IMPOSING RESERVE TAX TO TURKISH FINANCIAL INSTITUTIONS FOR STRENGTHENING RESERVES OF THE CENTRAL BANK OF THE REPUBLIC OF TURKEY[1]

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Abstract

Although foreign exchange rates (FER) and inflation increased slowly between from 2002 and 2013, they increased rapidly after that time and they have reached the highest level in 2018 on annual base since 2006. Adverse developments in indicators like FER make negative effects on economic actors by causing uncertainty and uneasiness. They also cause adverse effects on a variety of macroeconomic indicators such as foreign debt burden and interest payments. For this reason, it is important for countries to determine causes of increasing in FER and take measures to keep them under control. For this purpose, there are a lot of conventional tools like tight monetary policy, tight fiscal policy, implementation of harmonious policies and capital controls. In this context, reserves of CBRT are an important tool. However, it is necessary to have adequate reserves in order to use reserves to keep FER under control. Taking into consideration this fact, it is recommended to impose reserve tax liability to financial institutions so that reserves of CBRT could be increased.

Keywords: *CBRT, Financial Intermediaries, Reserve Tax, Reserves, Turkey*

TÜRKİYE CUMHURİYET MERKEZ BANKASI REZERVLERİNİN GÜÇLENDİRİLMESİ İÇİN TÜRK FİNANSAL KURUMLARINA REZERV VERGİSİ UYGULANMASI

Öz

Döviz kurları ve enflasyon, 2002-2013 arasında yavaş artmasına karşın 2013 sonrasında hızlı artış göstermiş ve 2006 sonrasında yıllık bazda en yüksek seviyeye 2018 yılında ulaşmışlardır. Döviz kurları gibi değişkenlerde görülen olumsuz gelişmeler belirsizlikler ve zorluklara yol açarak ekonomik aktörler üzerinde negatif etkiler oluşturmaktadır. Dış borç yükü ve faiz ödemeleri gibi birçok makroekonomik gösterge üzerinde de olumsuz etkilere neden olmaktadır. Bu nedenle, döviz kurlarında artışın nedenlerinin belirlenmesi ve döviz kurlarının kontrol altında tutulması için önlemler alınması ülkeler açısından önem taşımaktadır. Bu amaçla, sıkı para politikası, sıkı maliye politikası, uyumlu politikaların uygulanması ve sermaye kontrolleri gibi birçok geleneksel araç bulunmaktadır. Bu kapsamda, TCMB rezervleri önemli bir araçtır. Ancak, döviz kurlarının kontrol altında tutulmasında kullanılması için yeterli rezervlere sahip olmak bir gerekliliktir. Bu gerçeği göz önünde tutarak, TCMB rezervlerinin artırılması için finansal kuruluşlara rezerv vergisi yükümlülüğü getirilmesi önerilmektedir.

Anahtar Kelimeler: *TCMB, Finansal Aracılar, Rezerv Vergisi, Rezervler, Türkiye*

1. Introduction

Nowadays, international markets have become much more globalized than they have ever been. With the increasing globalization, countries have become more dependent each other. This structure causes financial fragility in many respects such as imbalance in foreign direct investments, high volatility in FER, deficits in current account and foreign trade depreciation of value of national currency, and hence resulting in high inflation and high interest rates. On the other hand, countries have been trying to decrease financial fragility and increase financial stability by taking a variety of precautions.

Due to fact that countries and markets are more fragile anymore, international capital flows are faster than they have ever been. This requires countries to take precautions rapidly. For enabling this, countries should have necessary tools, capacities and resources in both ministry of finance and central bank (CB) side. Taking into consideration that fiscal policy can make effect in long-term and monetary policy can make effect in short-term, tools, resources and capacities, which can be used by central banks, come to the fore.

When examining situation in Turkey, it can be seen that Turkey experienced problems in macroeconomic indicators such as budget deficit, foreign trade deficit, current account deficit, high inflation, high interest rates, instability in FER resulting in crisis of 2000 and 2001 (Kartal, 2018a: 209). Although financial stability is provided after 2001 crisis, problems in such macroeconomic indicators as FER, inflation, and interest rates have been seen in recent times. In this context of globalization, in order for definite victory in the mentioned indicators and keeping them under control, usage of appropriate and necessary tools, resources and capacities of central banks has substantial importance and effect. Central banks have a variety of tools; however, the most important of them is reserves.

Main purpose of usage reserves of central banks is to make international payment and take precautions against depreciation of national money against FER (Yüksel and Sarı, 2017: 42). Besides, reserves of central banks are used especially in volatile conditions to intervene markets to enable stability. These can be defined as main reason of accumulation of reserves of central banks. So, increasing reserves of CBs is essential. This is a question whether reserves of CBRT is enough or not. According to figures published by CBRT, there is a decreasing trend in both gross and net reserves. So, reserves of CBRT are not enough and additional reserves should be accumulated (Eren, 2017). However, there is no exact result regarding how much central bank should have reserves. The amount of reserves accumulated by central banks depends on countries' conditions.

When examining CBRT's reserves, it can be seen that gross reserves was USD 28.23 billion as of 2002 end and USD 73.3 billion as of 2019 April. However, these figures show gross volumes which mean that net reserves have lower than this amount. Net reserves of CBRT were USD 11.06 billion and USD 26.9 billion, respectively (CBRT, 2019a). The difference between gross and net reserves shows an important point to be mentioned. The important partial of this difference results from required reserves (RR) of financial institutions in CBRT. The amount of RR of

financial institutions in CBRT is USD 47 billion as of 2019 April and it counts for approximately 64% of gross reserves. However, it should be stated that total reserves resulting from RR are temporary reserves for CBRT because of the fact that CBRT does not have actually free usage right on these reserves (Eğilmez, 2017). Therefore, in the view of increasing capacities and resources of CBRT in implementation of effective monetary policy, increasing net reserves of CBRT is crucial.

Taken into consideration issues mentioned above, importance of reserves is obvious. Therefore, a proposal is proposed in order to increase net reserves of CBRT in this study. The proposal is to impose reserve tax to financial institutions. As far as it is known, there is no published article examining the proposal recommended in the study. For this reason, it is thought that the study has pioneer and unique characteristics taking into consideration the proposal recommended.

This study consists of five parts. After the introduction, Section 2 gives details about the contextual background. Section 3 reviews the literature related reserves of central banks. Section 4 analyzes effects of the reserve tax with all aspects. Section 5 summarizes the results of the study.

2. Contextual Background

CBs aim to provide contribution to the financial stability. CB could realize this by autonomy in the light of having necessary tools and instruments (Acemoğlu and Robionson, 2018: 424). Although there are a limited number of instruments, main tool, which can be used by CBs, is reserves.

CBs should take precautions rapidly to react undesired developments such as immediate increasing of FER in turbulence periods. In such conditions, CBs should consume excessive reserves to stabilize related financial indicators. Some selected main macroeconomic indicators for Turkey are included in Table 1.

Table 1: Selected Macroeconomic Indicators of Turkey*

Year	USD	PPI	Commercial Credit Interest Rate	CBRT Policy Rate (1 Week Repo Rate)
2014	2.19	6.3%	12.4%	8.3%
2015	2.72	5.6%	15.7%	7.5%
2016	3.03	9.6%	14.3%	8.0%
2017	3.65	14.5%	17.1%	8.0%
2018	4.82	34.2%	28.3%	24.0%

Note: *: The indicators show the realization of the year-end figures.
Source: Derived from CBRT, 2019a; Turkish Statistical Institute (TSI), 2019.

As it can be seen from Table 1, FER (USD), inflation (PPI), and commercial credit interest rate have an increasing trend from 2014 to 2018. Depending on distortions on these indicators, CBRT was able to have to increase policy rate from 8.3% as of 2014 end to 24% as of 2018 end. Also, in this process, CBRT used excessive reserves in order to keep FER under control by consuming net USD 12.8 billion reserves. Therefore, net reserves of CBRT decreased to USD 30 billion as of 2018 end from USD 42.8 billion as of 2014 end (CBRT, 2019a).

Besides distortions on some macroeconomic indicators, CBRT must have more reserves due to Turkey has an important amount of current account deficit, foreign trade deficit and foreign exchange currency debt owned by nonfinancial companies. All these factors require that CBs, specifically CBRT in Turkey example, should have enough reserves and if they do not have, they should accumulate and increase reserves of CB.

3. Literature Review

There are a variety of studies regarding reserves of CBs. Some selected studies are included in Table 2.

Table 2: Some Selected Studies

Authors	Year	Scope	Period	Method	Results
Aizenman & Marion	2003	125 Countries	1980 1996	Regression	Current account deficit and economic growth affect reserves of CBs.
Gosselin & Parent	2005	8 Countries	1980 2003	Vector Error Correction (VEC)	Changes in FER affect reserves of CBs.
Aizenman et al.	2007	S. Korea	1998 2003	Regression	Current account balance and short term debts are the most important factors which affect reserves of CBs.
Kasman & Ayhan	2008	Turkey	1982 2005	Granger Causality	Changes in FER affect reserves of CBs.
Irefin & Yaaba	2011	Nigeria	1999 2011	ARDL	Economic growth and import affect reserves of CBs.
Sula	2011	108 Countries	1980 2007	Regression	Export and changes in FER affect reserves of CBs.
Cook & Yetman	2012	9 Countries	2001 2010	Regression	Accumulation of reserves is negatively associated with domestic investments.
Chowdhury et al.	2014	Bangladesh	1972 2011	Engle Granger Co-integration, ADF	FER, export and economic growth affect reserves of CBs.
Cinel & Yamak	2014	Turkey	2000 2013	VEC	Volatility in FER affects reserves of CBs positively.
Aizenman et al.	2015	95 Countries	1999 2012	Regression	Emerging market economies, which have insufficient reserves holdings, tends to experience FER depreciation.
Ghosh	2016	100 Countries	1998 2014	Generalized Method of Moments (GMM)	USD, inflation hedge properties of gold and higher FER risk and monetary instability affect reserves of CBs.
Gümüş	2016	18 Countries	1998 2007	Regression	Interest rates affect reserves of CBs.
Panda & Trivedi	2016	India	1996 2015	VEC	Money supply affects reserves of CBs positively whereas volatility in FER affects reserves of CBs negatively.
Senibi et al.	2016	Nigeria	1981 2013	Johansen Co-integration	Foreign debts affect reserves of CBs.
Yüksel & Özsarı	2017	Turkey	1988 2015	MARS	High TRY interest rates, current account deficit and USD interest rate, which is higher than 5.02%, affect reserves negatively.
Benecká & Komarek	2018	104 Countries	1999 2010	Bayesian Model Averaging	Key determinants with a positive link to level of reserves are trade openness and the broad-money-to-GDP ratio. Moreover, need for reserves are lowered with financial development.
Kartal	2018b	Turkey	2008-2017	Descriptive Statistics	Reserves of CBRT could be increased with the recommendation that Treasury share in CBRT's profit could be transferred to reserves instead of Treasury.
Kartal & Tan	2018	Turkey	2011-2018	Descriptive Statistics	Reserves of CBRT is quite low and they could be increased at an important amount with reserve tax.
Mahraddika	2019	58 Countries	2000 2014	Panel ARDL	Domestic private investment in the long run is positively associated with FER accumulation.

Source: Authors.

When examining studies in the literature as a whole, as it can be seen from Table 2, there are various studies examining the relationship between independent variables and reserves of CBs. Also, such methods as regression, VEC, Granger Causality, ARDL, Engle Granger Co-integration, ADF, GMM, Johansen Co-integration, MARS et cetera are used in these studies to examine the relationship. However, studies regarding reserves of CBs in Turkey are very limited. Also, current studies in Turkish literature are limited to variables, which have effect on reserves. So, it is important to develop new proposals in order to increase reserves of CBs. It is obvious that there is a need such studies. In this study, it is aimed to develop and present a proposal to increase reserves of CBRT. In the next part of the study, details of the proposal are examined.

4. An Analysis regarding Imposing Reserve Tax to Financial Institutions

The proposal recommended is to impose reserve tax to financial institutions. This part of the study examines the details of the proposal. Firstly, trend of reserves of CBRT is examined. Secondly, concept and trend of RR is examined. Thirdly, concept of reserves tax is examined. Fourthly, some practices similar to reserve tax in Turkey are examined. Fifthly, tradeoff between reserve tax and RR is examined. Sixthly, possible outcomes of the proposal on reserves are examined if it was applied between 2011 and 2018. Lastly, necessary steps, which should be taken to apply the proposal, are examined.

4.1. Trend of Reserves of CBRT

There is a variable trend in reserves of CBRT. It is an important point that reserves can be measured in either gross or net. So, reserves are examined as both gross and net. Development trend of reserves in Turkey since 2006 is included in Figure 1.

Figure 1: Reserves of CBRT
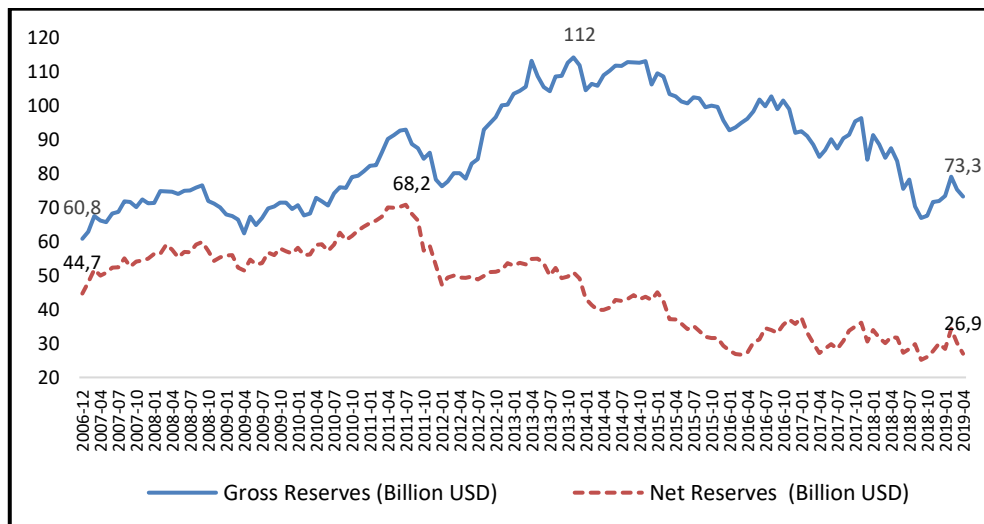
Source: CBRT, 2019a.

Reserves of CBRT have been changing over time. Gross reserves were USD 60.8 billion as of 2006 end and they reached to USD 114.3 billion as of 2013 November. After that time, gross reserves have been decreasing and they were USD 73.3 billion USD as of 2019 April. Besides gross reserves, net reserves of CBRT have a variable trend over time. Net reserves were USD 26.9 billion as of 2019 April. They were USD 44.7 billion as of 2006 end. The highest level of net reserves was seen as USD 70.9 billion as of 2011 July. As general, it can be said that gross and net reserves are under level of the highest points. Also, net reserves are lower than from the level of 2006 end.

Besides level of gross and net reserves, level of reserves in comparison with Gross Domestic Product (GDP) is important due to fact that CBs should have enough reserves in comparison with growth of the macro economy in order to guide monetary policy effectively. For this reason, examining reserves as share of GDP is also essential. Development trend of reserves as a share of GDP in Turkey since 2006 is included in Figure 2.

Figure 2: Reserves Of CBRT As A Share Of GDP Between 2006 And 2018
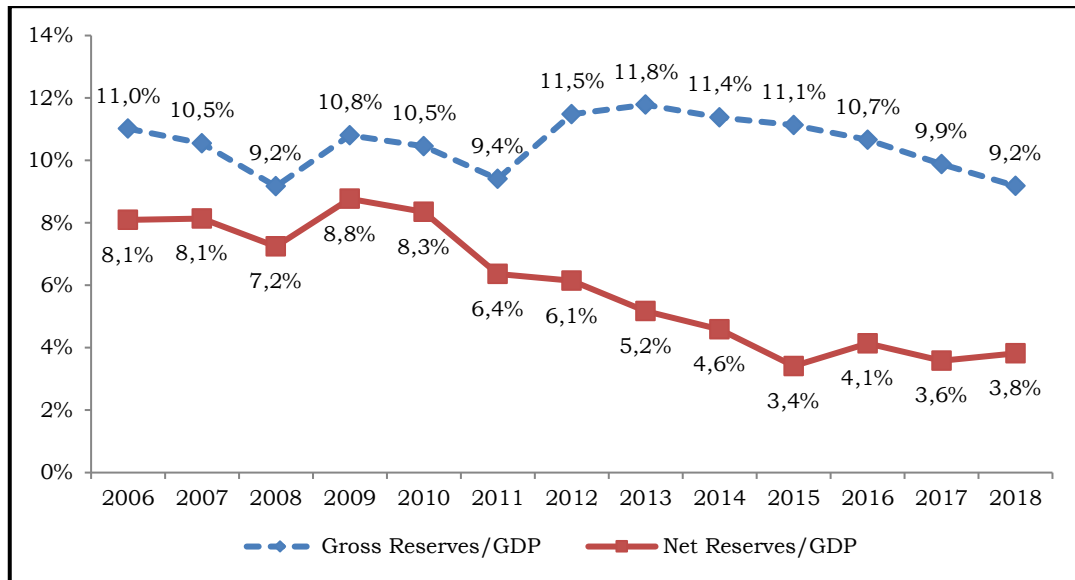
Source: CBRT, 2019a; TSI, 2019; World Bank, 2019.

Gross reserves/GDP was 11% as of 2006 end and it was 11.8% as of 2013 end, which is the highest level. After this level, it was decreasing and it has been 9.2% as of 2018-year end.

Net reserves/GDP has a similar trend with gross reserves/GDP. It was 8.1 % as of 2006 end and it was 8.8% as of 2009 end, which is the highest level. After this level, it was decreasing and it has been 3.8% as of 2018-year end.

As general, it can be said that gross reserves/GDP and net reserves/GDP ratios are quite lower than the levels in 2006 end the levels at which they reached to the highest level.

4.2. Concept and Trend of Required Reserves

RR is a practice like an implied tax imposed to the financial institutions by CBRT. The framework regarding scope, mainly Central Bank Law (CBL) regulates timing and rates of RR. According to CBL, banks and other institutions, which are determined by CBRT, are subject to RR practice (CBL, 1970, article 40). Besides CBL, CBRT also issues a regulation named as Charter about Required Reserves in order to determine details of RR practice. According to the charter, followings of banks and financing companies are subject to RR (CBRT, 2013, article 4):

- Deposit / participation fund,
- Funds provided from repo transactions,
- Loans used (excluding those provided by Treasury guarantee),
- Securities issued (net),
- Debt instruments not included in capital calculation,
- Liabilities to the external center (net),
- Debts from credit card payments.

As a summary, it can be said that deposits, which are subject to RR, include "*deposits of real and legal persons, interbank deposits (excluding domestic interbank deposits), and deposits collected from Turkey by deposit banks on behalf of overseas branches*". Figure 3 shows the development trend of required reserves in Turkey since 2011/9.

**Figure 3: Trend of Required Reserves**
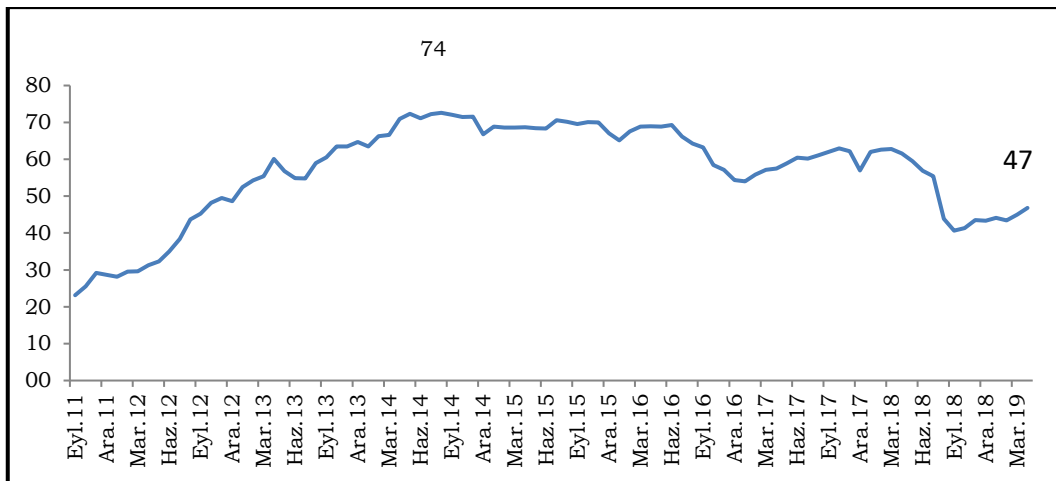
Source: CBRT, 2019b.

RR was USD 23 billion as of 2006 September and they were USD 73 billion as of 2014 August end which is the highest level. After this level, they were decreasing and they have has been USD 47 billion as of 2019 April.

As general, it can be said that RR have a variable trend over time. So, they cannot be used by CRBT as actual or free reserves.

Figure 4 shows the change in required reserves with regard to previous reporting period in Turkey since 2011/9.

Figure 1: Trend of Change in Required Reserves
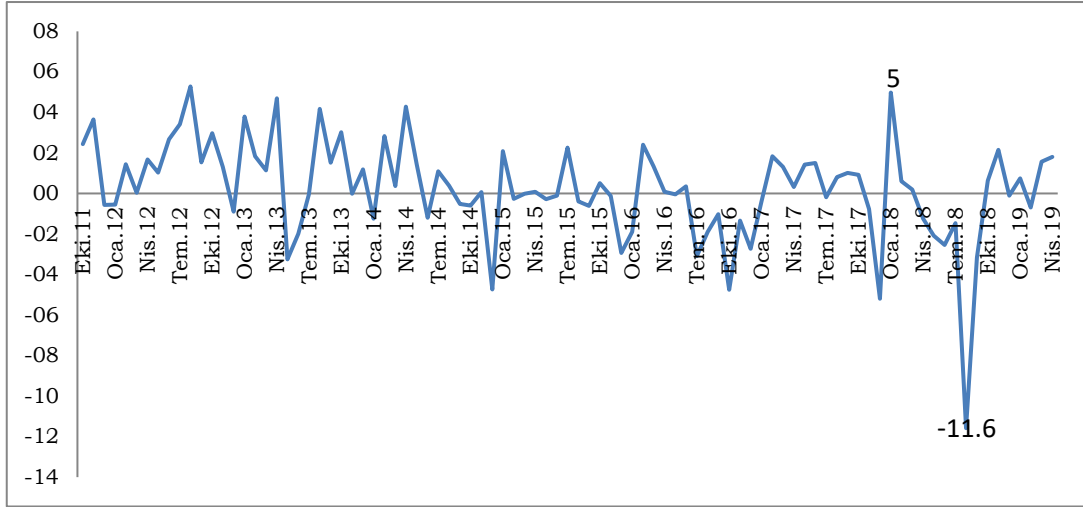
RR has been changing over time depending on banks and financing companies. Due to fact that RR is not actual reserves belonging to the free usage of CBRT and they actually belong to banks and financing companies, RR have a high volatility in time. As it can be seen from figure above, change in RR compared to previous month is approximately USD 5 billion and has a narrow wave range until 2018 July; wave rage has been increasing after this time and reaches USD 11.6 billion as of 2018 August. This trend shows that RR is not a component of reserves because of the fact that RR is temporary reserves. For this reason, reserves of CBRT should be strengthened as actual.

4.3. Concept of Reserve Tax

Reserve tax is a participation share to be taken from financial institutions by CBRT similar to other self-regulatory bodies in Turkey, which are Energy Market Regulatory Authority (EMRA), Radio and Television Supreme Council (RTSC), Information Technology and Communication Authority (ITCA), Capital Markets Board (CMB), and Banking Regulation and Supervision Agency (BRSA). Financial institutions, which would be subject to reserve tax, will be determined by CBRT. Reserve tax to be taken as a participation share is going to be transferred to the reserves in order to increase and strengthen reserves of CBRT.

In theory, reserve tax would be imposed to everyone and every institution in the country. However, due to fact that it is related with the economic growth, usage of financial sources and financial aspect generally, imposing reserve tax to only financial institutions would be much more appropriate. For this reason, it is recommended that reserve tax would be imposed to financial institutions rather than everyone or every institution in the country.

4.4. Some Practices Similar to Reserve Tax in Turkey

As mentioned above, some regulatory bodies in Turkey have been taking participation share from institutions over which they have authority of regulation,

audit and supervision. These authorities are mainly BRSA, CMB, EMRA, RTSCV and ITCA. They take participation share in a variable range.

EMRA takes 0.1% share of net oil sales. RTSC takes 1.5% share over monthly commercial communication revenues. ITCA also takes 0.35% share. As a financial authority, CMB takes a share with the increasing of the average of Consumer Price Index and Producer Price Index based on 2014. As another financial authority, BRSA takes 0.015% share over total balance sheet of banks prior year-end.

Table 3 shows the development trend of the BRSA share between 2014 and 2018.

Table 3: Trend of BRSA Share

	2014	2015	2016	2017	2018
Total Assets of Turkish Banking Sector (Billion TL)	1,994	2,357	2,731	3,258	3,867
BRSA Share (Million TL)	299	354	410	489	580

Source: BRSA, 2019a.

4.5. Tradeoff Between Reserve Tax and Required Reserve

Current RR practice could increase reserves of CBRT temporally due to fact that CBRT does not have actually free usage right on these reserves (Eğilmez, 2017). So, reserve tax is recommended in order to increase reserves of CBRT permanently. However, if reserve tax was applied without making any changes in current RR practice, there would be doubled liabilities on financial institutions. For this reason, if reserve tax came into force, making an adjustment in RR practice is a must. Hence, while structure of reserves of CBRT is changed and reserves of CBRT are strengthened, no additional liabilities would be imposed on financial institutions.

4.6. Outcomes of the Proposal If Applied for the Period between 2011 and 2018

The proposal recommended is to impose reserve tax to financial institutions. In this sub-part, effects of imposing reserve tax are analyzed. Financial institutions include a variety of financial companies such as banks, insurance, leasing and factoring companies, asset management companies, exchanges, intermediary institutions, publicly traded companies etc. In the study, in order to simplify the analysis, it is preferred to be taken only banking sector into consideration. Also, total assets size is preferred to calculate effect of reserve tax in the study although it is possible to impose reserve tax based on different indicators such as total shareholders' equity, market share etc.

Table 4: Accumulation of Reserves by Imposing Reserve Tax to Banks in Turkish Banking Sector between 2001 and 2018 (Billion TL)

Years (A)	Total Assets (B)	Reserve Tax (C)	CBRT Share (D)(B*C)	RR (E)	New RR Amount (F)(E-D)	CBRT Share/ RR (G) (D/E)
2011	1,218	5.0%	60.9	89.9	29.0	68%
2012	1,371	5.5%	75.4	100.7	25.3	75%
2013	1,732	5.5%	95.3	138.6	43.3	69%
2014	1,994	6.0%	119.6	155.6	36.6	77%
2015	2,357	6.0%	141.4	200.7	59.3	70%
2016	2,731	6.5%	177.5	229.8	52.3	77%
2017	3,258	6.5%	211.8	264.2	52.5	80%
2018	3,867	7.0%	270.7	265.2	-5.4	102%

Source: BRSA, 2019a; CBRT, 2019a.

As Table 4 illustrates, total assets size of Turkish Banking Sector has reached to TL 3,867 billion as of 2018 year-end while it was TL 1,218 billion as of 2011 year-end. Also, it is an important point that there should be a transition period. For this reason, calculation was started with 5% reserve tax rate in 2011 and it reached to 7% as of 2018. Based on the total assets size of Turkish Banking Sector, CBRT would have TL 75.4 billion for 2012, TL 119.6 billion for 2014, TL 177.5 billion for 2016, and TL 270.7 billion for 2018. Required reserves for the same years were TL 100.7 billion, TL 155.6 billion, TL 229.8 billion, and TL 265.2 billion, respectively. Because of the fact that there would be a transition period, the amount of RR, which is equal to the CBRT share in the relevant year, should be released. So, new RR for the same years would be TL 25.3 billion, TL 36.6 billion, and TL 52.3 billion. New RR would be TL 0 for the 2018. That is why transition process would be completed as 2018 year-end.

Table 5: Accumulation of Reserves by Imposing Reserve Tax to Banks in Turkish Banking Sector between 2001 and 2018 (Billion TL)

Years	CBRT Share (Billion TL)	USD/TR FER at the End of the Year	Accumulated Reserves (Billion USD)
2011	60.9	1.6781	**36.3**
2012	75.4	1.8011	**41.9**
2013	95.3	1.9054	**50.0**
2014	119.6	2.1918	**54.6**
2015	141.4	2.7249	**51.9**
2016	177.5	3.0267	**58.6**
2017	211.8	3.6543	**58.0**
2018	270.7	4.8221	**56.1**
Total	**1,152.6**	-	**407.4**

Source: BRSA, 2019a; CBRT, 2019a.

The amount of reserves in terms of USD is calculated in Table 5 depending on the calculations taken place in Table 4. As Table 5 illustrates, if reserve tax was applied between 2001 and 2018 based on total assets size of banks, then there would be USD 407.8 billion as accumulated reserves. This in a substantially important in

terms of reserves especially when taking into account that there is USD 26.9 billion net reserves as of 2019 April.

According to the authors, it is much more reliable to take into consideration year-end USD/TL FER due to fact that total assets size of banks would be end of the years. So, banks would pay reserve tax at the end of each year. A need to renewal of current regulation is ignored here and it is handled in forthcoming subpart of the study.

As mentioned above, there are lots of financial institutions. So, regulatory authorities would determine scope of reserve tax, and much more type of financial institutions would be included in the reserve tax. Types of these financial institutions summarized as follows:

- Institutions subject to BRSA (BRSA, 2019b): Banks (53), Leasing Companies (23), Factoring Companies (58), Finance Companies (14), Financial Holding Companies (3), Asset Management Companies (20), Electronic Money Companies (14), Payment Companies (33)
- Institutions subject to CMB (CMB, 2019): Exchanges (2), Custody and Settlement Institutions (2), Intermediary Institutions (66), Publicly Traded Companies (511), Portfolio Management Companies (52), funds and ınvestment trusts.

Depending on the selection how much and which type of financial institutions would be included in reserve tax practice; there would be a higher amount to be accumulated reserves.

4.7. Necessary Steps to Apply the Proposal

In this study, a proposal is recommended to strengthen reserves of CBRT. It is to impose reserve tax to financial institutions. RR practice is also associated with the reserve tax concept. However, it is clear that there are legislations to regulate RR practice and how a new tax is imposed.

As mentioned above, CBL regulates RR practice in article 40. Similar articles take place in the Charter about Required Reserves in article 4 (CBRT, 2013, article 4). So, in order to apply the proposal, it is a must to remove/revise these regulations in CBL and Charter. After that, a regulation saying that a reserve tax to financial institutions is imposed with a transition period. The most possible date to pay reserve tax by financial institutions is year-end. That is why FER of year-end is used in analysis in the study.

It is an important point to be stated that total assets of Turkish Banking Sector is very high and CBRT would collect and accumulate so much reserves if a reserve tax was imposed. In order to decrease negative effects of the proposal on financial institutions, there should be a transition period and the rate of reserve tax could be started with 5% and could be reached to 7%. After approximately 8 years transition period, the proposal could be fully applied. Effect of imposing reserve tax to financial institutions would be tolerated by decreasing RR liabilities. When the transition period is completed, it is recommended to fully remove of RR liabilities to financial

institutions. Hence, CBRT could accumulate real reserve rather than temporary reserves.

5. Conclusion

It is known that the level of reserves of CBRT is quite low. Therefore, there is a discussion about how much reserves CBRT has. Depending on data of CBRT, it is clear that reserves have been decreasing. Because of the decreasing trend, it is important to develop new proposals to increase reserves. In order to this, a proposal is developed and recommended in this study. The proposal mainly consists of imposing a reserve tax to financial institutions.

According to the analysis made by using data for the period of 2011-2018, total assets size of Turkish Banking Sector has reached to 3,867 billion as of 2018 year-end. If the reserve tax was started 5% in 2011 and it was increased 0.5% each year, total USD 407.4 billion reserves would be accumulated. When taking into account that CBRT's gross reserves is USD 73.3 billion and net reserves is USD 26.9 billion as of 2019 April end, it is clear that the proposal would be very effective to increase reserves of CBRT if applied. Of course, much more reserves would be accumulated if reserve tax was applied to a broader mass of financial institutions. It would be also possible to apply reserve tax based on different alternatives such as market shares or net profit of the financial institutions or a combination of these parameters. Reserve tax would be differentiated according to type of financial institutions or systematic importance. For the simplicity in the analysis, banking sector and total assets size are preferred in this study. Additional proposal should be searched in order increase reserves of CBRT. It is an important point to be stated that there is a requirement to make changes in current legislations.

Implementation of the proposal would provide an important contribution for increasing reserves of CBRT. The capacity of CBRT to intervene to FER when financial instability is seen would be increased by strengthening reserves. Hence, contribution to financial stability from many perspectives, especially stabilization of FER and decreasing inflation by this way would be provided. This cycle would be followed with increasing efficiency of monetary policy, decreasing interest rates, decreasing public debt and interest payments. For this reason, it is highly recommended to apply the proposal stated in this study by related authorities if strengthening of reserves of CBRT is really desired.

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