



Relationship between Rate of Return on Foreign Exchange Islamic and Conventional Deposits in Turkey

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ABSTRACT

The causal relationship between the rates of return on deposits of Islamic banks and deposits of conventional banks in an economy with dual banking systems is a significant area of study in the literature. While studying this causal relationship, vast majority of the existing studies consider domestic currency deposits. In this paper instead of domestic currency deposits, I consider foreign exchange currency deposits. By employing Toda-Yamamoto causality analysis, a causality relationship for all the maturity groups is found, but not for the 12-months maturity. For dollar accounts, the causality relationship between rate of returns of Islamic and Conventional banking is found to be two-way. For Euro accounts, this causality relationship is found to be one way, where the interest rate of conventional banks is Granger cause of profit share of Islamic banks.

Keywords: Profit Share, Interest Rate, Foreign Exchange Deposits, Islamic Banking, Turkish Banking System

JEL Classification: G20, G21, E43

Türkiye’de İslami ve Geleneksel Banka Döviz Mevduatlarının Getirileri Arasındaki İlişki

ÖZ

Dual bankacılık sistemine sahip ekonomilerde İslami ve geleneksel banka mevduatlarının getirileri arasındaki nedensellik ilişkisi, literatürde önemli bir çalışma alanı teşkil etmektedir. Mevcut çalışmaların hemen hemen tümü, bu nedensellik ilişkisini yerli para cinsi mevduatlar özelinde değerlendirmektedir. Bu çalışmada yerli para cinsi mevduatlar yerine döviz cinsi mevduatlar ele alınmıştır. Toda-Yamamoto nedensellik yönteminin kullanıldığı analizlerde, 12 ay ve daha uzun vade grubu dışındaki tüm vade gruplarında nedensellik ilişkisi tespit edilmiştir. Dolar cinsi mevduatlarda, İslami ve geleneksel banka mevduat getirileri arasında çift yönlü nedensellik ilişkisi bulunmaktadır. Avro cinsi mevduatların getirileri arasında ise mevduat faiz oranının, kar paylarının Granger nedeni olduğu, tek yönlü nedensellik ilişkisi bulunmaktadır.

Anahtar Kelimeler: Kar Payı, Faiz Oranı, Döviz Tevdiat Hesapları, İslami Bankacılık, Türk Bankacılık Sistemi

JEL Sınıflandırması: G20, G21, E43

Geliş Tarihi / Received: 15.03.2018 Kabul Tarihi / Accepted: 30.04.2018

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1. INTRODUCTION

Although its modern history is relatively new compared to conventional finance, Islamic finance which is bounded both by conventional and Islamic financial constraints, is growing rapidly in the world. The global size and the growth rate of Islamic finance sector is given in Table 1.

Table 1: Size and Growth of Global Islamic Finance Sector

	Size		Growth
	Bil \$	Bil \$	%
2008	822	183	28,6
2009	1.036	214	26,0
2010	1.139	103	9,9
2011	1.357	218	19,1
2012	1.631	274	20,2
2013	1.813	182	12,3
2014	1.981	178	9,3
2015	2.143	261	7,3
2016	2.293	150	7,0

Source: Global Islamic Finance Report 2017

According to Table 1, Islamic finance, which is operated by 1329 financial institutions, including 480 banks in 2016, has a rapid growth performance (Participation Banks, 2016: 37). For 2020 it is estimated that this industry will reach 3006 million dollars, under the assumption that Islamic finance will keep the growth rate of 2016 (7%) and 4362 million dollars, assuming that the period average will keep its growth rate (15,5%) (Global Islamic Finance Report 2017: 37).

Islamic banks are the most important financial intermediaries of this rapidly growing industry, which has recently achieved a significantly accelerated development.¹ Many of the Islamic banks operate in the economies with dual structures where both conventional and Islamic banks exist. Operating in a dual banking system means, that Islamic banks are competing not only with one another but also with the conventional banks.

For both conventional and Islamic banks, main funding sources are deposits on which they pay returns. While the returns paid to depositors by conventional banking is defined as the deposit interest rate, in Islamic banking this return is called as profit share rate².

In an economy, interest rates are determined within the framework of liquidity supply and demand conditions in the market. Although there may exist multiple interest rates³ in an

¹ The share of Islamic banking is nearly 80% of Islamic Finance Industry in 2016 (Islamic Financial Services Industry Stability Report, 2017: 8)

² In this paper I prefer to call “interest rate” to rate of returns on deposits in conventional banks and “profit share” to rate of returns on deposits in Islamic banks.

economy, these rates generally move together. Under the assumption that the other conditions remain stable, the increase in liquidity demand (decrease in supply) increases interest rates, while a decrease in liquidity demand (increase in supply) causes a decrease in interest rates. Interest rate of deposits is one of the several interest rates existing in an economy. Interest rate is known in advance by the depositor before the deposit relationship between the customer and the conventional bank. In other words, the interest rate is determined at the beginning of the period (ex ante) and is the purchase price of the deposit by the bank.

On the other hand, the process of determining profit share in Islamic banking is quite different. Since trading money is forbidden in Islam and Islamic banking needs to work in harmony with this, Islamic banks avoid working with interest. For this reason, the relationship between the depositor and the Islamic bank is quite different from conventional banking. In Islamic banking, instead of buying deposits from the depositor, the depositor and the bank establish a partnership on the operating of deposits. In Islamic Banking, profits are earned by using the loans from the pool of the collected deposits and then, this profit is shared by the depositors and the bank. According to this working structure, the amount of profit share to be taken by the depositors, which is uncertain at the deposits are deposited, is determined at the end of the maturity (ex post).

Despite the differences in these work arrangements, the question whether the rates of return paid to customers in the two banking systems are similar or different draws attention. The relationship between the rates of returns of both types of deposits has been empirically studied in many papers. Most of these papers have found a causal relationship between interest rates and profit shares. The reason behind this relation is thought to be lending preferences of Islamic banks.⁴

While studying the causal relationship between interest rates and profit shares the vast majority of the existing studies consider domestic currency deposits. Therefore, it is not that clear whether this causal relationship still holds in case of foreign exchange deposits. This paper considers this situation and analyses foreign exchange deposits in Islamic and conventional banking sectors in Turkey with different maturity groups (1, 3, 6 and 12 and longer term) by using Toda-Yamamoto causality method.

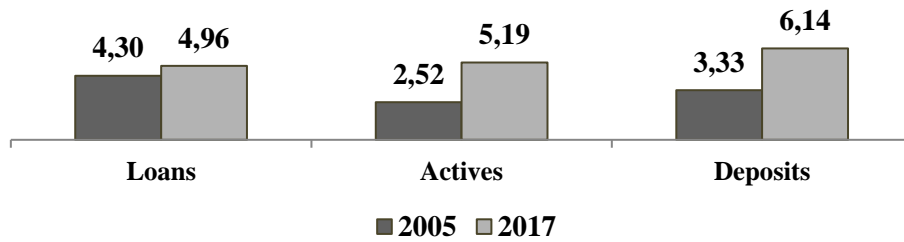
2. FOREIGN EXCHANGE TIME DEPOSITS IN TURKISH BANKING SECTOR

Investments in an economy are considered as the basic dynamics of economic development. However, investment decisions depend on procuring the funds for investment. From this point of view, financial system, especially banks, plays an important role of transferring funds needed for investment.

The shares of Islamic banking in Turkish banking system for 2005 and 2017 are given in Graph 1. According to Graph 1, although the share of Islamic banking increased from 2005 to 2017, this increase is higher in total assets and deposits compared to the increase in total loans.

³ The reason why the interest rates differ is explained by the term structure of the interest rates by the economic theory.

⁴ For a detailed theoretical explanation why return rate of Islamic deposits are affected by interest rates, see Ergeç and Asutay (2018).



Graph 1: Share of Islamic Banking in Turkish Banking System

Source: Banking Regulation Supervision Agency (BDDK)

Table 2 shows some ratios of deposits which are the main funding source for the banking system for Islamic and conventional banking in Turkey.

Table 2: Share of Deposits in Turkish Banking System

	Total Dep./Total Liabilities		Demand Dep./Total Dep.		Time Dep./Total Dep.	
	CB*	IB*	CB	IB	CB	IB
2005	65,0	85,2	21,0	23,1	79,0	76,9
2006	65,4	82,2	18,3	21,7	81,7	78,3
2007	65,0	76,7	17,2	18,9	82,8	81,1
2008	65,8	73,7	14,7	18,1	85,3	81,9
2009	64,9	78,9	16,6	19,0	83,4	81,0
2010	64,0	77,4	17,2	19,4	82,8	80,6
2011	61,7	70,8	18,1	25,6	81,9	74,4
2012	60,7	69,9	18,6	21,9	81,4	78,1
2013	58,9	65,6	19,3	24,2	80,7	75,8
2014	57,5	64,0	19,3	24,4	80,7	75,6
2015	57,2	63,0	19,4	26,9	80,6	73,1
2016	58,3	63,6	20,9	28,8	79,1	71,2
2017	57,3	67,1	21,0	30,7	79,0	69,3

Source: BDDK

* CB: Conventional banks and IB: Islamic banks

The first two columns of Table 2 show that the share of deposits in total liabilities decreased for both Islamic and conventional banking. Hence the ability of finding funds outside the deposit increased. However, the decrease in the share of deposits in total liabilities is more

significant for Islamic banks. As the source of funding, for Islamic banks, the importance of deposits is higher than for conventional banks.

According to the last four columns of Table 2, the share of demand deposits of Islamic banks is higher, the share of time deposits is lower compared to conventional banks. This can be interpreted as the tendency to use time deposits as a traditional means of savings is relatively weak for Islamic banking customers.

Table 3: Share of Islamic Banking in Total Deposits of Turkish Banking System

	Domestic Currency Deposits			Foreign Exchange Deposits		
	Total	Demand D.	Time D.	Total	Demand D.	Time D.
2005	2,94	3,32	2,85	4,52	4,67	4,47
2006	2,94	3,68	2,79	5,25	5,38	5,21
2007	3,52	4,50	3,34	5,98	5,35	6,14
2008	3,87	5,13	3,68	5,47	5,83	5,40
2009	5,18	6,20	5,00	6,09	6,31	6,04
2010	5,44	6,41	5,26	6,42	6,32	6,45
2011	5,36	6,80	5,08	5,72	7,05	5,43
2012	5,62	6,41	5,47	7,11	7,38	7,05
2013	6,24	8,04	5,84	6,88	8,15	6,60
2014	5,96	7,74	5,57	6,73	8,16	6,38
2015	5,75	7,63	5,31	6,64	9,34	5,96
2016	5,76	7,51	5,31	5,50	7,98	4,87
2017	6,04	7,63	5,64	6,34	10,12	5,27

Source: BDDK

In Table 3 the share of Islamic bank deposits in total deposits of the Turkish banking system is being given. According to this table, the share of Islamic banks in total deposits increased both in domestic and foreign currencies. However, the increase of domestic currency deposits is higher than foreign exchange deposits of Islamic banks.

Table 4: Share of Foreign Exchange Deposits in Turkish Banking System

	Demand Dep./Total Dep.		Time Dep./Total Dep.	
	IB	CB	IB	CB
2005	24,7	23,9	75,3	76,1
2006	22,6	22,0	77,4	78,0
2007	18,0	20,2	82,0	79,7
2008	18,1	17,0	81,9	83,0
2009	19,3	18,6	80,7	81,4
2010	18,8	19,1	81,2	80,9
2011	21,9	17,6	78,1	82,4
2012	19,8	19,1	80,2	80,9
2013	21,0	17,5	79,0	82,5
2014	23,9	19,5	76,1	80,5
2015	28,1	19,4	71,9	80,6
2016	29,4	19,7	70,6	80,3
2017	35,2	21,2	64,8	78,8

Source: BDDK

The distribution of time deposits of foreign currency for both banking types is given in Table 4. The share of demand deposits in total deposits is higher in Islamic banks compared to conventional banks. This proportion increased from 24,7% to 35,2% for Islamic banks, while for conventional banks it is decreased between 2005 and 2017.

Table 5: Share of Maturity Groups in Foreign Exchange Deposits in Turkish Banking System

	Islamic Banks				Conventional Banks			
	1M	3M	6M	12M	1M	3M	6M	12M
2005	67,3	19,0	3,6	10,1	33,9	41,6	12,9	11,6
2006	79,4	13,5	2,8	4,3	37,8	42,3	8,3	11,6
2007	50,5	25,3	9,3	15,0	39,4	41,3	6,8	12,5
2008	36,5	23,0	6,7	33,9	42,3	39,6	6,5	11,6
2009	45,3	22,7	8,8	23,2	37,3	46,9	5,2	10,5
2010	48,2	23,9	7,5	20,5	34,7	48,5	5,9	10,9
2011	25,5	28,2	4,6	41,7	22,8	57,6	8,0	11,5
2012	25,1	34,9	3,4	36,6	19,9	59,6	7,0	13,5
2013	35,4	39,7	6,0	18,9	18,0	61,7	5,8	14,4
2014	29,5	49,4	5,9	15,3	17,8	62,5	6,3	13,4
2015	18,2	65,8	4,4	11,5	19,1	63,2	5,7	11,9
2016	23,5	60,7	5,8	10,0	15,9	67,2	5,3	11,5
2017	26,5	60,4	6,2	6,9	16,5	67,2	5,1	11,2

Source: BDDK

The distribution of maturity groups of foreign currency deposit is given in Table 5. According to this table, the spread of the foreign currency is extended in both types of banking.⁵ In Islamic banks, the biggest share in 2005 is 1-month deposits, but in 2017, a 3-month deposit is the largest maturity group. In the same period, the maturity group with the largest share has remained unchanged in conventional banking, while the share of 3-month deposits has increased from 42% to 67%. Another consequence of the table is that the share of 1- and 6-month deposits is higher than that of conventional banking in Islamic banking.

3. LITERATURE REVIEW

The relationship between the rate of returns of Islamic and conventional banking in economics which has dual banking systems is one of the popular topics in empirical Islamic banking literature. Many papers such as Kaleem and Isa (2003), Bacha (2004), Rosly (1999), Haron and Ahmad (2000), Kasri and Kassim (2009), Chong and Liu (2009), Sukmana and Kassim (2010), Zaionol and Kassim (2010), Ito (2013) and Adewuyi and Naim (2016) study this topic and find causal relationship between interest rates and profit shares. With the same motivation some papers such as Çevik and Charap (2011), Erturk and Yuksel (2013), Ergeç and Kaytancı, (2014), Sarac and Zeren (2015), Ata, Buğan and Çiğdem (2016) and Yüksel, Canoz and Ozsarı (2017) find similar relation in case of Turkey. Table 6 presents the findings of these papers. According

⁵From 2006 to 2016, the average maturity for foreign currency deposits increased from 106 days to 116 days in conventional banks and from 56 to 108 days in Islamic banks (Ergeç and Asutay; 2018: 76).

to this table, generally a one way causal relationship between interest rates and profit shares is found which is from conventional to Islamic banks.

Table 6: Empirical Studies Focused on Causality Relationship between the Interest Rates and Profit Shares in Turkey

Author(s)	Period	Methodology	Summary of Results
Cevik and Charap (2011)	1997 - 2000	Granger Causality	Interest rates are Granger cause of profit shares
Erturk and Yuksel (2013)	2005- 2013	Granger Causality and VAR	For all maturity groups except the 12-month maturity, causality is from interest rates to profit shares and For 12-month maturity, opposite way causality. After 2008 Crises; causality from interest rates to profit shares
Ergec and Kaytancı (2014)	2002-2010	Granger Causality	Interest rates are Granger cause of profit shares. This causality is more visible after 2006.
Sarac and Zeren (2015)	2001-2013	Granger Causality	Interest rates are Granger cause of profit shares.
Ata, Bagan, and Cigdem (2016)	2004-2014	Hacker and Hatemi Causality	They found for all the maturity groups except the 12-month maturity, causality from interest rates to profit shares. For 12-month maturity, results show two way causality
Yuksel, Canoz and Ozsarı (2017)	2000-2016	Toda-Yamamoto Causality	Bi-causality is determined between interest rates and profit shares.

The papers existing in the literature are generally focused on the rate of returns of domestic currency deposits. In this paper, I consider the rate of return on foreign exchange deposits to determine the causal relationship between interest rates and profit shares. For this purpose, the rate of returns of Dollar and Euro deposits in Islamic and conventional banking are analyzed on different maturity groups (1, 3, 6 and 12 and longer term).

4. DATA AND METHODOLOGY

In this paper, Toda-Yamamoto causality method is used to investigate the causality relationship between profit share rate of participation accounts and interest rate of time deposit accounts. For the causality test developed by Granger (1969), which is used to determine the causality relation, variables need to be stationary. On the other hand, for Toda-Yamamoto (1995) analysis the variables do not need to be stationary and, the non-stationarity and cointegration relationship of the variables do not affect the results of analysis.

Toda-Yamamoto method that is based on the VAR model, the optimal lag (k) and maximum co-integration level (d_{max}) should first be determined. k is determined by using information criteria in VAR model and maximum co-integration level is determined by unit root tests. For Toda-Yamamoto causality analysis, a VAR model with the $k+(d_{max})$ lag structure is estimated by using at the level of the variables and then the MWALD hypothesis test is applied. The equations with two variables and the hypotheses to apply the Wald test are as follows:

H_0 : Profit share rate (PS) is not Granger cause of interest rate (IR).

$$IR_t = \alpha_0 + \sum_{i=1}^k \alpha_{1i} IR_{t-i} + \sum_{j=k+1}^{d_{max}} \alpha_{2j} IR_{t-j} + \sum_{i=1}^k \beta_{1i} PS_{t-i} + \sum_{j=k+1}^{d_{max}} \beta_{2j} PS_{t-j} + v_{1t}$$

H_0 : Interest rate is not Granger cause of profit share rate.

$$PS_t = \mu_0 + \sum_{i=1}^k \mu_{1i} PS_{t-i} + \sum_{j=k+1}^{d_{max}} \mu_{2j} PS_{t-j} + \sum_{i=1}^k \xi_{1i} IR_{t-i} + \sum_{j=k+1}^{d_{max}} \xi_{2j} IR_{t-j} + v_{2t}$$

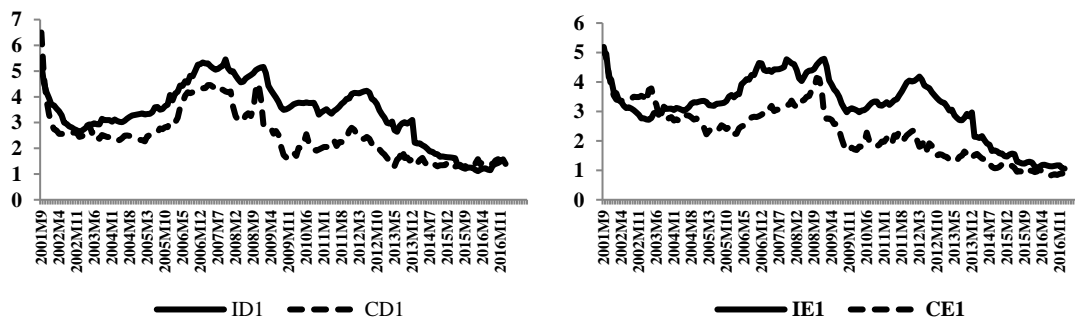
The significance of the causality relationship depends on the coefficients (β and ξ) of these equations. If the null hypothesis, which states that the coefficients are equal to zero, is rejected then this means the Granger causality runs between these variables. The rejection of the null hypothesis for the first equation implies that PS is Granger cause of IR. Whereas, the rejection of the null hypothesis for the second equation, implies that IR is Granger cause of PS.

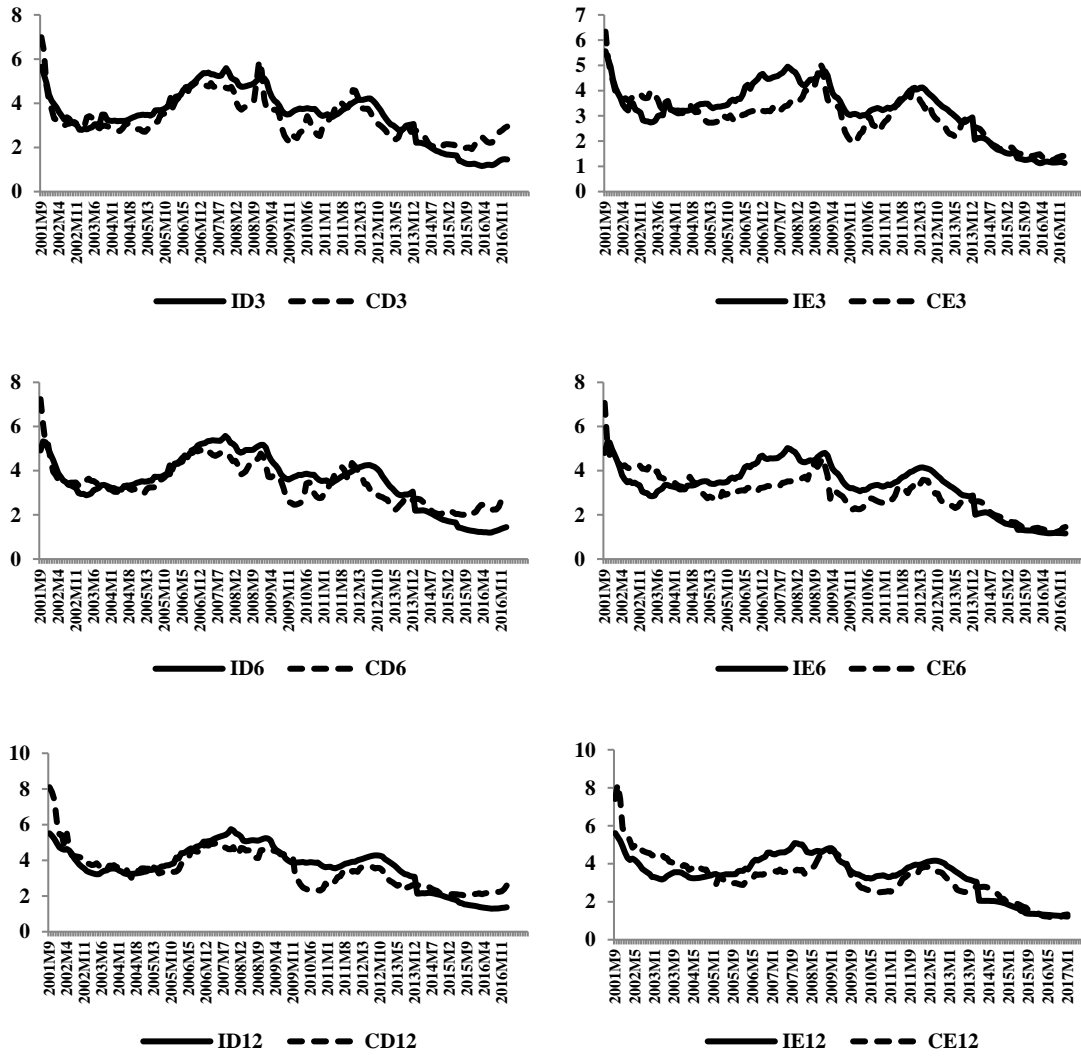
The series used in this study are presented in Table 7 below. For four maturity groups (1, 3, 6 and 12 and longer term), profit shares and interest rates for dollar and euro deposits are used in this study.

Table 7: List of Variables

ID1	Profit Share of OneMonthDollar Deposit
CD1	Interest Rate of One MonthDollar Deposit
IE1	Profit Share of OneMonthEuroDeposit
CE1	Interest Rate of One MonthEuroDeposit
ID3	Profit Share of ThreeMonthsDollar Deposit
CD3	Interest Rate of ThreeMonths Dollar Deposit
IE3	Profit Share of ThreeMonths EuroDeposit
CE3	Interest Rate of ThreeMonths EuroDeposit
ID6	Profit Share of SixMonths Dollar Deposit
CD6	Interest Rate of Six Months Dollar Deposit
IE6	Profit Share of SixMonths EuroDeposit
CE6	Interest Rate of Six Months EuroDeposit
ID12	Profit Share of One Year and Longer Dollar Deposit
CD12	Interest Rate of One Year and Longer Dollar Deposit
IE12	Profit Share Rate of One Year and Longer EuroDeposit
CE12	Interest Rate of One Year and LongerEuroDeposit

The dataset used in the study contains 185 monthly observationsfor the period between September 2001 and January 2017.Profit share rates offour Islamic banks are collected from the Participation Banks Association of Turkey and then their average is calculated. Theaverage interest rate of conventional banks is obtained from the Central Bank of the Republic of Turkey. Graph 2 below shows the comparison of interest rates and profit sharesfor the given time interval.





Graph 2: Rate of Returns of Participation and Time Deposit Accounts

According to the graphs, the return rates of the deposits in the two banking systems are similar. Descriptive statistics for interest rates and profit shares are given in Table 8.

Table 8: Descriptive Statistics of Profit Share and Interest Rate

	Mean		Max		Min		Std.Dev.	
	IB	CB	IB	CB	IB	CB	IB	CB
1M								
Dollar	3,37	2,49	5,45	6,50	1,11	1,24	1,16	0,95
Euro	3,16	2,30	4,99	5,19	1,06	0,81	1,02	0,92
3M								
Dollar	3,46	3,30	5,65	6,99	1,16	1,92	1,18	0,94
Euro	3,24	2,94	5,56	6,34	1,12	1,19	1,06	0,88
6M								
Dollar	3,52	3,39	5,58	7,24	1,20	1,95	1,19	0,92
Euro	3,31	2,98	5,28	7,07	1,16	1,21	1,07	0,92
12M								
Dollar	3,65	3,50	5,75	8,10	1,29	2,02	1,18	1,08
Euro	3,42	3,30	5,61	8,18	1,22	1,13	1,06	1,14

According to Table 8, the average profit shares are higher than the interest rates for both dollar and euro deposits. Although this holds for all maturity groups, the highest difference between the median of profit share and interest rate is achieved for one-month deposits. The difference between the two bank averages in this maturity group is 0.88% for dollar deposits and 0.86% for Euro deposits. Moreover, the smallest difference between profit share and interest rate is achieved for six-months deposits with 0.13% for dollar deposits and 0.12% for Euro deposits.

For the standard deviation levels, for all Dollar maturity groups, the standard deviation seems to be higher in Islamic banks compared to the conventional banks. A similar result holds for Euro accounts too. For Dollar accounts, the difference between the standard errors for the two banking systems is higher compared with the difference between the standard deviations of Euro accounts.

5. EMPIRICAL RESULTS

For testing the stationarity of the variables, Augmented Dickey Fuller (ADF) method is used in this paper. The results of ADF tests are given in Table 9. These results are taken into account when determining co-integration level in casualty testing process.

Table 9: Augmented Dickey Fuller (ADF) Stationary Test Results

	Level			First Dif.		
	t-Stat.	Prob.*	Type*	t-Stat.	Prob.*	Type
CD1	-2,6484	0.2596	T+I	-11,0499	0.0000	None
ID1	-1,2799	0.1845	None	-10,8782	0.0000	None
CE1	-3,4758	0.0450	T+I	-10,3655	0.0000	None
IE1	-1,0590	0.2609	None	-6,9400	0.0000	None
CD3	-2,2389	0.1934	T	-10,9972	0.0000	None
ID3	-0,0528	0.3229	None	-5,3301	0.0000	None
CE3	-3,0054	0.1336	T+I	-9,0773	0.0000	None
IE3	-1,1571	0.2250	None	-5,2575	0.0000	None
CD6	-2,7336	0.0703	T	-9,4507	0.0000	None
ID6	-1,2820	0.1839	None	-4,2626	0.0000	None
CE6	-5,6010	0.0000	T+I	-14,5069	0.0000	None
IE6	-2,0576	0.0383	None	-9,5615	0.0000	None
CD12	-4,8100	0.0001	T	-12,4848	0.0000	None
ID12	-1,3818	0.1549	None	-5,8694	0.0000	None
CE12	-2,6990	0.2384	T+I	-8,6944	0.0000	None
IE12	-1,9748	0.0465	None	-8,9189	0.0000	None

*T:Trend, I: Intercept

Before Toda-Yamamoto test, VAR models were employed to determine the optimal lagby using the information criteria. The LM test is used to detect autocorrelation at the optimal lag if it exists.

In the next step, for Toda Yamamoto causality analysis, a VAR model with $k+(d_{max})$ lag length is estimated by using the level of the variables and the MWALD hypothesis test is applied. The results of these tests are given in Table 10.

Table 10: Toda and Yamamoto No-causality (Modified WALD) Tests Results

Mat.	Cur.	PS Not Cause IR		IR Not Cause PS		df
		Chi-sq	Prob.	Chi-sq	Prob.	
1M	\$	1,1278	0,010	1,8157	0,000	3
	€	2,8680	0,412	3,3262	0,000	3
3M	\$	2,1415	0,000	1,3804	0,008	4
	€	5,2192	0,266	1,4726	0,005	4
6M	\$	1,0876	0,028	1,4237	0,007	4
	€	6,5954	0,086	1,1080	0,011	3
12M	\$	1,0246	0,069	5,8178	0,324	5
	€	4,1446	0,529	6,0911	0,298	5

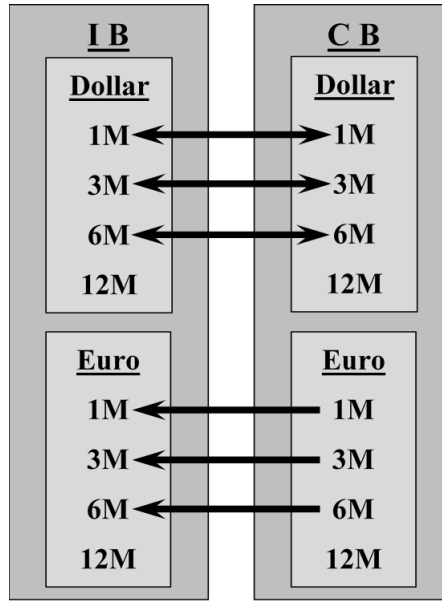
The null hypothesis stating that there is no causal relationship between interest rate and profit share with one year and longer maturity is not rejected. On the other hand for both Dollar and Euro deposits, this hypothesis is rejected at the 5% significance level when applied to other maturity groups. For all maturity groups except one year maturity, the causality relationship between interest rates and profit shares on Dollar and Euro deposits is detected. The causality relationship between interest rates and profit shares is found to be one way for Euro deposits and bidirectional for dollar deposits.

6. CONCLUSION

Although its modern history is relatively new compared to conventional finance, Islamic finance which is bounded both by conventional and Islamic financial constraints, is growing rapidly in the world. Islamic banks are the most important financial intermediaries of this finance model which is bound by conventional financial constraints as well as constraints of compliance with Islamic religion. Many of the Islamic banks operate in the economies with dual structures where both conventional and Islamic banks exist. For both conventional and Islamic banks, main funding sources are deposits on which they pay returns. While the returns paid to depositors by conventional banking is defined as the interest rate, in Islamic banking this return is called as profit share. Interest rate is known in advance by the depositor before the deposit relationship between the depositor and the conventional bank. In other words, the interest rate is determined at the beginning of the maturity and is the purchase price of the deposit by the bank. On the other hand, the process of determining profit rates in Islamic banking is quite different. In Islamic banking, instead of buying deposits from the depositors, the depositor and the bank establish a partnership on the operating of deposits. In Islamic Banks, profits are earned by using the loans from the pool of the collected deposits and then, this profit is shared by the depositors and the bank. According to this working structure, the amount of profit share to be taken by the depositors, which is uncertain at the deposits are deposited, is determined at the end of the maturity.

Despite the differences, the question whether the interest rates and profit shares in the two banking systems are similar or different draws attention. The relationship between the interest rates and profit shares has been empirically studied in many papers. Most of these papers have found a causal relationship between interest rates and profit shares. While studying the

causal relationship between interest rates and profit shares the vast majority of the existing studies consider domestic currency deposits. Therefore, it is not that clear whether this causal relationship still holds in case of foreign exchange deposits. This paper considers this situation and analyses foreign exchange deposits in Islamic and conventional banking sectors in Turkey with different maturity groups (1, 3, 6 and 12 and longer term) by using Toda-Yamamoto causality method. The results of causality analyzes, which summarized in the following diagram, shows that there is a causality relationship between all the maturity groups except the 12-and longer term.



A two-way causality relationship between the interest rates and profit shares has been detected for the 1, 3, and 6-month dollar deposits. However, in Euro deposits for the same maturity groups, the causality relation is one way. In these deposit accounts, it has been determined that interest rate is Granger cause profit share. These results are important both for bank management and for customers who are sensitive about whether rate of deposits are related each other.

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