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GLOBAL NEW TURKISH LIRA BOND ISSUANCES

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ABSTRACT

The objective of this study is to analyze current and likely future impacts of the issuance of New Turkish lira (YTL) denominated borrowing instruments by many global financial institutions around the major financial centres. These bonds are strong source of evidence for international confidence on stabilization efforts in Turkey and they are an indicator of bilateral acceptance of the de facto convertibility of YTL. They may also create an opportunity for the Turkish economy to mitigate negative effects of the original sin.

Keywords: Original sin, De facto convertibility, De jure convertibility, New Turkish lira borrowing instruments, Global New Turkish lira issuances.

JEL Classification: E4, E5, E6, G1.

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² Gökhan Yılmaz, Research and Monetary Policy Department, Central Bank of the Republic of Turkey, 06100 Ulus, Ankara, Turkey. Phone: +90 312 311 14 22, E-mail: Gokhan.Yilmaz@tcmb.gov.tr. All the views expressed in this paper belong to the authors and do not necessarily represent the views of the Central Bank of the Republic of Turkey. The authors would like to thank Hüseyin Cahit Özcet, Ali Hakan Kara and Refet Gürkaynak for useful comments and Doris Herrera-Pol for providing data. Usual disclaimers apply.

1. INTRODUCTION

- 1.1** The objective of this study is to analyze current and likely future impacts of the issuance of New Turkish lira (YTL) denominated borrowing instruments by many global institutions around the major financial centres. The study focuses in particular on the effects of global YTL issues in the way of alleviating original sin, the meanings of the issues in terms of the convertibility of YTL and the implications of the issues on fiscal and monetary policy, financial markets and real sector.
- 1.2** In doing so, we think it might be easier to grasp the next sections by specifying characteristics of these instruments and discussing what they mean initially. Global YTL bonds are the YTL denominated borrowing instruments issued at abroad by global companies and sovereigns³. They are not registered locally and not subject to national clearing systems and local laws.
- 1.3** These bonds are strong sources of evidence of international confidence on stabilization efforts in Turkey. With the help of stabilization program that had been implemented since 2001 crisis, the Turkish economy has realized a cumulative growth of about 40 percents with declining annual inflation rate from 70 percent in 2001 to single digit levels in 2007. The stabilization program with prudent macroeconomic policies and far-reaching structural reforms triggered off global YTL issuances and hereby the international approval of YTL.
- 1.4** The global YTL issuances have been also supported by favorable external conditions. We have observed a significant demand for those instruments by international investors as a result of portfolio diversification, search for yield motivation and declining home bias of investors and favorable global liquidity conditions.
- 1.5** The issuances of those bonds convey clear messages for policy makers in the Turkish economy. The international approval of YTL simply means *pari passu* with the *de facto* acceptance of the YTL convertibility. Such a favorable incidence may enable to alleviate the cost of the original sin⁴ -basically, fail to borrow from international markets in YTL- for the Turkish economy. And the declining cost of original sin has

³ Even national government and local companies may issue, if issuance is registered to a global custody house.

⁴ Original sin will be discussed in the Section 2.

many positive repercussions on fiscal and monetary policy, financial markets and real sector.

1.6 The study has ten sections. Section 2 describes the concept of the original sin. Section 3 presents the role of international financial institutions in the global bond issues. Section 4 discusses the global YTL issuances and the Turkish economic outlook. Section 5 investigates the de facto versus de jure convertibility of the YTL. In the next three sections, the implications of global YTL issues on fiscal and monetary policy and financial markets, and real sector will be analyzed sequentially. The section 9 will underline opportunities for debt management strategies for the Turkish Treasury. Finally, conclusion will complete the paper.

2. THE ORIGINAL SIN: SOURCES and CAUSES

2.1 Global YTL bond issuances may create an opportunity for the Turkish economy to mitigate negative effects of the original sin. And discussing what the original sin is, its sources and causes may crystallize the likely gains that may stem from the diminishing burden of it on the Turkish economy.

2.2 Many countries around the world, especially emerging countries, face two types of borrowing problems regarding saving deficits and debt management. The first one, they simply cannot borrow from international capital markets in their own currencies. The second one, they cannot borrow in their own domestic markets in terms of national currencies at long maturities and fixed rates. These two undesirable cases are called “original sin” (Eichengreen and Hausmann, 1999).

2.3 In the literature, there are different theories that aim to explain the causes and the determinants of the original sin, as has been investigated by Hausmann and Panizza (2003). The first theory is related to the importance of institutions for financial markets with a special emphasis on the *level of development*.

2.4 The second theory is related to the inadequate *monetary credibility*. When credibility is low, interest rates in domestic currency find the equilibrium at high levels and firms and households face the forced choice of borrowing in hard currencies.

- 2.5** The third theory arises from the *fiscal sustainability*. The argument asserts that the larger the stock of hard currency public debt, the larger will be the inflation-devaluation necessary to restore fiscal equilibrium, leading to a vicious circle. Therefore, as the economy approaches to serious solvency problems, domestic currency debt instruments lose its existence as a policy option and borrowing through hard currencies emerges.
- 2.6** The fourth theory comes from the *credit market imperfections* and poor contract enforcement with low level (and complexity) of property rights.
- 2.7** The fifth theory is related to the *choice of the exchange rate regime*. It may be argued that pegged exchange rate regimes may lead excessive foreign borrowing and as a result higher cost arising from the original sin.
- 2.8** The sixth theory focuses on the *political economy* arguments. It is claimed that if international investors are the main holders of public and private debts, then there is likely to be a larger domestic political constituency in favor of weakening the value of total debt stock –or even declaration of default-. The latest example from the Argentinean case may provide empirical evidence for this argument.
- 2.9** The last theory focuses on *international causes (country size)*, highlighting the role of economies of scale in liquidity that limits the incentives for diversification. Hausmann and Panizza (2003) discuss and test those aforementioned theories and hypothesis related to determinants of original sin. They find that, the unique variable that is robustly correlated with international original sin is “country size”. In other words, they think absolute size of the economy, whether measured by GDP, trade or total domestic credit, is the only variable that seems related to international original sin.
- 2.10** It is generally accepted that many national economies not respecting the credibility and sustainability of financial and monetary stability would pay a price by loosing the real benefits of issuing and circulating a national currency, including seigniorage. This price is absolute and in terms of higher borrowing rates in the beginning. If the policy misjudgments are persistent, then the end result will be a collapse of the so-called national currency. Such an episode will create a demand for either dropping some of

the zeros that the inflation added to the numbers or changing the name of the national currencies, if not dollarisation.

3. THE ROLE of INTERNATIONAL FINANCIAL INSTITUTIONS in GLOBAL BOND ISSUES⁵

- 3.1** After discussing theoretical reasons of original sin, we will investigate the role of global financial institutions in bond issuances. Hence, in this section the importance of International Financial Institutions (IFIs) in international markets will be discussed. Although the opening of various markets to foreign issuers has followed many diverse paths, the common denominator has been that IFIs such as the International Bank for Reconstruction and Development (IBRD) led the way, as in the case of Turkey.
- 3.2** The IBRD has been issuing debt securities in the international capital markets for more than 50 years⁶. Its debt instruments provide investors with the reassurance of a superior credit rating and a wide choice of products, including bonds with high secondary market liquidity and a strong secondary market performance⁷. The leading role of IBRD has been seen in Turkey and it was the first international issuer to announce global bonds denominated in the New Turkish lira.
- 3.3** Table 1 demonstrates the timing and opening of various markets to foreign issuers of emerging economy global bonds over the last two decades. In the 1980s, the Scandinavian countries, Southern European countries, Australia and New Zealand started welcoming international borrowers. Then, in the 1990s a new wave of market openings from Eastern European countries, Asia and South Africa was observed. In the new millennium, Latin American and a wave of Asian countries recovering from the latest crises have been welcoming the foreign issuers of their national currency denominated bonds.

⁵ For a detailed analysis: Herrera-Pol, D. (2005).

⁶ Its debt issues are the funding source for development loans and have provided financing for more than 4,000 development projects in 129 countries through over US\$340 billion in lending.

⁷ The World Bank demands the highest execution standards from its underwriter partners to achieve solid primary placement that reaches a diversified investor base. The IBRD has been an innovator in the capital markets ever since its initial debt offering in 1947 and issued the first swap in the international capital markets in 1981. It also launched the first global emerging market bond in 1989.

Table 1: Opening of Bond Markets to Foreign Issuers (1985-2004)

Mid-1980s	Early 1990s	Mid 1990s	Early 2000s	2004
Australia, New Zealand,	Portugal, Hungary,	Taiwan, Korea,	Mexico,	India, Thailand*,
Denmark, Ireland, Norway,	Greece, Czech	Philippines,	Chile,	China*,
Sweden, Finland, Spain, Hong	Republic, Slovak	Singapore, South	Colombia.	Malaysia*, Peru
Kong.	Republic, Poland.	Africa.		Turkey.

*The authorities have made announcement but there has been no bond issuance by foreign issuers as of 9/04.

Source: Herrera-Pol, D. (2005) "The Opening of New Markets to Foreign Issuers", The Euromoney International Debt Capital Markets Handbook 2005.

3.4 The IFIs have been playing a leading role in new markets. When foreign investors consider investing in a new market, they prefer initially to detach the "credit risk" decision from the "currency risk" component. Thus, the high creditworthiness of the IFIs with investment grade ratings, global bonds give them a safe tool for new currency investments and contribute to enhance the confidence in the local currency fixed-income markets. On the domestic investor front, IFI bonds in the local currency can provide a high creditworthiness, low beta and means of credit diversification.

3.5 We may argue that gaining an investment grade rating is not an overnight issue. It may take many years to accumulate credibility. But the road to monetary and financial stability is full of practical market solutions. After a while from the start of the normalization, local and international financial engineers may provide solutions to create demand for borrowing instruments denominated by the strengthening currency. Only institutions with an investment rating can supply such bonds. The Treasuries may only enjoy the decreasing borrowing rates, when the rating agencies upgrade to the investment level. IFIs may fulfill the gap and enjoy the rate of return through the spread between the international and national issues.

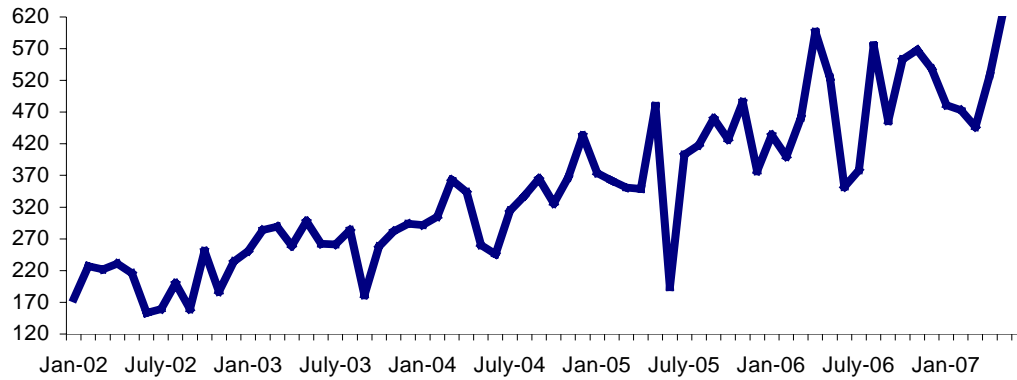
3.6 The discussion so far may shed light not only on the importance of stabilization programs but the real benefits behind strengthening a national currency through ensuring monetary and financial stability along with transparency, accountability and good governance. The social and economic costs of stabilization programs have long been a discussion topic. Most of the time, the collapse of the determination in favor of higher inflation through increased public spending without any real financial backing are reasoned by the 'unbearable' social pressures. Maybe this time, real benefits of stabilization would be proven and quantified through observing IFIs competing with

the Treasury's borrowing rates. It may be hoped that social support needed for heightened willingness for the decisive fight against inflation will increase with the international recognition of the real benefits of a strong currency.

4. GLOBAL YTL ISSUANCES and the TURKISH ECONOMIC OUTLOOK

- 4.1** Global YTL issuances may enable to alleviate the burden of original sin in Turkey. Without such issuances, it may take longer and harder processes to decrease the accumulated side effects of the original sin.
- 4.2** Hausmann and Panizza (2003) emphasized on domestic policies such as the implementation of floating exchange rate regime, the maintenance of low inflation and the imposition of capital controls in order to decrease the burden of the domestic dimension of the original sin. However, the international side remains unresolved. They argued that monetary credibility is very important in overcoming domestic one but it is not sufficient to redeem countries from international one. Eichengreen and Hausmann (2005) go through an empirical analysis suggesting that domestic reforms by themselves, are unlikely to eliminate the original sin anytime soon. Given that the quality of domestic institutions and policies goes only so far in explaining prevalence of the problem, an international initiative may be needed to overcome the problem.
- 4.3** Turkey's experience is consistent with these theories. The domestic dimension of the original sin has been declining in Turkey. Average borrowing maturities for local currency denominated discount auctions have been escalating since 2002 (Graph 1).

Graph 1: Average Borrowing Maturities for YTL Denominated Discount Auctions (Days)



Source: Turkish Treasury.

- 4.4 The Turkish Treasury's ability to borrow at longer maturities with fixed rates in local currency in the home market has reached through a declining interest rate path. In general, from January 2002, average compound interest rates decreased significantly (Graph 2).

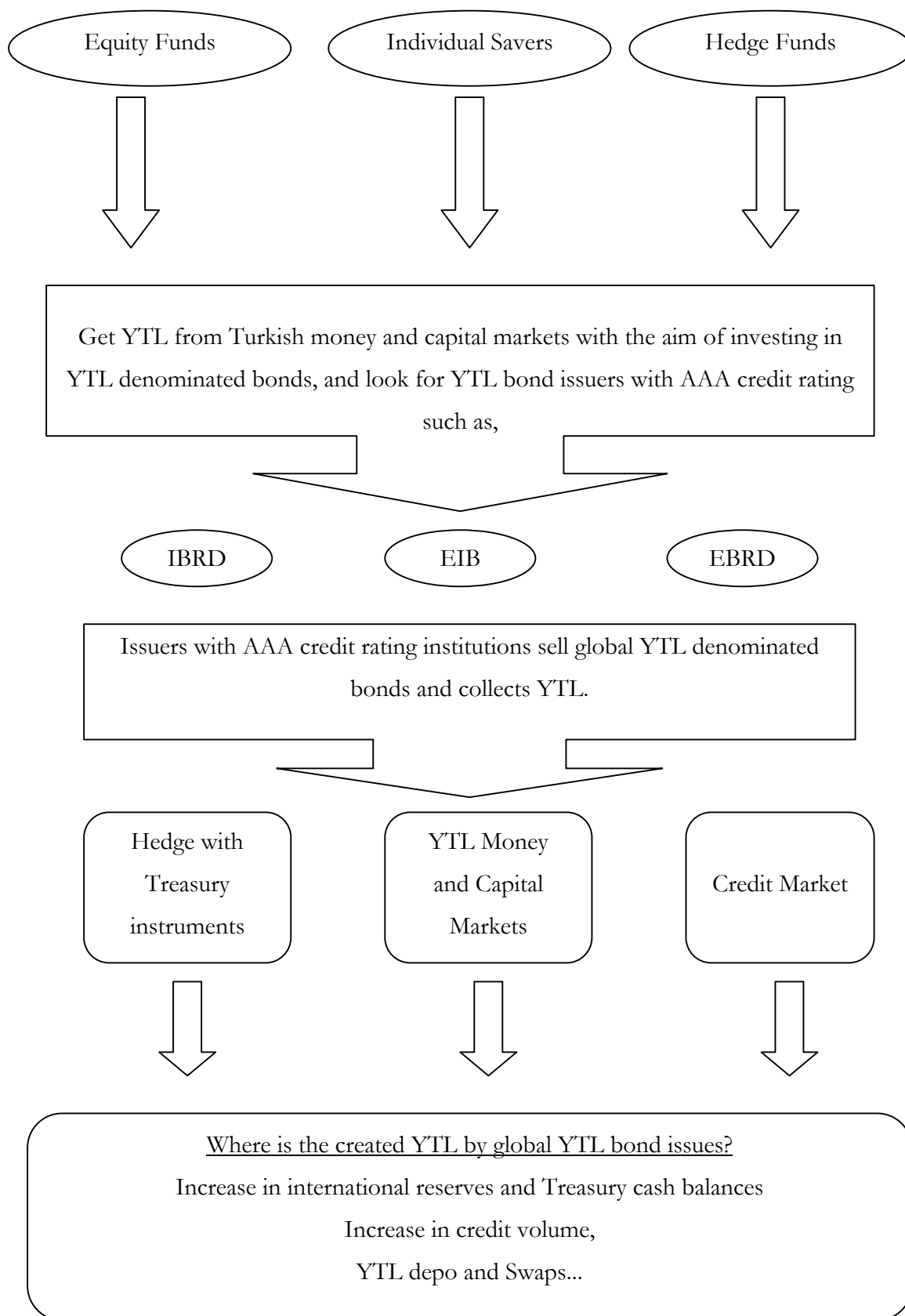
Graph 2: Sales Weighted Compound Interest Rates for YTL Denominated Discount Auctions (Percentage)



Source: Turkish Treasury.

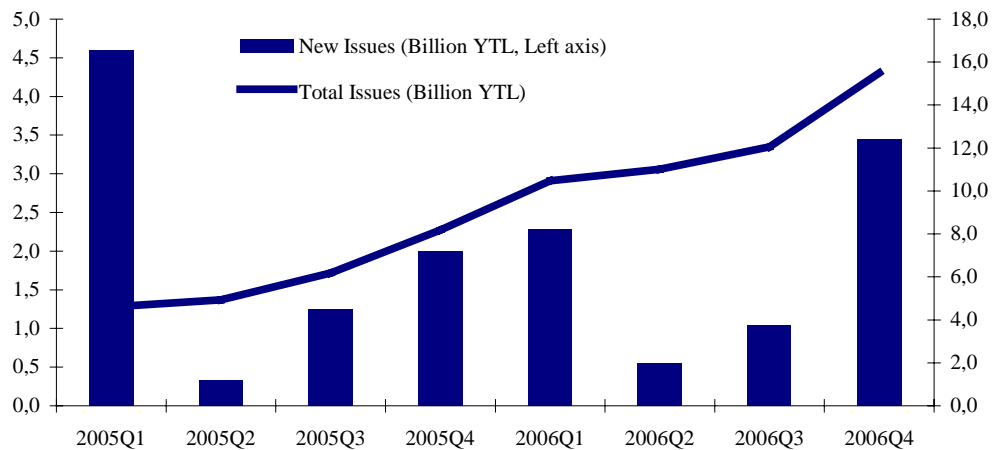
- 4.5 The international dimension of the original sin has also been declining in Turkey as a result of increasing international confidence on stabilization efforts in Turkey along with observed successful results. Hence political stability associated with sound macroeconomic policies convinced high credit rating bearing international investors to the persistence of stabilization in Turkey.
- 4.6 Therefore, as expected, a clear and fast-growing demand for the YTL denominated assets has been emerging. But institutional investors and pension funds faced serious regulation constraints, as they can't invest in assets that are issued by low credit rating bearing issuers. As Turkey's credit rating level isn't high enough for them to offer a legally investable alternative, there has been a clear demand for alternative issuers. Most pension and hedge funds forbid investing to issuances from companies and sovereigns with rating levels below the top tier. Market solutions have activated its own instruments as high credit bearing issuers started to issue YTL denominated assets (Graph 3). Financial engineering came in and gave support to bring the supply and demand for YTL denominated borrowing instruments with eliminated credit risk – obviously accepting the currency risk- to equilibrium.

Graph 3: The Evolution of Global YTL Bonds



- 4.7 Before the introduction of YTL, Turkish lira denominated issuances couldn't be settled in the accounts of prestigious settlement banks such as the Euroclear and the Clearstream, because of technical disabilities for presenting such a devaluated currency. But as of Jan 1st, 2005, this constraint was eradicated as six zeros from the currency have been dropped. Because of these technical barriers, YTL bond issuance started in the latest month of 2004 in order to guarantee the clearinghouse registration. As a result, settlement dates for all issuances fall within the beginning month of 2005, if not later.
- 4.8 From the first month of 2005, international investors started to lend in a unit that policy makers in Turkey could manipulate, by deciding to go back to a higher inflationary path. However, they rely on the continuity of the stabilization program that will provide a better rate of return on their investment. Such a confidence in the new Turkish lira is a clear declaration of diminishing international dimension of the original sin (Graph 3).

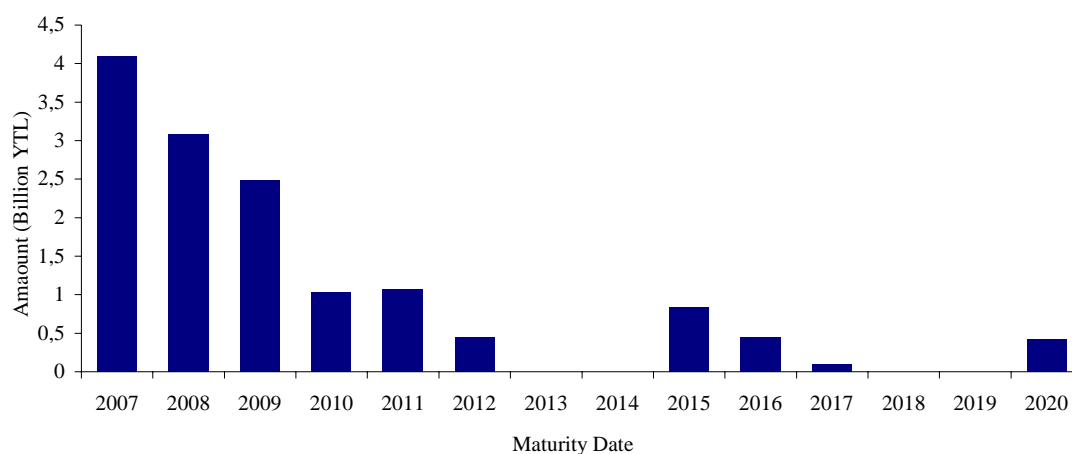
Graph 3: Global YTL Issues (as of February 01, 2007)



Source: The Central Bank of the Republic of Turkey.

4.9 As the Graph 4 demonstrates, the distribution of the global YTL redemptions ranges from 1 year to 13 years.

Graph 4: The Global YTL Redemptions (as of February 01, 2007)



Source: The Central Bank of the Republic of Turkey.

5. DE FACTO versus DE JURE CONVERTIBILITY of the YTL

5.1 After touching upon the potential impact of global YTL issuances on the Turkish economic outlook, this section will investigate the acceptance of YTL by international investors as an alternative investment instrument. Convertibility is the ability to exchange a certain currency with other fiat moneys or with commodities with intrinsic values such as gold or silver. It may be argued that convertibility can be classified as de facto and de jure in countries with comparable monetary policy history and similar structures to Turkey. A country may announce and establish relevant legal and regulatory framework for convertibility of local currency and declare it to establish de jure convertibility.

5.2 However, it may not be sufficient for effective usage of local currency in international markets (de facto convertibility) as the case has been in Turkey since 1990. As the definition reveals, de facto convertibility is a demand-oriented concept and requires foreign demand for local currency to fulfill store of value function. Although de jure convertibility is unilateral, de facto convertibility is bilateral in nature. In other words, in the de jure convertibility there is no mutual demand among local currency and

foreign currencies. There is just one-sided declaration since only domestic residents demand foreign currency. On the other hand, in the case of de facto convertibility, a mutual demand among currencies is observed and it is two-sided since foreigners also demand local currency especially for store of value.

5.3 In Turkey, foreign exchange regime was liberalized to a great extent as of 1984. Various decrees issued concerning the protection of the value of the Turkish currency and related communiqués liberalized the foreign currency regime to a great extent and thus, the legal framework necessary for the convertibility of Turkish currency was formed by “Decree No. 32 on the Protection of the Value of the Turkish Currency” which went into effect on August 11, 1989. As of July 9, 1992, the Turkish lira was accepted as a “foreign currency” in the free zones and all payments may be made in these places in Turkish Lira corresponding to foreign currencies (de jure convertibility).

5.4 The historical initiatives were not enough for the Turkish lira to be viewed as de facto convertible as a result of political instabilities and macroeconomic imbalances. We believe that institutional investors’ demand of YTL for investment motive is a turning point for real or de facto convertibility of the New Turkish lira. It seems that the time has come to enjoy the fruits of monetary stability and to realize clear and quantifiable benefits of paying the price to create a non-inflationary monetary and financial environment.

6. THE IMPLICATIONS of GLOBAL YTL BOND ISSUES on FISCAL POLICY

6.1 Global YTL bonds have a potential to ease heavy debt burden on the Turkish Treasury by decreasing interest rate of debt along with lengthening maturities. The channel may be that the final hedge for these bonds could be settled by using domestic YTL bonds issued by the Treasury.

6.2 The experience of Brazil in 2002 and 2003 has demonstrated the importance of fiscal dominance in full-fledged inflation targeting countries. In a country where debt stock is high and this stock is overwhelmingly comprised of short-term, floating rate, FX-linked and FX-denominated debt, the inflation-targeting regime could have some limitations.

Therefore in economies where fiscal dominance exists, the success in disinflation efforts demands a strong support from the fiscal policy.

- 6.3** The Turkish Treasury's ability to borrow at longer maturities and fixed and flexible rates in local currency with a declining interest rate path in the home market would support to decrease the side effects of fiscal dominance, strengthen the cash flow, easing the debt management and lowering the generational transfer of wealth. The fast growing YTL borrowings at long maturities in international markets may further improve debt dynamics by creating additional demand for local bonds for hedging purposes.
- 6.4** Global YTL bonds might also help to ease the term-structure limitations for debt management. The average maturity of deposits in the Turkish banking system is around three months. Banks willing to invest in Treasury borrowing instruments have been facing a conflict of interest: On the one hand the Treasury wants to borrow for longer terms. On the other hand, banks would not prefer to create a maturity mismatch by buying long-term bonds to be financed by a deposit base with three months duration. Consequently, the deposit base structure and the borrowing strategies do not seem to be perfectly compatible. However, global YTL bond issues create a demand for longer-term Treasury borrowing instruments and ease the burden on the Turkish banks of the borrowing pressures from the Treasury. Because global issues are mostly on the longer end of the YTL yield curve. Actually, global YTL bond duration is longer than the Treasury's marketable instruments' duration.
- 6.5** Improvements in the Turkish fiscal balance might enable to increase the flexibility of fiscal policy and policy makers might have more room to implement it counter cyclically to ensure macroeconomic stability.
- 6.6** Easing debt management with the help of the global bond issuances may help monetary policy to place a stronger impact on shaping inflation expectations. Therefore we think that declining of original sin originated from global YTL issuances is beneficial to the implementation of full-fledged inflation targeting in Turkey.

7. THE IMPLICATIONS of GLOBAL YTL BOND ISSUANCES on MONETARY POLICY and FINANCIAL MARKETS' DEEPENNING

- 7.1** The global YTL bonds may mitigate negative effects of dollar liabilities in the economy, decrease interest rate volatility, improve the stability of financial markets, yield long run information for authorities and assist financial deepening.
- 7.2** The existence of liability dollarisation may limit the ability of central banks to avert liquidity crises in their role as lenders of last resort. Dollar-denominated debts and the associated volatility of domestic interest rates heighten the uncertainty associated with public debt service, thus lowering credit ratings. In such an environment, a shock to the exchange rate can cause asset prices to move adversely. However, if countries attempt instead to minimize these risks by limiting their dependence on foreign sources of funding, they may then be starved of the finance needed to underwrite their growth. The process of economic and financial development will be slowed (Eichengreen, Hausmann and Panizza, 2003b). Therefore, it may be argued that effectiveness of monetary policy and predictability of transmission mechanism increases as the share of foreign currency denominated debt decreases with global domestic currency denominated bond issues.
- 7.3** Eichengreen, Hausmann and Panizza (2003b) claimed that, countries suffering from the original sin have found it difficult to participate in the movement toward greater currency flexibility or to exploit its benefits. Since exchange rates movements fill monetary policy with wealth effects that limit its effectiveness, interest rates must do more of the work when the economy is hit by adverse shocks. Therefore interest rates are more volatile and pro-cyclical in such countries, and more volatile interest rates and fragile financial positions imply correspondingly greater macroeconomic volatility. Hence decreasing interest rate volatility will be another positive effect of the global YTL issues.
- 7.4** Another contribution of global YTL issues is to improve stability of financial markets and to ensure long run information available for authorities. Existence of long term YTL denominated fixed assets in markets may ensure development of derivative and structured instruments that are vital for financial stability. Longer-term structures allow financial engineers to find clever hedging and arbitrage techniques for risk-averse

investors. Like a snow-ball, integration of forward rates, options, futures, swaps, etc. may further help decrease the borrowing cost and increase the financial depth, which will add value to the financial system and increase capital adequacy through enhanced market capitalisations.

- 7.5** In addition to that, as the long-term instruments are traded, monetary policy decision makers may extract market perceptions and expectations about economic variables via yield curve. As such derivations would be from market-trading rates, they may provide better and more meaningful data sets compared to survey techniques. At the end of the day, it is the actual trade that accumulates the sample, instead of an investigation of “the willingness to trade” as it is the case in survey techniques.
- 7.6** The global YTL bonds would also assist financial deepening. As the rating of Turkey reaches to the investment grade, real sector firms may reach to global YTL credit markets and they may be able to find alternative financing sources for their profitable investment projects. Current conditions in the Turkish financial system fail to supply long-term credits to finance investment or mergers and acquisitions projects exceeding three to five years. With maturities longer than ten years, global YTL bond issuers may prefer to distribute long-term YTL credits through consumer credit companies in the domestic market in order to hedge themselves. The level of corporatisation in Turkey allows the IFIs to find credible firms to establish a financial relation in terms of long-term credits. The IFIs may also prefer to have swap operations with the banks operating in Turkey in order to hedge their position. In either case, the Turkish financial system reaches to new instruments that will also help to narrow the maturity mismatch problem between deposit and credit stock.
- 7.7** It may also be expected that with the help of the new Mortgage Law, Turkish financial institutions would issue YTL bonds in the global markets with longer maturities. As the rating restrictions may diminish in the near future, rating premiums would decrease so that Turkish firms can directly issue YTL bonds abroad, which will enhance financial deepening even further.
- 7.8** At this stage, it is recommended to differentiate the impact of global local currency bond issuances for developing and developed countries. There may be a case that with strong monetary policy credibility, operational rate transmission to long-term interest

rates may be delayed or rate decision's impact may be eased as a result of cheaper financing opportunities in the credit markets. These bonds forces long-term interest rate differentials to converge and when there is a case to increase relative rates, market forces may surpass central bank decisions. Such a case may require credible central banks in original-sin-free countries with no saving deficits to over-react inflationary pressures. Current problems in the re-emergence of inflation risk for the New Zealand economy signals such a complication⁸.

8. THE IMPLICATIONS of GLOBAL YTL BOND ISSUES on REAL SECTOR (BALANCE SHEET EFFECTS)

- 8.1** After discussing the implications of these bonds on monetary policy and financial deepening, the likely effects of global YTL bonds on Turkish real sector will be mentioned in this section. First of all, these bonds may help to strengthen the stability of the Turkish economy. They may also enable to avoid some dead weight losses stems from holding excess reserves.
- 8.2** The original sin causes financial fragility in any economy by accumulating net external debt, and causing maturity and currency mismatches in the balance sheets of economic agents and the reel sector as a whole. As mentioned by Eichengreen, Hausmann and Panizza (2003a), large literature could be seen about balance sheet factors in financial crises. This literature focuses on the impact of disturbances on the assets, liabilities and net worth of households, firms, governments, and the economy as a whole and on the implications for growth and stability. As we discussed in the previous sections, global YTL bond issuances may enable to decrease financial fragility by ameliorating currency and maturity mismatches in the balance sheets, to alleviate interest rate volatility and to increase the flexibility of fiscal policy. All these factors may strengthen the effectiveness of fiscal and monetary policy in aiming at ensuring macroeconomic stability.
- 8.3** A country may take certain measures to eliminate those balance sheet mismatches or prevent them from arising in the first place. Decision on not to borrow on hard currencies is an option. A financially self-sufficient country with saving and investment

⁸ Bollard (2007) explains the complications for the New Zealand economy caused by Eurokiwi and Uridashi bonds that have been issued in New Zealand dollar denominations in Europe and the Far East. Current level of global New Zealand dollar bonds stands around 55 billion.

balance might have no currency mismatch problem because it has no external debt that has been borrowed before to fill saving gap. And it is thought that such a response clearly has costs; the country in question will forgo all the benefits, offered by borrowing abroad. Alternatively, the government can accumulate foreign reserves to match its foreign obligations. In this case the country eliminates its currency mismatch by eliminating its net debt (matching its foreign currency borrowing with foreign currency reserves). But again it is costly too; the yield on reserves is generally significantly below the opportunity cost of funds. Therefore, financial fragility may be alleviated and some dead weight losses may be avoided by issuing global YTL issues.

- 8.4** Eichengreen, Hausmann and Panizza (2003a) asserts that emerging market economies are volatile because they find it difficult to denominate their obligations in units that better track their capacity to pay, such as the domestic currency or the domestic consumption basket. They think this constraint derives in part from the structure of international portfolios and the operation of financial markets. In addition to that the composition of external debt is a key determinant of the stability of output, the volatility of capital flows, the management of exchange rates, and the level of country credit ratings. Therefore, global YTL issues may function as stabilizers and strengthen the stability of Turkish economy.

9. OPPORTUNITIES FOR DEBT MANAGEMENT STRATEGIES

- 9.1** After investigating theoretical reflections of YTL denominated borrowing instrument issuances by the IFIs on different aspects of monetary and financial stability, some practical aspects of the global YTL bonds and “de facto” convertibility of the YTL will be discussed especially by considering the opportunities for the debt management strategies.
- 9.2** In order to estimate future potential for the YTL bonds issuance by the IFIs, it may be better to cross-check other countries experiences, namely Hungary and Poland, which have been also at the centre stage of convergence. As of June 2007, global bonds reached to 7% of GDP for Hungary and 5% of GDP for Poland. As of 1st February 2007, the amount reached 11 billion USD (2% of officially projected 2007 GDP) for Turkey. The amount is quite staggering when we consider the huge economic

prospects of Turkey and the nascent EU convergence process and gross saving deficit of Turkey. In such a framework prominence of increasing YTL denominated issuances for the Turkish Treasury becomes clear: The effect of debt accumulation arising from that deficit may be eased substantially through the coming years. Debt accumulation rate may fall as a result and such a contribution may ease fiscal dominance concerns even further.

- 9.3** Risk perception of international investors for YTL borrowing instruments may change positively as international YTL bond issuances have longer maturities. Stripping, hedging, swaps and arbitrage techniques may be designed that will lead to stronger demand for those bonds. The liquidity spared for trade might increase. All will lead to further demand growth and decreasing yields in the international and domestic markets. In sum, the Treasury's borrowing cost may go down.
- 9.4** Global demand for YTL bonds is also a clear sign for the credibility gains of the Central Bank of Turkey for the prudent monetary policy framework since 2002. Elimination of advances to the Treasury in 2001 with the new Law and legal base for the disinflation has given a global trust on the national currency such that European pensioners, American fund managers, Asian portfolio investors and the like are attracted to enjoy interest rate differentials between the YTL and other currencies around the world. Through the carry-trade strategies and by using structured products, global yield hunters and long-term investors have been demanding YTL bonds for high yields compared to other alternatives.
- 9.5** The increasingly issuance of global YTL bonds may also create an opportunity for the following decade on the interest rate convergence for the YTL. As long as the European Union convergence is sustained in the medium term with basic reforms kept on track including education, social security and widening the tax base to limit the unofficial sectors that leads to unfair competition, the interest rate differentials between the YTL and other major currencies including the Euro would narrow on an annual basis. Basic drivers for such a convergence would follow a path that is described below:
- Global demand for the YTL denominated instruments increases, which will put pressure on the IFIs to supply YTL bonds: This phase is already fulfilled. Until the

rating for Turkey goes up to investment grade, this demand would basically be fulfilled by the IFIs.

- The IFIs will create a demand for hedging instruments for their issues. The apparent alternative is already available Treasury bonds in the domestic market. However, these bonds are shorter in maturity. There comes a strong demand for the longest end of the yield curve.
- The Treasury finds an opportunity for longer-term local bond issues. The borrowing cost also decreases.
- Prudent and credible monetary and fiscal policies along with structural reforms allow rating upgrades, which also helps to further decline in the interest rates.
- With an investment grade, the Treasury gets a chance to directly issue global YTL bonds with compatible rates⁹ and longer maturities.
- Fiscal dominance disappears completely and Corporate Turkey with high credit worthiness takes over the global YTL bond markets.
- Through structured products, hedging instruments and swaps, interest rate differentials narrows on a gradual basis. The borrowing cost of the Treasury decreases to levels compatible with the Eurozone.
- International trust on the YTL eliminates main drivers of dollarisation and locals may change their investment preferences in favour of the YTL as well. In this phase, the YTL may become a truly competitive currency to challenge investment alternatives from many developed countries with strong central bank credibility.

10. CONCLUSION

10.1 Chronic inflation that has emerged after the second oil crisis in the second half of 70's has played a destructive role in the emerging Turkish economy. Still, the national

⁹ Brazil has already issued Brazilian real global bonds.

currency became so inflated that six zeros were needed to be dropped in order to ease settlement of daily transactions both for conventional and electronic payments and custody services. As electronic custody and settlements have become technically realisable for the YTL, IFIs started to issue global bonds denominated in the YTL.

10.2 The inability to borrow from international markets in domestic currency has many destructive effects on many emerging market economies including Turkey. Hence, global YTL issues with the technical support of dropping six zeros from the Turkish lira is a very constructive development. Because, it may help lengthen the maturity of debt stock with decreasing borrowing cost parallel to a demand growth for YTL denominated instruments. Through directly hedging the issuance with investing in the local market in the same denomination or by using swap operations to guarantee a positive return on investment, the Treasury enjoys additional demand for YTL bond markets, both primary and secondary. Consequently, increasing share of global YTL issuances may help to limit risks for a re-emergence of fiscal dominance. In addition to that, likely improvements in the Turkish fiscal balance stems from global YTL bond issuances may also enable to increase the flexibility of fiscal policy. Thereby, the policy makers may have more room to implement fiscal policy counter cyclically to ensure macroeconomic stability.

10.3 In highly integrated and globalized financial markets, portfolio diversification and search for yield motivation of investors and favorable global liquidity conditions along with the declining home bias may help to support growth of global YTL bonds in the future. As long as the rating premium exists and the interest rate differentials between the YTL and other major currencies remains, one might expect that the global YTL bond issuance would play a critical role on the financial sector developments in Turkey. Looking at experiences of other countries such as Brazil, the Treasury may have options to directly issue global YTL bonds in the international markets in YTL denominations free from foreign exchange rate risk. Because of the legal advantages of the global bonds arising from the differences between local and international law, it may be expected that the cost of global borrowing in YTL would be lower than local YTL borrowing.

- 10.4** The global YTL bond issuances may also have many positive effects on monetary policy, financial markets and real sector. These bonds may alleviate undesired effects of dollar liabilities in the economy, decrease interest rate volatility, improve the stability of financial markets, yield long run information for authorities and assist financial deepening. In addition to these highly welcome effects, these bonds may also help to strengthen the stability of Turkish economy and enable to avoid some dead weight losses stems from holding excess reserves.
- 10.5** Global YTL issues are an indicator of bilateral acceptance of the convertibility of YTL and they enable a sharp cut off from the cost of the original sin for the Turkish Treasury. They help to decrease borrowing costs for the Treasury and to increase the credibility of the Central Bank. The Turkish lira is de jure convertible since July 9, 1992. Fortunately, it has been de facto convertible since December 24, 2004. Although there is approximately 12 years and 4 months lag, de facto convertibility of YTL is also a very pleasant development.

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