Bu-Ali Sina University

Financialization and Welfare in Iran: The Institutional Quality Paradox

Reza Maaboudi[1] (ID), Ramin Khochiany[2] (ID), Younes Nademi[3] (ID)

Abstract

Understanding the impact of financialization on the economy is crucial for policymakers seeking to design strategies that enhance social welfare. This study examines the effect of financialization on economic welfare in Iran from 1990 to 2023, employing a threshold regression approach to account for nonlinear dynamics. The results reveal a threshold level of institutional quality at 57%. Across both, i.e., low and high institutional quality regimes, financialization exerts a negative and significant influence on economic welfare. However, once institutional quality surpasses the threshold, the adverse impact of financialization intensifies markedly. Findings highlight the paradoxical role of institutional quality, showing that greater financialization consistently undermines welfare in Iran, with stronger institutions amplifying rather than mitigating its negative effects. It means that in environments with higher institutional quality, advanced financial instruments and capital markets develop; however, access to financial development is usually asymmetrical. Consequently, wealthy individuals and large corporations benefit the most, while low-income households receive minimal benefits and may even suffer from asset inflation or consumer debt. Thus, strong institutions do not necessarily prioritize public welfare. Policymakers may regulate to develop financial markets in a way that prioritizes the financial sector's profitability over social interests. This mechanism can lead to financial sector growth occurring faster than the real economy's capacity, ultimately undermining welfare.

Keywords: Financialization, Economic Welfare, Institutional Quality, Threshold Regression, Approach, Iran.

JEL Classification: I31, G10, O16, E44.

1. Associate Professor, Department of Economics, Faculty of Humanities, Ayatollah Boroujerdi University, Boroujerd, Iran (Corresponding Author). **Email:** maaboudi@abru.ac.ir
2. Associate Professor, Department of Economics, Faculty of Humanities, Ayatollah Boroujerdi University, Boroujerd, Iran.
3. Associate Professor, Department of Economics, Faculty of Humanities, Ayatollah Boroujerdi University, Boroujerd, Iran.

1. Introduction

Financial development enhances economic performance by improving risk management, facilitating resource access, reducing financing costs, and directing funds toward profitable and productive activities. Financial development plays a substantial role in raising productivity and promoting economic growth by providing the necessary tools and institutions for mobilizing and allocating savings to productive investments. However, in recent decades, most developing and developed countries have experienced profound transformations in their financial sectors, including extensive deregulation of financial markets, capital account liberalization, and the privatization of banking systems. As a result, economies have experienced the rapid expansion of the financial sector, the increasing reliance of non-financial corporations on financial activities, and the participation of households in financial markets with the aim of generating returns. This process is commonly called the *financialization of the economy* (Sawyer, 2024). The concept highlights the growing influence of financial markets, institutions, and practices on the overall functioning of the economy—often at the expense of the real sector (Saha *et al.,* 2025).

In this process, the pursuit of profit through financial channels—such as asset trading, borrowing, speculative investment, and complex financial instruments—tends to replace value creation through real production. Although such structural changes may facilitate access to credit and investment opportunities, they also generate complex and multidimensional effects on economic variables. As financialization progresses, financial profits increasingly gain importance relative to traditional modes of production and may even supplant them altogether. Beyond altering production structures, financialization reshapes individual and collective perceptions of markets. These changes bring about unintended consequences, impacting economic growth and even the redistribution of power. The financialization process means that household spending decisions are influenced not only by labor income and the wealth effect, but also by the volatility of financial assets. As a result, by shaping the expenditure decisions of major economic actors, financialization has a significant impact on economic policies, business cycles, and the genesis of crises (Braga *et al.,* 2017). From a more recent perspective, financialization is not merely an economic phenomenon but also an institutional and political transformation, in which financial institutions gain significant influence over public policies, inequality, and social welfare. Particularly in developing countries, the rapid expansion of the financial sector without effective regulatory oversight can lead to economic fragility, increased household vulnerability, and reduced sustainability of growth (Akan & Gunduz, 2025).

Over the past two decades in Iran, the financial sector has grown and expanded significantly relative to the real sector. Amid prolonged stagflation and declining real incomes, households and firms operating in the real economy have increasingly sought opportunities in financial markets. Given Iran's considerable dependence on oil revenues, alongside the relatively nascent and evolving structure of its financial institutions, financialization may have distinctive and multifaceted effects on key macroeconomic variables. Empirical evidence suggests that financialization in Iran influences saving, inflation, income distribution, and economic growth through various channels—including shifts in labor market structures, the rising importance of capital markets over traditional banking, the introduction of complex financial instruments, and the transition of firms from productive to financial activities (Maaboudi & Dare Nazari, 2021). Since social welfare is a function of both aggregate income and its distribution (Stark, 2025), financialization affects welfare through its impacts on income distribution (Zhang & Wang, 2025) and economic growth (Doruk, 2024). Yet, its overall effect on welfare remains ambiguous. On the one hand, financialization may enhance welfare by deepening financial markets, creating new investment opportunities, improving liquidity, and facilitating access to credit. On the other hand, it can undermine welfare by generating financial instability, widening income inequality, reducing productive investment, and imposing greater risks on households.

The imperative for this research is particularly acute given Iran's current economic conditions. The country confronts severe challenges, including inflation, income inequality, and diminishing social welfare, while its financial system is simultaneously undergoing a transition from a traditional bank-centric model towards a more market-oriented and complex structure. Within this environment, a nuanced understanding of financialization's effects on welfare is crucial for informing sound policy and strategic economic planning. Although the topic is of increasing international importance, a significant gap persists in the domestic literature. The relationship between financialization and economic welfare has not been studied within the country, while international studies have predominantly used income distribution as a proxy for welfare. Consequently, the current research intends to bridge this gap by exploring the nonlinear relationship between financialization and economic welfare, focusing on the intermediary role of institutional quality. Examining the role of institutional quality on the effects of financialization on welfare is important because it reveals whether institutional quality, as a mediating variable, can amplify or mitigate these effects.

2. Literature Review

Kevin Phillips (1993) was among the first to define *financialization* as the systematic separation of the financial sector from the real economy. In his view, financialization represents a process through which the rapid and disproportionate expansion of finance ultimately dominates the real economy, intensifies financial wealth effects, and makes financial profit a general objective. Initially, financialization provided firms with capital to expand production, share surplus value, and accumulate rents before exiting the cycle. Over time, however, the financial cycle increasingly replaced the production cycle as the main avenue of capital accumulation. With the persistence and excess of financialization, this process strengthened the dominance of financial circuits over markets, crowding out productive investment, reducing employment growth, real wages, and consumption, while amplifying the profitability of financial incomes and pushing industrial capital toward speculative and virtual accumulation (Chen & Jiao, 2025). Thus, in financialization, markets, institutions, and financial activities assume a growing role in the economy, with financial logic replacing the logic of production and income distribution (Epstein, 2005). By encouraging speculative activities and complex financial instruments, financialization increases systemic risk and financial instability. These instabilities—manifested in financial crises, market collapses, and asset devaluations—have severe welfare consequences, especially for vulnerable groups. As Krippner (2005) notes, financialization does not generate sustainable economic growth but rather fosters volatile cycles that erode welfare outcomes. Overall, the rise of financialization weakens non-financial corporations, constrains aggregate demand, and limits governments' ability to use policy tools to promote full employment, welfare, and development (Izurieta *et al.,* 2018).

In recent years, greater attention has been paid to how financialization penetrates firms' and households' decision-making, reflecting the growing influence of financial motives, markets, institutions, and elites over economic policy, corporate behavior, and household consumption. This shift is associated with the increasing dominance of finance over the real economy, signifying a transition from industry- and production-based growth toward an economy increasingly dependent on financial transactions, speculation, and shareholder value maximization (Malika *et al.,* 2025).

2-1. Channels of Financialization's Impact on Economic Welfare

Financialization, as a defining trend of modern economies, has far-reaching implications for macroeconomic variables and social structures. Much of the research has focused on its effects on economic growth and income inequality (Akan & Gündüz, 2025). However,

closer examination shows that financialization also influences welfare through multiple channels—both directly via financial markets and indirectly through changes in state and household behavior.

2-2. Economic Growth

The first major channel is *investment*. As profitability in the financial sector rises, firms reallocate resources from productive investment to financial activities, reducing capital accumulation and long-term growth. Institutional investors' pressure for short-term returns further discourages long-term investment and R&D (Barradas, 2017). Accordingly, reducing financialization may encourage firms to redirect financial resources toward the real economy, thereby boosting growth. Gutierrez and Philippon (2017) highlight concerns in both developed and developing countries over the negative effects of financialization on investment, economic growth, and financial stability. Conversely, Mabeba (2024), in a cross-country study covering 1996–2022, finds that financialization had a significantly positive impact on growth in developing economies with large financial sectors. Another channel is the expansion of finance's demand for skilled labor. As talented workers are drawn into finance, the real sector faces a human capital shortage, thereby depressing output (Li, 2021). Doruk (2024), studying emerging Asian economies, shows that financialization diverts resources toward speculative activities, weakening investment in human capital and, ultimately, undermining growth.

2-3. Income Distribution

The first mechanism linking financialization to income inequality is the growing size and power of the financial sector, especially under post-Keynesian frameworks emphasizing financial market behavior. Globalization of finance, deregulation, securitization, and the rise of capital markets collectively weaken redistributive policies and intensify inequality (Vita & Liu, 2021). A second mechanism is regulatory change. Policies encouraging profit maximization and speculative opportunities motivate non-financial firms to shift resources from productive to financial investments (Lin & Tomaskovic-Devey, 2013), thereby depressing wages and employment in the real economy. A third channel is the financial dependence of non-financial corporations. Financial markets compel firms to adopt shareholder value strategies, shifting financial repayment pressures onto workers through wage suppression and cost-cutting, which enhances managerial rewards while deepening inequality (van der Zwan, 2014). Cross-country evidence confirms this: Lee & Siddique (2021) find that between 1998 and 2017, financialization exacerbated inequality across

emerging, developing, and advanced economies alike. Similarly, Bhaduri & Oro (2025) show that asset prices and asymmetric access to credit widen inequality, weakening welfare transmission from growth. Chen & Jiao (2025) further note that financialization intensifies urban–rural wage gaps while marginally reducing asset-income inequality, with strong spatial spillover effects consistent with the *club convergence* phenomenon. Policies such as financial regulation, inclusive financial systems, and balanced regional development could mitigate these disparities.

2-4. Household Debt and Financial Fragility

Another major welfare channel is rising household indebtedness. Financialization expands access to consumer credit, allowing households to spend beyond their current income. While this may raise perceived welfare in the short term, it produces long-term vulnerability, weaker real purchasing power, and psychological stress from debt (Montgomerie & Büdenbender, 2015). Moreover, mortgage-based policies of *asset-based welfare* have tied household wellbeing to volatile housing markets, with devastating effects during crises such as the 2008 financial meltdown.

2-5. Job Insecurity and Declining Employment Quality

Financialization alters corporate priorities, shifting from long-term investment toward short-term profit maximization for shareholders. This reduces investment in human capital, promotes temporary and informal contracts, and erodes workers' bargaining power. The result is greater job insecurity, lower real wages, and a deteriorating quality of life. In economies lacking strong social protection systems, these trends directly undermine household welfare (Doruk, 2024).

2-6. Weakening of the Government's Role and Redistributive Policies

A critical indirect effect of financialization lies in its transformation of state policy. As finance gains influence, governments increasingly design policies favoring investors rather than the broader public. This erodes redistributive and welfare policies, diminishes social capital, and weakens governments' responsiveness to social crises (Epstein, 2005). By prioritizing financial stability over social welfare, states redirect resources away from productive sectors such as education, healthcare, and infrastructure. Financialization also commercializes public services, thereby limiting equitable access to welfare (Gabor, 2019). In this sense, financialization systematically increases inequality and reduces the economy's capacity to support collective welfare (Akan & Gündüz, 2025). Saha *et al.,*

(2025) further argue that while financialization often reduces welfare by exacerbating inequality, democratic governance and strong institutions can mitigate these effects. Absent effective institutions, however, financialization tends to concentrate income and widen inequality.

2-7. Institutional Quality

The role of institutional quality in shaping financialization's welfare effects is crucial. Poor institutional quality is a major reason why resource-rich economies often experience weak growth. Evidence suggests that while in high-quality institutional settings, financialization may foster sustainable growth and more equitable income distribution, in countries like Iran with institutional weaknesses, it often exacerbates inequality and undermines welfare (Akan & Gündüz, 2025). Thus, institutional quality serves as a critical channel moderating financialization's welfare impact.

In sum, the literature shows that no study has yet directly examined the effect of financialization on welfare using a comprehensive welfare index. Most previous research relied on income inequality indicators as proxies for welfare. This study addresses this gap by employing the composite index of welfare proposed by Osberg and Sharpe (2002), which includes not only growth and inequality but also broader welfare dimensions. Furthermore, unlike prior studies, this research investigates the *threshold effects* of financialization on welfare, thereby offering a novel contribution to the literature.

3. Methodology

3-1. Model Specification and Data Description

The main purpose of the current study is to investigate the financialization impact on economic welfare in Iran. Following the literature, the relationship is specified as:

$$W_t = f(ly_t, \ q_t, \ fin_t, \ E_t) \qquad (1)$$

where W_t represents the composite index of economic welfare, ly_t is the logarithm of real GDP, q_t denotes the size of government, fin_t captures financialization, and E_t is a vector of control variables affecting welfare, including the misery index, income distribution, human capital, international sanctions, trade openness, and sanctions. Economic and social welfare refers to a situation in which individuals and households not only have adequate economic resources to meet basic needs such as food, housing, education, and healthcare, but also live in an environment that ensures economic security, equal opportunities, social stability, and the possibility of active participation in economic and political processes. This concept goes beyond per capita income and encompasses

quality of life, distributive justice, economic sustainability, and social protection (Stiglitz *et al.,* 2009). Accordingly, following Osberg and Sharpe (2002), a composite index comprising four components- consumption flows (CF), wealth accumulation (WS), income distribution (ID), and economic security (ES)-is used to measure the Index of Economic Well-Being (IEWB), as defined by Equation (2).

$$IEWB = \beta_1 \underbrace{[(C + G + WT - RE)](LE)}_{CF} + \beta_2 \underbrace{[(K + RD + HC + NR + FD - ED)]}_{WS} +$$
$$\beta_3 \underbrace{[(\gamma(PHR) + (1 - \gamma)Gini)}_{ID} + \beta_4 \underbrace{[WWR + \delta(ILL) + \theta(SSP) + \omega(OLD)]}_{ES}$$

(2)

where C is real per capita household consumption expenditure, G is real per capita government consumption expenditure, WT represents real per capita value of changes in working time, RE is real per capita value of compensatory expenditures, LE denotes life expectancy at birth indexed to the base year 1979, K is the real per capita gross fixed capital stock, RD represents the real per capita stock of research and development expenditure, HC is the real per capita human capital stock, NR denotes the real per capita stock of natural resource wealth, FD is real per capita net foreign direct investment inflows, ED is the Real per capita social cost of environmental degradation (pollution from CO_2 emissions), $gini$ is the Gini coefficient, PHR is poverty headcount ratio at the household level at a minimum income of \$1.25 per day; however, due to the unavailability of data for this measure, the income ratio of the top 10% to the bottom 10% is used as a proxy, γ is relative weight of poverty that set to 0.75, WWR is working-age population (15-65 years) to total population ratio, δ is the share of the population at risk of disease (assumed to be 100%), ILL is the ratio of out-of-pocket health expenditures to disposable income, SSP is the risk associated with single parenthood, θ is the proportion of women with children, OLD is the risk of exposure to poverty, and ω is the share of population between aged 45 to 66 years. Also, $\beta 1$ is the consumption flow coefficient, $\beta 2$ is the wealth accumulation coefficient, $\beta 3$ is the income distribution coefficient, and $\beta 4$ is the economic security coefficient. To measure financialization, following the study by Zheng *et al.,* (2025), the ratio of the value added of the financial, insurance, and real estate sectors to GDP is utilized. To quantify the institutional quality, a composite index of good governance components is used, in which the data are normalized to a range between 0 and 2.5. Given the imposition of extensive sanctions on the Iranian economy, a dummy variable is employed to capture the effects of sanctions on economic welfare. This variable takes the value of one for the years during which sanctions were in effect and zero otherwise. The data frequency is annual, covering the period from 1990 to 2023. Furthermore, all nominal variables are converted to real

terms using the Consumer Price Index (CPI) with the base year 2016, as calculated and published by the Central Bank of Iran. To estimate the financialization effects on welfare and analyze relationships among variables, the threshold regression approach is employed. Following Hansen (2000), a two-regime threshold model is specified:

$$y_t = \alpha_1' x_t + \varepsilon_{1t}, \quad q_t < z \tag{3}$$

$$y_t = \alpha_2' x_t + \varepsilon_{2t}, \quad q_t \geq z \tag{4}$$

where y_t is the dependent variable (welfare), x_t is the explanatory variable, α_i' is the explanatory variable's coefficients, ε_{it} is the error term, q_t is the threshold variable (institutional quality), and z is the threshold value of institutional quality. Based on the equations above, Equation (3) is estimated for values of the threshold variable below the threshold, and Equation (4) for values above it. To introduce single-equation regression using equations (3) and (4) and the dummy variable, we have:

$$y_t = \alpha' x_t + \rho' x_t(z) + \varepsilon_t \quad, \quad \varepsilon_t \sim iid(0, \sigma_t^2), \quad x_t(z) = \begin{cases} x_t I(\ q_t < z) \\ x_t I(\ q_t \geq z) \end{cases} \tag{5}$$

In equation (5), the parameters are defined as follows: $\alpha = \alpha_2, \rho = \alpha_1 - \alpha_2$ and $\varepsilon_t = [\ \varepsilon_{1t} \ \varepsilon_{2t}]'$. The dummy variable $I_t(Z)$ is defined as $I_t(Z) = \{\ q_t < z\}$. If $q_t < z$, the dummy variable is assigned the number one, and otherwise it is assigned the number zero. In the threshold regression approach, the threshold value of institutional quality is calculated by minimizing the sum of squared errors. By estimating the parameters, the sum of squared errors $SS_t(z) = (\widehat{\varepsilon_t(z)})'(\widehat{\varepsilon_t(z)})$, the optimal threshold value $\hat{z} = argmin \, SS_t(z)$ and the residual variance of the model $\hat{\sigma}^2 = \frac{1}{T} \, SS_t(\hat{z})$ are extracted. By calculating $\hat{z}$, the coefficients $\hat{\theta} = \hat{\theta}(\hat{z})$ and $\hat{\alpha} = \hat{\alpha}(\hat{z})$ are estimated. Finally, considering the research objectives, the specification of the research model is introduced based on equation (6):

$$W_t = \alpha_0 + \alpha_i'^{x_t} I(\ q_t < z) + \alpha_j'^{x_t} I(\ q_t \geq z) + \gamma_1 Tr_t + \gamma_2 M_t + \gamma_3 Gi_t + \gamma_4 H_t + \gamma_5 D_t + \varepsilon_t \tag{6}$$

where x_t represents the vector of explanatory variables in the regime, namely financialization, institutional quality, and the logarithm of GDP, α'^{x_t} denotes their coefficients, q_t is the threshold variable (institutional quality), z is the threshold value of institutional quality. The non-threshold control variables are defined as the trade openness, M_t misery index, Gi_t Gini coefficient, H_t human capital, D_t sanctions. Also, γ is the coefficient vector of the non-threshold variables, and ε_t is the disturbance component and is assumed to follow the white noise process. To test the significance of the existence of a threshold according to the Lagrange-Hansen coefficient, the F statistic is used as $F =$

$\frac{SS_t - SS_t(\hat{z})}{\hat{\sigma}^2}$, where SS_t represents the sum of squared errors in the regression without threshold and $SS_t(\hat{z})$ represents the sum of squared errors in the case of the threshold. The null hypothesis in the above test is stated as $H_0: \alpha_1 = \alpha_2$ and states that the regression pattern is linear.

4. Findings

To calculate the composite economic welfare index, different coefficients are assigned to each of the components of consumption flow, wealth accumulation, income distribution, and economic security, depending on their importance. In the present study, following the research of Osberg & Sharpe (2002), the coefficients of consumption flow, wealth accumulation, income distribution, and economic security are considered to be 0.4, 0.1, 0.25, and 0.25, respectively. Figure 1 reports the trend of changes in Iran's composite economic welfare index during the period of 2020 to 2023. As can be seen, welfare has a downward trend during the period. However, from 1990 to 2011, welfare experienced a higher level than from 2012 to 2023.

Fig. 1: Composite Index of Economic Well-being in the Country from 1990 to 2023 (Research Calculations).

From 1990 to 2011, economic welfare reached a higher average level due to factors such as increased economic growth, reduced income inequality, granting facilities to combat unemployment, and a subsequent decline in unemployment rates. In contrast, during the period of 2012-2023, the imposition of new economic sanctions, increased inflation, increased exchange rates, and gold prices caused income inequality to increase and economic growth to decrease, resulting in a lower level of economic welfare. Table 1

provides a summary of the descriptive statistics, measurement method of variables, and data sources. Nominal variables were deflated using the Consumer Price Index (2016=100).

Table 1: Descriptive statistics of variables

Variable Name	Measurement Method	Data Source	Mean	Std. Dev.
Economic Welfare	Composite index including four components: consumption flow, wealth accumulation, income distribution, and economic security	CBI & WDI	0.74	0.061
Financialization	Ratio of value added in the finance, insurance, and real estate sector to GDP	CBI	0.1783	0.0384
Log of Real GDP	Logarithm of real GDP	CBI	6.128	0.89
Institutional Quality	Average of good governance components	WDI	1.459	0.784
Misery Index	The sum of the inflation rate and the unemployment rate	WDI & IMF	0.346	0.112
Gini Coefficient	The difference in income distribution among individuals in the country	SCI & WDI	0.3981	0.009
Trade Openness	The ratio of the sum of exports and imports to GDP	CBI	0.4403	0.067
Human Capital	Ratio of university students to total population	CBI	0.195	0.032

(Research Calculations).

The low standard deviation of the variables indicates that the data has little dispersion.

To avoid spurious regression, the stationarity of the data is first tested. For this purpose, the Zivot &Andrews test is used. Since the variables are at the level of nonstationary, the first-order difference of the variables is first calculated and retested. Table 2 reports the results of the Zivot &Andrews stationarity test in three cases: time changes and stationarity in the level, time changes and stationarity in the slope of the trend function, and time changes and stationarity in the level and slope of the trend function for the first-order difference of the variables.

Table 2: Unit Root Test Results

Variable Name	Time trend and stationarity in level			Time trend and stationarity in trend slope			Time trend and stationarity in level and trend slope		
	Test Statistic	Critical Value	Break	Test Statistic	Critical Value	Break	Test Statistic	Critical Value	Break
W_t	-7.61*	-5.34	2018	-7.33*	-5.06	2018	-5.39	-5.17	2013
Fin_t	-5.97	-5.34	2020	-5.58	-5.06	2021	-5.86*	-5.72	2014
$logY_t$	-4.96	-4.85	2004	-6.27*	-5.06	2006	-8.92*	-5.17	2004
Z_t	-6.27*	-5.34	2017	-4.71	-4.52	2010	-5.78*	-5.72	2017
Tr_t	-5.41	-5.34	2020	-5.26	-5.06	2021	-5.74	-5.72	2018
Gi_t	-7.905*	-5.34	2009	-7.81*	-5.06	2003	-8.77*	-5.72	2011

H_t	-7.34*	-5.34	2019	-6.81*	-5.06	2014	-7.17*	-5.72	2016
M_t	-5.86*	-5.34	1995	-5.30*	-5.06	1997	-5.73*	-5.72	1995

(Researcher's findings). *Significant at the one percent level

The structural unit root test results indicate that the first-order difference of the variables is stationary at the 5% error level. Therefore, before estimating the main research model, cointegration and the existence of a long-run relationship among the variables are tested. Considering the nonlinear approach in the regression and the degree of first-order integration of the model variables, the Enders and Siklos threshold cointegration approach is used to examine the long-run equilibrium relationship between the research variables (Enders & Siklos, 2001). For this purpose, based on equation (7), the null hypothesis $\rho_1=\rho_2$ is tested, meaning the absence of threshold cointegration.

$$\Delta\xi_t = I_t\rho_1\xi_{t-1} + (1 - I_t)\rho_2\xi_{t-1} + \gamma_1\Delta\xi_{t-1} + \cdots + \gamma_p\Delta\xi_{t-p} + \pi_t \quad (7)$$

Where, ξ_t is the disturbance component extracted from regressing public debt on explanatory variables; also, the I_t function is defined as $I_t = \begin{cases} 1, & if \, \xi_{t-1} \geq \tau \\ 0, & if \, \xi_{t-1} < \tau \end{cases}$ with respect to the threshold level τ. For testing nonlinear cointegration among the study variables, the optimal lag order of the model was selected as 2 based on the Schwarz Bayesian Criterion (SBC). Table 3 reports the results of the threshold cointegration test. The critical values and simulation statistics of the F test, T-max, and Φ were extracted based on 15,000 Monte Carlo simulations and at a 5 percent error level.

Table 3. Threshold Cointegration Test Results

Variable	Coefficient	t-Student
$I_t\xi_{t-1}$	-2.022	-4.501
$(1 - I_t)\xi_{t-1}$	-1.63	-4.105
$\Delta\xi_{t-1}$	0.568	1.86
$\Delta\xi_{t-2}$	0.346	1.197
Simulated Critical Values at 5% Significance Level		
Test	Test Statistic	Critical Value
F: $\rho_1=\rho_2$	8.98	5.863
T-max	-3.218	-2.875
Φ: $\rho_1=\rho_2=0$	11.792	10.851

(Researcher's calculations).

The results show that the adjustment coefficient in the first regime is -2.022 and in the second regime is -1.63, which indicates the asymmetry of cointegration between the variables in the two regimes; so that the adjustment speed in the second regime is lower than in the first regime. Based on the F test, nonlinearity and asymmetry of cointegration

are accepted. Also, according to the findings of the T-max and Φ tests, the cointegration and the long-term nonlinear relationship among the research variables are confirmed. To estimate the research model, the first-order lag of institutional quality was determined as the threshold variable using the threshold regression approach by minimizing the sum of squared errors. Subsequently, the number of model thresholds was examined based on the Schwarz Criterion and Likelihood-Weighted Zero-One statistics. The statistical significance of the threshold was then tested using Hansen's (2000) bootstrap method. Since the asymptotic distribution of the Wald statistic is non-standard under the null hypothesis of linearity, bootstrap procedures were applied to obtain the critical values. The bootstrap involved 10,000 replications to approximate the empirical distribution, and the significance level of the threshold was determined accordingly. Table 4 provides a concise summary of the aforementioned test results.

Table 4. Results of Threshold Specification

Multiple Threshold Tests				
Number of Thresholds	**Sum of Sq. Resides**	**Log-L**	**Schwarz Criterion**	**LWZ Criterion**
0 vs 1*	0.0241	75.726	-6.04	-5.368
1 vs 2	0.0869	53.373	-5.014	-4.716
2 vs 3	0.1436	44.691	-4.805	-4.261
Hansen's Linearity Test				
Threshold Value		**F-statistic**		**Prob**
1.2679		9.538		0.0341

(Researcher's findings).

According to the findings, the model estimation with one threshold and two regimes was confirmed. Also, the threshold level of institutional quality in the estimated model is 1.2679 at a 5 percent error level, which is significant. According to the standardization of the institutional quality variable, the threshold value refers to the institutional quality at the level of 57 percent. In fact, when the institutional quality variable crosses the 57 percent threshold, the pattern changes from the low institutional quality regime to the high institutional quality regime. Accordingly, the results of the research model estimation are reported in Table 5.

Table 5. Estimation Results

Variable Name	Coefficient	t-Statistic	Probability Level
Regime 1: $q < 1.2679$			
fin_t	-0.8244	-3.961	0.0009

Maaboudi et al.: *Financialization and Welfare in Iran: The Institutional Quality...* مطالعات اقتصادی کاربردی ایران 56

q_t	0.0087	2.793	0.0112
ly_t	0.0562	14.56	0.0000
Regime 2: $q \geq 1.2679$			
fin_t	-1.254	-6.75	0.0000
q_t	0.027	2.45	0.0238
ly_t	0.0681	8.18	0.0000
Non-Threshold Variables			
Intercept	-0.33	-8.39	0.0000
Tr_t	0.296	6.83	0.0000
M_t	-0.104	8.82	0.0000
H_t	0.563	2.90	0.0088
Gi_t	-1.82	-7.83	0.0000
D_t	-0.0986	-9.16	0.0000
$R^2 = 0.79$	$Adj. R^2 = 0.75$		$D.W.=2.4$

Diagnostic Tests	Test Statistic	prob
Normality (Jarque-Bera)	2.097	(0.3505)
Serial Correlation (Breusch-Godfrey)	1.225	(0.3171)
Heteroskedasticity (White)	1.306	(0.2896)

(Researcher's findings).

The coefficient of R-Squared shows that about 79 percent of the changes in welfare are explained by the independent variables. The small difference between the R-Squared and the adjusted R-Squared indicates the model's goodness of fit. The normality test of the residuals based on the Jarque-Bera statistic specifies that the distribution of sample errors is normal, so the t-statistic and F-statistic are valid in statistical inferences. The results of the Breusch-Godfrey and the White tests show that the estimated model does not have the problem of serial correlation and variance heterogeneity. According to the findings, after the institutional quality improves and it passes the 57 percent threshold, the coefficients of the variables face a structural change. The coefficient of the financialization variable in the first and second regimes is -0.8244 and -1.254, respectively. Therefore, financialization has a negative effect on economic welfare in both regimes. With the difference that after passing the threshold, improving institutional quality increases the intensity of the negative impact of financialization on economic welfare. As the results of various studies show, financialization in Iran is associated with reduced economic growth and increased income inequality. Therefore, the decreasing effect of financialization on economic welfare is understandable. However, the main point is to strengthen the intensity of the undesirable

negative impacts of financialization on welfare. A phenomenon that occurs in weak institutional conditions. These findings highlight the importance of paying attention to the institutional and economic contexts of countries in analyzing the effects of financialization. Institutional quality in both regimes has a positive and significant consequence on economic welfare, and in the high regime, the increasing effect of institutional quality on economic welfare is strengthened. In fact, institutional quality means the growth and development of good governance, and this causes components such as the rule of law, government efficiency in resource distribution, corruption reduction, and political stability to play a more prominent role in the economy. Therefore, improving institutional quality increases welfare more intensely. In both low and high regimes, institutional quality has a positive and significant effect on economic welfare. But, its influence on economic welfare increases in a regime of high institutional quality, meaning that the impact intensity of financialization on welfare is strengthened in the presence of higher institutional quality. In low institutional quality, most of the national income is spent on unproductive plans and projects; public services in the areas of education and health are weak; and even in the presence of significant economic growth, income inequality increases with the concentration of wealth in the hands of certain groups and the emergence of corruption. The enjoyment of the positive impact of growth on welfare is neutralized. On the contrary, in high institutional quality, increased rule of law and political stability lead to efficient allocation of resources in the areas of infrastructure, education, and health; corruption decreases, and, as a result, the positive effects of economic growth are more reflected in the economic welfare of the society. Therefore, the development and improvement of institutional quality is a factor in strengthening the impact of economic growth on welfare. Examining the effects of non-threshold variables further demonstrates that the degree of trade openness is positively and significantly associated with economic welfare.

In fact, increasing trade in goods and services with the outside world, on the one hand, increases the variety and quality of services for consumers, and on the other hand, producers have greater access to larger markets and advanced technology, which increases the welfare of society. The misery index has a significant and decreasing effect on economic welfare. In fact, increasing unemployment coincides with a drop in both income and inflation. This subsequently lowers consumption and service utilization, thereby eroding welfare. Human capital also has a positive and significant effect on welfare, which shows that human capital leads to improved welfare through improved productivity, production growth, and health promotion. Income inequality has a significant and negative effect on welfare. The worsening income distribution through reduced economic growth undermines

national cohesion and fuels crime, which collectively stifles individual talent and sustainable development, thereby threatening societal welfare. Finally, the negative and significant impact of sanctions on welfare shows that sanctions reduce economic growth through various channels, increase inflation, poverty, and inequality, resulting in a decrease in economic welfare.

5. Conclusions

The research findings revealed that financialization exerts a nonlinear and diminishing effect on welfare under both low and high institutional quality regimes. However, this negative impact intensifies once institutional quality exceeds a threshold of 57 percent. In the Iranian economy, the attractiveness of investment in the financial sector and the failure to adopt correct policies by the government have caused firms not to reinvest the profits from financial investment in productive activities. Therefore, the process of financialization, along with the tendency to consume imported goods and consequently the decrease in demand for domestic products, economic sanctions, and currency crises, has led to a decrease in production in the real sector and, as a result, a decrease in economic growth in the country. Since the financial sector can't absorb the surplus labor force, employment and consequently the income of the active labor force in the country's real sector have also decreased. One way to compensate and achieve a new source of income for the active labor force in the real sector is to participate in financial markets. Individuals invested their surplus resources in the economy's financial sector, intending to earn income and maintain monetary value by increasing debt or reducing consumption. However, the inefficiency of the financial system, including a lack of access to credit and a lack of information transparency, caused the share of individuals participating in financial markets to be low. Meanwhile, the enjoyment of information rent, high profitability, and overvaluation of financial assets caused individuals and firms active in the financial sector to enjoy increasing returns by investing in financial markets. Therefore, the increase in the income of individuals active in the financial sector, the decrease in the workers' wages in the real sector, and the lack of compensation in financial activities have led to a deterioration in the society's income distribution.

In general, the phenomenon of financialization, along with factors such as the economy's dependence on oil revenues, continuous government budget deficits, unemployment, inflation, inefficiency of government institutions, the imposition of political-economic sanctions, and currency crises, have on the one hand increased the wage gap and income difference between the real and financial sectors, and on the other hand,

have had a negative impact on the country's economic growth by diverting investment towards unproductive activities. As a result, the expansion of financialization has been associated with a decrease in welfare in Iran during the period under study. The findings of the study are consistent with the results of Bhaduri & Oro (2025), Chen & Jiao (2025), and Saha *et al.,* (2025). According to the results of the present study, after the institutional quality crosses the threshold, the severity of the negative effects of financialization on economic welfare increases. This indicates the paradox of institutional quality. That is, in higher institutional quality, advanced financial instruments and capital markets develop, but this access is usually asymmetric. Therefore, the wealthy and large corporations benefit the most, while low-income households have a small share and may even be harmed by rising housing costs, asset inflation, or consumer debt. Strong institutions do not necessarily mean focusing on public welfare. Policymakers may adjust regulations in such a way that the profitability of the financial sector takes priority over social interests to develop financial markets. This can cause financial growth to occur faster than the real capacity of the economy and undermine welfare. Even under strong institutional conditions, if redistributive policies or the financial sector supervision are not adequately designed, the financialization benefits will accrue mainly to high-income groups, and class gaps will widen. This phenomenon often occurs through phenomena such as Over-financialization and the Open Gate Effect. Accordingly, Over-financialization at low levels of institutional quality, the expansion of the financial sector is often associated with inefficiency and rent-seeking, and its negative impact on welfare is clear; but when institutional quality is high, the financial sector becomes more efficient and its size grows faster.

This excessive growth can increase the intensity of the transfer of resources from the real sector (production, employment) to speculative financial activities. The Open Gate Effect implies that strong institutions such as banking regulations, the rule of law, and transparency seemingly provide the conditions for healthy financial development, but in practice, these institutions become tools for facilitating speculative activities. On the one hand, this leads to the emergence of destructive financial flows that only benefit the financial sector of the economy by attracting investor confidence to invest in unproductive and risky projects; on the other hand, financialization generates more profits in the presence of strong institutions, but the profits generated may not be redistributed to the productive sector of the economy under the influence of interest groups such as banks and financial institutions; therefore, strong institutions strengthen the severity of the adverse effects of financialization on real sector growth. In other words, in the presence of stronger institutional quality, the negative effects of financialization on reducing the country's

economic welfare increase. This paradox suggests that institutions designed to reduce risk can, over time, lead to greater diversion of resources and human capital from the real sector to the financial services sector, along with financial development, which reduces the productivity of the real sector of the economy. On the other hand, financialization in the presence of stronger institutions increases the profits of the financial sector and firms, since wages do not increase in proportion to the profits of the financial sector, the wage gap and income inequality reduce welfare. Therefore, even in strong institutions, financial competition and complex innovations can lead to increased inequality, financial instability, and pressure on households. In this regard, the study's findings are consistent with those of Akan and Gunduz (2025), which show the interactive role of institutional quality and financialization in determining welfare. Their research indicates that in countries with high institutional quality, financialization can lead to increased welfare; however, under weak institutional conditions, the effects of financialization are often negative, leading to increased inequality and reduced welfare. These findings highlight the importance of considering countries' institutional and economic contexts when analyzing the effects of financialization.

Since the key components of institutional quality—including Voice and Accountability, Regulatory Quality, and Political Stability—have not experienced significant improvement, the relative enhancement of institutional quality has not reduced the negative impact of financialization on welfare. This matter indicates that in the absence of effective institutional reforms, financial development not only fails to enhance welfare but also may actually be detrimental to it by intensifying speculative behavior, diverting resources from the productive sector, and increasing economic instability. Therefore, considering the potential role of financial institutions in promoting growth and welfare, it is recommended that policymakers adopt appropriate policy measures such as channeling capital into the real economy and preventing the diversion of resources to unproductive activities; restricting short-term corporate behavior through instruments like taxes on share buybacks, mandatory transparency in reporting, and incentives for long-term investment; strengthening financial regulation and systemic risk management; clarifying legal frameworks, reducing information rents, and addressing unequal access in financial markets through public disclosure and anti-corruption regulations; revising the role of supervisory institutions; and enhancing international and regional cooperation to mitigate the adverse effects of sanctions. Such measures can help reduce the negative impact of financialization on economic welfare.

Acknowledgments

Observation Contribution

All authors contributed equally to this work.

Conflict of Interest

The authors declare no conflicts of interest relevant to the content of this article.

References

- Akan, T. & Gunduz, H. I., (2025). *What Is Financialization? Routledge*. https://doi.org/10.4324/9781003336105.

- Barradas, R., (2017). "Financialisation and Real Investment in the European Union: Beneficial or Prejudicial Effects?". *Review of Political Economy, 29*(3): 376-413. https://doi.org/0.1080/09538259.2017.1348574.

- Bhaduri, A. & Oro, G., (2025). "How Inequality Increases Through Financialization". *Journal of Post Keynesian Economics, Review of Political Economy, 5*: 1-17. https://doi.org/10.1080/09538259.2025.2498499.

- Braga, J. C., Oliveira, G. C. D., Wolf, P. J. W., Palludeto, A. W. A. & Deos, S. S. (2017). "For a Political Economy of Financialization: Theory and Evidence". *Economia e Sociedade, Campinas, 26*(4): 829-856. http://dx.doi.org/10.1590/1982-3533.2017v26n4art1.

- Chen, Z. & Jiao, F., (2025). "The Impact of Economic Financialization on the Income Gap Between Urban and Rural Residents: Evidence from China". *Sustainability*, *17*: 1-31. https://doi.org/10.3390/su17083484.

- Doruk, O. T., (2024). "The Dark Side of Finance: the Link Between Financialisation and Labour Investment in Emerging Asian Countries". *Economic Change and Restructuring, 57*(223): 1-18. https://doi.org/10.1007/s10644-024-09809-4.

- Epstein, G. A., (2005). *Financialization and the World Economy. Edward Elgar Publishing.* https://www.depfe.unam.mx/actividades/11/curso-seccareccia/Epstein_Jayadev2005.pdf.

- Fioramonti, L., (2017). *Wellbeing Economy: Success in a World Without Growth. Pan Macmillan.* https://www.amazon.com.au/Wellbeing-Economy-Success-Without-Growth/dp/1770105174.

- Gabor, D., (2019). "The Wall Street Consensus". *Development and Change*, *52*(3): 429–459. https:// doi.org/10.1111/dech.12645.
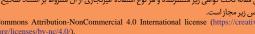
- Gutierrez, G. & Philippon T., (2017). "Investmentless Growth: An Empirical Investigation". *Brookings Papers on Economic Activity, 2*: 89–102. https:// doi.org 10.1353/eca.2017.0013.

- Hansen, B. E., (2000). "Sample Splitting and Threshold Estimation". *Econometrica, 68*(3): 575-603. https://doi.org/10.1111/1468-0262.00124.

- Izurieta, A., Kohler, P. & Pizarro, J., (2018). "Financialization, Trade, and Investment Agreements: Through the Looking Glass or Through the Realities of Income Distribution and Government Policy?". *Global Development and Environment Institute working paper*, 18-02, https://www.bu.edu/eci/files/2020/01/18-02_IzurietaKohlerPizarro_FinancializationTradeInvestmentAgreements.pdf.

- Krippner, G. R., (2005). "The Financialization of the American Economy". *Socio-Economic Review, 3*(2): 173–208. https://doi.org/10.1093/SER/mwi008.

- Lee, K. & Siddique, M. A. B., (2021). "Financialization and Income Inequality: An Empirical Analysis". *The Japanese Political Economy, 47*(2-3): 121-145. https://doi.org/10.1080/2329194X.2021.1945465.

- Li, K., (2021). "Mechanism of the Effect of Financialization on Economic Growth from the Perspective of Talent Flow". In: *Proceedings of the 4th International Conference on Economic Management and Green Development,* 387-393. https://doi.org/10.1007/978-981-16-5359-9_44.

- Lin, K. H. & Tomaskovic-Devey, D., (2013). "Financialization and U.S. Income Inequality, 1970-2008". *American Journal of Sociology, 118*(5): 1284-1329. https://doi.org/10.1086/669499.

- Maaboudi, R. & Dare Nazari, Z., (2021). "The Relation of Financialization With The Income Distribution and Economic Growth in Iran". *Economics Research, 21*(82): 49-90. https://doi.org/10.22054/joer.2022.60674.970 (In Persian).

- Mabeba, M., (2024). "The Effect of Financialization on Economic Growth in Developing Countries with Large Financial Sectors". *International Finance, 28*(4): 218-227. https://doi.org/10.26794/2587-5671-2024-28-4-218-227.

- Montgomerie, J. & Büdenbender, M., (2015). "Round the Houses: Homeownership and Failures of Asset-Based Welfare in the United Kingdom". *New Political Economy, 20*(3): 386–405. https://doi.org/10.1080/13563467.2014.951429.

- Osberg, L. & Sharpe, A., (2002). "An Index of Economic Well-Being for Selected OECD Countries". *Review of Income and Wealth, 48*(3): 291-316. https://doi.org/10.1111/1475-4991.00056.

- Saha, M., Dutta, K. D. & Rahman, T., (2025). "Balancing Financialization and Equity: The Crucial Role of Democratic Governance". *Future Business Journal, 11*: 1-12. https://doi.org/10.1186/s43093-025-00562-2.

- Sawyer, M., (2024). "Financial Liberalization and Financial Crisis. Chapter in Financialization: Economic and Social Impacts. Cambridge University Press. https://doi.org/10.1017/9781911116967.006.

- Stark, O., (2025). "On A Transformation of the Gini Coefficient into A Well-Behaved Social Welfare Function". *Journal of Kyklos, 78*(2): 301–304. https://doi.org/10.1111/kykl.12420

- Stiglitz, J. E., Sen, A. & Fitoussi, J. P., (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress*. https://unesdoc.unesco.org/ark:/48223/pf0000206999.

- Stockhammer, E., (2015). "Determinants of the Wage Share: A Panel Analysis of Advanced and Developing Economies". *British Journal of Industrial Relations, 7*: 1-31. https://doi.org/10.1111/bjir. 12165.

- van der Zwan, N., (2014). "Making Sense of Financialization". *Socio-Economic Review,* 12(1): 99–129. https://doi.org/10.1093/ser/mwt020.

- Vita, G. D. & Luo, Y., (2020). "Financialization, Household Debt and Income Inequality: Empirical Evidence". *International Journal of Finance & Economics in-Press*, *26*(2): 1917-1937. https://dx.doi.org/10.1002/ijfe.1886.

- Zheng, D., Yang, G., Lei, L. & Li, P., (2025). "Feed-Back Effect or Crowding-Out Effect: The Influence of Financialization on the Main Business Performance of Real Enterprises". *International Review of Economics & Finance, 98*: 103879. https://doi.org/10.1016/j.iref.2025.103879.

- Wang, Y. Z. & Zhang, Z. T., (2025). "Digital Development and Rural Financial Inclusion: Evidence from China". *Research in International Business and Finance*, *73*(PA): 102637, https://doi.org/10.1016/j.ribaf.2024.102637.

- Zhuang, C. & Fangyi, J., (2025). "The Impact of Economic Financialization on the Income Gap Between Urban and Rural Residents: Evidence from China". *Journal of Sustainability*, *17*(3484): 1-31. https://doi.org/10.3390/su17083484.

مالی سازی و رفاه در ایران: پارادوکس کیفیت نهادی

رضا معبودی'، رامین خوچیانی٢، یونس نادمی٣

چکیده

درک تأثیر مالیسازی بر اقتصاد برای سیاستگذارانی کـه بهدنبال طراحی راهبردهایی بـرای ارتقای رفاه اجتماعی هسـتند، از اهمیت حیاتی برخوردار است. این پژوهـش به بررسی اثر مالیسازی بـر رفاه اقتصـادی در ایـران طی دورهٔ ۱۴۰۲-۱۳۶۹هـ.ش. میپردازد و با بهکارگیری رهیافت رگرسیون آستانهای، پویاییهای غیرخطی را مدنظر قرار میدهد. نتایج، یک سطح آستانهای بـرای کیفیت نهادی در حد ۵۷٪ نشان میدهد. در هـر دو رژیم کیفیت نهادی پاییـن و بالا، مالیسازی تأثیـر منفی و معنـاداری بـر رفاه اقتصادی دارد؛ با ایـنحال، زمانیکه کیفیت نهادی از این آستانه فراتر رود، اثر نامطلوب مالیسازی بهطور محسوسی تشـدید میشـود. این یافتهها نقـش متناقض کیفیت نهادی را برجسته میسازد و نشان میدهد که مالیسازی بیشتـر بهطـور پیوسته رفاه در ایـران را تضعیف میکنـد و نهادهـای قویتـر، بهجای کاهـش، بر اثرات منفی آن میافزایند. به این معنـا کـه در کیفیت نهـادی بالاتر، ابزارهـای مالی پیشرفته و بازار سرمایه توسعه مییابد؛ امـا این دسترسـی معمولاً نامتقارن است؛ از ایـنرو، اقشار ثروتمند و شرکتهای بـزرگ بیشتریـن بهره را مـیبرند، درحالیکه خانوارهـای کمدرآمد سهم اندکی دارند و حتی ممکن است از افزایش هزینهٔ مسکن، تورم دارایی، یا بدهی مصرفی آسیب ببینند.

کلیدواژگان: مالیسازی، رفاه اقتصادی، کیفیت نهادی، رویکرد رگرسیون آستانه، ایران.

طبقهبندی JEL: I31, G10, O16, E44.

۱. دانشیار گروه اقتصاد، دانشکدهٔ علوم انسانی، دانشگاه آیت الله بروجردی (ره)، بروجرد، ایران (نویسندهٔ مسئول).
Email: maaboudi@abru.ac.ir
۲. دانشیار گروه اقتصاد، دانشکدهٔ علوم انسانی، دانشگاه آیت الله بروجردی (ره)، بروجرد، ایران.
Email: khochiany@abru.ac.ir
۳. دانشیار گروه اقتصاد، دانشکدهٔ علوم انسانی، دانشگاه آیت الله بروجردی (ره)، بروجرد، ایران.
Email: Younesnademi@abru.ac.ir