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RESEARCH PAPER



# **Transition Policy and Banking Stability: A New Approach to Policy Making in Islamic Banking**

Mohsen Asadian<sup>a</sup>, AbdolMohammad Kashian<sup>a,\*</sup>

a. Faculty of Economics, Management and Administrative Sciences, Semnan University, Semnan, Iran \*. Corresponding author, E-mail: a.m.kashian@profs.semnan.ac.ir

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### Abstract

This study examines the impact of "transition policy" on the stability of Islamic banks and answers the question of whether the decrease in the share of loans based on partnership contracts and the increase in the share of loans based on exchange contracts have a direct or indirect impact on the banking stability of Islamic countries. Due to the different nature of exchange and partnership contracts based on risk and profit, these two types of contracts have different effects on bank stability, and banks can use the transition policy to improve bank stability. In this study, quarterly data of four Islamic countries with significant allocation of banking resources in the form of Islamic contracts for the years 2014 to 2020 were used in a panel data regression model to investigate the direct or indirect relationship of transition policy to bank stability. The results indicate that the transition policy leads to increased banking stability by increasing the share of partnership facilities and decreasing the share of exchange facilities.

**Keywords:** Banking Stability, Exchange Contracts, Partnership Contracts, Policymakers, Islamic Economics, Islamic Banking, PLS.

JEL Classification: G21, G01.

### 1. Introduction

The issue of financial stability has become increasingly important to economists since the 2009 financial crisis. The causes of instability in financial institutions, especially banks, have been the subject of a wide range of research. Numerous studies, especially in Islamic countries, have asserted the superiority of the Islamic banking system over conventional banking. This is because they claim that countries with Islamic banking are more stable to external shocks.

One of the most important differences between Islamic banking and conventional banking is the legal framework for payment of banking services. In Islamic banking, the emphasis on the relationship between banking facilities and the physical market has resulted in banking facilities being paid only in the form of two types of partnership contracts (profit and loss sharing contracts) and exchange contracts (deferred payment transactions). The specific characteristics of these two types of contracts have meant that the weight of each of these contracts in the banks' portfolio has particular economic implications for bank performance, including the impact on bank stability, bank profitability, and other indicators. The importance and concept of these contracts have been described in detail.

Exchange contracts are contracts in which banks and financial and credit institutions provide part or all of the capital required for an economic activity, with the difference that the bank's profit is fixed and certain after the conclusion of the contract and before the implementation of this economic activity, so that future developments and possible financial changes in the economic activity are not important for the bank in terms of profit and loss. The obvious difference between this type of contract and other contracts is the profit without possible losses. This type of contract is commercial in nature and the bank has the role of a liaison in it. The risk of this type of contract is risk-free for the banks and always brings a clear profit to the banks. Among the exchange contracts, we can mention Murabahah.

In these partnership contracts, banks provide part or all of the required capital for an economic activity, including production, trade, and services, and on the maturity date. The profits and losses from this contract are shared according to the contract. What is special about this new contract is the risk of default or even loss of this economic activity, which means that the bank always makes a profit or loss in terms of risk. Mudaraba contracts, civil partnerships, and legal partnerships (Musharakah) are among the important and practical contracts of partnership contracts. Undoubtedly, the difference between the profit and risk of participatory exchange contracts has different implications for the banking stability of different countries (Taherpoor et al., 2019).

Due to the characteristics of these two types of contracts, banks can reduce the amount of participation and increase the amount of exchange to reduce the risk of the bank. This is a special feature of Islamic banking that gives the Islamic banks the policy-making power. Theoretically, the policy of transition from partnership to exchange may have a positive impact on the stability of Islamic banks, but this issue has not been empirically studied. The main topic of this study is to investigate the impact of the policy of transition from partnership to exchange on the stability of Islamic banks. Therefore, the main question of this study is whether the policy of reducing participation facilities and increasing exchange facilities has an impact on the stability of banks in Islamic countries.

In order to answer the research question, effective parameters and indicators that determine banking stability in the study area are collected and the nature and extent of their relationship with the selected contracts in the study period are evaluated. This paper examines the theoretical basis of the research and explains the impact of contract format on banking stability in Islamic banking using econometric methods in the form of panel models. In doing so, the relationship between the ratio of partnership contracts to exchange contracts and banking stability is examined. Since banking stability data for a country requires the construction of a composite index, one of the most important features of this paper is the calculation of banking stability based on a composite index. The remainder of this paper is organized as follows. Section 2 explains the background and theoretical foundations of the research and provides a literature review on the subject matter. Section 3 provides the research method. Section 4 discusses the results in detail and presents a data analysis, and finally, Section 5 concludes the paper and gives some policy implications.

### 2. Theoretical Foundations

#### 2.1 Bank Stability

One of the factors affecting the financial stability of a country is the stability of the banking sector. Historical records show that many financial crises are caused by crises in the banking system, which ultimately lead to economic recession and social crises (Sadeghi Shahedani and Nasrabadi, 2016: 86). Therefore, the stability of the banking system can be considered as part of the financial stability of an economy and the risk can spread to the whole financial system and cause instability or even a crisis in the whole system. Because banks are the most important center of financial stability (Nili, 2005: 24) and the banking sector is one of the most important sectors of the economy that can create the basic conditions for economic growth (Zalbegi Daristani, 2014: 208).

Theoretically, some important factors affect the stability of banks. In general, banking regulators in developed economies mainly rely on capital adequacy to ensure stability (Caprio and Honohan, 1999). Some experts believe that capital adequacy is not sufficient to achieve bank stability in developing countries due to structural weaknesses (Brunnermeier et al., 2009; Barth et al., 2004; Caprio and Honohan 1999). Demirgüç-Kunt and Detragiache (2002) point out that regulators place much emphasis on micro- and macroprudential regulation for bank stability, but pay little attention to factors such as institutional and structural factors that affect bank stability. According to Brunnermeier et al. (2009), the 2008 global financial crisis and several national

banking crises in countries around the world proved that crises are more likely to occur in countries with weak institutional controls and systemic interdependencies among banks in the financial system (Brunnermeier et al., 2009), and such interdependence can have serious consequences for banking stability (Ozili, 2018).

One of the most important differences between Islamic banking and conventional banking from an institutional perspective that has a significant impact on bank stability is the legal nature of banking contracts, i.e., the method of allocating bank resources. The different legal nature of contracts in Islamic banking has different implications for bank stability and enables bank managers to make policy decisions. The next section discusses these key differences.

### 2.2 Islamic Banking Contracts

In Islamic banking, several factors affect the stability of banking, one of the most important of which is the method of allocating bank funds. In Islamic banking, the receipt and payment of usury are prohibited (Quran, Surah Al-Baqarah, verse 278). Therefore, banking and financial transactions should be conducted to the exclusion of usury. In general, Islamic banking contracts are divided into four groups, namely:

- 1) Exchange contracts (deferred payment transactions);
- 2) Participation contracts (contracts for sharing profits and losses);
- 3) Qarz al-Hasna;
- 4) Direct investments, which are similar to partnership contracts in their effects and results sometimes fall into this category.

Sometimes they are divided into the following categories: Non-profit contracts (Qarz al-Hasna), profit contracts with certain interest (exchange contracts), and profit contracts with expected profits (partnership contracts and direct investments).

Bank resources are allocated mainly through exchange and partnership contracts. Therefore, these two groups of contracts constitute the largest part of Islamic banking in different countries. Therefore, these two categories will be emphasized more.

### 2.2.1 Exchange Contracts

Exchange contracts are contracts with fixed interest rates and no risk. In these contracts, the bank provides all or part of the required capital for economic activity, with the difference that after the conclusion of the contract and before the implementation of the economic activity, the bank's profit is known and the future developments and possible changes in the financial situation are anticipated. The mentioned activity (in terms of profit and loss) has nothing to do with the bank's profit

and receivables in this contract (Mousavian, 2012: 33). Some of the most important of these contracts are: Murabaha, Jo'ala, Salaf and Leasing.

### 2.2.2 Partnership Contracts

Partnership contracts are contracts in which the individual or the financial institution provides all or part of the resources needed to carry out an economic activity (production, business, or service), and eventually, the profit of the activity is shared based on an original agreement. The main features of this type of contract include profit and loss sharing, variability of profits in the contracts, and the need for continuous monitoring and control. Several types of these contracts are used in Islamic banking, including civil Shirakah, legal Shirakah, Mudaraba, Musaghah, and Mozarebah (Arab, 2021: 25).

### 2.3 The Policy of Transition from Exchange Contracts to Partnerships

An overview of the definition of exchange and partnership contracts shows that exchange contracts have fixed profits, while partnerships have variable profits. For this reason, banking policy views exchange contracts as low-risk and partnership contracts as high-risk. On the other hand, the attractiveness of partnership contracts is that banks can make more profit if they accept higher risk.

The fact that banks prefer to take higher risks to make more profit, or that they make more bill loans to reduce the bank's risk by getting fixed profit rates, allows the bank to make policy. One indicator that can accurately explain the nature of bank policy is the ratio of exchange contracts to partnership contracts. The higher the "ratio of exchange contracts to partnership contracts" index is, the more risk-averse banks are, and the higher this index is, the more risk-averse banks are.

Initially, one might think that the transition from partnership contracts to exchange contracts would lead to a reduction in risk and thus to an increase in bank stability. However, since the bank stability index is a combination of risk and profitability components, the transition could lead to a reduction in bank stability by reducing banks' profits from corporate activities. Therefore, this study attempts to determine the actual impact of these variables by considering these components.

## 3. Literature Review

Mousavian et al. (2015) studied and optimized bank's behavior under stochastic (indeterminate) conditions. In other words, given the indeterminacy of the profits of accounts and also the profits of participation contracts in interest-free banking, the

subject of stochastic calculus in mathematics is of great use in modeling the behavior of these banks. Thus, in this article, using the technique of stochastic optimal control, they investigated the behavior of this type of banks as an objective function and detected, in the form of a theoretical model, the share of participation and exchange contracts that maximized the share of the Islamic bank. They also calculated the exchange rate elasticity and the participation rate elasticity for the optimal share of contracts in the Iranian banking system.

Kočišová (2015) discussed some of the existing efforts to construct an aggregate financial stability index and attempted to construct an aggregate banking stability index (BSI) that takes into account indicators of banks' financial strength (performance and capital adequacy) and the main risks (credit and liquidity risk) that affect banks in the banking system. An aggregate BSI is then used to assess stability in European Union (EU) countries, focusing on ten countries that joined the EU in 2004. The results showed that the countries with the most stable banking sectors in 2014 were Luxembourg and Estonia. At the other end of the scale were the banking sectors in Spain, Portugal, and Greece. The results of the study showed that the average stability of the banking sector in EU countries decreased in the period 2005-2008 and improved since 2009. The improvement in recent years was positively influenced mainly by the development of capital adequacy. The results also showed that the countries that joined the EU in 2004 were positively influenced by EU accession, as evidenced by the value of BSI, which increased between the years 2004 and 2014.

Karimi and Firozan (2016) investigated the impact of exchange contract profit rates on banks' performance over the period 2008-2013 using econometric analysis and panel data estimation. Their results showed that there is a significant relationship between the profit rate and other selected variables with bank profitability. The study showed that the profit rate of foreign exchange contracts is positively related to the banks' return on assets. Hence, while the selected banks included in this study have increased their assets through various methods due to inflationary conditions, they do not welcome the decrease in the profit rate of foreign exchange contracts. This problem could also apply to all other banks, as they are owned by companies. Since the banks cannot find a solution to get out of the ownership of the companies, the conditions for high lending rates in the country are present. The results also show that the other bank variables, such as the ratio of non-interest income to assets and the ratio of loans to assets, have a significant positive correlation with bank profitability.

Taherpoor et al. (2019) studied the distribution of banking institutions with a focus on the exchange and inclusion of contracts in economic growth in Iran. For this purpose, we used time series from 1985-2015 and autoregressive distributed lag. The

results show that the coefficients of the highlighted variables were significant in the short- and long-run and were in line with expectations. The log coefficient of the financial expansion index is positive and significant in the short run with one and three intervals, and positive and significant in the long run, indicating the positive role of financial expansion in economic growth. For contracts, the index coefficient for the distribution of banking facilities (exchange to incorporation contracts) was found to be positive and significant in the short-run and long- run, illustrating the positive impact of exchange contracts on economic growth. Since the benefit rates of exchange contracts are lower and their repayment period is longer than that of incorporation contracts, and these contracts are used in productive activities (compared to unproductive ones), the distribution of facilities in favor of these contracts has a positive effect on growth.

Jani and Badpama (2020), based on the literature of Islamic economics, believe that the banking facility in the form of partnership contracts increases investment motivation compared to exchange contracts due to its return opportunities and risk sharing between the bank and the investor. For this reason, and because of the implementation of the usury-free banking law in Iran, this study analyzed the impact of banking facilities in the form of exchange and partnership contracts on private investment in Iran. Seasonal data for the period 1999-2013 and ARDL approach are used. The results show that facilities in the form of exchange and partnership contracts have a positive significant effect on private investment in the long run. The impact of partnership contracts on private investment is larger than the impact of exchange contracts, but the difference is not significant. Moreover, public investment and the price index have a negative effect on private investment, while GDP has a positive effect.

Avani et al. (2021) empirically analyzed banking stability in Islamic banking and conventional banking and answered the question of whether countries with higher penetration coefficients in Islamic banking have greater banking stability than other countries. Many researchers have put forward several legal and economic reasons for the superiority of Islamic banking over conventional banking, but this claim has never been empirically tested. Therefore, this study used data from 7 countries with the highest level of Islamic banking and 8 countries with conventional banking for the years 2008 to 2018 in the form of a panel data family regression model to test the hypothesis of a direct relationship between Islamic banking penetration and banking stability. The results of the analysis of the research data indicate that the introduction of Islamic banking and the increase in the penetration of Islamic banking have a positive significant effect on banking stability, and therefore countries with Islamic banking have higher banking stability than countries with conventional banking.

# 4. Data and Methodology

# 4.1 Data

The dependent variable in this research is BSI. Since such an index does not exist across countries with predetermined data, it is necessary to use different data to create a composite index for banking stability of different countries. Previous research has used different methods to construct the banking stability index, which are listed in the table below (Kočišová, 2015).

Author (Year)	Country	Categories (Indicators)	Weight
		Capital adequacy (CAR)	0.05
		Asset quality (NPL/TL)	0.25
Constand Hammonals (2007, 2008)	Crach Dopublic	Profitability (ROA, ROE)	0.25
Gersl and Hermanek (2007; 2008)	Czech Republic	Liquidity (LA/TA, LA/TD)	0.25
		Interest rate risk (Net position/TA)	0.10
		Foreign exchange risk (FX1, FX2)	0.10
		Asset quality (NPL/TL, NPL/E, FA/TA)	1/6
		Liquidity (LA/TA)	1/6
	Turkey	Exchange rate risk (FX1, FX2)	1/6
Central Bank of the Republic of Turkey (2008)		Profitability (ROA, ROE)	1/6
		Capital adequacy (CAR, FC/TA)	1/6
		Interest rate risk (Net position/E)	1/6
		Financial development index	0.20
		Financial vulnerability index	0.40
Albulescu (2010)	Romania	Financial soundness index	0.25
		World economic climate index	0.15
		Asset quality (NPL/TL, NPL/E, FA/TA)	1/6
		Liquidity (LA/TA, STA/STL)	1/6
		Exchange rate risk (FX1, FX2)	1/6
Bank of Albania (2010)	Albania	Profitability (ROA, ROE)	1/6
		Capital adequacy (CAR, FC/TA)	1/6
		Interest rate risk (Net position/E)	1/6

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Maudos (2012)	Spain	Profitability (ROA), Solvency (CAR), Efficiency (CI), Asset quality (NPL/TL)	No defined		
		Capital adequacy (CAR)	0.223		
		Asset quality (NII, TL/TA, DELINQ, LD)	0.208		
Ginevičius and Podviezko (2013)	Lithuania	Management (NIE/GI)	0.166		
		Earnings (PPP/RWA, NI/RWA)	0.225		
		Liquidity (TD/TL, LIQ)	0.178		
Laznia (2013)	Slovakia	Profitability (ROA) Liquidity (TD/TL) Capital adequacy (CAR) Asset quality (NPL/TL)	0.30 0.30 0.10 0.30		
		Insolvency (CAR)	0.25		
		Credit risk (NPL/TL, GNPL)	0.25		
Petrovska and Mihajlovska (2013)	Macedonia	Profitability (ROE, NIE/GI)	0.20		
		Liquidity (LA/TA, LA/TD)	0.25		
		Currency risk (Net FX/OF)	0.05		

Source: Kočišová (2015).

Each of these studies has used different methods to construct the index and determine the weights of the variables in it. However, what is used in the present study as an indicator of banking sector stability are the components approved by the International Monetary Fund, with all components weighted equally (i.e. category) and due to incomplete data, the index under 12 variables was removed. The following table shows the International Monetary Fund classification for banking stability data:

Category	Indicators
Capital adequacy	<ol> <li>Regulatory capital to risk-weighted assets, Ratio (%)</li> <li>Regulatory Tier 1 capital to risk-weighted assets, Ratio (%)</li> </ol>
Asset quality	<ul> <li>3. Non-performing loans to total gross loans, Ratio (%)</li> <li>4. Non-performing loans net of provisions to Capital, Ratio (%)</li> <li>5. Sectoral distribution of loans to total loans, Ratio (%)</li> </ul>
Earnings and profitability	<ul> <li>6. Return on assets, Ratio (%)</li> <li>7. Return on equity, Ratio (%)</li> <li>8. Interest margin to gross income, Ratio (%)</li> <li>9. Non-interest expenses to gross income, Ratio (%)</li> </ul>
Liquidity	<ol> <li>Liquid assets to total assets, Ratio (%)</li> <li>Liquid assets to short-term liabilities, Ratio (%)</li> </ol>
Exposure to foreign exchange risk	12. Net open position in foreign exchange to capital, Ratio (%)

Table 2. IMF's Core Financial Soundness Indicators

Source: International Monetary Fund (2022).

Since the above indicators have negative and positive effects on stability, it is necessary in the first phase to define the same direction for all of them and change some indicators. Therefore, the data for the indicators that are directly related to stability were not changed, but the variables that are negatively related to stability had to be adjusted and were therefore used in reverse. According to this table, the indicators that have a positive impact, such as CAR, T1 CAR, ROA, ROE, IM/ GI, LA/ TA and LA/ STL are normalized, and the indicators that have a negative impact, such as NPL/ TL/ C (NPL-P) and NIE/ GI are first modulated by inversion and then

normalized. To normalize the data, we use the following formula to set and normalize all data between zero and one.

Category	Weight	Adjustments	Indicators	Impact
Capital adequacy	0.25	Mean of normalized values	CAR T1 CAR	+ +
Asset quality	0.25	Mean of adjusted and normalized values	NPL/TL (NPL- P)/C	- -
Earnings and profitability	0.25	Mean of adjusted and normalized values	ROA ROE IM/GI NIE/GI	+ + +
Liquidity	0.25	Mean of normalized values	LA/TA LA/STL	+ +

**Table 3.** Banking Stability Index (BSI)

Source: Kočišová (2015).

The independent variable in this study is the exchange ratio (MSR), which is calculated by dividing the amount of exchange facilities in each country into participation facilities, and was chosen as the transition policy criterion. Gross domestic product (GDP) and inflation (*inf*) are also modifiers or control variables, and the data were taken from the World Bank.

### 4.2 Methodology

The main objective of this study is to investigate whether there is a relationship between transition policy and banking stability in the four Islamic countries with the highest penetration coefficient in Islamic banking for the period 2014-20200 using panel data regression. Panel data analysis has been widely used in the last decade and the primary form of panel data regression differs from a regular time series or cross-sectional regression in that the variables are double subscripted as shown in the equation below (Baltagi, 2005: 11). Using the panel data method has two advantages over the time series method and the cross-sectional method. First, it allows researchers to consider relationships between variables and even units over time. Second, the panel data method can control for individual effects of cross-sectional units that are not observable and measurable (Harris and Sollis, 2003).

$$bsi_{ij} = \alpha + \beta_1 m sr_{ij} + \beta_2 g dp_{ij} + \beta_4 inf_{ij} + e_{ij}$$

$$\tag{1}$$

where *bsi* is the banking stability of Islamic countries, *msr* is the ratio of the paid basis of the exchange rate contract to the partnership contract, *gdp* is the gross domestic

product, and *inf* is the inflation rate. In this model, *i* shows the time, the 20 quarters from 2014-2020, and *j* shows the countries (Indonesia, Pakistan, Saudi Arabia, and Malaysia). Countries such as Iran, for which complete data are not available, were excluded from the study.

### 4.2.1 Panel Unit Root Test

When regressing panel data, the panel unit root test must first be performed to determine if the relevant variables are stationary. If the variables are not stationary, this may lead to spurious regressions, and cointegration will be performed. The unit root test is performed on each of the variables to ensure that they are stationary. The unit root means that there is a significant coefficient in the model that causes the variables to be anonymous. The null hypothesis in this test indicates the anonymity of the variables. If the statistical level is less than 0.05, this hypothesis is rejected.

**Table 4.** Panel Unit Root Test (Fisher-Adf Method)Null: Unit Root (Assumes Individual Unit Root Process)

		1	At Level			First Diffe	erence		
	Statistic	Prob.**	sections	Obs	Statistic	Prob.**	sections	Obs	result
BSI	4.59687	0.7997	4	98	80.7751	0.0000	4	99	<b>I</b> (1)
GDP	10.4975	0.2318	4	91	29.0495	0.0003	4	93	<b>I</b> (1)
INF	14.7218	0.0648	4	97	58.4993	0.0000	4	92	<b>I</b> (1)
MSR	4.63300	0.7960	4	97	33.4475	0.0001	4	96	<b>I</b> (1)

Source: Research Finding.

As the results show, the variable BSI is not stationary on the level; however, the first-order difference is stationary. Similarly, the first-order difference *Inf*, *MSR*, and *GDP* variables are stationary.

### 4.2.2 Cointegration Test

One can draw an inference from the results in Table 2 that all the series are integrated with order I(1) and satisfy the basic requirements of the cointegration test. So the next step is to test whether there is a long-run relationship between the variables. There are various test procedures for cointegration such as Maddala and Wu (1999), Kao (1999), and Pedroni (1999), but the cointegration test proposed by Pedroni (1999) and Kao (1999) has been widely used in the past.

<b>Table 5.</b> Kao Residual Cointegration TestSeries: BSI INF GDP MSR				
	t-Statistic	Prob.		
ADF	-1.562010	0.05		
Residual variance	0.004205			
HAC variance	0.003661			

Source: Research finding.

As the results show, there is cointegration between variables and therefore the model used in the research uses the variables so that all variables are significant and you do not experience spurious regression.

#### 4.2.3 Pool or Panel Test/ Fix or Random Effect

After analyzing the stationary variables, the first step is to analyze the F-Limmer test to realize a pooling or panel of the statistical data. The null hypothesis of the F-Limmer statistic is based on the fact that the data are pooled. If it is rejected, the hypothesis based on panel data is accepted for the data. The F-statistic is calculated using the following equation (Shahabadi et al., 2017):

$$F_{(n-1,nt-n-k)} = \frac{[RRSS - URSS]_{n-1}}{USSS_{nt-n-k}}$$
(2)

The RRSS is the coefficient of determination of the constrained model (ordinary least squares method), and URSS is the coefficient of determination of the unconstrained model (using panel data). In the above equation, n is the total number of countries, t is the number of observations, and k is the number of explanatory variables. After ensuring that a panel data model is available in all cases, the Hausman test is used to choose between a fixed or random effects model. The null hypothesis of the Hausman test for statistical data is based on a random effects model. If the null hypothesis is rejected, this indicates that the alternative hypothesis, i.e., the existence of a fixed effects model, is accepted. In other words: If the Hausman test statistic is greater than its critical values or the statistical probability (prob) is less than 5%, the null hypothesis is rejected and the theory of a fixed effects model is accepted (Shahabadi et al., 2017).

<b>Table 6.</b> Result of Pool or Panel Test						
Effects Tests	Statistic	DF	PRO			
Cross-section F	8.008426	(3,101)	0.0001			
Cross-section Chi-square	23.046705	3	0.0000			
Source: Research Finding.						

The result shows that the null hypothesis is rejected and thus the data is panel. Considering that the H0 hypothesis was rejected by the F-Limer hypothesis against the H1 hypothesis, the Hausman test is required to choose between fixed and random effects models. In other words, the use of the panel data model was validated for each of the hypotheses based on the results of the F-Limer (Chao) test. The next step is Hausman test to choosing between fix or random effect.

 Table 7. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. D.F	Pro
Cross-Section Random	24.025277	(3)	0.0000
ource: Research Finding			

**Source:** Research Finding.

As the results show the model must be estimated by fix effect.

### 5. Results and Discussion

## **5.1 Descriptive Statistics**

Table 7 shows the descriptive statistics of the different variables. We used BSI as the bank stability index, with a range from 0 (lowest bank stability) to 1 (highest bank stability). The data range from 0.17 to 0.79, with a mean of 0.50 and a median of 0.49. The MSR, the transition policy index, has a normal distribution from 0.0002 to 2.61, with a mean of 0.51 and a median of 0.27, showing that in our case study the share of partnership contracts is half of the exchange contracts. The same information is presented for *Gdp* and *Inf*.

Table 8. Descriptive Statistic					
	BSI	GDP	INF	MSR	
Mean	0.504622	0.120369	3.256838	0.519989	
Median	0.498462	0.083031	3.019515	0.271029	
Maximum	0.798139	0.287484	13.22202	2.612124	
Minimum	0.170430	0.059461	-3.202965	0.002160	
Std. Dev.	0.139928	0.074387	2.976108	0.578528	
Skewness	0.093477	1.202221	0.864043	1.220975	
Kurtosis	2.722247	2.629010	4.607129	3.702139	
Jarque-Bera	0.504445	26.63539	25.06117	29.05255	
Probability	0.777072	0.000002	0.000004	0.000000	
Observations	108	108	108	108	

Source: Research finding.

#### 4.3 Estimation of Model

Models were fitted using balanced panel data from four Islamic countries quarterly over a 7-year period from 2014 to 2020. The sample includes 28 observations for each country. In this paper, the relationship between the banking stability variable and transition policy was examined using panel data models. The estimated parameters are reported in Table 8. The variable MSR, the transition policy index, has positive significant effects on banking stability as estimated in Table 8. That is the transition policy leads to increased banking stability by increasing the share of partnership facilities and reducing the share of exchange facilities. From a risk analysis point of view, the results obtained may be at odds with the conventional intuition, because the conventional intuition is that a higher proportion of partnership contracts leads to higher risk and thus reduces bank stability. However, bank stability is a composite indicator that also includes earnings and return components. As a result, banks' risk-taking and shifting resources to partnership contracts has led to an improvement in their bank stability index, which can be explained by an improvement in income levels.

Table 9. Estimating	Parameters 1	Bv Panel	Data Regression
		J	

	U	•	0	
Variable	Coefficient	t-statistic	dev	Prob
С	0.294477	2.438991	0.120737	0.0165
MSR	0.266969	4.037300	0.066126	0.0001
INF	-0.020679	-3.478475	0.005945	0.0007
GDP	1.152059	1.158014	0.994858	0.2496

Source: Research finding.

As the results show, inflation has a negative and significant effect on banking stability. In other words, an inflationary economy experiences less banking stability. In contrast, the effect of GDP on banking stability is positive. In other words, when the level of GDP increases, banking stability also increases. However, the coefficient obtained in this variable is not significant at the level of 95% and therefore the analysis is distorted.

#### 6. Conclusion

The objective of this study was to introduce the transition policy and investigate its impact on banking stability of selected Islamic countries during the period 2014-2020 using a panel data approach. The BSI is an index composed of different variables covering different areas of banking system performance. The results show that the estimated coefficient of MSR is positive and significant. That is the transition policy (increasing the share of bank resource allocation based on partnership contracts and decreasing the share of exchange contracts) increases the stability of the banking system. In other words, the transition policy leads to increased banking stability by increasing the share of partnership facilities and decreasing the share of exchange facilities. The results show, inflation has a negative and significant effect on banking stability. In contrast, the effect of GDP on banking stability is positive and insignificant. In other words, when the level of GDP increases, banking stability also increases. The coefficient obtained in this variable is not significant at the level of 95% and therefore the analysis is distorted.

Since the model used in this study is a panel data model, the results obtained in this study cannot be analyzed for a specific country. For future research, it is suggested that these estimates be done for a specific country or even just for a specific bank in order to make policy decisions for a specific case.

# References

Arab, M. (2021). The Impact of Stock Market Risk on the Transfer of Banking Facilities from Corporate Contracts to Exchange Contracts in Iran (Unpublished Master's Thesis). University of Semnan, Iran.

Avani, M., Kashian, A. M., & Erfani, A. R. (2021). An Empirical Analysis of Banking Stability in Islamic and Conventional Banking Systems. *Islamic Economics Studies Bi-quarterly Journal*, *13*, 247-287.

Barth, J. R., Caprio, G., & Levine, R. (2004). Bank Regulation and Supervision: What Works Best? *Journal of Financial Intermediation*, *13*(2), 205-248.

Brunnermeier, M. K., Crockett, A., Goodhart, C. A., Persaud, A., & Shin, H. S. (2009). *The Fundamental Principles of Financial Regulation* (11). Geneva: ICMB.

Caprio, G., & Honohan, P. (1999). Restoring Banking Stability: Beyond Supervised Capital Requirements. *The Journal of Economic Perspectives*, *13*, 43-64.

Demirgüç-Kunt, A., & Detragiache, E. (2002). Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation. *Journal of Monetary Economics*, 49(7), 1373-1406.

Jani, S., & Badpama, H. (2020). Analyzing Banking Facilities Effect on Private Investment in the Form of Exchange and Partnership Contracts. *Islamic Economics Studies Bi-quarterly Journal*, *12*, 233-261.

Karimi, M., & Firozan, T. (2016). The Impact of Profit Rate of the Exchange Contracts on the Bank Performance. *Journal of Quarterly Journal of Islamic Finance and Banking Studies*, *1*, 115-139.

Kočišová, K. (2014). Banking Stability Index: A Cross-Country Study. *Košice*, 4001, 197-208.

Mousavian, A. (2012). *Interest-free Banking From Theory to Practice*. Tehran: Danesh va Andisheh Moaser.

Mousavian, S. A., Hastiani, A. A. H., & Moqaddam, R. H, (2015). Determining Participatory and Exchange Contracts, Optimal Share in the Interest-free Banking. *Journal of Islamic Economics*, *14*, 85-98.

Nili, F. (2005). An Introduction to Financial Stability. Tehran: Centeral Bank of Iran.

Ozili, P. (2018). Banking Stability Determinants in Africa. *International Journal of Managerial Finance*, 14, 1-29.

Sadeghi Shahedani, M., & Nasrabadi, D. (2016). (Case study: 2008 Financial Crisis) Constancy of Islamic Banking against Financial Crisis. *Islamic Economics Studies Bi-quarterly Journal*, *9*, 85-118.

Shahabadi, A., Samari, H., & Morteza, N. (2017). The Factors Affecting Environmental Performance Index (EPI) in Selected OPEC Countries. *Journal of Iranian Economic Review*, 21, 457-467.

Taherpoor, J., Mohammadi, T., & Fardi Kalahrodi, R. (2019). The Influence of Banking Facilities Distribution on Iran's Economic Growth; By Emphasis on Incorporating Exchanging Contracts. *Islamic Economics Studies Bi-quarterly Journal*, *12*, 151-76.

Zalbegi Daristani, H. (2014). Factors Affecting Stability in Iran's Banking Network. *Monetary and Banking Research*, 20, 20-32.



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