

Correlation Analysis Between Regional Economic Development Level and Residents' Quality of Life: A Case Study Based on Economic Data

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Abstract: The global development imbalance and the varying distribution of development priorities among countries have led to significant disparities in economic levels and standards of living. Different regions and countries exhibit contrasting economic profiles, resulting in varying living standards for their populations. These economic disparities exert a tangible influence on people's lives, with changes in the economy directly impacting their daily experiences. This paper adopts a case study method, utilizing data on variables such as GDP, employment rates, average property prices, and per capita car ownership, to examine the manifestation of living standards disparities resulting from economic gaps across different regions and countries. The findings emphasize the crucial role of a stable and growing economy as a prerequisite for enhancing people's living standards, as the economy serves as a tangible reflection of their quality of life. Understanding the causes and theoretical relationship between the economy and its impact on people's lives is of paramount importance. In conclusion, this paper illustrates that economic disparities between regions and countries significantly affect people's living standards and underscores the significance of economic stability and growth in improving people's well-being. The economy and people's lives are intertwined, exerting reciprocal effects on each other while also imposing mutual constraints.

Keywords: GDP, Economic development, Life quality

1. Introduction

The pursuit of economic development and improving people's quality of life has always been a strategic priority for nations worldwide. The essential objective of economic development is to enhance the standard of living for individuals. However, solely focusing on improving citizens' welfare without considering the economic structure can impose a heavy burden on the economy, leading to slow or negative growth and even the risk of bankruptcy. Greece has implemented a series of generous welfare measures, including high retirement pensions and healthcare coverage, which have put immense pressure on the country's finances. As welfare expenditures increased, the Greek government had to borrow funds to cover the budget deficits, ultimately resulting in a severe debt crisis. This series of problems has plunged Greece into economic distress and serves as a prominent

case study of the strain that high welfare systems can put on an economy. This imbalance in domestic economic development gives rise to various social problems that impact all aspects of society, including but not limited to education, social welfare, public safety, wealth disparity, and the environment.

The people are the foundation of a nation, and relinquishing their well-being is tantamount to self-destruction. Furthermore, the state plays a vital role as a governing, organizing, and protecting institution for its citizens. The foundation of a nation lies in its economy, as it represents the root of the country. The economy, in turn, has a significant impact on various aspects of people's lives, creating a substantial ripple effect that reverberates back to the nation. Therefore, finding the balance between economic development and people's well-being and identifying the equilibrium point on this delicate balance is a crucial consideration for countries striving for sustainable development.

It is imperative to avoid stagnation in economic growth caused by excessive focus on improving people's welfare, as well as resist the temptation of neglecting the standard of living while focusing solely on economic development. This article aims to conduct an in-depth analysis of the impact of the economy on people's lives and outline how countries can develop their economies to enhance the quality of life. It focuses on four aspects closely related to the people: welfare policies, public safety management, ecological environment, and education.

Research has shown that multiple factors contribute to overall satisfaction levels of perceived quality of life [1]. Previous research mainly focused on the impact of quality of life on the economy. Therefore, the article aims to fill the gap in economic research related to the interplay between the economy and people's well-being, providing a more comprehensive understanding. By utilizing a comparative analysis method, this article will compare the quality of life in social welfare in Iceland and German, social security in China and South Africa and education in India and England, exploring the impact of the economy on people's lives and identifying the differences and connections between relevant factors. It will delve into the underlying logic and causality behind the interplay between the economy and people's well-being.

This article will begin by discussing the main constituents of quality of life and the close connection between the economy and its impact. This will provide a preliminary understanding of the relationship between the economy and people's well-being. Subsequently, through four comparative case studies focusing on welfare policies, public safety, the environment, and education, this article will comprehensively analyze the relationship between the economy and people's quality of life. Finally, it will examine the internal linkages between the economy and quality of life, identifying the underlying factors that drive their mutual interaction.

2. The Relationship Between Economics and Livelihood: A Comprehensive Exploration

2.1. The Composition of Livelihood

Here are many components that constitute people's livelihood, but the most closely related ones are social welfare, public security, education, and natural environment. These four aspects respectively correspond to social well-being, personal safety, social mobility, and living environment, covering all aspects of residents' basic living [2,3].

2.2. The Link between Economics and Livelihood

The economy and people's well-being are intricately linked, with economic development serving as a pivotal upper-limit indicator for the standard of living. However, a higher level of economic development doesn't automatically translate to an enhanced standard of living for the populace in a specific region or country. Instead, the level of economic development signifies the theoretically achievable standard of living for the people in that area. Concurrently, people's livelihoods impose

constraints on economic levels, as a relative lag in livelihood can lead to diminished productivity, subsequently slowing down economic growth.

Moreover, there exists a mutual relationship between the two, wherein economic development lays the material foundation and provides opportunities to enhance people's living conditions. Additionally, the demands and consumption behaviors of the populace act as driving forces for economic growth and market demand, thereby propelling overall economic development.

3. Dimensions of Livelihood and Measurement for Regional Economic Development

3.1. Dimensions of Livelihood

Welfare policies play a crucial role in reflecting livelihood at the societal level. They directly relate to the living conditions and quality of life of individuals within society. Research on the relationship between economic conditions and the public's attitude towards welfare policies has indicated that changes in economic conditions can predict changes in the public's attitude towards these policies [4]. Welfare policies hold significant importance in modern society, encompassing the daily lives of all individuals. Their objective is to ensure social fairness and justice by providing social security and public services, assisting vulnerable groups in improving their lives, and offering equal opportunities.

Safety also holds immense significance in people's lives. Without a secure environment, individuals cannot ensure their life security. The absence or instability of safety issues can significantly impact the quality of life and well-being of the public, which in turn hampers economic development and prosperity [5]. In such societal environments, a complete industrial chain and adequate job positions are unlikely to exist. For instance, in war-torn Syria, potential investors withdraw, foreign trade nearly stagnates, economic vitality plummets, and the lack of motivation among individuals to create new value perpetuates a vicious cycle.

Education serves as a primary avenue for social class mobility. Education is indispensable as it enables countries to fully utilize existing technology [6]. In countries with underdeveloped education systems, social mobility becomes challenging. This phenomenon leads to the emergence of class monopolies, where the impoverished find it difficult to escape poverty, the wealthy enjoy excessive access to resources, and the middle class is squeezed, resulting in a distorted class structure in society. Consequently, economic stagnation arises, social innovation is impeded, and the market becomes subject to the manipulation of the wealthy, causing a loss of fair and effective market competition, with resource allocation and price formation favoring the affluent class.

The environment serves as a tangible manifestation of people's living conditions. A pristine environment not only brings pleasure and comfort to individuals but also provides them with abundant natural resources. Moreover, the environment acts as a starting point for economic development, with natural resources being the fundamental support system for human economic progress. If the environment suffers irreversible damage, the first to be impacted would be people's survival, resulting in a series of cascading consequences for economic development, perpetuating a vicious cycle.

These factors are interconnected and vital to people's livelihood. Welfare policies, safety, education, and the environment play crucial roles in determining the happiness and quality of life of the people.

3.2. The Measurement Dimensions of Regional Economic Development

To measure the economic level of a region, the most direct reflection is GDP. Although the benchmark estimate is not particularly timely, it has the significant advantage of being predominantly based on the economic census [7]. GDP represents the total scale and output of a region's economy, and its annual growth rate reflects the pace of economic growth and vitality. A higher growth rate

indicates a stronger economic vitality, which can attract investors. Additionally, GDP growth is closely linked to employment levels. During economic prosperity, businesses require more labor force to meet increased demand, leading to more employment opportunities.

Besides, the employment rate and the unemployment rate are equally important components of regional economies. It is instructive to use the trade-off between the rate of unemployment and the employment/population ratio to predict the workforce evolution in developed countries [8]. When the economic conditions are favorable, the employment rate usually rises, while in difficult economic times, the employment rate may decrease, and the unemployment rate may rise. The acceleration of economic development is likely to be impeded following an increase in unemployment rate. Furthermore, the rise of the unemployed population may exacerbate social security issues in certain areas, leading to a decline in overall living standards for the population. Monitoring the proportional changes between these two indicators can provide a rough understanding of the economic conditions in that region from a macro perspective.

Moreover, per capital consumption is also an important factor, often used to assess consumption trends in the economy, individual income levels, and living standards. It reflects the consumption habits, consumption structure, and household financial situation of each individual. It is closely related to people's lives, and through this data, the main consumption tendencies of residents in the entire society can be revealed, which are the most needed services that people cannot obtain for free in the entire society.

4. Correlation Analysis Between Economic Development Level and Life Quality

4.1. Case One: Social Welfare and Economic Development in Iceland and Germany

Both Iceland and Germany have very comprehensive social welfare systems [9,10]. Providing extensive welfare coverage for citizens, including healthcare, pension insurance, and unemployment assistance. Both countries are committed to ensuring the basic living needs of their residents. Iceland offers universal healthcare services, providing citizens with free or low-cost medical services through the national healthcare system. Additionally, public schools in Iceland are free, and the country provides multiple layers of support, including unemployment insurance and pension insurance.

Similarly, Germany's welfare system includes healthcare, education, pension, and unemployment assistance. However, in Germany's healthcare insurance system, residents are required to participate and contribute a certain proportion of fees, as they are also required to do in the pension insurance system.

Table 1: Welfare system in Iceland and German.

Iceland	German
Healthcare	Health care
Pension insurance	Education
Unemployment assistance	Pension
	Unemployment assistance

Presently, Iceland's corporate tax rate is approximately around 20%, while Germany's is around 30%. Iceland's value-added tax (VAT) is approximately 24%, compared to Germany's 19%. The difference in personal income tax is not significant, as both countries have progressive tax systems.

Table 2: Tax level in Iceland and German.

Tax	Iceland	German
Corporate Tax	20%	30%
VAT	24%	19%

Taking into account geographical factors, Iceland is a relatively small country surrounded by the sea, with its major industries being fisheries and tourism. The contribution of Iceland’s fishing industry to its GDP has fluctuated between 10% and 20% over the past few decades, while the share of tourism in Iceland’s GDP increased from about 3% in 2000 to over 10% in 2019. However, it does not have a large industrial structure, making its economic development relatively fragile and susceptible to global economic fluctuations. For example, with Japan’s recent announcement of the discharge of nuclear waste into the ocean, the dispersion of radioactive substances through oceanic currents could potentially have a significant impact on Iceland’s fishing industry, consequently leading to a profound effect on its economic activities. In contrast, Germany is located in the central part of Europe and has a strong manufacturing and export industry, with an emphasis on industrial activities. Therefore, the tax revenue and welfare expenditure in Iceland mainly rely on tourism consumption, which may not provide a stable structure.

Despite being a high-welfare country, Iceland has not balanced its economic development, leading to an overemphasis on the tourism industry. This over-reliance on high welfare systems has created a biased impression of “high welfare” associated with Iceland among people worldwide. However, it is crucial to strike a balance between economic development and social welfare. Managing the welfare system in accordance with the current economic level and the needs of the people is of paramount importance.

Overall, both Iceland and Germany have established robust welfare systems, but their economic structures and dependency on certain industries differ, leading to unique challenges and considerations for maintaining the balance between economic development and social welfare.

4.2. Case Two: A Comparison of Social Security Situations between South Africa and China

Over the past two decades, China’s domestic security apparatus has undergone significant expansion, with “stability maintenance” operations assuming a top priority for local Chinese authorities. It can be argued that this trend traces back to the early 1990s, when central Party authorities introduced new governance models that differed markedly from those of the 1980s. This included elevating the bureaucratic rank of public security chiefs within the Party apparatus, broadening the reach of the Party’s political-legal apparatus to encompass a wider array of governance issues, and adjusting cadre evaluation standards to heighten local authorities’ sensitivity to social unrest [11].

It is evident that China has been gradually establishing a comprehensive legal system to maintain social security over an extended period, with the country’s crime rate in 2022 standing at a mere 52%. In stark contrast, South Africa’s crime index is at 7.18. Struggling to maintain its bond with the poor, the government signaled, through police practices, that a quotient of South Africans’ freedom was being stolen and that the perpetrators should be punished. It is this that led mobs into the streets, for it gave purchase to the idea that the business of making the city secure was forever unfinished [12].

The South African government’s challenge lies not in a lack of action but in its inability to act due to economic inequality, social issues, historical apartheid policies, and transnational criminal activities. Inability to regulate firearms has resulted in numerous security concerns in people’s daily lives, such as robberies and retaliatory actions, impeding their ability to work with peace of mind and hindering the effective realization of value from South Africa’s abundant natural resources.

This indicates that the challenges facing South Africa's security issues are multifaceted and deeply rooted in historical, social, and economic factors. Addressing these complex issues will require concerted efforts and comprehensive strategies aimed at addressing the underlying causes of social unrest and insecurity.

4.3. Case Three: Differences in Education Quality Between the United Kingdom and India

The United Kingdom has a rich tradition of educational excellence and is home to some of the world's oldest and most prestigious universities, including the University of Cambridge and the University of Oxford, renowned for providing comprehensive and high-quality education for British students. The government in the UK places significant importance on its education system and continually improves it. This is evident from initiatives such as the expansion of the academies program and the introduction of Free Schools, which increase user choice and promote educational development [13]. Such societal values emphasize the importance of education and contribute to fostering talent in various fields, thus driving economic growth.

On the other hand, India faces significant challenges in education due to highly unequal resource distribution. As recent studies have revealed, the overall state of Indian higher education is distressing and severely limits the supply of qualified manpower [14]. The influence of the caste system also has an impact, resulting in a low representation of socially disadvantaged groups such as Dalits in top-tier institutions like the Indian Institutes of Technology and the Indian Institutes of Management. This means that a large portion of higher education is predominantly accessible to privileged classes, such as the Brahmins. Societal factors make it difficult for individuals in India to achieve upward social mobility through education, which in turn dampens their motivation to pursue education. The constrained supply of talents hampers economic development.

In the 2024 world university rankings, there are 17 universities from the UK and 27 universities from the US listed in the top 100. In contrast, countries with relatively less economic development, such as Mexico and Argentina, have a significantly higher proportion of universities listed in the rankings. Looking at India, the highest-ranked university in the 2024 world university rankings is the Indian Institute of Technology Bombay, ranked at 1149. This demonstrates the close link between educational level and economic development. We can find some clues from China's example. China's GDP has experienced explosive growth from 9.06 trillion RMB in 1999 to 120.47 trillion RMB in 2022. In 1999, China underwent significant educational reforms, expanding university enrollment and admitting more students, to supply more talent for the nation's economic development. Therefore, economic development relies on the supply of talent, and education serves as the primary source of talent.

Furthermore, due to shifting economic priorities, the allocation of educational resources in India may be affected. Subsidies for education, particularly for economically disadvantaged individuals who have the ability to pursue higher education but lack financial means, may face reductions. This exacerbates the scarcity of talents in the job market.

It is crucial to address these challenges and promote equitable access to quality education to enhance talent development and stimulate economic growth in India.

4.4. The Impact of The Environment on People's Livelihoods and The Economy

Economic development relies on the natural resources provided by the environment, and the living environment of the people is also included in it. Overemphasis on economic development without proper restraint in exploiting natural resources can lead to environmental destruction and impact people's living environment, such as the Great Smog event in London in 1952. The results of this study reveal that nearly 20% of children born in London around the time of the Great Smog reported

having had childhood asthma, compared with 11% of those in the other groups studied [15]. Excessive focus on economic development and overexploitation of natural resources in the UK did indeed result in a decline in the living standards of the people and created significant labor market gaps.

The climate in Africa is diverse, with some regions suitable for cereal crops and others suitable for fruits, vegetables, and flowers. However, it is well known that much of Africa suffers from severe water scarcity and is facing serious issues such as land degradation. Due to a combination of climatic and land factors, agricultural production in Africa has been greatly constrained, leading to significant challenges in economic development of African countries. This is one of the reasons for relative poverty in Africa.

The Malacca Strait, as one of the busiest sea lanes, connects maritime trade routes between East Asia, South Asia, the Middle East, and Europe. Located at the southern end of the Malacca Strait, Singapore is a crucial port city. With its advanced port and logistics facilities, Singapore has become a vital transshipment hub in Asia. In such an environment, Singapore's economy has been able to grow rapidly, establishing itself as an important hub for regional and international trade.

5. Conclusion

The improvement of people's living standards must be synchronized with economic development in order to avoid situations where economic progress surpasses the improvement of people's living standards or where the standard of living significantly exceeds the level of economic development. Such mismatches can have negative consequences, constraining economic development and causing a regression in people's living standards. Economic development and people's living standards are interdependent and synchronous in nature. In situations where the level of economic development is low, governments are unable to provide high-level social welfare for their citizens. Similarly, when people's living standards are low, they lack the motivation to create value that can drive economic development.

Therefore, when governments focus on economic development and the improvement of people's living standards, they should consider the interrelationships and synchronicity between the two. Governments should not only adopt measures to promote economic development, create more employment opportunities, and increase productivity and national income, but they should also ensure that the benefits of economic development are shared with the people. This can be achieved through the implementation of appropriate social welfare policies, the improvement of living conditions, the optimization of the education system, and the assurance of social stability and security, thereby raising people's living standards.

In conclusion, economic development and the improvement of people's living standards are interdependent and synchronous. Governments, while striving for economic development, must also pay attention to raising the living standards of their citizens, ensuring mutual reinforcement. Only through synchronous development of the economy and people's living standards can society achieve sustainable prosperity and stability.

The limitations of this paper lie in its emphasis on exploring the importance of the relationship between the economy and people's livelihoods without conducting data analysis on the core connection between these two factors. Furthermore, the theoretical framework presented in this paper may not be directly applicable to specific examples, as it mainly provides a broad conceptual framework.

For the future development of this research, it is hoped that there will be sufficient data to support the entire framework and construct a complete and more robust theoretical model. This model should be able to quantify the relationship between the standard of living and economic development by using various parameters, thus expanding its applicability.

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