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Impact of Dependency Ratio on Economic Growth: Evidence from Selected Asian Countries

Mahmood ul Hasan[•]

Associate Professor, Department of Economics, University of Sargodha, Sargodha, Pakistan.

mahmood.hassan@uos.edu.pk

Umme Kalsoom

MPhil Scholar, Department of Economics, University of Sargodha, Sargodha, Pakistan.

Muhammad Nauman Malik

Lecturer, Department of Economics, University of Sargodha, Sargodha, Pakistan.

[•]**Corresponding Author**

ABSTRACT

Dependency ratio affects economic growth, with a particular emphasis on the developing and developed countries of South and East Asian regions. The study used the FMOLS method to examine the bond among, dependency ratio and economic growth, using "un balanced panel data" covering 5 developing countries of South Asian region including (Pakistan, India, Sri-Lanka, Bangladesh, Bhutan and five developed countries of East Asian region including (Japan, South Korea, Singapore, Macau. This study is done for the period of 1971-2022.GDP per capita, a gauge of economic growth, is the dependent variable, whereas independent variable is YDR, ODR, FDI and GDPDEF. The empirical results of the study show that both young and old dependents has adverse effect on economic growth both wealthy and emerging nations of Asia and positively impacted by FDI while GDPDEF has adverse impact on GDP Per capita. This study found that in emerging nations young age dependents is greater than developed countries while old dependency ratio is greater in developed countries as compared to developing countries.

Keywords: Economic Growth, Dependency Ratio, Developing Countries, Developed Countries

INTRODUCTION

According to the study, the main macroeconomic elements that may be linked to economic growth in industrialized nations are trade, population, fiscal policy, monetary policy, human capital, physical capital ,financial and technological aspects. Physical capital considered significant aspects influencing economic growth for any nation since the Harrod-Domar and Solow models of economic growth.The literature on empirical growth makes use of natural resource variables such as exports or abundance as well as actual interest rates. One factor that undermines the pricing system's efficacy is policy-induced uncertainty. For example, the future pace of economic growth may be negatively impacted if it is anticipated that population growth, real interest rates, real exchange rates, government spending, and inflation will all increase. Population shifts are usually thought to possess a noteworthy effect on economic expansion.According to current estimates, the world's population has nearly tripled over the last 50 years (United Nations (UN), 2019), with emerging and developing economies expected to have the fastest population growth rates. The majority of the world's developing nations are seeing decreasing rates of fertility and death in the current position of the demographic transition, which could result in an increase in the percentage of people who are working age population in the overall population. An economy's demographic structure is essential to attaining greater economic growth.Dependents had used in place of the population growth rate because it demonstrates that the amount of savings has an impact on the growth of people of working age. If employed in productive jobs, a people with education and talent can make a substantial contribution to a nation's progress. The demographic profile of the world is fairly diverse, though, with the industrialized world seeing a situation of a growing elderly population as a result of low fertility, while developing nations are seeing a proportionate increase in population of working age.

The dependency ratio's impact on economic expansion ultimately hinges on a number of variables, including government policy, human capital investment, and labor market efficiency.Developing measures that encourage workforce participation or reacting to demographic shifts brought about by technological improvements may be necessary for nations with high dependency ratios.The old age dependence ratio is typically used in the literature on demographics to quantify the elderly's burden. To properly evaluate the demographic prospects resulting from the age-distribution shifts in under developed nations, it is therefore possible to modify the measure of dependency while taking these factors into account.According to Eastwood and Lipton (2012), the dependency ratio is the proportion of the people of working age (those who are 15–64 years old) that are under the age of 15 and over 65. Based on the Solow growth model (1956), this study creates and examines a framework that focuses on the growth process of an economy with a high dependency ratio. Dependency's impact on savings, the foundational element of the neoclassical growth model, may be linked to economic success. The anticipated growth gain from a decline in dependents ratio might not materialize if the resources are transferred to other economies, whether voluntarily or involuntarily. The study attempted to

investigate how the dependency ratio affected the economic growth of five developing and five developed countries of Asia. It is often acknowledged that a nation's demographic composition can significantly impact its efforts to grow. Understanding the long-term economic effects of this altered population structure is crucial given the proportionate rise in the youth population in developing nations and the proportional increase in the comparatively older group of people in developed nations. The study's introduction is covered in the first section, followed by the study's literature review is covered in the second chapter, and the theoretical backdrop is covered in the third chapter. Section 4 provides an explanation of the study's material and methodology; Section 5 presents the findings and discussion; and Section 6 concludes with policy recommendations .The most notable gap in this literature is that the reliance ratio is more severe in emerging and developed nations. By concentrating on the economic growth of five established Asian nations—Japan, South Korea, Singapore, Hong Kong, and Macau—and five emerging Asian nations—Pakistan, India, Sri Lanka, Bangladesh, and Bhutan—this study aims to close this gap.The general objective of the study is how demographic trends affect economic growth in Asian nations, both developed and emerging.The specific objective of the study is to Find connection between the dependency ratio and economic growth in industrialized and developing Asian Countries.

RELEVANT LITERATURE

Jane Golley et al.(2012) arranged the connections between population changes and economic expansion in China and India.Based on actual data up to 2010 and projections beyond, the crude birth and death rates for China and India from 1950 to 2030 are displayed. Economic expansion is impacted by the shift in the population brought on by the fall in fertility in a number of ways. As demonstrated here that in under developed nation with a huge number of fertility slowing population growth, a fall in fertility also raises the percentage of the population that is working age and lowers the total dependents. Assuming constant labor participation rates and falling factor returns across an ageless population, this is one of the primary predictions of the conventional Solow-Swan model of growth.

Sijia Song (2013) examines the impact of demographic changes on economic growth in thirteen Asian countries from 1965 to 2009. According to the results, economic growth is positively impacted by increases in the working-age population and working-age population ratio, but negatively by increases in the general population and the young population.and found that the dependency ratio and economic growth had a positive relationship.

Anglica Harryson (2014) looked into the connection between the number of workers (ages 15–64) as well as the dependence ratio, which compares the dependents' ages (ages 0–14 to 65+). Making use of secondary data mostly from the World Bank and a sample of 26 sub-Saharan nations, a cross-sectional regression analysis was used to conduct the inquiry.1990–2010 is the time frame covered in this study. The results show that there is a substantial inverse connection between

economic growth and both iterations of the dependency ratio.

Saidou Baba Oumar et al.(2015) examined how international dependency affected the economic growth of most industrialized countries and less developed countries applying the secondary data analytical method for the years 1980-1990. The mindset that each party has formed to place and maintain itself in its current status as underdeveloped and developed is explained by this study, which serves as a pertinent example. and discovered that LDCs see all nations to be reliant and progressing (Hamid, 2025; Hamid & Abbas, 2025). And economic inefficiencies are the result of this dependency and development order.

Lo-Rick Brenden et al. (2016) studied that Asia's economies are under a lot of strain due to the region's rising total fertility,life expentency,shifting patterns of birth and death and growing proportion of elderly population in terms of age distribution using the bound testing approach of co-integration, the study period covered seven Asian countries from 1970 to 2014 and found a substantial inverse long-term correlation between economic growth and the elderly age dependence ratio,as well as a significant positive long-term relationship between the young (DR) and economic growth (Uddin, 2016).

Teixeira et al.(2017)carried out research that was centered on primarily on developed economies and investigated the connection between aging and economic performance used the latest dynamic panel data techniques, which are founded on the generalized method of moments (GMM) developed by Blundell and Bond (1998) and Arellano and Bover (1995)to capture the effect of aging and the rate of aging on a nation's economic growth. They had found that less developed countries (LDC) and emerging economies (EE) are transitioning more quickly than those in developed regions. For this reason, the pace of aging is an important element to examine in this particular situation. Comparing the calculations of system dynamic panel data for 40 LDC, 19 EE, and 28 DC from 1990 to 2013, they found aging hinders economic growth in each of these nations, with notable differences based on the developmental stage. The current rate of aging has a major and detrimental effect impact the expansion of DC, but not that of LDC.

Maja Bengtsson(2018) looked at the impact of shifting age distribution on Sri Lanka's economic expansion. The regression model's data set spans the years 1960 through 2014 and is determined annually (Hamid & Awhinawhi, 2025). The human capital Solow model—which has been expanded to incorporate factors pertaining to age structure—is the foundation of the regression analysis. They discovered that economic progress is slowed by dependents (age groups 0–14 and 65+)and that there is a markedly negative impact on the population growth rate overall.

Sayema Haque Bidisha et al,(2019) examined data in time series for Bangladesh from 1972 to 2018 and using time series techniques of Johansen Cointegration analysis to empirically demonstrate the sustained relationship between economic expansion and dependence ratio (Aurangzeb et al., 2025). According to empirical research, the DR has a substantial and detrimental long-term impact on growth per capita; a decrease in the ratio is anticipated to boost

Bangladesh's per capita growth.

ZAINAB JEHAN et al.(2020) examined the effect of demographic factors on economic growth in Pakistan from 1960 to 2014 using physical capital. Four alternative measures—population growth,YDR,ODR and the population ratio of working age —are used to reflect the demographic shift in this context. First, to examine the channel effect, the direct impact of population changes on physical capital is computed (Hsu & Huynh, 2023; Masih et al., 2025). The result of capital stock caused by population changes on economic growth is calculated.

Suriani et al.(2021) examine how poverty and the dependence ratio are impacted by economic growth, the human development index, and zakat. employing a multiple linear regression approach with time series for 2010–2019 and a panel data format (21 districts/cities). The findings indicate that poverty and the dependency ratio are significantly impacted negatively by zakat (Iqbal et al., 2021). The DR and poverty are then significantly impacted negatively by the HDI. Additionally, economic expansion has a major detrimental effect on poverty but has little influence on the dependency ratio.

Vegard Skirbekk et al. (2022) examined the connection between dependency and age, which differs greatly between nations. As a result, we introduce the HADR a novel indicator of the pressure of aging that is based on the health of the adult population as they age (Shah et al., 2025). According to this 2017 study, the OADR and HADR indicate that the burden of aging is lower while it is higher in central Asia, southern Asia, and Africa, it is lower in Asia, western Europe, and North America.

Dr. Sadiq Neghamish Jassim Al-Jayyashee (2023) to conduct a study on economic dependency rates and how they affected the population's economic growth within the administrative boundaries of the Al-Muthanna Governorate in 1997. The accessibility of population estimates, data from the 1997 general population census, the results of the field research for 2021, and the calculation of the crude age-dependent and economic dependency.The study's two components covered a broad age range and regional variance at the level of the governorate's administrative divisions.The results and analyses revealed that the population of Al-Muthanna Governorate is young, and this youth is directly related to the age dependency ratio, which indicates a high percentage of the population under the age of fifteen, and its variation at the level of administrative units (Aurangzeb et al., 2024).

Mazhar Abbas et al.(2024) looked into the connection between the three South Asian Association for Regional Cooperation (SAARC) members—Bangladesh, India, and Pakistan—and their economic growth in 2024 (Farooq & Uddin, 2025). The study spans the years 1960–2021.The high real economic reliance rates—which varied from 106% in 1997 to 132% in 2021—combine with this. The effects of YDR and population aging on the growth of specific industries, such as services, agriculture, and industry, are also thoroughly examined. The effect of the population dependency ratios on economic expansion is examined in this study using panel data.

They employed the Pooled Mean Group/Autoregressive Distributed Lag (PMG/ARDL) approach to estimate this effect. There is a long-term association between these factors, according to the ARDL analysis's findings. Additionally, the results indicate that a higher old age population DR has a favorable impact on these countries' economic growth. The long-term relationship findings between economic growth and the old and YDR support the findings of Bawazir et al who proposed that the old population dependence ratio has a favorable influence on economic growth, whereas the youthful population has a negative effect.

Conceptual Framework

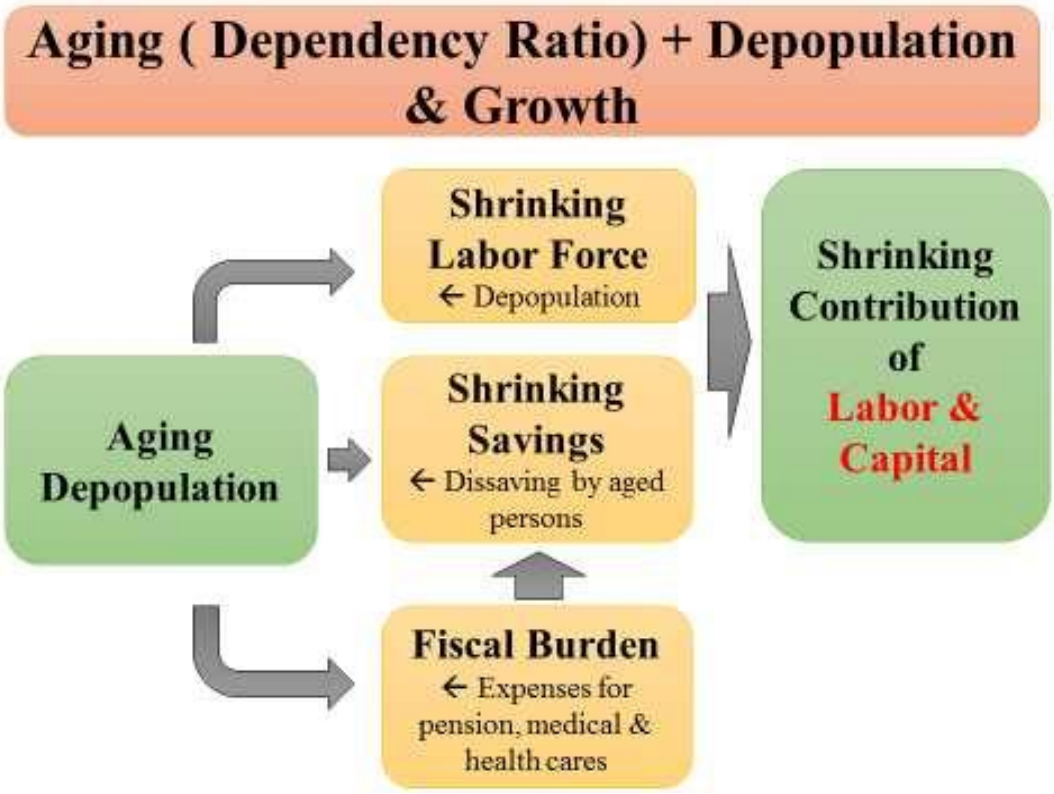

Figure: Dependency Ratio,Depopulation and its Impact on Economic Growth
Source.: Lar et al.(2020)

Growth, depopulation, dependency ratio, and aging are all closely related ideas that can significantly affect one another, particularly when it comes to a nation's social structures, economics, and demographic patterns. The term "aging" describes the rise in the percentage of senior citizens in a population. The average age of the population increases as life expectancy increases and fertility rates decrease. A reduction in the population's total size is referred to as depopulation. Because there are fewer people to generate products and services, the economy may be less productive as a result of the aging population and smaller workforce. Depending on other variables like technology or capital investment, the economy may grow more slowly or even decrease when fewer young people enter the workforce. In order to prepare for retirement, people usually begin saving more

during their working years as populations get older.

Materials and Methods

Unbalanced panel data is used in this study aims to investigate the long-term correlation between economic growth and the DR for a few Asian nations. During the years 1971–2022, this study was conducted.Five developed and five developing Asian nations are chosen, and the connection between the dependents and economic growth is investigated. Pakistan, India, Sri Lanka, Bangladesh, and Bhutan are among the developing nations covered in this study; Japan, South Korea, Singapore, Hong Kong, and Macau are among the developed nations. This research makes use of information from a secondary sources. The dependent variable for emerging and industrialized Asian nations is GDP per capita growth as a percentage of GDP per year, and the WDI provide the data for this particular variable.Furthermore data for independent

Model Specification

Econometric Model 1:

$GDPC=\beta_1 YDR_{it} +\beta_2 OLDR_{it}+\beta_3 FDI_{it}+\beta_4 DEF\mu_{it}+\mu_{it}$

Econometric Model 2:

$GDPC=\beta_1 YDR_{it} +\beta_2 OLDR_{it}+\beta_3 FDI_{it}+\beta_4 DEF\mu_{it}+\mu_{it}$

Where

GDP=Gross Domestic product

YDR= Young Dependency Ratio

FDI=Foreign direct investment

GDPDEF=GDP deflator

ORD=Old Age Dependency Ratio

μit=Residual

Since the data is panel in nature, "i" in the equation above denotes the number of cross sections, "t" denotes time, "β" stands for the coefficients, and "μ" is the residual.

RESULTS AND DISCUSSION

Descriptive statistics methodology is used to compile, arrange, and meaningfully display dat, making it easier to understand and interpret.

Table 5.1: Descriptive Statistics of Developing Asian Countries

Variable	Mean	Maximum	Minimum	Std.Dev
GDPCG	3.21	14.68	-10.80	2.94
YDR	60.83	88.58	30.92	16.39
FDI	0.74	5.88	-0.63	0.80
GDP-DEF	3.10	65.94	-1.05	5.17
OLD DR	2.04	2.86	1.71	0.21

Note.: The description provided by the Author

The table displays descriptive statistics for five economic variables: GDP Deflator (GDP-DEF), Foreign Direct Investment (FDI), Younger Dependency Ratio (YDR), Older Dependency Ratio (OLD DR), and GDP per capita growth (GDPCG).

An explanation of these findings is as follows:The high volatility of GDP per capita growth indicates that economic growth rates differ significantly between nations.Significant fluctuation in the younger dependency ratio suggests that populations vary in age, with some nations having a significantly higher proportion of young dependents. The amount of foreign direct investment varies somewhat, with certain nations seeing negative FDI.

Significant inflationary volatility is represented by the GDP Deflator, which illustrates both periods of inflation and deflation. The older dependence ratio is comparatively constant among nations, suggesting that there is little variation in the percentage of the population of working age that is elderly. It is noteworthy that the developing Asian countries in this study achieved an average of 3.21 percent in GDP Per capita growth. While old dependency ratio grew by 2.04 percent on average. The young dependency ratio increased by 60.83 percent on average.

Table 5.2: Descriptive statistics of Developed Asian Countries*:*

Variables	Mean	Maximum	Minimum	Std .dev
GDP PCG	3.90	26.63	-54.33	6.61
OLD DR	14.94	51.19	5.95	9.75
GDP-DEF	80.18	125.12	11.02	27.31
YNGR	29.07	74.39	15.74	12.18
FDI	7.45	58.51	-24.52	10.99

Note.: The description provided by the Author

The table presents the descriptive statistics for five economic variables: GDP per capita growth (GDP PCG), Older Dependency Ratio (OLD DR), GDP Deflator (GDP-DEF), Younger Dependency Ratio (YNGR), and FDI. Here's the interpretation of the results:With numbers ranging from large negative to large positive, GDP per Capita Growth (GDP PCG) is extremely erratic. This points to times of both sharp economic recession and robust international expansion.The Older Dependency Ratio (OLD DR) varies significantly, suggesting that the burden of elderly dependents in certain nations is significantly higher than that of people of working age.Significant inflationary volatility is shown by the GDP Deflator (GDP-DEF), indicating that price levels vary greatly among nations.Additionally, there are large variations in the Younger Dependency Ratio (YNGR), which indicates that the burden of juvenile dependency varies greatly among nations.There is a lot of diversity in foreign direct investment (FDI); some nations have negative FDI, while others see significant capital inflows.To sum up, these findings show notable demographic and economic variations among the nations in the data set, with FDI, GDP growth, and inflation (measured by the GDP deflator) all exhibiting exceptionally high volatility. The large disparity between the younger and older dependency percentages illustrates the various demographic difficulties that various nations face. In developed countries in this study achieved an average of 3.90% in GDP Per capita growth. While old dependency ratio grew at an average of 14.94%.Younger dependency ratio increase at an average of 29.07 percent.Compared to industrialized nations, developing

nations have a greater old dependency ratio. Although the ratio of younger dependents is larger in emerging nations than in wealthy ones,it indicates several socio-economic dynamics:

Table 5.3: Panel Unit Root Results of Developing Asian Countries

Variables	LLC		IPS	
	Individual Intercept	Individual Intercept& Trend	Individual Intercept	Individual Intercept& Trend
GDP PCG	-1.03* (0.0000)	-2.08* (0.0000)	-6.29* (0.0000)	-8.93* (0.0000)
YDR	-2.91** (0.0018)	-6.90* (0.0000)	-2.05** (0.01)	-3.39* (0.003)
ODR	-7.76** (0.0000)	-8.13* (0.0000)	-7.10** (0.0000)	-6.50* (0.0000)
FDI	-1.82* (0.03)	-1.17* (0.12)	-2.43* (0.007)	-2.21* (0.001)
GDP DEF	-4.77** (0.0000)	-3.87** (0.0001)	-7.06** (0.000)	-6.08** (0.000)

Variables	ADF Fisher		PP Fisher	
	Individual I Intercept	Individual Intercept& Trend	Individual In Intercept	Individual Intercept& Trend
GDP PCG	63.74* (0.0000)	101.90* (0.0000)	140.65* (0.000)	131.076* (0.0000)
YDR	18.59** (0.04)	29.47* (0.0000)	10.01** (0.4)	8.01* (0.6)
ODR	69.98** (0.0000)	59.17* (0.0000)	36.88** (0.0001)	24.97* (0.005)
FDI	24.60* (0.006)	22.72* (0.01)	26.75* (0.002	24.37* (0.006)
GDPDEF	80.24** (0.0000)	68.42** (0.0000)	114.407** (0.0000)	353.60** (0.000)

Note.: The description provided by the Author

This table shows the results of multiple unit root tests for several economic variables, including GDP per capita growth, the GDP Deflator (GDP DEF), the Younger Dependency Ratio, the Old Dependency Ratio, and Foreign Direct Investment (FDI).As stated to most studies, all of the variables examined—GDP per capita growth, the GDP deflator, FDI, the younger and older dependency ratios—are stationary. Overall, the data supports stationarity, however the younger dependency ratio and FDI exhibit significant variability in the test results (particularly the IPS test). In order to provide more accurate model estimate, these findings imply that these variables do not have a unit root and can be utilized in further time-series

research without worrying about non-stationarity.

Table 5.4: Panel Unit Root Results of Developed Asian Countries

Variables	LLC		IPS	
	Individual Intercept	Individual Intercept& Trend	Individual Intercept	Individual Intercept& Trend
GDP PCG	-8.60*	-10.96*	-7.40*	-9.21*
	(0.000)	(0.0000)	(0.000)	(0.0000)
YRD	-4.78*	-8.55?*	-2.26*	-6.16*
	(0.0000)	(0.000)	(0.01)	(0.000)
ORD	-8.66**	-9.85**	-10.08**	-10.96**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
FDI	-7.2795**	-6.01**	-13.41**	-12.83**
	(0.000)	(0.0000)	(0.000)	(0.0000)
GDP DEF	-4.90**	-3.78*	-5.16**	-3.38*
	(0.000)	(0.0001)	(0.000)	(0.004)

Variables	ADF Fisher		PP Fisher	
	Individual Intercept	Individual Intercept& Trend	Individual Intercept	Individual Intercept& Trend
GDP PCG	73.25*	88.46*	111.33*	135.29*
	(0.000)	(0.0000)	(0.000)	(0.0000)
YRD	24.89*	60.36*	105.9*	25.93*
	(0.005)	(0.000)	(0.000)	(0.003)
ORD	104.48**	110.81**	46.80**	285.54**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
FDI	145.65**	129.05**	153.98**	1151.111**
	(0.000)	(0.0000)	(0.000)	(0.0000)
GDP DEF	49.31**	25.21*	37.41**	25.212*
	(0.000)	(0.005)	(0.000)	(0.005)

Note.: The description provided by the Author

The vast majority of tests show that every variable — Growth in GDP per capita, the GDP deflator, the younger and older dependence ratios, and foreign direct investment—are stationary. These variables do not show a unit root and most likely do not follow random walks, as The unit root null hypothesis is disproved in the majority of cases. With a few exceptions (such as the IPS test for the younger dependence ratio), which nonetheless imply stationarity but with marginally lower evidence, the most of the results are highly significant (p-values near 0).In both developing and developed countries of Asia ** denotes stationary on the first difference, and the sign implies that values are stationary on level

Table 5.5: Panel Regression Results of Developing Asian Countries

Variable	Co-efficient	Std.Error	T.statistics	Probability
OLD DR_{it}	-6.47	2.07	-3.12	0.002
Younger DR_{it}	-0.08	0.022	-3.90	0.0001
FDI_{it}	1.23	0.24	5.12	0.0000
GDP-DEF_{it}	-0.08	0.03	-2.23	0.026

Note.: The description provided by the Author

The above Table represents the negative coefficient (-0.08), a decline in An increase in GDP per capita is associated with in the young dependence ratio.In particular, GDP per capita is predicted to fall by 0.08 units for per unit rise in the ratio of young dependents i.e., more children or dependents under 15 years of age per working-age person), assuming all other variables remain unchanged.This suggests that nations with a greater young dependency ratio may have to increase social service spending, healthcare, and education, which could strain their financial resources and have a detrimental effect on GDP per capita.The ODR large negative coefficient (-6.47) suggests a substantial and adverse association with GDP per capita.Keeping all other factors equal, GDP per capita falls by 6.47 units every time the old dependency ratio increases by one unit (i.e., more elderly dependents 65 and older per working-age person). Given that an aging population frequently necessitates increased spending on healthcare, pensions, and related services, this means that nations with a higher elderly dependency ratio may face significant economic issues. GDP per capita may fall as economic growth slows due to a shortage of workers to maintain this population.Foreign direct investment and GDP per capita are favorably correlated, as seen by the positive correlation (1.23) for FDI.Specifically, for each 1-unit increase in FDI, It is anticipated that GDP per capita would rise. by 1.23 units, holding other factors constant.

Table 5.6: Panel Regression Results of Developed Asian Countries

Variable	Co-efficient	Std.Error	Statistics	Probability
OLD DR_{it}	-3.11	1.15	-2.69	0.007
YDR_{it}	-0.27	0.09	-2.91	0.003
FDI_{it}	0.10	0.05	1.93	0.05
GDP DEF_{it}	-0.17	0.04	-4.08	0.001

Note.: The description provided by the Author

The above table 5.10 represents the YDRit coefficient is negative, a higher YDR—that is, a larger proportion of the population under 15—is linked to a lower GDPC (Gross Domestic Product per Capita).In particular, GDPC is predicted to fall by 0.27 units for every unit rise in the Youth DR. This might be an indication of the financial strain imposed by a sizable youth population that depends on those of working age, which could lower the amount of money available for infrastructure, investment, and economic output.Although it is significantly bigger in size, the ODR

also has a adverse coefficient. GDPC is predicted to fall by 3.11 units for every unit increase in the ODR greater proportion of the population 65 and older).This implies that an increasing proportion of senior citizens possesses a detrimental effect on economic production since they need healthcare, pensions, and other forms of support. Fiscal issues that lower economic production per capita may affect nations with aging populations.FDI has a positive impact on GDPC, as seen by the positive coefficient for FDIit. In particular, GDPC rises by 0.10 units for every unit increase in FDI. This implies that foreign investments, perhaps through bringing in money, technology, and productivity, have a positive effect on economic expansion.This illustrates how bringing in foreign investment can boost a nation's economy. Given that the DEFit coefficient is negative, a rise in the government deficit is linked to a fall in GDPC.

CONCLUSION AND POLICY RECOMMENDATION

The main problem facing the Asian area, and the globe at large, is the dynamics of demographic structure, which lead to resources imbalances and population expansion, which in turn have a major influence on economic expansion. No study has looked at the demographic structure of the five developing nations in South Asia and five developed nations in East Asia during the period of 1971 to 2022 in relation to economic growth.

Age dependence's effects on economic growth was carefully examined within the framework of developed and developing Asian nations in this study.

The sample's panel data encompassed the years 1971–2022, and the panel FMOLS approach was used for empirical estimate. Data is compiled, arranged, and presented in a comprehensible manner using descriptive statistics approach, which facilitates comprehension and interpretation.To ascertain whether a time series in a panel data set—that is, data that incorporates cross-sectional and time series dimensions—is stationary or has a unit root, one can apply the panel unit root test. The test determines if the mean and variance of each time series show a stochastic trend across time. Johansen To ascertain whether there are one or more cointegration links among several time series data, tests of Cointegration are employed.It is particularly helpful when working with non-stationary data in econometrics and finance. Hypotheses concerning the parameters (coefficients) of a statistical model are frequently tested using the Wald test. It is specifically used to assess model coefficient constraints, particularly when estimating several parameters or examining particular correlations between them. According to the study's findings, the In emerging countries, the ODR is smaller nations than in industrialized ones. In contrast to wealthy nations, the ratio of younger people who are dependent on others is higher. In both affluent and emerging nations, the YDR and the ODR dependence ratio have a detrimental impact on economic expansion. GDP Deflator has a adverse impact on economic expansion, in contrast to foreign direct investment has a favorable effect. To lessen this,

- Increase spending on education and career training to raise workforce

productivity in the future.

- Put in place measures that support women entering the workforce, like parental leave benefits and reasonably priced childcare.
- To make the transition from school to work easier, support internships and youth employment initiatives.
- Provide investment-friendly regulations and tax breaks to entice international companies.
- To safeguard investors, bolster legal frameworks and intellectual property rights.
- Encourage political and economic stability to boost investor trust.

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