Turkey: 2011 Article IV Consultation—Staff Report; Staff Supplements; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Turkey.

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2011 Article IV consultation with Turkey, the following documents have been released and are included in this package:

- A staff supplement of November 22, 2011 updating information on recent developments.

- The staff report for the 2011 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on September 19, 2011, with the officials of Turkey on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 14, 2011. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- Staff supplements containing an Analytical Annex and Informational Annex.

- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its November 30, 2011 discussion of the staff report that concluded the Article IV consultation.

- A statement by the Executive Director of Turkey.

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

TURKEY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION
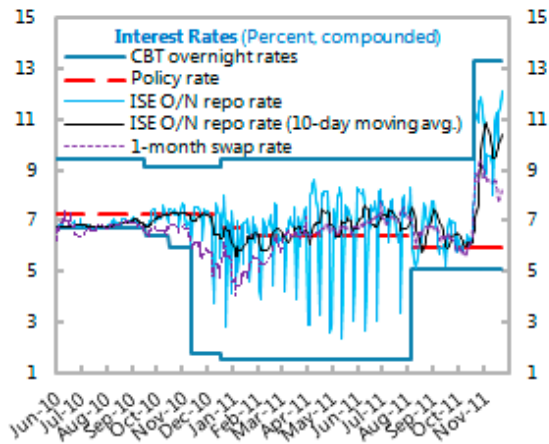
November 22, 2011

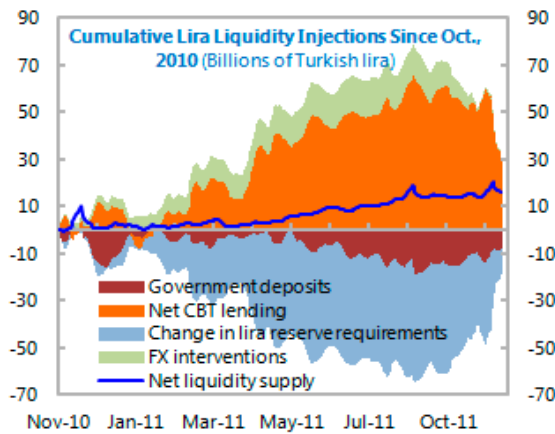| Approved By	Ajai Chopra and Aasim Husain

This supplement updates financial market developments that occurred since the main report was issued. These developments, together with other recent economic data that are in line with the outlook in the staff report, do not affect the thrust of the staff appraisal.
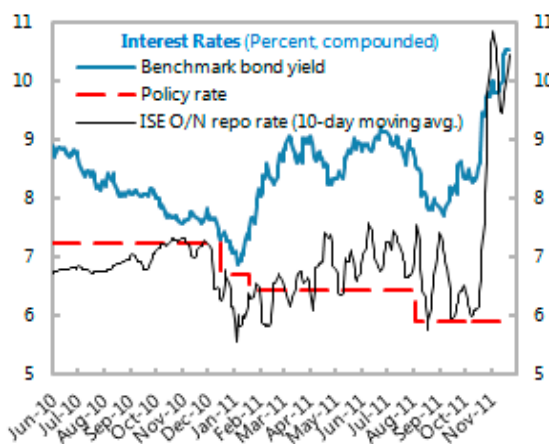
The Central Bank of Turkey's new dual-policy rate framework (see paragraphs 31 and 32 of the staff report) achieved a marked increase in average interest rates and a slowdown in financial intermediation, but depreciation has resumed. Since the policy was introduced in late October, overnight interbank rates jumped to around 9¾ percent on average, with considerable day-to-day variability. This was accompanied by only a modest reduction in lira liquidity as banks' demand for precautionary balances increased in response to the greater uncertainty inherent in the new system. Yields on the benchmark government bond jumped by 2 percentage points in tandem with the higher average interbank rate, and stood at 10½ percent on November 22, while trading volumes have slumped. In addition, and in conjunction with the weaker domestic and external environment, credit growth has further slowed. Although the lira initially appreciated in response to the effective tightening, depreciation pressure has recently resumed on intensifying global concerns. Despite restarting daily fx sale auctions (a cumulative US$550 million since November 1, 2011), the lira has depreciated somewhat faster than other emerging-market currencies during the past two weeks. Nonetheless, CBT reserves have risen by US$5 billion during this period as banks increased the amount of RR on lira liabilities they hold in the form of fx.
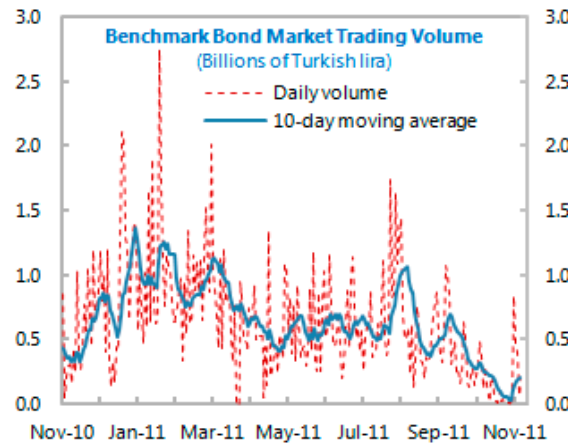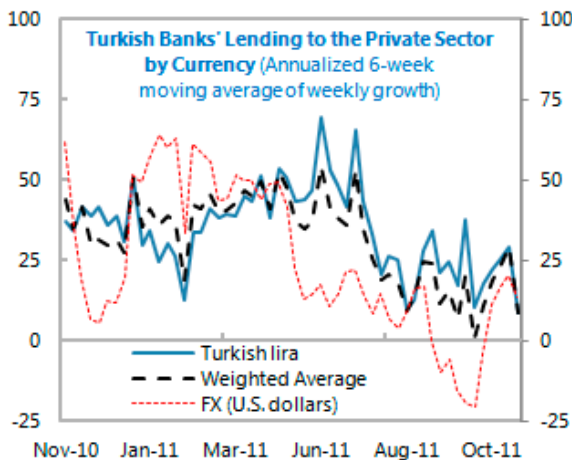
Interest Rates (Percent, compounded)
- CBT overnight rates
- Policy rate
- ISE O/N repo rate
- ISE O/N repo rate (10-day moving avg.)
- 1-month swap rate

Sources: CBT; and IMF staff estimates.

Cumulative Lira Liquidity Injections Since Oct., 2010 (Billions of Turkish lira)
- Government deposits
- Net CBT lending
- Change in lira reserve requirements
- FX interventions
- Net liquidity supply

Sources: Central Bank of Turkey; and IMF staff estimates.

Interest Rates (Percent, compounded)
- Benchmark bond yield
- Policy rate
- ISE O/N repo rate (10-day moving avg.)

Sources: CBT; and IMF staff estimates.

Benchmark Bond Market Trading Volume (Billions of Turkish lira)
- Daily volume
- 10-day moving average

Source: Istanbul Stock Exchange.
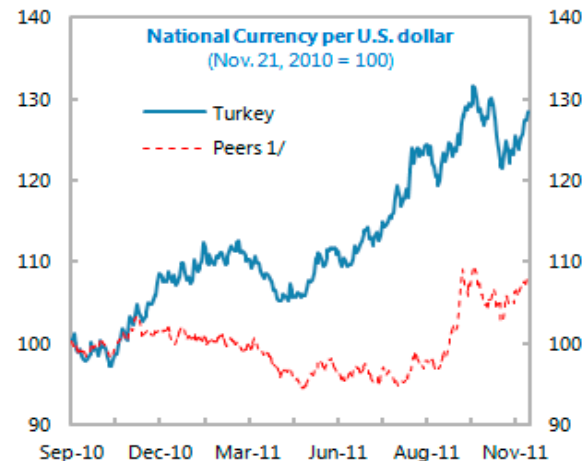
Turkish Banks' Lending to the Private Sector by Currency (Annualized 6-week moving average of weekly growth)
- Turkish lira
- Weighted Average
- FX (U.S. dollars)

Sources: BRSA; and IMF staff estimates.

National Currency per U.S. dollar (Nov. 21, 2010 = 100)
- Turkey
- Peers 1/

Sources: Bloomberg; and IMF staff calculations.
1/ Simple average of Brazil, Chile, Colombia, Hungary, Indonesia, Poland, Korea, S. Africa and Thailand.

TURKEY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION

November 14, 2011

KEY ISSUES

Context: The dynamic rebound from the 2008–09 global crisis has put output well above pre-crisis levels. However, loose macroeconomic policies and a sizable competitiveness gap caused a surge in credit-financed, import-intensive domestic demand. The current account deficit has risen precipitously, funded largely by short-term debt and other volatile flows. Turkey's hard-earned resilience, built up following its 2000–01 financial crisis, has been weakened by the recent unbalanced growth episode.

Challenges: With very low savings, Turkish economic growth relies on capital inflows to finance imports. When inflows are abundant, growth is strong; when flows reverse, the economy contracts, leaving Turkey prone to boom-bust cycles. Since mid 2009, capital inflows have intensified on favorable push and pull factors, including abundant yield-seeking global liquidity, healthy Turkish balance sheets, and Turkish policymakers' agile response to the global crisis. With risks rising, what can be done to deliver a soft landing? What policies can reduce the propensity for future boom-bust cycles?

Policies: The authorities' response relied on improving the headline fiscal balance and introducing credit-restraining prudential measures. But the centerpiece has been an unconventional monetary policy framework intended to deter very short-term inflows, moderate credit growth, and more recently, manage output, exchange rate, and inflation volatility. With a potentially conflicting set of objectives and no clear evidence of effectiveness, staff considered monetary policy overburdened while fiscal, prudential, and structural policies were underutilized. Staff advocated a much tighter structural fiscal position and financial policies geared to moderating systemic risk to allow monetary policy to maintain both inflation and interest rates at levels similar to other emerging markets within a conventional inflation-targeting framework, limiting competitiveness loss and reducing attractiveness to short-term carry-trade inflows. In the near term, raising the single policy rate within a transparent monetary policy framework would limit the risk of capital reversal, and hence help achieve a soft landing.

Approved By
**Ajai Chopra and
Aasim Husain**

Discussions for the 2011 Article IV consultation were held in Ankara and Istanbul during September 6–19, 2011. The mission comprised Ms. van Elkan (head), Messrs. Tchaidze and Tyson and Ms. Zhang (all EUR), Messrs. Gracia (FAD), Hesse (MCM) and Miao (SPR), and Mr. Lewis (Senior Resident Representative). Mr. Yalvaç (Senior Advisor, OED) joined the meetings. The mission met with Deputy Prime Minister Babacan, Minister of Finance Simsek, Central Bank of Turkey Governor Bascī, Treasury Undersecretary Canakcī, other senior public officials, officials of financial institutions, and private sector representatives.

CONTENTS

BACKGROUND

1.   **In the decade since the tumultuous 1990s, Turkey achieved a remarkable economic revival, which brought new strengths but also challenges.** Fiscal indiscipline and weakly-regulated banks combined during the 1990s to produce chronic inflation, high real interest rates, and fiscal unsustainability. In the wake of a severe crisis in 2000–01, a new economic framework was established, focusing on unprecedented fiscal consolidation, inflation targeting under a newly-independent central bank, and overhaul of banking system regulation. This framework delivered rapid growth with single-digit inflation, large fiscal primary surpluses, and strong reserve buildup, but also attracted large capital inflows that widened the current account deficit. Nonetheless, Turkey entered the global crisis in a stronger position than many other countries in the region.

A.   Recent Developments

2.   **The Turkish economy experienced a dynamic rebound from the 2008–09 global crisis**. Growth recovered strongly, and by mid-2011, real output was 25 percent above its crisis trough and 9 percent higher than its pre-crisis peak. As a result, the unemployment rate fell below 10 percent—a floor not breached before the crisis—notwithstanding an increase in labor force participation. This impressive performance was underpinned by ample capital inflows, reflecting Turkey's generally strong balance sheets, favorable medium-term growth prospects, as well as abundant global liquidity (see Analytical Annex I).

3.   **However, in line with prior episodes of rapid growth, economic activity became increasingly skewed toward domestic demand and imports.** GDP grew 9 percent in 2010 and 10 percent in H1 2011, led by private consumption and investment. The external sector's contribution was negative and large. On the production side, activity during H1 2011 was especially strong in the non-tradable sectors of construction, trade, and transport and communication, but slowed to a still-robust 10¾ percent in manufacturing.

Contribution to Real GDP Growth
(Year-on-year percent change)

Private consumption
Public spending
Private investment
Changes in stocks
Exports
Imports
Y-o-y growth

Sources: Turkstat; and IMF staff estimates.

Expenditure Components of Real GDP, SA
(2007Q1=100)

Exports
Imports
Domestic demand
Total GDP

Sources: Turkstat; and IMF staff estimates.
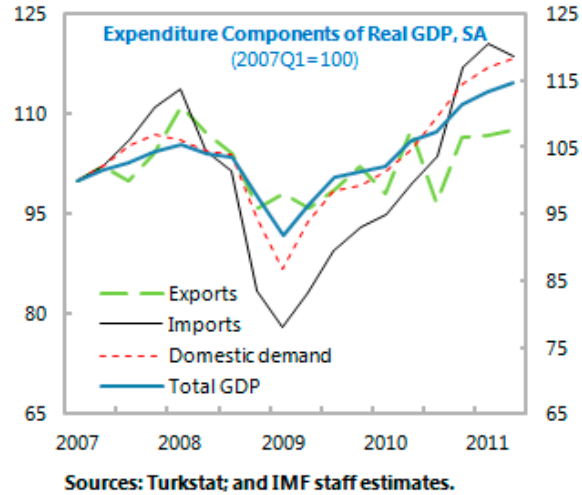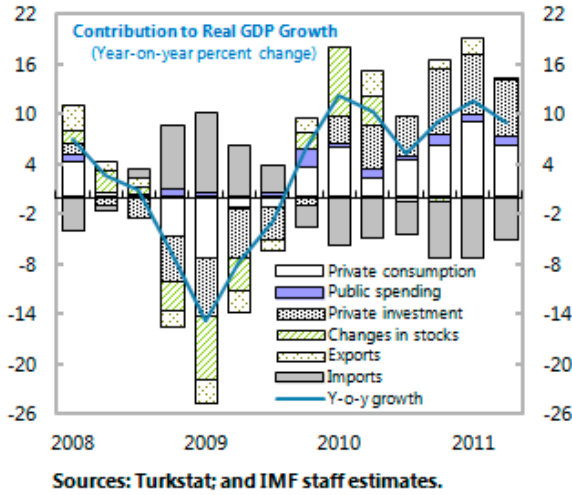
4.   **Historically-low real interest rates and a considerable competitiveness gap contributed to a sharp widening of the non-energy current account deficit (CAD).** The net import intensity of GDP rose to an all-time high as nominal import growth accelerated to around 40 percent—about twice the rate of exports. As a result, the current account deficit expanded from over 6½ percent of GDP in 2010 to 9¼ percent of GDP in H1 2011. Although energy accounts for the largest part of the trade deficit (around 4¾ percent of GDP on average in recent years), the non-energy balance contributed three-quarters of the deterioration. These developments reflect a large decline in the private sector saving-investment balance that more than offset the improved public sector balance, in addition to continued substitution toward imports reflecting the—until recently— considerably overvalued real exchange rate (see Box 1 and Analytical Annex I).

Rolling 12-month Current Account
(Billions of U.S. dollars)

Total
Nonfuel

Sources: Central Bank of Turkey; and IMF staff estimates.

Saving-Investment Balance (Percent of GDP)

Private
Public

Proj.

Sources: Turkstat; and IMF staff estimates.

Exports and Imports (Billions of U.S. dollars) 1/

Sources: Central Bank of Turkey; and IMF staff calculations.
1/ 2011H1 annualized.
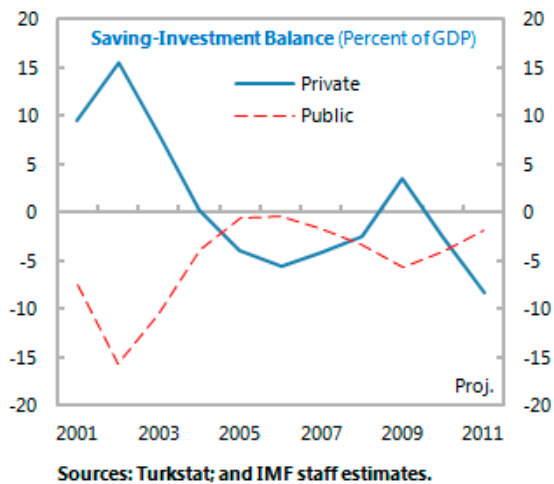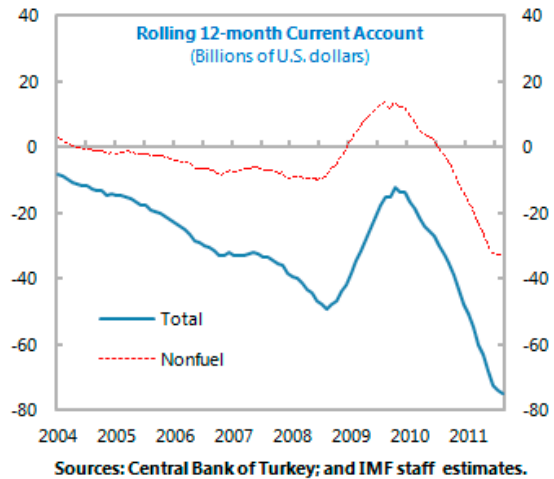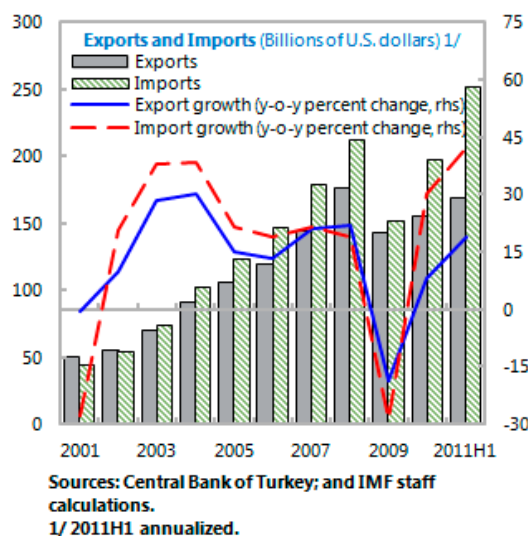
5. **Capital inflows have been dominated by potentially-volatile short-term debt—largely channeled through banks—and unidentified financing.** Alongside sharply higher financing needs, funding sources have become less reliable, with much greater dependence on interest-sensitive portfolio flows and short-term borrowing, as well as errors and omissions.[1] This contrasts with predominantly FDI and medium- and long-term debt flows prior to the global crisis. Hence, while the CBT's reserves grew by US$17¼ billion since end-2009, reserve cover of short-term debt (projected at US$130 billion—around 15 percent of GDP—in 2012) declined to

70 percent as of end October 2011, very low in comparison with international peers. Banks absorbed the largest share of external funding—much of it short term—and the sector's net external liability position rose to 8½ percent of GDP.

6. **Credit growth has been strong, supported until recently by ample, low-cost external financing**. Loans to the private sector grew by around 40 percent y-on-y during Q4 2010 to Q2 2011, to reach 48 percent of GDP. This reflected the historically-low interest rate environment and banks' intense competition for market share (Box 3). Lending was especially rapid to households (for general purpose and housing loans)[2] and to small- and medium-sized firms due to strong demand and higher profit margins on these loans. With the increase in resident's deposits—previously banks' main funding source—falling far short of the increase in lending, banks' average loan-to-deposit ratio jumped from 76 percent at end 2009 to near 95 percent in mid 2011. To expand loans, during the first nine months of 2011, banks relied on financing sourced from abroad to the same extent as residents' deposit growth.

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[1] Staff estimate that inflows through portfolio debt in H1 2011 are thought to be overstated by some US$6.5 billion in the official balance of payments and external debt statistics because short-term external borrowing by domestic banks collateralized with government securities (securities repurchase agreements) are recorded as nonresidents' purchases of government debt. See Box 2 on the implications of this treatment.

[2] Nonetheless, available data indicate only moderate house price increases, with prices of existing homes growing 6¼ percent in the year through September 2011, and 7–10 percent for new housing.
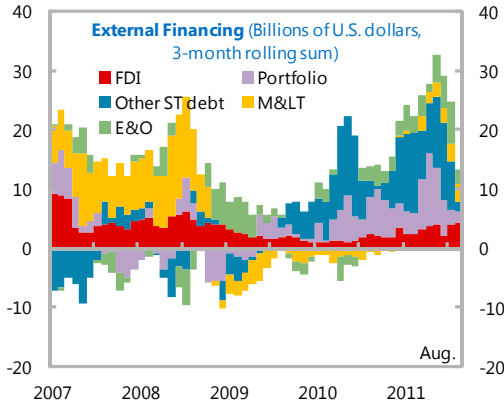
External Financing (Billions of U.S. dollars, 3-month rolling sum)

- FDI
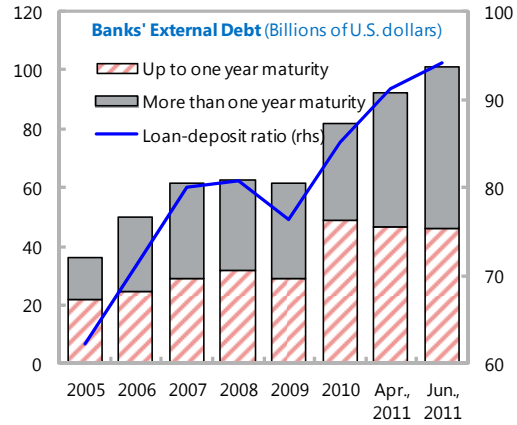- Portfolio
- Other ST debt
- M&LT
- E&O

Aug.

Sources: Central Bank of Turkey; and IMF staff estimates.

Banks' External Debt (Billions of U.S. dollars)

- Up to one year maturity
- More than one year maturity
- Loan-deposit ratio (rhs)

Source: BRSA; and IMF staff calculations.

Composition of Capital Flows (Billions of U.S. dollars)

- 2010
- Jan. to Jun., 2011 (not annualized)

Corporate loans
Other
Portfolio equity
Errors and omissions
FDI
Portfolio debt1/
Bank borrowing 1/
Net curr. and dep.
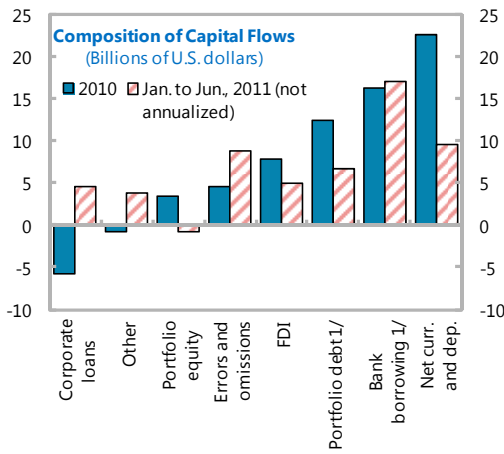
Sources: Central Bank of Turkey; and IMF staff calculations.
1/ Include banks' securities repos in bank borrowing, with a corresponding deduction from portfolio debt.

Reserves, Proposed New Metric and Traditional Metrics, 2011 (Percent of GDP)

- Reserves
- 3 months of imports
- 100 percent of short-term debt
- 20 percent of M2
- Proposed new metric 1/

Turkey
Colombia
Mexico
Brazil
Poland
Hungary
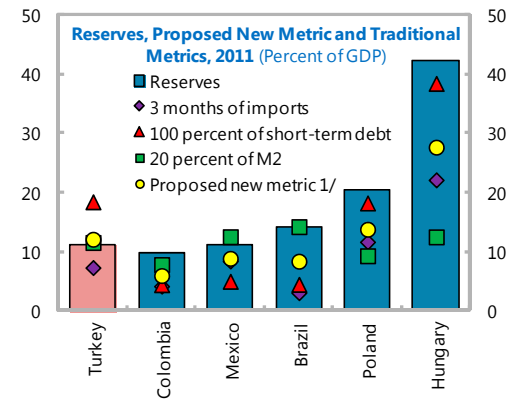
Sources: IMF, *World Economic Outlook*; and IMF staff estimates.
1/ The proposed new reserve metric is calculated as 30 percent of short term debt + 10 percent of other portfolio liabilities + 5 percent of broad money + 5 percent of export income for countries with flexible exchange rate regimes.

Reserve Cover of Short-Term External Debt for Emerging Market Inflation Targeters, 2010 (Percent) 1/

Turkey
Hungary
Chile
Poland
Romania
S. Africa
Israel
Indonesia
Mexico
Colombia
Peru
Brazil
Thailand
Philippines
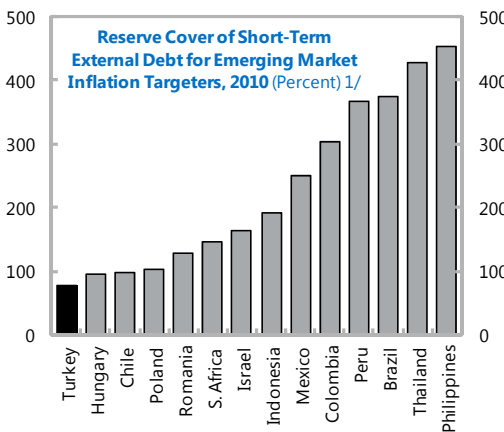
Source: IMF staff estimates.
1/ Short-term debt on a remaining maturity basis.

Credit Growth and Current Account Deficit (Percent of GDP)

- Current account deficit (12-month rolling sum)
- Change in nominal credit stock (right scale)

Sources: Central Bank of Turkey.

Funding of Increases in Private Sector Loans
(Turkish lira; annual change)

Private Sector Loans by Sector, 2011Q2
(Percent)
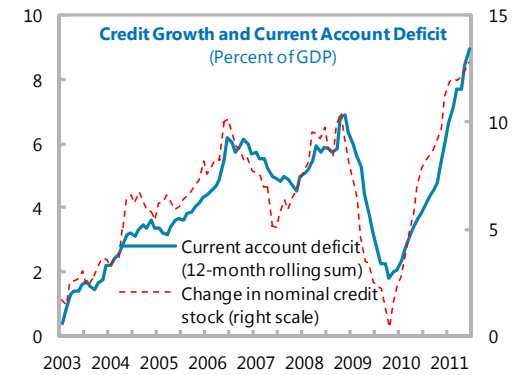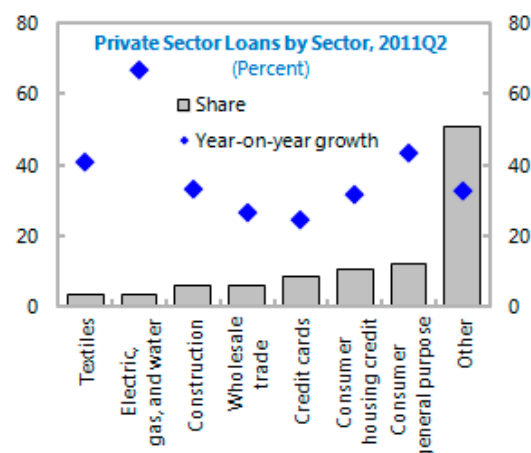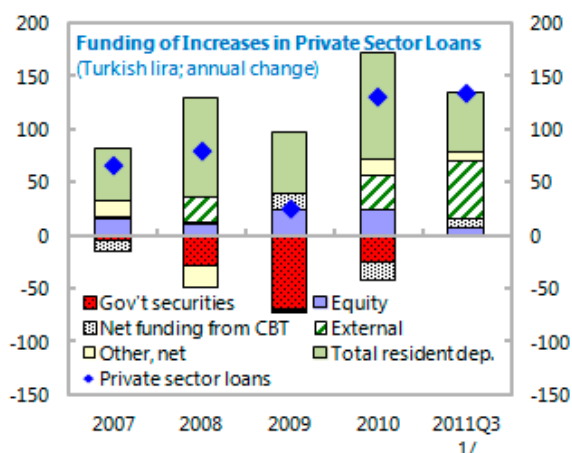
Sources: BRSA; Central Bank of Turkey; IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff estimates and calculations.
1/ Change from 2010Q4 to 2011Q3.

Turkish Banks' Loans to the Private Sector by Currency

Sources: BRSA.

Turkish Banks' Lending to the Private Sector by Currency (Annualized 6-week moving average of weekly growth)
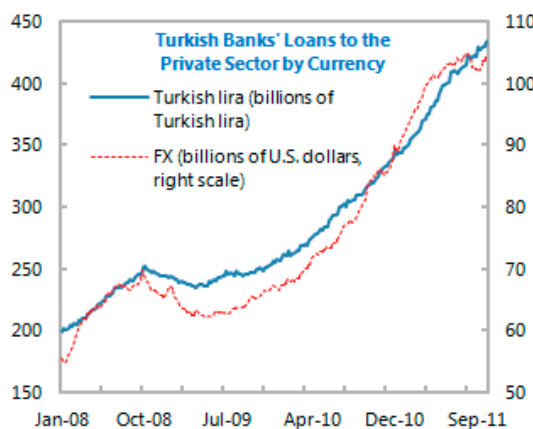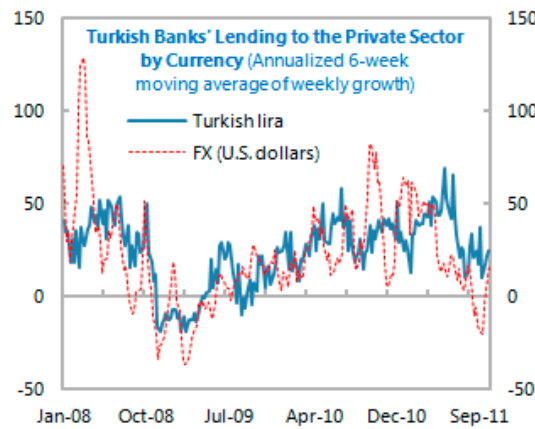
Sources: BRSA; and IMF staff estimates.

7.   **While headline inflation has been volatile, core inflation is steadily trending up**. This primarily reflects pass-through of the cumulative 30 percent nominal depreciation (against an equally-weighted euro-dollar basket) since November 2010 (see below). In addition, tighter domestic supply conditions— with declining unemployment,[3] strong labor cost growth, and rising capacity utilization—

also contributed. Producer price inflation has increased rapidly on rising world commodity prices and the weakening lira, and temporarily decoupled from consumer price inflation, which has weaker and more-delayed exchange rate pass through, and because administered retail prices for electricity and natural gas were held constant during October 2009 and September 2011.

8.   **Data suggest a modest pause in real activity in recent months**. Loan growth eased from around 50 percent year-on-year in early

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[3] However, about one third of the post-crisis increase in economy-wide employment is due to unpaid agricultural labor—possibly a form of disguised unemployment.
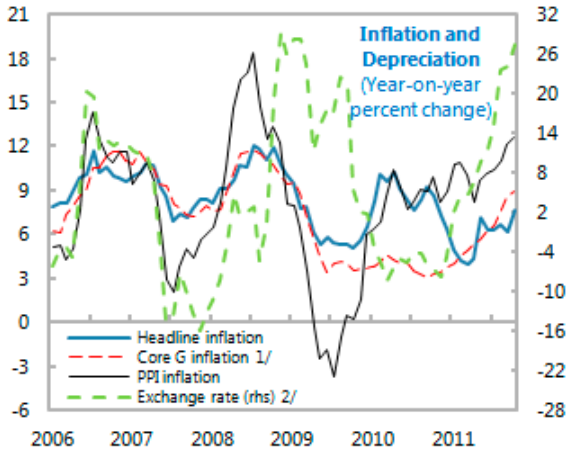
Sources: Turkstat; and IMF staff calculations.
1/ Excludes energy, alcoholic beverages, tobacco products, administrated prices, indirect taxes, and unprocessed food products.
2/ Dollar-euro 50-50 basket. Increase indicates depreciation.
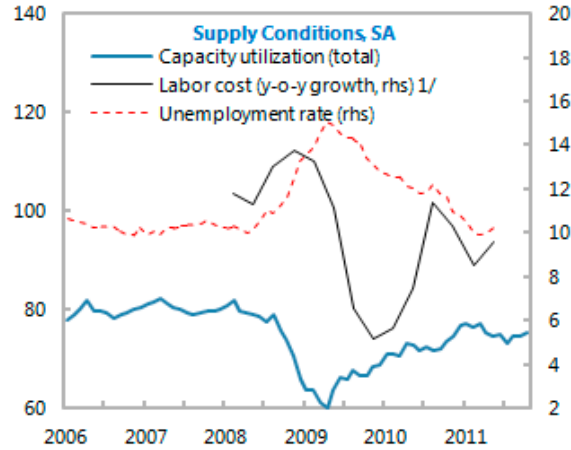
Sources: Central Bank of Turkey; Turkstat; and IMF staff estimates.
1/ Hourly labor cost index.

June to around 10 percent in October. However, other indicators of activity—imports, capacity utilization, confidence, and unemployment— have held up, despite previous monetary and prudential tightening measures (see below), and some US$4½ billion in portfolio debt outflows associated with recent strains in global funding markets. The absence of a decisive slowdown may reflect the cushioning provided by the CBT's large reserve drawdown, which entirely financed the August current account deficit.

Political Setting

9.   **The Justice and Development (AK) Party won a third consecutive term in the June 2011 general elections**. As stated in the government's program, a key political priority is the adoption of a new constitution aimed at strengthening democracy; a new constitution is on the parliamentary agenda. The economic program aims to maintain macroeconomic stability, boost competitiveness and productivity, enhance regional development, and bolster institutions.

B.   Authorities' Policy Response

10.   **Through an unorthodox approach to monetary policy,** the CBT took the lead in responding to growing imbalances, with other policy interventions being less timely or more limited.

Monetary Policy

11.   **Surging inflows and a sharp appreciation were met with an unorthodox monetary policy mix**. The CBT initially responded by hiking daily fx purchases from US$40 million to US$140 million. However, this failed to staunch the nominal appreciation and also created difficulties sterilizing the large liquidity injections (equivalent to an annualized 5 percent of GDP). Since mid-November 2010,

the CBT has actively pursued financial stability alongside price stability. This entailed: (i) widening the CBT's interest rate corridor to facilitate greater volatility of short-term money market rates; (ii) halting remuneration of reserve requirements (URR), and applying progressively higher rates on shorter maturity liabilities; (iii) lowering the policy interest rate; and, (iv) using moral suasion to target a maximum 25 percent increase on banks' annual loan growth, adjusted for exchange rate movements. The CBT also sharply scaled back its fx purchases to US$40–50 million per day. These measures were intended to discourage very short-term carry-trade inflows, lengthen the maturity of bank funding, and contain domestic credit growth.

Sources: BRSA; Central Bank of Turkey; and IMF staff estimates.

Sources: BRSA; Central Bank of Turkey; and IMF staff estimates.

Cumulative Lira Liquidity Injections Since Oct., 2010 (Billions of Turkish lira)

- Government deposits
- Net CBT lending
- Change in lira reserve requirements
- FX interventions
- Net liquidity supply

Sources: Central Bank of Turkey; and IMF staff estimates.

Interest Rates (Percent, compounded)
- CBT overnight rates
- Policy rate
- ISE O/N repo rate
- ISE O/N repo rate (10-day moving avg.)
- 1-month swap rate

Sources: CBT; and IMF staff estimates.

12.   **The most discernable effect was a decoupling of the lira from other emerging market currencies**. The lira weakened immediately relative to peer countries, as inflows—while remaining strong—were insufficient to cover the burgeoning current account deficit. This is consistent with anecdotal evidence that investors were wary of the new framework. On the other hand, loan growth slowed decisively only with a considerable lag as banks continued to actively tap short-term foreign funding.
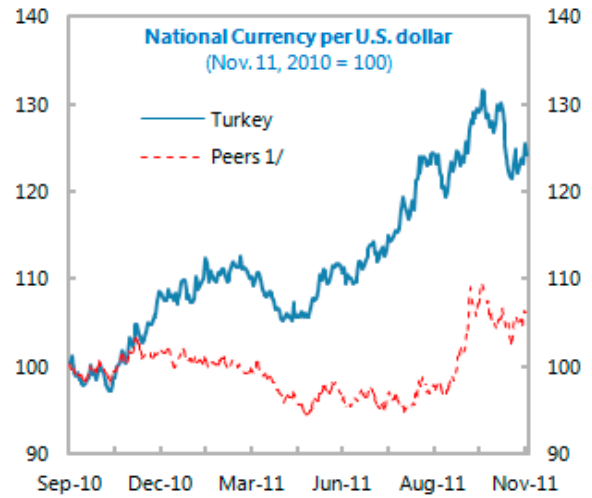
National Currency per U.S. dollar (Nov. 11, 2010 = 100)
- Turkey
- Peers 1/

Sources: Bloomberg; and IMF staff calculations.
1/ Simple average of Brazil, Chile, Colombia, Hungary, Indonesia, Poland, Korea, S. Africa and Thailand.

13.   **The CBT's policy stance shifted in early August to reflect evolving domestic and external risks**. This was prompted by concerns about global financial markets, a sharp depreciation of the currency, and evidence of a domestic slowdown (see Box 4). The policy rate was lowered by a further ½ percentage point. The O/N borrowing rate was raised significantly to narrow the interest rate corridor and reduce interest rate volatility. Cuts in URR on fx liabilities, together with large, sustained fx sales, released some US$10 billion of reserves, partially offset by allowing banks to hold part of their URR on lira liabilities in fx.[4] In addition, in contrast to prior practice, the Governor commented on the level of the lira, noting the currency had overshot its equilibrium. Reflecting the substantial release of reserves in recent months, the lira depreciated by less than many other EM currencies. A further significant policy realignment was introduced in late October (see ¶31).

Fiscal Policy

14.   **The headline fiscal balance continued to improve and public debt further declined, but masked a relaxed fiscal stance**. The 4¾ percentage points of GDP improvement in the nonfinancial public sector (NFPS) overall balance during 2009–11

reflects efforts at fiscal restraint, but also a smaller interest bill, higher indirect tax rates, and transient revenue from the sizable competitiveness gap, boom in output and imports, and a comprehensive tax restructuring program (see Analytical Annex II).[5] However, primary spending remains 3 percentage points of GDP above pre-crisis levels, primarily due to higher appropriations for capital, wages and pensions. Moreover, holding constant energy tariffs deteriorated the balance of the energy SEEs. Thus, while the end-year outturn is expected to over-perform the original target in the 2011–13 Medium-Term Program (MTP) by more than 1 percentage point of GDP, in structural terms, the primary balance continued to deteriorate in 2011, with a structural primary deficit of around 1¼ percent of GDP

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[4] Separately, several public entities—the Unemployment Insurance Fund and the Savings and Deposit Insurance Fund—also sold fx (more than US$0.5 billion).

[5] Under the scheme, outstanding interest (40 percent of total arrears) and all penalties will be written off. Payments of overdue principal (converted to current value using the lesser of the government bond yield and the producer price index) may be made on a 12- or 18-month installment plan. In 2010, 15 percent of *declared* taxes were not paid, possibly in expectation of a future amnesty.

Fiscal Indicators, 2007–11

(Percent of GDP)

	2007	2008	2009	2010	2011 MTP 1/	Proj.
		Actual				
Nonfinancial public sector primary balance (a)	3.2	1.6	-1.0	0.8	1.2	1.8
Transient revenue (b+c)	1.7	1.3	-0.9	0.9	2.8	2.9
Contribution of unsustainable macroeconomic conditions to fiscal revenue (b)	1.5	0.6	-1.0	0.9	1.9	1.9
Imports	0.4	0.2	-0.3	0.7	1.0	1.1
Banking / financial	0.2	0.1	0.2	0.2	0.1	0.1
Other income	0.9	0.3	-1.0	0.1	0.8	0.8
Revenue from receivables restructuring (c)	0.2	0.7	0.2	0.0	0.9	0.9
Structural primary balance (a-b-c)	1.5	0.3	-0.1	-0.1	-1.6	-1.1
Cumulative fiscal effort since 2007	...	-1.2	-1.6	-1.6	-3.1	-2.6
Nonfinancial public sector overall balance	-1.8	-2.8	-5.6	-2.9	-1.4	-0.8
Import gap (percent of potential GDP)	3.5	3.1	-1.0	4.2	7.9	7.9
Output gap (percent of potential GDP)	3.5	1.3	-3.6	0.2	2.9	2.9

Sources: Ministry of Development; and IMF staff estimates.

1/ MTP for 2012-14. Contribution of unsustainable macroeconomic conditions to fiscal revenue calculated under staff's macroeconomic scenario and methodology

Financial Policies[6]

15.   **Financial policy responses were appropriately targeted but, from a macroprudential perspective, in some cases were delayed**. The Banking Regulation and Supervision Agency (BRSA) imposed loan-to-value ceilings on housing and commercial real estate loans in early 2011. However, crisis-era relaxation of prudential norms on loan restructuring and general provisioning were rescinded only in March 2011, following a one-year extension. Despite extremely rapid loan growth during H1 2011, provisioning requirements and risk weights on general

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[6] While some policies under the authority of the CBT may be considered macroprudential, only policies under the jurisdiction of other institutions/ministries are considered here.

purpose loans (GPLs)—the fastest growing category—were raised only in mid June. With banks' profits having moderated due to competition for loan-market share (Box 3), they immediately passed these higher intermediation costs through to lending rates. However, delayed adoption caused the measure to coincide with the deteriorating international conditions. In addition, since June, individual credit card limits may not be increased if three or more monthly payments within a calendar year are less than half the outstanding debt on the card (including any new payables incurred in the latest transaction period), and no cash advance is permitted if the card has an outstanding balance. Several measures that had been under consideration, including URR on banks' on-balance sheet short fx positions or significantly higher

marginal URR on new funding were not introduced.

16.   **Financial conditions tightened on monetary and prudential policy actions and more restrictive external financing conditions**. Interest rates on lira-denominated bank loans—which provide the best gauge of the net impact of the numerous policy changes—have risen substantially, especially for households. As a result, real rates for households are now back to pre-crisis levels, but are considerably lower—but still strongly positive—for corporates. On the other hand, real rates on lira-denominated deposits remain low, and a meaningful yield curve for deposits has been slow to emerge.

Real Interest Rates (Percent, compounded) 1/
- Deposit rate
- Consumer loans 2/
- Corporate loans
- Policy rate
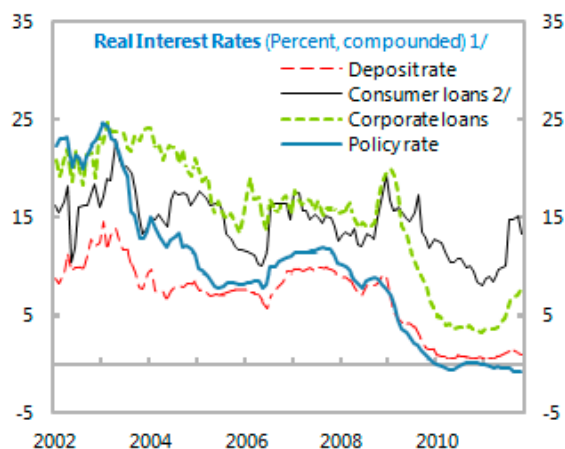
Sources: Bloomberg; Central Bank of Turkey; and IMF staff estimates.
1/ Deflated by 12-month ahead inflation expectations.
2/ Includes overdraft rate.

C.   Strengths and Challenges

17.   **The previous externally-financed demand boom has weakened Turkey's resilience in some areas**. Since 2008, private short-term foreign debt climbed sharply. With banks absorbing most of these liabilities, they face intensified rollover risk, notwithstanding that aggregate capital adequacy ratios (CARs) remain well-above the allowable 12 percent floor (but have slipped more than 4 percentage points to 16½ percent) and open fx positions are small. Nonfinancial corporates' net fx liabilities have risen to US$120 billion, exposing them to currency depreciation, although short-term fx obligations are a more manageable US$15 billion. Households retain long fx positions,[7] and are net savers. But deposits are extremely concentrated (the largest 0.1 percent of accounts hold more than 46 percent of system-wide deposits), while the number of retail borrowers increased sharply, presumably expanding beyond very wealthy households. Moreover, while the headline fiscal balance continues to improve—returning the public debt to GDP ratio to a downward path—this strong performance is contingent on favorable macroeconomic conditions at home and abroad.

Selected Macroeconomic Indicators, 2008–11

	2008	2011 Proj.
Current account balance (percent of GDP)	-5.7	-10.2
External debt (percent of GDP)	38.4	42.9
Short-term debt (billions of U.S. dollars)	53.1	94.1
Nonfinancial public sector overall balance (percent of GDP)	-2.8	-0.8
Nonfinancial public sector structural primary balance (percent of GDP)	0.1	-1.3
General government gross debt (percent of GDP) 1/	39.5	39.1
Net financial assets of corporates (percent of GDP) 2/	-16.8	-19.4
Net financial assets of households (percent of GDP) 2/	22.0	21.2
FX position of corporates (billions of U.S. dollars) 2/	-80.4	-119.3
FX position of households (billions of U.S. dollars) 3/	58.2	56.4

Sources: Central Bank of Turkey, BRSA, and IMF staff estimates.

1/ EU definition.
2/ Data for 2011 as of Q2.
3/ Data for 2011 as of Q3.

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[7] Households are not permitted to borrow in fx and, since June 2009, are no longer permitted to use fx-indexed loans.

Turkey: 2011 Risk Matrix

This matrix considers the effects of macro-financial shocks on the Turkish economy. Four shocks are identified. Each of them would potentially impact the five sectors/entities listed to

varying degrees through their interaction with the sectors' initial conditions, as reflected in their vulnerabilities and mitigating factors.

Shock	Transmission Channels	Affected Sector / Entity	Initial Vulnerabilities and Mitigating Factors	Potential Impact
External funding shortfall/ Capital flow reversal	Cost of external funding jumps; TL depreciates sharply; Imports compressed; Domestic credit squeezed	Banking Sector	- Funding risk from increased loan-to-deposit ratio (close to 100 percent) and large ST external debt (9% of GDP); - Interest rate risk due to maturity mismatch (net on- and off balance sheet of US$117b up to 1 year); - Corporate borrowers often exposed to fx risk; - Deposits sticky; - CARs declining, but still strong (16.6 percent); - NPLs at historic low (<3 percent).	Funding squeeze, TL depreciation lead to: - credit crunch; - rise in NPLs; - losses on repricing of securities and higher funding costs; - CAR deterioration.
Recapitalization needs of euro-area banks	Parent deleveraging from Turkey; Higher cost of external financing more generally	Banks with EA parents	- About a third of banking sector has links to euro-area banks under stress, but direct funding is low; - Wholesale funding costs partly linked to parents, but Turkish subsidiaries profitable.	As above. In addition parent banks sell stakes in Turkish banks to better capitalized banks
Delayed, but very aggressive, policy tightening prompted by continued strong domestic demand, TL selling pressure, and/or inflation spike	Cost of lira funding jumps, raising cost of financial intermediation; Indirect taxes raised; Fiscal spending cut	Public sector	- Reliance on transient revenue; - Large share of variable-rate debt (nearly half); - High rollover requirement (10 percent of GDP); Government securities concentrated at local banks (70 percent).	Deterioration in NFPS balance from fall in transient revenue from weaker GDP and import compression and higher cost of borrowing.
Drop in external demand from the euro area	Reduced demand for Turkey's exports	Corporates/firms	- Large net FX liability position (US$120b); - High import content of production; - Large share of loans is short-term; - Half exports to EU.	TL depreciation, credit crunch, and weak domestic and external demand: - squeeze profits and ability to repay loans, including in fx; - cut production, investment, employment.
		Households	- Debt service absorbs a quarter of disposable income; - Loans are unsecured but only in TL; - HH are long in fx and have a net financial asset position.	Reduced employment, credit crunch, higher inflation from depreciation and higher indirect taxes reduces ability to service loans and leads to lower living standard.

REPORT ON THE DISCUSSIONS[10]

A. Outlook, Competitiveness and Risks

18.   **The authorities expected a healthy soft landing to continue in the medium term.** Policy actions implemented since late 2010 were credited with slowing domestic demand and imports, and buoying exports. As outlined in the 2012–14 MTP, GDP growth is forecast to temporarily slow to 4 percent next year, before recovering to 5 percent thereafter, and with the CAD gradually moderating to 7 percent of GDP in 2014. Inflation is expected to drop to close to the 5 percent target by end-2012 and remain there through the medium term. Domestic and external demand would underpin growth, while imports relative to GDP stabilize, reflecting a series of policy measures, including recent hikes in indirect taxes.[9] Sustained growth and labor market reforms were expected to continue to boost employment.
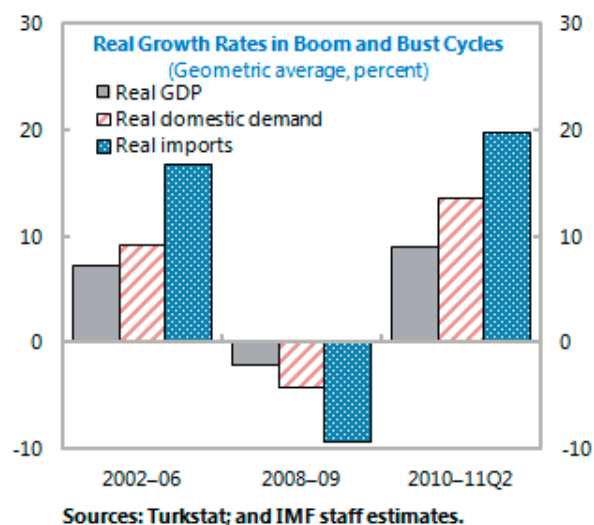
19.   **While the mission's baseline envisages a broadly similar path for the CAD ratio as in the MTP, they expect a steeper slowdown in growth.** A reduction in

external financing (from US$75 billion in 2011 to US$60 billion in 2012—around 8 percent of GDP) is expected to compress imports, measured in dollar terms.[10] Because imports are mostly raw materials and manufactured intermediates—key inputs into domestic value added—GDP growth is likely to moderate sharply from 7½ percent this year to 2 percent in 2012. This is consistent with previous capital flow-driven corrections.[11] Thereafter, some

Real Growth Rates in Boom and Bust Cycles
(Geometric average, percent)
■ Real GDP
▨ Real domestic demand
▨ Real imports

2002–06   2008–09   2010–11Q2

Sources: Turkstat; and IMF staff estimates.

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[8] Based on discussions during the mission and subsequent official publications and public statements by senior officials.

[9] Excises on large engine-capacity cars, cell phones, and alcohol and tobacco products were increased in October. These increases are expected to add at least 0.9 percentage points to headline inflation.

[10] Relative to the current lira exchange rate, the MTP implicitly assumes a sizable nominal appreciation on average in 2012. This translates their larger (than projected by the mission) CAD forecast, measured in dollars, into a similar ratio relative to GDP. An implication of the MTP's 2012 forecast of a modest CAD adjustment measured in dollars and the more appreciated exchange rate is that external financing is not considered to be constraining.

[11] This differs from the MTP, which assumes a sustained increase in imports and continued domestic demand-driven growth.

limited expenditure switching and expanded domestic production of import substitutes is projected in response to the previous real depreciation, raising GDP growth and further moderating the CAD (see Analytical Annex III). However, persistent positive inflation differentials—with inflation surging to 9½ percent this year and to 6½ percent in 2012—are forecast to gradually erode initial competitiveness gains. Thus, the RER would remain noticeably overvalued relative to equilibrium. Still-large current account deficits in the medium term are forecast to raise external debt to 50 percent of GDP by 2016, with additional risk from slower growth and more depreciation (Analytical Annex III).

20.   **The authorities and staff considered risks skewed to the downside.** A weaker outlook for global activity and more severe international funding strains have the potential to spill over to Turkey. Notwithstanding, the authorities expected that with its relatively

Contributions to GDP Growth Projections
(Percent)
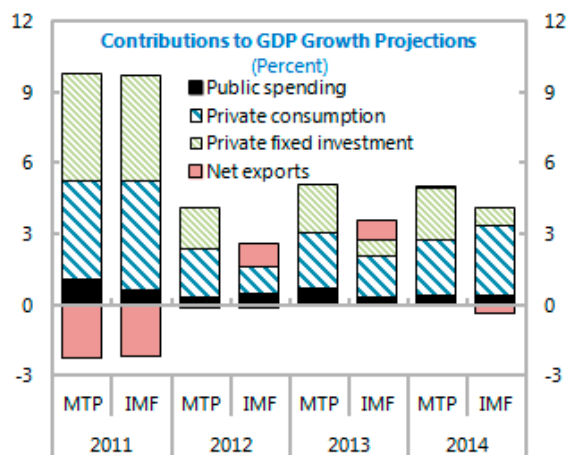
Sources: Central Bank of Turkey; and IMF staff projections.

healthier balance sheets, Turkey could receive safe-haven inflows. The mission agreed the near-term outlook was contingent on capital inflows, and cautioned a more coherent set of policies was needed to avoid an abrupt adjustment. Moreover, the mission was concerned that heightened risk aversion or deleveraging by European banks could sharply limit external financing, causing further depreciation, fx funding strains for banks and corporates amid low reserve buffers, and compressing imports and credit. As in 2008–09, the effect on growth could be harsh.

Comparison of MTP and Staff Projections

	2011		2012	
	Staff	MTP	Staff	MTP
Real GDP growth (percent)	7.5	7.5	2.0	4.0
Current account deficit (billions of U.S. dollars)	-78.8	-71.7	-62.9	-65.4
Current account deficit (percent of GDP)	-10.2	-9.4	-7.8	-8.0
Exports (fob, billions of U.S. dollars)	134.2	134.8	143.6	148.5
Imports (cif, billions of U.S. dollars)	241.6	236.9	243.5	248.7
CPI inflation (eop, percent) 1/	9.5	7.8	6.4	5.2

Sources: Ministry of Development; and IMF staff estimates.

1/ According to the CBT's latest Inflation Report (October 26, 2011), inflation in 2011 is forecast at 8.2 percent, with the 2012 forecast remaining as in the MTP.

B.   Policy Framework

21.   **The authorities were committed to gradually reducing the current account deficit while bolstering macroeconomic stability**. They intend to maintain their unconventional monetary policy framework, supplemented by the more ambitious fiscal adjustment path in the 2012–14 MTP and structural reforms. However, fiscal consolidation was seen as having limited effect at moderating the CAD due to accelerating private sector credit. Thus, when faced with potential large inflows, they would keep interest differentials low to discourage carry trades, and use macroprudential tools to moderate credit growth.

22.   **In the mission's view, monetary policy is overburdened while fiscal, prudential, and structural policies remain underutilized**. The recent increase in public saving was primarily attributable to tax revenue derived from higher private sector dissaving and hence, at a structural level, fiscal policy has not leaned against the wind. With other policies largely on the sidelines, monetary policy attempted to deliver multiple objectives, through an increasingly activist approach.

23.   **To reduce the propensity for volatile capital flow-driven cycles, the mission advised rebalancing the policy mix within a standard inflation-targeting framework.** With a tighter structural fiscal position to support disinflation, and financial policies

geared to reducing macroprudential risks, monetary policy would then be better placed to maintain inflation and policy rates at levels prevailing in other countries within a conventional inflation-targeting framework. This would reduce attractiveness to short-term inflows and limit erosion of competitiveness through inflation differentials. Structural reforms would also help reduce reliance on imports and support price flexibility.

24.   **The mission observed that if staff's recommended policy mix had been adopted 18 months earlier, a more moderate capital flow-driven boom would have ensued.** Consistent with staff's advice at the time, implementing a much tighter structural fiscal position—with all transient revenue being saved—and preemptively strengthening macroprudential policies would have reduced absorption of "hot money" inflows that fuelled credit, domestic demand and imports. As a result, the current account deficit and domestic and external vulnerabilities would have been smaller, obviating the need for the CBT's unconventional policy mix, which pushed up inflation. Despite the changed macroeconomic conditions, the recommended mix still remains valid, but now must be implemented more cautiously.

Fiscal Policy

25.   **To differentiate Turkey's healthy budget balance and debt trends from those elsewhere in the region, the authorities**

intend to keep lowering the fiscal deficit.
Turkey will likely out-perform the 2011 fiscal
targets set in the previous MTP. Going forward,
a back-loaded improvement in the NFPS
primary balance of 0.3 percentage point
by 2014 is targeted—with a slight
deterioration next year—despite the loss of
1 percentage point of one-off revenue from
the receivables restructuring program. This
would reduce the debt ratio by 8 percentage
points to 32 percent of GDP. The improvement
relies on restraining primary spending, the
recently-increased indirect tax rates, and rapid
growth of the tax base. Spending restraint
would focus on wages and capital—categories
that grew rapidly in recent years.

26.   **The mission commended the 3-year
planning horizon for fiscal policy in the
MTP, but observed that fiscal targets tend
to be outdated early in the first year.** The
current MTP assumes a 2011 NFPS primary
outturn of 1.2 percent of GDP, against the
mission's projection of 1.8 percent of GDP,
based on performance through September
and announced spending plans for the rest of
the year. This implies either a large late-year
jump in spending in excess of approved
limits,[12] which is permissible under the public
financial management framework, or a much
smaller fiscal adjustment in 2012. This
unpredictability of policy severely limits the

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[12] In December 2010, central government spending
was 3.2 percent of annual GDP, far exceeding previous
end-year spending jumps.

relevance of the budget and the MTP as
indicators of the fiscal stance, and complicates
macroeconomic policy coordination.

27.   **Instead, the mission recommended
targeting a strong structural primary
surplus—excluding transient revenue—to
support disinflation and protect against
large negative revenue shocks**.

• *The focus of fiscal policy should go beyond
  public debt sustainability to reducing
  absorption of short-term inflows that
  contribute to boom-bust cycles*. Thus, the
  structural primary surplus target should be
  set sufficiently high to ensure inflation and
  nominal policy rates are broadly
  comparable to those of EM peers. While
  this target should be reviewed periodically
  to ensure these macroeconomic goals are
  being met, and with a view to gradually
  relaxing the target once lower inflation has
  become entrenched, a structural primary
  surplus of around 1 percent of GDP is an
  appropriate target. This would imply a
  return to the level prevailing in 2007,
  thereby reversing the fiscal stimulus
  injected in response and subsequent to the
  crisis (see text table below). With the net
  interest bill around 2–3 percent of GDP,
  this would be consistent with a small
  overall structural deficit. The already high
  tax rates and large share of predetermined
  spending constrain Turkey's ability to

adjust public finances, and thus the 1 percent structural primary surplus target would safeguard sustainability in the event of an abrupt capital reversal, where the short-run revenue loss could considerably exceed current transient revenue and borrowing costs could increase sharply.

- *How quickly this target should be reached depends on the pace of economic activity*. While deferring adjustment would leave the economy vulnerable to capital flows, the pace should balance the drag on growth with the need to reverse the structural loosening of recent years. For 2012, targeting a NFPS headline primary surplus near 2 percent of GDP— against the MTP target of just over

1 percent—would be appropriate under the baseline macroeconomic scenario where the current account deficit remains high and the output gap is still positive. As shown in the text table, staff projects that fiscal policy in 2012 will be stronger than in the MTP, and thus achieving a 2 percent target would require ½ percentage point in new measures relative to those already planned for 2012, and would be best achieved by slowing the growth of current spending. With this structural improvement of 1½ percentage points in 2012, a further ½ percentage point would be needed over the next few years to reach the 1 percent of GDP structural primary surplus target. However, slower structural adjustment is appropriate if growth considerably underperforms the baseline forecast.

Fiscal Indicators, 2007–12

(Percent of GDP)

	2007	2008	2009	2010	2011		2012		
	Actual				MTP 1/	Proj.	MTP 1/	Proj.	Staff Recomm.
Nonfinancial public sector primary balance (a)	3.2	1.6	-1.0	0.8	1.2	1.8	1.1	1.5	1.9
Transient revenue (b+c)	1.7	1.3	-0.9	0.9	2.8	2.9	1.6	1.6	1.8
Contribution of unsustainable macroeconomic conditions to fiscal revenue (b)	1.5	0.6	-1.0	0.9	1.9	1.9	1.2	1.2	1.4
Imports	0.4	0.2	-0.3	0.7	1.0	1.1	0.9	0.9	1.1
Banking / financial	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0
Other income	0.9	0.3	-1.0	0.1	0.8	0.8	0.2	0.2	0.2
Revenue from receivables restructuring (c)	0.2	0.7	0.2	0.0	0.9	0.9	0.4	0.4	0.4
Structural primary balance (a-b-c)	1.5	0.3	-0.1	-0.1	-1.6	-1.1	-0.5	-0.1	0.1
Cumulative fiscal effort since 2007	...	-1.2	-1.6	-1.6	-3.1	-2.6	-2.0	-1.6	-1.4
Required additional adjustment with respect to projections									0.4
Nonfinancial public sector overall balance	-1.8	-2.8	-5.6	-2.9	-1.4	-0.8	-1.5	-1.1	-0.7
Import gap (percent of potential GDP)	3.5	3.1	-1.0	4.2	7.9	7.9	5.3	5.3	5.0
Output gap (percent of potential GDP)	3.5	1.3	-3.6	0.2	2.9	2.9	0.9	0.9	0.9

Sources: Ministry of Development; and IMF staff estimates.

1/ MTP for 2012-14. Contribution of unsustainable macroeconomic conditions to fiscal revenue calculated under staff's macroeconomic scenario and methodology.

28.   **Expanding recourse to public-private partnerships (PPPs) should be accompanied by strengthened, centralized oversight**. Some US$16 billion (1¼ percent of GDP) of PPP-financed infrastructure projects have been approved or are in the pipeline. To limit associated risks: (i) an updated legal framework integrating the various laws covering PPPs is needed; (ii) PPP projects should be subject to the same cost-benefit criteria as other government investments; (iii) decision-making should be centralized, with approval of Treasury and the relevant line ministry being needed before projects can proceed; (iv) the Credit Risk Management Department of the Treasury should compile a comprehensive PPP database and regularly report on associated fiscal risks; and (v) the fiscal impact of PPPs, including contingent liabilities, should be transparently discussed in budget documents and integrated into debt sustainability analysis.

Monetary Policy

29.   **The CBT saw little alternative to its unconventional framework, and was generally satisfied with the results**. With an already-large current account deficit, Turkey could ill afford further real appreciation and the inevitable boom-bust cycle that large interest-sensitive short-term flows would bring. In addition, there was room in late 2010-early 2011 to cut the policy rate because headline inflation was below target and any inflationary pressure was expected to be temporary. Narrower interest differentials and

greater downside volatility of money market rates were seen as immediately effective at alleviating appreciation pressure—even to the point where the lira depreciated, which was a welcome side benefit. However, the CBT saw URR increases as only partially effective at slowing credit, in part because they are a blunt instrument, unlike the BRSA's more targeted tools (see Analytical Annex IV).

30.   **The mission recognized the appeal of the new framework given the constrained environment monetary policy was operating in, but was uncertain of its effectiveness and consistency.** The CBT's innovative strategy for regaining monetary policy independence in the context of abundant international liquidity relies on segmenting the domestic financial market to allow the co-existence of widely-dispersed interest rates. This helped engineer a large nominal depreciation that would begin to narrow the current account deficit. However, raising RR contributed to dampening deposit rates and slowing deposit growth—banks' main funding source—that, contrary to intentions, increased reliance on foreign financing and discouraged domestic saving. In addition, capital inflows remained predominantly short term, and credit growth did not slow markedly until strains appeared in international financial markets, the annual credit growth cap began to bind, and the BRSA measure on GPLs was introduced. Moreover, tension with the inflation target is severe. Relying on multiple goals and policy instruments can lead to inconsistencies and unintended outcomes.

31.   **Responding to recent intensified depreciation pressure, in late October the CBT realigned its unconventional framework to tighten monetary conditions.** Whereas previously downside interest rate volatility had been used to weaken the lira, the CBT is now generating greater upside variability in interbank rates to strengthen the lira and defend the inflation target. In practical terms, the CBT considers it has two policy rates—the 7-day repo rate (the official policy rate) at 5.75 percent and the new higher O/N lending rate at 12.5 percent. The CBT will push banks to the upper-rate window on days when it sees the lira depreciating sharply; otherwise it will inject funds at the lower rate. The CBT viewed this shifting-rate mechanism as providing needed flexibility, and was not inclined to tighten through the policy rate ahead of major central banks. Other policy tools would be used as needed, and URR on shorter-duration lira liabilities were cut while fx sales were temporarily suspended and resumed in November on a smaller scale.

32.   **While the mission welcomed the suspension of fx sales, it was concerned about the side effects of the new approach to tightening**. The mission noted that the previous rapid depletion of reserves may itself have encouraged speculative demand because sales needed to be halted at some point to preserve limited reserve cover.[13] The volatility

inherent in the new dual-rate system may discourage speculative activity by making it more costly to short the lira, but will be burdensome for banks already facing a difficult external funding environment, requiring them to hold larger liquidity buffers and risking an excessively abrupt deleveraging. It also creates the impression the exchange rate is the overriding policy goal. In addition, the dual-rate system is discriminatory toward banks that are more dependent on CBT funding, and scope for arbitrariness may raise concerns about CBT objectivity. Hence, while flexibility to quickly reorient policy at a time of heightened international uncertainty may be beneficial, selective tightening in response to only a single source of inflation—the exchange rate—is unlikely to restore price stability.

33.   **Against the risk of a sustained rise in inflation, and with weaker global risk appetite, the mission urged raising the policy rate within a transparent and consistent framework.** In contrast to the dual-rate approach, raising the single policy rate within a narrow interest rate corridor would send a clear signal on the future direction of policy that is essential for shaping inflation expectations. Staff forecasts inflation at 6½ percent at end-2012, broadly in line with expectations, but well above the 5 percent

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[13] Moreover, referencing the specific level of reserves the CBT finds strong may also encourage speculative
                        (continued)

demand. In addition, using a somewhat unconventional measure of short-term external debt that excludes obligations to branches of Turkish banks abroad is warranted only if all liabilities of Turkish branches abroad are owed to Turkish residents.

target.[14] While the real policy rate is currently very negative, conditions warrant a firmly positive real rate, and a decisive first step in this direction is urgently needed. If, however, domestic and external demands quickly turn down, and the lira is not under disproportionate selling pressure, some reduction in the policy rate may be appropriate amid lower inflation and global monetary policy easing.

34.   **The authorities considered their current inflation targets appropriate, while the mission recommended lowering them over the medium term to preserve competitiveness**. High targets and wide bands push up "acceptable" inflation outcomes. Moreover, the top of the band has often been overshot. The CBT viewed its existing targets as warranted to avoid unduly constraining growth, with the wider band needed to accommodate high food price volatility. The mission observed a tendency to downplay the adverse consequences of inflation for competitiveness. It also noted that volatility was not noticeably higher than in other EMs (see Box 5). Narrowing the tolerance band and introducing a continuous target

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[14] This projection assumes fiscal policy outperforms the MTP target—consistent with staff's 2012 projection, shown in the above table, and reflects second-round effects of depreciation and numerous administrative measures (hikes in indirect taxes, regulated energy prices, and clothing and textile tariffs).

would help reinvigorate the commitment to price stability. Subsequently, supported by a tighter structural fiscal stance, a lower inflation outcome would be feasible with more moderate real and nominal policy rates.

Financial Sector

35.   **The banking sector's dependence on short-term funding heightens procyclicality and exposes it to global funding shocks**. Current pressures in international financial markets were seen as further reducing access to longer-term external funding.

- *Greater recourse to long-term funding would reduce rollover risk and permit a corresponding lengthening of loan maturities*, enabling banks to straddle temporary liquidity shocks without having to recall loans. Some modest progress has been made by differentiating URR according to the maturity of liabilities since late 2010 and allowing banks to issue lira-denominated bonds since October 2010. However, with banks having built up large short-term external debt, they will be impacted by ongoing funding strains in international markets. While the CBT can mitigate lira and—to some extent—fx funding shocks, any residual shortfall would—as in 2008–09—be propagated to the real economy. Behind-the-curve timing of some otherwise well-designed macroprudential measures may also have contributed to procyclicality of the banking

sector. In addition, given the advantages of retaining government securities in the face of a funding shock—zero risk weight in the calculation of capital adequacy and collateral for CBT funding—banks may prefer to de-lever loans while retaining their securities portfolio.

- *Incentives for reducing maturity mismatch should therefore be designed to promote longer-duration funding*. Otherwise, banks may narrow duration gaps by shortening loan terms. Thus the BRSA's new measure imposing capital charges on banks' interest rate risk (see text table) should be complemented with the introduction of minimum lira and fx liquidity ratios at the 3-month and longer horizons (the current outer limit is one month) to extend funding duration. To reflect the greater fx funding risk from the rising loan-to-

deposit ratio, which exposes banks to volatile international wholesale funding markets, higher capital charges could be imposed on shorter-term fx funding. Such a measure would need to be phased in very gradually, and with a lag, to avoid deleveraging. Early enforcement of the recent increase in required capital for some banks with strategic foreign shareholders could force them to cut risk-weighted assets. Further deepening local capital markets and developing new private savings vehicles are ultimately needed to promote domestic savings and enhance Turkey's resilience to swings in global financial conditions. However, limiting the upside flexibility of the policy rate, and providing undue assurances that the policy rate will remain low, may preclude the development on an upward-sloping deposit yield curve, thwarting other attempts to lengthen deposits and increase savings.

Recent Macroprudential Measures

Measure	Details
Interest Rate Risk	Announced by BRSA in August 2011. Interest rate risk is to be contained through capital charges on large maturity mismatches, discouraging duration gaps.
Changes to Deposit Insurance	Announced by the Savings Deposit Insurance Fund (SDIF) in September 2011. Introduced a premium surcharge for large financial institutions, amendments in the profitability and the insured deposit ratio thresholds, and a new factor to calculate the bank's score for the deposit premium determination.
Changes to Capital Adequacy Requirements	Introduced by the BRSA in September 2011 but to apply to banks with foreign strategic shareholders as of January 2012. The new minimum capital requirement depends on various factors, such as the CDS spread of the parent bank and its sovereign, EBA stress test results, and the public debt ratio in the country of origin.
Credit Risk Management	The BRSA has currently a draft regulation on banks' credit risk management that should help to limit the unhedged borrowing by corporates.

36.   **The new Financial Stability Committee (FSC) provides the basis for a systemic approach to financial supervision that may be better suited to preemptively containing aggregate risk**. Officials noted that mandates of individual institutions may not always be fully aligned with the policy tools at their disposal. The FSC—established in June 2011 and comprising the Treasury, CBT, BRSA, Deposit Insurance Fund, and Capital Markets Board, chaired by the Deputy Prime Minister in charge of Economic and Financial Affairs—is intended to improve detection and mitigation of emerging systemic risk. The authorities reported the FSC meets frequently, and discussions have included the policy response to recent international financial events. The mission observed that balancing institutional coordination with preserving the independence of respective institutions may be a challenge. They called for preemptively developing measures for a coordinated response to future systemic risks—such as a renewed credit boom cycle—to support timely future implementation.

37.   **The Financial Sector Assessment Program (FSAP) Update called for further strengthening supervision and regulation**. Banks' sizable capital buffers were seen as capable of absorbing a short-lived macroeconomic shock, but strains would be much greater if the shock were protracted. In addition, a few banks would face significant funding pressure if Turkey was hit by a sudden stop. The existing crisis management framework and the CBT's emergency liquidity assistance facilities were considered fully adequate. While the BRSA has issued the numerous supporting regulations to fully implement the Banking Law, to help address evolving risks, further strengthening the supervisory framework—especially more stringent oversight of liquidity and operational risks, banks' risk management framework and models, and more comprehensive supervision of financial groups—is needed. Initiatives in all these areas are underway. The BRSA also needs to attract and retain specialist staff to effectively supervise an increasingly complex banking system.

38.   **Turkey has yet to bring its AML/CFT legislation into line with international standards to improve its status in the Financial Action Task Force (FATF) International Cooperation Review Group process**. Since June 2011, Turkey has been listed by the FATF among the jurisdictions with strategic anti-money laundering/combating the financing of terrorism (AML/CFT) deficiencies that have not made sufficient progress in addressing them (see annex III, para. 10). If not improved, heightened due diligence may affect financial markets.

Structural Policies

39.   **The authorities and staff agreed that structural reforms are needed to deliver a permanent improvement in the current account deficit**. To moderate import demand, the authorities raised indirect taxes on several categories of imported consumer durables (large engine-capacity cars, cell phones), and are considering measures to decrease dependence on the imports of intermediate goods, although this was seen as longer-term endeavor. The mission noted that attracting investment to facilitate domestic sourcing of manufactured inputs requires improving the business climate, including combating informality to support a revenue-neutral cut in the tax burden on formal-sector employment and activity. The decision to decouple all tax audit functions from tax collection was viewed as a set-back for encouraging voluntary compliance. Timely adjustment of regulated energy prices to changes in world prices and the exchange rate would encourage efficient usage and domestic production to cut down on imports, while avoiding loss buildup in public energy companies. The mission therefore welcomed the recent tariff increases as a step toward achieving cost-recovery pricing. They noted that passage of the updated Commercial Code and Code of Obligations—once fully effective in mid-2012—could significantly improve the business environment.

40.   **Greater flexibility of the formal labor market would raise employment, lower inflation persistence, and distribute the gains from growth more evenly**. Preparation of a National Employment Strategy remains ongoing, with a focus on microeconomic labor market measures. The authorities attributed the strong employment gains since the crisis to the rapid pace of growth and the 5 percentage point cut in the employers' social security contribution introduced in 2008. To encourage new employment and job mobility within the formal sector, the mission urged lowering restrictions on temporary and part-time work, and replacing the current ex post severance pay with a pre-funded, lower-cost insurance scheme. Keeping the growth rate of the minimum wage and civil servant salaries strictly in line with the inflation point target—and with no ex post adjustment for inflation overshoots—would improve external competitiveness and reduce inflation inertia. Raising the educational attainment at the lower end of the skill distribution (the median for employed workers is 5 years of schooling) and better tailoring education to employers' needs (including through vocational training) would improve labor productivity, reduce skill mismatch, and boost employment and income growth over the medium term.

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41.   Previous policy actions laid the foundation for Turkey's enviable growth performance over the past two and a half years. Turkey entered the 2008–09 global crisis with stronger private and public sector balance sheets than many other countries in the region, reflecting deep-seated institutional reforms and revamped policy frameworks adopted earlier in the decade. Moreover, the deft macroeconomic and financial policy response during the crisis enhanced policy credibility and helped position Turkey as a safe-haven destination for capital. These factors paved the way for the subsequent robust recovery.

42.   Nonetheless, a sizable competitiveness gap had emerged. Much-needed reforms to enhance flexibility of labor and product markets were delayed. With inflation regularly exceeding rates in other emerging markets, and official and implicit indexation of wages to inflation, the Turkish economy gradually lost competitiveness. As a result, import dependence grew, and the current account deficit was already elevated in 2008. With external financing shrinking during the crisis, these problems lay dormant.

43.   An inadequate policy response to renewed capital flows caused growth to revert to its previous unbalanced path. Fiscal policy failed to rein back crisis-era

stimulus and the structural balance further weakened. Financial policies were too timid or implemented with a long delay, reducing effectiveness. Monetary policy was forced to assume responsibility for a wide range of goals for which it was not well-equipped, particularly in a setting of abundant global liquidity. With an overvalued real exchange rate and abundant external financing, demand became skewed toward imports and the current account deficit widened precipitously.

44.   Vulnerabilities have quickly risen. Potentially-volatile short-term debt—much of it absorbed by banks—and unidentified inflows became the primary form of external funding. Household indebtedness increased, firms accumulated additional foreign currency debt, and reserve cover of short-term debt and banks' capital ratios declined. While headline fiscal balances and public debt relative to GDP continued to improve, this strong performance benefited from transient revenue brought by unsustainable macroeconomic conditions and one-offs.

45.   Reconfiguring the policy framework could reduce Turkey's propensity for capital flow-driven cycles. Without adequate support from fiscal, financial, and structural policies, monetary policy has tended to shoulder the burden of countercyclical adjustment. But there are limits to what monetary policy can

achieve in a setting of abundant global capital flows. A much tighter structural fiscal position and financial policies geared to moderating systemic risk would allow monetary policy to maintain inflation and policy rates at levels similar to other emerging markets within a conventional inflation-targeting framework. This revamping of policies would deliver more balanced, less volatile output by reducing attractiveness to short-term inflows and limiting erosion of competitiveness through inflation. Targeted structural reforms would reinforce the framework.

46.   **A much-strengthened structural fiscal position is a key element of the policy-mix rebalancing**. Restoring a structural primary surplus for the nonfinancial public sector to a level similar to the one in 2007 would moderate domestic demand to promote disinflation and also provide a buffer in the event capital flows reverse. A more comprehensive estimate of transient revenue would prevent an unintended structural tightening during a downturn that could result from an excessively-narrow concept of cyclical revenue, and—symmetrically—a procyclical loosening during an expansion. Further delaying structural adjustment leaves Turkey vulnerable to the next inflow cycle. Adjustment should be front loaded, unless growth is very weak.

47.   **Reinforcing the framework for public financial management would enhance fiscal policy's demand-management role**. Current practice places undue attention on delivering the fiscal balance target as a share of GDP, resulting in procyclical policy. Fiscal targets should be set in structural terms, with realistic estimates of base-year revenue and spending underpinning budget forecasts. Spending appropriations without explicit ex ante parliamentary authorization should not be permitted. Project financing through public-private partnerships should be better regulated to limit fiscal risk, and ensure such financing arrangements are not used to create budget space.

48.   **A decisive increase in the single policy rate is essential to re-anchor inflation expectations and regain policy credibility**. The unorthodox framework has not demonstrated it can deliver either price stability or financial stability. In the current subdued risk appetite setting, raising the single policy rate would also relieve selling pressure on the lira, allowing conservation of scarce reserves by keeping fx sales on hold. To reduce the scale and adverse impact of future capital cycles, and in tandem with a tightened structural fiscal stance, the inflation tolerance band should be narrowed and inflation targets gradually lowered.

49.   **With the financial cycle having begun to turn down, Turkey faces new challenges**. Scope to mitigate an external funding shock is limited. More restricted external financing is therefore expected to slow loan supply, although demand is also

likely to soften. However, care is needed to avoid exacerbating the effect on the real economy by introducing measures intended to bolster banks' resilience, but which would have been more appropriately implemented when systemic risks were building. More-timely detection and response to emerging macroprudential risk will hopefully be achieved with the new Financial Stability Committee in place

50.   **Further delaying labor and product market reforms is detrimental to competitiveness, social equity, and the ability to cope with volatile capital flows**. Structural reforms are needed to prevent the emergence of a negative output gap as the current account is corrected. Hence, nominal depreciation provides only a temporary and partial fix. Preserving benefits of labor-market insiders disadvantages workers in the shadow economy and the disenfranchised, and also reduces efficiency. Minimum wages in the formal sector should be brought into line with peer countries, restrictions on flexible work arrangements should be relaxed, and a benefit scheme cushioning unemployment spells— rather than discouraging job mobility—should be introduced. With civil servant and public sector wage increases sending an important signal for the rest of the economy, breaking inflation inertia requires indexing public sector wages only to the point inflation target and halting asymmetric catch-up indexation for inflation overshoots. Timely adjustment of energy prices to movements in the domestic cost of imports would incentivize suppliers and users, and help lower Turkey's energy trade deficit.

51.   It is recommended that the next Article IV Consultation with Turkey be held on the standard 12-month cycle.

Box 1. Turkey's External Competitiveness

Relative to late 2010, Turkey's external competitiveness has improved considerably on the back of a large nominal depreciation, but sustainability could be jeopardized by persistent differentials in the growth rates of prices and wages relative to trading partners.

Real effective exchange rates based on consumer and producer prices fell by close to 20 percent from their October 2010 historical peaks, reflecting recent depreciation of the nominal effective exchange rate. As a result, price-based REER indicators are now below levels prevailing during the crisis, but remain some 5 percent above levels of 2003. Coming from a much higher peak in late 2010, the ULC-based REER fell sharply in Q1 2011, as unit labor cost growth slowed on moderating nominal wage increases and improved labor productivity. But this was partially reversed in Q2 2011 on account of weakening labor productivity, keeping the ULC-based REER elevated.

The **US dollar-euro exchange rate** is also an important determinant of the competitiveness of Turkey's exports, especially in view of the high import content—and hence relatively low domestic valued added—of Turkish production. Many raw materials and intermediate inputs are priced in US dollars or currencies that move closely with the US dollar, while about half of exports are sold in Europe, priced in euros. Thus a strengthening of the euro relative to the US dollar increases export profit margins, on average. This is supported by the observation that growth of imports (around 70 percent of which are intermediate goods) tends to outpace that of exports when the US dollar weakens against the euro. Since mid-2010, the more appreciated euro relative to the US dollar has therefore supported exporters.

Fairly rapid **export growth** in recent years has kept Turkey's share of major advanced country import markets (Germany and the EU as a whole) fairly stable. However, penetration of emerging-market has declined considerably since the global financial crisis, reversing in part the significant gains of earlier years. The disruption in MENA external trade due to unrest in some countries is expected to have only a modest adverse on Turkey's exports, and may even present an opportunity in view of disruptions to production in affected countries.

CGER-type assessments of the equilibrium value of the real exchange rate in Fall 2011 continue to point to a considerable competitiveness gap. Although the extent of misalignment has narrowed significantly since the previous vintage in view of the substantial real depreciation since end-2010, still-large current account deficits and a deteriorating net foreign asset position projected for the medium term suggest a persistent competitiveness gap. The recent nominal depreciation since the CGER reference period of July-August would tend to further reduce the misalignment, but the magnitude in nominal effective terms is likely moderate (given that many currencies simultaneously depreciated) and may not be persistent. Moreover, the near-term improvement is projected to unwind gradually due to persistent inflation differentials.

In the context of **large capital inflows**, however, standard CGER assessments may overstate the extent of overvaluation. The recent surge of capital inflows to Turkey has not only financed the current account deficit in an accounting sense but may have also caused it in a behavioral sense: by relaxing consumers' budget constraints to facilitate import demand. When the inflows abate, as they have now begun to do, both the near- and medium-term current account projections would improve which, in turn, would imply smaller misalignment. This is consistent with the notion of "capital account dominance" in Emerging Markets. Alternatively, if the flows—though mostly of a short-term duration—turn out to be more persistent, then the equilibrium exchange rate itself would appreciate, reflecting better fundamentals, and hence leading to a smaller estimated misalignment, other things being equal.[1]

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[1] It is difficult to predict if a surge in inflows is temporary or portends a persistent trend. A rule of thumb, offered by Ostry et al. (2010), is that flows that push the REER toward equilibrium are more likely to be persistent than flows that lead to overshooting since these would presumably be subject to future reversal as overshooting eventually unwinds. This suggests current inflows into Turkey are most likely temporary.

Box 1. Turkey's External Competitiveness (Concluded)

Effective Exchange Rates (2003=100)

CPI-based   PPI-based
ULC-based   Nominal

Sources: Central Bank of Turkey; and IMF staff estimates.

Market Share Developments
(Turkey's exports in percent of region's imports, 2000=100)
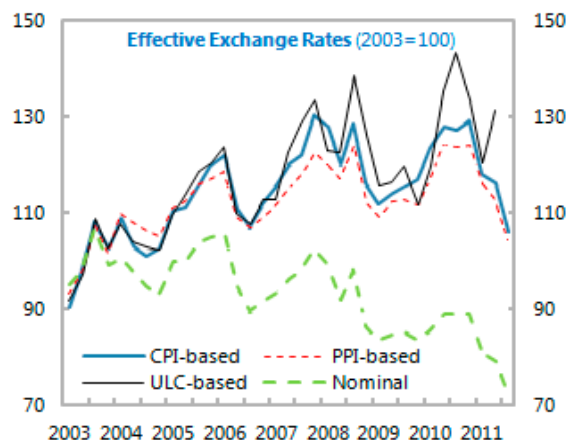
Fuel exporting economies
E.U.
Germany
Emerging markets

Sources: IMF, *Direction of Trade Statistics*; and IMF staff estimates.
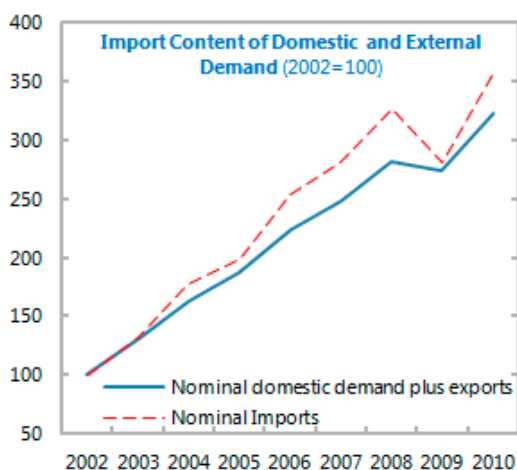
Import Content of Domestic and External Demand (2002=100)

Nominal domestic demand plus exports
Nominal Imports

Sources: Turkstat; and IMF staff estimates.

Real Growth Rates in Boom and Bust Cycles
(Geometric average, percent)

Real GDP
Real domestic demand
Real imports

2002–06   2008–09   2010–11Q2

Sources: Turkstat; and IMF staff estimates.

Euro Exchange Rate and Imports

Difference between real export and import growth (3mma)
Euro appreciation against dollar
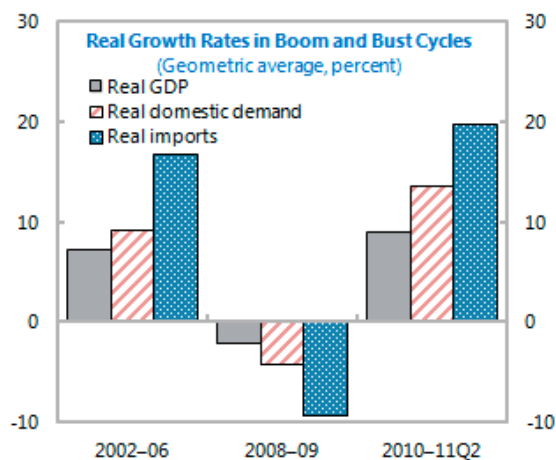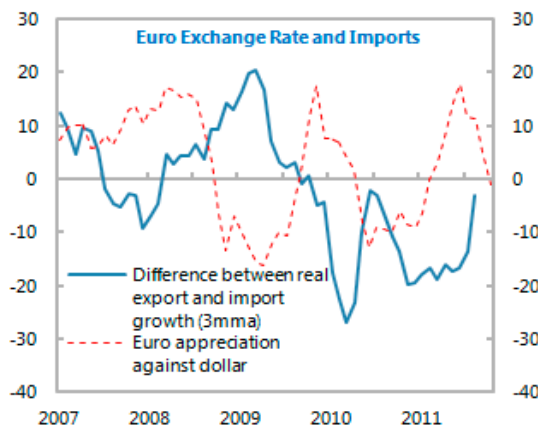
Sources: Bloomberg; Turkstat; and IMF staff estimates.

Box 2. Implications of Misclassifying Securities Repos

In recent years, many emerging markets have seen capital inflows tilt heavily toward portfolio debt securities. This reflects deep and liquid government debt markets, and sizable interest differentials. Portfolio debt flows also reversed rapidly in recent months on renewed concerns about euro-area sustainability, accompanied by strong depreciation pressures. Relative to GDP, Turkey received considerable such flows during 2010 and Q1 2011, and saw some of the largest reversals in September 2011.

However, some of Turkey's portfolio debt flows are not in fact outright sales to nonresidents, but the first leg of sale-and-repurchase agreements (securities repos). These agreements involve the sale of a security by a domestic bank to a foreigner, with a commitment to repurchase the security at an agreed future date and price. Functionally, a repo is equivalent to collateralized borrowing by the spot seller of the security. While the security may

be denominated in local currency, in most emerging-market cases, the cash exchanged is typically in fx. Importantly, the duration of the repo is not linked to the maturity of the security, and repos are typically short term. As of June 2011, Turkish banks had US$15.6 billion of external repos, of which US$11.2 billion had maturities of less than one year.

Statistical Treatment of Repos[1]

Securities repos involve dual concepts of ownership. Legal ownership ("full, unfettered title") of the security moves from the domestic bank to the foreigner at the start of the contract, and back again at termination. However, beneficial ownership remains throughout with the domestic-bank seller because—given the commitment to repurchase at a fixed price—the seller bears all valuation risk.

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[1] See S. Gray (2009), "Repos and Central Banks," unpublished IMF manuscript.

Net Portfolio Debt Flows, 2010–2011Q1
(Percent of 5-quarter rolling GDP)
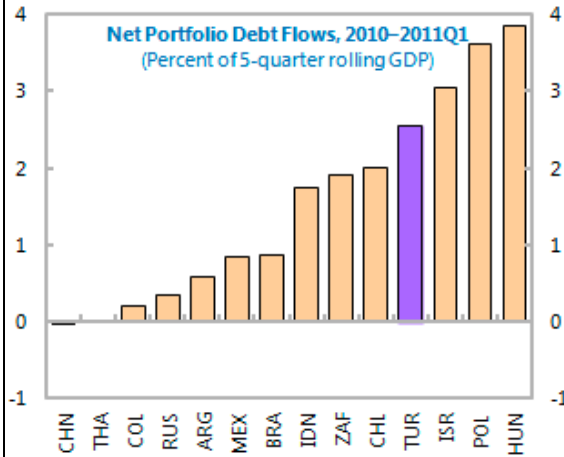
Sources: IMF, *International Financial Statistics*; and IMF staff estimates.

Capital Inflows Adjusted for Banks' Securities Repos (Billions of U.S. dollars) 1/
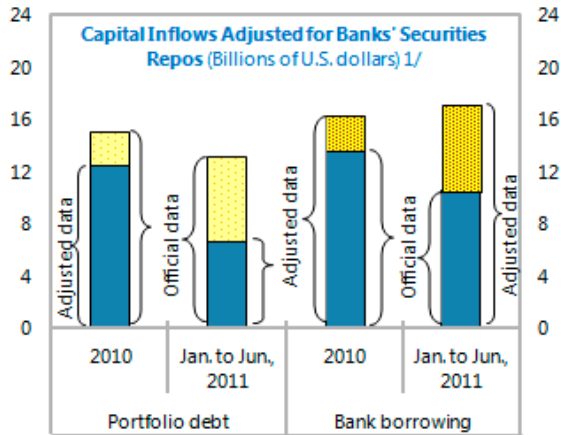
Sources: Central Bank of Turkey; BRSA; and IMF staff calculations.
1/ Change in the stock of banks' external securities repos is deducted from portfolio debt flows and added to banks' external borrowing.

Box 2. Implications of Misclassifying Securities Repos (concluded)

The statistical treatment of securities repos follows the economic character of the instrument, rather than its legal format. The BRSA follows this convention, consistent with International Accounting Standards and the revised System of National Accounts.[2] Accordingly, since the domestic bank retains the risks and benefits of ownership, the security remains on the domestic bank's balance sheet throughout the repo contract. The loan—and the corresponding receipt of cash—is recorded separately, expanding its balance sheet. The corresponding entries in the financial account of the BoP are an "other investment" inflow when the repo is initiated, and an outflow through the same category when the contract is unwound.

Recording repo transactions using the legal-ownership concept—as done by the CBT—gives a quite different impression. If the repo is treated as a separate spot sale and future purchase, the size of the domestic bank's balance sheet would remain fixed, but with a decline in securities and an increase in cash on the asset side. These entries would be reversed when the contract expires. Under this treatment, the financial account of the BoP would report a nonresident inflow into portfolio securities, with a similar outflow when the contract matures.

Implications

Recording securities repos using the legal-ownership convention makes it more difficult to gauge the extent and location of market risk. This has several implications: First, while Turkey's official BoP and external debt statistics suggest foreigners bear the risk of interest rate fluctuations, that risk in fact resides with the domestic bank. Second, the maturity of the underlying security conveys no information about the duration of the loan. Third, domestic banks' short-term external debt is understated. Fourth, the conventional wisdom that sudden reversals of portfolio flows create only modest exchange rate pressure—because falling local-currency asset values erode the amount of fx reserves needed to repatriate the investment—does not apply. Instead, if the foreign lender is unwilling to renew the securities repo, the domestic bank will need to secure sufficient fx to repay the loan in full, exerting downward pressure on the currency. And fifth, margin calls on the domestic bank to top-up collateral in response to a rise in domestic interest rates (and hence a lower value of the security) effectively shrink the net size of the loan.

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[2] See mdgs.**un**.org/unsd/**nation**alaccount/AEG/papers/m4Liabilities.pdf

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Box 3. Banks' Competition for Market Share and Implications for Policy Transmission

Turkish banks' drive for market share is widely seen as taking precedence over near-term profit maximization. Relative to other EMs, the market share of the five largest banks—accounting for around 70 percent of system assets—has remained remarkably stable, and the rank-ordering of their individual market shares has barely changed in recent years. This suggests preserving market share has been an important objective for large Turkish banks, including during the recent period of rapid credit growth.

There are several reasons why Turkish banks may place market share ahead of near-term profit maximization. First, a large market share supports fee income—a growing contributor to bank profits. Second, larger banks may be perceived as less exposed to deposit runs, thereby lowering the risk premium they pay to attract depositors. Third, larger banks may be less vulnerable to takeovers from rivals. Fourth, larger banks may benefit from economies of scale. Fifth, with the growing importance of foreign funding, size may improve access to, and lower the cost of, credit in the international wholesale market. And finally, in recent years, the BRSA has limited dividend payouts, thus encouraging growing market share (and hence future profits) over current profits.

With state banks having certain inherent advantages over their peers, aiming to preserve market share may have negatively impacted profits of other banks. Relative to other banks, state banks (including the largest bank in the system) have access to cheaper and more stable deposit funding because they are perceived as less risky in view of an implicit government guarantee. Moreover, they generally offer lower lending rates because their retail borrowers (including civil servants) are seen as good credit risks. These benefits give state banks an edge over their competitors in terms of funding costs and lending rates. Moreover, state banks have lower loan-to-deposit ratios (LTDs) than other banks, and hence do not need to rely on less stable, more expensive wholesale funding to finance loan expansion compared with other banks with much higher LTDs. This allowed state banks to be market leaders during the recent credit boom, growing their loan books earlier and faster than other banks, and encouraging other banks to catch up.

The strong drive for market share may have generated a "collective action" problem that weakens or delays the effectiveness of policies intended to slow credit growth. Following the

increase in URR, being the first to pass on these higher intermediation costs to lending rates would have risked losing market share. Instead, banks tended to absorb the cost into lower profits and accelerate lending to compensate lower profit margin with higher volume. Hence, the higher URR were not initially successful at moderating loan growth. This was compounded by the rapid loan expansion of state banks, pressuring other banks to follow. These considerations—drive for market share and the privileged funding position of state banks—would likely have led to a similarly weak or delayed credit response by banks if instead of raising URR, the CBT had raised the policy rate. On the other hand, raising risk weights and provisioning in June 2011 directly impacted, among others, the large state banks that had previously lent most aggressively, encouraging immediate system-wide repricing of loans.

Standard Deviation of the Asset Market Share of Largest 5 Banks, 2010

Sources: Bloomberg; and IMF staff estimates.

Loan to Deposit Ratios, June, 2011 1/
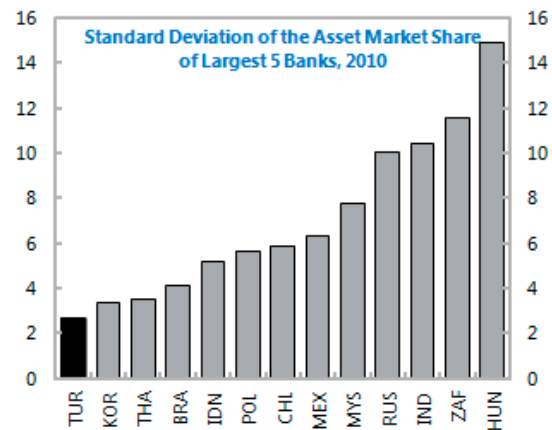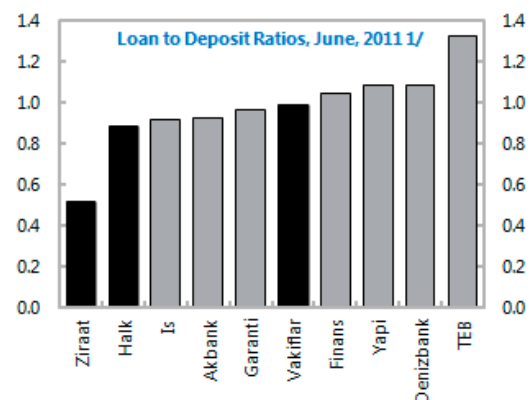
Source: Turkish Banker's Association.
1/ State banks shaded black.

Box 4. The CBT's Recent Policy Actions

Since early August 2011, the CBT has made numerous changes to its policy instruments. Two separate periods can be identified: (i) August-mid October, in response to concerns about sovereign debt problems in Europe and uncertainties regarding the global economy; and (ii) since mid October, responding mainly to a sharp increase in inflation.

August –mid October

- To support the lira and shore up fx reserves:

  (a) The CBT raised its *O/N borrowing rate* from 1.5 percent to 5 percent, considerably narrowing the interest rate corridor to limit potential volatility of money market rates that had previously discouraged very short-term inflows;

  (b) *URR on banks' fx liabilities* were reduced three times (in July, August, and October) and mostly on longer duration liabilities by an effective 1.5 percentage points, releasing about US$2.8 billion to banks;

  (c) *Part of RR obligations on TL liabilities* (up to 10 percent from September and 20 percent from October) *was allowed to be held in fx*. This was intended to encourage banks to repatriate their fx liquid assets back to Turkey, and could potentially boost the CBT's reserves by up to US$7.6 billion. Moreover, because the cost of borrowing fx is lower than lira, banks' opportunity cost of holding URR was reduced—equivalent to a reduction in the RR ratio on lira liabilities;

  (d) the CBT scaled back its daily *fx purchases* (from US$50 billion to US$40 billion in May and to US$30 billion in June), halted fx activity at end July, and switched to *fx sales* in early August. Total sales reached US$4.9 billion through mid October, with varying daily amounts;

  (e) URR were imposed on banks' gold deposit accounts.

- To support real activity, the main *policy interest rate*—the 7-day repo rate—was further lowered by 50 bp in August to 5.75 percent.

- To reduce the cost of financial intermediation transacted in lira, and to promote longer non-deposit bank funding, *RRs on TL liabilities* were reduced in early October by effective 0.6 percentage points, with the largest reductions on longer-duration non-deposit liabilities, releasing TL3.2 billion to banks.

Since mid October

- To contain the deterioration in inflation expectations, especially resulting from TL depreciation:

  (a) The CBT engaged in *large-scale fx selling auctions and direct intervention*. Total sales through auctions reached US$3.3 billion.

  (b) The *O/N lending rate was raised* from 9 percent to 12.5 percent (and from 8 percent to 12 percent for primary dealers). This facilitates greater upside volatility of money market rates;

  (c) On RR obligations relating to TL liabilities, a maximum of 40 percent (raised from the previous 20 percent) may be held in fx, and up to 10 percent may be held in gold. If fully utilized, this would add a combined US$7.7 billion to CBT reserves. In addition, URR on lira-denominated short-term liabilities were lowered, resulting in a 2 percentage point effective reduction.

  (d) The CBT re-opened its "blind broker" fx borrowing and lending facility to facilitate greater mobility of fx between banks in response to heightened uncertainties in international markets.

Box 5. Inflation Targets in Turkey

Among the group of inflation targeters, Turkey stands out as having one of the highest targets. Targets are generally set higher in EMs than in advanced economies to minimize the output cost from low inflation as EMs face more structural problems including higher price rigidity, lower monetary and fiscal credibility, and larger exchange rate volatility. However, Turkey's 5 percent target for 2012 is several percentage points higher than for most other major EMs.[1] Indeed, in mid-2008, Turkey revised up its end-of-period inflation targets from a constant 4 percent to 7.5, 6.5 and 5.5 percent, respectively, for 2009–11 in response to the upside risks posed by food and energy prices to the medium-term inflation outlook and the possibility of further supply side shocks.

Turkey also has the widest tolerance band, intended to accommodate its higher food inflation volatility than other

EMs. The high volatility of Turkey's unprocessed food prices together with its high share in the consumption basket (around 15 percent) is the main reason given for setting the inflation tolerance band at ±2 percentage points.[2] Several factors contribute to the volatility of Turkey's food prices. In addition to measurement issues,[3] while Turkey exports unprocessed food, such imports are very restricted, thereby precluding international trade as a means to smooth domestic prices.

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[2] Atuk, O. and O. Sevinç (2010), "Fixed and Variable Weight Approach for the Treatment of Seasonal Products in the Consumer Price Index: A Study on Turkey's Fresh Fruit and Vegetable Prices", CBT Economic Notes No. 10/15.

[3] The consumption basket for fresh food used to calculate food inflation is seasonal and the weights depend on the previous year's consumption basket. Öğünç, F. (2010), "Volatility of Unprocessed Food Inflation in Turkey: A Review of the Current Situation", CBT Economic Notes No. 10/05.

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[1] Thailand targets core inflation while the rest target headline inflation.
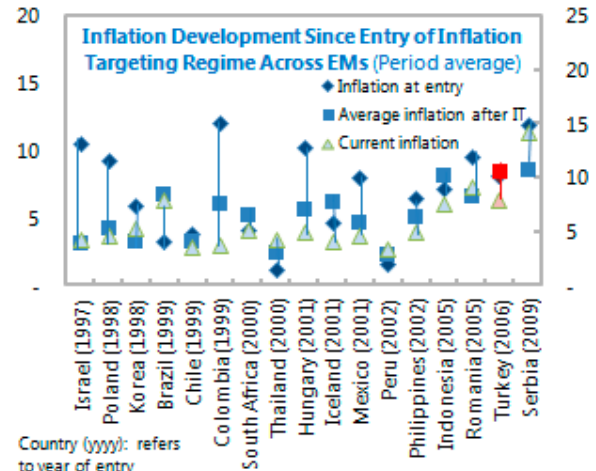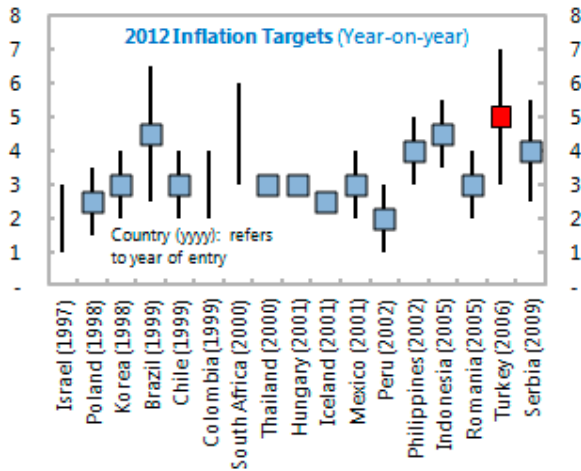
Sources: Member Country Central Banks; and IMF staff estimates.

Box 5. Inflation Targets in Turkey (concluded)

Turkey has maintained high import tariffs and tight quotas to support farmers, which account for around a quarter of the workforce. This has contributed to a considerable increase of food price volatility since 2007, and the level of food inflation is among the highest within the EM group. Other structural factors also compound the effect of import controls, notably uncertain agriculture subsidies, geographical concentration of production, volatile export prices and external demand, and long supply chains with a prevalence of small farmers which immediately price in weather effects.[4] Nonetheless, looking at sample period of 2004-2011, the volatility of headline inflation and of food inflation weighted by its share in the basket is not among the highest within the group of EMs. However,

Turkey's inflation was on average the highest among the group during 2004–11.

Despite the combination of a high point target and a wide tolerance band, Turkey has frequently overshot the top of the band. The exceptions were the recession year of 2009, and in 2010 when inflation came in just below the revised target due to a large *downward* shock to food prices. Thus, the flexibility afforded by the wide band has tended to be used asymmetrically.

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[4] Orman, C., Öğünç, F., Saygılı, Ş. and G. Yılmaz (2010), "Structural Factors Causing Volatility in Unprocessed Food Prices", CBT Economic Notes No. 10/16.
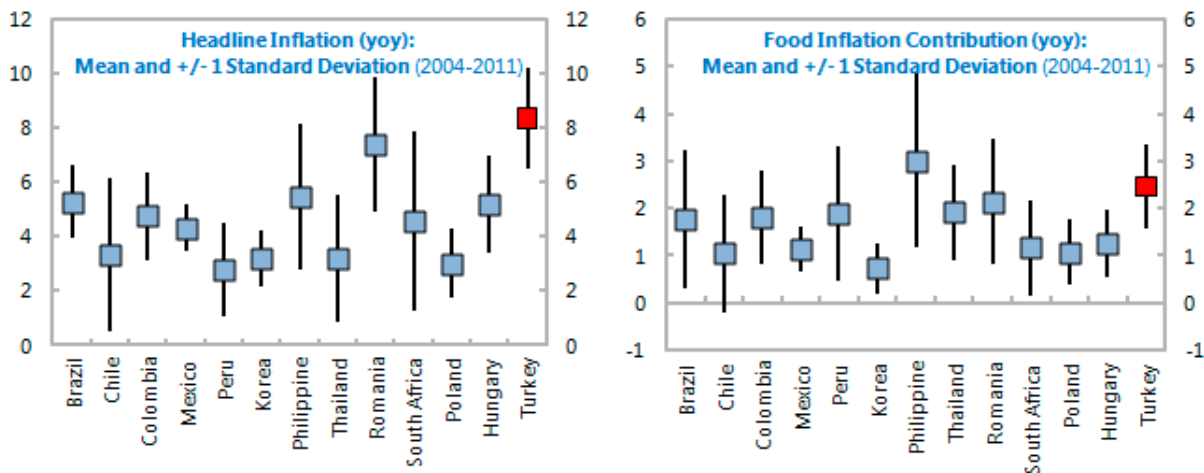
Sources: Member Country Central Banks; and IMF staff estimates.
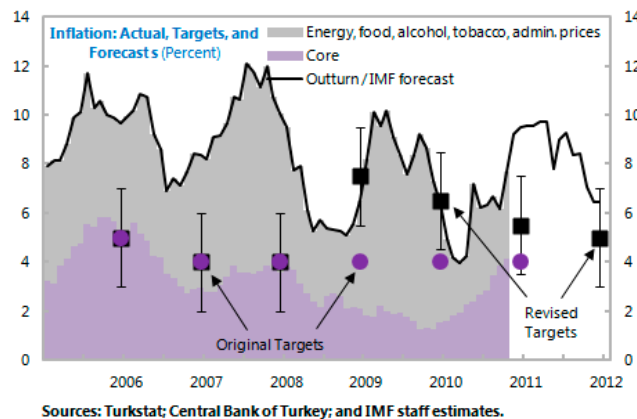
Sources: Turkstat; Central Bank of Turkey; and IMF staff estimates.

Box 6. Other Key Takeaways on the Banking Sector

Profitability: Banks' return on assets and equity have significantly declined since 2009 and currently stand at 1.6 and 13.6 percent, respectively, in August 2011. This decline has been mainly driven by declining net interest rate margins amid banks' strong competition for market share for loans and the waning effect from the one-off repricing of assets in response to the CBT's more than 10 percentage point cut in the policy rate during late 2008-2009.

NPLs: Despite very rapid credit growth, NPLs relative to total loans have declined to historical lows (under 3 percent). This was aided by: (i) banks selling off NPLs; (ii) following the crisis, some restructuring of loans in distress; and (iii) more recently, the increase in the denominator, with nominal NPLs remaining stable. Looking ahead, loan quality is likely to be cyclical, especially as much of recent lending is concentrated in profitable, but potentially-risky, uncollateralized consumer lending. A protracted economic slowdown could lead to a steady rise in NPLs, especially on credit card and general purpose loans, lowering banks' profitability and capital buffers.

Capital Adequacy Ratios: Based on Basel I regulatory standards, banks are adequately capitalized with an aggregate CAR of 16½ percent in October, comfortably above the BRSA's floor of 12 percent. This is down from 19 percent at end-2010 (and 21 percent at end 2009), mainly because of the shift from zero risk-weighted government securities to positive risk-weighted loans during the recent credit boom. The introduction of Basel II in 2012, as well as the recent currency depreciation that expanded the lira-equivalent—and hence risk-weight—of fx loans, will further reduce CARs. In recent years, the BRSA has restricted dividend payouts by banks with low CARs. Going forward, CARs may be a constraint on future loan growth. The criteria for assessing minimum required CARs for foreign-owned banks was recently modified, requiring several banks to increase capital.
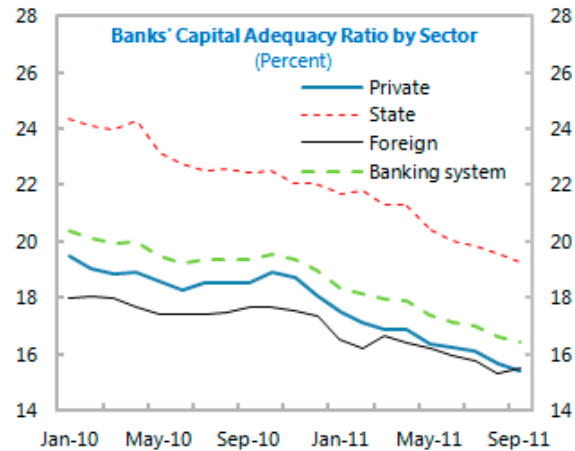
Source: BRSA.

Box 6. Other Key Takeaways on the Banking Sector (Concluded)

External Funding: Nearly one third of Turkey's banking system (measured by assets) has links to parents in peripheral Europe and, despite limited direct funding from their foreign parents, availability and cost of funding is likely to reflect to some extent the parents' financial condition. While the Turkish banking sector have continued to tap syndicated loans at low spreads, external funding conditions have undoubtedly been affected by funding strains in international markets. Possible de-leveraging by European banks as they rebuild their capital ratios may further affect Turkish banks' access to wholesale funding. Turkish branches abroad play a smaller role in providing loans to resident firms than in the past, but have become more active in securing external funding (accompanied by an increase in their holdings of government securities). Overall, at 13 percent of total liabilities, banks' external funding is not high relative to other countries in the region.

Open Foreign Currency Positions: Banks' on-balance sheet short fx positions, which tend to be closed off-balance sheet through the use of cross currency swaps (CCS), recently widened close to its historical peak, reflecting banks' growing recourse to external funding. The recent sharp increase in average CBT and market interest rates has fed into higher costs for short-term CCS, which banks use to repeatedly roll over sizable short-duration swaps, exposing them to interest rate risk.

Sources: Central Bank of Turkey; Turkstat; and IMF staff calculations.

Figure 1. Monetary Policy, June 2010 Onwards

Interest Rates (Percent, compounded)
— CBT overnight deposit rate
--- Policy rate
— ISE O/N repo rate
— ISE O/N repo rate (10-day moving avg.)
--- 1-month swap rate

Yield Curve
(Compounded rates; polynomial trend)
Oct. 31, 2011
Jun. 30, 2011
Oct. 28, 2010
Jan. 19, 2011
Months to Maturity

Bank Interest Rates (Percent)
— Deposit
--- Consumer lending
— Corporate lending

Repo Auctions: Ratio of Amount Accepted to Amount Requested (Percent)
— 10-day moving average

Banks' Daily FX Transactions Volume
(Billions)
— Spot (10-day moving average)
--- Swap (10-day moving average)

Exchange Rate
(Percent change from November 4, 2010 to November 10, 2011)
Turkey, Hungary, Poland, S.Africa, Brazil, Bulgaria, Phil., Indonesia, Ukraine, Russia

Sources: Central Bank of Turkey; and IMF staff estimates.

Figure 2. Real Sector Developments, 2006–11
(Percent, unless otherwise indicated)

After collapsing in late 2008 and early 2009, the economy rebounded sharply ...

Real GDP Growth

— Year-on-year

- - - Quarter-on-quarter (sa)

...driven by consumption and investment.

Contributions to Y-o-Y GDP Growth

Investment
Net exports
Consumption
Real GDP growth (percent)

Nearly all production sectors recovered strongly but are now slowing.

Production Components of GDP 1/
(Year-on-year percent change)

Agriculture (11%)
Industry (28%)
Construction (6%)
Services (55%)

Short-term indicators confirm a slowing...

Short-term Activity Indicators
(3-month moving avg. of q-o-q growth)
Real sector confidence
Industrial production
Capacity utilization
White goods sales

...and so does consumer confidence.

Consumer Confidence Indicators
(2002=100)

CNBC
Turkstat (right scale)

Recovery in 2010 was sharp, with a large contribution from base effects.

Real GDP and Output Gap

Output gap
Real GDP growth

Sources: Turkstat; CNBC; and IMF staff estimates.
1/ Values in parentheses denote shares of total value added in 2009.

Figure 3. Inflation Developments, 2006–11
(Percent, unless otherwise indicated)

Headline inflation has been volatile and rising ...

CPI Inflation
(12-month change)

- Virtual HICP 1/
- Headline CPI
- Core-G 2/

...reflecting an increase in core inflation.

Annual CPI Inflation (Contributions) 3/

- Food
- Alcohol and tobacco
- Energy
- Core-G 2/

Broad-based price pressures remain high..

(Percentage of individual items in CPI whose price increased by more than CPI percent over previous 12 months)

...with services inflation picking up...

12-month CPI Inflation

- Goods
- Services

...and higher producer prices...

Producer Price Index
(12-month change)

- General
- Manufacturing

...leading to elevated CPI inflation expectations.

Inflation: Actual, Targets, and Forecasts (Percent)

- CBT's inflation forecast
- Actual
- CBT Midpoint forecast
- Targets
- Inflations expectations survey (Nov., 2011)

Sources: Turkstat; Central Bank of Turkey; and IMF staff estimates.
1/ Applying Turkey's 4-digit HICP weights to EU-27 average inflation.
2/ Index "G" excludes energy, alcoholic beverages, tobacco products, administered prices, indirect taxes, and unprocessed food products.
3/ Calculated based on 2010 weights.

Figure 4. External Sector Developments, 2006–11

Export growth rates increased...

Export Values (3-month average, y-o-y) 1/

- Consumption (37%)
- Intermediate (53%)
- Capital (10%)

...but import growth, although declining, remains high.

Import Values (3-month average, y-o-y) 1/

- Consumption (12%)
- Intermediate (74%)
- Capital (14%)

In volume terms, import growth is also strong...

Trade Volume (12-month change of 3-month moving average)

- Exports
- Imports

...leading to a widening current account deficit...

Current Account (Percent of GDP)

- Total
- Nonfuel

...that is increasingly financed by debt-creating flows...

Net Debt and Nondebt-Creating Flows (Billions of U.S. dollars, 12-month rolling sum)

- Debt
- Nondebt

...at short-term maturities.

Net Debt Creating Flows by Maturity (Billions of U.S. dollars, 12-month rolling sum)

- Short-term
- Medium and long-term

Sources: Turkstat; and IMF staff estimates.
1/ Values in parentheses denote shares of total in September 2011.

Figure 5. Financial Indicators, 2007–11
(Percent, unless otherwise indicated)

The lira has depreciated since late 2010...

- Lira per dollar
- Lira per euro (rhs)

...and the stock market index has fallen.

- Stock market (000s, ISE 100 index)
- Emerging markets MSCI (right scale)

Government domestic bond yields have also risen....

- Domestic benchmark bond rate
- CBT policy rate 1/

...while nonresidents' holdings of stocks and government debt have plateaued.

Portfolio Holdings by Nonresidents
(Percent of total holdings)
- ■ Domestic government debt
- ▨ Equities

Aug-08 Mar-09 Sep-09 Mar-10 Sep-10 Apr-11 Oct-11

External spreads have increased though broadly in line with other EMs...

- EMBI+ Turkey (basis points)
- EMBI+ composite (basis points)

...and in line with trends for CDS spreads.

5-year Credit Default Swaps
(Spread, bps)
- Turkey
- Brazil
- Russia

Source: Bloomberg.
1/ The increase in May, 2010 corresponds to the switch from the CBT overnight borrowing rate to the 7-day repo as the policy rate.

Figure 6. Banking System, 2006–11
(Percent, unless otherwise indicated)

Bank profitability and capital adequacy ratios are declining.

Profitability (Percent)

- CAR
- ROE
- ROA (right scale)

High deposit growth ...

Deposits

- Lira (billions of Turkish lira)
- FX (billions of U.S. dollars, right scale)

...funded rapid credit expansion, but...

Loans

- Lira (billions of Turkish lira)
- FX (billions of U.S. dollars, rhs)

...lately the growth rates have started to decline.

Loans by Borrower Group
(Year-on-year percent change)

- Consumer
- Corporate

Asset quality remains high .

Nonperforming Loans to Total Loans (Percent)

- NPLs (BRSA)
- Past due loans (CBT) 1/

Government securities as share of bank assets continues to decline.

Turkish Banks' Holdings of Government Securities

- Total portfolio securities (billions of Turkish lira)
- Total portfolio securities (percent of total assets, rhs)

Sources: BRSA; Central Bank of Turkey; and IMF staff calculations.
1/ Past due loans (CBT) data excludes the loans extended by branches abroad of the Turkish Banks.

Table 1. Selected Economic Indicators, 2006 – 12

	2006	2007	2008	2009	2010	2011	2012
						Proj.	
(Percent)							
Real sector							
Real GDP growth rate	6.9	4.7	0.7	-4.8	9.0	7.5	2.0
Private consumption growth rate	4.6	5.5	-0.3	-2.3	6.7	6.8	0.5
Private gross fixed investment growth rate	15.0	2.6	-9.0	-22.5	33.5	25.2	0.6
Contributions to GDP growth							
Private domestic demand	6.3	5.0	-1.8	-8.3	12.6	9.4	0.6
Public spending	0.9	0.8	0.6	0.8	0.8	0.7	0.4
Net exports	-0.3	-1.2	1.9	2.7	-4.4	-2.6	1.0
GDP deflator growth rate	9.3	6.2	12.0	5.3	6.3	8.6	8.6
Nominal GDP growth rate	16.9	11.2	12.7	0.2	15.9	16.7	10.8
CPI inflation (12-month; end-of period)	9.7	8.4	10.1	6.5	6.4	9.5	6.4
PPI inflation (12-month; end-of-period)	11.6	5.9	8.1	5.9	8.9	11.3	6.6
Unemployment rate	10.2	10.3	11.0	14.0	11.9	...	...
Average nominal treasury bill interest rate	18.4	18.1	19.2	11.4	8.1	...	...
Average ex-ante real interest rate	8.6	6.9	12.2	2.6	1.9	...	...
(Percent of GDP)							
Nonfinancial public sector							
Primary balance	4.5	3.2	1.6	-1.0	0.8	1.8	1.5
Net interest payments	5.1	4.9	4.4	4.6	3.7	2.6	2.6
Overall balance	-0.6	-1.8	-2.8	-5.6	-2.9	-0.8	-1.1
Structural balance	3.0	1.5	0.3	-0.1	-0.1	-1.1	-0.1
Debt of the public sector							
General government gross debt (EU definition)	46.5	39.9	40.0	46.1	42.2	39.1	36.2
Nonfinancial public sector net debt	40.1	34.4	34.5	39.5	36.6	33.5	30.8
External sector							
Current account balance	-6.1	-5.9	-5.7	-2.3	-6.5	-10.2	-7.8
Nonfuel current account balance	-1.3	-1.5	-0.2	2.0	-1.9	-4.1	-1.8
Gross financing requirement	21.1	18.7	18.9	17.4	18.9	22.2	23.1
Foreign direct investment (net)	3.6	3.1	2.3	1.1	1.1	1.6	2.0
Gross external debt 1/	39.3	38.4	38.4	43.7	39.5	42.9	44.7
Net external debt	21.0	21.0	21.5	24.7	24.0	27.8	30.9
Short-term external debt (by remaining maturity)	15.0	11.7	16.0	15.2	16.1	17.9	17.2
Monetary aggregates							
Nominal growth of M2 broad money (percent)	22.2	15.2	24.8	12.7	18.3	...	...
GDP (billions of U.S. dollars) 2/	529.2	649.1	730.3	614.4	734.6	...	...
GDP (billions of Turkish lira)	758.4	843.2	950.5	952.6	1,103.7	1,288.3	1,427.4

Per capita GDP (2010): $10,297 (WEO)

Quota (As of October 31, 2011): SDR 1,455.8 million.

Sources: Turkish authorities; and IMF staff estimates and projections.

1/ The external debt ratio is calculated by dividing external debt numbers in U.S. dollars based on official Treasury figures by GDP in U.S. dollars calculated by staff using the average exchange rate (consolidated from daily data published by the CBT).

2/ GDP in U.S. dollars is derived using the average exchange rate (consolidated from daily data published by the CBT).

Table 2. Balance of Payments, 2007–16
(Billions of U.S. dollars)

(Billions of U.S. dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
					Proj.					
Current account balance	-38.4	-42.0	-14.0	-47.7	-78.8	-62.9	-53.0	-56.0	-65.0	-77.1
Trade balance	-46.9	-53.0	-24.9	-56.4	-92.2	-82.7	-77.1	-82.3	-94.1	-108.2
Exports (f.o.b.)	115.4	140.8	109.6	120.9	141.5	151.5	161.0	171.1	179.9	189.3
Of which:										
Exports (f.o.b.) in trade returns	107.3	132.0	102.1	113.9	134.2	143.6	152.7	162.4	170.8	179.6
Shuttle trade	6.0	6.2	4.8	5.0	4.5	4.7	4.9	5.2	5.4	5.7
Imports (f.o.b.)	-162.2	-193.8	-134.5	-177.3	-233.7	-234.1	-238.0	-253.4	-274.1	-297.5
Of which:										
Imports (c.i.f.), incl. non-monetary gold	-170.1	-202.0	-140.9	-185.5	-241.6	-243.5	-247.3	-263.2	-284.6	-308.8
Fuel imports (c.i.f.)	-33.9	-48.3	-29.9	-38.5	-53.2	-54.6	-55.0	-54.9	-55.4	-55.9
Services and Income (net)	6.2	8.9	8.6	7.3	11.6	17.6	21.2	23.0	25.3	26.8
Services and Income (credit)	35.4	42.0	38.6	38.5	44.4	48.6	52.0	55.7	59.9	64.0
Of which:										
Tourism receipts	18.5	22.0	21.3	20.8	24.5	27.5	29.5	31.8	34.3	37.0
Services and Income (debit)	-29.2	-33.0	-30.1	-31.2	-32.8	-31.0	-30.8	-32.8	-34.6	-37.2
Of which:										
Interest	-13.4	-15.1	-13.2	-11.6	-11.6	-9.7	-9.0	-9.9	-10.5	-11.7
Private transfers (net)	1.4	1.4	1.1	0.9	1.1	1.5	2.0	2.4	2.9	3.2
Official transfers (net)	0.8	0.7	1.2	0.6	0.7	0.7	0.8	0.9	1.0	1.0
Capital account balance (excluding IMF)	48.8	34.6	8.3	59.2	78.9	61.2	67.3	75.5	85.4	93.8
Including errors and omissions	50.6	39.3	13.4	63.9	87.7	61.2	67.3	75.5	85.4	93.8
Direct investment 1/	19.9	17.0	6.9	7.8	12.6	16.2	17.5	19.4	21.4	23.2
Portfolio investment in securities	-0.1	-5.6	-1.6	12.0	22.7	16.5	14.0	14.3	18.3	19.5
Public sector (central and local governments and EBFs)	1.0	2.3	3.4	7.6	6.4	4.4	5.3	5.6	5.6	5.6
Bonds (net)	0.9	0.6	1.8	4.1	4.3	3.1	4.0	4.3	4.3	4.3
Eurobond drawings	4.6	4.0	3.8	6.7	6.0	5.5	5.5	5.5	5.5	5.5
Eurobond repayments	-3.7	-3.4	-1.9	-2.6	-1.8	-2.4	-1.5	-1.2	-1.2	-1.2
Loans (net)	0.1	1.7	1.6	3.6	2.1	1.3	1.3	1.3	1.3	1.3
Loan disbursements	3.4	5.2	4.8	6.7	5.6	5.8	5.7	5.7	5.7	5.7
Loan repayments	-3.3	-3.5	-3.2	-3.2	-3.4	-4.4	-4.4	-4.4	-4.4	-4.4
Central Bank of Turkey (excl. reserve assets, liabilities)	-1.1	-1.4	-0.5	-0.1	-0.6	-0.5	-0.4	-0.4	-0.4	-0.4
Deposit money banks (net)	0.3	-4.3	12.9	36.7	33.8	15.9	20.5	24.1	23.4	27.1
FX deposits abroad (- denotes accumulation)	-3.5	-13.3	12.7	8.8	18.7	4.1	1.4	1.2	1.0	0.8
Other (net)	3.9	9.0	0.2	27.9	15.1	11.7	19.1	23.0	22.4	26.4
Medium and long-term (net)	7.3	0.9	-1.7	2.0	6.4	4.0	8.5	10.4	12.7	15.6
Short-term (net)	-3.4	8.1	1.9	25.9	8.6	7.8	10.6	12.6	9.7	10.7
Other private sector (net)	28.7	26.6	-12.9	-4.9	3.9	8.7	10.5	12.4	17.2	18.7
Medium and long term (net)	25.8	22.9	-9.7	-7.1	7.1	5.9	4.9	5.0	8.2	8.9
Short term (net)	2.9	3.6	-3.1	2.2	-3.2	2.7	5.6	7.4	8.9	9.8
Errors and omissions	1.8	4.7	5.1	4.7	8.8	0.0	0.0	0.0	0.0	0.0
Overall balance	12.1	-2.7	-0.6	16.2	8.9	-1.7	14.2	19.5	20.4	16.7
Overall financing (NIR change, + denotes decline)	-12.0	2.8	0.7	-15.0	-6.4	1.7	-14.2	-19.5	-20.4	-16.7
Change in gross official reserve assets (+ denotes decline)	-8.0	1.1	-0.1	-12.8	-3.6	3.8	-13.4	-19.5	-20.4	-16.7
Change in reserve liabilities (IMF)	-4.0	1.7	-0.7	-2.2	-2.8	-2.1	-0.9	0.0	0.0	0.0
Purchases	1.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repurchases	-5.1	-1.9	-0.7	-2.2	-2.8	-2.1	-0.9	0.0	0.0	0.0
SDR allocation	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 2. Balance of Payments, 2007–16 (concluded)
(Billions of U.S. dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
					Proj.					
Memorandum items:										
Trade in goods and services										
Percent of GDP										
Current account balance (incl. shuttle trade)	-5.9	-5.7	-2.3	-6.5	-10.2	-7.8	-6.1	-5.9	-6.3	-6.8
Nonfuel current account balance	-1.5	-0.2	2.0	-1.9	-4.1	-1.8	-0.6	-0.9	-1.7	-2.6
Trade account balance (incl. shuttle trade)	-7.2	-7.3	-4.0	-7.7	-11.9	-10.2	-8.8	-8.7	-9.1	-9.6
Exports of goods and nonfactor services	22.2	24.1	23.3	21.1	23.3	24.0	23.6	23.2	22.4	21.7
Imports of goods and nonfactor services	27.4	29.0	24.6	26.8	32.8	31.5	29.6	29.0	28.8	28.5
Percent change										
Value growth in exports of goods (incl. shuttle trade)	22.9	19.7	-23.5	13.0	18.2	7.0	6.3	6.3	5.1	5.2
Value growth in exports of goods (excl. shuttle trade)	25.1	23.1	-22.1	10.6	18.2	7.1	6.3	6.4	5.2	5.2
Value growth in imports of goods	20.5	19.5	-30.6	31.9	31.0	0.8	1.7	6.5	8.2	8.5
Volume growth in exports of goods 2/	10.9	6.1	-8.1	6.3	8.3	5.8	6.3	6.2	5.0	5.0
Volume growth in imports of goods 2/	11.1	-2.1	-13.2	21.4	17.9	-0.2	1.7	6.8	8.2	8.6
Volume growth in imports of goods exluding fuel 2/	15.5	-2.6	-12.0	30.9	18.1	1.7	1.8	8.2	9.8	10.2
Terms of trade	1.1	-4.0	7.9	-4.9	-1.3	1.4	1.0	0.8	0.6	0.6
Reserve and debt indicators										
Gross foreign reserves (Central Bank of Turkey) 3/										
Billions of U.S. dollars	76.2	74.0	73.8	86.6	90.1	86.3	99.7	119.2	139.6	156.3
Months of goods and nonfactor service imports	4.9	4.0	5.6	5.1	4.1	4.0	4.6	5.1	5.6	5.7
Net international reserves (Central Bank of Turkey)	56.1	57.1	56.3	63.9	67.5	63.7	77.1	96.7	117.2	133.9
Net international reserves (net of IMF)	43.9	48.8	48.7	58.5	64.9	63.2	77.5	97.1	117.6	134.3
External debt (end-of-period)										
Billions of U.S. dollars	249.4	280.4	268.8	290.4	332.7	362.4	398.8	442.2	488.5	542.4
Percent of GDP 4/	38.4	38.4	43.7	39.5	42.9	44.7	45.5	46.5	47.2	47.9
Percent of exports of goods and nonfactor services	174.7	163.6	195.0	191.0	186.0	188.6	195.3	203.6	213.2	224.3
Short-term debt (end-of-period)										
Billions of U.S. dollars	43.1	53.1	49.7	78.6	94.1	101.7	114.2	130.4	144.9	161.2
Reserves to short-term debt ratio	176.7	139.4	148.4	110.1	95.8	84.9	87.3	91.4	96.4	97.0
Short-term debt plus amortization of medium- and long-term debt										
Billions of U.S. dollars	84.3	100.6	95.9	115.5	131.5	139.3	153.3	172.9	187.4	203.7
Reserves to short-term debt ratio	90.5	73.6	76.9	75.0	68.5	62.0	65.0	68.9	74.5	76.7
Debt service ratio 5/	31.9	32.1	37.8	28.3	23.8	21.7	20.6	21.0	19.9	19.1

Sources: Turkish authorities; and IMF staff estimates and projections.

1/ Including privatization receipts.
2/ Volumes based on *World Economic Outlook* deflators.
3/ Changes in stocks may not equal balance of payments flows due to valuation effects of exchange rate changes.
4/ The external debt ratio is calculated by dividing external debt numbers in U.S. dollars based on official Treasury figures by GDP in U.S. dollars calculated by staff using the average exchange rate (consolidated from daily data published by the CBT).
5/ Interest plus medium- and long-term debt repayments in percent of current account receipts (excluding official transfers).

Table 3. External Financing Requirements and Sources, 2007–16
(Billions of U.S. dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
					Proj.					
Gross financing requirements	121.3	138.3	106.8	138.5	172.3	188.0	189.3	207.7	236.4	267.5
Current account deficit (excluding official transfers)	39.2	42.7	15.2	48.3	79.5	63.6	53.9	56.9	66.0	78.2
Amortization on debt securities	3.7	3.4	1.9	2.6	1.8	2.4	1.5	1.2	1.2	1.2
Government Eurobonds	3.7	3.4	1.9	2.6	1.8	2.4	1.5	1.2	1.2	1.2
Medium- and long-term debt amortization	28.8	35.8	44.9	41.4	32.3	32.9	35.2	38.0	41.3	45.6
Public sector 1/	3.3	3.5	3.2	3.2	3.4	4.4	4.4	4.4	4.4	4.4
Private non-bank sector	22.4	25.1	34.0	31.5	23.0	22.9	24.3	25.6	27.1	29.2
Banks	3.1	7.2	7.6	6.7	5.8	5.6	6.5	8.0	9.8	12.0
Short-term debt amortization	42.6	43.1	53.1	49.7	78.6	94.1	101.7	114.2	130.4	144.9
Public sector (net) 1/	4.3	4.4	5.1	5.4	5.9	6.5	6.5	6.4	6.4	6.3
Trade credits 2/	16.4	21.1	22.0	21.1	22.8	17.4	16.0	16.6	18.6	21.4
Banks	20.7	16.6	24.5	22.6	48.8	66.4	74.7	85.7	98.9	109.2
Other private	1.2	1.0	1.5	0.7	1.2	3.8	4.5	5.4	6.6	8.0
Increase in portfolio and other investment assets	6.9	13.3	-8.3	-3.5	-19.9	-5.1	-2.9	-2.6	-2.5	-2.4
Available financing	121.3	138.3	106.8	138.5	172.3	188.0	189.3	207.7	236.4	267.5
Foreign direct investment (net)	19.9	17.0	6.9	7.8	12.6	16.2	17.5	19.4	21.4	23.2
Portfolio flows	6.5	-0.4	4.9	20.9	25.2	23.9	21.6	22.1	26.3	27.6
Government Eurobonds	4.6	4.0	3.8	6.7	6.0	5.5	5.5	5.5	5.5	5.5
Private non-bank sector (net) 3/	1.9	-4.4	1.1	14.2	19.1	18.4	16.1	16.6	20.8	22.1
Medium and long-term debt financing	61.1	56.5	37.3	35.8	39.9	43.4	49.4	54.3	63.1	70.9
Public sector 1/	2.5	3.8	4.0	6.2	4.8	5.4	5.3	5.3	5.3	5.3
Private non-bank sector	48.2	44.5	27.3	21.9	25.3	28.5	29.0	30.6	35.3	38.0
Banks	10.4	8.1	6.0	7.6	9.8	9.6	15.0	18.4	22.5	27.6
Short-term financing	42.9	56.6	50.4	83.3	91.2	102.0	114.3	130.4	145.0	161.3
Public sector 1/	4.4	5.1	5.4	5.9	6.5	6.4	6.4	6.4	6.3	6.2
Trade credits	21.1	22.0	21.1	22.8	17.4	16.0	16.6	18.6	21.4	21.3
Banks and other private	17.4	29.5	23.9	54.6	67.3	79.5	91.3	105.5	117.3	133.8
Official transfers	0.8	0.7	1.2	0.6	0.7	0.7	0.8	0.9	1.0	1.0
Other 4/	2.1	5.1	7.0	5.1	9.0	0.0	0.0	0.0	0.0	0.0
NIR change (excl. short-term liabilities, - denotes increase)	-12.0	2.8	-0.8	-15.0	-6.4	1.7	-14.2	-19.5	-20.4	-16.7
Accumulation of gross reserves	-8.0	1.1	-0.1	-12.8	-3.6	3.8	-13.4	-19.5	-20.4	-16.7
IMF (net)	-4.0	1.7	-0.7	-2.2	-2.8	-2.1	-0.9	0.0	0.0	0.0
Purchases	1.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repurchases	-5.1	-1.9	-0.7	-2.2	-2.8	-2.1	-0.9	0.0	0.0	0.0
Memorandum item:										
Net public sector financing (incl. IMF, excl. reserves)	1.3	8.4	8.5	11.5	10.1	9.1	11.3	12.5	12.5	12.6

Sources: Turkish authorities; and IMF staff estimates and projections.

1/ Includes Central Bank of Turkey (excludes IMF purchases and repurchases).
2/ Series reflects stock of short term trade credits at end of previous year.
3/ Portfolio equity and domestic government debt (net).
4/ Errors and omissions and other liabilities.

Table 4. Consolidated Nonfinancial Public Sector Presentation, 2005–12

	2005	2006	2007	2008	2009	2010	2011	2012
							Proj.	
(Millions of Turkish lira)								
Nonfinancial public sector primary balance	30,973	34,468	26,637	14,857	-9,434	8,971	23,305	21,536
General government	29,362	33,028	23,408	14,423	-15,578	1,622	23,109	23,718
Central govt. and social security	26,649	33,560	22,374	17,033	-13,767	-5,089	18,040	19,406
Primary revenue	181,411	222,846	226,406	250,466	254,547	307,406	374,703	408,404
Tax revenue	119,627	137,480	152,835	168,109	172,417	210,532	257,429	283,259
Nontax revenue	20,975	27,186	23,939	25,443	27,374	29,571	33,014	36,580
Social security	40,808	58,180	49,632	56,914	54,757	67,303	84,260	88,565
Primary expenditure	154,761	189,286	204,032	233,433	268,314	312,495	356,663	388,998
Central government current	75,742	96,006	102,488	115,893	132,895	158,840	182,363	197,314
Central government capital	10,340	12,098	13,003	17,616	19,847	25,907	27,445	27,094
Social security 1/	68,680	81,183	88,540	99,925	115,572	127,749	146,854	164,590
Other general government	2,713	-532	1,034	-2,610	-1,811	6,710	5,069	4,313
State economic enterprises	1,611	1,440	3,230	434	6,144	7,349	196	-2,182
Memorandum items:								
Primary spending (less revenue transfers) 2/	141,943	175,162	186,840	213,177	247,010	286,136	325,703	354,544
Current	131,603	163,065	173,836	195,561	227,163	260,229	298,258	327,450
Capital	10,340	12,098	13,003	17,616	19,847	25,907	27,445	27,094
Pension spending	38,537	45,076	51,981	58,885	68,604	78,957	92,156	102,315
Health spending 3/	17,641	23,017	26,670	32,111	37,608	38,307	42,462	48,716
GDP	648,932	758,391	843,178	950,534	952,559	1,103,750	1,288,257	1,427,413
(Percent of GDP)								
Nonfinancial public sector primary balance	4.8	4.5	3.2	1.6	-1.0	0.8	1.8	1.5
General government	4.5	4.4	2.8	1.5	-1.6	0.1	1.8	1.7
Central govt. and social security	4.1	4.4	2.7	1.8	-1.4	-0.5	1.4	1.4
Primary revenue	28.0	29.4	26.9	26.4	26.7	27.9	29.1	28.6
Tax revenue	18.4	18.1	18.1	17.7	18.1	19.1	20.0	19.8
Nontax revenue	3.2	3.6	2.8	2.7	2.9	2.7	2.6	2.6
Social security	6.3	7.7	5.9	6.0	5.7	6.1	6.5	6.2
Primary expenditure	23.8	25.0	24.2	24.6	28.2	28.3	27.7	27.3
Central government current	11.7	12.7	12.2	12.2	14.0	14.4	14.2	13.8
Central government capital	1.6	1.6	1.5	1.9	2.1	2.3	2.1	1.9
Social security 1/	10.6	10.7	10.5	10.5	12.1	11.6	11.4	11.5
Other general government	0.4	-0.1	0.1	-0.3	-0.2	0.6	0.4	0.3
State economic enterprises	0.2	0.2	0.4	0.0	0.6	0.7	0.0	-0.2
Memorandum items:								
Primary spending (less revenue transfers) 2/	21.9	23.1	22.2	22.4	25.9	25.9	25.3	24.8
Current	20.3	21.5	20.6	20.6	23.8	23.6	23.2	22.9
Capital	1.6	1.6	1.5	1.9	2.1	2.3	2.1	1.9
Pension spending	5.9	5.9	6.2	6.2	7.2	7.2	7.2	7.2
Health spending 3/	2.7	3.0	3.2	3.4	3.9	3.5	3.3	3.4

Sources: Turkish authorities; and IMF staff estimates.

1/ Social Security Institutions plus budget spending on social security (such as civil servants' health and Green Card).
2/ Consolidated central government and social security spending.
3/ Measured as health spending by the Social Security Institution and budget for Green Card and civil servants. This is a
a lower estimate for health spending, as it excludes some items (such as Ministry of Health spending on medical personnel salaries).

Table 5. Public Nonfinancial Sector Finances, 2005–12
(Millions of Turkish lira)

	2005	2006	2007	2008	2009	2010	2011	2012
							Proj.	
Nonfinancial public sector primary balance	30,973	34,468	26,637	14,857	-9,434	8,971	23,305	21,536
Central government	26,725	32,669	21,594	17,245	-14,434	-5,434	18,040	19,406
Primary revenue	140,602	164,666	176,774	193,552	199,790	240,103	290,443	319,839
Tax revenue	119,627	137,480	152,835	168,109	172,417	210,532	257,429	283,259
Personal income taxes	24,490	28,983	34,447	38,030	38,445	40,392	46,861	51,923
Corporate income taxes	12,048	11,158	13,751	16,905	18,023	20,925	24,423	27,061
VAT	34,326	41,337	43,286	46,777	46,984	62,533	80,563	88,808
SCT	33,345	36,926	39,111	41,832	43,620	57,285	64,822	73,169
Other	15,419	19,077	22,241	24,565	25,345	29,398	40,760	42,299
Nontax revenue 1/	20,975	27,186	23,939	25,443	27,374	29,571	33,014	36,580
Primary expenditure	113,878	131,997	155,180	176,307	214,224	245,537	272,402	300,433
Personnel	37,389	42,887	49,373	55,264	63,136	73,361	87,257	95,459
Goods and services, *of which:*	15,186	19,001	22,258	24,412	29,594	28,823	32,855	34,402
Defense and security	6,498	7,630	7,599	8,327	9,644	9,444	11,406	12,638
Transfers, *of which:*	50,963	58,010	70,545	78,116	101,646	117,445	124,845	143,477
Social security institutions	23,762	18,543	33,063	35,133	52,685	55,039	56,685	69,256
Agricultural subsidies	3,707	4,747	5,555	5,809	4,495	5,817	7,089	6,845
Transfers of revenue shares	12,819	14,124	17,192	20,256	21,304	26,359	30,960	34,454
Capital transfers	1,384	2,637	3,542	3,174	4,314	6,736	5,324	3,622
Capital expenditure	10,340	12,098	13,003	18,516	19,847	25,907	27,445	27,094
Rest of the public sector	4,248	1,798	5,043	-2,388	5,000	14,405	5,265	2,131
Extrabudgetary funds	917	-1,988	1,345	-696	-903	-573	182	48
Revolving funds 2/	-673	116	594	240	496	1,224	766	135
Social security institutions	-76	891	780	-213	667	345	0	0
Unemployment insurance fund	1,682	2,316	2,876	3,580	2,305	3,380	3,606	3,559
Local governments 2/	786	-976	-3,780	-5,734	-3,709	2,679	515	571
State economic enterprises 3/	1,611	1,440	3,230	434	6,144	7,349	196	-2,182
Nonfinancial public sector overall balance	-3,400	-4,247	-15,084	-27,028	-53,013	-32,064	-10,507	-15,486
Interest expenditure (net)	34,373	38,715	41,722	41,885	43,579	41,035	33,812	37,022
Memorandum items:								
Central govt. overall balance (auth. def.)	-7,110	-4,625	-13,687	-17,670	-52,215	-39,599	-8,941	-11,911
Total revenue	152,576	173,483	190,360	209,598	215,060	254,028	307,475	336,305
Primary revenue (from above)	140,602	164,666	176,774	193,552	199,790	240,103	290,443	319,839
Interest revenue	8,431	4,267	3,923	4,036	5,003	4,562	5,402	5,039
Total expenditure	159,686	178,109	204,046	227,268	267,275	293,628	316,416	348,216
Primary expenditure (from above)	113,878	131,997	155,180	176,307	214,224	245,537	272,402	300,433
Interest expenditure	45,680	45,945	48,732	50,661	53,201	48,296	42,697	46,419

Table 5. Public Nonfinancial Sector Finances, 2005–12 (concluded)
(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012
							Proj.	
Nonfinancial public sector primary balance	4.8	4.5	3.2	1.6	-1.0	0.8	1.8	1.5
Central government	4.1	4.3	2.6	1.8	-1.5	-0.5	1.4	1.4
Primary revenue	21.7	21.7	21.0	20.4	21.0	21.8	22.5	22.4
Tax revenue	18.4	18.1	18.1	17.7	18.1	19.1	20.0	19.8
Personal income taxes	3.8	3.8	4.1	4.0	4.0	3.7	3.6	3.6
Corporate income taxes	1.9	1.5	1.6	1.8	1.9	1.9	1.9	1.9
VAT	5.3	5.5	5.1	4.9	4.9	5.7	6.3	6.2
SCT	5.1	4.9	4.6	4.4	4.6	5.2	5.0	5.1
Other	2.4	2.5	2.6	2.6	2.7	2.7	3.2	3.0
Nontax revenue 1/	3.2	3.6	2.8	2.7	2.9	2.7	2.6	2.6
Primary expenditure	17.5	17.4	18.4	18.5	22.5	22.2	21.1	21.0
Personnel	5.8	5.7	5.9	5.8	6.6	6.6	6.8	6.7
Goods and services, *of which* :	2.3	2.5	2.6	2.6	3.1	2.6	2.6	2.4
Defense and security	1.0	1.0	0.9	0.9	1.0	0.9	0.9	0.9
Transfers, *of which* :	7.9	7.6	8.4	8.2	10.7	10.6	9.7	10.1
Social security institutions	3.7	2.4	3.9	3.7	5.5	5.0	4.4	4.9
Agricultural subsidies	0.6	0.6	0.7	0.6	0.5	0.5	0.6	0.5
Transfers of revenue shares	2.0	1.9	2.0	2.1	2.2	2.4	2.4	2.4
Capital transfers	0.2	0.3	0.4	0.3	0.5	0.6	0.4	0.3
Capital expenditure	1.6	1.6	1.5	1.9	2.1	2.3	2.1	1.9
Rest of the public sector	0.7	0.2	0.6	-0.3	0.5	1.3	0.4	0.1
Extrabudgetary funds	0.1	-0.3	0.2	-0.1	-0.1	-0.1	0.0	0.0
Revolving funds 2/	-0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0
Social security institutions	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Unemployment insurance fund	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.2
Local governments 2/	0.1	-0.1	-0.4	-0.6	-0.4	0.2	0.0	0.0
State economic enterprises 3/	0.2	0.2	0.4	0.0	0.6	0.7	0.0	-0.2
Nonfinancial public sector overall balance	-0.5	-0.6	-1.8	-2.8	-5.6	-2.9	-0.8	-1.1
Interest expenditure (net)	5.3	5.1	4.9	4.4	4.6	3.7	2.6	2.6
Memorandum items:								
Central govt. overall balance (auth. def.)	-1.1	-0.6	-1.6	-1.9	-5.5	-3.6	-0.7	-0.8
Total revenue	23.5	22.9	22.6	22.1	22.6	23.0	23.9	23.6
Primary revenue (from above)	21.7	21.7	21.0	20.4	21.0	21.8	22.5	22.4
Interest revenue	1.3	0.6	0.5	0.4	0.5	0.4	0.4	0.4
Total expenditure	24.6	23.5	24.2	23.9	28.1	26.6	24.6	24.4
Primary expenditure (from above)	17.5	17.4	18.4	18.5	22.5	22.2	21.1	21.0
Interest expenditure	7.0	6.1	5.8	5.3	5.6	4.4	3.3	3.3
Nominal GDP (billions of Turkish lira)	649	758	843	951	953	1,104	1,288	1,427

Sources: Turkish authorities; and IMF staff estimates.

1/ Excluding privatization proceeds, transfers from CBT, and interest receipts.

2/ Excluded from consolidated government sector.

3/ Excluding severance payments for retirees.

Table 6. General Government Fiscal Balances 2005–12 1/
(Millions of Turkish lira)

	2005	2006	2007	2008	2009	2010	2011	2012
Revenue (a)	210,025	246,871	259,842	292,677	310,162	364,099	439,482	479,934
Of which: primary revenue	198,268	238,647	251,164	282,704	298,867	354,865	429,521	469,286
Taxes	117,588	142,628	152,565	172,299	176,193	216,437	264,395	290,954
Taxes on income, profits, and capital gains	37,491	45,475	48,643	54,935	56,468	61,317	71,283	78,984
Payable by individuals	25,954	31,481	33,674	38,030	38,445	40,392	46,861	51,923
Payable by corporations and other enterprises	11,537	13,994	14,969	16,905	18,023	20,925	24,423	27,061
Taxes on goods and services	61,057	74,059	79,219	89,466	90,925	120,932	146,651	163,356
Taxes on international trade and transactions	0	2,137	2,478	2,809	2,515	3,319	4,780	5,095
Taxes not elsewhere classified	19,039	20,956	22,225	25,089	26,286	30,869	41,680	43,520
Social contributions	38,841	47,112	50,395	56,914	54,757	67,303	84,260	88,565
*Of which: s*ocial security contributions	38,841	47,112	50,395	56,914	54,757	67,303	84,260	88,565
Grants	0	0	0	1,300	4,141	3,664	1,500	1,500
Other revenue	53,595	57,130	56,882	62,164	75,071	76,694	89,327	98,916
Of which: interest income	11,757	8,224	8,678	9,973	11,295	9,233	9,961	10,648
Expense (b)	189,420	219,915	246,771	287,025	328,451	352,823	398,580	439,378
Of which: primary expense	142,930	173,153	197,062	235,253	273,653	302,869	354,794	391,655
Compensation of employees	40,658	50,046	55,936	65,565	74,151	85,464	100,943	110,623
Purchases/use of goods and services	19,837	24,418	27,291	31,989	36,265	41,056	47,936	50,891
Interest	46,489	46,762	49,709	51,772	54,798	49,954	43,787	47,723
Social benefits	68,680	81,183	88,540	99,925	115,572	127,749	146,854	164,590
*Of which: s*ocial security benefits	38,537	45,076	51,981	58,885	68,604	78,957	92,156	102,315
Expense not elsewhere classified	13,755	17,506	25,294	37,774	47,665	48,600	59,061	65,551
Gross operating balance (c=a–b)	20,605	26,956	13,071	5,652	-18,290	11,276	40,901	40,556
Of which: primary	55,338	65,494	54,102	47,451	25,214	51,997	74,727	77,632
Net acquisition of nonfinancial assets (d)	22,267	25,567	24,554	26,793	33,135	38,923	42,636	43,926
Of which: capital spending	22,267	27,408	30,634	35,907	35,179	42,298	46,576	48,292
Net lending / borrowing (e=c-d)	-1,661	1,389	-11,483	-21,141	-51,424	-27,647	-1,735	-3,370
Of which: primary	33,071	39,927	29,548	20,658	-7,921	13,074	32,090	33,705
Statistical discrepancy (i=e-h) 2/	-14,606	-6,851	-34,898	8,009	-8,647	-12,015	16,986	-10,016
Change in net financial worth (h=f-g)	12,944	8,240	23,415	-29,150	-42,777	-15,632	-18,721	6,646
Net acquisition of financial assets (f)	21,751	19,019	7,175	14,645	16,171	10,878	19,128	19,390
Of which: policy lending	3,709	5,522	3,711	4,582	5,572	8,803	5,907	6,580
Domestic	...	...	...	...	...	...	19,969	22,519
Currency and deposits	...	...	...	...	...	...	14,062	15,939
Loans	...	...	...	...	...	...	5,907	6,580
Foreign	...	...	...	...	...	...	1,459	1,452
Net incurrence of liabilities (g)	8,807	10,780	-16,239	43,795	58,948	26,510	37,849	12,744
Domestic	...	...	...	...	...	...	9,142	13,812
Foreign	...	...	...	...	...	...	35,503	-1,100
Memorandum Items:								
SEE primary balance	1,611	1,440	3,230	434	6,144	7,349	196	-2,182
NFPS Net lending / borrowing	-51	2,829	-8,253	-20,707	-45,280	-20,298	-1,539	-5,552
Of which: primary	34,682	41,367	32,778	21,092	-1,777	20,423	32,287	31,523

Table 6. General Government Fiscal Balances 2005–12 (concluded) 1/
(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012
Revenue (a)	32.4	32.6	30.8	30.8	32.6	33.0	34.1	33.6
Of which: primary revenue	30.6	31.5	29.8	29.7	31.4	32.2	33.3	32.9
Taxes	18.1	18.8	18.1	18.1	18.5	19.6	20.5	20.4
Taxes on income, profits, and capital gains	5.8	6.0	5.8	5.8	5.9	5.6	5.5	5.5
Payable by individuals	4.0	4.2	4.0	4.0	4.0	3.7	3.6	3.6
Payable by corporations and other enterprises	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
Taxes on goods and services	9.4	9.8	9.4	9.4	9.5	11.0	11.4	11.4
Taxes on international trade and transactions	0.0	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Taxes not elsewhere classified	2.9	2.8	2.6	2.6	2.8	2.8	3.2	3.0
Social contributions	6.0	6.2	6.0	6.0	5.7	6.1	6.5	6.2
*Of which: s*ocial security contributions	6.0	6.2	6.0	6.0	5.7	6.1	6.5	6.2
Grants	0.0	0.0	0.0	0.1	0.4	0.3	0.1	0.1
Other revenue	8.3	7.5	6.7	6.5	7.9	6.9	6.9	6.9
Of which: interest income	1.8	1.1	1.0	1.0	1.2	0.8	0.8	0.7
Expense (b)	29.2	29.0	29.3	30.2	34.5	32.0	30.9	30.8
Of which: primary expense	22.0	22.8	23.4	24.7	28.7	27.4	27.5	27.4
Compensation of employees	6.3	6.6	6.6	6.9	7.8	7.7	7.8	7.7
Purchases/use of goods and services	3.1	3.2	3.2	3.4	3.8	3.7	3.7	3.6
Interest	7.2	6.2	5.9	5.4	5.8	4.5	3.4	3.3
Social benefits	10.6	10.7	10.5	10.5	12.1	11.6	11.4	11.5
*Of which: s*ocial security benefits	5.9	5.9	6.2	6.2	7.2	7.2	7.2	7.2
Expense not elsewhere classified	2.1	2.3	3.0	4.0	5.0	4.4	4.6	4.6
Gross operating balance (c=a–b)	3.2	3.6	1.6	0.6	-1.9	1.0	3.2	2.8
Of which: primary	8.5	8.6	6.4	5.0	2.6	4.7	5.8	5.4
Net acquisition of nonfinancial assets (d)	3.4	3.4	2.9	2.8	3.5	3.5	3.3	3.1
Of which: capital spending	3.4	3.6	3.6	3.8	3.7	3.8	3.6	3.4
Net lending / borrowing (e=c-d)	-0.3	0.2	-1.4	-2.2	-5.4	-2.5	-0.1	-0.2
Of which: primary	5.1	5.3	3.5	2.2	-0.8	1.2	2.5	2.4
Statistical discrepancy (i=e-h) 2/	-2.3	-0.9	-4.1	0.8	-0.9	-1.1	1.3	-0.7
Change in net financial worth (h=f-g)	2.0	1.1	2.8	-3.1	-4.5	-1.4	-1.5	0.5
Net acquisition of financial assets (f)	3.4	2.5	0.9	1.5	1.7	1.0	1.5	1.4
Of which: policy lending	0.6	0.7	0.4	0.5	0.6	0.8	0.5	0.5
Domestic	...	...	...	...	...	...	1.6	1.6
Currency and deposits	...	...	...	...	...	...	1.1	1.1
Loans	...	...	...	...	...	...	0.5	0.5
Foreign	...	...	...	...	...	...	0.1	0.1
Net incurrence of liabilities (g)	1.4	1.4	-1.9	4.6	6.2	2.4	2.9	0.9
Domestic	...	...	...	...	...	...	0.7	1.0
Foreign	...	...	...	...	...	...	2.8	-0.1
Memorandum Items:								
SEE primary balance	0.2	0.2	0.4	0.0	0.6	0.7	0.0	-0.2
NFPS Net lending / borrowing	0.0	0.4	-1.0	-2.2	-4.8	-1.8	-0.1	-0.4
Of which: primary	5.3	5.5	3.9	2.2	-0.2	1.9	2.5	2.2

Sources: Turkish authorities; and IMF staff estimates.

1/ GFSM 2001 presentation.

2/ A positive (negative) statistical discrepancy indicates that the above-the-line net lending exceeds (is less than) the identified below-the-line increase in net financial worth.

Table 7. Medium-Term Scenario, 2003–16
(Percent change, unless otherwise indicated)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2003–10	2011–16
											Proj.				Average	Average
Real GDP	5.3	9.4	8.4	6.9	4.7	0.7	-4.8	9.0	7.5	2.0	3.0	3.4	3.9	4.1	4.9	4.0
Real domestic demand	8.8	11.7	9.5	7.0	5.7	-1.2	-7.4	13.4	9.7	1.0	2.0	3.7	4.8	5.4	5.9	4.4
Private consumption	10.2	11.0	7.9	4.6	5.5	-0.3	-2.3	6.7	6.8	0.5	2.0	4.0	5.6	6.0	5.4	4.2
Private investment	23.7	36.1	16.2	15.0	2.6	-9.0	-22.5	33.5	25.2	0.6	2.0	3.5	4.0	5.0	12.0	6.7
Public spending	-6.0	2.9	7.5	6.9	6.5	4.5	5.5	5.3	5.2	3.6	2.3	2.3	2.3	2.3	4.1	3.0
Exports	6.9	11.2	7.9	6.6	7.3	2.7	-5.0	3.4	4.6	4.2	4.4	3.5	3.6	3.6	5.1	4.0
Imports	23.5	20.8	12.2	6.9	10.7	-4.1	-14.3	20.7	13.3	-0.1	0.6	4.5	6.9	8.3	9.5	5.6
Contributions to GDP growth (percent)																
Real domestic demand	8.5	11.8	9.8	7.2	5.9	-1.2	-7.6	13.4	10.1	1.0	2.1	3.8	5.0	5.6	6.0	4.6
Private consumption	6.8	7.7	5.6	3.3	3.8	-0.2	-1.6	4.7	4.7	0.3	1.4	2.7	3.8	4.1	3.8	2.8
Private investment	3.1	5.6	3.1	3.1	0.6	-2.0	-4.4	5.4	5.0	0.1	0.5	0.8	0.9	1.1	1.8	1.4
Public spending	-0.9	0.4	1.0	0.9	0.8	0.6	0.8	0.8	0.7	0.4	0.3	0.4	0.4	0.4	0.5	0.4
Net exports	-3.3	-2.4	-1.4	-0.3	-1.2	1.9	2.7	-4.4	-2.6	1.0	0.9	-0.4	-1.1	-1.5	-1.0	-0.6
Exports	1.6	2.7	1.9	1.6	1.8	0.7	-1.3	0.9	1.1	1.0	1.0	0.9	0.9	0.9	1.2	1.0
Imports	-4.9	-5.1	-3.3	-1.9	-3.0	1.2	4.0	-5.2	-3.7	0.0	-0.2	-1.3	-2.0	-2.4	-2.3	-1.6
Saving-investment balance (percent of GDP)																
Public saving-investment balance	-10.6	-3.9	-0.6	-0.5	-1.8	-3.3	-5.8	-3.8	-1.7	-2.0	-2.3	-2.7	-2.8	-2.9	-3.8	-2.4
Private saving-investment balance	8.1	0.3	-4.0	-5.6	-4.1	-2.4	3.5	-2.7	-8.4	-5.8	-3.7	-3.2	-3.5	-4.0	-0.9	-4.8
Employment rate	...	41.3	41.5	41.6	41.6	41.7	41.2	43.0	...	...	...	...	...	...	41.7	...
Unemployment rate (percent)	10.5	10.3	10.6	10.3	10.3	11.0	14.1	12.0	...	...	...	...	...	...	11.1	...
GDP deflator	23.3	12.4	7.1	9.3	6.2	12.0	5.3	6.3	8.6	8.6	5.7	5.1	4.9	4.9	10.2	6.3
Consumer prices																
Period average	25.3	8.6	8.2	9.6	8.8	10.4	6.3	8.6	6.4	8.4	5.9	5.3	5.0	5.0	10.7	6.0
End-period	18.4	9.4	7.7	9.7	8.4	10.1	6.5	6.4	9.5	6.4	5.6	5.0	5.0	5.0	9.6	6.1
Output gap (percent of potential GDP)	-3.4	-0.4	1.7	3.1	3.5	1.3	-3.6	0.2	2.9	0.9	0.0	-0.6	-0.8	-0.8	0.3	0.3
Nonfinancial public sector (percent of GDP)																
Primary balance	4.7	5.5	4.8	4.5	3.2	1.6	-1.0	0.8	1.8	1.5	1.1	0.7	0.7	0.6	3.0	1.1
Overall balance	-7.3	-3.6	-0.5	-0.6	-1.8	-2.8	-5.6	-2.9	-0.8	-1.1	-1.4	-1.8	-1.9	-2.0	-3.1	-1.5
General government gross debt (EU definition)	67.7	59.6	52.7	46.5	39.9	40.0	46.1	42.2	39.1	36.2	34.7	33.9	33.3	32.8	49.4	35.0
External indicators																
Current account (percent of GDP)	-2.5	-3.7	-4.6	-6.1	-5.9	-5.7	-2.3	-6.5	-10.2	-7.8	-6.1	-5.9	-6.3	-6.8	-4.7	-7.2
Gross external debt (percent of GDP) 1/	47.5	41.0	35.2	39.3	38.4	38.4	43.7	39.5	42.9	44.7	45.5	46.5	47.2	47.9	40.4	45.8
Real effective exchange rate (CPI-based, levels, EOP)	102.0	103.6	121.1	112.0	131.3	115.0	116.8	126.2	110.8	115.2	118.8	122.5	126.3	129.6	116.0	...

Sources: Turkish authorities; and IMF staff estimates and projections.

1/ The external debt ratio is calculated by dividing external debt numbers in U.S. dollars based on official Treasury figures by GDP in U.S. dollars calculated by staff using the average exchange rate (consolidated from daily data published by the CBT).

Table 8. Banking System at a Glance, 2005–11
(Percent, unless otherwise indicated)

	2005	2006	2007	2008	2009	2010	2011 1/
				Banking system			
Balance sheet and quality of loans							
Assets (percent of GDP)	62.7	65.9	69.0	77.1	87.6	91.2	94.2
Loans / total assets	38.4	43.8	49.1	50.2	47.1	52.2	54.5
Government securities / total assets	35.2	31.8	28.3	26.5	31.5	28.6	23.8
Loans / total deposits	62.2	71.2	80.0	80.8	76.3	85.2	96.7
Year-on-year loan growth	57.4	40.0	30.4	28.6	6.9	33.9	39.1
Deposits/total Assets	61.8	61.6	61.4	62.1	61.7	61.3	56.3
Funds borrowed / total assets	13.4	14.2	12.3	12.7	10.3	12.2	13.3
NPLs (gross, percent of total loans)	5.0	3.9	3.6	3.8	5.6	3.8	2.8
Provisioning ratio (percent of NPLs)	88.7	89.7	86.8	79.8	83.6	83.8	81.4
FX exposure (banking system)							
FX assets / FX liabilities (on-balance sheet only)	87.4	87.7	84.6	86.9	84.7	84.0	83.2
FX loans / total loans	27.4	25.5	24.0	28.7	26.6	27.0	29.3
FX deposits / total deposits	36.8	39.4	35.4	35.3	33.7	29.7	33.1
Capital ratios (banking system)							
Capital adequacy ratio	23.7	21.9	18.9	18.0	20.6	19.0	16.4
Shareholders' equity / total assets	13.4	11.9	13.0	11.8	13.3	13.4	11.7
Profitability and liquidity ratio (banking system)							
Return on assets 1/	1.5	2.3	2.6	1.8	2.4	2.2	1.6
Return on equity 1/	10.9	19.1	19.6	15.5	18.2	16.4	13.8
Liquid assets / total assets 2/	35.3	34.7	31.7	23.7	29.4	27.7	28.1
				State-owned banks			
Balance sheet and quality of loans							
Assets (percent of GDP)	20.8	20.5	21.0	23.5	28.2	28.9	28.6
Loans / total assets	26.7	32.8	38.2	41.3	41.0	48.3	51.2
Government securities / total assets	49.1	44.6	39.5	38.2	39.9	35.0	30.1
Loans / total deposits	38.0	46.8	54.2	59.1	60.6	70.1	83.9
Year-on-year loan growth	43.4	42.1	32.4	36.5	19.4	39.8	39.1
Deposits / total assets	70.1	70.1	70.5	69.9	67.6	69.0	61.0
Funds borrowed / total assets	4.6	5.8	5.1	5.7	4.8	6.3	8.2
NPLs (gross, percent of total loans)	7.5	5.1	4.1	3.8	4.5	3.3	2.6
Provisioning ratio (percent of NPLs)	96.8	96.6	96.1	88.0	86.7	87.7	87.0
Memorandum items:							
Share of assets held by the five largest banks 3/	63	63	62	62	63	63	66
Share of assets held by the three largest public banks 3/	33	30	29	29	31	31	31
Share of assets held by the three largest private banks 3/	40	38	38	39	39	38	40
Number of banks	51	50	50	49	49	49	48
Number of domestic employees	138,169	150,462	167,212	182,100	183,614	190,586	194,106
Number of branches	...	7,302	8,122	9,304	9,581	10,066	10,501

Sources: BRSA; CBT; Turkish Banker's Association; and IMF staff calculations.

1/ Annualized, based on data through September, 2011.
2/ Liquid assets include cash, receivables from the CBT, money markets, and banks, and securities held for trading and sale.
3/ As of June, 2011. Data from the Banks Association of Turkey.

APPENDIX I: EXTERNAL DEBT SUSTAINABILITY ANALYSIS

Under the baseline, gross external debt, while increasing, remains sustainable, but is vulnerable to a large exchange rate shock (Appendix Table I.1). External debt is expected to rise to 48 percent of GDP by 2016 on account of a still-wide current account deficit, slower GDP growth than prior to the crisis, and a large share of debt-creating inflows. Standard tests show the external debt is robust to a combined ¼ standard deviation shock in interest rate, growth, and current account. External debt will remain below 60 percent of GDP under individual shocks or a combination of the three shocks. However, an additional real depreciation of 30 percent in 2011 would cause gross external debt to increase to 70 percent of GDP in 2012. Nevertheless, a real exchange rate shock of this size would likely further precipitate adjustment in the current account and other second-round effects that would partially mitigate the impact on external debt, but which are not captured in a static debt sustainability exercise.

Turkey's decreasing exposure to the Fund and moderate external debt levels should ensure adequate capacity to repay the Fund (Appendix Table I.2). Under the baseline scenario, the exposure to Turkey would decline very rapidly and fall to only SDR 1.9 billion at end-2011 (129 percent of new quota, 0.4 percent of GDP, or 3.3 percent of reserves). Annual debt service to the Fund would remain very small at around 0.1-0.4 percent of GDP.

Appendix Table I.1. Turkey: External Debt Sustainability Framework, 2006–16

(Percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing non-interest current account 7/
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Baseline: external debt 1/	39.3	38.4	38.4	43.7	39.5	42.9	44.7	45.5	46.5	47.2	47.9	-6.8
Change in external debt	4.1	-0.8	0.0	5.3	-4.3	3.4	1.9	0.7	1.1	0.6	0.8	
Identified external debt-creating flows (4+8+9)	-1.0	-5.2	-0.8	8.0	-2.1	5.3	4.0	1.7	1.4	1.1	1.7	
Current account deficit, excluding interest payments	4.9	4.8	4.2	0.7	5.4	9.2	7.0	5.5	5.3	5.7	6.2	
Deficit in balance of goods and services	6.3	6.6	6.6	3.2	7.2	10.8	8.9	7.4	7.2	7.6	8.1	
Exports	22.3	22.0	23.4	22.4	20.6	23.1	23.7	23.3	22.9	22.1	21.4	
Imports	28.6	28.6	30.1	25.7	27.9	33.8	32.7	30.7	30.1	29.8	29.5	
Net non-debt creating capital inflows (negative)	-4.0	-3.9	-2.3	-1.6	-1.5	-2.0	-3.0	-3.1	-3.1	-3.5	-3.3	
Automatic debt dynamics 2/	-1.9	-6.1	-2.7	8.9	-6.1	-1.9	-0.1	-0.7	-0.8	-1.1	-1.2	
Contribution from nominal interest rate	1.2	1.2	1.6	1.7	1.1	0.9	0.8	0.6	0.6	0.6	0.6	
Contribution from real GDP growth	-2.2	-1.5	-0.2	2.2	-3.3	-2.8	-0.8	-1.2	-1.4	-1.7	-1.8	
Contribution from price and exchange rate changes 3/	-0.9	-5.8	-4.0	5.0	-3.9	...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 4/	5.1	4.4	0.8	-2.7	-2.2	-1.9	-2.1	-1.0	-0.3	-0.4	-1.0	
External debt-to-exports ratio (percent)	175.9	174.7	163.9	195.1	191.2	186.0	188.6	195.3	203.6	213.2	224.3	
Gross external financing need (billions of U.S. dollars) 5/	108.1	121.8	132.1	113.3	132.0	194.9	194.6	193.9	212.7	237.9	264.5	
Percent of GDP	20.4	18.8	18.1	18.4	17.9	25.1	24.0	22.1	22.4	23.0	23.4	
Scenario with key variables at their historical averages 6/						42.9	38.8	37.2	36.1	35.1	33.7	-4.4
Key Macroeconomic Assumptions Underlying Baseline												
Real GDP growth (percent)	6.9	4.7	0.7	-4.8	8.9	7.5	2.0	3.0	3.4	3.9	4.1	
GDP deflator in U.S. dollars (percent change)	2.6	17.2	11.8	-11.6	9.9	-1.9	2.3	5.1	4.8	4.9	4.9	
Nominal external interest rate (percent)	3.7	3.6	4.6	3.6	3.1	2.5	1.8	1.4	1.4	1.3	1.3	
Growth of exports (U.S. dollar terms, percent)	12.9	20.9	19.8	-19.5	10.2	17.8	7.4	6.2	6.4	5.5	5.6	
Growth of imports (U.S. dollar terms, percent)	18.1	22.5	18.3	-28.2	30.0	28.1	0.8	1.6	6.3	7.9	8.3	
Current account balance, excluding interest payments	-4.9	-4.8	-4.2	-0.7	-5.4	-9.2	-7.0	-5.5	-5.3	-5.7	-6.2	
Net nondebt creating capital inflows	4.0	3.9	2.3	1.6	1.5	2.0	3.0	3.1	3.1	3.5	3.3	

1/ The external debt ratio is calculated by dividing external debt numbers in U.S. dollars based on official Treasury figures by GDP in U.S. dollars calculated by staff using the average exchange rate (consolidated from daily data published by the CBT).

2/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in U.S. dollar terms, g = real GNP growth rate,   e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

3/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

4/ For projection, line includes the impact of price and exchange rate changes.

5/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period. Differs slightly from external financing requirement in Staff Report because includes official transfers and IMF repurchases but excludes increase in portfolio and other investment assets.

6/ The key variables include real GNP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GNP.

7/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Appendix Figure I.1. Turkey: External Debt Sustainability: Bound Tests 1/
(External debt in percent of GDP)
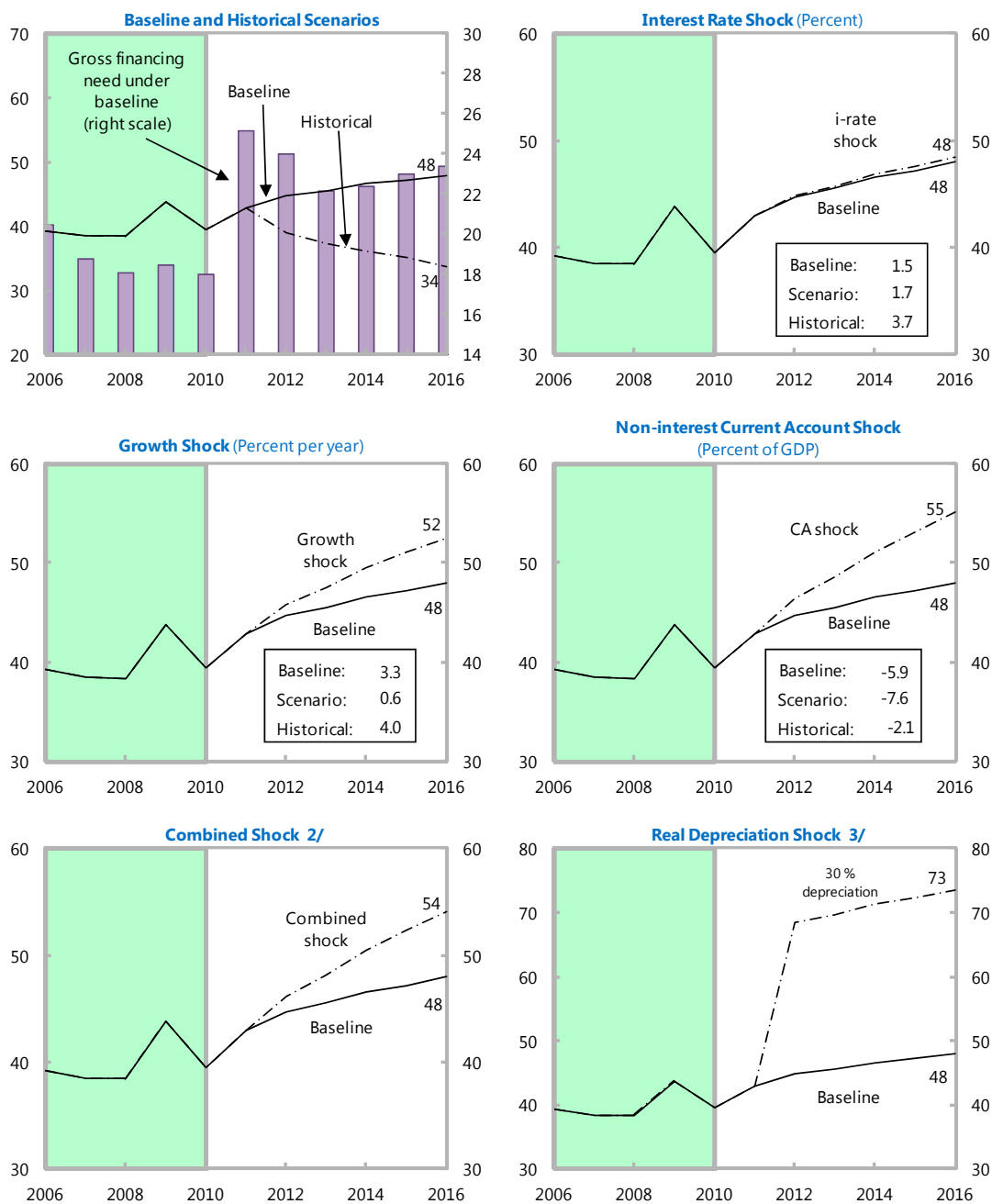
Source: IMF staff estimates.
   1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks.
Figures in the boxes represent average projections for the respective variables in the baseline and scenario
being presented. Ten-year historical average for the variable is also shown.
   2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account
balance.
   3/ One-time real depreciation of 30 percent occurs in 2011.

Appendix Table I.2. Turkey: Indicators of Fund Credit, 2007–16 1/

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Outstanding Fund credit (end of period)										
Billions of SDRs	4.5	5.5	5.1	3.7	1.9	0.6	0.0	0.0	0.0	0.0
Percent of quota 2/	380	465	349	251	129	39	0	0	0	0
Percent of exports of goods and nonfactor services	5	5	6	4	2	0	0	0	0	0
Percent of GDP	1	1	1	1	0	0	0	0	0	0
Percent of public sector external debt	10	11	10	6	3	1	0	0	0	0
Percent of overall external debt	3	3	3	2	1	0	0	0	0	0
Percent of end-period foreign reserves	9	11	11	6	3	1	0	0	0	0
Repurchases of Fund Credit										
Billions of SDRs	3.4	1.2	0.5	1.4	1.8	1.3	0.6	0.0	0.0	0.0
Percent of quota 2/	283	104	38	119	149	110	47	0	0	0
Percent of new quota	283	104	31	98	122	90	39	0	0	0
Percent of exports of goods and nonfactor services	4	1	1	1	2	1	0	0	0	0
Percent of GDP	1	0	0	0	0	0	0	0	0	0
Percent of public sector external debt service	27	11	5	12	16	11	5	0	0	0
Percent of overall medium- and long-term external debt service	11	3	1	5	6	5	2	0	0	0
Percent of start period foreign reserves	8	3	1	3	3	2	1	0	0	0
Percent gross public sector external financing 3/	31	15	6	16	20	14	7	0	0	0
Net Fund Resource Flows 4/										
Billions of SDRs	-3.0	1.0	-0.6	-1.5	-1.8	-1.3	-0.6	0.0	0.0	0.0
Percent of quota 2/	-252	84	-47	-126	-153	-111	-47	0	0	0
Percent of new quota	-252	84	-38	-103	-125	-91	-39	0	0	0
Percent of exports of goods and nonfactor services	-3	1	-1	-2	-2	-1	0	0	0	0
Percent of GDP	-1	0	0	0	0	0	0	0	0	0
Percent of public sector external debt service	-24	9	-6	-13	-17	-11	-5	0	0	0
Percent of overall medium- and long-term external debt service	-10	3	-2	-5	-7	-5	-2	0	0	0
Percent start period foreign reserves	-7	2	-1	-3	-3	-2	-1	0	0	0
Percent gross public sector external financing 3/	-28	12	-8	-17	-21	-14	-7	0	0	0
Memorandum item:										
SDR per U.S. dollar, period average	0.63	0.66	0.63	0.65	0.63	0.63	0.63	0.63	0.63	0.63

Source: IMF staff estimates and projections.

1/ Projected on an obligations basis.
2/ Quota of SDR 1455.8 million.
3/ Consolidated government and CBT. Includes reserve accumulation before repurchases.
4/ Purchases less repurchases and charges.

APPENDIX II: PUBLIC DEBT SUSTAINABILITY ANALYSIS

Public debt is projected to moderate as a share of GDP, but large shocks could interrupt its decline. Under the baseline, both general government debt (EU definition) and nonfinancial public sector net debt decline over the projection period (Appendix Table I.1). Standard tests indicate that public debt sustainability is generally robust to various combinations of shocks, although sizable contingent liabilities or large exchange rate depreciations would generate large initial jumps in the debt ratio. An alternative low growth scenario in the medium-term (real GDP growth 1.5 percentage points lower each year during 2012–16) would significantly increase debt ratios in the absence of fiscal adjustment.

(Percent of GDP, unless otherwise indicated)

	Actual							Projections					
	2006	2007	2008	2009	2010			2011	2012	2013	2014	2015	2016
General government gross debt 2/	46.5	39.9	40.0	46.1	42.2			39.1	36.1	34.5	33.7	33.1	32.6
Nonfinancial (NFPS) public sector net debt	40.1	34.4	34.5	39.5	36.6			33.4	30.7	29.5	28.7	28.1	27.6
Of which: foreign-currency denominated	14.5	10.9	11.8	11.6	10.5			11.1	9.9	9.5	8.5	7.7	6.3
Change in NFPS net debt	-6.3	-5.7	0.1	4.9	-2.9			-3.1	-2.8	-1.2	-0.7	-0.7	-0.5
Identified debt-creating flows	-7.6	-6.2	0.2	4.2	-3.8			-4.0	-2.9	-1.4	-0.9	-0.8	-0.6
Primary deficit	-4.7	-3.1	-1.6	1.0	-0.8			-1.8	-1.5	-1.1	-0.7	-0.7	-0.6
Automatic debt dynamics	-0.8	-1.5	3.5	4.4	-1.5			-1.3	-0.6	0.0	0.1	0.2	0.2
Contribution from interest rate/growth differential	-1.6	0.9	0.5	4.5	-1.7			-2.6	-0.7	0.0	0.1	0.2	0.2
Of which: contribution from real interest rate	1.1	2.6	0.7	2.8	1.4			-0.3	-0.1	0.8	1.0	1.2	1.3
Of which: contribution from real GDP growth	-2.7	-1.7	-0.2	1.7	-3.1			-2.3	-0.6	-0.8	-0.9	-1.0	-1.0
Contribution from exchange rate depreciation	0.8	-2.4	3.0	-0.1	0.2			1.3	0.1	0.1	0.0	0.0	0.0
Other identified non-debt-creating flows	-2.2	-1.5	-1.8	-1.2	-1.5			-0.9	-0.8	-0.3	-0.3	-0.2	-0.2
Privatization receipts (negative)	-1.6	-0.8	-1.0	-0.3	-0.4			-0.4	-0.4	-0.1	-0.1	-0.1	-0.1
Other sources (includes state bank dividends and central bank profits)	-0.6	-0.7	-0.7	-1.2	-1.1			-0.5	-0.4	-0.2	-0.2	-0.1	-0.1
Residual 3/	1.2	0.3	-0.1	0.7	0.9			0.9	0.2	0.2	0.2	0.1	0.1
						10-Year Historical Average	10-Year Standard Deviation						
Key Macroeconomic and Fiscal Assumptions													
Real GDP growth (percent)	6.9	4.7	0.7	-4.8	9.0	4.0	5.5	7.5	2.0	3.0	3.4	3.9	3.9
Average nominal interest rate on public debt (percent) 4/	12.9	13.7	14.4	13.3	10.9	20.6	13.9	8.4	8.6	8.7	9.0	9.7	10.0
Average real interest rate (nominal rate minus change in GDP deflator, percent)	3.5	7.5	2.4	8.0	4.6	7.5	4.8	-0.2	0.0	3.0	3.9	4.8	5.1
Nominal appreciation (increase in U.S. dollar value of local currency, percent)	-5.0	21.3	-23.0	0.4	-2.1	-5.2	21.2	-12.0	-0.6	-0.6	0.0	0.0	0.0
Inflation rate (GDP deflator, percent)	9.3	6.2	12.0	5.3	6.3	17.2	16.0	8.6	8.6	5.7	5.1	4.9	4.9
A. Alternative Scenarios (based on nonfinancial public sector net debt)													
A1. Key variables are at their historical averages in 2011–16					36.6			35.0	32.4	31.1	30.2	29.3	28.6
A2. No policy change (constant primary balance) in 2011–16					36.6			35.4	34.6	34.9	35.4	35.9	36.4
A3. 2011 GDP growth is reduced (relative to baseline) by one standard deviation					36.6			35.6	32.9	31.8	31.2	30.6	30.1
B. Bound Tests													
B1. Real interest rate is at baseline plus one-half standard deviation					36.6			33.5	31.2	30.5	30.4	30.3	30.4
B2. Real GDP growth is at baseline minus one-half standard deviation					36.6			33.5	31.8	31.7	32.1	32.5	33.1
B3. Primary balance is at baseline minus one-half standard deviation					36.6			33.5	31.9	31.9	32.3	32.8	33.4
B4. Combination of B1-B3 using one-quarter standard deviation shocks					36.6			33.5	32.0	32.2	32.9	33.6	34.5
B5. One time 35 percent real depreciation in 2012 5/					36.6			33.5	37.0	35.8	35.1	34.4	33.8
C. Tailored Tests													
C1. Slow recovery 6/					36.6			33.5	31.8	32.2	33.5	35.3	37.7

1/ The baseline scenario assumes that the government does not save revenue overperformance in 2011 and onwards.
2/ General government debt consistent with the Maastricht definition.
3/ For projections, it includes exchange rate changes.
4/ Calculated as nominal interest expenditure divided by previous period debt stock.
5/ Real depreciation is defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).
6/ Assumes that real GDP growth is 1.5 percentage points lower each year during 2012-16. The primary surplus is adjusted for the cumulative shortfall in growth (relative to baseline).

Appendix Figure II.1. Turkey: Public Debt Sustainability: Bound Tests 1/ 2/
(Net NFPS debt in percent of GDP)
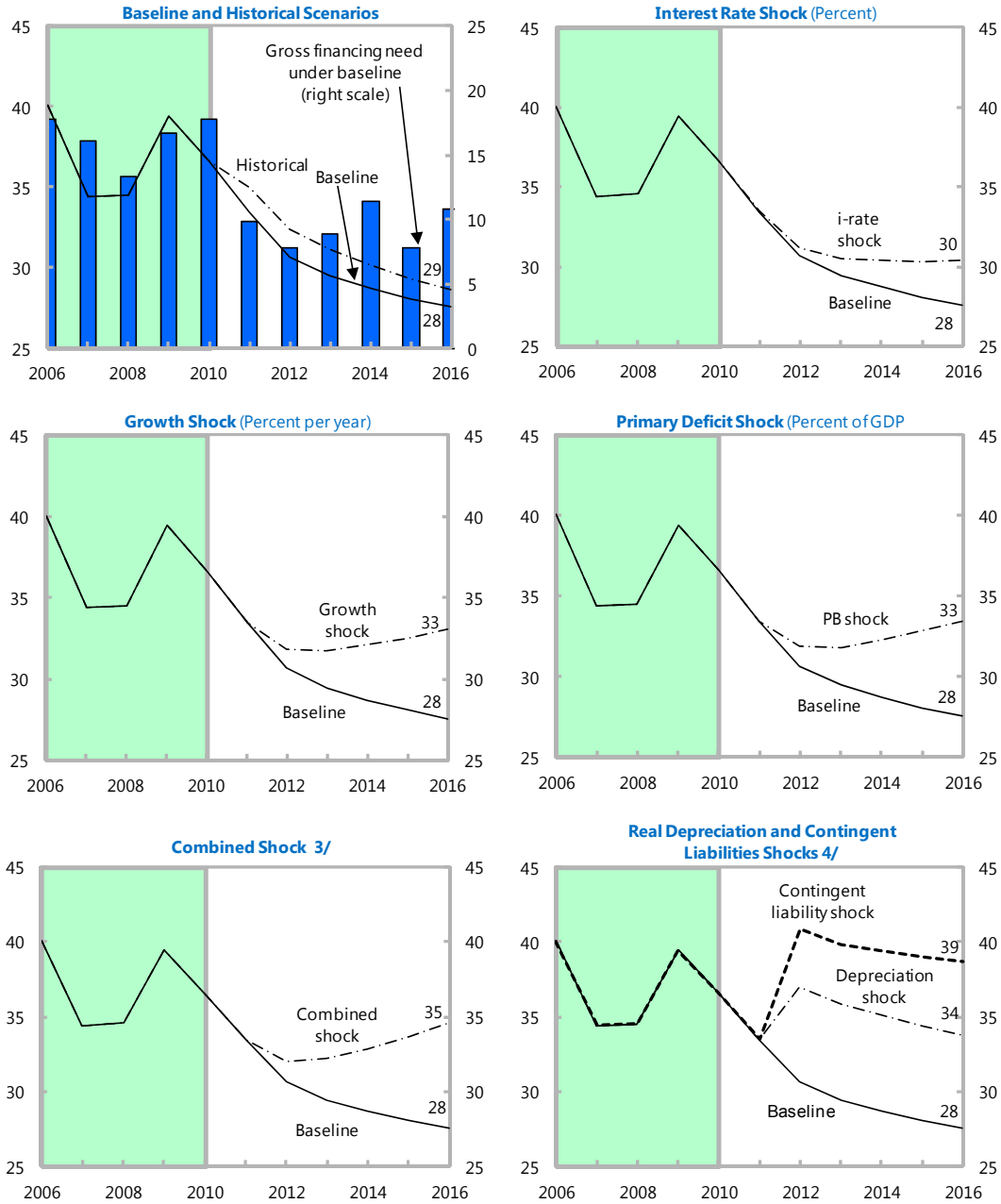
Baseline and Historical Scenarios

Gross financing need under baseline (right scale)

Historical

Baseline

29

28

Interest Rate Shock (Percent)

i-rate shock   30

Baseline   28

Growth Shock (Percent per year)

Growth shock   33

Baseline   28

Primary Deficit Shock (Percent of GDP)

PB shock   33

Baseline   28

Combined Shock 3/

Combined shock   35

Baseline   28

Real Depreciation and Contingent Liabilities Shocks 4/

Contingent liability shock

39

Depreciation shock   34

Baseline   28

Source: IMF staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ The baseline scenario assumes that the government saves some revenue overperformance in 2011 and onwards.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

4/ One-time real depreciation of 35 percent and 10 percent of GDP shock to contingent liabilities occur in 2012, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

INTERNATIONAL MONETARY FUND

TURKEY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—ANALYTICAL ANNEX

November 14, 2011

Prepared By	European Department

CONTENTS

I.   TURKEY—A LONGER PERSPECTIVE

1.   During the past decade, swings in Turkey's growth rate have tended to be closely correlated with capital flow cycles. When capital flowed in, GDP growth was robust; when flows reversed, real activity slumped. In fact, Turkish GDP has been one of the most volatile among major emerging markets. Turkey's declining risk premium (evidenced by moderating sovereign CDS and EMBI spreads) may even have increased its sensitivity to global liquidity conditions, while limiting its ability to run a more independent monetary policy.
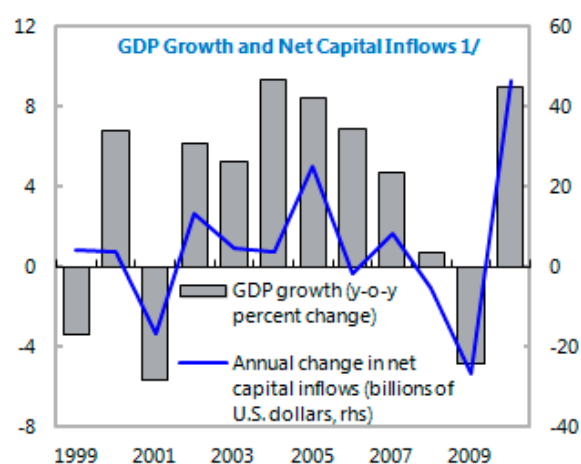
Sources: Central Bank of Turkey; and IMF staff calculations.
1/ Includes errors and omissions.
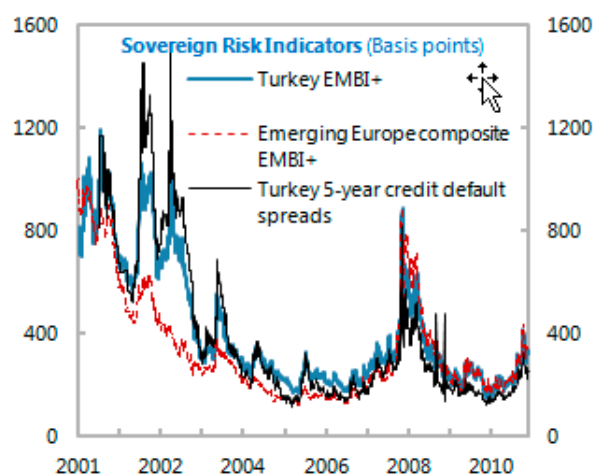
Source: Bloomberg.

2.   Despite periodic nominal depreciations when capital flows reversed, competitiveness was gradually eroded through persistent cross-country differences in price and wage growth. Several episodes of large nominal depreciation resulted in a moderate cumulative nominal effective depreciation between late-2001 and late 2010. Despite that, the CPI-based real exchange rate rose by 35 percent over this period due to systematically higher inflation in Turkey than in advanced and EM trading partners and competitors.[1] Widespread de jure and de facto indexation of wages to prices (with a lag of one or two quarters), and moderate labor productivity growth, meant that the unit labor cost-based REER closely tracked the CPI-based measure.

Effective Exchange Rates (2003=100)

Sources: Central Bank of Turkey; and IMF staff estimates.

CPI Inflation (Year-on-year percent change)
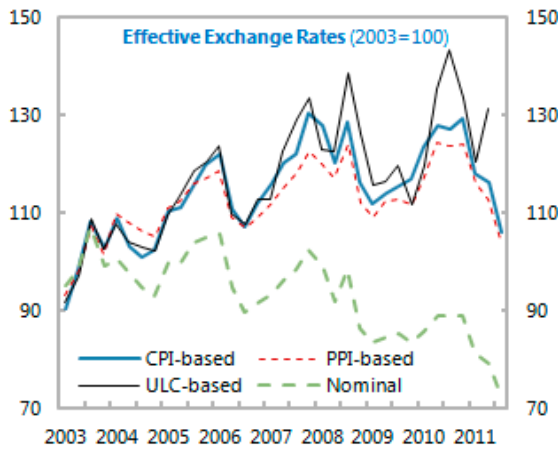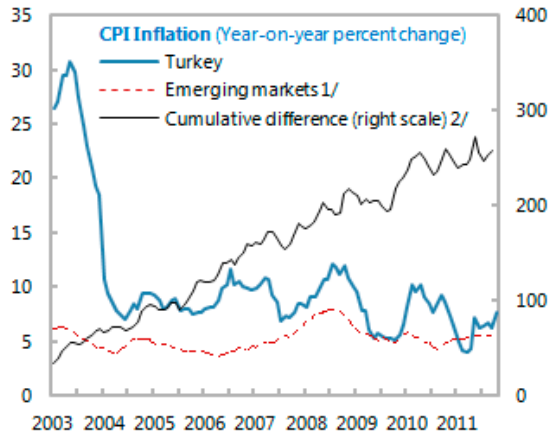
Sources: Haver and IMF staff calculations.
1/ Simple average of Brazil, China, Czech Rep., Hungary, India, Mexico, Poland, Russia, and South Africa.
2/ Cumulative change in the difference of Turkey and emerging market indices since December, 2002 rebased to 2005=100.

Inflation and Labor Costs
(Year-on-year percent change)
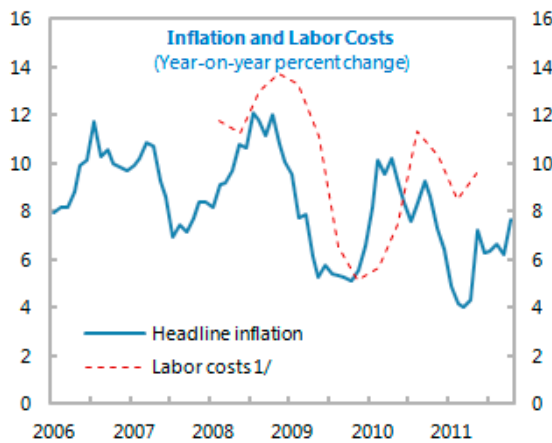
Sources: Turkstat.
1/ Hourly labor cost index.

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[1] This reflected an elevated upper limit on the inflation tolerance band that was, nonetheless, overshot in all but two years since the commencement of inflation targeting in 2006.

3. **The real appreciation boosted residents' purchasing power over imports and diverted demand from locally-sourced goods**. During this period, imports grew faster than other expenditure components, raising the import content of domestic and external demand. Non-energy imports tended to be the most cyclical. This is consistent with survey results that found firms shifted significantly in recent years to imported intermediate goods, including because locally-sourced products could not compete. This lowered the domestic value-added content of local production. Hence, when external financing dried up in 2008–09, the resulting fall in imports contributed to a sharp output contraction.
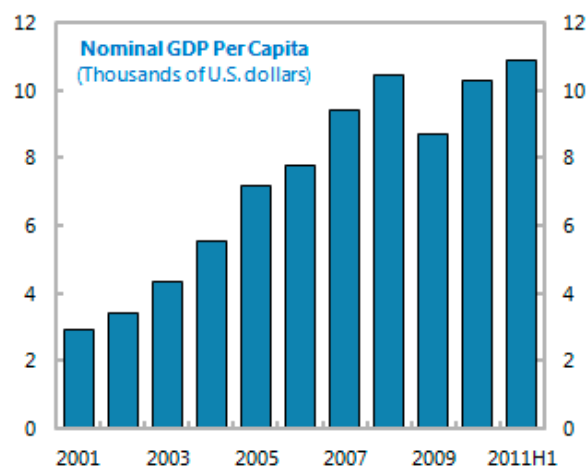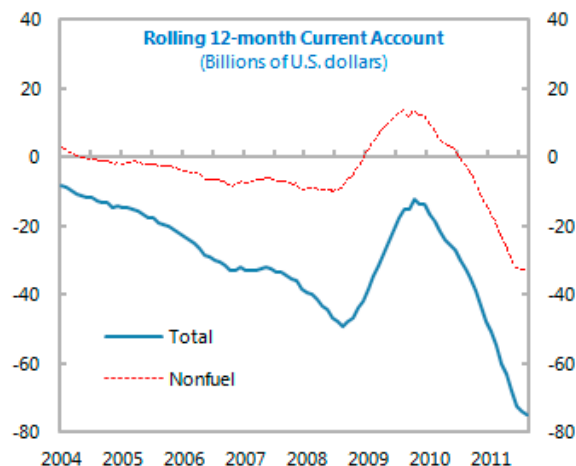
Nominal GDP Per Capita
(Thousands of U.S. dollars)

Sources: Turkstat; and IMF staff estimates.

Rolling 12-month Current Account
(Billions of U.S. dollars)

Total
Nonfuel

Sources: Central Bank of Turkey; and IMF staff estimates.

Ratio of Real Imports to Domestic Demand Plus Exports and REER (Percent)

Ratio
REER (2000=100, rhs)

Sources: Turkstat; and IMF staff calculations.

Real Growth Rates in Boom and Bust Cycles
(Geometric average, percent)

Real GDP
Real domestic demand
Real imports
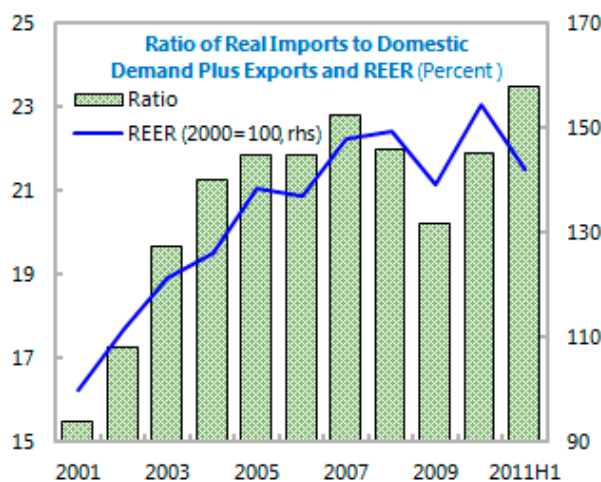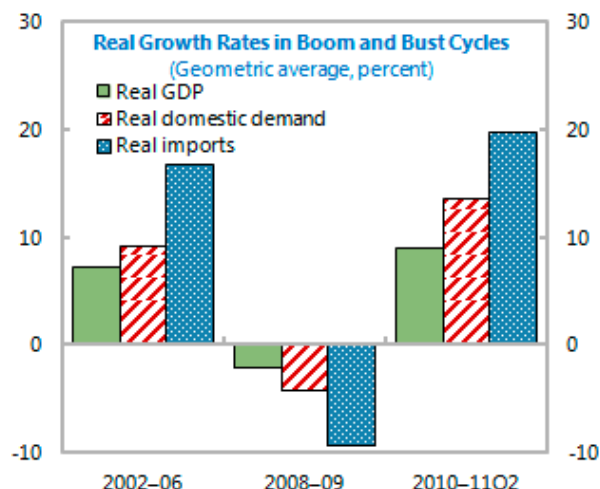
Sources: Turkstat; and IMF staff estimates.

4. **The widening CAD mirrored a declining private saving-investment balance**. A large improvement in public net saving early in the decade compensated the weakening private saving ratio. More recently, however, public net saving remained broadly stable, while the private saving-investment balance has fallen sharply on strengthening consumption and investment. A large informal sector, with limited savings options, may also have depressed the private saving rate.
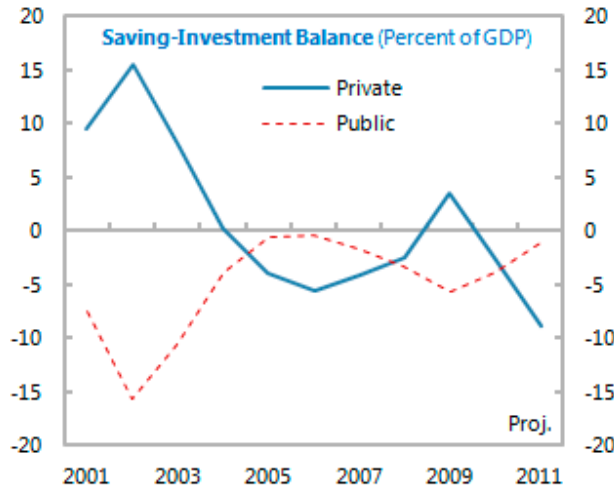
Sources: Turkstat; and IMF staff estimates.
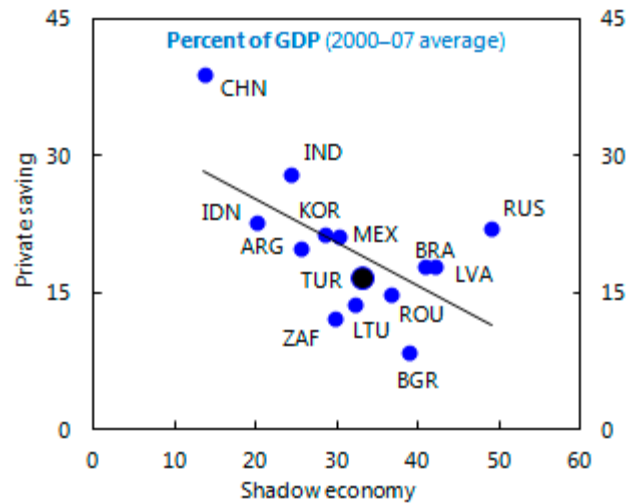
Sources: F. Schneider, et. al., *Shadow Economies all over the World: New Estimates for 162 Countries from 1999 to 2007;* IMF, *World Economic Outlook;* and IMF staff estimates.

5. **From a low initial level, financial deepening gathered pace, more recently relying on foreign funding**. Bank lending to the private sector grew at an annual average 42 percent during 2004–08, raising the credit-to-GDP ratio to a relatively modest 36 percent. Rapid deposit accumulation was the primary funding source, keeping banks' loan-to-deposit ratios considerably below 100 percent and the nonfinancial sector's balance sheet position strong. Lately, new borrowing outpaced deposit accumulation, and household indebtedness has risen rapidly from a low base. Households maintain large long fx positions through extensive fx savings, while they are not permitted to borrow in fx. On the other hand, corporates have large net fx liability positions due to extensive borrowing in fx—including directly from abroad—because of lower nominal interest rates on fx than on lira-denominated loans.
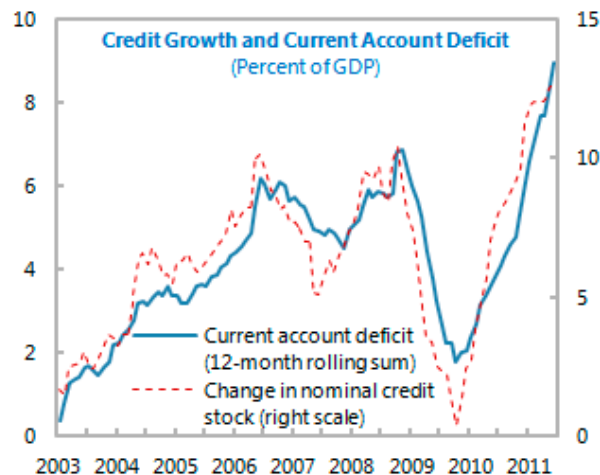
Credit Growth and Current Account Deficit
(Percent of GDP)

- Current account deficit (12-month rolling sum)
- Change in nominal credit stock (right scale)

Sources: Central Bank of Turkey.

Banks' External Debt (Billions of U.S. dollars)

- Up to one year maturity
- More than one year maturity
- Loan-deposit ratio (rhs)

Source: BRSA; and IMF staff calculations.

Net Financial Assets
(Percent of GDP)

- Public sector
- Banks
- Households
- Nonfinancial firms
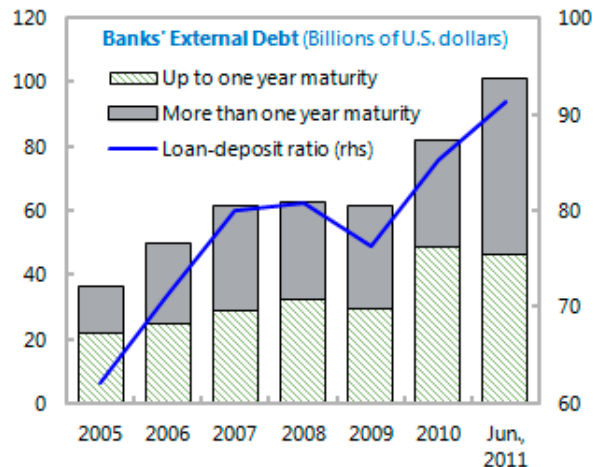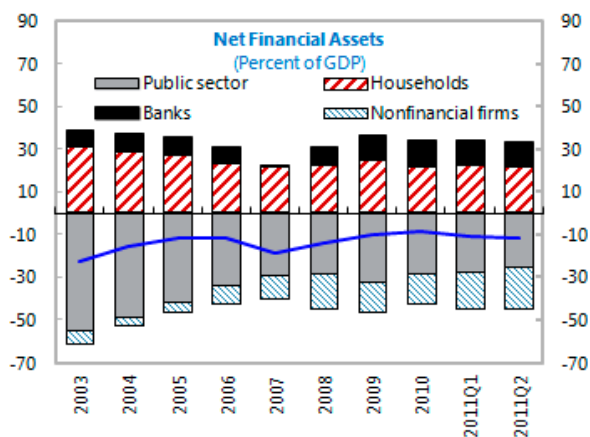
Sources: BRSA; Central Bank of Turkey; Central Registry Agency; Turkish Treasury; and IMF staff estimates.

Household Sector FX Position
(Billions of U.S. dollars)

- Liabilities
- Assets
- Net

Sources: Central Bank of Turkey; and IMF staff calculations.

Nonfinancial Corporate Sector FX Position
(Billions of U.S. dollars)

- Other fx assets
- Other fx liabilities
- Deposits
- Net position
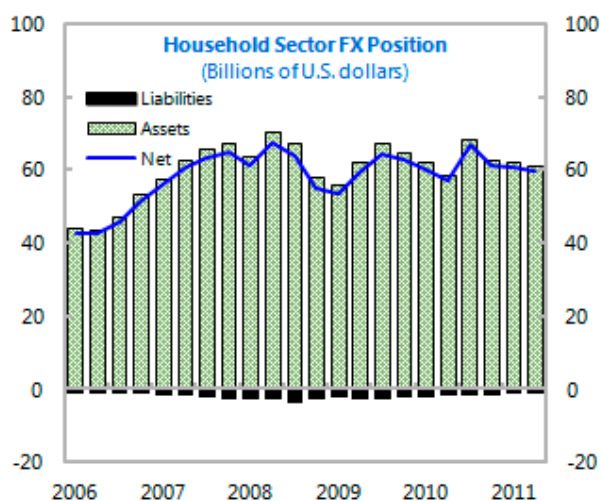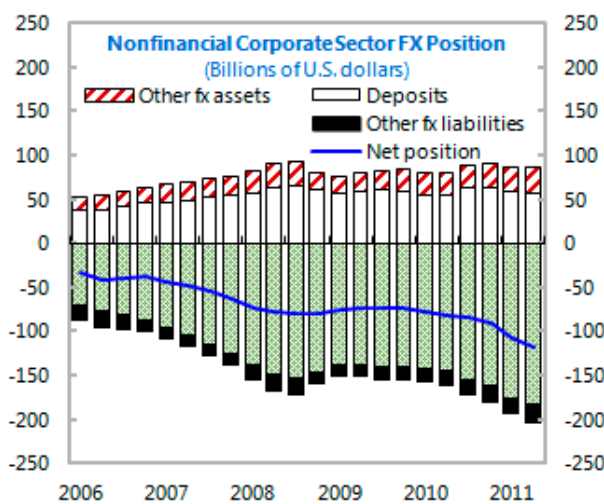
Source: Central Bank of Turkey.

6.   Rigidities in the labor market kept unemployment elevated, despite rapid GDP growth, and encouraged substitution toward imports. For much of the past decade, Turkey's unemployment rate was stuck around 10 percent, even as labor force participation declined. Effective labor supply increased strongly due to rapid growth in working-age population and labor-shedding in agriculture. However, the inability to generate sufficient jobs to absorb these workers and moderate unemployment

reflects a generous severance pay scheme, the large tax wedge on employment, a high minimum wage, and low average educational attainment. These factors reinforced incentives to expand employment in the informal sector and substitute imported capital and intermediate goods for labor and domestically-sourced inputs. While the post 2008–09 crisis recovery saw a strong decline in unemployment, part of this reflects a shift toward unpaid agricultural work—likely a form of disguised unemployment.
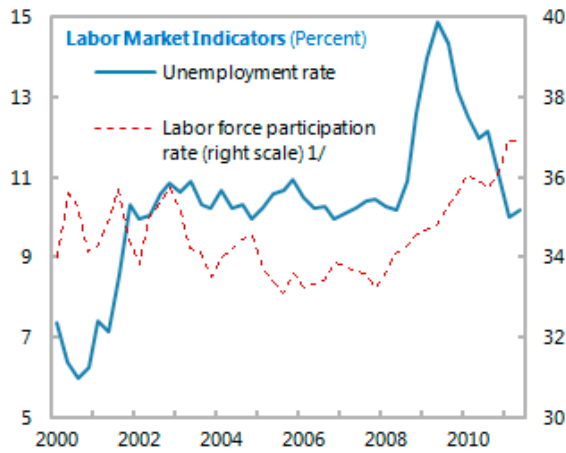
Sources: Turkstat; and IMF staff estimates.
1/ Ratio of labor force to civilian population.
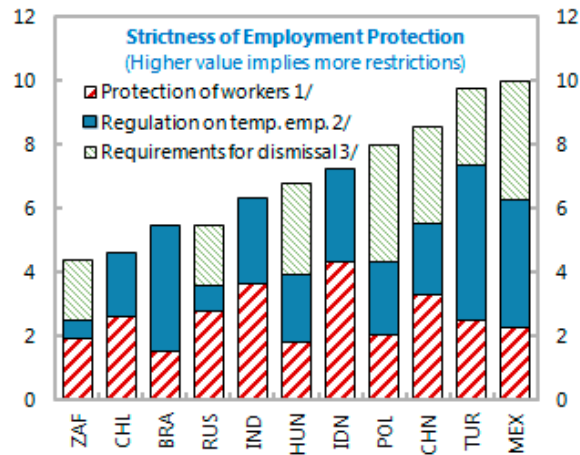
Source: OECD.
1/ Protection of permanent workers against (individual) dismissal.
2/ Regulation on temporary forms of employment.
3/ Specific requirements for collective dismissal.

Source: Eurostat.

7. **On the policy front, the mix was unbalanced**. Turkey maintained a positive headline primary fiscal balance for much of the past decade and debt as a share of GDP has fallen considerably. Nonetheless, fiscal policy tended to be expansionary, reflecting the contribution to revenue from cyclically-buoyant income and imports, and proceeds from several tax amnesties.
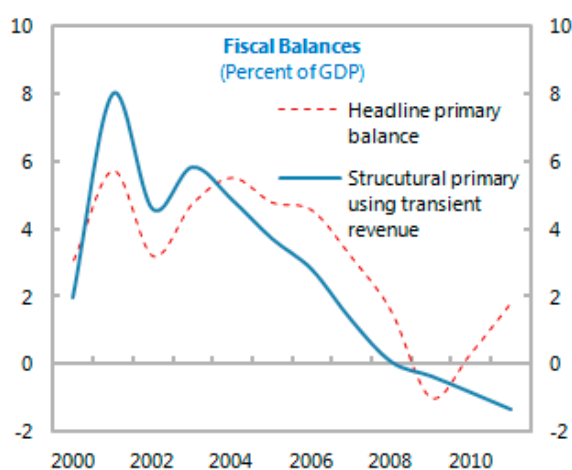
As a result, the countercyclical response was relegated to monetary policy. Within the context of inflation targeting, nominal policy rates were therefore kept high relative to other EMs to offset the fiscal stance and subdue inertial inflation. High interest rates attracted interest-sensitive capital inflows and encouraged firms to borrow in fx, both on- and off-shore.

Fiscal Balances
(Percent of GDP)

- Headline primary balance
- Structural primary using transient revenue

Sources: Turkish authorities; and IMF staff estimates.

Policy Rate (Percent, compounded)

- Turkey
- EM median 1/
- Max (95th percentile)
- Min (5th percentile)
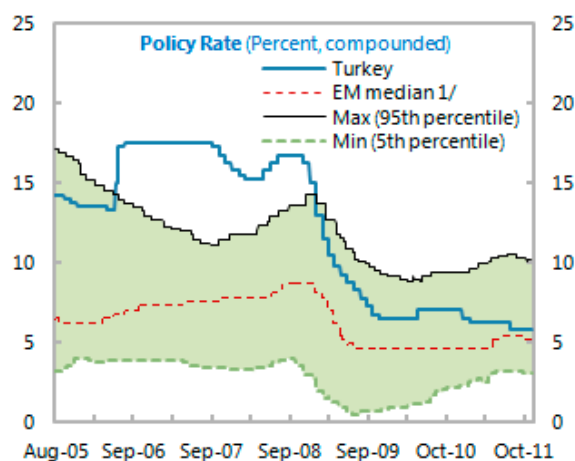
Sources: Bloomberg; and IMF staff estimates.
1/ Emerging markets include Brazil, Chile, Colombia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Poland, Russia, South Africa, and Thailand.

II. MEASURING THE STRUCTURAL FISCAL POSITION USING TRANSIENT REVENUE: APPLICATION TO TURKEY

Accurately estimating the underlying fiscal position is key to avoiding unintentional pro-cyclicality. Traditional output-gap adjustment may not capture the full impact of economic cycles on revenue, and no one-size-fits-all approach is likely to be appropriate. Rather, revenue should be partitioned according to its underlying drivers. In Turkey, not accounting for cyclically-sensitive imports has systematically overstated the structural fiscal position and masked the recent fiscal impulse. Once this and other factors are accounted for, the structural primary balance deteriorated from surpluses of around 5 percent of GDP during 2003–06, to deficits of around 1 percent of GDP in 2010–11.

A. Introduction

1.   Implementing the dictum of avoiding pro-cyclical fiscal policy requires being able to correctly identify the non-structural component of revenue.[1] Applying the wrong concept can lead to systematic bias that, in turn, causes an unintentionally pro-cyclical fiscal stance or creates the *perception* of fiscal space, which disappears when the economic cycle turns. Prior to the 2008 global financial crisis, many advanced and emerging market countries ran fiscal surpluses on headline and output-gap adjusted terms, but which gave a false sense of policy prudence. Only once the boom ended did it become apparent that cyclical revenue had been grossly underestimated. In numerous countries, fiscal revenue still has not recovered, forcing policymakers to make difficult adjustment decisions.

2.   Failing to recognize that factors other than the output gap can drive transient revenue was largely responsible for overstating structural positions prior to the crisis. While relevance varied by country, these other factors included commodity booms with improved terms of trade, price bubbles affecting real estate and financial assets, domestic demand and import booms related to overvalued real exchange rates and plentiful capital inflows, and sticky employment reflecting labor market contracts and flexicurity arrangements.

3.   Transient fiscal revenue depends on the interaction of the economic cycle with the tax system. For budgets to benefit from an economic boom, related activities or asset values must be taxed. Examples of interactions

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[1] Depending on the characteristics of spending, adjustment of this item may also be warranted.

between cycles and taxes include: (i) a commodity producer experiencing a favorable terms of trade shock with a levy on resource extraction; (ii) in a period of low interest rates, a country with large financial and construction sectors with a tax base focusing on those activities; and (iii) in the presence of an overvalued real exchange rate, having sizable consumption taxes on domestic absorption and imports. Therefore, a one-size-fits-all approach to identifying transient revenue for all countries, and even for one country through time, will not be appropriate due to differences in the characteristics of economic cycles, and differences in tax systems.

4.   To implement this approach, different categories of tax revenue are paired with their underlying economic drivers. The standard output gap-based cyclical adjustment implicitly assumes all revenue is driven by GDP. However, revenue from direct taxes will be more closely linked to value added and income, while indirect taxes will be tied to domestic consumption and imports. The extent of disaggregation employed depends on the specifics of the situation, but data availability may be a binding constraint. Recognizing the existence of multiple drivers of tax revenue may help explain why observed tax elasticities with respect to broad tax bases (GDP, consumption) often exceed unity.

B.   Alternative Approaches

Standard Output Gap Approach

5.   Under the output gap approach, all tax revenue is assumed to be driven by the single factor, real GDP (Y). Structural or underlying revenue, R^*, is defined as the level of revenue that would occur if output was equal to potential—the output norm, Y^*:

$$R^* = R\left(Y^*\!\big/Y\right)$$

Transient revenue is defined as the difference between actual nominal revenue, R, which is realized when real output is Y, and structural revenue. Denoting $R = r\,Y$, where r is the effective tax rate, and assuming a constant effective tax rate, this relationship can also be written as:

$$R^*\!\big/R = Y^*\!\big/Y$$

Absorption Gap Approach

6.   The excess of domestic demand—or absorption—relative to domestic supply is equivalent to the goods and nonfactor services deficit in the balance of payments. The absorption cycle may not be identical to the real GDP cycle, either because they have different amplitudes and/or their frequency and phasing are not identical.

7.   In this case, absorption, A, drives some revenue, R_A, while the rest move in line with output, R_Y. The absorption norm, A^*, is derived from the current account norm. Structural revenue is defined as the level of revenue when

both absorption and output are equal to their respective norms:

$$R^* = R_Y \left(Y^* \middle/ Y \right) + R_A \left(A^* \middle/ A \right)$$

8.   The absorption approach has been applied several times to EU member countries in the run up to the global financial crisis. Jaeger and Klemm (2007) find that in Bulgaria, the budgetary effect of absorption booms—coming through indirect taxes—is underestimated by conventional structural balance approaches. Moreover, Bulgaria's large and growing fiscal surplus in the mid 2000s was not the result of fiscal austerity but the automatic effect of the unsustainable absorption boom. Lendvai, et. al. (2011) explore the effect of absorption booms on the fiscal positions of EU member countries. They conclude that euro area and new EU member states with sizeable current account deficits prior to the crisis had underlying fiscal positions that were significantly weaker than traditionally estimated.

C. Application to Turkey

11.   In recent years, it has been evident that—after adjusting for changes in tax policies—factors other than output have contributed to the rapid increase in Turkey's tax revenue. Especially since early 2009, total tax revenue has risen much faster than nominal GDP. GDP also does a poor job explaining collections of VAT on imports and VAT on domestic goods and services.[2] Moreover, import VAT has not moved together with nominal consumption, and it is apparent that consumption does not explain well developments in domestic VAT. On the other

Other Extensions

9.   The effect on fiscal balances of house and equity price deviations from fundamentals is examined by Price and Dang (2011) for OECD countries. They find that asset price fluctuations lead to sizable revenue "surprises" that cause governments to cut tax rates and increase spending, resulting in procyclicality.

10.   Terms of trade and commodity price effects on fiscal balances has received considerable attention. Turner (2006) concludes that in countries where commodity production is important, especially during periods of rapidly changing commodity prices, traditional cyclical adjustment of fiscal balances should be augmented with adjustment for terms of trade effects. Villafuerte and Lopez-Murphy (2010) find that in oil-producing countries, fiscal spending tends to move in line with oil prices, exacerbating fluctuations in economic activity.

hand, import VAT is closely aligned with nominal imports.

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[2] VAT on imports is charged on the foreign currency value of invoiced import prices adjusted by the exchange rate at the date of customs clearance, inclusive of all other taxes applied at the border (custom duties, excises, etc) and other direct import-related spending, including cost of temporary storage. Domestic VAT is levied on domestic value added, which includes the mark up and any additional domestic value added on imports.

Tax Revenue and GDP (2008Q1 = 100)

VAT and GDP (2008Q1 = 100)

VAT and Consumption (2008Q1 = 100)

VAT, Imports, and Consumption (2008Q1 = 100)

Sources: Turkish authorities; and IMF staff estimates.
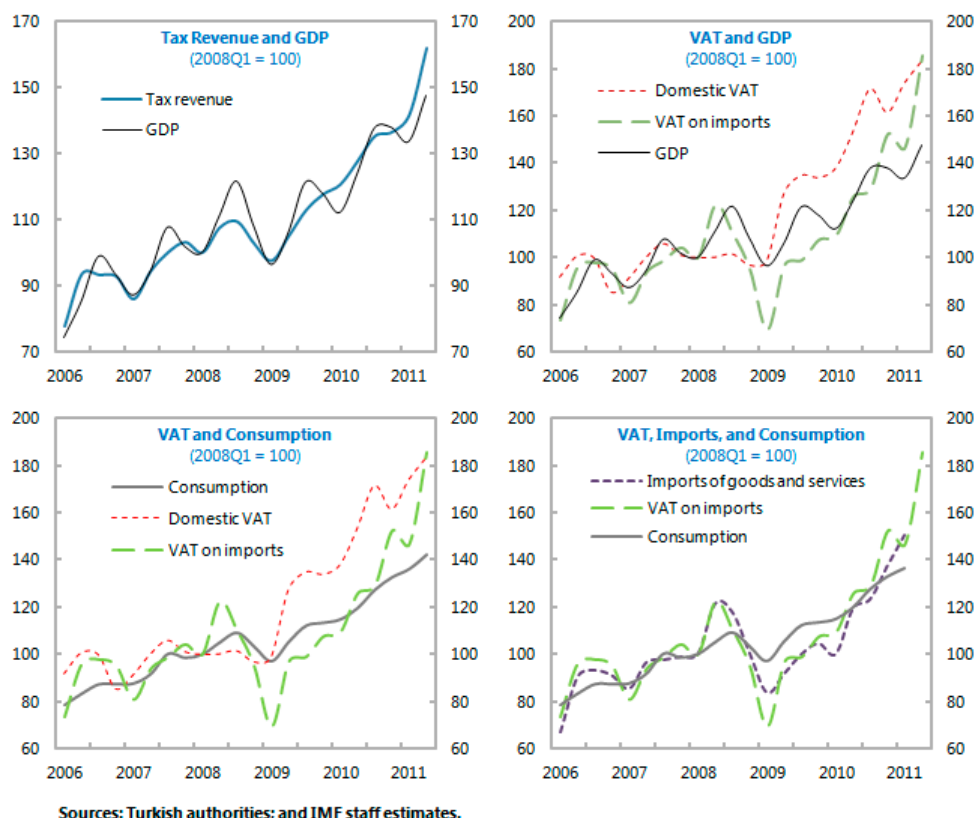
12.   Taxes on imports (which include import VAT, various excises, and customs duties) comprised 16 percent of tax revenue in 2010, and have been one of the more dynamic sources of tax revenue growth in recent years. This is consistent with the greater cyclical variability of domestic demand and imports than of GDP during boom-and-bust cycles, and with the relatively high rates of indirect taxes compared with direct taxes. The pronounced cyclical buoyancy of imports reflects in turn Turkey's persistent external competitiveness gap, together with volatile external financing flows. In addition, in 2009–10, corporate income tax paid by the banking sector was unusually large, reflecting the boost to profits from the steep decline in the policy interest rate that widened banks' interest margins. A number

Central Government Tax Revenue by Type (Billions of Turkish lira)

Sources: Turkish authorities; and IMF staff estimates.
1/ Annualized.

Real Growth Rates in Boom and Bust Cycles (Geometric average, percent)

Sources: Turkstat; and IMF staff estimates.
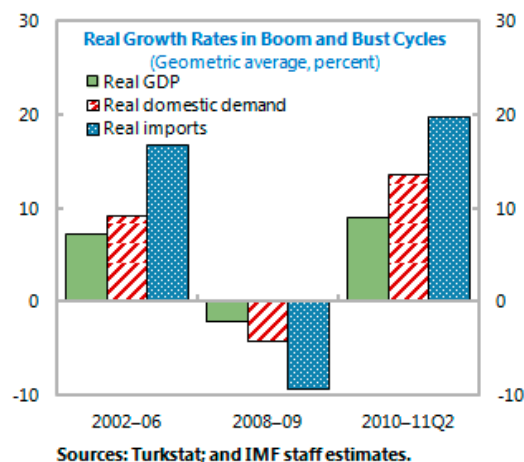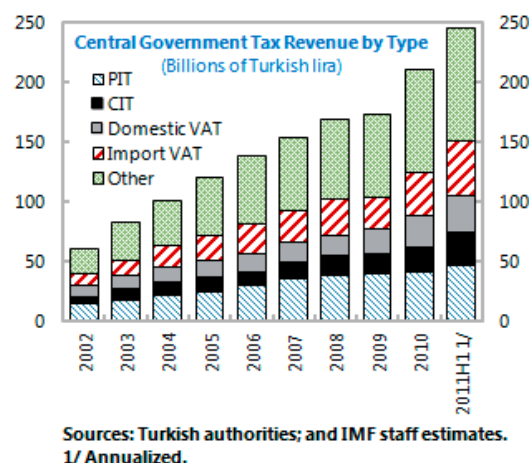
of tax amnesties also temporarily boosted revenue in several years.

13.   As a result, using only the standard output gap to adjust for the effects of the economic cycle in Turkey would considerably underestimate transient revenue from the current unsustainable macroeconomic conditions. Hence, it would also understate the stimulus implied by any given fiscal target. A corollary is that in the downturn phase of the cycle, the amount of lost transient revenue will be large.

Procedure

14.   The first step in identifying Turkey's transient revenue is to divide total tax revenue according to its different underlying drivers:

$$R = \underbrace{R_{VAT_M} + R_{TRADE}}_{IMPORTS} + \underbrace{R_{FINANCICAL} + R_{OTHER}}_{NON\_IMPORTS}$$

where other revenue includes domestic VAT, excises, non-financial corporate income tax, personal income tax, and other taxes.

Import-Related Transient Revenue

15.   The import gap approach builds on the absorption gap approach, which adjusts for the over-the-cycle excess of domestic demand relative to domestic supply—that is, for the goods and nonfactor services (G&NFS) deficit—and for the deviation of output from its potential level. The extension to imports reflects that the G&NFS deficit does not imply a unique level of imports and, while imports are an important component of the tax base, exports are largely untaxed. Hence, imports—rather than

excess absorption—is more relevant for determining transient revenue.

16.   Conceptually, import-related transient revenue is the difference between actual import-related revenue and the revenue that would occur if imports were equal to their norm. Similar to the absorption approach, the import-gap approach relies on an estimate of Turkey's current account norm. This norm is defined as the level of Turkey's current account to GDP ratio that would prevail given Turkey's fundamentals relevant for its saving-investment behavior, and conditioned on simultaneous external and internal balance in all countries. Estimates of Turkey's current account norm are taken from the Fund's CGER exchange rate assessments,[3] and are typically around -2¾ percent of GDP. To obtain the norm for the G&NFS balance—the relevant concept for the absorption approach—current transfers and factor income are deducted from the current account norm. All steps so far are identical to the absorption-gap approach. Finally, the import norm itself is obtained by adding actual exports.[4] Thus, the import norm is derived by:

$$M^* = X - CA^* + FI + CurTr$$

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[3] See http://www.imf.org/external/np/pp/eng/2006/110806.pdf

[4] Ideally, to calculate the G&NFS norm and the import norm, one would use the norm values of exports, current transfers, and factor income. Using actual exports pre-crisis (post crisis) likely understates (overstates) somewhat the export norm because the rest of the world was (is) importing above (below) its import norm. On the other hand, interest payments abroad are now likely higher than in equilibrium because of the large capital inflows. In any event, the approximation error in M^* introduced through this approach is likely to be modest.

17. As expected from the close synchronization of the cycles of the underlying real variables, the import gap—the difference between the actual import-to-GDP ratio and the norm—moves closely with the output gap. However, the import gap is considerably more volatile over the cycle than the output gap, particularly since the onset of the global financial crisis in late-2008. This is consistent with Turkey's increased dependence on imports.
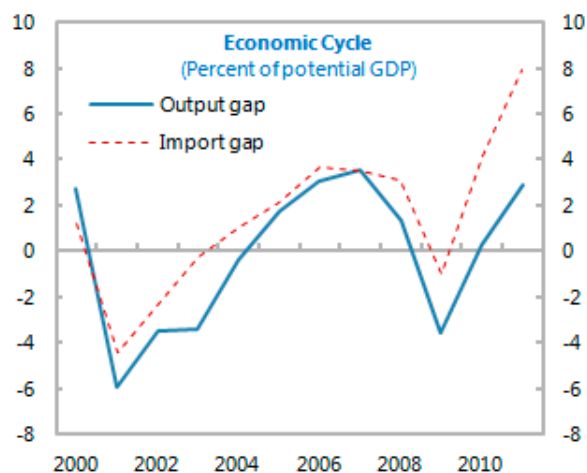
Sources: Turkish authorities; and IMF staff estimates.
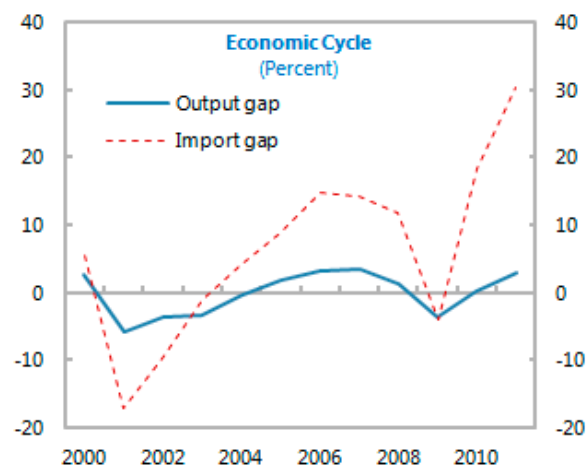
Sources: Turkish authorities; and IMF staff estimates.

18. Cyclical adjustment for import VAT uses the effective VAT rate on imports, *etc*. This effective rate has seen large swings, reflecting changes in the composition of imports. In view of the fast growth of imports of consumption goods, which are more heavily-taxed than other imports, the effective import VAT rate has risen sharply in recent years. Structural import VAT revenue is calculated using the average effective tax rate since 1999 (10.8 percent), as follows:

$$R^*_{VAT\_M} = etr^* \cdot M^*$$

Structural revenue from other import-related taxes is obtained by:

$$R^*_{TRADE} = R_{TRADE}\left(M^*/M\right)$$
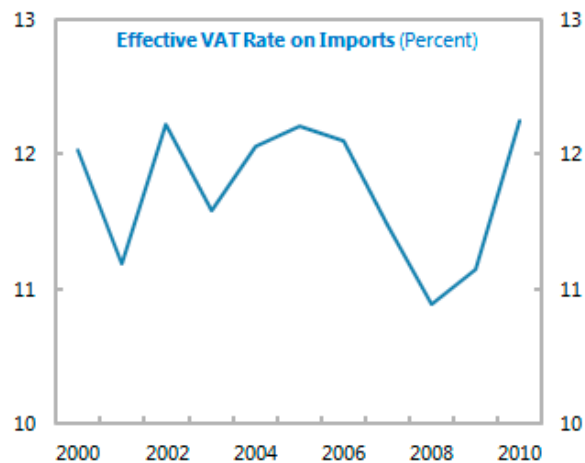
Source: Turkish authorities; and IMF staff estimates.

Banking Sector Transient Revenue and Other Cyclical Revenues

19. Corporate income tax of the financial sector is assumed to fluctuate with banking sector profit which, in turn, reflects banks' return on assets (RoA). The norm, RoA*, is

assumed to equal the average RoA for banks in Central, Eastern, and South-Eastern Europe (1.4 percent). Given the actual level of banks' assets, the banking profit gap is the difference between actual banking sector profit, BP, and the profit that would have prevailed at the RoA norm. Structural revenue from banking profits is derived from the banking profit gap:

$$BP^* = RoA^* \cdot BankAssets$$
$$R^*_{CIT\_FIN} = R_{CIT\_FIN}\left(BP^*\big/BP\right)$$

The structural value of the remaining components of tax revenue is derived after deducting amnesty-related revenue collected from the 2007 social security amnesty (yielding

revenue during 2007–10) and the comprehensive amnesty introduced in early 2011. This residual "other" revenue is adjusted using the standard output-gap approach:

$$R^*_{Other} = R_{Other}\left(Y^*\big/Y\right).$$

20.   The quantitative impact of the various adjustments is shown in the table below. During 2001–03 and in 2009—years when both the import and output gaps were negative— structural primary tax revenue exceeded headline primary tax revenue, i.e., transient revenue was negative. In 2011, 3 percentage points of tax revenue (one-tenth of the total) was transient.

Revenue Sources, 2000–11

(Percent of GDP, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primary revenue	28.0	28.0	28.0	30.5	30.0	30.6	31.7	30.6	30.4	30.9	31.9	33.3
Transient revenue	1.3	-2.0	-0.9	-0.7	0.4	0.9	1.5	1.7	1.3	-0.9	0.9	2.9
Due to unsustainable macro conditions	1.3	-2.0	-0.9	-0.7	0.4	0.9	1.5	1.5	0.6	-1.0	0.9	1.9
Financial revenue	0.4	0.3	0.2	0.3	0.3	0.0	0.1	0.2	0.1	0.2	0.2	0.1
Import revenue	0.2	-0.7	-0.2	-0.1	0.2	0.4	0.6	0.4	0.2	-0.3	0.7	1.1
VAT imports	0.2	-0.7	-0.2	-0.1	0.2	0.4	0.5	0.3	0.1	-0.3	0.6	1.0
Trade Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other	0.7	-1.6	-0.9	-1.0	-0.1	0.5	0.8	0.9	0.3	-1.0	0.1	0.8
Amnesty revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.2	0.0	0.9
Structural primary revenue	26.7	30.0	28.9	31.2	29.6	29.7	30.2	29.0	29.1	31.8	31.0	30.4
Memorandum items:												
Output gap (percent of potential GDP)	2.7	-5.9	-3.5	-3.4	-0.4	1.7	3.1	3.5	1.3	-3.6	0.2	2.9
Import gap (percent of potential GDP)	1.2	-4.4	-2.4	-0.2	1.0	2.1	3.7	3.5	3.1	-1.0	4.2	7.9

Sources: Ministry of Finance; and IMF staff estimates.

D. Structural Revenue and the Underlying Fiscal Position

21.   Because every approach to cyclical adjustment involves an element of judgment, how can one assess whether the approach chosen is reasonable and an improvement over the standard output-gap approach? One possibility is to look at the behavior of structural revenue. If structural revenue is correctly estimated, differences across time should be explained by changes in tax policy and/or compliance. Large unexplained differences would therefore raise doubts about the underlying methodology.

22.   In Turkey, adjusting import-related revenue using only the output gap leaves behind large swings over time (2 percentage points of potential GDP) in derived structural import revenue. Such large differences cannot be explained by discretionary policy measures. On the other hand, the transient revenue approach applied to imports generates a broadly stable estimate of structural import-related revenue. A similar result holds for total revenue. The structural revenue series obtained by deducting transient import revenue is much smoother than the one constructed by subtracting standard output-gap cyclical revenue.

23.   To more systematically assess how well the transient revenue approach performs, the impact of discretionary tax policy changes should be removed from structural revenue. The preferred approach to cyclical adjustment is the one that generates the flatter structural
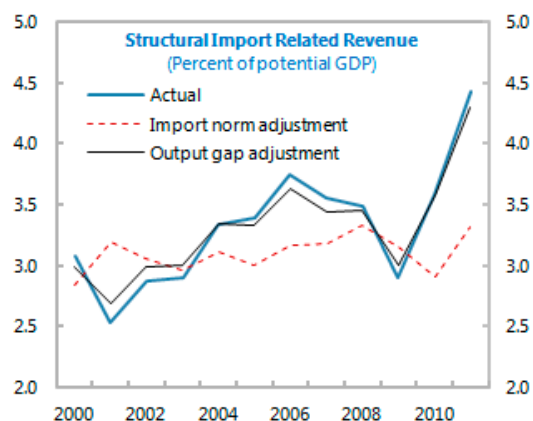
Sources: Turkish authorities; and IMF staff estimates.
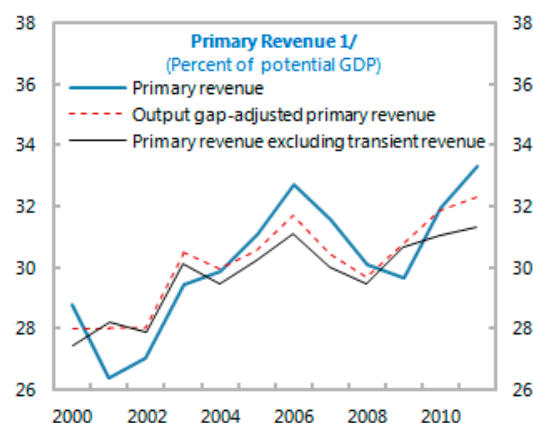
Sources: Turkish authorities; and IMF staff estimates.
1/ All series exclude amnesty revenue.

revenue series. Data limitations preclude adjusting for policy changes prior to 2008. Discretionary changes since then include a tax amnesty, temporary stimulus tax cuts, and increases in various excise rates. These measures raised revenue by ¼ to ¾ percentage points of GDP during 2008–10. Excluding these effects, it is apparent the transient revenue approach yields a flatter series for structural revenue, and hence is better at removing cyclical and temporary revenue effects than the standard output-gap approach.

Effect of Tax Policy Changes
(Percent of potential GDP)
- Permanent rate increases
- Temporary tax cuts
- SSI restructing
- Policy changes

Structural Revenue Excluding Effect of Tax Policy Changes (Percent of potential GDP)
- Adjusted for transient revenue
- Adjusted for standard output gap
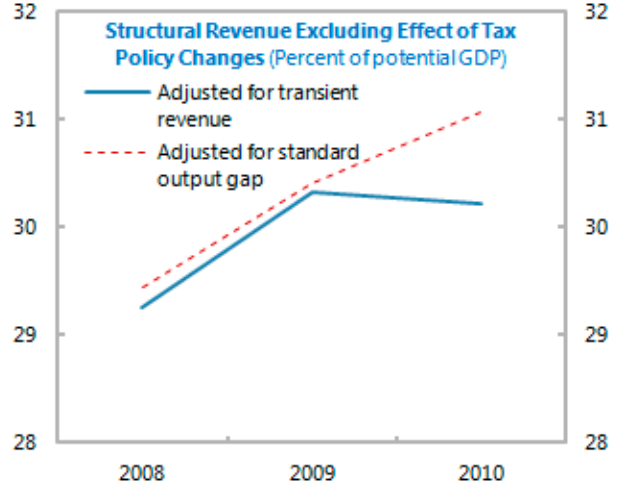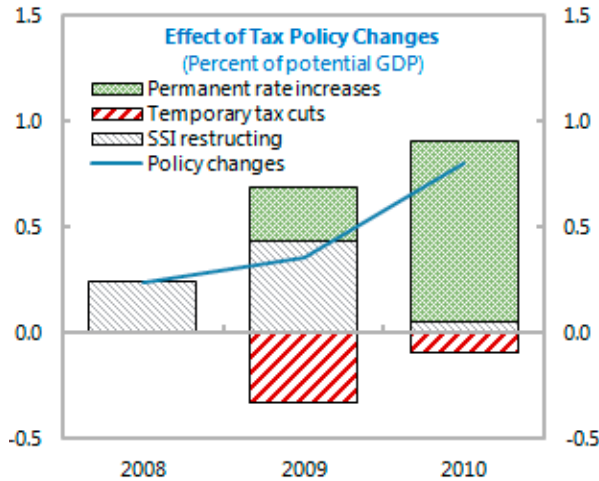
Sources: Turkish authorities; and IMF staff estimates.

24.   From an exceptionally strong position during and immediately after Turkey's 2000 financial crisis, the structural fiscal position has steadily weakened. This is apparent independent of which approach is used to calculate structural revenue. However, the transient revenue approach indicates a faster deterioration than the standard approach. In addition, while the headline balance suggests the crisis-related stimulus was withdrawn in 2010, and with a further improvement in 2011, the transient revenue approach reveals further stimulus was added each year (while the standard approach indicates a neutral stance in 2010 and 2011).[5]

Nonfinancial Public Sector Primary Balance
(Percent of GDP)
- Headline
- Structural using transient revenue
- Structural using output gap
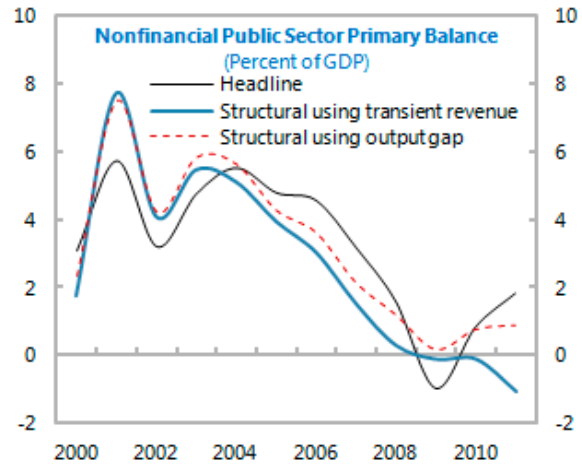
Sources: Turkish authorities; and IMF staff estimates.

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[5] Note that both approaches attribute the headline improvement in 2010–11 solely to cyclical factors.

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III. CORRECTING THE TRADE BALANCE THROUGH NOMINAL DEPRECIATION: HOW LIKELY FOR TURKEY?

Following several years with an overvalued real exchange rate and relaxed macroeconomic policies, and faced with an influx of short-term capital, Turkey's 12-month rolling current account deficit widened sharply to around 9½ percent of GDP in the first half of 2011. The trade deficit reached an even higher 12 percent of GDP. Against this, the Turkish lira depreciated by a cumulative 25 percent against an equally-weighted dollar-euro basket since October 2010. The depreciation was first achieved by a refocusing of monetary policy, and occurred gradually. More recently, it reflected intensified global risk aversion and deleveraging, resulting in capital reversals from emerging markets (EMs).

This annex explores through which channels, and to what extent, Turkey's trade deficit can be expected to adjust in response to the nominal depreciation. Conventional wisdom is that a nominal depreciation improves the trade balance, expressed in local currency terms. But the conditions for doing so are quite restrictive. Moreover, factors other than the exchange rate could be the driving force of adjustment. The implications for real GDP growth are also discussed.

It concludes that more limited external financing—rather than relative price-induced expenditure switching—is expected to improve the trade balance in the near term. Over the medium term, and in the absence of a tighter and rebalanced macro policy mix, the competitiveness gain from the recent nominal depreciation is likely to be eroded. This suggests that in the absence of external financing constraints, any improvement in the trade balance is unlikely to be sustained. However, if financing is limited, a smaller trade deficit may be accompanied by a persistent negative output gap.

A. What Theory Suggests

Relative Price Channel

1. Exchange rate depreciation affects the trade balance, *TB*, through prices and quantities:

$$TB = eP_x^* X - P_m M \qquad (1)$$

Defining the nominal exchange rate, *e*, as units of local currency per dollar (such that an increase is a depreciation of the local currency), where eP_x^* and P_m are the local currency prices of exports and imports, respectively, and P_x^* is the export price in foreign currency, say dollars. The trade balance is denominated in local currency, while exports, *X*, and imports, *M,* are volumes. Partially differentiating (1) and multiplying by

$$\frac{e}{eP_x^* X}$$

gives that a depreciation improves the trade balance if:

$$1 + \beta_{P_x^*,e}\left(1 + \eta_{X,P_x^*}\right) > \frac{P_m M}{eP_x^* X}\beta_{P_m,e}\left(1 + \eta_{M,P_m}\right) \qquad (2)$$

where $\beta_{P_m,e}$ is the exchange rate pass-through (ERPT) to import prices in local currency, and $\beta_{P_x^*,e}$ is the ERPT to export prices in dollars. In general,

$$0 \leq \beta_{P_m,e} \leq 1 \text{ and } -1 \leq \beta_{P_x^*,e} \leq 0.$$

Zero pass-through is when prices in the consuming country do not change in response to a depreciation,

i.e., $\beta_{P_m,e} = \beta_{P_x^*,e} = 0$

and full pass-through is when the depreciation is passed in full to prices in the consuming country, i.e.,

$$\beta_{P_m,e} = 1 \text{ and } \beta_{P_x^*,e} = -1.\ \eta_{x,P_x^*} \text{ and } \eta_{m,P_m}$$

denote the elasticities of export and import demand to their respective prices abroad and at home. Both demand elasticities are negative.[1]

Several cases can be identified:

- With *zero pass-through*,

$$(\beta_{P_x^*,e} = 0 \text{ and } \beta_{P_m,e} = 0)$$

a nominal depreciation always improves the trade balance.

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[1]Since $P_x = eP_x^*, \beta_{P_x^*,e} = \beta_{P_x,e} - 1$. Hence zero ERPT for export prices implies producer prices in the producer's currency rise by the same percentage as the depreciation. Moreover, in equilibrium, where the quantity of exports demanded equals the amount supplied,(∂X/∂e) is the same for producers and consumers. This implies (2) can be expressed in terms of export supply by noting that

$$\eta_{x,P_x^*}\beta_{P_x^*,e} = \eta_{x,P_x}\beta_{P_x,e},\text{ where } \eta_{x,P_x} > 0 \text{ is the}$$

supply elasticity of exports..

- The *classic Marshall Lerner condition* assumes:[2] (1) trade is initially balanced,

$$\frac{P_m M}{e P_x^* X} = 1 \ ;$$

and (2) there is full ERPT to consumer prices, i.e., $\beta_{P_x^*, e} = -1$, and $\beta_{P_m, e} = 1$.

In this case, equation (2) reduces to:

$$\left| -\eta_{X, P_x^*} \right| + \left| -\eta_{M, P_M} \right| > 1$$

which holds when demand for imports and/or exports in the consuming country is responsive to prices and export supply is elastic.

- An *initial trade deficit,*

$$\frac{P_m M}{e P_x^* X} > 1 \ ,$$

makes it harder to improve the trade balance, requiring larger price elasticities and/or lower ERPT than if trade is balanced.

In general, improving the trade balance through a nominal depreciation is easier if: (i) the initial trade deficit is small; (ii) ERPT to consumer prices of exports and imports is low; (iii) demand for imports and exports is responsive to prices; and (iv) export supply is elastic. These conditions are elaborated in the following sections.

Impact on Terms of Trade

2.   Smaller ERPT supports the country's terms of trade (ToT)—the price of exports

relative to imports—and helps improve the trade balance through price effects:

- Under complete ERPT to consumer prices, a depreciation worsens the ToT. This reflects that dollar-denominated export prices decline by the full amount of the depreciation, keeping local currency-denominated export prices unchanged, while local-currency import prices rise by the amount of the depreciation. If quantities are unchanged, the weaker ToT worsens the trade deficit.

- Under zero ERPT, a depreciation improves the terms of trade. In this case, exporters keep dollar prices unchanged, resulting in an increase in local currency prices that boosts profit per unit, while local currency import prices are unchanged. With unchanged quantities, the improved ToT narrows the trade deficit.

3.   The extent of ERPT depends on the degree of market competition. Exporters of homogeneous goods or goods with close substitutes tend to face fixed dollar prices, implying zero ERPT, consistent with the small-country assumption of a price taker in international markets. On the other hand, exporters of differentiated goods have more pricing power and are more likely to fix their prices in local currency (full ERPT). Regarding imports, ERPT is likely to be higher when the local market is closer to perfect competition and when local demand is strong.

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[2] See IMF (April 2007), Chapter 3, *World Economic Outlook*.

4.   The direction and duration of exchange rate movements may also influence the extent of ERPT. ERPT may be asymmetric if exporters and importers are unwilling to incur a loss but are willing to expand profits. In addition, ERPT may be larger in response to exchange rate movements that are perceived to be persistent.

5.   Exchange rate depreciation typically affects the general price level, not just relative prices. This reflects the downward rigidity of prices of nontradables and indexation of wages to the exchange rate and/or inflation. Thus, higher domestic production costs may offset part of the competitiveness gain from the nominal depreciation such that it may not be feasible to keep consumer (dollar) prices unchanged.

Impact on Trade Volumes

6.   Conditioned on some ERPT to relative prices, the volume of imports and exports may change. What is relevant here is the size of the price change and the substitutability of the goods in consumption/domestic production in the case of imports, and domestic supply conditions in the case of exports. In fact, quantity responses may not be linear to price changes, with adjustment occurring only above some minimum price change threshold, or only if the price change is seen as permanent.

7.   On the import side, an increase in import prices causes a negative substitution effect and an adverse income effect

proportional to the initial trade deficit. This encourages expenditure switching from now more-expensive imports to home goods. The magnitude of this switch will vary across different types of goods, depending on the availability of close substitutes in consumption and domestic production and the size of the income effect. For example, if no domestic alternative to imported raw materials or hi-tech goods is available, the reduction in imports may be modest. If imported intermediates are used in the production of exports, a depreciation—by raising the quantity of exports—may actually increase the derived demand for imports. Indeed, if the import content of exports is very high—and hence the domestic content is very low—imports (and exports) may not be very sensitive to the bilateral local/foreign currency exchange rate.

8.   On the export side, the potential to expand supply in the short run depends on the availability of spare capacity. If exporters are operating at full capacity and the cost of adjusting to a higher level of output is high, export volumes may be inflexible in the short run. In addition, scope to increase exports also depends on the strength of external demand, although there may be potential to gain market share from suppliers in other countries. Over the medium term, there is greater room to expand export volumes (higher elasticity of supply) through new investment in existing sectors, and diversifying into new export products. However, incentives to undertake the

needed investment will be smaller if the (real) depreciation is expected to be only temporary.

External Financing Channel

9.   Relative price changes and resulting expenditure switching may experience a delay, while the drop in external financing that precipitated the depreciation can occur rapidly. More constrained external financing will cause the trade deficit to shrink, unless adjustment is cushioned by running down reserves. With less financing available, imports will be immediately compressed. Trade credit for the pre-financing of exports may be more resilient than other forms of short-term capital inflows, suggesting that imports used in the production of exports would be less affected. If the capital reversal reduces funding of banks, bank credit-financed imports—such as consumer durables—would decline.

Impact on Real Growth

10.   A sustained real depreciation may reduce GDP growth in the short run but,

over the medium term, is more likely to be expansionary. Near-term growth can be expected to decline if imports are an essential input into domestic production, and if there is no spare capacity in the export sector. On the other hand, GDP growth may be little affected if the previous imports fed domestic absorption, but were not used in the production of domestic value added. During the 2008–09 global financial crisis, there was a widespread tendency for imports to fall by more than GDP in percentage terms, reflecting cross-border vertically-integrated production combined with the fact that trade is measured in gross terms while GDP measures domestic value added.[3] Over the longer horizon, increased domestic production of import substitutes and exports may expand GDP, with the strength of the response depending inter alia on the ability to redirect resources to these sectors.

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[3] IMF (Oct 2010b), Box 4.1 of World Economic Outlook.

B. Turkey's Previous Nominal Depreciation Episodes

11.   Can Turkey's previous nominal depreciations provide clues as to whether the trade balance might improve this time? In mid 2006, the lira depreciated 27 percent in response to global financial turmoil. However, the depreciation was very short-lived owing to the quick return of benign external funding conditions. As a result, the effect on the trade deficit and output growth was minimal.

12.   By contrast, the much sharper nominal depreciation between early 2008 and early 2009 (41 percent) was associated with larger effects. The depreciation initially reflected domestic political uncertainty, and was followed by the global retrenchment of capital. Turkish investment and consumption dropped sharply. Import volumes contracted by considerably more than export volumes and, together with a slight improvement in the terms of trade, reduced the current account deficit by more than half to 2¼ percent of GDP in 2009.[4] However, domestic demand revived strongly beginning in Q2 2009 on improving sentiment and a capital flow surge to emerging markets. Thus, in 2010, the current account deficit rebounded to 6½ percent of GDP (higher than the pre-crisis level), led by booming imports from an overvalued real exchange rate and strong capital inflows, while exports grew much more slowly.

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[4] IMF Country Report 10/278
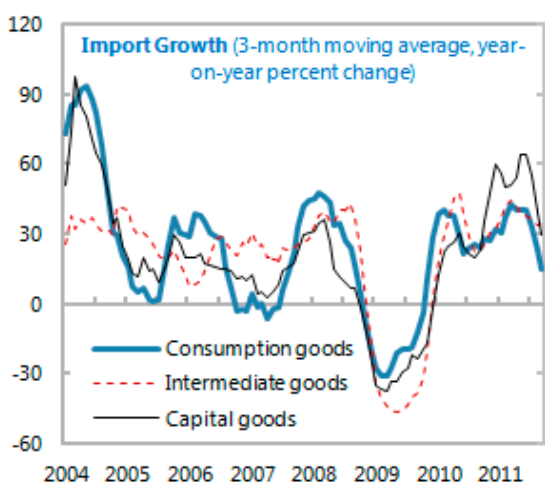
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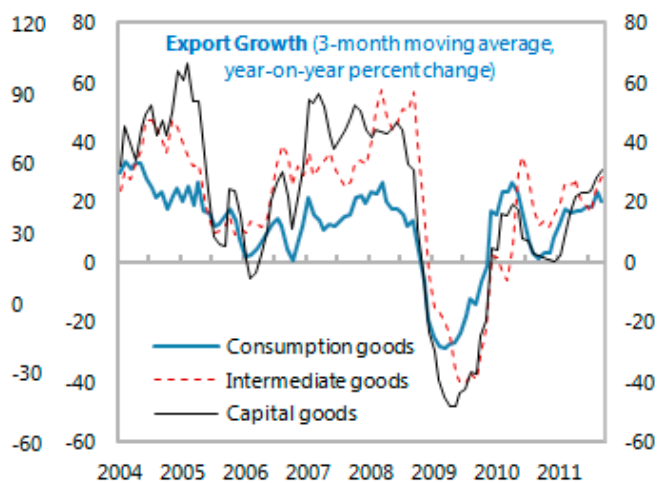
Source: Turkstat.

Selected Economic Indicators, 2005–10

(Year-on-year percent change, unless otherwise indicated)

	2005	2006	2007	2008	2009	2010
Real GDP	8.4	6.9	4.7	0.7	-4.8	9.0
Export volume	10.4	12.0	11.1	6.2	-7.1	6.3
Import volume	11.8	8.5	12.8	-1.5	-12.7	20.8
Export price (Turkish lira)	-0.4	11.2	1.9	15.3	0.1	1.7
Import price (Turkish lira)	0.8	16.2	-0.9	18.8	-3.6	6.0
Terms of trade	-1.1	-4.5	2.9	-3.0	4.0	-4.1
Current account balance (percent of GDP)	-4.6	-6.1	-5.9	-5.7	-2.3	-6.4
Nominal exchange rate	0.4	5.2	-17.5	29.8	-0.4	2.7
CPI inflation (period average)	8.2	9.6	8.8	10.4	6.3	8.6
Financial account (percent of GDP)	8.8	8.1	7.5	4.7	1.3	8.1

Sources: Central Bank of Turkey; Turkstat; IMF staff calculation.

13.   Both these previous episodes were quite different from Turkey's nominal depreciation since late 2010. In the earlier cases, the nominal depreciation occurred suddenly and was quickly reversed, while in the current case, the depreciation has been mostly gradual and persistent. Moreover, prior episodes coincided with widespread deleveraging and risk aversion. Together, these suggest that current account adjustment during previous episodes was primarily due to compression of imports brought by more restricted external financing. On the other hand, for much of Turkey's recent depreciation episode, global risk appetite has been strong.

C. What to Expect This Time?

Near-Term Adjustment: Expenditure Switching...

14.   Turkey's lira-denominated export and import prices have risen broadly in line with the nominal depreciation, but import prices have risen by slightly more. This conforms with anecdotal evidence that prices of imported luxury goods, such as cars and high-end electronics, have risen rapidly (even excluding the recent increase in indirect taxes). This indicates high ERPT to import prices, and with lira-denominated export prices rising by somewhat less than the depreciation, foreign currency-denominated export prices fell slightly, indicating partial export ERPT. However, non-tradable prices were not sufficiently flexible on the downside to prevent a sharp increase in the general price level, reducing the amount of real depreciation and muting the increase in the price of imports relative to nontradables.

Trade Prices and Depreciation (Year-on-year percent change)

— Export price (Turkish lira)
- - - Import price (Turkish lira)
— Nominal exchange rate 1/

2004 2005 2006 2007 2008 2009 2010 2011
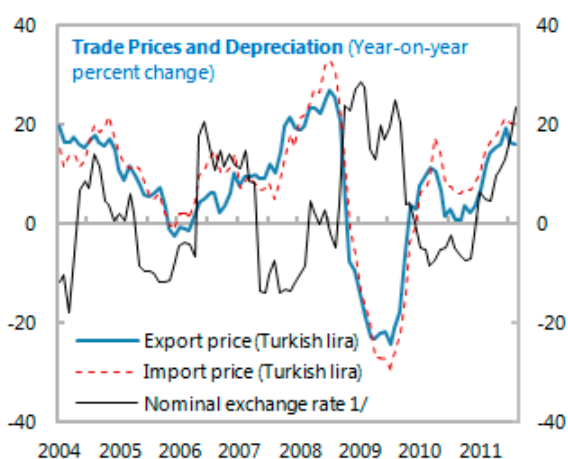
Sources: Central Bank of Turkey; Turkstat; and IMF staff calculations.
1/ Against equally-weighted euro-U.S. dollar basket. Increase indicates depreciation.

15.   While high import ERPT might suggest considerable expenditure switching, the composition of imports is likely to diminish this effect. More than 65 percent of total imports are raw materials and intermediates—including energy—and domestic alternatives are not readily available in the short term. Thus, while demand for consumer imports may be price elastic, the bulk of imports could be fairly insensitive to price changes.

Share of Imports, September, 2011 (Percent)

▨ Capital goods
■ Intermediate goods
▦ Consumption goods

12%
14%
74%
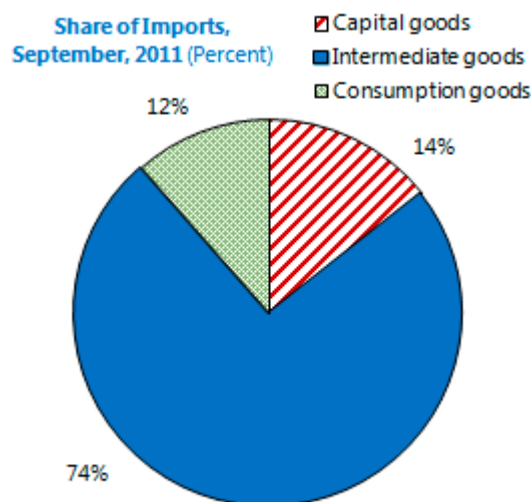
Source: Turkstat.

16.   Scope to expand export volumes is constrained in the near term by the limited domestic spare capacity in major export sectors. Capacity utilization in some of the top export sectors—textiles, wearing apparel, and machinery—has returned close to the pre-crisis levels, though there is some room to increase output in the vehicle and metal sectors (about 10 and 8 percent below pre-

crisis levels, respectively). Despite exports' competitiveness gain, weak EU demand may be the binding constraint. In addition, Turkish exporters rely heavily on imported raw materials and intermediates inputs. Increased demand for imports to expand exports, coupled with the higher cost of imports, will limit the improvement in the trade deficit. Moreover, these imports are generally priced in the US dollars or in currencies closely linked to the US dollar, while the main destination for exports is the EU, and priced in euros. Hence, the euro/USD exchange rate may be more important than the lira-foreign currency exchange rate for determining activity in key export sectors. When the euro depreciates against dollar—as recently—profit margins are squeezed, thereby reducing the incentive to expand export supply.
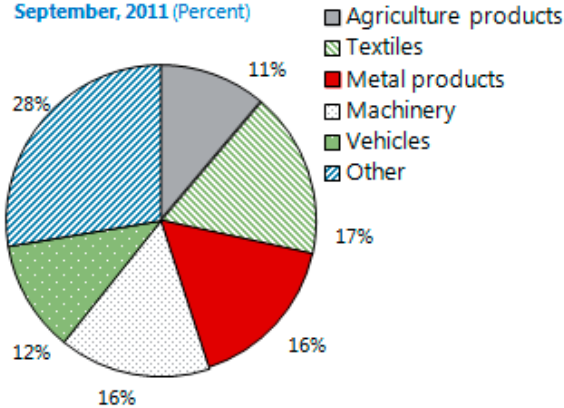
Source: Turkstat.

17.   In sum, Turkey's large initial trade deficit, high ERPT to import prices but relatively smaller ERPT to export prices, and inelastic trade volumes are not supportive of a relative price-driven improvement in

the lira-denominated trade balance in the near term.
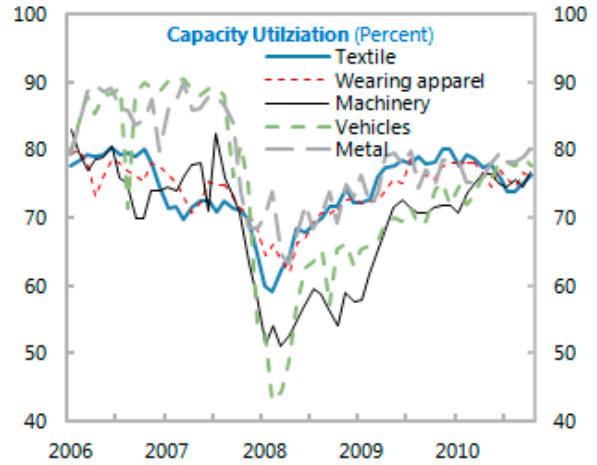
Source: Turkstat.

Or Mainly Import Compression?

18.   Reduced external financing may well dominate the expenditure-switching channel, bringing a smaller trade deficit in the short term but also slowing GDP growth. Portfolio outflows during September and October were a sizable US$4b, and the August current account deficit was fully financed by reserve drawdown, providing a temporary buffer to current account adjustment. If external financing remains constrained, the trade deficit can be expected to shrink as spending on imports is compressed. This would improve the trade balance, but may restrict output growth through fewer imports of goods used in production, including value-added from distribution and retail services on imports of consumer goods.

Medium-Term Adjustment

19.   To achieve a durable improvement in the trade deficit requires a sustained real depreciation. This, in turn, requires containment of price and wage inflation to narrow differentials with trading partners and peer emerging markets that undermine competitiveness. Fund staff projections suggest that even if Turkey was to meet its inflation targets over the medium term, its CPI inflation would exceed most other peers. Moreover, with energy accounting for nearly one quarter of imports, scope to shift to domestic replacements of imports is limited. Thus, to lower its trade deficit, Turkey will need to become more competitive in import-replacing and export sectors to cover the cost of energy imports and still achieve a moderate trade deficit.
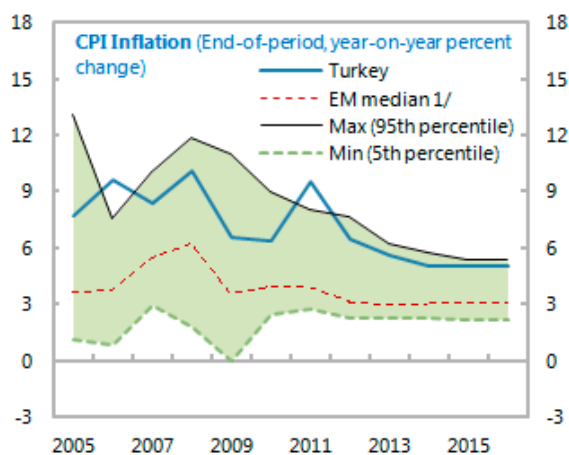
CPI Inflation (End-of-period, year-on-year percent change)
— Turkey
---- EM median 1/
— Max (95th percentile)
---- Min (5th percentile)

Sources: IMF, *World Economic Outlook;* and IMF staff estimates.
1/ Emerging markets include Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Poland, Russia, South Africa, and Thailand.

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IV. HOW EFFECTIVE WERE THE RESERVE REQUIREMENT INCREASES?

1. The CBT raised unremunerated reserve requirements (URR) on banks' lira- and fx-denominated on-balance sheet liabilities in several steps, beginning in November 2010. Larger increases were imposed on shorter-duration liabilities. The goal of the revised URR policy was to slow the growth of bank lending. This annex looks at the mechanics of URRs and assesses the effectiveness of the measure in Turkey.

2. URR is a tax on financial intermediation that drives a wedge between interest rates received by depositors and other suppliers of funds and those paid by borrowers.[1] URR can be seen as helping to resolve the dilemma currently facing numerous EMs, namely, that domestic conditions warrant significantly higher interest rates than those prevailing in international financial markets.[2] Thus, in contrast to an increase in the domestic policy interest rate that would raise funding rates alongside lending rates, hiking URR may lower the funding rate while raising the lending rate.

3. The effect of URR on these market interest rates depends on the incidence of the tax. Three parties may share in paying the URR tax: (i) borrowers, (ii) depositors and other suppliers of funds, and (iii) the banks on which the URR is notionally levied. Burden sharing between suppliers and borrowers depends on the relative elasticity of supply of—and demand for—financial intermediation. If suppliers of funds have better access to nonbank financial intermediation than do borrowers, more of the tax will be borne by borrowers. Burden sharing between banks and their clients depends on the degree of competition within the banking sector. Part of the URR burden will be borne by banks when banks possess market power, such that their marginal revenue and/or marginal cost varies with quantity, enabling them to earn positive profits.[3]

4. Because URR are paid with base money, URR may increase demand for central bank (CB) credit. Hence, the monetary policy framework is relevant for

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[1] If required reserves are remunerated at the market interest rate, they have no opportunity cost and hence are not a tax. Nevertheless, they may still reduce the amount of financial intermediation if the supply of funding is limited.

[2] This gap is traditionally bridged by a country's risk premium. However, risk appetite tends to be negatively correlated with the level of global interest rates, suggesting a role for URR.

[3] For example, if banks are perfectly competitive and depositors are very mobile, then borrowers will pay the URR.

determining the impact of URR. If—as in Turkey's inflation targeting regime—the CB fixes the policy interest rate, the quantity of base money provided by the CB is endogenous. However, even though the policy rate remains unchanged, the increase in the derived demand for base money to fund the URR payments represents an extra cost for banks.[4,5]

5.   The effectiveness of Turkey's URR policy can be judged based on several metrics: (i) spread widening between banks' funding and lending rates, and the distribution of the spread between borrowers and lenders; (ii) differential impact on funding rates according to maturity, and lengthening of bank funding maturities; (iii) the share of increased lira required reserves funded with CBT credit; and ultimately (iv) slowdown in loan growth.

6.   Against these metrics, results have been mixed. Initially, and contrary to expectations, banks' interest rate spreads did not widen following the increase in URRs in November 2010, as lending rates actually fell. Interest rates on deposits moderated on average, but did not became more differentiated by maturity. Banks secured the extra liquidity to fund the increased URR mostly by drawing on new repo funding from

the CBT. Only following the final, largest URR increase in April were the results more in line with expectations—with banks raising their lending rates as well as rates on longer-term deposits, which helped to lengthen the maturity composition of deposits. However, the lending slowdown was delayed, and may have been caused by other factors (reduced availability of external financing and targeted BRSA measures).

7.   Why was the increase in Turkey's URR not more effective at quickly slowing loan growth? Several factors were at work:
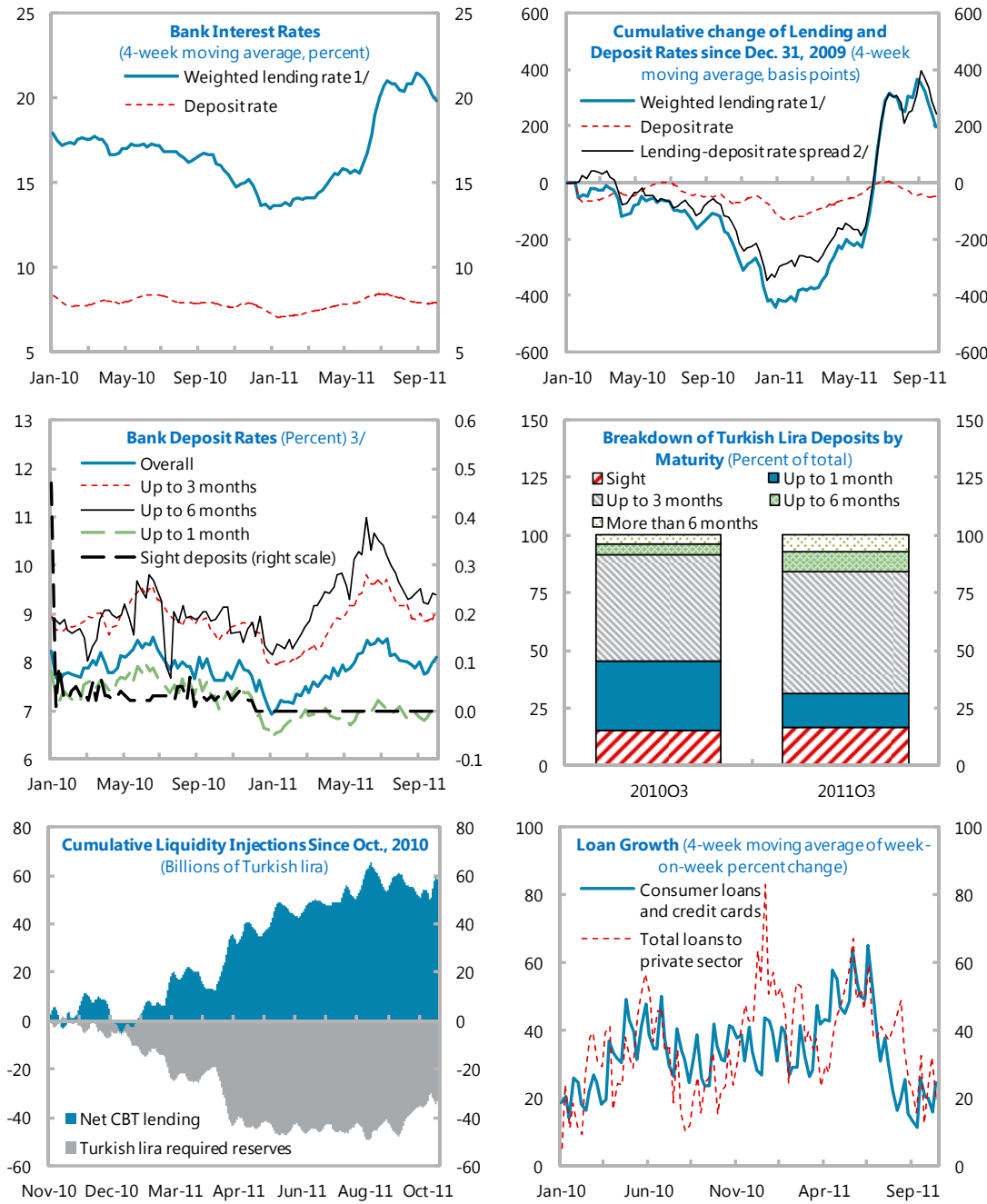
- *Market structure*: the oligopolistic structure of the Turkish banking sector, together with historically-high bank profits, initially encouraged banks to absorb the higher URR costs into lower profits, limiting pass-through to customer interest rates.[6] In addition, banks sought to offset the effect of a narrower interest margin through faster expansion of loan volumes. Subsequently, rapid contraction of profits forced banks to widen their interest margins, particularly since May 2011.

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[4] The cost is equal to the policy rate multiplied by the change in the rate of reserve requirements.

[5] If, instead, the CB fixes the quantity of base money, URR will bid up CB interest rates, further adding to banks' costs associated with URR.

[6] However, small cuts in the policy rate reduced marginally the cost of CBT funding, thereby lowering the overall drag on banks' profits from URR.

Figure 1. Turkey: Interest Rates and Monetary Policy, 2010–11

Bank Interest Rates
(4-week moving average, percent)
— Weighted lending rate 1/
---- Deposit rate

Cumulative change of Lending and Deposit Rates since Dec. 31, 2009 (4-week moving average, basis points)
— Weighted lending rate 1/
---- Deposit rate
— Lending-deposit rate spread 2/

Bank Deposit Rates (Percent) 3/
— Overall
---- Up to 3 months
— Up to 6 months
— Up to 1 month
— Sight deposits (right scale)

Breakdown of Turkish Lira Deposits by Maturity (Percent of total)
◪ Sight   ■ Up to 1 month
▨ Up to 3 months   ▨ Up to 6 months
▨ More than 6 months

Cumulative Liquidity Injections Since Oct., 2010
(Billions of Turkish lira)
■ Net CBT lending
■ Turkish lira required reserves

Loan Growth (4-week moving average of week-on-week percent change)
— Consumer loans and credit cards
---- Total loans to private sector

Sources: BRSA; Central Bank of Turkey; and IMF staff estimates.
1/ Weighted by 8-week moving average of flow of consumer-to-corporate loan portfolio.
2/ Calculated as difference in cumulative lending rate and cumulative deposit rate.
3/ Excludes rate on sight deposits.

- *Ability to bypass*: Banks initially sold or repo'd part of their government securities portfolio to fund loan growth, thereby avoiding an expansion in liabilities (the base for URR).

- *Liquidity effect neutralized through CBT credit*: The liquidity withdrawn through higher URR was fully offset by liquidity injections through CBT 7-day repos to ensure money market rates remained in line with the policy rate. While greater reliance on CBT repos shortened the average maturity of bank funding, assurances that the policy rate was unlikely to be raised made this funding structure attractive.

- *Substitutes for bank intermediation*: Banks initially chose to reduce interest rates on deposits rather than raise them on loans because they expected depositors to be relatively insensitive to interest rates.

However, deposit growth slumped and banks subsequently reversed course— raising rates on both loans and deposits. In addition—although small still in absolute terms—credit provided by non-bank intermediaries, which is not subject to URR, grew rapidly.

- *Expectations of future credit tightening measures*: Front-loading of loan demand and supply early in the year when the credit growth cap was not binding and to avoid the expected tightening of credit conditions later in the year could have temporarily offset any underlying moderation in lending growth.

- *All-time low bank lending rates*: In combination with robust income growth, low initial loan penetration of households, and lengthening of loan maturities, credit demand may not be very responsive to nominal or even real lending rates.

INTERNATIONAL MONETARY FUND

TURKEY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

November 11, 2011

Prepared By | European Department

CONTENTS

FUND RELATIONS

(Data as of October 31, 2011)

A three-year SDR 6.7 billion (559 percent of quota) Stand-By Arrangement was approved in May 2005 and expired on May 10, 2008. Cumulative purchases amounted to SDR 6.7 billion. The Board concluded an Ex-Post Assessment of Longer-Term Program Engagement and Ex-Post Evaluation of Exceptional Access for Turkey on August 1, 2008 (SM/08/248). In September 2008, the Fund initiated Post-Program Monitoring, which concluded in September 2011. Outstanding Fund credit amounted to SDR 2.3 billion (161 percent of quota) as of September 30, 2011.

I. Membership Status: Turkey became a member of the Fund on March 11, 1947. Turkey has accepted the obligations of Article VIII, Sections 2, 3, and 4 of the Fund's Articles of Agreement as of March 22, 1990 and maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions except for those maintained solely for the preservation of national or international security and which have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51).

II. General Resources Account

	SDR Million	Percent Quota
Quota	1,455.80	100.00
Fund holdings of currency	3,685.15	253.14
Reserve position in Fund	112.78	7.75

III. SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	1,071.33	100.00
Holdings	979.10	91.39

IV. Outstanding Purchases and Loans

	SDR Million	Percent Allocation
Stand-By Arrangements	2,342.12	160.88

V. Latest Financial Arrangements

	Approval Date	Expiration Date	Amount Approved	Amount Drawn
			In millions of SDRs	
Stand By	05/11/05	05/10/08	6,662.04	6,662.04
Stand By	02/04/02	02/03/05	12,821.20	11,914.00
Stand By	12/22/99	12/20/01	15,038.40	11,738.96
Of Which:				
SRF	12/21/00	12/20/01	5,784.00	5,784.00

VI. Projected Payments to the Fund[1/]

(In millions of SDRs; based on exisisting use of resources and present holdings of SDRs).

	Forthcoming				
	2011	2012	2013	2014	2015
Principal	468.42	1,311.59	562.11	--	--
Charges/Interest	8.46	18.67	3.44	0.30	0.30
Total	476.88	1,330.26	565.55	0.30	0.30

[1/]When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

VII. Safeguard Assessments

An assessment of the central bank's safeguards framework was conducted under the previous SBA and completed on June 29, 2005. While it uncovered no material weaknesses in the central bank's safeguard framework, a few recommendations were made to address some remaining vulnerabilities in the areas of internal audit and controls. Those recommendations have been implemented.

VIII.   Exchange Rate Arrangement:

The de facto exchange rate arrangement of Turkey has been classified as floating since October 4, 2010.

IX. Article IV Consultations:

The last Article IV staff report (EBS/10/144) was issued on July 13, 2010. Board discussion took place on July 30, 2010.

X. ROSCs

Standard or Code Assessed	Date of Issuance	Document Number
Fiscal Transparency	June 26, 2000	N/A
Corporate Governance	December 11, 2000	Prepared by the World Bank
Data ROSC	March 14, 2002	Country Report No. 02/55
Fiscal ROSC	November 25, 2003	Country Report No. 03/353
Fiscal ROSC	March 24, 2006	Country Report No. 06/126
FSSA and Related ROSC	May 7, 2007	Country Report No. 07/361
Data ROSC	September 3, 2009	Country Report No. 09/286
BCP	*Forthcoming*	*Forthcoming*
IAIS	*Forthcoming*	*Forthcoming*

XI. Recent Technical Assistance

Dept.	Timing	Purpose
FAD/MFD	February 2005	Treasury cash management and state bank reform
MFD	2005–06 (several missions)	Inflation targeting and monetary policy implementation
ICM	May 2005	Investor relations office
FAD	July 2005	Income tax reform
FAD	2005–08 (numerous missions)	Revenue administration reforms
FAD	February 2007	Health spending
STA	June 2007, November 2007	Revision of national accounts statistics and communication strategy
STA	November 3–17, 2008	DATA ROSC

WORLD BANK RELATIONS

1.   Turkey and the World Bank Group have a strong partnership, which continuously deepened over the last ten years. As the global financial crisis and economic downturn hit Turkey's real economy in 2008 and 2009, the World Bank Group responded flexibly and quickly by (1) increasing new International Bank of Reconstruction and Development (IBRD) financing, to US$2.08 billion in FY09 and US$2.99 billion in FY10, and (2) re-focusing the program on addressing the impact of the crisis, in particular access to credit and jobs, and supporting a return to sustainable growth while also (3) expanding the program on energy security and efficiency, clean and renewable energy, environmental management, and climate change as a long-term strategic priorities, in line with Turkey's rise as a regional and global player. Both the IBRD and the International Finance Corporation (IFC) accelerated and expanded financing to the private sector, including Small and Medium Enterprises, which generate around 80 percent of employment in Turkey and were heavily credit constrained during the crisis. These adjustments to the FY08–11 Country Partnership Strategy (CPS) are reflected in the CPS Progress Report (January 2010). A new CPS, FY12-15, is currently under preparation.

2.   By June 2011 Turkey was IBRD's second largest borrower with US$ 12.9 billion outstanding. The CPS FY08–11 IBRD provided US$ 7.64 billion financing of which US$ 6.44 billion in financing was delivered in the last three fiscal years. IBRD's portfolio is large, focused and considerably improved. Turkey's active portfolio comprises 16 projects with a total commitment of US$ 5.42 billion (end June 2011) which performs well and has a continuing trend towards fewer, larger operations.

3.   IFC's financing during FY08-11 was spread across 45 projects with USD 2 billion in new commitments, Additionally, IFC mobilized US$1.73 billion through private institutions to assist the private sector. Targeted areas included exporters, MSMEs, renewable energy, energy efficiency, cleaner production and energy security, health, infrastructure, trade finance and support for Turkish companies investing in the region and beyond.

4.   The World Bank Group is engaged in Turkey with its full range of financing as well as analytic, knowledge, and advisory

services. Recent analytic, knowledge, and advisory activities have included assessments of the economic and social impact of the crisis and policies and programs to mitigate it and promote growth recovery, Country Economic Memorandum on informality and on savings and growth, a roadmap for the development of a corporate bond market, a programmatic Public Expenditure Review, studies of female labor force participation, the inequality of opportunities, the quality of education, an investment climate assessment, and technical assistance on food safety, sustainable development, watershed management and promoting gender equity in the private sector.

5.   **Much analytic and advisory work is carried out together with the Turkish authorities, the private sector, academia, or civil society stakeholders.** The World Bank Group engages with civil society in the preparation and implementation of projects and collaborates closely with other development partners such as the IMF, EU, United Nations organizations, and key bilateral partners.

STATISTICAL ISSUES

1.   Data provision to the Fund is broadly adequate for surveillance purposes, despite certain shortcomings. Turkey subscribes to the Special Data Dissemination Standard (SDDS).

Real Sector Statistics

2.   Data on producer and consumer prices are published monthly, with a short lag. Monthly data on industrial production are published with a lag of five to six weeks. The CPI and the PPI generally conform to international standards. The methodology of the CPI was improved with the introduction of a 2003-based index, and this new CPI was effective as of 2005. The methodology of the CPI was further improved in 2009 regarding the collection of telecommunication services prices. The new CPI does not cover owner-occupied housing, commodities produced by households for own consumption, and expenditures on commodities obtained through in-kind payments. The PPI is compiled only by product (and not by economic activity).

3.   Quarterly national accounts are published with a 2-3 month lag. The Turkish Statistical Institute (Turkstat) publishes national accounts in current and constant prices for the production and expenditure approaches to gross domestic product (GDP) and in current prices for the income approach. The national accounts are compiled in accordance with

the *1993 System of National Accounts* (*1993 SNA*) methodology.

4.   In March 2008, revised annual and quarterly estimates were released for 1998 onwards following the introduction of *ESA 1995* in Turkish National Accounts. The new national accounts data implement the main recommendations from the 2001 Data Module of the Report on the Observance of Standards and Codes (Data ROSC): (i) improved estimation and deflation of output and household consumption; (ii) disaggregated deflation of trade in services and inclusion of shuttle trade in exports of goods; and (iii) improvement in the estimation of selected aggregates. However, GDP time series have not been constructed for years prior to 1998. Work is underway aiming at incorporation of data from annual collections, the development of independent estimates of household consumption, and further enhancement of estimates for the non-observed economy. A project recently initiated aims at extending the scope of the accounts to a full sequence of accounts for the total economy, annual supply and use tables, and institutional sector accounts.

5.   There is a wide range of data on labor market developments, with the biannual Household Labor Force Survey (HLFS) replaced with a monthly survey at the beginning of 2000. These new data are

published quarterly with a three month lag. Coverage of wage developments in the private sector has improved through the use of quarterly surveys of the manufacturing sector.

Government Finance Statistics

6.   Budgetary data are published monthly, with a lag of some 2−3 weeks. Coverage of the budget is incomplete, with some fiscal operations conducted through extra budgetary funds, for which data are available only with long lags. Fiscal analysis is further complicated by the omission of certain transactions from the fiscal accounts, some quasi-fiscal operations carried out by state banks, state economic enterprises (SEEs) and other public entities; and technical problems associated with consolidating the cash-based accounts of governmental entities with the accrual-based accounting of SEEs. It is difficult to reconcile fiscal data with monetary and BOP data, especially in the accounting of external debt flows and central government deposits.

7.   Turkey reports fiscal data for publication in the *Government Finance Statistics Yearbook*. The latest data available are for 2009 and cover the central government budgetary sector (including annex budget units). Monthly data are being reported for publication in *International Financial Statistics*, starting from September 2009.

Monetary and Financial Statistics

8.   Data on the central bank balance sheet, and provisional data on the main monetary aggregates and total domestic credit, are published weekly, with a one- and two-week lag, respectively. Data on the monetary survey and deposit interest rates are published monthly, with a one month lag, except for year-end data, where the lag is two months. The CBRT reports to STA the Standardized Report Form (SRF) 1SR for the Central Bank on a monthly basis with a two-week lag and SRF 2SR for the Other Depository Corporations with a one month lag, except for year-end data, where the lag is two months.

9.   Public data on banks' external funding could be improved. The CBRT reports data on banks foreign assets and liabilities, however, this includes data on transactions with banks' branches abroad that are classified as non-residents from the BOP perspective. The BRSA maintains data on the consolidated banking sector with more accurate information on the true foreign assets and liabilities; however, this data is not currently disseminated in a public report.

10.   In June 2011, the Financial Action Task Force (FATF) issued a public statement listing Turkey among the jurisdictions with strategic anti-money laundering and combating the financing of terrorism (AML/CFT) deficiencies that have not made sufficient progress in addressing them. The FATF noted that Turkey has taken steps towards improving its AML/CFT regime,

including by working on CFT legislation. Despite Turkey's high-level political commitment to work with the FATF to address its strategic AML/CFT deficiencies, the FATF pointed out that Turkey has not made sufficient progress in implementing its action plan and that certain strategic AML/CFT deficiencies remain. The FATF stressed that Turkey should work on addressing these deficiencies, including by: (1) adequately criminalizing terrorist financing; and (2) implementing an adequate legal framework for identifying and freezing terrorist assets.

External Sector Statistics

11.   In line with SDDS prescriptions**, Turkey disseminates**:

- monthly balance of payments (BOP) statistics with a 5–6 week lag;

- weekly international reserves with a one-week lag;

- monthly data on the template on international reserves and foreign currency liquidity (reserve template) within one month after the reference period;

- monthly merchandise trade data with a one month lag;

- quarterly external debt with one quarter lag; and

- international investment position (IIP) data with a six month lag.

12.   The central bank reports quarterly BOP data to STA with about two months lag. Balance of payments and IIP statistics are compiled in broad conformity with the conceptual framework of the fifth edition of the *Balance of Payments Manual* (*BPM5).* The CBRT periodically reviews the international transactions reporting system (ITRS) to address problems of coverage and misclassification using supplemental data sources and estimation techniques.

Turkey: Table of Common Indicators Required for Surveillance
(As of November 1, 2011)

	Date of latest observation	Date received	Frequency of data[7]	Frequency of reporting[7]	Frequency of publication[7]	Memo Items:	
						Data Quality – Methodological soundness[8]	Data Quality Accuracy and reliability[9]
Exchange Rates	10/31/2011	10/31/2011	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	10/28/2011	10/28/2011	W	W	W		
Reserve/Base Money (narrow definition)	10/31/2011	10/31/2011	W and M	W and M	W and M	O,O, LO, O	O, O, O, O, O
Reserve/Base Money (broad definition)	10/31/2011	10/31/2011	W and M	W and M	W and M		
Broad Money	10/31/2011	10/31/2011	W and M	W and M	W and M		
Central Bank Balance Sheet	Oct. 2011	10/31/2011	W and M	W and M	W and M		
Consolidated Balance Sheet of the Banking System	Oct. 2011	10/31/2011	W and M	W and M	W and M		
Interest Rates[2]	10/31/2011	10/31/2011	D/W/M	D/W/M	W/M		
Consumer Price Index	Sept. 2011	10/03/2011	M	M	M	O,LO,O,LO	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	Sep, 2011	10/18/2011	M	M	M	O, LO, O, O	O, O, LO, O, LO
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	Sep, 2011	10/18/2011	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Aug. 2011	09/20/2011	M	M	M		
External Current Account Balance	Aug. 2011	10/11/2011	M	M	M	O, O, O, LO	O, O, O, O, O
Exports and Imports of Goods and Services	Aug. 2011	09/30/2011	M	M	M		
GDP/GNP	Q1 2011	09/12/2011	Q	Q	Q	O, LO,O, O	LO, O, LO, O, LO
Gross External Debt	Aug. 2011	08/18/2011	Q	Q	Q		
International Investment Position[6]	Aug. 2011	08/18/2011	M	M	M		

[1] Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Includes external gross financial assets and liability positions vis-à-vis nonresidents.
[7] Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).
[8] Reflects the assessment provided in the data ROSC published in September 2009 and based on the findings of the mission that took place during November 3-17, 2008. The assessment indicates whether international standards concerning (respectively) concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).
[9] Same as footnote 7, except referring to international standards concerning (respectively) source data, statistical techniques, assessment and validation of source data, assessment and valid.

Public Information Notice (PIN) No. 11/150
FOR IMMEDIATE RELEASE
December 7, 2011

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2011 Article IV Consultation with Turkey

On November 28, 2011, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Turkey.[1]

Background

The Turkish economy continued to grow strongly through the first half of 2011, reaping the benefits of institutional reforms and revamped policy frameworks implemented in the previous decade. However, growth became increasingly fueled by domestic demand and imports. This was supported by strong credit growth, reflecting an appreciated currency combined with low interest rates and a surge in short-term capital inflows. The current account deficit widened sharply to near 10 percent of GDP. Inflation is rising quickly, reflecting pass-through from a large nominal depreciation since late 2010, numerous tax and regulated-price increases, and underpinned by tight domestic supply conditions, and is forecast to reach 9½ percent at end 2011, well above the point target of 5½ percent.

The externally-financed demand boom has weakened Turkey's resilience in some areas. Capital inflows are dominated by potentially-volatile financing, and short-term external debt has climbed sharply. With banks absorbing much of these inflows, an external funding shortfall will slow down credit. Nonfinancial corporates' net FX liabilities increased substantially, exposing them to currency depreciation. While the headline fiscal balance continues to improve and the

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

public debt-to-GDP ratio is declining, fiscal performance has been supported by benign economic conditions at home and abroad.

Policy responses were insufficient to prevent the development of a large current account deficit and high inflation. Monetary policy shifted to an unconventional mix of reserve requirements, the interest rate corridor, and the policy rate, which has not demonstrated it can deliver price- or financial–stability. Numerous prudential measures aimed at slowing credit growth and building buffers were introduced but, from a macroprudential perspective, were sometimes delayed. The primary balance of the nonfinancial public sector continued to improve, largely reflecting buoyant—but transient—tax revenue from the boom in output and imports and proceeds from a tax restructuring scheme, which masked a relaxed fiscal stance.

Growth is expected to slow sharply to 2 percent in 2012 due to weaker capital inflows, reflecting in part concerns about Turkey's large current account deficit. More limited foreign financing would constrain the current account deficit to about 8 percent of GDP and compresses imports. In line with Turkey's previous capital flow-driven corrections, with fewer imports of key raw materials and intermediates, GDP growth is forecast to be sharply scaled down. Inflation is projected to decline to a still-elevated 6½ percent, eroding external competitiveness.

Executive Board Assessment

Executive Directors commended the Turkish authorities for their agile economic management during the global crisis, which, together with structural reforms undertaken earlier, had contributed to a rapid recovery. Going forward, Directors urged the authorities to rebalance the policy mix to ensure a soft landing, in view of volatile capital flows, a widening current account deficit, and an externally financed credit boom. Tightening the structural fiscal position and gearing macroprudential policies to preventing systemic risk would allow monetary policy to focus on price stability, helping to preserve the credibility of the inflation-targeting framework and strengthen Turkey's resilience to changes in global liquidity conditions. It will also be important to accelerate structural reforms to reverse eroding competitiveness and improve the business climate, facilitating current account adjustment.

Directors welcomed the decline in public debt and the fiscal deficit. They encouraged the authorities to tighten fiscal policy, with a view to stemming domestic demand, supporting disinflation, while also providing a fiscal buffer in the event capital flows reverse. Directors recommended front loading the adjustment as much as feasible, and establishing fiscal targets in structural terms. They emphasized in particular the need to restrain current spending, expand the tax base to ensure sustainable revenues, and strengthen the oversight of public-private partnerships.

Directors acknowledged the difficult environment under which monetary policy operates. With a tighter fiscal stance and appropriate macroprudential policies in place, they saw scope for cautiously raising the single policy interest rate, taking into consideration the possible impact on economic growth and capital flows. Directors recommended moving toward a more transparent and consistent monetary policy framework to re-anchor inflation expectations and avoid excessively rapid disintermediation. Narrowing the inflation tolerance band and gradually lowering the inflation target will help moderate the impact of future capital flow cycles.

Directors noted the strong performance of the banking sector, but encouraged further efforts to address weaknesses in the financial sector, in particular its vulnerability to an external funding shock and possible deleveraging by banks in the region. They urged caution in implementing near-term measures to bolster banks' resilience so as to avoid a sharp drop in credit. Timely detection and response to future emerging systemic risk is crucial, along with further strengthening of financial sector oversight and regulation, as recommended in the Financial Sector Stability Assessment. Directors saw an important role for the recently established Financial Stability Committee in this regard. They underscored the importance of Turkey bringing its Anti-Money Laundering/Combating the Financing of Terrorism legislation into line with international standards.

Directors endorsed labor and product market reforms to enhance competitiveness and social equity. They recommended measures to enhance labor market flexibility, tailor training to employers' skill needs, and better align employment costs—including the minimum wage—with regional peers. Timely adjustment of regulated energy prices to movements in the domestic cost of imports would help lower Turkey's energy trade deficit.

Turkey: Selected Economic Indicators, 2006−12

	2006	2007	2008	2009	2010	2011	2012
							Proj.
				(Percent)			
Real sector							
Real GDP growth rate	6.9	4.7	0.7	-4.8	9.0	7.5	2.0
Private consumption growth rate	4.6	5.5	-0.3	-2.3	6.7	6.8	0.5
Private gross fixed investment growth rate	15.0	2.6	-9.0	-22.5	33.5	25.2	0.6
Contributions to GDP growth							
Private domestic demand	6.3	5.0	-1.8	-8.3	12.6	9.4	0.6
Public spending	0.9	0.8	0.6	0.8	0.8	0.7	0.4
Net exports	-0.3	-1.2	1.9	2.7	-4.4	-2.6	1.0
GDP deflator growth rate	9.3	6.2	12.0	5.3	6.3	8.6	8.6
Nominal GDP growth rate	16.9	11.2	12.7	0.2	15.9	16.7	10.8
CPI inflation (12-month; end-of period)	9.7	8.4	10.1	6.5	6.4	9.5	6.4
PPI inflation (12-month; end-of-period)	11.6	5.9	8.1	5.9	8.9	11.3	6.6
Unemployment rate	10.2	10.3	11.0	14.0	11.9	…	…
Average nominal treasury bill interest rate	18.4	18.1	19.2	11.4	8.1	...	...
Average ex-ante real interest rate	8.6	6.9	12.2	2.6	1.9	...	...
	(Percent of GDP)						
Nonfinancial public sector							
Primary balance	4.5	3.2	1.6	-1.0	0.8	1.8	1.5
Net interest payments	5.1	4.9	4.4	4.6	3.7	2.6	2.6
Overall balance	-0.6	-1.8	-2.8	-5.6	-2.9	-0.8	-1.1
Structural balance	3.0	1.5	0.3	-0.1	-0.1	-1.1	-0.1
Debt of the public sector							
General government gross debt (EU definition)	46.5	39.9	40.0	46.1	42.2	39.1	36.2
Nonfinancial public sector net debt	40.1	34.4	34.5	39.5	36.6	33.5	30.8
External sector							
Current account balance	-6.1	-5.9	-5.7	-2.3	-6.5	-10.2	-7.8
Nonfuel current account balance	-1.3	-1.5	-0.2	2.0	-1.9	-4.1	-1.8
Gross financing requirement	21.1	18.7	18.9	17.4	18.9	22.2	23.1
Foreign direct investment (net)	3.6	3.1	2.3	1.1	1.1	1.6	2.0
Gross external debt 1/	39.3	38.4	38.4	43.7	39.5	42.9	44.7
Net external debt	21.0	21.0	21.5	24.7	24.0	27.8	30.9
Short-term external debt (by remaining maturity)	15.0	11.7	16.0	15.2	16.1	17.9	17.2
Monetary aggregates							
Nominal growth of M2 broad money (percent)	22.2	15.2	24.8	12.7	18.3	…	…
GDP (billions of U.S. dollars) 2/	529.2	649.1	730.3	614.4	734.6	…	…
GDP (billions of Turkish lira)	758.4	843.2	950.5	952.6	1,103.7	1,288.3	1,427.4

Per capita GDP (2010): $10,297 (WEO)

Quota (As of October 31, 2011): SDR 1,455.8 million.

Sources: Turkish authorities; and IMF staff estimates and projections.
1/ The external debt ratio is calculated by dividing external debt numbers in U.S. dollars based on official Treasury figures by GDP in U.S. dollars calculated by staff using the average exchange rate (consolidated from daily data published by the CBT).
2/ GDP in U.S. dollars is derived using the average exchange rate (consolidated from daily data published by the CBT).

Statement by Mr. Willy Kiekens, Executive Director for Turkey and Mr. Omer Yalvac,
Senior Advisor to the Executive Director
November 30, 2011

Despite increased uncertainties in the global economy, the Turkish economy has maintained strong growth during 2011. Its resilience is grounded in a strong fiscal position, political stability, a well capitalized banking sector and skilful monetary policy. Political stability has facilitated agile economic policies in response to global developments. The hard-won credibility has been crucial in preserving confidence. A prudent fiscal stance has been one of the key pillars of previous economic programs, and remains so in the new Medium-Term Program. The strength of the banking sector allowed a sound credit expansion, thereby supporting growth. Sound credit is closely monitored by the prudential supervision and financial stability authorities. Monetary policy targets inflation while preserving financial stability. Despite the strength of the economy, the authorities remain vigilant about the risks and are ready to take necessary measures.

Growth

The Turkish economy grew strongly in 2010 and 2011, driven by strong private investment and consumption. By contrast, because of prudent fiscal policies, the contribution of public investment and consumption to growth was rather limited. With strong private-led growth, the economy has created around 3.4 million jobs since April 2009, allowing the unemployment rate to drop below 10 percent.

Strong private investment and consumption was fuelled by large foreign capital inflows and significantly contributed to a widening current account deficit. The authorities, each within their institutional mandate, and in light of global developments, have taken monetary, fiscal and financial policy measures to rebalance growth. As a result, the latest data show signs both of a slowdown in the economy and a moderation of the current account deficit.

The authorities target a 4 percent growth in 2012. The authorities are closely monitoring the regional and global developments and acknowledge that the risks are downside.

Fiscal Policy

The fiscal balance has continued to improve and has exceeded the targets in the Medium-Term Program. The budget deficit in terms of GDP is expected to improve from 3.6 percent in 2010 to 1.7 percent in 2011. Under the government's most recent Medium-Term Program the fiscal deficit should be further reduced to 1.5, 1.4, and 1 percent of GDP during the next three years.

On the fiscal stance, the views of the authorities and of the staff differ to some degree. The authorities appreciate the efforts of the staff in assessing Turkey's structural fiscal position and the extent to which fiscal revenues are transient. However there is no agreement in the

literature on how to calculate the structural fiscal balance and transient revenues. The comments on the fiscal stance can be misleading without a consensus on the methodologies applied.

The authorities consider the fiscal balance to be prudent. The public sector primary surplus is expected to be 1.2 percent of GDP in 2011 of which 0.8 percentage points result from the restructuring of public receivables. The remaining 0.4 percent of primary surplus exceeds the target in the previous Medium-Term Program. For 2012, the public sector primary surplus target is 1.1 percent, of which 0.3 percentage points are revenues from public receivables. The remaining 0.8 percentage points of the primary surplus would be again higher than the target in the previous Medium-Term Program.

The prudent fiscal stance and high growth have improved public debt sustainability. The EU-defined General Government debt-to-GDP ratio drops from 42.2 percent in 2010 to an expected 39.8 percent in 2011.

The authorities are determined to take the necessary measures to strengthen the fiscal stance and reduce imbalances in the economy. To moderate import demand while increasing fiscal buffers, the government has recently raised indirect taxes on several categories of mainly imported consumer durables. Domestic energy tariffs have been adjusted to avoid losses in public energy companies.

Monetary Policy—External Balance

The Central Bank of the Republic of Turkey (CBRT) has pursued a non-conventional policy shaped by domestic and external developments. The appreciation of the Turkish Lira (TL) has been moderated by a series of policy measures which decoupled the behavior of the TL exchange rate from other emerging market currencies. However, after the recent signs of a further deterioration in the global markets, the authorities reversed their policies in line with development in the financial markets.

The Consumer Price Index (CPI) is expected to significantly overshoot its target by the end of the year. The exchange rate pass-through and the recent adjustments in indirect taxes and administrative prices help explain the surge in inflation. The monetary authorities have tightened monetary policy to contain the second round effects of these temporary price increases. In sum, the CBRT's policy should help inflation converge to its end-2012 target.

The authorities share the concern of the staff that a heightened risk aversion and deleveraging by European Banks could limit external financing for Turkey. The authorities are closely monitoring the external conditions and are ready to take coordinated monetary, fiscal and financial measures. The authorities took note of the staff's recommendation to increase the monetary policy rates. However, in a highly uncertain period and because of an expected decline in growth next year, the authorities are cautious to tighten monetary policy under the present circumstances.

Despite the rise in external debt, the banking sector, corporate sector and the households have strong balance sheets and buffers. The external debt of the banking sector is only 13 percent of total liabilities. This is low in comparison with other emerging market countries. Additionally, banks have started to diversify their funding by issuing Eurobonds and TL denominated securities. The nonfinancial corporate net FX liabilities have increased, however short-term FX obligations are limited (i.e. around USD 15 billion). By contrast, the households have a strong long FX position and almost no FX liabilities.

The newly established "Financial Stability Committee" will assume an important role in coordinating the policies to address countercyclical adjustments and macro-financial stability risks. This Committee is chaired by the Deputy Prime Minister for Economic and Financial Affairs. The Committee consists of the Undersecretariat of Treasury, the Central Bank, the Banking Regulation and Supervision Authority, the Deposit Insurance Fund, and the Capital Markets Board. The Committee meetings will facilitate prompt coordinated action and better integrate micro- and macro-prudential perspectives among the institutions.

Financial Sector

The banking sector remains adequately capitalized. Last September, the aggregate Capital Adequacy Ratio (CAR) was 16.42 percent. The non-performing loan ratio has declined to historical lows. The private sector credit now reaches 48 percent of GDP, which is still comparably low. Funding is covered, in part by domestic bond issuances and external financing. The latest Eurobond issuances of the banking sector have been positive in terms of diversifying the investor base and lengthening the maturity.

The Financial Sector Assessment Program (FSAP) Update has been completed. There has been significant improvement since the latest FSAP. The stress test results confirm the strength of the financial sector but call for more attention to the risks stemming from global uncertainties. The banking sector's capital buffers protect banks even when hit by large shocks. The authorities welcome the FSAP's policy recommendations. New AML/CFT legislation to ensure compliance with international standards is on the agenda of the Parliament.

The authorities are closely monitoring bank capital adequacy and credit growth. They will take additional measures as needed. The risk weights for general purpose (consumer) loans and general provisioning requirements for banks with high levels of consumer loans or non-performing consumer loans have been increased. The Banking Regulation and Supervision Agency (BRSA) has restricted the dividend payouts by banks with low CAR. The criteria for assessing the minimum required CARs for foreign-owned banks have been modified to minimize contagious external effects. New capital charges on large maturity mismatches to discourage the duration gaps will come into force on July 1, 2012. Reserve requirements that vary with the maturity of liabilities have increased the term structure of deposits thereby reducing the maturity mismatch in the banks' balance sheets. The authorities are also preparing new regulation on credit risk management.

Structural Reforms

The authorities agree with the staff's assessment that the current account deficit has deep structural roots. They are determined to implement the reforms in the current Medium-Term Program to improve the business climate and combating informality. Public investment will focus on improving infrastructure and human capital. The country's export capacity will be strengthened. Energy efficiency will be enhanced and renewable and domestic energy resources promoted. The flexibility and the quality of the labor force will be enhanced.