demographic approaches. Islamic perspectives emphasize that demographic management should not focus solely on economic efficiency and population control, but also on human dignity, family welfare, distributive justice, and collective prosperity. Within this framework, development policies are expected to align with the principles of maqasid al-shariah, including the protection of life, intellect, lineage, and wealth. Consequently, demographic transition should contribute not only to economic expansion, but also to social cohesion, moral responsibility, and equitable welfare distribution.

The integration of these two perspectives suggests that successful demographic transformation requires a balance between economic modernization and ethical-social development. Structural-economic approaches provide empirical and policy-oriented instruments for improving productivity, labor-market efficiency, and institutional performance, while ethical-humanistic approaches provide normative guidance for ensuring that economic development remains socially inclusive, morally grounded, and welfare-oriented. Therefore, demographic transition should be managed through integrated policies that simultaneously prioritize human capital development, institutional strengthening, employment creation, healthcare improvement, social protection, and distributive justice.

In the Indonesian context, this integrative framework is particularly relevant because Indonesia is currently experiencing a demographic dividend period while simultaneously facing structural challenges such as labor-market mismatch, inequality, uneven educational quality, and limited employment absorption. Indonesia's demographic experience also demonstrates that demographic transition is shaped not only by economic modernization, but also by socio-cultural adaptation, public policy, religious values, and collective welfare considerations. Accordingly, integrating structural-economic and ethical-humanistic approaches may provide a more comprehensive framework for formulating inclusive and sustainable development strategies in Muslim-majority developing countries.

Overall, this integrative comparative framework contributes theoretically by bridging the gap between Western and Islamic perspectives on demographic transition and economic development. It also contributes practically by offering a broader policy orientation that combines economic productivity, institutional effectiveness, ethical responsibility, and social welfare as interconnected foundations for sustainable development. Through this framework, demographic transition is ultimately understood not only as a demographic phenomenon, but also as a holistic process influencing the long-term direction of economic, social, and human development.

Thus, the integrative framework developed in this study demonstrates that demographic transition should be managed not only as an economic and demographic phenomenon, but also as a multidimensional development process that integrates

institutional capacity, ethical responsibility, social welfare, and sustainable human development.

4. CONCLUSIONS

This study comparatively examines demographic transition and economic development from both Western and Islamic perspectives through theoretical and empirical approaches. In line with the objectives of the study, the findings demonstrate that demographic transition is a multidimensional process closely associated with structural transformation, population dynamics, human development, and socio-economic change.

From the theoretical perspective, Western approaches generally interpret demographic transition through a structural-economic orientation emphasizing modernization, industrialization, labor productivity, and institutional efficiency. In contrast, Islamic perspectives approach demographic transition through an ethical-humanistic orientation that emphasizes justice, welfare, social balance, and moral responsibility within the broader framework of maqasid al-shariah and falah. Despite these differences, both perspectives share common concerns regarding education, institutional quality, governance, and sustainable human development.

From the empirical perspective, evidence from Indonesia and other developing countries confirms that demographic transition does not automatically generate economic growth. The successful transformation of demographic change into demographic dividends depends heavily on human capital development, labor-market absorption, institutional capacity, healthcare systems, and inclusive public policies. Declining fertility and the expansion of productive-age populations may create economic opportunities; however, weak institutional readiness, unemployment, inequality, and limited economic diversification may reduce long-term demographic benefits.

This study further demonstrates that demographic management in Muslim-majority countries is strongly influenced by socio-cultural adaptation, public policy, and ethical considerations. Islamic perspectives do not reject demographic regulation, but emphasize that demographic policies should remain aligned with the principles of justice, maslahah, and collective welfare. Consequently, demographic management should balance economic objectives with ethical responsibility, human dignity, and inclusive development.

Overall, this study contributes by developing an integrative comparative framework that combines structural-economic approaches commonly found in Western demographic theories with ethical-humanistic approaches emphasized in Islamic economic thought. Through this framework, demographic transition is understood not merely as a structural and economic transformation, but also as a social and moral process closely related to welfare, justice, and sustainable development. Therefore, future development policies should not only focus on demographic efficiency and economic productivity, but also prioritize human welfare, institutional strengthening, social justice, and sustainable development.

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6. REFERENCES

Abbasi-Shavazi, M. J., Mehryar, A., Jones, G., & Mcdonald, P. (1999). Revolution , War and Modernization : Population Policy and Fertility Change in Iran *. *Journal of Population Research*, *19*(1), 25–46.

Açıkalın, Ş. N., & Güngör, H. (2019). Are Demographic Transition and Economic Growth Triggering Each Other? In *Economic Growth and Demographic Transition in Third World Nations* (pp. 147–156). https://doi.org/10.1201/9780429433894-8

Aghajanian, A., & Merhyar, A. H. (1999). Fertility , Contraceptive Use and Family Planning Program Activity in the Islamic Republic of Iran 98 International Family Planning Perspectives. *International Family Planning Perspectives*, *25*(2), 98–102.

Ahmad, K. (1994). *Islamic Approach to Development*. Institute of Policy Studies. https://khurshidanswers.org/islamic-approach-to-development

Ahmad, N., & Nayyab, S. (2021). Impact of Demographic Variables on Economic Growth in South Asian Countries: A Panel Data Analysis. *Sustainable Business and Society in Emerging Economies*, *3*(1), 49–58. https://doi.org/10.26710/sbsee.v3i1.1814

Al-Qaradawi, Y. (1960). *The Lawful and The Prohibited in Islam*. Al-Aflah Foundation.

Ali, M. M., & Rehman, N. (2024). *Demographic Transition and Human Capital Developing Countries : An Empirical Analysis*. *02*(1), 29–36.

Ayu Arini, G., Daeng, A., & Ayu Putri, I. (2022). Analisis Keseimbangan Jangka Panjang Pengaruh Transisi Demografi Terhadap Pertumbuhan Ekonomi Indonesia. *Elastisitas - Jurnal Ekonomi Pembangunan*, *4*(1), 41–58. https://doi.org/10.29303/e-jep.v4i1.55

BAPPENAS. (2023). Penduduk Berkualitas Menuju Indonesia Emas. In *academia.edu* (pp. 1–74). https://www.academia.edu/download/116620910/Buku_Penduduk_Berkualitas_Menuju_Indonesia_Emas_310522_.pdf

Bawazir, A. A. A., Aslam, M., & Osman, A. F. Bin. (2020). Demographic Change and Economic Growth: Empirical Evidence from the Middle East. *Economic Change and Restructuring*, *53*(3), 429–450. https://doi.org/10.1007/s10644-019-09254-8

Chapra, M. U. (2001). *The Future of Economics ; An Islamic Perspective (Terjemahan oleh Ikhwan Abidin)*. Gema Insani Press.

Chapra, M. U. (2008). *The Islamic Vision of Development in the Light of Maqasid al-Shariah*. Islamic Research and Training Institute.

Choudhry, M. T., & Elhorst, J. P. (2010). Demographic transition and economic growth in China, India and Pakistan. *Economic Systems*, *34*(3), 218–236. https://doi.org/10.1016/j.ecosys.2010.02.001

Cilliers, J. (2020). *Challenges and Opportunities The Future of Africa*. Springer (Open Access) ; Palgrave Macmillan.

Crombach, L., & Smits, J. (2022). The Demographic Window of Opportunity and Economic Growth at Sub-National Level in 91 Developing Countries. *Social Indicators Research*, *161*(1), 171–189. https://doi.org/10.1007/s11205-021-02802-8

Dogan, E., Doğan, B. Ö., & Savaş Çelik, B. (2025). The Relationship Between Unified Growth Theory, Demographic Transition and Population: Empirical Evidence from E-7 Countries. *ARPHA Preprints*, *6*, ARPHA Prepr. https://doi.org/10.3897/arphapreprints.e152730

Farah, A., & Sugiyanto, F. X. (2024). Contribution of Demographic Factors to Indonesia's Economic Growth. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *25*(2), 171–181. https://doi.org/10.23917/jep.v25i2.23816

Febryanna, S. (2022). Pengaruh Transisi Demografi Terhadap Kemiskinan. *Jurnal Ekonomi Dan Kebijakan Publik Indonesia*, *9*(1), 68–77. https://doi.org/10.24815/ekapi.v9i1.29696

Gakpa, L.-L., & Kouadio, H. K. (2023). Effect of Demographic Transition on Economic Growth: does Economic Freedom Matter? Evidence from ECOWAS Countries. *Studies in Economics and Econometrics*, *47*(3), 199–222. https://doi.org/10.1080/03796205.2023.2201892

Gbehe, B. Y. G., Konan, Y. S., & Ballo, Z. (2024). Demographic structure, structural change, and economic growth: panel evidence in sub-Saharan African countries. *Cogent Economics and Finance*, *12*(1). https://doi.org/10.1080/23322039.2024.2375786

Harahap, I. (2019). *Ekonomi Pembangunan : Pendekatan Transdisipliner* (Issue November). Perdana Publishing. https://books.google.co.id/books?id=4Gt0yQEACAAJ

Hidayah, N., Wahyuningrum, D., Kamara, I. S., & Rahmah, J. L. (2023). Determinants of Green Gross Domestic Product (GDP) in ASEAN-5 Countries. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *24*(2), 256–264. https://doi.org/10.23917/jep.v24i2.22488

Huang, Q., Xie, Y., & Zhang, X. (2024). The Demographic Transition and Rural Industrialization in China. *Economic Development and Cultural Change*, *72*(4), 1863–1892. https://doi.org/10.1086/725727

International Islamic Fiqh Academy and Organization of Islamic Cooperation. (2024). *Resolution and Recommendations of the International Islamic Fiqh Academy* (Third Edit). International Islamic Fiqh Academy.

Khaldun, I. (2015). *The Muqaddimah: An Introduction to History* ((N. J. Daw). Princeton University Press.

Kurniawati, E., & Sugiyanto, C. (2021). Pengaruh Struktur Umur Penduduk terhadap Pertumbuhan Ekonomi di Indonesia. *Jurnal Ekonomi Dan Pembangunan Indonesia*, *21*(1), 41–58. https://doi.org/10.21002/jepi.2021.04

M'baye, C. K. (2023). Fertility, Employment, and the Demographic Dividend in sub-Saharan African Countries with Incipient Demographic Transition: Evidence from Mali. *Journal of Population Research*, *40*(2), 7. https://doi.org/10.1007/s12546-023-09299-7

Mafrudlo, A. M., Mansur, Z. A., Mustofa, M., & Janwari, Y. (2024). Economic Development Theory of Ibnu Khaldun: Interrelation between Justice and Umran al-Alam. *Share: Jurnal Ekonomi Dan Keuangan Islam*, *13*(1), 43–70. https://doi.org/10.22373/share.v13i1.20552

Maliki, A., & Arif, Z. (2024). Optimalisasi Bonus Demografi Dan Peningkatan Kualitas Sumber Daya Manusia Dalam Perspektif Ekonomi Islam Ibn Khaldun : Studi Kasus Kabupaten Belitung Timur. *Misykat Al-Anwar Jurnal Kajian Islam Dan Masyarakat*, *7*(2), 105–118. https://doi.org/10.24853/ma.7.2.105-118

Maulida, Y., Harlen, H., Sari, D. R., & Zacharias, T. (2023). Factors Predicting Fertility Rate in Indonesia. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *24*(1), 1–11. https://doi.org/10.23917/jep.v24i1.20076

Mukhtar, H., & Hassan, H. M. (2018). Demographic Transition and Economic Implications in Sudan. *SSRN Electronic Journal*, 1–13. https://doi.org/10.2139/ssrn.3137464

Niaz, A., Nazia, M., Teresa, R., & Zaki, W. (2020). *Is Son Preference Disappearing from Bangladesh ? 13996*.

Pan, Z., Wang, Z., & Cui, X. (2024). New Interpretation of Human–Land Relation: Differentiated Impacts of Global Demographic Transition on Carbon Emissions. *Sustainability (Switzerland)* , *16*(12). https://doi.org/10.3390/su16125168

Panggabean, M. (2022). Bonus Demografi Dan Capaian Indikator Pembangunan Sosial. In *Prosiding Seminar Nasional Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan* (Vol. 5, pp. 180–192). feb.untan.ac.id. https://feb.untan.ac.id/wp-content/uploads/2023/06/14.pdf

Prasetyani, D., Cahyadin, M., Yong Sze Wei, & Rosalia, A. C. T. (2023). Do Corruption and Institutions Contribute to the Economic Growth in ASEAN Countries During 2000-2018? *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *24*(1), 141–160. https://doi.org/10.23917/jep.v24i1.21426

Purwati, W. D., & Prasetyanto, P. K. (2022). Analisis Pengaruh Bonus Demografi Terhadap Pertumbuhan Ekonomi Di Indonesia. *Jurnal Economina*, *1*(3), 532–546. https://doi.org/10.55681/economina.v1i3.130

Rajagukguk, W. (2016). *Monograf Pertumbuhan Ekonomi Dengan Memanfaatkan Bonus Demografi Di Provinsi Nusa Tenggara Timur*. UKI Press.

Solow, R. M. (2000). *Growth Theory: An Exposition*. https://philpapers.org/rec/MSOGTA?utm_source=chatgpt.com

Tambunan, K. (2020). *Ekonomi Pembangunan, Medan: FebiPressUINSU*

Thi Mai, A. N., Xuan, V. N., Mai, H. Le, Xuan, H. P., & Thi Phuong, T. N. (2024). Population, Carbon Dioxide Emissions and Renewable Energy Consumption Nexus: New Insights from Vietnam. *Energy Exploration and Exploitation*, *42*(5), 1763–1798. https://doi.org/10.1177/01445987241252453

Todaro, M. P. ., & Smith, S. C. . (2020). Economic Development. In *Economic Development* (Thirteenth). Pearson Education Limited. https://www.mkm.ee/en/objectives-activities/economic-development

Tomala, J., Mierzejewski, M., Urbaniec, M., & Martinez, S. (2021). Towards Sustainable Energy Development in Sub-Saharan Africa: Challenges and Opportunities. *Energies*, *14*(19). https://doi.org/10.3390/en14196037

Wang, Y., Fan, H., & Guo, C. (2021). Trend and Factors of Population Fertility Changes From the Perspective of Economics and Education — China, 1949–2020. *China CDC Weekly*, *3*(28), 599–604. https://doi.org/10.46234/ccdcw2021.159

Wang, Z., Pan, Z., Xu, Z., Cui, X., & Zhang, X. (2024). How does demographic transition affect energy conservation? Evidences from the resource effects of global demographic transition. *Journal of Cleaner Production*, *441*, 140954. https://doi.org/10.1016/j.jclepro.2024.140954

Wibowo, T. S., Ariprabowo, T., Waluyo, S. P., Asiyah, S. N., Putri, S. A. A., Lestari, Y. D., & Wijaya, M. P. (2023). *Pembangunan Ekonomi*. CV. Mega Press Nusantara. https://www.google.co.id/books/edition/Pembangunan_Ekonomi/fwQKEQAAQBAJ?hl=id&gbpv=1&dq=Pembangunan Ekonomi&pg=PP1&printsec=frontcover

Wietzke, F. B. (2020). Poverty, Inequality, and Fertility: The Contribution of Demographic Change to Global Poverty Reduction. *Population and Development Review*, *46*(1), 65–99. https://doi.org/10.1111/padr.12317

Wilopo, S. A. (2016). Transisi Demografi Dan Pembangunan Berkelanjutan*. *Populasi*, *6*(1), 19–37. https://doi.org/10.22146/jp.11443

Woldegiorgis, M. M. (2023a). Drivers of Demographic Dividend in Sub-Saharan Africa. *Review of Evolutionary Political Economy*, *4*(2), 387–413. https://doi.org/10.1007/s43253-023-00094-x

Woldegiorgis, M. M. (2023b). Towards Inclusive Development Through Harnessing Demographic Dividend ? Empirics for Africa. *Journal of Social and Economic Development*, *25*(2), 380–402. https://doi.org/10.1007/s40847-023-00243-2