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ANATOMY OF THE RECENT CRISIS IN TURKEY

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Turkey has been a chronic high inflation country over the past fifteen years. In the second half of the 1990s, fiscal balances in Turkey deteriorated rapidly resulting in an unsustainable domestic debt accumulation. Moreover, the counterpart to domestic debt was short-term external liabilities intermediated by the banking system. Against this background, a three-year stand-by programme was initiated in 2000. The programme, an exchange rate-based programme with quasi-currency board arrangements, was hailed as the final chance to root out inflation. However, within less than a year, a liquidity crisis developed and risks inherent in the system were materialised. Given the quasi-currency board arrangement, the liquidity crisis can only be explained by reversal of capital inflows. As a result, the domestic debt market collapsed, the programme was terminated and the exchange rate was left to float. Given the highly-leveraged private sector, higher interest and exchange rates resulted in a severe recession. A new agreement with the IMF was reached and fresh funds amounting to over USD15 billions were made available to Turkey. The long-term aim of the new programme is to complete the structural reform agenda and resume sustainable growth. But the formidable short-term task of domestic debt servicing remains to be the main problem.

1. INTRODUCTION

Turkey embarked on an ambitious IMF-supported, exchange rate-based programme in 2000, which was publicly presented as an inflation reduction programme. The programme was accompanied by measures of strong fiscal performance and structural reform. However, it was seriously impaired after only eleven months with a severe liquidity crunch that exposed long-standing structural weaknesses in the banking system. The programme never really recovered from the turmoil in November and it was finally abandoned three months later in February 2001.

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The purpose of this paper is to provide an account of this episode. After reviewing the problems prior to the initiation of the programme, developments that led to its demise are presented. We then reconsider, in the light of post-crisis information, the inherent weaknesses in the design of the programme. Our main contention is that the programme understated the domestic debt problem and the structural weaknesses in the banking system, the main holder of domestic debt instruments. The problem with its full implications was only recognised after the crush and a new programme is under way at present. After a brief review of the immediate aftermath of the crisis, the paper ends with some concluding remarks.

2. A BRIEF OVERVIEW OF MACROECONOMIC DEVELOPMENTS IN THE 1990s

The main macroeconomic indicators for Turkey are shown in Table 1. The economy was characterised by high and variable inflation, together with fluctuating growth rates throughout the 1990s. It is interesting to note that the economy was not experiencing any noteworthy current account problems, especially after 1994. Despite this, the external debt stock increased from USD66 billions at end-1994 to USD103 billions by the end of 1999. Over the same period, the external debt of the public sector increased by only USD4 billions. Consequently the rest of the increase was attributable to the private sector, USD9 billions being an increase in the short-term borrowing of the banking system. This pattern of external debt accumulation reflected the basic problem that the economy was facing, namely the high and increasing public deficits financed by private capital inflows.

The monetary policy setting, especially after 1996, was conducive to short-term capital inflows. This is illustrated in Chart 1. Throughout 1999, and the same picture applies to all of the period, the rate of depreciation was systematically below the cost of short-term funds that could be obtained from the Central Bank (the CB repo rate), and there was a good margin of profit from funding a portfolio of government domestic debt instruments by borrowing in terms of foreign exchange. But the same policy also perpetuated the debt build-up in the absence of a fiscal effort to eliminate the need for borrowing.

Public finances were burdened by high and increasing interest payments on domestic debt, and towards the end of the decade, the pace

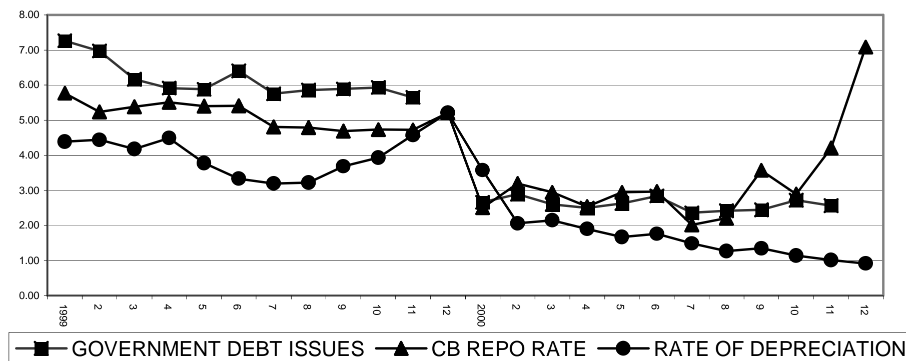
Table 1. Main Indicators, Turkey

	Inflation	GNP Growth	PSBR/GNP	Interest/GNP	CAB/GNP
1990	60,3	9,4	7,4	5,1	-1,7
1991	66,0	0,3	10,2	6,1	0,2
1992	70,1	6,4	10,6	6,2	-0,6
1993	66,1	8,1	12,0	8,2	-3,5
1994	106,3	-6,1	7,9	10,8	2,0
1995	89,1	8,0	5,0	9,5	-1,4
1996	80,4	7,1	8,6	10,4	-1,3
1997	85,7	8,3	7,7	8,8	-1,4
1998	84,1	3,9	9,0	12,6	1,0
1999	64,9	-6,4	15,3	16,3	-0,7

Source: State Planning Organisation.

Notes: Inflation figures are average annual percentage changes of CPI. PSBR: total public sector borrowing requirement. Interest: interest payments of the public sector, CAB: current account balance.

CHART I: MONTHLY INTEREST RATES



Source: The Central Bank.

Notes: Government Debt Issues and CB Repo Rate are monthly rates that compound to the actual realised rates in the relevant time period. The Rate of Depreciation is the average rate of depreciation of a basket (USD1 + DM1.5) over the previous month. In December of both years, there were no Treasury debt issues.

of increase of interest payments was clearly unsustainable. This, in fact, was the diagnosis of the Letter of Intent of December 9, 1999 that Turkey submitted to the IMF.[1] The fourth paragraph of the Letter reads, "Moreover, these high real interest rates, together with a weak fiscal primary position, have pushed public finances onto an unsustainable path. Public sector debt…is projected to increase from 44 percent of GNP at end-1998 to 58 percent of GNP at end-1999. *This leaves Turkey vulnerable to swings in international financial markets' confidence."* (Emphasis added).

In other words, as of the end of the decade, Turkey, while in economic difficulty with a long history of inflation and accumulated problems as reflected in high and fast increasing public debt, was not in immediate crisis, but was prone to crisis. Moreover, the approaching crisis would originate from the banking sector. This is because most of the domestic debt instruments, constituting the largest portion of the total public debt, were held by the banking sector, which in turn financed the government securities portfolio by short-term capital inflows. This explains the reference to the "swings in international financial markets' confidence" in the Letter of Intent.[2]

3. THE PROGRAMME

Against this background, a three-year stand-by agreement with the IMF was concluded on 22nd December 1999, and an ambitious programme was initiated as of January 2000. The programme aimed at reducing consumer price inflation to 25% in 2000, and to single digits by end-2002. The other important aim was to first stabilise and then reduce the total debt to GNP ratio, the end-programme target being 54.75% of GNP from a realised 61% as of end-1999. There was also an ambitious structural reform and privatisation agenda as shown in Table 2.

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[1] This and other related documents are available on the web pages of the IMF.

[2] The World Bank, and surely the IMF, knew the weaknesses in the Turkish banking system. The President of the World Bank J. Wolfensohn visited Turkey in May 2000 and addressed a Bankers' Association meeting in Istanbul. According to press reports "by referring to the weaknesses in the banking sector in South Asia prior to crisis, he drew attention to the weaknesses in the banking sector and explicitly called for a consolidation in the Turkish banking system", Erdal Sağlam, Hürriyet (Newspaper), 29 May 2000. For a recent assessment of the banking system in Turkey see A. Ertugrul and F. Selcuk (2001).

But by far the most important and urgent aim was to generate a sustainable path of public finances and public debt. The programme had "three pillars: up-front fiscal adjustment, structural reform and a firm exchange rate commitment" (Letter of Intent of December 9, 1999). The fiscal adjustment envisaged a primary surplus of 2.2% of GNP (3.7% excluding earthquake-related expenses amounting to 1.5% of GNP) in 2000. In the remaining two years of the programme, the primary surplus was projected to reach 5.5% of GNP. Moreover, the programme undertook to transfer privatisation revenues to the Treasury for debt reduction. In other words, the usual case for privatisation, such as increased efficiency, was put aside and the sale of public assets was explicitly associated with the debt reduction strategy. The same perspective motivated the structural reform agenda, which "…aims at making sustainable over the medium term the fiscal adjustment implemented in 2000, lowering the burden of interest payments on public sector debt, improving transparency and economic efficiency, and reducing the contingent liabilities of the public sector." (Paragraph 38.) Other than paying lip service to "improving transparency and economic efficiency", the structural reform agenda was again clearly subordinated to the debt reduction strategy.

Table 2. Structural Reform Measures of the Letter of Intent

Agricultural Policies	The medium-term objective was to phase out existing support policies, such as support pricing and purchasing and credit subsidies that burden public finances, and replace them with a direct income support system targeting poor farmers. In the interim, existing support policies were to take into account the programme targets.
Pension Reform	Social security reform was to be deepened by undertaking administrative reforms to improve coverage and compliance and more importantly by creating the legal framework for private pension funds.
Fiscal Management	Extra Budgetary Funds totalling 61 were to be phased out gradually by June 2001.
Tax Policy	Pledged to broaden the tax base but no specific measures were given.

Privatisation	Listed 16 publicly owned enterprises to be privatised in 2000. A further list of public companies for the privatisation programme in 2001 was to be prepared in time. Turk Telekom and energy sectors were to be subjected to the Turkish commercial code (prior actions) with a view to preparing them for privatisation.
Banking Regulations	The Banks Act was to be amended to strengthen prudential standards, to increase transparency and independence of the Banking Regulation and Supervision Agency. Two major state-owned banks were to be commercialised with an eventual privatisation goal.

The last pillar, namely the “firm exchange rate commitment” or the monetary policy setting, was a pre-announced crawling peg regime. Accordingly, a gradually declining monthly rate of depreciation of a basket (1 USD + 1.5 DM or 0.75 Euro) was announced for eighteen months. The cumulative rate of depreciation by the end of 2000 was to be 20%, and by the end of June 2001 it was announced to reach 26.3%. From July 2001 onwards, the basket rate was to be left to fluctuate within a widening band. By the end of 2002, the band was to reach 22.5%. In other words, there was a pre-announced exit strategy from the peg, reflecting the lessons learnt from previous crises in Mexico and Asia where fixed rate regimes were maintained over a long period.

Furthermore, the programme set floor targets for the net foreign assets of the Central Bank. The net domestic assets of the Bank were to be maintained within a band around its value as of end-1999. The band value was to be determined as 5% of the monetary base at the end of each quarter. The meaning of these measures is clear. The Bank was committed not to sterilise changes in its foreign assets, and liquidity would be created only through the acquisition of foreign exchange, amounting essentially to a quasi-currency board arrangement.

The monetary policy leg of the programme, thus, formalised the policy that the Bank was covertly following in the 1996-1999 period. With hindsight, it is clear that the monetary policy setting was particularly conducive for the debt reduction strategy as well as

providing a nominal anchor for inflation reduction. Pre-announced slower currency depreciation was beneficial for the public sector on two accounts. First, the domestic currency equivalent of external debt servicing by the public sector would be lower, reducing the domestic borrowing of the public sector. Second, it would allow a fall in interest rates, reducing the interest burden of the debt. Given that the unsustainable debt dynamics were driven by ever-higher interest payments, this was the main element of the debt reduction strategy.

4. DEVELOPMENTS IN 2000

The basket rate of depreciation was maintained according to the programme targets and gradually declined to 1% per month in the last quarter (see Chart 1). The average cost of domestic borrowing also came down sharply and remained more or less constant over the year with an average of 2.5% per month. The margin between the rate of depreciation and the cost of borrowing narrowed substantially as envisaged by the programme. However, unlike the previous year, the short-term interest rate remained above the interest rate on domestic debt issues, with the exception of the summer months when foreign exchange earnings are higher thanks to tourism. This reflects the quasi-currency board nature of the arrangement, whereby the Bank lost all control over short-term rates. The sudden hike of the short-term rate in September is noteworthy. In short, by the beginning of the last quarter, the market participants must have sensed that there was no possibility of further falls in the interest rates despite an even slower rate of depreciation. This observation will be important in later discussions.

As for general macroeconomic developments, the outcome was in accord with those observed in other exchange rate-based stabilisation programmes (Calvo and Vegh, 1999). Accordingly, the convergence of inflation was slow. While the target for the rate of depreciation was met, CPI (WPI) inflation turned out to be 39% (33%) against a target of 25% (20%). There was, thus, a sizeable real appreciation of TL. The real activity recovered sharply and GNP growth for the year was 6.1%. The current account recorded a record deficit at around 5% of GNP or USD9.8 billions. The increase in economic activity and the record deficit were accompanied by a rapid expansion of commercial bank credits. Of the USD8.4 billion increase in commercial bank credit to the private sector over the year, USD6 billions went to the household sector.

The latter reflected the surge in the demand for consumer durables including imported goods taking advantage of low interest rates.

The government was successful in meeting the target for the primary surplus, which was realised at 2.8% of GNP against a target of 2.2%. In the structural reform and privatisation sphere, however, the progress was not satisfactory. Only 50% of the privatisation target (USD7 billions = 3.5% of GNP) could be realised. This meant that the debt reduction strategy could not proceed as fast as envisaged by the programme. Some structural reform measures undertaken by the programme were carried out, but in two important areas, namely state banks and Telekom, there was considerable political resistance and no progress could be achieved. The two cases became test cases for the resolve of the government in carrying out the programme.

In short, by the end of the third quarter, the economy had realised a current account deficit of USD6.8 billions (Table 3), the scope for further falls in interest rates was bleak, and worries concerning the slow progress of structural reform were mounting. Moreover, during the preceding months, the Banking Supervision Authority revealed large-scale corruption within several small banks that were taken over previously. Public attention turned to banks and the tough stance of the Supervision Authority increased the expectations of further operations towards the banking system. That is, the main intermediary for capital inflows (the main pillar of the programme) was showing signs of weakness.

Table 3. Balance of Payments, USD Billions

	1998	1999	2000I	2000II	2000III	2000IV	2001*
CAB	2,0	-1,4	-2,3	-3,3	-1,2	-3,0	0,4
KAB	-0,8	4,7	3,4	4,5	3,0	-1,5	-5,9
PORTFOLIO	-6,7	3,4	2,1	1,6	2,3	-5,0	-2,9
(GOVERN)	-	-	1,7	1,8	2,1	0,4	-0,2
RESERVES	-0,4	-5,2	-0,6	-1,4	-0,4	5,4	6,6

Source: Central Bank

Notes: CAB: current account balance, KAB: capital account balance, PORTFOLIO: Net Portfolio investment, GOVERN: Net portfolio investment in government issues, RESERVES: Change in official reserves (- indicates increase). 2001 figures cover the January-May period.

Despite these tensions, the fate of the “firm exchange rate commitment” was not in serious question. On 14th of November, the last Treasury auction for the year was successfully completed. On November 20, 2000, however, the outlook suddenly changed. Driven by a liquidity shortage, short-term interest rates started increasing to reach 200% within days and, in the same week, the Central Bank lost USD2.5 billions in reserves. The following is the IMF’s account of the onset of the crisis:

> “The crisis was triggered by the rumoured withdrawal of external credit lines to Turkish banks and, in turn by two large Turkish banks to a mid-sized bank investing heavily in the government securities market, combined with a scaling back in its funding in the international syndicated loan market. As a result, the bank was forced to sell a large chunk of its T-bill holdings, pushing yields above the stop-loss levels of foreign investors and other local banks, thereby triggering a massive closing of positions and prompting primary dealers to suspend trading in government paper. Foreign investors’ concern about domestic banks’ net foreign exchange exposure, and the quality of their forward cover exacerbated the rush for the exit.” (IMF 2001, p.8)

With the onset of the crisis, liquidity became ever tighter due to capital outflows and the banking system at large became under threat. To avoid a full-scale collapse of the banking system, the Central Bank suspended its targets on net domestic asset and supplied liquidity to the system. “An initial injection of liquidity by the CBT (Central Bank of Turkey) led to a slight easing of tensions, but ongoing injections raised concerns about the sustainability of the exchange rate regime leading to an acceleration of foreign exchange outflows in the following week.” (IMF 2001, p.8) Thus, the authorities came to face the choice of abandoning the exchange rate system or reverting to the quasi-currency board regime and they chose the latter. In the face of ongoing capital outflows, short-term (overnight) rates soared to almost 2000%. The mechanism that was supposed to reverse capital outflows, namely higher interest rates, was not working, given the collapse of confidence in the banking system and the sustainability of the exchange rate regime.

The economy was experiencing the force of the “swings in international financial markets’ confidence” that the programme was trying to avoid. The Central Bank lost about USD7 billions of reserves within two weeks and the collapse of the programme could only be

avoided with fresh funds from the IMF. On December 6, the IMF approved a Supplemental Reserve Facility (SRF) making additional USD7.5 billions of funds available to Turkey, bringing the total available to around USD10 billions.

With this injection of fresh funds and renewed support from the IMF, the collapse of the programme was avoided for the time being. However, the three weeks' turmoil left deep marks on the banking system. The "mid-sized bank investing heavily in the government securities market", namely Demirbank[3], and two other banks were taken over by the deposit insurance fund because the losses they incurred over their government securities portfolio exceeded their equity. The banking system in general suffered heavily in terms of realised losses over their portfolio of government debt instruments. The upshot of the crisis was that the market for government debt securities collapsed. The primary dealership system, Demirbank was one of the primary dealers, was abandoned. Banks were now carrying illiquid assets in the form of government securities. Moreover, their access to external finance was heavily impaired.

5. THE COLLAPSE OF THE EXCHANGE RATE SYSTEM

The new Letter of Intent (18th December) brought an important change to the conduct of monetary policy. While the exchange rate targets were maintained according to the original Letter, the band system for the net

[3] The fate of Demirbank had much in common with the fate of the programme. It later became evident that Demirbank had purchased almost 15% of all the Treasury issues earlier in the year. Relying on the best scenario, the bank was expecting handsome capital gains towards the end of the year when interest rates were expected to fall further in line with the decelerating rate of depreciation. That is, in line with the expectations of the programme, more capital would be attracted towards the end of the year as the programme matured, and the bank would be in a position to empty its portfolio of government securities with a profit. In fact, we see from Table 3 that private capital inflows were not as strong even during the first three quarters. During the first three quarters, portfolio investment amounted to USD6 billions, but USD5.6 billions were through the government. Note also that the capital inflows due to the government sale of securities amounted to more than half of the cumulative capital account balance over the first three quarters (USD10.9 billions). In the last quarter, there were no government external issues according to its financing programme. Thus, an important source of capital inflows and liquidity dried up and private inflows did not replace this source, contrary to expectations.

domestic assets (NDA) was replaced with specified ceilings for the NDA. This meant that while the Central Bank was not allowed to inject liquidity into the system by means other than acquiring foreign assets, it could now sterilise capital inflows so as to check undue falls in short-term rates. The overall post-crisis monetary strategy was to clear up the excess liquidity created during the crisis and maintain a high enough interest rate to recover the reserve losses of the Bank. This was clearly a knife-edge strategy. Given that the rate of depreciation was going to fall below one percent from January 2001 onwards, a high short-term rate structure maintained for too long would either attract capital inflows as envisaged or would result in the complete loss of already weak confidence.

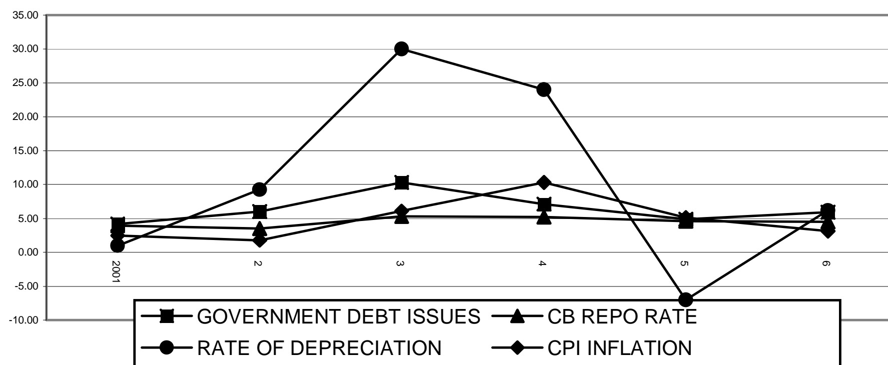
With this strategy, about USD4 billions returned to the Central Bank in January. But this was from within the country, mainly the banking system. In the Treasury auctions of January 2001, the average monthly rate was 4.2% (Chart 2), which compounds to over 60% annually, against the programme target of at most 15% dollar rate of depreciation over the year. This disproportionate parity in favour of the TL should have attracted foreign investors, but it did not. In fact, as we now know, mostly Treasury-controlled banks, i.e., public banks or banks taken over by the deposit insurance fund, were participating in the Treasury auctions. Private banks, with fresh memories of Demirbank being taken over for investing in government securities, and continuing to register losses on securities purchased in 2000 at an average monthly rate of 2.5%, were reluctant to accumulate further assets with dubious liquidity. Foreign investors were obviously reluctant to take new positions in Turkey in the light of fresh information on the health of the banking system.

In a way, the Treasury was selling securities to itself, and presumably, the market participants at the time knew this. The aim of generating a sustainable debt dynamics had collapsed with the collapse of the market for government securities. With foreign investors out of the market, it was not possible to roll over the debt stock, the extent of which was only revealed after the crisis, as we shall see below.

The spark finally came on 19th February, when the Prime Minister abruptly ended the National Security Council meeting during which he had a row with the President over anti-corruption policy, and declared that there was a “serious crisis.” Within hours banks placed buy orders of

USD7 billions of foreign exchange with the Central Bank to be cleared the following day. The next day about USD3 billions of orders were cancelled because ordering banks could not raise the TL equivalent of their orders. The reason turned out to be that their overnight lending to state banks did not return, as these banks were now completely illiquid. Driven by the immense liquidity needs of public banks and insatiable demand for foreign exchange, overnight rates soared to three digit figures, occasionally reaching 7000%, and the payments system was virtually paralysed. The TL was finally left to float on the 22nd of February.

CHART 2: MONHTLY INTEREST RATES



Source: The Central Bank.
Notes: For definitions see Chart 1.

6. WHAT CAUSED THE CRISIS?

There has been a lively discussion over the causes of the crisis.[4] Arguments range from unsustainable real exchange rates and current account balance, implementation problems such as slow progress on structural reform, political risk, the inadequate response of the Central Bank, on IMF's advice, to the liquidity problem in November, according

[4] Exchanges between academics, columnists, and IMF officials have taken the form of letters to the Editor of the Financial Times (March 13, July 12, 2001). See the Turkey pages of the web site of the Fund for the replies of Michael Deppler, The Director of the European Department of the Fund. The Fund's own account of the unfolding of the crisis can be found in IMF Country Report No: 01/89, June 2001.

to which had the Bank continued to supply liquidity to banks in November allowing more loss of reserves, the crisis could have been averted. At a deeper level, however, we are now in a position, in the light of new data that was made available after the collapse of the programme (Table 4), to better assess the nature of the problem that was facing policy makers, and the inherent fragility involved in the design of the programme.

Table 4. Public Debt Indicators, % of GNP

	1994	1995	1996	1997	1998	1999	2000
DOMESTIC	14,4	12,2	20,4	20,4	24,4	40,9	38,8
EXTERNAL	30,7	29,1	26,0	22,5	19,3	20,1	19,7
DUTY LOSS	1,9	2,1	4,2	5,2	11,4	16,7	14,4
INTEREST	10,1	9,1	11,9	11,0	16,4	22,1	21,9
PRIMARY	-0,2	2,7	-2,1	-2,1	0,5	-2,8	2,8

Source: Treasury of Turkey, IMF Staff Country Report No. 00/14, February 2000, Annex of the Letter Of Intent May 15, 2001.

Notes:
DOMESTIC: net domestic debt of the public sector;
EXTERNAL: net external debt of the public sector;
DUTY LOSS: accumulated duty losses of public banks;
INTEREST: net interest payments of the consolidated public sector;
PRIMARY: primary balance (+ surplus) of the consolidated public sector.

On comparing the data on interest payments and primary surplus between Table 1 and Table 4, we see that from 1996 onwards they diverge widely and in fact, as 1999 total public sector borrowing requirement (interest + primary deficit), approach a quarter of GNP. The data in Table 1 is State Planning Organisation (SPO) data and draws on a conventional public sector definition compatible with national accounts. By contrast, the Treasury-IMF data includes public banks, and the alarming extent of the heavy burden of domestic debt comes out more sharply. From 1998 to 1999, domestic debt to GNP ratio increased by 16.5% to reach 40.9%.[5] Coupled with the duty losses of public banks,

[5] We may note that, as of end-1999, the total assets of the banking sector were 70% of GNP, while the total TL and foreign exchange deposits with the banking sector were about 48% of GNP.

which were financed in the money market at very short maturities, it is clear that the economy was heading towards an inevitable crisis. The overnight borrowing of public banks was revealed to be TL20 quadrillions (more than USD20billions or 10% of GNP) after the crisis in February. The interest hikes no doubt exacerbated the financing needs of these banks after November 2000. Nevertheless, it is highly indicative of the unsustainable financing needs of the public sector.

In summary, public banks (37% of the total banking system by asset size) were carrying a sizeable part of the public debt in the form of duty losses. Moreover, public banks were not borrowing in the international markets, but rather relied on the domestic money market. Private banks on the other hand, in addition to having to finance their own portfolio of government securities, were the main source of short-term financing of duty losses and they borrowed internationally. It follows that private banks were in effect carrying the entire risk of the system, the soundness of which depended on the smooth rolling over of the public debt. The latter, in turn, was conditional on the smooth and increasing inflow of capital through the intermediation of private banks.

Given these conditions, the programme of 2000 is seen to be a framework for facilitating capital inflows. As we already said, the programme formalised what Turkey had been doing in the 1996-99 period, but this time with a commitment to reduce debt through primary surpluses and privatisation under the explicit auspices of the IMF. The IMF committed negligible funds (USD3.7 billions) for the three-year programme, but reckoned that its presence would confer sufficient credibility to the programme so as to convince the international financial markets to increase their exposure in Turkey for a period of two years of crawling peg arrangement. In our view, the inherent fragility of the programme was that too much faith was put in the assumed enthusiasm of the international financial markets to take on an increasing portion of Turkey's domestic debt just because there was an IMF supported programme.

As M. Deppler has recently said in his exchanges with critics referred to earlier "… the programme design was, with hindsight, probably too brittle for Turkish conditions. It was the one, however, that, if successful, would have allowed a faster exit from the deep recession into which Turkey had fallen because of high interest rates."

While we are unsure whether we have the same reasons for the "brittleness" of the programme, we agree that had the programme been successful, it would have been a major success, given the size of the problems it addressed. In any event, it turned out that international financial markets were less than reluctant in taking on higher risks in Turkey.

Given this inherent fragility, a current account deficit of USD9.8 billions, in addition to the already huge financing needs of domestic debt servicing and delays in privatisation as well as other factors, must have affected the risk assessments of external sources of finance. In fact according to a report:

> "A criminal probe into 10 banks in administration spread concerns across the sector about the health of other institutions, resulting in the discontinuation of credit lines and a liquidity crunch in late November. The troubles in the banking sector acted as a catalyst that amplified investors' concerns on other issues, including the excessively large current account deficit and delays in privatisation." (Daiwa Institute of Research Europe, Emerging Markets Debt Monthly, 7th December 2000.)

With confidence in the main intermediary, the banking system, collapsing, first a liquidity and then a banking crisis ensued in November. As in the Asian banking crisis, the problem was illiquid assets financed with short-term external borrowing (Corsetti et al, 1999). But unlike the Asian crisis, the illiquid assets were government debt instruments or short-term instruments of public banks, rather than "bad" credit as a result of "overlending" to the private sector under implicit government guarantees. Accordingly, dealing with the problem was more difficult. The illiquid assets of the banking system were government securities, and so could not be taken over by giving government securities to the banking system as happened in Asia and Mexico (Kruger and Tornell, 1999). Moreover, the easing of liquidity by the Central Bank in November would mean monetisation of the debt and clearly would not be possible without the collapse of the exchange rate arrangement.

7. AFTER THE COLLAPSE

There was a sharp depreciation of the currency after the float (Chart 2). The inflation rate that turned out to be very favourable in February also

jumped with a peak in April. Note that the pass-through has been moderate with respect to CPI because of a sharp contraction in demand. In the first two quarters, GDP plummeted by 2.2% and 9.3% year on year, respectively. The second quarter contraction in consumption and investment over the same quarter of the previous year has been 11.5% and 32.1%, respectively. The signs are that contraction will continue in the rest of the year. This severe contraction has been accompanied by a sharp contraction of bank lending and bankruptcies. The credit expansion of the previous year had left a legacy of highly-leveraged business and household sector. A sizeable portion of debt was foreign exchange denominated. Because of higher exchange and interest rates, the non-bank private sector experienced severe debt servicing problems. Moreover, banks themselves had their own balance sheet problems in view of the sharp depreciation of the currency, as they had uncovered foreign exchange liabilities. The attempt to restructure their balance sheets in favour of foreign exchange assets resulted in a withdrawal from the credit market, further exacerbating the debt servicing problems of the non-bank sector. Public banks, the main lender to the small-medium business and agricultural sector, also cut lending as part of their restructuring programme. With an increasing number of firms defaulting, banks experienced further balance sheet problems as bad loans accumulated. In short, balance sheet problems propagated through a multiplier process. The government-led attempt to bring together banks and larger corporations to restructure debt and maintain credit lines to viable corporations is still in the making as of the time of writing.[6]

As for the general policy response to the crisis, the government appointed Mr. Kemal Dervis, Vice President of the World Bank at the time, as the minister responsible for economic affairs. The Central Bank Governor and the Treasury Undersecretary were also replaced. The new team headed by Dervis prepared a programme, called "Strengthening the Turkish Economy", that later became the Letter of Intent of May 15 2001. The renewed stand-by agreement augmented the previous funds to USD19 billions so that USD15.1 billions became available through the last seven months of 2001, and USD3.8 billions were released

[6] The idea is to imitate the approach known as the London Approach to corporate workouts designed by the Bank of England in the 1990s. See, for example, "Corporate Workouts - A UK Perspective" by Pen Kent, www.bankofengland.co.uk/londapp.pdf.

immediately. The IMF took a more pre-emptive approach this time. Much of the structural measures that were delayed in the previous programme were legislated before 15th of May. In particular, the law of public banks was changed and, according to the new law, the government can no longer give duties that result in "duty losses." A new joint management was appointed with the explicit mandate to prepare them for privatisation. Several other laws, including the Telekom law, were also changed according to the requests of the IMF later in June and July.

The long-term aims of the programme are to complete the structural reform agenda, which was broadly in agreement with the EU membership prospects of Turkey, and generate sustainable growth. But the more formidable short-term problem was debt management. The domestic debt stock increased from USD54 billions (10 billions non-cash) as of the end of 2000 to USD72 billions (42 billions non-cash) as of June 2001. The increase in total and non-cash debt reflect the restructuring of government securities portfolio of public and Fund banks (banks taken over by the Deposit Insurance Fund), securities given in exchange for the duty losses of public banks and securities given to strengthen the capital base of Fund banks. In other words, all public debt was consolidated and securitized. Obviously giving new government securities at a time when such securities had no liquidity would not alleviate the short-term financing needs of these banks. This problem was solved by the direct intervention of the Central Bank.

As part of the structural reform, the Central Bank law was amended giving the Bank instruments independence and an explicit mandate to pursue price stability. The eventual aim is to adopt inflation targeting, which the authorities intend to start in the last quarter of 2001. But in a provisional article the Bank was allowed to purchase debt instruments issued by the Treasury in the primary market for a period of six months beginning from the effective date of the law (24 April 2001). That is, in view of the severity of the domestic debt problem, the door for monetisation was left open. In all, the Bank credits to the public amounted to TL20 quadrillions (around USD16 billions in terms of July exchange rates) between February and July; most of this in the form of direct purchase of securities from public and Fund banks. As a result, these banks withdrew completely from overnight money markets, easing the pressure in money markets as well as reducing the interest burden of

the Treasury. The original plan was to redeem these securities purchased by the Bank until the end of the year, but in July they were replaced by longer maturity securities, thereby making the monetisation permanent. With public and Fund banks out of the market, and with an active Central Bank, the paralysis in the money markets was overcome and the payments system started functioning, although as of the time of writing, the markets cannot be said to have completely recovered from the impact of the crisis.

The Central Bank sterilised the increase in liquidity created by direct credits to the government by losing USD5 billions in reserves, in addition to USD8 billions that became available through IMF and World Bank sources. However, the overwhelming problem remained to be rolling over the domestic debt through Treasury auctions. The markets received the renewal of the stand-by agreement in May favourably; the exchange rate appreciated in nominal terms, and the hopes for the remaining part of the year were high. But starting from June, and considering the fact that total debt servicing was TL25 quadrillion in June-August, the optimistic mood was lost. The participation in Treasury auctions, especially those with a longer than three months maturity, turned out to be low. The Treasury has been able to service debt so far by reverting to foreign exchange indexed borrowing, using Central Bank facilities and sterilising the proceeds with IMF-supplied funds. But the markets remain suspicious about the possibility of debt servicing and the tension continues as of the time of writing. The root of the problem is the unwillingness of foreign investors to take positions in the domestic debt market. The aim of the authorities at present is to use official funds in debt servicing for the time being and, eventually, regain credibility so as to be able to gain access to the international markets in 2002.

8. CONCLUDING REMARKS

The programme of 2000 glossed over the domestic debt problem and was presented as the programme that was finally going to root out inflation from the economy. The IMF committed meager funds, and the authorities just hoped for the best, which did not materialise. With hindsight, it now appears that the post-February 2001 operation relating to public and Funds banks should have been undertaken in 2000, without being committed to explicit exchange rate and inflation targets.

In this way, a trade-off between a higher inflation and a sounder banking sector would be accepted for some time. The IMF, on the other hand, should have committed funds commensurate with the extent of the debt problem, which they knew at the time, while imposing strict measures for public finances. Moreover, since it was common knowledge that exchange rate-based stabilisation programmes did involve an increase in current account deficits, measures should be included to alleviate the problem. This could take the form of imposing external borrowing limits on domestic banks for purposes of domestic credit expansion. Note that Turkey could not impose tariffs, or tariff-equivalent domestic taxes, on imports in view of the custom union arrangements with the EU, the source of the bulk of imports. And using a high interest rate policy to check domestic demand expansion would clash with the debt reduction strategy.

The return to reality came with the onset of the crisis. The debt problem was explicitly acknowledged, and policy was set accordingly. It seems impossible to solve a domestic debt problem that involves over 20% of GNP in interest transfers without some monetisation. But it is well known that unsterilised monetisation of debt can only result in hyperinflation, and sterilisation without monetization is possible with sufficient foreign exchange reserves. The IMF-supplied funds in the new arrangement serve precisely this purpose. Had this fact been recognised earlier, the programme would have had a better chance. It is still uncertain that the debt problem can be overcome without a debt deflation, the flip side of hyperinflation. Much depends on the ability of the Treasury and the banking sector to gain access to the international markets within a reasonable time. The IMF may have to commit further funds to Turkey before markets are fully convinced that domestic debt is sustainable.

REFERENCES

Calvo, G. A., and C. A. Vegh. “Inflation Stabilization and BOP Crisis in Developing Countries,” in J. Taylor and M. Woodford (eds), *Handbook Of Macroeconomics*, Amsterdam, North Holland, 1999.

Corsetti, G, P. Pesenti, and N. Roubini. “What caused the Asian currency and financial crisis?” *Japan and the World Economy* 11, (1999), 305-373.

IMF *Emerging Market Financing, Quarterly Report on Developments and Prospects*, Volume 2, no.1, (2001).

Krueger, A., and A. Tornell. "The Role of Bank Restructuring in Recovering from Crises: Mexico 1995-98." NBER Working Paper 7042, (1999).

Ertugrul, A and F. Selcuk "A Brief Account of the Turkish Economy, 1980-2000." *Russian and East European Finance and Trade*, Vol.37, no.6, (2001).