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TURKEY ECONOMIC MONITOR

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CHARTING A NEW COURSE





TURKEY ECONOMIC MONITOR, OCTOBER 2019: CHARTING A NEW COURSE

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The Turkey Economic Monitor (TEM) periodically analyzes economic developments, policies and prospects in Turkey. The TEM was prepared under the guidance of Auguste Tano Kouame (WB Country Director, Turkey), Lalita Moorty (Regional Director for Equitable Growth, Finance and Institutions, ECA) and Sandeep Mahajan (Practice Manager, Macroeconomics, Trade and Investment GP) by core team including Habib Rab (Program Leader, EFI Turkey), David Knight (Senior Country Economist, MTI GP), Pinar Yasar (Country Economist, MTI GP), Erdem Atas (Research Analyst, MTI GP), Facundo Cuevas (Senior Economist, Poverty GP), Metin Nebiler (Economist, POV GP), and Etkin Ozen (Senior Financial Sector Specialist, Finance, Competitiveness and Innovation GP).

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EXECUTIVE SUMMARY

TAKING STOCK

Supportive external environment and somewhat agile policy responses enable external adjustment

The Turkish economy has experienced major external adjustments over the past 12 months, including declining current account imbalances, reduced external debt of banks, and a recovery in portfolio flows. These have lessened the external vulnerabilities that had accumulated in the run up to the August 2018 currency shock.

These adjustments have reduced the country's external financing needs and contributed to a more stable Lira, notwithstanding bouts of currency volatility in 2019 Q2 and Q3. The adjustments were aided by somewhat agile policy responses and more favorable (than expected) global monetary conditions.

Even so, foreign exchange reserves have gotten eroded over the past two years, exposing Turkey to external market pressure.

The real sector is deeply affected by shrinking investments and elevated inflation …

The real sector remains deeply affected by the persistence of macro-financial vulnerabilities. Investment significantly decreased – contracting for four quarters in a row (till 2019 Q2) – whilst industrial production points to a weak turnaround. The gradual recovery from recession in 2018 H2 has been fueled by a pickup in private consumption and net external demand.

The decline in inflation has begun, after exchange rate pass-through and episodes of loss of confidence in the Lira had sharply increased consumer prices, averaging 17 percent in the first three quarters of 2019. A gradual decline in producer prices since October 2018 has helped close the gap between PPI and CPI inflation and reduced pass-through pressures on consumer prices.

…hurting households through rising unemployment and declining purchasing power

Stagnating output levels, rising costs of production, and high consumer prices have led to significant job losses and falling real wages. Turkey's economy lost around 840 thousand jobs from May 2018 to May 2019, amounting to 2.9 percent of total employment. The unemployment rate increased from 10.6 percent to 14 percent between May 2018 and May 2019, with the youth seeing a jump in their unemployment rate from 19.6 to 25.6 percent. Average real wages declined by 2.6 percent between 2017 and 2018. The rise in unemployment and decline in real wages was experienced by workers across the skills and education spectrums.

Poorer households have been the most impacted because many low-income workers are employed in construction and agriculture—the sectors that saw the biggest decline in jobs. Moreover, the long-term impact of a drop in real wages is significantly greater for the poorest households since they have limited coping mechanisms.

The corporate sector remains weighed down by debt burdens, amplifying real sector woes

Corporate debt burden remains high despite gradual deleveraging. Total credit to corporates declined slightly from a peak of 72 percent of GDP (68 percent excluding import payables) to 68 percent (63 percent excluding import payables) between September 2018 and June 2019. Part of the increase in September 2018 was due to currency depreciation, which meant higher TL equivalent of FX debt. The gradual decline was driven by the subsequent appreciation in the currency and reduced domestic borrowing by SMEs. Credit rationing in Turkey affects SMEs more than larger firms, particularly during cyclical downturns.

Credit markets remained tight for much of 2019 (see below), which has impacted the larger corporates, some of which have turned to bond issuances. Capital markets, however, account for a very small share of corporate financing needs.

Elevated corporate debt coupled with high borrowing costs and declining earnings have squeezed corporates' liquidity position. This is reflected in falling interest coverage ratios, which, for listed companies, have reached critical thresholds. These developments underly the real sector woes noted above, as firms have been forced to cut investments and shed labor.

Corporate vulnerabilities remain high and sensitive to further demand and interest rate shocks. In addition, two thirds of corporate debt is denominated in foreign currency. Fortunately, more than 80 percent of these foreign currency loans belong to larger corporates that are hedged through exports and other mechanisms. Plus, SMEs' access to FX loans has been tightened and the use of FX indexed loans has been forbidden through regulation. Nevertheless, currency volatility contributes to exchange rate risk through operational and other costs.

Banks too have deleveraged to cope with worsening balance sheets positions

Corporate debt challenges have contributed to a deterioration in asset quality in the banking sector. Non-Performing Loans have risen from 3 percent in September 2018 to 4.7 percent in September 2019. Despite the rise in NPLs, capital adequacy across banks remain within prudential thresholds and profits have only dropped slightly.

An additional indicator of asset quality stress is the rise in the share of Stage 2 loans, which are classified as having elevated credit risk. Stage 2 loans account for around 12 percent of outstanding credit in the system. Part of the increase in Stage 2 loans reflects the introduction of International Financial Reporting Standards accounting norms designed to report more accurately risky assets. An ongoing challenge is the absence of implementation guidelines for this new regulation, which has created inconsistencies in the categorization of distressed assets across banks.

The authorities have committed to addressing the decline in asset quality, though the accumulated effects of last year's fragilities are projected to sustain pressure on asset quality. According to the statement released by the Banking Regulation and Supervision Agency, NPLs are projected to rise further to over 6 percent after reclassification of loans mandated by the regulator.

Maturity mismatches in bank balance sheets have declined over the past year. The deposit to loan ratio has improved in 2019; loans financed through relatively short-term deposits – which have high rollover ratios – have increased slightly from 80 percent in 2018 to 90 percent in 2019.

Banks continue to close on balance sheet foreign exchange open positions through off balance sheet swap operations. Though banks have been repaying foreign exchange debts, dollar deposits are now just over half of all deposits; foreign exchange loans on the other hand have been

declining. Banks' long position in FX swap operations help manage currency risk.

Banks have responded rationally by significantly cutting lending activities. The authorities have extended credit guarantees and relaxed macroprudential rules, which provided some credit impulse from state banks. But private banks have been cautious in a weak economic and high-interest-rate environment to avoid further deterioration in asset quality.

Policies, despite challenges, have helped steady the ship…

The overall policy response in the past year has fared reasonably well in restoring short-term stability, although given the major reorganization in government there may be room to further strengthen coordination and communication.

While the authorities have maintained a tight monetary policy stance since September 2018, efforts to boost credit through macro-prudential and fiscal channels went in the opposing direction, countering the effects of deleveraging and NPL resolution efforts.

In another example, the Central Bank responded swiftly to Lira liquidity constraints in 2019 H1 through a swap mechanism that helped bolster international reserves. Similar measures were taken in other countries during the Taper Tantrum episode of 2013. The Central Bank has consistently published comprehensive information on foreign exchange reserves; though an unclear drop in net reserves in 2019 Q1 created market anxieties and subsequent currency volatility.

There has been some progress in supporting corporates and banks to repair their balance sheets, although more is needed. The authorities have adopted both in- and out-of-court corporate debt restructuring frameworks in the past year and a half. These have been used mostly by larger corporates; SMEs seem to be relying on refinancing through credit guarantees. The debt restructuring measures could be usefully preceded by an independent Asset Quality Review in the banking sector, drawing on international expertise, which could further build market confidence.

Fiscal policy has responded countercyclically to help moderate the economic downturn. Transfers to households have increased rapidly, which will have played some role in cushioning the job losses among low-income workers. Ad hoc tax cuts were implemented to spur consumption, but at the likely loss of tax revenue. Authorities also cut capital spending to make fiscal space for public transfers.

…but there is still room for improvement

There has been an increase in the number of changes in the overall policy framework in Turkey in recent years. This could be in part due to the ongoing reorganization in government; new roles and responsibilities take time to settle. In addition, responding to a crisis requires firefighting, with effective communication and consultation on policy decisions.

Using big data techniques, the TEM finds that these may have contributed to increased economic policy uncertainty. The analysis shows that: (i) the number of changes to rules and regulations affecting businesses increased significantly each year peaking in 2018, reflecting greater volatility in the business environment; (ii) a growing share of the changes has been introduced through more discretionary legal instruments (i.e. not requiring formal consultation), which will have contributed to uncertainty; (iii) the most frequent changes were made in the areas of labor market, finance, the environment, quality infrastructure, trade and tax; (iv) most recently, the focus has shifted from tax and labor market issues towards quality infrastructure, environmental issues.

The above is not to say that the policy and institutional changes were not positive for businesses or that all changes were relevant for all businesses – but that businesses had to contend with more changes than before, which can be detrimental for operational and investment decisions. Strengthening policy transparency and

predictability now that the dust is beginning to settle on major administrative changes will be central to building investor confidence and reducing risk premia on investment.

LOOKING AHEAD

Pace and sustainability of recovery subject to reducing uncertainty and restoring investor confidence

The TEM projects no change in GDP in 2019 and gradual medium-term recovery with risks tilted to the downside. Medium-term growth is projected to be driven largely by a continued recovery in consumption. Inflation is projected to fall to high single digits in the medium term. Poverty is projected to increase in 2019, before declining gradually over the forecast period.

The degree of uncertainty over the medium-term remains high relative to peer countries, as reflected in the broad range of forecasts across different institutions. The pace and sustainability of the current incipient recovery will depend in great part on reducing economic uncertainty and restoring investor confidence. A sudden loss of confidence in the currency will heighten the balance sheet pressures on banks and corporates and further damage the real sector.

Turkey needs to strengthen external buffers to reduce market pressures

Key to restoring confidence and reducing Turkey's risk premia is strengthening external buffers. Though Turkey's reserves are adequate compared to possible short-term calls, it nevertheless remains vulnerable to external market pressures (EMP).

Empirical analysis suggests that the two important leading indicators of EMP are: a sharp increase in the US Federal funds rate, which predicts a crisis around one year ahead, and a spike in the ratio of short-term financial flows to reserves, which predicts a crisis within a few months. Though the former seems less likely now, Turkey remains vulnerable to the latter, particularly if foreign flows remain speculative rather than geared to long-term investments. This raises the importance of strengthening external buffers, and, through that, building investor confidence and reducing risk premia.

Which can be supported by tight monetary policy

Monetary policy going forward will be critical to reducing risk premia and strengthening external buffers, but monetary authorities have a complex balance to strike. An overly expansionary monetary policy could fuel currency pressures and further stress corporate and bank balance sheets. Market interventions to accelerate credit expansion could delay recovery (given existing leverage, short-term finance and low demand) and exacerbate financial instability. Corporate debt overhang in Turkey is likely to be an important drag on private investment over the medium-term.

Addressing this challenge will require a holistic approach to dealing with distressed assets in the banking sector, which the authorities are working on. It will also require efforts to increase access to long-term finance including through the development of capital markets, which is a long-term endeavor. In East Asia for example, policy reforms after the Asian Financial Crisis helped to significantly increase firms', including SMEs', access to domestic equity and bond markets. This helped reduce financial vulnerabilities emanating from foreign currency borrowing, high debt rollover risks, and access to limited markets, which are all challenges in Turkey.

In addition to using available fiscal space effectively by focusing on the composition of the fiscal stimulus

Effective use of available fiscal space can play a useful role in supporting Turkey's economic recovery. Turkey entered recession in 2018 H2

with more fiscal space compared to selected peer countries in comparable recessions in recent years.

One difference with those peer countries is the elevated risk premium and borrowing cost in Turkey, which constrains fiscal space and the multiplier. An analysis of how fiscal space evolves under different macroeconomic scenarios suggests that Turkey can absorb limited shocks.

Starting from the assumption that Turkey has some fiscal space, it is important to assess the effectiveness of the countercyclical response based not just on the level but also the composition of the fiscal stimulus. Econometric analysis of the impact of transfers on growth point to a positive and significant relationship.

Since workers at the bottom end of the welfare distribution are likely to have been affected more badly (i.e. because of lack of alternative sources of income, higher share of job losses in relatively low skill industries such as construction), automatic stabilizers through public transfers to those workers could help to at least partially offset the drop in private consumption.

But these transfers need to be timely, targeted, and timebound. They should not turn into long-term entitlements that create budget rigidities and negative labor market impacts. They need to be designed to clearly provide temporary relief.

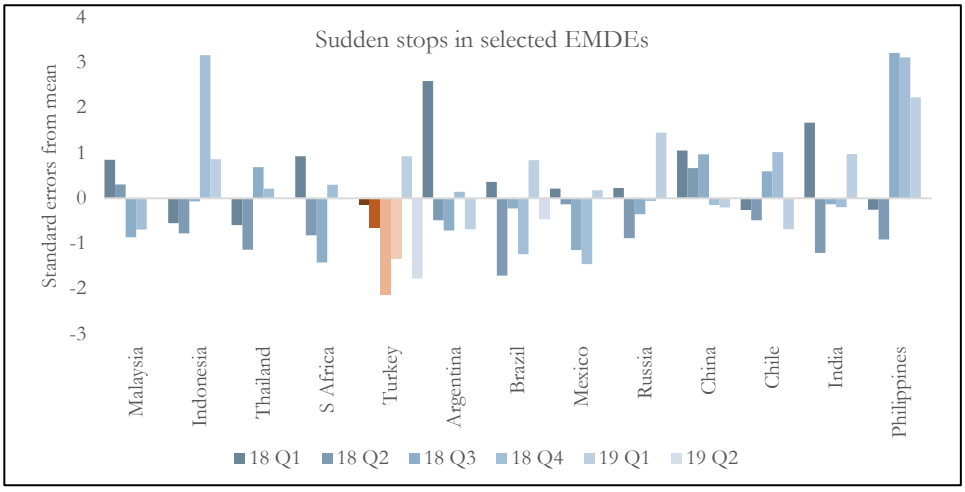
I. TAKING STOCK

Supportive external environment and somewhat agile policy responses enable external adjustment

1. **Turkey's currency shock in August 2018 raised for the first time in nearly a decade the real risk of an external crisis.** Currency pressures at the time affected banks' and corporates' abilities to meet rising external debt obligations in the face of declining economic activity. There were concerns in August 2018 over foreign investors' appetite to refinance Turkey's (mostly private) external debt, with close to $130 billion falling due in the 12 months from August 2018. This was exacerbated by monetary tightening in the US and contagion from developments in Turkey and Argentina, a combination of which led to a general sell off in emerging market assets. Credit Default Swap rates and short-term bond yields in Turkey peaked over this period. Some projected that Turkey would face a precipitous external financing gap.

2. **Turkey's capital outflows and external market pressure (EMP) indicators in mid-2018 had risen to levels not seen since the Global Financial Crisis (GFC).** Turkey experienced a sudden stop in capital inflows in 2018 Q3 for the first time since the GFC,[1] the only country to have done so at the time in a sample of 13 emerging market and developing economies (EMDEs) (Figure 1). Turkey's EMP index (Box 1) displayed heightened external financial pressure, reaching crisis levels in mid-2018, again for the first time since the GFC. No other EMDE in the sample, except for Argentina, reached such levels in 2018.

Figure 1: Turkey experiences sudden stop in 2018 Q3



Sources: International Finance Statistics, WB Staff estimates.

[1] 2018 Q3 capital flow data has been revised down since the last edition of the TEM, and now shows a sudden stop. Capital inflows fell to just over 2 standard deviations below their 5-year average in 2018 Q3 before recovering in 2019 Q1. Eichengreen and Gupta (April 2016) classify an episode as a sudden stop when: (i) non-resident portfolio and other investment inflows decline below the average in the previous 20 quarters by at least one standard deviation; (ii) when the decline lasts for more than one quarter; (iii) and when flows are two standard deviations below their prior average in at least one quarter. Episodes end when capital flows recover to the prior mean minus one standard deviation

Box 1: External Market Pressure Index

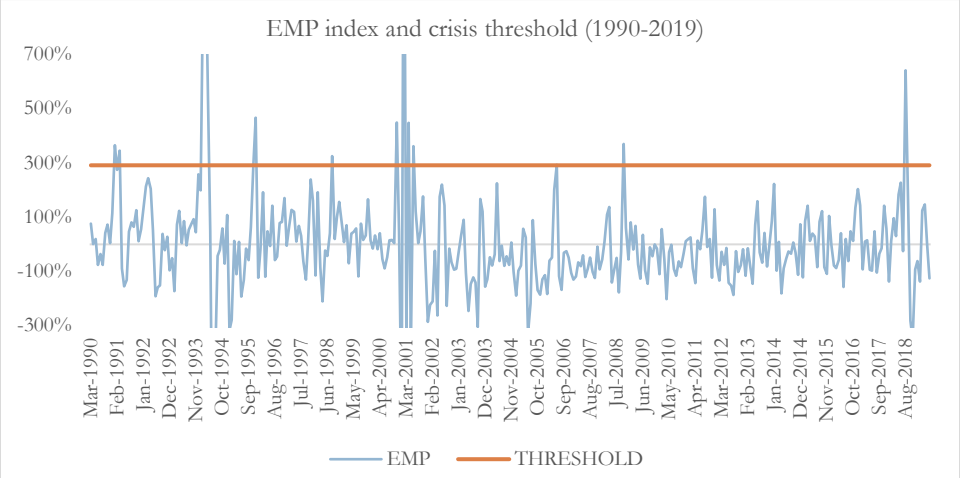
The External Market Pressure (EMP) index is a commonly used index that aims to identify periods of unusually high external financial pressure on a given country. The most obvious component of this index is the exchange rate, but it also includes changes in relative interest rates and changes in international reserves that may be used as policy responses to counteract external market pressure. Therefore, simply expressed the Exchange Market Pressure (EMP) index is as below:

$$\boldsymbol{EMP_t = \partial e_t + \partial i_r - \partial f_t}$$

Where e_t is the exchange rate expressed in domestic currency terms, i_t is the nominal interest rate, relative to a world interest rate, and f_t is the level of international reserves held at the Central Bank.

An EMP 'crisis' is commonly defined as the EMP exceeding 1.5 standard errors. Constructing this index for Turkey using monthly data since 1990 shows that Turkey has gone through eight discrete periods of external market pressure. However, post 2001, there have been fewer EMP crises, and they have been shorter. In August 2018 Turkey's EMP index reached crisis levels, the highest since 2001 (Figure 2).[2]

Figure 2: Turkey's EMP index rises above critical threshold in August 2018



Sources: Haver Analytics, WB Staff estimates.

Much of the EMP in Turkey in August 2018 was driven by a sharp depreciation of the Lira, but the drop in international reserves also contributed significantly (Figure 3); looking at the exchange rate alone would underestimate the level of underlying pressure by more than one-third.

Constructing EMP indices for selected other EMDEs shows that few faced as severe pressure as Turkey in the last year (Figure 4).[3] Of these countries, only Argentina faced crisis-levels of external market pressure, as it has done frequently since 2014. This suggests that Turkey, along with Argentina, were the countries that faced the brunt of worsening EMDE sentiment last year.

[2] Sensitivity analysis using only a post-2001 time series also identified August 2018 as an EMP crisis period.
[3] Countries covered are Argentina, Brazil, India, Indonesia, and South Africa.

Figure 3: EMP driven by exchange rate then reserves

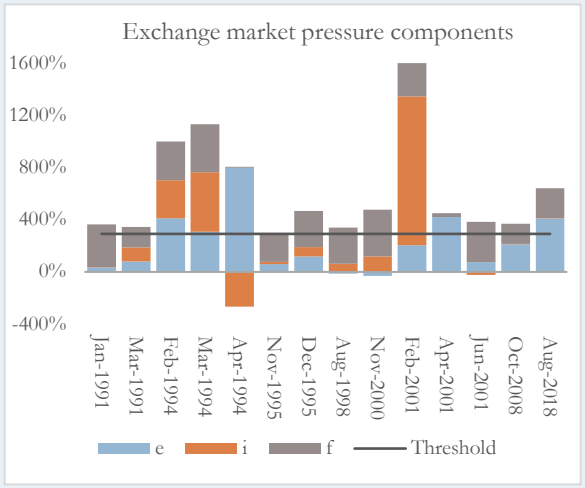
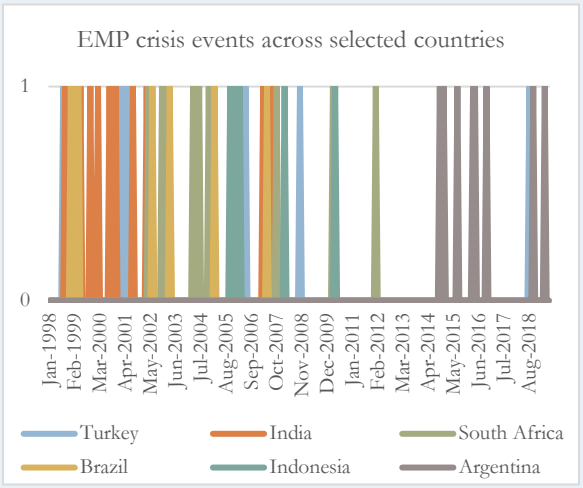


Figure 4: Turkey one of few EMDEs to face EMP in recent years



Sources: Haver Analytics, WB Staff estimates.

3. **From this difficult context only 14 months ago, Turkey has gone through a sharp external adjustment that has helped reduce external vulnerabilities.** Three developments are worth highlighting. Firstly, a significant reduction in Turkey's current account imbalances; a sharp decline in import demand (combined with a pick-up in exports) had by June 2019 contributed to a small current account surplus for the first time since 2002 (Figure 5). Secondly, portfolio inflows into the corporate sector accelerated rapidly (Figure 6). Thirdly, banks have been deleveraging external debt (as evidenced from a net outflow of other investments), strengthening their financial resilience. From a peak us $134bn in August 2018, banking sector debt fell to $101bn by end June 2019. Corporate and central government debt have remained relatively stable in nominal terms (Figure 7).

4. **The external adjustment helped reduce Turkey's gross external financing requirement (GEFR) in 2019**. A lower external debt stock compared to the previous year has played some role, but by far the biggest factor has been the drop in current account imbalances. The annual rolling GEFR[4] fell from US$227bn in August 2018 to US$178bn by May 2019 (Figure 8). However, of that amount US$51bn are domestic FX holdings, which are not rolled over, and US$55bn are low-risk trade credits. The adjusted-GEFR excluding these two items therefore stood at US$72bn in May 2019. The lower external debt stock reduced the annual GEFR by US$10bn while the falling CAB has reduced the need for almost US$50bn of external financing.

5. **Lower current account imbalances have also helped reduce currency sensitivity to capital flow developments**. Higher foreign holdings of domestic securities, a higher 'basic balance' deficit (the current account balance less foreign direct investment) and more shallow credit markets can all indicate greater sensitivity of the exchange rate. Prior to the exchange rate shock last year, Turkey stood out amongst EMDEs as more sensitive. The basic balance has increased sharply since then, and now lies in positive territory (Figure 9), which implies a lesser dependency on more volatile short-term external financing flows. Aside from a bout of currency instability between March and May 2019 – associated with declining reserves (see below) and uncertainty over the Istanbul elections – the Lira has remained relatively stable (Figure 10).

[4] Constructed using forward looking debt amortization for the next 12 months, and the current account balance over the last 12 months as a proxy for the future current account balance.

Figure 5: Sharp decline in current account imbalances

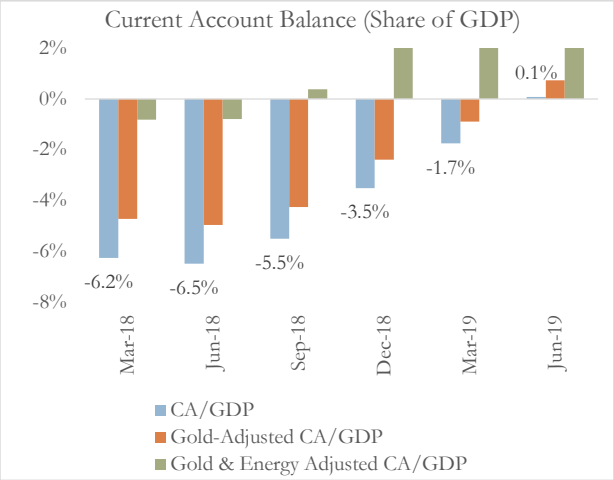
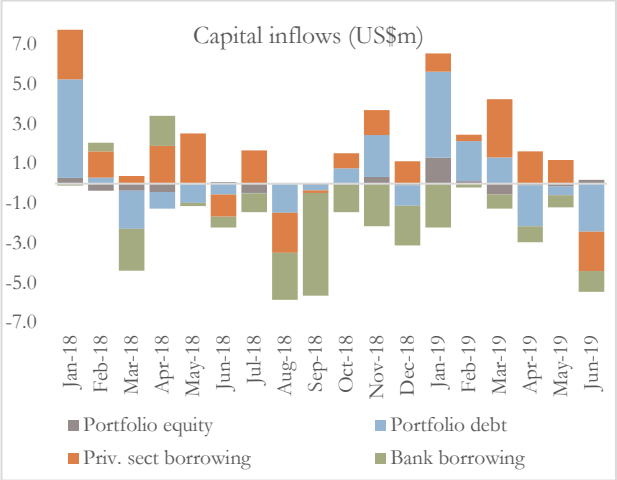


Figure 6: Acceleration in portfolio inflows



Sources: Haver Analytics, WB Staff estimates.

Figure 7: Large drop in banks' external debt

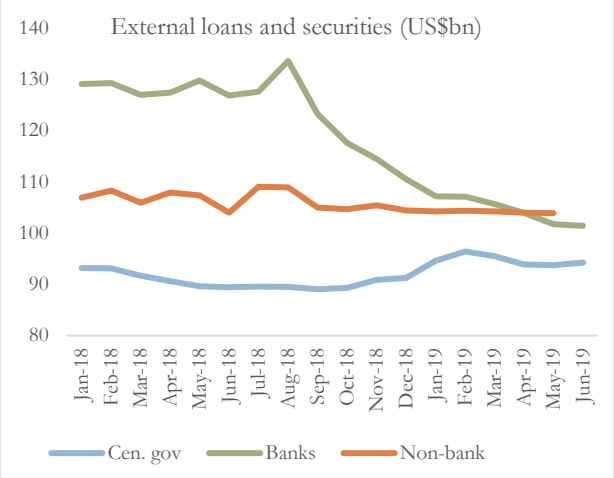
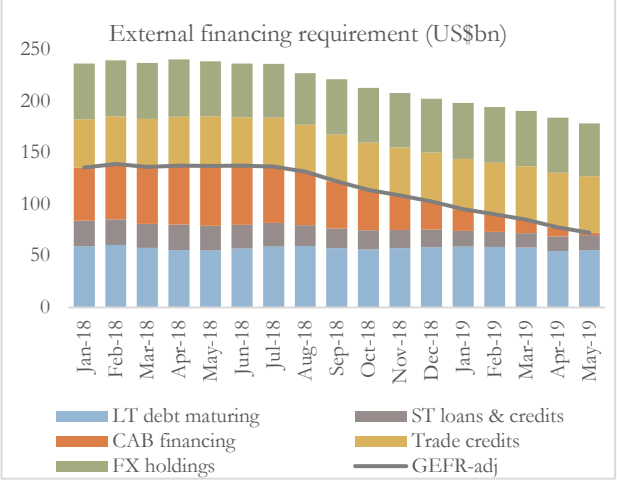


Figure 8: Decline in external financing requirement



Sources: Central Bank of the Republic of Turkey (CBRT), Haver Analytics, WB Staff estimates.

Figure 9: Reduced currency sensitivity to capital flows

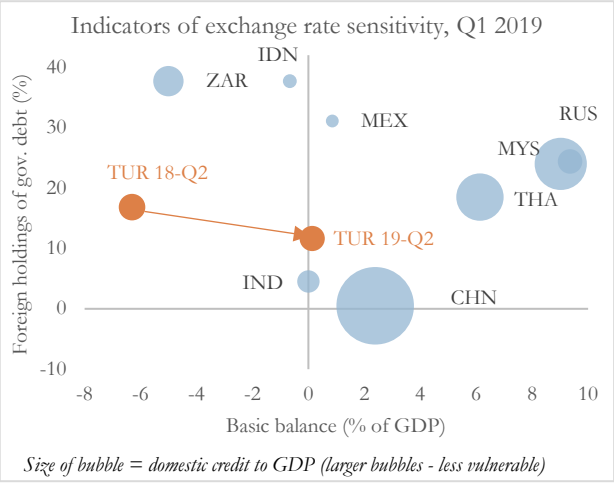
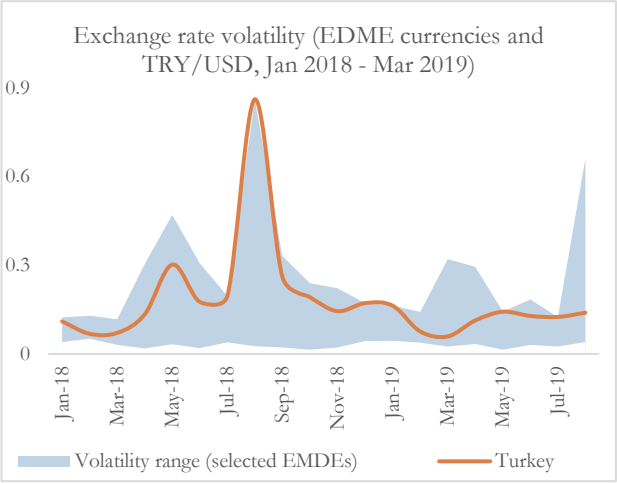


Figure 10: More stable Lira in recent months

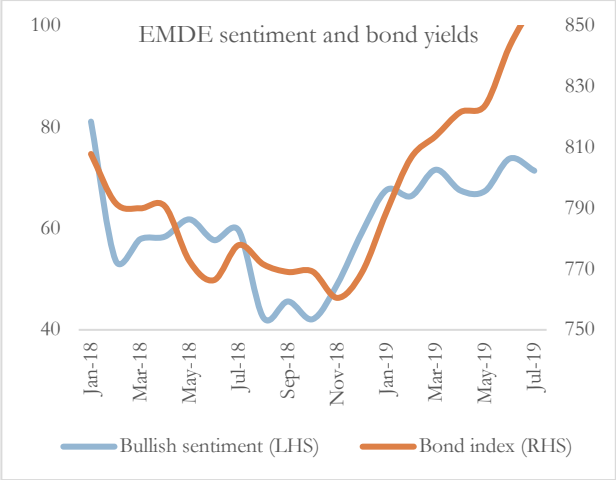


Sources: IFS, Haver Analytics, WB Staff estimates.

6. **The external adjustment was in part thanks to the authorities' short-term policy responses to the currency and capital flow shock of last year**. Good practice in such instances includes[5] maintaining exchange rate flexibility; tighter monetary policy if needed for price and exchange rate stability, a tight fiscal stance; and short-term use of macroprudential and capital flow management measures. Turkey maintained exchange rate flexibility to a large extent but also ran down its reserves more than most other countries experiencing large capital outflows.[6] It also hiked interest rates by the most relative to comparators and, other than Argentina, its exchange rate adjusted the most sharply. On the fiscal front, relative to comparators Turkey maintained the smallest fiscal deficit during and immediately after the shock.

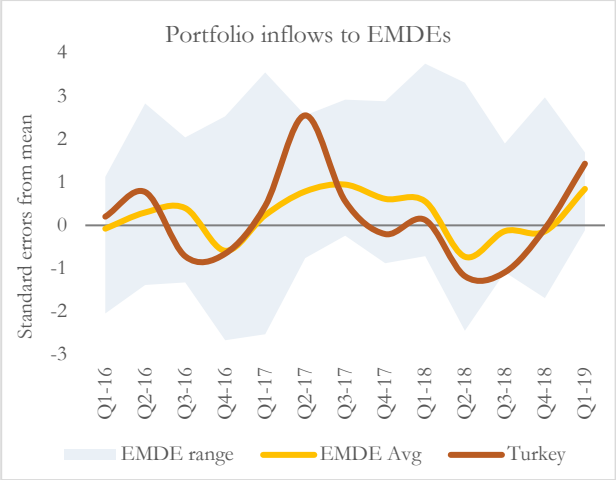
7. **The adjustment was also possible thanks to more favorable global monetary conditions than anticipated in August 2018**. At the time, strong growth numbers from the US had built expectations of monetary tightening by the Fed. However, growth concerns in advanced economies have kept bond yields muted at multi-year lows (Box 2). In July, the US Federal Reserve implemented its first interest rate cut for more than a decade. Bullish sentiment on EMDEs has risen sharply since last October (Figure 11) with portfolio flows gradually recovering (Figure 12).

Figure 11: Bullish sentiment towards EMDEs



Sources: Haver Analytics.

Figure 12: General recovery in portfolio flows



Sources: International Institute of Finance, Haver Analytics, WB Staff estimates.

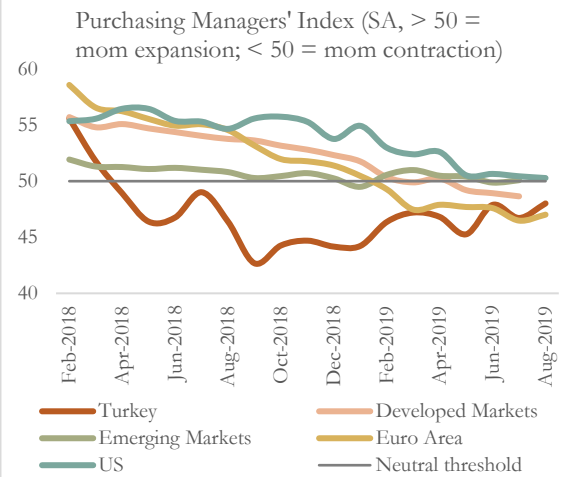
[5] Eichengreen, BJ; Gupta, P, 2016, "Managing Sudden Stops," WBG Policy Research Working Paper WPS7639.

[6] Turkey, India, South Africa, Brazil and Argentina all experienced sharp falls or reversals in portfolio inflows 2018 Q2-Q3. After Argentina, Turkey's exchange depreciated the most against the dollar (60 percent lower year-on-year over Q3 compared to an average 13 percent depreciation in South Africa, India and Brazil). Turkey put in place the largest increase in interest rates (except for Argentina) at 625bps, compared to tightening of 50bps in India (compared to a year previously) and loosening in Brazil and South Africa over the same period. Turkey's gross reserve position fell by the most amongst this group, 24 percent lower in Q3 year-on-year with other countries only registering smaller changes - between -3 and +3 percent. In the third quarter, the rolling annual fiscal deficit stood at 1.9 percent of GDP in Turkey, compared to 3.8 percent in India, 4.5 percent in South Africa, 5 percent in Argentina, and 6 percent in Brazil.

Box 2: Global economic developments[7]

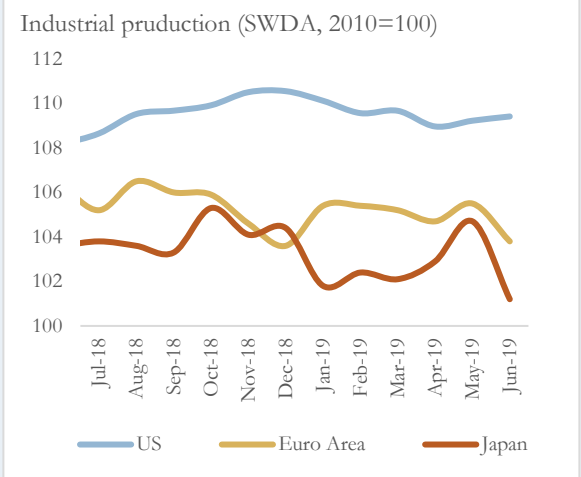
Global economic activity slowed down in 2019 with sluggish investment and rising trade barriers. The composite Purchasing Managers' Index signals cooldown in economic activity for both advanced economies and EMDEs starting 2019 Q2. Industrial production in the US contracted 1.2 percent (q/q, sa) in 2019 Q2 (Figures 13, 14). Despite a rebound in US employment in June (224.000 jobs added to the nonfarm payroll), consumer confidence has fallen to a two-year low. Industrial activity in the Euro area remained tepid (Figure 14), especially in Germany, whilst Brexit uncertainty further strained the UK economy. In Japan, consumer confidence has plummeted in recent months, reaching a five-year low, whilst China's growth decelerated to 6.2 percent (y/y) in 2019 Q2. Recovery in both major commodities exporting and importing EMDEs remains fragile due to weak industrial activity.

Figure 13: Declining industrial activity



Sources: Haver Analytics, World Bank Global Economic Prospects, June 2019, WB staff calculations.

Figure 14: Particularly in developed markets



Source: IHS Markit Economics, Haver Analytics.

Trade tensions between the US and China have further increased economic uncertainty and strain. Despite ongoing negotiations since the end of 2018, US tariffs have been applied on $550 billion worth of Chinese imports, whilst China reciprocated with tariffs on $185 billion worth of US imports (as of early September). The current economic situation and expectations index moved to negative territory in August for the first time in three years (Figure 15). Volatility in major EMDEs' currencies has increased in recent weeks.

Global monetary conditions started to ease after June 2019 amid low global inflation and a deterioration in growth outlook. The US Federal Reserve (FED) and the European Central Bank cut policy rates in end-July and early September respectively. The US faced an inverted yield curve for the first time since 2007, which raised concerns over a looming recession.

Bond yields in advanced economies declined to historic lows in August following the FED's rate cut. In the US and Japan, 10-year yields fell to levels last seen in the second half of 2016, before rising somewhat, while they reached an all-time low of negative 0.7 percent in Germany in early September. Major advanced economies especially Euro Area economies and Japan faced negative bond yields. Borrowing costs in EMDEs have mirrored declining bond yields in advanced economies, with EMDE bond spreads falling to a near 12-month low in August (Figure 17).

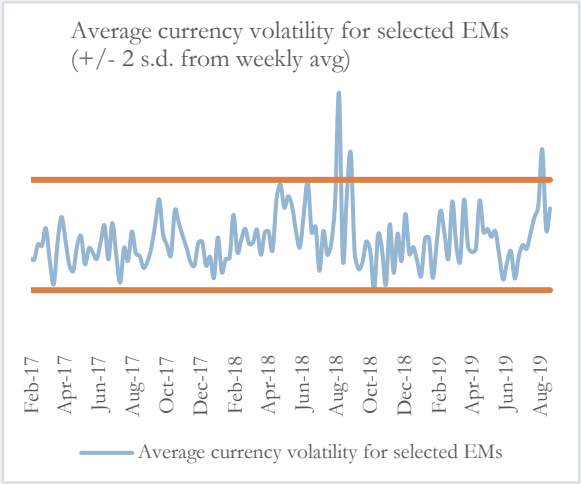
[7] This box draws on WBD, "Global Economic Prospects: Heightened Tensions, Subdued Investment," June 2019 and "Global Economic Monitor," January-August 2019.

Figure 15: Economic situation and expectations index turns negative

Sources: Haver Analytics/ Netherlands Bureau for Economic Policy Analysis.

Notes: All variables are seasonally adjusted. Industrial production is calculated with production-weighted method by the source, 2010=100. Trade volume index, 2010=100. Economic situation and expectations index are reported as percent balance.

Figure 16: Rising EMDE currency volatility

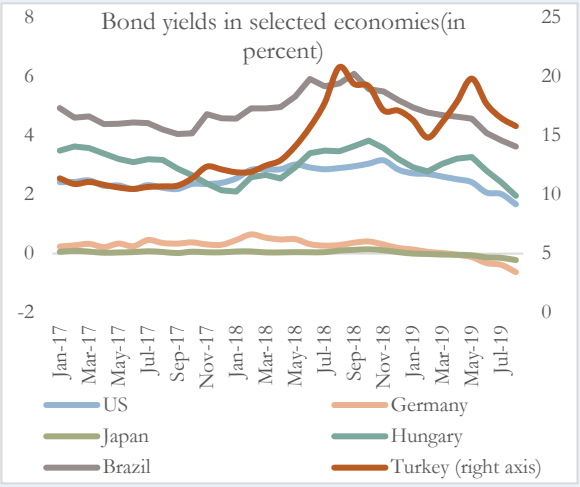


Sources: Haver Analytics.

Notes: Selected emerging market economies represent Turkey, South Africa, China, India, Indonesia, Hungary, Poland, Romania, Brazil and Argentina. Average currency volatility is calculated through taking simple average of weekly percentage change for each currency against US$. Dashed lines represent +-2 standard deviation for all weeks between 2017 January-2019 August.

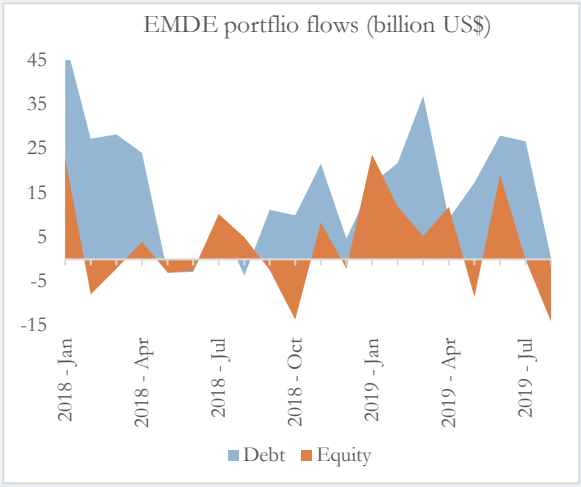
Capital flows to EMDEs have been more favorable so far in 2019 relative to 2018, but increased trade tensions have led to some reversals. EMDEs benefited from benign financing conditions as investors' search for yield continued to support a recovery in EMDE portfolio flows especially until May. Amid favorable borrowing costs, debt of EMDEs rose to historical highs in 2019 Q1. EMDE bond issuances improved in June with increasingly favorable financing conditions.

Figure 17: EMDE bond spreads falling



Sources: Haver Analytics, Central Banks, FT, Reuters.

Figure 18: Some decline in EMDE portfolio flows



Sources: Haver Analytics, Institute of International Finance Statistics.

8. **Despite the external adjustment, vulnerabilities remain elevated, in large part due to the drain on net foreign exchange reserves**. The gross level of international reserves (GIR) has remained stable, but net of liabilities, reserves fell in 2019 H1. CBRT's reserves net of short-term drains[8] halved between March and May this year as an increase in liabilities was not offset by rising reserve assets (Figure 19). Two factors drove the increase short-term drains in March and May. First, the scaling up of a one-week FX swap window with the CBRT, designed to provide TRY liquidity to the market, which increased the amount of US$ payable by the CBRT over the period by US$10bn. Second, an increase in commercial deposits of foreign currency led to an increase in the amount of FX required to be held at the CBRT, which constitutes a contingent short-term liability for the CBRT.

9. **Turkey's level of international reserves remains below the minimum prudent level recommended according to the IMF Assessing Reserve Adequacy methodology**. This suggests that the lower level for recommended GIR is around US$130bn, due to high levels of short-term debt rollover and risks of outflows of 'other investment liabilities', mostly FX deposits and bank loans. In comparison actual reserves are around US$100bn (Figure 20).

10. **A comparison across countries also suggests that international reserves, especially once accounting for pre-determined and contingent short-term drains, are low in Turkey**. Compared to a selection of other EMDE countries, Turkey has the lowest net reserves on this measure other than Argentina, and only about half the level of Ukraine when compared in terms of months of import cover (Figure 21).

11. **Turkey nevertheless has foreign exchange liquidity to meet short-term liabilities.** For instance, if a confidence crisis in the national currency were to occur, the central bank may be called on to support the country's external FX-denominated debt service obligations, running down reserves. However, the Central Bank's gross reserves are also likely to increase through reserve requirements as domestic holdings of foreign exchange tend to rise in Turkey during periods of uncertainty and volatility. Figure 22 compares gross reserves to external debt. Those in the South-East quadrant are more vulnerable. But countries with larger domestic FX deposits, represented by larger bubbles, have more buffers in the private sector to support FX payments in the case of a sudden stop.

Figure 19: Drop in net reserves in 2019 H1

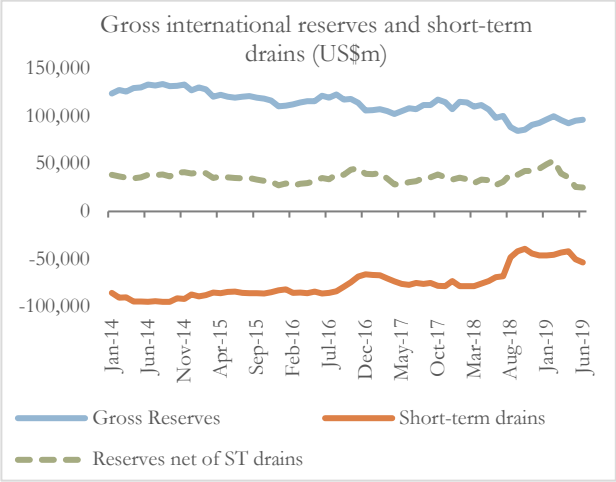
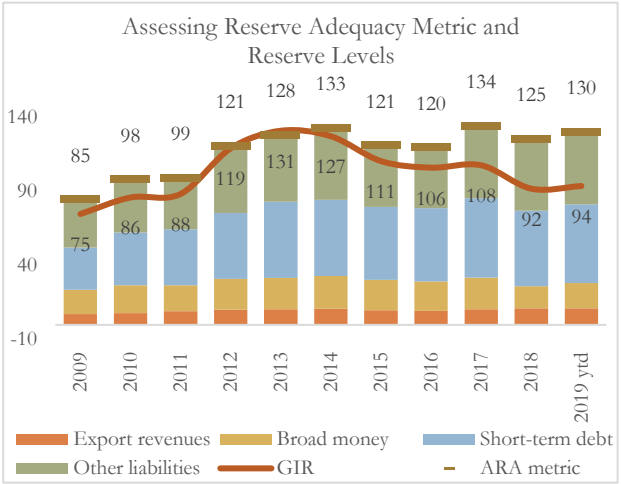


Figure 20: Reserves below prudential levels



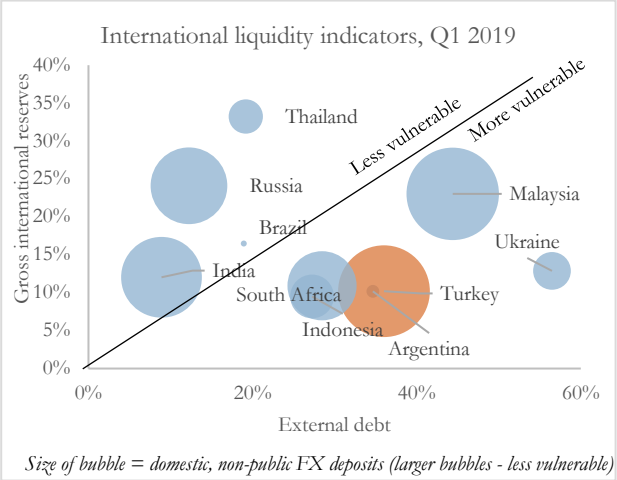
Sources: CBRT, IMF ARA, WB Staff estimates.

[8] There is no internationally accepted definition for a "net reserves". In this case, the definition used is the one reported for all countries by the International Monetary Fund (http://data.imf.org/?sk=2DFB3380-3603-4D2C-90BE-A04D8BBCE237).

Figure 21: Reserves low compared to other EMDEs

Sources: CBRT, IMF ARA, WB Staff estimates.

Figure 22: But domestic FX deposits provide some buffer



Note: External debt excludes trade credits, FX deposits and inter-company lending.

Box 3: Central Bank of the Republic of Turkey forex reserves composition

The CBRT holds deposits, securities and gold as gross international reserves (GIR), with around one quarter of the total value being held in gold (Figure 23). International reserves are mainly held in one of the currencies that forms the SDR basket[9] although in the last 18 months the CBRT has divested itself of almost all US securities (from US$60 billion in November 2017 to US$3 billion in January 2019).[10]

Figure 23: One quarter of GIR held in gold

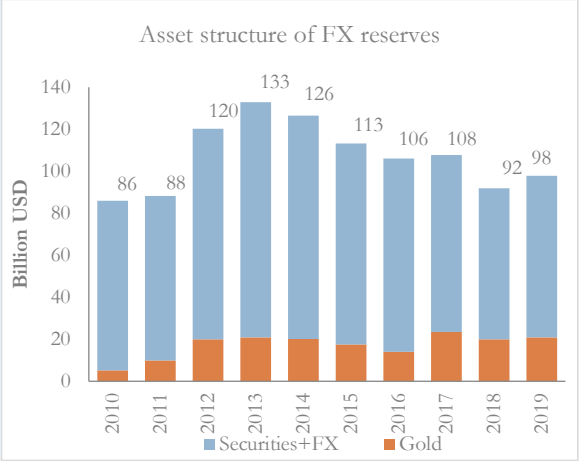
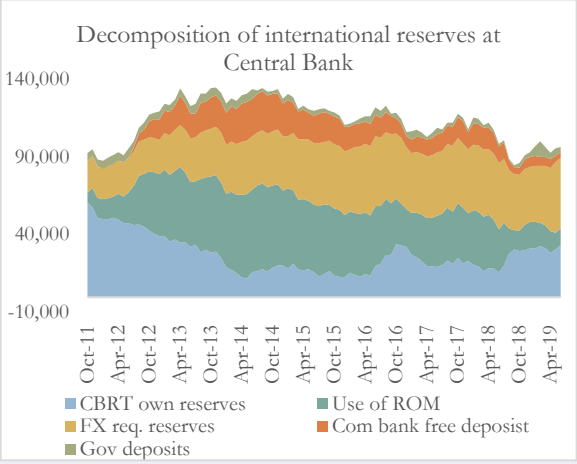


Figure 24: Drop driven by reduction of ROM usage



Sources: CBRT, WB Staff estimates.

Against these reserves are various liabilities with a relatively large proportion being commercial bank assets held at the CBRT in compliance with reserve requirements for FX deposits, and use of the "Reserve Option Mechanism" enabling the use of FX and gold as required reserves against Turkish Lira deposits. In the last year, commercial banks' voluntary holdings at the central bank – either via the ROM or as free reserves – have fallen the most sharply.

[9] The US dollar, the Euro, the Chinese Yuan, the Japanese Yen, and the Pound Sterling.

[10] Source: US Treasury, Treasury International Capital System. Note: The data in this table are collected primarily from US-based custodians. Since US securities held in overseas custody accounts may not be attributed to the actual owners, the data may not provide a precise accounting of individual country ownership of Treasury securities.

The real sector is deeply affected by shrinking investments and elevated inflation…

12. **Despite the generally positive external adjustments, the shock of August 2018 has had a significant negative impact on the real sector**. The economy went into recession in 2018 H2 with two consecutive quarters of GDP contraction (Figure 25). Both private consumption and investments had decreased significantly. As projected in the last TEM, external demand helped offset a more significant contraction in GDP. Data for 2019 H1 point to a gradual recovery thanks to a rebound in private consumption and in external net trade. This is consistent with retail sales growth (Figure 26), which bottomed out in 2018 Q4; but the extent of the rebound in private consumption has surprised on the upside given deteriorating labor market trends, likely due to the offsetting impacts of government transfers to households (discussed further below). The sustained contraction in investment on the other hand is line with expectations, given market sentiments, a contraction in credit growth, and corporate debt overhang (discussed further below).

13. **Supply side indicators point to a weak turnaround in industrial production**. Much of the GDP growth in 2019 H1 was from services and agriculture (Figure 27). The construction sector in 2019 Q2 continued to shrink, with a fourth consecutive quarter of contraction in 2019 Q2. Capacity utilization in the manufacturing sector picked up from a monthly low in November-January, reaching close to its 10-year average in 2019 Q3. The Purchasing Managers' Index is also gradually picking up, though its average over Q3 remains below the threshold for expansion. Whilst industrial production has also started to expand in recent months, in annual terms it remains in negative territory (Figure 28). This is consistent with negative growth of both investment and credit to the private sector. Industrial output has been stronger in the tradable sector compared to the non-tradable sector. Real turnover growth in the domestic sector remains negative till end 2019 Q2, whilst the export sector's turnover continues to grow, albeit at a slowing pace.

Figure 25: Economy enters recession in 2018 H2

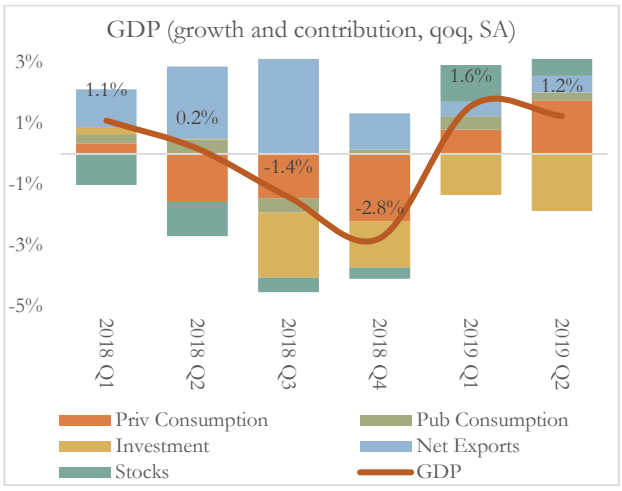


Figure 26: With gradual consumption led recovery in 2019 H1

Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 27: Contributing to an expansion in services

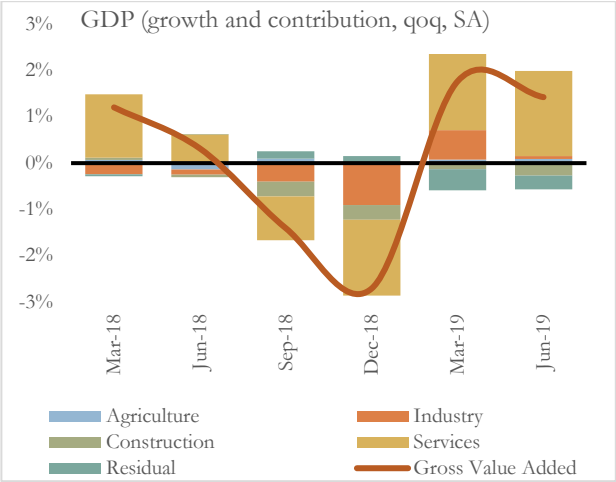
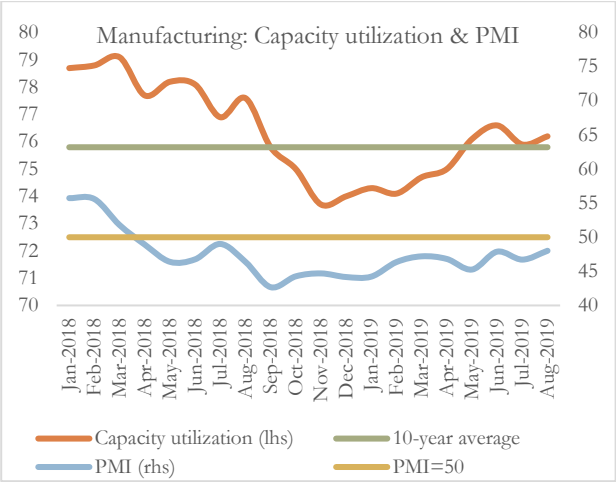


Figure 28: But weak turnaround in industry



Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 29: Despite some recovery in recent months

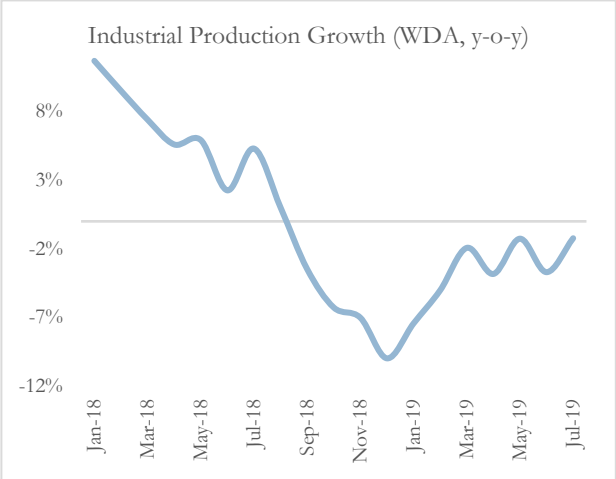
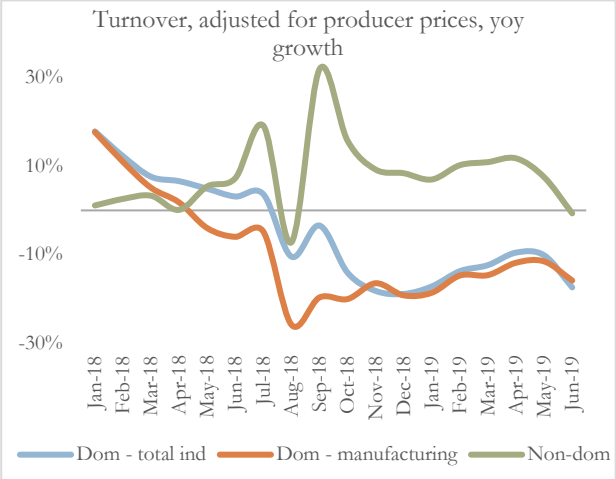


Figure 30: Led by the tradable sector



Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

14. **Inflation, despite the recent decline, has remained high due to exchange rate pass-through and episodes of loss of confidence in the Lira**. Consumer price inflation peaked at 25 percent (yoy) in October 2018. Inflation then persistently fell over the following months, although the rate of decline was gradual in the first six months of 2019 (Figure 31). This is because close to half of the increase in consumer prices over this period was driven by energy and food prices, both of which have high exchange rate pass-through in addition to core goods. For food prices, much of the pressure has come from unprocessed foods; the exchange rate played an important role through the costs of energy, transport, and imported inputs (Box 4). Energy prices were impacted through both international commodity prices[11] and a weaker Lira as Turkey is a net importer of energy.[12] This contributed to a sharp increase in the price of transport services (Figure 32).

[11] Global energy prices declined sharply in November 2018 (from US$ 76/bbl in October to US$53/bbl) but picked up again before peaking in March 2019 (US$69/bbl).
[12] Some of the food and energy price increases were contained by government policy.

Figure 31: Gradual disinflation

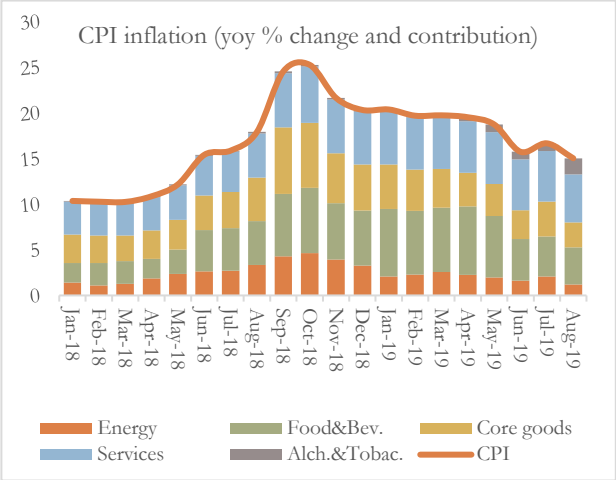
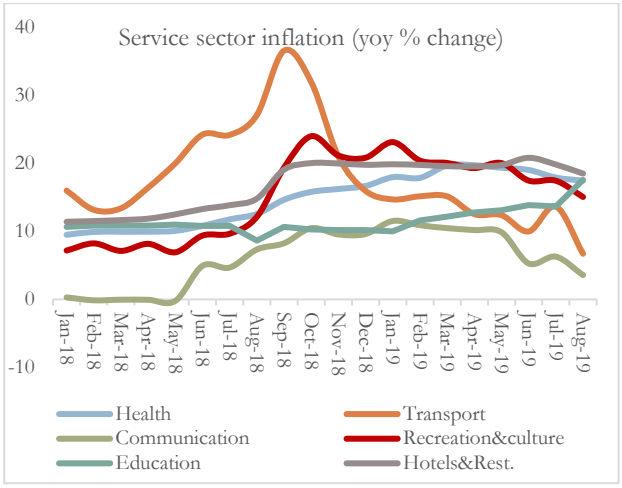


Figure 32: Sharp increase in transport costs



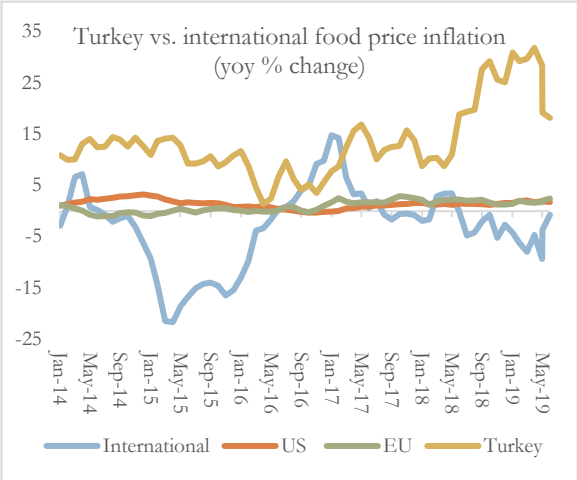
Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Box 4: Food price inflation in Turkey

Turkey's food prices, the main source of high inflation, have continuously increased despite a fall in international food prices in 2018-mid2019 period (Figure 33)[13]. The divergence came after the food crisis in 2006-2009 (Akcelik et al. 2016). Unprocessed food inflation was very strong (Figure 34), particularly for vegetable, meat and fruit. The fall in unprocessed food inflation from its peak level of around 46 percent in April 2019 to 3 percent in September helped the food inflation to slow down.

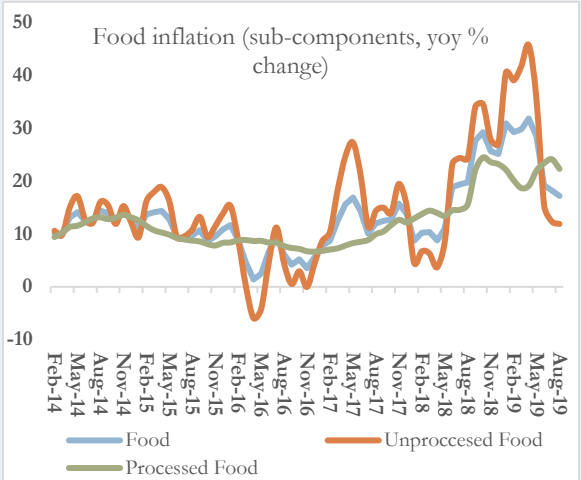
Seasonal factors play a significant role in unprocessed food inflation but other factors that affect the volatility include climatic factors, high number of intermediaries in the supply chain, uncertainties surrounding agricultural subsidies, concentration of production in certain geographic areas, fluctuations in external demand, price structure of export goods and consumption pattern (Orman et al. 2010).

Figure 33: Divergence with international food prices



Sources: TURKSTAT, WB Staff estimates.

Figure 34: Unprocessed food inflation very high



Sources: TURKSTAT, WB Staff estimates.

[13] Cyclical as well as structural measures have been introduced by the Food Committee (The Food and Agricultural Product Markets Monitoring and Evaluation Committee) in order to prevent excessive volatilities in unprocessed food prices during this period.

Ongoing analysis of food inflation in Turkey by the World Bank and others shows that the exchange rate and cost of agricultural inputs impact significantly on food prices. Food price dynamics since 2012 point to a strong link between agricultural producer prices and food inflation. Pre-2012 period, the exchange rate was relatively stable while food price was rising. However, post-2012 food inflation was associated with exchange rate depreciation.

The estimated exchange rate pass-through is quite significant. Recent analysis shows that import price pass-through is in the range of 12-15 percent, while the exchange rate pass-through is on the range of 23-27 percent (Ozmen and Topaloglu 2017). The causal role of the transportation-cost channel is significant in fresh fruits and vegetables inflation and fuel-price increases have a potential to lead to more-than-one-for-one increases in the wholesale prices of fresh produce (Balkan et al. 2015).

15. **An important part of the exchange rate pass-through has been transmitted from producer prices to consumer prices.** Producer prices, as measured by the Producer Price Index, tend to be more responsive to exchange rate movements compared to consumer prices. Currency depreciation can lead to higher producer prices, which tend to be passed on to consumers to help cover increased costs; CPI and PPI exhibit strong correlation and long-term relationship.[14]

16. **The pass-through from producer prices to consumer prices in Turkey has increased over the past 5 years.** This is illustrated using a Vector Autoregression (VAR) analysis of CPI and PPI (and CPI and PPI excluding food and tobacco) for two periods (2003-2013; 2003-2019).[15] The results show that (Figure 35): (i) the rate of pass-through increased from 35 percent in the first period (consistent with Atuk et al. 2013) to 48 percent in the second period (the same trend is observed in the case of PPI and CPI excluding food and tobacco); (ii) based on variance decomposition, both exchange rate and import price shocks impact producer prices more than consumer prices across both periods; (iii) when food and tobacco prices are excluded, the pass-through magnitude from producer to consumer prices increases by 5-10 percentage points (consistent with Atuk et al. 2013).

Figure 35: Pass-through to consumer prices increased

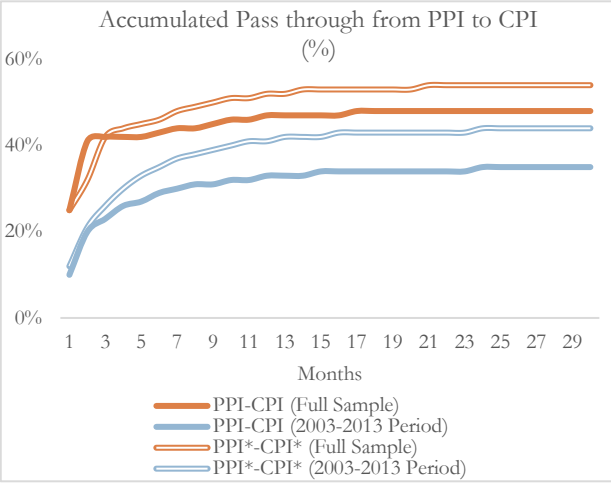
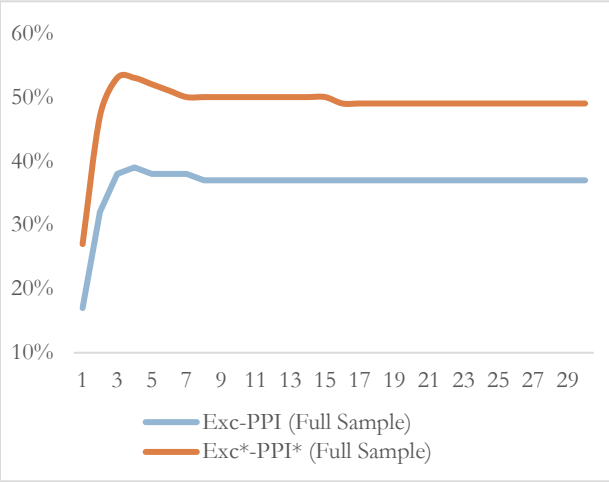


Figure 36: Exchange rate pass through to PPI



Source: WB Staff estimates, TURKSTAT. Notes: *PPI*, CPI* are excluding food and tobacco prices

[14] Both Johansen and Engle-Granger cointegration tests point out there is a cointegration between these two series.
[15] The ordering of variables in the model is taken as nominal exchange rate, import prices, output gap, producer prices and consumer prices similar to Yunculer (2011). The pass-through coefficient is calculated as the ratio of cumulative change in the consumer prices to the cumulative change in the producer prices.

17. **Despite the sharp increase in PPI inflation in 2018 (Box 5), the extent of pass-through to CPI in this round has been more muted than before.** The gap between PPI inflation and CPI inflation accelerated after mid-2018 as producers were not able to pass on increased production costs to consumers (Figure 37). There could be several reasons for this as per Kara et al. (2017):[16] (i) the exchange rate pass-through to consumer prices tends to be lower during downturns than during upturns (10 percent vs. 25 percent according to Kara et al. 2017); (ii) despite the sharp drop in the Lira in August 2018, the currency recovered relatively quickly, and expectations of further depreciation had receded by 2018 Q4, a combination of which would have limited the pass-through to consumer inflation.

18. **A gradual decline in producer prices since October 2018 has helped close the gap between PPI and CPI inflation and reduced pass-through pressures.** This is largely due to a strong base effect from the spike in September 2018. PPI inflation for intermediates and energy have declined sharply (Figure 39), as well as food prices (Figure 40). This signals the gradual phasing out of the exchange rate pass-through impact.

Figure 37: Less pass-through to CPI in this round

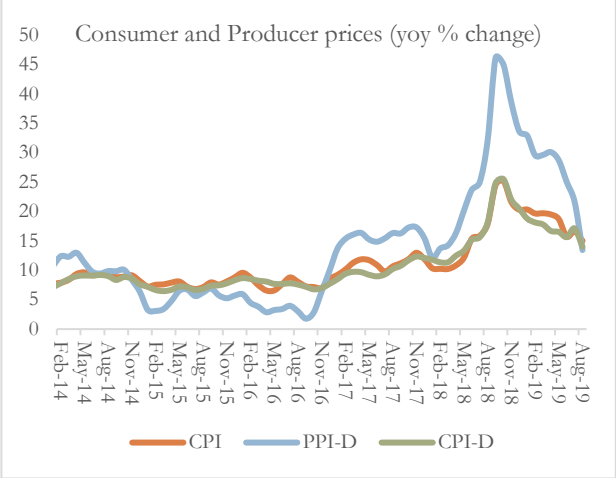


Figure 38: Linked to downturn and currency recovery

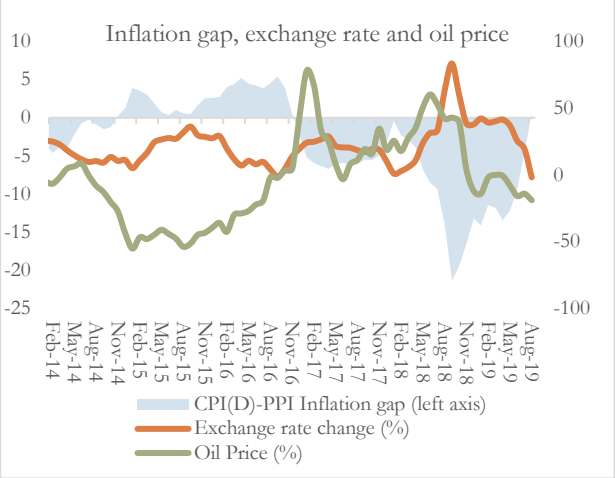


Figure 39: Declining CPI and PPI gap driven by energy

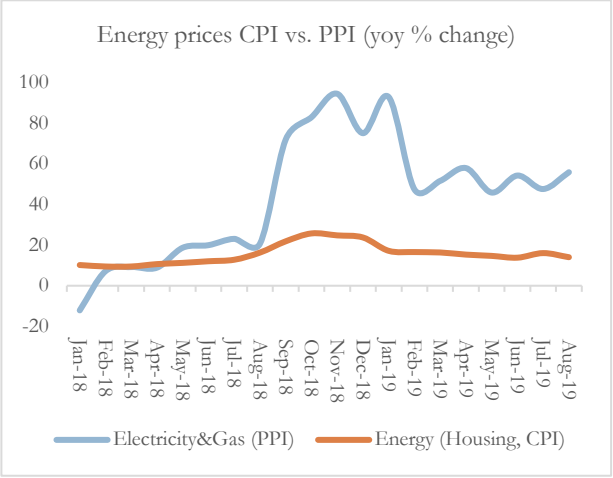
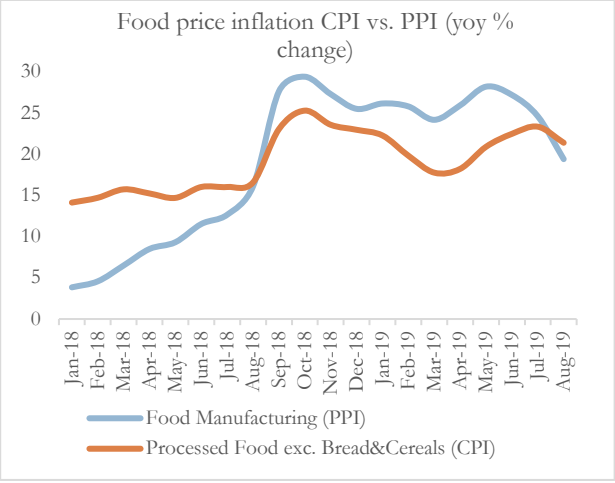


Figure 40: And also declining food prices



Sources: TURKSTAT, WB Staff estimates.

[16] There are coverage and definition differences in producer and consumer prices that also lead to only a partial pass-through from producer to consumer prices rather e.g. taxes are included in CPI but excluded from domestic PPI. Also, CPI covers the services sector and constitute around 30 percent of the CPI basket whereas PPI does not cover services.

Box 5: Producer Price Inflation in Turkey

Producer price inflation in 2018-2019 was driven primarily by imported intermediate goods. Producer price inflation peaked at 46 percent (yoy) in September 2018 before gradually coming down to 2 percent in September 2019 (Figure 41). Intermediate goods contributed around half of the price increase over this period (Figure 42). Within intermediate goods, most sub-categories experienced sharp price increases. The textiles, chemicals, basic metals, and fabricated metal products industries experienced the biggest price increases (Figure 43). These four sectors constitute around 14 percent of the total PPI basket and around one third of PPI inflation. Unsurprisingly, these sectors are the most import dependent sectors, which has increased over time (Figure 44).

Another major contributor to PPI inflation was the cost of energy (Figure 45). Energy producer prices are directly associated with oil prices, even more with exchange rate movements (Figure 46). The Electricity and gas industries make up more than half of the energy PPI basket. This is followed by crude petroleum and natural gas sub-sector, 27 percent of the basket. Electricity and gas industries are highly import dependent and thus very sensitive to exchange rate developments. The sector's import dependency which was 32.7 percent in 2002, rose to 46.3 percent in 2012. This sector is also highly dependent on natural gas as an input. These two sub-sectors have been the main drivers of the sharp rise in energy prices since summer 2018.

Figure 41: PPI inflation peaked in September 2018

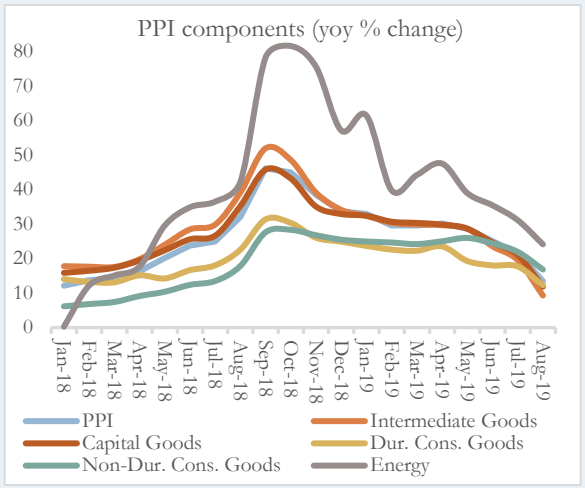
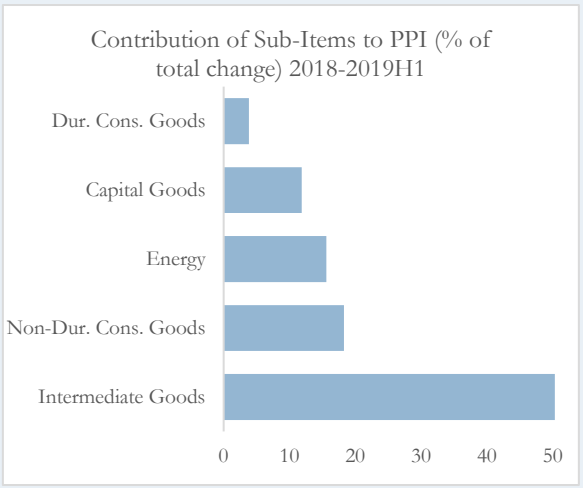
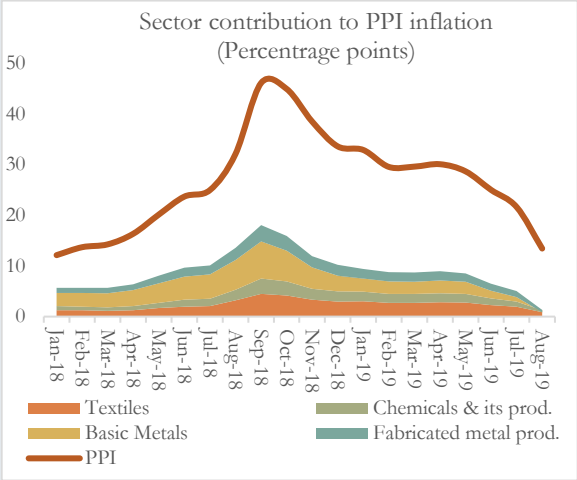


Figure 42: Driven by intermediate goods



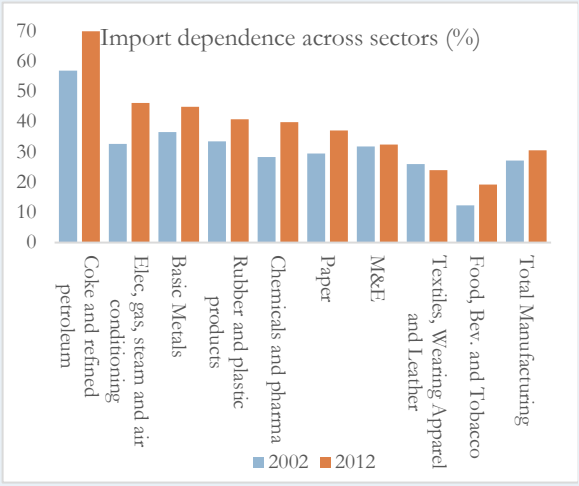
Sources: TURKSTAT, WB Staff estimates.

Figure 43: From selected manufacturing industries



Source: TURKSTAT.

Figure 44: That tend to be highly import-dependent



Source: Ozcan-Tok and Sevinc (2019), based on Input and Output Tables.

Figure 45: Energy prices have also been major drivers of PPI

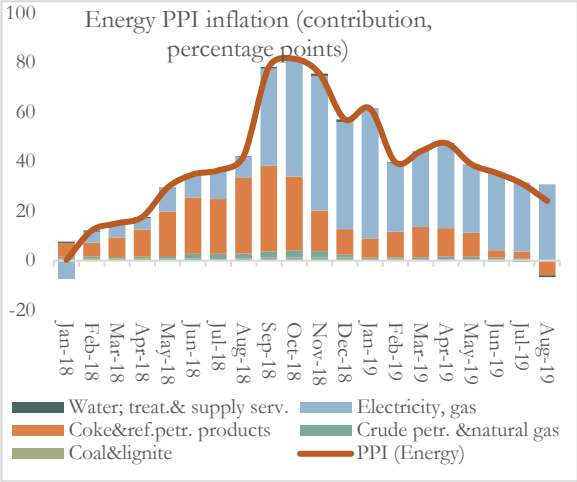
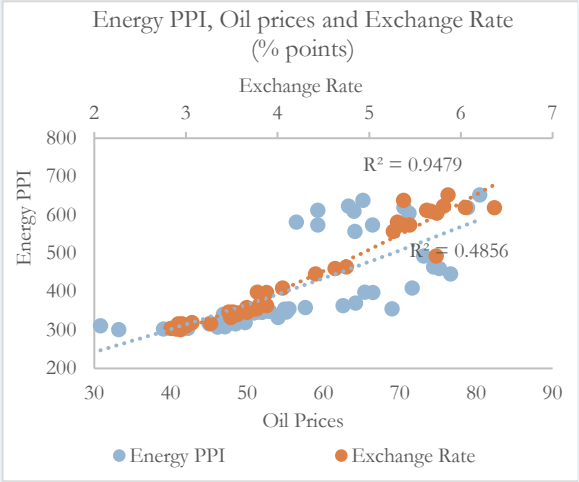


Figure 46: And have been affected more by exchange rate developments than international market prices



Sources: TURKSTAT, WB Staff estimates.

...hurting households through rising unemployment and declining purchasing power

19. **Stagnant output, rising costs of production, and high inflation led to significant job losses and falling wages in 2017-2018.** Turkey's economy lost around 730 thousand jobs from July 2018 to July 2019, amounting to 2.5 percent of total employment. This is in sharp contrast to the preceding year. Between May 2017-May 2018, the economy generated an increase in employment of 1.9 percent. If the trend had continued during May 2018-May 2019, the economy would have produced an additional 540 thousand jobs, and total employment would have reached 29.3 million workers. Compared to current employment, this represents a gap of 1.27 million.

20. **As a result, hundreds of thousands of people have gone into unemployment, while others have opted out of the labor force or decided not to enter altogether** (Figures 47, 48). The rate of unemployment increased from 11.1 percent to 14.3 percent (seasonally adjusted) between July 2018 and July 2019. The unemployed but available to work rose by 1.1 million compared to a year ago, reaching 4.7 million. The labor force participation (LFP) trend saw a reversal. Given Turkey's demographic growth, LFP had been consistently growing, but in the month of October 2018 it reached an inflection point and started to decrease. Discouraged by the lack of opportunities, some working age people that would have decided to participate in the economy are opting out. The unemployment rate of the population between ages 15 and 24 increased sharply to 27.3 percent, up from 20.1 percent (seasonally adjusted) a year ago. It has become significantly more difficult for young people to find job opportunities. Given their lack of work experience, the market places them at increasing relative disadvantage relative to older, more experienced candidates.

Figure 47: Economy producing fewer jobs

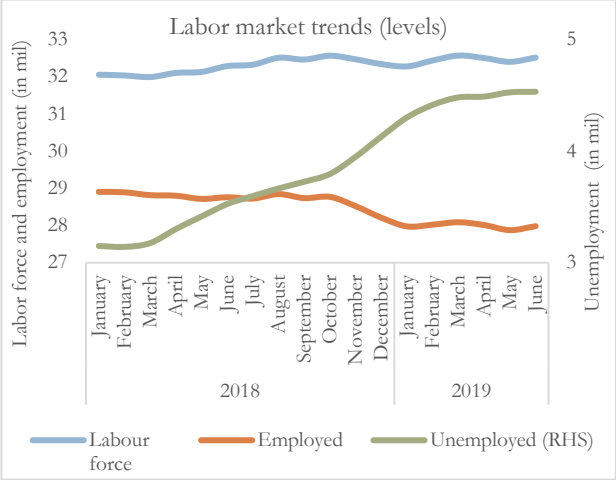
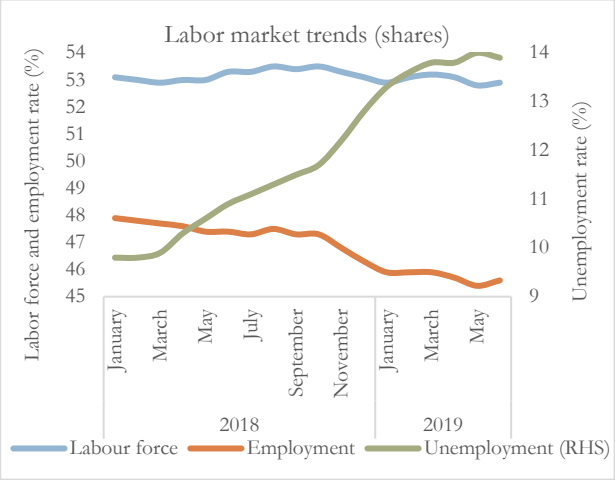


Figure 48: Share of LF drops outs and unemployed rising



Source: TURKSTAT. Seasonally adjusted numbers and rates.

21. **The economic turbulence is affecting workers across the skills spectrum, as measured by education levels.** Illiterate workers' unemployment rate doubled in a year from 4.8 percent to 6.8 percent in July 2019 (all not seasonally adjusted). Similarly, among workers with less than high school degree (but are literate) the unemployment rate rose from 9.6 percent to 13.2 percent. Unemployment rate of high school graduates increased from 12.7 percent to 16.6 percent while the rise was higher among vocational/technical high school graduates from 10.8 to 15.3 percent. The lowest increase in the unemployment rate was observed among university graduates from 13.3 percent to 14.2 percent.

22. **Out of the total number of jobs lost, the majority originate from the construction sector** (Figure 49)**.** Of the 730 thousand net decrease in employment, about 450 thousand are from construction, 130 thousand from agriculture and 100 thousand from industry, and 50 thousand from services. The contribution of construction and agriculture are disproportionately large, given these sectors' weight in total employment (Figure 50). In July 2018 construction represented 6.8 percent, and agriculture 18.3 percent of total employment. Employment in construction decreased 22.9 percent, agriculture decreased 2.5 percent, industry decreased 1.8 percent, and services decreased 0.03 percent, relative to each sector's pre-downturn levels (July 2018).

Figure 49: Biggest job losses in construction and agriculture

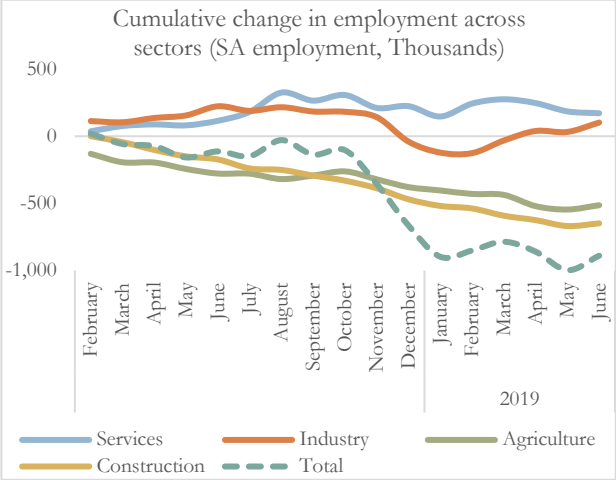
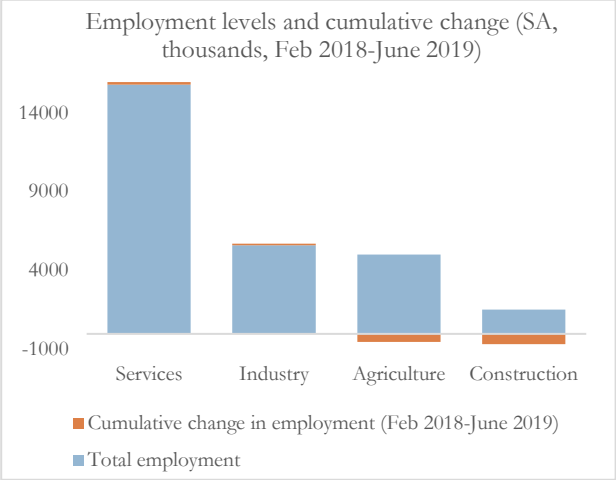


Figure 50: Even though they are not the biggest employers



Source: Household Labor Force Survey.

23. **Although the number of informal workers declined slightly, the informality rate increased because total employment dropped over this period**. This suggests that the economic slowdown mainly affected formal job creation. The increase in informality was higher in the agriculture sector compared to the non-agriculture sectors.

24. **The largest employment loss was experienced by men, 670 thousand men and 70 thousand women lost their work over the last 12 months**[17]. The level of employment among men declined in almost all sectors (except services, which increased slightly) while employment among women dropped only in agriculture and construction sectors and increased in services. The informality rate among women increased from 44.1 percent to 44.6 percent while among men it increased from 29.9 percent to 32.1 percent for men between May 2018-2019.

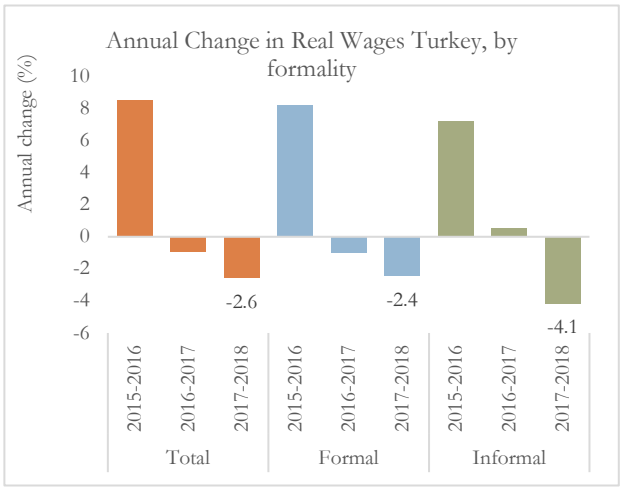
25. **In addition to job losses, workers are also affected by the economic slowdown and inflation through losses in real wages**.[18] Average real wages decreased 2.6 percent from 2017 to 2018 (Figure 51). The loss was more pronounced for informal than for formal workers. Wages of informal laborers decreased 4.1 percent, while wages of formal workers went down by 2.4 percent. Real wages dropped for workers from all educational backgrounds between 2017-2018, whether low, medium or high skilled (Figure 52). Employees with no education lost 4.2 percent, employees with secondary education lost 5.2 percent and employees with Master's degree or more lost 5 percent.

26. **Although workers in the construction sector were the hardest hit in terms of job losses, they were not the most affected in terms of adjustment in remuneration**. The real wage loss was highest in services and agriculture sector, with 3.1 and 2.4 percent, respectively (Figure 53). The wage adjustment had already started in 2017, with remuneration slightly decreasing across all sectors in real terms.

[17] Not seasonally-adjusted data.
[18] This section covers workers working as employees, since the Labor Force Survey does not collect data on the earnings of self-employed or employers.

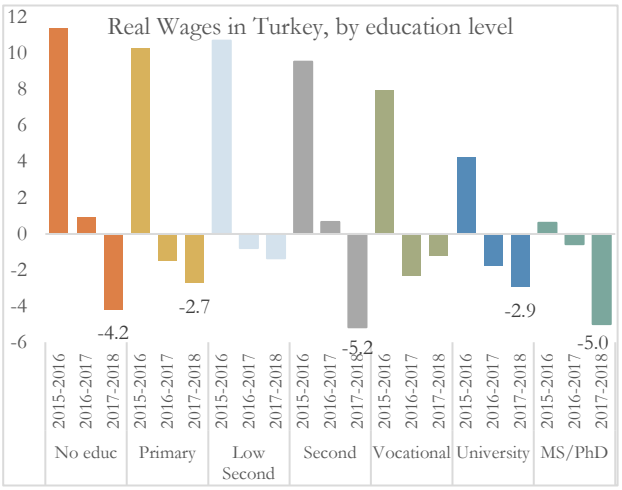
27. **Overall, the decline in real wages has been steeper for workers with higher paychecks than for workers at the bottom of the wage distribution** (Figure 54). The bottom 40 percent of workers of the distribution got reductions of 3 to 4 percent, while workers in the top 40 percent got reductions of 7.5 to 10 percent. Statutory minimum wage likely played a protective role in the wages of the lower paid employees. In contrast, unlike other income groups, real wages dropped for the bottom 40 percent also in 2017, making the total loss in real wages among the bottom 40 percent larger in the last two years.

Figure 51: Declining real wages



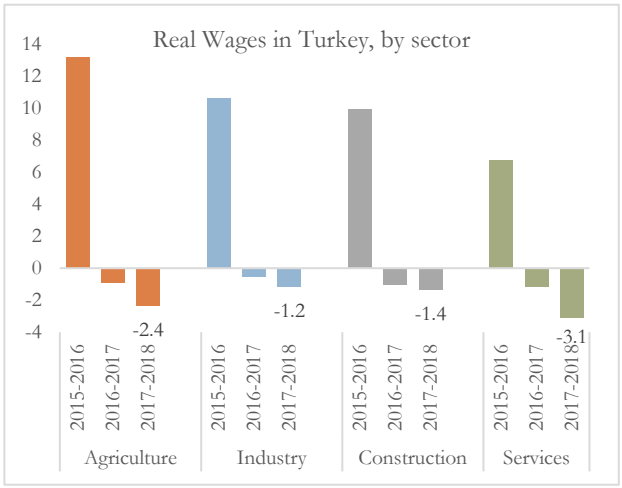
Source: Household Labor Force Survey, 2015-2016-2017-2018.

Figure 52: For workers from all education backgrounds



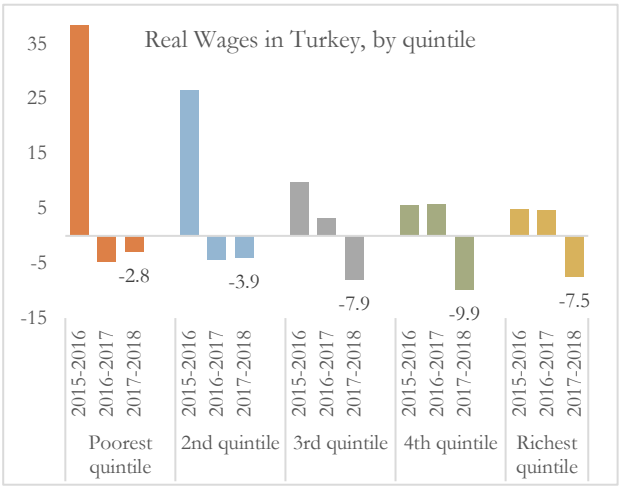
Source: Household Labor Force Survey, 2015-2016-2017-2018.

Figure 53: Agriculture and Services affected the most



Source: Household Labor Force Survey, 2015-2016-2017-2018.

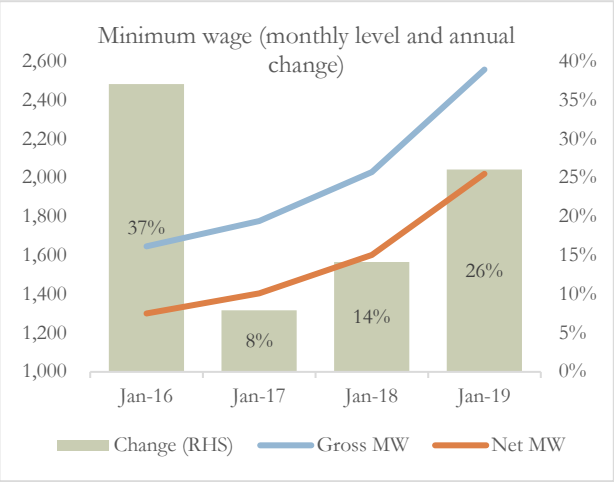
Figure 54: Steepest drop among higher wage earners



Source: Household Labor Force Survey, 2015-2016-2017-2018. Household per capita wage income is used as a welfare indicator to generate deciles.

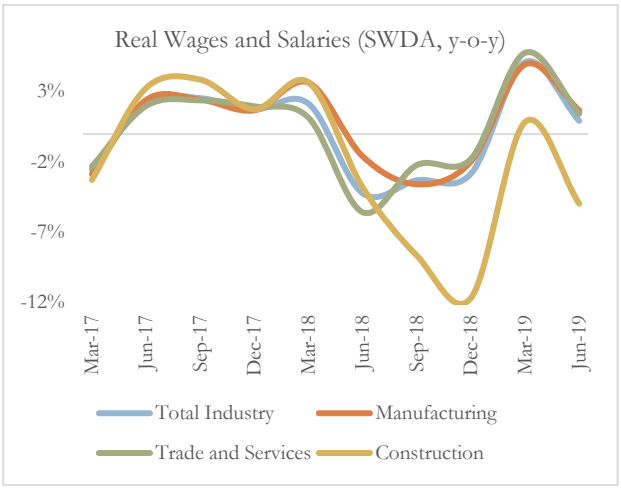
28. **An upward adjustment to the minimum wage in January 2019 has helped to offset some of the decline for lower income households in the past 1-2 years.** The gross minimum wage was raised from TL 2,030 per month to TL 2,558 per month (Figure 55). This may have contributed to some recovery in real wages and salaries in industry, manufacturing, and trade and services (Figure 56). This may also explain some of the recovery in private consumption seen in 2019 H1 as discussed above. Real wages in the construction industry, however, have generally remained depressed in 2019 H1, which continues to affect poor households.

Figure 55: Minimum wage adjustment in January 2019



Sources: TURKSTAT. Notes: Net MW excludes SSI premium, unemployment insurance, income tax, stamp duty.

Figure 56: …helped offset some of the decline



Source: TURKSTAT.

29. **Labor market dynamics have a primary influence on household welfare, since most income of the average Turkish households originates from the labor market.**[19] Labor income is even more important for low income households, with 81 percent of their income coming from the returns of their work (Table 1). Data on the distribution of income across households permits analysis of the incidence of the downturn. Per capita consumption is used to measure of welfare; this is the measure used to monitor absolute poverty in Turkey. Households are sorted from poorest to richest and grouped in 10 deciles. This analysis looks at how different deciles were linked to the labor market before the start of the downturn in 2017 to understand how the incidence of the 'economic shock' varied across the welfare distribution.

Table 1: Income sources across deciles

	Labor Market	Investment	Government	Remittances	Total
Total	73.2	4.36	19.55	2.9	100
Poorest decile	76.6	1.3	18.7	3.3	100
2nd decile	75.2	1.7	19.8	3.4	100
3rd decile	75.5	1.9	19.4	3.2	100
4th decile	74.8	2.4	20.2	2.6	100
5th decile	75.9	2.1	19.8	2.2	100
6th decile	73.2	2.9	21.3	2.6	100
7th decile	72.6	2.9	22.1	2.4	100
8th decile	71.6	3.0	22.2	3.2	100
9th decile	69.6	5.5	22.3	2.6	100
Richest decile	74.0	7.6	15.1	3.2	100

Source: Household Budget Survey 2017. Household per capita consumption expenditure is used as a welfare indicator to generate deciles.

[19] The food price dynamics discussed in the preceding section (Box 4) also have a disproportional impact on low income households because food expenses account for a larger share of their consumption basket.

30. **On average, the poorest households are the hardest hit by the adjustment in employment, since compared to better-off households, they rely more on agriculture and construction for their livelihood** (Table 2). These are the two sectors with highest decrease in total employment during the 2018-2019 downturn. The poorest decile is the most affected since more than half of all adults work on agriculture or construction, that is 46 percent work in agriculture and 12 percent in construction. Among top deciles, only 5-7 percent work in construction, and 7-15 percent in agriculture.

Table 2 - Sector of Employment, by decile

	Agriculture	Industry	Construction	Services	Total
Poorest decile	45.8	10.7	12.3	31.3	100.0
2nd decile	32.9	14.5	15.0	37.6	100.0
3rd decile	24.8	23.2	10.2	41.8	100.0
4th decile	21.4	21.9	9.7	47.0	100.0
5th decile	17.8	22.2	7.5	52.5	100.0
6th decile	15.7	23.8	5.3	55.2	100.0
7th decile	15.5	20.0	6.6	58.0	100.0
8th decile	11.5	22.6	7.3	58.6	100.0
9th decile	9.7	19.4	4.7	66.2	100.0
Richest decile	7.4	12.9	5.7	74.1	100.0

Source: Household Budget Survey 2017. Household per capita consumption expenditure is used as a welfare indicator to generate deciles.

31. **The impact of wage adjustments has hit households across the wage distribution, though poorer households are affected relatively more.** Poor households on average tend to work more in informal jobs, which have seen the biggest decrease in real wages (Table 3, Figure 51). Among the bottom two deciles, more than half of workers are informal. In contrast, less than 30 percent of the workers in the top 3 deciles are informal. In addition, wages of the poorest workers have been declining for the past two years (Figure 54) and they have less resources to cope with labor income losses.

Table 3 - Employment status and formality, by decile

	Total Informality rate	Employee	*Informality among employees*	Unpaid worker	*Informality among unpaid workers*	Employer	*Informality among employers*	Self-employed	*Informality among self-employed*
Poorest dec	72.2	52.5	*58.2*	18.4	*100.0*	1.4	*56.0*	27.6	*81.2*
2nd decile	57.1	58.8	*41.7*	17.0	*100.0*	1.5	*52.6*	22.7	*65.2*
3rd decile	47.1	66.3	*34.6*	12.6	*100.0*	2.0	*19.9*	19.1	*58.5*
4th decile	41.6	67.9	*27.5*	10.6	*100.0*	1.5	*29.2*	20.0	*59.9*
5th decile	38.2	69.5	*24.1*	9.4	*100.0*	2.4	*17.7*	18.7	*62.2*
6th decile	36.0	70.2	*23.8*	8.7	*100.0*	3.0	*22.7*	18.1	*55.1*
7th decile	32.3	73.1	*20.3*	7.7	*100.0*	4.1	*25.0*	15.2	*57.8*
8th decile	30.5	73.5	*19.1*	6.2	*100.0*	4.8	*24.0*	15.5	*58.4*
9th decile	27.6	76.0	*18.1*	4.0	*100.0*	6.0	*30.0*	14.1	*57.4*
Richest dec	24.5	75.3	*15.4*	3.3	*100.0*	9.4	*30.7*	12.1	*55.9*

Source: Household Budget Survey 2017. Household per capita consumption expenditure is used as a welfare indicator to generate deciles.

The corporate sector remains weighed down by debt burdens, amplifying real sector woes

32. **Despite some signs of deleveraging, corporate debt burden remains high.** Total credit to corporates as a share of GDP has declined from a peak of 72 percent (September 2018) to 68 percent (June 2019) (Figure 57).[20] The pace of debt accumulation (Figure 58) has also slowed down in nominal terms.[21] Part of this is driven by a tightening in domestic financial markets (discussed in the next section) causing the credit-to-GDP gap to decline sharply from elevated levels (Figure 59).[22] The overall corporate debt burden however remains large compared to other emerging market economies (Figure 60).

33. **The slight decline in corporate debt burden was driven by exchange rate effects and by reduced domestic borrowing by SMEs**. Total credit to non-financial companies as a share of GDP peaked in September 2018 partly due to an increase in the Lira equivalent of FX debt; this reversed subsequently with currency appreciation. In addition, negative credit shocks tend to affect SMEs more than larger firms in Turkey, which in turn leads to a drop in their investment rate (Box 6). At the same time, tighter macroprudential regulations since May 2018 made it more difficult for all corporates to access FX loans from the domestic market. This led to some improvement in the net FX position of corporates.[23] Almost two-thirds of this improvement stemmed from a fall in liabilities driven by FX and FX-indexed loans from domestic banks; FX indexed loans prior to the May 2018 regulations were extended mostly to corporates without FX income. There has also been a shift from long-term to short-term FX loans from the domestic market. FX assets of corporates on the other hand have increased through deposits in both domestic and foreign banks.

Figure 57: Slight decline in corporate debt/GDP

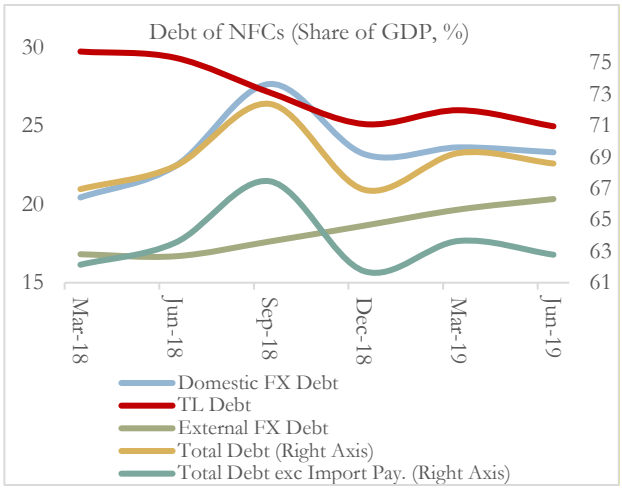
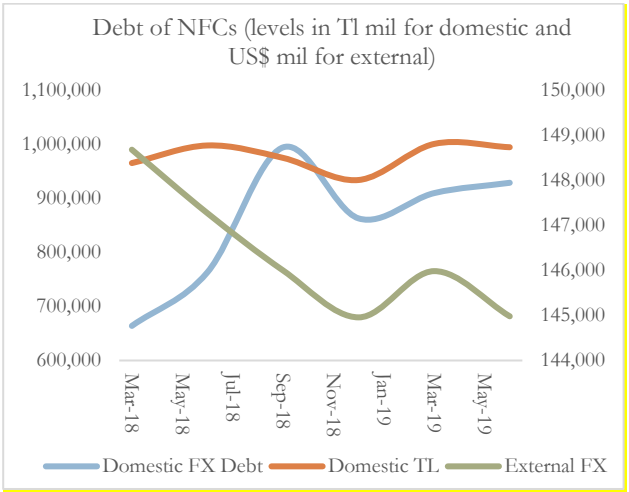


Figure 58: Slowdown in pace of debt accumulation

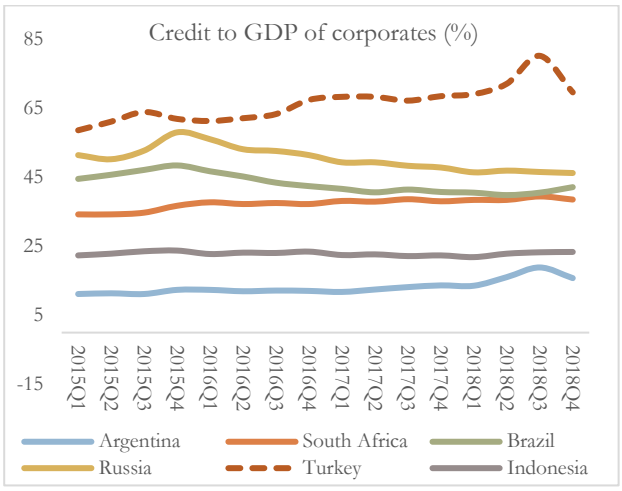


Sources: CBRT, BRSA.
Note: Domestic FX and TL debt of corporates are calculated based on the BRSA database. The source of external FX debt is the data released by CBRT on Foreign Exchange Assets and Liabilities of Non-Financial Companies.

[20] The corporate debt to GDP ratio excluding import payables stands at 65.3 percent in June 2019.
[21] External debt grew 3 percent in nominal terms between 2018 Q2 and 2019 Q2 compared to 9 percent the previous year; domestic debt grew 17 percent in nominal terms between 2018 Q2 and 2019 Q2 compared to 25 percent the previous year.
[22] The credit-to-GDP gap is defined as the difference between the credit-to-GDP ratio and its long-run trend, and captures the build-up of excessive credit in a reduced form fashion (Bank for International Settlements)
[23] The net FX position declined by US$ 30 billion between June 2018 and June 2019, reaching US$ 184 billion (26 percent of GDP).

Figure 59: Financial tightening leads to drop in credit to GDP gap[24]

Figure 60: Though corporate debt burden remains relatively high



Source: BIS.

Figure 61: TL commercial lending have declined

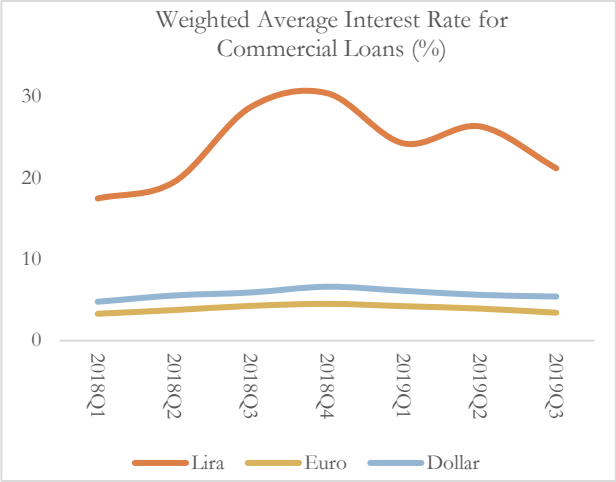
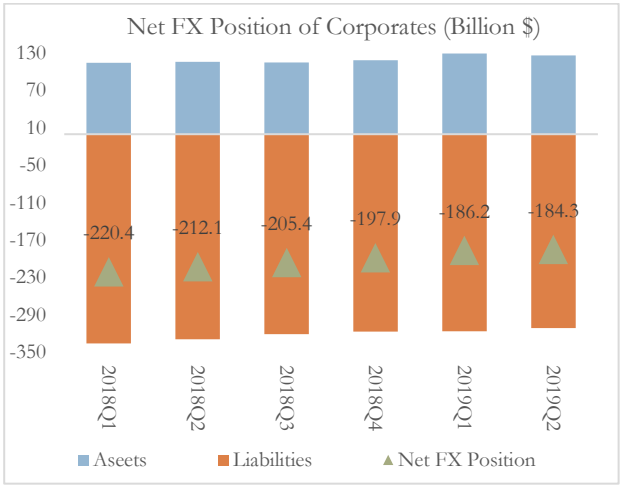


Figure 62: Net FX position of corporates has declined



Sources: CBRT, BRSA.

Box 6: SME access to finance and investment

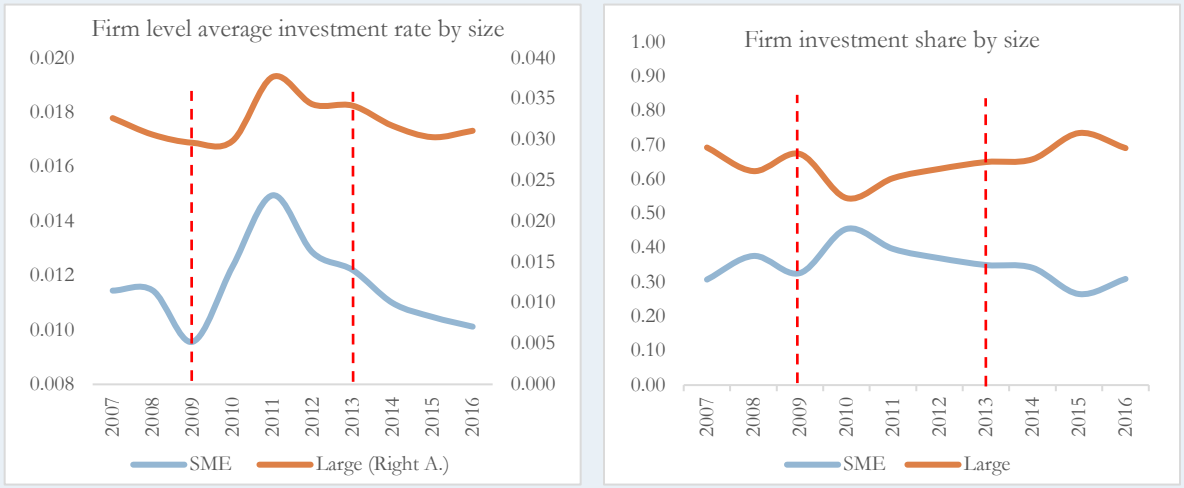
SMEs play an important role in the Turkish economy though financial shocks and frictions negatively impact their investment potential. SMEs in Turkey account for 73 percent of total employment, 62 percent of total sales and 99 percent of all firms. Despite their large presence, SMEs' investments are moderate compared to large firms and highly sensitive to global financial conditions (Cilasun and Yilmaz, 2019).

This is illustrated by the effects of two financial shocks, namely the Global Financial Crisis (GFC) and the Fed Tapering episodes. Large capital inflows, in the post GFC era, provided a positive shock to firms' access to finance, including SMEs. This dissipated with the European Debt Crises in 2012; Turkey (and other EMDEs) eventually experienced a negative financial shock with FED tapering in 2013 (Cilasun et. al. 2018).

[24] The credit to GDP gap and debt service ratio are available for private non-financial sector in BIS database. Thus, these figures include household sector as well. While the household debt to GDP ratio in Turkey, Russia and Indonesia stands at around 17 percent, this ratio is higher for South Africa (33 percent) and Brazil (25 percent).

Firms' investment behaviors are closely associated with these two episodes. After the GFC there was a clear jump in SMEs' and a relatively moderate increase in large firms' average investment rate (Figure 63). The situation however reverses in the post-2013 period, given the decline in SME investment is sharper. This is reflected in SMEs' declining share of total investment as well.

Figure 63: SME investment rate and share are sensitive to global financial conditions



Source: Authors' calculation from EIS. The data covers all manufacturing firms reported balance sheets for tax purpose between 2006 and 2016. Firm investment rate is defined as the ratio of real investment (measured as the difference in nominal capital stock in balance sheet and then, deflated by PPI of capital goods) to real net sales (nominal net sales deflated by PPI at NACE industry (4-digit level).

The relatively larger decline in SME investments is likely a reflection of frictions within the financial system. This in turn prevents enterprises, particularly SMEs, to invest in longer-term projects. Recent analysis (Akçiğit et. al. 2019) shows that business dynamism declined in Turkey after 2012, part of which is due to access to finance.

This in part explains differences in financing sources between SMEs and larger firms (Figure 64). During the 2006-2016 period, the main source of finance for an average large firm was bank finance (i.e. usually more than 50 percent of total debt) compared to only 15 percent for an average SME. Trade credit and other debt appear to be the main source of finance for SMEs, which presumably help finance working capital (rather than investment) needs given short maturities and temporary nature.

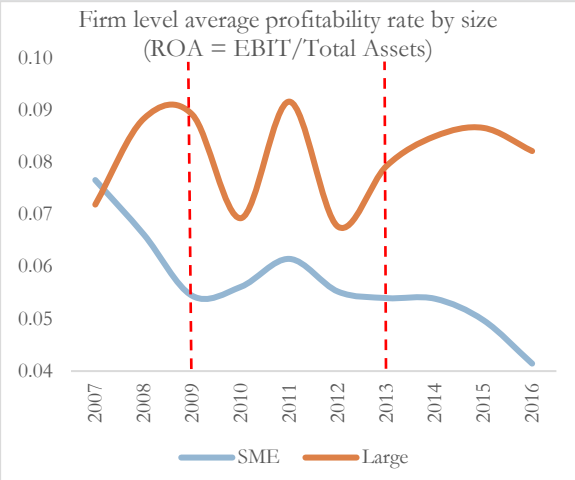
Figure 64: SME bank leverage dropped more in the post-2013 period

Source: Authors' calculation from EIS. The data covers all manufacturing firms reported balance sheets for tax purpose between 2006 and 2016. Total debt = bank (financial) debt + trade credit+ other debt (debt to owners).

As a result, SME bank leverage is relatively low and declined post-2013, in contrast to larger firms. Total average leverage ratio of large firms was 43 percent in 2006, increasing to 52 percent in 2016, while this number remained mostly around 48 percent for SMEs throughout the whole period. Bank leverage however for SMEs in 2016 was around 9 percent compared to 30 percent for large firms.

Internal finance is an alternative to debt financing. Firms with higher internal cash flows can also use these sources in financing their investment. A recent report analyzing firm data in Turkey (Cilasun et. al., 2019) shows a positive association between internal cash flow and investment rate. Figure 65 presents firms' return on assets (ROA) by size that also displays similar patterns to the earlier discussion. SMEs' profitability declined significantly especially in the post-2013 period, which limits their ability to finance their activities internally.

Figure 65: SME profitability dropped in the post-2013 period



Source: Authors' calculation from EIS. The data covers all manufacturing firms reported balance sheets for tax purpose between 2006 and 2016. EBIT defined as earnings before interest (finance costs) and tax.

Econometric analysis affirms the significance in the differential access to finance between SMEs and large enterprises in the post 2013 period (Cilasun and Yilmaz, 2019).[25] The results show that the decrease in SMEs' credit access relative to large firms in the post-2013 period is statistically significant. For the positive shock period (post-2009), the results confirm that compared to large firms, SMEs' credit access significantly improved, while its effect on the investment is generally positive.

This has policy implications in improving SMEs' access to finance, especially during downturns.[26] However, for large firms, machinery and equipment constitute the bulk capital stock, whereas for SMEs it is dominated by vehicles (Cilasun et. al., 2018). The policy challenge may be to differentiate SMEs with high investment appetite towards productive (machinery and equipment) investments from others.

Source: This box is written by Seyit Mümin Cılasun and Fatih Yilmaz, Structural Economic Research Department, CBRT.

[25] A regression model is estimated by comparing the trends (i.e. difference-in-difference) of SMEs' access to credit and investment performance compared to large firms, while controlling for most of the factors besides the SME status. The results of this exercise depend on the specification. In some specifications, we find statistically significant and positive impact on investment, while in others, statistical significance disappears although the positive sign remains the same. The exercise is firstly implemented for the three years before and after 2013, while excluding 2013. The exercise is repeated for the two years before and after 2009 to identify the trend differences during the easing period.

[26] Improved access to finance for SMEs has potentially other positive real outcomes as well, such as increased exports (Akgunduz et al. (2018)) and enhanced firm employment growth (Fendoglu and Ongena (2018)).

34. **With tighter credit markets, there has been some increase in corporate bond issuances, though these account for a small share of corporate financing.** The stock of external bonds increased from US$8.4 billion US$ 9.7 billion between August 2018 and August 2019 (Figure 66), and the stock of domestic bonds increased from US$ 1.4 billion (approx. TL 9 billion) to US$ 2 billion (approx. TL 12 billion) over the same period (Figure 67). Eurobond issuances in 2019 H1 were driven by a small number of companies,[27] likely for refinancing rather than new investments (Figure 68), which led to a slight increase in corporate debt rollover rates (Figure 69). Interest on Eurobonds increased by 100 basis points compared to the previous year. Domestic bonds were issued mainly by emerging and manufacturing companies, with maturities of less than two years.

Figure 66: Increased external bond issuances

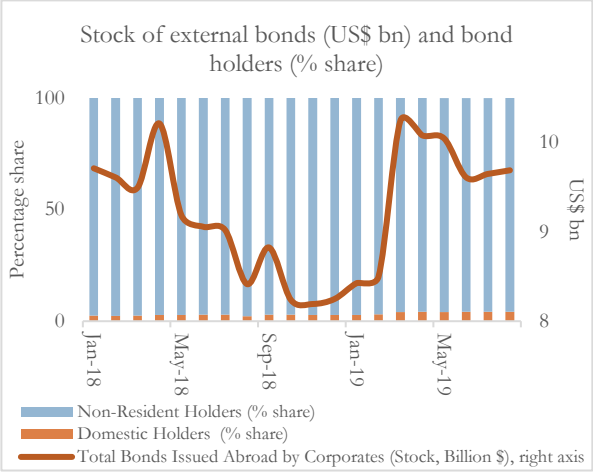
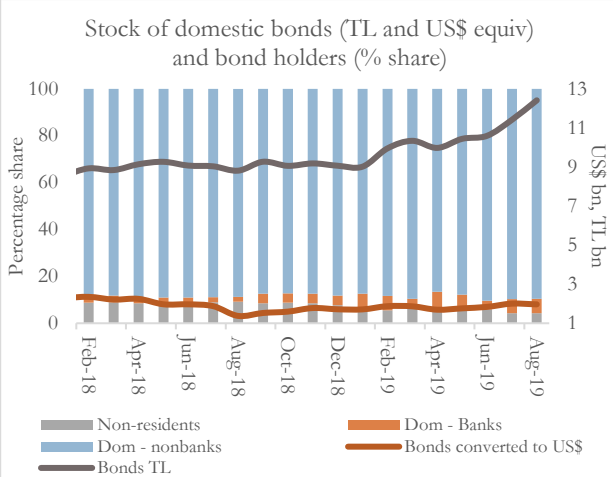


Figure 67: And domestic bond issuances



Sources: CBRT.

Figure 68: Rise in Eurobond issuances for refinancing

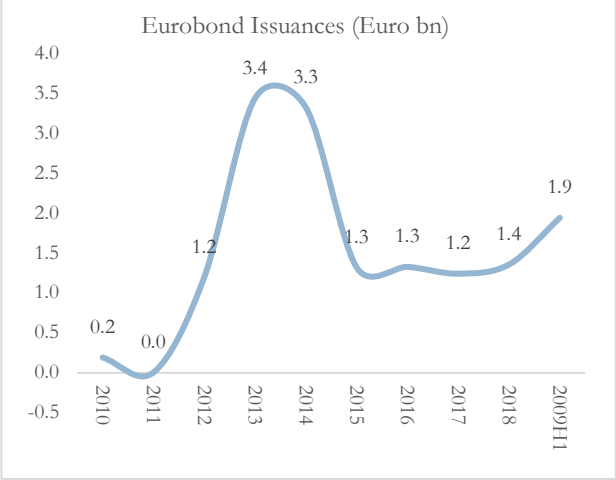
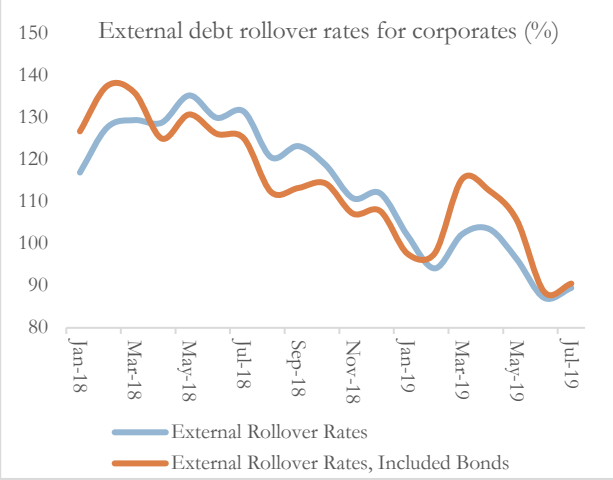


Figure 69: Contributing to higher rollover rates



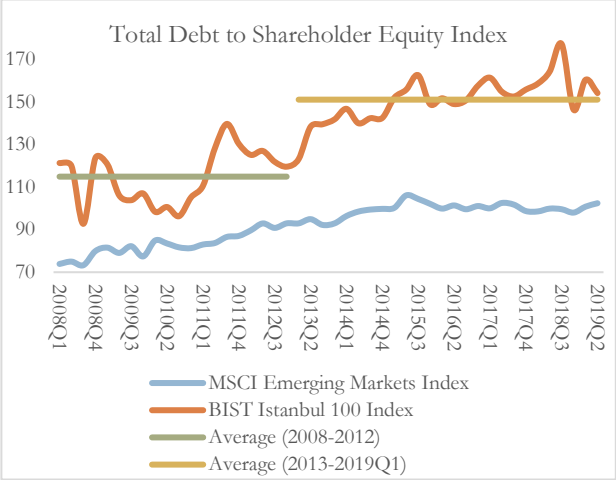
Sources: CBRT.

[27] The Eurobond issuances in the first half of 2019 were made by 3 companies, namely Koc Holding (conglomerate, big exporter), Sisecam glassware (manufacturer, big exporter) and Turk Telekom (communication operator) for a total of US$ 1.94 billion.

35. **Corporate deleveraging is evident among listed companies, though solvency pressures persist due to high levels of overall debt.** Corporates trading on Turkey's BIST 100 are more leveraged than those trading on the MSCI Emerging Markets Index as reflected in debt to equity indices (Figure 70).[28] The gap between the two has narrowed slightly after peaking in 2018 Q3. However, the interest (and financial coverage ratios (ICR-I and ICR-F)[29] of corporates – a measure of liquidity – point increased strains. The fall in earnings and rise in borrowing costs caused the ICR-F and ICR-I of non-financial companies to deteriorate (Figure 71). Current ICR-I values were very close to sustainability thresholds in 2019 H1. The deterioration in ICR-I in 2019 H1 compared to 2018 H2 stemmed primarily from the rise in interest expenditures. ICR-F on the other hand has been stable in 2019 H1 due to no significant pressure from FX losses.

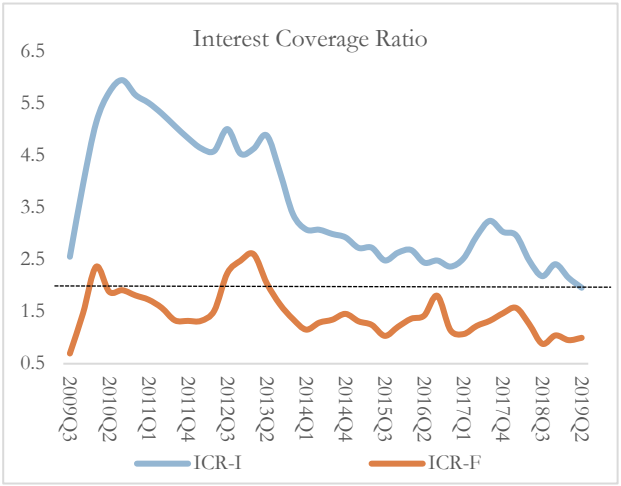
36. **These developments have strained corporates' balance sheets leaving them highly vulnerable to further demand, exchange rate and interest rate shocks.** Corporates with FX liabilities, particularly those with limited non-Lira assets, will have experienced a negative shock to net worth following Lira depreciation. This will have been partially offset by rising corporate FX deposits. Though corporate vulnerability – as measured by probability of (corporate) default – has dropped sharply from its peak in August 2018, it remains high, even when compared to past episodes of economic recessions across selected countries (Figure 72). Another proxy for corporate health is the level and number of bad checks, which surged in 2018 H2 (Figure 73). Despite some improvement in 2019Q1, likely linked to credit expansion led by public banks, it deteriorated again in 2019Q2.

Figure 70: Turkish traded companies are more leveraged



Source: Bloomberg.

Figure 71: Contributing to solvency pressures

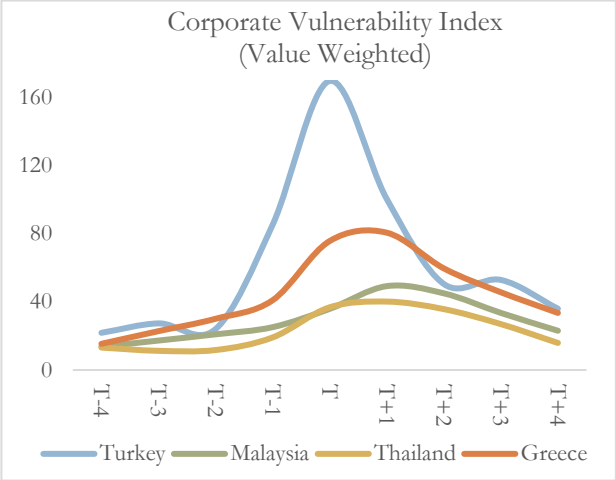


Sources: WB Staff estimates based on RASYONET and Bloomberg.

Notes: ICR-I represent the interest coverage ratio based on interest expenses for listed non-financial corporations while ICR-F represent the interest coverage ration based on financial expenses. Interest expenses are sub-group of financial expenses. Financial corporates and the corporates having zero financial expenses or not having value for financial expenses, are excluded from all listed corporates.

[28] The MSCI Emerging Markets is an international equity index, which tracks stocks from 24 emerging market countries, including Turkey. All corporates both financial and non-financial are presented to compare with the other emerging market economies.
[29] ICR reflects the ability of corporates to cover their financial expenses including interest expenses with their operating earnings.

Figure 72: And elevated corporate vulnerability

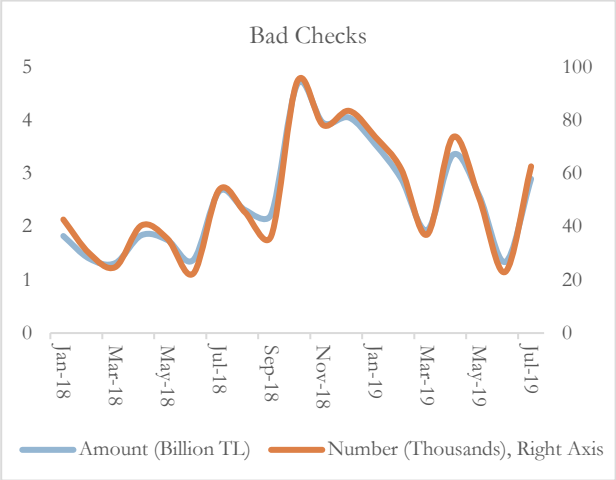


Source: Credit Research Initiative, WB Staff calculations.

Note: Value-weighted CVI sums up the individual probabilities of default with their market capitalizations as weights.

T=quarterly data for pre and post-recession periods. Indonesia (2007-09); Malaysia (2007-09); Thailand (2007-09); Greece (2007-09).

Figure 73: As also reflected by a surge in bad checks



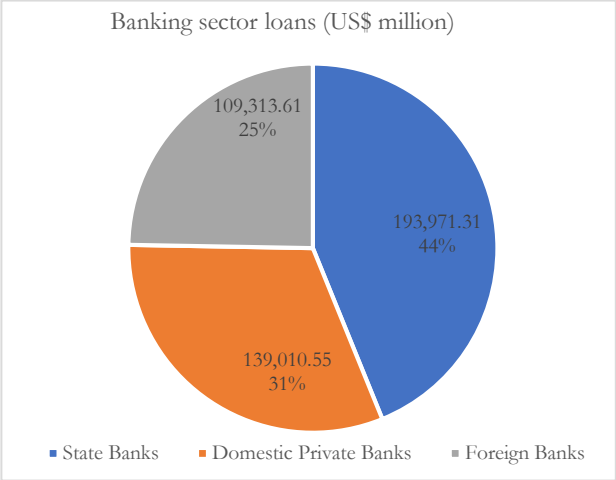
Sources: Risk Center, The Banks' Association of Turkey.

Banks too have deleveraged to cope with worsening balance sheets positions

37. **Corporate stress has contributed to a falling asset quality in banks.** Non-Performing Loans (NPLs) across all banks went from 3.2 percent in mid-2018 to 4.4 percent in mid-2019 (roughly US$20 billion of the $443 billion of outstanding loans, Figure 74), with the biggest increases in foreign and domestic private banks (Figure 75). According to BRSA's weekly data, it was around 5.1 percent as of October 11th. While the sharpest NPLs rise was seen in SMEs loan, large enterprises were the bigger contributor to the increase in NPLs– as discussed above, a combination of negative balance sheet effects from currency depreciation and financial sector frictions have made it more difficult for corporates to refinance. Larger corporates on the other hand have either completed or sought to restructure at least US$20 billion worth of loans by 2019 Q1, up by US$ 6.2 billion from a year earlier (Figure 76).[30]

[30] Bloomberg.

Figure 74: Outstanding loans exceed US$450 billion



Source: Haver Analytics.

Figure 75: NPLs rise particularly in private banks

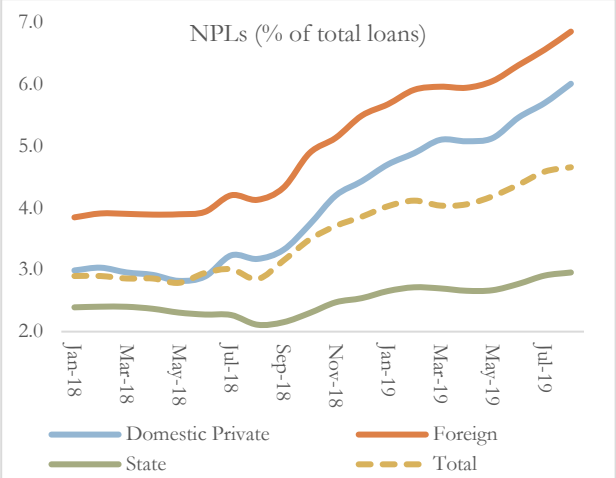
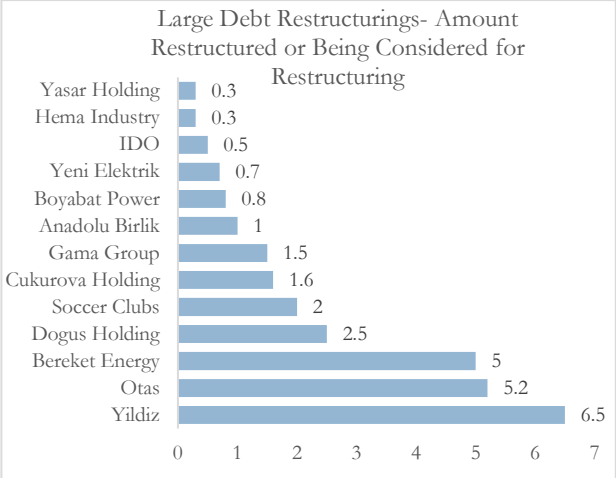
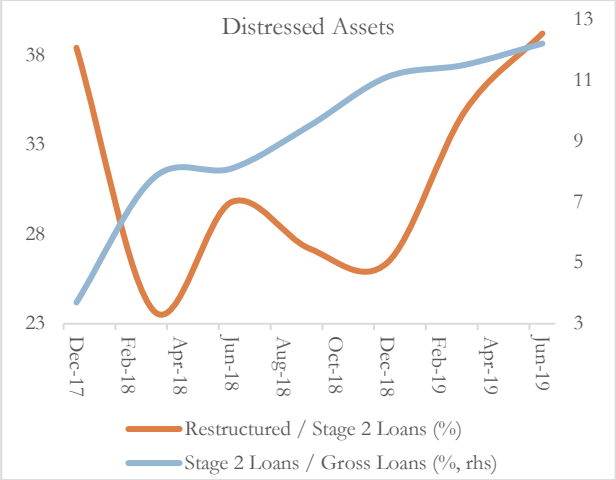


Figure 76: Large corporates restructure their debt



Source: Bloomberg.

Figure 77: Stage 2 loans continue to rise



Source: Bloomberg.

38. **The increase in the share of loans under close monitoring (Stage 2) is another indicator of deteriorating asset quality.** Stage 2 loans have risen from 8 percent in August 2018 to over 12 percent in June 2019, rising as high as 15 percent in top private banks (Figure 77). The construction and energy sectors make up an important share, accounting for 12.5 percent and 14.5 percent of the total respectively. Some of the Stage 2 loans have already become NPLs. At the same time, by June 2019 close to 40 percent of Stage 2 loans had been restructured. Part of the increase in Stage 2 loans reflects the introduction of International Financial Reporting Standards (9) accounting norms designed to report more accurately risky assets.[31] An ongoing challenge is the differences in models that banks are using and absence of implementation guidelines for this new regulation, which has created inconsistencies in the categorization of distressed assets across banks.

[31] IFRS 9 introduces new provisioning standards, moving from incurred loss approaches to expected loss methods by incorporating forward looking assessments in the estimation of credit. Banks set aside provisions for 3 different categories of loans:
• Stage I - Loans where the credit risk has not raised significantly
• Stage II - Loans where the credit risk has raised significantly ("Watch List")
• Stage III - Loans which are "credit-impaired" that are categorized as group 3, 4 and 5 under the BRSA communiqué. NPL term is used to refer to stage III loans.

39. **The authorities have committed to help addressing the decline in asset quality, though the accumulated effects of last year's shock are projected to raise NPLs further.** Several reforms were introduced for debt restructuring, NPL sales, and the establishment of special purpose vehicles to help relieve pressure on banks' balance sheets. The Banking Regulation and Supervision Agency in September 2019 indicated that by the end of 2019, an additional TL 46 billion ought to be classified as NPLs, following a review of asset quality across banks. This would raise the level of NPLs from 4.6 percent to 6.3 percent, which may also reflect an unwinding of forbearance measures introduced last year.

40. **Despite the rise in NPLs, capital adequacy across banks remains within prudential thresholds and profits have only dropped slightly.** The Capital Adequacy Ratio (CAR) across the banking sector increased from 16.4 percent in 2019 Q1 to 17.7 percent in 2019 Q2. This was aided by an injection of Euro 3.4 billion Tier 1 (AT1) capital into state banks. Two private banks have also strengthened capital buffers through injection of US$650 million AT1 capital and a TL 3 billion rights issue. The AT1 capital injection provides a partial hedge against further currency depreciation. The BRSA has indicated that CAR would decline slightly from 18.2 percent to 17.7 percent after their recommendation to reclassify the additional TL 46 billion as NPLs. Bank profits in terms of (annualized) return on equity declined slightly from 15 percent in early-2018 to 12 percent in mid-2019. The drop is due to a combination of lower lending, higher provisioning expenses, and high deposit rates.

41. **Maturity mismatches in bank balance sheets have declined over the past year.** The deposit to loan ratio has improved in 2019; loans financed through relatively short-term deposits – which have high rollover ratios – have increased slightly from 80 percent in 2018 to 90 percent in 2019. Although turning short-term deposits into longer-term loans is part of banking and these deposits, which are core liabilities, are rolled over almost completely even in times of stress, financial shocks like the one in Turkey last year raise liquidity and rollover concerns. The deterioration in market conditions in Turkey made it more difficult for banks to acquire liquid assets to cover short-term liabilities whilst borrowing costs had increased significantly. Banks' short-term liabilities also constrain loan tenors (based on remaining maturity, Figure 78), which feeds vulnerabilities through heightened rollover risks of corporates.

42. **The banking sector close their foreign exchange open on-balance sheet position through swap operation that are reported off-balance sheet**. Banks can hold open FX position up to 20 percent of their regulatory capital according to BRSA regulations. Turkish banks' foreign exchange liabilities exceed their foreign exchange assets because most loans are denominated in Lira. However, banks have long position in FX derivatives, which helps manage exchange rate risk. Depositors increasingly converted Lira deposits into foreign exchange deposits in the first half of 2019 (Figure 79), which now make up over 50 percent of all deposits. Dollarization of deposits is closely associated with currency depreciation. Foreign exchange loans, on the other hand, have declined significantly due to low demand, and partly as the authorities have tried to boost Lira lending to help corporates refinance their debt (see below).

Figure 78: Large maturity mismatches

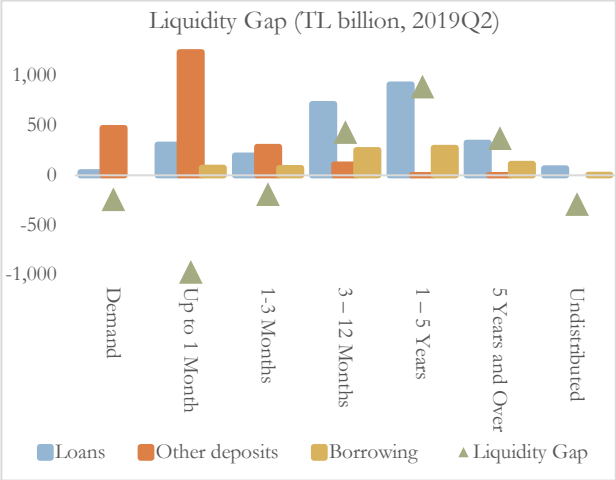
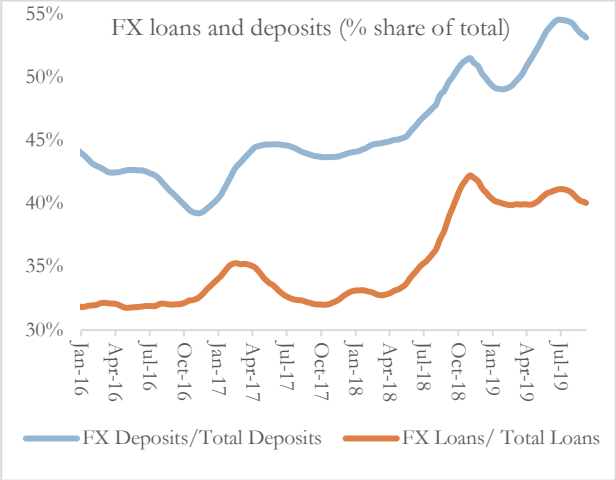


Figure 79: And currency mismatches



Source: TBA, CBRT.

43. **Banks have responded rationally to these challenges by deleveraging to help repair balance sheets.** Banks were able to refinance large debt coming due over the past year, albeit at a higher cost than before August 2018. But they have focused on repaying debts and thereby reducing their external liabilities. This is reflected in declining debt rollover ratios (Figure 80), which as a result has led to banks' external debt declining by over US$30 billion since August 2018. These opposing dynamics means that currency risk in banks' balance sheets remain elevated. On the other hand, banks continue to maintain liquid assets in foreign exchange to help cover short-term foreign exchange financing needs (Figure 81).

Figure 80: Banks reduce external liabilities

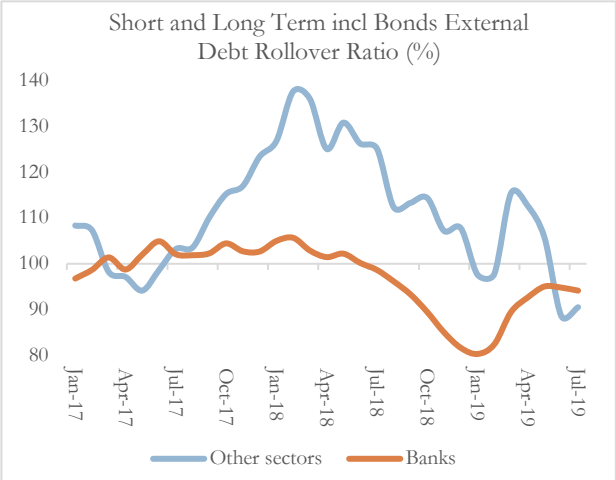
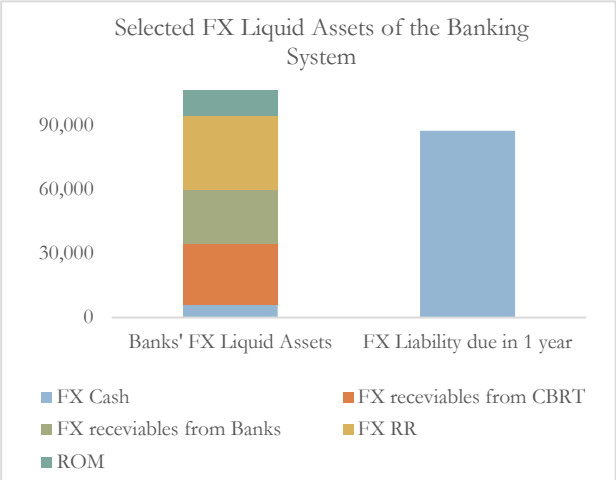


Figure 81: Liquid assets sufficient to cover ST FX liabilities



Source: CBRT, BRSA.

44. **In parallel, private banks have significantly cut back on lending despite policies to try and accelerate credit growth**. Overall credit growth contracted between September 2018 and February 2019 (Figure 82). It turned positive in March 2019 due to a credit impulse from state banks. But this soon faded and overall credit growth has remained flat, though in 2019 Q3 started to accelerate again. These factors explain some of the movements in the loan-to-deposit ratios (Figure 83). Though the authorities have relaxed macroprudential regulations, there are real constraints to credit expansion in the current context. Private

banks are more cautious in a weak economic and high interest rate environment to avoid further deterioration in asset quality. Further interventions to relax credit conditions may be counterproductive to the overall health of the financial system as discussed in the looking ahead section.

Figure 82: Credit growth drops sharply

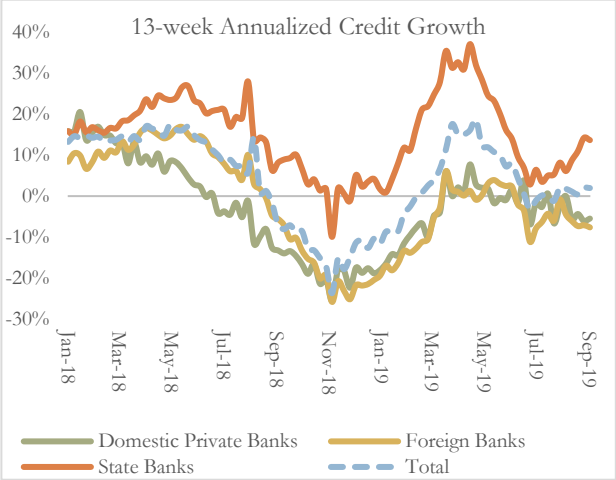
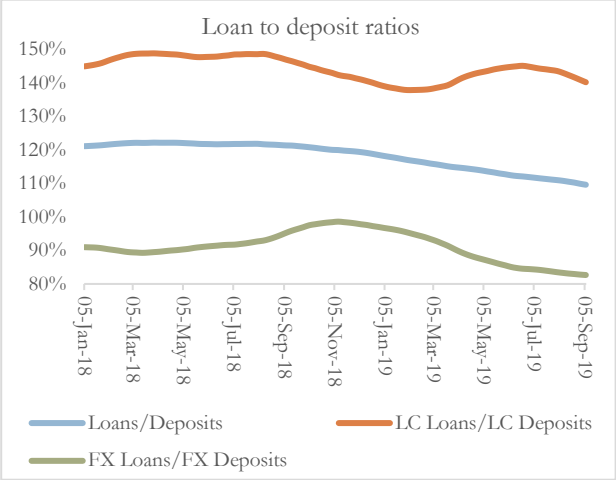


Figure 83: Contributing to improved loan to deposit ratios



Source: CBRT, BRSA.

Policies, despite challenges, have helped steady the ship…

45. **Turkey has faced several geopolitical and external relations challenges since the start of 2019, which could have spiraled into another financial turmoil.** Tensions around the Istanbul elections in March and June 2019, the escalation of conflict in the Idlib Region of Syria since early 2019, and the delivery of the S-400 defense missile system in July 2019 were all significant pressure points. These and other events caused spikes in market volatility, particularly from the end of 2019 Q1 till the start of 2019 Q3, which elevated market perceptions of risk.

46. **All things considered, therefore, the authorities' overall policy response has fared reasonably well in restoring short-term stability, with more recent support from global monetary conditions.** The last TEM suggested the need for a consistent package of economic policies, building on the New Economic Program (September 2018), that would include: (i) tight monetary policy to restore price and exchange rate stability; (ii) complementary financial sector measures to support deleveraging and enhance financial risk monitoring and management; (iii) a sound debt restructuring framework to achieve orderly deleveraging; (iv) targeted fiscal stimulus to help restore demand and absorb supply side corrections; and (v) clear communication of the package of economic policies, including milestones and updates. Progress against these benchmarks are discussed below.

47. **Though the authorities maintained a tight monetary stance, some of the Central Bank's measures to provide liquidity to the financial system created confusion in the market.** The Central Bank maintained its policy rate at 24 percent (following a 625 bp hike in September 2018) until July 2019 when slowing inflation between July and September prompted 750 bp cuts. The Central Bank responded swiftly to Lira liquidity constraints in 2019 H1 through a swap mechanism that helped bolster international reserves. Similar measures were taken in other countries during the Taper Tantrum episode of 2013. The Central Bank has consistently published comprehensive information on foreign exchange reserves; though an unclear drop in net reserves in 2019 Q1 created market anxieties and subsequent currency volatility.

48. **There has been progress in supporting corporates and banks to repair their balance sheets.** Larger corporates have been restructuring debt through the court-based Concordat framework introduced in early 2018, an out-of-court framework announced by the Banking Regulatory and Supervisory Authority in October 2018 (formalized through legislation in July 2019), and more directly with banks (see looking ahead section). The overall restructuring approach is being refined to help better audit and prioritize restructuring applications. The authorities also acknowledged the need to support more directly; in April they announced that 3.7 billion Euro in new capital would be raised for state banks, and that special measures would be taken to address distressed assets in the construction and energy sectors (Box 7).

Box 7: Authorities' priorities for financial sector reform

1) Banking

a) Strengthening capital
- Giving state banks Public Domestic Debt Securities (PDDS) of 3.7 billion Euro
- In case of need, a required capital increase presented in the framework of the recapitalization plans prepared by private banks
- Limiting dividend distribution during the rebalancing process, and limiting cash bonus payments to executives
- Establishment of national data center
- Regulation on independent audit requirement limits (>USD 100 million) for corporates applying for loans

b) Asset quality improvement
- Establishment of a new Legal and Institutional Framework to faster and efficient debt restructuring and execution and bankruptcy transactions.
- Transferring of some NPLs to the off-balance sheet funds of banks and national-international investors: (i) Energy Venture Capital Fund; (ii) Real Estate Fund

2) Savings and insurance

a) BES and Severance compensation
- Restructuring of Individual Pension System (IPS)
- Implementation of the Severance Pay Reform with the Participation of all Stakeholders
- Integration of severance pay fund and IPS
- From 2020 accumulation of minimum TL 100 billion annually in Automatic Participation Scheme and IPS
- Reaching a total fund size in excess of 10 percent of GDP in 5 years

b) Insurance
- The Insurance Supervision and Regulation Authority (SDDK) is commenced
- National Reinsurance Company started its activities

3) Exports and production-based credit supply
- Establishment of a structure in Financial Stability and Development Committee (FIKKO) to promote credit supply to strategic sectors
- Localization of inputs
- Increasing finance for exporters
- Increasing finance for high value-added production

4) Real sector
- Corporates that has total risk of 100 Million TL and above in Banks' balance sheets should provide independent audit reports of their financial statements
- Increasing Financial Transparency
- Upgrading Corporate Governance Standards
- Improving Financial Management Quality
- Establishment of a National Credit Rating Company

49. **At the same time, however, there are also efforts to accelerate credit growth, which under the current conditions are unlikely to be effective.**[32] This could be a conscious strategy to enable SMEs to refinance whilst focusing debt restructuring efforts on larger corporates. This is evident in the multiple extensions of the CGF since early 2019 (additional TL 50 billion), providing various credit support packages for SMEs; in May 2019, banks for the first time could use the CGF for SME debt restructuring. It may make sense to prioritize debt restructuring for larger corporates and enable SMEs to refinance through credit given the latter are relatively less leveraged and more vulnerable to credit shocks (Box 6). In addition, the government has prioritized high-tech sectors, youth, women and entrepreneurs. However, interventions in banking sector may be counterproductive for financial stability and growth, as discussed in the looking ahead section below.

…including through countercyclical fiscal policies

50. **Automatic stabilizers in fiscal policy seemed to have helped counter some of the downturn in 2018 H2.** This is evident in the behavior of fiscal aggregates in the periods running up to and immediately following the recession in 2018 H2 (Table 4). Tax collections as a share of GDP dropped by 1.6 percentage points in 2018 H2 relative to 2018 H1, which was more than offset by a 2.7 percentage point cut in expenditure. In 2019 H1, the authorities accelerated recurrent expenditures (3.7 percentage point of GDP increased relative to 2018 H2) driven in part by an increase in non-tax receipts (1.1 percentage point increase) but also increased borrowing, which contributed to a 1.9 percentage point of GDP increase in central government debt burden. This contributed to higher interest payments (0.6 percentage points of GDP).

Table 4: Fiscal aggregates 2018 H1 – 2019 H1 (% change in variables as a share of GDP)

	2018 H1	2018 H2	2019 H1
CG revenue	**1.8%**	**-1.3%**	**0.9%**
Tax	0.7%	-1.6%	-0.2%
Non-Tax	1.1%	0.3%	1.1%
CG expenditure	**3.3%**	**-2.7%**	**3.7%**
Recurrent	4.1%	-3.1%	4.7%
Interest	0.3%	0.0%	0.6%
Capital	-0.8%	0.4%	-1.0%
CG Budget balance	**-1.4%**	**1.4%**	**-2.7%**
CG Primary balance	-1.1%	1.4%	-2.1%
CG debt	**-0.9%**	**0.2%**	**1.9%**
Domestic	-1.2%	-0.7%	1.2%
External	0.3%	0.9%	0.7%

Sources: Haver Analytics, WB Staff estimates.

51. **The net results are therefore an increase in fiscal imbalances and government debt** (Figure 84). The overall deficit rose from -1.9 percent of GDP in 2018 Q4 to -2.6 percent of GDP in 2019 Q2, whilst the primary balance over the same period went from a small surplus to a deficit of -0.6 percent of GDP. A rising share of the growing budget deficit was financed by external borrowing (Figure 85). This contributed to a slight increase in central government debt burden due to exchange rate effects, but also helped reduce pressure on domestic debt markets.

[32] Among other measures, the Credit Guarantee Fund for SMEs was extended, interest rate ceilings on state bank deposit rates were imposed, banks reduced interest on mortgages, and reserve requirements were cut for banks with credit growth between 10-20 percent.

52. **Tax collections have declined due to cyclical factors though the overall buoyancy has also fallen**. For direct taxes, this could be related to incentives that enable businesses and individuals to retain a higher share of income during the downturn, which would reduce buoyancy (Figure 86). It could also be related more tax loss carry forward, which helps reduce overall income tax liability. At the same time, however, most of the incentives announced by the authorities have focused on consumption taxes, especially for consumer durables and vehicles.[33] This is associated with some increase in consumer durable and vehicle purchases, particularly in 2019 Q2. However, the demand for these types of goods under the current economic climate are likely to be price inelastic – therefore a cut in tax would lead to a proportionately smaller increase in demand, which in turn would be consistent with a lower buoyancy for consumer taxes (Figure 87).

53. **The fall in tax receipts was offset by an increase in non-tax revenues coming largely from Central Bank transfers**. In January 2019, the Central Bank transferred around TL 37 billion worth of dividends to the Treasury. Currency depreciation and increased interest rates have boosted Central Bank profits. This was followed by legislation adopted in July 2019 allowing the Central Bank to transfer a larger share of its dividends than before to the Treasury.

54. **The authorities have adjusted spending on capital and goods and services to help create fiscal space for public transfers** (Figure 88). The decline in goods and services spending is evident in the public procurement statistics (Box 8), which show a clear downward trend to accommodate fiscal adjustment targets. At the same time, there also seems to be a trend towards domestic preference to support local producers. Though cuts to capital spending can be detrimental for long-term growth, in the very near-term, some adjustment is warranted to create savings for immediate public transfer needs, particularly for vulnerable households affected by the downturn (this is discussed further in the looking ahead section).

55. **Though an important share of household transfers is through more rigid social security expenditures, discretionary social assistance to households has also increased rapidly in 2019 H1** (Figure 89). Most household transfers are through extra budgetary institutions captured in general rather than central government accounts. Around 60 percent is through social security institutions, which include pensions. A large share of the remainder are social assistance expenditures, which accelerated rapidly since 2018 Q4 in response to the downturn, averaging 17 percent real growth per quarter. This increase will have contributed to partially offsetting the drop in consumption from rising unemployment, particularly much of the social assistance is targeted to low income households (Box 9).

[33] For example, in: (i) September 2018 Special Consumption Tax for automobiles was reduced; (ii) October 2018 VAT and Special Consumption Tax discounts were introduced for white goods, automobiles and furniture; (iii) October 2018 VAT and title deed fee support for housing extended till the end of 2018; (iv) December 2018 VAT exemptions introduced for new machinery and equipment purchases, whilst tax support for vehicles, white goods, furniture, housing and title deed fees was extended by another 3 months; (v) March 2019 further extension of tax incentives for housing, automobile, white goods and furniture, which expired in June 2019.

Figure 84: Rising fiscal imbalances

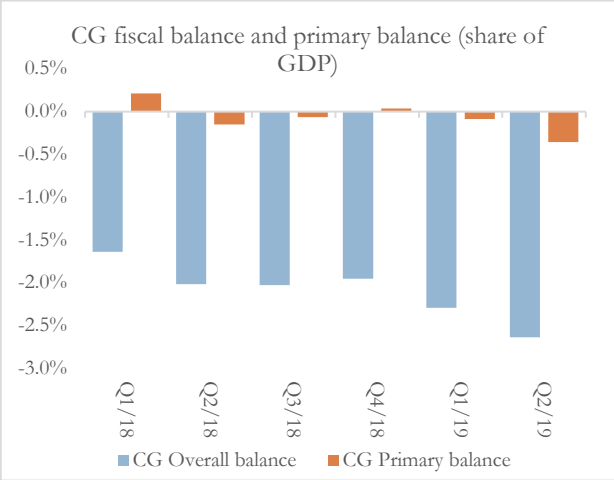


Figure 85: Increasingly financed through external debt

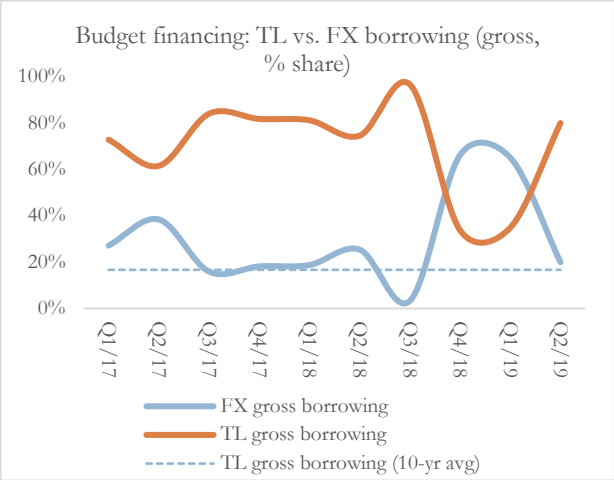


Figure 86: Real income tax collections drop sharply…

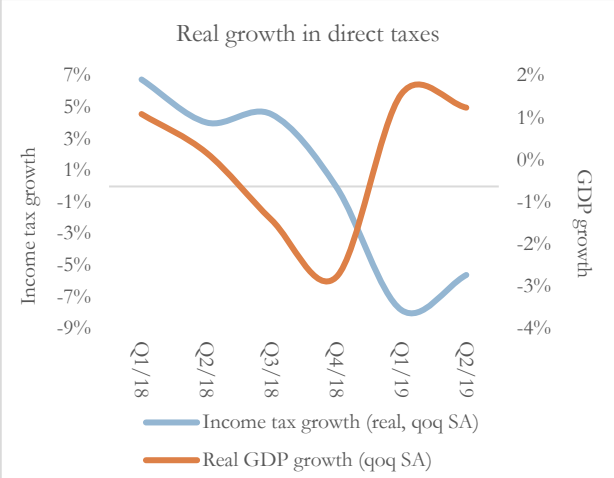


Figure 87: …as does consumption tax buoyancy

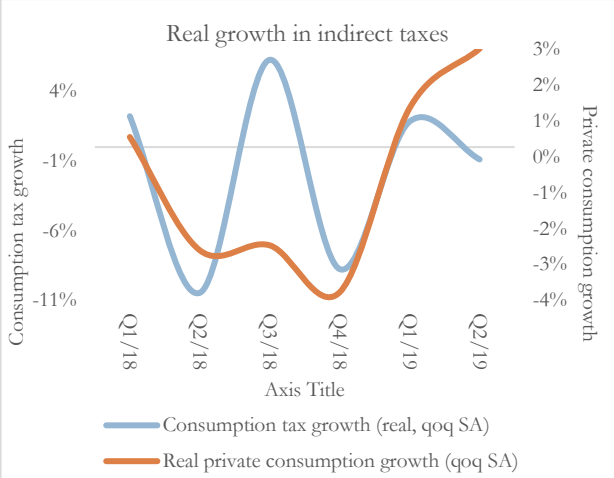


Figure 88: Spending consolidation driven by investments…

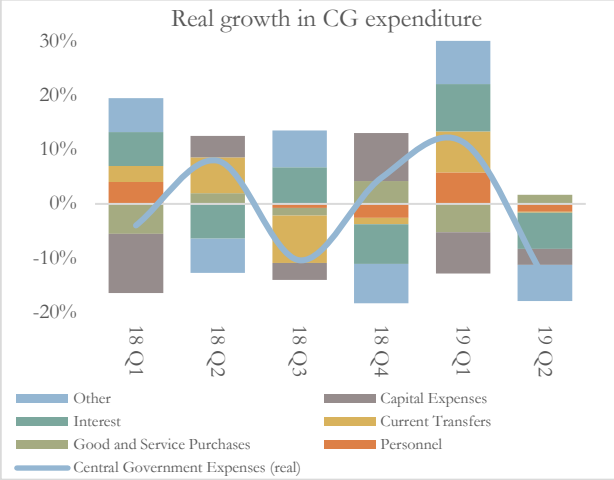
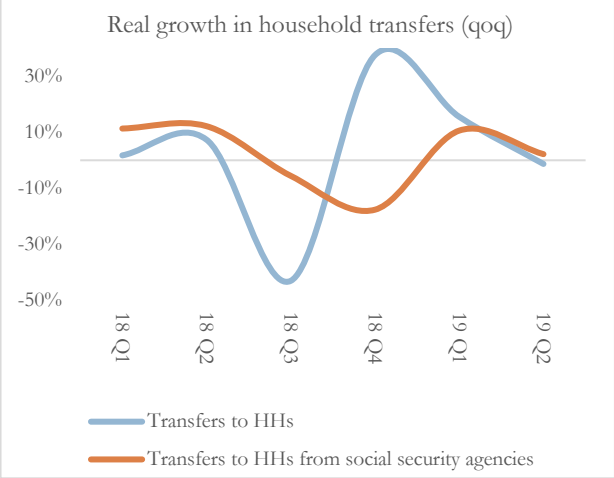


Figure 89: …creating space for household transfers



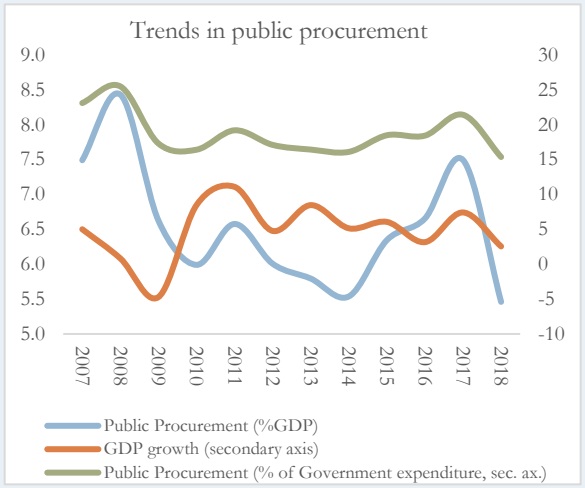
Sources: Haver Analytics, SBO, WB Staff estimates.

Box 8: Public Procurement trends in Turkey

Public procurement policies impact significantly not only on the overall quality of government spending but also on private sector development in Turkey. Over the past 10 years, public procurement has averaged around 6-7 percent of GDP and close to 17-18 percent of government expenditure (Figure 90). Fiscal adjustments in response to the most recent economic downturn led to a slight drop in procurement activity in 2018 (5.5 percent of GDP, 15 percent of spending).

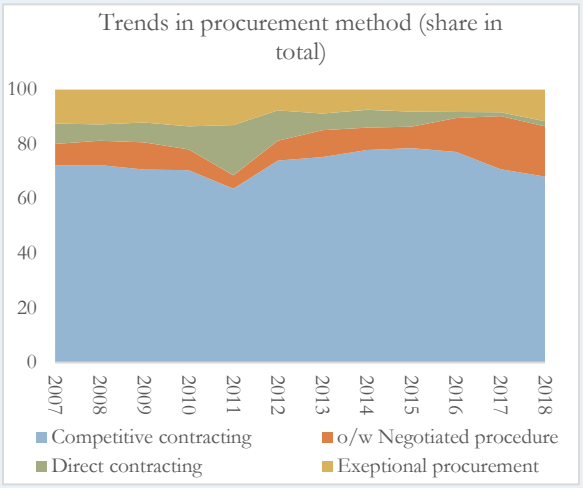
Most public contracts are procured through competitive processes. Since 2012, the share of direct procurement declined from 11 percent to 2 percent, whilst the share of competitive bids has increased from 81 to 87 percent (Figure 91). Within competitive bidding, there is increased use of negotiated procedures. Exceptional procurements have increased slightly though remain relatively low.[34]

Figure 90: Public procurement is large



Source: Public Procurement Statistics, Haver Analytics, WB staff calculations.

Figure 91: Most contacts procured competitively



Source: Public Procurement Statistics, Haver Analytics, WB staff calculations.

The use of competitive processes is consistent with large savings. The savings are calculated by looking at the difference between the estimated costs in the initial tender documents and the actual contract amount. Based on this, the estimated savings have averaged around 25 percent of total amounts bid (and ranging from 19-35 percent over the entire period).

Public procurement has shifted away from goods and services over time in favor of public works. There was observable decline especially in goods purchases between 2007-2018 period, while procurement for works increased from 30 percent in 2009 to around 60 percent in 2017 (Figure 92). These trends could be linked to a noticeable increase in the share of procurement contracts being implemented by municipalities, likely for local public works (Figure 93).

Domestic bidders have over time obtained increased price advantage for tenders that were also open to foreigners.[35] The share of price-advantaged procurements for domestic bidders on average increased from 19 percent in 2007 to 43 percent in 2018 (Figure 94). Nearly all public contracts have been awarded to domestic bidders (Figures 95).

[34] Exceptional procurement data is based on the implementing institutions' declaration and institutions may not have fully declared.
[35] A number of the amendments to the public procurement law aim the local preference. On the other hand, statistics only provide the data on the bids that the local preference was expected to be applied. There is no clear information on the contracts that were awarded following the application of domestic preference. (i.e. in case a foreign firm does not submit a bid, domestic preference is not applied in practice as there are no foreign bidders, however on paper the provision on domestic preference exists). Therefore, it may be misleading to indicate that domestic bidders are receiving price advantage.

Figure 92: Procurement shifted towards works

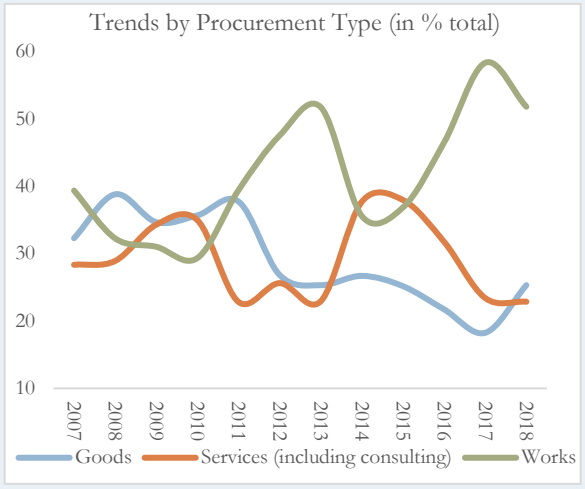


Figure 93: And increasingly towards municipalities

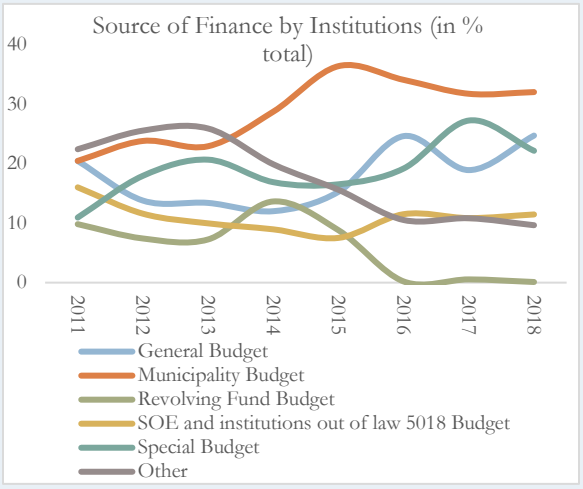
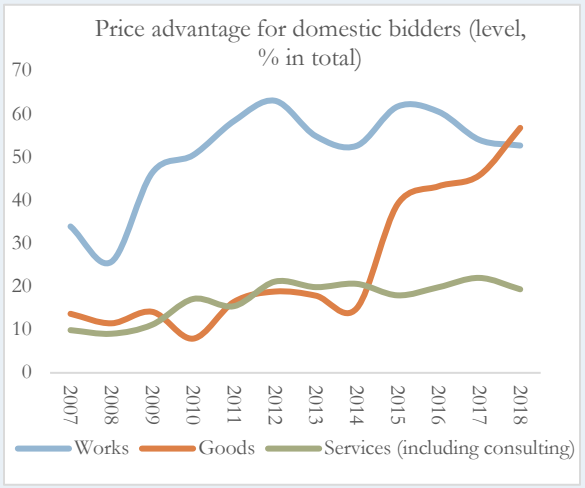


Figure 94: increase in domestic bidders' price advantage



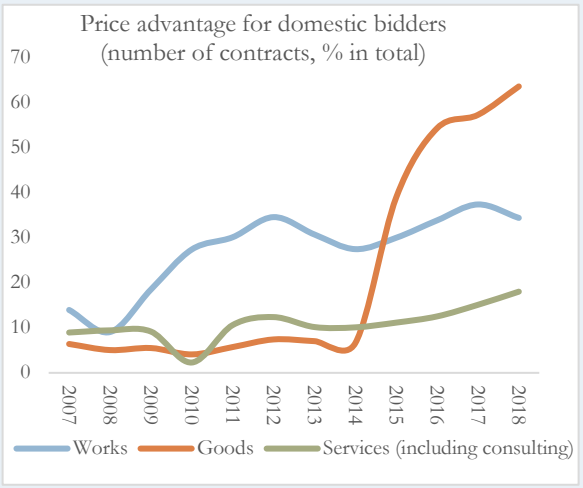
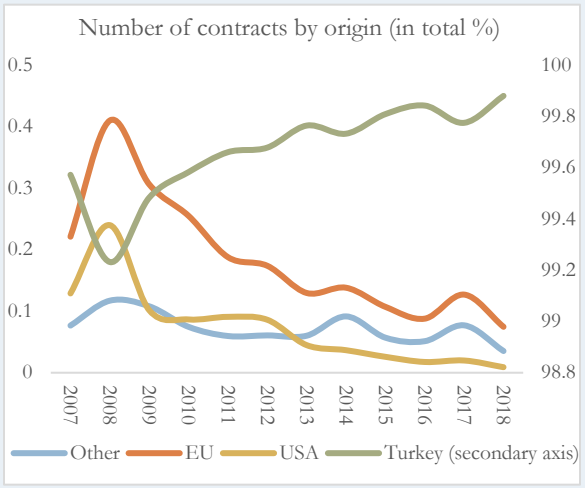
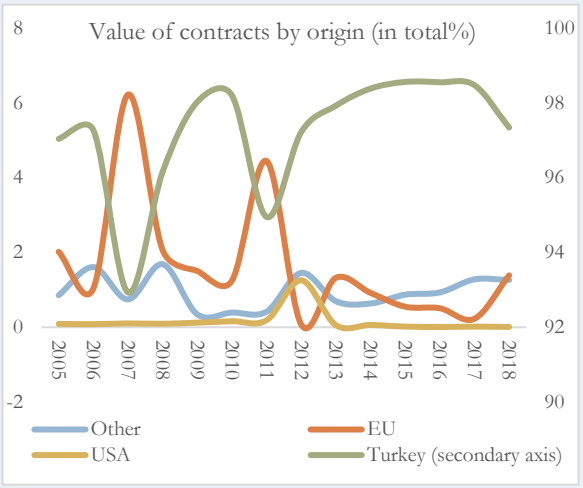


Figure 95: Turkish firms account for the largest share of contracts





Source: Public Procurement Statistics, WB staff calculations.

The above trends are largely consistent with ongoing amendments to the Public Procurement Law (No 4734). There have been more than 55 amendments since the enactment of the law in 2002. The objectives were to address implementation problems and to align the framework with EU Directives.

However, there are also critical amendments for exceptions and domestic preference. More than 15 amendments in public procurement law aims to enlarge number of exemption and exceptions, and there are 4 major amendments in public procurement law for increasing domestic preference to support national manufacturing industry.

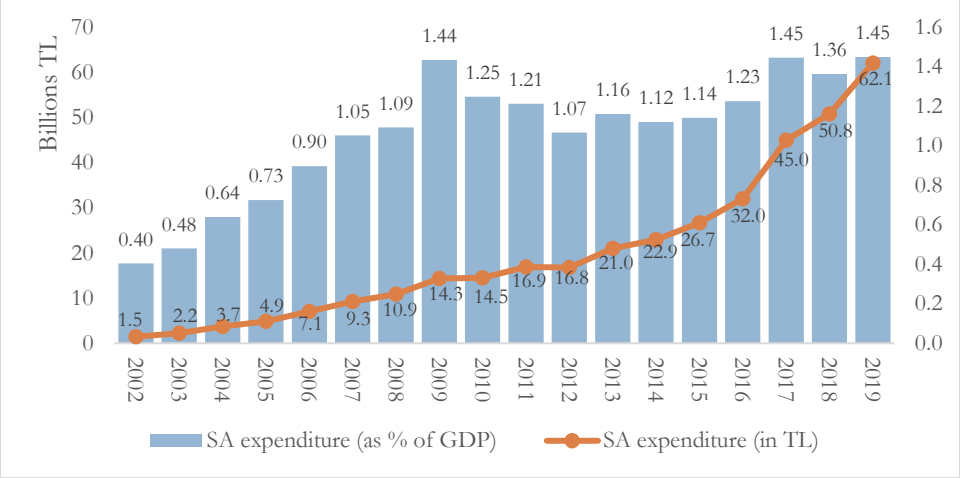
In general, exception and exemptions vary quite a lot among different institutions with different purposes. Domestic preference-related legislative changes are mostly related to enhancing and supporting domestic production capacity with price advantages, and by the definition of high technology goods.

Box 9: Social Assistance system in Turkey

Turkey's social assistance system is relatively young but has grown stronger in the new century. The system is structured around 40 programs that address multiple dimensions of need: basic income, housing, food, education, and health. Most programs are categorical and poverty-targeted, and use 'no income from formal employment' as eligibility criterion. Beneficiaries are expected to fall into a category (old-age, disability, widow, student etc.) and have income below the required threshold (household per capita income lower than one-third of the minimum wage). Only in-kind transfers and health insurance are delivered to household on the basis of being poor and/or vulnerable. Cash transfers as the most common modality of delivery.

Turkey's overall spending on social assistance continues to be relatively modest. As percent of GDP, the average OECD country spends almost twice the amount that Turkey spends. After a decade of developing its social assistance system, Turkey spends 1.45 percent of its GDP (Figure 97).

Figure 96- Social Assistance Expenditure in real and nominal terms over time, 2002 – 2019



Source: Ministry of Family, Labor and Social Policies for SA expenditure.

But there is still room for improvement

56. **There has been an increase in the number of changes in the overall policy framework in Turkey in recent years**. This could be in part due to the ongoing reorganization in government; new roles and responsibilities take time to settle. In addition, responding to a crisis requires firefighting, with effective communication and consultation on policy decisions.

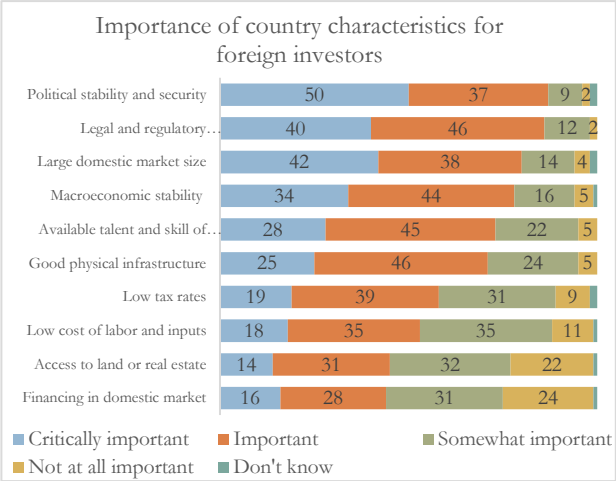
57. **At the same time, however, transparency and predictability are critical to building investor confidence.** In a recent paper, the Central Bank[36] developed an index of Economic Policy Uncertainty for Turkey,[37] which rises during shocks. This is associated with heightened economic uncertainty across firms and households, which negatively affect growth, consumption and investment decisions. In a similar study,[38] the IMF finds that uncertainty leads firms to reduce their investment and substitute labor for fixed capital. Moreover, sectors with high level of irreversibility reduce short-term borrowings in periods of uncertainty.

58. **These findings are consistent with general feedback from private businesses in Turkey.**[39] Dealing with government regulations, lack of predictability in rule-making and implementation were highlighted as some of the biggest constraints to doing business. Businesses highlighted the challenge of compliance with decrees that enter into force at very short notice with limited consideration on the impact of new measures on business operations. One often-cited example was the Presidential Decree no. 32 on the Protection of the Value of the Turkish Currency, which was enacted to require companies to denominate their contracts in Turkish Lira to reduce dollarization. Similarly, tax regulations were reported as complex and subject to frequent amendments.

59. **Foreign investors have similar feedback.** According to a World Bank survey with more than 700 CEOs of multinational companies around the world, policy and regulatory uncertainty is the second most important deterrent to foreign investment, following political stability (Figure 98).

[36] Evren Erdogan Cosar & Saygin Sahinoz, 2018. "Quantifying Uncertainty and Identifying its Impacts on the Turkish Economy," Working Papers 1806, Research and Monetary Policy Department, Central Bank of the Republic of Turkey.
[37] Based on newspaper coverage frequency counts of articles in major Turkish newspapers that contain specific terms related to economy, policy and uncertainty such as *tax*, *regulation*, *policy*, *budget* and *spending*.
[38] La-Bhus Fah Jirasavetakul, Antonio Spilimbergo, "Economic Policy Uncertainty in Turkey," IMF WP/18/272 (2018).
[39] Based on structured interviews with selected private businesses in Istanbul.

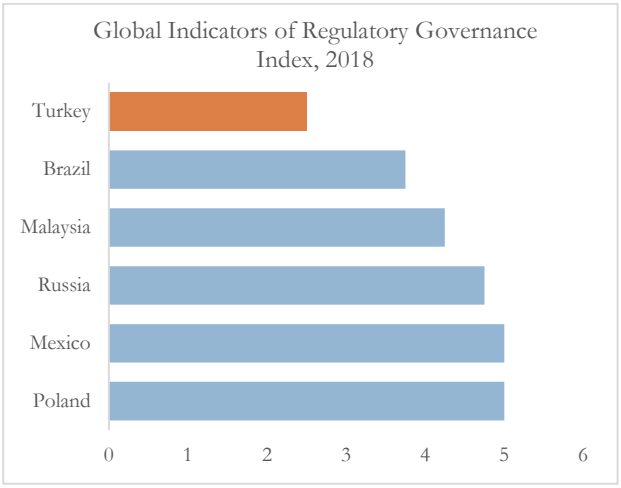
Figure 97: Business-friendly legal and regulatory environment is important for investors



Sources: GIC Survey, WBG Global Investment Competitiveness Report 2017/2018: Foreign Investor Perspectives and Policy Implications.

Notes: Respondents were asked, "How important are the following characteristics to your company's decision to invest in developing countries?" Factors were asked in random order. They are listed in the graph in descending order of importance, based on the combination of "critically important" and "important" in dark green and light green bars. Critically important means it is a deal-breaker; by itself this factor could change a company's decision to invest or not in a country.

Figure 98: Turkey has the lowest score among its peers in terms of regulatory governance



Sources: WBG Global Indicators of Regulatory Governance 2018.

Notes: 6=best

60. **Beyond the short-term volatility, however, broader measures of the quality of regulatory governance point to scope for improvement.** Based on the World Bank's Global Indicators of Regulatory Governance, which assesses the rule-making process across countries, two specific areas of improvement are consultations over business regulations and regulatory impact assessment. This is not to say that these do not take place, but that there is potentially that could be done to strengthen the process to catch up with peers (Figure 99). In Turkey, there appears to be no binding legal obligation for ministries or regulatory agencies to publish the text of proposed regulations before their adoption.[40] Turkey's regulatory governance indicators, notably the ones related to *the efficiency of legal framework in challenging regulations* and *the efficiency of the legal framework in settling disputes* declined after 2012.

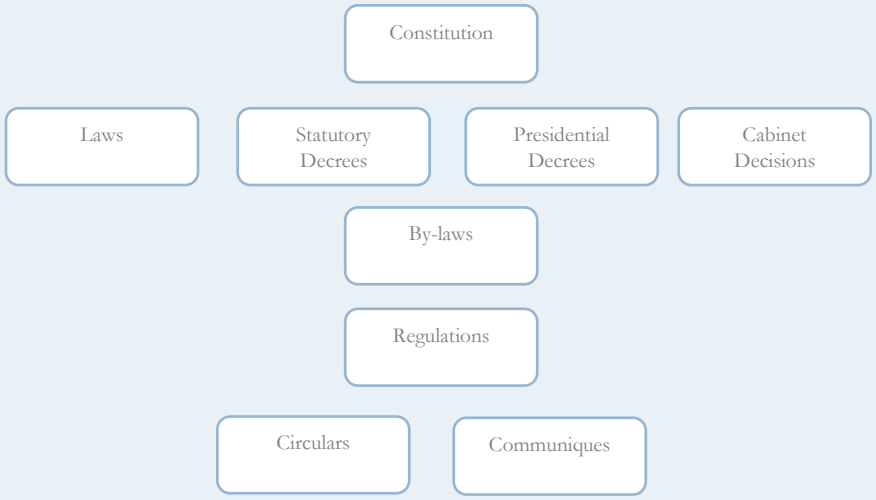
61. **An analysis of legislative changes in Turkey points to an increase in the volume and the frequency of changes in rules and regulations affecting business operations.** Using big data techniques, the number of changes for 19 categories of business regulations were analyzed across all relevant legal instruments in Turkey (Box 10). In sum, the analysis shows that: (i) the number of changes to rules and regulations affecting businesses increased significantly each year peaking in 2018, reflecting greater volatility in the business environment; (ii) a growing share of the changes has been introduced through more discretionary legal instruments (i.e. not requiring formal consultation), which will have contributed to uncertainty; (iii) the most frequent changes were made in the areas of labor market, finance, the environment, quality infrastructure, trade and tax; (iv) most recently, the focus has shifted from tax and labor market issues towards quality infrastructure, environmental issues.

[40] WBG Global Indicators of Regulatory Governance 2018.

Box 10: Big data analysis of business regulation changes in Turkey

Business rules and regulations in Turkey are instituted through various legal or administrative instruments such as laws, decrees, by-laws, cabinet/presidential decisions, regulations and communiques (Figure 100). Each instrument has different degrees of discretion (i.e. in terms of level of authority and consultation needed to adopt new rules or introduce changes to existing ones), which can affect predictability and transparency of the rule-making process. Legal instruments such as regulations and communiques do not formally require prior consultation.

Figure 99: Hierarchy of legal instruments in Turkey[41]



An analysis of legal instruments using big data techniques reveals that the number and frequency of changes to rules and regulations affecting businesses in Turkey has increased sharply, rising from a total of 551 in 2007 to a total of 3,800 in 2018 (Figure 101). The number of changes increased from an average of 360 per year between 2000 and 2009 to an average of 2,100 per year between 2010 and 2018.

This is not to say that these were not positive changes for businesses or that all changes were relevant for all businesses – only a few changes may have had any real impact – but that businesses had to contend with more changes than before, which can be unsettling for operational and investment decisions.

[41] Cabinet Decisions can appear in any part of the hierarchy. Presidential Decisions are not included in the hierarchy because they can be in the form of individual or regulatory decision.

Figure 100: Big increase in annual changes to business regulations

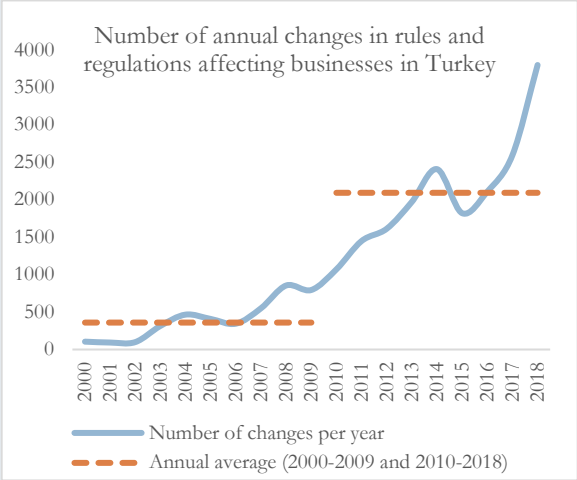
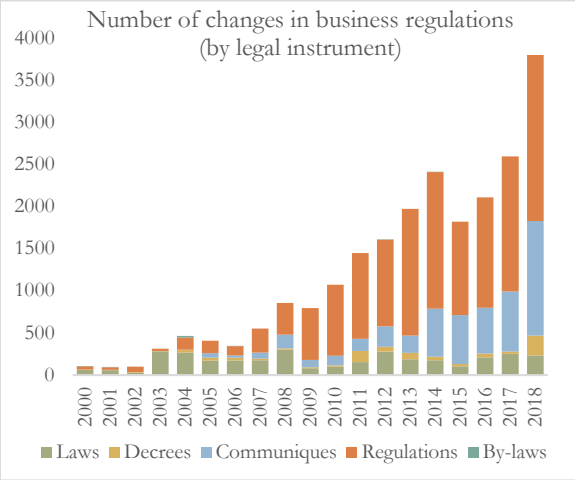


Figure 101: Driven by more discretionary instruments



Sources: Official Gazette, WB Staff Calculations.

The analysis also shows that changes to rules and regulations were increasingly introduced using more discretionary instruments. Between 2003 and 2008, most changes were instituted through primary Laws, but after 2009, most changes came through communiques and regulations (Figure 102); the latter accounted for around 90 percent of changes relating to business rules and regulations between 2016 and 2018.

Whilst this again does not necessarily signal a deterioration in terms of the quality and relevance of rules and regulations (this would require separate analysis), it does point to greater uncertainty. This is consistent with results from the World Bank's Global Indicators of Regulatory Governance as discussed above.

Uncertainty is also reflected in increased frequency of changes. Frequency of changes – as measured by the standard deviation from the last 5 years' annual average changes – has been high through the 2004 to 2018 period (Figure 103). Since 2011, the frequency of changes was driven largely by regulations and communiques.

In terms of business categories, the largest number of changes (or new rules and regulations) were in labor market rules and regulations. This was followed by quality infrastructure (e.g. standards), financial sector, trade, environmental issues, and tax (Figure 104). This has changed over time, with a shift away from tax and labor market issues towards infrastructure quality and environmental issues.

Different legal instruments have focused on different areas of business regulation (Figure 105). For example, laws have tended to tackle issues around tax, insolvency, labor markets, and the environment. Regulations and communiques on the other hand have been more focused on quality infrastructure, financial law and trade related changes.

Figure 102: Changes to business regulations have become more frequent

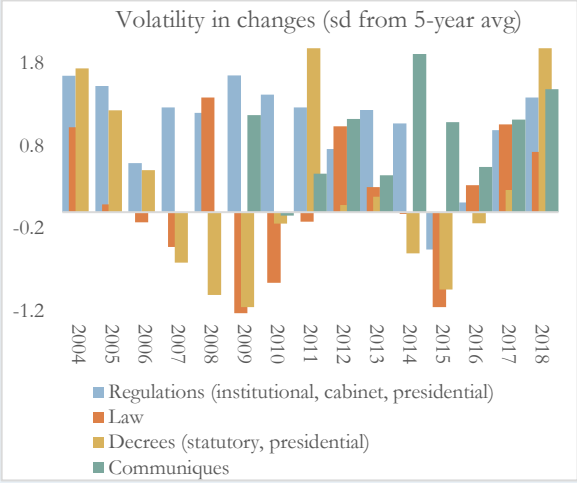
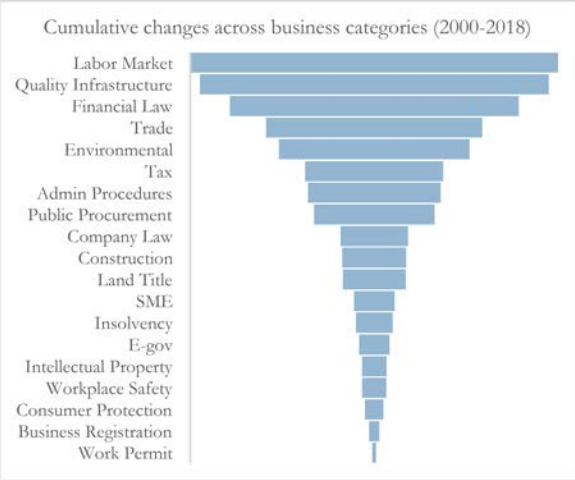
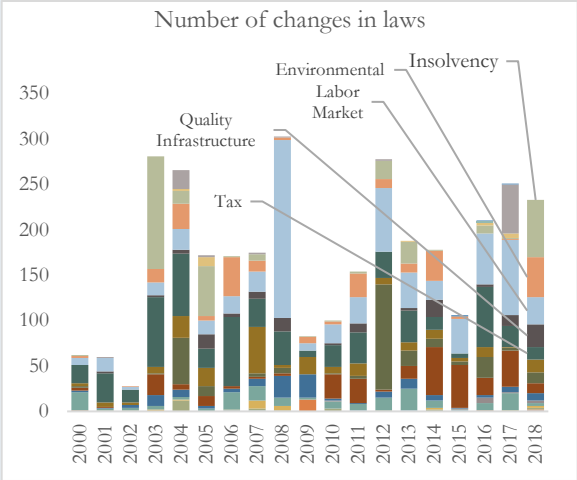


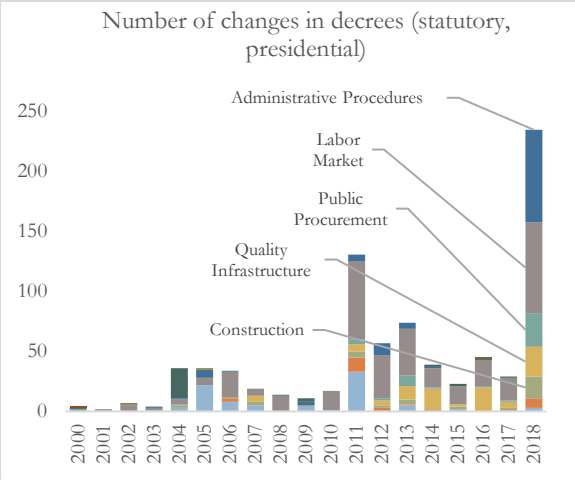
Figure 103: With most changes in labor market regulations

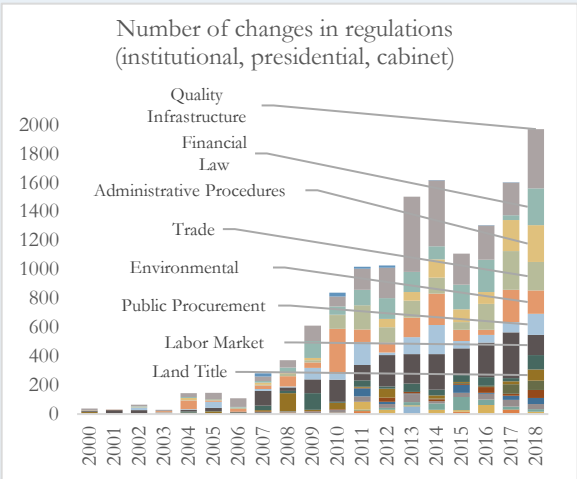


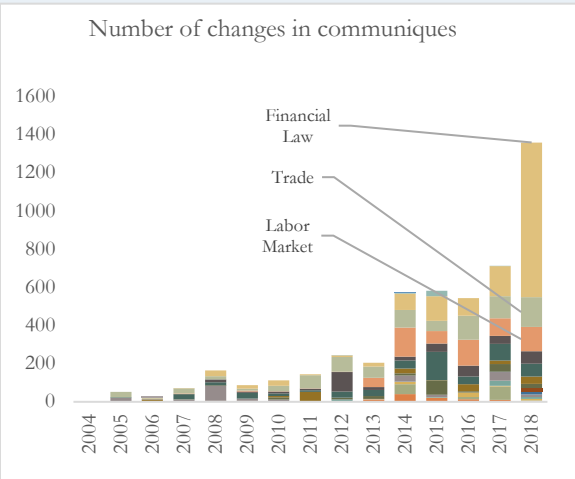
Sources: Official Gazette, WB Staff Calculations.

Figure 104: Different legal instruments have focused on different areas of business regulations









Sources: Official Gazette, WB Staff Calculations.

II. LOOKING AHEAD

Pace and sustainability of recovery subject to reducing uncertainty and restoring investor confidence

62. **The TEM projects no change to GDP in 2019 and a slow medium-term recovery with risks tilted on the downside.** GDP is projected to record zero percent growth in 2019 with a slight rebound to 3 percent and 4 percent in 2020 and 2021, respectively. Domestic policy mix aside, there is a high level of uncertainty and fragility in the global outlook (Box 11). Global trade uncertainty, slowdown in economic activity of the EU, uncertainty regarding monetary easing of the FED and the ECB and volatility in investor sentiment toward emerging market economies and potential implementation of US sanctions on Turkey are the factors that might affect medium term outlook of Turkish economy substantially.

63. **Medium-term growth is projected to be driven largely by consumption, with relatively low contribution from investment and external demand**. Private consumption is expected to pick up in 2019 H2 with falling in inflation, a more stable Lira, and a strong base effect. In line with domestic demand recovery, imports are projected to accelerate. Investment is projected to pick up gradually amid corporate stress and debt overhang. Nominal credit growth is projected to accelerate—however, given asset quality concerns and corporate leverage, credit is unlikely to be a big driver of growth. The general government fiscal deficit is forecast to peak in 2019, largely due to cyclical factors. As growth picks up in in the medium term, public consumption growth is projected to decelerate and revenue growth to accelerate. On the external side, the moderate current account deficit in 2019 is expected to widen in 2020-21.

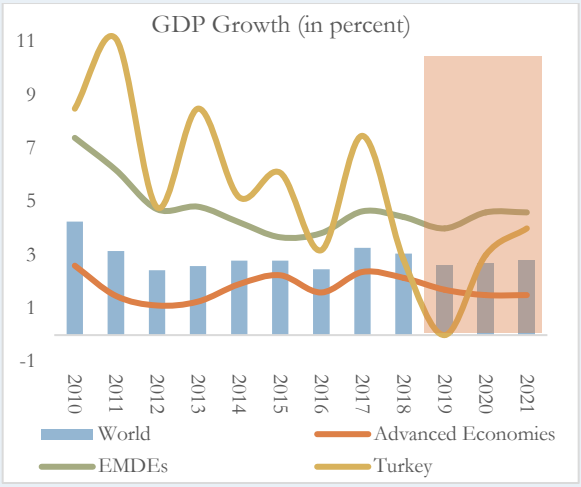
64. **Inflation is projected to fall to high single digits in the medium term**. CPI inflation is projected to decelerate for the rest of 2019 supported by Lira stability, favorable base effects and a negative output gap. However, inflationary expectations remain relatively high. In the medium term, a closing of the output gap with growth recovery together with adjustments to administrative prices and taxes will add pressure on prices. CPI inflation is expected to gradually decline and projected to reach 9 percent on average in 2021. Going forward, aggressive monetary loosening without a permanent fall in inflation and inflationary expectations could hurt Lira stability and the disinflation process.

65. **Poverty is projected to increase in 2019**. The total number of poor is forecast to rise from 7.35 million people in 2018 to 7.53 million in 2020. Although the government increased the minimum wage by 26 percent in January 2019, unemployed and informal workers will remain particularly vulnerable to falling into poverty. Addressing high levels of unemployment is central to Turkey's push for poverty reduction. Unemployment continues to climb in sectors where low-income households are employed, resulting in income loss and rising vulnerability.

Box 11: Global growth outlook

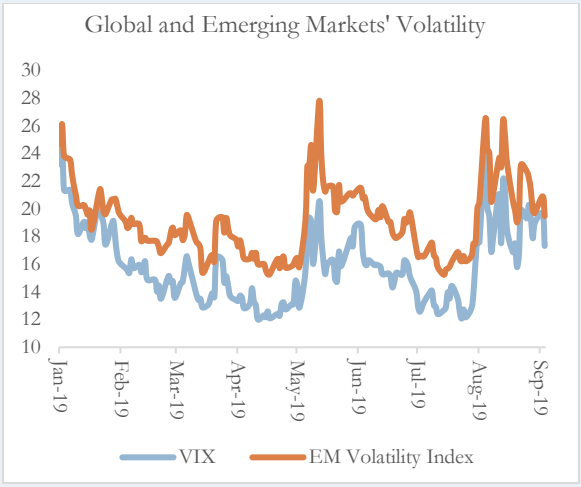
High policy uncertainty, weaker-than-expected trade and investment figures triggered a moderation in global growth which has been downgraded to 2.6 percent from 2.9 percent for 2019. Over the medium term, global growth is expected to gradually improve to 2.7 percent and 2.8 percent in 2020 and 2021, respectively. However, there are significant downside risks for global growth which have become apparent especially after July 2019. On the other hand, EMDEs' growth is expected to decelerate to a four-year low of 4 percent alongside subdued investment and export performance in 2019 (Figure 106)[42]. Trade negotiations between US and China are planned to continue in October. However, downside risks continue to prevail.

Figure 105: Global growth projected to slow down



Sources: Haver Analytics, World Bank Global Economic Prospects, June 2019, WB staff calculations.

Figure 106: Increased market volatility in EMDEs



Source: CBOE, Haver Analytics.

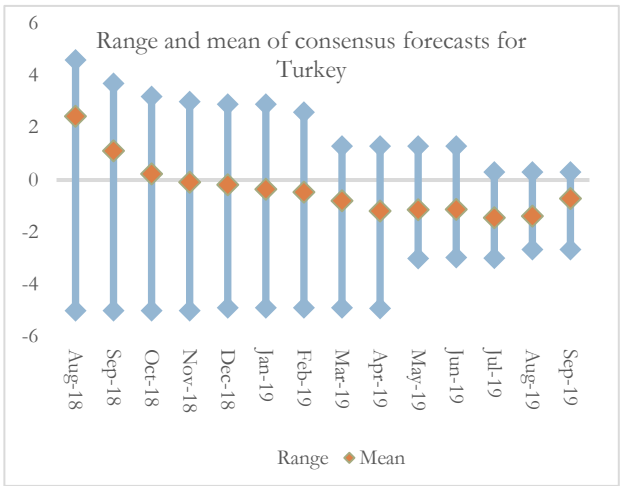
Further uncertainty in policy direction and trade negotiations have caused substantial challenges which are clouding the global economic outlook in both the near and long term. Fears of recession for advanced economies is increasing due to declining exports, lack of fiscal space and room for monetary expansion, while it hits the EMDEs through weak investments, declining exports, debt overhang and fiscal expansion capabilities. Although expected monetary expansion in advanced economies is likely to help improve financing conditions for EMDEs in the short run, potential for destabilizing policy developments might have adverse impacts on the economies. Increased risk perception and volatility since the beginning of August is likely to depend on the effectiveness of monetary expansion in advanced countries, as well as the policy direction over the medium term (Figure 107)

Sources: Global Economic Prospects: June 2019, Global Economic Monitor (January-August 2019).

[42] Growth projections rely on Global Economic Prospects Report (June 2019).

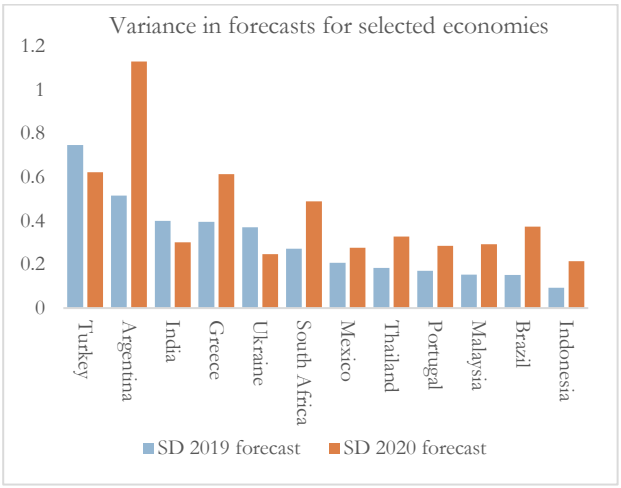
66. **Though Turkey has achieved short-term stability, the pace and sustainability of its recovery will depend in great part on reducing economic uncertainty and restoring confidence.** The outlook remains subject to higher than usual degrees of uncertainty, as also noted in the last TEM. Though the forecasts for 2019 seems to be converging, with most analysts revising up their projections since the release of 2019 Q2 data and leading indicators for 2019 Q3 (mean forecast rising from -1.4 percent to -0.7 percent for 2019) (Figure 108), the variance in forecasts remains high for 2020 (Figure 109). This is reflected in elevated risk premia, which depresses investment prospects and reduces the fiscal multiplier. Though many exogenous factors affect this, a big part also depends on the right policy mix that will support, as discussed below, rebuilding of external buffers, bank and corporate deleveraging, and an effective fiscal policy stimulus.

Figure 107: 2019 forecasts converging



Source: Consensus Forecast Ltd.

Figure 108: A little more consensus for 2020 but variance remains high



Source: Consensus Forecast Ltd.

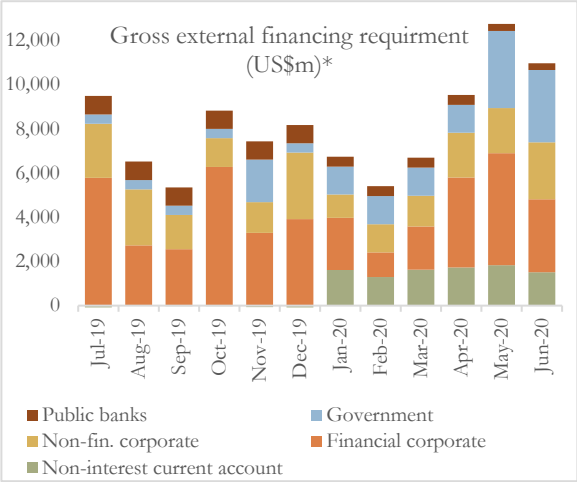
Turkey needs to strengthen external buffers to reduce market pressures

67. **Key to restoring confidence and reducing Turkey's risk premia is strengthening external buffers.** International reserves provide an important buffer in the case of international liquidity shortages in-country. As noted above, the CBRT's international reserve position is lower than comparable countries and estimated prudential levels. It is important, however, to also assess this against the possible demands for liquidity under different assumptions, and consider the potential impact on, and sufficiency of, reserves.

68. **The current level of Gross International Reserves is close to Turkey's external financing requirements, assuming no sudden big change in financing needs.** The external financing requirement, assuming no change in FX deposit holdings and excluding trade credits, is estimated to be US$94bn. This compared to gross international reserves of just over US$100bn, meaning that in theory, reserves could cover the national financing requirement for 12 months[43]. Just over half of this is due to the financial sector (45 percent private banks and 8 percent public banks). Government debt service accounts for around 13 percent, the non-financial corporate sector 24 percent and non-interest current account financing 10 percent. Financing requirements will peak in May and June 2020 (Figure 110).

[43] This is a hypothetical supposition. In almost no possible circumstances would external financing fall to zero.

Figure 109: GIR close to financing requirements

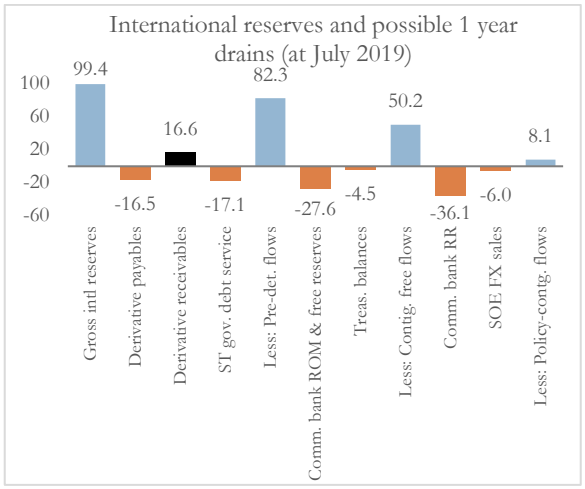


Sources: CBRT.

*Excludes trade credits and foreign exchange deposits.

Note: Does not assume any in-period rollover.

Figure 110: External reserves not down to critical levels



Note: SOE FX sales is a forecast based on previous 12-months; all figures are approximate and may not match with official sources.

69. **Going one step further, central bank reserves can be measured against predetermined and possible flows of reserves over the next 12 months** (Figure 111)**.** Predetermined flows include payment and receipt on FX contracts – both FX to be paid which is held under swap (approx. US$17bn) and FX credits to be received from exporters (approx. US$17bn). Also included is the FX required for payment of central government external debt (approx. US$17bn).

70. **The remaining balance (US$82bn) may, or may not, be called on at the determination of the central bank and other economic actors**. A total of US$28bn is held by commercial banks – under the Reserve Option Mechanism for Lira required reserves and as free deposits. Commercial banks can withdraw these funds at any time assuming Lira reserve requirements are fulfilled. These reserves, combined with Treasury FX cash balances, constitute the next component of reserves, which are not under the control of CBRT, but can be used by others to help fulfil their FX liquidity needs.

71. **Excluding these reserves leaves a balance of US$50bn of reserves which are under regulatory control or owned by the Central Bank**. The Central Bank provides a fraction of reserves to SOE companies; assuming this is maintained at the same level as the previous year, this would commit US$6bn of reserves. The Required Reserves on FX deposits amount to around US$36bn. Should the CBRT choose to support banks' FX liquidity needs, it could lower the Reserve Requirement. However, the FX liquidity of the private sector is not considered here and is not a direct call on reserves even in a sudden stop scenario because the private sector holds its own FX liquidity, which in Turkey is very considerable. But even in the case that CBRT releases all these reserves, it would still maintain a small positive reserve balance.

72. **Though the above suggests that, in static terms, external reserves are not down to critical levels, Turkey nevertheless remains vulnerable to External Market Pressures.** Any major currency shock may lead to further deterioration in net worth of banks and corporates, thereby raising external financing needs. Analysis of past drivers of External Market Pressure, suggest two potential predictors of EMP crises in Turkey (Box 12): Large rises in the US Federal funds rate, which tend to predict an EMP crisis around one year ahead, and a spike in short-term financial flows to reserves, which predicts a crisis within a few months. Though the former seems less likely now, Turkey remains vulnerable to the latter, particularly if

foreign flows remain speculative rather than geared to long-term investments. This comes back to the point of building confidence and reducing risk premia, which higher external buffers can contribute to.

Box 12: Leading indicators of External Market Pressure in Turkey

Following on from the External Market Pressure index discussed in Box 1, what indicators can provide a signal of future external market pressure crisis in Turkey? Using a signaling methodology in line with common practice in the literature, a set of macroeconomic indicators previously identified as early warning indicators (EWIs) of EMP crisis were tested for Turkey (Table 5). These indicators derive from different conceptual frameworks of vulnerability, but this exercise focuses on their historical empirical power to predict market pressures in Turkey. Functional forms are generally drawn from those used in the literature and were tested to aim to ensure that those presented are the most efficient predictors.

Signals were defined as being when an indicator, standardized to a mean of zero and standard error of 1 exceeds the 90th percentile of its probability distribution. If this occurs within 18 months before an EMP crisis month, it is said to be a good signal, otherwise it is a false signal. The first step was to observe which indicators predicted which crises in Turkey, and secondly to rank them according to those that provided the highest proportion of good signals in all signals, and those that minimized the proportion of noise.

Table 5: Early warning indicator results

	Jan-Mar 91	Feb-Apr 94	Oct-Nov 95	Aug 98	Nov 00-Jun 01	Jun 06	Oct 08	Aug 18
M2 to reserves	Yes: 12m	Yes:18m	No	No	No	No	No	No
GIR to CAD	Yes: 10m	Yes:18m	Yes:13m	Yes: 15m	Yes:10m	No	No	No
GIR to imports	No	Yes:18m	Yes:17m	Yes: 18m	No	No	No	No
Ext debt to exp	No	Yes:14m	Yes:17m	Yes: 18m	No	No	No	No
Inflation	No	No	Yes:17m	Yes: 18m	No	No	No	No
REER apprn	No	No	No	No	No	Yes: 6m	Yes: 15m	No
Real credit growth	No	No	No	No	No	Yes: 18m	No	No
ST ext. debt	No	No	No	No	No	No	No	Yes: 8m
CAB	No	No	No	No	No	No	No	Yes: 5m
d real US int rate	Yes: 9m	No	Yes:17m	Yes: 17m	Yes:6m	Yes: 13m	No	Yes: 17m
d nom US int rate	No	No	Yes:17m	Yes:16m	Yes: 15m	Yes: 18m	No	Yes: 3m
ST ext flows to GIR	No	Yes:2m	Yes: 17m	Yes: 1m	No	Yes: 10m	No	Yes: 2m

The table above illustrates which indicators predicted which EMP crises in Turkey. Broadly, there is a set of indicators that predicted crises prior to 2000 relatively accurately but did not predict crises afterwards (first five variables in the table). There is also a set that predicted some crises post-2000 but not those earlier (rows 6 to 9). Finally, three variables predicted most crises: change in US real interest rates; change in US nominal interest rates; and the ratio of ST external flows to reserves. Of these, the external flows ratio generally was a nearer-term predicter, usually predicting a crisis 1 or 2 months ahead of time, while the interest rate indicators tended to predict a crisis one year or more ahead.

Quantitatively, the proportion of good signals in all signals is another test of predictor effectiveness and may lead to a different assessment to the one in the table above if, for instance, an indicator produces many good signals (e.g. month after month for 18 months), but clustered against a small number of crisis episodes. Based on this indicator, the best-ranking variables is change in nominal US interest rates at 82.4 percent.

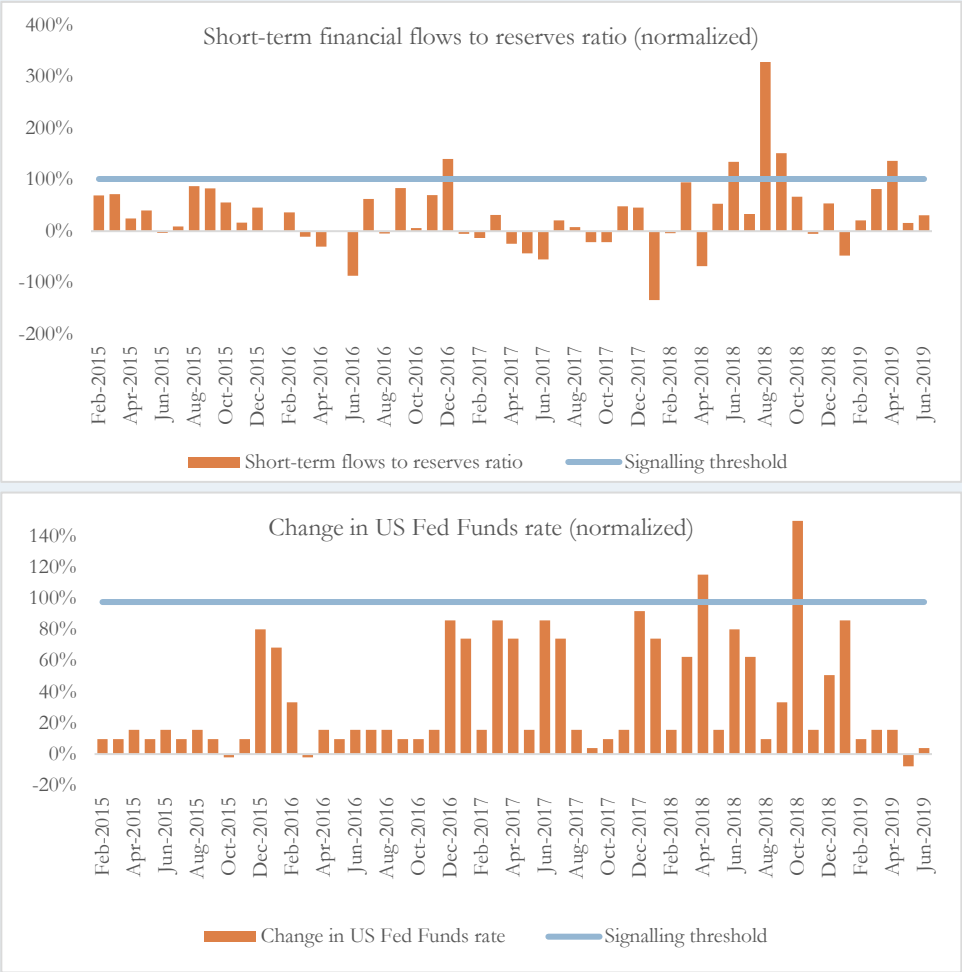
A common optimization criterion for signaling variables is minimizing the noise-to-signal ratio (NSR). By convention, a variable with an NSR below 100 percent is considered an adequate early warning

indicator, and the lower the NSR the better, other things being equal. By this measure, nominal US interest rates performs as the best indicator, with an NSR of 11 percent. The change in real interest rates has an NSR of 127 percent and reserves to ST external flows to GIR 57 percent, meaning that while they predict crises well, they also provide many more 'false positives'. (Figure 112)

While inflation (14 percent), external debt to exports (24 percent) and reserves to imports (25 percent) have quite low NSRs, none of these indicators have predicted a crisis since 2000, so it is likely that there are going to be less useful in predicting an EMP crisis going forward.

Overall, this analysis suggests two indicators that may provide an early warning of future crisis: Large rises in the US Federal funds rate, which tend to predict an EMP crisis around one year ahead, and a spike in short-term financial flows to reserves, which predicts a crisis within a few months.

Figure 111: Strongest leading indicators of EMP in Turkey



Sources: Haver Analytics, WB Staff calculations.

Looking at these two indicators in the months since the last recorded EMP crisis month in August, both have registered a signal – the interest rate EWI in October 2018 and the short-term flow ratio to reserves in April 2019. On this evidence, there remains a risk of further external market pressure within the next year or so.

Which can be supported by tight monetary policy

73. **Monetary policy going forward will be critical to reducing risk premia and strengthening external buffers, but monetary authorities have a very complex balance to strike.** The rational response to the downturn would be to reduce interest rates to relieve burden on existing debt and stimulate growth. But accommodative policies could lead to currency depreciation and reverse progress on disinflation. This is further complicated by the balance sheet mismatches in Turkish corporates discussed above; currency pressures would compound the existing burden of foreign exchange debt. In addition, given elevated inflation expectations (12 percent and 10 percent end of period in September 2020 and 2021 respectively), an overly expansionary monetary policy could further increase dollarization. This is not to say that there is no room for interest rate adjustments; global monetary easing has created some space for this. But the key is that monetary stimulus cannot be the prime driver of the recovery.

74. **In this context, market interventions to expand credit could delay recovery instead of restoring growth**. Credit to the non-financial sector in Turkey is high compared to selected comparators during periods they entered recession (Figure 113).[44] This reflects the general acceleration in EMDE corporate debt following post GFC accommodative monetary policies; non-financial sector debt in Turkey prior to the GFC was closer to the lower end of the range. Household debt has remained low (Figure 114) but overall private non-financial indebtedness is large (Figure 115). There are signs of deleveraging (Figure 116), but the credit burden (Figure 117) remains elevated – one of the highest debt service ratios among EMDEs during periods of recession – because corporates' access to non-bank finance has historically been low (Figure 118). High debt, asset quality concerns, and low aggregate demand mean that credit market interventions are unlikely to boost supply, particularly given the short tenor of credit in Turkey (Box 13). Recent analysis of past banking crises shows that government intervention to accelerate credit can delay recovery.[45] This is linked with diminishing returns in leveraged environments;[46] cross-country analysis shows the marginal effect of credit on growth becomes negative when private sector credit reaches 80-100 percent of GDP;[47] in Turkey, credit to GDP to the private sector has hovered around 85-95 percent of GDP in the past 2 years (Figure 113), The effects are likely to be stronger following a financial shock given distressed balance sheets and low demand.

[44] Countries in the sample include Argentina (t=Q4 2008), Brazil (t=Q2 2015), Chile (t=Q3 2008), Czech Republic (t=Q4 2008), Hungary (t=Q3 2008), Mexico (t=Q4 2008), Russian Federation (t=Q3 2014), South Africa (t=Q4 2008).
[45] Fetai, B. 2017 "The Effects of Fiscal Policy During the Financial Crises In Transition And Emerging Countries: Does Fiscal Policy Matter?" Economic Research (Routledge – Taylor and Francis Group), Vol 30, No.1
[46] WBG 2019, "Firm Productivity and Economic Growth," Country Economic Memorandum.
[47] Arcand, J.L, Berkes, E, Panizza U, 2012 "Too Much Finance?" IMF Working Paper WP/12/161.

Figure 112: Relatively high credit to private sector

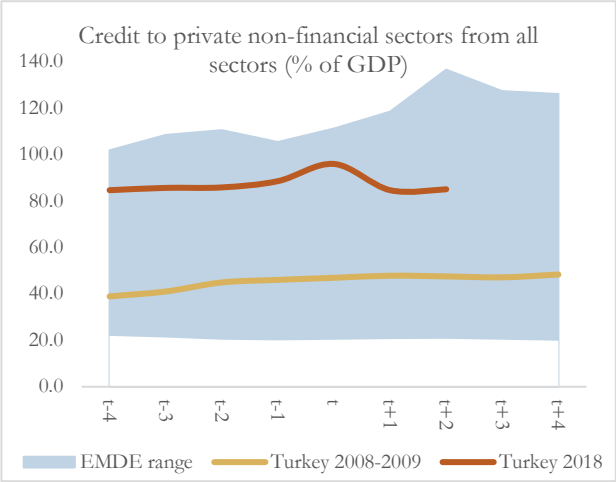
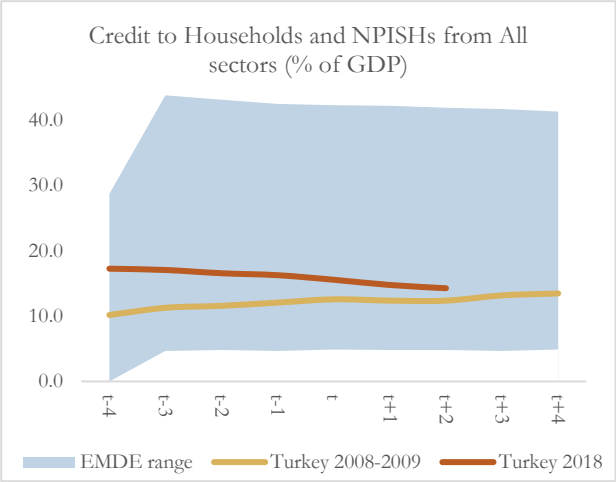


Figure 113: Households debt is low



Sources: BIS, WDI, WB Staff calculations. Note: t = onset of recession (quarterly data).

Figure 114: But corporate debt is high

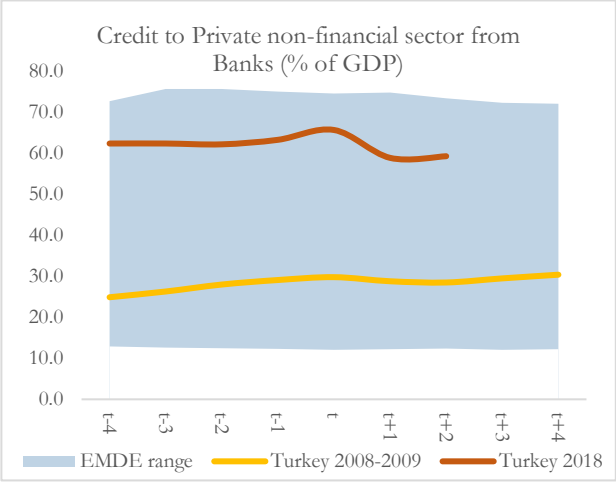


Figure 115: With some signs of deleveraging

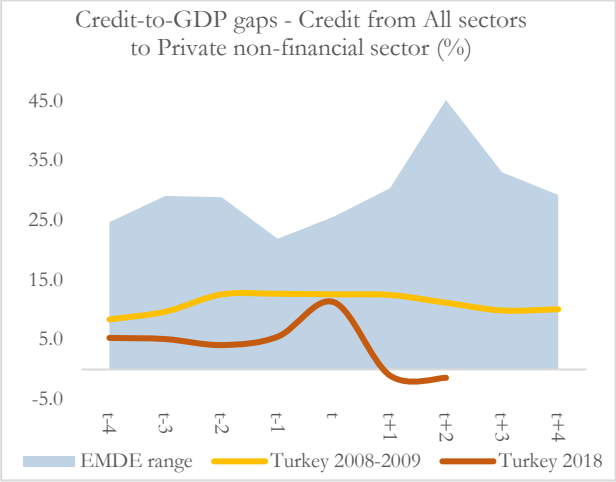


Figure 116: But debt burden remains high

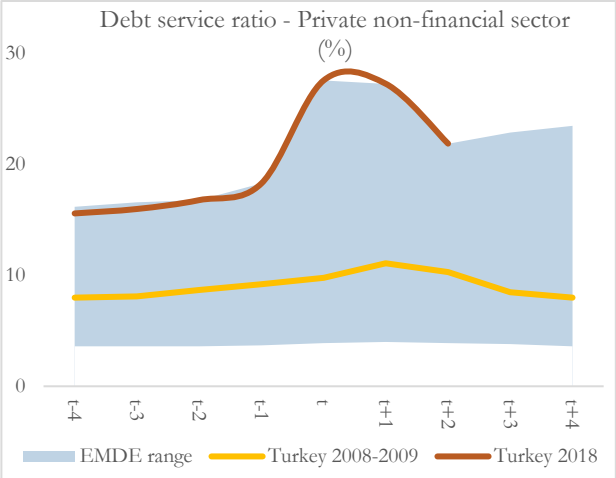
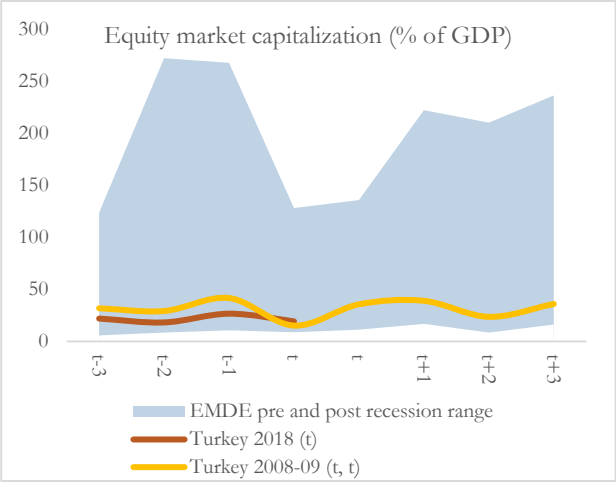


Figure 117: And access to alternative finance low



Source: International Institute of Finance . Note: t = annual data.

Box 13: Macro effects of deteriorating asset quality and currency depreciation

Bank lending remains the main channel of financing in Turkey but a deterioration in asset quality and economic conditions have curtailed credit growth. The TEM argues that additional pressure on credit could have counterproductive effects given the current health of the financial system and the economy more generally.

Corporate debt restructuring and NPL resolution are essential for financial stability and economic recovery in Turkey. They can provide much needed breathing room for banks and corporates by cleaning their balance sheets and start fresh, viable financing.

The relationship between GDP and financial sector health is tested using a Structural Bayesian VAR model that links GDP, commercial credit supply, commercial lending rate, foreign exchange rate, NPLs, and the Capital Adequacy Ratio (CAR) of Turkish banks.

Considering the relatively short time series (2006-2019), the analysis uses Bayesian methods, applying the BEAR toolbox of Dieppe et al. (2016). A Normal-Wishart prior distribution is assumed to obtain the posterior estimates. To identify the structural shocks, sign restrictions are applied on the impulse response functions using Arias et al. (2014).

The model is estimated using quarterly data (2006 Q4-2019 Q2). After adjusting for seasonality, variables are expressed in quarter-on-quarter growth rates, except for lending rates, monetary policy rates, NPL ratios and CAR, which are included in differences. Variables have four-quarter lags.

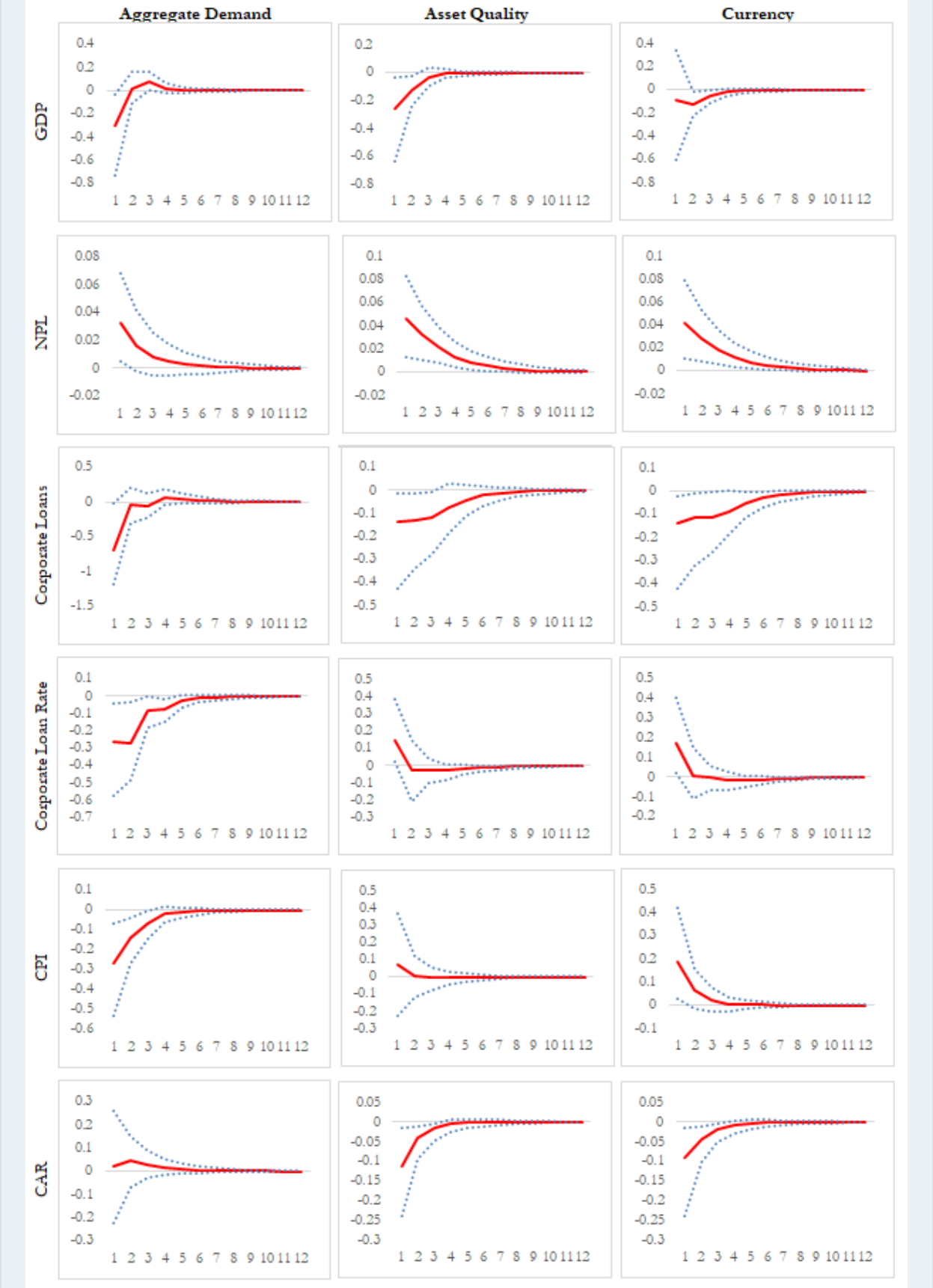
The model considers three distinct shocks: aggregate demand, asset quality, and currency depreciation (Table 6). All the restrictions are imposed on impact. The restrictions on aggregate demand, asset quality and currency shocks draw from standard theory. A negative demand shock will increase NPLs and decrease lending rates. Asset quality shocks will lower GDP, cause currency depreciation, reduce loan supply, increase interest rates and decrease CAR. A currency shock will raise NPLs, reduce loan supply, increase interest rates and decrease CAR.

Table 6: VAR Analysis: Sign restrictions

	GDP	NPL	FX	COM	COMR	CBRT	CPI	CAR
Aggregate Demand	-	+		-	-			
Asset Quality	-	+	+	-	+			-
Currency		+	+	-	+		+	-

The Charts below show the impulse response function of the eight variables to a one standard deviation of the identified shocks. The charts plot the median together with the 16 percent and 84 percent confidence bands. The signs of the impulse response functions are restricted on impact (Table 6). However, most effects persist for at least a few quarters and frequently for significantly longer. IRFs are in variables own unit, which are percentage points.

In sum, an asset quality shock significantly decreases GDP and reduces CAR, leading banks to reduce loan supply and increase lending rates. An easing of financial conditions is associated with an increase in activity and lending volumes. These are both restricted on impact, but the effect is sustained for some quarters afterwards. A currency shock adds pressure on NPLs and CAR mostly due to the high foreign exchange share of bank loan books. Inflation rises sharply as expected.


Aggregate Demand
Asset Quality
Currency
GDP
NPL
Corporate Loans
Corporate Loan Rate
CPI
CAR

75. **Following on from this, corporate debt overhang in Turkey is likely to be an important drag on private investment over the medium-term**. When debt burden is high relative to prospective earnings from new investments, corporates will underinvest even if projects are likely to be profitable in the long-term. This channel is reinforced by investments being crowded out by elevated borrowing costs, and high rollover risks due to the relatively short-term nature of debt. Recent research shows that corporate debt overhang is an important factor behind the collapse in investment in Europe[48] and EMDEs[49] after the GFC. The research on EMDEs (Borensztein and Ye, 2018) finds that corporate debt overhang imposes a sizeable effect on investment at the firm level, with the link being more pronounced for large firms and highly leveraged firms. The study also finds that debt overhang discourages investment more severely under high levels of indebtedness.

76. **Turkey faces similar debt overhang issues suggesting low credit elasticity of investment without corrective balance sheet measures.** The ratio of earnings to total debt, used as a proxy for debt overhang,[50] has been on a consistent declining trend between 2006 and 2016 for large, medium and small enterprises (Figure 119).[51] Much of the increase in debt overhang has been driven by rising corporate debt *relative to* a decline in earnings (Figure 120). Across industries, construction and energy display the biggest drop in earnings to debt (Figure 121). Within manufacturing, the food and beverages sector, which is a large employer, displays high debt overhang (Figure 122). In Turkey, the rise in corporate debt overhang is compounded by: (i) short-tenor of debt, exacerbating rollover risks; and (ii) elevated borrowing costs reflecting risk premia. These factors indicate that corporates are unlikely to finance more investment through credit without reduced pressure on balances sheets or long-term finance.

Figure 118: Debt overhang increases across all firm sizes

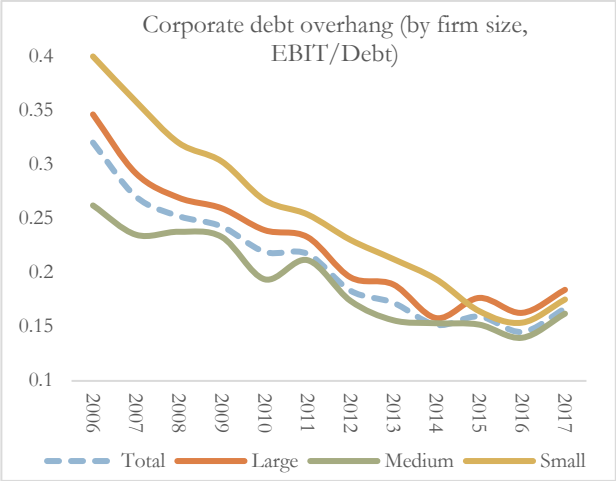
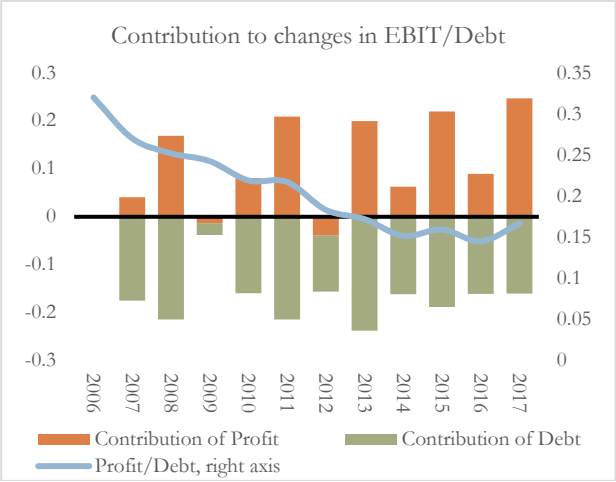


Figure 119: Driven by rising debt stock relative to fall in earnings



Sources: MOIT Entrepreneur Information System, WB Staff calculations.

[48] Kalemli-Ozcan, S, Laeven, L, Moreno D, 2018, "Debt Overhang, Rollover Risk, and Corporate Investment: Evidence from the European Crisis," National Bureau of Economic Research Working Paper Series.
[49] Borensztein, E, Ye, SL, 2018, "Corporate Debt Overhang and Investment: Firm-Level Evidence," WBG Policy Research Working Paper 8553.
[50] Borensztein, E, Ye, SL, 2018.
[51] Part of the change in the ratio may be explained by exchange rate developments given corporates' FX debt.

Figure 120: Construction and energy display the biggest drop in earnings to debt

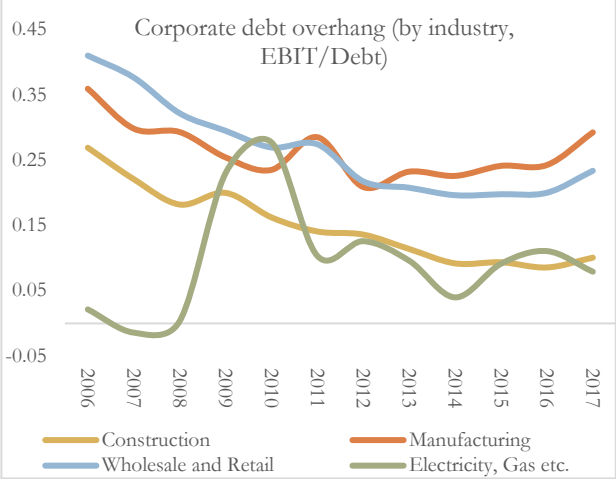
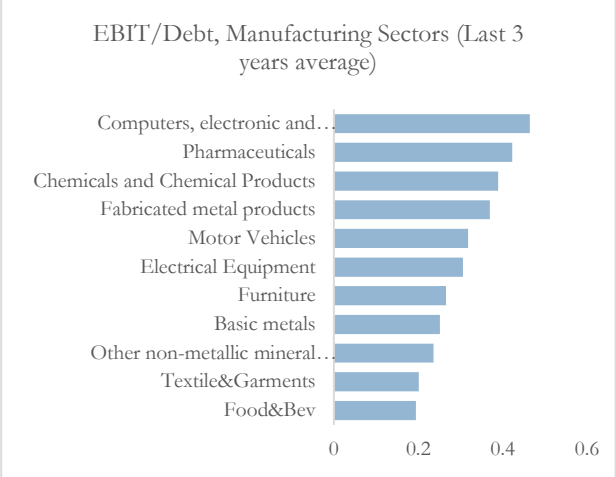


Figure 121: Within manufacturing, large employers display highest debt overhang



Sources: MOIT Entrepreneur Information System, WB Staff calculations.

77. **Addressing this challenge will therefore require a holistic approach to dealing with distressed assets in the banking sector, which the authorities are working on.** The BRSA has already introduced an enhanced framework for reporting NPLs as discussed above. They have also reported on the results of two Asset Quality Review (AQR) and stress testing exercises in December and September; an independent AQR, drawing on international expertise, could further build market confidence in the exercise. In addition to the Concordat framework, the BRSA announced a new regulatory framework for out-of-court debt restructuring in October 2018.[52] This has been enhanced more recently through new legislation adopted in July 2019. This should improve the outcome of restructuring processes particularly compared to those relying only on amending existing credit contracts and extending loan, maturities, which provides temporary relief. The new framework brings new provisions to support a more sustainable restructuring effort (Box 14).

Box 14: Measures to support debt restructuring and NPL resolution

New out-of-court restructuring framework: Legislation passed by Parliament in July 2019 introduced measures to support corporate debt restructuring, bringing changes to the Framework Agreement Regulations issued in October 2018. The new provisions have been adopted as amendments to the existing Banking Law; those provisions relating to financial restructuring will be valid for only two years, with possibility of extending for another two years through approval of the President.

Banks, leasing companies, factoring companies and financing companies, and foreign creditors are all eligible under the framework. Large enterprises with total debt over 25 million Turkish Liras can participate. SMEs with total debt below 25 million can also apply for restructuring. Financial institutions cannot participate as a borrower. Creditors that have approved a restructuring application cannot take legal action to reclaim loans. If the restructuring of a loan is approved by creditors forming two-thirds of the outstanding debt of the borrower, the remainder of the creditors who signed this FA will be obliged to participate.

[52] A restructuring regulation published in August 2018 by the BRSA, provided a framework for the financial restructuring schemes, requiring a standard creditor agreement (so called the Framework Agreement) to be signed between the lenders. Each debtor requesting a restructuring will then be able to apply to one of the three of its lenders with the highest amount of receivables. Most of the Turkish banks have signed the Framework Agreement.

A borrower can only extend new loans during the restructuring process with the approval of its lenders. Cram down is permitted with lender authorization for larger enterprises. The lenders are also permitted to take over the borrower's stocks in exchange for their debt. There will be no cram down for SMEs restructuring.

Independent auditors shall evaluate the eligibility of borrowers to engage in reorganization. A regulatory reorganization transaction should be finished within a maximum of 150 days. Foreign credit institutions may participate in the process without further authorization by other lenders upon request.

The law refers to allows banks to transfer credit to special purpose vehicles or investment banks to be established in accordance with the Capital Markets Law, for instance private equity investment funds and property investment funds. Although the law and the Regulation both specify the types of measures by way of illustrating, the provisional article clearly mentioning that the loans may be transferred to SPVs or funds, gives a relief to banks that have been contemplating to implement such solutions.

The Concordat: Though the Concordat offers an alternative to the out-of-court Framework Agreement procedure, it presents challenges, particularly for SMEs, namely: (i) the costs associated with the proceeding, (ii) the mandatory authorization of the viability of the borrower by the independent auditor (just like in the FA), and (iii) the long time required to complete this procedure.

Another challenge is that privileged creditors under the Bankruptcy Law (secured creditors, workers and the tax authority) are not included in the General Assembly of Creditors, which means that they are entitled to receive full payment of their claims irrespective of the agreements reached for ordinary creditors. In practice, this implies that most debts owed by the debtor cannot be written-off, which makes the approval of a restructuring plan extremely unlikely.

Other countries have adopted systems that allow for the 'cram-down' of creditors regardless of their security or privilege, if a certain majority of creditors approve such treatment and priority rules are observed. Such systems allow the rescue of the debtor at the expense of creditor's interests, assuming all of them have been treated fairly.

78. **It will also require efforts to increase access to long-term finance including through the development of capital markets.** As discussed in previous TEMs, procyclical finance creates a credit glut during downturns. Corporate debt overhang issues in this round could deepen that glut and reduce investment over an extended period, dragging down potential output. This should focus policy attention on the development of capital markets, which in Turkey are very small. There are many challenges, including macro policy stability and corporate governance constraints. But there are examples from elsewhere that show a rapid increase in post-crisis access to domestic capital markets. In East Asia for example, policy reforms after the Asian Financial Crisis helped to significantly increase firms', including SMEs', access to domestic equity and bond markets (Box 15).[53] This helped reduce financial vulnerabilities emanating from foreign currency borrowing, high debt rollover risks, and access to limited markets, which are all challenges in Turkey.

[53] Abraham, F, Cortina, JJ, Schmukler SL, 2019 "The Rise of Domestic Capital Markets for Corporate Financing," WBG Policy Research Working Paper 8844.

Box 15: The Rise of Domestic Capital Markets for Corporate Financing

The amount of equity and bonds raised by East Asian firms during the 1990-2016 period accounted for about 70 percent of the total amount raised by firms from emerging regions in domestic and international markets. Following the 1997-98 Asian Financial Crisis, policy makers in the region have made a conscious effort to develop domestic markets, among other initiatives, to decrease the reliance on financing from abroad and foreign currency instruments.

Recent research at the World Bank uses transaction-level data to analyze equity and corporate bonds issued in domestic and international (cross-border) markets over the period 1990-2016 by firms in the 10 largest East Asian. The research highlights the following findings, that are very relevant for Turkey today.

First, driven by domestic rather than international issuances, the amount of financing raised in capital markets by East Asian firms has greatly increased since the 1990s. The total amount of equity and bond financing raised per year (relative to GDP) in the median East Asian economy doubled between the periods 1990-98 and 2008-16. As a result, the relative size of capital market financing in East Asia has become similar to that in advanced economies. The total amount of equity and bond financing raised per year (relative to GDP) in the median East Asian economy doubled between the periods 1990-98 and 2008-16.

Second, along with the growth in the amount raised, the extensive margin increased as more and smaller firms in East Asia gained access to equity and bond markets. Driven by a higher participation of firms in domestic markets, the average number of issuing firms per year in the median East Asian economy more than tripled, from 60 issuers in 1990-98 to 185 issuers in 2008-16. Because domestic markets cater to smaller firms than international ones, the size of the typical capital market issuer in East Asia declined 38 percent between 1990-98 and 2008-16.

Third, the relatively larger firms with access to international markets have also benefited from the development of domestic markets in East Asia. Whereas the relatively smaller issuing firms rely almost exclusively on domestic capital markets, the largest firms raise funds in multiple markets: domestic capital markets, international capital markets, and syndicated loan markets. Access to different markets allows firms to mitigate negative shocks in one market by raising more funds in other markets. When international debt markets collapsed during the Global Financial Crisis, firms in East Asia moved from international to domestic bond markets. This "spare tire" function was not present during the Asian Financial Crisis, when domestic capital markets were less developed.

Fourth, the growth in domestic financing occurred while policy makers implemented a set of reforms to develop domestic capital markets after the Asian Financial Crisis. Aware that relatively large corporations are typically the main users of traditional capital markets, policy makers complemented these reforms with policies aimed at developing domestic capital markets for small and medium-sized enterprises (SMEs). Compared to those in other regions, including advanced ones, SME markets have become large in East Asia. By 2016, SME markets in the region were the largest in the world in terms of market capitalization.

However, the experience of China (mainland); Hong Kong SAR, China; and Taiwan, China suggests that SME markets tend to serve few firms that, in some cases, are not SMEs, but rather larger corporations. On the positive side, these markets seem to be providing financing to new sectors that are not adequately served by traditional markets.

Source: Abraham, F, Cortina, JJ, Schmukler SL, 2019 "The Rise of Domestic Capital Markets for Corporate Financing," WBG Policy Research Working Paper 8844.

In addition to using fiscal space effectively by focusing on the composition of the fiscal stimulus

79. **Effective use of available fiscal space can play a big role in supporting Turkey's economic recovery.** Fiscal space is the room available to implement discretionary fiscal policies whilst maintaining fiscal sustainability. Discretionary policies could be targeted to specific objectives including measures to smooth out the business cycle. Fiscal space can be created through increased revenue, expenditure cuts, and borrowing. Considering debt indicators, Turkey entered recession in 2018 H2 with more fiscal space compared to selected peer countries in comparable recessions in recent years (Figure 123). Turkey's cyclically adjusted fiscal imbalances had started to deteriorate in 2017-2018 (Figure 124) due to procyclical policies in 2017 and 2018 (Figure 125) but sound fiscal policies helped sustain primary and operational surpluses (Figure 126), which helped to protect fiscal space.

80. **However, an important constraint on fiscal space and the multiplier effects of fiscal stimulus in Turkey currently is the risk premia and therefore high borrowing costs.** Though near-term risk indicators and short-term bond yields have started to decline, they nevertheless remain high (Figures 127 and 128). Recent research shows that fiscal imbalances can impact fiscal multipliers through two channels:[54] (i) the Ricardian channel, whereby a stimulus on the back of a weak fiscal position lead agents to scale back consumption and investment in the expectation that taxes will rise in the future; and (ii) an interest rate channel, whereby high risk premia raises overall borrowing costs and thereby crowds out investments.

81. **Another issue to consider is how fiscal space may evolve under different macroeconomic shocks and scenarios.** Past crises have shown that the room for discretionary policies can get eroded very quickly as contingent liabilities generate large fiscal costs. To assess these risks for Turkey, various macroeconomic scenarios – including extreme contingent liability shocks – are run through a model that generates probability distribution of different macro-fiscal variables based on stochastic shocks to the baseline presented above.

82. **For illustrative purposes, in the most extreme (and the least probable) case**: the fiscal deficit could deteriorate to 7 percent of GDP over the medium-term (Figure 129), leading to a doubling in gross borrowing requirements (Figure 130), driven both by a cyclical drop in revenues (Figure 131) and a 4 percentage point of GDP jump in primary expenditures due to fiscal outlays linked to contingent liabilities (Figure 132), doubling the gross borrowing requirement (Figure 133), adding significantly to liquidity pressures (Figure 134) and debt to GDP rising to 45 percent of GDP. This is the most extreme and not the most likely scenario – in the latter, debt to GDP is likely to increase to around 40 percent of GDP. Whilst more severe outcomes are not ruled out, this does illustrate some ability to absorb shocks going forward.

[54] Huidrom, R; Kose, MA; Lim, JJ; Ohnsorge, FL, 2019 "Why Do Fiscal Multipliers Depend on Fiscal Positions," WBG Policy Research Working Paper 8784.

Figure 122: Turkey has relatively low debt

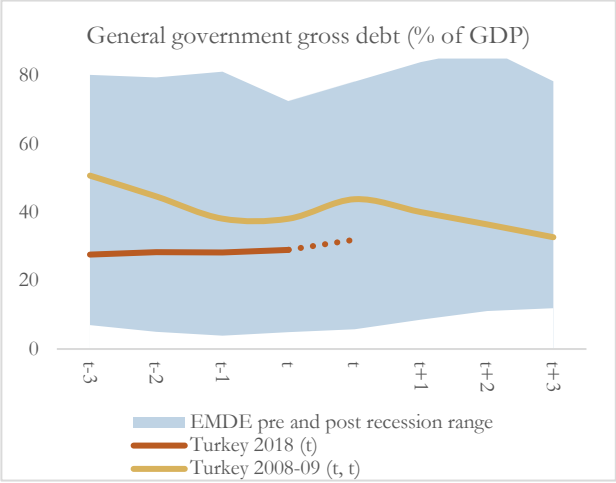
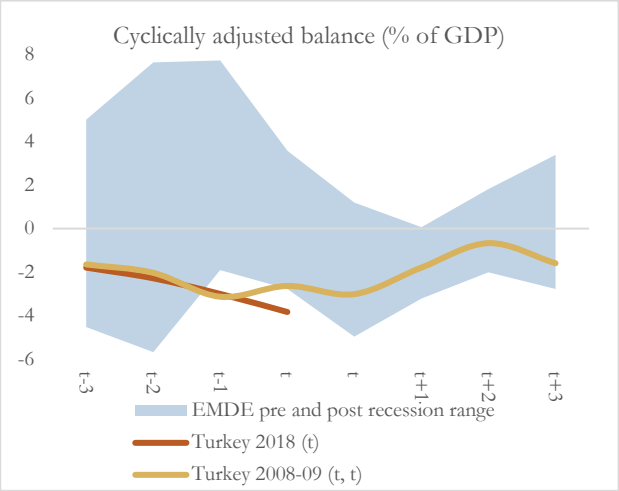


Figure 123: Even though fiscal imbalances grew recently



Sources: Haver Analytics, WDI, WB Staff calculations. Kose, M. Ayhan, Sergio Kurlat, Franziska Ohnsorge, and Naotaka Sugawara (2017). "A Cross-Country Database of Fiscal Space." World Bank Policy Research Working Paper 8157, World Bank, Washington, DC. Note: t = onset of recession (quarterly data).

Figure 124: Due to procyclical policies in 2017

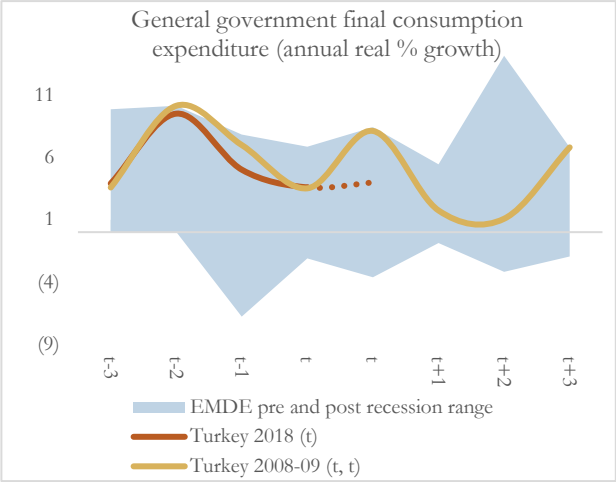


Figure 125: But fiscal discipline helped build buffers

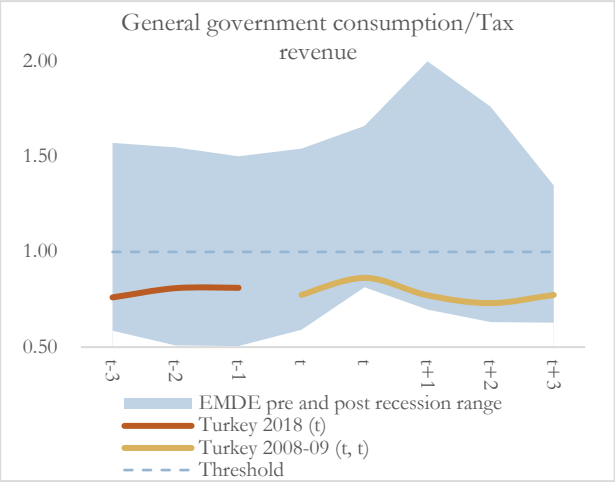


Figure 126: But high-risk premia

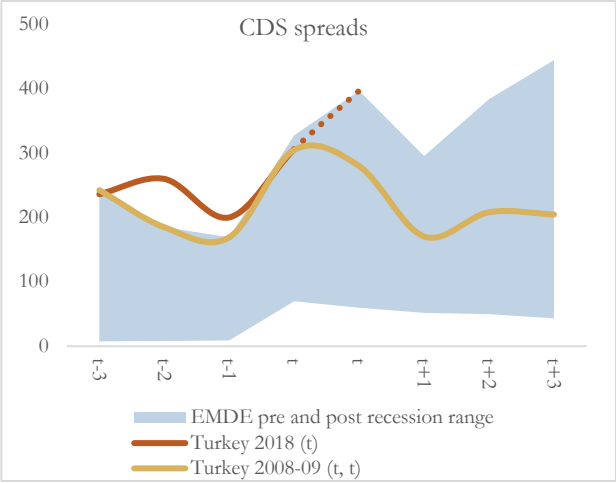


Figure 127: And borrowing costs constrain fiscal space

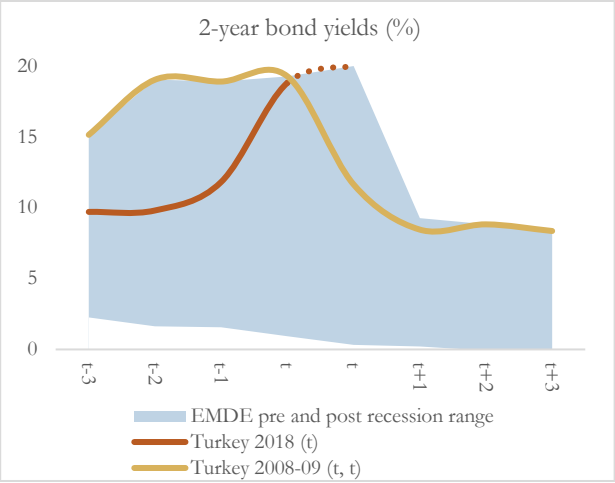


Figure 128: Macro shock would expand the deficit

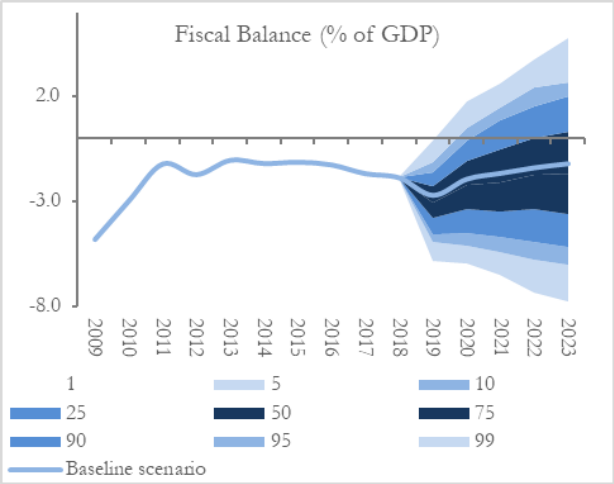
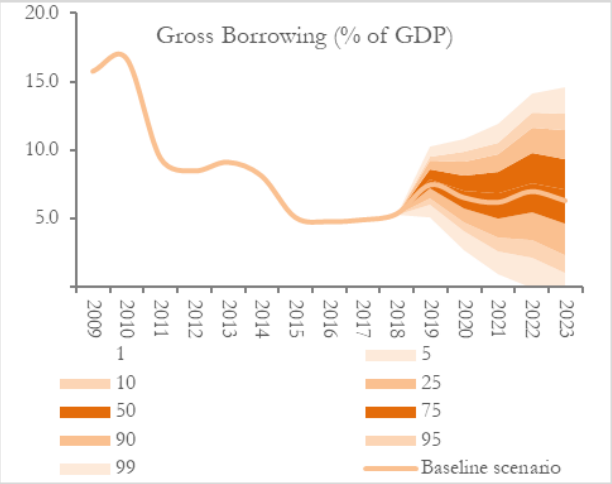


Figure 129: And raise gross borrowing requirements



Sources: WB MTFF tool, WB Staff estimates.

Figure 130: Due to a cyclical drop in revenues

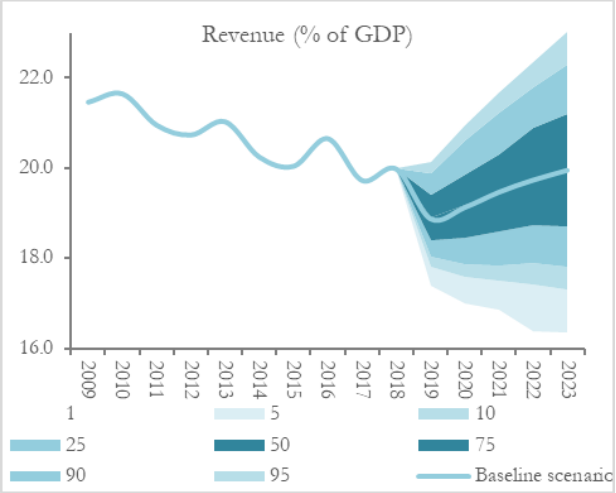


Figure 131: And increased fiscal outlays

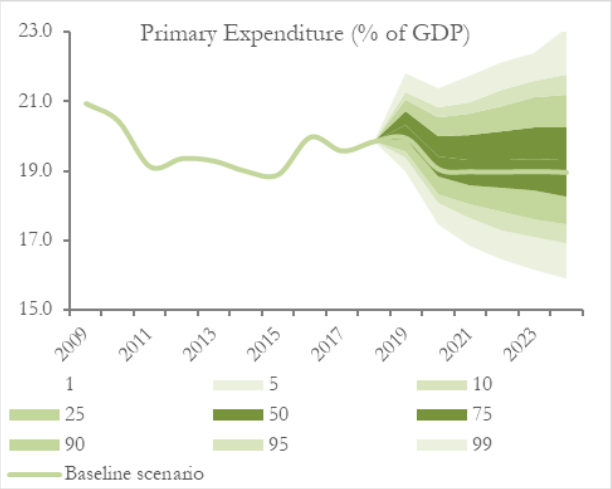


Figure 132: Creating liquidity pressures

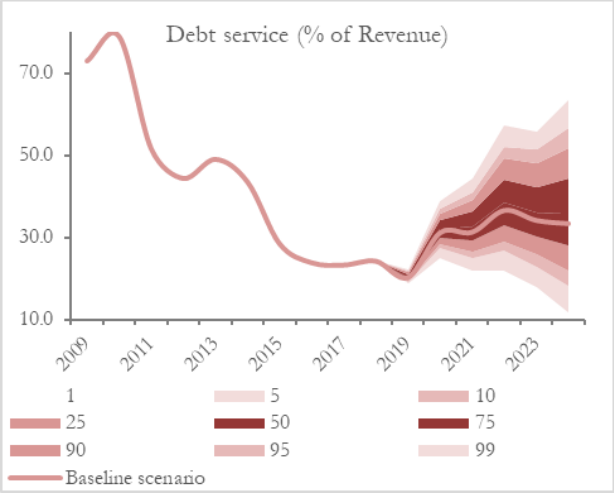
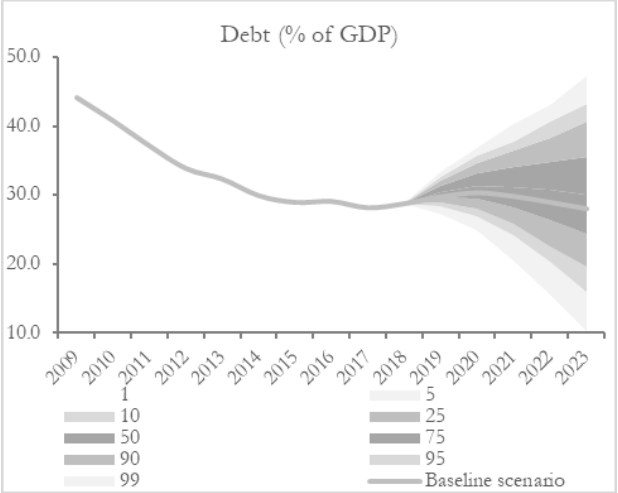


Figure 133: And solvency concerns



83. **Therefore, starting from the assumption that Turkey has fiscal space, it is important to assess the effectiveness of the countercyclical response based not just on the level but also the composition of the fiscal stimulus**. Several studies have shown how the size of the fiscal multiplier varies significantly according to the stage of the business cycle (Baum and Koester 2011, Auerbach and Gorodnichenko 2012, 2013, 2014 and Arin, Koray and Spagnolo 2015); the multiplier tends to be higher during downturns given negative output gaps. In Turkey, a recent study also finds that government spending at times of low growth can have a more profound impact on output relative to spending during periods of high growth (Cebi and Ozdemir, 2016). As noted above, though, this can be dampened because of Ricardian equivalence or higher borrowing costs; other factors that can depress the multiplier include the degree of openness and access to credit. But the composition of spending can also impact on the multiplier.[55]

84. **It is argued here that public transfers to households in Turkey through automatic stabilizers could play a significant role in Turkey's near-term recovery.** As noted in the taking stock section, labor force incomes have dropped because of rising unemployment and declining real wages. This will have contributed to the sharp decline and slow recovery in private consumption. Since workers at the bottom end of the welfare distribution are likely to have been affected more badly (i.e. because of lack of alternative sources of income, higher share of job losses in relatively low skill industries such as construction), public transfers to those workers through automatic stabilizers could help to at least partially offset the drop in private consumption. For example, some studies find that when households are under pressure with rising unemployment, tax cuts do not increase consumption spending while transfers play a significant role Bouthevillain and Dufrénot (2010).

85. **Econometric analysis of the impact of transfers on growth point to a positive and significant relationship** (Box 16). The response of real GDP to current transfers is higher compared to public consumption and the impact is found to be significant. The increase in current transfers raises real GDP, which peaks in the 4th quarter after the shock. A one percent increase in transfer leads to a rise in GDP between 0.1-0.20 percent in 1-2 years. The positive impact fades away within two years. This suggests that transfers to households could help raise private consumption in the short-term.

86. **It is important to note though that these transfers should provide a temporary stimulus, within the overall social assistance system** (Box 16). They should not form permanent entitlements that risk crowding out more productive public expenditures. Particularly as noted above the growth impact of the transfers starts to fade, particularly as inefficient entitlements crowd out other spending and act as disincentives for work (or formal employment). The transfers should also be complemented with retraining programs to ensure that the unemployed can be productively reabsorbed into the labor market.

[55] Fetai, B. 2017 "The effects of fiscal policy during the financial crises in transition and emerging countries: does fiscal policy matter?" Economic Research (Routledge – Taylor and Francis Group), Vol 30, No.1.

Box 16: Assessing the impact of transfers on growth

To assess the effects of public expenditure composition on GDP, an SVAR model is constructed for the period of 2006Q1-2008Q4 period. 5-variables (seasonally adjusted, in logarithm) are ordered as follows: (1) public expenditures on good and services (cons), (2) public transfers expenditures (transf), (3) net tax[56] (tax), (4) 2-year bond yields (int)[57] and GDP.

The structural presentation of a VAR model is:

$$A_0X_t = A(L)X_{t-1} + B\varepsilon_t \quad (1)$$

A_0 is the matrix of contemporaneous impact between the variables, X_t is a 5x1 vector of the 5 variables. A(L) is 5x5 matrix of lag-length L, representing impulse-response functions of the shocks to the elements of X_t. B is a 5x5 matrix that captures the linear relations between structural shocks and ε_t is a 5X1 vector of structural shocks.

As a first step for estimating the SVAR model, the reduced form is obtained by multiplying the inverse matrix A_0^{-1}.

$$X_t = C(L)X_{t-1} + u_t \quad (2)$$

where $C(L) = A_0^{-1} A(L)$ and $u_t = A_0^{-1} B\varepsilon_t$

The relation between structural shocks and reduced form shocks is:

$$A_0u_t = B\varepsilon_t \quad (3)$$

In the model setup, it is needed to impose restrictions assuming some structural shocks have no contemporaneous effects on some endogenous variables. The variables are ordered as it follows: real public consumption expenditure (only goods and services), real current transfer expenditures, real net tax revenue, taxes, real GDP and interest rate, assuming that:

- Public consumption expenditure spending is not contemporaneously affected by any of the shocks;
- Current transfers is contemporaneously affected only by the public consumption expenditure;
- Net tax revenue is contemporaneously affected by current transfers and real GDP;
- Real GDP is contemporaneously influenced by the shocks from all the variables of the model expect interest rates.
- Interest rate is contemporaneously influenced by the shocks from all the variables of the model

These assumptions show the relationships between reduced shocks only in the first period, while later every shock can be affected by any other shock.

With these assumptions imposed, A matrix is the following:

$$\begin{bmatrix} \mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{0} & \mathbf{0} \\ \boldsymbol{\alpha 1} & \mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{0} \\ \boldsymbol{\alpha 2} & \boldsymbol{\alpha 3} & \mathbf{1} & \mathbf{0} & \mathbf{0} \\ \boldsymbol{\alpha 4} & \boldsymbol{\alpha 5} & \boldsymbol{\alpha 6} & \mathbf{1} & \mathbf{0} \\ \boldsymbol{\alpha 7} & \boldsymbol{\alpha 8} & \boldsymbol{\alpha 9} & \boldsymbol{\alpha 10} & \mathbf{1} \end{bmatrix} = A$$

[56] Tax revenues excluding transfers. Tax revenues are deflated by GDP deflators while public consumption and current transfers are deflated by public consumption deflator and private consumption deflators, respectively.

[57] 2-year bond yields are HP filtered and then the difference between bond yields and its trend is used as a proxy for the cost of borrowing.

Following the estimation of the SVAR model the impulse-response functions are obtained. The main interest is to analyze the impact of a public consumption and public transfers expenditure shocks to real GDP. Figure 135 displays the response of real GDP to a positive public consumption expenditure. One-standard deviation shock is scaled to percentage change. The increase of public consumption raises GDP, but it is found to be statistically insignificant.

On the other hand, the response of real GDP on current transfers is higher compared to public consumption and the impact is found to be significant. A one percent increase in transfer leads to a rise in GDP between 0.1-0.20 percent in 1-2 years. The positive impact fades away within two years.

Figure 134: Impact of public consumption shock on growth is positive but not significant

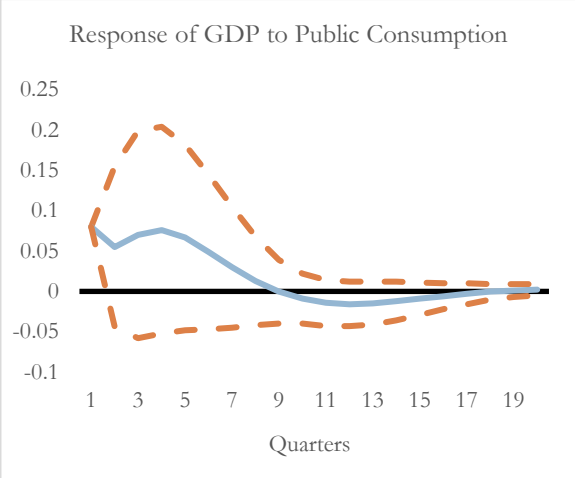
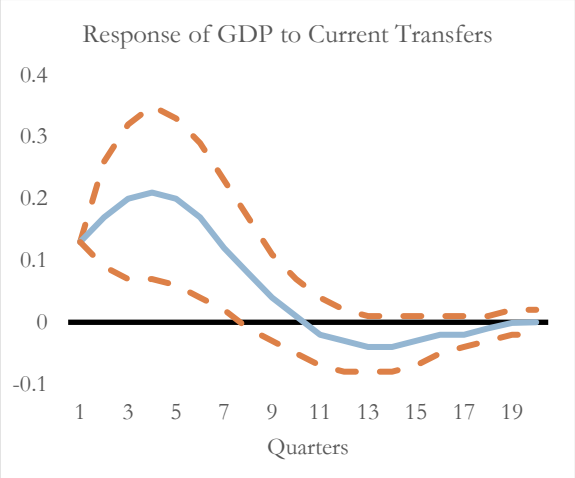


Figure 135: Impact of public transfers shock on growth is positive and significant



Sources: Haver Analytics, WB Staff estimates.

Annex 1: Medium-Term Outlook

Key Macroeconomic Indicators

	2016	2017	2018	2019	2020	2021
Population (mid-year, million)	79.3	80.3	81.4	82.4	83.4	84.4
GDP (current US$, billion)	862.7	852.6	789.0	749.2	748.5	785.6
GDP per capita (current US$)	10883	10616	9693	9092	8975	9308
Upper middle-income Poverty Rate (US$5.5 in 2011 PPP)	9.9	9.2	9.0	9.1	9.0	8.7
CPI (annual average, in percent)	7.8	11.1	16.3	16.5	11.0	9.0
Real Economy	TL Billion, unless otherwise indicated					
Real GDP	1576.4	1694.1	1742.0	1741.6	1794.3	1865.6
Private Consumption	964.8	1025.0	1025.4	1036.1	1058.9	1093.6
Government Consumption	219.5	230.5	245.6	252.9	259.4	264.1
Gross Fixed Capital Formation	465.8	504.2	501.2	443.7	472.3	517.3
Net Exports	-33.9	-32.0	29.1	92.3	87.5	75.3
Fiscal Accounts	TL Billion, unless otherwise indicated					
Total Revenues	904.3	1028.2	1224.3	1446.2	1657.2	1923.3
Total Expenditures	940.5	1085.5	1312.6	1570.7	1763.6	2017.8
General Government Balance	-36.2	-57.3	-88.3	-124.6	-106.4	-94.5
Government Debt Stock	738.5	877.9	1123.9	1395.0	1619.2	1840.7
Primary Balance	16.6	3.0	-6.9	26.7	17.5	25.0
Monetary Policy	TL Billion, unless otherwise indicated					
Broad Money (M3)	1450.7	1675.8	1988.3	-	-	-
Credit Growth (FX-adjusted, eop, y-o-y)	10.7	19.8	1.2	-	-	-
Average Funding Rate (annual average, in percent)	8.4	11.5	17.7	-	-	-
Gross Reserves (in US$ Billion)	106.1	107.7	93.0	-	-	-
o/w Gold Reserves	14.1	23.5	20.1	-	-	-
o/w Net Reserves	34.1	36.1	30.2	-	-	-
External Sector	US$ Billion, unless otherwise indicated					
Current Account balance	-33.1	-47.3	-27.0	-6.0	-22.9	-29.7
Net Foreign Direct Investment	10.8	8.8	9.4	6.6	8.4	9.0

Source: TURKSTAT, CBRT, Strategy and Budget Presidency, WB Staff calculations.

Annex 2: Medium-Term Outlook

Key Macroeconomic Indicators

	2016	2017	2018	2019	2020	2021
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	3.2	7.5	2.8	0.0	3.0	4.0
Private Consumption	3.7	6.2	0.0	1.0	2.2	3.3
Government Consumption	9.5	5.0	6.6	3.0	2.6	1.8
Gross Fixed Capital Formation	2.2	8.2	-0.6	-11.5	6.5	9.5
Exports	-1.9	12.0	7.8	7.2	4.0	4.5
Imports	3.7	10.3	-7.8	-9.1	6.5	9.0
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
Total Revenues	34.7	33.1	32.9	33.3	33.2	33.9
Total Expenditures	36.1	34.9	35.2	36.1	35.4	35.5
General Government Balance	-1.4	-1.8	-2.4	-2.9	-2.1	-1.7
Government Debt Stock	28.3	28.2	30.2	32.1	32.5	32.4
Primary Balance	0.6	0.1	-0.2	0.6	0.4	0.4
Monetary Policy	Percent of GDP, unless otherwise indicated					
CPI (annual average, in percent)	7.8	11.1	16.3	16.5	11.0	9.0
Broad Money (M3)	55.6	53.9	53.4	-	-	-
Gross Reserves	12.3	12.6	11.8	-	-	-
In months of merchandise imports c.i.f.	6.4	5.5	5.0	-	-	-
Percent of short-term external debt	104.4	90.0	79.8	-	-	-
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-3.8	-5.6	-3.4	-0.8	-3.1	-3.8
Net Foreign Direct Investment	1.3	1.0	1.2	0.9	1.1	1.1

Source: TURKSTAT, CBRT, Strategy and Budget Presidency, WB Staff calculations.

Annex 3: Gross Domestic Product

Gross Domestic Product: Production Approach

	2014	2015	2016	2017	2018
GDP (current, TL billion)	2044.5	2338.6	2608.5	3110.7	3724.4
Agriculture	134.7	161.4	161.3	189.2	216.7
Industry	410.8	462.0	511.8	642.4	830.6
Construction	165.7	190.6	223.4	266.1	267.1
Services	1097.0	1246.7	1402.4	1659.1	2020.9
GDP (constant prices, TL billion)	1440.1	1527.7	1576.4	1694.1	1742.0
Agriculture	95.2	104.1	101.4	106.4	108.4
Industry	284.0	298.4	311.0	339.8	344.1
Construction	106.4	111.6	117.6	128.2	125.5
Services	790.2	834.6	861.4	926.7	969.1
Real GDP Growth (%)	5.2	6.1	3.2	7.5	2.8
Agriculture	0.6	9.4	-2.6	4.9	1.9
Industry	5.7	5.0	4.3	9.3	1.3
Construction	5.0	4.9	5.4	9.0	-2.1
Services	6.3	5.6	3.2	7.6	4.6
GDP (constant prices, % share)					
Agriculture	6.6	6.8	6.4	6.3	6.2
Industry	19.7	19.5	19.8	20.1	19.8
Construction	7.4	7.3	7.5	7.6	7.2
Services	54.9	54.6	54.6	54.7	55.6

Source: TURKSTAT, WB Staff calculations.

Annex 4: Gross Domestic Product

Gross Domestic Product: Expenditure Approach

	2014	2015	2016	2017	2018
GDP (current, TL billion)	2044.5	2338.6	2608.5	3110.7	3724.4
Private Consumption	1242.2	1411.8	1560.5	1836.2	2111.3
Government Consumption	288.1	324.6	387.0	450.6	552.4
Gross Fixed Capital Formation	590.7	694.8	764.7	935.7	1114.1
o/w Construction	338.4	380.2	424.5	536.2	644.1
o/w Machinery and Equipment	206.4	263.1	283.9	327.2	381.1
Net Exports	-79.4	-61.0	-75.3	-140.3	-40.9
Change in Inventories	2.8	-31.5	-28.4	28.4	-12.5
GDP (constant prices, TL billion)	1440.1	1527.7	1576.4	1694.1	1742.0
Private Consumption	882.8	930.7	964.8	1025.0	1025.4
Government Consumption	192.8	200.4	219.5	230.5	245.6
Gross Fixed Capital Formation	416.8	455.5	465.8	504.2	501.2
o/w Construction	231.2	242.1	248.8	279.7	286.3
o/w Machinery and Equipment	153.9	182.4	184.5	186.0	173.4
Net Exports	-22.3	-14.2	-33.9	-32.0	29.1
Change in Inventories	-30.1	-44.7	-39.8	-33.5	-59.3
Real GDP Growth (%)	5.2	6.1	3.2	7.5	2.8
Private Consumption	3.0	5.4	3.7	6.2	0.0
Government Consumption	3.1	3.9	9.5	5.0	6.6
Gross Fixed Capital Formation	5.1	9.3	2.2	8.2	-0.6
o/w Construction	6.5	4.7	2.8	12.4	2.4
o/w Machinery and Equipment	3.9	18.5	1.2	0.8	-6.8
Exports	8.2	4.3	-1.9	12.0	7.8
Imports	-0.4	1.7	3.7	10.3	-7.8
Change in Inventories	28.8	48.4	-11.0	-15.8	77.1
GDP (constant prices, % share)					
Private Consumption	61.3	60.9	61.2	60.5	58.9
Government Consumption	13.4	13.1	13.9	13.6	14.1
Gross Fixed Capital Formation	28.9	29.8	29.5	29.8	28.8
o/w Construction	16.1	15.8	15.8	16.5	16.4
o/w Machinery and Equipment	10.7	11.9	11.7	11.0	10.0
Exports	22.7	22.3	21.2	22.1	23.2
Imports	24.2	23.2	23.4	24.0	21.5
Change in Inventories	-2.1	-2.9	-2.5	-2.0	-3.4

Source: TURKSTAT, WB Staff calculations.

Annex 5: Prices

Consumer and Producer Prices: End of period y-o-y, percentage change

	2014	2015	2016	2017	2018
CPI (All items)	8.2	8.8	8.5	11.9	20.3
CPI (Food and non-alc. Beverages)	12.7	10.9	5.7	13.8	25.1
CPI (Core C)	8.7	9.5	7.5	12.3	19.5
Alcoholic beverages, tobacco	7.7	5.7	31.6	2.9	2.4
Clothing and footwear	8.4	9.0	4.0	11.5	14.8
Housing & Energy	6.8	6.7	6.4	9.6	23.7
Furnishings	8.1	11.0	6.2	12.7	31.4
Health	8.6	7.2	9.7	11.9	16.7
Transport	2.1	6.4	12.4	18.2	16.0
Communication	1.6	3.6	3.2	1.4	9.6
Recreation and culture	5.7	11.6	5.9	8.4	20.9
Education	8.3	6.4	9.5	10.5	10.2
Restaurants and Hotels	14.0	13.2	8.6	11.5	19.8
Miscellaneous goods and services	9.7	11.0	11.1	12.8	28.8
PPI (All items)	6.4	5.7	9.9	15.5	33.6

Consumer and Producer Prices: Annual average, percentage change

	2014	2015	2016	2017	2018
CPI (All items)	8.9	7.7	7.8	11.1	16.3
CPI (Food and non-alc. Beverages)	12.6	11.1	5.8	12.7	18.0
CPI (Core C)	9.2	8.0	8.5	10.1	16.5
Alcoholic beverages, tobacco	4.1	4.5	18.1	15.4	1.5
Clothing and footwear	8.0	6.2	7.4	7.1	13.6
Housing & Energy	5.7	7.6	6.6	8.0	15.8
Furnishings	8.3	8.7	8.6	8.2	23.6
Health	8.4	7.3	9.6	12.4	12.4
Transport	9.8	1.5	7.4	16.8	21.8
Communication	1.0	3.1	2.8	2.7	4.6
Recreation and culture	7.3	9.0	7.1	9.8	12.9
Education	9.1	7.0	8.2	10.0	10.5
Restaurants and Hotels	13.3	13.5	10.2	10.3	15.1
Miscellaneous goods and services	7.2	10.1	11.3	12.3	19.9
PPI (All items)	10.2	5.3	4.3	15.8	27.0

Source: TURKSTAT, WB Staff calculations.

Annex 6: Balance of Payments

Balance of Payments Statistics

	2014	2015	2016	2017	2018	2019-Jun
	US$ Billion, unless otherwise indicated					
Current Account	-43.6	-32.1	-33.1	-47.3	-27.0	1.1
Trade Balance	-36.9	-23.9	-25.6	-39.0	-16.1	11.8
Exports	168.9	152.0	150.2	166.2	174.6	177.9
Imports	232.5	200.1	191.1	225.1	216.5	194.2
Services Balance	26.7	24.2	15.3	19.9	25.8	28.1
Primary Income Balance	-8.2	-9.7	-9.2	-11.0	-11.8	-11.6
Secondary Income Balance	1.5	1.4	1.7	2.7	0.9	0.9
Capital Account	-0.1	0.0	0.0	0.0	0.1	0.0
Financial Account	-43.2	-22.7	-22.0	-46.7	-7.9	13.0
Direct Investment	-6.3	-14.2	-10.8	-8.8	-9.4	-9.2
Portfolio Investment	-20.2	15.5	-6.3	-24.5	3.1	1.5
Other Investment	-16.2	-12.1	-5.7	-5.2	8.7	22.6
Net Errors & Omissions	0.5	9.5	11.1	0.6	19.1	11.9
Reserve Assets	-0.5	-11.8	0.8	-8.2	-10.4	-1.8
Overall Balance	-0.5	-11.8	0.8	-8.2	-10.4	-1.8
memo item:						
Energy Balance	-48.8	-33.3	-24.0	-32.9	-38.6	-37.4
Gold Balance	-3.9	4.0	1.8	-10.0	-8.7	-4.7
	Percent of GDP, unless otherwise indicated					
Current Account	-4.7	-3.7	-3.8	-5.6	-3.4	0.2
Trade Balance	-3.9	-2.8	-3.0	-4.6	-2.0	1.7
Exports	18.1	17.7	17.4	19.5	22.1	24.9
Imports	24.9	23.2	22.1	26.4	27.4	27.2
Services Balance	2.9	2.8	1.8	2.3	3.3	3.9
Primary Income Balance	-0.9	-1.1	-1.1	-1.3	-1.5	-1.6
Secondary Income Balance	0.2	0.2	0.2	0.3	0.1	0.1
Capital Account	0.0	0.0	0.0	0.0	0.0	0.0
Financial Account	-4.6	-2.6	-2.6	-5.5	-1.0	1.8
Direct Investment	-0.7	-1.6	-1.3	-1.0	-1.2	-0.3
Portfolio Investment	-2.2	1.8	-0.7	-2.9	0.4	0.2
Other Investment	-1.7	-1.4	-0.7	-0.6	1.1	3.2
Net Errors & Omissions	0.1	1.1	1.3	0.1	2.4	1.7
Reserve Assets	-0.1	-1.4	0.1	-1.0	-1.3	-0.3
Overall Balance	-0.1	-1.4	0.1	-1.0	-1.3	-0.3
memo item:						
Energy Balance	-5.2	-3.9	-2.8	-3.9	-4.9	-5.2
Gold Balance	-0.4	0.5	0.2	-1.2	-1.1	-0.7

Source: CBRT, WB Staff calculations.

Annex 7: Monetary Policy

Monetary Survey (TL Billion)

	2014	2015	2016	2017	2018	2019-Jul
Total Assets	1394.3	1627.4	1894.4	2224.6	2717.9	2993.0
Net Foreign Assets	-41.5	-65.7	-42.4	-80.0	-3.1	91.9
Foreign Assets	385.8	443.6	561.8	631.2	876.0	966.4
Monetary Authorities	299.4	326.7	380.3	417.1	499.1	563.5
Deposit Money Banks	80.3	107.3	167.4	201.2	348.9	403.0
Foreign Liabilities	427.4	509.3	604.2	711.2	879.1	874.5
Monetary Authorities	11.0	9.7	10.5	12.0	21.7	22.6
Deposit Money Banks	372.0	441.6	514.8	607.5	734.7	862.1
Domestic Credits	1435.8	1693.0	1936.8	2304.5	2721.1	2901.2
Net Claims on Central Government	170.5	175.2	174.5	178.1	289.3	349.3
Claims on private sector	1214.3	1456.3	1687.0	2025.9	2307.3	2418.0
Total Liabilities	1394.3	1627.4	1894.4	2224.6	2717.9	2993.2
Money	185.5	217.1	270.1	297.4	290.2	320.2
Currency in Circulation	75.4	91.9	111.3	118.5	119.1	130.0
Demand Deposits	110.1	125.3	158.8	178.9	171.1	190.1
Quasi Money	923.5	1071.6	1245.5	1453.9	1794.8	2015.5
Time and saving deposits	550.8	589.7	682.4	764.1	876.9	881.1
Residents' foreign exchange deposits	328.5	439.2	517.6	631.4	862.2	1043.8
Securities Issued	0.0	0.0	0.0	0.0	0.0	0.0
Restricted Deposits	0.0	0.0	0.0	0.0	0.0	0.0
Other Items (Net)	285.3	338.6	378.9	473.3	632.9	657.5

Source: CBRT

Annex 8: Monetary Policy

Central Bank of Turkey Balance Sheet (TL Billion)

	2014	2015	2016	2017	2018	2019-Aug
CBRT Assets	281.9	293.2	345.4	396.2	461.2	604.1
Foreign Assets	299.4	326.7	381.0	436.8	506.9	600.6
Domestic Assets	5.3	-0.8	18.2	16.4	-0.7	73.7
Treasury Debt: Securities	9.2	9.0	13.9	14.5	13.7	15.3
Cash credits to Public Sector	9.1	8.9	13.8	14.4	13.5	15.1
Cash credits to Banking Sector	19.3	22.7	37.6	48.1	80.9	95.0
Credits to SDIF	0.0	0.0	0.0	0.0	0.0	0.0
Other Items	-23.1	-32.4	-33.1	-46.1	-95.1	-36.3
FX Revaluation Account	-22.9	-32.7	-53.8	-57.0	-45.0	-70.2
CBRT Liabilities	281.9	293.2	345.4	396.2	461.2	604.1
Total FX Liabilities	207.7	244.1	260.9	299.7	347.2	412.4
Foreign Liabilities	10.8	9.7	10.0	9.1	21.7	24.8
Domestic Liabilities	197.0	234.4	251.0	290.6	325.5	387.6
Central Bank Money	74.2	49.1	84.5	96.5	114.0	191.7
Reserve Money	107.2	122.3	168.0	174.1	192.2	196.4
Other Central Bank Money	-33.1	-73.3	-83.5	-77.6	-78.2	-4.8

Source: CBRT

Annex 9: Fiscal Operations

General Government Budget

	2013	2014	2015	2016	2017	2018
	TL Billion, unless otherwise indicated					
Revenues	625.3	691.2	799.3	904.3	1028.2	1224.3
Tax Revenues	334.4	361.9	418.7	470.4	549.8	644.8
o/w Indirect	231.1	243.7	285.7	315.1	367.2	416.8
o/w Direct	92.6	106.0	118.9	138.1	164.3	205.1
Non-Tax Revenues	29.5	38.9	42.8	46.3	47.8	71.4
Factor Incomes	90.8	99.4	112.7	129.6	144.8	168.3
Social Funds	158.0	178.9	212.9	248.4	280.7	331.9
Privatization Revenues	12.6	12.1	12.1	9.6	5.0	8.0
Expenditures	637.0	701.9	801.5	940.5	1085.5	1312.6
Current Expenditures	281.6	314.6	357.6	426.5	480.1	589.2
Investment Expenditures	65.8	66.9	81.1	91.4	115.1	136.4
Transfer Expenditures	289.6	320.4	362.8	422.6	490.3	587.0
o/w Current Transfers	272.0	295.8	339.4	399.9	466.4	560.9
o/w Capital Transfers	17.6	24.6	23.4	22.7	23.9	26.1
Overall Balance	-11.7	-10.6	-2.3	-36.2	-57.3	-88.3
Interest Expenditures	51.7	51.7	54.9	52.7	60.3	81.4
Government Debt Stock	567.9	588.2	646.5	738.5	877.9	1123.9
Primary Balance	40.0	41.1	52.6	16.6	3.0	-6.9
	Percent of GDP, unless otherwise indicated					
Revenues	34.6	33.8	34.2	34.7	33.1	32.9
Tax Revenues	18.5	17.7	17.9	18.0	17.7	17.3
o/w Indirect	12.8	11.9	12.2	12.1	11.8	11.2
o/w Direct	5.1	5.2	5.1	5.3	5.3	5.5
Non-Tax Revenues	1.6	1.9	1.8	1.8	1.5	1.9
Factor Incomes	5.0	4.9	4.8	5.0	4.7	4.5
Social Funds	8.7	8.8	9.1	9.5	9.0	8.9
Privatization Revenues	0.7	0.6	0.5	0.4	0.2	0.2
Expenditures	35.2	34.3	34.3	36.1	34.9	35.2
Current Expenditures	15.6	15.4	15.3	16.4	15.4	15.8
Investment Expenditures	3.6	3.3	3.5	3.5	3.7	3.7
Transfer Expenditures	16.0	15.7	15.5	16.2	15.8	15.8
o/w Current Transfers	15.0	14.5	14.5	15.3	15.0	15.1
o/w Capital Transfers	1.0	1.2	1.0	0.9	0.8	0.7
Overall Balance	-0.6	-0.5	-0.1	-1.4	-1.8	-2.4
Interest Expenditures	2.9	2.5	2.3	2.0	1.9	2.2
Government Debt Stock	31.4	28.8	27.6	28.3	28.2	30.2
Primary Balance	2.2	2.0	2.2	0.6	0.1	-0.2

Source: Strategy and Budget Presidency, Treasury and Finance Ministry, WB Staff calculations,
**2018 data indicates provisional figures.*

Annex 10: Banking Sector Balance Sheet

Money and Banking Statistics of Financial Institutions

	2014	2015	2016	2017	2018	2019-Jul
Assets	Billion TL, unless otherwise indicated					
Total assets	1972.4	2338.3	2732.6	3263.0	3936.6	4303.7
Net foreign assets	-342.1	-397.5	-433.2	-521.4	-543.7	-532.1
Claims on nonresidents	86.7	117.3	182.2	214.9	378.7	405.2
Liabilities to nonresidents	428.8	514.8	615.4	736.3	922.4	937.3
Claims on Central Bank	221.4	260.3	295.8	355.3	372.6	391.4
Currency	11.2	12.9	13.6	15.2	15.8	13.5
Reserve deposits and securities	210.2	247.3	282.2	339.7	356.4	376.5
Other claims	0.1	0.1	0.0	0.3	0.4	1.4
Net claims on central government	217.7	231.0	242.9	279.5	395.1	500.0
Claims on central government	261.6	287.8	307.1	353.8	470.3	589.7
Liabilities to central government	44.0	56.8	64.2	74.3	75.3	89.7
Claims on other sectors	1276.9	1533.7	1790.7	2168.0	2492.8	2638.5
Claims on other financial corporations	35.2	40.8	48.8	61.8	69.9	74.1
Claims on state & local governments	15.3	17.6	23.4	34.4	36.9	38.2
Claims on public nonfinancial corporations	0.9	3.7	3.8	5.5	11.4	24.8
Claims on private sector	1225.5	1471.6	1714.7	2066.3	2374.5	2501.5
Liabilities	Billion TL, unless otherwise indicated					
Liabilities to Central Bank	65.6	112.9	106.8	99.2	119.7	101.5
Transfer deposits included in broad money	194.3	230.4	282.3	343.9	398.4	498.9
Other deposits included in broad money	761.0	881.7	1028.7	1184.3	1442.5	1565.1
Securities other than shares included in broad money	26.5	27.4	26.3	38.9	36.4	51.7
Deposits excluded from broad money	0.0	0.0	0.0	0.0	0.0	0.0
Securities other than shares excluded from broad money	2.5	1.2	1.5	2.3	1.6	11.8
Loans	12.2	12.3	17.4	30.4	53.5	56.3
Financial derivatives	1.2	1.6	2.7	2.7	4.1	6.1
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0
Shares & other equity	237.5	269.0	308.3	366.2	429.4	469.5
Other items (Net)	73.1	91.1	122.2	213.5	231.3	237.0

Source: CBRT, BRSA, IFS

Annex 11: Banking Sector Ratios

Selected Ratios for Banking Sector

	2014	2015	2016	2017	2018	2019-Jul
Liquidity Position						
Liquidity Requirement Ratio	144.3	143.5	135.6	144.5	143.8	144.1
Capital Adequacy						
Core Capital Adequacy Ratio	14.0	13.3	13.2	14.1	13.8	14.0
Capital Adequacy Standard Ratio	16.3	15.6	15.6	16.9	17.3	18.2
Total Risk Weighted Assets (Net) / Total Risk Weighted Assets (Gross)	68.8	68.6	43.3	64.4	64.2	64.1
Regulatory Capital / Total Risk Weighted Assets	16.3	15.6	15.6	16.9	17.3	18.2
Profitability						
Profit (Loss) Before Tax / Average Total Assets	1.7	1.5	1.9	2.0	1.8	0.8
Net Income / Average Total Assets	1.3	1.2	1.5	1.6	1.5	0.7
Net Income / Average Shareholder's Equity	12.3	11.3	14.3	15.9	14.8	6.7
Net Interest (Profit) Revenues (Expenses) / Average Total Assets	3.5	3.5	3.7	3.8	3.9	2.1
Asset Quality						
Non-Performing Loans (Gross) / Total Cash Loans	2.8	3.1	3.2	3.0	3.9	4.6
Provision for Non-Performing Loans / Gross Non-Performing Loans	73.9	74.6	77.4	79.3	68.3	68.2
Interest Rates (end-of-period)						
Weighted average of Central Bank Cost of Funding	8.5	8.8	8.3	12.8	24.1	19.7
Weighted average Interest Rate for Deposits	9.5	11.0	9.6	12.8	22.5	20.1

Source: CBRT, BRSA, IMF

Annex 12: Doing Business Index (2020)

Doing Business Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Global Rank	93	49	33	40	126	84	52	12
Starting a business								
Rank	101	63	77	128	141	139	87	126
Procedures - Men (number)	7	5	7	5	12	7	6	8
Time - Men (days)	24	11	7	37	12	40	7	17
Cost - Men (% of income per capita)	16.7	4.3	6	11.6	5	0.2	4.5	11.1
Procedures - Women (number)	7	5	7	5	12	7	6	9
Time - Women (days)	24.2	10.6	7	37	11.5	40	7	18
Cost - Women (% of income per capita)	16.7	4.3	6	11.6	5	0.2	4.5	11.1
Minimum capital (% of income per capita)	2.3	4.7	0	9.3	0	0	36.2	0
Dealing with construction permits								
Rank	89	61	53	39	155	98	108	2
Procedures (number)	15	14	18	12	17	20	22	9
Time (days)	152	151	100	137	318	155	193	41
Cost (% of Warehouse value)	3.2	1.8	3.6	0.3	3.1	1.9	0.6	1.3
Building quality control index (0-15)	10	11	13	10	11	12	13	13
Quality of building regulations index (0-2)	2	2	2	1	2	2	2	2
Quality control before construction index (0-1)	1	1	1	1	1	1	1	1
Quality control during construction index (0-3)	2	2	2	2	2	2	2	2
Quality control after construction index (0-3)	3	3	3	2	3	3	3	3
Liability and insurance regimes index (0-2)	1	1	1	2	1	0	1	1
Professional certifications index (0-4)	3	3	4	2	2	4	4	4

Getting electricity

Rank	92	49	41	60	111	114	125	4
Procedures (number)	5	4	4	4	6	5	5	3
Time (days)	80	66	34	113	92	109	257	24
Cost (% of income per capita)	336	76	62.3	16.3	15.5	158.4	74.7	25.6
Reliability of supply and transparency of tariff index (0-8)	5	7	5	7	5	4	7	8
Total duration and frequency of outages per customer a year (0-3)	1	2	0	2	0	0	2	3
System average interruption duration index (SAIDI)	15.4	12.2	44.7	1.1	4.5	30.5	2.6	0.5
System average interruption frequency index (SAIFI)	9.2	1.3	19.5	1.1	14.4	6	1.2	0.5
Minimum outage time (in minutes)	5	3	5	3	3	5	3	1
Mechanisms for monitoring outages (0-1)	1	1	1	1	1	1	1	1
Mechanisms for restoring service (0-1)	1	1	1	1	1	1	1	1
Regulatory monitoring (0-1)	1	1	1	1	1	1	1	1
Financial deterrents aimed at limiting outages (0-1)	0	1	1	1	1	0	1	1
Communication of tariffs and tariff changes (0-1)	1	1	1	1	1	1	1	1

Registering property

Rank	93	61	27	92	123	108	29	33
Procedures (number)	6	5	6	6	7	7	4	6
Time (days)	33	33	4.5	135	51.5	23	17.5	11.5
Cost (% of property value)	5.4	4.7	3	0.3	6.6	8	5	3.5
Quality of land administration index (0-30)	15.6	21	27	19	13.5	15.5	26	26.5
Reliability of infrastructure index (0-8)	5	6	8	7	5	5	8	7
Transparency of information index (0-6)	3.2	3.5	4	2.5	2.5	4	3.5	4.5
Geographic coverage index (0-8)	3	6	8	4	2	2	8	8
Land dispute resolution index (0-8)	5.3	5.8	7	5.5	4	4.5	6.5	7
Equal access to property rights index (-2-0)	0	0	0	0	0	0	0	0

Getting credit								
Rank	86	82	37	37	104	80	37	37
Strength of legal rights index (0-12)	6	6	7	7	2	5	9	7
Depth of credit information index (0-8)	5	6	8	8	8	7	6	8
Credit registry coverage (% of adults)	21	23.7	80.2	0	48.1	0	0	64.9
Credit bureau coverage (% of adults)	38.2	52.7	0	100	100	66.5	91.1	89.1
Getting Credit total score	56.4	58.7	75	75	50	60	75	75

Protecting minority investors								
Rank	90	59	21	51	61	13	97	2
Extent of disclosure index (0-10)	6	6	9	7	7	8	2	10
Extent of director liability index (0-10)	5	6	5	2	2	8	4	9
Ease of shareholder suits index (0-10)	6	7	6	9	6	8	7	8
Extent of shareholder rights index (0-10)	3	4	6	5	6	5	4	5
Extent of ownership and control index (0-10)	3	4	6	4	5	6	5	6
Extent of corporate transparency index (0-10)	3	5	6	6	5	5	5	6
Strength of minority investor protection index (0-50)	27	32	38	33	31	40	27	44

Paying taxes								
Rank	101	49	26	77	170	54	56	80
Payments (number per year)	21	13	10	7	9	7	11	9
Time (hours per year)	284	148	170	334	312	210	277	174
Total tax and contribution rate (% of profit)	39	36	42.3	40.8	106.3	29.2	37.9	38.7
Profit tax (% of profit)	17	15	20	14.5	3.6	21.8	9.4	19.6
Labor tax and contributions (% of profit)	15.4	19.2	19.7	25.3	29.9	4	26.4	16.7
Time to comply with corporate income tax audit (hours)	13	13	2	6	6	11	4	11
Time to complete a corporate income tax audit (weeks)	14	9	0	18	0	32	0	26
Post filing index (0-100)	58	77.3	100	77.4	47.9	60.8	87.5	51

Trading across borders

Rank	93	51	44	1	119	145	1	49
Trading across borders (score)	72.8	86.9	91.6	100	67.1	59.6	100	88.5
Time to export: Documentary compliance (score)	44.6	12.8	98.2	100	82.8	60.4	100	94.7
Time to import: Documentary compliance (score)	42.7	15.8	99.4	100	20.1	85.4	100	97.7
Time to export: Border compliance (hours)	50	25	10	0	21	92	0	28
Time to import: Border compliance (hours)	53	23	7	0	60	87	0	36
Cost to export: Documentary compliance (US$)	125	67	55	0	60	55	0	35
Cost to import: Documentary compliance (US$)	100	73	55	0	120	73	0	60
Cost to export: Border compliance (US$)	465	231	338	0	150	1257	0	213
Cost to import: Border compliance (US$)	452	256	46	0	1200	676	0	213

Enforcing contracts

Rank	87	58	24	55	97	102	25	35
Time (days)	634	619	623	685	995	600	605	425
Filing and service (days)	44	36	44	60	90	30	60	35
Trial and judgment (days)	405	442	450	480	540	490	365	270
Enforcement of judgment (days)	185	141	129	145	365	80	180	120
Cost (% of claim)	30	22	24.9	19.4	22.5	33.2	15	37.9
Attorney fees (% of claim)	19	15	12	12	15	22.6	5	30
Court fees (% of claim)	5	5	3	5.4	6.5	7.6	8	1.7
Enforcement fees (% of claim)	5	3	9.9	2	1	3	2	6.2
Quality of the judicial administration index (0-18)	9	11	15	11	12.5	8.5	12.5	13
Court structure and proceedings (0-5)	3	4	3.5	5	4.5	3.5	3	4
Case management (0-6)	2	3	5	1.5	4	2	4	4
Court automation (0-4)	1	2	4	1.5	2	0.5	2.5	2.5
Alternative dispute resolution (0-3)	2	2	2.5	3	2	2.5	3	2.5

Resolving insolvency

Rank	98	53	120	25	111	68	66	40
Outcome (0 as piecemeal sale and 1 as going concern)	0	1	0	1	0	0	0	1
Time (years)	3	2	5	3	2.4	2	2	1
Cost (% of estate)	16	10.4	14.5	15	16.5	18	14.5	10
Recovery rate (cents on the dollar)	34	59.2	10.5	60.9	19.2	34.7	44.2	81
Strength of insolvency framework index (0-16)	8.2	10	10.5	14	9.5	11.5	10	7.5
Commencement of proceedings index (0-3)	2.4	2.6	3	3	2.5	3	2.5	3
Management of debtor's assets index (0-6)	4	5	3	6	4	6	5	2
Creditor participation index (0-4)	2	2	3	2	1	2	2	2

Source: WB, Doing Business

Annex 13: Logistics Performance Index (2016)

Logistics Performance Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Logistics performance index: Overall	2.7	3.6	3.4	3.4	3.0	3.8	3.4	3.4
Lead time to export, median case (days)	3.9	2.3	2.0	1.0	2.0	3.0	1.0	3.0
Lead time to import, median case (days)	3.7	2.7	2.0	1.0	4.0	3.0	3.0	7.0
Ability to track and trace consignments	2.7	3.6	3.4	3.5	3.3	3.9	3.4	3.5
Competence and quality of logistics services	2.6	3.5	3.3	3.4	2.8	3.8	3.4	3.3
Ease of arranging competitively priced shipments	2.7	3.5	3.4	3.4	2.8	3.6	3.4	3.5
Efficiency of customs clearance process	2.5	3.4	3.2	3.3	2.6	3.6	3.0	3.2
Frequency with which shipments reach consignee within scheduled or expected time	3.1	3.9	3.8	3.8	3.5	4.1	3.9	3.7
Quality of trade and transport-related infrastructure	2.6	3.6	3.5	3.2	2.9	3.8	3.5	3.5

Score, 1=low to 5=high

Source: WB, Logistics Performance Index

Annex 14: Health Statistics (2017)

Health Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Life expectancy at birth, total (years)	75.5	80.7	77.2	77.9	76.7	63.4	76.1	75.5
Life expectancy at birth, male (years)	73.3	78.2	74.1	73.9	73.0	59.9	72.6	73.3
Life expectancy at birth, female (years)	77.9	83.4	80.1	82.0	80.4	67.0	79.7	77.9
Mortality rate, infant (per 1,000 live births)	11.6	4.6	9.7	4.0	9.2	28.8	3.8	6.7

Source: WB, World Development Indicators

Annex 15: Education Statistics (2016)

Education Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Educational attainment, at least completed primary, population 25+ years, total (%) (cumulative)	-	-	89.5	99.2	91.9	82.4	99.6	93.9
Primary completion rate, total (% of relevant age group)	95.5	97.8	89.8	100.2	102.5	81.7	98.6	100.6
Educational attainment, at least Master's or equivalent, population 25+, total (%) (cumulative)	-	-	2.3	19.3	-	1.2	8.7	1.6
Educational attainment, Doctoral or equivalent, population 25+, total (%) (cumulative)	-	-	0.4	0.4	-	-	0.7	0.3
School enrollment, secondary (% net)	81.5	92.5	85.5	92.1	89.5	85.0	89.2	73.8
Educational attainment, at least completed upper secondary, population 25+, total (%) (cumulative)	-	-	39.0	84.9	-	64.6	76.1	58.3
Educational attainment, at least completed lower secondary, population 25+, total (%) (cumulative)	-	-	68.9	85.3	54.7	77.2	97.2	74.2
Adjusted net enrollment rate, primary (% of primary school age children)	96.4	97.2	94.4	95.6	99.3	91.6	96.9	98.9
School enrollment, primary (% net)	95.3	96.5	94.4	95.0	99.0	84.3	91.4	98.9

Source: WB, World Development Indicators

**Scores for South Africa represent 2015 figures.*

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