

## THE IMPACT OF WELFARE STATE ON ECONOMIC GROWTH OF OIC COUNTRIES: THE MODERATING ROLE OF GOVERNMENT EFFECTIVENESS

BRONI MOHAMMED YAW\*, JARITA DUASA, LACHEHEB ZAKARIA & ABDUL SAMAD  
SAKINAH

*Kulliyah of Economics and Management Sciences (KENMS), International Islamic University  
Malaysia, Malaysia*

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### ABSTRACT

The advent of the COVID-19 pandemic reinforced the need for the state to exhibit benevolence towards its citizens. Though the welfare state system has long been responsible for protecting the well-being of the poor and vulnerable citizens, especially in capitalists' economies, activities of the welfare state have commonly been viewed as being inimical towards efforts in enhancing economic growth. Being a religious obligation, Islamic countries are required to foster welfare state activities, exposing them to a conflict of interests as they intend to achieve increasing economic growth as well. This paper investigates whether such conflict of interests exists by measuring the impact of welfare state on economic development of OIC countries, and to determine the moderating effect of government effectiveness on the relationship. Data from 23 countries spanning 2005 to 2022 were analysed using the System GMM method. The results indicate that the welfare state possesses a significant negative impact on economic growth. Contrary to expectation, government effectiveness fails to moderate the impact on the relationship between the welfare state and economic growth. A robustness check with the LSDVC method affirms the significant negative impact observed. Islamic countries should consider formulating policies that monitor the activities of the welfare state, without compromising tenets of the Islamic worldview for safeguarding the dignity of the needy and vulnerable among the citizenry.

**KEYWORDS:** WELFARE STATE, ECONOMIC GROWTH, STATE BENEVOLENCE, ISLAMIC WORLDVIEW, GMM

### ABSTRAK

Kemunculan pandemik COVID-19 mengukuhkan keperluan bagi negara untuk menunjukkan kebajikan terhadap warganya. Walaupun sistem negara kebajikan telah lama bertanggungjawab untuk melindungi kesejahteraan golongan miskin dan lemah, terutamanya dalam ekonomi kapitalis, aktiviti negara kebajikan sering dilihat sebagai bertentangan dengan usaha untuk meningkatkan pertumbuhan ekonomi. Sebagai kewajipan agama, negara-negara Islam diwajibkan untuk memupuk aktiviti negara kebajikan, yang mendedahkan mereka kepada konflik kepentingan kerana mereka juga berhasrat untuk mencapai pertumbuhan ekonomi yang semakin meningkat. Kertas kerja ini mengkaji sama ada konflik kepentingan tersebut wujud dengan mengukur impak negara kebajikan terhadap pertumbuhan

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\* CORRESPONDING AUTHOR: Broni Mohammed Yaw, International Islamic University, Malaysia. E-mail: [mohammedybroni@gmail.com](mailto:mohammedybroni@gmail.com)

ekonomi negara-negara OIC, serta untuk menentukan kesan moderasi kecekapan kerajaan terhadap hubungan tersebut. Data daripada 23 negara dari tahun 2005 hingga 2022 dianalisis menggunakan kaedah Sistem GMM. Hasil kajian menunjukkan bahawa negara kebajikan memberi impak negatif yang signifikan terhadap pertumbuhan ekonomi. Berbeza dengan jangkaan, kecekapan kerajaan gagal untuk memoderasi impak dalam hubungan antara negara kebajikan dan pertumbuhan ekonomi. Semakin ketahanan menggunakan kaedah LSDVC mengesahkan impak negatif signifikan yang diperhatikan. Negara-negara Islam harus mempertimbangkan untuk merangka dasar yang memantau aktiviti negara kebajikan, tanpa menjejaskan prinsip-prinsip pandangan dunia Islam untuk melindungi maruah golongan yang memerlukan dalam kalangan rakyat.

**KATA KUNCI:** NEGARA KEBAJIKAN, PERTUMBUHAN EKONOMI, KEBAIKAN NEGARA, PANDANGAN DUNIA ISLAM, GMM

## 1. INTRODUCTION

Poverty and deprivation faced by citizens in capitalist economies, have necessitated the need for establishing the welfare state system (Esping-Andersen, 1989). This need has been reinforced in recent times following the grave global challenges, caused by the COVID-19 pandemic (Nguyen & Darsono, 2022) and the Russian-Ukraine conflict. A World Bank report indicates over 71 million people around the globe have crossed into extreme poverty as a result of the COVID-19 pandemic (Chikwira *et al.*, 2022). This has further increased the income gap between the rich and the poor, leading many countries to knock on the doors of the International Monetary Fund (IMF) for economic bailouts. Additionally, the high intensity of globalisation and financialisation experienced in recent times has worsened the plight of the vulnerable in many economies, which has aggravated the need for benevolent state interventions in the form of welfare provision.

The welfare policy framework reflects the degree of state benevolence in the eyes of citizens. Accordingly, state-sponsored welfare provisions are regarded as acts of state benevolence (Yoltar, 2020). The welfare state is defined as functions and responsibilities that allow the state to assist members of society to obtain a good life, the financing and provision of welfare services and income transfers (Greve, 2008). Central to the description of the welfare state, lies in the emphasis that the government takes responsibility for providing comprehensive welfare for its citizens (Larasati *et al.*, 2023).

However, the welfare state system has suffered huge criticisms, being blamed as a conduit for declining economic growth. Specifically, the Market liberals' theory posits that interventions in free market mechanisms aimed at reducing income inequalities have the propensity to cause a decline in economic growth. This view, though, is opposed by Social reformist and Institutionalist scholars, who consider the welfare system as having the capacity to promote economic growth. From the perspective of both theories, the welfare state has a positive influence on the utilisation of human capital, and thus, results in increasing overall demand in the economy thereby enhancing economic growth (Korpi, 1985). Similarly, inconsistencies exist in the results of extant empirical investigations relating to the subject matter. Some studies have confirmed the existence of a negative impact of the welfare state on economic growth (Uchida & Ono, 2021; Gilleard, 2023). Other investigations show contrasting findings to the effect that the welfare state impacts economic growth positively (Azarnert, 2018; Facchini & Seghezza, 2018). This is because of the differences in the quality and roles of government institutions in welfare delivery, in the various jurisdictions where the investigations were undertaken (Atkinson, 1995).

The absence of consistency, both theoretical and empirical, on how the welfare state impacts economic growth, calls for further evaluation of the relationship. There is a need to explore other jurisdictions with different characteristics, taking into consideration other factors that may influence the relationship. Literature, for the most part, appears to have paid little attention to the nature of the impact on the relationship for a panel of Islamic countries. Such a study is vital given the unique circumstances of Islamic countries, as they endeavour to follow the tenets of Islam. Governments in

Islamic countries appear not to have any choice, but to exhibit benevolence towards the poor and vulnerable among the citizenry. This position is well articulated in the following *Hadith* (sayings and traditions of the prophet Mohammed, Peace Be Upon Him):

*"The compassionate are shown compassion by the All-Compassionate. Show compassion to those on earth, and He Who is in heaven will show compassion to you." (Abu Dawud 4941; Al-Tirmidhi 1924).*

Based on the above *Hadith*, governments can show compassion to their citizens through the institutional framework of the welfare state. This is not alien to Islam. Indeed, the renowned Islamic philosopher, Abd Ar Rahman bin Muhammed Ibn Khaldun, alludes to a condition by Prophet Mohammed (peace be upon him (pbuh)) stipulating that the ruler must be mild in character to exhibit kindness and beneficence in the ruling of his subjects (Rosenthal, 1958). On his part, Abu Hamid Muhammad b. Muhammad al-Ghazali, an Islamic intellectual and philosopher, advocates for Islamic states to allocate state resources in the form of social security for eradicating poverty, and for the attainment of distributive justice (Islahi & Ghazanfar, 1998). The channel for the realisation of fairness and distributive justice was to be established through the deployment of state resources to care for the poor, needy, unemployed and elderly, provide healthcare, and cater for victims of natural disasters, just to mention a few (Sarkun & Hasan, 2015).

Another motivation for considering Islamic countries is the difference between the welfare state from the Islamic perspective, compared with its counterparts as practiced in the Western world (Chapra, 1979; Abdullah Kuyateh, 2022). Apart from caring for the material and financial well-being of citizens, the Islamic welfare state is also keen on securing the spiritual well-being of the vulnerable (Syafuruddin & Mukhlisin, 2022). In the opinion of Al-Ghazali, the welfare state must function to align with the five objectives of *Shariah*, which seek to protect and preserve religion (*din*), life (*nafs*), progeny (*nasl*), wealth (*mal*) and intellect (*aql*). This means welfare provision in Islamic countries would not exactly mirror what pertains to the Western world. As a typical example, the provision of alcohol and items forbidden in Islam, cannot feature among the expenditure of the welfare state in Islamic countries. Since the Organisation of Islamic Cooperation (OIC) member countries are the embodiment of Islamic countries that seek to integrate Islamic principles into their policies (Bashir, 2022), they stand out as the ideal object of study in the current paper.

Meanwhile, not in every situation the explanatory variable can have a direct impact on the dependent variable (Falk & de Lemos, 2019). This fact has led to the use of moderating variables which are capable of altering the impacts existing between empirical relationships (Lemurt *et al.*, 2024). The concerns raised in the 'leaky bucket' phenomenon, which questions the ability of the welfare system to effectively deliver assistance to the vulnerable, required the use of a moderating variable in the current paper. The 'leaky bucket' phenomenon refers to a situation where the resources taken for purposes of helping the poor, do not reach the intended beneficiaries. In essence, it means the welfare state system leaks, leading to wastage and misappropriation of resources meant to alleviate the suffering of the vulnerable. By referring to the welfare state as a 'leaky bucket', Okun (1975) casts doubt on whether government effectiveness is adequate, to ensure that resources deployed in the welfare state will reach the intended recipients without being misappropriated.

In countries with high government effectiveness, the necessary assistance provided by the state is expected to reach those at risk, leading to an enhancement in the impact of the welfare state on economic growth. Government effectiveness' suitability as a moderating variable is based on its capacity to craft effective policies that elicit government support, encourage investment, and enhance private sector development and economic growth (Shittu *et al.*, 2024). With the above arguments considered, the current study intends also to measure the moderating effect of government effectiveness on the relationship between the welfare state and economic growth.

Fifty-seven (57) countries spread across four continents constitute the OIC. Members of the OIC are bound together through their common desire to integrate Islamic principles into their policy frameworks (Wibowo, 2020). As a consequence, these policies are shaped in ways that do not conflict

with tenets enshrined in Islamic texts and worldviews (Bashir, 2022), to facilitate implementation in the member countries. In this regard, member countries of the OIC, would be expected to align with welfare state principles expressed in the Islamic worldview.

The following verses put an obligation on Islamic countries to show benevolence towards the vulnerable among the citizenry:

*"You shall not attain righteousness until you spend out of love (in the way of Allah). Allah knows whatever you spend" (Quran 3:92).*

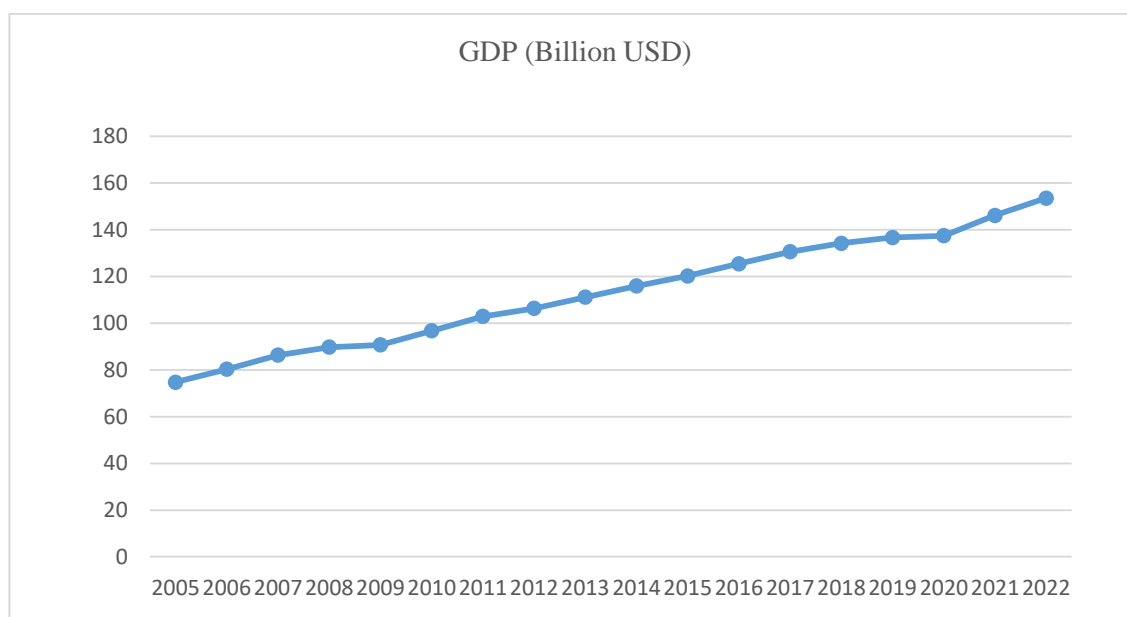
*"Indeed, the men who give charity, and the women who give charity, and lend to Allah a goodly loan, it will be multiplied for them, and them is a noble reward" (Quran 57:18).*

With the above verses in mind, governments of OIC countries must dedicate funding to concretely establish efficient welfare state systems. However, if the liberalists' theory is anything to go by, then these countries face a possible decline in their economic growth for undertaking welfare state activities. Thus, OIC countries face a conflict of interests in their attempt to adhere to Islamic tenets of being benevolent to citizens, and for achieving economic growth. This dilemma motivates this study.

In general, economies of OIC member countries are not in the best of shape given that about 40% are classified among low-income countries. This income classification prevails despite the member countries, possessing about 70% and 40% of the global energy and mineral resources respectively (Ismail *et al.*, 2019). With huge resources in minerals, crops, oil and gas, it is surprising most of the OIC countries have been bedevilled with challenges of economic backwardness, poverty, unemployment, and low levels in education, science and technology (Wibowo, 2020). Such inadequacies expose member countries to several risks. For instance, the COVID-19 pandemic caused the death of 18,128 persons by May 2020 (Hasan, 2020) in the OIC. Such calamities and other vulnerabilities prevailing in OIC member countries cast doubt on the existence of an effective welfare state system in the OIC (Majeed, 2012).

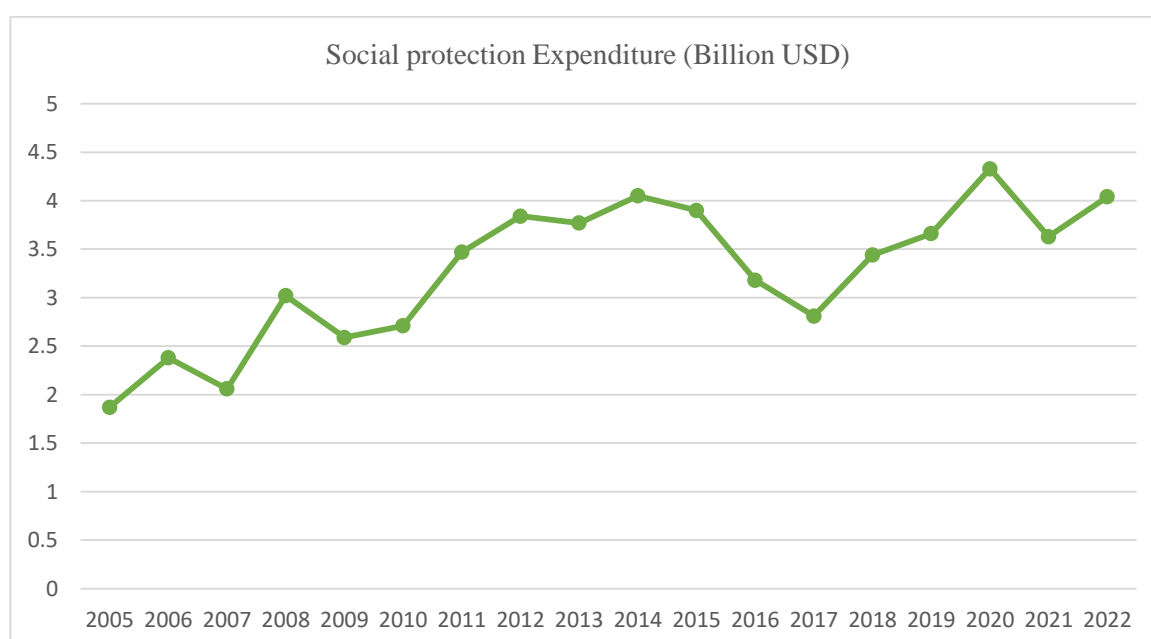
Figures 1 and 2 provide graphical representations of trends in GDP and social protection expenditure, respectively of the sampled OIC countries, over the period 2005 to 2022. Although both variables exhibit ascending trends in the period, the paths are not similar. While GDP shows a smooth path, the path for the social protection expenditure is undulating. The zigzag path exhibited by the welfare state over the period is an indication that matters regarding the welfare of the poor and vulnerable may not be receiving the seriousness they deserve. The path shown by GDP makes the variable's predictability easier, compared with the path exhibited by the welfare state and its predictability. From the Islamic perspective, the lack of predictability raises concern about the member countries' adherence to the Islamic principles requiring the need for benevolence towards all creatures of Allah.

The System GMM was employed for analyzing data from 23 OIC countries over the period 2005 to 2022. The results indicate the existence of a negative impact of the welfare state on economic growth. Additionally, the results indicate government effectiveness does not moderate the relationship between welfare state and economic growth. By providing an Islamic perspective on the nexus between the welfare state and economic growth, this study contributes substantially to the body of knowledge. Likewise, this paper contributes to the literature in considering a panel of OIC countries as the unit of analysis, which has not received much attention in the past, regarding the topic under consideration.



**FIGURE 1: GDP (BILLION USD) AN OIC COUNTRY SAMPLED IN THE CURRENT STUDY OVER THE PERIOD 2005-2022**

Source: Generated by the Authors with Data from World Bank and IMF databases



**FIGURE 2: SOCIAL PROTECTION EXPENDITURE (BILLION USD) AN OIC COUNTRY SAMPLED IN THE CURRENT STUDY OVER THE PERIOD 2005-2022**

Source: Generated by the Authors with Data from World Bank and IMF databases

In the rest of this paper, section 2 contains a review of relevant literature. This is followed by methodology in section 3 and results and discussions in section 4. Section 5 looks at research implications and contributions, and section 6 provides the conclusion and future research areas.

## 2. LITERATURE REVIEW

### *Relationship between the Welfare State and Economic Growth*

Various theories explain the expected outcome in the relationship between the welfare state and economic performance. From the perspective of the endogenous growth theory, only productive public spending can positively influence total factor productivity (TFP), which will in turn cause a positive impact on economic growth (Facchini & Seghezza, 2018). On this basis, the market liberals' theory considers welfare state spending as unproductive and is expected to impact economic growth negatively. On the contrary, the socialist reformist hypothesis considers activities of the welfare state to positively influence innovation and human capital development, which are vital for the realisation of enhancement in economic growth (Facchini & Seghezza, 2018). Also, institutionalists' hypothesis views activities of the welfare state including cash transfers and social intervention policies, as enhancing aggregate demand, resulting in increased investments and economic growth (Korpi, 1985).

Similarly, extant empirical studies on the subject matter have yielded contradictory results. Among the studies that find the welfare state as possessing a negative effect on economic growth is Gründler and Scheuermeyer (2018) whose results show that income redistribution, on the whole, affects economic growth negatively. Further, Gründler and Scheuermeyer (2018) find redistribution to have a positive impact in developing countries, but a negative impact in developed economies. Besides, Uchida and Ono (2021) find government spending on the elderly's welfare hurts economic growth. On further analysis, however, Uchida and Ono (2021) observed that when an education spending floor is applied, spending on the elderly impacts economic growth positively. Similarly, the findings of Gilleard (2023) provide evidence that increased social spending on the health and welfare of the elderly are factors inhibiting economic growth.

On findings of a positive impact on the relationship between the welfare state and economic growth, Azarnert (2018) provides evidence which shows that when refugees are resettled in a less advanced and less wealthy country followed by income transfers, it causes an increase in human capital accumulation, impacting economic growth of the host country positively. Facchini and Seghezza (2018) find a positive impact of expenditure on the protection of property rights, on economic growth. Further, the results of Facchini and Seghezza (2018) indicate the existence of a positive impact of health spending on economic growth. On the contrary, the authors did not find any significant impacts of social expenditure and education expenditure on economic growth.

Likewise, Yu and Li (2021) report that social security reduces poverty, instilling fairness and stability required for enhancing economic growth. The results of Oyvat and Onaran (2022) indicate social expenditure on social infrastructure, which includes spending on education, childcare, health and social care, has a positive impact on the performance of the non-agricultural sector. On their part, Kalkavan *et al.* (2021) find the Islamic moral values that promote fair income distribution, alleviation of poverty, and access to education, provide a conducive environment for increasing economic growth.

### *Moderating Role of Government Effectiveness*

The realisation that a variable's impact on any sector of the economy could be affected by the quality of public institutions has grown in recent times (Agyapong *et al.*, 2024). The result of this is manifested in the escalating considerations given to the moderating role of institutional quality variables, in addition to determining the direct impacts in empirical relationships (Destek *et al.*, 2023). While some have considered moderating effects as determining indirect impacts in relationships (Lemurt *et al.*, 2024), others seek to find out whether the moderating variable can alter impacts in empirical relationships (Zhao *et al.*, 2024). Specifically, government effectiveness, an important governance quality variable, has been widely applied as a moderating variable in the literature. The reasons for this among others, have been the existence of inconclusive empirical findings, the pursuance of indirect impacts in empirical relationships (Cooray & Nam, 2024), and the need to mitigate observed undesirable impacts in relationships (Zhao *et al.*, 2024).

The moderating may weaken or strengthen the impact between the two variables under investigation (Le *et al.*, 2023). Government effectiveness possesses such a potential, based on its role in the crafting and implementation of policies for generating support and a conducive social, technological and economic environment, required for attracting capital inflows, private sector development, and increased economic growth (Dubey *et al.*, 2023; Shittu *et al.*, 2024).

High levels of government effectiveness can also curb corruption in resource allocation, leading to the efficient application of scarce resources, for attaining desired impacts on economic growth (Destek *et al.*, 2023). Moreover, high government effectiveness can strengthen public institutions (Cooray & Nam, 2024) with the use of modern technology, highly trained and motivated technocrats, and financial support to meet set targets. Additionally, government effectiveness is important for establishing efficient, transparent, and accountable governance, strong regulatory frameworks and rule of law, and the attainment of political stability (Handoyo & Anas, 2024; Shittu *et al.*, 2024). Furthermore, the suitability of government effectiveness as a moderating variable, lies in its role of protecting minority rights, property rights and the vulnerable thereby, curbing inequalities and poverty to meet the aspirations of the socially marginalised (Bakri *et al.*, 2019; Doucouliagos *et al.*, 2021).

Empirically, a study by Agyapong *et al.* (2024) finds government effectiveness to possess a positive moderating effect on the relationship between corporate social responsibility (CSR) and the performance of rural banks. According to Bakri *et al.* (2019), government effectiveness exhibits a negative moderating effect on the relationship between stock liquidity and dividend payout. The finding of Yahya and Rafiq (2020) reveals contrasting moderating effects of government effectiveness. In the first instance, the results show that government effectiveness has no significant moderating impact on the relationship between Brownfield investment (BFI) and renewable energy consumption. However, splitting the countries into categories produces results indicating government effectiveness moderates positively, to enhance the positive impact of Greenfield investment (GFI) on renewable energy consumption, in the global and low-risk panel of countries. Further, Yahya and Rafiq (2020) find government effectiveness to have a negative moderating effect, restricting the negative impact of GFI on environmental performance, in the high-risk panel of countries.

Similarly, Lemurt *et al.* (2024) observe contrasting moderating effects of government effectiveness. The authors report that government effectiveness moderates positively to increase the positive impacts of exchange rate, inflation, and interest rate on horticulture export. On the contrary, Lemurt *et al.* (2024) find government effectiveness interaction with trade to have a negative effect, weakening the negative impact of trade on export performance. Relatedly, the results of Shittu *et al.* (2024) reveal a negative moderating effect of government effectiveness on the negative impact of fuel subsidy on electricity access. According to Zhao *et al.* (2024) as well, government effectiveness exhibits a negative moderating effect on the negative relationship between natural disasters and agricultural import risk.

Besides, Ohemeng *et al.* (2023) find government effectiveness to positively moderate the relationships between GDP growth uncertainty and net FDI inflows, and between inflation uncertainty and net FDI inflows. In Doucouliagos *et al.* (2021), government effectiveness moderates a significant negative impact of health aid on infant mortality. The moderating effects of government effectiveness vary in Abaidoo and Agyapong (2022). The findings of Abaidoo and Agyapong (2022) show that government effectiveness has negative moderating effects on the relationships between crude oil prices and development, and coffee prices and development, but the moderating effect of the same, on the relationship between cocoa prices and development is positive. Further, Abaidoo and Agyapong (2022) indicate that government effectiveness has no significant moderating effect on the relationship between gold prices and development. Finally, Khan *et al.* (2023) provide results which show the moderating effect of government effectiveness as being negative on the nexus between urbanisation and carbon dioxide emissions.

The above review leaves no doubt about the usefulness of government effectiveness as a moderating variable. However, such a moderating role in the relationship between welfare state and economic growth, in the context of the OIC, is yet to receive similar attention.

## METHODOLOGY

### *The Estimation Method*

The data to be analysed comes from twenty-three (23) countries of the OIC, covering the period 2005 to 2022. This calls for a panel estimation technique. When a sample suffers from problems of missing data, and the estimations are likely to encounter problems of cross-section dependence, heteroscedasticity and autocorrelation, the results may be inaccurate (Tuncsiper, 2023). To resolve such problems, this study employs the Generalised Method of Moments (GMM) for estimating the regression coefficients in the relationship. Specifically, the System GMM developed by Arellano and Bover (1995) and Blundell and Bond (1998) would be utilised, since the number of units or countries (N) is greater than the number of time series (T).

By using instruments, GMM resolves the problem of correlation likely to exist between the error term and lagged-dependent variable. This is achieved by using two equations, the difference and level equations, to achieve moment conditions. Also, the System GMM is equipped for resolving problems of fixed effects and endogeneity of control variables, correlation among independent variables and error terms, omitted variables bias, and autocorrelation within individuals (Roodman, 2009). In the differenced equation, the independent variables are instrumented with the lags of their levels, while in the level equation, the variables are instrumented with the lags of their first differences. This produces accurate and efficient estimated coefficients (Konstantakopoulou, 2022). Two important diagnostic tests namely, Sargan and Arellano–Bond AR(2) are required for validating the robustness of the estimated coefficients. The Sargan test of overidentification is to ensure the absence of proliferation of instruments. Arellano–Bond AR(2) test provides assurance of lack of second-order autocorrelations among the residuals.

### *Model Specification*

This paper adopts an extended Cobb-Douglas production framework for specifying the two models to be estimated. In the original Cobb-Douglas, formulated through the pioneering work of Cobb and Douglas (1928), capital stock and labour are the main determinants of performance as indicated as follows:

$$P = BL^k C^{1-k} \quad (1)$$

where, P, L, and C represent production, labour, and capital respectively. B, k, and j are constant, factor elasticity of labour, and factor elasticity of capital respectively.

The current study follows Oryani *et al.* (2021) and augments the Cobb-Douglas model by adding the welfare state variable into the original formulation. This is realised by using the general model specification for System GMM estimations (Konstantakopoulou, 2022) as given below:

$$y_{it} = \lambda y_{it-1} + \beta x_{it} + \gamma z_{it} + \eta_i + \varepsilon_{it} \quad (2)$$

$$\mu_{it} = \eta_i + \varepsilon_{it}$$

$$\eta_i \sim \text{IID}(0, \sigma^2_\eta), \varepsilon_{it} \sim \text{IID}(0, \sigma^2_\varepsilon) \text{ and } E[\eta_i \varepsilon_{it}] = 0$$

For  $i = 1 \dots N$  and  $t = 2, \dots T$ , where  $y_{it}$ ,  $\lambda y_{it-1}$ ,  $x_{it}$  and  $z_{it}$  represent the dependent variable, lagged dependent variable, a matrix of independent variables, and a matrix of control variables respectively.  $\mu_{it}$  is the error term,  $\varepsilon_{it}$  represents the random disturbance term, and  $\eta_i$  is unobserved country-specific effects or fixed effects which are correlated with  $y_{it-1}$ .

Based on the objectives of this paper, the models following would be estimated:



$$\text{LnGDP} = \beta_0 + \beta_1 \text{LnGDPI}_{t-1} + \beta_2 K + \beta_3 L + \beta_4 S + \lambda Z_{it} + \eta_i + \varepsilon_{it} \quad (3)$$

$$\text{LnGDP} = \beta_0 + \beta_1 \text{LnGDPI}_{t-1} + \beta_2 K + \beta_3 L + \beta_4 S + \beta_5 \text{GEF} + \beta_6 S * \text{GEF} + \lambda Z_{it} + \eta_i + \varepsilon_{it} \quad (4)$$

where LnGDP,  $\text{LnGDPI}_{t-1}$ , K, L, S, GEF, and  $S * \text{GEF}$  are the natural logarithm of gross domestic product (GDP), the natural logarithm of the first-lag of GDP, capital stock, labour stock, government expenditure on social protection, government effectiveness, and interaction variable of S and GEF respectively. S is the proxy for the welfare state. Z represents a matrix of control variables which have been duly defined in the next section.  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ ,  $\beta_6$  and  $\lambda$  are coefficients to be estimated.

#### *Variables and Data*

The welfare state and economic growth are the independent and dependent variables respectively, in the current study. Various variables have been employed to proxy economic growth in literature. Because the models to be estimated are augmented forms of the Cobb-Douglas framework, and following Baz *et al.* (2020) and Ledhem and Mekidiche, (2020), this study would use GDP to proxy economic growth. Similarly, the welfare state has been represented by different proxies including expenditures on health, housing and childhood care (Facchini & Seghezza, 2018), social expenditure, social rights and benefit receipt (Han & Kwon, 2020), and social protection expenditure (Kutasi & Marton, 2020). Following Kutasi and Marton (2020) and Halaskova and Bednář (2020), the current study adopts central government expenditure for social protection, as the proxy for welfare state. Description by the World Bank, social protection is meant to help the poor and vulnerable survive during crises and shocks, find jobs, cater for their children's health and education, and offer protection to the elderly (Daud, 2021).

In line with many previous studies, fixed capital formation (Oryani *et al.*, 2021) and labour force participation rate (Verma *et al.*, 2022) would be used as proxies for capital stock and labour stock respectively. Intending to lessen the effects of omitted variables on the accuracy of results, several control variables including FDI, government consumption, life expectancy, trade openness, gross domestic savings, rule of law, and government effectiveness would be incorporated in the models. The selection of the control variables has been informed by extant literature in the body of knowledge. Summary descriptions of all the variables to be employed in the study, have been presented in Table 1. Twenty-three countries (23) including Afghanistan, Albania, Azerbaijan, Bahrain, Bangladesh, Burkina Faso, Egypt, Iran, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon,

**TABLE 1: SUMMARY DESCRIPTION OF VARIABLES IN THE STUDY**

Variable	Variable's Function	Expected Sign of Impact	Proxy	Unit of Measurement	Sources of Data
Economic performance (GDP)	Dependent	-	GDP	GDP ( in 2015 constant USD)	World Bank
Welfare state (S)	Independent	Negative	Central government expenditure on social protection	Percentage of GDP	IMF
Capital stock (K)	Control	Positive	Gross fixed capital formation	Percentage of GDP	World Bank
Labor stock (L)	Control	Positive	Labour force participation rate, a total of 15-64 years economically active	Percentage of total population ages 15-64	World Bank

Trade openness (TOP)	Control	Positive	The sum of exports and imports	Percentage of GDP	World Bank
Gross domestic Savings (SAV)	Control	Positive	Gross domestic savings	Percentage of GDP	World Bank
Government consumption (CSM)	Control	Negative	General government final consumption expenditure	Percentage of GDP	World Bank
Foreign direct investment (FDI)	Control	Positive	Foreign direct investment, net inflows	Percentage of GDP	World Bank
Life expectancy (LEX)	Control	Positive	Life expectancy at birth	Years	World Bank
Rule of law (ROL)	Control	Positive	Rule of law	Units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5	World Bank
Government effectiveness (GEF)	Control/ Moderating	Positive Positive	Government effectiveness	Units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5	World Bank

Source: Table by Authors

Maldives, Mozambique, Oman, Palestine, Qatar, Somalia, Tunisia, Turkey, Uganda and Uzbekistan, constitute the object of analysis in this study.

#### 4. FINDINGS

##### *Descriptive Statistics*

Descriptive statistics which provide information on means, standard deviations, and minimum and maximum values of all the variables are contained in Table 2. The information indicates that GDP and expenditure on social protection have mean values of USD 113.3 billion and 2.92% of GDP respectively. The mean values of capital stock and labour stock stand at about 24.1% of GDP and 60.6% of the population eligible to work respectively. It is also worth mentioning the prevailing weaknesses in the quality of the rule of law and government effectiveness, their mean values registering negative scores.

The standard deviations of most of the variables including GDP, gross domestic savings, FDI, rule of law, and government effectiveness appear very large, exceeding their respective means. Such largeness reflects the high level of diversity among the countries under investigation, especially, in respect of the specific variables with the anomaly (Agyapong *et al.*, 2024). High standard deviations are common in panel data, which explains why such data hardly passes the criteria for normality in the distribution of variables (Patra & Sethi, 2024). The high standard deviations observed can be attributed to the differences in economic development, culture, democracy and institutional quality, existing among the studied countries.

**TABLE 2: DESCRIPTIVE STATISTICS**

Variable	Mean	Std. Dev.	Min	Max	Skewness Normality (p-value)	Kurtosis Normality (p-value)	Jarque- Bera (p-value)	Shapiro- Wilk (p-value)
GDP	113.3	186.7	2.2	1094.0	0.000	0.000	0.000	0.000
K	24.1	5.7	1.2	41.3	0.045	0.011	0.001	0.021
L	60.6	13.8	34.6	89.6	0.796	0.000	0.000	0.000
S	2.92	2.79	0.02	18.3	0.000	0.000	0.000	0.000
TOP	78.5	30.9	26.3	191.9	0.000	0.073	0.000	0.000
SAV	20.5	23.6	-44.0	75.6	0.570	0.302	0.501	
CSM	14.6	5.2	2.4	29.0	0.052	0.672	0.132	0.002
FDI	4.5	5.6	-5.7	38.9	0.000	0.000	0.000	0.000
LEX	70.8	7.9	50.5	81.6	0.000	0.644	0.000	0.000
ROL	-0.49	0.72	-2.59	0.98	0.000	0.143	0.000	0.000
GEF	-0.42	0.65	-2.44	1.14	0.000	0.003	0.000	0.000

Note: GDP is in billions of USD.

Source: Table by Authors

Besides, Table 2 contains information on the normality of skewness, kurtosis and distributions of all variables. Information from the table indicates that only labour stock and gross domestic savings have normal skewness, based on the insignificance of the results obtained. Meanwhile, gross domestic savings, government consumption, life expectancy, and rule of law have normal kurtosis. Based on the Shapiro-Wilk normality test, only gross domestic savings pass the normality distribution criteria (Patra & Sethi, 2024). However, the normality test by Jarque-Bera identifies government consumption in addition to gross domestic savings as having normal distributions. This is evident in the tests for both variables being insignificant. Aside from these two variables, the rest are non-normal in their distribution.

Correlations between the variables are provided in Table 3. Information in the table shows the welfare state is positively correlated with GDP, and the correlation coefficient is 0.28. While capital stock has a positive correlation with GDP, the correlation between labour stock and the latter is negative. Though the observed negative correlation between labour stock and GDP is contrary to theory, this outcome cannot be assumed to mean causation (Fuest, Neumeier & Stöhlker, 2018). The real impact of labour stock on GDP, and the other variables will be determined in a regression estimation. Considering the acceptable correlation coefficient to be within 0.7-0.8 (Baur & Hoang, 2021), all the values in Table 3 are normal, except the correlation coefficient of 0.92 existing between the rule of law and government effectiveness, which appears to be very high. Accordingly, collinearity exists between the rule of law and government effectiveness. Featuring both variables can lead to inaccurate estimation results due to the collinearity existing between the variables (Basagaña & Barrera-Gómez, 2022). Such a problem is resolved by not featuring variables that are collinear in the same regression model (Konstantakopoulou, 2022).

**TABLE 3: PAIRWISE CORRELATIONS BETWEEN THE VARIABLES**

	GDP	K	L	SP	TOP	SAV	CSM	FDI	LEX	ROL	EFF
GDP	1.00										
K	0.14	1.00									
L	-0.14	0.26	1.00								
S	0.28	-0.11	-0.10	1.00							
TOP	-0.37	0.19	0.23	0.14	1.00						
SAV	0.24	0.41	0.55	0.09	0.10	1.00					
CSM	-0.19	0.07	0.04	0.06	0.41	-0.12	1.00				
FDI	-0.24	0.22	0.17	0.01	0.37	-0.14	0.10	1.00			
LEX	0.23	0.34	0.08	0.36	0.32	0.37	0.15	-0.11	1.00		
ROL	0.10	0.23	0.40	0.32	0.32	0.53	0.31	-0.06	0.63	1.00	
GEF	0.20	0.35	0.44	0.29	0.35	0.63	0.22	-0.01	0.71	0.92	1.00

Source: Table by Authors

### Results

Regressions estimation results have been provided in Table 4. There are five columns in the table. Estimation of the direct impact of the welfare state on economic growth is obtainable in columns (1) and (2), while the moderating effect of government effectiveness on the relationship is reported in column (3). This is achieved with the introduction of the interaction variable  $S*GEF$ . The method of estimation in these three columns is the System GMM. Columns (4) and (5) also, contain results of the direct impact of the welfare state on economic growth, and the moderating effect of government effectiveness respectively, however, the estimations are carried out using the Least Square Dummy Variable Corrected (LSDVC) model, and are meant for checking the robustness of the estimated coefficients. Though both columns (1) and (2) measure the direct impact of the welfare state on economic growth, they differ in the effect that column (1) does not feature government effectiveness while column (2) does not feature the rule of law in the respective models. This is meant to avoid inaccuracies associated with collinearity.

The results in columns (1) and (2) of Table 4, show a consistent significant positive impact of the lag-dependent variable on economic growth, justifying the use of a dynamic method for the estimations. There is also an indication of a significant negative impact of the welfare state on economic growth as shown by the coefficient of  $S$  in both columns. On the basis that column (1) has a higher Chi-square value relative to (2), the results would be interpreted using the former column. Accordingly, the results imply that economic growth would decline by 0.013% for a 1-unit increase in social protection expenditure. Therefore, increasing social protection expenditure of the government, will lead to a reduction in economic growth. Alternatively, the results imply that increasing the size of the welfare state will cause economic growth to decline.

Likewise, capital and labour have no significant impact on economic growth. This is clear from the impacts shown by  $K$  and  $L$  in columns (1) and (2). The lack of significant impacts from  $K$  and  $L$ , suggests that the Cobb-Douglas production framework lacks validity when the model is augmented with the welfare state proxy. This agrees with the assumption that activities of the welfare state discourage work intensity and investments in physical and human capital (Okun, 1975), leading to lower effects on the productivity of both capital and labour.

**TABLE 4: ESTIMATIONS OF THE RELATIONSHIP BETWEEN WELFARE STATE AND ECONOMIC GROWTH**

	Two-step System GMM			LSDVC	
	(1)	(2)	(3)	(4)	(5)
$\text{LnGDP}_{t-1}$	1.067 (0.000)***	1.064 (0.000)***	1.065 (0.000)***	1.230 (0.000)***	1.240 (0.000)***
$K$	-0.002 (0.270)	-0.002 (0.288)	-0.002 (0.201)	-0.001 (0.177)	-0.002 (0.119)
$L$	0.002 (0.122)	0.002 (0.125)	0.002 (0.184)	-0.001 (0.626)	-0.001 (0.705)
$S$	-0.013 (0.000)***	-0.012 (0.000)***	-0.012 (0.001)***	-0.009 (0.011)**	-0.006 (0.141)
$TOP$	0.002 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.001)***	0.001 (0.002)***
$SAV$	-0.002 (0.016)**	-0.002 (0.015)**	-0.002 (0.014)**	0.001 (0.298)	0.001 (0.261)
$CSM$	0.001 (0.564)	0.002 (0.362)	0.002 (0.334)	-0.002 (0.284)	-0.003 (0.192)
$FDI$	0.003 (0.021)**	0.003 (0.008)***	0.003 (0.008)***	0.004 (0.001)***	0.004 (0.001)***
$LEX$	-0.004 (0.155)	-0.003 (0.244)	-0.003 (0.255)	-0.023 (0.000)***	-0.024 (0.000)***
$ROL$	0.008 (0.508)				

GEF		-0.016 (0.279)	-0.020 (0.031)**	0.035 (0.041)**	0.002 (0.948)
S*GEF			0.001 (0.906)		0.011 (0.071)*
Constant	-1.419 (0.000)***	-1.427 (0.000)***	-1.451 (0.000)***	N/A	N/A
Wald chi2 test	988983.97 (0.000)	947501.65 (0.000)	792608.51 (0.000)	N/A	N/A
AR(2)	0.191	0.157	0.151	N/A	N/A
Hansen test	0.501	0.479	0.461	N/A	N/A
F-test				N/A	N/A
R-Squared				N/A	N/A

Notes:  $\text{LnGDP}_{t-1}$  is the natural logarithm of  $\text{GDP}_{t-1}$ . Values in parentheses indicate p-values. \*, \*\*, and \*\*\* are 10%, 5% and 1% significance level respectively. N/A implies not applicable.

Source: Table by Authors

Among the control variables, TOP, CSM, FDI, and ROL, have positive impacts on economic growth. However, only the impacts of TOP and FDI are significant. Further, SAV, LEX and GEF, have negative impacts on economic growth, though it is only the impact of SAV which is significant. Both the Arellano-Bond test for AR(2) and the Sargan test are not significant indicating the absence of second-order autocorrelation and excessive proliferations of instruments in the estimations respectively. Thus, the significant negative impact observed in the relationship between welfare state and economic growth is robust to the System GMM framework.

Column (3) of Table 4, contains results regarding the moderating effect of government effectiveness on the relationship between welfare state and economic growth. As depicted by the coefficient exhibited by the interaction term S\*GEF, government effectiveness has no significant moderating impact on the aforementioned relationship. Thus, government effectiveness is unable to alter the sign, magnitude or significance of the impact exerted by the welfare state on economic growth. It is important also, to check whether the impacts of other variables have changed, in response to the interaction variable being introduced into the model (Destek *et al.*, 2023). According to the results, the unconditional impact of the welfare state on economic growth remains the same with a value of – 0.012, when column (3) is compared with column (2). This confirms the lack of moderation in the relationship by government effectiveness.

Similarly, the impacts of capital stock and labour stock, and all the control variables have not changed, except government effectiveness whose impact has become significant in the model with the interaction term, when it was not significant without the interaction. Accordingly, the results in column (3) show that economic growth would decline by 0.020% following a 1-unit increase in government effectiveness. It is an indication that government effectiveness is a factor in the capacity to curtail economic growth (Destek *et al.*, 2023).

### Discussions

The current finding aligns with the market liberals' theory, which posits that activities of the welfare state would cause a decline in economic growth. The market liberals identified inefficiency (Okun, 1975) and market interference (Olson, 1982) arising from the welfare state, as being the cause of derailment in economic growth. Both concerns are partly true given that OIC countries have been associated with low levels of governance quality and a prevalence of high corruption (Wibowo, 2020). Both factors can certainly reduce the efficiency and effectiveness of social welfare service delivery, affecting economic performance adversely.

Another factor that may account for the negative impact of the welfare state on economic growth, could be the Islamic principles that guarantee the dignity of recipients of any form of charity and benevolence. Such principles could discourage the application of systems for monitoring and evaluating the welfare state architecture, necessary for avoiding the 'leaky bucket' phenomenon, and

for ensuring the achievement of the desired impact on the economy. To assume that the Islamic principle of accountability for one's deeds on the Day of Judgment (Raj & Subin, 2022), might curtail corruption in the Islamic welfare state system, could be a misjudgment. Such principles complement the thoughts of the market liberalists and reflect the current finding of the negative impact of the welfare state.

Empirically, the current finding concurs with those of Gründler and Scheuermeyer (2018), Uchida and Ono (2021), and Gilleard (2023), which found a negative impact of the welfare state on economic growth. The authors attribute the negative impact to problems associated with the welfare state including low levels of investments, human capital development, and savings. These problems are not far-fetched in OIC countries which are noted for low levels of education (Wibowo, 2020). The inability of officials to monitor how receipts of welfare benefits are utilized does not encourage investments of such receipts in profitable ventures. Again governments of OIC countries face several challenges with enormous risks to human survival, the resolution of which leaves little resources for undertaking investments. As noted by ibn Khaldun, the activities of the Islamic welfare state are extensive and include protecting and supporting the vulnerable, preventing against need, caring for the free (noble) elderly, and caring for the needy, accident victims, widows, orphans, and the blind with stipends from the treasury. Non-material welfare care includes being friendly to the weak, the leader allowing frequent visits for the people, show of humility, showing of smiling countenance, and leniency towards the vulnerable (Rosenthal, 1958).

The finding of no significant moderating effect of government effectiveness aligns with Yahya and Rafiq (2020) and Abaidoo and Agyapong (2022), in which government effectiveness was reported as having no moderating effects on the respective relationships studied. Lack of moderation by the variable is the consequence of the prevailing weak levels of public governance institutions (Awwad, 2024) in many of the OIC countries studied. This fact is confirmed by the descriptive statistics which show the average level of government effectiveness to be weak. Implications of the results regarding the interaction term point to the fact that the countries studied are unable to capitalise on high government effectiveness for improving the impact of the welfare state on economic growth. Here also, the Islamic principles of dignifying the needy and vulnerable, could make government effectiveness incapable of moderating in the relationship. This justifies the finding obtained regarding the lack of moderating effect of government effectiveness.

In all, the negative impact of the welfare state on economic growth observed in the studied OIC countries is mainly due to the Islamic principle of protecting the dignity of the needy and vulnerable. This principle prevents officials from ensuring the benefits received from the social protection system are deployed for productive activities that add value to economic growth. Additionally, the principle incapacitates government effectiveness, in the design and implementation of potent government policies for the welfare state, capable of yielding a positive impact on economic performance.

The finding of a significant negative impact of the welfare state on economic growth is robust to the LSDVC method, whose accuracy is assumed to supersede that of the System GMM (Dahir *et al.*, 2019). In column (4) of Table 4, where the results of the direct impact of the welfare state on economic growth are found, the impact of S is a significant negative. This confirms the robustness of the negative impact of the welfare state obtained in the System GMM. In column (5) of the table, results of the moderating effect of government effectiveness estimated using the LSDVC method, are provided as a robustness check on the impact displaced by S\*GEF. The impact displayed by the interaction term is positive, just as in the System GMM estimation. However, while the impact of S\*GEF is significant under the LSDVC model, the same impact is not significant in the GMM estimations. In this regard, the moderating effect of government effectiveness on the relationship between the welfare state and economic growth appears to be sensitive to the estimation method employed (Abaidoo & Agyapong, 2022), as far as the significance of the interaction term is concerned.

## 5. CONTRIBUTIONS

Some interesting policy implications drawn from this work are explained accordingly. Governments of the studied countries would have to design appropriate policies aimed at erasing the negative impact of the welfare state on economic growth or convert the same impact into a positive one. Such policies should accommodate the monitoring of welfare beneficiaries to ensure the productive application of their receipts, without infringing on their dignity. It is important to incorporate the inputs of Islamic scholars in the policy formulation and implementation processes. State agencies such as the Ministry of Finance and the Department of Statistics, must continue to monitor the relationship between the welfare state and economic growth and take steps to mitigate the negative impact in the relationship at all times.

With *Shariah*-compliant policies in place, governments of the sampled OIC countries must manage the welfare state system efficiently, devoid of corruption, wastage and misapplication of resources intended for meeting the needs of the vulnerable. There will be the need to undertake reforms in the welfare state system by providing training to make the officers more professional. There is also the need to recruit the best technocrats in the welfare state sector and motivate them appropriately for efficient service delivery that yields a positive impact on economic growth. More importantly, governments must establish potent policies for eradicating poverty, wars, and internal conflicts, a necessity for reducing vulnerability among the citizenry. This is important for reducing the financial burden of the welfare state.

This paper makes two important contributions to the body of knowledge. Firstly, it provides an Islamic perspective of the welfare state, indicating the obligation imposed by the tenets of Islam that require the state to be benevolent towards its citizens facing vulnerabilities. Secondly, this study contributes to the political economy literature by considering a panel of OIC countries as the unit of analysis, which has not received much attention in the past.

## 6. CONCLUSION

The Islamic worldview holds in high regard, the need to be benevolent to all creatures of Allah. Through the welfare state, governments and state authorities have the opportunity of showing compassion to the citizenry, while following the dictates of Islam as enshrined in the *Quran* and *Sunnah*. For Islamic countries, and membership of the OIC, a show of state benevolence through activities of the welfare, is a religious obligation that is difficult to ignore. Thus, Islamic countries must be seen to undertake and champion welfare state activities.

However, the general assumption that the welfare state system has negative consequences on economic growth, puts Islamic countries in a situation of conflict of interests. In their attempt to undertake welfare state activities as a religious obligation, Islamic countries are faced with the possibility of experiencing a decline in economic growth. This paper investigated the existence of such a conflict of interest in OIC member countries. Therefore, this paper estimated the impact of the welfare state on the economic growth of OIC countries and determined the moderating effect of government effectiveness on the relationship.

After analyzing the data, the welfare state was found to significantly impact economic growth negatively. Also, the results indicate that government effectiveness does not moderate the relationship between the welfare state and economic growth. The findings are largely in agreement with the market liberals' theory which views the welfare state as a disincentive to investments in physical and labour capital, and a source of crowding out effect both of which in turn lead to lowering of economic growth (Ansategi & Marsiglio, 2017).

The lack of appropriate and effective policy mechanisms, to ensure that the activities of the welfare state are managed in ways for achieving a positive impact on economic growth, is a reflection of the negative impact of the welfare state observed. To the extent that Islamic tenets forbid monitoring of

recipients of benevolence to ensure the proper utilisation of the benefit received, the finding is not unexpected. Under the circumstances, beneficiaries are free to appropriate welfare benefits as they deem fit, even at the detriment of adding value to economic growth. The current situation paints a picture depicting that beneficiaries of social protection interventions in the OIC countries studied, might have been using the receipts unproductively, which has caused the negative impact of the welfare state on economic growth.

Further, the findings reveal the lack of moderation by government effectiveness in the relationship between the welfare state and economic growth. This is due to the generally weak level of the quality of government effectiveness in the countries sampled (Awwad, 2024). Again, the Islamic principles of safeguarding the dignity of the needy and vulnerable, and encouraging providing help to the latter in secrecy, debar government effectiveness from effectively functioning as a moderating variable. Any state activity for monitoring the disbursement and utilisation of welfare benefits in Islamic countries would be considered as going contrary to the tenets of the Islamic worldview. The adherence to these Islamic principles does not allow the OIC countries studied to benefit from increasing levels of government effectiveness in erasing the adverse impact of the welfare state on economic growth.

Following the results obtained, governments of the studied OIC countries are exposed to a conflict of interests, as they intend to adhere to the Islamic obligation requiring the state to be benevolent to citizens and to simultaneously pursue achieving the enhancement of economic growth. This conflict exists because the activities of the welfare state cause a decline in economic development. As a cardinal obligation in Islam, state benevolence through the welfare state, intended to secure the welfare of the vulnerable, cannot be ignored. It is for this reason the well-known Islamic scholar al-Ghazali, advocates for the state to undertake the obligation of protecting citizens' welfare, even if it means imposing extra-Islamic taxes (Islahi & Ghazanfar, 1998). Similarly, al-Ghazali holds the state responsible for ensuring the realisation of economic prosperity and progress (Irijanto *et al.*, 2015). The two objectives outlined by al-Ghazali further strengthen the position of the current study that Islamic countries are exposed to conflicting interests, as far as the protection of vulnerable citizen's well-being, and the achievement of economic growth by the respective governments are concerned. Thus, governments of the OIC countries studied must exercise maximum caution, when implementing the Islamic principles of state benevolence towards the needy among the citizenry.

There are two limitations to this study. Firstly, the lack of data for about 50% of the OIC countries limits generalising the findings for the entirety of the OIC membership. Hence, the findings should be viewed in the context of the countries investigated. Secondly, a comparison of the impact of the relationship in Islamic countries with that of non-Islamic countries could not be undertaken due to a constraint of space. As the current study is already voluminous, adding another objective of making such a comparison would have been both laborious and complicated. Future research work should devote attention to investigations to cover all the 57 OIC countries, and to compare the impacts in Islamic and non-Islamic countries, about the welfare state-economic growth nexus.

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