

Dynamics of Financial Crises and the Case of Turkey 2001

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I. Introduction

“There is no generally accepted formal definition of a currency crisis, but we know them when we see them.”¹

Paul Krugman

The frequency of financial crises since late 1970's has generated a lot of academic interest; many researchers have tried to explain the origins and impact of financial turmoil. The models which were developed on the dynamics of the currency crises, based on theoretical and empirical grounds, tried to establish a consistent model in explaining different types and episodes of financial crises. At first, the major interest area of academic study was the emerging markets, but developed economies have also been subject to speculative attacks and financial turmoil. The academic interest intensified following the recent crises in the 1990s, both in emerging countries and in the industrial world.

The dynamics of financial crises, as well as the early identification of problems, management of risks, and development of a system of early-warning indicators became attractive topics within the context of the theoretical crisis models. However, there is no broadly accepted genuine model that explains all episodes and types of currency crises. As Paul Krugman said, *“Each new set of crises presents new puzzles!”*² Thus there still remain many important and unresolved issues.

Turkey, as an emerging economy, was never an exception to the distress of financial crises. Since the 1970's, when the closed economy and the state-led development strategy based

¹ Krugman (2000)

² Currency Crises, by Paul Krugman, available at <http://web.mit.edu/krugman/www/crises.html>

on an import-substitution model of development was maintained, the economy has frequently suffered from external debt pressures and high financing cost traps. During this period, foreign exchange reserve shortages and reserve depletion became a frequent problem. The economic and financial downturn of the 1970's led to a series of radical policy changes in the 1980's. With an IMF-backed programme in the 1980's, the liberalization of trade and current account convertibility was introduced, followed by capital account convertibility in 1989. In short, the economy was opened to the rest of the world, aiming at the establishment of a free market system. Following full-fledged capital account liberalization in the late 1980's, the availability of capital inflows, in all types, increased the possibility of speculative attacks against the local currency. As a result, the market was never immune against attacks and meltdown. On the contrary, the later the crises hit the markets, the larger and more severe the impact they had on the economic activity.

In February 2001, Turkish economy was hit by its most severe economic crisis, just in the fourteenth month of an IMF-backed stabilization and disinflation programme, which was launched with an ambitious exchange rate based disinflation target. However, it was not the first time in the recent economic history that the financial turmoil pushed economic activity into a severe recession. The first crisis shaking the financial markets took place in 1994, and the economy shrank by 6%, in the same year. Following the 1994 crisis, the economy was under the pressure of financial distress, led by the deterioration in public balances. Several attempts were launched, aiming at pulling the consumer inflation down to tolerable levels, but they were not successful. As an exogenous shock, the earthquakes in 1999 had a disastrous impact on the economy, which had already been in a crisis-like situation for years. We have a detailed timeline

of events on the Turkish economy in the third section of this study. We maintain the position that the dynamics of the February 2001 crisis can not be fully covered in isolation from the economic history of Turkey. The crisis was not a distinct event breaking out from a couple of factors that suddenly became evident in 2000. Neither was it an outcome of a speculative attack independent from the vulnerabilities and structural problems accumulated through the past decades.

In fact, the crises of both 1994 and 2001 showed that the policies of the 1980's and 1990's were unsustainable and that populist policies only worsened the economy without substantial structural reforms, particularly in the public finance and the banking sector. During these two decades, the extra-budgetary funds and duty losses had violated the principle of budget unity, making the budget inflexible and inefficient. The budget figures published by the governments did not provide useful information to decision-makers, as most of the deficit was hidden in extra-budgetary funds and public sector companies, particularly in the state banks. The private banking sector was ill functioning, as the sector was also shadowed by the dominance of the public sector.

Rather than special case assessments on the financial and economic collapse, the 2001 crisis should be evaluated with a long term and structural perspective. The collapse in 2001 was not an exceptional development observed in a single year. Instead, as the figures show, the economy had contracted by -6.2% in aggregate terms from 1997 to 2001; the Turkish economy was in a deep recession due to deteriorating macroeconomic fundamentals. The inflation remained high during this term despite several efforts at correction.

Verifying our argument, the economic recovery in the aftermath of the crisis came along

with the public sector reforms, which aimed at ensuring transparency and accountability in resource allocation in the public sector. At the same time, the banking sector was rehabilitated and the risks were eliminated, paving the way for a stronger financial structure.

The dynamics and the features of the financial turmoil during late 2000 and early 2001 could be partially explained within the framework of traditional crisis models. ‘Continuous deterioration in economic fundamentals’ was not the only ground for the economic crisis as defended in the first generation models. Neither was it a result of a self-fulfilling dynamics after a speculative attack, and it did not fit the characteristics of the second generation models. In other words, neither the first generation model nor the second could fully capture the 2001 financial crisis in detail. Instead, understanding the dynamics of the crisis requires deeper analysis and further academic study monitoring not only the macro-economic fundamentals, but also the impacts of political discrepancies and the lack of successful institutional transition throughout the modern economic history in Turkey.

Several studies emphasized that the 2001 economic crisis of Turkey was a result of the deterioration of the external balance. However, the expansion of the deficit in Turkey’s external trade balance was not a specific development that occurred only in 2000. In fact, since the beginning of trade liberalization in 1980, the external trade deficit figures of Turkey grew rapidly. The growth of imports was hardly surprising since the imports have been more elastic to economic growth. But the widening trade deficit could not be blamed as the main determinant of the fall of the economy into crisis. As a matter of fact, the developments were within the expectations and in line with the stylized facts of exchange rate based stabilization programs; namely, an output expansion and strong demand were observed in the initial period, the first half

of the year. Thus, the growth of imports in 2000 was in line with the expectations, and the financing requirement for the current account deficit was provided by the IMF beforehand. In other words, the government's exchange rate based disinflation program was strongly backed by the IMF in financial and political terms, in order not to face any problems of the widening of the current account deficit.

Others blamed the design of the IMF-backed stabilization program arguing that the weakness of the program had led to speculative financial inflows and outflows, which was ready to hit the financial markets, on an imminent political tension. In order to claim that choosing an exchange-rate based disinflation strategy was an unfortunate choice, one should keep in mind that Turkey did not have an alternative strategy to reduce the inflation, when the economy was already in deep recession at the end of 1999, eliminating monetary based disinflation strategy as an alternative.

We do not disregard the role of emerging market-specific nature of banking and financial system in turning the currency attack against the Lira to a full-blown economic crisis. Instead, the banking sector fragility, the ill-functioning public sector, and irresponsible policies that had been maintained throughout the 1990's had enabled the currency attack to have a massive adverse impact on the economy. Thus, recognizing the financial capital movements as the major cause of the problem would be naïve, and would not present a full grasp of the roots of the economic collapse.

The crisis in 2001 stemmed from an unfortunate combination of political events with attacks on currency stemming from weaker confidence in government's commitment to the

stabilization program. If detailed, continuing public sector imbalance, resistance to reforms, irresponsible policies of the government members violating the principles of the economic program, the authorities' policies disregarding the structural problems of the public banks (particularly the so called duty loss problem), and the systemic fragility in the banking sector could be listed as the main headlines. Had the structural reforms and privatizations not been interrupted and the banking system been rehabilitated, there would be room for a responsible political authority to avoid the crisis, i.e. the crisis was not unavoidable!

The second part of our study provides a brief summary of the widely accepted theoretical models which explain the dynamics of currency crises. The third part is a brief account of macroeconomic developments in Turkey from a historical perspective. Then, in the fourth part, the dynamics of the February 2001 financial crisis, which is the most recent and the most severe crisis in modern Turkish economic history, are analyzed within the context of economic and financial development. With a critical review of what has been said about the 2001 crisis so far, we will try to point out the valid grounds, as well as acceptable justification for the financial disaster in February 2001.

II. Theories and Models of Currency Crises

II.A. Definition and the dynamics of currency crises

Although there is a lack of a comprehensive and widely accepted definition of a financial crisis, the episodes are usually identified with attacks to domestic currency leading to a sharp

devaluation and to large decline in international reserves, or to a combination of the two.³ Frequently, the definition of the crisis is linked with a series of financial and economic indicators. For instance, Eichengreen and Bordo define currency crises by an index of exchange market pressure or a forced change in parity, abandonment of a pegged exchange rate, or an international rescue⁴.

Frequently, the banking, corporate, or sovereign payment crises⁵ are also associated with the currency crises. Theoretical studies examine a wide variety of factors to identify direct links with the episodes of crises.⁶ Earlier models attached more emphasis on macroeconomic fundamentals, particularly on the terms of trade and on fiscal balance. At the same time, particular emphasis was attached on exchange rate regimes. Although most of the crises occurred under fixed exchange rate regimes, it should be noted that other regimes are not fully safeguarded against speculative currency attacks. On the other hand, although a certain majority of the academic interest focused on emerging economies, developed countries were not fully protected against currency crises either.

The main story behind an early type of financial crisis follows the collapse of an exchange rate peg with sharp falls in the value of a floating currency, indicating a broader loss of confidence in the country's economic policies. As a result of such events usually capital inflows into the country dry out. The decline in capital flows, in turn, often creates financial trouble and liquidity risk for the banks and other financial sector members while the private firms are not free

³ Kaminsky et. al. (1998).

⁴ Eichengreen and Bordo (2002)

⁵ Roubini and Setser (2004) pp.26-27

⁶ See Kaminsky et.al (1998), Roubini and Setser (2004).

from the risk either. The governments are also vulnerable against exchange rate risk, as they count on continuous access to market financing, both to cover ongoing deficits of the external and the fiscal balance. Even with a balanced trade and low level of budget deficits, the level and the composition of the debt stock is critical, as the refinancing of existing debts puts the governments in a “glass” case. Moreover, the devaluation of the domestic currency brings about an increase in the burden of foreign-currency denominated debt for both the private and the public sectors, making it even harder to service. In consequence, both the financial and the real sector, and both the public and private sector are harmed, and the real output in the economy falls sharply almost in every crisis country.

It is repeatedly underlined by scholars that every crisis has its own specific features and causes. Nevertheless, the most common source of vulnerability in most recent crises is identified as large and unsustainable macroeconomic imbalances. The financing of the fiscal deficits, when combined with unsustainable trade deficits, make the economies more vulnerable to liquidity runs. Unsustainable fiscal deficits increase the doubts on the credibility of the monetary and fiscal authority. Thus, the management of expectations is considered as a critical issue for policymakers. In other words, unsustainable policy choices increase the risk of the crises as the system becomes more fragile. In addition to that, as soon as the policymakers’ credibility is harmed, there is the risk that the financial system itself may trigger self-fulfilling episodes leading to a catastrophic downward spiral.

Although it is not perfectly correlated, the fixed or semi-fixed exchange rates play a crucial role during the outbreak of the currency attacks. When the exchange rate regime is a hard peg, or a managed exchange rate, the authority does not defend the fixed parity whenever an

attack is triggered against the domestic currency. Another common element frequently emphasized by theoretical models is the poor banking regulation and the combination of political shocks and external shocks.

Kaminsky (1998) lists a large variety of indicators based on several episodes of currency crises. The indicators are grouped into several broad categories, which include the external sector, the financial sector, the real sector, the public finances, institutional and structural variables, political variables and contagion effects. It is also indicated in the same paper that many of the indicators listed in explaining the dynamics of crisis, are in fact transformations of the same variables. However, there is no clear-cut answer provided by the theory, which enlightens all episodes of currency crises. It is concluded that an effective warning system for a currency crisis should monitor a broad variety of indicators meaning that most of the crises are preceded by multiple economic and political problems.

Some of the variables, such as the terms of trade and the level of the sovereign debts, are often misperceived and exaggerated in assessments. Although there is a common belief favoring a causality relationship between the balance of payments and attacks to the currency, the economic theory and the empirical results do not support this argument. The same study mentioned above (Kaminsky, 1998) presents that the variables associated with the external debt profile and with the current account balance do not receive much support as a useful indicator of crises.

Where the balance of payments is concerned, it was argued that debtor and creditor countries respond asymmetrically to income shocks.⁷ It is well presented by Calvo that the correlation of large current account deficits with currency crisis is weak.⁸ Furthermore, he recommends developing crisis scenarios that are free from current account imbalances in order to sketch the essential financial components. A key element he presents is the maturity mismatch between the assets (long) and financial obligations (short). In general, it is thought that currency crashes and current account reversals are distinct events.⁹

Edwards (2002) shows that although current models of current account sustainability provide useful information about the long run, they are of limited use in determining if a country's current account deficit is too large at a particular moment in time¹⁰. It is also argued that, the equilibrium models of frictionless economies are of little help in understanding actual current account behavior or assessing a country's degree of vulnerability.

From a historical perspective, the modern models on currency crises are built just after the episodes encountered in Latin American countries during the 1970s and early 1980s. Then, the financial crisis in the 1990s, mainly the ERM crisis in 1992-93 in Europe, and the Asian crisis in 1997 led to more detailed discussions on the topic and gave birth to alternative models.

Traditional theoretical models explained the causes of financial crises with relatively simple approaches, while the recent models are more focused on self-fulfilling episodes with change in expectations and existence of multiple equilibria. Empirical tests of crisis models use

⁷ Ferretti and Razin (1998)

⁸ Calvo (2000)

⁹ Ferretti and Razin (1998)

¹⁰ Edwards (2002)

various indicators of fundamentals, such as the ratio of reserves to money, fiscal balance, and the rate of domestic credit creation. However, it is difficult to infer from available data, whether the collapse of a fixed peg is a result of deteriorating fundamentals or of self-fulfilling prophecies.¹¹

Some of the models try to establish a direct link between the volatility of the exchange rates, and financial turmoil and economic crises. It is again suggested that, weak or unsustainable economic policies are main reasons for exchange rate instability. Volatility of capital markets combined with weak policies results in increased vulnerability of the financial system and diminishes the investors' confidence. This kind of speculative environment in free capital markets forces a sudden response from the market agents and they become the victim of the attack while being the starter of it at the same time. Although partial explanations for some currency crisis episodes are provided by these models, severity of the impact after the turmoil remains unanswered. Furthermore, sound conclusions on the timing of the attack and sequential causes are uncovered.

In the following section, widely accepted models used in explaining the dynamics of the crises are summarized briefly. The summary also presents a timeline of the currency crisis literature, from simple approaches relying on macroeconomic fundamentals and balance of payments to more complex models of multiple equilibrium and balance sheet effects.

¹¹ Ferretti and Razin (1998)

1. First Generation Models

In the late 1970s, the first generation models of currency crisis were constructed by Krugman, with his canonical article “A Model of Balance of Payment Crises” (Krugman, 1979). This model is also frequently referred to in the literature as exogenous-policy model. The paper introduced the “canonical” crisis model, a simple and suggestive analysis that was developed more than 20 years ago but remains as the starting point for most discussion. Krugman’s model was refined by Flood and Garber in 1984¹². In this model, financial crises are identified as unavoidable outcomes of unsustainable economic policies and essential structural imbalances.

The model relies on the theoretical monetary model of exchange rate determination without uncertainty. In other words, the economic agents have perfect foresight about the macroeconomic balances. When an inconsistency between internal and external objectives is observed, traders start to speculate against domestic currency under the fixed exchange rate regime. The final aim is to profit from an anticipated devaluation. The model suggests that a balance of payment crisis is provoked as traders acquire a large portion of the Central Bank’s foreign reserves when the bank attempts to support the domestic currency. In this framework, the inevitable speculative attack represents an entirely rational market response to persistent misalignment of internal and external macroeconomic variables. In consequence, the collapse of the fixed exchange rate system is unavoidable, as explained by the model.

The collapse is due to the central bank’s policy, which mechanically expands domestic credit by monetization of persistent fiscal deficits. After a period of gradual reserve losses, a

¹² Flood and Garber (1984)

perfectly foreseen speculative attack wipes out the remaining reserves of the central bank and forces the abandonment of the fixed exchange rate.¹³

The main feature in first generation models has been a passive government running huge budget deficits. It is assumed that these deficits are financed typically by printing money. As a result, the financing of the deficit through money creation leads to a decrease in foreign exchange reserves of the central bank in order to offset the increase in domestic credit.

These models have two initial assumptions: The first is the continuation of inconsistent policies and the second is the maintenance of a fixed peg exchange rate regime. The question on the timing of the attack is answered by the model with the suggestion of a simple formula: When the over-spending is financed through monetary expansion, the country loses international reserves with the same speed as the increase in domestic credit, until a speculative attack takes place. When the speculative attack occurs, international reserves dramatically drop to zero, and the monetary authority can no longer defend the fixed exchange rate. The exchange rate begins to depreciate at the same rate as the increase in domestic credit. The answer to the critical question of timing given by the model is the time when the shadow exchange rate¹⁴, which is a hypothetical exchange rate that would be realized immediately after the attack, is exactly equal to the fixed rate. However, a discrete devaluation of the local currency represents a windfall capital

¹³ Ferretti and Razin (1998)

¹⁴ The *shadow exchange rate* is defined to be the floating exchange rate that would prevail in the market if the speculators purchase the remaining government reserves committed to the fixed rate and the government refrains from foreign exchange market intervention thereafter. The shadow rate is crucial to assessing the profits available to speculators in a crisis as this is the price at which speculators can sell the international reserves that they buy from the government. In general, the shadow rate is influenced by the amount of reserves that the government continues to hold following its optimal defense of the fixed rate. The shadow exchange rate therefore is the exchange rate that balances the money market following an attack in which foreign exchange reserves are exhausted. (see Flood and Marion, 1998)

loss for those holding the local currency. If the devaluation is expected, as in these models, investors will try to avoid the loss by acting earlier. They sell local currency for foreign currency. This brings the crisis forward in time.

The rest of the scenario becomes simpler: when the shadow exchange rate is below the initial fixed rate, speculation will appreciate the home currency and depreciate the foreign currency, so there is no incentive to buy the foreign currency. When the shadow exchange rate is above the fixed rate, the attack will depreciate the home currency and appreciate the foreign currency, so everyone wants to attack. Thanks to the competition among speculators, the actual attack is realized when the fixed rate is exactly equal to the shadow exchange rate. The exchange rate smoothly moves from fixed to floating without a jump. Before this point, attack does not pay. After this point, attack is too late, since everyone else has already attacked.

The first generation models suffer from some obvious weaknesses: The rule of deficit financing assumed is very rigid, even though deficits are not sustainable in the long run. While the investors are actively maximizing the returns on their assets, the government is too passive—it knows that the central bank is losing reserves, hence can give up the parity before it runs out of all reserves, but chooses not to do so!

Theoretical models imply that the exchange rate will adjust smoothly when the exchange rate regime shifts from a fixed to a flexible one. In reality, countries generally experience quick, unexpected and huge devaluations. The ruling out of discrete jumps in the exchange rate in these models is partly due to perfect information, but introducing uncertainty may not be sufficient to explain why countries that let go of their exchange rates during a currency crisis face big

devaluations.

To present the significance of uncertainty, Krugman (1979), and Flood and Garber (1984) consider two models with uncertainty. In the former, the local government may want to spend a fraction of its foreign reserves to defending the currency with certainty, while there is a positive probability less than unity, that it will spend the rest of the reserve on defending the currency. The investors will then purchase all the reserve that is committed to defending the currency with certainty at the time when the pegged exchange rate is equal to shadow exchange rate corresponding to the remaining reserve. They then wait and see whether the government spends the rest of the reserves. If it does not, the exchange rate becomes flexible and follows continuously the path of the shadow exchange rate. If it does, the confidence of the investors returns, and they sell the reserve back to the government, and hold the local currency. The fixed exchange rate regime is maintained, until the next crisis occurs, when the pegged exchange rate is equal to the shadow exchange rate corresponding to zero reserve.

In the uncertainty model of Flood and Garber (1984), the rule of domestic credit creation is uncertain, and the investors do not know with certainty whether in the next period the shadow exchange rate will be higher or lower than the pegged exchange rate. However, since the cost of holding foreign reserves is zero, investors can simply purchase foreign reserve from the government just before each period, wait and see whether the exchange rate will become flexible. If it does not, investors can simply sell the foreign reserve they hold back to the government.

Sen argued that the attack on the Central Bank's foreign exchange reserves can take place on any date¹⁵, contrary to Krugman's argument presented in his seminal paper. For the attack to be successful, the amount of foreign exchange reserves that the Central Bank will lose on any date is uniquely determined. It was shown that the Central Bank may be in possession of a lot of foreign exchange reserves but not an "adequate amount" i.e., not enough to maintain a fixed exchange rate.¹⁶

To sum up, the first generation models suggest that the root of the crisis is poor fiscal policy by the governments. The source of the upward trend in the shadow exchange rate is given by the increase in domestic credit. The crisis can be prevented by an immediate solution of the fiscal problem, according to the model. Speculative target is provided by the government's pursuit of inconsistent policies including persistent deficits together with an exchange rate peg. Although the crisis is sudden, it is a deterministic event, since it is inevitable given the policies and the timing is predictable. An important outcome of the discussion is that the theoretical model seems to do no harm to the economy. In the model, there is no effect on output, and the crisis does not need to be followed by a real economy slump. However, the empirical results and the examples of currency crises proved that in the real cases these assumptions and conclusions do not hold exactly.

¹⁵ Sen (2000).

¹⁶ Sen (2000).

2. Second Generation Models

The speculative attacks on government-controlled exchange rates in Europe (1992) and in Mexico (1994) led the economists to search for alternative models in explaining the crises. In both episodes mentioned above, there was no clear evidence for irresponsible fiscal policies. Moreover, there was no obvious trend in the long-run equilibrium exchange rate, and the shadow rate was not depreciating. No mechanical link between capital flight and abandonment of the peg was observed.

The new model, namely the second generation model¹⁷, introduced the “multiple equilibria” and underlined it as the major ground for currency crises. The model points out that the crises may occur even when there are no problems with the macroeconomic fundamentals. According to the second generation model, which is also called as the *multiple equilibria model*, a currency crisis occurs when the economy suddenly jumps from one equilibrium point to another, which needs not to be dependent on the deterioration of macroeconomic fundamentals. Without any imbalance in macroeconomic indicators, it was shown that raising the cost of devaluation increases the possibility of the attack on the currency, and brings forth a self-fulfilling crisis¹⁸.

In the first generation models, the crisis is driven mainly by the government’s insistence on depletion of reserves due to inconsistent macroeconomic policies with damaged fundamentals. According to the second generation models, on the other hand, the crisis is driven by self-

¹⁷ Obstfeld (1994, 1996)

¹⁸ Flood and Marion (1998)

fulfilling expectations. The costs of avoiding the depletion of reserves at the time of an attack are underlined. In other words, costs of defending the parity during the attack gets so high that the government makes a political decision to devalue. The self-validating circle becomes the major ground for the crisis. Simply, the possibility of the crisis makes the crisis possible.

The 'second generation' models emphasize that not only does current policy affect the crisis probability, but also expected future policy is essential. In these models there is no longer a unique solution as the optimal future policy depends on the occurrence of a speculative attack. Even if current policy is not inconsistent with the exchange rate commitment, speculative attacks may be successful because the costs of maintaining a currency peg, in the form of high domestic interest rates, rise in response of the attack. In this framework, speculative attacks become more likely if high interest rates become more problematic, for instance due to economic slowdown, high unemployment rates, or a weak domestic banking sector. Raising interest rates increases short term funding costs for banks, whereas the higher proceeds from loans might be dubious due to the on average longer maturity of loans relative to deposits and the increased probability of bad loans.

However, it was shown that the agents' expectations for the possibility of expansionary policies in the near future are crucial in determination of the attack against the currency. Flood and Marion summarize the difference between two models: "Whereas the first-generation models use excessively expansionary pre-crisis fundamentals to push the economy into crisis, second-

generation models use the expectation of fundamentals expansion ex post to pull the economy into a crisis that might have been avoided”.¹⁹

We can say that, the second generation models endogenize the government’s policies. Private agents forecast the government’s choice as to whether or not to defend the peg, based on trading off short-term flexibility against long-term credibility. The peg is abandoned either as a result of deteriorating fundamentals, as in first-generation models, or following a speculative attack driven by self-fulfilling expectations. The self-fulfilling attack can -but need not- occur with vulnerable fundamentals.²⁰ The expectations of private agents for a probable devaluation pull the interest rates up, which will increase the cost of defending the fixed exchange rate, validating the self-fulfilling circle. In contrast, when the private agents do not anticipate devaluation, the interest rates stay at lower levels and devaluation becomes less likely.

Secondly, the first-generation models had linear behavioral functions.²¹ On the contrary, the second-generation models focus on the non-linearities in government behavior. The model examines what happens when government policy reacts to changes in private behavior or when the government faces an explicit trade-off between the fixed exchange rate policy and other objectives.²²

Finally, the first-generation models generate an attack when the inconsistent policies push the economy into a crisis. In the second-generation models, even when the policies are consistent

¹⁹ Flood and Marion (1996)

²⁰ Ferretti and Razin (1998)

²¹ Flood and Marion (1996)

²² For a detailed study on linearity and non-linearity, see Flood and Marion (1996)

with the fixed exchange rate, attack-conditional policy changes can pull the economy into a crisis.

A reversal in capital flows can also cause a currency crisis and force a reduction in current account deficits because sources of external financing dry up. However, a reversal can also take place in response to a change in macroeconomic policy designed to forestall the possibility of future speculative attacks or capital flow reversals, or as a consequence of a favorable terms-of-trade shock. Speculative attacks leading to currency crises can follow a collapse in domestic asset markets (as in Asia), accumulation of short-term debt denominated in foreign currency, a persistent real appreciation and deterioration of the current account (as was the case in Mexico), or a political choice to abandon a rigid exchange rate system (as was the case in the United Kingdom in 1992).²³

The two models have different implications on institutional arrangements. Strengthening cross-country currency ties would stabilize the exchange rate and would thus reduce the likelihood of crises according to the theory of first-generation models while the opposite is implied by second-generation models. The second-generation models, according to Obstfeld's model, entering into a stronger monetary union in order to raise the cost of changing exchange rates may be exactly the wrong policy prescription.²⁴

The multiplicity of the equilibria is the substantial element of the framework suggested by the second generation models. The model contains one policy parameter, which cannot be

²³ Ferretti and Razin (1998)

²⁴ Flood and Marion (1996)

controlled by the policymaker: confidence. This parameter measures the degree of political commitment, government credibility or institutional support behind the exchange rate²⁵. If the cost of devaluing is negligible, devaluations will be a regular occurrence. But if the cost of devaluing is set high enough, there will be no devaluations.²⁶

Krugman argued that, in the second-generation models the crisis is again provoked by the inconsistency of government policies, macroeconomic fundamentals, as it was in the first-generation models. According to him, although pure self-fulfilling crisis is possible with no worsening trend in fundamentals, long-run survival of the fixed exchange rate is impossible with a government insisting on inconsistent policies. The expectations of devaluation are the main ground for the devaluation, but the whole process is originally caused by the impossibility of the continuation of the inconsistent policies by the attacked country in the long run, or a conflict between its domestic objectives and the exchange rate. In general, the result brings us to the same point: **A currency crisis is essentially the result of policies inconsistent with the long-run maintenance of a fixed exchange rate.**

3. Alternative to First and Second Generation models: the Balance Sheet Approach

The first two theoretical models on currency crises focus on flow variables of the economy such as the fiscal deficits, the current account deficits, foreign capital inflows and outflows. An alternative approach to both models, the balance sheet approach, examines the stock

²⁵ Flood and Marion (1996)

²⁶ Flood and Marion (1996)

variables in the balance sheets of the sectors in aggregate terms²⁷. The model simply attaches increasing probability to financial crises when there is a fall in demand for financial assets of one or more sectors in a country. A possible outcome follows that the creditors of that country lose confidence in her ability to fulfill her obligations. The country is assumed to fail earning required levels of foreign currency in order to service her external debt. Furthermore, the government's ability as to whether there is a sufficient level of financing in order to redeem its debt—domestic or external—is questioned. The banking sector's ability to meet deposit outflows and the real sector's ability to repay bank loans and other debt are also questioned by the market agents.

The real sector and the banking sector are included in the model separately since the financial markets became increasingly integrated over the past decades thanks to the pace of globalization. In a global world, more foreign borrowing options are available for both the real and the financial sector as well as for the governments. When the savings within a country are insufficient to meet required amount of investments, the foreign capital inflows fill the gap, provided that prudent macroeconomic policies are implemented and maintained. Here, the financial integration made the private capital flows more sensitive to market conditions, macroeconomic outlook, policy weaknesses and negative shocks. Thus, the composition and the size of the liabilities and assets on the country's balance sheet, including the financial and the real sector, became more critical than ever. For instance, an increase in the level of short-term debt stock owed by the real sector may be an important source of vulnerability, since the creditors, even the domestic investors, will start re-assessing their willingness to continue financing the country.

²⁷ Allen et. al. (2002)

In the worst-case scenario, the consolidated financial balance sheet of a country will reflect how far the governments can carry on inconsistent policies, or how effectively a country can manage to protect the market from volatility stemming from the changes in global conditions. With the help of the theoretical background provided by the first two generation models, a systematic analysis of the balance sheets of a country explores the weaknesses, fragilities and the vulnerabilities in an economy. Additionally, a special focus on balance sheets of particular sectors, which are perceived as key sectors, helps in understanding and estimating the probability of a crisis in that sector. The risk of the specified sector may generate a broader crisis.

As in a private company's balance sheet, an economy's capacity to absorb external and internal shocks depends on the economy's stock of liabilities and assets. Thus, the balance of the external liabilities and the liquid assets of a country in aggregate terms are vital. On the other hand, the internal interaction of the key sectors, the government, the financial, and the corporate sectors, is equally essential. The fragilities and the weaknesses of a particular sector may expand within the entire system. Thus, the sources of fragility are analyzed with a particular attention to the mismatches between the balance sheet elements. These are the mismatches of maturity and currency, in addition to capital structure and solvency problems.

It should be noted that the maturity mismatches, currency mismatches and poor capital structure, can each contribute to solvency risk. But the solvency risk can also arise from simply borrowing too much or from investing in low-yielding assets.

The other issue associated with the fragilities within the economy is the problem of moral hazard. In some recent models, moral hazard is underlined as the main cause of the financial

crises. The financial intermediaries may be essentially unregulated, while their liabilities are perceived as having implicit government guarantee. The financial sector or even the real sector can borrow easily from abroad while the creditors may have limited information about the risks of their investments. This generates a circular process of price bubbles and presents the financial condition of these risk-takers as sounder than it actually is. At some point, when the bubble bursts, the capital flight generates a collapse in the currency, which cannot be defended by the monetary authority. Here, when moral hazard and asymmetric information becomes the critical issue, transparency, accountability and regulation becomes the essential parts of the solution. Thus, reducing the informational asymmetry will reduce the problem.

4. Financial stability and the financial structure

One criticism on the theoretical models of financial crisis paying attention to the macroeconomic fundamentals, the role of self-fulfilling expectations and contagion is that they assumed identical institutional structures across national economies. However, it is evident that different types of institutions have shaped not only the context upon which the expectations are formed in market economies, but also the long run health of the economic fundamentals. Therefore, the financial and institutional structures of an individual country are critical for the dynamics of the economy.

The explanations of currency crisis episodes with the first two-generation models pay no attention to this diversification. It is well presented by Li and Inclan that the central bank independence, coordinated wage bargaining, the structure of the financial system and maturity composition affect both the long run frequency of currency crises and the variability of the

crisis.²⁸ It was also added that the financial market maturity tends to reduce the number of currency crises and market uncertainty in the stock market based financial systems. Compared to the bank-based financial system, the security market based system appears more prone to crises and greater uncertainty, with such effect mediated and weakened by the financial system maturity of a country. As a result, the institutional differences result in distinctive patterns in the frequency and variability of currency crises.

Instead of treating different economies to have identical institutional structure, a differentiated approach should be taken into account in order to shed more light on the different patterns of currency crises. Institutional configurations do make great difference in changing and shaping the patterns of currency crises. Additionally, institutional configurations offer informative cues to currency traders as to the most probable trend and pattern of economic performance in a country, hence reducing the short-run variability in the probability of currency crises and the number of crises motivated by self-fulfilling expectations²⁹. From this point of view, the institutional insights do not substitute for the theoretical models, but complement them with a richer understanding of the causal process³⁰.

In a broader sense, the financial stability is thought to be the system's ability to ensure efficient allocation of economic resources and to sustain the effectiveness of the processes like wealth accumulation, economic growth, and social prosperity. The institutional structure in an economy is crucial for the stability in order to assess, price, allocate, and manage the financial risks and to maintain the ability to perform the key functions. From this point of view, stability

²⁸ Li and Inclan (2001)

²⁹ Davis and Stone (2004)

³⁰ Li and Inclan (2001)

depends mostly on the institutional structure and maintenance of prudent economic policies. The external shocks, or internal imbalances, are cases for the ability of the system to ensure self-corrective mechanisms within the institutional structure and to absorb the risks related to the financial outlook. **Stability not only includes the actions of the fiscal and monetary authorities, but also the processes, institutions, and conventions of the private financial activities.**

The expectations on any kind of disturbances can also undermine the overall stability, requiring a systemic perspective, since the financial system involves uncertainty and many interlinked and evolutionary elements. In this context, the political authority, which allocates and transfers the resources and risks and also regulates the financial framework, becomes a critical component of the system. The payment systems throughout the economy should function smoothly in order to ensure the financial stability.³¹

The literature on economic and financial development provided insights into different corporate financial structures of industrial and emerging market countries. Financial crises have a greater and more consistently negative impact on corporate sectors in emerging markets than in industrial countries, although even in the latter the impact is not negligible. Industrial countries benefit from the existence of multiple channels of intermediation, thanks to a much deeper institutional framework, in the wake of banking crises.³²

³¹ Davis and Stone (2004)

³² Davis and Stone (2004)

It is found that financial variables have a strong relation to capital accumulation, economic growth and productivity growth³³. It was also shown that stock market liquidity as well as the development of the banking sector was related to economic growth.³⁴

Corporate financial structure had little or no role in the early theoretical crisis literature, which began with “first generation” currency crisis models stressing government debt, and “second generation” models, which took into account a broader government’s objective function. The introduction of banks and private sector into more recent models underlined the impact of misalignments on the outbreak and spread of the financial crises.

II.B. Literature on the crisis of February 2001

The economic crises of 1994 and 2001 of the last decade have been the subject of several academic studies. Ozatay and Sak³⁵ compare the two crises and draw the conclusion that the effects of the latter were more severe than those of the former. This severity was explained by the fragility of the banking system, which triggered the crisis in the financial markets and where the chaos was intensified. It was also concluded that, an economic analysis of the year 2000 in isolation would be misleading. With an assertive argument, it was claimed that, had the banking system not been that fragile, the crisis would not have happened at all in 2001. In line with this argument, the main igniting factors towards the crisis were underlined as the delays in the banking sector reforms and the manner that the high level of public sector borrowing requirement was financed.

³³ King and Levine (1993)

³⁴ Davis and Stone (2004)

³⁵ Ozatay and Sak (2002)

On the other hand, Akyuz and Boratav³⁶ put the blame mostly on the approach of the IMF-backed stabilization and disinflation programme, although the structural problems of the economy and the fragility of the banking sector were also mentioned. According to them, the exchange-rate based disinflation strategy of Turkey was initially deficient, and the failure of the programme could have been anticipated. The failure was entirely due to the shortcomings in the design of the program, rather than its implementation. The program failed to meet the inflation target (the disinflation trend was ignored) despite full-commitment to the fiscal and monetary policy targets. The widening of the current account deficit and the expectations of currency devaluation were solely responsible for the capital outflows, which materialized towards the end of 2000. Turkey's crisis was much similar to those of other exchange-rate-based stabilization programs that ended in crashes, with the exception that the program had a shorter life span in Turkey.

Uygur³⁷ agrees with the argument that the crisis was unavoidable, expected, and it was hardly surprising under the IMF umbrella. According to him, what Turkey needed was a “national program” instead of a traditional IMF-backed stabilization program. For a program to be “national”, Uygur maintained, the program should rely on Turkey's own resources – although the details of these resources are not defined – rather than relying on backing by the IMF. The choice of the fixed peg exchange rate regime with a widening current account deficit was the main factor leading to the crisis. Yeldan³⁸ goes one step further, and blames not only the IMF and the government, but also globalization, and the financial integration of Turkey with the global

³⁶ Akyuz and Boratav (2001).

³⁷ Uygur (2001).

³⁸ Yeldan (2002).

world. “Contrary to the official wisdom” he says, “the crisis was not the end result of a set of technical errors or administrative mismanagement unique to Turkey, but it was the result of a series of pressures emanating from the process of integration with the global capital markets.”

Gokkent et. al.³⁹ accept that the crisis in February 2001 was predictable, but only after November 2000, when the unforeseeable financial turbulence hit the markets first. However, the failure of the programme had little to do with the traditional explanations of the failures of exchange rate based stabilization programs. Instead, the phasing in of stricter prudential foreign currency position rules for banks had been much more significant. According to them, when explaining the driving factors of the tension, namely the current account deficit, the credibility loss, the takeover of the banks by the authorities should be underlined. This study puts more emphasis on foreign exchange transactions and argues that the currency risk rules were not met during the run-up to the crisis. The policymakers had failed to react to the up-and-down volatility in the financial markets, and they were reluctant to take measures against the widening current account deficit. Moreover, the decline in confidence in the banking sector was not prevented. On the contrary, stricter rules on currency short positions in tandem with a new regulatory body had an adverse impact on calming the interest rates, and the behavior of interest rates made the conditions even worse for the banks.

The fragility of the banking sector was mentioned as the third main factor by Ozkan⁴⁰. The primary factor was the weakness of the external position, particularly the high level of the external debt stock, and the appreciation of the Lira during the stabilization programme. The

³⁹ Gokkent et. al. (2001)

⁴⁰ Ozkan (2005)

second factor was the weakness of the fiscal position. It was concluded in the same study that the Turkish crisis in 2001 had features relevant to all three generations of currency crisis models, though financial fragility seems to have played a major role, especially in turning the currency crisis into a major financial crisis. Thus, a healthier banking system and balanced fiscal position are seen as the most effective policies in preventing the financial crises.

Tunc⁴¹ objects to the predictability of the crisis, arguing that the investors' panic had played a key role in both the November and February financial crises, rather than certain economic weaknesses such as the widening current account deficit, currency overvaluation and delays in the implementation of certain structural reforms, causing the collapses of the exchange rate based stabilization program. According to Tunc, the weak economic fundamentals were not severe enough to provoke a financial crisis of the magnitude faced by Turkey. Regarding the financial panic, the fragility of the banking sector was underlined as a key factor shaping the outcome of the panic attacks. Thus, although the limitations of the disinflation program were already known in the beginning (say at the end of 1999), failure was not unavoidable. Comparing the Turkish case with other emerging market crises, he adds that the February 2001 crisis was not a unique case. The common element was the "external illiquidity" – the term borrowed by Tunc from Chang and Velasco⁴² to define the maturity and currency mismatches between the assets and liabilities of the banking sector. A common feature in all the cases included in Tunc's comparison (Mexico-1994, Thailand-1997, Brazil-1999) is his underlining the sudden change in the investor sentiment, which was explained with the herd behavior of the market participants and

⁴¹ Tunc (2003)

⁴² Chang and Velasco (1999)

their self-fulfilling expectations. However, he made the distinction that the banking crisis in other exchange rate based disinflation strategies (Brazil 1994 and Russia 1995) in the turbulence did not evolve into full-fledged currency crises.

Alper⁴³ termed the February 2001 a liquidity crisis and listed the main factors as the inability of the Turkish government in maintaining the stream of good news and sustaining capital inflows; the lack of enough backing of the program by the IMF in terms of providing sufficient insurance against exchange rate risk; and the existence of the “no sterilization” rule in the letter of intent, which was argued to be a ‘design flaw’ in the program since it led to interest rate undershooting initially. According to him, these factors, coupled with the fragile structure of the banking system, helped bring about the events that led to the following crisis at the end of February 2001.

After comparing the crisis of Turkey with that of Argentina, Eichengreen⁴⁴ described the exchange rate base stabilization strategies as “buying stability now at the price of instability in the future!” To him, due to the failure of the attempts to strengthen the banking system and accustoming banks to an environment of greater exchange-rate flexibility during the 18-month transition phase, the currency peg created moral hazard for both the banks and the government. Choosing an exchange rate based disinflation strategy was an unfortunate choice according to Eichengreen. He further argued that Turkey might be the “Last nail in the coffin of crawling pegs”, in bringing down the inflation! Additionally, Turkey’s crisis pointed up the special risks of short-term foreign obligations and the importance of carefully managing the maturity structure

⁴³ Alper (2001).

⁴⁴ Eichengreen (2002).

of the external debt. Turkey's crisis also justified the priority that has been attached to strengthening banking systems in emerging markets.

III.A Brief Overview of the Turkish Economy

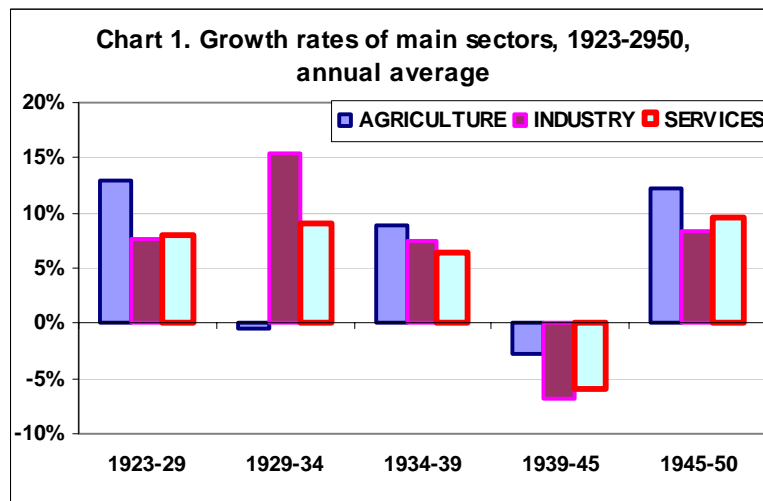
III.A. From Ottoman Empire to Nation-State building: 1923-1950

At a time when the industrial revolution swept through Western Europe, the Ottoman Empire was still relying mainly on medieval technologies. Compared to any other European power at the beginning of the twentieth century, the Ottoman Empire had virtually no industrial sector and raw materials were not being harvested domestically. The internal resources in the country were inadequate to meet the financing requirements of the economic costs of continued wars during the first quarter of the twentieth century.

During the war years, estimates show that the Anatolian population shrank from 17-18 million in 1913, to 13 million in 1924. As for economic activity, total agricultural output, making up almost the entire economy, is estimated to have contracted by 50% during the same period. The last Ottoman governments (*Ittihat ve Terakki* as the ruling party) adopted and followed protectionist economic policies in line with their nationalistic visions. As a result, when the Republic of Turkey was founded, she inherited a huge burden of external debt (*Düyun-u Umumiye*) and a poor economy from the Ottoman Empire.

In the early years of the Republic, economic activity was still dominated by agriculture. The industrial sector was almost negligible, while the trade sector was seriously damaged by the emigration of non-Muslim population out of the national borders. The economic policies of the

new state, aiming to establish a national economy, were first shaped in the National Economic Congress of Izmir (1923). The most compelling outcome of the congress was the annulment of the agricultural income tax applied at 10% of total production. The decision presents the initial economic incentive applied by the Republican government, which favored the maintenance of an agriculture-dominated economy with government subsidies in the following years. It is understandable that the new state aimed at gaining more popularity in its early years against the defenders of old Ottoman regime.



Early on, the development of the industrial sector was far from introducing a transition of the society from agriculture to industry. The prerequisites of an industrial economy, capital and labor force, were insufficient, or did not exist at all. Although a certain level of new investments were undertaken by the state (statism was the accepted policy in the economy), they remained at a limited level. Most of the industrial activity could be perceived within the context of the reconstruction of a war-torn economy.

As regards economic activity, there is limited statistics and data available for the first period of the Turkish Republic. The official estimations indicate that the agricultural and the industrial output grew by an average annual rate of 10.8% and 8.3% respectively between 1923 and 1930.⁴⁵ In this period the fall in global prices of agricultural products during the Great Depression had a negative impact on agricultural output and exports. In the 1930's the average annual growth rate of the agricultural sector declined to 4.4%, while it remained at 8.8% in the industrial sector. The development in the industrial sector was brought about by a new set of economic policies, which placed heavy emphasis on import substituting industrialization instituted in the early 1930s. Reflecting the negative impact of the Second World War, both growth rates declined to below 1% per annum in the next decade. In sum, the GDP growth in the first decade of the Republic is estimated at 9.1% per annum, and it declined to 4.9% in the 1930's and to 0.2% in the 1940's.

In the mid-1930's, statism was adopted as a national policy. The position sought a middle way between Soviet-style comprehensive state planning and a Western-style market economy system. Although the statistics indicate a high industrial growth trend in the 1930's, state-driven investments were far from creating buoyant opportunities for a substantial transition in the economic activity. As we stated earlier, high growth rates are explained with the efforts of reconstruction in the war-torn country. Detailed estimates show that total employment in the industrial sector was only 600,000 in 1938, corresponding to only 10% of total labor force. State Economic Enterprises constituted just 10% of the industrial employment and the rest were employed by small-sized private enterprises.

⁴⁵ State Planning Organization.

On the other hand, the public investments in the industrial sector mostly focused on rehabilitation of the railway network rather than building a fertile environment for industrial development. Some argued that this policy was due to political reasons and purposes related with security issues and collection of taxes.⁴⁶ The fears of the external debt inherited from the Ottoman Empire prevented the policymakers from initiating expansionary fiscal and monetary policies. Thus, industrial development was mostly achieved by the incentives of small-scale private enterprises, which were far from allocating sufficient resources for capital accumulation and for industrial revolution. Instead, the development was much slower, and at a more limited level. Overall, the GDP growth in the first decades of modern Turkey reflected the impact of a rising population and the increased use of agricultural land.

III.B. Introduction to Multi-Party Democracy: 1950-1960

Although Turkey managed to remain neutral during the war, the end of World War II and its global implications had a critical impact on political and economic life in Turkey. The political block formation internationally, and the increasing threat the Soviets posed for Turkey, pushed the one-party government to closer ties with the US in the post-war period. As a result, Turkey joined the IMF in 1946, and then started to receive considerable amount of American aid within the context of the Marshall Plan. In order to satisfy the demands of the international community, the government switched to a multi-party regime starting in 1946 and becoming fully effective in 1950. At the same time, the continuous contraction of the economy during the war years and new tax arrangements on the agricultural sector had weakened the political support for

⁴⁶ See Owen and Pamuk (2002)

the ruling CHP, the Republican Peoples' Party, and presented a great opportunity for Democrat Party.

After the single-party system was abolished in 1946, Democrat Party, which was founded by a group of former CHP members, came to power in 1950. At first, the Menderes-led government was popular, thanks to the relaxation of the political restrictions and implementation of expansionary and populist policies. Thanks to the rising prices of agricultural products in the global system, the government had the opportunity to announce high prices, boosting the agricultural output. However, no other new prescriptions were on the agenda for the economy. Briefly, *'the government's plan was not to plan'*⁴⁷.

At first, the high level of international agricultural prices in the post-war years and the steep rise in agricultural output thanks to favorable weather conditions helped a robust growth trend. However, the majority of the population (more than 75%) still resided in the rural areas, meaning that they depended on agricultural income. The entire population welcomed the "momentary paradise" of high agricultural prices and all other sectors in the economy were positively affected. The GNP grew by an average growth rate of 7.2% annually, thanks to 10.9% growth of agricultural output. But it did not take too long for the fairy tale to come to an end.

The global conditions dramatically changed in 1954, and the decline in agricultural output hit the economy. But the government continued to support the agricultural sector, announcing high prices and undermining the costs of higher fiscal deficits. The expansionary policies were financed directly from central bank resources. As a result, inflation rates climbed up and the

⁴⁷ Celasun and Rodrik (1990)

government was forced to devalue the lira against the dollar, consecutively. Another consequence of this process was the decline of the real income level in urban areas, specifically the salaries of civil servants and military officials. The unrest within the state stiffened until May 1960, when the government was toppled by a military coup d'état.

From the economic point of view, one crucial development in the 1950's is the start of migration from rural to urban areas, or from poor East to more industrialized West. However, it is hard to argue that this flow was a consequence of successful industrialization which would attract the massive unemployed rural population to industrialized settlements and cities. On the contrary, the industrial sector was still poor and growing slowly. The service sectors were not able to create sufficient employment opportunities for the newcomers either. The reason for the mass migration was in fact the insufficiency of agricultural resources in response to rapid population growth. Those who came to the urban settlements did not find what they had expected. As a result, they did not break their ties with the countryside, and they continued to collect agricultural income by returning to hometowns at harvesting seasons every year.

One critical factor, and also an outcome, is the popularity of shanty houses, which are illegal settlements built on Treasury lands, at the outskirts of metropolitan areas. Availability of shanty houses not only attracted the rural population to large cities, but also served as a mechanism for distribution of wealth, albeit not of income. The popularity and the prevalence of the shanty houses became a typical indicator of misalignments in the economy. During the later decades, granting legal permissions to the shanty house builders became a critical means for the governments, presenting their populist practices during the election campaigns.

III.C. Centrally planned development strategies: 1960-1970

Unlike the experiences in several Middle-Eastern and Latin American states, the military rule has been temporary and transitional in Turkey. The army returned the country to civilian rule in 1961, following the adoption of the new constitution. The new constitution gave birth to a new institution, the State Planning Organization (SPO), which introduced a formal economy-wide planning for development. According to this system, the state was the final authority to administer all activities in the economy. Within this context, SPO not only issued recommendations for the private sector, but also granted loans and permissions to the private sector for new investments through five-year plans.

Targeting rapid growth in the industrial sector, the first and second five-year plans almost ignored the agricultural sector. The focus was on industrial development with an import-substitution strategy. At first, the policies were effective. Between 1963 and 1973, the GDP growth averaged around 6.7%, despite the sluggish agricultural sector, which grew well above the long-term average. During this phase, the State Economic Enterprises (SEEs) had an enormous contribution in the industrial development. However, the industrial sector did not have any orientation on exports; instead, they were aiming at meeting the domestic demand.

The first phase was also referred to as ‘the easy period’ thanks to the initial success⁴⁸. During the easy period, the development programs sustained the industrial growth. However, they failed to uphold the required investments for capital goods, which required technology. Thus, the strict restrictions on imports hindered the formation of a competitive environment.

⁴⁸ Owen and Pamuk (2002)

Instead, the import substitution strategy relied heavily on imported raw materials. As the programs lacked the orientation for export prospects, the final target was meeting the domestic demand. This feature was the weakest chain of the development plans. As a result, no rapid climb took place in exports. From the 1960's to 1970's the volume of exports remained below 12% of the GNP.

Towards the end of the first decade, weak exports resulted in intensified pressure on the external balance, as the economy became strictly dependent on the imports of petroleum. The government initiated a stabilization strategy and devalued the lira in August 1970. The devaluation was followed by a military intervention in politics in March 1971, and leading to political chaos. Although the army did not entirely take over civilian rule this time, the political structure was destabilized. The search of political parties for larger popular support paved the way for consecutive populist practices by the governments and political parties and formation of weak coalitions.

III.D. The lost decade: 1970s

At first, the exports were positively affected by the devaluation of 1970. The GDP growth rate stayed at considerably high levels until 1973, when the first global oil crisis emerged. Since the oil dependency was at a limited level in those years, the extra burden was completely undertaken by the governments. Thus, the impact of the oil crisis on the overall economic activity was not as severe as it was in the industrial economies. The cost of increasing oil burden was not reflected in the prices and the costs were financed from the central budget through short-term borrowings. Without paying attention to the global dynamics, the coalition governments

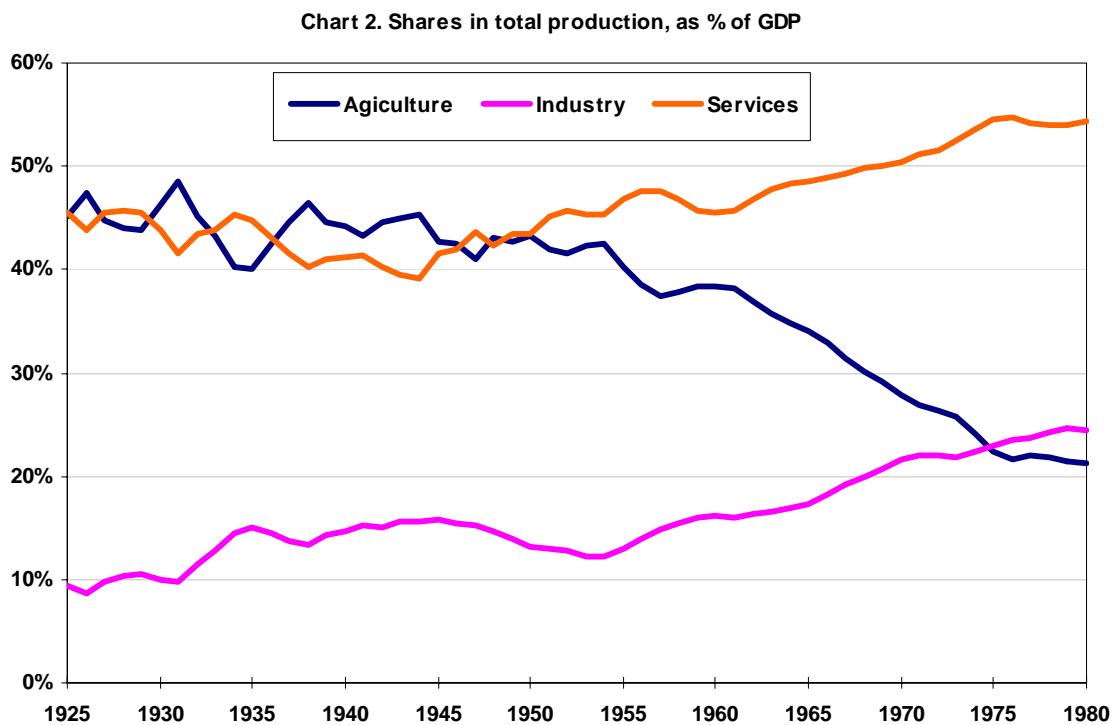
continued to implement expansionary policies, initiating and fostering new public investments. At this point, the foreign exchange inflows from Europe through Turkish workers' remittances absorbed the risk of deteriorating balance of payments.

Total investments increased from 18.1% of GDP in 1973 to 25% in 1977, and the GDP growth rate peaked at 8.9% in 1976. However, the populist policies and the fiscal deficits were unsustainable for longer periods. The public sector borrowing requirement increased from 2.0% of GNP in 1973 to 6.6% in 1976 and then to 10.6% in 1977. The largest financing source for the deficit during this period was the Central Bank. The monetization of the fiscal deficits pulled the inflation up. It should be noted that, high inflation had hardly been a problem for the economy in the past, except for certain short periods. On the other hand, high level of public borrowing fueled the rapid accumulation of a debt stock. Starting in 1977, the country was pushed to the inevitable problems of financing the deficit external trade.

On the external side, the weak export sector was unable to balance the imports in spite of hard restrictions on the latter. In consequence, current account balance recorded a cumulative USD 7.5bn deficit between 1974 and 1977, while the entire deficit was financed through external borrowing (81%) or from foreign exchange reserves (17%). Total volume of foreign direct investments was at negligible level, corresponding to only 2% of the deficit. Consequently, total external debt increased from USD 3.3bn in 1973 to USD 11.3bn in 1977, more than half of it having short-term maturity.

The government introduced the notion of convertible-lira-deposits in 1975, to benefit from collecting foreign exchange deposits from non-resident Turkish citizens working abroad.

None of the adjustment strategies was successful, and the economy faced a severe debt crisis in mid-1977. Foreign exchange sources dried up and external balance became a binding constraint. The lira was devalued a number of times, but no immediate solution was established. It should be noted that the governments did not undertake any fiscal adjustment, and the stabilization policy of the public sector was missing. The immediate impact of the policies was on the price level. The (wholesale price) inflation climbed to 52.6% in 1978, to 63.9% in 1979 and finally to 107.2% in 1980.



To conclude a short summary on the economic history between 1923 and 1980, the central tenet of the system was the short-termist development strategies and frequent repetition of populist policies. The populist policies were always on top of the agenda since the early years of the Republic. It is crucial that a complete transition from an agricultural society to an

industrialized economy had failed during six decades. Even the centrally planned development strategies in the 1960 have remained incomplete as they failed to focus on productivity and technology investments. Instead, the political desires and populist policies were always on top of the agenda. From this point of view, the State Economic Enterprises did not function as an industrial leader, but became another vehicle for populist policies. The governments hired more-than-necessary personnel in SEEs, and the over-populated employment led to lower labor productivity and efficiency loss in production.

In sum, throughout the entire economic history of modern Turkey, the governments neither succeeded in the management of an industrial revolution, nor could they achieve substantial agricultural reforms. The main structural problem of the economy, insufficient productivity, was never solved. The governments neither implemented required education policies, nor did they install necessary technology replacements. Instead, the fiscal deficits as the outcome of populist policies re-emerged in the early 1970's and gave rise to inflation. Since then, Turkey has failed to have a balanced budget and low inflation, and a comprehensive stabilization programme was never successfully implemented. On the contrary, the governments have increased the dose of populist policies.

With regard to the composition of the labor force, Turkey had a predominantly agricultural population in the 1950's. The educated and qualified workforce was a minority in the overall population; i.e. their supply was less than the demand for it. Thus, the qualified and skilled workforce did not face any problems in finding jobs. The majority of the population, on the other hand, resided in rural areas and they were self-employed, occupied with agricultural activities. The overall picture of the society was interesting: people were relatively poor, but they

were not jobless.

By the 1960's, educated population started to increase and labor supply rose in urban settlements, fuelled by migration. However, the governments implemented short-term strategies to solve the rising unemployment problem. State Economic Enterprises became the ultimate mechanism for solution of the unemployment problem leading to over-populated employment and low productivity level. The private sector, on the other hand, needed more educated and qualified personnel, but the education system was far from meeting the market demand. Thus, the private sector was also constrained by low levels of productivity. A further demand for labor force came from Germany and Europe, drawing instant workforce from Turkey, to the tune of millions.

III.E. Transition to open economy: 1980's

The Turkish economy suffered from severe debt crisis during late-1970s. The launch of a comprehensive stabilization and structural adjustment plan in 1980 pushed the economy towards a market-oriented process, fueling the incentives on exports with an attempt aimed at financial liberalization and higher degree of integration with the world economy. Turkey's trade liberalization process was first initiated in order to overcome the unresolved 1977-1979 balance of payments crisis in an environment of low domestic savings and sluggish investments. Before 1980, Turkey was described as a closed-import-substitution economy and the financial system was described as "financially repressed".⁴⁹

⁴⁹ Akyuz (1989)

The financial repression period before 1980 is characterized by negative real interest rates, credit rationing, undeveloped capital markets, excessive reliance on Central Bank resources for financing of the public deficits, severe restrictions on foreign exchange operations through capital controls, and a high level of taxation of financial income and transactions. The restrictions on actions related to foreign exchange were so strict that Turkish citizens were not allowed to travel abroad freely. The closed economy was not responding to the macroeconomic dynamics, as all deposit rates were determined directly by the government. The lira was often kept overvalued for some time and then it was devalued irregularly until 1980. Furthermore, some sectors had priority within the context of protectionist policies and they were financed through selective credit schemes. This feature led to structural misalignments in the private sector investments.

Although rapid growth rates were achieved during certain periods, they had temporary outcomes and the trends remained unsustainable. When the economy was hit by serious balance of payment crises in the second half of the 1970's, the governments were unable to sustain 'the inward-oriented' development strategies behind closed doors. Following the global oil shocks, the public investments were increased and the import-substituting industrialization strategies were maintained, while neither was attainable in the long run. The imported oil-dependent economy was not able to finance the foreign trade deficits with low levels of exports income. Thus, the external debt burden intensified.

The traditional short-term stabilization policies during the 1970's became the main source of public deficits. The public sector borrowing requirement increased from 2.0% in 1973 to 10.6% in 1977 (as percentage of GNP). The financing was mostly through the Central Bank, as net financing through the bank increased from 0.2% of GNP in 1973 to 6.6% in 1977. In addition

to the public deficits, the current account recorded a total deficit of USD 7.5bn during the three years between 1974 and 1977. These deficits were partially financed through external borrowing (USD 6.1bn), while central bank reserves decreased by USD 1.3bn during the same period. Needless to say, the economy was far from attracting foreign capital in terms of investments. Total FDI accumulated to only USD 184mn, which is dramatically negligible.

Finally, the liberalization attempt was launched on 24 January 1980, with an economic stabilization and adjustment programme, backed by the International Monetary Fund. In a broader sense, the main strategy of the programme was to switch the economy to a free market system, using an export-led growth model. In line with this strategy, a number of reforms were undertaken targeting to alter the entire financial system in Turkey. The reforms also aimed at meeting the financing needs of the private sector in an open economy. The political authority was to introduce the stabilization programme along structural reforms. Additionally, the effectiveness of the monetary policy would be enhanced in order to sustain a functional market economy according to the plan. Liberalization and increased competition in the market would contribute to the establishment of operational and allocational efficiency within the system.

Reforms were initiated in 1980 with the liberalization of interest rates for deposits and loans, supported by a period of tight monetary policy and other demand restrictive policies. The announcement of the reform, which lacked essential regulatory support, immediately triggered competition among banks and brokerage houses. The bankers competed by offering high interest rates in order to collect deposits without considering the long-term costs. As expected, the rising trend of interest rates and demand restrictive policies harmed the business sector. However, the more critical problem was in the financial sector. Fiercer competition by the “bankers”, namely

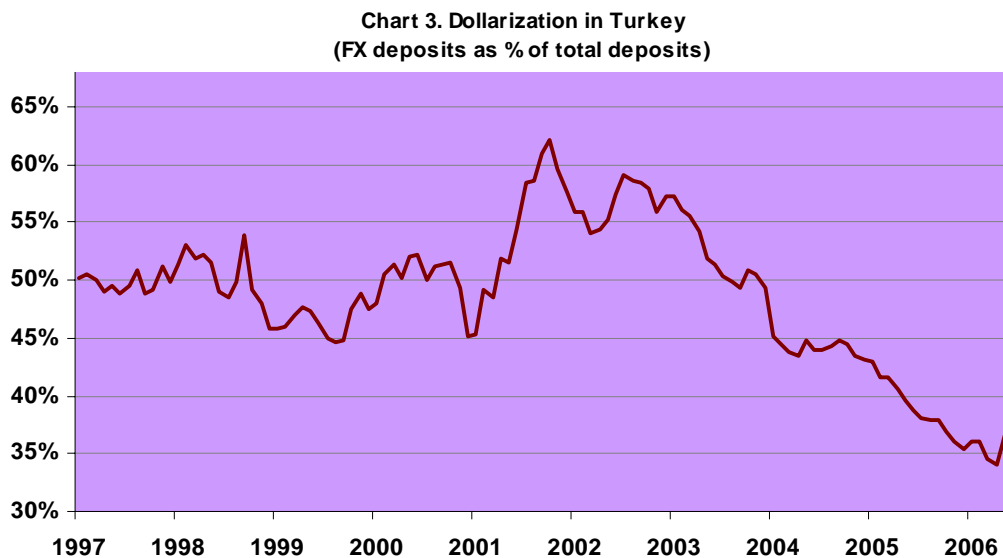
unregulated brokerage houses, brought the financial system to a crisis in 1982, resulting in the simultaneous collapse of some banks, and bankruptcies of the brokerage houses. Moreover, the magnitude of non-performing loans became a major problem for both the banking system and the real sector. The central bank started to regulate the interest rates again in 1983. The first lesson in the liberalization chapter was the importance of the timing of the reform and the introduction of relevant regulatory and supervisory framework.

As for exchange rate policies, the government decided to adjust the exchange rates in order to reflect the real value of the domestic currency, within the context of the adjustment programme. The idea was to promote export orientation of the private sector. At first, the lira was substantially devalued in January 1980. The devaluation rate was much higher than expected, since the government aimed at extra support for the export sector. With maintenance of the depreciated lira against major world currencies, Turkish exports were planned to have comparative advantage in the global trade. A year later, in May 1981, the Central Bank adopted the crawling peg regime in which exchange rates were adjusted on a daily basis and multiple exchange rate practices were eliminated.

The Capital Market Board was established in 1982 in order to regulate, develop and supervise the capital markets under the Capital Market Law that was enacted in 1981. Empowered with a new legal arrangement in 1983 to regulate the secondary markets, the Capital Market Board initiated the establishment of stock exchanges. Within this context, the Istanbul Stock Exchange became operational in 1986.

The Decree 28 of December 1983 and the Decree 30 of July 1984 introduced a substantial

degree of trade and finance liberalization simultaneously, by lifting all quantitative restrictions on the import regime and the restrictions related to buying, selling and owning of foreign exchange and allowing residents to open foreign exchange deposits. The exchange rate determination process was further liberalized by permitting the banks to set their own currency rates with a specified band around Central Bank rate. The banks were also allowed to engage in foreign exchange operations within certain limits to their foreign exchange liabilities. Later, in September 1988, an official foreign exchange market was opened under the auspices of the Central Bank. The scope of financial liberalization was widened in August 1989 with Decree 32, which was modified in 1990, and all restrictions were lifted on capital movements and borrowing by residents in international markets. Finally, in April 1990, the government declared full convertibility of the lira, notifying the International Monetary Fund that Turkey accepted the relevant obligations.



In an environment with a high and volatile inflation rate after 1983, the Central Bank's

efforts to maintain positive real interest rates were unsuccessful. Thus, starting in 1987, the interest rates were deregulated gradually, in order to promote financial savings. However, due to the volatility of the inflation rate, the maturity of saving deposits remained short. Additionally, the citizens and the investors discovered the new saving instrument, foreign currency, as a safeguard against inflation: Turkey was fully dollarised. With the help of chronic and volatile inflation, foreign exchange became an attractive instrument for portfolio holders and households.

Political and economic instability had put the financial dollarisation underway, but this made the implementation of monetary policy more difficult. Banks' operations in foreign currency grew substantially and foreign exchange deposits became a major component of the broader definition of the money supply (M2Y). At first, the government introduced a 5% withholding tax on interest earnings from foreign currency deposits in 1988. This rate was increased to 10% in 1989 in order to prevent currency substitution. However, inflation and the continuous devaluation of the lira made the foreign currencies more alluring and these arrangements became inefficient.

Although the financial markets were harmed by the destabilizing impact of high interest rates and foreign currency denominated savings, one critical institutional development was the establishment of the inter-bank money market in 1986. The inter-bank money market was created to satisfy short-term liquidity requirements of the banks. However, the effectiveness of the market was limited since the high inflation rates remained as the most critical obstacle for the operations of the banking system.

To continue with the regulations, deepening of the securities markets was promoted with

new arrangements which prevented the double taxation of dividends, removed taxes from capital gains and from interest income on government securities by individuals. Additionally, the new issues in stock markets, starting in 1988 within the context of privatization, contributed to the deepening of the capital markets.

Until 1985, the fiscal deficits had been financed by issues of government securities or through Central Bank resources, which made the monetary policy subordinate to fiscal policy. The government introduced the Treasury auctions of government securities in 1985, in order to borrow from the market. Through this opportunity, the burden on the Central Bank to finance the fiscal deficits was reduced, and the cost of borrowing was determined freely by market conditions. Since then, the outcome of each auction has provided a signal to the market regarding interest rates. However, critical institutional reforms were still lacking, and the monetary policy was unable to control the liquidity in the system. A relevant legal arrangement was not brought in until 1989, when a protocol between the Central Bank and the Treasury imposed a ceiling on the short-term advances to the Treasury. The short-term advances granted by the Central Bank had much lower interest rates than the market rates. Consequently, the Central Bank had an option to reshape the structure of its balance sheet, aiming at reducing the rigidities and increasing the efficiency of the monetary policy.

In sum, the financial reforms introduced in the 1980's were enormous and substantial. The capital account liberalization in 1989 aimed at full integration with international capital markets. The stabilization policies, structural adjustment programme and the financial liberalization attempts resulted in higher growth rates in the first half of the 1980's. However, the distortions in the macroeconomic fundamentals, mainly the public deficits and the inflation, were

not healed during the transition process. Instead, the government returned to old populist tricks as soon as the political competition rallied after the 1987 election. By then, the economic policies had become expansionary and the real wages of public employees were increased, with a higher burden on public finances. Additionally, the maintenance of a real exchange rule, which aimed at supporting the competitiveness of the export sector, worsened the burden of the external debt stock. The rule was abandoned in 1989 and the lira started to appreciate against major currencies. During this period, the exchange rate had already become a nominal anchor for safeguarding against the inflation.

The inflation rates have always remained high since 1980, reaching a peak of 75% in 1988. Due to the lack of a strong and sustained fiscal adjustment program, the government relied on financing the deficits through domestic borrowing in the second half of the decade. The monetization of the deficits was later restricted by the protocol between the Treasury and the Central Bank the public sector dominated the financial markets. This led to a typical crowding out of the private sector in the market for loanable funds. Furthermore, the appreciation of the lira gave rise to short-term capital inflows through the banking sector, opening the foreign exchange positions in order to lend to the public sector. However, the financial markets were not mature enough to absorb and meet the borrowing requirement of the government. Thus, the dominance of the public sector in financial markets pulled the interest rates up.

Continuation of loose fiscal policies, high rates of inflation and unstable economic circumstances further reinforced the trends for currency substitution. Although it is difficult to measure the exact extent of this substitution, the share of foreign currency denominated deposits in the banking system — a narrow measure of financial dollarisation — surged from 13.5% at the

end of 1985 to 50.5% in 1994.

To sum up, the strategy of the 1980 stabilization programme was successful at first, in terms of export-led growth. Within two years the volume of exports doubled, increasing from an annual volume of USD 2.3bn in 1979 to USD 4.7bn in 1981 and then to USD 8bn in 1985. The economy grew by an average rate of 4.7% during 1980-85, while the average annual growth rate was only 1.9% during the previous five years.

The programme was less successful in the fight against the rising inflation. It enforced a strict fiscal tightening in the first years, bringing down the public sector borrowing requirement from 8.8% (of GNP) in 1980 to 4.0% in 1981 and to 3.5% in 1982. Parallel to that, the consumer inflation was brought down from its peak of 115.6% in 1980 to 21.9% in 1982, but it was still high. However, despite a successful launch, the impact of the programme was not permanent, save for the exports.

The following years showed that only policy adjustments and reforms on paper were not sufficient to maintain full liberalization in an economy. Strong commitment by the political programme to the announced stabilization strategy was an indispensable component of the strategy. What had happened in the 1980s was to the contrary. Failure to adopt required regulations and institutional arrangements, and a return to 1970s' vicious populist cycles altered the dynamics of the economy and brought new costs. In other words, the liberalization efforts were not backed by prudent fiscal policies by the political authority, especially after the 1987 elections.

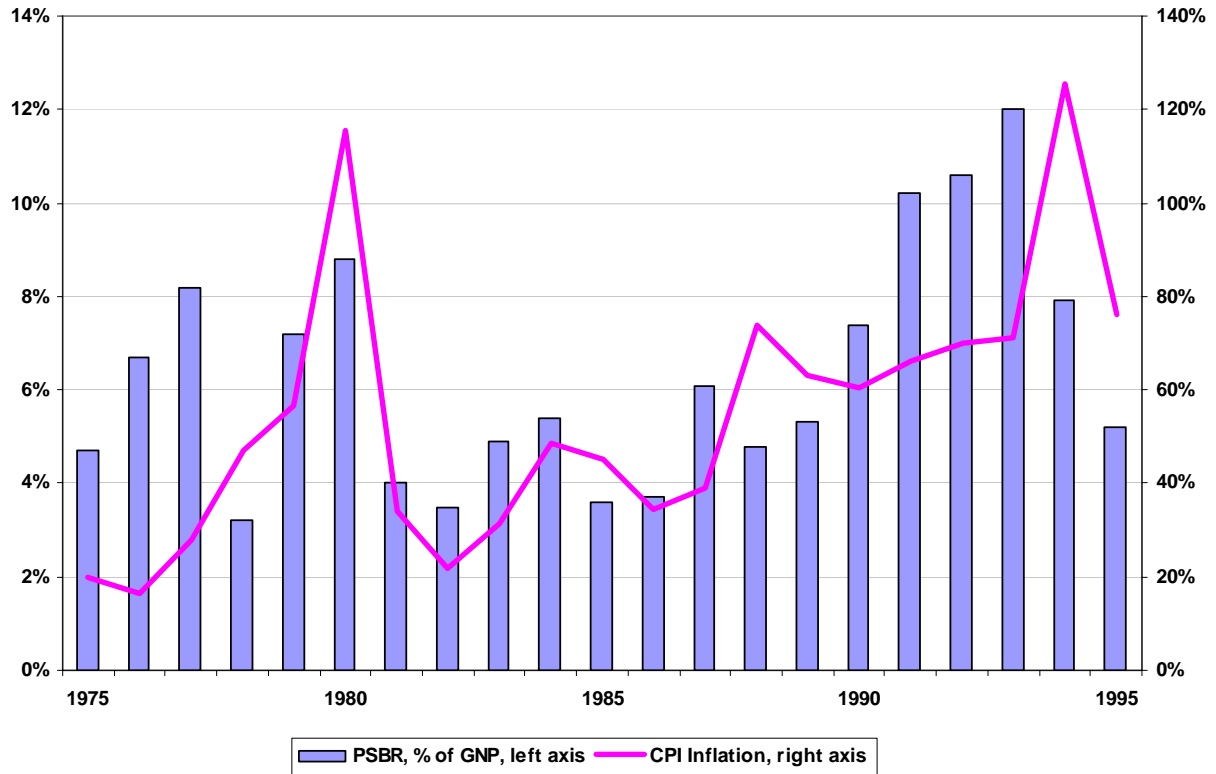
Unsustainable populist policies in the second half of the decade increased the fragilities of

the system, which were materialized in the chronic inflation rate. Since then, the high and chronic inflation has remained as an unsolved problem. Reflecting the slow pace of the transition process, Turkish economy was identified as a functioning market economy only in 2005, a quarter century after the original attempt.

In 1990, the Central Bank announced a monetary program which aimed at controlling its own balance sheet and restoring confidence in the financial markets. As a result, the international reserves of the bank started to increase until the financial turmoil in 1994. However, a fiscal discipline was still absent and the deficits kept widening. The governments were more focused on external financing, with the idea to decrease the interest rates in domestic borrowing markets. As a result, the economy was pushed to the high real interest rates and repressed exchange rates trap.

The actual magnitude of fiscal imbalance in Turkey has been never known explicitly. The main reason behind this is the existence of extra-budgetary funds, the individual budgets of the local governments and the state economic enterprises, which are included in the public sector. The consolidated budget included the operations of the central government. Based on the public sector borrowing requirement figures, the public sector deficits had been brought down from an average of 6.5% of GNP in 1975-1980 to 4.6% in 1981-1989, which was still high. In the period between 1990 and 1993, deficits increased again to 10% (Figure 1) of the GDP. It was striking that even the primary balance of the central government budget was running deficits until 1995. From this aspect, the public sector reform was the most disappointing feature of the structural adjustment program initiated in 1980.

Chart 4. Public Sector Borrowing Requirement and Consumer Inflation



Absence of fiscal reforms and the failure in prudent policies of public finance, increasing share of domestic debt in the composition of financing, and resulting high levels of interest expenditures further widened the deficits. Additionally, the extra-budgetary funds and SEEs became the major sources of disarray in the public sector. As a result, the inflation rate remained high between 1983 and 1993, and stabilized above 60%.

The deterioration in the SEEs continued, even at an increasing pace, not only enlarging the deficits, but also decreasing the efficiency and productivity. They also became a critical component of the inflationary policies through erratic and large price adjustments, as they had the

monopoly position in most of the sectors.

The privatization agenda was another failing part of the programme. Turkey was among the early adopters of the idea of privatization at the beginning of 1980's. At first, the idea behind privatizing state-owned economic entities was to have the government shift most of its economic activities to the market mechanism and concentrate on its main functions as a social state. It was hoped that efficiency would increase, industries dominated by state monopolies would open to competitive forces, capital markets would prosper and ownership of industrial wealth would be widely distributed among the people through the sale of shares of stock of privatized companies. Moreover, with the revenues raised through the sale of state-owned economic entities and reduced ongoing state subsidies on inefficient firms, the government would have more resources for reducing the debt stock and decreasing the fiscal deficits.

The legal procedure to clear the way for the sale of state owned economic entities started in the early 1980's and took much longer than initially anticipated. Nevertheless, not many privatization projects were successfully accomplished until the end of 1990's. Opposition groups took parts of the legislation to the Supreme Court, which annulled them occasionally. Each time, the government issued a new decree or enacted another piece of legislation to clear the way for privatizations. On the other hand, the operational expenses of the SEEs that were handed over to Privatization Administration and new capital injections had increased the public deficits as the privatizations were delayed. Successful privatizations were mostly the corporations with partial state-ownership, rather than fully state-owned economic entities. The real targets for privatization in terms of size and expected benefits were missing. The largest entities like Turk Telekom, Erdemir, Petkim, and Tupras were not privatized due to legislative barriers and strict political

opposition.

Failing to grasp the need for structural reforms including the agriculture, banking and corporate sectors, the government kept on populist practices and avoided taking the political risks of a sound stabilization and disinflation program. In contrast, they competed for inventing and exploiting new ways of populism in order to maintain their potency. Taking no notice of the structural problems, the governments pushed the economy to a social security problem with younger population. In the early 1990's, the statutory retirement age was lowered to 38 for women and 43 for men and extremely high "replacement rates" were imposed. The other critical problem seeded at the beginning of the decade was the "duty losses," by which the governments perfectly transferred the budget deficits to the balance sheets of public banks; hence, deficits were not announced to the public.

Towards the end of 1993 when the economy faced the problem of sustainability, the coalition government searched for a 'magic formula' to lower the inflation rate. The domestic borrowing auctions were cancelled in order to pull the interest rates down. Controlling both the market interest rates and the exchange rates with an open capital account was impossible; it was a fundamental error, and it was against the basic "trilemma"⁵⁰ principle. The market response was harsh. Noticing that the deficits were unsustainable and no measures were taken then, the foreign creditors warned that they would not carry on financing the government. The government was reluctant to take required actions, for the sake of the upcoming municipal elections in March

⁵⁰ *Trilemma*: In economics, the trilemma (or "impossible trinity") is a term used in discussing the problems associated with creating a stable international financial system. It refers to the trade-offs between the following three goals: a fixed exchange rate, national independence in monetary policy, and capital mobility. According to the Mundell-Fleming model, a small, open economy cannot achieve all three of these policy goals at the same time: in pursuing any two of these goals, a nation must forego the third. (Obstfeld et. al. 2004)

1994. The lack of credibility, instability and deteriorating confidence led to a rush to foreign exchange at the end of 1993 and triggered the financial crisis of 1994. With the intention to calm the panic, the central bank intervened in the foreign exchange market by selling its reserves. From November 1993 to April 1994, the Central Bank sold around USD 7bn in the foreign exchange market, decreasing its reserves to USD 3.3bn. The lira was devalued twice, first in January and then in April, and the government announced a stabilization package on 5 April 1994, after the local elections.

The depreciation of the currency had a devastating impact on the banking sector, destroying the balance sheets of commercial banks. Three of them were liquidated while the capital adequacy ratios of all banks substantially fell. The state banks lost 90% of their net worth while the credit channel to the business sector almost closed down. Non-performing loans in total credit volume increased to 65%.

The stabilization programme announced in 1994 gradually restricted the credit relations of the Treasury and commercial banks with the Central Bank. The ceiling for Central Bank credits to Treasury was decreased to 12% in 1995, to 10% in 1996, to 6% in 1997 and to 3% in 1998 and onwards. However, these restrictions could not prevent the expansionary fiscal policies and populist practices of the governments. When the restrictions were imposed on the Central Bank, the public banks were used as financing resource intensifying the burden of duty losses. The stabilization programme was abandoned in 1995 prior to the upcoming elections. Consequently, the Central Bank failed to meet the monetary targets.

The measures did not heal the vulnerability in the banking system either. Acquisition of

Treasury bills and bonds were still attractive investments as the public deficits led to a growing rate of domestic borrowing. Banks borrowed short term from international creditors and financed the fiscal deficits neglecting the market risk, the exchange rate risk, the interest rate risk, and the fragilities imposed on the balance sheets in terms of mismatches. The system became more vulnerable to small shocks and the unsustainable policies and political instability further worsened the circumstances in the second half of the 1990's.

Towards the end of the decade, the Asian crisis in 1997 and the Russian crisis in 1998 had an adverse impact on the economy while the chronic inflation was still the major unsolved problem. The increases in prices of oil products in 1997 intensified the burden on the manufacturing sector at a time when the East Asian competitors had gained competitive advantage through devaluations. In July 1997, the producers prices in the manufacturing sector increased by 15.2% in the public sector and by 6.3% in the private sector, accumulating to 108.7% annual inflation. As a result, the industrial sector, mainly the textiles, which was the largest sub-sector, was harmed by the growing burden of input costs on the domestic side, and by the challenging competition of East Asia on the external side.

Failing to survive the damage of the East Asian Crisis, the economy was shivered again by the Russian debt moratorium crisis in 1998. The moratorium in Russia triggered large capital flight from Turkey, pulling the interest rates up. The public sector dominance in the borrowing markets intensified at a time when available funds were already shrinking. The industrial sector was still in deep crisis. The conditions worsened further by the contraction in domestic demand. From 1981 to 1993, the economy was growing by an average rate of 5.2%, while the average growth rate declined to 2.3% between 1993 and 1999. The industrial growth rates during these

periods averaged 6.6% and 3.2% respectively.

In 1997, the government announced a three-year stabilization and disinflation program to be monitored by the IMF, which set the inflation targets as 50% in 1998, and to be decreased to 20% in 1999, and further to single digits in 2000. Building on a strengthening of policies in the first half of 1998 that had begun to lower the inflation, the government aimed at a further decrease in inflation rates through tight fiscal policy, a supportive and closely-coordinated monetary policy, and structural reforms, including stepped up privatization.

Within the context of the program, the fiscal deficits were to be controlled through certain measures on inflationary policies. The program assumed about 4% of primary surplus in 1998, structural reforms were to be implemented in the banking sector, the social security system was to be restructured, and the subsidies to the agricultural sector were to be restricted. Moreover, the authorities were seeking to reduce the interest burden by building credibility for their program, increasing the share of inflation-indexed securities to as much as 30 percent of new debt issues, and retiring debt through accelerated privatization.

Although the early results were considerably positive, the program failed to succeed again, since the political support for the program was not at an adequate level. The primary fiscal surplus went slightly above the program target in 1998 and consequently the consolidated budget deficit stabilized at about 7.5% of GNP despite the rise in interest rates and the surge in interest expenditures. However, the deficit of the broader public sector widened, largely due to the mounting receivables owed by the Treasury to the state banks (duty losses) for agricultural subsidies.

The government faced the same dilemma: it either had to increase the prices of publicly manufactured products in order to finance the public expenditure or to keep the prices controlled and allow widening of the public deficits. The former had a direct impact on inflation while the latter pulled up the interest rates since the public sector borrowing requirement was growing. The government was not able to solve this dilemma, and an early election was introduced. Hence, the inflation remained high (64.7%) in 1998 and (68.8%) in 1999, due to failure in meeting program targets. The industrial production slowed down and the balance of payments position improved in 1998, with reserves rising to about US\$20 billion by the end of the year.

The failure of the stabilization program was strongly correlated with the government's reluctance on key structural reforms such as the social security reform, a regulatory framework for the privatization in telecom and energy, and the banking reform. The economic cost of the political weakness materialized in higher interest rates placing a heavier burden on the budget. The reforms were further postponed to an indeterminate date due to upcoming elections. Eventually, fiscal policy was progressively relaxed in late 1998, and, in the absence of offsetting measures, the primary surplus declined to as low as 1 percent of GNP in 1999.

The maintenance of the economic program and all burden of adjustment fell on monetary policy, magnifying the effect of the external shocks on domestic interest rates. The Central Bank succeeded in protecting the external balance and in maintaining an adequate level of foreign exchange reserves during this term, despite the capital outflow due to the crisis in Russia in 1998.

Unable to recover from the adverse impact of East Asian and Russian crises, the year of 1999 was the most unfortunate year of the 1990's. First, the early elections were held at the

beginning of the year and the election-economics created devastating disturbances on already-in-crisis public finances. Higher agricultural output in this year and higher agricultural prices announced by the government further worsened the problem. Moreover, two earthquakes in the second half of the year in the most industrialized region of the country dramatically reduced economic activity. Towards the end of 1999, the economy was in recession, the fiscal deficits were almost at one fourth of the GDP, and the inflation was still high.

At the end of the decade and of the century, the chronic inflation was still, by far, the most essential problem in Turkish economy. The continuously high level of inflation rates not only increased the volatility in the financial markets but also distorted the balance sheets of the banks and private sector. The persistence of high inflation since 1970s, without ever degenerating into hyperinflation, is explained either with the relationship between monetary expansion, or with public sector prices and fiscal deficits and later with the high level of interest rates cultivated with domestic borrowing and expectations.

The scenario behind the relationship of inflation with the fiscal deficits in Turkey was simple. The governments employed expansionary fiscal policies, either with massive infrastructure investments, or with high prices for the agricultural sector and high wages for the fixed-income working class, or with various channels of subsidies to agricultural and/or industrial sectors. Additionally, high level of military expenditures played a crucial role in deteriorating fiscal balances. The growth of deficits was financed either directly through monetization by the Central Bank, or through price adjustments on publicly produced input products. As expected, both had strong inflationary impact. When a restriction was imposed on the financing channel between Central Bank and the Treasury, and the governments were bound to borrow tools in

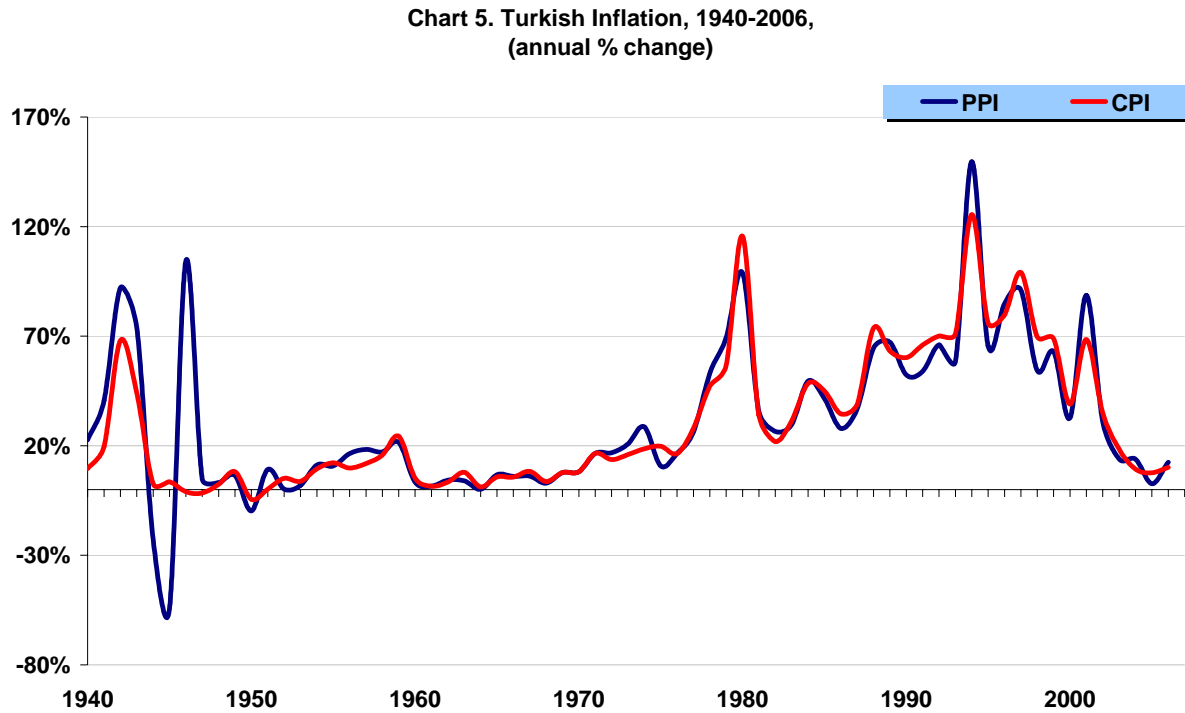
order to finance the deficits, and interest rates increased. Another financing option was the so-called duty losses, which meant hiding the deficits and subsidies in the balance sheets of public banks.

Table 1. Public Sector Deficits, as % of GNP							
	1995	1996	1997	1998	1999	2000	2001
Central Government	-4.0	-8.2	-7.6	-7.1	-10.6	-11.2	-19.9
Total Government	-4.8	-13.1	-13.0	-15.8	-22.3	-18.9	-21.1
Net Debt Of The Public Sector	41.3	46.5	42.9	44.5	61.0	57.5	91.0

For about two decades, several disinflation attempts were introduced, but neither was successful. In fact, they were either abandoned, remained incomplete, or lacked full commitment by political actors. Most of the private sector safeguarded themselves with frequent adjustments in product and service prices, while the rise of currency substitution brought another option for households to safeguard against the impact of inflation. Agricultural sector was still subsidized through populist policies and announcements of high product prices. The retailers and the traders immediately reflected the inventory costs on the consumer prices, exploiting the availability through frequent price adjustments. Thus, only a considerable minority in the overall population, the fixed-income groups, carried the burden of and suffered from persistent inflation. Through the years, this led to continuous deterioration in income distribution.

As a result, the high level of inflation affected the economic agents' expectations on inflation and fostered the 'dollarization' process. Policymakers' commitment to active exchange rate depreciation for the sake of boosting exports also contributed to the inflationary process,

creating a devaluation-inflation spiral.



Econometric analysis by Lim and Papi supported an interpretation of the inflation in which monetary base and the exchange rate play a central role in the inflationary process, inertial factors are quantitatively important, and fiscal deficits directly affect the inflation. It was also shown in the same study that, the exchange rate had a stronger role in the inflationary process than the typical cases in other developing economies.⁵¹

⁵¹ Lim and Papi (1997)

III.F. The Banking Sector

The Turkish financial system has been dominated by the banking sector. In both money and capital markets most of the operations are carried out by the banks. As an expected consequence of the economic and historical development, the financial system and the banking sector are virtually synonymous. The dominance of the banks is supported by several factors. At first, the banks were established by the state in order to finance certain sectors. Moreover, in the private sector, almost all conglomerates established their own banks in order to finance their long-term investment plans.

Going back to the historical development, different policies and methods have been effective on the formation of the financial sector. In the Ottoman years, all quasi-banking activities were carried out by moneychangers, the Galata bankers, who were mostly members of the ethnic minorities in Istanbul. Later, when the Ottoman Empire faced essential financial problems and required external financial support, several foreign banks arrived and established new banks or their own branches in Turkey to extend credits at high interest rates. The Ottoman Bank (Osmanli Bankasi) was established in 1856 with its head office in London. Ottoman Bank served as a Central Bank until the establishment of Central Bank of the Turkish Republic in the 1930's. Although some national banks were established in the early years of the twentieth century, the banking system was dominated by the foreign banks until the foundation of modern Turkey.

After the National Economic Congress held in Izmir in 1923, a number of national banks were established in order to finance the main sectors of the economy. Due to negative effects of

the Great Depression, and due to the absence of sufficient domestic capital formation, the banking sector was incapable of meeting the financing needs. Several state banks were established in the 1930's, including the Central Bank.

The development of private banks took place after 1945, thanks to the increase of domestic capital stock during the post-war period. Considerable weakening of Statism as a national policy, expansion of international cooperation and more liberal and private sector-oriented policies were also effective on development of private banks during this period. With the introduction of state planning after 1960, several development and investment banks were established to finance various sectors in the 1960's and 1970's.

As expected, liberalization and internationalization in banking in Turkey took place after 1980, when the economy switched to the free-market system. The new liberal economic policy aimed at further integration with world economy and the banks were also a part of this strategy. Immediately after the launch of the economic programme, continuous legal, structural and institutional changes and developments took place in the banking sector. Competition among banks was fostered while several reforms and new regulatory institutions were formed. New entrants to the banking system were permitted and foreign banks were encouraged to operate in Turkey. The liberalization of foreign exchange regulations increased foreign exchange transactions of the banks. With the capital account liberalization, Turkish banks intensified their business relations abroad either by purchasing banks in foreign countries or by opening branches and representative offices. After 1984, special finance houses, transacting business according to Islamic banking principles, also became part of the financial system.

Until the end of the 1990's the private banks suffered from weak financial situations and several banks were liquidated due to high level of non-performing loans provided to group companies, as most commercial banks have ownership links with non-financial corporations. Holding companies or large conglomerates control the ownership and management of some banks as well as industrial corporations.

On the other hand, nearly half of the assets of the Turkish banking system were controlled by state-owned banks. The state banks were not functioning efficiently due to the burden of duty losses and corruption. Due to increasing financing needs, state banks had offered higher interest rates than the private commercial banks in the sector. It should be added that the reconstruction of the state banks and privatization strategies were unsuccessful. There was also high degree of concentration as total assets of the five largest banks amounted to 47.1% of the total assets of the banking system.

As a result of the high level of public sector borrowing requirement, more than 80% of the banks' securities portfolio consisted of public sector securities such as treasury bills, government bonds and revenue-sharing certificates issued to fulfill the funding requirement of the public sector. Thus, the banking system was mostly unable to meet the financing needs of the industrial sector and of the households. In other words, private firms and households were crowded out of the loan market due to growing government borrowing to finance the fiscal deficit.

The size of the private banking sector in terms of the assets was not higher than 48% of the GNP at the end of 1999. At that time, total share of private domestic banks in the banking sector was only 45.1%. In sum, the weak financial sector was dominated by the state owned

institutions, and the system was far from fulfilling the needs of the business sector and performing the traditional role of intermediation between the firms and households.

	Banking System	Private Domestic Banks	Public and SDIF Banks	Foreign and Investment Banks
Total Assets	82.4	37.2	39.3	6.0
Total Assets (% of GNP)	105.2%	47.5%	50.1%	7.6%
Selected asset items				
- Treasury bills and bonds	18.3	7.6	10.0	0.7
- Loans, net	22.6	11.4	8.6	2.7
Loans, net (% of total assets)	27%	31%	22%	45%
Non performing loans (% of total loans)	9.7%	3.6%	19.0%	2.1%
Net profit/loss before tax	0.8	2.1	-1.8	0.5
Share in total assets (%)	100.0%	45.1%	47.7%	7.2%
Share in deposits and repos (%)	100.0%	41.0%	57.9%	1.1%

As for the loans provided by the banks to the private enterprises and households, they constituted just one third of total assets (1999 data). Instead, as we indicated above, the banking sector had been financing the governments' borrowing needs. Increasing and high level of the debt stock led to ever-higher interest rates in real terms and made it more profitable for the banks to finance the government.

Our aim here is to present the misalignments in the financial system on the eve of an IMF-backed stabilization and disinflation programme. For many, the weak and ill-functioning banking system was the main source of vulnerability of the Turkish economy. Underlining the banking system fragility not only helps to explain the financial turmoil that started towards the end of 2000, but also provides an in-depth perception of the severity of the 2001 crisis.

As the data reveals, 9.7% of the loans in the banking system were non-performing loans. This ratio was considerably lower for private banks, 3.6%, while almost one fifth of total loans

provided by the public banks were in default or close to being in default. There is no doubt that non-performing loans have been a hindrance to economic stability and growth during the 1990's. From this aspect, the Turkish financial crisis had common features with the Asian crisis in 1997-98. Until the crisis in 2001, there has been limited progress in the restructuring of the banking sector, reflecting less political will in tackling the problem and involving the commitment of substantial financial resources. Indeed, the problem undermined the effectiveness of the banking sector in performing its role as the most important channel of financial intermediation and thus inhibited economic growth, development and stability.

Ozatay and Sak describe the adverse development in the credit market, and argue that credit risk, interest rate risk and foreign exchange risk factors increased during the 1980's and 1990's, especially after the capital account liberalization in 1989⁵². This limited the room for maneuver for the banking sector as a whole. Moreover, the increased volatility of the growth rate during the 1990's as a proxy for the default risk of the borrowers made it difficult for the banking sector to identify credit worthiness of prospective borrowers, thus increasing the reluctance of the banks to extend loans to corporate firms. Consequently, in an environment of increased risk, the banking sector as a whole preferred to remain liquid as it is revealed in the growing share of government debt instruments on bank balance sheets. Similarly, increased price and growth rate volatility could also have influenced the loan demand of the corporate sector negatively. On the demand side, studies of the corporate firms' financing behavior reveal that almost one third of financing was based on inter-firm trade-credits during the 1990's and domestic bank loans

⁵² Ozatay and Sak (2002)

remained a secondary source of finance. Moreover, with the capital account liberalization, especially the large-sized corporate firms were able to gain access to direct foreign borrowing.

The short-term nature of the banking system and also of the Turkish economy can easily be observed from the maturity structure of both the commercial bank deposits and loans. The domestic debt problem in the early 1990's, the governments' efforts to pull down the borrowing rates, the increased volatility in the exchange rates, continuing depreciation of the lira against major currencies, high rates of inflation, and political instability could be listed as the main reasons for maturity mismatch between deposits and loans in the banking sector. In the last decade, the average maturity of time deposits hardly ever increased over 3-4 months whereas almost three-fourths of the loans to the private sector were short-term.

The fragility in the financial system was further intensified due to the existing moral hazard problem, based on the full government insurance on deposits in the banking system. The lack of adequate regulation and supervision should also be underlined as a crucial factor. But both moral hazard problems further intensified leading to increased fragility: First, the saving deposits were 100% insured by the government in order to increase confidence in the banking system following the systemic liquidity problem in the aftermath of the 1994-crisis. And secondly, the authorities facilitated the establishment and easy acquisition of private banks, deepening the regulation and supervision problems.

To sum up, we see that the problems in the banking sector had dramatically deepened towards 2000. The negative shocks of the Asian crisis and the Russian moratorium, as external factors, and economic instability, high inflation and volatile interest rates further destroyed the

balance sheets of the banks. The size of non-performing loans increased and the profitability substantially decreased. Deterioration in the assets of the banking sector led to liquidity problems, which further increased the risks. After the early elections in 1999, the government had taken steps in structural reforms. Namely, with the reforms and legislations on the social security system, the international arbitration, the privatization and the banking and capital markets, the economy was put into a new track. The Banking Regulation and Supervision Agency (BRSA) was established based on the new Banking Act, which was introduced in June 1999, in order to comply with the international standards in the banking sector. The main target was to limit the political intervention in the banking system. After the reforms were enacted, the government finally agreed with the IMF and installed a stand-by arrangement in order to sustain the economic stability and pull down the inflation rate. The monetary and exchange rate policies were determined according to the disinflation programme, and a quasi-currency board and soft-peg currency system were introduced as part of the disinflation plan. The BRSA launched operations against corruption in the banking sector as part of its supervision activity in banks which were handed over to the Saving Deposits Insurance Fund (SDIF).

III.G. IMF backed stabilization and disinflation programme of 2000

In 2000, high and chronic inflation during the two previous decades was the foremost problem for the Turkish economy. In the ten years before 2000, the governments had not succeeded in reducing the budget deficit. The general policy implemented by the governments in this period was to increase the prices of public goods and services, which led to high inflation. They faced such a dilemma that when they did not increase the public prices, inflation went down, but the deficit soared. Although some measures were taken to reduce the budget

deficit and inflation simultaneously, the relative success of strategies remained limited and the inflation rates were not pulled down.

When we sum up the misalignments in the economy as high inflation, high fiscal deficits, high level of dollarization, intensifying unrecorded economic activity, weakened banking sector and ill-functioning financial system, populist practices by governments, it is clear that the financial conundrum was not sustainable and a fresh disinflation strategy was necessary. Any economic program to overcome structural misalignments in the economy should first sustain an ambitious decline in inflation level. In parallel to that, the government needed to pursue a tight fiscal programme. The fiscal discipline would help in narrowing the public sector deficits and bringing down the burden of interest payments on the public sector. It would only be possible to realize a significant decline in inflation in this way, and nominal and real interest rates would be expected to fall thereafter.

Given that the disinflation strategy would be successful, the demand for the lira denominated financial instruments was expected to increase, and the maturity of financial instruments would be lengthened in line with the improvement in expectations. Moreover, higher growth rates would be possible and also sustainable in a stable environment. The risks in the banking sector would decline under these new circumstances and the financial structure of the banking sector would be strengthened with the normalization of the economy.

Under these conditions and projections, Turkey signed a new stand-by agreement with the International Monetary Fund in December 1999, which was an extension of the Staff Monitoring Program that was signed in July 1998. Within the context of the new three-year arrangement, the

government launched a disinflation and economic stabilization programme, aiming at disinflation and sustainable economic growth at the same time.

In accordance with the arrangement, the Central Bank announced an exchange rate based disinflation policy, which was at the heart of the monetary policy. The disinflation goals, decreasing the CPI inflation to 25% by the end of 2000, and to single digit territory by the end of 2002, were set with special emphasis on a clear break away from the past inflationary episodes, and the exchange rate was chosen as the main tool. This strategy makes sense when the difficulty of bringing the inflation down to single digits is taken into account, given the inertial component of inflation in Turkey. It was underlined by the officials of the IMF and the Turkish Treasury that the strength of the programme had enhanced the credibility of the disinflation goals.

The fundamental goal of the economic programme, disinflation, was to be achieved through implementing consistent, credible and persistent fiscal, income, monetary and exchange rate policies, all supported through structural reforms by the government. In consequence, the real interest rates were expected to decline to plausible levels and the growth potential of the economy was expected to be boosted. As a final target, more effective and fair allocation of the resources in the economy would be achieved.

On the other hand, the main pillars on which the disinflation program would operate were a tight fiscal policy (monitored through a primary surplus target), commitment on the structural reforms, speeding up of the privatization, an income policy in line with the inflation targets, and finally a tight monetary policy and an almost hard-pegged exchange rate policy. The public sector primary surplus target was set as equivalent of 2.2% of GNP for the year 2000 in order to restrict

the total debt stock at 61% of GNP.

It should be repeated that the fiscal discipline and the structural reforms were the most crucial elements at the heart of the programme. The monetary and exchange rate policies, as instruments, were designed to aid these main determinants in decreasing the inflation and the interest rates.

The scenario behind the mechanism was a typical case of exchange rate based disinflation strategy. The main instrument, the semi-fixed exchange rates, was planned to provide a long-term perspective to the economic agents through management of expectations. In other words, the predictability of exchange rates would help the disinflation process through noticeable improvement in expectations, and a rapid decline in the interest rates would follow consequently. It was also within the projections that the value of financial investments would fuel the capital inflow into the country by both residents and nonresidents since the uncertainty would be reduced.

The feasibility of the programme was dependent on the success of the political authority, the three-party coalition government, in maintaining the fiscal discipline and implementation of the structural reforms. Finally, the increase in international reserves coupled with financial support from the international community would help the government during the implementation.

On the other hand, as observed in all previous examples of exchange rate base disinflation strategies, there was the risk of being locked into a monetary and exchange rate framework trap. It was foreseen that the domestic currency would appreciate in real terms. Thus, a transparent and pre-announced exit strategy from the exchange rate regime was envisaged in the programme, in

order to prevent the unnecessary rigidities that may occur in the exchange rates stemming from the disinflation process in the long run.

The central bank's exchange rate policy was designed in two different exchange rate regimes during the implementation of the three-year program. In the first half, between January 2000 and June 2001, nominal value of the basket (composed of 1US\$ + 0.77 Euro) was planned to increase in line with the targeted inflation rate. In the following period after July 2001, the exchange rate policy would be carried out with respect to a band, which would widen at a rate of 15 percentage points per annum, measured from edge to edge.

The exchange rate policy and the pre-announced path were perceived as the most important tools for the central bank at achieving the inflation target. The other items, such as the main aggregates in the balance sheet of the central bank, were designed in accordance with this strategy. A floor was imposed for net international reserves and a ceiling restriction was followed for net domestic assets. The bank had limited flexibility in increasing net domestic assets. Therefore, money creation by the bank was dependent on the balance of payments. Secondly, the interest rates were left to be determined by the market conditions.

As far as the financial sector is considered, the changes in the Banking Law sought to change the supervision of the banking sector in line with the international standards. With new regulations, the financial system was expected to show a healthy enlargement, which would facilitate increase in funds and loans provided by the banking sector. In fact, the new legislation that was enacted in 1999 had brought the standards and regulations in the Turkish banking sector close to the European Union level. With the changes in the area of prudential regulation, the

banking sector was expected to increase its profitability and it was likely to catch up with the EU in terms of size and competitiveness. However, there still remained some essential steps to be taken by the government, related to the strengthening of the banking sector.

As an integral part of the disinflation program of the Turkish government, certain measures needed to be taken in order to enhance overall economic stability and strengthen the banking sector that faced critical risks, as mentioned before. Therefore, necessary actions were stated in the letter of intent approved by the IMF on 22 December 1999. The reforms were designed to strengthen the financial sector in addition to the notable progress in the rehabilitation of the banking sector that was achieved through amendments in the Banking Law earlier in 1999. However, as far as the public banks were considered, there still remained important issues.

According to the government's initial agenda outlined in the programme related to the banking sector, an autonomous institution for the regulation and the supervision of the banks was to be created by the newly formed autonomous body, the Banking Regulation and Supervision Agency (BRSA). BRSA was responsible for prudential regulations and supervision in the banking sector. Appropriate requirements in line with international standards and best practices were to be put in force in the accounting standards applicable to banks for prudential reporting and financial disclosure purposes, for capital adequacy, including market risk, and for improved internal risk management procedures. The government was obliged to help the BRSA with continuation of related reforms through necessary legislations indicated in the standby arrangement as performance criteria. Sector's foreign exchange positions were required to be controlled through new penalties and prudential limits would be introduced against excess open foreign exchange positions. The government was expected to increase its regulatory role with

necessary regulatory amendments mainly aiming at the protection of investors and depositors and ensuring standardization and transparency in the application of accounting standards and principles.

On the public side of the banking sector, the long-standing duty-loss problems of the state-owned banks needed an urgent solution. This need was addressed in the economic programme emphasizing that the state needed a rehabilitation and operational and capital restructuring in order to strengthen their oversight and to develop strategic corporate plans. Furthermore, a privatization strategy was pledged to be launched for Ziraat Bank and Halk Bank, the two largest state banks. In order to improve the state banks' cash management, strict measures needed to be taken against the duty loss problem. Although some actions were envisaged in the economic programme, they remained as partial remedies. Furthermore, the actual practice in 2000 showed that the problem was not solved. On the contrary, the duty loss problem became a systemic risk towards the end of 2000.

Finally, the risks in the banking sector as a whole were closely related with political stability, which would ensure the success of the disinflation strategy. Lifting uncertainties, following consistent economic policies, putting into effect necessary legislative amendments, liberalizing institutions that regulate and monitor the sector would allow the banks to operate in a stronger and healthier environment. When the disinflation strategy was put into practice, the sector had positive expectations about lowering inflation, but at the same time, disinflation was perceived as dependent on political stability, for which the sector had non-uniform expectations. The success of the economic programme was very much dependent on political stability; and it was unclear how consistent low-inflationary policies could be applied without first ensuring

political stability and enabling the necessary infrastructure developments.

IV. Towards the financial crisis of February 2001

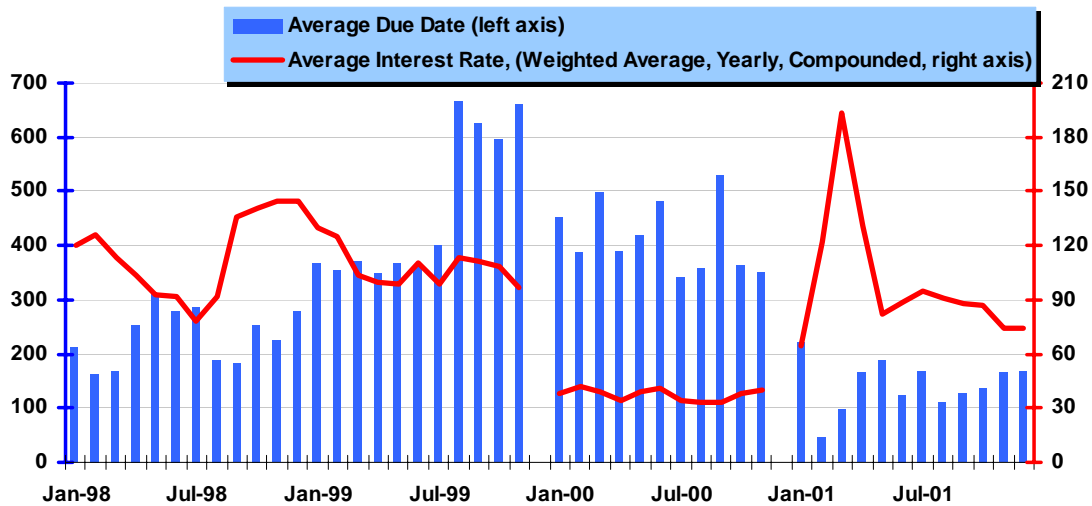
After the adoption of an ambitious stabilization programme at the end of 1999, the implementation at the first stage was successful and promising. The market indicators also supported the improvement in the expectations, as the benchmark rates in the secondary bond market sharply declined from above 90 percent, to around 40 percent. The early success of the programme was coupled with strong domestic demand, pulling the growth rates up. The inflation was falling in line with the path envisaged in the programme, and the government was committed to the fiscal discipline. The fiscal objectives were achieved as they were set out in the programme. The fall in interest rates brought the interest expenditures down and gave the government relief in the budget.

The launch of the privatization auction for the third GSM license, and a successful sale in the first half of the year also contributed to the improvement of expectations. The growing domestic demand and the rise of imports were not surprising, since the inertia in inflation led to a real appreciation of the foreign exchange rate. The real appreciation of the lira, coupled with the recovery of domestic demand and the increase in international oil prices, led to a dramatic deterioration in terms of trade and balance of payments.

Towards the second half of the year, the visible reluctance of the government on key reforms hampered the positive mood in the markets. The delays in privatization program and failure on structural reforms during the second half of the year were perceived by the market as government's irresponsibility and weakening commitment on the stabilization programme. Moreover, the worsening of the current account deficit was perceived as a critical risk although the IMF had granted generous financing in advance at the beginning of the year. As a result, the

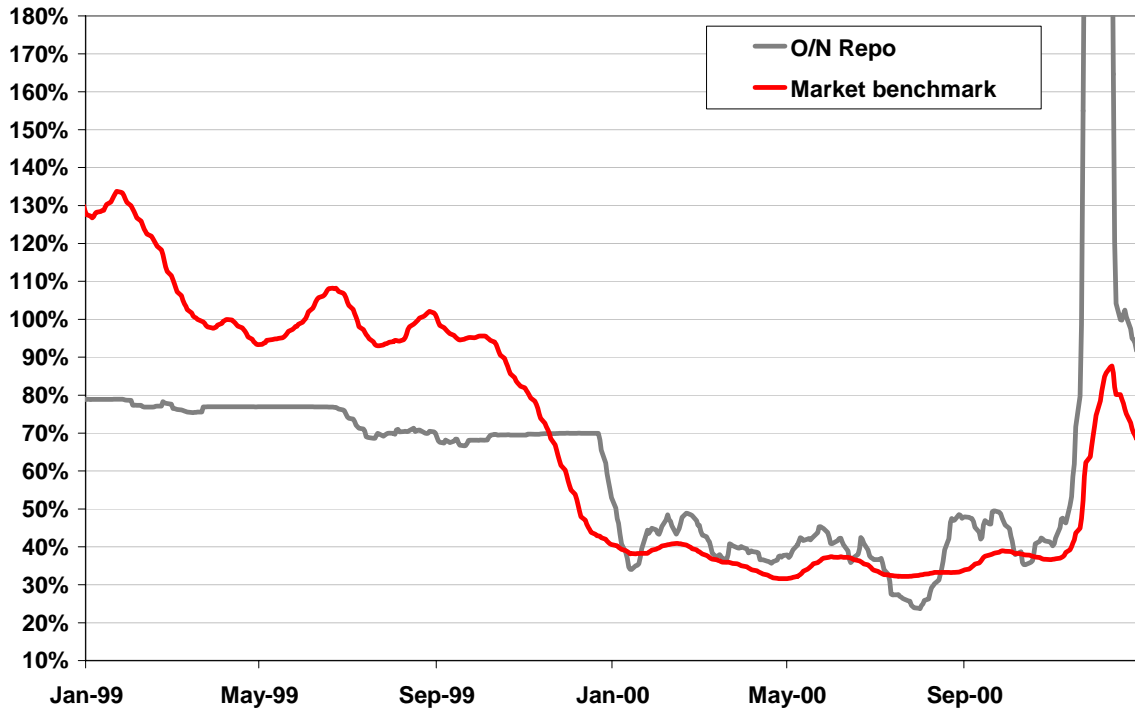
investors' sentiments in the financial markets turned negative and short-term interest rates began to rise in August 2000.

AVERAGE INTEREST RATES AND MATURITY IN GDI AUCTIONS



The rising interest rates led the banks in difficulty to try to maintain liquidity, which resulted in selling their holdings of Treasury bonds and writing losses. It should also be underlined that the problems of the banking sector were not solved. Although the regulatory framework was established and the BRSA was formed, the key supervision and restructuring measures were delayed due to delays and political debates over the appointments to the BRSA board and other staffing problems. The board of the bank was named at the end of August with a five-month delay. According to the initial strategy, the board was to be appointed by March 2000, and the Agency would have been in full operation by August. The delay caused a further loss of credibility for the government. Coupled with alleged corruption claims in private banks, the speculations about the autonomy and the independence of the board grew, further damaging the

government's profile and leading to increased uncertainty.



The corruption claims and criminal investigations of former bankers had led to increasing speculation in the media about the irregularities and existence of severe problems in the private banking system. The banks taken over by the SDIF had brought new costs and burden on the Treasury. Moreover, the credibility and the public support of the three-party coalition were in more danger.

In consequence, the expectations of international investors quickly turned negative. Further rise in the interest rates hurt the financial structures of the banks which had a high share of government securities in their portfolios and financed those securities with rather short maturity resources. Open foreign exchange positions of the private banks became a systemic

problem. Besides, there was the problem of asymmetric information as the private banks concealed the exact volume of their open positions through bilateral contracts with sister companies. Besides, it was profitable for the banks to borrow on foreign exchange and finance the government, since the real interest would be high given the inflation target. The Treasury had also encouraged the private banks in such actions since that would provide easy financing for the budget deficits. Demirbank, which held the largest ratio of government securities in its portfolio to its total assets, faced liquidity problems since it was financing its portfolio through short-term repos.

In mid-November of the year 2000, the overnight borrowing rates began to rise and volatility was observed in the secondary bonds market. Similarly, the share prices in the Istanbul Stocks Exchange began to fall, an expected result of foreign capital exodus. When the other banks cut their credit lines to short term lending and decided to lower their exchange rate risk in response to worsening expectations, Demirbank was trapped with liquidity problems. The main reason behind the financial outflow was first outlined as the risky balance sheet of Demirbank, which had increasingly invested in government bonds. The liquidity trap had further intensified with the rising uncertainty on government's willingness to pass key reforms and privatizations. In addition, the developments in Argentina had a negative impact on foreign investors' confidence. The panic in the financial system spread quickly and all private banks in the system shut their short term credit channel in the inter-bank market.

Repo rates immediately climbed up to 250%, although the Central Bank tried to calm the markets with consecutive announcements underlining the continuation of the monetary policy programme. The liquidity crisis had harmed all the banks, including the largest ones. The state

banks, which were bound to roll-over the duty losses, were in trouble and they further intensified the liquidity problem.

Table 3. The FX open positions of the banks (million US \$)				
	Jan 2000	Jan 2000 (including forward)	Sep 2000	Sep 2000 (including forward)
State banks	-177	-191	-1	+19
Private banks	-6.061	-773	-9.637	-847
SDIF banks	-5.345	-2.684	-6.271	-4.900
Foreign banks	-1.201	-60	-2.112	-78
Investment banks	-2	+91	-168	+200
Total	-12.786	-3.617	-18.189	-5.606
Total (excluding SDIF banks)	-7.441	-933	-11.918	-706

Demirbank was not alone in facing troubles in the banking system. On the contrary, Demirbank was a minor part of the problem. The financing requirement for the duty losses of the state banks led to more severe problems. In November, the state banks were financing 15 percent of duty losses totaling around USD 20bn, through short-term borrowing. Three public banks, Ziraat Bank, Halk Bank and Emlak Bankasi, constituted nearly one third of the banking system then. Thus, the problem of public banks aggravated the systemic risks.

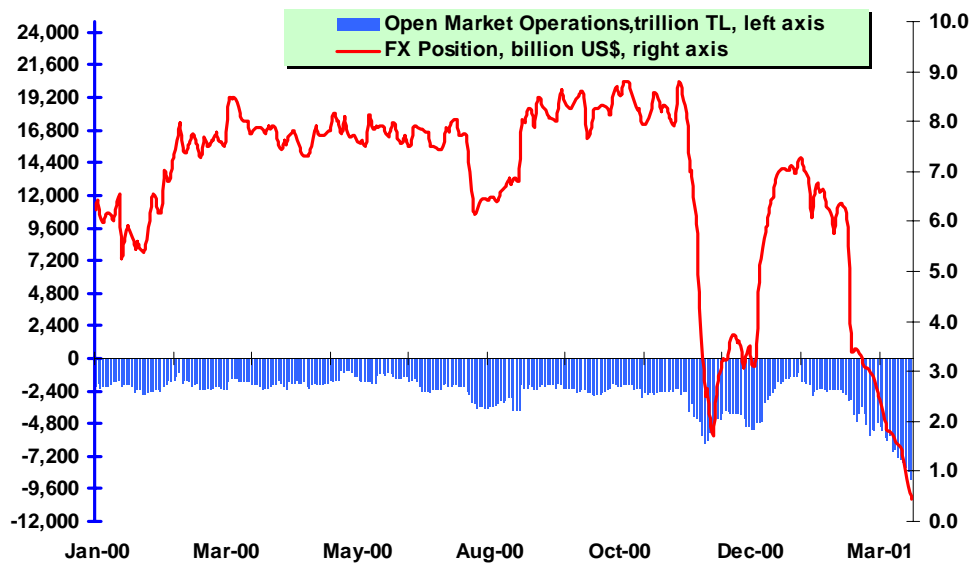
Finally, the turbulence and the liquidity crisis hit the economy in November when the market interest rates skyrocketed to 134 percent and the overnight repo rates to above 800 percent on December 1, 2000. The turmoil in financial markets led to an outflow of foreign investments, creating excess demand for foreign exchange and resulting in central bank's foreign exchange reserve losses. Demirbank was liquidated and the IMF granted an emergency package through the Supplementary Reserve Facility in December to calm the markets down. Although the IMF's financial assistance helped the Central Bank to recover its foreign exchange reserves to

former levels and restore confidence in the program, the market interest rates never returned to old levels. However, the market fluctuations were partially removed. The inflation was in line with the target, with a slight lag of two months.

The liquidity crisis in November was overcome shortly with the support of the IMF while an extra loan was provided. The government pledged to continue on enacting the key reforms and the banking system was to be restructured. It should be underlined that the reluctance for reforms, delays in the privatization process, the lack of regulations to overcome the inefficiency of the taxation system, the systemic problems of the public sector were the main causes of the increasing fragility before and after the November crisis. The investors, both domestic and foreign, had lost confidence in government's willingness on structural reforms and determination on the economic programme. The foreign banks demanded more foreign exchange in order to get out of Turkey, while domestic banks were in panic to acquire sufficient amount of foreign exchange in order to insure themselves against an announcement of "devaluation", due to their FX open positions. In other words, the liquidity risk that led to November crisis in 2000 was transformed to exchange rate risk. Further turmoil in domestic politics transferred the financial turmoil to a devastating banking and economic crisis in February 2001.

The liquidity-based turbulence in November showed that the banking system was deeply vulnerable. Moreover, the sustainability of the foreign exchange regime was being questioned as the lack of political commitment further fueled the suspicions over the stabilization program. As a result, the maturity of both domestic and foreign funds shortened after the November crisis, bringing about increased maturity mismatches for the financial sector.

Although relative stability was sustained in the financial markets at the beginning of 2001, the long-standing problems such as the duty loss problem of the state banks and the reluctance of the government on structural reforms still remained unsolved. On the contrary, the political disputes within the government and disagreements between the government and the president eroded market confidence totally.



When the Prime Minister disclosed an announcement informing a political disagreement between the government and the President on 19 February, defining the situation as a state of “crisis”, the lira became the target of a massive attack. In other words, the crisis was officially launched by the head of the government, although the financial indicators had not signaled for any turmoil in the markets. Ironically, the political dispute that led to the financial turmoil at the National Security Council between the government leaders and the President was about the supervision of banks and of the BRSA.

In the immediate aftermath of the attack, the liquidity needs of the public banks locked up the whole payments system totally. The Central Bank tried to defend the foreign exchange rate with a squeeze in liquidity, which was followed by another hike in short-term interest rates. The overnight interest rates increased to 2058 percent on February 20 and to 4019 percent on February 21. That hike did not hinder the capital outflows. As expected, the central bank was unable to defend the lira against the attacks. After the depletion of reserves, the exchange rate regime was abandoned on February 22, and the lira was allowed to float freely. The lira depreciated by around 40 percent against the US dollar. The outflow of financial capital led to a financial crisis, which quickly became the most severe economic crisis in the history of the Turkish economy.

		Beginning of 2000 Program 15.12.1999	November Crisis 13.11.2000	February Crisis 28.2.2001
Duty loss problem of the banks				
In quadrillion TL	Total Duty Losses	10.2	11.8	13.5
	Duty Losses (financed with Short-Term)	2.4	6.6	13.5
	Short Term (as share of total Balance Sheet)	8%	15%	37%
Interest rates	Duty Loss	110%	70%	628%
	Government Security	75%	39%	145%
	Private Banks Deposit	71%	58%	107%
	Government Banks Deposit	79%	70%	130%

The impact of the crisis on the economy was dramatic. The cost of the crisis led to higher rates of taxes. Furthermore, the government introduced new special taxes on all consumption items, mostly on the utilities. The government was forced to implement an even tighter fiscal policy as the internal and external borrowing costs of the Treasury intensified. The depression in the financial system led to sharp contraction in volume of credits, which brought forth a sharp

decline in domestic demand. The growth rates turned to negative, the inflation went upwards, presenting a typical case of stagflation.

In the wake of the financial crisis, a new agreement was made with the IMF in May 2001, announcing “Turkey’s Program for Transition to a Strong Economy.” The crisis served as a turning point in implementing the structural reforms. First, the new program attached special focus on the restructuring and the rehabilitation of the banking sector, enabling the structural reforms. Secondly, the special conditions in the aftermath of the crisis served as a perfect opportunity to finally break the politicians’ control over the Turkish economy. In other words, the new program envisaged a more market oriented, and populism-free economy with the introduction of necessary regulations.

The central bank attained its independence immediately after the crisis. By the relevant law, the primary objective of the Central Bank became the achievement and maintenance of price stability. It was prohibited from granting advances and extending credit to the Treasury and public institutions. It was also prohibited from purchasing debt instruments issued by the Treasury and public institutions in the primary market. The duty periods of vice governors were extended from three years to five. According to the Central Bank Law of 1970, governors could not be excused from office before the end of their duty periods. With the new law, this statement was extended to vice governors, in accord with 14 in European Central Banks System. Transparency and accountability were also enhanced. The strategy envisaged in the new stabilization programme, and the success of it, served as a great information source on the reason of the financial crisis in 2001. The new program’s overall strategy could be summarized in three steps: reducing the uncertainty in the financial markets, stabilizing the money and the foreign

exchange markets, and establishing macroeconomic balances. One aim of the program was to ensure the long-term sustainability of fiscal adjustment and to improve the efficiency of the public sector governance. In this regard, the regulations to strengthen budget discipline and to enhance the revenue resources have been put in place. To combat tax evasion and to distribute the tax burden evenly, the tax regulations introduced the use of tax identification numbers. Precautions were taken to expand the coverage of the budget and improve fiscal control. Moreover, the budgetary, extra-budgetary and revolving funds were closed. The issues of the public finance and debt management were redesigned with a new legislation. Income policy in line with targeted inflation rates was one of the basics of the program.

The fragility in the banking sector was a critical drawback of the 2000 stabilization program, and that was why the new program gave top priority to banking reform. Moreover, the governance structure of the state-owned banks was reformed to minimize the political influence on the banking sector. Most importantly, the duty losses of state banks were totally eliminated through an operation jointly undertaken by the Treasury and the Central Bank. And finally, long-waiting reforms on the banking system were successfully enacted by the parliament and approved by the President. Within a few years, Turkey completed a great step in its turn to a market economy, which it had started with the early reforms of 1980's. Finally, in 2005, the European Union officially announced that the "Turkish economy is a functioning market economy".



V. Conclusion

Our analysis of the economic history showed that the Turkish economy was already in crisis-like state of affairs at the end of 1999, when the IMF-backed and exchange rate based disinflation strategy was launched. The economic programme was a clear attempt to rescue the economy from the deadlock of chronic inflation and financial instability. In order to achieve the disinflation target, the authorities did not have the option to choose a strategy based on monetary-tightening, since the country was already in the midst of a recession at the end of 1999. Thus, exchange-rate based disinflation strategy was the most appropriate plan although it had well-known risks like the possibility of an over-valued local currency. The risks were known at the beginning, and certain measures had already been taken. Furthermore, the IMF had backed the programme with generous loans, diminishing the risks related to the necessity of external financing due to the widening current account deficit. However, what lacked during the implementation of the programme was the policymakers' -namely the three-party coalition

government's- commitment during the second half of 2000, contrary to the pledges initially documented in the stand-by arrangement.

The government's reluctance on the privatization agenda and on the structural reforms could be addressed as the source of credibility loss, which increased the tension in the financial markets. Excluding the government's stance, the developments in the economy –including the negative developments- were approximately in line with the expectations. The government's irresponsibility was immediately reflected in the financial markets as the interest rates went up, and the liquidity dried up in November. The authorities' response to the liquidity crisis in November 2000 is a typical case of moral hazard, as the structural problems of the public banks, and the risks undertaken individually by the private banks were ignored, disregarded and overlooked. There was also the case of asymmetric information, as the balance sheet problems of the public banks were intentionally concealed from the public. It is well known in economic theory that when there is asymmetric information, the markets fail. From this point of view, the crisis in November was no exception to the generally accepted rule. Even after the November crisis, it was in the hands of the political authority to survive an economic crisis. To recap, the IMF provided another generous loan in December, showing that the support was maintained. However, it was the government's failure to support the economic programme with structural reforms that caused the financial distress in November 2000. Rather than showing its full commitment to the economic programme, the parties forming the coalition government pushed harder towards further political instability. It was not surprising that the outbreak of the crisis in February was due to the political tension at the top of the government rather than to some unexpected development in the economy. It is still unclear for the attackers of the programme

that whether the exchange-rate based disinflation strategy would have been successful or not if the government had been more constructive in 2000. Thus, putting the blame on the IMF or on the design of the programme will be misleading if the main dynamics of the crisis are to be analyzed.

The question we put forward through this study is about the longstanding vulnerability and fragility of the economy, which allowed a political chaos in February to lead to the most severe economic crisis in Turkey. Had it not been weakened by structural problems for decades, the economy would not have faced the economic meltdown in 2001. In other words, the timeline of events before the February 2001 crisis presents a full picture of what happened and how. However, it was the age-old weakness of the economic fundamentals and the historical fragility of the financial system that made those events possible.

From a longer time perspective, the crisis of 1994 should be perceived as a critical warning, indicating that the populist policies are no longer sustainable, and reforms were needed for a structural well-being. Without the reforms, particularly in the public sector and in the banking sector, the liberalization of the markets is not possible and the populist policies would only worsen the economy. During the previous two decades, fiscal discipline was almost completely absent. Violating the principle of budget unity, there were extra-budgetary funds and duty losses hidden in public banks' balance sheets, which made the government's budget less flexible and less efficient. The budget figures published by the governments did not provide useful information to decision-makers, as most of the deficit was hidden in extra-budgetary funds and public sector companies, and particularly in the state banks. Similarly, the private banking sector contained similar cases of asymmetric information. Moreover, the banking sector as a

whole was mostly unregulated, and there was not adequate supervision. The necessity of the reforms in both the public and banking sectors continued until the 2001 crisis. The reforms were initiated only after the crisis, aiming at ensuring credibility, transparency and accountability.

The dynamics and the features of the financial turmoil during late 2000 and early 2001 could be partially explained within the framework of traditional crisis models. ‘Continuous deterioration in economic fundamentals’ was not the only cause for the economic crisis as emphasized in the first generation models. Neither was the crisis a result of self-fulfilling dynamics after a speculative attack, and hence the events did not fit into the scheme of the second generation models. In other words, neither the first generation model nor the second could provide a full capture of the 2001 financial crisis in detail. Instead, understanding the dynamics of the crisis requires deeper analysis and further academic study monitoring not only the macro-economic fundamentals, but also the impacts of political discrepancies and the lack of successful institutional transition throughout the economic history since the initial years of the Turkish Republic.

We share the view of Ozatay and Sak (2002) that the financial crisis of 2001 did not fit in the first generation models. They showed that the central bank was not the financier of the public deficits. Furthermore, although we cannot talk about balanced macroeconomic fundamentals in 2000, they were worse in 1999 than they were at the end of 2000. The public sector borrowing requirement was at 15.6% of GNP in 1999, the historical highest level until then. Thus, the turbulence in the financial markets could not be explained with macroeconomic fundamentals. In 2000, the borrowing requirement did not worsen but improved by 2.9 percentage points. As a result, weak macro-economic fundamentals did not have much to do with the outbreak of the

crisis, but added an immense pressure on the recovery process during the post-crisis era, as we discussed.

Several studies analyzed the 2001 economic crisis of Turkey as a result of the deterioration in the external balance. However, the expansion of the deficit in Turkey's external trade balance is not specific to the year 2000. Since the beginning of trade liberalization in 1980, the external trade figures of Turkey have grown rapidly. The openness of Turkey, if expressed as the ratio of external trade volume to the GNP, improved sharply during the trade liberalization, the ratio increasing from below 10% in 1980 to around 40% in 2000. During the year 2000, it was within the expectations and in line with the stylized facts of exchange rate based stabilization programs. As well known ahead of time, an output expansion and strong demand were observed in the initial period, in the first half of 2000. Thus, the growth of imports in 2000 was an expected consequence, and the government was backed by the IMF in order not to face any financing problems regarding the current account deficit.

Others blamed the design of the IMF-backed stabilization program arguing that the weakness of the program had led to speculative financial inflows. Moreover, outflows were ready to hit the financial markets quickly in case of political tensions. The role of emerging market-specific nature of banking and financial system in turning the currency attack against the lira to a full-blown economic crisis should not be disregarded. Instead, the banking sector fragility, the ill-functioning public sector, and irresponsible policies maintained during the 1990's had enabled the currency attack to have a massive adverse impact on the economy. Thus, recognizing the financial capital movements as the major cause of the problem would be naïve and would not

present a full grasp of the roots of the economic collapse.

Rather than special case assessments of the financial and economic collapse, the 2001 crisis should be evaluated with a long-term perspective, which we tried to put forward. The collapse in 2001 was not an exceptional development observed in a single year. Instead, as the figures show, the economy had contracted by -6.2% in aggregate terms from 1997 to 2001, and Turkish economy was in a deep recession due to deteriorating macroeconomic fundamentals. The inflation remained high during this term despite several rescue efforts. As we detailed in our study, with unsustainable fiscal deficits and growing burden of interest payments on the budget, the public sector indiscipline was the main determinant of systemic fragility. The second was the resistance to reforms in the banking sector, which endangered the whole financial system.

The scholars called the Mexican crisis of 1994 as the first financial crisis of the twenty-first century, meaning that it was the first major crisis that hit the new world of globalized financial markets. With the same terms of classification, the Turkish financial crisis of 2001, as being an outcome of populist policies, structural problems, systemic fragilities, could be called as the last crisis of the twentieth century.

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