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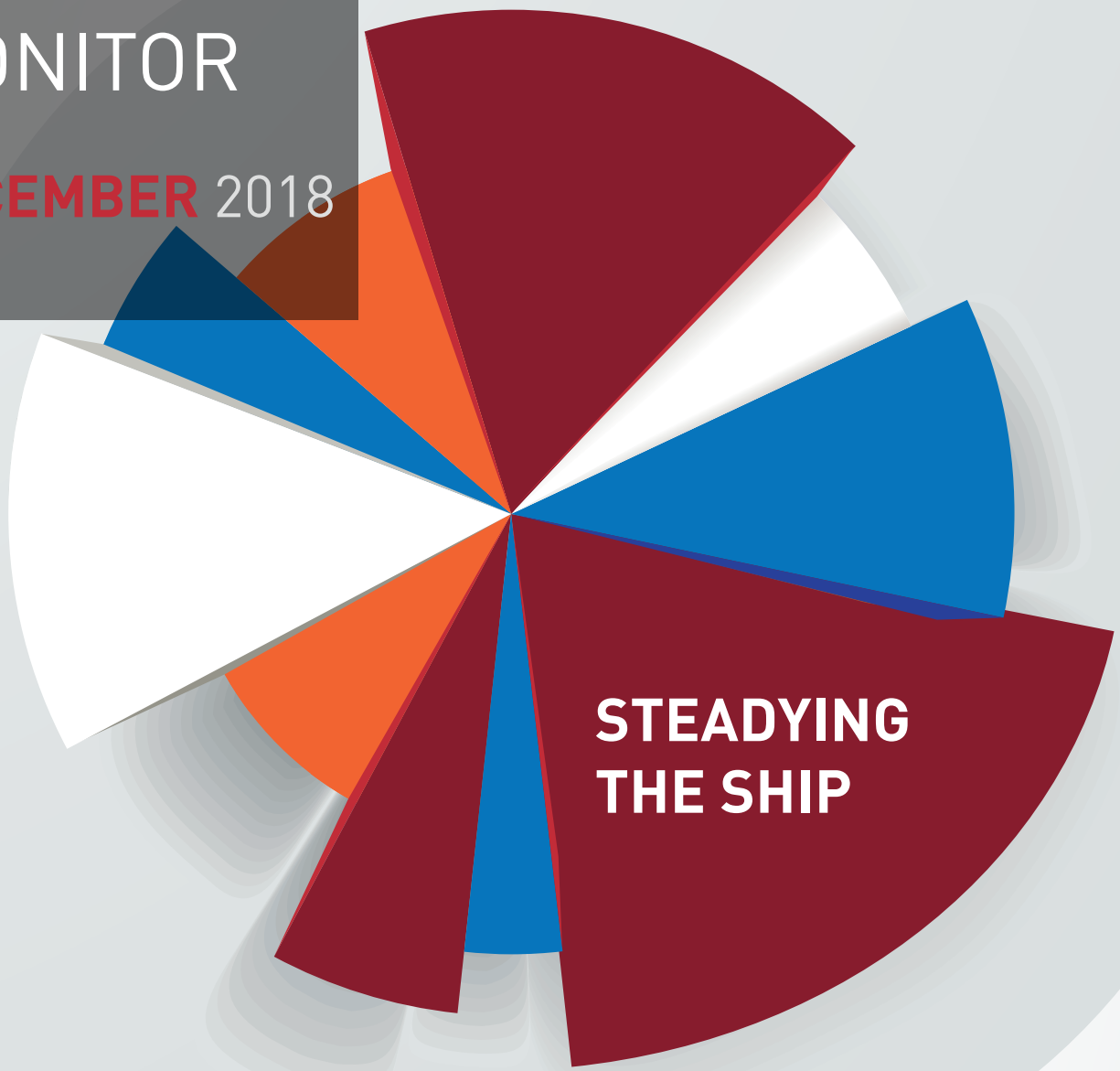
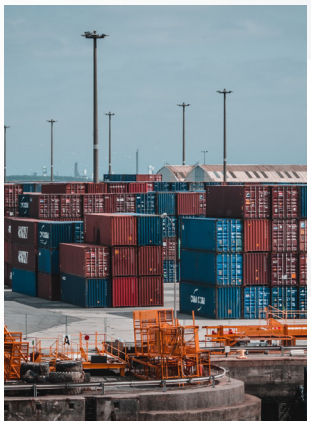
TURKEY ECONOMIC MONITOR

DECEMBER 2018





TURKEY ECONOMIC MONITOR, DECEMBER 2018: STEADYING THE SHIP

WORLD BANK GROUP

1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

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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 Johannes Zutt (WB Country Director, Turkey), John Panzer (Acting Senior Director, Macroeconomics Trade and Investment) and Lalita M. Moorty (Practice Manager, MTI GP) by 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), and Alper Ahmet Oguz (Senior Financial Sector Specialist, Finance, Competitiveness and Innovation GP).

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EXECUTIVE SUMMARY

TAKING STOCK

Mid-2018 was a period of intense market volatility and rising economic stress in Turkey that was precipitated by existing macroeconomic imbalances and elevated political tensions with the US. A confluence of burgeoning domestic economic imbalances and a more challenging external environment led to a dent in investor confidence in Turkish assets and a sharp slowdown in capital flows to Turkey in 2018 Q2-Q3. Though this did not technically amount to a sudden stop, Turkey was particularly badly affected by a general move away from emerging markets (EMDE) due to its accumulated macro imbalances (high current account deficit, high inflation, overheating economy) and perceived policy weaknesses.

Market volatility in Turkey has subsided since the turbulence in August, but the economic situation remains fragile. Turkey's large external exposure leaves it vulnerable to further market jitters and external monetary tightening. The external shock in the summer of 2018 also translated into significant real sector impacts, including a sharp acceleration in inflation from already elevated levels. The gap between consumer and producer price inflation widened significantly since July, reflecting suppliers' inability to pass on price increases to consumers due to declining demand. High production costs together with slowing demand have prompted supply side adjustments.

Supply side indicators suggest that the correction in 2018 Q2-Q3 is more gradual compared to the run up to the last major recession in Turkey (2008-2009), when output fell much more sharply. This does not preclude a more serious supply correction in 2018-2019, particularly as corporates exhibit increased stress from falling demand and credit, though an important difference with the 2008-2009 crisis is the role of external demand. In 2008-2009, both domestic and external demand had collapsed. In 2018, employment and turnover numbers point to a rebalancing towards tradable sectors as exchange rate depreciation has boosted external competitiveness. Non-tradable sectors, particularly construction and energy, on the other hand are highly vulnerable.

Supply side corrections combined with elevated corporate debt, including FX exposure, have raised corporate solvency and liquidity concerns in Turkey. An analysis of the balance sheets of listed corporates in Turkey points to a rapid increase in financial leverage in 2018 Q2-Q3, even relative to other EMDEs. In addition, starting 2018 Q3, corporates have come under increased liquidity pressures, including stress on debt servicing capacity. A combination of the above has led to a general increase in corporate vulnerabilities as measured by the share of debt-at-risk. Energy, telecommunication and real estate investment trust corporates are under most pressure. A composite measure of financial distress further indicates a deterioration in the overall financial conditions of listed non-financial corporates in 2018.

Though the financial sector entered the recent period of turbulence with adequate buffers, cracks are beginning to appear because of real sector developments and tighter international finance. Structural imbalances including maturity and currency mismatches persist and expose Turkish banks to external market volatility risks. Exchange rate and interest rate developments have further dented banks' balance sheets through recalculation of risk-weighted assets, mark to market security portfolios and on-balance sheet open positions. Banks to date have been able to weather liquidity pressures thanks in part to Central Bank liquidity injection and continued access to external loans. The growing challenge, however, is with the deterioration in asset quality, which goes beyond the reported Non-Performing Loans; NPLs are around 3.7 percent of outstanding loans whereas distressed assets are closer to 13 percent.

Fiscal policy has been mildly expansionary with automatic stabilizers helping to cushion some of the economic slowdown. Early indications are that social insurance outlays will increase in late 2018 as more people have become eligible for unemployment insurance, whilst the seasonally adjusted unemployment rate has risen to 11.2 percent in the third quarter from 10.7 percent in 2018Q2. Central government debt outstanding as a ratio to GDP jumped up by nearly three percentage points in the third quarter of 2018,

driven by the revaluation effects of FX-denominated debt. At 31.4 percent or US$56bn equivalent, central government debt remains manageable though the realization of contingent liabilities, the full extent of which is difficult to estimate, could dent this fiscal space.

LOOKING AHEAD

The economic outlook is subject to higher levels of uncertainty than usual given high domestic and external vulnerabilities. Growth is projected to slow to a 10-year low of 1.6 percent in 2019 followed by a medium-term recovery. Private domestic demand is projected to drop sharply in 2019, offset in part by public consumption and external demand. Most analysts project a sharper correction for 2019 with a consensus mean of -0.1 percent (Consensus Economics Inc., November 2018). Investment is projected to contract, though a significantly higher budget deficit is expected. Monetary tightening and commitments in the New Economic Program (NEP) signal important policy adjustment, though any uncertainty or inaction could tip the economy into a more difficult situation. The lack of progress on an orderly deleveraging in the private sector could precipitate this tipping point.

The projected economic slowdown poses multiple challenges for households. Food inflation, at close to 30 percent compared to a year ago, has a far greater negative incidence for the poor than the non-poor. The poverty rate is very sensitive to such price increases, although the net effect may be offset by nominal wage or income growth. Neither household debt nor net financial equity are expected to be significant stress factors for most households. Minimum wage adjustment in early 2019 and government employment support programs may help to stem the decline in real wages but overall the outlook suggests that both wages and employment will be depressed, and unemployment is expected to rise over the next three years based on estimated employment elasticities and sectoral growth forecasts. Growth-led poverty reduction is expected to slow in the baseline, and there is a risk of higher poverty should downside risks materialize.

The authorities' New Economic Program released in September provides a good foundation for gradually restoring macro stability. The NEP's headline growth projections are at the upper end of the range of forecasts, though also the most conservative ever presented in an NEP/Medium-Term Program. That said, the demand side drivers of medium-term projections in the NEP assume that much of the downward correction to growth arises from the public sector, whereas given the outlook for the economy, countercyclical fiscal policy is expected to play a big role. This is particularly important as a big challenge for policy makers in 2019 is the prospect of stagflation – a combination of high unemployment and high inflation.

Building on the NEP, a consistent package of economic policies could ensure an orderly adjustment for the Turkish economy. Monetary policy should remain tight while inflation is well-above the target and inflation expectations are elevated. Continuation of an appropriate monetary policy should be complemented by a financial sector response that supports gradual deleveraging and enhances financial risk monitoring and management. Critical to supporting the deleveraging process is a strong corporate debt restructuring framework, the absence of which could spell the difference between an orderly adjustment for the economy and a hard landing. An upwards fiscal adjustment led by automatic stabilizers and essential support for households will be necessary to help the economy tide over the period ahead, while also laying the ground for a gradual fiscal consolidation as a recovery becomes entrenched to maintain a strong fiscal anchor across the cycle. Clear communication of such a package of economic and fiscal policies is central to avoiding a short-term challenge becoming a longer-term problem.

I. TAKING STOCK

Over the past six months Emerging Markets and Developing Economies (EMDEs) have faced headwinds from declining capital flows, slowing global trade, and commodity price volatility. In Turkey, these factors combined with macro imbalances, perceived policy weaknesses, and international tensions to trigger a Lira sell-off and capital outflows. Market volatility has subsided since August; the Lira has rebounded and external imbalances have narrowed. But Turkey's external financial situation remains fragile and market perceptions of risks are high. Market volatility has also affected the real sector through high inflation, falling demand, and a big supply side correction. Supply side adjustments combined with elevated corporate debt, including FX exposure, has raised corporate solvency and liquidity concerns. Impacts vary across sectors; non-tradable sectors are the worst affected whilst outward oriented manufacturing sectors remain buoyant. Rising corporate stress has exacerbated banking sector vulnerabilities. Timely policy actions including liquidity management, a tightening of monetary policy, and addressing corporate debt vulnerabilities have helped prevent a sharper correction.

Uneven global growth and increased headwinds for Emerging Markets[1]

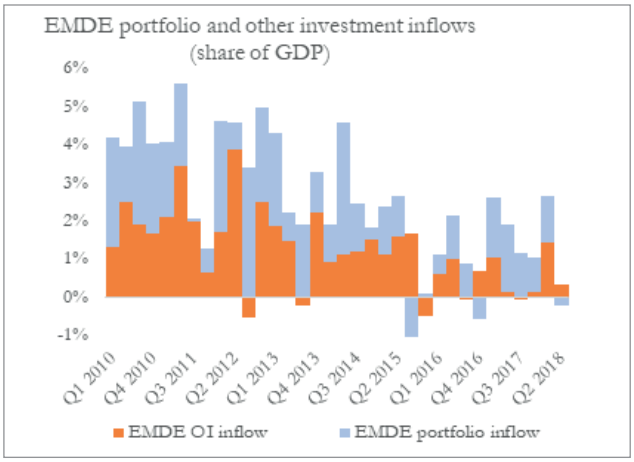
1. **Global growth in the first three quarters of 2018 has remained strong though more uneven across regions compared to 2017**. The US economy has been expanding rapidly thanks to procyclical fiscal policy; adding an average of 200,000 jobs per month, which contributed to unemployment falling to 3.7 percent in September, its lowest level since 1969. Growth in the Euro area on the other hand moderated in 2018 Q3, coming in at 0.2 percent (q/q, sa), its slowest pace since 2014 Q2. The Japanese economy contracted in two out of three quarters in 2018, whilst China and many other Emerging Market and Developing Economies (EMDEs) are exhibiting signs of slowdown.

2. **EMDEs experienced financial pressure in 2018 Q2-Q3 though, apart from a few countries including Turkey, not as severe as other recent episodes of global financial tightening**. Portfolio flows to EMDEs in the first 8 months of 2018 dropped by 40 percent compared to the same period in 2017, turning negative in Q2 (Figure 1) and Q3. From June to August, EMDE issuances of sovereign and corporate debt were down 65 percent from the same period in 2017. Bond yields in EMDEs increased over the summer, reflecting higher risk premia (Figure 2). These developments were linked to US monetary tightening (June saw the 7th increase in policy rates since December 2015) and higher Treasury yields from the fiscal stimulus in the US, a combination of which led to a general appreciation of the US dollar. Nevertheless, other investment flows to EMDEs have held up and portfolio flow reversals did not amount to a sudden stop.

3. **Rising trade policy uncertainty and a slowdown in global trade further contributed to rising risk premia in EMDEs and a sell-off in EMDE equity markets over the summer**. International trade tensions have been mounting with the United States imposing tariffs on around $300 billion of its imports, and other countries retaliating with tariffs on similar levels of US exports. There was some reduction in uncertainty with the announcement of a new trade agreement with Mexico and Canada on October 1st and a temporary agreement between the US and China to deescalate the ongoing trade war on December 2nd. Nevertheless, global goods trade stagnated for the first time in two years in 2018 Q2, reflecting weakening trade in and out of Asia and decelerating imports from some major advanced economies. Moreover, by September global new export orders has declined for 8 consecutive months, falling just below the threshold that indicates contraction.

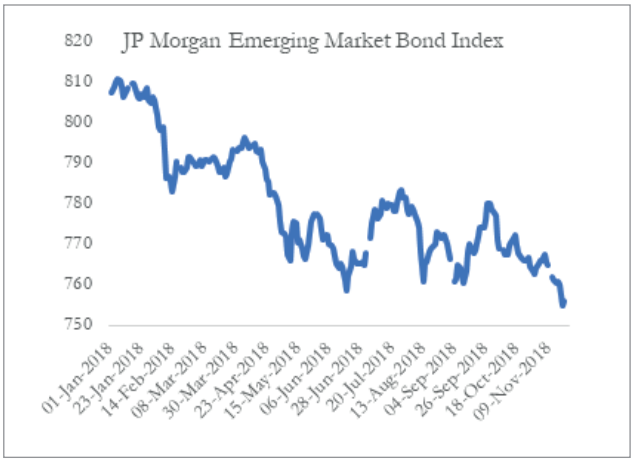
1 This section draws on WBG, "Global Economic Monitor," May-November 2018.

Figure 1: Slowdown in portfolio flows to EMDEs



Sources: International Finance Statistics, WB Staff estimates
Note: Emerging Market countries according to MSCI classification; OI: Other Investment

Figure 2: Increased bond yields over the summer



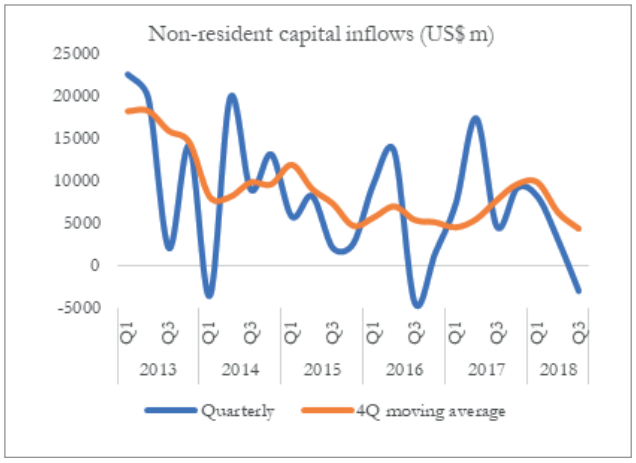
Source: Haver Analytics

4. **Volatility in commodity markets has further exacerbated economic uncertainties around EMDEs**. Crude oil prices reached a 4-year high in October, hitting $86 per barrel amid reports that Iranian oil exports had fallen ahead of the reintroduction of US sanctions and rising international tensions with Saudi Arabia. Since then, however, oil prices have been declining rapidly, averaging $70 per barrel in November compared to $80 in October with reports of increased production in Russia and Saudi Arabia. Metal prices on the other hand have been on a steady decline throughout 2018, reflecting concerns over trade tensions and growth prospects in China. Economic activity across several commodity-exporting EMDEs has stalled, with more severe stress among metal exporters. Turkey, whose energy imports amount to the equivalent of 6 percent of GDP, stands to benefit from the recent fall in oil prices and is particularly sensitive to oil price volatility.

Declining capital inflows and high external vulnerability in Turkey

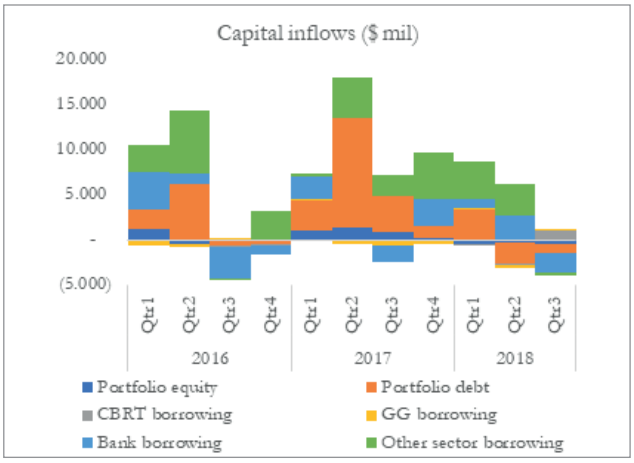
5. **A difficult external environment together with domestic economic challenges combined into a sharp slowdown in portfolio and other investment flows to Turkey in 2018 Q2-Q3**. In the first three quarters of 2018, portfolio and other investment flows averaged a third of inflows over the same period in the previous 5 years, turning negative in Q3 for the first time since 2016 Q3 (Figure 3). A very small part of this contraction was driven by a sell-off in portfolio equity, in line with a rebalancing away from emerging markets more generally. Most of the contraction in capital flows however was due to an outflow of portfolio debt (Figure 4), linked to repayment of securitized debt, particularly as some banks and corporates chose not to refinance due to escalating interest rate and currency pressures. FDI inflows remained stable whilst net errors and omissions increased sharply, amounting to nearly twice the level of portfolio and other investment flows in 2018 Q1-Q3.

Figure 3: Contraction in capital inflows



Sources: International Finance Statistics, WB Staff estimates
Note: Excludes FDI, Net Errors and Omissions

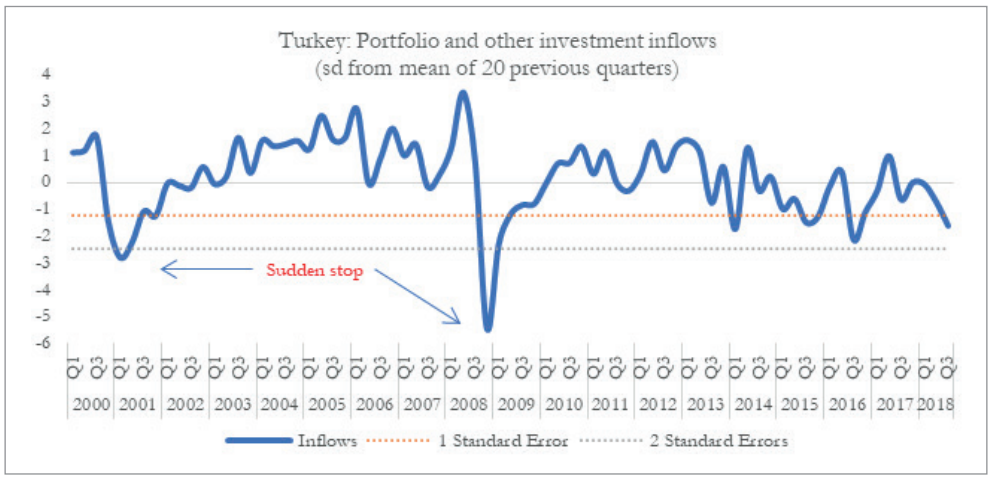
Figure 4: Driven by outflow of portfolio debt



Sources: International Finance Statistics, WB Staff estimates
Note: Excludes currency and deposits

6. **Whilst the slowdown in capital flows to Turkey was significant, it did not technically amount to a sudden stop**.[2] Turkey experienced two sudden stop episodes in the past 20 years, namely during the 2000-2001 and 2008-2009 crises (Figure 5).[3] The decline in capital inflows in 2018 was milder than those earlier episodes and the capital flow shocks in 2014 and 2016. Moreover, non-residents' portfolio flows in October and November turned positive,[4] and large Turkish banks' rollover of more than $5 billion in external debt, albeit at higher costs,

Figure 5: Significant slowdown in capital flows but not a sudden stop



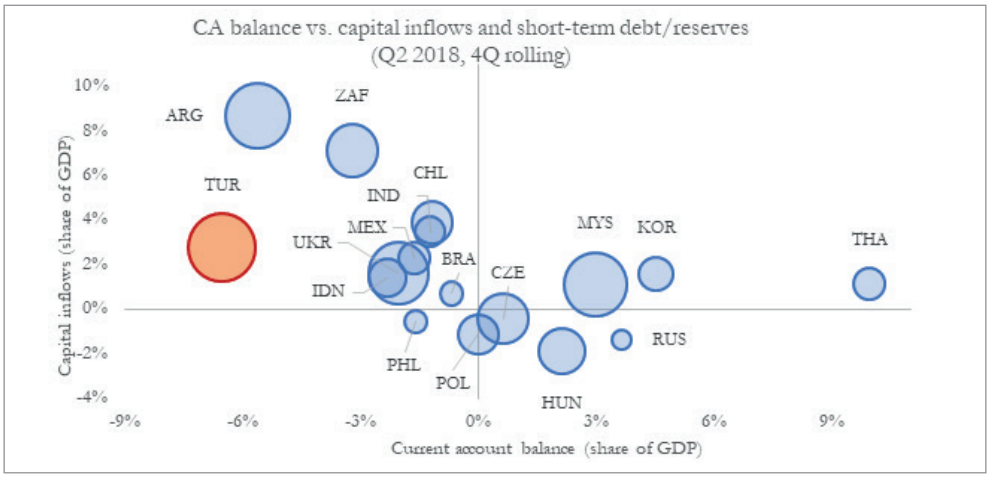
Sources: IFS, WB Staff estimates

2 The sudden stop analysis in this section is based on the framework in Eichengreen, B, and Gupta P. "Managing Sudden Stops," WBG Policy Research Working Paper (April 2016).

3 Eichengreen and Gupta 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.

4 See CBRT: Securities Portfolio of Non-Residents (Market Value, Stock, Flow, Million USD).

Figure 6: High external vulnerability relative to other EMDEs



Sources: International Finance Statistics, WB Quarterly External Debt Statistics, Haver Analytics, WB Staff estimates

between September and November, signals recovery in other investments.

7. **Nevertheless, the slowdown in capital flows happened when Turkey was already facing high external vulnerability, indicating weaker defenses against the effects of market volatility**. As discussed in the previous TEM,[5] Turkey's external buffers against tightening financial conditions had declined relative to 2007 (before the onset of the Global Financial Crisis) and 2012 (before the Taper Tantrum following announcement of US monetary policy normalization). Turkey's external vulnerability was also high compared to other emerging markets, as reflected by its relatively large current account deficit; considerable dependence on volatile, debt-creating flows; and elevated short-term debt to reserve ratio (Figure 6).

8. **The situation came to a head in August when rising international tensions combined with Turkey's macro imbalances and perceived policy weaknesses to trigger a Lira sell-off and capital outflows**. The severity of the shock and the potential adjustment path are benchmarked below (Figure 7 to Figure 12) against a range of financial effects (i.e. on exchange rate, reserves, capital markets, short-term debt) from 28 sudden stop episodes in emerging markets between 1990 and 2016.[6] A few points are worth noting:

(i) The recovery of the Lira since August has been sharper and more rapid relative to the sample of sudden stops (Figure 7, Figure 8).[7] Most currencies in the sample had some form of exchange rate peg, unlike the Lira which is a free float, making their drop more akin to traditional currency crises including adjustment of exchange rate to a much lower equilibrium.

5 WBG, "Turkey Economic Monitor: Minding the External Gap," May 2018.

6 Countries in the sample include Argentina, Brazil, Chile, Czech Republic, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Philippines, Poland, Russia, South Africa, Thailand, Turkey and Ukraine. Quarterly capital flow data includes non-resident portfolio and other investment flows accessed from the IMF's International Financial Statistics. Data period is 1990-2018. Sudden stop classification is based on Eichengreen and Gupta (2016).

7 The precipitous drop in August likely reflects overshooting linked to a rapid deterioration in international relations.

The degree of downward adjustment in the currency directly affects pressures on the real and financial sectors, which are discussed in the next sections. In Turkey, prolonged currency weakness after the August shock would have been even more troubling for the economy given the high exposure of corporates to forex debt, dependence on imports of energy and intermediate inputs, and exchange rate pass through to inflation.

(ii) The impact of the 2018 Q3 capital flow shocks on the Turkish stock market valuation seems in line with the impact during sudden stop episodes (Figure 9). However, equity markets in Turkey are generally quite shallow, and portfolio equity (hot money) is less than a quarter of external financial inflows. Therefore, the real sector impacts of this are likely to be more limited.

(iii) The impact on reserves and short-term debt to reserves has been more severe and closer to the upper bound of sudden stop episodes (Figure 10, Figure 11). Gross international reserves declined by just over 20 percent between 2018 Q1 and Q4. Given Turkey's large external financing requirements on the one hand (see below) and tightening capital flows on the other, the big drop in reserves prompted concerns from some about external financing gaps and a balance of payments crisis.

But a big part of the decline in reserves was driven by the Central Bank's decision to lower forex reserve requirements of banks, including under the Reserve Options Mechanism (ROM) (Figure 13); this was introduced to provide greater forex liquidity to banks at a time of tightening external finance and forex liabilities coming due. The increase in short-term debt to reserves is linked to the decline in gross reserves rather than an increase in short-term debt.

(iv) Current account imbalances have started to shrink, in line with the adjustment in past sudden stop episodes (Figure 12). Exchange rate depreciation and falling domestic consumption and investment have contributed to a sharp deceleration in import demand, whilst exports have accelerated. These developments helped shift the current account deficit to surplus in August, September and October 2018, reducing to some extent pressures on external financing needs.

A detailed analysis of the drivers of current account balances (Box 1) finds that credit to the private sector has contributed most in recent years to Turkey's current account deficit. The sharp drop in credit growth therefore should help to contain current account imbalances going forward.

9. **Market volatility in Turkey has subsided since the turbulence in August**. The Lira has recovered and stabilized for now (Figure 14), averaging TRY 5.4/USD in November, after bottoming out in August at TRY 7.2/USD. Though reserves remain slightly below prudential threholds (5.6 months of imports in November), they are starting to pick up; the Central Bank's net international reserves have risen from a 2018 low of $25 billion in October to $28 billion in November, whereas gross reserves have increased from $86 billion to $91 billion over the same period (Figure 15).

10. **Nevertheless, Turkey's external financial situation remains fragile whilst market perceptions of risks are high**. CDS spreads have declined from 560 bp in August to 370 bp in November (only Argentina is higher among emerging/frontier markets) (Figure 16). Short-term treasury bond yields have come down from a high of 27 percent in August though remain elevated at 20 percent in November. At the same time, Turkey has close to $40 billion in external debt service due between December and June 2019. Though it has successfully covered a spike in refinancing requirements in October and reduced its current account financing need, its ability to raise external finances will depend on global monetary conditions and soundness of domestic policies.

Figure 7: REER declining with free float

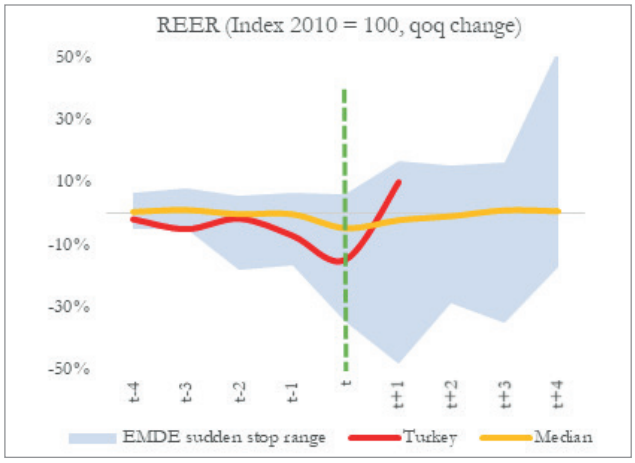


Figure 8: Rapid recovery in Lira

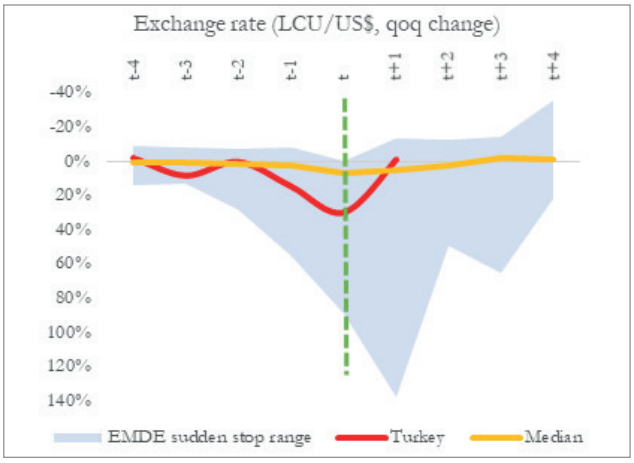


Figure 9: Equity markets contracted sharply

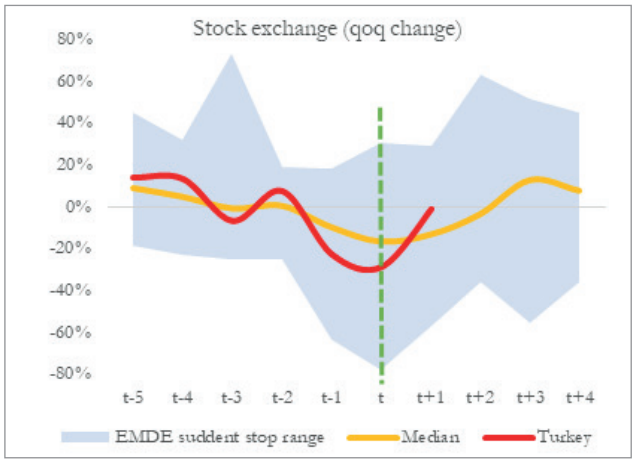


Figure 10: Big drop in gross reserves

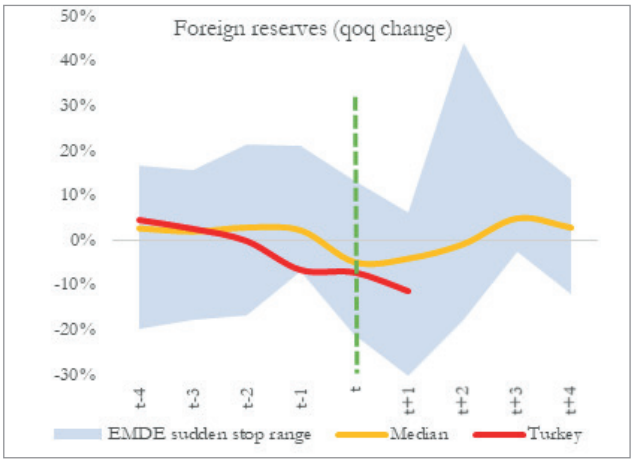


Figure 11: Increase in ST debt/reserves

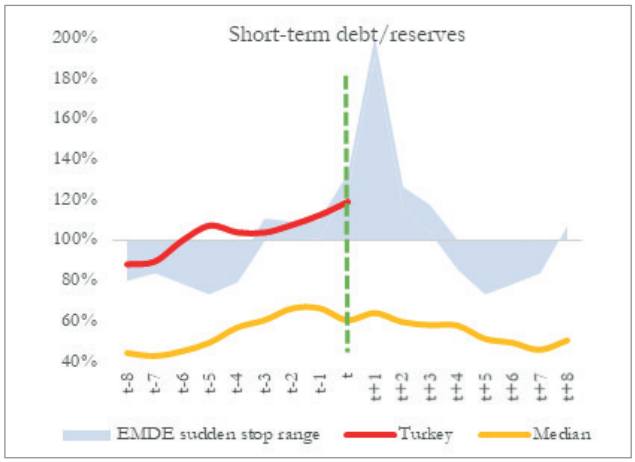
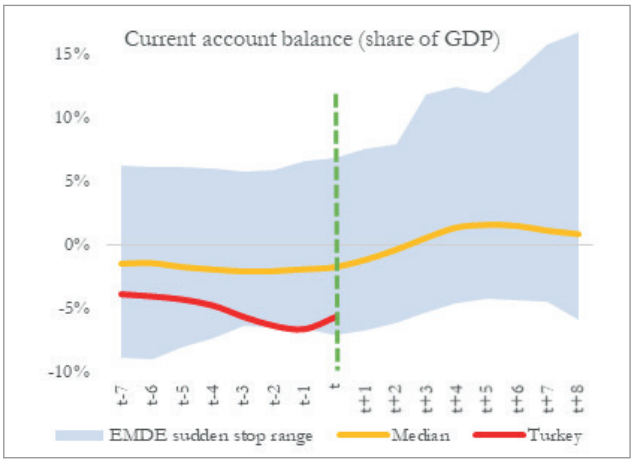
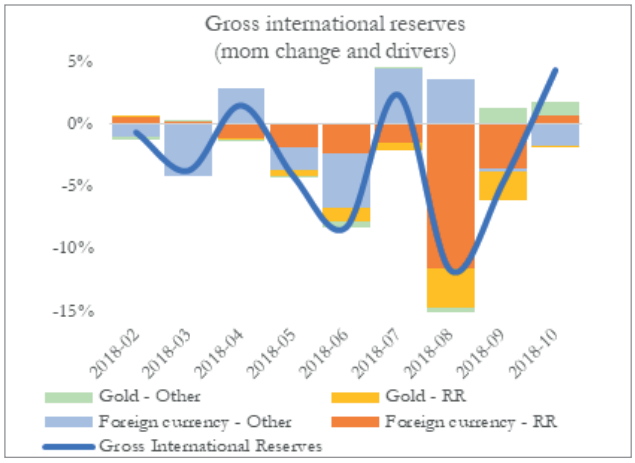


Figure 12: Current account adjustment



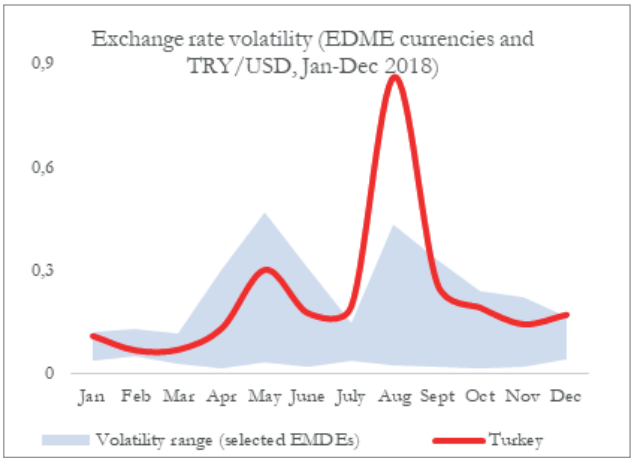
Sources: International Financial Statistics, WB Quarterly External Debt Statistics, Haver Analytics, WB Staff estimates
Notes: t = quarter in which sudden stop started (for Turkey it is 2018 Q3 when capital flows turned negative).

Figure 13: Gross reserves decline due to RR policy



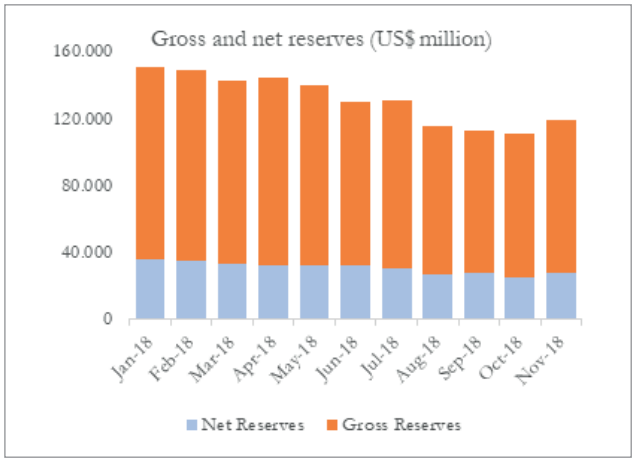
Sources: CBRT, WB Staff estimates

Figure 14: Exchange rate volatility high in Turkey



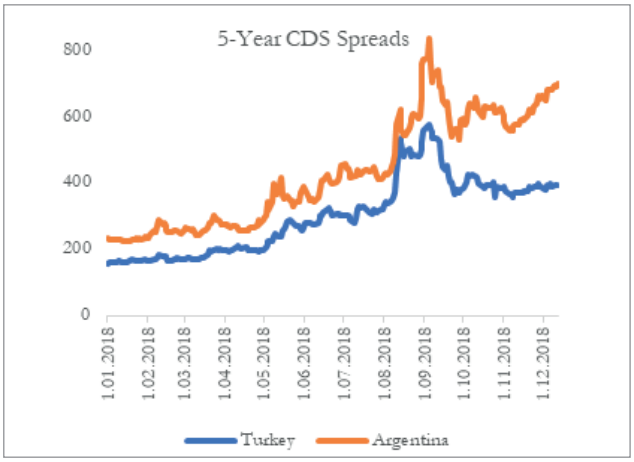
Sources: Haver Analytics, WB Staff estimates
Notes: Annualized volatility estimate. EDMEs in range include Argentina, Brazil, Russia, RSA, Malaysia, Indonesia, India, Mexico

Figure 15: Reserves have started to recover



Sources: CBRT, WB Staff estimates

Figure 16: Market perceptions of risk high in Turkey



Source: Bloomberg Terminal

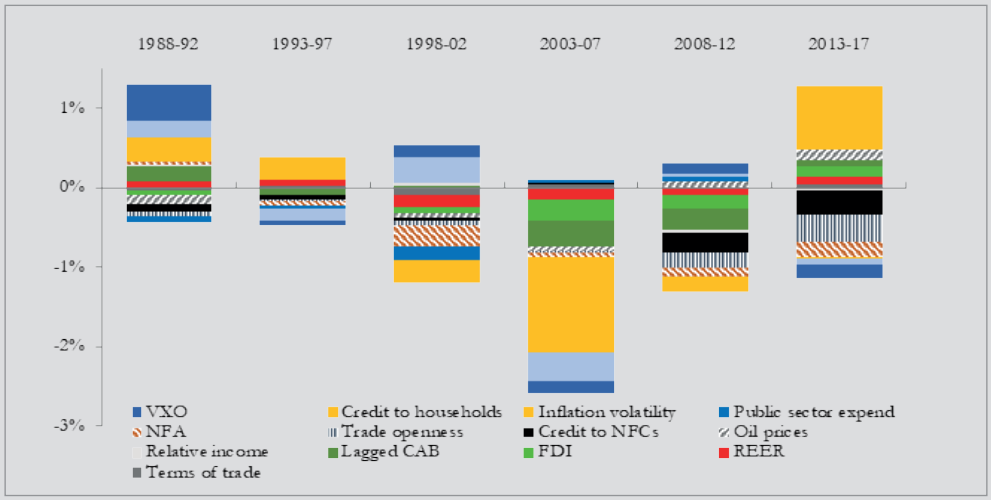
Box 1: Drivers of the current account balance in Turkey

Turkey over the past 20 years has experienced large and persistent current account deficits relative to its peers. Ongoing World Bank research looks to econometrically assess the drivers of current account imbalances in Turkey. The results aim to inform policy discussions on external sustainability, an issue that has come into focus with recent external shocks.

Drivers of current account imbalances in Turkey

Large and persistent CAD: Increased domestic investment and consumption in Turkey post 2000s contributed to a widening current account deficit (CAD). This was further accelerated by FDI-related imports (Figure 17). Ongoing analysis finds that Turkey's CAB has a low level of persistence by comparison with other countries, which suggests that the CAB in Turkey adjusts more quickly in response to shocks.

Figure 17: Drivers of the current account balance in Turkey



Sources: International Finance Statistics, Haver Analytics, WB Staff estimates

Credit expansion and CAD: The biggest single driver of Turkey's CAD post 2001 was a rapid expansion of credit to households. Private credit accelerated further between 2007 and 2012 with global monetary easing though this time led by corporates. Between 2013 and 2017, compensating factors came into play to lower the CAD, most notably the pull-back in credit to households. But the deficit persisted due to continued expansion of credit to corporates, while a deterioration in openness relative to other countries also contributed more substantively to the CAD in this period.

Large negative Net Foreign Assets (NFA) perpetuated CAD: The hangover from successive CADs began to be felt in earnest as the servicing costs of foreign liabilities exerted a larger negative pull on the current account. NFA reached 50 percent of GDP at the end of 2017, a threshold level which has been found to be associated with a higher risk of external crisis.[8]

8 Catao, L. and G.M. Milesi-Ferretti (2014), "External Liabilities and Crises", Journal of International Economics, Volume 94, Issue 1.

Policy implications

Link between growth and CAD: Strong macro fundamentals in the early 2000s resulted in domestic investment expanding more rapidly than domestic savings. The resulting gap was financed by foreign sources, which led to a negative NFA position. A high CAD and growing exposure to volatile capital flows implies that Turkey would need to move to a growth model that breaks the link between growth and the CAD through higher domestic savings.

Depth of financial markets and credit booms: Credit to corporates more than doubled over the past 10 years, growing from a relatively low base. Turkey has a strong suite of macro-prudential regulations to maintain financial stability and rapid credit growth does not necessarily imply risks to sustainability. But capital inflows and private credit have been highly procyclical in recent years, including an elevated credit-to-GDP gap. These trends can exacerbate external risks.

Openness and CAD: CAD expansion is linked to some decline in openness relative to other countries. Agricultural trade is subject to restrictive tariff quotas and price regulation, though import barriers on grains, cereals, pulses and meat have been reduced in the past two years. Protectionist and localization hurdles have also arisen in sectors such as pharmaceuticals, medical devices, apparel and e-commerce. But openness varies across sectors, with some sectors more open than in other countries. This will be discussed further in the upcoming paper on drivers of CA imbalances.

Foreign Direct Investment: While FDI inflows had a negative effect in the past, FDI is generally associated with increased productivity in the domestic economy, increased diversification and sophistication of the production and export bundles, thus reducing vulnerabilities associated with current account deficits, as well as benefiting the economy beyond its impact on the current account balance.

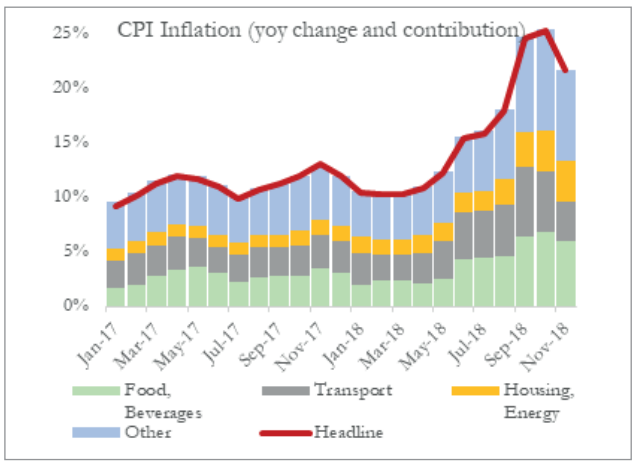
Price pressures forcing supply side corrections in non-tradable sectors

11. **The financial effects of market volatility in Turkey translated into significant real sector impacts, including a sharp acceleration in inflation from already elevated levels**. Year-on-year consumer prices increased by 25 percent in September (Figure 18), following a 6 percent jump that month, levels not seen since the 2001 crisis in Turkey. Despite the big jump in food and energy prices, there is little divergence between headline and core inflation, pointing to a broad-based increase in prices across all major components of the CPI basket. This is further illustrated by the distribution of price increases across the CPI basket (Figure 19); whilst in January 2017, prices across 70 percent of the CPI basket rose in the 0-10 percent range, in September 2018, 70 percent of the basket rose in the 20-40 percent range.

12. **The gap between consumer and producer price inflation widened significantly since July, reflecting suppliers' inability to pass on price increases to consumers due to declining demand and more direct exposure of producer prices to exchange rate shocks**. Producer price inflation peaked at 46 percent in September (Figure 20), driven in part by the effects of exchange rate depreciation on imported intermediates. Private consumption in Q3 moderated (1.1 percent yoy growth) whilst investment contracted (-3.8 percent yoy growth). Retail sales, which map closely to private consumption developments, contracted in 2018 Q3 for the first time since 2016 Q3, whilst consumer confidence was its lowest level since end 2008. Rising inflation has contributed to a broad-based decline in real wages in 2018 Q3, further depressing demand (Figure 21, Figure 21, Figure 23).[9]

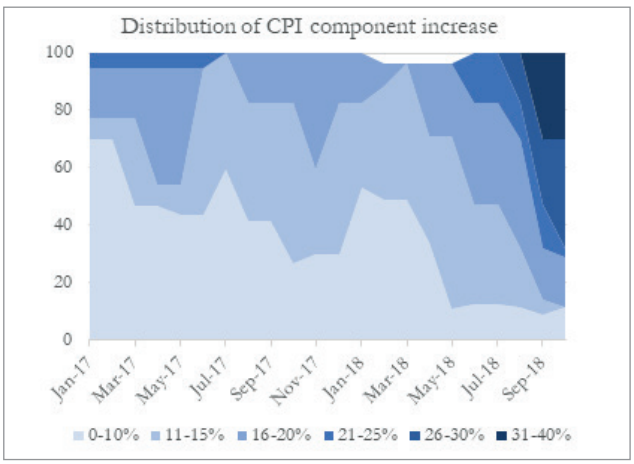
13. **Declining demand, among other factors, contributed to the first monthly deflation in November since June 2017**. Consumer prices in November fell by 1.5 percent, whilst year-on-year inflation fell by 3.62 percentage points in November to 21.6 percent – the first time it has fallen since March and a better-than-expected outturn. The biggest contribution to declining CPI stemmed from the durable goods, falling by 15 percentage points in one month thanks to recent tax cuts on vehicles, furniture and white goods. The domestic PPI also fell in November, from 45 to 38.5 percent last month. Aside from declining demand and tax cuts, a partial rebound in the Lira and softer oil prices helped reduce inflation.

Figure 18: Jump in inflation after market volatility



Sources: Haver Analytics, WB Staff estimates

Figure 19: Broad-based increase in prices



Sources: Haver Analytics, WB Staff estimates

9 All sectors have seen declining real wages in Q3, but construction stands out the worst hit. Construction sector real wages (SWDA, q-o-q) contracted by 7.8 percent in Q3 while manufacturing and retail trade sectors recorded 4.6 percent and 5.0 percent contractions, respectively.

14. **High production costs together with slowing demand have prompted supply side adjustments**. Output growth over Q3 steadily decelerated, with the composite leading indicator reaching 1 percent (yoy) by September. The industrial production index (calendar adjusted) contracted by 5.7 percent in October (yoy), which in part reflects a correction from rapid growth in the last two quarters of 2017. This is consistent with sustained easing in the manufacturing purchasing managers' index (PMI) since May, albeit with some signs of bottoming out in September.

Figure 20: Large divergence between PPI and CPI

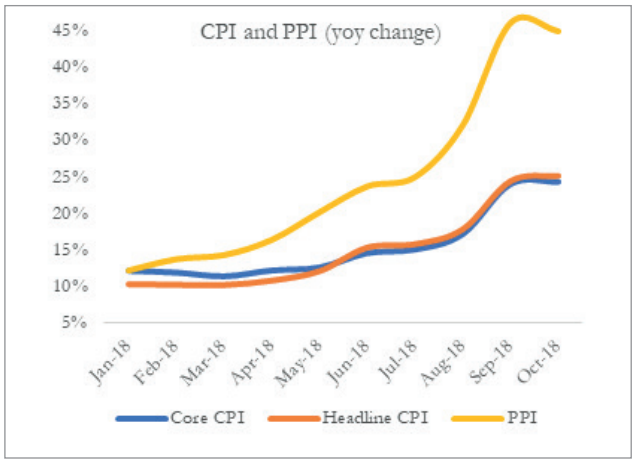


Figure 21: Due to declining consumer demand

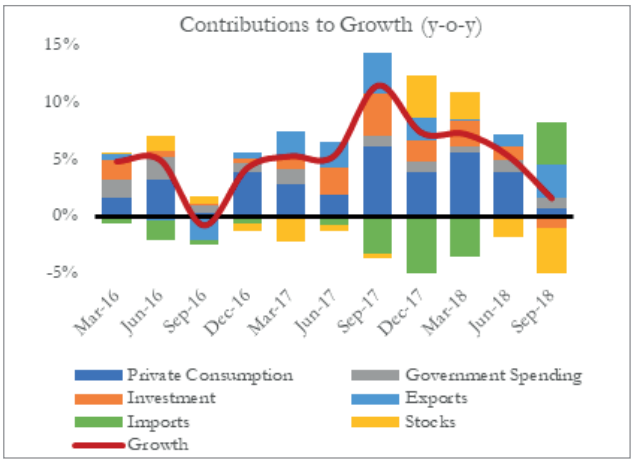


Figure 22: With contracting retail sales

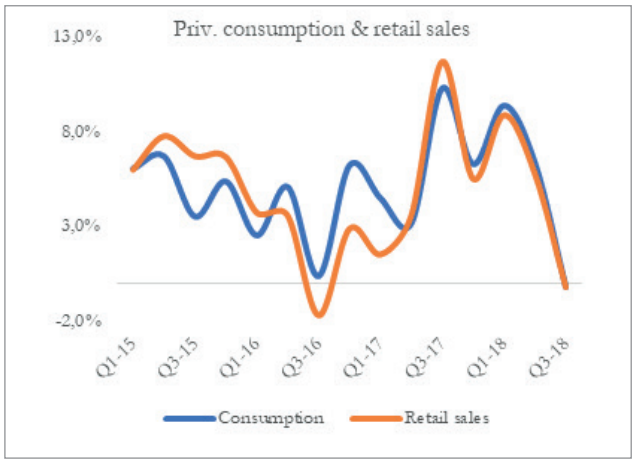
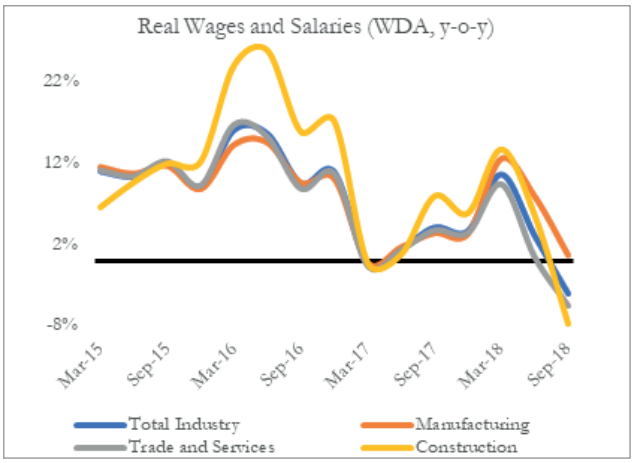


Figure 23: Precipitated by falling real wages



Sources: Haver Analytics, TURKSTAT, WB Staff estimates

15. **Supply side indicators point to a big correction in 2018 Q2-Q3 compared to the six months preceding the last economic contraction in 2016 Q3, albeit a more gradual correction compared to the run up to the last major recession in Turkey (2008-2009)**. The severity of the adjustment relative to 2016 Q3 in part reflects the economy coming down from a period of overheating in 2017-2018. On the other hand, in the four months preceding the 2008-2009 recession, the composite leading indicator was already in negative territory (Figure 24) before the economy collapsed into four consecutive quarters of contraction. In addition: the PMI experienced a sustained drop from 51 to 41 in the run up to the 2008-2009 recession, before collapsing to 32, though is showing some signs of improvement in 2018 (Figure 25); capacity utilization declined from 81 to 73 percent in 2008-2009, compared to a drop from 78 to 74 percent in 2018 (Figure 26). Unemployment rates increased more rapidly in 2008-2009, though also started from a lower base (Figure 27).

Figure 24: Composite output indicator already negative in run up to 2008-2009

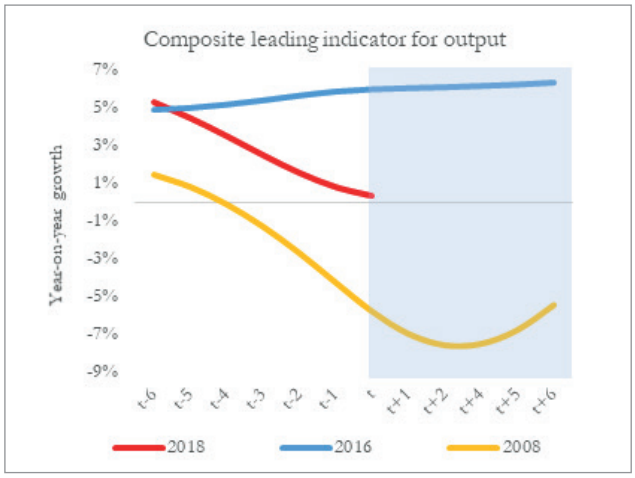


Figure 25: PMI is showing some signs of improvement in 2018

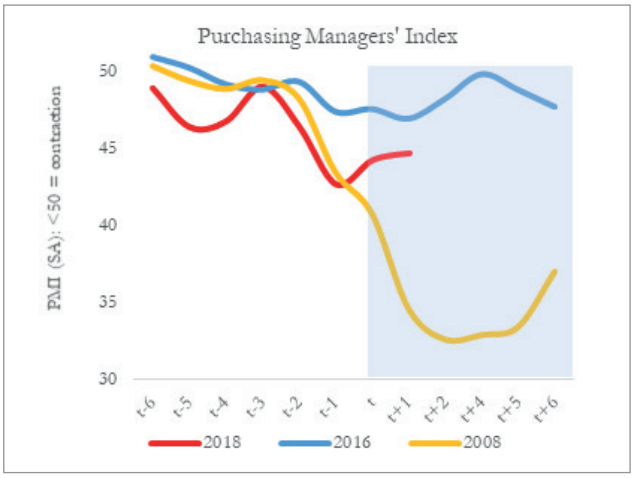


Figure 26: Capacity utilization adjusting down from a period of overheating

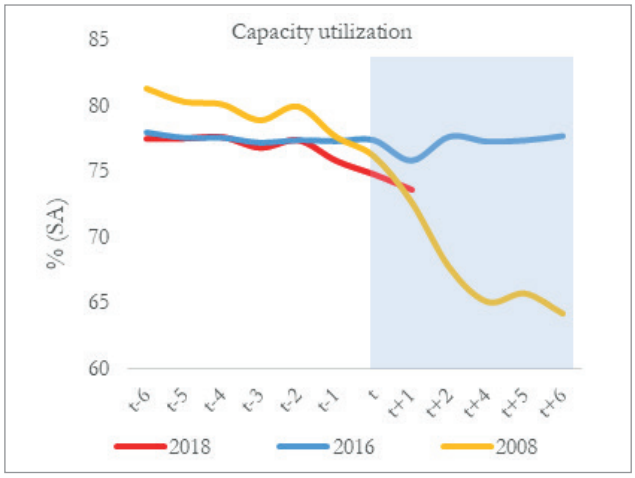
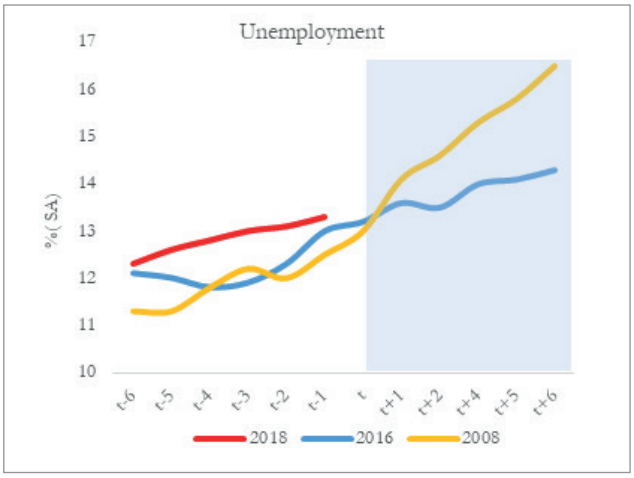


Figure 27: Unemployment levels rising gradually, though from a higher base than 2008-2009



Sources: Haver Analytics, TURKSTAT, WB Staff estimates

Figure 28: Real turnover contracting in non-tradable sectors

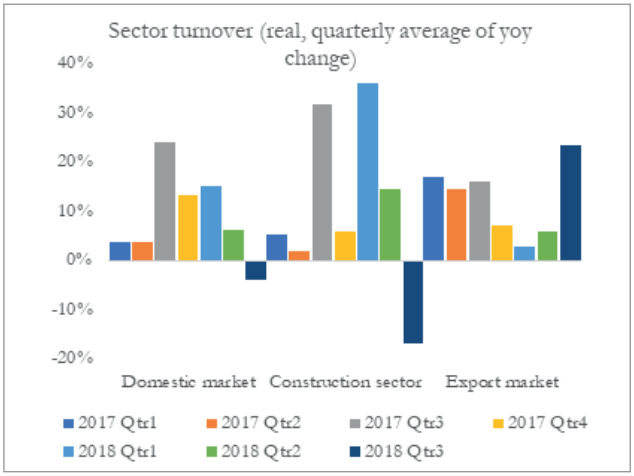
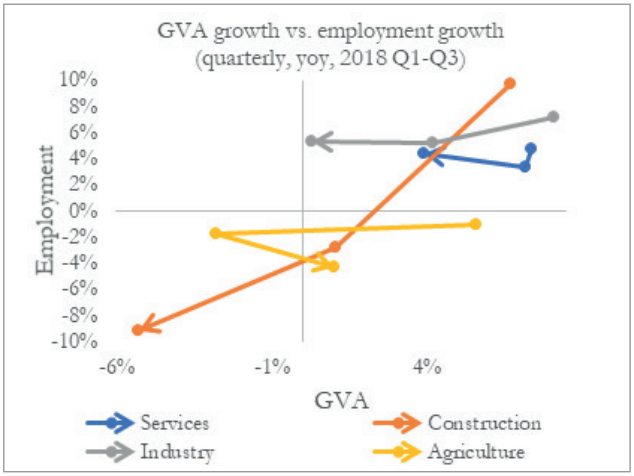


Figure 29: GVA and employment growth negative in non-tradable sectors



Sources: Haver Analytics, WB Staff estimates

16. **These developments do not preclude a more serious supply correction in 2018-2019, particularly as corporates exhibit increased stress from falling demand and credit (see next two sections), though an important difference with the 2008-2009 crisis is the role of external demand**. Real turnover growth in the year to September has contracted in non-tradable sectors (Figure 28). Higher costs and credit rationing are forcing corporates to cut costs. Tradable sectors, on the other hand, have seen an over 20 percent increase in real turnover. This strong growth has been aided by the mid-year deprecation of the Lira, with Lira-priced exports increasing in value with depreciation and sustained external demand. Not only exports of goods but also exports of services contributed to growth in 2018, thanks to a strong rebound in tourism sector. In 2008-2009, both domestic and external demand had collapsed. Without the compensating effect of tradable sectors, the economy is likely to have already dipped into recession.

17. **The rebalancing towards tradable sectors is also evident in employment numbers**. Both construction and agriculture, primarily non-tradable sectors, are contracting, whilst the more outward-oriented manufacturing, and to some extent services, sectors are still growing, albeit at a slower pace (Figure 29). Employment in construction fell sharply in Q2, and has continued to fall in Q3, although at a slower rate. Agriculture too has seen continued job losses in Q3. Both services and industry sustained growth in Q2 and continued to create jobs in Q3, though in services the bulk seems to be in non-tradable public services. In manufacturing, the PMI shows a much stronger outlook for new export orders compared to domestic orders. Within industrial sub-sectors, motor vehicle and other transportation equipment exhibit growth in Q3, adding 1.2 percent to total industrial production y-o-y, driving overall growth for the quarter. This sub-sector was primarily led by exports, with motor vehicles exports in US$ growing 1.2 percent over the same period.

18. **Developments in the housing market signal risks for housing developers, banks, suppliers and households** (Box 2). A combination of FX indebtedness, increased cost of construction, excess supply, and lack of price adjustment explain housing developers' recent financial stress. This is important given the real estate sector's linkages across the economy. Although households are not significantly leveraged and most of the newly sold houses were non-mortgaged sales, negative wealth effect might further lower consumption. The wealth effect is likely to hit through high inflation (lower yield of housing investments), higher borrowing costs, lower asset prices (lower collateral values) and therefore a lower wealth level.

Box 2: Real estate sector developments

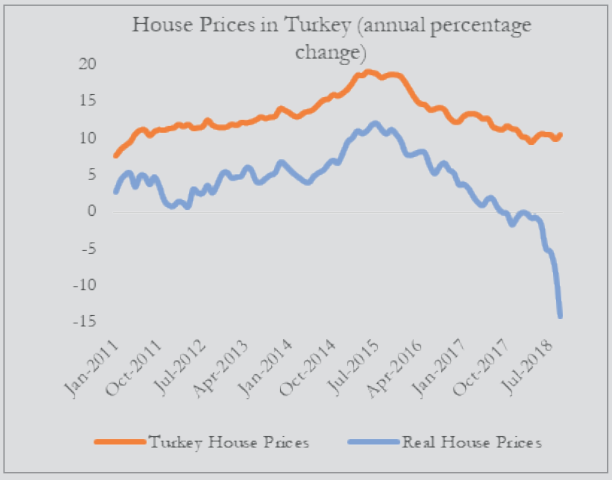
Conditions in the real estate sector can influence the real and financial sector impacts of recent market volatility in Turkey. Changes to real estate asset prices and returns affect household wealth and consumption; housing developers' and suppliers' profits and solvency; and the health of the financial sector. Sharp corrections can exacerbate economic stress and trigger crisis. This section reviews real estate sector developments in Turkey and economic vulnerabilities that may arise.

House price developments in Turkey: After a period of rapid house price inflation in Turkey between 2013 and 2015, price increases started to decelerate, eventually deflating in real terms, starting in early 2018 (Figure 30). House price inflation in September 2018 fell to 10.5 percent (yoy) from a peak of 19 percent in May 2015, whilst in Istanbul it fell from a peak of 29 percent to 4.1 percent over the same period. In real terms, house prices in Turkey declined by 8 percent (yoy, deflated with CPI) while Istanbul's real house prices declined by 14.2 percent in August.

This in part reflects a sharp correction in the buy-to-let market particularly in large metropolitan areas. Buy-to-let investments increased rapidly in the last 8 years with construction of high-rise buildings and increased mortgage lending. The availability of *'sell-build model'* also enabled housing developers to sell their units before construction, which also impacted on prices (Figure 31). Until recently, these investments offered high returns; but an oversupply of rental housing has led to declining rental yields (see below). Combined with rising cost of finance, the demand for housing has fallen below trend (Figure 32) and prices have started to decline.

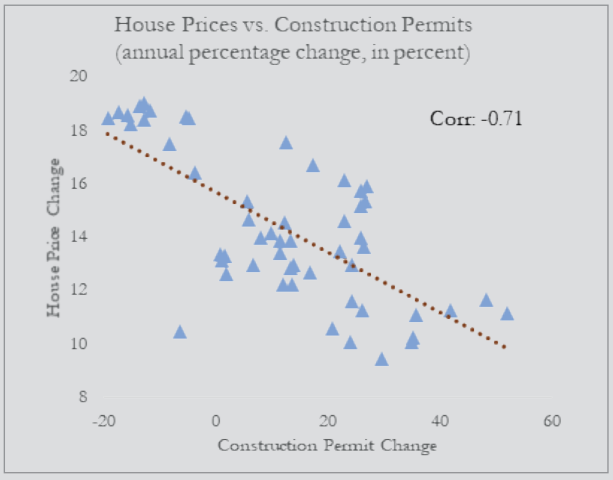
Alignment of house prices and income: Turkey's house price-to-income ratio on the other hand has been low (and declining) relative to other OECD economies and MICs (Figure 33).[10] This signals that house prices in Turkey are in line with income *relative to* OECD countries and MICs. This means that income growth has been greater than house price inflation, though it does not automatically imply that housing in Turkey is affordable. This would require more detailed analysis of affordability across markets and households within the country.

Figure 30: House price correction in Turkey



Source: CBRT

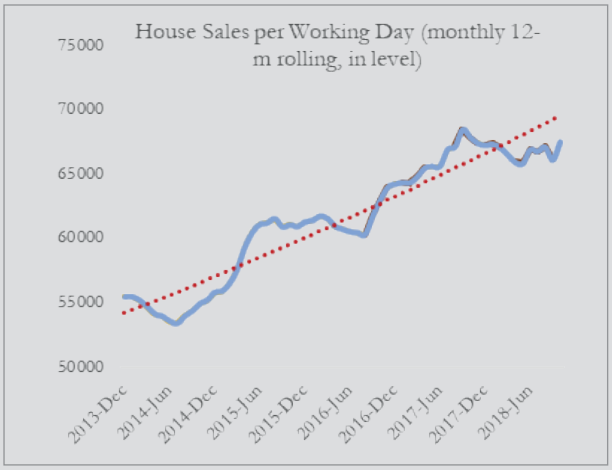
Figure 31: House price changes linked to construction permit application



Sources: TURKSTAT, CBRT

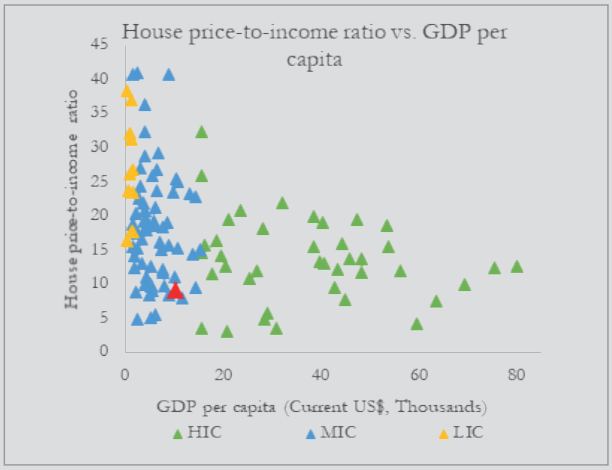
10 The price to income ratio is the nominal house price divided by the nominal disposable income per head.

Figure 32: Demand falling below trend



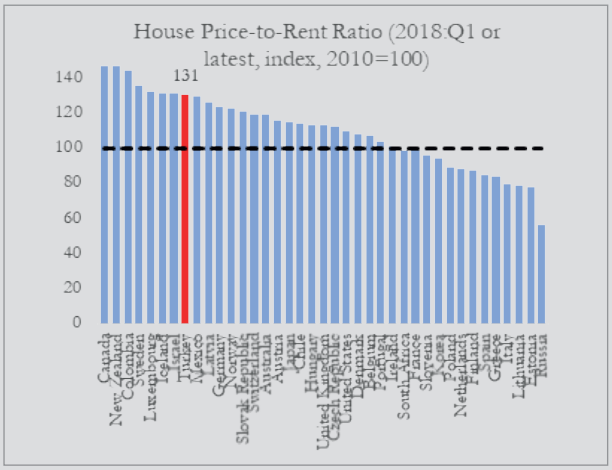
Sources: TURKSTAT, WB Staff calculations

Figure 33: House prices in line with income



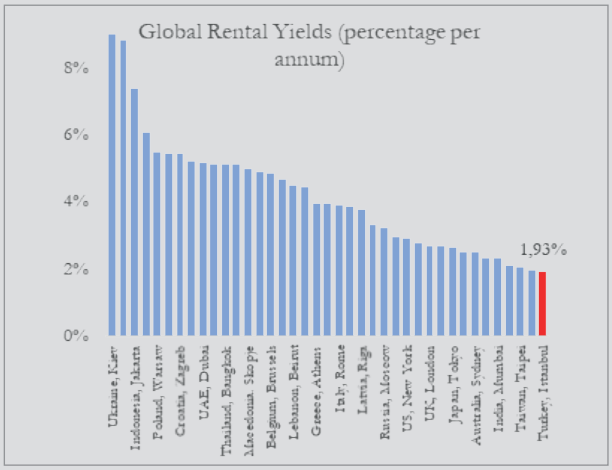
Sources: Towngate Insurance, WDI

Figure 34: Change in house price-to-rent ratio



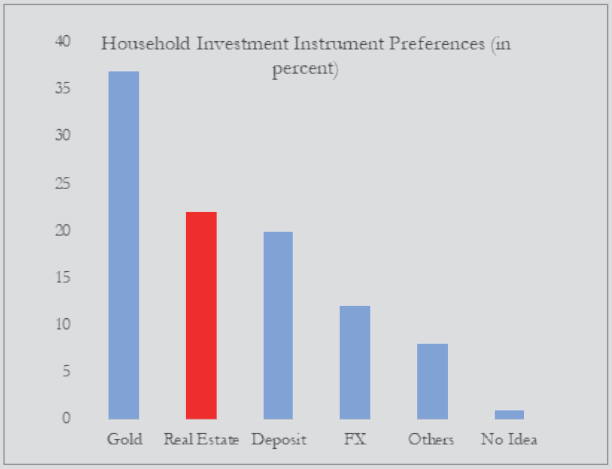
Source: Global Housing Watch

Figure 35: Low global rental yields



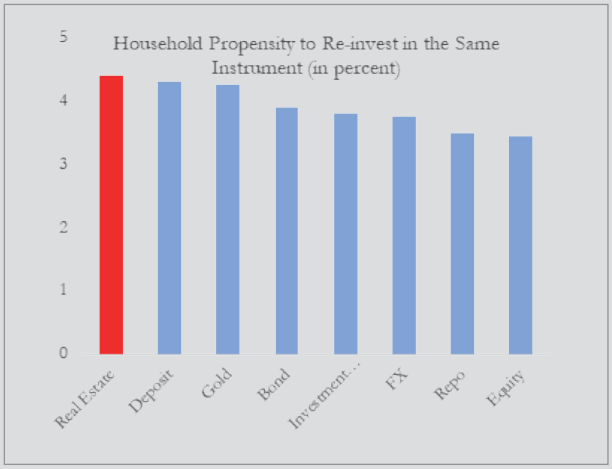
Source: Global Property Guide

Figure 36: Housing is a big source of savings



Source: Turkey Capital Markets Board Survey

Figure 37: With high propensity for reinvestment



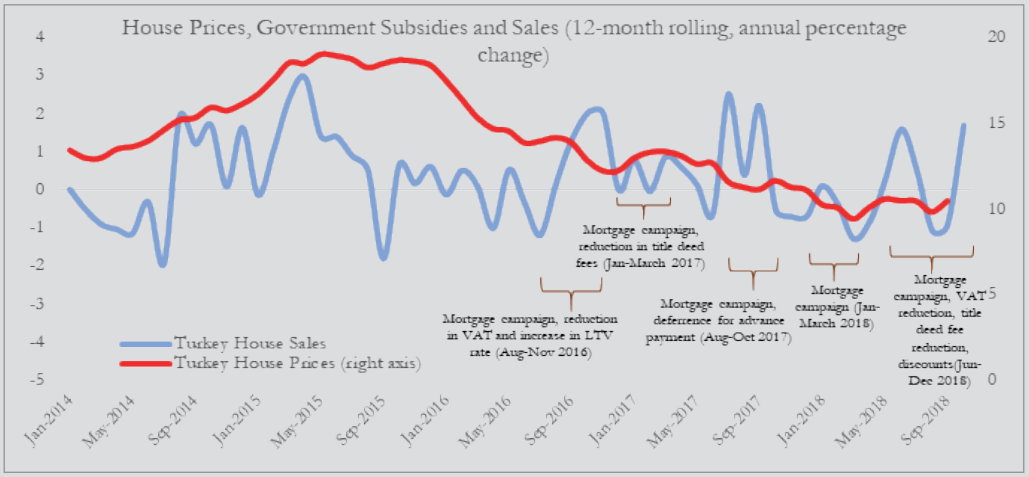
Source: Turkey Capital Markets Board Survey

Returns on housing investment: Data on price-to-rent ratio[11] shows that house prices increased faster than rental prices in Turkey since 2010, amounting to lower returns from housing investment in Turkey compared to other OECD economies (Figure 34); among a selected group of metropolitan cities, Istanbul in 2018 in had one of the lowest rental yields (Figure 35). This potentially signals some overvaluation in housing, a correction to which seems to be underway. This has important implications for households given that real estate is an important saving/investment instrument in Turkey; there is also high propensity for reinvestment in housing (Figure 36, Figure 37).

Policies to stimulate house sales: In response to falling demand, the government has in recent years tried to incentivize house purchase. Policies measures include increasing the Loan-To-Value ratio from 75 percent to 80 percent in 2016; temporary reduction in housing VAT rates in 2013, 2016 and 2018; reduction in mortgage lending rates; allowing housing developers to receive 20 percent in advance amount in instalments. These have provided short-term boosts to demand but not reversed the trend (Figure 38).

Though stimulus measures include relaxation of macro-prudential regulations or reduction in mortgage rates, mortgage-backed sales are a small and declining share of total sales, falling from 45 percent in 2013 June to 5.5 percent in 2018 October. Cash purchases and purchases through financing packages offered by housing developers make up the bulk of total sales.

Figure 38: Government incentives provide short-term boost to house sales



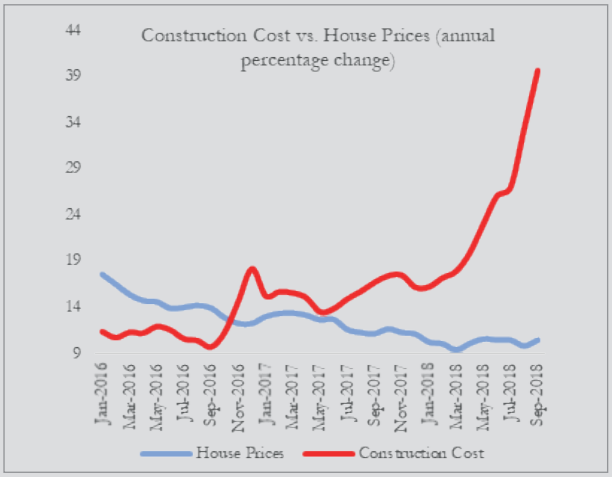
Sources: TURKSTAT, CBRT, WB Staff estimates

Investment by foreigners: The share of houses sold to foreigners in total house sales has been stable around 1.5-2 percent until 2018, increasing recently to 4.3 percent in October 2018. The government lowered the minimum housing investment requirement for Turkish citizenship from $1million to $250,000 to boost foreign investment in real estate.

Developments in the construction sector: Falling demand for housing is impacting the construction sector, which has expanded very rapidly in the last 10 years. The shares of construction in gross value added and employment as of 2018Q3 are high at 8.4 and 7.1 percent respectively. In 2017, the sector contributed to around a quarter of GDP growth. But as discussed elsewhere in the TEM, there has been a marked deceleration in 2018.

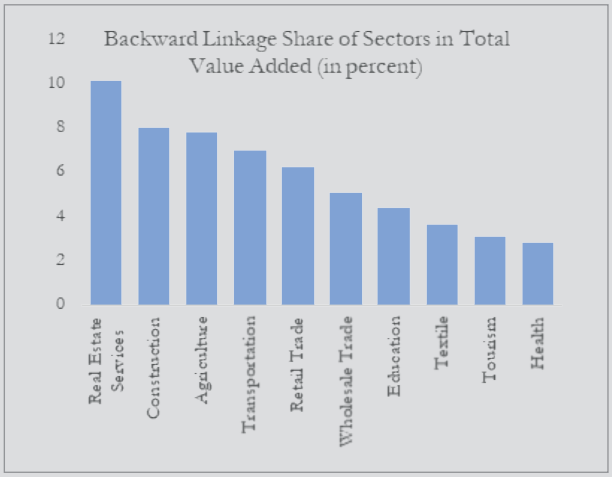
11 The price to rent ratio is the nominal house price divided by the rent price.

Figure 39: Divergence between construction costs and house prices



Source: Turkey Capital Markets Board Survey

Figure 40: Developments in the construction sector have strong spillover effects



Source: Turkey Capital Markets Board Survey

The acceleration in costs of construction has outpaced house price inflation since November 2016, with a rapid divergence since January 2018. The annual change difference between cost of construction and house prices is more than 29 percent as of September 2018, reflecting housing developers' inability to pass on costs to buyers given the slowdown in demand (Figure 39).

This has prompted supply side adjustments, which have significant spillover effects across other parts of the real economy. Input-output analysis show that construction sector is the second largest in terms of value added creation in other sectors. Construction and real estate activities together form more than 18 percent of total backward linkage share of value added with the other sectors (Figure 40).

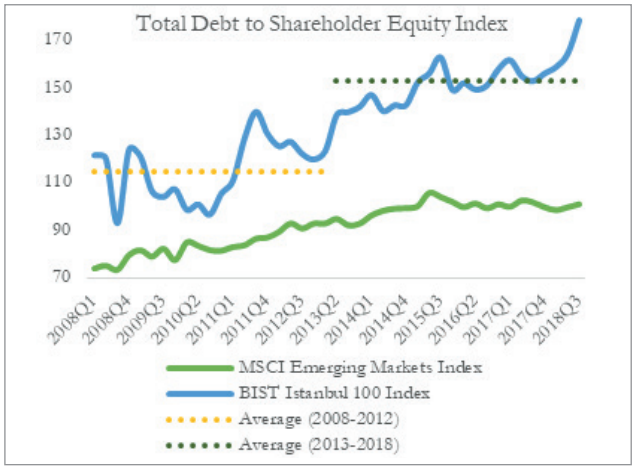
Financial shock in 2018 has caused a rise in corporate stress

19. **Supply side corrections combined with elevated corporate debt, including FX exposure, has raised corporate solvency and liquidity concerns in Turkey**. Corporate debt in Turkey has risen sharply since the Global Financial Crisis, driven in big part by foreign exchange (FX) debt including in non-tradable sectors that are vulnerable to the recent currency shock (Box 3). The situation is exacerbated by credit rationing, making it more difficult for corporates to access finance for rising working capital needs (see next section). This has resulted in a rapid rise in corporate debt restructuring demands in the past months, including under the newly established Concordat process.

20. **Consistent with this, an analysis of the balance sheets of listed corporates in Turkey points to a rapid increase in financial leverage in 2018 Q2-Q3 as measured by corporates' debt-to-equity ratios**.[12] Turkish corporates' financial leverage has been on an upward trajectory over the past five years, diverging from other EMDEs (Figure 41) (consistent with findings in Box 3). The spread between the debt to equity index of corporates trading on MSCI Emerging Markets Index[13] and on Turkey's BIST Istanbul 100 Index hit the highest level in 2018 Q3 amid the financial turbulence in Turkey over the summer.

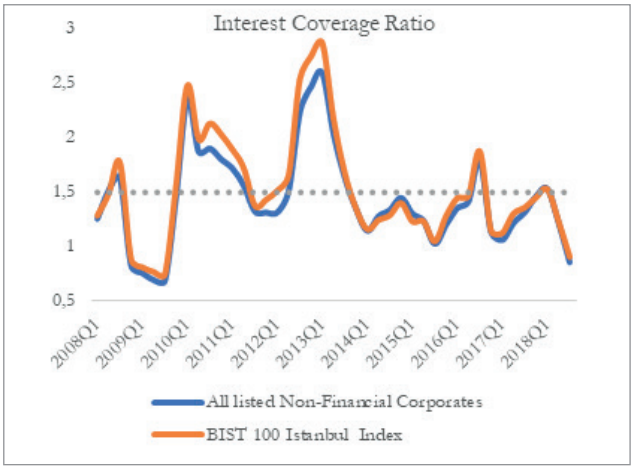
21. **In terms of liquidity, listed corporates experienced a sharp drop in their interest coverage ratio (ICR)[14] in 2018 Q3, signaling increased pressure on debt servicing capacity**. In 2017, rapid economic expansion helped improve the ICR for most corporates despite an increase in financial expenses. But in 2018, a combination of declining corporate earnings and rising borrowing costs caused the ICR to deteriorate sharply, falling to 0.90, significantly below the critical threshold of 1.5 (Figure 42). These developments are not reflected in non-performing loan

Figure 41: Increase in financial leverage of corporates



Source: Bloomberg Terminal

Figure 42: ICR drops below critical threshold



Sources: WB Staff estimates based on RASYONET **4-quarter rolling*

Notes: While BIST 100 index includes both financial and non-financial corporates, financial corporates and the corporates having zero financial expenses or not having value for financial expenses, are excluded from all listed corporates

12 This section uses data of corporates listed on the Istanbul Stock Exchange to quantify the amount of debt which is at risk and the financial stress of corporates up to 2018 Q3. Financial companies (banks, factoring, insurance, venture capital trusts, financial leasing, investment securities and trusts) are excluded from the listed corporates. The Altman Z-score is estimated to measure the financial distress of corporates by employing several corporate income and balance sheet indicators. Although the analyses do not cover all the non-financial corporates in the economy and do not reflect all corporates' situation, the financial analysis of listed companies, which are relatively well-performing, can provide some up to date insight information about the general trend.

13 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.

14 ICR reflects the ability of corporates to cover their interest and financial expenses with their operating earnings.

Figure 43: Share of DAR above 2009 peak

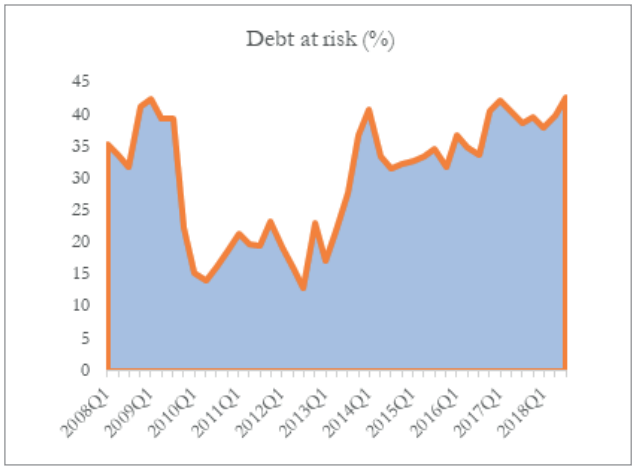
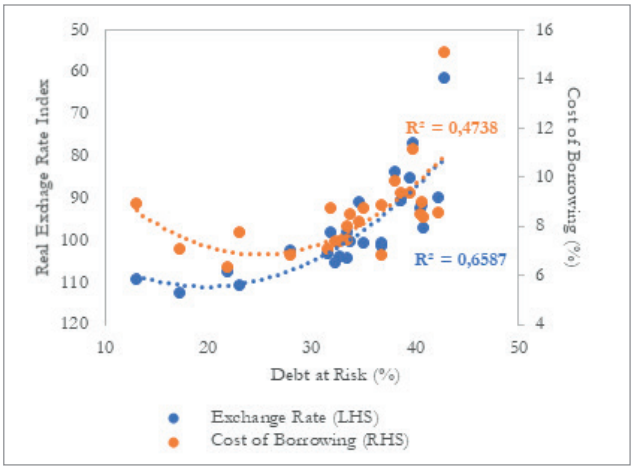


Figure 44: DAR associated with finance cost and REER



Sources: WB Staff estimates based on RASYONET, CBRT

ratios. This is partly because the analysis only covers listed companies, and partly because of the acceleration in debt restructuring. It nevertheless signals risks for the banking sector (see next section).

22. **A combination of the above has led to a general increase in corporate vulnerabilities as measured by the share of debt-at-risk (DAR).** The share of DAR is measured by the ratio of the debt of corporates[15] that have ICR of less than 1.5 over total debt. Based on this, the share of risky debt among listed corporates in Turkey has more than doubled since 2013, surpassing the peak reached in 2009 (Figure 43). The share of DAR was at around 42 percent in 2018Q3. The share of DAR is directly associated with cost of borrowing, and even more so with REER depreciation (Figure 44). Energy, telecommunication and real estate investment trust corporates are under most pressure, contributing significantly to the rise in DAR.

23. **A composite measure of financial distress further indicates a deterioration in the overall financial conditions of listed non-financial corporates in 2018**. The Altman Z-score combines several corporate income and balance sheet indicators to measure financial distress of corporates.[16] Calculated Altman Z-scores for listed non-financial corporates display a downward trend since 2013[17] (Figure 45, Figure 46) falling below a critical threshold in 2018, reaching its lowest level in 2018 Q3.

24. **This is mostly driven by the deterioration in the interest coverage ratio and drops in liquidity, profitability and loss in market value** [18]. Rapid lira depreciation caused an increase in financial expenses and a decline in net margin and put pressure on working capital. This is exacerbated by increased uncertainty in market values. The number of corporates going into the distressed zone increased significantly (Figure 47).

25. **At sector level, large energy corporates and real estate investment trusts seem to experience the biggest deterioration in Z- scores**. As they have large asset size, their poor performance drags down the weighted average Z-score. The outlook for corporate earnings in 2019 is not promising amid the expectations of a slowdown in the economy and of a decline in profit margins pressured by inflation.

15 All listed corporates except financial ones are included in the sample. The real estate investment trust corporates are not excluded as they are not pure financial entities and are actively working on real estate sector.

16 See Appendix for details on Altman Z-score.

17 While the unweighted Altman Z-score is trending down from mid-2010, the weighted equivalent remains stable until 2013.

18 Market value is the price of the company in the stock exchange market.

26. **High frequency corporate vulnerability index data confirm the elevated pressure on corporates**. A daily corporate vulnerability index is calculated by the Credit Research Initiative (CRI) to estimate the probability of default (PD) of individual publicly listed corporates.[19] Macro financial risk factors and firm specific attributes (distance to default, balance sheet indicators) are used as inputs to the model. For Turkey, Istanbul Stock Exchange National 100 Index (stock index 1-year return) and Turkish Interbank 3-Month (short-term risk-free rate) are used as macro financial factors in the estimation. According to the index (Figure 48), corporate vulnerability has been on an increasing trend since March 2018. It peaked in August, surpassing 2009 levels. There has been a decline in vulnerability in the recent months and the value-weighted index retreated to the level in May 2018. However, the vulnerability is still high compared to early 2018.

Figure 45: Financial distress peaks in 2018 Q3

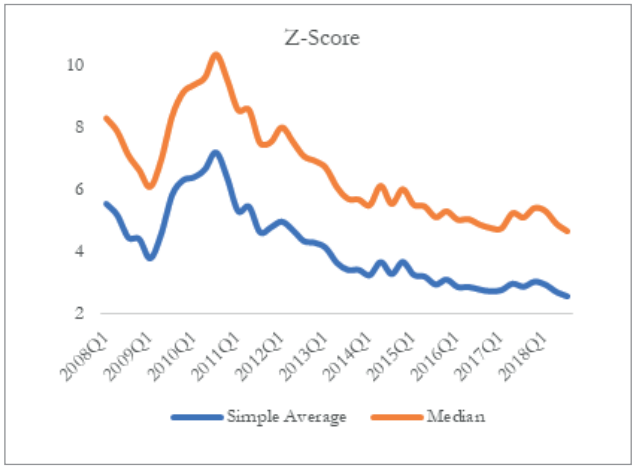
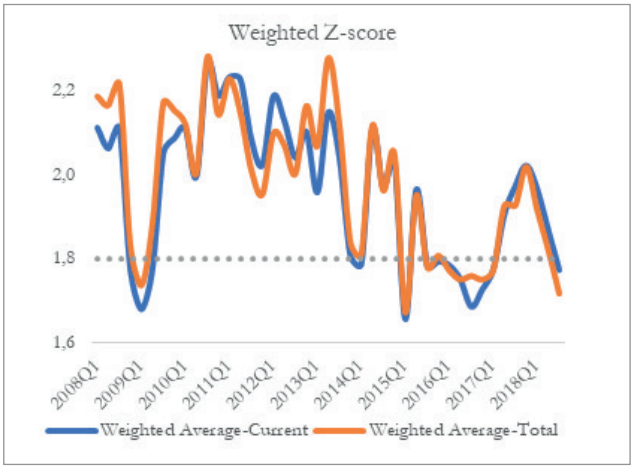
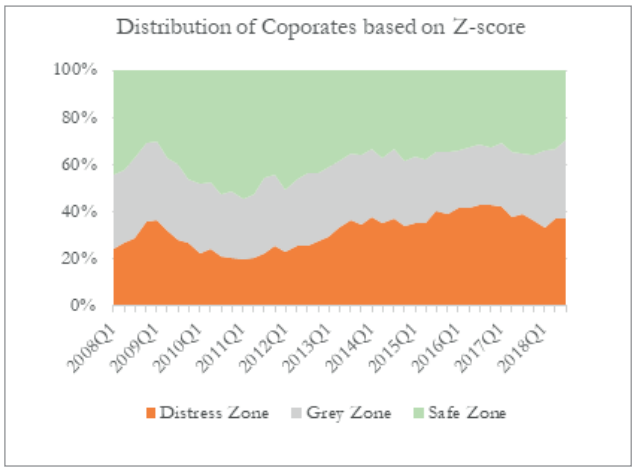


Figure 46: Financial distress indicator below threshold



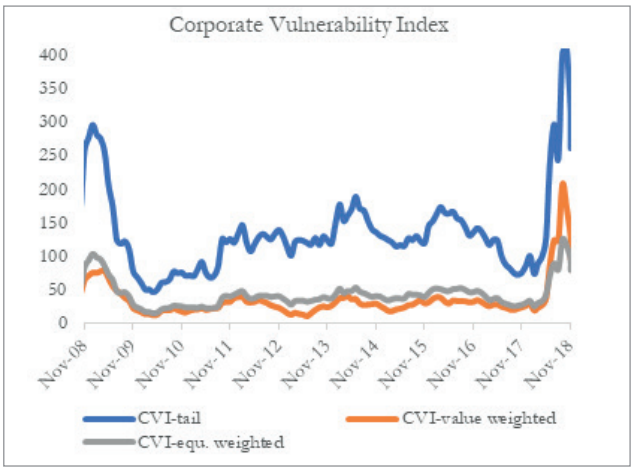
Sources: WB Staff estimates based on RASYONET and CBRT
Notes: Both currents assets and total assets are used in calculating the weighted Z-scores

Figure 47: More corporates in distressed zone



Sources: WB Staff estimates based on RASYONET and CBRT

Figure 48: Daily index shows rise in corp. vulnerability



Source: The Credit Research Initiative

19 The Credit Research Initiative (CRI), launched in 2009, is a non-profit undertaking at the Risk Management Institute (RMI) of the National University of Singapore. The corporate vulnerability index is estimated based on the intensity model developed by Duan et al. (2012). The equally-weighted CVI is the average value of the individual PDs in a group. The value-weighted CVI sums up the individual PDs with their market capitalizations as weights. The tail CVI is the top 5th percentile of the individual PDs in a group, focusing on the riskiness of the most vulnerable firms in a group. For detailed information, https://www.rmicri.org/en/view_cvi/8503/.

Box 3: Corporate Debt in Turkey

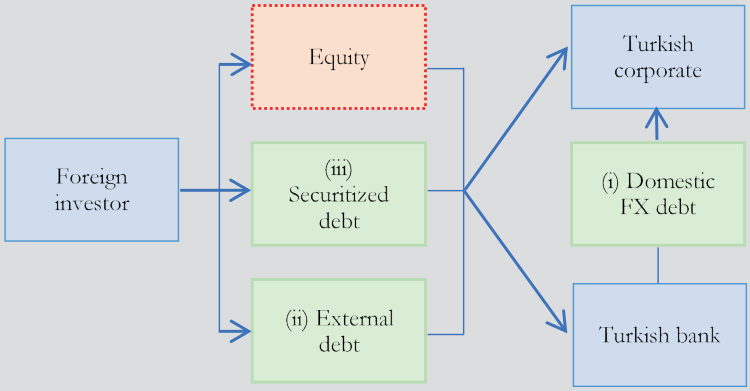
Corporate indebtedness in Turkey: Corporate debt in EMDEs rose sharply since the Global Financial Crisis, from around $9 trillion to $31 trillion dollars (108 percent of GDP).[20] Among EMDEs, Turkey has one of the highest corporate debt to GDP ratios, rising from 56 percent of GDP at the end of 2014 to an estimated 77 percent in 2018 Q3.

FX debt of Turkish corporates: Around 90 percent of the increase in Turkey's corporate debt over this period stemmed from a rise in FX debt, driven by post-GFC global monetary easing and Turkey's strong economic performance. By 2018, around 65 percent of corporate debt to GDP is FX denominated. Lira depreciation had a substantial impact on the recent increase through a reduction in the dollar denominated GDP. The rise in FX leverage has caused a large and negative net open FX position for corporates (net sum of all FX assets and liabilities), reaching 215.3 billion dollars (26 percent of GDP) in August.

Source of FX debt: The corporate sector's FX borrowing comes largely from (Figure 49): (i) FX lending by domestic banks to Turkish corporates; (ii) direct lending by foreign banks or investors to Turkish corporates; and/or (iii) securitized debt (e.g. bond issuances by corporates).

Around 60 percent of total FX loans are through domestic banks. The amendment of Decree 32 in June 2009 allowed firms with no FX income to borrow in FX from on-shore bank branches provided the loan amount was greater than $5 million with minimum maturity of one year. Firms that collateralized FX loans with FX deposits and securities were exempt from these conditions. Regulations however were tightened in May 2018[21] given rising concerns about increased forex exposure of some companies that have no forex earnings or other form of hedge.

Figure 49: Sources of FX debt for Turkish corporates



FX debt costs and maturities: FX debt is available at lower cost and longer maturity compared to TRY debt, reflecting low levels and short-term nature of TRY deposits in the banking system. The weighted average interest rate for TRY loans have exceeded that of FX loans by on average 10-15 percentage points, rising to 25 percentage points in the most recent months due to monetary tightening (Figure 50).

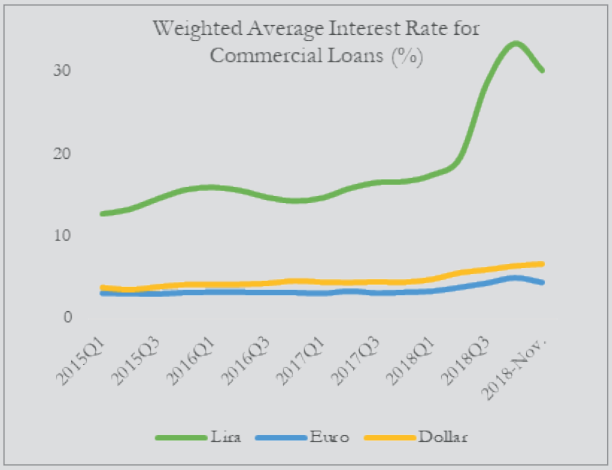
Most of the $150 billion external debt of corporates[22] (iii in Figure 50) has medium to long-term maturity (4.9 years average) and only 1.5 percent of the total, excluding import credits ($41.3 billion), is short-term. Around 12.5 percent of long-term external corporate debt is maturing in one year or less (Figure 51).

20 BIS Database

21 Official Gazette No. 30312, January 25, 2018: (i) Decree No. 2018/11185 amending the Decree No. 32 on the Protection of the Value of the Turkish Currency; (ii) Communiqué No. 2018-32/46 amending the Communiqué on the Decree No. 32 on the Protection of the Value of the Turkish Currency. The government introduced new measures to restrict on new FX borrowing by SMEs by introducing new limits for FX debt to FX income ratio and banning new FX-indexed corporate loans in May 2018.

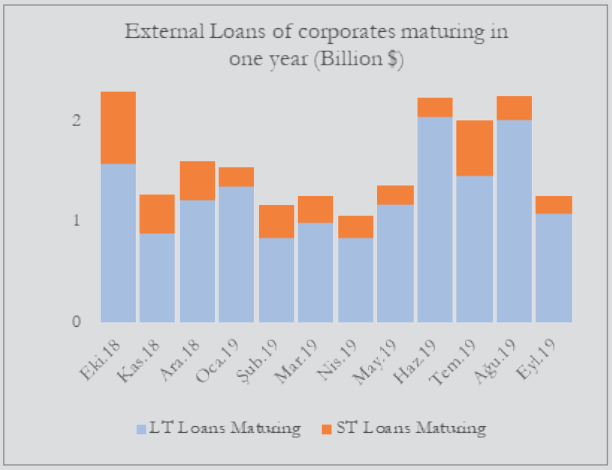
22 I.e., excluding domestic FX loans A relatively smaller amount – around 6 percent of external debt – is Lira denominated.

Figure 50: Lower cost of FX debt



Source: CBRT

Figure 51: Large external debt service obligations



Sources: CBRT, BRSA

FX debt servicing obligations of corporates and concentration by size of corporates: Corporates face increased debt servicing costs (around $5 billion) in the last quarter of 2018. Long-term refinancing rates of the corporates are still over 100 percent, reaching 141 percent (12-month rolling) in September.

Around 85 percent of FX loans (and half of TRY loans) are held by large corporates. SMEs on the other hand benefited from an acceleration in TRY credit through the extension of government guarantees in 2017 and early 2018.

FX debt concentration across sectors:[23] The highest concentration of FX loans is in the manufacturing sector (29 percent of total FX loans), though its share has been declining in the last decade. There is also high concentration in the energy sector (12 percent of external FX loans, 17 percent of domestic FX loans), and the transportation and storage sector. In more recent years, FX lending to the construction sector has risen sharply (10 percent of external FX loans, 13 percent of domestic FX loans).

FX debt leverage and currency risk across sectors:[24] FX leverage of a sector is defined as total FX liabilities divided by total non-equity liabilities. Comparing FX leverage of a sector to that sector's tradability, measured by the ratio of export receipts to total sales, gives a sense of potential currency risk; in other words, export revenue can provide a natural hedge against currency depreciation. High leverage versus low tradability signals currency mismatch and vulnerability to currency shock.

Manufacturing, transport and storage, and mining have relatively high FX leverage, but also relatively high export to sales ratios, which provides a hedge against currency risk (Figure 52). Within manufacturing, motor vehicles, transport equipment, electrical machinery have relatively high FX but also high export receipts (Figure 53).

There are sub-sectors within manufacturing however that may face higher currency risk. These include chemicals, pharmaceuticals, coke refined petroleum sectors; all have weak export to sales relative to their FX leverage. These sectors also rely quite heavily on intermediate imports. The food sector, one of the largest but most unproductive sub-sectors,[25] is highly leveraged with a low export to sales ratio.

23 The breakdown of corporate FX loans at sectoral disaggregation is not publicly available for the domestic FX loans which constitute the bulk of FX exposure of corporates. Therefore, the figures are obtained from the CBRT Financial Stability Report, November 2018.

24 FX leverage data and exports receipts to total sales data obtained from CBRT sectoral accounts (2015-2016 averages) which is the latest data available. The significant developments in FX market since that time may have led to a change in the sectorial position. The results should be interpreted with this in mind.

25 WBG 2018, "Firm productivity and economic growth," (forthcoming).

26 In the energy sector, around 80 percent of the loans are FX-denominated.

Outside of manufacturing, there are several non-tradable sectors with high FX leverage. The real estate sector significantly increased its FX exposure in the last decade without strong natural hedge. The real estate sector's FX leverage is greater than 50 percent whilst almost all its sales are domestic. Similarly, in the energy sector, FX exposure is around 45 percent[26], even though sales are almost all domestic. The sector however is buffered against currency risk through indexation of energy prices to exchange rate developments. Despite its FX denominated pricing, the restrictions on domestic energy price adjustments might put pressure on debt servicing capability.

Figure 52: FX leverage vs. export ratios across sectors

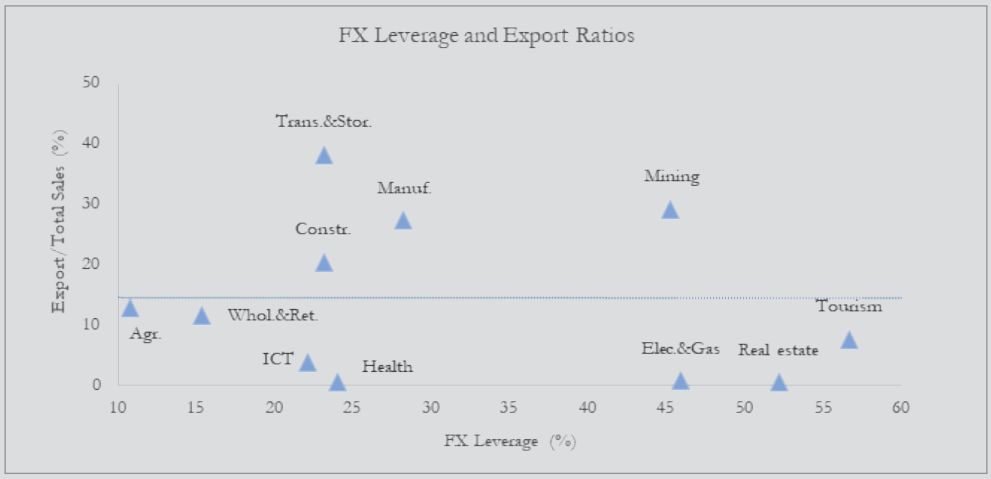
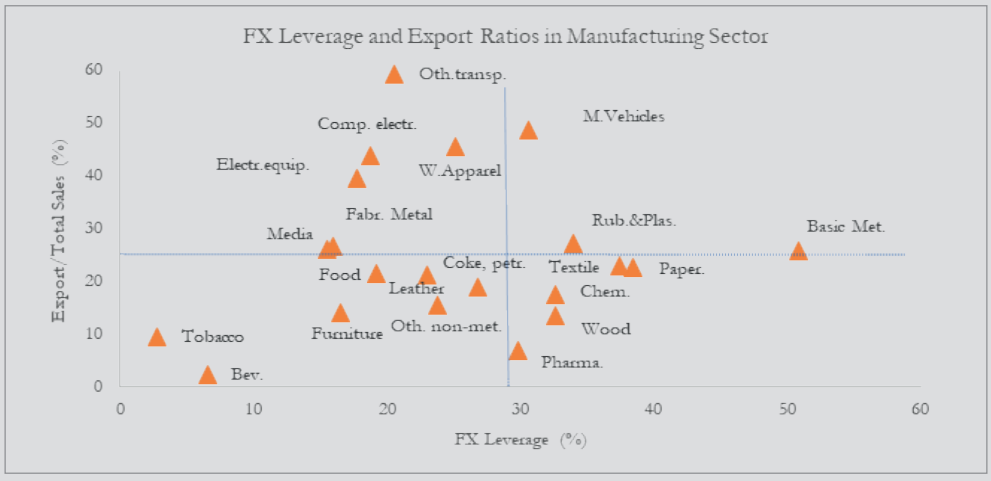
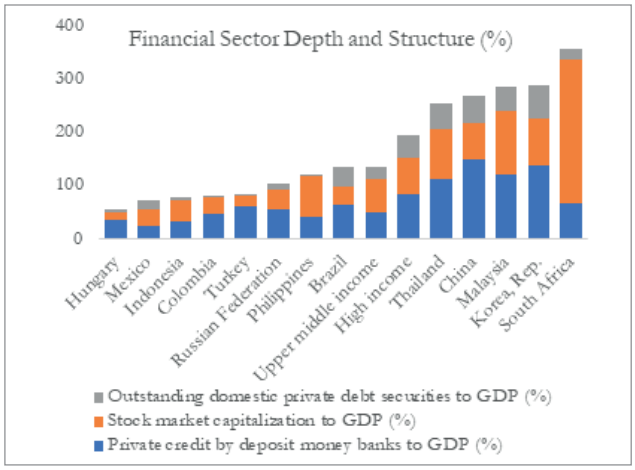


Figure 53: FX leverage vs. export ratios within manufacturing



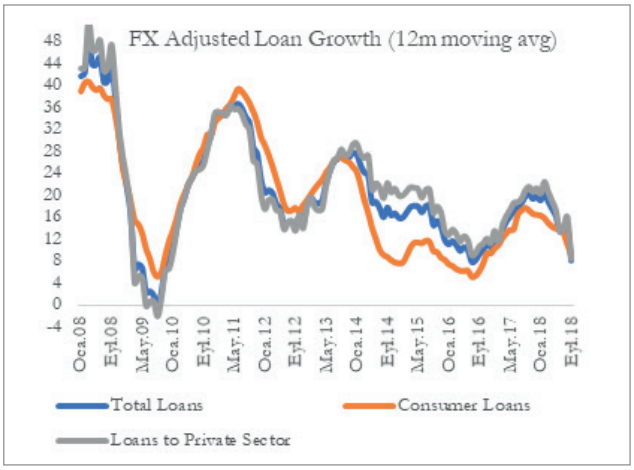
Sources: CBRT Sectoral Accounts 2015-2016 average, WB Staff estimates

Figure 54: Banks dominate financial sector in Turkey



Sources: World Bank, Global Financial Development Database

Figure 55: Sharp deceleration in credit growth



Sources: CBRT, BRSA

Banks face volatility with strong buffers but cracks begin to appear

27. **The Turkish financial sector's buffers were relatively strong ahead of recent market volatility**. Banks account for around 90 percent of total assets in the financial sector, growing rapidly over the past decade with assets reaching 101 percent of GDP at the end of 2017. Strong capital buffers, strengthened banking regulation and supervision, and effective macro-prudential regulation set a strong foundation for weathering the 2008-2009 crisis. On the other hand, capital markets and the non-bank financial sector remain relatively small and underdeveloped in Turkey compared to more advanced economies in the OECD (Figure 54).

28. **The banking sector still exhibits sound financial metrics despite recent market pressures, but cracks are beginning to appear on the asset quality side due to rising corporate stress discussed above**. Banks' capital adequacy ratio – available capital as a share of banks' risk weighted assets, which provides a measure of banks' ability to absorb losses – is high at 18.19; though part of this is also because CAR calculation has benefited from temporary forbearance measures introduced by the BRSA in August 2018, adding around 160 basis points to CAR. Profitability in the banking system remains strong with return on assets at 1.23 percent and return on equity at 12.60 percent. At the same time, Non-Performing Loans have been on an upward trend in recent months, reaching 3.47 percent as of October 2018, despite regulatory forbearance measures introduced by BRSA. Loan growth has decelerated sharply in recent months (Figure 55), due to the phaseout of the credit guarantee scheme, interest rate hike, and tightened liquidity conditions.

29. **Additionally, structural imbalances including maturity and currency mismatches persist and expose Turkish banks to external market volatility risks**. Rapid credit growth over the past decade has been fueled by external capital flows (Figure 56). Share of foreign liabilities in total liabilities recorded a sharp increase from 10 percent to 22 percent between 2009 and 2013 as banks took advantage of cheap international funding conditions. Between 2013 and 2017 share of foreign liabilities followed a relatively flat trend and fluctuated between 22 and 23 percent levels before surpassing 24 percent in October 2018 after the August FX volatility. Large FX positions generated by banks' FX funding have been closed through derivatives transacted with foreign counterparties (Figure 57). Most balance-sheet hedging of FX exposures is achieved through conventional cross-currency and interest rate swaps with international banks. With tightened regulations, the on-balance-sheet short position decreased to 30 percent of regulatory capital in October after peaking at 50 percent in June 2018. Hedging allows banks to reduce exposure to market (exchange rate) risk although given their short tenor relative to the banks' lending terms, rollover risks and maturity mismatches remain high.

Figure 56: Banks' external borrowing risen sharply

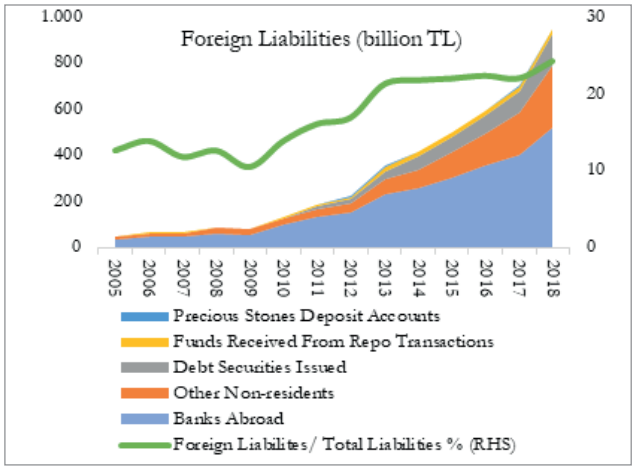
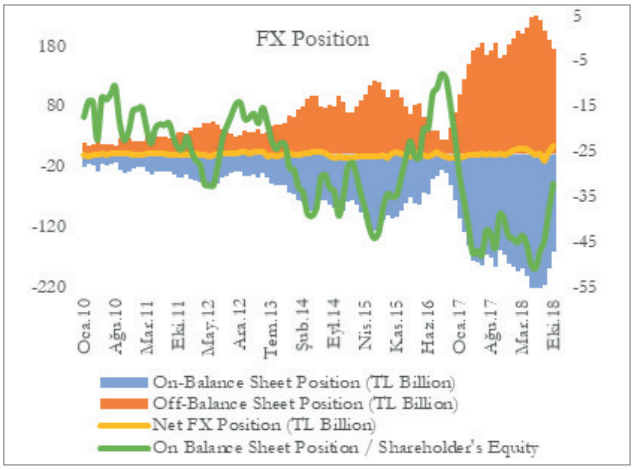


Figure 57: Use of swaps to close short FX positions



Sources: CBRT, BRSA

30. **Maturity transformation has become more prominent in the banks' balance sheets during the last 15 years as they have been moving from government securities to private credit, whilst extending loan maturities**. High TL loan premia have also incentivized rising maturity transformation and increasing balance-sheet maturity mismatches while liquidity risk management has become more challenging (Figure 58). Deposit maturities are very short with 95 percent of the deposits below 1 year and 90 percent below 3 months maturity. It is important to note that banks have managed to increase the share of wholesale external funding in medium term maturity buckets over the last six years. However, more than half of the wholesale funding remains short-term, i.e., below one year according to date to maturity (Figure 59).

31. **Recent exchange and interest rates developments impact banks' balance sheets through recalculation of risk weighted assets, mark to market security portfolios and on-balance sheet open positions, ultimately impacting on solvency**. The regulator introduced some forbearance measures to mitigate the immediate impact of the currency depreciation on bank balance sheets including on mark to market security portfolio and risk weighted assets. At the same time, the longer-term impact of worsening macro-financial environment on banks' liquidity asset quality, profitability, and solvency is yet to be felt.

Figure 58: Widening liquidity gap

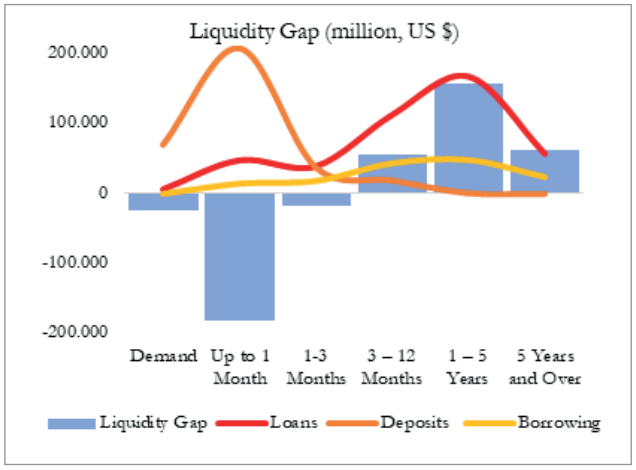
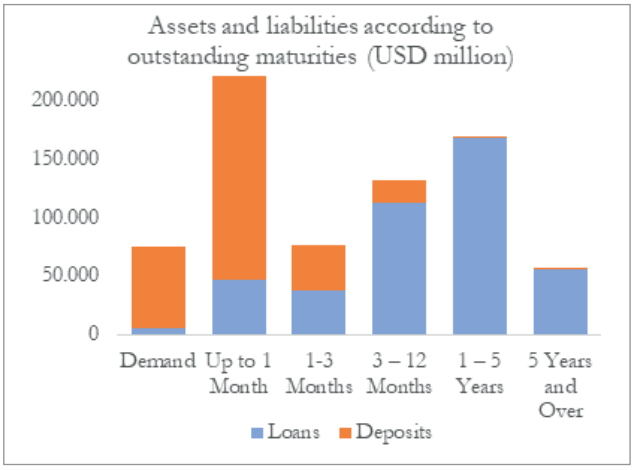


Figure 59: LT loans funded out of ST deposits



Sources: CBRT, BRSA

Figure 60: Declining FX deposits in Turkish banks

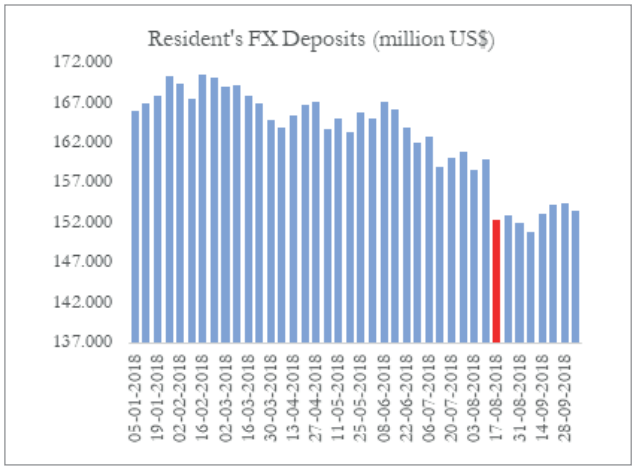
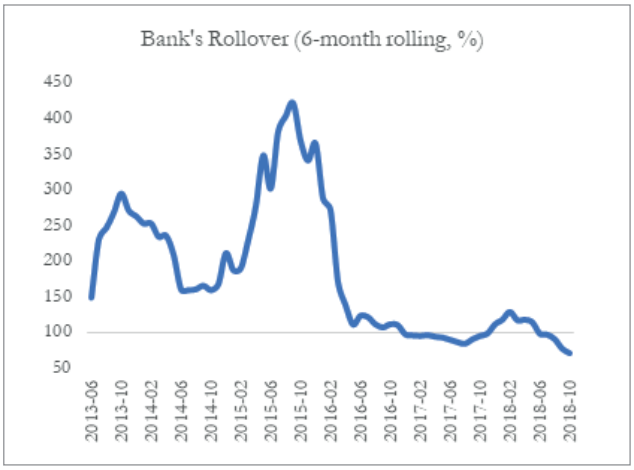


Figure 61: Banks' rollovers have fallen to 70 percent



Source: CBRT
Note: Bank rollovers are on a 6-month total basis.

32. **Banks were able to absorb liquidity pressures in the aftermath of the August volatility thanks to the timely actions of the Central Bank** (see next section). Deposit outflows observed during the few weeks of high volatility in August stopped, and funds partially returned to the system (Figure 60). However, in total, there has been around US$ 12 billion net withdrawal in resident's FX deposits as of October since the beginning of the year.

33. **Banks also generally been able to rollover their foreign syndicated loans, starting with first-tier banks in September** (Figure 61). However, the cost of refinancing almost doubled compared to the beginning of the year, standing at around 275 bps level in October. The downward trend in rollover ratios could be associated with slowing loan demand due to falling investment and increasing cost of borrowing. It is worth noting that Turkish banks historically had access to international borrowing even in times of liquidity crunch such as during the GFC in 2008, when banks were able to rollover 80 percent of their FX loans.

34. **Turkish banks maintain substantial liquidity especially in FX**. Public preference for FX deposits coupled with the strong demand for TL loans resulted in a widening in the gap between TL and FX Loan to Deposit (LTD) ratios. The banks' average LTD ratio remains high (end-Q3: 121 percent) (Figure 62) but it has slightly improved compared with June 2018 (124 percent), reflecting FX loan deleveraging and robust quarterly growth in TL deposits. The Liquidity Coverage Ratio of the banking sector is well above the minimum legal ratio[27] while the share of liquid assets to total assets has been fluctuating between 20 and 23 since the beginning of 2015. Turkish banks can access sufficient FX liquidity – primarily foreign currency placed with the central bank, and short-term currency swaps with foreign counterparties – to service short-term wholesale debt in the event of a loss of market access.

35. **Though officially reported asset quality indicators show only a slight downward trend, continuing exchange rate and interest rate pressures as well as the anticipated economic downturn negatively affect asset quality**. The level of distressed assets in the financial system is much higher than official NPL levels. Loans under close monitoring (Category 2) have continued rising and in fact are almost three times higher than officially reported NPL levels (Categories 3, 4 and 5 combined). It is worth noting that loans under close monitoring have also increased due to implementation of internal credit rating models under TFRS 9 standard since the beginning of 2018 and banks' prudent attitude which is reflecting a more comprehensive approach in identifying risks. An analysis of the loan portfolio of the seven largest Turkish banks shows that while NPLs

27 The minimum liquidity coverage ratio should be 90 percent for total and 70 percent for FX assets.

Figure 62: Rising TRY Loan to Deposit ratio

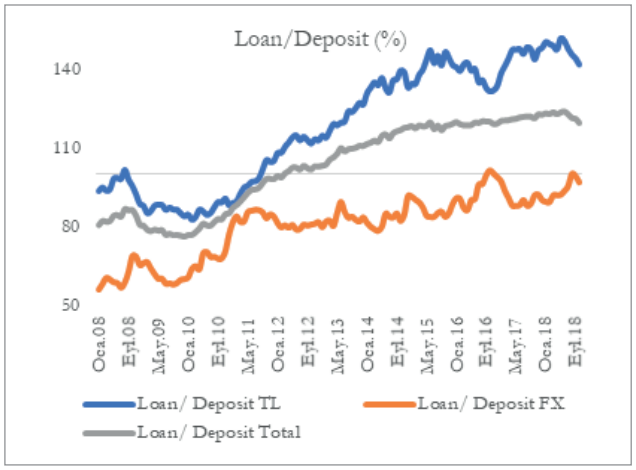
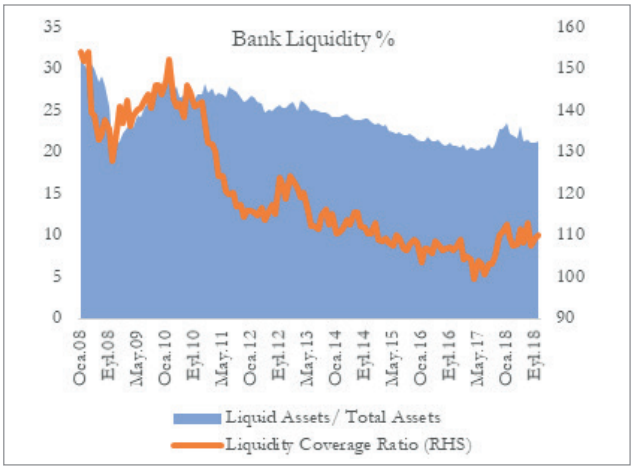


Figure 63: Liquidity cov. ratio within prudential norm



Sources: CBRT, BRSA

Table 1: Breakdown of distressed assets

	June 2017	June 2018	October 2018
Standard loans (Group 1)	93.8	89.4	87.5
Loans under close monitoring (Group 2)	3,1	7,7	9,3
Loans with limited collectability (Group 3)	0.3	0.5	0.6
Loans with doubtful collectability (Group 4)	0.6	0.5	0.7
Uncollectable loans (Group 5)	2.1	2.0	1.9

Sources: Independent audit reports of the largest 7 Turkish banks for 2017-2018.

remain at TL 59.8 billion or on average 3.3 percent of total loans, Category 2 loans have reached TL 170,8 billion or on average 9.3 percent of total loans as of September 2018 (Table 1).

36. **Category 2 loans are a relevant proxy for financial distress because banks in Turkey tend to restructure problematic loans as soon as possible before the loan becomes 90 days overdue, thereby benefitting from laxer provisioning requirements**. The aggregate amount of loans included in Categories 2-5 is TRY 230.7 billion or on average 12.5 percent of total loans, which might be a better representation of current NPL levels in Turkey (Table 1). This is a rapid increase from 10.0 percent in June 2018 but due to the typical time lag does not reflect the full impact of the large depreciation in June-August 2018. The situation with Category 2 loans has deteriorated substantially compared to June 2017, when Category 2 loans were only 3.1 percent of all loans (Table 1).

37. **To understand the overall picture of distressed assets, it is important to consider restructured loans and sold NPLs**. Restructured loans included in Categories 1 and 2 have increased sharply; often these loans have been restructured more than once. The analysis of the top 7 banks shows that restructured loans where payment plan extensions have been adopted have reached (i) TL 26 billion or 1.6 percent of total loans in Category 1, and (ii) TL 51 billion or 31 percent of total loans in Category 2.

38. **Private Turkish banks have been selling NPLs since 2008 following the introduction of legal framework for Asset Management Companies in 2006**. In 2017 the procedure for NPL sales by state banks was simplified. Between 2008 and 2017 Turkish banks sold a total amount of TL 38 billion NPL portfolios consisting of retail and corporate portfolios (Figure 64). Since its start, NPL portfolio sales growth has been 20 percent per annum. Historically, retail NPL

Figure 64: Breakdown of NPLs by borrower types

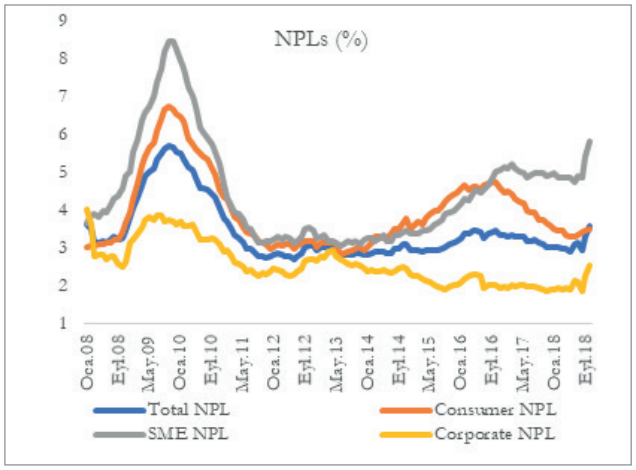
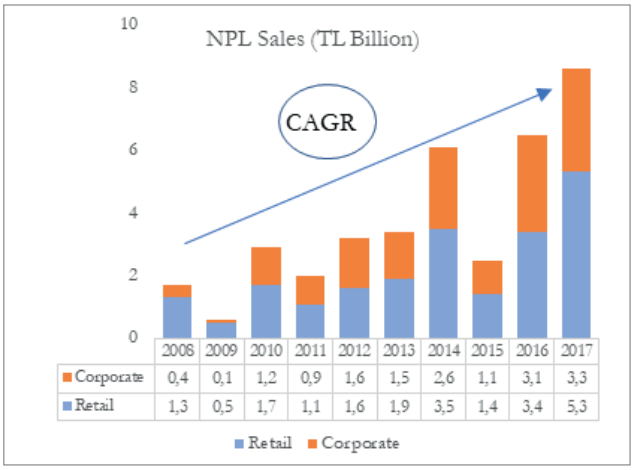


Figure 65: Rising sale of NPLs



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Corporate	0,4	0,1	1,2	0,9	1,6	1,5	2,6	1,1	3,1	3,3
Retail	1,3	0,5	1,7	1,1	1,6	1,9	3,5	1,4	3,4	5,3

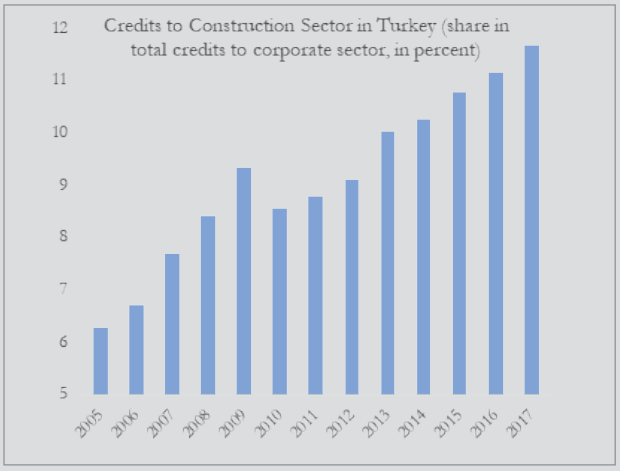
Source: BRSA

sales have made up the majority (58 percent) of total sales. This has been mostly due to; (i) lower average ticket size requiring a systematic approach to collection for financial institutions; (ii) the higher share of unsecured loans, hence lower recovery expectations of financial institutions; and (iii) the moral hazard problem for financial institutions (i.e. granting favorable terms to some borrowers may lead to a moral hazard amongst performing borrowers).

Box 4: Financial sector vulnerabilities from the construction sector

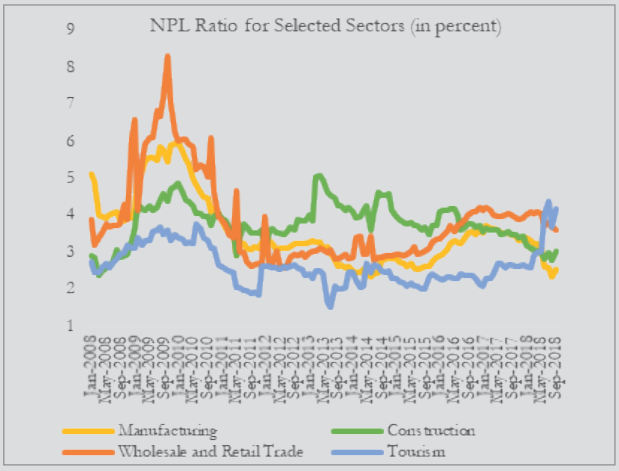
Banks' exposure to construction sector: The construction sector accounted for 11.7 percent of total corporate loans in 2017, the second largest exposure for the banking sector (Figure 66). NPLs in the construction sector have declined since September 2016 (currently at 3 percent) (Figure 67). This is likely due to debt restructuring and loans extended under the Credit Guarantee Fund.

Figure 66: Banks' exposure to construction Co's



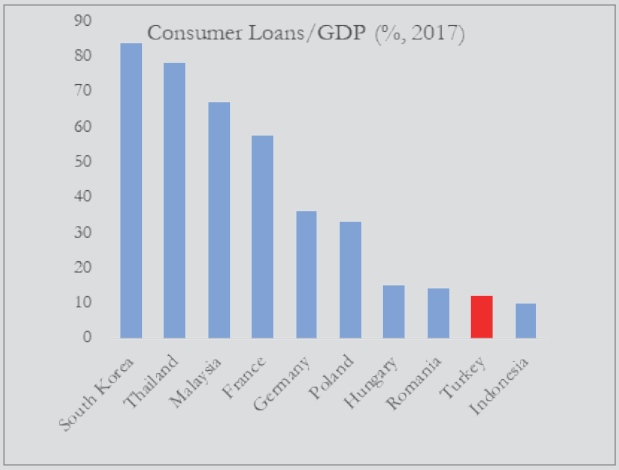
Source: BRSA

Figure 67: Construction NPLs declining slightly



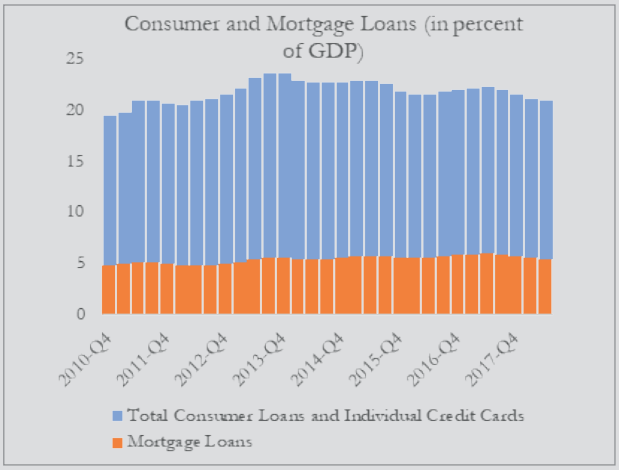
Source: BRSA

Figure 68: Consumer loans/GDP relatively low



Source: Haver Analytics

Figure 69: Small mortgage market



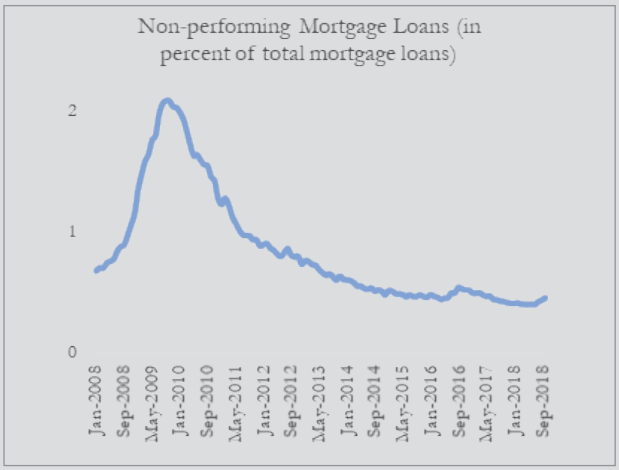
Source: CBRT

Risks in the Turkish mortgage market: Household indebtedness is generally low at around 15-17 percent of GDP. Household mortgage loans total between 5-6 percent of GDP. Macroprudential regulations for mortgage lending have generally been tight. Turkish banks have been quite careful to select high credit worthy customers for mortgage loans, and there are no sub-prime mortgages. Mortgages are only available in Turkish Lira with a fixed rate.

Risks in the housing portfolio: The share of non-performing mortgage loans peaked at 2 percent during the 2009 financial crisis and declined afterwards to 0.5 percent (Figure 71). Turkish households have been borrowing at between 5-10 years' maturity for housing loans. Since late 2012, maturity composition has slightly shifted from 10-15 years to 5-10 years which increased from 57 percent to 73 percent of total housing loans (Figure 72).

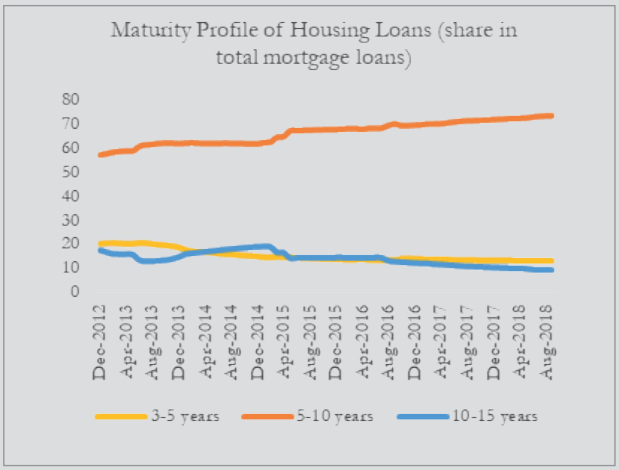
Due to the existing level of mortgage loans as a share of GDP and shorter maturity profile, the mortgage market in Turkey can be classified as a burgeoning market relative to advanced economies. In the medium and long run, improvement in macro-financial conditions with lower cost of mortgage credits and longer maturities may help deepening in mortgage market and shape the future of the Turkish housing market.

Figure 70: Limited NPLs in mortgage market



Source: CBRT

Figure 71: Mortgages relatively short-term tenor



Source: CBRT

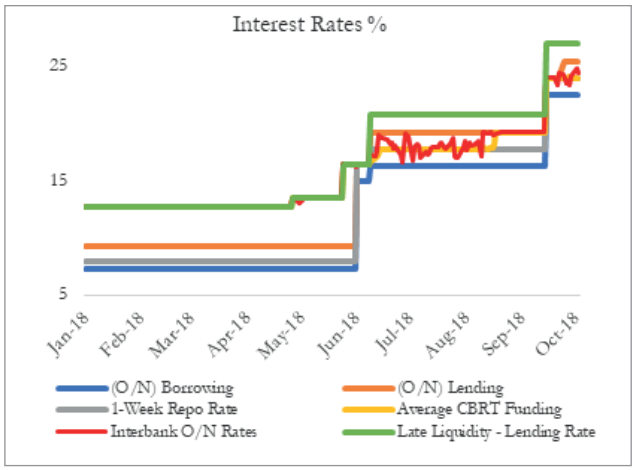
Complex economic situation with acute policy trade-offs

39. **The above developments have compounded into a complex economic situation with acute policy trade-offs**. The orthodox response to a large currency sell-off, capital outflows and market volatility as experienced by Turkey in recent months would be to tighten monetary and fiscal policies to contain macro imbalances and halt the currency slide. In most sudden stop episodes of recent years, policy makers in other countries have opted for fiscal tightening but monetary easing to offset tighter external finances, and thereby avert too sharp an economic correction.[28] For those countries, this also meant sharp currency depreciation (Figures 7, 8) and an eventual move to a more flexible exchange rate. This was a viable policy mix in those countries given relatively low inflation and forex liabilities at the onset of their sudden stop episodes.

40. **In Turkey, however, high inflation and forex liabilities together with a flexible exchange rate, called for Central Bank to tighten monetary policy**. A first round of tightening was implemented in June with a 300 b.p. hike in interest rates (Figure 72); this followed a decision in May to improve the transparency of the monetary policy framework by reverting to the one-week repo rate as the central policy rate of the Central Bank. A second round of tightening was implemented in September with a 625 b.p. hike in the policy rate, which currently stands at 24 percent.[29] Some expressed concerns that the decision to raise interest rates came late; moreover, credit rationing had already started from August with sharply rising commercial lending rates. Nevertheless, the policy rate adjustment in September provided a boost to market confidence.

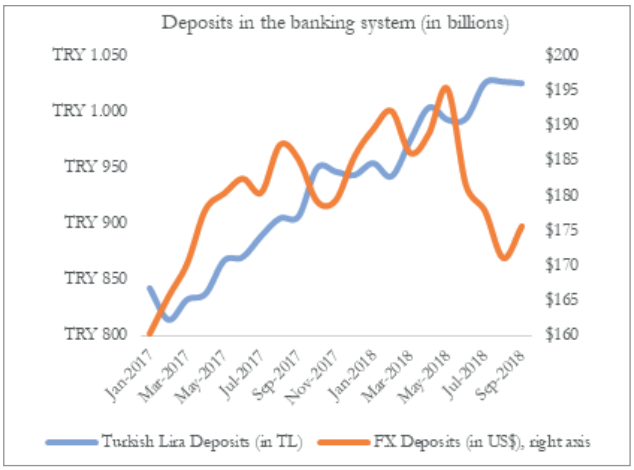
41. **At the same time, the Central Bank had to respond to rising concerns over liquidity in the financial sector**. Those concerns stemmed firstly from the risks of deposit withdrawals triggered by concerns over the health of the banking system; between May and September, FX deposits declined from $195 billion to $170 billion, associated with debt repayment rather than conversion into TRY deposits (Figure 73). The second source of concern was the large FX debt rollover needs of the banking sector, with nine banks requiring annual loan syndications by the end of 2018. The third source of concern was pressures on TRY liquidity in the financial system. The loan to deposit ratio for FX is around 95 percent, but for TRY it is close to 150 percent, requiring banks to use FX borrowing to finance TRY lending.

Figure 72: Two episodes of monetary tightening



Sources: Haver Analytics, CBRT

Figure 73: Declining FX deposits

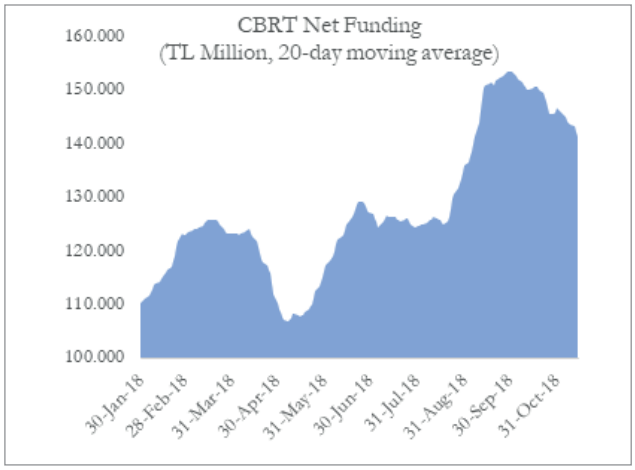


Sources: CBRT, WB Staff estimates

28 Eichengreen, B, and Gupta P. "Managing Sudden Stops," WBG Policy Research Working Paper (April 2016).

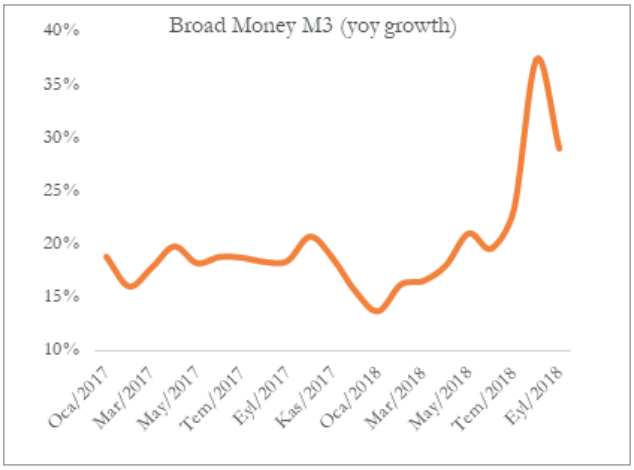
29 In August, the Central Bank implicitly tightened monetary policy following the sharp increase in FX volatility by temporarily reverting back to the O/N lending rate (19.25) instead of policy rate (17.75).

Figure 74: Liquidity boost to financial sector



Sources: Haver Analytics, CBRT

Figure 75: Aug-Sept spike in M3 expansion



Sources: Haver Analytics, CBRT, WB Staff estimates

42. **The authorities successfully implemented measures to relieve liquidity pressures, which on the other hand expanded broad money and contracted forex reserves**. To provide FX liquidity, the Central Bank lowered the Reserve Options Mechanism for FX reserves of domestic banks from 55 to 40 percent of banks' total FX reserves with the CBRT, which as discussed earlier led to a drop in gross reserves. To relieve pressures on TRY deposits and the currency, the Banking Regulation and Supervision Agency (BRSA) in August restricted Turkish banks' FX Swap transactions (i.e. where Turkish banks pay TRY and receive FX) with foreign banks to 25 percent of the Turkish banks' equity. In addition, CBRT net funding for commercial banks rose sharply in September (Figure 74); this fueled broad money growth (Figure 75) but not credit expansion as discussed earlier.

43. **Fiscal policy has been mildly expansionary in 2018 to date, with a moderate increase in the central government budget deficit from 1.5 percent of GDP last year to 1.9 percent in 2018** (Figure 76, Figure 77). The primary surplus has narrowed from 0.3 to 0.1 percent over the same period. Central government revenue in the first ten months of the year increased 19 percent in nominal terms compared to the same period last year (contraction in real terms), with indirect tax collections slowing most sharply due to declining consumption and imports (Figure 78). Subsidy to gasoline prices and temporary tax cuts on durable goods also contributed to the slowdown in revenue collection.

44. **Interest payments, wages and salaries and public transfers have driven spending growth.** Central government interest costs peaked in July and August, and continue to rise faster than overall spending (Figure 79). Personnel and current transfer costs are also growing with the hiring of contract workers early in the year, and one-off payments to pensioners in June and August. Government lending is expanding rapidly year-on-year, standing at 60 percent higher than at the same point last year. Following a spike early in the year, capital expenditure has slowed, while goods and services nominal spending is running far below inflation, standing at just 3.2 percent. In May this year, net cash outlays began falling below accrued expenditure, indicating a build-up of obligations which are likely to adversely affect the budget position at some point in the future. By October, this annual differential had reached its highest level – Lira 8.5bn – since August 2016.

Figure 76: Moderate increase in budget deficit

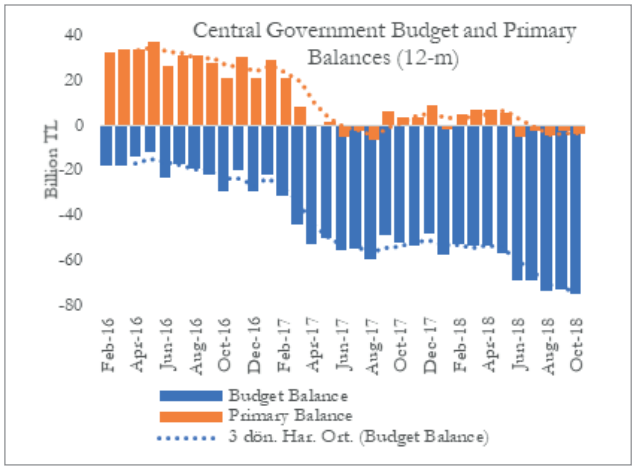


Figure 77: Driven by capex and revenue slowdown

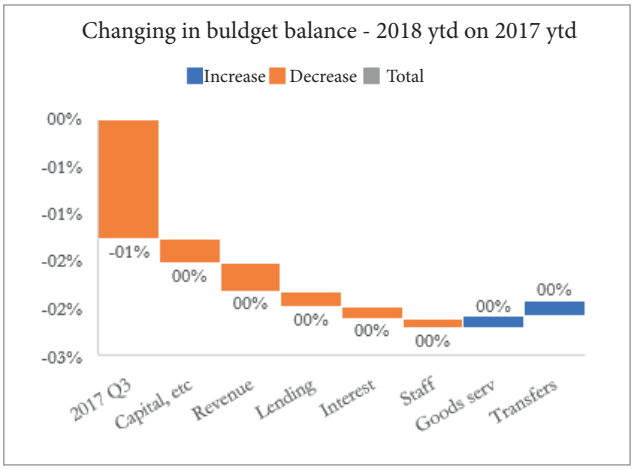


Figure 78: Slowdown in tax collections

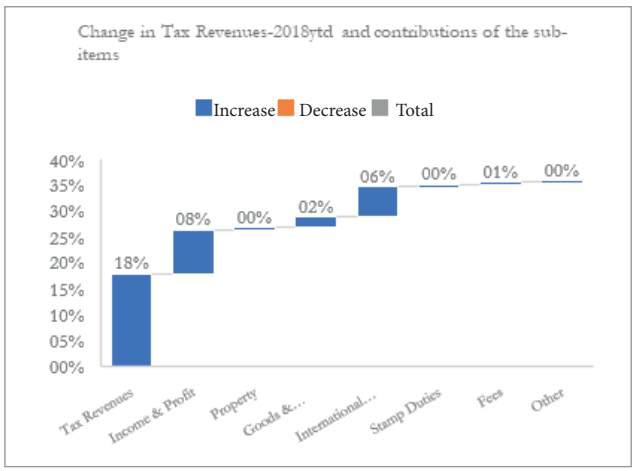
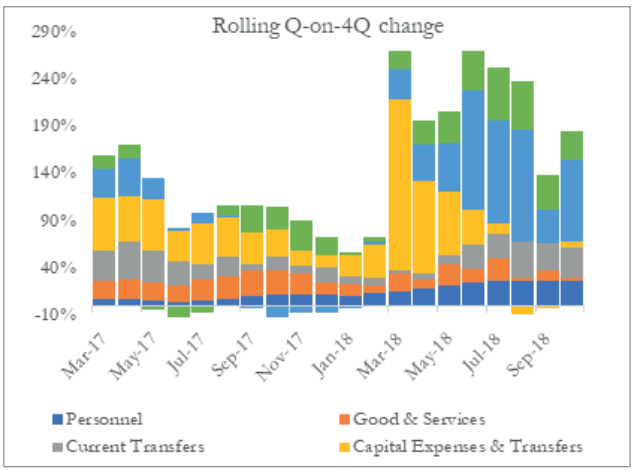


Figure 79: Sharp rise in lending and capex



Sources: Haver Analytics, CBRT, WB Staff estimates

45. **Automatic stabilizers are to some extent helping to cushion the economic slowdown**. Early indications are that social insurance outlays will increase in late 2018 as more people have become eligible for unemployment insurance and with unemployment rising (from 9.7 percent in 2018 Q2 to 11.4 percent in 2018 Q3). Unemployment insurance payouts[30] increased from TRY 369.1 m in January 2018 to TL488.9 million in November. Unemployment insurance payments are expected to rise further, particularly since the government announced a loosening of eligibility criteria in its 100-day action plan.

46. **Government debt levels remain manageable, although the realization of contingent liabilities, the full extent of which is difficult to estimate, could dent fiscal space.** Central government debt outstanding as a ratio to GDP jumped up by nearly three percentage points in the third quarter of 2018, driven the revaluation effects of FX-denominated debt. At 31.4 percent or US$56bn equivalent, total central government debt remains manageable. Contingent liabilities include Treasury guaranteed debt at US$14bn (end June). There are other potential liabilities (e.g. US$17bn of unguaranteed debt contracted by public institutions, mostly public banks and US$15bn in debt assumption guarantees for PPP projects), in addition to demand guarantees provided for the PPP projects. At this stage it is difficult to estimate how much or whether any of these liabilities are likely to be realized though they pose risks that warrant close monitoring.

30 Unemployment Fund payments are not part of the central government expenses discussed above.

II. LOOKING AHEAD

The economic outlook is subject to high levels of uncertainty than usual given domestic and external vulnerabilities. Growth is projected to slow to a 10-year low of 1.6 percent in 2019 followed by a gradual medium-term recovery. Private domestic demand is projected to drop sharply in 2019, offset in part by public consumption and external demand. Monetary tightening and commitments in the New Economic Program (NEP) signal important policy adjustment, though any uncertainty or inaction could tip the economy into a more difficult situation. The lack of progress on an orderly deleveraging in the private sector could precipitate this tipping point. The projected economic slowdown poses multiple challenges for households, with the impact of inflation on household purchasing power likely to be the most acute. The authorities' New Economic Program provides a solid foundation to tackle Turkey's economic challenges, though a bigger role for countercyclical fiscal policy will be needed than envisaged under the NEP. This should be complemented with tight monetary policy, a financial sector response that supports gradual deleveraging of the private sector and enhances financial risk monitoring and management in the banking sector. Critical to supporting the deleveraging process is a strong corporate debt restructuring framework, the absence of which could spell the difference between an orderly adjustment for the economy and a hard landing.

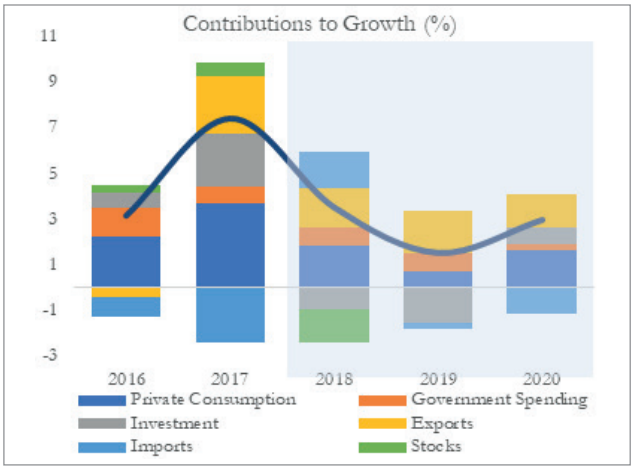
Downward correction to economic growth

47. **The economic outlook for Turkey is subject to higher levels of uncertainty than usual. The economic situation remains fragile given high domestic and external vulnerabilities discussed above**. The economy's ability to avert a deep recession depends in part on sound policies, as discussed further below. Monetary tightening and commitments in the New Economic Program (NEP) signal important policy adjustment. There are however exogenous factors, namely the pace of monetary tightening in the US and the EU, global trade uncertainty, the path of commodity prices, and investor sentiments towards EMDEs, that will substantially affect the outlook for Turkey. Upcoming local elections in Turkey, scheduled for March 2019, add another element of ambiguity around policy direction.

48. **Growth is projected to slow to a 10-year low of 1.6 percent in 2019 followed by a gradual medium-term recovery** (Figure 80). Growth is estimated to moderate from 7.4 percent in 2017 to 3.5 percent in 2018 and down to 1.6 percent in 2019 before recovering to 3 percent in 2020. This assumes policy adjustment (tight monetary policy, countercyclical fiscal policy, partial corporate debt restructuring) and a moderately supportive external environment to help tide the economy through a difficult period.

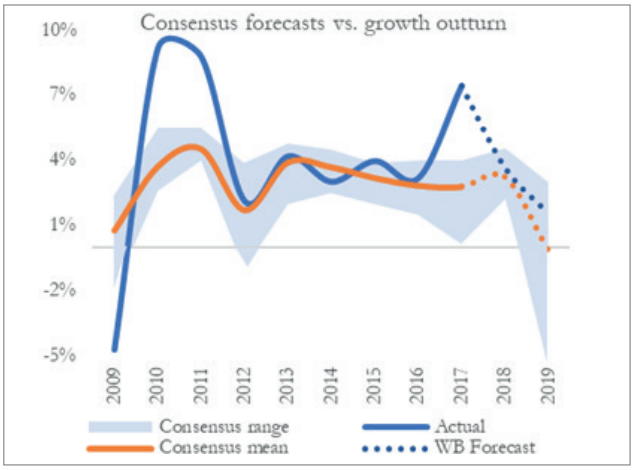
49. **Private domestic demand is projected to drop sharply in 2019, offset in part by public consumption and external demand**. Private consumption, which accounts for two thirds of GDP growth, will be weighed down by falling real wages and credit, and is projected to contract over 3 quarters starting in 2018 Q4. The outlook for private investment is severely negative linked to corporate stress and credit rationing. To prevent the economy tipping over into deeper recession, public consumption growth is projected to accelerate (see below), whilst a slowdown in growth will lead to a deceleration in revenue collections, a combination of which will yield a larger fiscal deficit. Net exports are projected to make a positive contribution to growth, driven by a sharp contraction in imports and continued growth in both goods and services exports.

Figure 80: Sharp slowdown in 2019



Sources: Haver Analytics, CBRT

Figure 81: Consensus forecast is negative for 2019



Sources: Haver Analytics, CBRT, WB Staff estimates

50. **Most analysts project a sharper correction for 2019; with a consensus mean of -0.1 percent, although forecasts range from 3 to -5 percent growth** (Figure 81).[31] While the investment projection for 2019 is in-line with the mean of consensus forecasts, a higher budget deficit is assumed and, partly arising from that, higher private consumption growth. Implemantation of NEP policy commitments will be important to avert more challenging economic conditions. The lack of progress on an orderly deleveraging in the private sector could precipitate this tipping point. In this alternative scenario, the economy is projected to go into a deep recession with economic contraction in 4 consecutive quarters, a sharp increase in the fiscal deficit, currency depreciation, and current account surplus.

Inflation and slower growth will substantially impact households

51. **The above outlook for the Turkish economy will impact households through various channels, including the effects of**: (i) price inflation on disposable incomes, particularly of poorer households; (ii) financial tightening on household debt; (iii) slower economic growth on employment and wages; and (iv) slower growth on poverty levels. The TEM tries to assess below the impact of each transmission channel, though in reality the net effect on households will be a combination of all these channels.[32] Nevertheless, even a partial assessment at this stage is important to understand the potential implications for countercyclical fiscal policy to support households.

52. **The impacts of high and rising inflation in Turkey varies across different types of households**. The poorest decile of households spends 36 percent of their budget on food (Table 2). This is almost double the share of the average household in the country. Therefore, food inflation, at close to 30 percent compared to a year ago, has a far greater negative incidence for the poor than the non-poor. In general, too, the poor consume a larger share of their income than the non-poor, i.e. they save much less, so inflation acts as a regressive tax and has a greater incidence for the poor.

53. **Simulations show that the poverty rate is very sensitive to such price increases, although the net effect may be offset by nominal wage or income growth**. To simulate the effects of inflation on poverty in Turkey, the value of the poverty line is inflated by the inflation rate and, using the latest household survey data on household per capita expenditure, different poverty indicators are calculated. The World Bank uses the Upper-Middle-Income Country (UMIC) poverty line to measure poverty in Turkey (320 TL per capita per month in 2017 prices), which leads to a baseline headcount poverty rate of 9.3 percent.

31 Consensus Economics Inc., November 2018.

32 Though each transmission channel has been looked at separately (partial equilibrium), in practice the net effect on households will be some combination of all these factors.

Table 2: Expenditure shares by decile of per capita expenditure distribution

	Overall	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
Food and non-alc. beverages	19.6	35.8	32.0	28.9	26.7	25.1	23.8	22.8	21.0	18.3	11.7
Alcoholic beverages and tobacco	4.4	6.1	6.9	6.8	6.7	6.0	5.9	5.4	4.6	4.0	2.6
Clothing and footwear	5.2	5.4	5.2	5.0	4.9	4.9	4.9	5.1	5.4	5.7	5.0
Housing and Utilities	25.3	29.0	28.5	29.8	29.2	29.9	28.1	27.4	25.5	25.2	21.1
Furnish, hh equipment, hh maint.	6.2	4.0	4.9	5.3	5.7	5.7	5.9	6.2	6.6	6.5	6.7
Health	2.0	1.5	1.7	1.6	1.5	1.6	1.5	1.8	2.0	2.1	2.3
Transport	17.9	6.6	7.8	8.3	9.6	11.0	12.9	14.3	16.0	17.8	27.0
Communications	3.7	2.7	3.1	3.0	3.9	3.9	4.1	4.2	4.0	4.0	3.3
Recreation and culture	2.8	1.1	1.2	1.5	1.6	1.7	2.2	2.0	2.6	3.1	4.0
Education	2.2	0.4	0.6	0.6	0.9	1.2	1.4	1.5	2.2	2.6	3.4
Hotels, cafes and restaurants	6.4	3.9	5.1	6.1	5.8	5.7	6.2	6.0	6.0	6.5	7.2
Miscellaneous goods and services	4.2	3.4	3.1	3.0	3.5	3.2	3.2	3.4	3.9	4.2	5.6

Source: World Bank Staff estimates using Household Budget Survey 2016

54. **A simulation of possible impacts of inflation shows that there would be severe effects on poverty in Turkey of this sharp increase in prices** (Table 3). A price increase of 24.52 percent (as of September 2018)[33], without any compensating increase in incomes or any substitution effects, would increase the poverty headcount from 9.3 percent to 15.4 percent, and the number of people in poverty would increase by 5.1 million. But this simulation models inflation as a 'shock' to the poverty line while maintaining income and expenditure patterns constant. In practice, the impact will depend on changes in income and wages as well. If wages increase, the net effect on poverty will be less than this estimate. Conversely, if there are significant job losses, household incomes will fall and the net effect may be greater. Table 3 also presents smaller simulated price shocks to proxy for these net effects. Even the most moderate of these still show large poverty impacts.

55. **Household debt is low and well-insulated from external and monetary shocks in the short-term**. Household debt and net financial equity is not expected to be a significant stress factor for most households. Household debt has been declining in relative terms for the last five years (Figure 82). Household debt as a

Table 3: Simulated poverty impacts of inflation

Poverty Line (per capita per month) and simulated increases	Poverty headcount ratio *(%)*	Poverty gap *(%)*	Poverty severity	Number of Poor *(million)*
320 TL	9.3	2.5	0.9	7.6
320+5% = 336 TL	10.3	2.6	1	8.5
320+10% = 352 TL	11.5	3	1.2	9.5
320+15%= 368 TL	12.9	3.4	1.3	10.6
320+20%= 384 TL	14.1	3.8	1.5	11.6
320+24.52% =398 TL	15.4	4.2	1.7	12.7

Source: World Bank Staff estimates using Household Budget Survey 2016

33 The scenarios are prepared based on the latest available data in November 2018.

Figure 82: Household debt low and falling

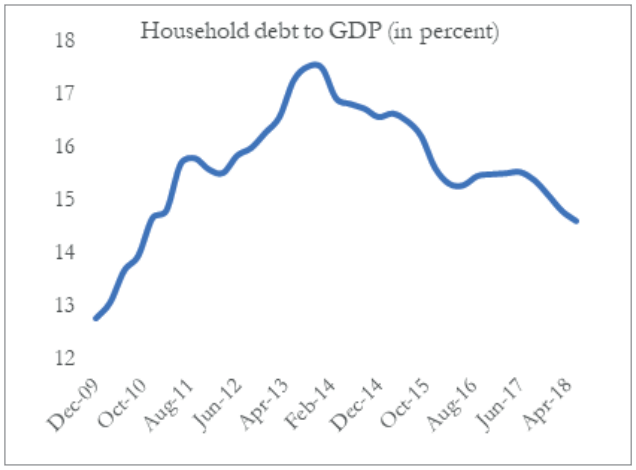
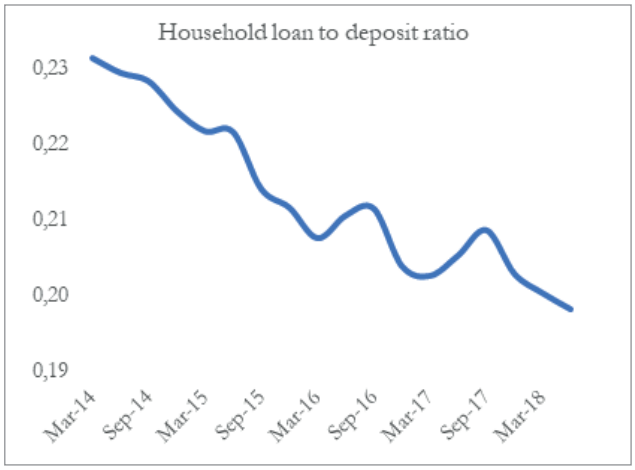


Figure 83: Household deposits rising faster than loans



Source: CBRT

proportion of GDP stands at 14 percent, while average household debt per capita is just over TRY 5,000. At the same time, household deposits in the domestic banking system have been rising relatively rapidly. Most household assets in Turkey (around two-thirds) are held in deposits. The loan-to-deposit ratio for the household sector is also low, and has fallen further, from 0.23 at the beginning of 2014 to 0.20 in 2018 to date (Figure 83).

56. **As noted earlier, there has been a broad-based decline in real wages with the construction sector being the worst hit**. Minimum wage adjustment in early 2019 and government employment support programs may help to stem the decline in real wages but overall the outlook suggests that both wages and employment will be depressed, and unemployment is expected to rise over the next three years based on estimated employment elasticities and sectoral growth forecasts (Figure 84). Under baseline assumptions, employment growth is expected to fall sharply in 2018 and remain at only around 1 percent in that year and each of the next two years, much lower than recent years' employment growth. Over this period, positive employment growth is almost entirely driven by the service sector, which is estimated to be more resilient over the next two years

Figure 84: Unemployment projected to rise

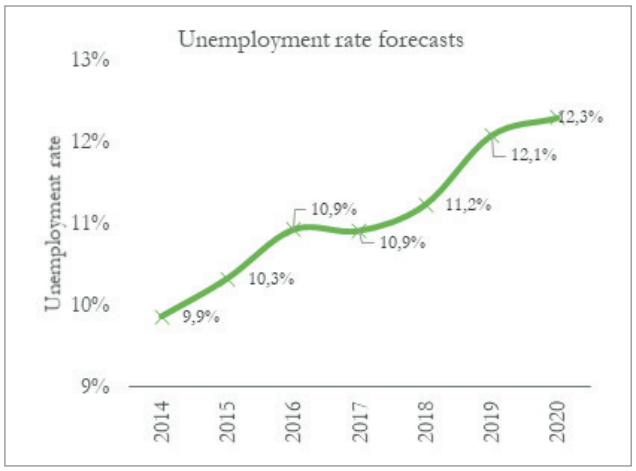
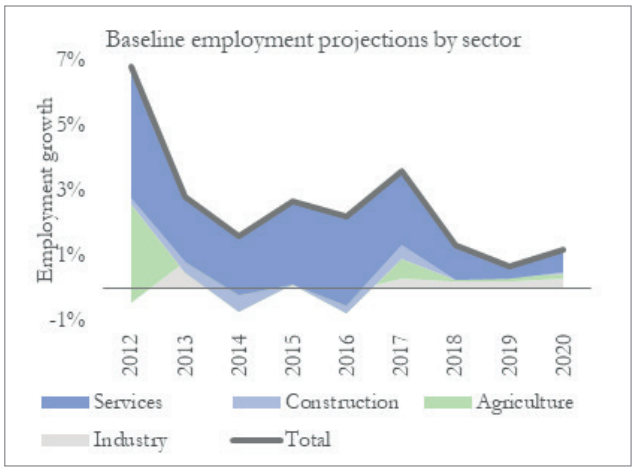
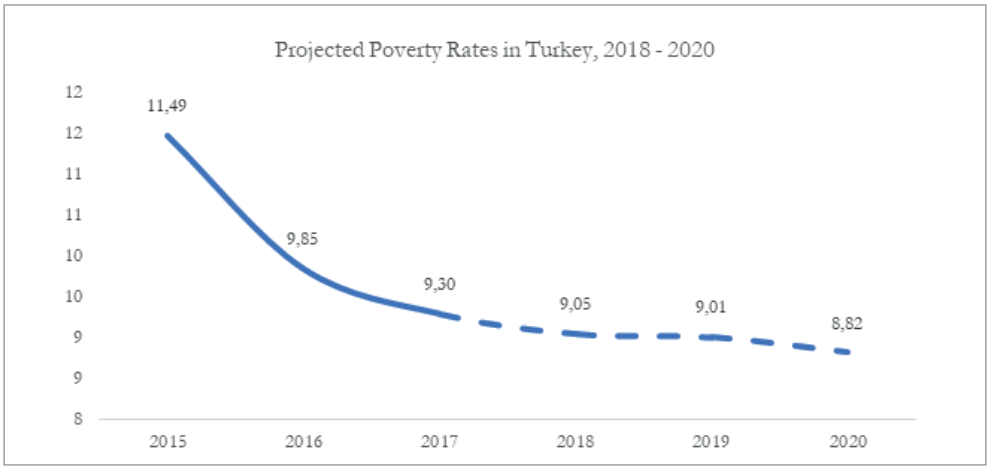


Figure 85: Most employment growth in services



Sources: TUIK and WB Staff estimates

Figure 86: Growth-led poverty reduction is expected to slow in the baseline



Sources: TUIK and WB Staff estimates

than agriculture and industry (Figure 85). Assuming a constant labor force participation rate, this would imply that the unemployment rate will grow steadily over the forecast period, reaching 12.3 percent by 2020.

57. **Poverty has been significantly reduced in Turkey in the last 15 years**. The poverty headcount rate has decreased from 36.5 percent in 2003 to as estimated 9.3 percent in 2017. This poverty-reduction progress has been largely driven by economic growth. With Turkey's economy now facing downside risks, slowing growth could have significant impacts on poverty. The elasticity of poverty with respect to GDP in Turkey is estimated to be -1.2. These forecasts are based on the effect on poverty of GDP growth only, and do not capture price effects and erosion of household purchasing power discussed in section one.

58. **Growth-led poverty reduction is expected to slow and there is a risk of higher poverty if downside risks materialize**. The projected trajectory of the poverty headcount ratio is shown in Figure 87. Poverty is expected to fall from 2017 to 2020 under central assumptions, but the rate of poverty reduction is much slower than in the recent past. It is also important to note that this is solely based on impacts of GDP on poverty and does not include price-induced welfare erosion. The next 3 months will be crucial to resolve some of these uncertainties and achieve a clearer picture in terms of poverty reduction for the near future.

A good foundation in the New Economic Program

59. **The authorities' New Economic Program released on September 20 sets out a Medium-Term Fiscal Policy Statement to restore internal and external macro balances**. It is the clearest statement on recent macro-financial challenges in Turkey and the government's proposed policy response. The NEP's headline growth projections are at the upper end of the range of forecasts, though also the most conservative ever presented in an NEP/Medium-Term Program. The NEP projects the largest and most sustained negative output gap for Turkey in at least ten years (Figure 87).

60. **That said, the demand side drivers of medium-term projections in the NEP assume that much of the adjustment to growth is likely to come from the public sector**. However, a bigger drop off in private consumption and investment than projected is highly likely (Figure 88). A sharper than projected slowdown in private demand would need to be offset by less ambitious fiscal consolidation projected in the NEP (see below). This may require frontloading of very targeted interventions to enable households to tide over difficult times, and assuming some contingent liabilities should there be a deeper shock to companies and banks.

Figure 87: NEP projects negative output gap over medium-term

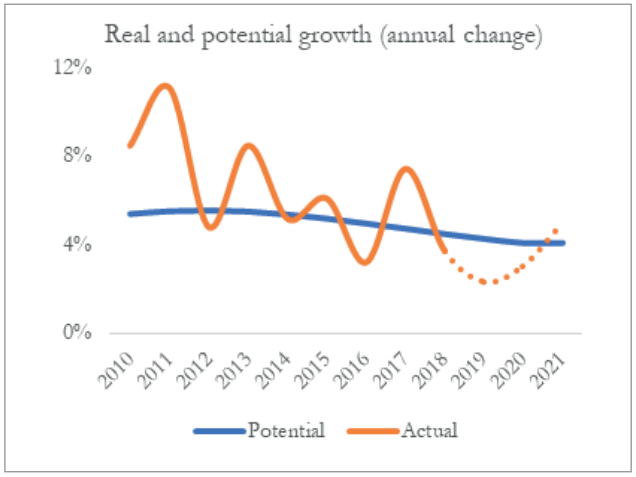
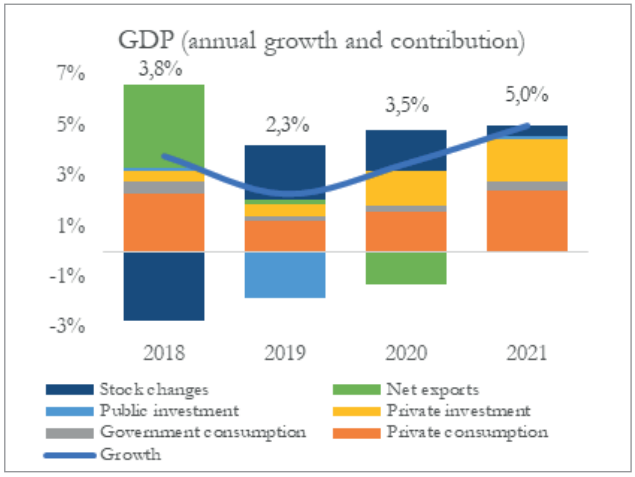


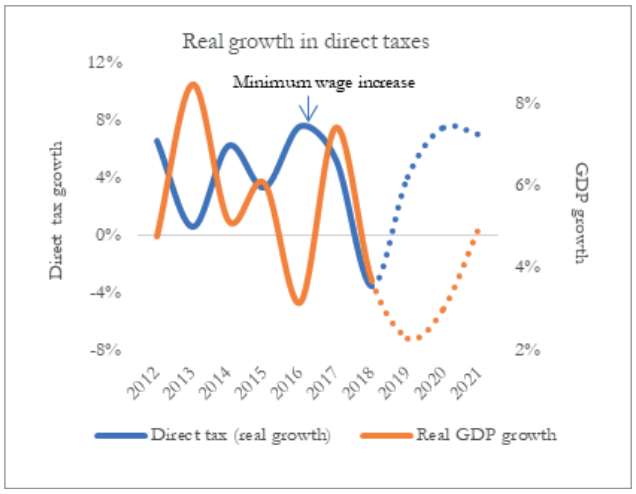
Figure 88: NEP assumes adjustment in public consumption and investment

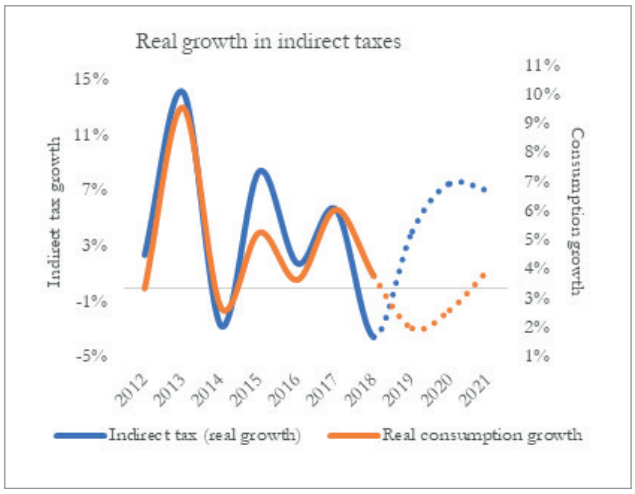


Sources: NEP, TURKSTAT, WB Staff estimates

61. **This is particularly important as a big challenge for policy makers in 2019 is the prospect of stagflation – a combination of high unemployment and high inflation**. Whilst inflation calls for fiscal tightening, rising unemployment and falling demand calls for countercyclical fiscal policy. The challenge is exacerbated by reduced revenue collection due to economic slowdown (2.2 percentage points of GDP projected decline on average in 2019-2021 relative to the 2011-2016 annual average) (Table 4). The decline in revenue could likely be even sharper when taking account of historical trends in revenue buoyancy (Figure 89). Though the NEP discusses potential revenue reforms, these may prove overly ambitious during a downturn.

Figure 89: Projected recovery in tax revenue is ambitious





Sources: NEP, Haver Analytics, WB Staff estimates

Table 4: NEP fiscal consolidation

	2011-2016	2017-2018	2019-2021
	Reference period (% of GDP)	Change from reference period (percentage points)	
Revenue	**33.7**	**-0.9**	**-2.2**
Tax	18.2	-0.7	-0.5
Non-Tax	1.8	-0.1	-0.4
Factor incomes	4.9	-0.3	-0.9
Social Funds	8.8	0.1	-0.4
Expenditure	**34.8**	**0.2**	**-1.4**
Recurrent	31.5	-0.2	-0.4
Primary expenditure	28.8	0.5	-0.7
Interest expenditure	2.7	-0.6	0.3
Capital expenditure	3.4	0.3	-1.1
Overall balance	**-1.1**	**-1.1**	**-0.8**
Primary balance	1.6	-1.7	-0.5
Recurrent balance	2.2	-0.7	-1.9
Memo items (annual change %)			
GDP growth	6.5	-0.9	-3.1
Inflation	8.3	8.1	2.3
Unemployment	10.4	0.7	1.2

Sources: NEP, WB Staff estimates - ***Note:*** General Government data

62. **The authorities have accordingly adopted a strong path for expenditure consolidation to set fiscal policy as an anchor for stabilization**. The biggest consolidation is in capital spending (-1.1 percentage points of GDP projected on average in 2019-2021 relative to 2011-2016 annual average). But the biggest driver is non-transfer related recurrent spending – namely items such as wages and salaries, goods and services. The projected changes in public transfers seem in line with the projected changes in unemployment. The NEP envisages growing transfers both in 2019 and 2020, in line with changes in unemployment. Though as noted above, projected unemployment is conservative, including given the projected drop in private demand.

63. **The marginal impact of transfers on growth could be relatively strong as we would assume a stronger fiscal multiplier than in 2017**. The estimated multiplier is between 0.9 and 1.3 assuming low trade openness, low public debt, high labor market rigidity, and most importantly a negative output gap. Nevertheless, higher unemployment would also require higher transfer expenditures and less consolidation.

Consistent and credible package of reforms to ensure orderly adjustment

64. **Building on the NEP, a consistent package of economic policies could ensure an orderly adjustment for the Turkish economy**. This would include tight monetary policy to close internal and external imbalances, complemented by a financial sector response that supports gradual deleveraging and enhances financial risk monitoring and management. Critical to supporting the deleveraging process is a strong corporate debt restructuring framework, the absence of which could spell the difference between an orderly adjustment for the economy and a hard landing. Fiscal adjustment will be necessary to help the economy tide over the difficult period ahead.

65. **Recent monetary tightening through interest rate hikes are helping to gradually restore price stability, exchange rate stability, and rebuilding external buffers and should be maintained while inflation expectations remain elevated**. Sustaining

the monetary policy framework rationalized in May 2018, including adoption of a central policy rate, is important for monetary policy transparency. Operational and policy independence of the Central Bank is essential for basing policy adjustments on strong economic judgement. This together with a credible inflation target supported by a transparent and predictable adjustment to policy rates, could help anchor inflation expectations. Premature loosening of monetary policy while inflation and inflation expectations are elevated could lead to an upward wage-price spiral.

66. **Credit to the private sector has started to adjust down very significantly**. Evidence from past financial crises that were preceded by credit booms, as in the case of Turkey, suggests that credit plays little role in supporting economic recovery after growth has bottomed out.[34] Therefore, efforts to curtail deleveraging (e.g. through credit guarantees, loosening macroprudential regulations) are likely to be counter-productive. The focus should be on analyzing the impact of current conditions (i.e. weak Lira, economic downturn, credit crunch) on banks' credit risk, liquidity, and capital. This would help target interventions, including potential resolution of problem banks.

67. **This analysis of the banking sector should provide details on the links between the financial system and corporate debt distress**. This would provide the basis for a corporate debt resolution framework. The Concordat system adopted earlier this year enables companies to negotiate debt restructuring through the courts with all creditors. The authorities are also exploring out of court options like the Istanbul Approach adopted in 2001, and there has been talk of setting up an Asset Management Company to (temporarily) absorb troubled assets. Whatever the mechanism, corporate debt resolution is central to an orderly adjustment; it can help provide much needed breathing space for both corporates and banks, without which there are heightened risks of corporate insolvency, rapid deterioration of banks' asset quality, debt overhang, and potential government bailout.

68. **These processes can help further enhance Turkey's already extensive macroprudential toolkit,[35] which has played an important role in containing risks in the financial sector, including those transmitted through volatile capital inflows**. Demand shocks in recent years, however, led to some loosening of macroprudential regulations in 2016. Though this contributed to countercyclical finance, the policy mix should now be revisited. Macroprudential instruments are central to the effectiveness of monetary policy targets.[36] Macroprudential measures should be focused on financial stability (countercyclical buffers, mitigating systemic risks, liquidity). This means unwinding short-term relaxation of macroprudential policies aimed at accelerating consumption or expanding sector investments.

69. **Credible tightening of monetary policy, with consistent financial sector and macro-prudential policies, will require careful adjustment to fiscal policy**. In the short-term, to ensure that tighter financing does not lead to a sudden stop, supply side subsidies (e.g. minimum wage support, tax relief) need to be withdrawn gradually (which is important too for longer-term productivity). There may also be scope to adjust other inefficient expenditure to ease pressures on the supply side of the economy; this requires deeper analysis of public expenditures as proposed in the New Economic Program 2019-2021.

70. **In general, fiscal policy will need to play an important countercyclical role, particularly through public transfers given the projected decline in demand and rise in unemployment.** Currently, Turkey's social assistance spending is at 1.5 percent of GDP, while the average OECD country spends almost twice as much. Turkey's social assistance programs perform relatively well in terms of targeting the poor and vulnerable households. In contrast, benefit levels as a share of household expenditure are significantly lower than peer countries and are not adjusted for inflation. As a result, even though targeting performs well, low adequacy yields a rather limited impact of social assistance on reducing poverty headcount and poverty gap.

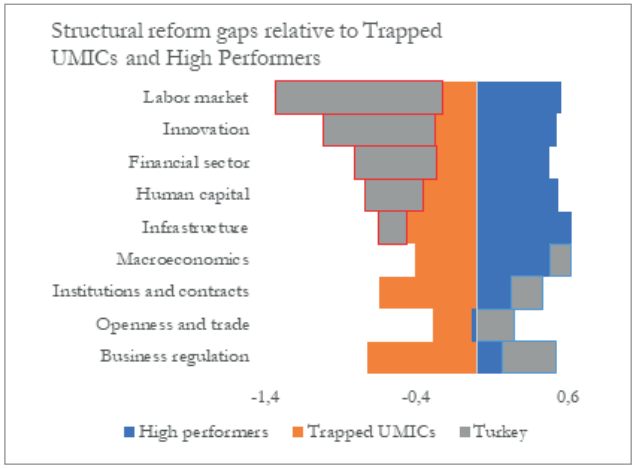
71. **The counter-cyclical response needs to be short-term, finite and targeted to soften the impact on the worst-affected**. The authorities have already committed to a loosening of unemployment support

34 Takats, E. and Upper, C (July 2013) "Credit and growth after financial crises," BIS Working Papers (No. 416).

35 Kara, H. (2016): "A brief assessment of Turkey's macroprudential policy approach: 2011-2015", Central Bank Review 16 (2016).

36 Chadwick, M.G. (2018): "Effectiveness of monetary and macroprudential shocks on consumer credit growth and volatility in Turkey," Central Bank Review.

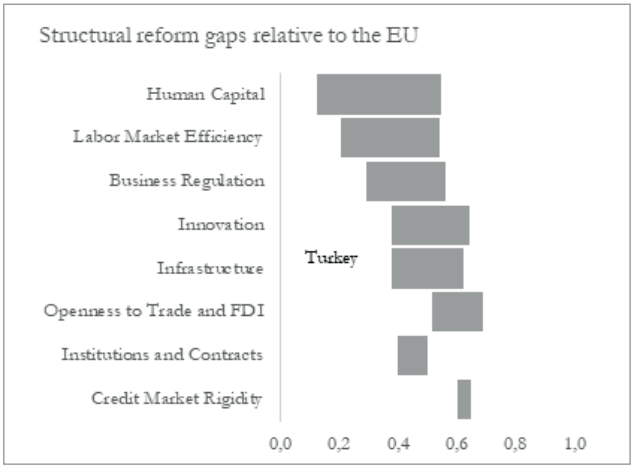
Figure 90: Turkey lags most on labor markets, innovation, financial sector, human capital



Sources: : Economic Freedom Index (2018), OECD Product Market Regulations (2013), World Bank Doing Business (2018), Global Competitiveness Index (2018)

Notes: Z scores derived for sub-indicators by survey, then grouped according to 8 categories (labor market, innovation, financial sector, human capital, infrastructure, institutions and contracts, openness and trade, business regulations). Results are averages of Z scores of sub-indicators under each category.

Figure 91: Gaps between Turkey and EU average greatest for human capital and labor market



Sources: : Economic Freedom Index (2018), OECD Product Market Regulations (2013), World Bank Doing Business (2018), Global Competitiveness Index (2018), Penn World Tables

Notes: Indexes and rankings across the above indicators were normalized for EU and Turkey between 0 (bottom EU performer) and 1 (top EU performer). The size of each bar shows the gap between Turkey and the EU average.

eligibility which is expected to substantially increase coverage of those made unemployed from formal employment. The expected uprating of the national minimum wage, broadly in line with consumer price inflation, early next year should also help to relieve hardship for working families. However, elevated levels of external and private sector debt, possible recapitalization needs of the banking sector and other contractual government commitments have the potential to rapidly erode fiscal space, so measures need to take these into account.

72. **In addition to short-term fiscal measures, it is also important to maintain momentum medium-term fiscal policy reforms, some of which are highlighted in the New Economic Program (2018-2021) that are critical to productivity in the economy**. These could include among other things:[37] (i) a rebalancing of tax burden from labor towards capital, including through property tax and rationalization of tax incentives, which can have positive impacts on domestic savings and labor formality; (ii) containing recurrent spending growth, and a slight rebalancing towards good quality public investments.

73. **The New Economic Program also highlights important structural reforms that are critical to productivity in the economy.** One way of prioritizing across the different areas is to look at Turkey's biggest competitiveness gaps relative to countries that transitioned quickly out of Upper Middle Income (UMIC) status (high performers), and others that have remained in the UMIC category for a more extended period (trapped MICs).[38] Based on this, Turkey's biggest competitiveness gaps relative to high performer comparators are in the areas of labor markets, innovation, financial sector, and human capital (Figure 90). Turkey even trails Trapped MICs in these policy

37 WB (May 20, 2014), "Turkey Public Finance Review: Time for a Fiscal Policy Pivot?".

38 "High performer" countries include a sample that recently graduated from Upper Middle Income to High Income in less than 20 years: Chile; Czech Republic; Korea, Rep; Poland. The other, referred to as "trapped MICs," includes countries that have remained in the Upper Middle Income category for more than 20 years: Argentina; Brazil; Malaysia; Mexico; and South Africa. The time series data on transition across income categories is based on World Bank data on per capita GNI and Felipe et. al (2012).

and institutional areas. Across all areas, high performer comparators do better than Turkey, with the slight exception of openness to trade where Turkey performs better. Relative to the EU average, Turkey trails most on human capital, labor market efficiency and business regulations (Figure 91). The financial sector indicator in the EU assessment measures the narrower dimension of credit market rigidity where the gap is not very significant.

74. **Clear communication of such a package of economic policies is central to avoiding a short-term challenge becoming a longer-term problem**. A predictable, credible and transparent policy framework is essential for market stability. This would provide a clearer indication of how the authorities plan to manage a soft landing. This means protecting the integrity of macroeconomic institutions and policy anchors, which Turkey has significantly strengthened over the past decade and a half.39 Key among those institutions and policy anchors are an independent Central Bank; monetary policy framework based on inflation targeting; strong bank supervision; transparency of public finances; a medium-term expenditure framework; and sound public debt management.

39 See IMF, "Structural Reforms and Macroeconomic Performance – Country Cases," (November 2015); and WBG, "Turkey's Transitions: Integration, Inclusion, Institutions," (December 2014).

Appendix: Corporate financial distress and the Altman Z-score

The Altman's Z-Score method was developed by Edward Altman to predict the financial failure of companies and is extensively used to measure the financial distress of corporates by employing several corporate income and balance sheet indicators (Altman, 1968). It is a multivariate formula used to measure the financial health of a corporate and the likelihood that it will enter bankruptcy in the next two years. Although the Z-score methodology was improved over time (Altman 1978, 2000) and Altman et. al (2014)), the original model (Altman 1968) is the one that has been most extensively used in the literature (Yilmaz and Colak, 2017). The original model was found to be approximately 80-90 percent accurate in predicting the financial stress for the US corporates.

The original Z-score formula is the weighted sum of five key financial ratios:

Z-score = $1.2X_1$ + $1.4X_2$ + $3.3X_3$ **+ $0.6X_4$ + $1.0X_5$**

X_1 = working capital / total assets **(liquidity indicator)**

X_2 = retained earnings / total assets **(profitability indicator)**

X_3 = earnings before interest and taxes / total assets **(operating efficiency indicator)**

X_4 = market value of equity / book value of total liabilities **(market indicator)**

X_5 = sales / total assets **(asset turnover)**

Z= Overall Index

The lower the score, the more likely the corporate is to declare bankruptcy. The coefficients and thresholds are determined based on listed corporate in New York Stock Exchange.

Threshold for Altman Z-score

Score	Zones
Z > 2.99	"Safe" Zone
1.81 < Z < 2.99	"Grey" Zone
Z < 1.81	"Distress" Zone

There are several studies applying the Z-score methodology for listed corporates in Turkey (Zeytinoglu and Akarim 2013, Muzir and Caglar 2009, Okay 2015). The predictive power of these models is found to be 80 percent or less. A recent research working paper by the Central Bank (Yilmaz and Colak, 2017) employs the original Altman Z-score model for listed corporates in Turkey and makes the performance testing of the Z-score with original coefficients and critical values. According to their findings, the Z-score performs well with accuracy of 70 percent when it comes to predicting financial stress in the coming period. Yilmaz and Colak (2017) argue that there is not a significant difference between the performance of the model estimated using the original Altman model coefficients and the performance of models using coefficients based on Turkish corporate data in previous studies. Based on this assessment, the TEM uses the original Altman model in assessing the financial stress of non-financial corporates listed in Turkey.

Annex 1: Medium-Term Outlook

Key Macroeconomic Indicators

	2015	2016	2017	2018	2019	2020
Population (mid-year, million)	78.2	79.3	80.3	81.3	82.4	83.4
GDP (current US$, billion)	861.9	862.7	851.5	771.8	746.9	746.0
GDP per capita (current US$)	11019	10883	10602	9488	9067	8945
Upper middle-income Poverty Rate (US$5.5 in 2011 PPP)	11.5	9.9	9.1	8.9	8.8	8.6
CPI (annual average, in percent)	7.7	7.8	11.1	16.3	19.0	11.0
Real Economy	TL Billion, unless otherwise indicated					
Real GDP	1527.7	1576.4	1693.7	1753.8	1781.2	1834.2
Private Consumption	930.7	964.8	1023.7	1054.8	1067.9	1096.7
Government Consumption	200.4	219.5	230.5	244.1	257.9	263.7
Gross Fixed Capital Formation	455.5	465.8	502.1	486.7	459.5	471.7
Net Exports	-14.2	-33.9	-31.9	24.2	52.0	58.2
Fiscal Accounts	TL Billion, unless otherwise indicated					
Total Revenues	799.2	904.3	1028.2	1219.4	1435.4	1653.6
Total Expenditures	801.5	940.5	1085.5	1334.3	1618.3	1801.2
General Government Balance	-2.3	-36.2	-57.3	-114.8	-182.8	-147.6
Government Debt Stock	646.5	738.5	877.9	1116.3	1432.9	1671.8
Primary Balance	52.6	16.6	3.0	-29.2	-56.4	26.6
Monetary Policy	TL Billion, unless otherwise indicated					
Broad Money (M3)	1232.3	1451.8	1686.4	-	-	-
Credit Growth (FX-adjusted, eop, y-o-y)	11.8	10.9	20.3	-	-	-
Average Funding Rate (annual average, in percent)	8.4	8.4	11.5	-	-	-
Gross Reserves (in US$ Billion)	110.5	106.1	107.6	-	-	-
o/w Gold Reserves	17.6	14.1	23.5	-	-	-
o/w Net Reserves	28.3	34.1	36.1	-	-	-
External Sector	US$ Billion, unless otherwise indicated					
Current Account balance	-32.1	-33.1	-47.4	-25.4	-21.8	-28.8
Trade Balance	-23.9	-25.6	-39.0	-17.5	-14.1	-21.5
Exports	152.0	150.1	166.2	176.9	186.4	193.0
Imports	200.1	191.1	225.1	218.4	220.5	228.9
Net Foreign Direct Investment	12.9	10.2	8.2	6.9	6.7	7.5

Sources: TURKSTAT, CBRT, Strategy and Budget Office, WB Staff Calculations

Annex 2: Medium-Term Outlook

Key Macroeconomic Indicators

	2015	2016	2017	2018	2019	2020
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	6.1	3.2	7.4	3.5	1.6	3.0
Private Consumption	5.4	3.7	6.1	3.0	1.2	2.7
Government Consumption	3.9	9.5	5.0	5.9	5.6	2.3
Gross Fixed Capital Formation	9.3	2.2	7.8	-3.1	-5.6	2.6
Exports	4.3	-1.9	11.9	7.8	8.0	6.0
Imports	1.7	3.7	10.3	-6.6	1.2	5.2
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
Total Revenues	34.2	34.7	33.1	32.6	32.2	32.6
Total Expenditures	34.3	36.1	34.9	35.6	36.3	35.5
General Government Balance	-0.1	-1.4	-1.8	-3.1	-4.1	-2.9
Government Debt Stock	27.6	28.3	28.3	29.8	32.1	33.0
Primary Balance	2.2	0.6	0.1	-0.8	-1.3	0.5
Monetary Policy	Percent of GDP, unless otherwise indicated					
CPI (annual average, in percent)	7.7	7.8	11.1	16.3	19.0	11.0
Broad Money (M3)	52.7	55.7	54.3	-	-	-
Gross Reserves	12.9	12.3	12.7	-	-	-
In months of merchandise imports c.i.f.	6.4	6.4	5.5	-	-	-
Percent of short-term external debt	104.9	104.6	91.4	-	-	-
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-3.7	-3.8	-5.6	-3.3	-2.9	-3.9
Trade Balance	-2.8	-3.0	-4.6	-2.3	-1.9	-2.9
Exports	17.7	17.4	19.5	22.9	25.0	25.9
Imports	23.3	22.1	26.4	28.3	29.5	30.7
Net Foreign Direct Investment	1.5	1.2	1.0	0.9	0.9	1.0

Sources: TURKSTAT, CBRT, Strategy and Budget Office, WB Staff Calculations

Annex 3: Gross Domestic Product

Gross Domestic Product: Production Approach

	2013	2014	2015	2016	2017
GDP (current, TL billion)	1809.7	2044.5	2338.6	2608.5	3106.5
Agriculture	121.7	134.7	161.4	161.3	189.0
Industry	355.3	410.8	462.0	511.8	639.8
Construction	145.9	165.7	190.6	223.4	266.0
Services	962.4	1097.0	1246.7	1402.4	1657.8
GDP (constant prices, TL billion)	1369.3	1440.1	1527.7	1576.4	1693.7
Agriculture	94.6	95.2	104.1	101.4	106.3
Industry	268.9	284.0	298.4	311.0	339.4
Construction	101.3	106.4	111.6	117.6	128.2
Services	743.4	790.4	834.8	861.2	926.6
Real GDP Growth (%)	8.5	5.2	6.1	3.2	7.4
Agriculture	2.3	0.6	9.4	-2.6	4.9
Industry	9.0	5.6	5.1	4.2	9.1
Construction	14.0	5.0	4.9	5.4	9.0
Services	7.7	6.3	5.6	3.2	7.6
GDP (constant prices, % share)					
Agriculture	6.9	6.6	6.8	6.4	6.3
Industry	19.6	19.7	19.5	19.7	20.0
Construction	7.4	7.4	7.3	7.5	7.6
Services	54.3	54.9	54.6	54.6	54.7

Sources: TURKSTAT, WB Staff Calculations

Annex 4: Gross Domestic Product

Gross Domestic Product: Expenditure Approach

	2013	2014	2015	2016	2017
GDP (current, TL billion)	1809.7	2044.5	2338.6	2608.5	3106.5
Private Consumption	1120.4	1242.2	1411.8	1560.5	1834.2
Government Consumption	255.6	288.1	324.6	387.0	450.5
Gross Fixed Capital Formation	516.2	590.7	694.8	764.7	931.9
o/w Construction	291.4	338.4	380.2	424.5	535.3
o/w Machinery and Equipment	182.3	206.4	263.1	283.9	327.0
Net Exports	-105.1	-79.4	-61.0	-75.3	-140.2
Change in Inventories	22.6	2.8	-31.5	-28.4	30.2
GDP (constant prices, TL billion)	1369.3	1440.1	1527.7	1576.4	1693.7
Private Consumption	857.2	882.8	930.7	964.8	1023.7
Government Consumption	187.0	192.8	200.4	219.5	230.5
Gross Fixed Capital Formation	396.6	416.8	455.5	465.8	502.1
o/w Construction	217.1	231.2	242.1	248.8	279.2
o/w Machinery and Equipment	148.2	153.9	182.4	184.5	186.0
Net Exports	-48.1	-22.3	-14.2	-33.9	-31.9
Change in Inventories	-23.4	-30.1	-44.7	-39.8	-30.7
Real GDP Growth (%)	8.5	5.2	6.1	3.2	7.4
Private Consumption	7.9	3.0	5.4	3.7	6.1
Government Consumption	8.0	3.1	3.9	9.5	5.0
Gross Fixed Capital Formation	13.8	5.1	9.3	2.2	7.8
o/w Construction	21.1	6.5	4.7	2.8	12.2
o/w Machinery and Equipment	8.1	3.9	18.5	1.2	0.8
Exports	1.1	8.2	4.3	-1.9	11.9
Imports	8.0	-0.4	1.7	3.7	10.3
Change in Inventories	-18.5	28.8	48.4	-11.0	-22.9
GDP (constant prices, % share)					
Private Consumption	62.6	61.3	60.9	61.2	60.4
Government Consumption	13.7	13.4	13.1	13.9	13.6
Gross Fixed Capital Formation	29.0	28.9	29.8	29.5	29.6
o/w Construction	15.9	16.1	15.8	15.8	16.5
o/w Machinery and Equipment	10.8	10.7	11.9	11.7	11.0
Exports	22.1	22.7	22.3	21.2	22.1
Imports	25.6	24.2	23.2	23.4	24.0
Change in Inventories	-1.7	-2.1	-2.9	-2.5	-1.8

Sources: TURKSTAT, WB Staff Calculations

Annex 5: Prices

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

	2013	2014	2015	2016	2017
CPI (All items)	7.4	8.2	8.8	8.5	11.9
CPI (Food and non-alc. Beverages)	9.7	12.7	10.9	5.7	13.8
CPI (Core C)	7.1	8.7	9.5	7.5	12.3
Alcoholic beverages, tobacco	10.5	7.7	5.7	31.6	2.9
Clothing and footwear	4.9	8.4	9.0	4.0	11.5
Housing & Energy	4.8	6.8	6.7	6.4	9.6
Furnishings	9.7	7.7	11.0	7.9	10.6
Health	4.8	8.6	7.2	9.7	11.9
Transport	9.8	2.1	6.4	12.4	18.2
Communication	1.2	1.6	3.6	3.2	1.4
Recreation and culture	5.2	5.7	11.6	5.9	8.4
Education	10.1	8.3	6.4	9.5	10.5
Restaurants and Hotels	9.9	14.0	13.2	8.6	11.5
Miscellaneous goods and services	2.2	9.7	11.0	11.1	12.8
PPI (All items)	7.0	6.4	5.7	9.9	15.5

Consumer and Producer Prices: Annual average, percentage change

	2013	2014	2015	2016	2017
CPI (All items)	7.5	8.9	7.7	7.8	11.1
CPI (Food and non-alc. Beverages)	9.1	12.6	11.1	5.8	12.7
CPI (Core C)	6.3	9.2	8.0	8.5	10.1
Alcoholic beverages, tobacco	15.2	4.1	4.5	18.1	15.4
Clothing and footwear	6.4	8.0	6.2	7.4	7.1
Housing & Energy	7.2	5.7	7.6	6.6	8.0
Furnishings	7.8	9.5	8.7	10.6	4.4
Health	2.7	8.4	7.3	9.6	12.4
Transport	6.8	9.8	1.5	7.4	16.8
Communication	5.1	1.0	3.1	2.8	2.7
Recreation and culture	2.5	7.3	9.0	7.1	9.8
Education	7.1	9.1	7.0	8.2	10.0
Restaurants and Hotels	9.3	13.3	13.5	10.2	10.3
Miscellaneous goods and services	4.9	7.2	10.1	11.3	12.3
PPI (All items)	4.5	10.2	5.3	4.3	15.8

Sources: TURKSTAT, WB Staff Calculations

Annex 6: Balance of Payments

Balance of Payments Statistics

	2013	2014	2015	2016	2017	2018-Sep
	US$ Billion, unless otherwise indicated					
Current Account	-63.6	-43.6	-32.1	-33.1	-47.4	-46.0
Trade Balance	-56.3	-36.9	-23.9	-25.6	-39.0	-35.5
Exports	161.8	168.9	152.0	150.2	166.2	172.7
Imports	241.7	232.5	200.1	191.1	225.1	231.6
Services Balance	23.6	26.7	24.2	15.3	19.9	23.4
Primary Income Balance	-8.6	-8.2	-9.7	-9.2	-11.1	-11.7
Secondary Income Balance	1.3	1.5	1.4	1.7	2.7	1.2
Capital Account	-0.1	-0.1	0.0	0.0	0.0	0.1
Financial Account	-63.0	-42.6	-22.4	-22.1	-46.7	-24.0
Direct Investment	-9.9	-6.1	-12.9	-10.2	-8.2	-7.6
Portfolio Investment	-24.0	-20.2	15.7	-6.3	-24.5	2.9
Other Investment	-38.7	-15.9	-13.3	-6.5	-5.8	5.3
Net Errors & Omissions	1.0	1.1	9.8	11.0	0.7	22.0
Reserve Assets	9.9	-0.5	-11.8	0.8	-8.2	-24.6
Overall Balance	9.9	-0.5	-11.8	0.8	-8.2	-24.6
memo item:						
Energy Balance	-49.2	-48.8	-33.3	-24.0	-32.9	-38.4
Gold Balance	-11.8	-3.9	4.0	1.8	-10.0	-10.3
	Percent of GDP, unless otherwise indicated					
Current Account	-6.7	-4.7	-3.7	-3.8	-5.6	-5.6
Trade Balance	-5.9	-4.0	-2.8	-3.0	-4.6	-4.3
Exports	17.0	18.1	17.6	17.4	19.5	21.0
Imports	25.4	24.9	23.2	22.1	26.4	28.1
Services Balance	2.5	2.9	2.8	1.8	2.3	2.8
Primary Income Balance	-0.9	-0.9	-1.1	-1.1	-1.3	-1.4
Secondary Income Balance	0.1	0.2	0.2	0.2	0.3	0.1
Capital Account	0.0	0.0	0.0	0.0	0.0	0.0
Financial Account	-6.6	-4.6	-2.6	-2.6	-5.5	-2.9
Direct Investment	-1.0	-0.7	-1.5	-1.2	-1.0	-0.9
Portfolio Investment	-2.5	-2.2	1.8	-0.7	-2.9	0.4
Other Investment	-4.1	-1.7	-1.5	-0.8	-0.7	0.6
Net Errors & Omissions	0.1	0.1	1.1	1.3	0.1	2.7
Reserve Assets	1.0	-0.1	-1.4	0.1	-1.0	-3.0
Overall Balance	1.0	-0.1	-1.4	0.1	-1.0	-3.0
memo item:						
Energy Balance	-5.2	-5.2	-3.9	-2.8	-3.9	-4.7
Gold Balance	-1.2	-0.4	0.5	0.2	-1.2	-1.3

Sources: TURKSTAT, WB Staff Calculations

Annex 7: Monetary Policy

Monetary Survey

	2013	2014	2015	2016	2017	2018-Sep
Total Assets (TL Billion)	1228.4	1394.3	1627.4	1894.4	2224.6	2735.1
Net Foreign Assets	-3.8	-41.5	-65.7	-42.4	-80.0	-96.3
Foreign Assets	364.6	385.8	443.6	561.8	631.2	1012.4
Monetary Authorities	283.5	299.4	326.7	380.3	417.1	525.5
Deposit Money Banks	75.2	80.3	107.3	167.4	201.2	459.5
Participation Banks	4.4	4.6	7.1	6.7	7.3	16.8
Investment & Development Banks	1.4	1.6	2.6	7.4	5.6	10.6
Foreign Liabilities	368.4	427.4	509.3	604.2	711.2	1108.7
Monetary Authorities	16.2	11.0	9.7	10.5	12.0	49.5
Deposit Money Banks	313.2	372.0	441.6	514.8	607.5	917.5
Participation Banks	17.8	18.4	20.0	22.2	22.4	30.7
Investment & Development Banks	21.3	26.1	38.0	56.7	69.3	111.1
Domestic Credits	1232.3	1435.8	1693.0	1936.8	2304.5	2831.4
Net Claims on Central Government	165.7	170.5	175.2	174.5	178.1	229.8
Claims on private sector	1023.2	1214.3	1456.3	1687.0	2025.9	2481.4
Total Liabilities	1228.4	1394.3	1627.4	1894.4	2224.6	2735.1
Money	165.9	185.5	217.1	270.1	297.4	322.2
Currency in Circulation	66.2	75.4	91.9	111.3	118.5	139.3
Demand Deposits	99.7	110.1	125.3	158.8	178.9	183.0
Quasi Money	826.3	923.5	1071.6	1245.5	1453.9	1837.9
Time and saving deposits	496.2	550.8	589.7	682.4	764.1	848.7
Residents' foreign exchange deposits	289.4	328.5	439.2	517.6	631.4	932.2
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)	236.2	285.3	338.6	378.9	473.3	575.0

Source: CBRT

Annex 8: Monetary Policy

Central Bank of Turkey Balance Sheet (TL Billion)

	2013	2014	2015	2016	2017	2018-Oct
CBRT Assets	265.9	281.9	293.2	345.4	396.2	430.4
Foreign Assets	283.5	299.4	326.7	381.0	436.8	487.3
Domestic Assets	4.6	5.3	-0.8	18.2	16.4	-3.3
Treasury Debt: Securities	8.9	9.2	9.0	13.9	14.5	13.8
Cash credits to Public Sector	8.9	9.1	8.9	13.8	14.4	13.7
Cash credits to Banking Sector	13.3	19.3	22.7	37.6	48.1	74.3
Credits to SDIF	0.0	0.0	0.0	0.0	0.0	0.0
Other Items	-17.6	-23.1	-32.4	-33.1	-46.1	-91.4
FX Revaluation Account	-22.2	-22.9	-32.7	-53.8	-57.0	-53.6
CBRT Liabilities	265.9	281.9	293.2	345.4	396.2	430.4
Total FX Liabilities	199.8	207.7	244.1	260.9	299.7	345.9
Foreign Liabilities	16.1	10.8	9.7	10.0	9.1	23.6
Domestic Liabilities	183.7	197.0	234.4	251.0	290.6	322.3
Central Bank Money	66.1	74.2	49.1	84.5	96.5	84.5
Reserve Money	91.2	107.2	122.3	168.0	174.1	203.2
Other Central Bank Money	-25.1	-33.1	-73.3	-83.5	-77.6	-118.7

Source: CBRT

Annex 9: Fiscal Operations

General Government Budget

	2013	2014	2015	2016	2017
	TL Billion, unless otherwise indicated				
Revenues	625.3	691.2	799.3	904.3	1028.2
Tax Revenues	334.4	361.9	418.7	470.4	549.8
o/w Indirect	231.1	243.7	285.7	315.1	367.2
o/w Direct	92.6	106.0	118.9	138.1	164.3
Non-Tax Revenues	29.5	38.9	42.8	46.3	47.8
Factor Incomes	90.8	99.4	112.7	129.6	144.8
Social Funds	158.0	178.9	212.9	248.4	280.7
Privatization Revenues	12.6	12.1	12.1	9.6	5.0
Expenditures	637.0	701.9	801.5	940.5	1085.5
Current Expenditures	281.6	314.6	357.6	426.5	480.1
Investment Expenditures	65.8	66.9	81.1	91.4	115.1
Transfer Expenditures	289.6	320.4	362.8	422.6	490.3
o/w Current Transfers	272.0	295.8	339.4	399.9	466.4
o/w Capital Transfers	17.6	24.6	23.4	22.7	23.9
Overall Balance	-11.7	-10.6	-2.3	-36.2	-57.3
Interest Expenditures	51.7	51.7	54.9	52.7	60.3
Government Debt Stock	567.9	588.2	646.5	738.5	877.9
Primary Balance	40.0	41.1	52.6	16.6	3.0
	Percent of GDP, unless otherwise indicated				
Revenues	33.9	33.8	34.2	34.3	32.9
Tax Revenues	18.5	17.7	17.9	18.0	17.7
o/w Indirect	12.8	11.9	12.2	12.1	11.8
o/w Direct	5.1	5.2	5.1	5.3	5.3
Non-Tax Revenues	1.6	1.9	1.8	1.8	1.5
Factor Incomes	5.0	4.9	4.8	5.0	4.7
Social Funds	8.7	8.8	9.1	9.5	9.0
Privatization Revenues	0.7	0.6	0.5	0.4	0.2
Expenditures	35.2	34.3	34.3	36.1	34.9
Current Expenditures	15.6	15.4	15.3	16.4	15.5
Investment Expenditures	3.6	3.3	3.5	3.5	3.7
Transfer Expenditures	16.0	15.7	15.5	16.2	15.8
o/w Current Transfers	15.0	14.5	14.5	15.3	15.0
o/w Capital Transfers	1.0	1.2	1.0	0.9	0.8
Overall Balance	-0.6	-0.5	-0.1	-1.4	-1.8
Interest Expenditures	2.9	2.5	2.3	2.0	1.9
Government Debt Stock	31.4	28.8	27.6	28.3	28.3
Primary Balance	2.2	2.0	2.2	0.6	0.1

Sources: Strategy and Budget Office, Treasury and Finance Ministry, WB Staff Calculations

Annex 10: Banking Sector Balance Sheet

Money and Banking Statistics of Financial Institutions

	2013	2014	2015	2016	2017	2018-Sep
Assets	Billion TL, unless otherwise indicated					
Total assets	1708.0	1972.4	2338.3	2732.6	3263.0	4234.3
Net foreign assets	-279.3	-342.1	-397.5	-433.2	-521.4	-643.7
Claims on nonresidents	81.2	86.7	117.3	182.2	214.9	488.4
Liabilities to nonresidents	360.4	428.8	514.8	615.4	736.3	1132.2
Claims on Central Bank	198.0	221.4	260.3	295.8	355.3	385.3
Currency	9.8	11.2	12.9	13.6	15.2	15.6
Reserve deposits and securities	188.2	210.2	247.3	282.2	339.7	369.7
Other claims	0.0	0.1	0.1	0.0	0.3	0.0
Net claims on central government	211.3	217.7	231.0	242.9	279.5	372.8
Claims on central government	249.0	261.6	287.8	307.1	353.8	450.9
Liabilities to central government	37.7	44.0	56.8	64.2	74.3	78.1
Claims on other sectors	1078.0	1276.9	1533.7	1790.7	2168.0	2696.2
Claims on other financial corporations	28.9	35.2	40.8	48.8	61.8	70.4
Claims on state & local governments	14.0	15.3	17.6	23.4	34.4	43.7
Claims on public nonfinancial corporations	0.9	0.9	3.7	3.8	5.5	8.2
Claims on private sector	1034.3	1225.5	1471.6	1714.7	2066.3	2573.9
Liabilities	Billion TL, unless otherwise indicated					
Liabilities to Central Bank	50.8	65.6	112.9	106.8	99.2	166.7
Transfer deposits included in broad money	173.3	194.3	230.4	282.3	343.9	430.0
Other deposits included in broad money	687.5	761.0	881.7	1028.7	1184.3	1473.8
Securities other than shares included in broad money	24.5	26.5	27.4	26.3	38.9	37.9
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	1.3	2.5	1.2	1.5	2.3	1.6
Loans	2.6	12.2	12.3	17.4	30.4	43.8
Financial derivatives	1.3	1.2	1.6	2.7	2.7	9.4
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0
Shares & other equity	194.0	237.5	269.0	308.3	366.2	418.5
Other items (Net)	72.8	73.1	91.1	122.2	213.5	228.7

Sources: CBRT, BRSA, IFS

Annex 11: Banking Sector Ratios

Selected Ratios for Banking Sector

	2013	2014	2015	2016	2017	2018-Sep
Liquidity Position	in percent, unless otherwise indicated					
Liquidity Requirement Ratio	146.5	144.3	143.5	135.6	144.5	140.3
Loan-to-Deposit Ratio	107.4	113.9	117.2	117.4	121.3	125.0
Capital Adequacy	in percent, unless otherwise indicated					
Core Capital Adequacy Ratio	-	14.0	13.3	13.2	14.1	14.3
Capital Adequacy Standard Ratio	15.3	16.3	15.6	15.6	16.9	18.1
Total Risk Weighted Assets (Net) / Total Risk Weighted Assets (Gross)	69.6	68.8	68.6	43.3	64.4	64.8
Regulatory Capital / Total Risk Weighted Assets	15.3	16.3	15.6	15.6	16.9	18.1
Profitability	in percent, unless otherwise indicated					
Profit (Loss) Before Tax / Average Total Assets	2.0	1.7	1.5	1.9	2.0	1.4
Net Income / Average Total Assets	1.6	1.3	1.2	1.5	1.6	1.1
Net Income / Average Shareholder's Equity	14.2	12.3	11.3	14.3	15.9	11.6
Net Interest (Profit) Revenues (Expenses) / Average Total Assets	3.7	3.5	3.5	3.7	3.8	2.9
Asset Quality	in percent, unless otherwise indicated					
Non-Performing Loans (Gross) / Total Cash Loans	2.7	2.8	3.1	3.2	2.9	3.2
Provision for Non-Performing Loans / Gross Non-Performing Loans	76.3	73.9	74.6	77.4	79.3	70.1
Credit Growth (FX-adjusted, eop, y-o-y)	29.6	15.4	11.7	10.8	20.1	6.5
Interest Rates (end-of-period)	in percent, unless otherwise indicated					
Weighted average of Central Bank Cost of Funding	6.8	8.5	8.8	8.3	12.5	24.0
Weighted average Interest Rate for Deposits	8.0	9.5	11.0	9.6	12.8	24.0
Consumer Loans Rate	12.6	13.1	16.4	14.7	17.7	37.0
Commercial Loans Rate	10.6	11.1	15.7	14.3	17.1	35.9

Sources: CBRT, BRSA, IMF

Annex 12: Doing Business Index (2019)

Doing Business Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Global Rank	93	49	43	33	119	82	53	15
Starting a business								
Rank	101	63	78	121	128	134	82	122
Procedures - Men (number)	7	5	7	5	11	7	6	9
Time - Men (days)	26	11	7	37	11	40	7	13
Cost - Men (% of income per capita)	22	5	10.6	11.8	5.3	0.2	4.9	11.6
Procedures - Women (number)	7	6	7	5	11	7	6	10
Time - Women (days)	27	11	7	37	11	40	7	14
Cost - Women (% of income per capita)	22	5	10.6	11.8	5.3	0.2	4.9	11.6
Minimum capital (% of income per capita)	3	6	0	10	0	0	40.1	0
Dealing with construction permits								
Rank	89	64	59	40	174	96	110	3
Procedures (number)	15	14	18	12	21	20	22	11
Time (days)	153	162	103	153	341	155	193	54
Cost (% of Warehouse value)	3	2	3.9	0.3	2.9	2	0.8	1.4
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	91	52	60	58	103	109	122	4
Procedures (number)	5	5	4	4	6	5	5	3
Time (days)	84	72	55	122	92	109	257	24
Cost (% of income per capita)	705	81	389.5	17.3	21	156.7	82.6	26
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)	22	19	22.4	1.3	3.7	44	2.1	0.7
System average interruption frequency index (SAIFI)	12	2	12.6	1.1	13.9	6.5	1.1	0.6
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	94	61	39	41	119	106	30	29
Procedures (number)	6	5	6	6	7	7	4	6
Time (days)	32	37	5	33	51.5	23	17.5	11.5
Cost (% of property value)	6	4	4	0.3	6.6	7.8	5	3.5
Quality of land administration index (0-30)	15	21	23	19	13.5	15	26	27.5
Reliability of infrastructure index (0-8)	4	6	8	7	5	5	8	7
Transparency of information index (0-6)	3	3	4	2.5	2.5	3.5	3.5	5.5
Geographic coverage index (0-8)	2	5	4	4	2	2	8	8
Land dispute resolution index (0-8)	5	6	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	73	32	32	85	73	32	32
Strength of legal rights index (0-12)	6	6	7	7	3	5	9	7
Depth of credit information index (0-8)	5	6	8	8	8	7	6	8
Credit registry coverage (% of adults)	22	22	77.7	0	45.7	0	0	63.3
Credit bureau coverage (% of adults)	34	57	0	98.1	100	67.3	91.2	86.6
Getting Credit total score	11	12	15	15	11	12	15	15

Protecting minority investors

Rank	91	64	26	57	57	23	110	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	6	8
Extent of shareholder rights index (0-10)	6	6	8	6	8	8	6	8
Extent of ownership and control index (0-10)	4	5	7	5	7	7	5	6
Extent of corporate transparency index (0-10)	6	7	8	8	7	5	7	8
Extent of shareholder governance index (0-10)	5	6	7.7	6.3	7.3	6.7	6	7.3
Strength of minority investor protection index (0-10)	6	6	7	6	6	7	5	8

Paying taxes

Rank	100	53	80	69	169	46	86	72
Payments (number per year)	21	14	10	7	9	7	11	8
Time (hours per year)	299	150	170	334	311.5	210	277	188
Total tax rate (% of profit)	39	38	40.9	40.7	106	29.1	40.3	39.2
Profit tax (% of profit)	17	14	18.1	14.5	3.9	21.8	9.1	21.8
Labor tax and contributions (% of profit)	16	19	20.3	25.2	29.3	4	29	16.4
Time to comply with corporate income tax audit (hours)	14	14	1.5	6	6	11	12	11.3
Time to complete a corporate income tax audit (weeks)	15	12	0	18.1	0	31.6	23	33.5
Post filing index (0-100)	56	74	50	77.4	47.9	60.3	63.9	52.7

Trading across borders

Rank	94	53	42	1	125	143	1	48
Trading across borders (score)	72	86	90.3	100	65.4	59.6	100	88.5
Time to export: Documentary compliance (score)	75	93	98.2	100	82.8	60.4	100	94.7
Time to import: Documentary compliance (score)	81	92	99.4	100	20.1	85.4	100	97.7
Time to export: Border compliance (score)	66	84	90.7	100	87.2	42.8	100	83.0
Time to import: Border compliance (score)	79	91	96.6	100	78.9	69.2	100	87.5
Cost to export: Documentary compliance (US$)	141	70	55	0	60	55	0	35
Cost to import: Documentary compliance (US$)	105	78	80	0	120	73	0	60
Cost to export: Border compliance (US$)	504	224	358	0	150	1257	0	213
Cost to import: Border compliance (US$)	470	278	46	0	1200	676	0	213

Enforcing contracts

Rank	86	61	19	53	107	115	22	33
Time (days)	624	629	609	685	995	600	605	425
Filing and service (days)	43	36	30	60	90	30	60	35
Trial and judgment (days)	399	450	450	480	540	490	365	270
Enforcement of judgment (days)	183	142	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)	6	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 processes index (score)	49	59	83.3	61.1	63.9	38.9	69.4	72.2
Quality of the judicial administration index (0-18)	9	11	15	11	11.5	7	12.5	13
Court structure and proceedings (0-5)	3	4	3.5	5	4.5	2	3	4
Case management (0-6)	2	3	5	1.5	4	2	4	4
Court automation (0-4)	1	2	4	1.5	1	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	99	50	109	25	104	66	65	41
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	11	14.5	15	16.5	18	14.5	10
Recovery rate (cents on the dollar)	34	59	14.7	60.8	21.5	34.5	44.2	81.3
Strength of insolvency framework index (0-16)	8	10	10.5	14	9.5	11.5	10	7.5
Commencement of proceedings index (0-3)	2	3	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

Sources: 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)	4.1	2.3	2.0	1.0	2.0	3.0	-	3.0
Lead time to import, median case (days)	3.7	2.7	2.0	1.0	4.0	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	2.7	3.5	3.3	3.4	2.8	3.7	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	3.7	3.8	3.5	4.0	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	3.4

Score, 1=low to 5=high

Sources: WB, Logistics Performance Index

Annex 14: Health Statistics (2016)

Health Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Life expectancy at birth, total (years)	75.3	80.4	75.8	77.5	76.6	62.8	75.6	75.3
Life expectancy at birth, male (years)	73.1	77.8	72.5	73.5	72.8	59.2	72.3	73.2
Life expectancy at birth, female (years)	77.6	83.1	79.0	81.6	80.3	66.4	79.0	77.7
Mortality rate, infant (per 1,000 live births)	12.0	4.5	10.9	4.0	9.9	34.2	4.4	7.1

Sources: WB, World Development Indicators

Annex 15: Education Statistics (2015)

Education Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Educational attainment, at least completed primary, population 25+ years, total (%) (cumulative)	-	-	88.3	98.9	-	82.4	99.6	-
Primary completion rate, total (% of relevant age group)	94.7	98.8	91.8	97.9	101.8	-	96.9	101.2
Educational attainment, at least Master's or equivalent, population 25+, total (%) (cumulative)	-	-	1.8	18.7	-	1.2	8.9	-
Educational attainment, Doctoral or equivalent, population 25+, total (%) (cumulative)	-	-	0.3	0.6	-	-	0.8	-
School enrollment, secondary (% net)	79.1	92.2	86.4	92.5	88.2	-	91.0	68.5
Educational attainment, at least completed upper secondary, population 25+, total (%) (cumulative)	-	-	37.1	83.5	-	64.6	75.1	-
Educational attainment, at least completed lower secondary, population 25+, total (%) (cumulative)	-	-	56.4	83.9	-	77.2	96.8	-
Adjusted net enrollment rate, primary (% of primary school age children)	95.7	97.2	94.2	96.5	99.7	-	95.7	98.1
School enrollment, primary (% net)	94.8	96.5	94.1	96.4	99.3	-	90.6	98.1

Sources: WB, World Development Indicators
**Scores for Poland and Argentina represent 2014 figures.*

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