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TURKEY ECONOMIC MONITOR

AUGUST 2020

ADJUSTING THE SAILS





TURKEY ECONOMIC MONITOR, AUGUST 2020: ADJUSTING THE SAILS

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

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 The TEM is based on data up to July 31, 2020.

EXECUTIVE SUMMARY

I. TAKING STOCK

Despite an initial surge in COVID-19 cases, cross country data suggests that Turkey contained relatively quickly the spread and worst health effects of the virus. As in other countries, however, continued vigilance is essential to sustain this fragile trend.

Turkey's pandemic response may offer some lessons, notwithstanding country specific conditions. Turkey implemented social distancing, mobility restrictions and health policies relatively quickly. This may have enabled more targeted measures compared to countries that reacted later, forcing them into more widespread lockdowns. Targeted measures in turn could have helped contain the spread of the virus, mortality rates, and perhaps even some of the decline in economic activity. Lessons from other countries suggest that health, social distancing and some mobility measures should be maintained to prevent the risks of a second wave.

The economic impact of the COVID-19 health crisis has understandably derailed a fragile economic recovery in Turkey. By the second half of 2019, the economy started to gradually recover from the shock of the mid-2018 economic turmoil. Inflation moderated and external balances narrowed. The situation turned quickly by March 2020 – the TEM takes stock of the economic impact of COVID-19 through five different channels.

First, a current account deficit in Turkey reappeared quickly in 2020 Q2 through contraction in trade and tourism. The collapse in global demand took a heavy toll on Turkey's merchandize trade. Trade through Global Value Chain trade was disproportionately affected. The current account, which declined from an annualized surplus of 1.1 percent of GDP in 2019 Q4 to 0.2 percent of GDP by 2020 Q1, deteriorated further to an estimated deficit of 1.6 percent in 2020 Q2. Though exports rebounded in June, the decline in tourism receipts and ongoing global mobility restrictions have maintained a wedge in the current account.

Second, a global flight to safety and a substantial drop in Turkey's foreign exchange reserves have raised external financing and market pressures. Capital flows in February-May turned negative. This put significant burden on foreign exchange reserves, which fell by 25 percent over this period to stem currency pressures and to finance the current account deficit. Market perceptions of risk and external premium on Turkey's sovereign debt has risen and remained high despite a decline between late May and late July.

Third, external pressures and containment measures combined into a sudden halt in domestic output in April-May. Manufacturing was affected significantly, including large, export-intensive industries. Services, which tend to be more resilient than manufacturing during economic shocks, were also not spared. All service sectors contracted in April except for ICT. Manufacturing showed some signs of a rebound in June – reflective of a base effect from nearly three months of closure – but services have remained relatively muted.

Fourth, real sector impacts have exacerbated labor market challenges that were already in motion prior to the pandemic. The COVID-19 shock has significantly aggravated declining trends in labor force participation and employment. Employment levels have declined by 2 million jobs compared to February 2020 whilst labor market participation has shrunk by 1.9 million workers over the same period. Declining labor force participation rates coupled with government measures have kept unemployment rates relatively stable at around 12-13 percent despite relatively large job losses. This reflects a significant deterioration in labor market conditions, including a fall in demand from employers and a rise in discouraged workers, including among the youth.

Fifth, firm survey analysis illustrates the severity of the impact across different types of enterprises. Among the worst affected include small and young firms; and enterprises in the accommodation, transport and storage, and education sectors. Economic support from the government helped to keep businesses afloat, which implemented

workhour and wage reductions. By June, when restrictions were lifted, two thirds of enterprises reopened their doors.

The authorities' economic policy response to COVID-19 was swift and comprehensive. Preliminary analysis seems to suggest that Turkey's short-term containment measures and economic support may have helped to balance the health and economic impacts of COVID-19. Turkey's economic policy package included various fiscal, monetary, and financial measures.

On fiscal policy, Turkey confronted COVID-19 with growing imbalances but with more fiscal space to respond than many peer countries. Automatic stabilizers played a role in the fiscal response. Discretionary policies provided added support to health, households and businesses. Fiscal imbalances have grown rapidly between March and May this year when the effects of the pandemic peaked, financed mostly through domestic borrowing. Monetary easing aided fiscal expansion. Overall, the authorities' fiscal response has been in line with targeted support rather than a general stimulus, which would have been less effective given depressed demand and supply conditions.

On monetary policy, Turkey loosened further to fight COVID-19 following a sustained period of already assertive policy rate cuts. Monetary easing and high inflation prior to COVID-19 – and growing external imbalances as a result of COVID-19 – suggest that Turkey had less space for further rate cuts going into the COVID-19 shock relative to peer countries. The need for CBRT to inject liquidity in the financial system was critical, but this has more recently started contributing to internal and external imbalances. Turkey's monetary response will require adjustment, as seems to be currently underway, given its inflation and external challenges.

On the financial sector, public banks have responded by accelerating credit to the economy. This has been driven by monetary easing but also relaxation of macroprudential regulations, expansion of forbearance measures, and extensions of credit guarantees. In 2020 Q2, public bank credit expanded by over TL 250 billion (US$ 36 billion) compared to TL 126 billion (US$ 18 billion) for private banks; over 49 percent of public bank lending in 2020 Q2 went to SMEs – TL 122 billion (US$ 18 billion) – compared to 22 percent for private banks (TL 27 billion, or US$ 4 billion). A large part of the expansion in credit has gone into previously underserved segments and some of the worse affected sectors of the economy.

Private banks, which have slightly higher NPLs compared to public banks, have been more cautious, despite having made good progress in deleveraging and cleaning up their balance sheets since the mid-2018 financial turmoil. Nevertheless, balance sheet pressures remain through currency risks, maturity mismatches, and declining asset quality. Adoption of forbearance measures make it more difficult to have an accurate picture of balance sheet risks.

II. LOOKING AHEAD

The global economy and Turkey will face a difficult 2020 followed by an uncertain rebound in 2021. The Turkish economy is projected to contract by 3.8 percent in 2020 in the baseline scenario. There is a large band of uncertainty around this forecast. But it is predicated on the assumption that the continued need for containment will be a drag on the pace of recovery in private consumption and services, which tend to rebound most quickly, whilst debt overhang will weigh on private investment and weak external demand weigh on exports.

Important sectors in the Turkish economy remain vulnerable to COVID-19 related economic strains. Some of the most vulnerable sectors such as wholesale and retail trade, transport and storage, and construction are large employers and contribute significantly to value addition. Some of these also have weak performing loans, potentially contributing to financial instability risks. Employment vulnerabilities display a similar pattern in terms of sector distribution. Sectors in which workers can adjust by working from home are not large employers or the most vulnerable.

A combination of these factors suggest that the COVID-19 shock will have seriously affected households' welfare in Turkey, particularly the poor and vulnerable. The shock to household incomes could increase Turkey's poverty rate from 10.4 to 14.4 percent, but the government's ongoing policy

response would likely decrease the poverty rate significantly from 14.4 percent to 11.8 percent.

Household characteristics of those pushed into poverty by COVID-19, such as household size, dependency ratio and education level of the main breadwinner tend to be more aligned with those of poor households rather than vulnerable or middle-income households. Around 10 percent of the main breadwinners among the new poor households have no school degree, while 72 percent of the main breadwinners have only primary education.

Three quarters of the new poor can be easily reached by the government since they are in the social protection system. Those households are in the social security system through formal employment or contributory transfers (i.e. retirement pension, contributory disability transfer, unemployment benefit and contributory widow transfer) and in the social assistance system since they currently receive social assistance transfers. Only around a quarter of the new poor are not in the social protection system of the government and it requires more effort to reach those households.

In this difficult real sector context, external imbalances for Turkey remain an important source of vulnerability. Though short-term external debt repayment obligations seem manageable, increasing current account imbalances, declining foreign exchange reserves, and currency pressures raise Turkey's overall external vulnerability. Gross international reserves (GIR) of the CBRT fell significantly but have recently been buttressed by the increase of a swap line with the Qatari Central Bank. CBRT's gross reserves rose above US$91 billion in May 2020. However, this remains well below the level of US$105 billion at the beginning of the year and well below the prudential levels.

A combination of all these factors have increased headwinds for medium-term growth. Many emerging and developing economies including Turkey were already experiencing weaker growth before this COVID-19 shock. In Turkey, prolonged stagnation in productivity has been accompanied by muted investment in the recent period. Thus, productivity growth did not contribute to potential output whilst the contribution of potential employment increased supported by a rise in participation rates, particularly female participation. Potential growth fell below 4 percent in 2019, the lowest rate in the last 15 years (Figure 144). Low labor force participation despite rising working age population and productivity stagnation point to a weaker outlook for potential growth compared to its historical performance.

Turkey like other countries will need to transition from policies focused on short-term economic relief to building resilience and accelerating recovery. One priority in this regard going forward is monetary discipline, essential to anchor economic expectations and restore investor confidence; the absence of this may fuel a vicious cycle of capital outflows, currency pressures, erosion of external buffers, price pressures and back around again. Turkey can on the other hand afford to maintain responsive and flexible fiscal policy to manage the difficult recovery ahead, ensuring that short-term responses are consistent with fiscal sustainability.

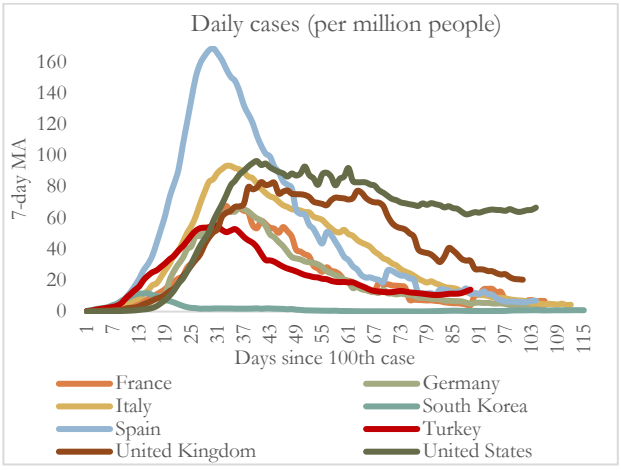
Another priority is to prevent this health induced economic shock to undermine financial stability While a swift policy response is welcome and necessary, over extension of forbearance measures may be pushing the authorities deep into uncharted territory, with possible unintended effects over financial stability. Easing financial conditions particularly through the first line of defense (i.e. liquidity and capital buffers created in good times to handle crises) and carefully exercising some regulatory forbearance were the keys while conditions remain difficult. However, prudence in regulatory and supervisory responses should prevail in order to avoid financial stress at a later stage that would amplify the current impact of the COVID shock.

Linked to this, Turkey's efforts to implement structural reforms and to increase productivity should gain traction. A key element to this is the deepening of its financial system and enhancing its resilience, including through greater access to long-term finance. Although the current nature of the credit impulse is countercyclical, its continuity could turn into a credit glut for the reasons noted above. Corporate financial debt had been declining prior to the COVID-19 shock, including FX debt. However, increased leverage as a result of the COVID-19 shock could deepen the credit glut,

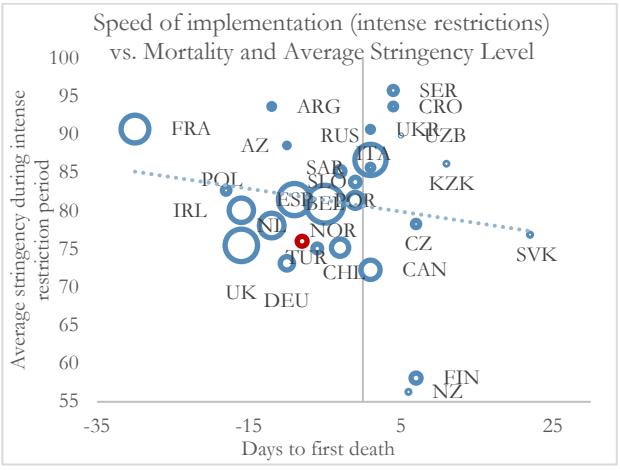
aggravated by reduced investment over an extended period, dragging down potential output. This should focus policy attention on the development of alternative finance and capital markets.

Finally, policy options for supporting jobs and welfare in Turkey will need to address both short- and long-term needs through an integrated approach. Key policy aims include the need to: (i) stem immediate pandemic transmission, enhance disease management and boost preparedness for ensuring access to therapy and treatment; (ii) enhance job creation, safeguard employment retention, wages and benefits and facilitate skills transition to new jobs for vulnerable workers; (iii) preserve human capital in terms of learning and enhance skills among children, young adults and vulnerable workers for changing economic realities; and (iv) compensate loss of household income.

Turkey seems to have contained the spread of the virus relatively quickly compared to other countries

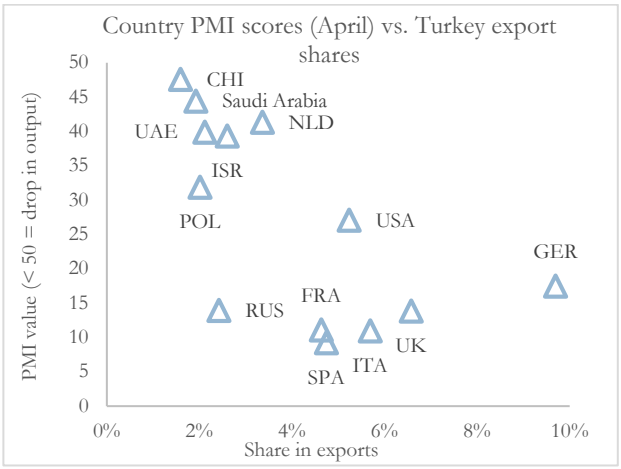


Cross-country data suggests relatively rapid and targeted response to the pandemic

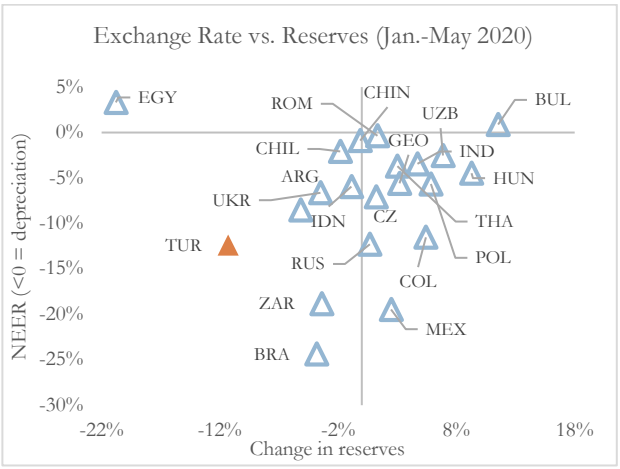


Sources: (Our World in Data, Oxford University, JHU CSSE)

But economy is hit by drop in external demand



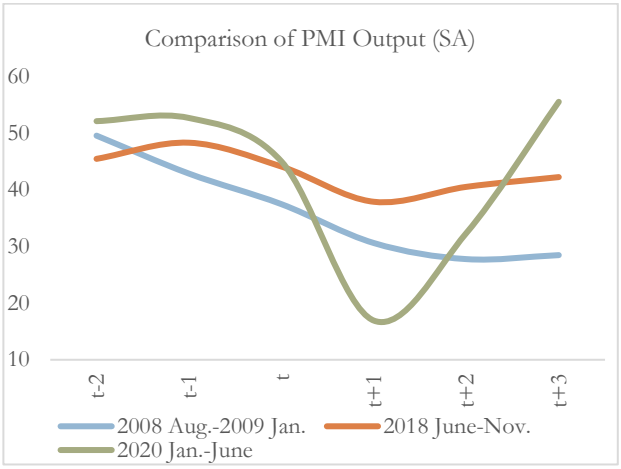
Contributing to rising external market pressures



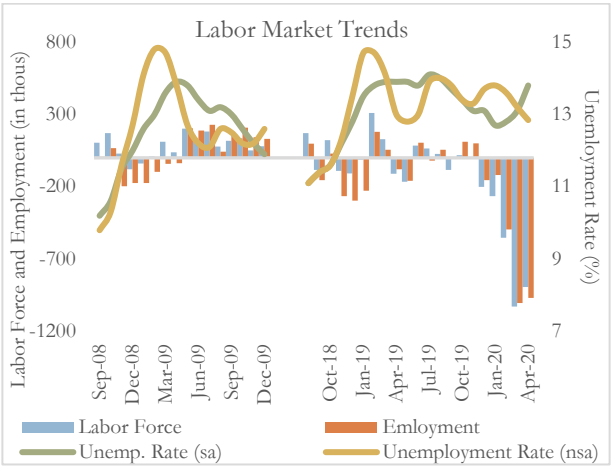
Sources: Haver Analytics, WB Staff estimates

Sources: Haver Analytics, WB Staff estimates

And a sudden halt in domestic output in April-May

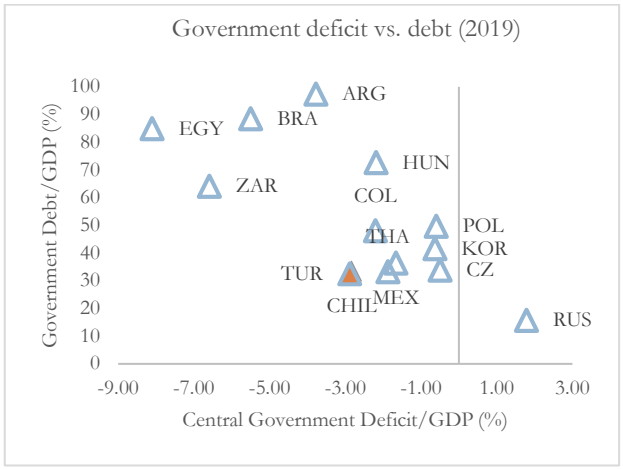


Exacerbating labor market challenges



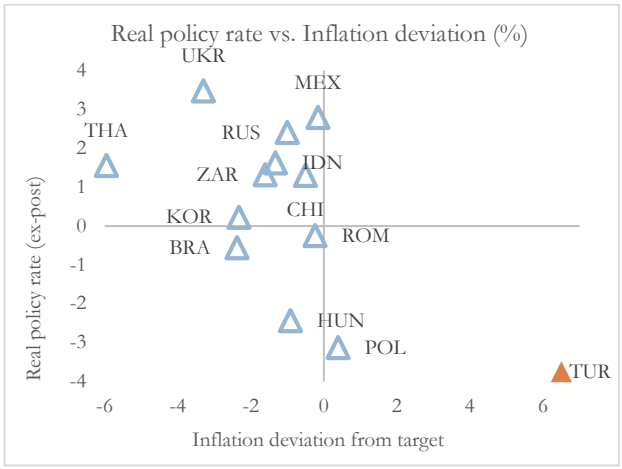
Sources: Haver, TURKSTAT, IHS Markit Econ, WB Staff estimates

Turkey using its fiscal ammunition to respond



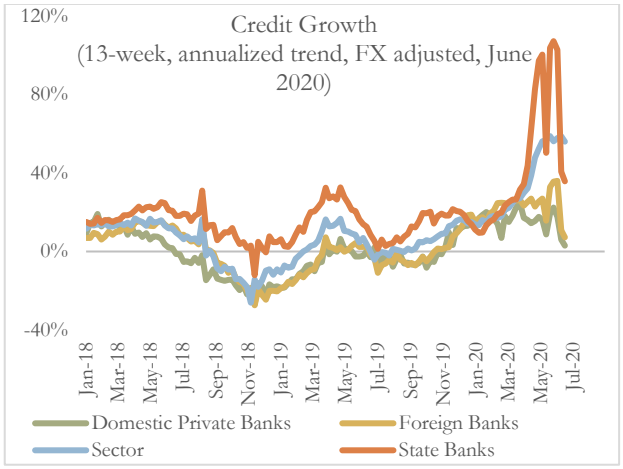
Sources: Haver Analytics, WB Staff estimates

Whilst monetary expansion reaching its limits



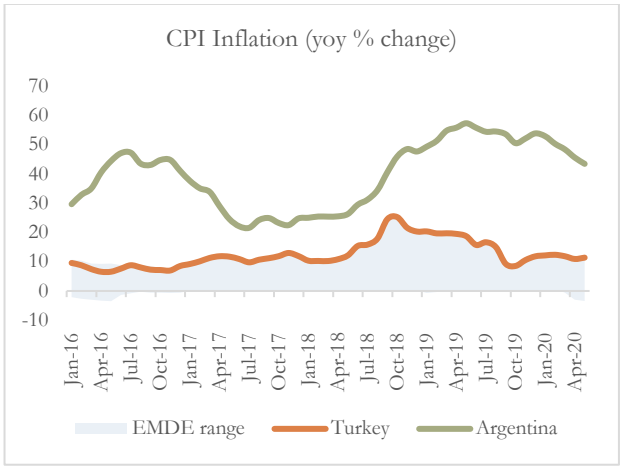
Sources: Haver Analytics, IMF WEO, WB Staff estimates

Credit impulse through public banks has been strong



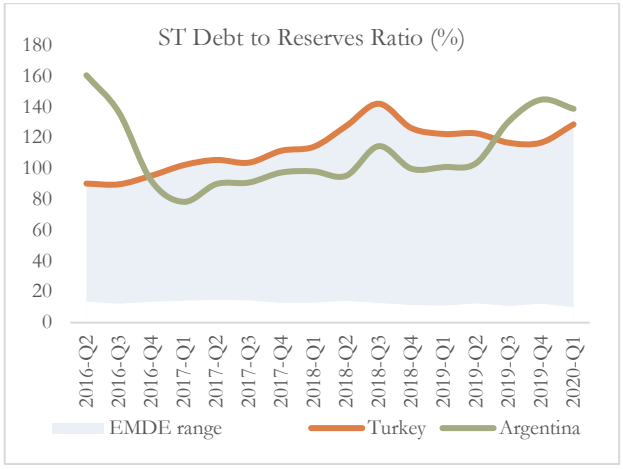
Sources: Haver Analytics, WB Staff estimates

Whilst inflation has remained relatively high



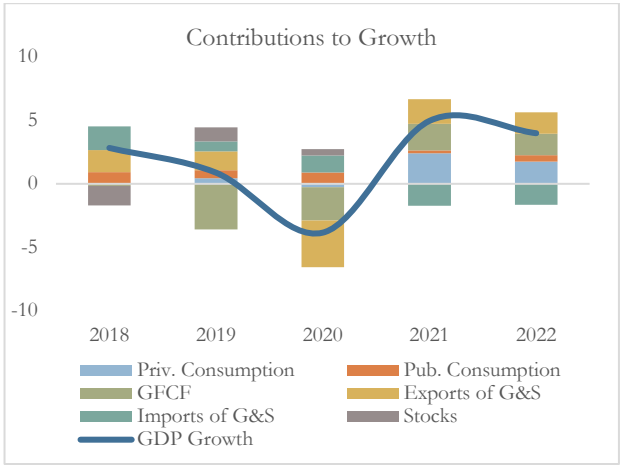
Sources: Haver Analytics, WB Staff estimates

As well as external vulnerabilities



Sources: Haver Analytics, WB Staff estimates

These factors may weigh on growth under already difficult conditions



Key Economic Indicators

	2017	2018	2019	2020	2021	2022
Population (mid-year, million)	80.3	81.4	82.6	83.4	84.4	85.4
GDP (current US$, billion)	852.6	789.0	753.7	660.9	684.5	726.1
GDP per capita (current US$)	10616	9693	9127	7924	8110	8502
CPI (annual average, in percent)	11.1	16.3	15.2	10.0	9.5	9.0
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	7.5	2.8	0.9	-3.8	5.0	4.0
Private Consumption	6.2	0.0	0.7	-0.5	3.9	2.9
Government Consumption	5.0	6.6	4.4	6.2	1.4	3.3
Gross Fixed Capital Formation	8.2	-0.6	-12.4	-10.5	9.0	7.0
Exports	12.0	7.8	6.4	-15.0	9.0	7.5
Imports	10.3	-7.8	-3.6	-6.5	8.6	8.0
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
General Government Balance	-1.8	-2.4	-3.0	-5.6	-3.2	-2.9
Government Debt Stock	28.2	30.4	32.8	38.8	39.1	38.1
Primary Balance	0.1	-0.3	-0.4	-2.6	0.3	0.3
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-4.8	-2.6	1.1	-3.2	-4.0	-4.7
Trade Balance	-3.8	-1.2	2.7	-1.5	-2.3	-3.3

I. TAKING STOCK

COVID-19 has been an unprecedented global health pandemic that has quickly turned into one of the deepest economic shocks of modern times. Available data suggests that Turkey was able to contain the spread and worst health effects of the virus but, as in other countries, continued vigilance is essential to sustain this fragile trend. The shock to global demand has had large negative impacts on trade and financial flows. These, combined with necessary containment measures, led to a sudden halt in Turkey's domestic demand and output over the course of April and May. Despite a short-term rebound in June, the effects on private consumption and services, which tend to be more resilient, are particularly deep. The authorities' policy response was swift. Targeted fiscal measures provided, and continue to provide, support for health, households and businesses. A large monetary response has injected liquidity to the financial system. There are signs of recovery in economic activity. But risks of sustained price pressures, renewed external imbalances, and eventual financial instability remain very real.

A. Turkey contains the spread and health effects of COVID-19

Virus spreads with Istanbul as the epicenter

1. **COVID-19 is an unprecedented health shock that has spread globally and in record time.** Several features to note include: (i) that it is a contagious virus that has infected around 13 million people (Figure 1) and caused nearly 600,000 deaths since it emerged in late 2019; (ii) the health effects can be debilitating in terms of fever, respiratory distress, and loss of speech and/or movement; (iii) the fatality rate (deaths per case) has globally averaged around 5.5 percent since June, declining from 7.2 percent in April (Figure 2);[1] (iv) those most vulnerable to COVID-19 risks include the elderly (65 years and over), and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease and cancer; (v) there is great heterogeneity across and within countries in ability to cope and respond to the crisis; (vi) there is yet no vaccine to protect people against COVID-19 though there is a global effort ongoing to develop one.

2. **Turkey experienced a rapid surge in COVID-19 cases though the spread seems to have been contained relatively rapidly.** The first case in Turkey was detected on March 11, rising to 213,000 by mid-July. The number of new cases accelerated to around 5,000 per day in mid-April, declining to just below 1,000 by mid-July (Figure 3). The largest number and incidence of cases has been concentrated in Istanbul (700 cases per 100,000 population, Figure 4), which declined sharply in June (from 76 active cases per 100,000 to 20 active cases, Figure 5). Over 5,000 people have passed away from COVID-19 in Turkey, 70 percent of whom were above 65 years and 22 percent between the ages of 50 and 64 (Figure 6).

3. **Health and demographic factors affect underlying COVID-19 health risks in Turkey.** These include a shift in the burden of disease from communicable to non-communicable diseases (NCDs). NCDs account for 89 percent of all deaths,[2] with underlying risk factors associated with the COVID-19 disease burden including relatively high rates of tobacco use (28 percent; nearly twice as high among males than females), high blood pressure (20 percent), diabetes (13 percent) and obesity (32 percent; nearly twice as high among females than males).

[1] World Health Organization.
[2] World Health Organization (2018). Turkey: World Health Organization Noncommunicable Diseases (NCD) Country Profiles, 2018. Geneva: World Health Organization. Most recent data.

Figure 1: Rapid spread in COVID-19 cases

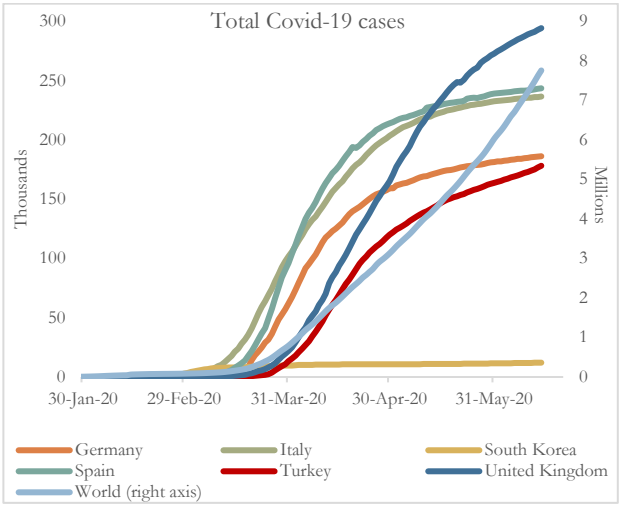


Figure 2: Fatality rate varies a lot across countries

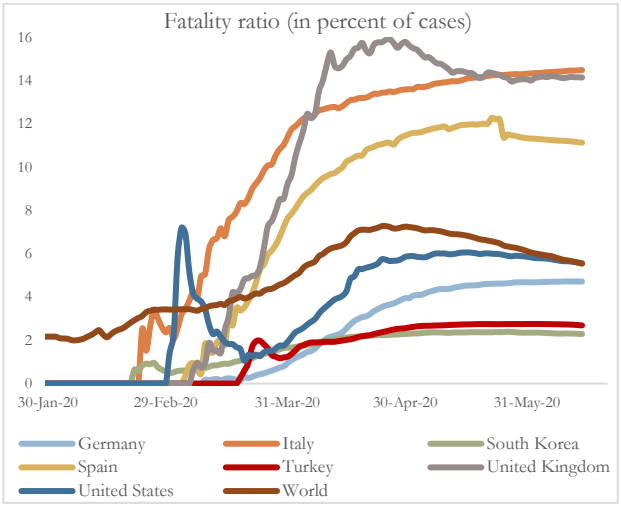


Figure 3: Turkey has quickly contained the spread

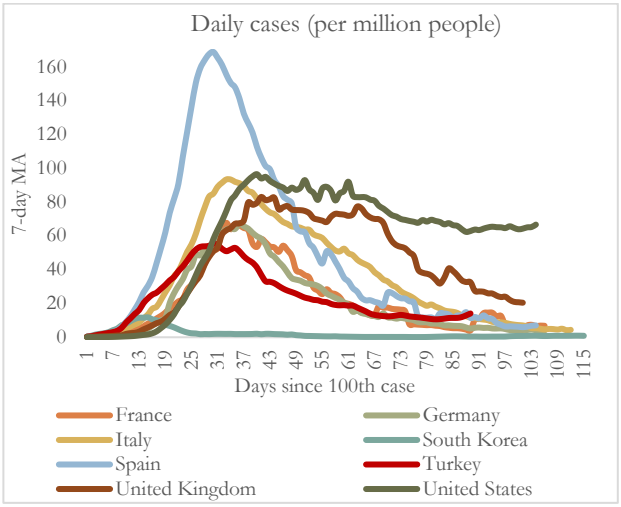


Figure 4: Cases have been concentrated in Istanbul

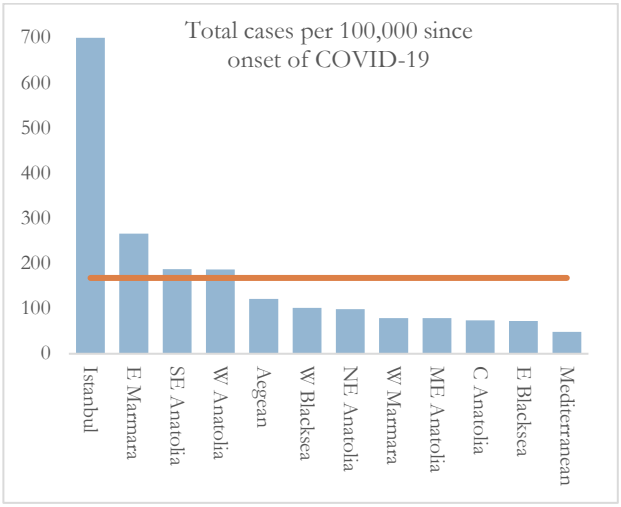


Figure 5: Though active cases have declined sharply

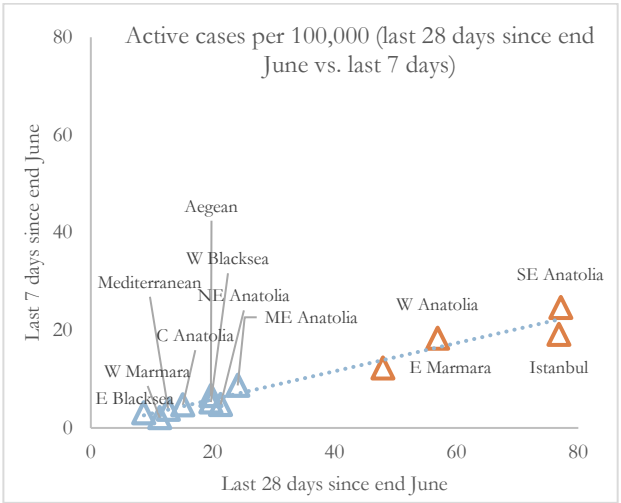
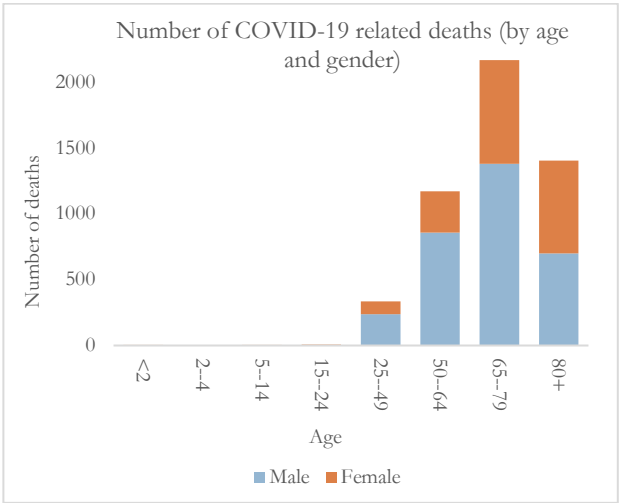


Figure 6: Most fatalities have fallen on the elderly



Sources: Figures 1-3 (Our World in Data, Oxford University, JHU CSSE); Figures 4-6 (Ministry of Health COVID-19 Situation Report).

Turkey contains COVID-19 but continued vigilance needed to sustain a fragile trend

4. **The authorities responded with measures to: (i) contain the virus; (ii) identify and treat those that are infected; (iii) provide economic support to impacted households and businesses.** The short-term priority was to contain the spread and protect lives through mobility restrictions, social distancing, and public health support (Box 1). The authorities had to avert large numbers of infections, which may have overwhelmed the health system. This may have increased the overall fiscal burden as the focus would have been on prevention rather than cure, which is costlier. The economic fallout would have likely been greater because of the wider negative impact on workers and employers. Containment measures necessarily slow down economic activity, which the authorities have tried offset through fiscal, monetary and financial support.

5. **Turkey's pandemic response seems to have been relatively rapid and targeted**. Mobility restrictions and social distancing measures were raised relatively soon after early infections were detected (Figure 7).[3] Early detection was possible thanks to an acceleration in testing and contact tracing (Box 1). This enabled more targeted measures (e.g. quarantines for selected geographic locations, curfews on weekends) compared to general lockdowns imposed by some countries that took longer to react (Figure 8).[4] This may partly explain why Turkey's stringency index accelerated quickly but did not reach go as high as some countries (Figure 7). It is also interesting to note that the mortality rate in countries that acted sooner has tended to be lower (Figure 8). This of course may be due to other country specific factors. But generally, the severity of the health impact can be lower by reducing the intensity of exposure to the virus.

6. **A targeted response may have helped to somewhat contain the decline in economic activity, which nevertheless was severe.** For example, in Turkey, despite the rapid initial decline in mobility, the overall impact was not as severe as in other countries (Figure 9).[5] As one would expect, countries that imposed more stringent measures saw a much sharper decline in mobility. Therefore, even with relatively less stringent containment measures and relatively higher mobility, the data seems to suggest that Turkey was able to flatten its pandemic curve relatively more quickly (Figure 10, 11).

7. **Though the above trends are not conclusive across countries, they may offer important lessons for protecting lives and livelihoods for Turkey and others**.[6] It cannot be concluded that all countries that reacted quickly were able to adopt more targeted measures and thereby were able to contain the health and economic impacts of the crisis. There are many country specific factors that could explain why for example it was possible to restrict mobility without imposing stringent rules; this could include adaptation based on prior experience with pandemics, or self-discipline and social norms inherent in local cultures. Secondly, smaller countries or countries with unitary governments may have been able to ensure compliance with restrictions more easily. Thirdly, there are important demographic factors that influence the severity of the health impact, independent of speed of response (Figure 12). In general, however, careful targeting of restrictions is important.

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[3] Government stringency index is calculated with the information on school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls. The index ranges from 0 (less stringent) to 100 (most stringent) and is calculated by a team at the Blavatnik School of Government (Oxford University). The index is based on policy decisions taken by governments in response to the COVID-19 pandemic.

[4] Figure 8 plots the relationship between the mean stringency of government response during the full lockdown (vertical axis) and the speed of implementation of the full lockdown (horizontal axis). The mean value of the stringency index covers the period when most stringent measures were in place. The speed of implementation of the full lockdown is calculated as the number of days to the first reported death by COVID-19 on the implementation date. A negative value indicates that the full lockdown was implemented after the first death was reported, a positive value indicates that the lockdown was implemented before the first death was reported. In these charts, the size of the bubbles is proportional to the mortality rate per million inhabitants as of June 15, 2020.

[5] Mobility index represents the time spent in residential places (percentage change from baseline) – the median value for the corresponding day of the week during the 5-week period Jan 3-Feb 6, 2020. Data from Google's Community Mobility Reports.

[6] See following papers for cross-country and Turkey analysis: (i) Demirguc-Kunt, Asli; Lokshin, Michael M.; Torre, Ivan. 2020. The Sooner, the Better: The Early Economic Impact of Non-Pharmaceutical Interventions during the COVID-19 Pandemic (English). Policy Research working paper; no. WPS 9257; COVID-19 (Coronavirus). Washington, D.C.: World Bank Group (ii) Cakmakli, C; Demiralp, S; Kalemli Ozcan, S; Yesiltas, S; Yildirim, M.A. (April 2020), "COVID-19 and Emerging Markets: The Case of Turkey," Koc University-TUSIAD Economic Research Forum WP 2011.

Figure 7: Turkey's response was early and targeted

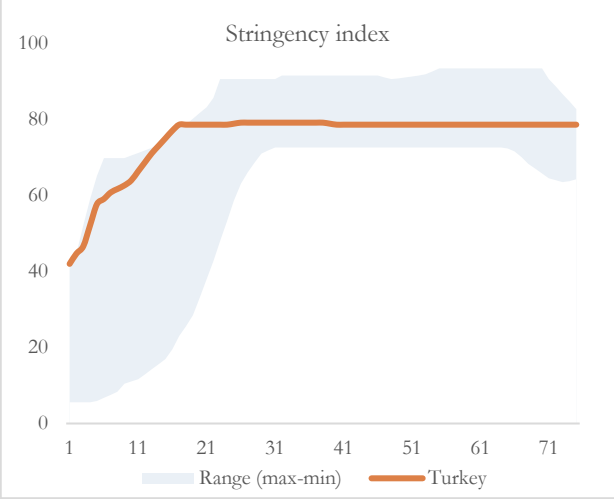


Figure 8: This helped contain negative health impacts

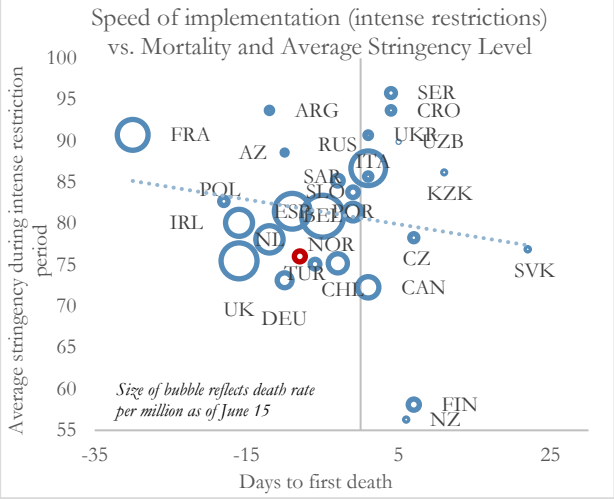


Figure 9: And contained the decline in mobility

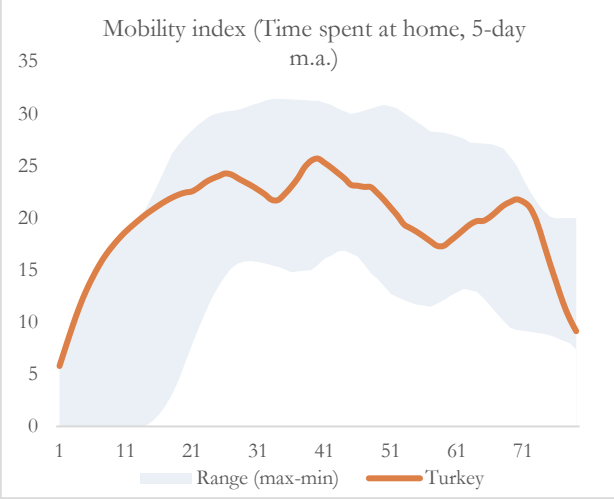


Figure 10: Which may have reduced the drop in activity

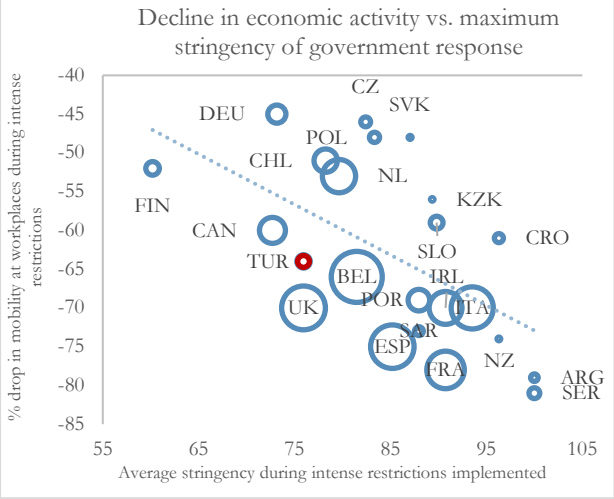


Figure 11: At the same Turkey flattens the curve sooner

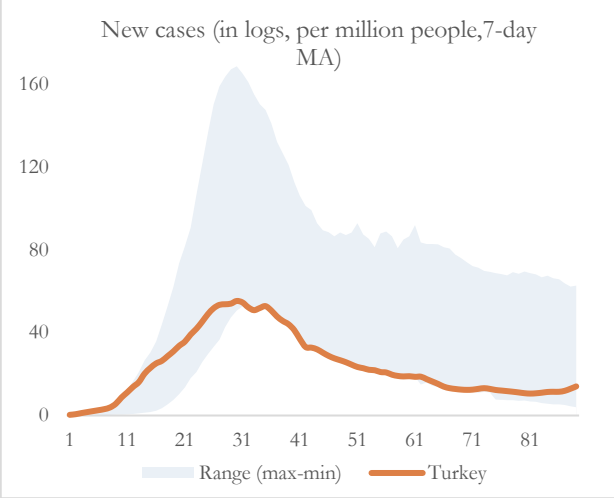
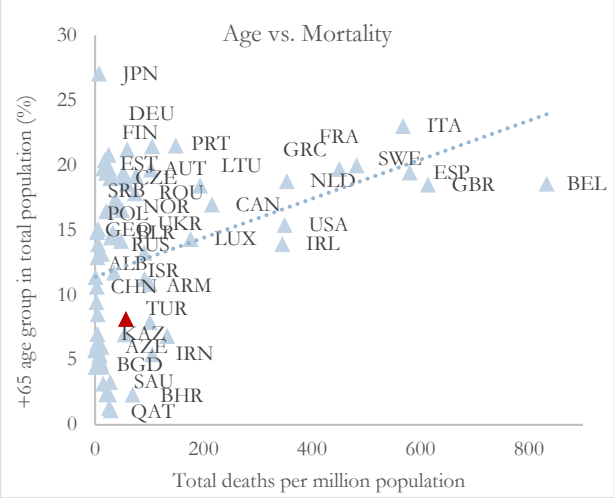


Figure 12: But there may be many factors to consider



Sources: Our World in Data, Oxford University, JHU CSSE, Google.
Notes: Countries in figures 7, 9, 11 include France, Germany, Italy, Spain, Turkey, UK, USA.

Box 1: Turkey's containment and public health response to COVID-19

Mobility restrictions: The authorities initially restricted flights from several Asian countries in late-February and cancelled all bilateral flights later in March. Border checks were increased, and some of the land borders, such as with Iran, were completely closed. Citizens could not travel by road between provinces (Figure 13, 14).

Social distancing: Schools, non-essential business activities (restaurants, bars and small businesses) and some public services were closed. Cultural events and congresses were cancelled, public gatherings were banned. The authorities announced self-quarantine requirement for travelers. Visits to nursery houses and prisons were limited (Figure 15).

Turkey adopted a selective approach and did not impose a wide-scale shutdown. The targeted restrictions (stricter mobility restrictions on those younger than 20 years and older than 65; weekend curfews) combined with selective broad measures (notably a shutdown of social and hospitality venues, mandating masks in public indoor and outdoor places with the possibility of fines) appears to have slowed transmission, aided by a relatively young population.

Health capacity and measures: Turkey has made significant strides in recent years to expand health care coverage, which provided some buffer in mitigating the immediate impact of COVID-19. There are challenges in terms health care coverage when compared to more developed economies. The number of physicians and nurses per capita, for example, is nearly 30 to 60 percent less than the average for the Europe and Central Asia (ECA) region and that of the OECD as of 2015,[7] despite recent increases in nurse ratios. Turkey has 536 persons per physician, with a total of over 153 thousand physicians nationwide.[8] It ranks as the 31st out of 38 selected OECD and non-OECD countries in terms of bed capacity per 1000 people in the hospitals as of 2018 (Figure 16).

Since the onset of COVID-19, the authorities rapidly ramped up health measures to detect and treat patients, whilst containing the pressure on the health system. The government immediately issued hygiene guidance and recommended physical distancing right after the emergence of pandemic. Currently, Turkey has 114 authorized diagnostic laboratories (in 64 out of 80 provinces), 17,000 ventilators and 25,000 adult ICU beds.[9] Turkey has also deployed an additional 32,000 health care personnel throughout the country.[10] The authorities have also provided periodic home health and social services to old people, all hospitals were declared to serve as pandemic hospitals with no charge to COVID -19 patients. Furthermore, import taxes on masks and ventilators were removed, new pandemic hospitals were built, and free masks were provided to elderly people (Figure 17).

During the pandemic period, Turkey increased its testing capacity from daily 33,000 in April on average to 44,000 in the first half of June (Figure 18). A combination of these measures has helped contain health effects, enabled Turkey to detect new cases earlier,[11] and kept the fatality ratio at 2.7 percent, below the global average and some advanced countries.

[7] World Bank World Development Indicators (WDI).
[8] TURKSTAT, 2018. Most recent data.
[9] According to World Bank, 2020. Project Appraisal Document. Turkey Emergency COVID-19 Health Project.
[10] World Bank, 2020. Project Appraisal Document. Turkey Emergency COVID-19 Health Project.
[11] https://www.vox.com/videos/2020/4/28/21238769/coronavirus-covid19-chart-data-misleading

Figure 13: Rapid pandemic response

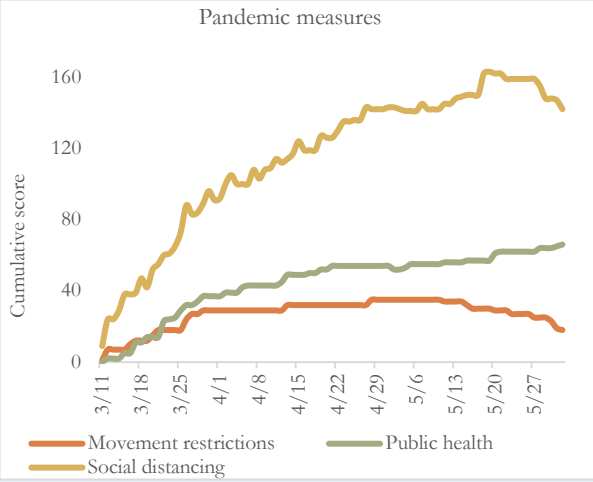


Figure 14: Targeted internal mobility restrictions

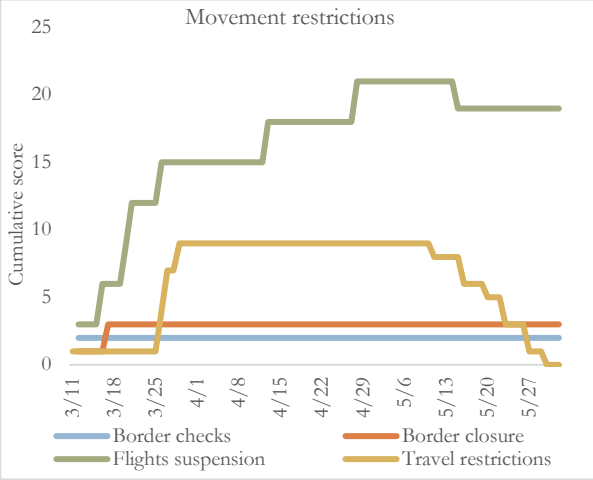


Figure 15: And widespread social distancing

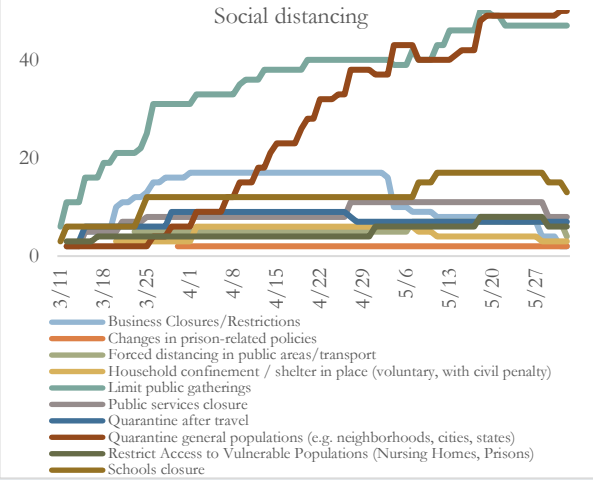


Figure 16: Health capacity grown with some lags

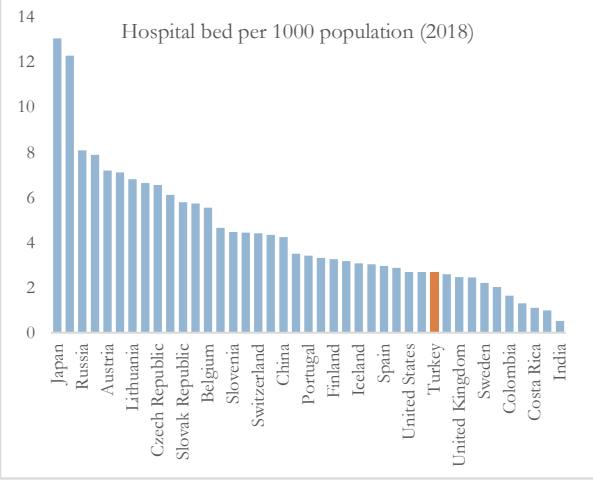


Figure 17: Strong health response to COVID-19

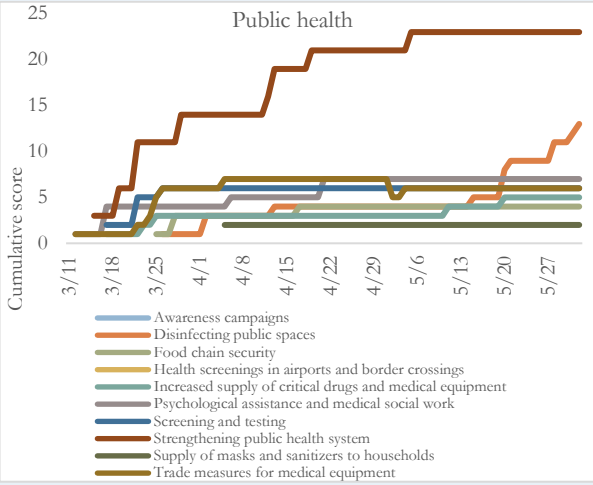
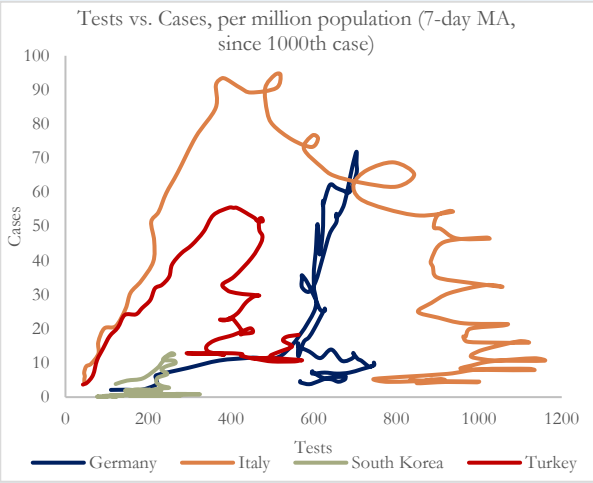


Figure 18: Including ramp up in testing



Sources. Figs 13, 14, 15, 17: WB staff calculation based on media sources. Fig 16: OECD. Fig 18: Our World in Data, Oxford University, JHU CSSE. Notes (Figs 13, 14, 15, 17): Scores determined based on the magnitude of the announced measure, ranking between -3 and +3 (+3 being the most impactful in terms of coverage, number of people affected, and positive externalities). Negative scores relate to relaxation of measures.

B. Health crisis quickly turns into biggest economic shock of modern times

8. **The COVID-19 health crisis quickly turned into a deep economic turmoil**. On the demand side: (i) external trade and finance deteriorated as the global economy pulled down its shutters (Box 2); (ii) private consumption, often the most resilient component of demand, fell sharply in March-May with mobility restrictions and shocks to household incomes; (iii) private investment, which in Turkey had already contracted over 7 quarters, fell further with declining economic prospects. On the supply side: (i) declining demand and containment measures led to business shutdowns and loss of cashflow; (ii) interruptions to domestic and international trade disrupted supply chains and production; (iii) services, which tend to be more resilient, were also not spared from contraction with closure of hospitality businesses, declining demand for transport, and others; (iv) a combination of all this negatively impacted labor market.

Box 2: COVID-19 and the global economy

COVID-19 started in the East Asia Pacific region but quickly swept over the entire globe. Its progression around the world means that some regions are now at the stage of having controlled the first wave and trying to return to normal, while other regions are still facing a sharp upward curve in cases and the associated requisite restrictions on activity. Various mitigation measures – such as lockdowns, closure of schools and non-essential business, and travel restrictions – have been imposed by most countries to limit the spread of COVID-19 and ease the strain on health care systems. The pandemic and associated mitigation measures have sharply curbed consumption and investment, as well as restricted labor supply and production. The cross-border spillovers have disrupted financial and commodity markets, global trade, supply chains, travel, and tourism.

Output has plummeted, and unemployment has risen, around the world. PMI indicators suggest China's output fell most sharply in February, before stabilizing from March (Figure 19). Output in the EU was affected starting in March and fell even more sharply in April. Output in the US is also falling, but so far to a lesser extent than in the EU. By June, these falls in production had almost leveled off. COVID-19 reached many emerging markets outside Asia later, and is increasingly impacting these economies now, with output falling sharply in April. There is evidence emerging of massive increases in unemployment, with initial unemployment claims in the US 12 times higher than their average level by May (Figure 20).

International trade in goods and services is probably the hardest hit part of the global economy. Global trade volumes fell by 1.4 percent in March are likely to have fallen further in April (Figure 21). International travel and tourism have almost completely ceased, with arrivals falling from their typical level in January to almost zero by April (Figure 22).

Portfolio flows have been extremely volatile. Mobile capital fled EMDEs in March more rapidly than at the peak of the GFC, but then recovered in April. Outflows were especially led by equity disinvestment, while EMDE debt has seen more inflows. Much of these trends were driven by flows in and out of emerging Asia with a relatively small US$5bn portfolio outflow from emerging Europe in March followed by a US$3bn inflow the following month (Figure 23).

In response to these global shocks, and depending on their policy space, authorities worldwide are cutting interest rates, expanding fiscal deficits and using a range of other economic policy tools to cushion the blow for businesses and households. Policy interest rates quickly fell to zero in advanced economies and are falling rapidly in most countries worldwide (Figure 24). Of forty EMDE countries with data to April, 80 percent have seen fiscal positions deteriorate in 2020 to date compared to the same period of 2019. Of the 17 EMDEs with data for May, 100 percent of them saw fiscal positions significantly deteriorate, year-to-date.

Figure 19: Manufacturing plummeted

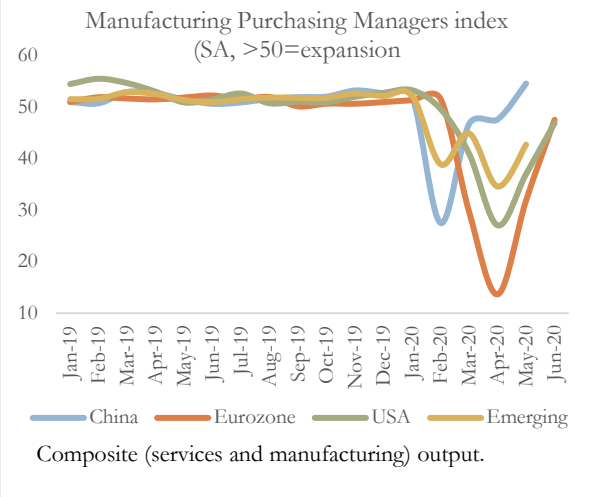


Figure 20: Whilst unemployment spiked

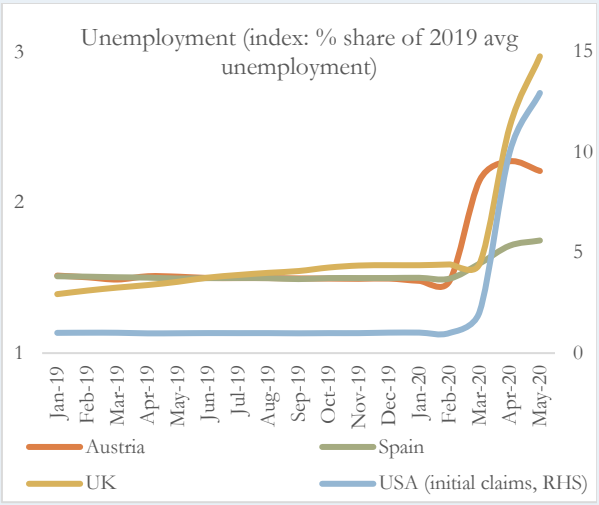


Figure 21: International trade severely hit

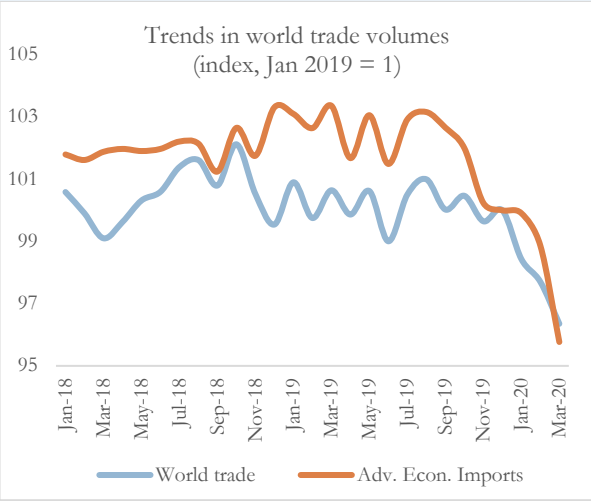


Figure 22: Whilst tourism at a standstill

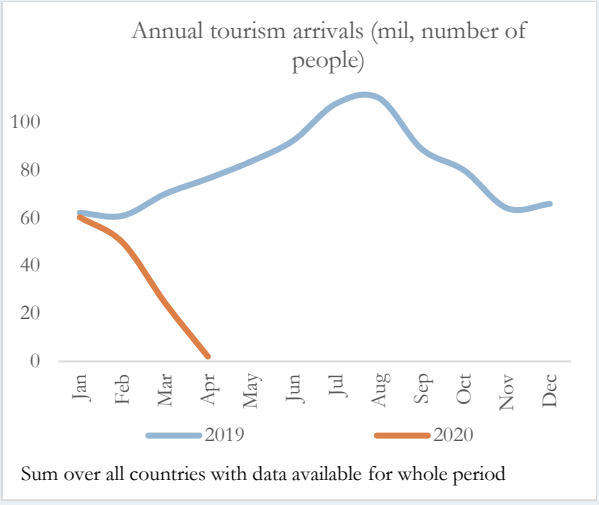


Figure 23: Portfolio outflows driven by Asia

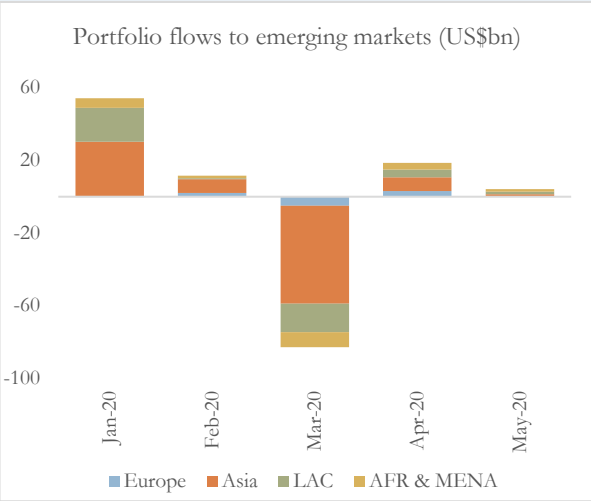
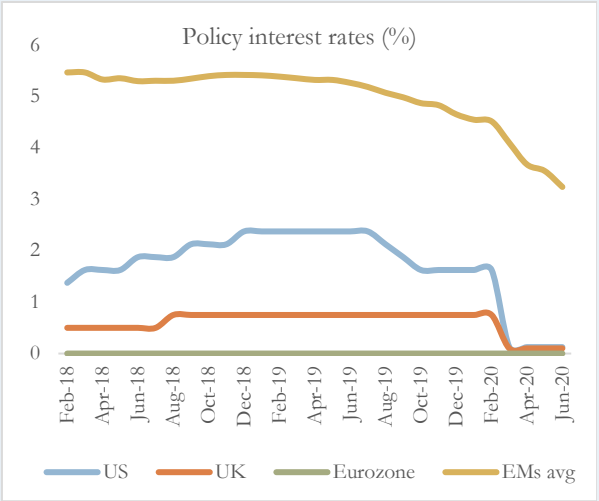


Figure 24: Authorities ease monetary policy



Sources: Haver Analytics, WB Staff estimates.

9. **These developments understandably derailed a gradual economic recovery in Turkey**. In 2019, Turkey came out of a short-lived recession at the end of 2018, growing at a post-Global Financial Crisis low of 0.9 percent. Monetary and fiscal expansion together with rising wages supported a recovery in private consumption and industrial output (Figures 25 and 26). Investment continued to contract. In 2020 Q1, GDP grew by 0.6 percent over the quarter and by 4.5 percent over the year, slightly lower than pre-COVID-19 projections but stronger than most other emerging markets. Over this period, external imbalances narrowed; Turkey ended 2019 with a small current account surplus – the first time since 2001 – and lower external debt thanks to deleveraging by banks and corporates.

Figure 25: Momentum continues in 2020 Q1 growth

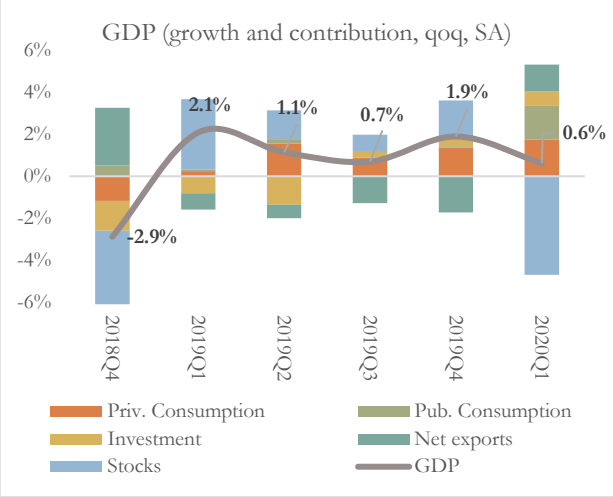
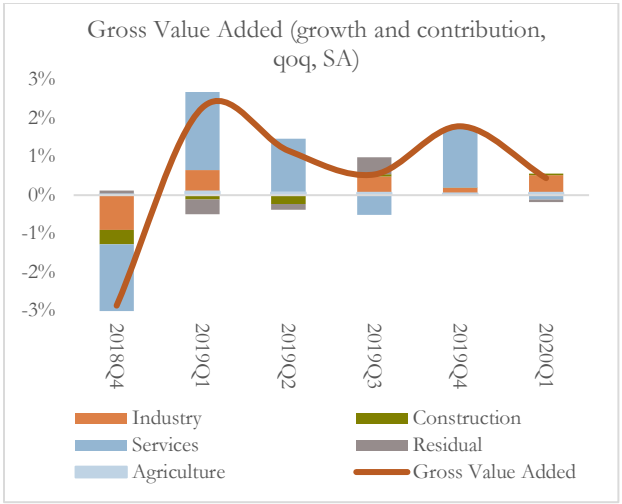


Figure 26: Including a rebound in industrial activity



Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

10. **With this backdrop, five channels through which the Turkish economy has been affected by COVID-19 are analyzed below.** These include: (i) reopening of a current account deficit due to a sharp contraction in external trade; (ii) a rise in external financing and market pressures linked to large capital flight from emerging markets and Turkey's declining foreign exchange reserves; (iii) the sudden halt in domestic output during the peak of the COVID-19 crisis in April-May, driven by virus containment measures and external pressures; (iv) the effects of these developments on the labor market, which had already been in a difficult state ahead of the COVID-19 shock; (v) the impact of the crisis on firms in Turkey based on a survey conducted in May and June.

Current account imbalances reappear quickly through contraction in trade and tourism

11. **The drop in global demand led to a return of a current account deficit for Turkey in 2020**. The current account declined from an annual surplus of 1.1 percent of GDP in 2019 Q4 to 0.2 percent of GDP in 2020 Q1 and an estimated deficit of 1.6 percent of GDP in 2020 Q2 (Figure 27). The fall in energy prices to a near 20-year low (Figure 28) helped narrow Turkey's energy trade deficit, but its impact on the current account was negligible (Figure 29). The rise in the current account deficit was driven by a contraction in merchandize trade and a significant decline in tourism receipts (Figure 30).

12. **The rapid spread of COVID-19 and containment measures in Turkey and its trading partners took a heavy toll on Turkey's merchandize trade** (Figure 31). After a year-on-year decline of 18.3 percent in March 2020, Turkey's exports plummeted in April and May before rebounding in June (Figure 32). The April-May year-on-year decline was the largest drop since records began 23 years ago. Imports decreased by over 25 percent in April and May 2020 relative to 2019.

Figure 27: Current account imbalances reemerge

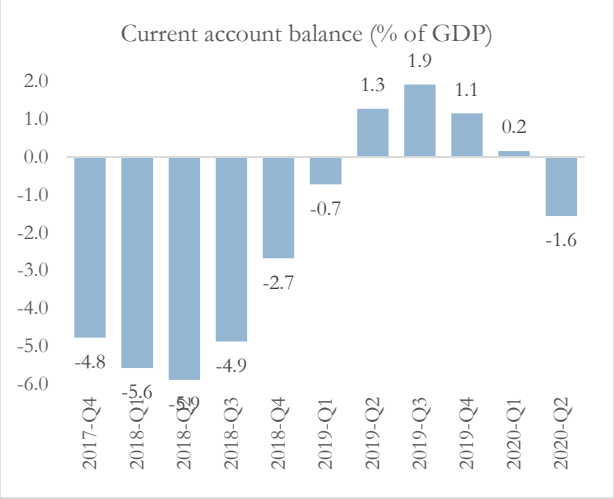


Figure 28: Despite record low energy prices

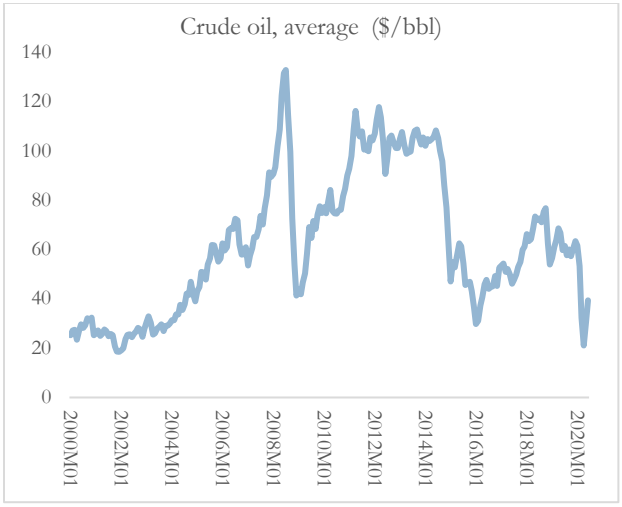


Figure 29: Which had little impact on the CAD

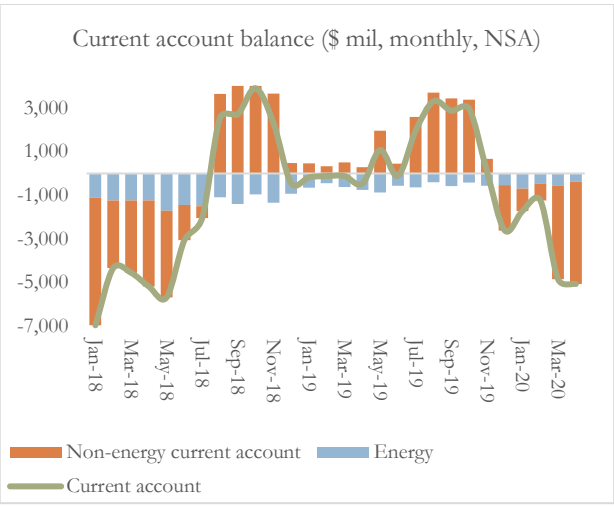


Figure 30: Merchandize trade and tourism decline

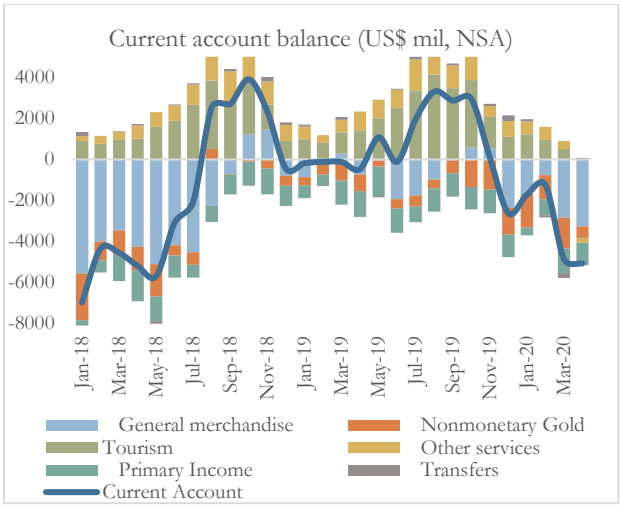


Figure 31: Turkey export markets contract

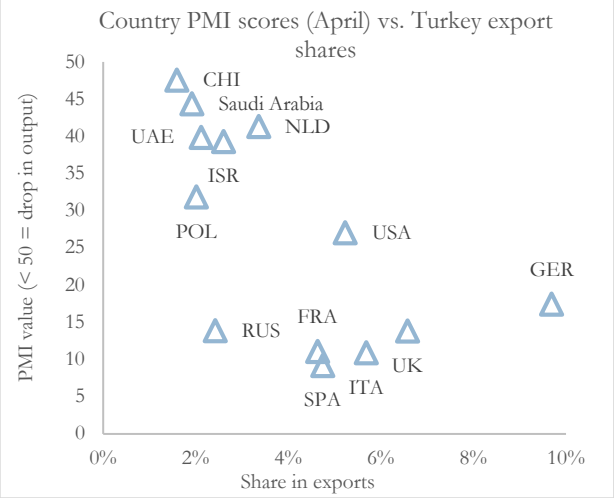
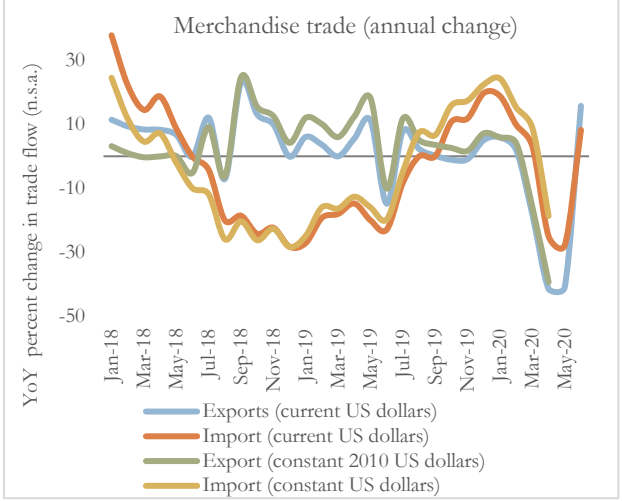


Figure 32: Leading to a drop in merchandise trade



Sources: Haver Analytics, WB Staff estimates.

13. **The drop in Turkey's merchandise trade has impacted sectors involved in Global Value Chains (GVCs) more than others, highlighting the breakdown in supply chains.** On the export side, this includes transportation equipment, which contracted by about 75 percent between April 2019 and April 2020, accounting for close to 35 percent of the overall decline in Turkey's merchandise exports (Figure 33). GVC-intensive sectors in total accounted for 70 percent of the decline in Turkey's merchandise exports in April. In contrast, exports of food, beverages and chemicals have proven resilient, increasing relative to April 2019. On the import side, following robust growth or mild decline in March, imports of several GVC-intensive sectors experienced double digit contractions in April (Figure 33): by 44 percent, in the case of textile and apparel, 26 percent for electrical equipment as well as rubber and plastics, and 19 percent for transport equipment.

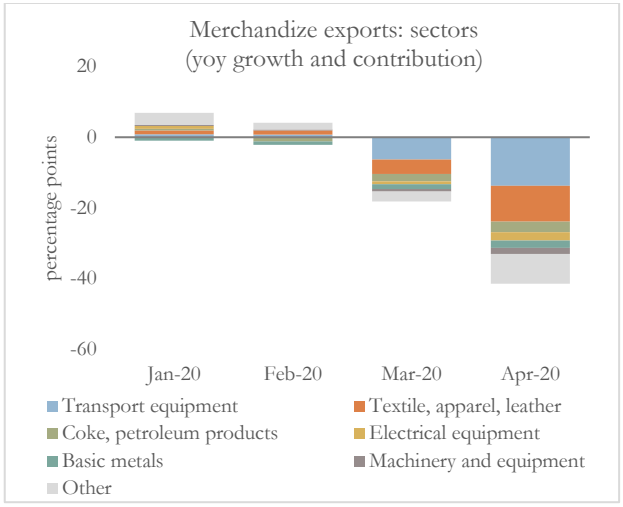
14. **Product categories associated with GVCs, such as capital goods, durable consumer goods and GVC-related intermediates have led the decline in Turkey's exports and imports** (Figure 34). Together, these products accounted for close to 90 percent of the drop in Turkey's overall merchandise exports. Exports of capital goods halved in April 2020 compared to the previous year; those of durable and semi-durable consumer goods dropped by 64 percent and those of passenger motor vehicles by 86 percent. Exports of parts and components contracted in April 2020 to half the value in 2019, while those of industrial supplies dropped by a quarter, raising the prospect of disruptions in forward stages of GVCs. On the import side, parts and components as well as industrial supplies accounted together for 50 percent of the year-on-year contraction in Turkey's overall merchandise imports in April 2020.

15. **The resilience of imports compared to exports in March 2020 reflects the chronology of the GVC disruption in Turkey**. The impact on exports preceded the impact on imports, being initially associated with the plunge in the demand of trading partners severely affected by COVID-19 lockdowns. The contraction in exports led to the contraction in imports to produce exports, and then both were compounded by the lockdowns in Turkey.

16. **COVID-19 seems to have disproportionately affected the transport equipment sector in Turkey**. Within the group of parts and components, those related to transport equipment have seen relatively sharper year-on-year declines in April 2020, of 64 and 53 percent for exports and imports, respectively. Similarly exports of transport equipment capital goods contracted by 82 percent in April 2020, while exports of other capital goods dropped by close to 30 percent. It should be noted however that imports of final goods in the form of transport equipment, either for capital use or for consumption (notably passenger motor vehicles) have proven remarkably resilient so far, cushioning the decline for the overall capital and consumer and also the decline in the imports of the transport equipment sector.

17. **The drop in total exports was driven by the EU and MENA regions** (Figure 35). The two regions contributed, respectively, 23 and 10 percentage points to the 41 percent year-on-year decline in Turkey's overall merchandise exports in April 2020, and 8 percentage points each to the 28 percent decline in Turkey's merchandise imports. The large impact from the EU and MENA regions is because they include key trading and GVCs partners of Turkey that have been severely affected by COVID-19. In contrast, exports to East Asia experienced a relatively milder drop and imports from this region stagnated, consistent with the recovery in China. The spike in imports from Sub-Saharan Africa merits closer examination to rule out inconsistencies in the preliminary monthly data.

Figure 33: GVC intensive sectors impacted most by contraction in merchandize trade



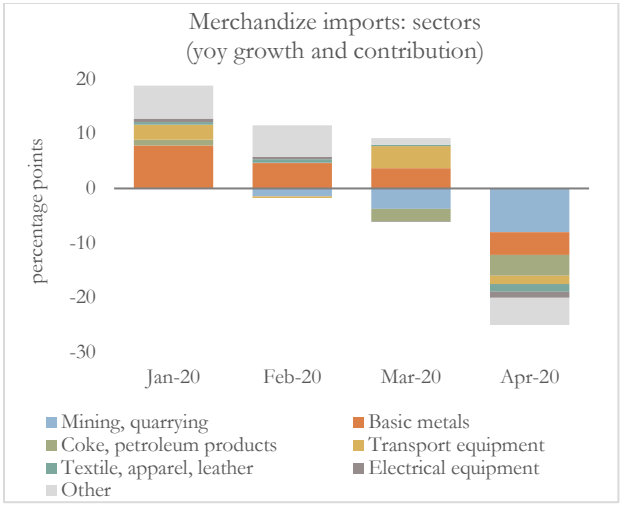
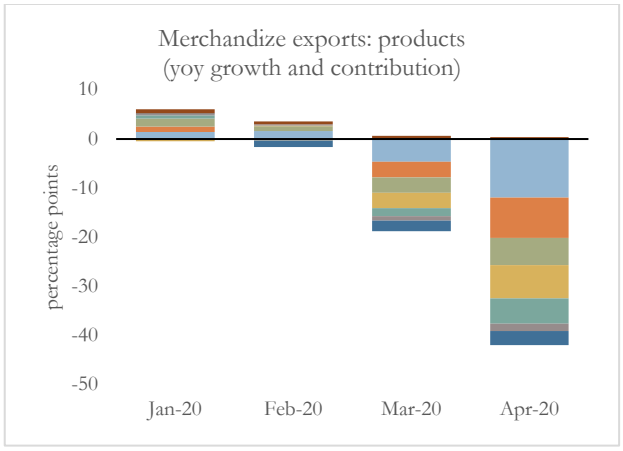


Figure 34: Product categories associated with GVCs lead the drop in merchandize trade



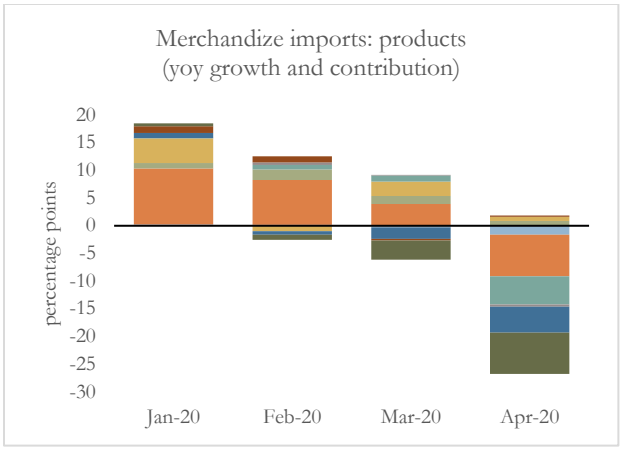
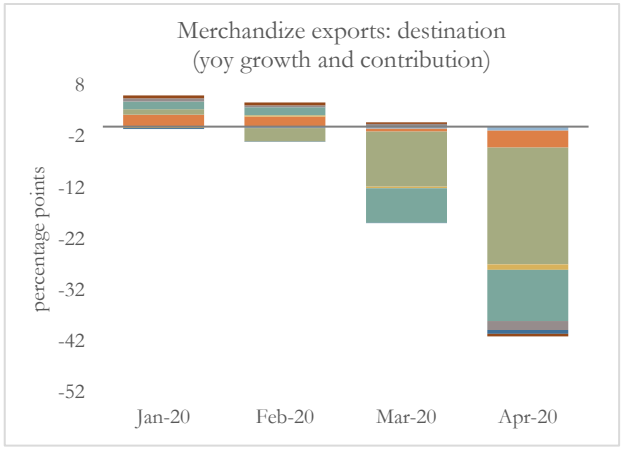
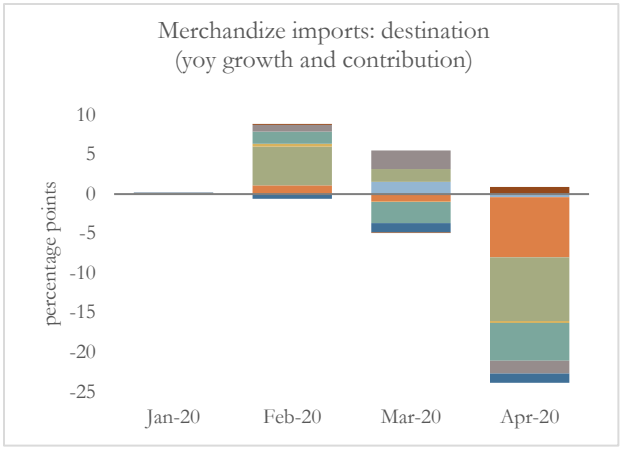
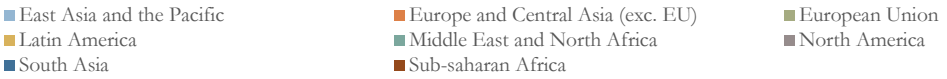


Figure 35: Drop in exports and imports driven by EU and MENA







Sources: Haver Analytics, Comtrade, WB Staff estimates.

Flight to safety and declining reserves raise external financing and market pressures

18. **In addition to a growing current account deficit, external financing pressures increased in the wake of the pandemic.** The level of capital outflows from emerging markets in the early phase of the COVID-19 outbreak exceeded the worst points of the Global Financial Crisis (Figure 36). Turkey also experienced substantial portfolio outflows between March and May 2020 (Figure 37). But the level of outflow was tempered by low stocks of non-resident portfolio holdings, which by the start of the COVID-19 shock was down to one third of what they were in early 2018 (Figure 37).

19. **More important than portfolio inflows for Turkey are other investment inflows, which were negative before the outbreak in February and declined further by April 2020**. These constitute the biggest share of external financing for banks and corporates; the latter were repaying more to external creditors between February and April than they were borrowing (Figure 38).

20. **A growing current account deficit coupled with declining external financing meant that Turkey had to draw down on its foreign exchange reserves.** Triggered by a sharp capital outflow from EMDEs, the 2020 Q1 period in Turkey fell just short of being classified as a sudden stop,[12] partly because of capital inflows in January and February (Figure 39). But by March-April, when capital inflows dried up, Turkey had to rely mostly on its forex reserves to finance its current account deficit (Figure 40).

21. **Pressure on the currency ratcheted up significantly from March.** The Lira depreciated by 20 percent between March 1 and early May[13] due to a combination of current account imbalances, capital outflows, dollarization of deposits and a general appreciation of the US dollar. The nominal effective exchange rate index (NEER) fell by May to its lowest level. Day-to-day currency volatility rose significantly (Figure 41). Depreciation and volatility may have been much sharper if it were not for the use of foreign reserves.

22. **These developments contributed to one of the sharpest drops in foreign exchange reserves experienced by Turkey recently**. They fell by US$16.6 billion in March 2020 – the largest monthly change in reserves since records began in 1992 – and a further US$8.6 billion in April 2020. The level of gross international reserves dropped to a low of approximately US$85bn before increasing in late May to over US$ 90 billion with the expansion of a currency-swap arrangement with the Central Bank of Qatar (Figure 42). Turkey's decline in reserves relative to its currency depreciation was one of the largest among peer countries (Figure 43).

23. **To contain currency volatility, the authorities also applied macroprudential regulations which limited certain capital flows**. Offshore swap transactions between foreign and domestic banks were limited to 1 percent of domestic banks' equity. Instead, the banks' foreign exchange and banknotes markets limits for Turkish Lira swap auctions with the Central Bank were raised from 20 to 50 percent of banks' equity as of May 2020. The new asset ratio regulation (see financial sector section) encouraged increased swap transactions with the CBRT. Taxes were also introduced to disincentivize the purchase of FX assets.

[12] Eichengreen and Gupta (April 2016) classify an episode as a sudden stop when: (i) non-resident portfolio and other investment inflows decline below the average in the previous 20 quarters by at least one standard deviation; (ii) when the decline lasts for more than one quarter; (iii) and when flows are two standard deviations below their prior average in at least one quarter. Episodes end when capital flows recover to the prior mean minus one standard deviation.

[13] In the week of May 4, the Lira reached a record low of 7.27/US$, which was reached temporarily during a trading session.

24. **A combination of declining reserves and currency depreciation – along with monetary easing as discussed later – contributed to external market pressures in March and April 2020.** A long-term analysis of periods of external market pressure (EMP)[14] shows that the index exceeded the EMP crisis threshold in March 2020. Along with the GFC and the August 2018 shocks, this was one of the three highest periods of external market pressure in Turkey in the last 20 years (Figure 44). The EMP in March 2020 was mainly driven by the sharp drop in international reserves.

25. **Market perceptions of risk and external premium on Turkey's sovereign debt has risen and remained high despite a decline in recent weeks**. These have been driven by the decline in reserves and some steps taken by the authorities linked to concerns over currency speculation (e.g. restriction on Lira liquidity in overseas swap markets). Market risks have increased across emerging markets since the beginning of March. But Turkey was especially affected, as reflected in a more than doubling of the Turkish 5-year Credit Default Swap (CDS) spread to 660 basis points in the first week of April (compared to an average of 250 bp in January 2020) (Figure 45). Though CDS spreads have come down since then, they remain among the highest (barring Argentina) across emerging market economies.

26. **These developments illustrate Turkey's challenging trade-offs, which may require some monetary tightening, as discussed later.** On the one hand, a sustained depreciation of the Lira significantly strains corporate and, indirectly, bank balance sheets[15] given that Turkey has large external debt (60 percent of GDP, 63 percent of which is private) and large domestic debt that is denominated in foreign currency (39 percent of GDP, 62 percent of which is private). On the other hand, a reduction in forex reserves increases external vulnerability given large external financing requirements (US$60 billion between May 2020 and January 2021). This is exacerbated by tightening external liquidity and a sharp rise in sovereign credit risk. This may warrant an end to the cycle of monetary easing to help reduce external vulnerabilities (section I.C).

[14] The External Market Pressure (EMP) index is a commonly used index that aims to identify periods of unusually high external financial pressure on a given country. The most obvious component of this index is the exchange rate, but it also includes changes in relative interest rates and changes in international reserves that may be used as policy responses to counteract external market pressure. Therefore, simply expressed the External Market Pressure (EMP) index is as below: $\mathrm{EMP_t} = \partial \mathrm{e_t} + \partial \mathrm{i_r} - \partial \mathrm{f_t}$ Where e_t is the exchange rate expressed in domestic currency terms, i_t is the nominal interest rate, relative to a world interest rate, and f_t is the level of international reserves held at the Central Bank. An EMP 'crisis' is commonly defined as the EMP exceeding 1.5 standard errors.

[15] In order to manage currency mismatch of their balance sheet, the banking sector close their open on-balance sheet position with FX-denominated financial derivatives reported in off-balance sheet. Banks can hold open FX position up to 20 percent of their regulatory capital according to BRSA regulations.

Figure 36: Portfolio outflows from EMDEs sharper than GFC

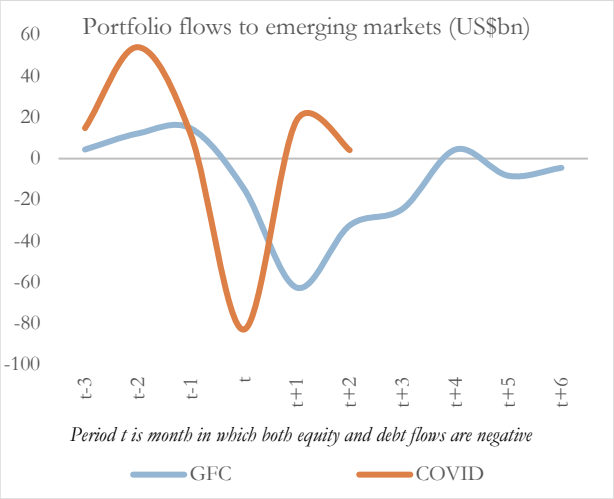


Figure 37: Non-resident holdings of Turkish portfolio assets declining before COVID

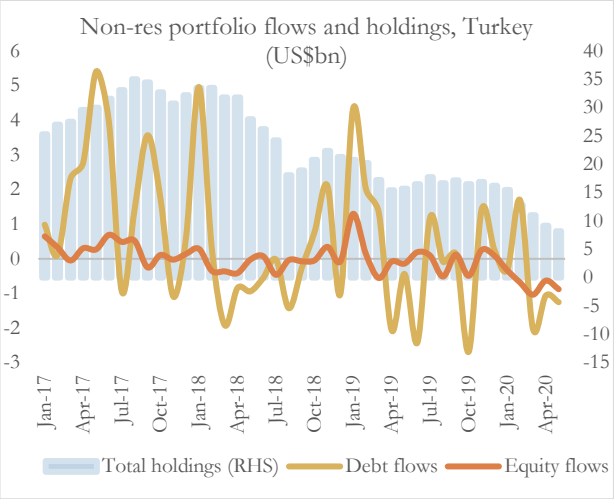


Figure 38: Other investment flows also negative

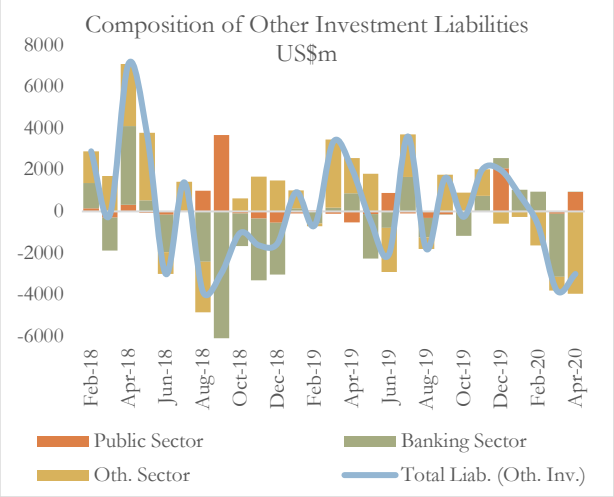


Figure 39: Though short of a sudden stop in 2020 Q1

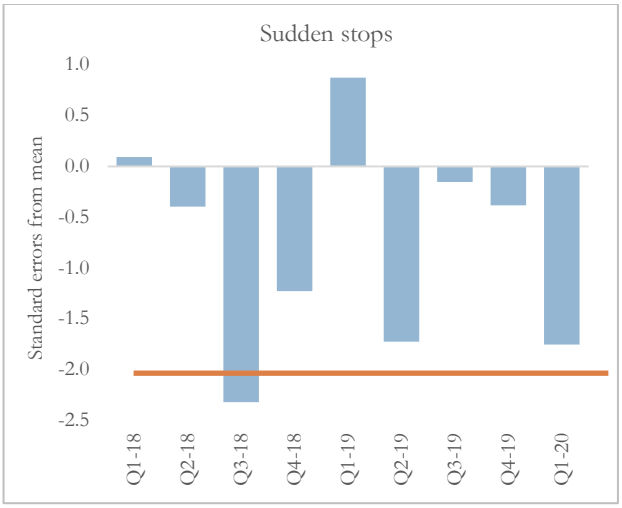


Figure 40: Increasing use of reserves to finance CAD

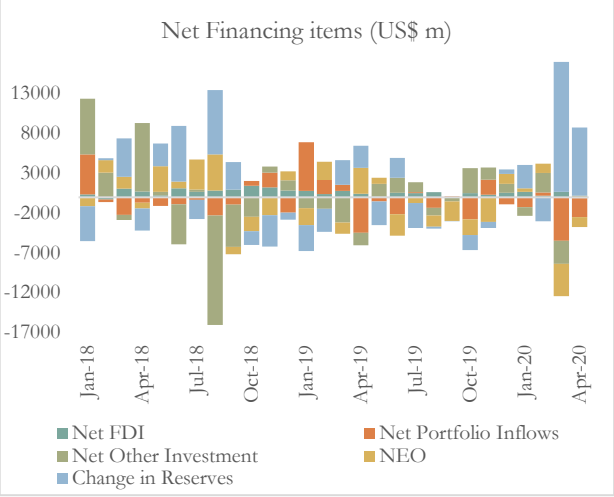
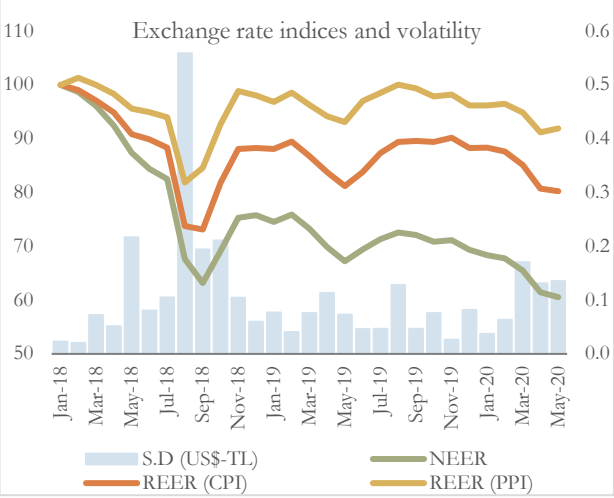


Figure 41: And to help contain currency pressures



Sources: Haver Analytics, WB Staff estimates.

Figure 42: Sharp drop in forex reserves

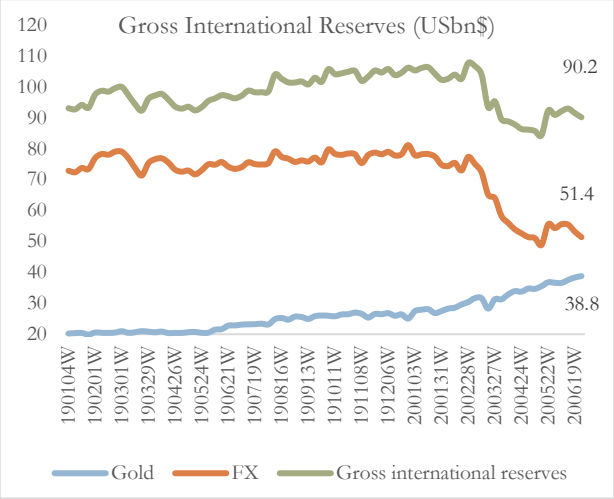


Figure 43: Sharper drop than most peer countries

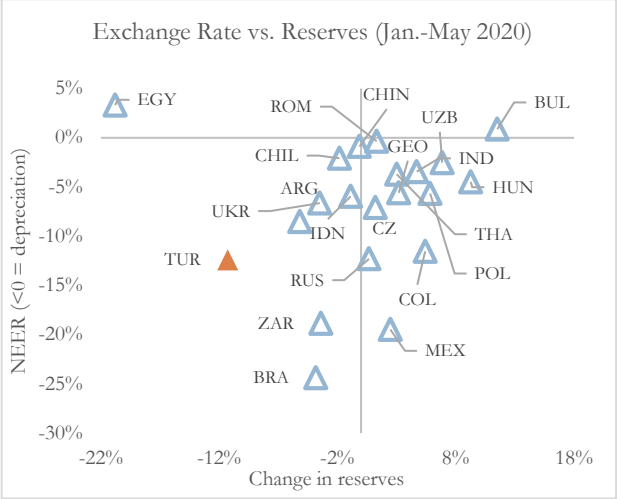


Figure 44: External market pressures have risen[13]

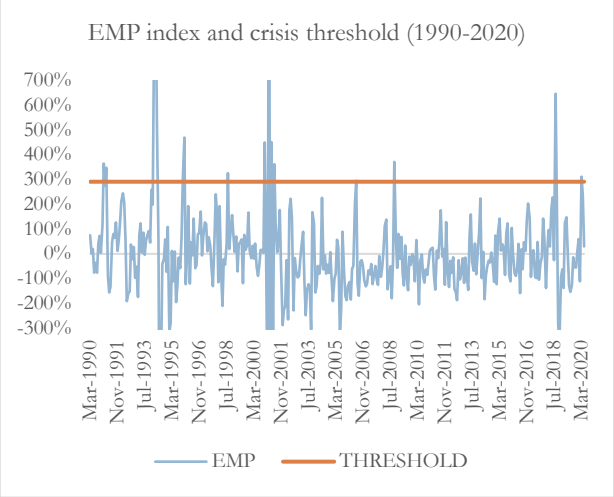
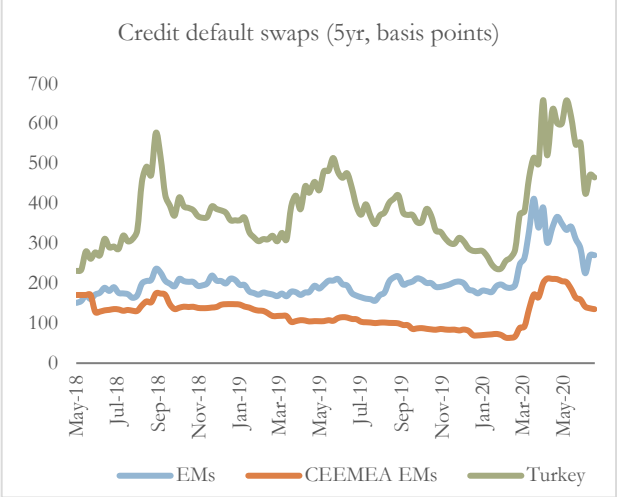


Figure 45: As well as sovereign credit risks



Sources: Haver Analytics, WB Staff estimates.

Containment and external pressures cause sudden halt in domestic output in April-May

27. **External trade and financing developments together with domestic virus containment measures hit the Turkish manufacturing sector particularly hard.** This is reflected in the sharp drop in manufacturing PMI (Purchasing Managers Index) figures. The shock hit when the Turkish manufacturing sector had just started to rebound from the effects of the 2018 financial turmoil. Similar to the fall in other EMDEs' PMI indices, the headline PMI declined from 52.4 in February to below 33.4 in April 2020, the sharpest drop since the PMI series started in 2005. The decline was even more severe in the PMI output component, which fell to 16.9 in April and 32.4 in May (Figure 46). This was lower than the trough reached during the GFC (Figure 47). Capacity utilization in the manufacturing sector fell to its lowest level in more than ten years (Figure 48).

28. **Turkey's largest and most export intensive industries within manufacturing were the most adversely affected, consistent with the merchandize trade analysis**. Manufacturing of textile, apparel and leather and motor vehicles, machinery and metal products and basic metals contracted most, whilst food, chemical and non-metallic mineral sectors were not hit as hard (Figure 49). The breakdown of GVCs coupled with contraction in the EU significantly impacted textile, apparel and motor vehicle sectors. These industries are also the most impacted globally.

Figure 46: Manufacturing recovering before COVID

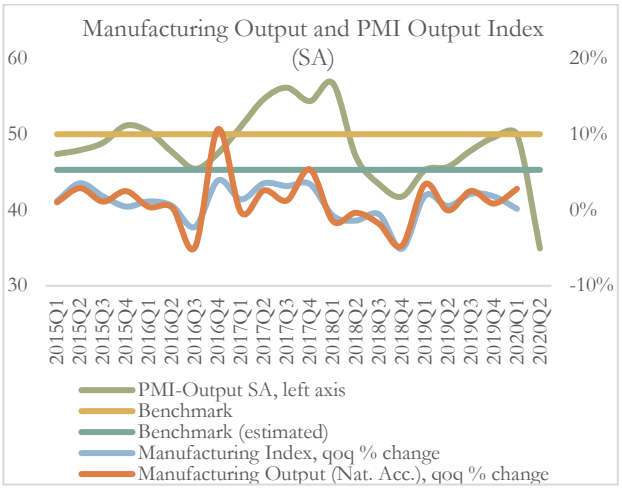
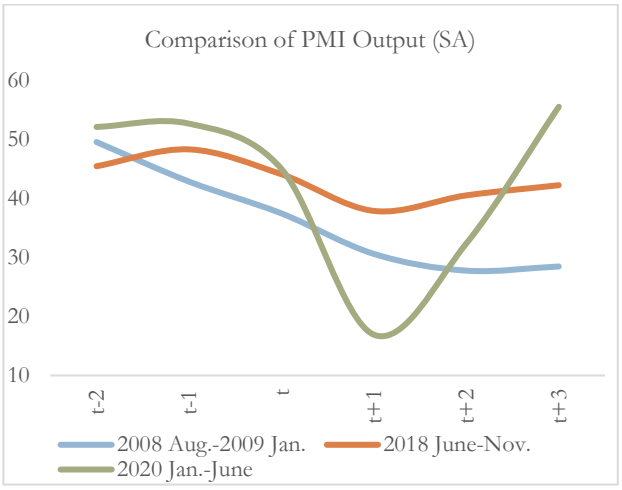
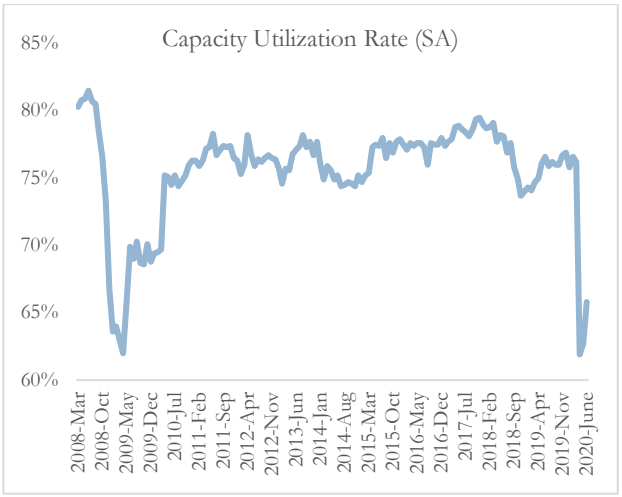


Figure 47: But impacted severely by the COVID-19 shock



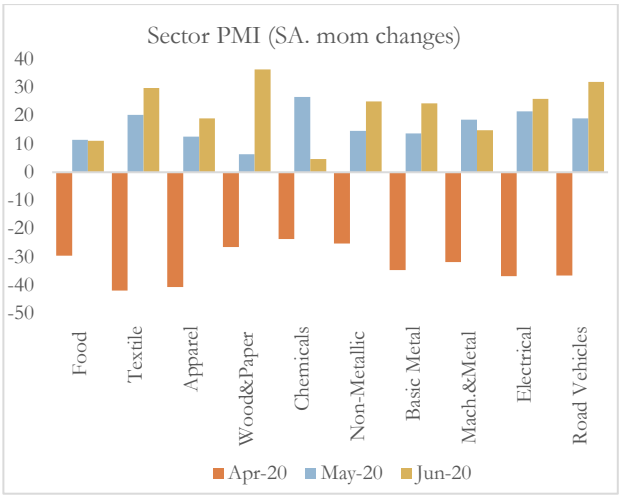
Sources: Haver Analytics, TURKSTAT, IHS Markit Economics, WB Staff estimates.

Figure 48: Capacity utilization is at record low levels



Sources: CBRT.

Figure 49: Large exporting industries hit worse



Sources: ISO, IHS Markit.

29. **Manufacturing rebounded in June with the easing of containment measures and buoyed by supportive monetary policy.** Large base effects kicked in as businesses reopened and resumed production. Credit packages and other incentives (e.g. employment, postponement of taxes) supported the pickup in manufacturing activity. The recovery was broad-based, and all sectors recorded notable increases (Figure 49). Road vehicles and vessels had the sharpest rise as vehicle manufacturers started to ramp up production following a complete halt in production in previous months. The industry benefitted from a surge in demand backed by favorable credit conditions specific to vehicle purchases. Wood and paper, textile and electrical equipment are the other industries that saw strong rebounds in June. On the other hand, apparel and leather sector remains under severe pressure amid weak demand conditions.

30. **Despite the rebound in June, manufacturing is projected to contract sharply in 2020 Q2.** The PMI output sub-index has a high correlation (0.77) with manufacturing production index and is a good high frequency proxy indicator. An analysis of the relationship between PMI output and manufacturing production index suggests that a one-point decline in PMI is associated with a 0.7 percentage point decline in manufacturing production growth. Based on April-June PMI output figures, manufacturing production is estimated to have the deepest contraction of the last decade (qoq)[16] in 2020Q2 (Box 3).

31. **The increase in PMI below the expansion threshold signals a relatively sharper rebound compared to any increase above the threshold.** An analysis of the relationship between the PMI output and manufacturing production index finds that: (i) the expansion threshold value differs from the standard threshold of 50 and; (ii) that there is an asymmetric relationship above and below the threshold. This has important implications. First, the estimated threshold ranging 45.3-47.8 suggests that using 50 as a benchmark for Turkey might be misleading to assess whether the manufacturing sector is expanding or contracting. This would imply that manufacturing production began to recover in the last year, earlier and by more than the PMI suggested. Secondly, a one-point increase/decrease in PMI below the threshold (0.7) has a bigger impact on manufacturing output than a one-point increase/decrease (0.3) above the threshold due to an asymmetric relationship. This implies that the PMI rebound in May 2020 would have a bigger impact on manufacturing output than the PMI rebound in June 2020.

Box 3: PMI and manufacturing output

The Purchasing Managers Index (PMI) is one the high frequency leading indicator which has been widely used for tracking economic activity in the manufacturing and services sectors. PMI in most countries serves as a good indicator for sector growth or GDP growth forecasts.[17] In Turkey, Istanbul Chamber of Industry (ISO) and IHS Markit have been releasing PMI Manufacturing survey data on a monthly basis since 2005.

To examine the relationship and use high frequency indicator PMI as a proxy for manufacturing output, we perform an analysis by following the methodology employed by Koenig (2002), Kilinc and Yucel (2016) and CBRT (2019).[18]

The purpose of this analysis is to (i) estimate Turkey specific PMI threshold value and test for asymmetric responses of manufacturing growth to unit changes in PMI output, (ii) empirically examine the predictive power of PMI on manufacturing sector growth. The analysis covers the period of 2005:Q3-2020:Q1.

As a first step, the following specification is estimated for whole period:

$$g = \beta_1(PMIO - \beta_2) + \beta_3 \Delta PMIO + \epsilon \quad \textbf{(1a)}$$

Here, g stands for the growth rate of manufacturing production of Turkey and PMIO denotes quarterly average value of PMI output sub-index. Standard errors are in parentheses.

In the equation, the β_2 coefficient shows the threshold value, the β_1 coefficient measures the impact of the gap between the PMI output level and the threshold. β_3 denotes the impact of the quarterly change in the PMI on the quarterly change in manufacturing production. Manufacturing production growth depends on the level of the PMI and the PMI's most recent change.

[16] The first specification estimation result implies around 7 percent (qoq) contraction in manufacturing output whilst the second specification estimates around 9 percent (qoq) contraction. These estimation results might reflect rapidly changing respondents' sentiments in a challenging environment. Thus, the model might underestimate the contraction in Q2 and the findings need to be taken into consideration with caution. For further details, please see Box 3.

[17] There are several studies that empirically tested indicator power of PMI on GDP or sector growth (Koenig (2002), D'Agostino and Schnatz (2012), Lahiri, Lahiri and Monokroussos (2013), Vermeulen (2012), Akkoyun and Gunay (2012), Eren (2014) and Kilinc and Yucel (2016).

[18] CBRT, Inflation Report 2019-III, Box.4.1.

$$g = 0.40(PMIO - 47.8) + 0.11\Delta PMIO + \epsilon \quad \textbf{(1b)}$$
$$\quad (0.40) \quad (0.74) \quad (0.06)$$

According to estimation results, the threshold value (β_2 coefficient) is found to be 0.47.8 different from 50 mark for the whole period. Another finding is that PMI level above the threshold (47.8) indicates a positive growth rate while below threshold leads to negative output growth. A 1-point increase in PMI also leads to 0.11 percentage point increase in manufacturing production growth.

The analysis was repeated for different sub-periods (Table 1) to see whether the threshold value changes over time. The threshold value has declined in the last 15 years (Table 1). While it was almost 50 in 2005-2009 period, it fell to 45.5 in the last 5 years (2016-2020 period). This is in line with CBRT(2019) findings.

As one step further, a new specification is defined considering the possible asymmetry in the response of manufacturing production growth to the change in PMI above and below the threshold[19],

$$g = \beta_1 I(PMIO <= \beta_2)\ (PMIO - \beta_2) + \beta_3 I(PMIO > \beta_2)\ (PMIO - \beta_2) + \beta_4 \Delta PMIO + \epsilon \quad \textbf{(2a)}$$

In this new specification, the cases where PMI is below or above the threshold is separated by using an indicator function I(.). This function takes value 1 when the argument holds and zero otherwise.

$$g = 0.69\ I(PMIO <= 45.3)\ (PMIO - 45.3) + 0.26\ I(PMIO > 45.3)\ (PMIO - 45.3) + 0.10\Delta PMIO \quad \textbf{(2b)}$$
$$\quad (0.12) \quad (1.50) \quad (1.50) \quad (0.06) \quad (1.50) \quad (1.50) \quad (0.05)$$

With this new specification, the threshold value declines to 45.3 compared to the first specification. The striking result is the difference in the response of manufacturing production growth to a change in PMI above and below the threshold. The response is much stronger when the PMI is below the threshold. A one-point decline in PMI when it is below the threshold leads to an around 0.7 percent decline in growth of manufacturing production while a one-point increase in PMI when it above the threshold indicates a 0.3 percent increase in manufacturing production growth. The Wald test for this specification confirms both the threshold is different from 50 and there is an asymmetry. This points out that using 50 as a benchmark for Turkey might be misleading to assess on whether the manufacturing sector is in the expansionary or contractionary region.

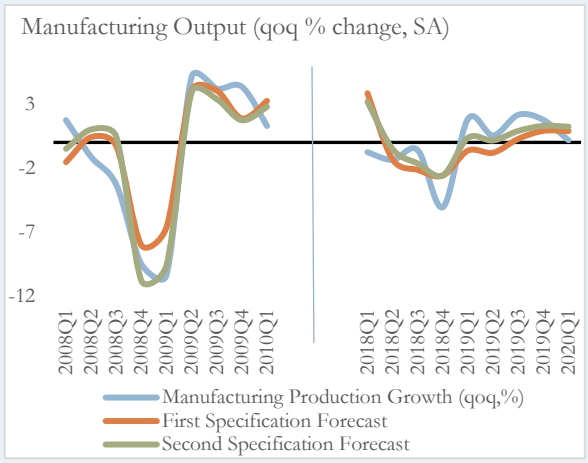
[19] There might be several reasons behind this asymmetry. CBRT (2019) highlights that the participants in the survey might tend to be more pessimistic during the times of turbulence. Kilinc and Yucel (2016) stressed that there might be a few observations that may drive this asymmetric relationship.

Table 1: Threshold value changes over time

	2005-2009	2010-2015	2016-2020	Full Period
Coefficient of the Deviation from the Threshold Value (β_1)	0.47	0.32	0.23	0.40
Threshold Value (β_2)	49.5	45.8	45.5	47.8
PMI Change Coefficient (β_3)	0.08	0.07	0.24	0.11
Adjusted R-squared	0.74	0.30	0.34	0.61

Sources: WB staff calculations.

Figure 50: Second specification performs better



Sources: ISO, IHS Markit Economics, Haver Analytics.

Manufacturing production growth (qoq) is forecast by using specification 1 and 2 to see the performance of these models. Figure 50 shows that both specification results are similar but specification 2 which includes the asymmetry captures relatively better particularly in downturns. The relation between the PMI and manufacturing production seems to have relatively weakened in recent years compared to the previous decade.

32. **Though services have been quite resilient in previous crises, in this instance services were also not spared**. Containment measures posed a unique challenge that led to widespread closure of hospitality and other services. The PUMAX business activity index (SWDA) for services sector fell to the level of 29.5 in April the largest drop since the release of data[20] (Figure 51). It recovered modestly to 38 in May and June with the removal of restrictions. Confidence in services excluding retail trade dropped 50 percent in April whilst confidence in retail trade recorded a relatively lesser drop (26 percent) (Figure 52). Confidence in retail and other services showed a recovery in June mainly driven by the improvement in demand and price expectations over next three months.

Figure 51: Services sector activity was severely impacted

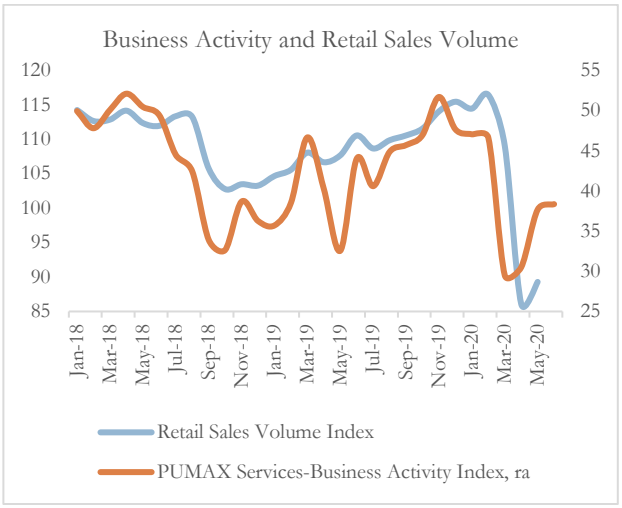
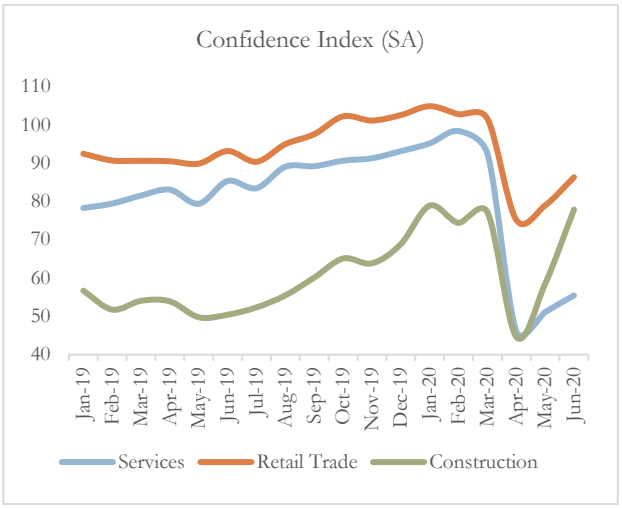


Figure 52: Confidence plunged with restrictions and heightened uncertainty



Sources: TURKSTAT and TDM.

[20] PUMAX composite index is a Purchasing Managers Index, available from 2013 on a monthly basis.

33. **All services recorded contraction in April except for ICT.** Those better able to adjust to social distancing or that were exempt from lockdown/restriction measures suffered relatively less. Food and accommodation, admin and support, transport and wholesale and retail sectors were heavily impacted whilst professional scientific and technical services, and ICT were the least impacted sectors (Figure 53). Closures of stores and shopping malls impacted wholesale and retail trade adversely. Some retail establishments selling essential goods and services including food and pharmaceutical products remained open, which contained some of the losses. Travel restrictions both domestic and international caused significant losses in the transport sector, particularly air travel. Only ICT recorded increased turnover.

34. **The pandemic has impacted the food and accommodation sector significantly.** Food and accommodation turnover (in real terms) contracted by 62.5 percent in April compared to March. This is not surprising considering the restrictions on hospitality and tourism. The number of foreign visitors dropped by 99.3 percent in April compared to a year earlier and hotel occupancy rate plunged to 3 percent in April from around 60 percent (Figure 54). Tourism in Turkey is significant; it has strong backward linkages and generates large export earnings (3-4 percent of GDP).

Figure 53: Disruption across nearly all services

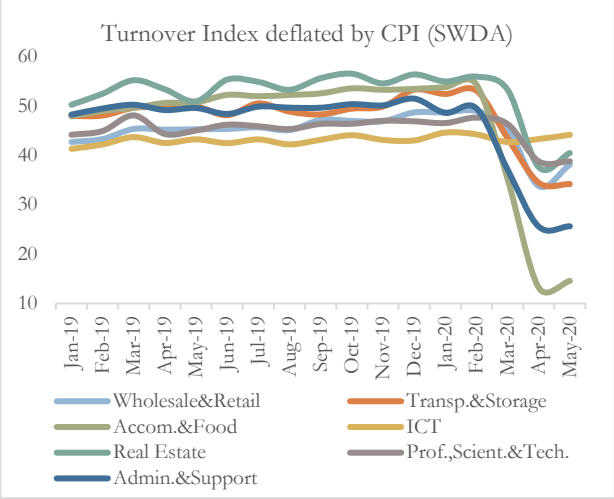
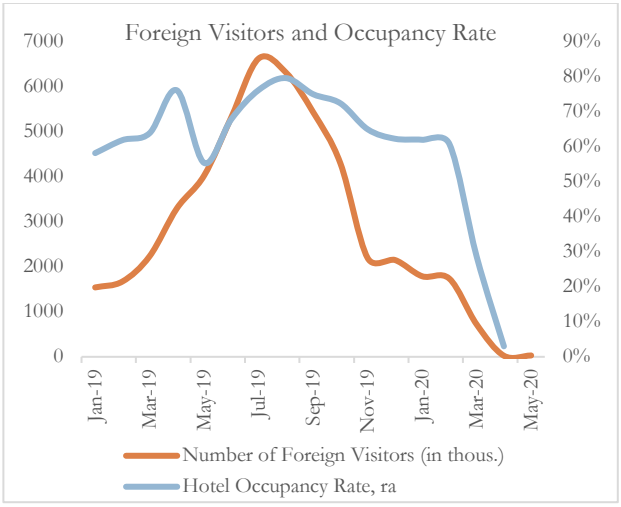


Figure 54: Tourism was very badly hit



Sources: Haver Analytics, TURKSTAT and Hotel Association of Turkey.

The pandemic exacerbates labor market challenges of declining employment and participation

35. **Unemployment rates remained stable throughout the real sector crisis, but this conceals challenges of falling employment and labor market participation.** The 2018 financial turmoil led to significant job losses and a rise in overall unemployment rates from 10 percent in early 2018 to 13.8 percent more recently. Though labor market outcomes started to improve slightly at the end of 2019, this was disrupted by COVID-19. In April: (i) employment declined by 2 million jobs lost compared to February 2020; and at the same time (ii) the labor force shrank by 1.9 million due declining labor market participation (Figure 55).

36. **Though all sectors were affected, job losses were the highest in services and among more vulnerable and less well-off households.** The services sector, accounting for 55 percent of total employment, lost more than 1.5 million jobs (10 percent of service sector employment) in February-April period. This was the biggest decline in the last two decades. Job losses in the construction sector over the same period was around 353 thousand (28 percent of its employment); in agriculture 270 thousand; whilst in industry the impact was a little more muted with 305 thousand jobs lost (Figure 56). At the same time, these job losses disproportionately affected regular and casual employees, those in the informal sector, and those with lower education levels (Box 4).

Figure 55: Labor force and employment declined sharply in early 2020

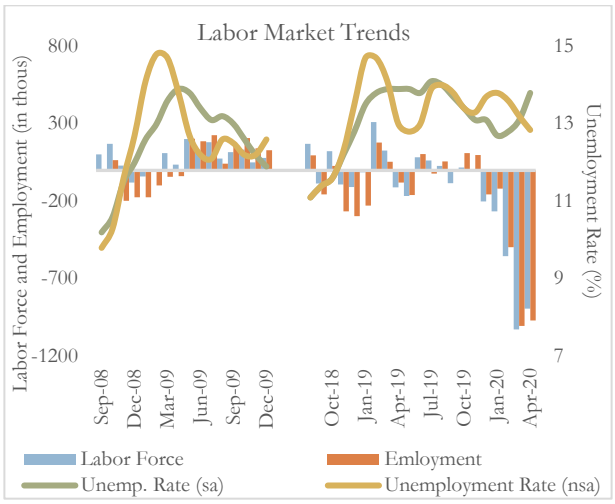
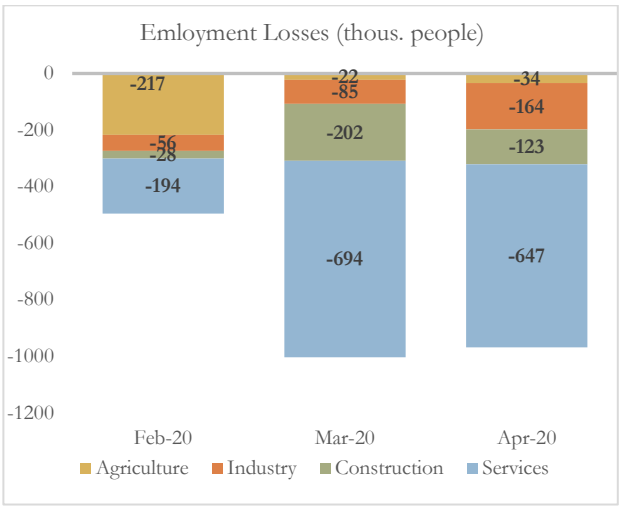


Figure 56: Biggest job losses has been in the services sector



Source: TURKSTAT. Seasonally adjusted numbers and rates.

Box 4: Types of workers most affected by job losses

Employment dropped for all type of workers but the highest share of workers who lost their jobs were regular and causal employees. Out of 2.6 million employment losses in April compared to previous year, the biggest decline belongs to the regular and casual employees, constituting 57 percent of total losses. This is followed by unpaid family workers with 21 percent share of total losses. Own account worker constituted 18.2 percent of decline whilst employers had just 4 percent share in total job losses.

The economic slowdown hit informal particularly hard. Informal employment decreased by 2.3 million jobs, i.e. 23.8 percent, from April 2019 to April 2020 while formal employment declined by around 290 thousand jobs within the same time period. Out of the total number of jobs lost, most informal job cuts were observed in the last quarter; 1.4 million informal workers lost their jobs in the last quarter. Higher job cuts in informal employment can be expected starting from May, since firms are prohibited to lay off formal workers due to the government's response to protect employment during the COVID-19 pandemic. Formal employment displayed a relatively lower contraction and declined by 1.6 percent in April 2020 compared to April 2019.

The impact of the economic turbulence affected low skilled workers, as measured by education levels. In the last 12 months, employment levels declined significantly for workers with low educational attainment, illiterate (28.5 percent) and workers with less than high school degree (14.8 percent). Employment losses were relatively lower for workers with higher educational attainment; 8.1 percent for high school graduates, 6.8 percent for vocational high school graduates and 3.4 percent for university graduates. Similarly, labor force participation dropped significantly higher for the low-skilled, 25.9 percent for illiterate and 13.6 percent for workers with less than high school degree.

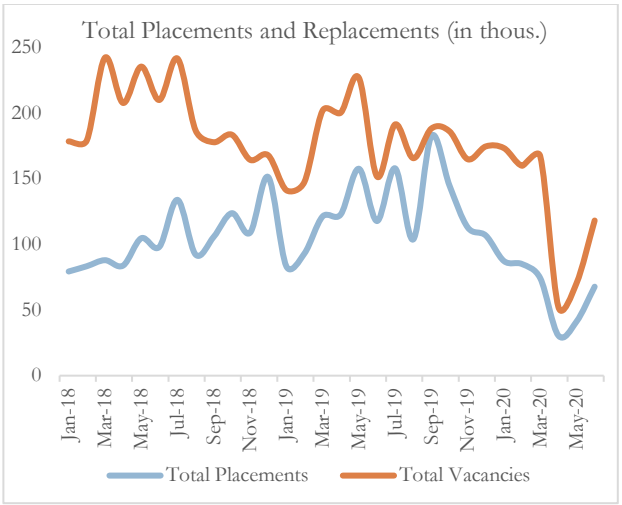
Sources: TURKSTAT, World Bank staff estimates.

37. **Government measures introduced since April have tried to stem job losses**. To prevent layoffs, the government banned employee terminations for 3 months by Law in mid-April and extended this by another 1 month until September. Moreover, short-term work allowance (STWA)[21] and unpaid leave support were introduced. Around 3.5 million workers have benefited from STWA and around 1.4 million workers have received unpaid leave cash support. Around 40 percent of applications for STWA were in the manufacturing sector, followed by the wholesale and retail trade sector. As a result, firms were able to retain employees, but also reduced their labor demand substantially (Figure 57). Unless economic activity recovers, removal of these measures might lead to a large number of job losses through the end of the year.

38. **In addition to declining employment, labor force participation dropped sharply and is a source of concern for the economy**. The labor force (seasonally adjusted) fell sharply by around 2.5 million in February-April despite a rise in working age population. This translates to a 5.7 percentage point drop between April 2019 and April 2020, a record decline, bringing participation rates down to their level in 2012. It is possible that workers might have preferred to stay out of the labor force during the COVID-19 pandemic – the latest available data show that workers, who lost their jobs in the last quarter, exited the labor force instantly. But the decline in labor force participation can be observed even before the pandemic in Turkey.

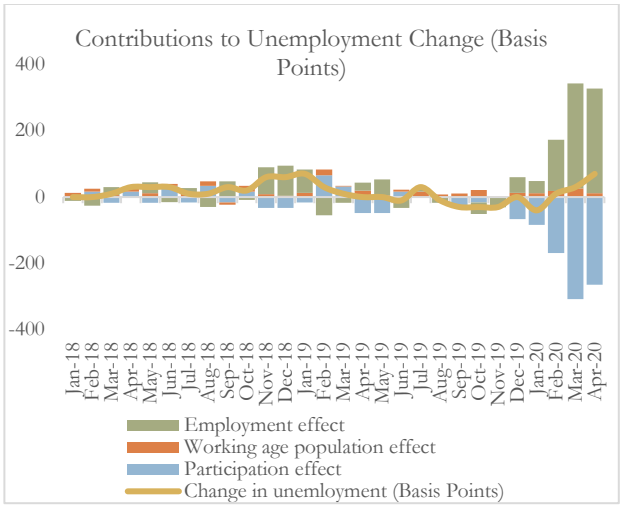
39. **In sum, employment measures and declining labor force participation, have suppressed the unemployment rate, which as a result understates the deterioration in labor market conditions**. The record drop in participation rates helped to pull down unemployment rates (Figure 58), unlike in previous crises when unemployment rates increased sharply. The unemployment rate (seasonally adjusted) rose by 1.1 pp from 12.7 percent in January 2020 to 13.8 percent in April. On the other hand, seasonally unadjusted unemployment fell to 12.8 percent in April from 13 percent a year earlier. Moreover, the share of long-term unemployed in total unemployed has risen by 2 pp for females whilst it dropped by 1.6 pp for males in April compared to a year earlier.

Figure 57: Labor demand deteriorated significantly



Source: TURKSTAT and ISKUR.

Figure 58: Fall in participation rates helped unemployment rate not to spike



Source: Presidency of Strategy and Budget Office, Macro Analysis of Labor Market Developments and TURKSTAT.

[21] The government launched a "short-term work allowance" program for highly impacted firms, providing a wage subsidy equal to the lower of 60 percent of the actual wage of 150 percent of minimum wage. The unpaid leave support is arranged to cover many unemployed or unpaid people who cannot benefit from short work, have not received unemployment benefits, and have no other income.

40. **The fall in labor force participation rate was mostly driven by younger people.** The decline in labor force participation for males was 6.2 pp in April compared to the previous year whilst it was 5.3 pp for females. The population shift or demographic effects explains only around 5 percent of the drop (Box 5. Table 2). Decomposing by age group, for males, the fall in participation of those below the age of 30 drives half of the decline in participation rates for males, despite an increase in working age population for this group compared to the previous year. For females in the 20-39 age group, the drop is sharper compared to males in the same age group (Box 5. Table 3).

41. **Female labor force participation is relatively low in Turkey and declined even further from 34.5 in April 2019 to 29.2 in April 2020.** During the last year, female labor force participation declined by 5.3 percentage points in April, which corresponds to 1,5 million women leaving the labor force in the last year. Female labor force participation was at these levels in early 2014. Similarly, male labor force participation declined by 6.2 percentage points, the lowest participation level in the last decade.

42. **Discouraged workers and people not seeking a job but available to start for other reasons[22] explains more than half of the optouts from labor force.** Discouraged workers and people not seeking a job constituted only 8 percent of people out of labor force in 2019. However, more than half of the increase in out of labor force stemmed from the steep rise (95 percent compared to end of 2019) in these groups which rose to 4.5 million in April 2020 (Figure 59). This also explains the decline in unemployment. A fall in informality rate from 34.5 percent at the end of 2019 to 28.7 percent in April suggests that informal workers constitute a big share of optouts and discouraged workers. On the assumption that the group of not seeking a job but available to work enters into the labor market and remain unemployed, then unemployment would be 24.3 percent rather than 12.8 percent in April.[23]

43. **In addition to job losses and fall in participation, workers are also affected adversely through loss in real wages in the wake of COVID-19**. The recovery in real wages at the end of 2019 was short-lived. Despite a decline in inflation compared to previous year, real wages stagnated in 2020Q1, reflecting the difficulties in the labor market. The construction sector, which lost around 35 percent of employment since 2018Q1, experienced continuous decline in real wages in the last two years (Figure 60). Wages are more likely to be depressed throughout the year as STWA and stagnant labor demand pulls down the wages.

Figure 59: Sharp increase in discouraged workers

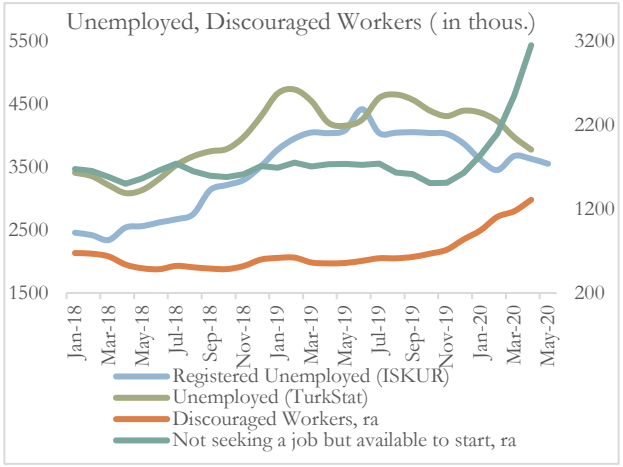
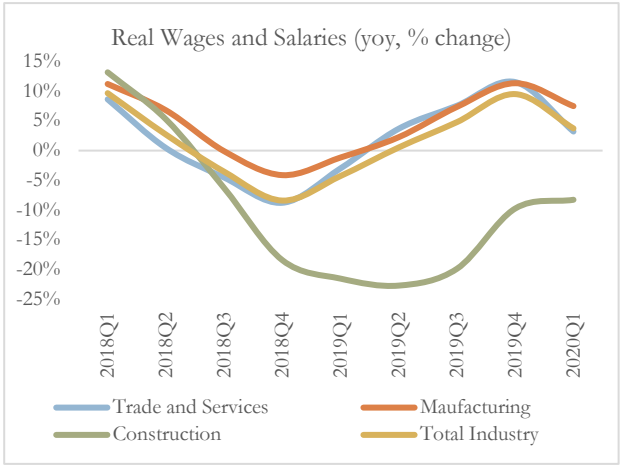


Figure 60: Wages on a declining trend



Source: TURKSTAT, ISKUR and Haver Analytics.

[22] These are persons not seeking a job for reasons including being: seasonal workers, busy with household chores, student, property income earner, retired, or disabled, but available to start a job.

[23] With the same assumption, unemployment rate would be 19.4 percent rather than 13.7 percent in 2019. While the gap between these two was 5.7 percentage points in 2019, the gap increased to 11.5 percentage points in April 2020.

Box 5: Shift share analysis

The changes in labor force participation rates in a more granular approach are analyzed by shift share analysis by following Balakrishnan et.al (2015). Shift share analysis quantifies the relative importance of changes in the population shares and participation rates of each age group. For the analysis, data on labor force, working age population and labor force participation rates by gender and age groups (15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65+) are used from Household Labor Survey on a monthly basis.

In the shift share analysis, the total change in the participation rate with respect to a base year is the sum of: (i) changes in the population share of each group weighted by their base-year participation rate (population share shift or "demographic effect); (b) changes in the participation rate of each group weighted by their base-year population share (participation rate shift); and (c) an interaction term that is typically small and negligible.

$$LFPR_t - LFPR_0 = \sum_g [LFPR_{g_0} (S_{g_t} - S_{g_0}) + S_{g_0}(LFPR_{g_t} - LFPR_{g_0}) + (LFPR_{g_t} - LFPR_{g_0}) (S_{g_t} - S_{g_0})] \quad (1)$$

where $LFPR_t$ stands for total labor force participation rate and $LFPR_{g_t}$ and S_{g_t} refer the participation rate and working age population share of age group g in month t, respectively. The data is seasonally unadjusted, and differences stand for year-on-year differences.

Table 2: Shift Share Analysis (yoy change, points)

	Pop. Shift	Part. Shift	Total LFPR Change	Pop. Shift	Part. Shift	Total LFPR Change	Pop. Shift	Part. Shift	Total LFPR Change
	Male			Female			Total		
2018 - Aug	-0.1	0.7	0.6	-0.1	0.7	0.6	-0.1	0.7	0.6
2018 - Sep	-0.1	0.5	0.4	-0.1	0.5	0.4	-0.1	0.5	0.4
2018 - Oct	-0.1	0.8	0.7	-0.1	0.7	0.6	-0.1	0.7	0.6
2018 - Nov	-0.1	0.4	0.3	-0.1	0.4	0.3	-0.1	0.4	0.3
2018 - Dec	-0.1	0.1	0.0	-0.1	0.3	0.2	-0.1	0.2	0.1
2019 - Nov	-0.2	-0.6	-0.8	-0.1	-0.1	-0.2	-0.2	-0.3	-0.5
2019 - Dec	-0.2	-0.5	-0.7	-0.1	-0.5	-0.7	-0.2	-0.5	-0.7
2020 - Jan	-0.2	-0.7	-0.9	-0.2	-1.2	-1.4	-0.2	-1.0	-1.2
2020 - Feb	-0.2	-2.2	-2.4	-0.2	-2.7	-2.8	-0.2	-2.4	-2.6
2020 - Mar	-0.2	-4.5	-4.7	-0.2	-4.1	-4.3	-0.2	-4.3	-4.5
2020 - Apr	-0.2	-6.1	-6.2	-0.2	-5.1	-5.3	-0.2	-5.6	-5.7

Source: Household Labor Survey, TURKSTAT, WB staff calculations.

Table 3: Shift Share Analysis-Age groups (yoy change, points)

2020 April	Population Shift	Participation Shift	Population Shift	Participation Shift	Population Shift	Participation Shift
	Male		Female		Total	
15-19	-0.2	-0.9	0.0	-0.5	-0.1	-0.7
20-24	0.1	-1.0	-0.1	-1.1	0.0	-1.0
25-29	-0.1	-0.6	0.0	-0.6	0.0	-0.6
30-34	-0.2	-0.5	-0.1	-0.6	-0.1	-0.6
35-39	-0.2	-0.4	-0.1	-0.6	-0.2	-0.5
40-44	0.1	-0.4	0.1	-0.5	0.1	-0.5
45-49	0.1	-0.3	0.1	-0.4	0.1	-0.4
50-54	-0.1	-0.5	-0.1	-0.3	-0.1	-0.4
55-59	0.1	-0.6	0.1	-0.2	0.1	-0.4
60-64	0.0	-0.4	0.0	-0.2	0.0	-0.3
65+	0.1	-0.4	0.0	-0.2	0.1	-0.3
Total	-0.2	-6.1	-0.2	-5.1	-0.2	-5.6

Source: Household Labor Survey, TURKSTAT, WB staff calculations.

Source: WB Staff estimates.

Private enterprises coping through policy support and firm-level adjustments

44. **To complement macroeconomic and sector analysis, the World Bank together with the Union of Chambers and Commodity Exchanges of Turkey (TOBB) conducted a survey to assess the impact of the COVID-19 crisis on enterprises** (Box 6)**.** Firms were surveyed in June, by which time many of the restrictions had been lifted.[24] As a result, the share of firms that are temporarily closed due regulations is only 4 percent (Figure 61). Firms that are permanently closed is only 1 percent, but the percentage of permanently closed firms may be underrepresented in the survey, since exiting firms are less likely respond. The largest portion of the firms (66%) reported that they are open, while the second largest group (20%) is partially open due to legal restrictions. Only 9% of the surveyed firms are closed due to their own choice.

45. **The smallest and youngest firms are the ones that are most seriously affected by the COVID-19 crisis and are more likely exit the market permanently.** Open and partially open firms are significantly larger than the closed establishments indicating that large firms are better able to absorb the crisis (Figure 62). The group that contains the smallest-sized establishments are those that are permanently closed. Similarly, older firms seem to be less affected and can partially or fully continue their operations. The share of female employment is slightly higher in the temporarily closed establishments (Figure 63).[25] The enterprises that are permanently closed, however, tend to have lower shares of female employees.

46. **The accommodation and education sectors have the highest shares of closed enterprises and the highest share of female employees.** The ratio of the number of closed firms (temporary or permanent) to the number of open firms (partially or fully) in a sector can be considered an index for the magnitude of the negative impact of Covid-19 in that sector. Accordingly, in the accommodation sector, the ratio of closed to open firms is the highest followed by transportation and storage and education. Education and transportation and storage also tend to have a high share of female employees.

47. **Most enterprises in the survey reported a decrease in sales since March 1, compared to the same period last year** (Figure 64). Sectors that produce necessities and where employees can continue working from home have reported a lower drop in sales (Figure 64). These include agriculture, fishing and mining as well as ICT. Sectors that reported a large drop in sales on the other hand include the accommodation sector, where all interviewed firms reported a decrease in sales, as well as education and transportation and storage sectors.

48. **Employees that work in restaurants and cafes are more likely to lose their jobs during the pandemic while the health sector has the largest share of firms hiring new employees** (Figure 65). The food services sector, which includes restaurants and cafes had the largest proportion of firms reporting layoffs. In the information and communication and in manufacturing, the share of firms reporting layoffs is also relatively high, but in these sectors the share of firms that hired new employees are even larger. Therefore, in these sectors, the outbreak caused a churn of employees. This is likely due to asymmetric effects of COVID-19 that affected, for instance, car manufacturers negatively but health product manufacturers positively. In the financial and real estate sectors, the percentage of firms firing is lower in comparison to other sectors, but the share of firms hiring is also distinctly low. The health sector, as expected, has the largest share of firms hiring and the lowest share of firms laying off employees.

49. **The share of firms that imposed unpaid leave is the highest in the most severely affected sectors.** They include education, accommodation sectors and manufacturing (Figure 66). Less affected sectors had a lower share of firms resorting to paid or unpaid leave. But overall a large share of firms across sectors have put employees on leave, benefiting from government subsidies for those on unpaid leave.

[24] See also "Survey on the Effects of Pandemic on Real Sector" conducted by the Central Bank of Turkey between 31 March and 7 April – CBRT Inflation Report III (July 29, 2020).

[25] The survey collects the percentage of female employees at the interviewed firm, where these percentages are weighted-averages within each status group using firms' employment shares as the weights.

Figure 61: Firms reopening since June

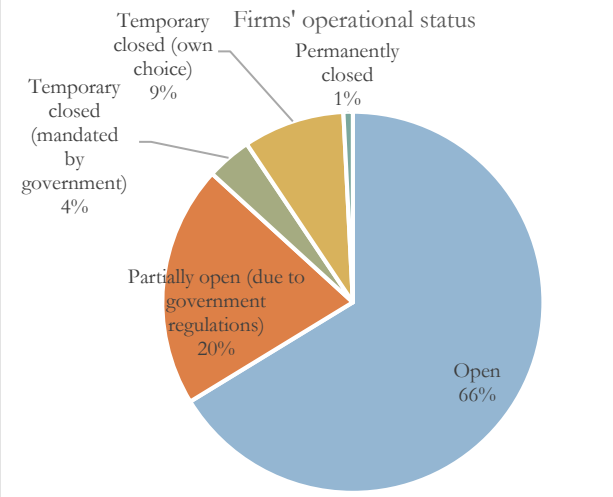


Figure 62: Smaller firms most adversely affected

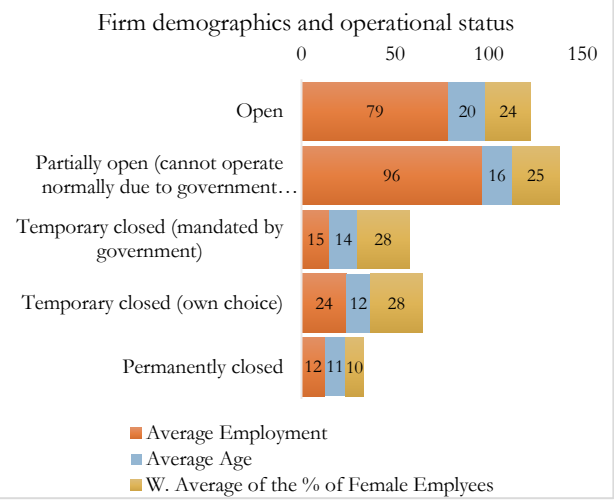


Figure 63: Construction, accom., education badly hit

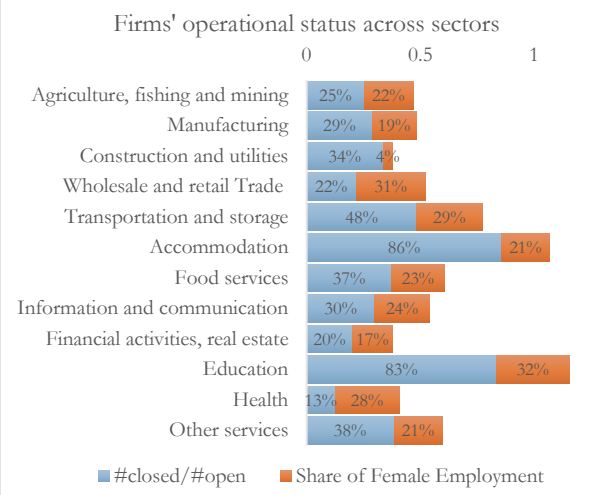


Figure 64: Most firms reporting drop in sales

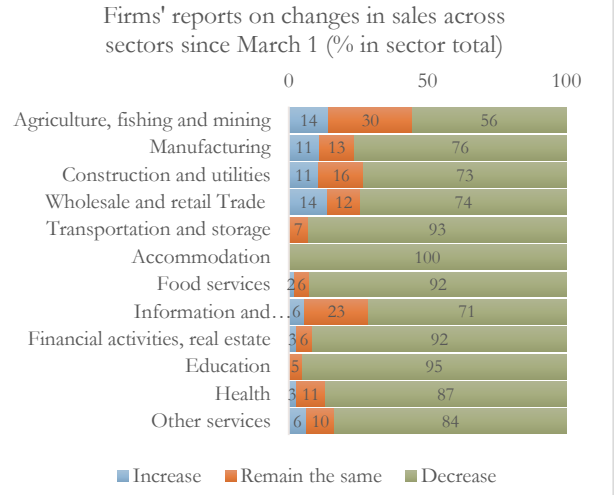


Figure 65: Service experience most layoffs

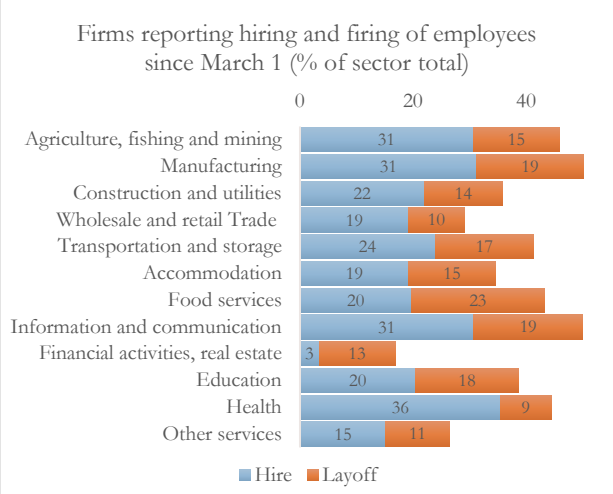
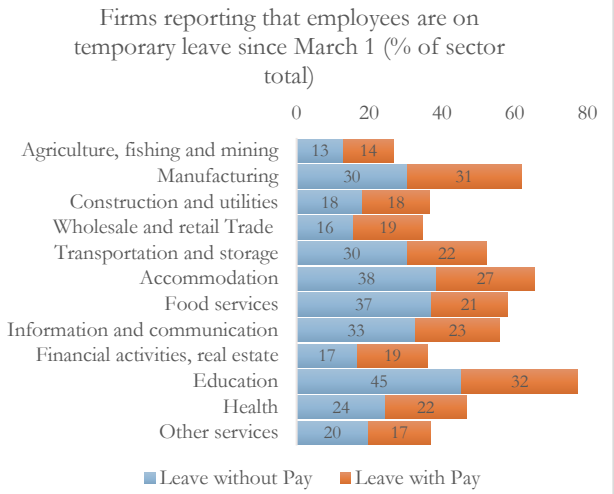


Figure 66: Many firms put employees on leave



Sources: WB-TOBB Business Pulse Survey, WB Staff estimates.

50. **Workhour reductions are common in the most severely affected sectors as well as in the sectors where the negative effects are milder such as the health sector and ICT** (Figure 67). This might imply that workhour reductions may be requested by employees (to reduce risk of face-to-face interaction) rather than always implemented by employers. In the health sector, for example, the share of firms reporting new hire of employees is the highest, which would otherwise run counter to the high rate of workhours reduction. The salary cuts are also common in sectors where there is an overall reduction of workhours. In few a few areas such as the financial sector and wholesale and retail trade, the share of firms reporting a reduction in workhours is generally high, but the share of firms that impose wage cuts is low.

51. **In terms of policy support, most firms are in favor of cash transfers for liquidity, while loans are generally a less preferred option** (Figure 68). The Business Pulse Survey asks respondents to choose up to three most preferred policy interventions among a set of choices. Among them, cash transfers are the most commonly selected type of intervention followed by deferrals, exemptions and reductions of taxes and wage subsidies. While around 600-700 firms chose one or more of these top three policy actions, the 4th most preferred intervention, deferral of credit payments, suspension of interest payments, or rollover of debt, had been chosen by less than 400 firms. Firms indicating their needs for new credits or subsidized loans are generally low.

Figure 67: Workhour and wage reductions are commonly applied

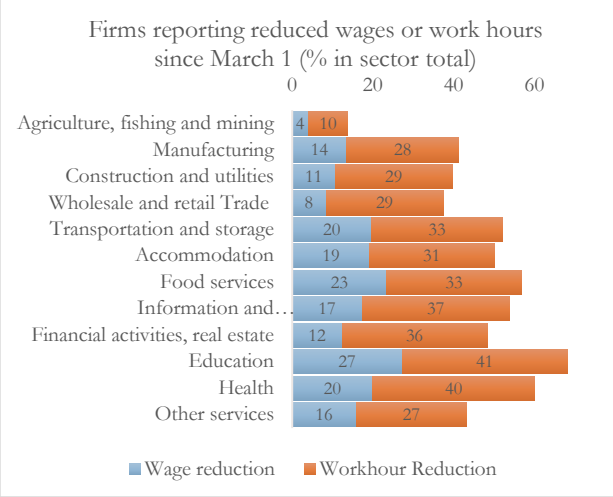
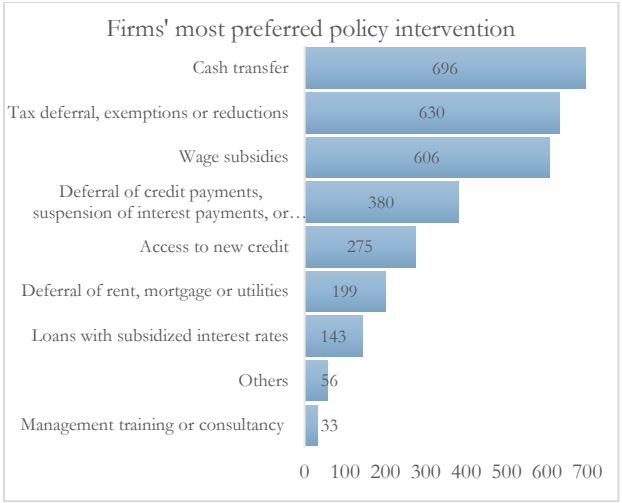


Figure 68: Cash transfers most preferred option for liquidity support



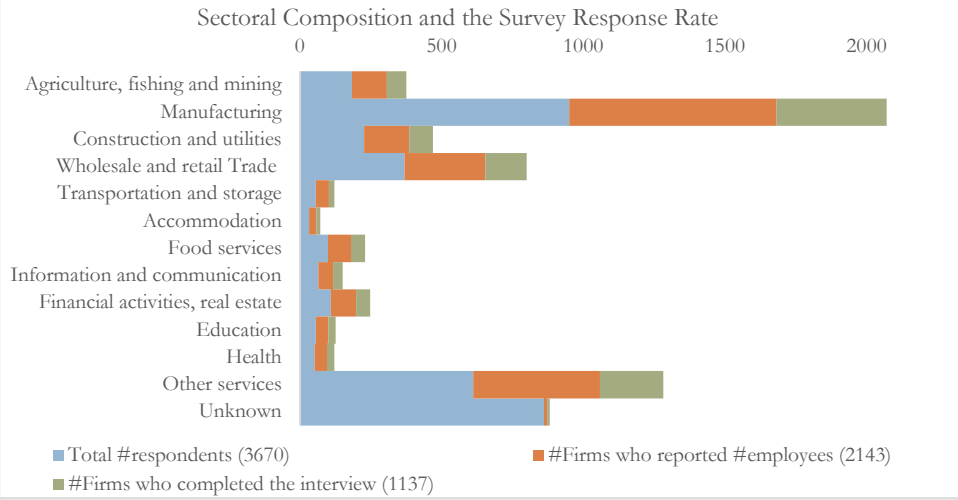
Sources: WB-TOBB Business Pulse Survey, WB Staff estimates.

Box 6: Turkey business pulse survey

A business pulse survey was implemented jointly by the World Bank and The Union of Chambers and Commodity Exchanges of Turkey. Online rollout of the survey started on June 15, 2020 where firms were sent a link to the survey form. As of July 6, 3,670 firms started filling the survey where 2,143 of them reported their actual number of employees, and 1,137 firms indicated that they have completed the survey.

Respondents were from across 12 sectors (Figure 69). Among all the respondents, 861 firms did not report their sector of operation but only 12 of them reported their number of employees and only 8 of them completed the survey. The analysis only includes firms that reported a positive number of employees within a sensible range, so that in all the figures and tables, the maximum number of respondents is 2,143. Regardless of a firm indicating the completion of the survey or not, the survey allows firms to leave any question unanswered, so that the total number of respondents for the questions differs from each other.

Figure 69: Sectoral Composition and the Survey Response Rate



Most of the firms in the sample are small with less than 50 employees (Table 4). There are 342 medium-sized firms and 120 large firms in the sample where the largest firm has 10,423 employees and is operating in the sector of wholesale and retail trade. Most firms in the sample are less than 20 years old. If we consider firms that are at most 5 years old as start-ups, the sample includes more than 200 start-ups

Table 4: Firm Size in the Survey Sample

	#Firms	Avg. Size	Std	Min	Max
Small <50	1681	11	12	0	49
Medium [50,250]	342	114	57	50	250
Large >250	120	865	1264	252	10423

Source: World Bank and TOBB Business Pulse Survey.

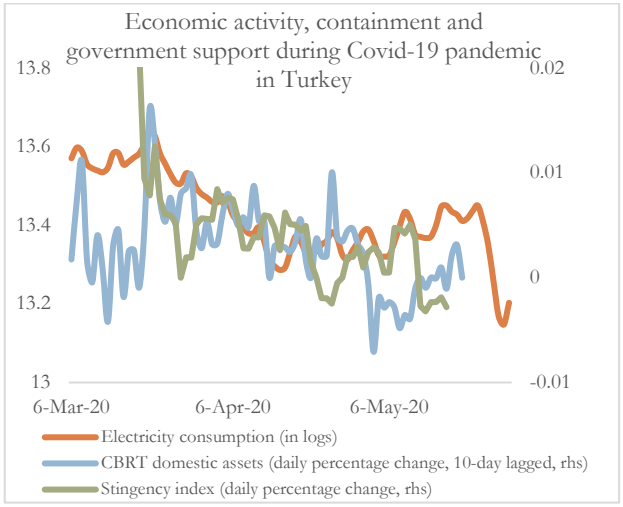
C. Economic policies help absorb the shock but intensify macro pressures

52. **Containment of COVID-19 slows down the economy, though early response (section A) and economic policies (discussed below) can help buffer the shock**. Analysis by Demirguc-Kunt et al. shows that non-pharmaceutical interventions (NPIs - i.e. social distancing and movement restrictions)[26] could have led to an estimated 10 percent decline in economic activity. At the same time, countries like Turkey that implemented the NPIs earlier seemed to have had better economic and health outcomes compared to others that imposed NPIs at the later stages of the pandemic.

53. **Preliminary analysis seems to suggest that Turkey's short-term containment measures and economic support may have helped to balance the health and economic impacts of COVID-19.** High frequency data relating to economic activity, containment measures, and economic support[27] in Turkey suggest that (Figure 70, Box 7): (i) a 1 percentage point increase in containment measures is associated with 0.12 percentage point decline in economic activity; whilst (ii) a 1 percentage point increase in economic policy support is associated with 0.19 percentage point increase in economic activity.

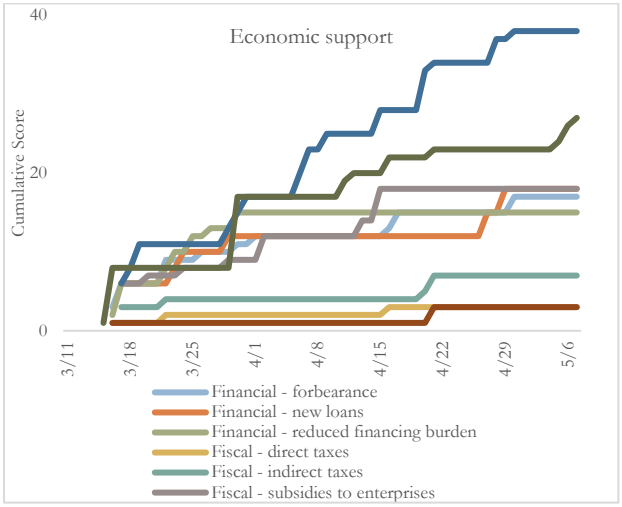
54. **Transparent, timely, targeted, and timebound assistance can support affected businesses and households**. It is important to avoid overly generous support to try and stimulate the economy in the short-term, mostly because demand and supply are unlikely to respond due to the virus. This can lead to macro imbalances and erosion of policy space, which can ultimately thwart a recovery. Turkey's comprehensive economic policy package included various fiscal, monetary, and financial measures (Figure 71) discussed in more detail in the next three sections.

Figure 70: Economic support buffer economic shocks



Sources: Ministry of Energy, CBRT, WB staff calculations.

Figure 71: Comprehensive economic support package[28]



Sources: WB staff calculation based on media sources.

[26] Demirguc-Kunt, Asli; Lokshin, Michael M.; Torre, Ivan. 2020. The Sooner, the Better: The Early Economic Impact of Non-Pharmaceutical Interventions during the COVID-19 Pandemic (English). Policy Research working paper; no. WPS 9257; COVID-19 (Coronavirus). Washington, D.C.: World Bank Group.

[27] Economic support covers the change in CBRT domestic assets as a proxy for government stimulus (Domestic asset = treasury debt (security holdings and other holdings) + credits to banking sector and other items).

[28] Scores determined based on the magnitude of the announced measure, ranking between -3 and +3 (+3 being the most impactful in terms of coverage, number of people affected, and positive externalities).

Box 7: Impact of economic support and containment on growth

Background

We use high frequency data on economic support and containment policies to roughly estimate how these opposite factors are associated with economic activity in Turkey since the onset of COVID-19.

Data

(i) Economic activity: change in energy consumption (MWh) is used (correlated with GDP growth) as it is highly correlated with change in GDP;
(ii) Economic support: change in CBRT domestic assets is used as a proxy for government stimulus (Domestic asset = treasury debt (security holdings and other holdings) + credits to banking sector and other items);
(iii) Containment measures: Covid-19 related index created by WB staff using movement and social distancing measures announced by authorities in Turkey (scores constructed through own assessment of policy magnitude between -3 and +3, +3 being most stringent).

Data coverage

(i) Working days only, daily change in log terms, 7-day moving average
(ii) 10-day lag for CBRT domestic assets
  - CBRT being lender of the last resort
  - Government stimulus become effective exactly after 10 days

(iii) Data covers the period between March 12 (one day after the first covid-19 case in Turkey) and June 1, only for working days. (For government stimulus, it starts on February 26)

Data sources

(i) Daily energy consumption: Ministry of Energy, Republic of Turkey
(ii) CBRT domestic assets: Central Bank of Turkey
(iii) Stringency index: WB staff calculations based on publicly available announcements

Regression

$$\Delta lneconomic\ activity_t = \Delta lnstringency_t + \Delta lneconomicsupport_{t-10}$$

Regression results

Dependent Variable: Economic activity

Variable	Coefficient	Standard Error	t-Statistic	Probability
Stringency	-0.1187022	0.0400802	-2.96	0.005
Economic sup.	0.187077	0.0930188	2.01	0.051
C	-0.0030294	0.0022586	-1.34	0.187
R^2	0.3099			
Adjusted R^2	0.2778			
F-statistic	9.65	Prob (*F*-statistic)		0.0003
Observations	46	Durbin-Watson stat		0.9229047

Sources: WB Staff estimates.

Fiscal policy provides critical support for health households and businesses

55. **Turkey confronted the COVID-19 shock on the back of growing fiscal imbalances.** Fiscal policy recently went through two phases of expansion: (i) from early 2017, following the failed coup attempt, to mid-2018, by which time fiscal policy turned procyclical and contributed to economic overheating; and (ii) from mid-2018 to late 2019 in response to an economic downturn that followed the market crash of August 2018. Tax collection as a share of GDP declined whilst current expenditures increased, leading to rising primary and overall fiscal imbalances over these two periods (Table 5, Figure 72).

56. **At the same time, Turkey entered the pandemic period with more fiscal space than comparator countries.** Countercyclical policies prior to 2017 helped maintain low levels of government debt. Across 48 Emerging Market and Developing Economies (EMDEs), those with government debt to GDP below a median of 51 percent, which includes Turkey with central government debt to GDP at 33 percent (Figure 73), had fiscal response packages that were almost twice the average of those above the median.[29]

Figure 72: Two phases of fiscal expansion have contributed to growing imbalances

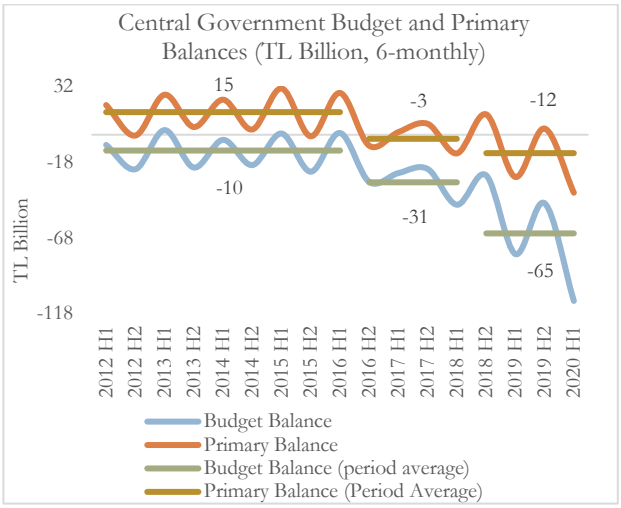
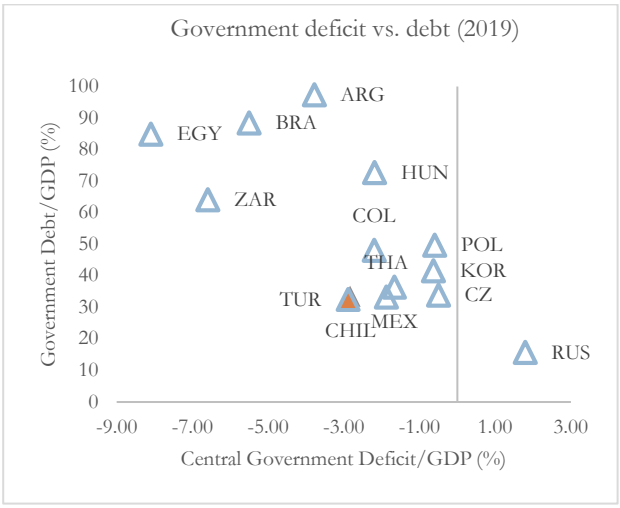


Figure 73: Turkey has relatively more fiscal space to respond to the COVID-19 crisis



Sources: Haver Analytics, WB Staff estimates.

57. **Automatic stabilizers played a role in Turkey's fiscal response to the 2018-2019 downturn, as well as the response to the COVID-19 shock.** Effective stabilizers help to reduce tax burden when the economy slows down, mostly through progressive income taxes, and raise spending for vulnerable segments through well targeted public transfers (Box 8). Income taxes and public transfers in Turkey are progressive. The targeting and coverage of public transfers in Turkey are strong, but adequacy of benefits remains low.[30, 31] This yields mixed results for automatic stabilizers – good targeting and coverage ensures that resources reach those that need it most, but low benefits impact on ability to smooth private consumption.

58. **The expansion of unemployment benefits over the past two years will have also supported the role of automatic stabilizers.** Two points to note in this regard: (i) active labor market policies (ALMPs), which have targeted mostly younger, less skilled workers, increased the number of beneficiaries to 570,000 in 2019 (15 percent of unemployed); (ii) unemployment benefits, which tend to target older beneficiaries than ALMPs, increased dramatically in 2019 and 2020, reaching over 1 million beneficiaries, over 25 percent of beneficiaries. Both sets of benefits have increased countercyclically.

[29] WBG (June 2020), "Global Economic Prospects – Pandemic, Recession: The Global Economy in Crisis" (p.52, Figure 1.21 C).
[30] WBG (October 2019), "Turkey Economic Monitor: Charting a New Course," and WBG Social Assistance Review (forthcoming).
[31] Discussed further in looking ahead section.

Table 5: Fiscal operations (% of GDP, change over previous period)					
	2017 Q1	**2018 Q1**	**2019 Q1**	**2020 Q1**	**2017-2020**
	Share of GDP	Change from previous year (percentage point)			Cumulative change
Revenue	**21.2%**	**-1.0%**	**0.9%**	**-0.4%**	**-0.4%**
Direct Tax	5.8%	0.0%	0.5%	-0.3%	0.2%
Indirect Tax	11.8%	-0.3%	-1.4%	-0.4%	-2.1%
Other	3.6%	-0.7%	1.8%	0.3%	1.4%
Expenditure	**22.4%**	**-1.0%**	**1.5%**	**0.0%**	**0.5%**
Recurrent	17.3%	-1.1%	1.0%	0.8%	0.7%
Current Transfers	8.6%	-0.6%	0.6%	0.4%	0.4%
Interest	1.9%	-0.1%	0.4%	0.2%	0.4%
Other	8.7%	0.1%	0.3%	-0.4%	0.0%
Capital	2.3%	0.2%	-0.03%	-0.7%	-0.5%
Other	0.8%	0.1%	0.3%	-0.4%	0.0%
Overall Balance	**-1.1%**	**0.0%**	**-0.7%**	**-0.3%**	**-1.0%**
Primary Balance	**0.8%**	**-0.1%**	**-0.3%**	**-0.2%**	**-0.6%**
Memo items					
GDP growth (% yoy)	**5.3%**	**7.2%**	**-2.1%**	**4.4%**	
Inflation (% yoy)	10.2%	10.3%	19.9%	12.1%	
Sources: Haver Analytics, WB Staff estimates.					

Box 8: Progressivity of taxes and public transfers in Turkey

Progressivity of fiscal policy can achieve more equity and enhance automatic stabilizers across business cycles. It can help reduce the tax burden and increase spending when the economy slows down (and vice versa). With a progressive income tax system, household income tends to fall (increase) relatively less during downturns (upturns), which can help smooth consumption. Similarly, corporate profits can fall more quickly than corporate revenue during downturns, leading to a sharp drop in tax payments compared to revenue, enabling sustained operations and employment. On the other side of the budget, a well targeted and responsive public transfer system can help offset loss of household income.

In Turkey, direct taxes in general are progressive (Figure 74).[32] They are also broadly inequality-reducing as shown by a positive marginal contribution to the Gini coefficient. Payroll income tax (PIT) is progressive and the most inequality-reducing, while agricultural income tax is regressive and does not contribute to reduce inequality. Progressivity of PIT helps strengthen automatic stabilizers.

Public transfers also exhibit a progressive pattern (Figure 75). These transfers are also inequality-reducing as most of the marginal contributions are also positive, but there is marked heterogeneity across them. Social assistance transfers are strongly progressive, given their poverty-targeted design, though taken individually their marginal impacts look relatively small, given their limited benefit levels.

Despite having low progressivity, the minimum subsistence allowance program (AGI) has the largest distributional impact among all programs. The reason being is that the AGI is a large government expenditure (3 percent of total, 0.9 percent of GDP). Improved targeting and progressivity of the AGI could play a major role in reducing inequality and poverty, whilst also enhancing automatic stabilizers.

[32] Direct taxes amount to about a fifth of total revenues, with personal income tax raising almost two-thirds of proceeds among direct taxes. Turkey's personal income tax (PIT) is levied on individual income from several sources. PIT consists of two main components; withholding tax (WHT) where the tax is paid at the source before the individual receives the gross amount of specific earnings, and PIT based on declaration (PITBD) where the individual is obliged to declare the annual earnings to the state.

Figure 74: Direct taxes in Turkey are progressive and redistributive…

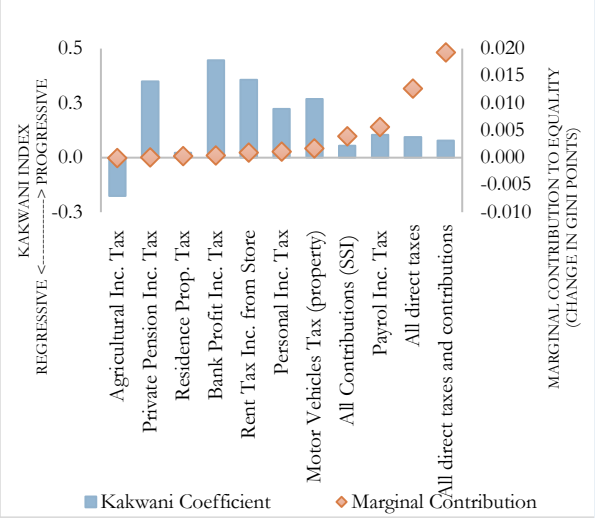
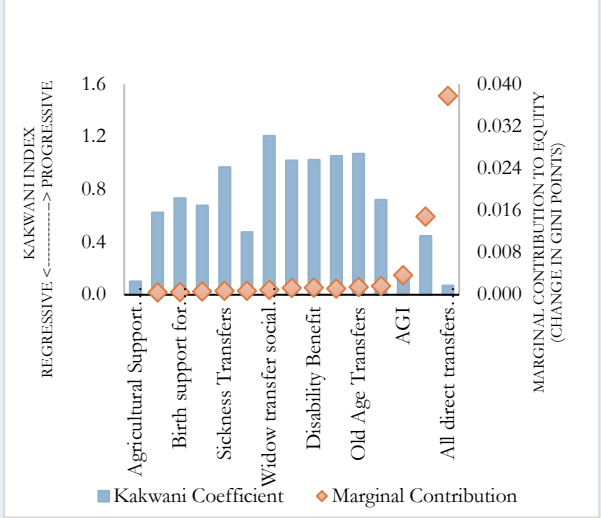


Figure 75: …as are public transfers



Source: Cuevas et al. (June 2020).

Notes: Progressivity is measured using the Kakwani index (Kakwani 1977). A tax is progressive whenever its burden rises with income. For each tax the Kakwani index is calculated as the difference between the concentration coefficient of the tax and the Gini coefficient of Market income plus pensions. A Kakwani index for taxes will be positive (negative) if a tax is globally progressive (regressive).

Notes: A benefit is progressive whenever its entitlement decreases with income. A Kakwani index for transfers is positive if a transfer is progressive in relative terms. In the case of transfers, the index is defined as the difference between the Gini coefficient of Market income plus pensions (when pensions are treated as deferred income) and the concentration coefficient of the transfers.

To analyze if a tax or transfer is equalizing, we use the marginal contribution of taxes and transfers to income inequality measured by the Gini coefficient.[33] The marginal contribution measures the marginal reduction in inequality due to a tax or a transfer, and is the difference between the Gini coefficient without the particular fiscal intervention and the Gini coefficient of all income components together.[34] The intervention is equalizing whenever the marginal contribution is positive. By comparing the marginal contribution and the Kakwani index we can determine whether a fiscal intervention is equalizing (unequalizing) despite being regressive (progressive).

Source: For more details please see Cuevas, P.F.; Lucchetti, L; Nebiler, M (June 2020), "What are the Poverty and Inequality Impacts of Fiscal Policy in Turkey," Policy Research working paper no. WPS 9300.

59. **On top of automatic stabilizers, discretionary fiscal measures are important for urgent expansion of healthcare and protection of household and business incomes**. Immediate fiscal responses should help: (i) expand urgent healthcare needs; (ii) avert a permanent supply shock from widespread layoffs and insolvencies; and (iii) avert a permanent drop in lifetime earnings of households through sale of assets and loss of human capital. This means targeted policies in the short-term rather than a general stimulus to accelerate demand. A general stimulus would be ineffective given the nature of the shock that includes mobility restrictions and social distancing, which necessarily slow economic activity. A general stimulus may also erode fiscal space needed for recovery once the health situation stabilizes and the economy begins to operate.

[33] If there was a single fiscal intervention in the system, then the Kakwani index alone could determine whether that intervention is unambiguously equalizing. However, this is no longer the case when there is more than one intervention. As Lambert (2001) shows, a tax or transfer can reduce (increase) inequality despite being regressive (progressive).

[34] Since there is path dependency, the sum of the marginal contributions of each intervention is not equal to the total change in inequality (Enami, Lustig, and Aranda 2017).

60. **Turkey's fiscal responses have been broadly aligned with these principles**. On the health side, the authorities have expanded health system capacity to support treatment. But they have also invested in monitoring and prevention (e.g. through social distancing and mobility restrictions). This helps contain the spread of the virus, reduce the need for treatment, and lowers the fiscal burden. Support to enterprises was mainly through deferral of social security premium payments and tax payments. In parallel, fiscal policy helped buffer liquidity support through the banking system by expanding the Credit Guarantee Fund (TL 50 billion), which does not affect the short-term fiscal stance but is a contingent liability (Figures 76-77).

Figure 76: Rapid ramp up in near term support to health, households and businesses

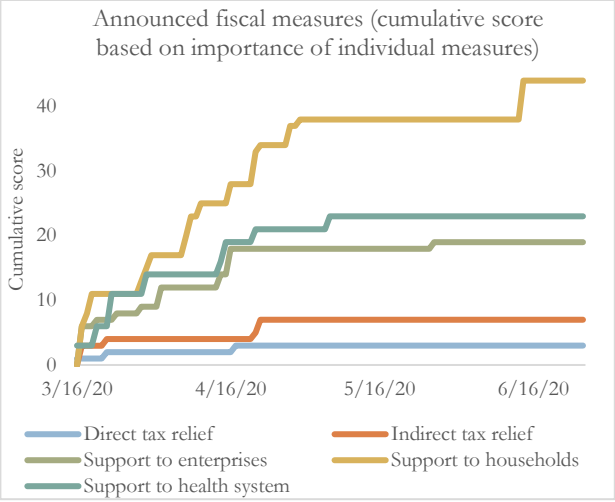


Figure 77: Short-term fiscal measures rightly focused on support rather than stimulus

Health system	Enterprises	Households
• Recruitment of 32k new health workers • New hospitals with >3,500 bed capacity • All hospitals to treat COVID • Home health and social services for elderly • Ramp up in testing capacity	• Deferral of social security premiums and tax payments (TL66 billion) • Short-term work allowance salary payments of private sector workers • Credit Guarantee Fund for support to MSMEs	• Unemployment insurance • Lump sum transfers (TL1,000 to poor households) • Wage subsidies for workers on unpaid leave • Increased pension payouts • National Solidarity Campaign

Sources: WB Staff based on government announcements.

61. **For households, important measures include:**

(i) A prohibition on layoff of formal workers for three months. In June, the measure was extended for another three months until the end of September. The unemployment benefit payments were continued for people who lost their jobs prior to the COVID-19 pandemic.

(ii) Sixty percent of gross wages of workers, who were on unpaid leave, was paid from the short-term allowance fund. The number of workers receiving short-term allowance reached to 3.51 million by mid-June. For workers who were not eligible for short-term allowance, the government has delivered monthly unpaid leave subsidy, which amounts to 1,177TL.

(iii) The Ministry of Family, Labor and Social Services (MoFLSS) introduced the Social Support program that provided a one-time TL 1,000 support for vulnerable households. The program reached to 6.11 million households by June 20 and consisted of three phases. In the first phase, the support delivered to existing beneficiaries of regular social assistance transfers. Between April 1-5, 2020, 2.1 million households received 1,000 TL. In the second phase, another 2.3 million vulnerable households were supported by the Social Support Program by April 19, 2020. Those households are considered in need with the investigation of the Social Assistance and Solidarity Foundations. In the final phase, the MoFLSS accepted online applications from vulnerable households for the one-time support. The stipend of 1,000 TL is delivered to 1.68 million households by June 20, 2020.

Table 6: COVID-19 measures introduced by the Ministry of Family, Labor and Social Services

		Number of individuals/ households reached	Amount of assistance provided (TL)
Social Support Program	Phase 1	2,111,254	2,111,254,000
	Phase 2	2,316,010	2,316,010,000
	Phase 3	1,680,180	1,680,180,000
Short Term Work Allowance	Workers	3,505,902	10,613,543,961
Unpaid Leave Subsidy	Workers	1,358,375	1,701,581,864
Unemployment Insurance	Individuals	717,911	2,071,032,826
Total			**20,493,602,651**

Source: Ministry of Family, Labor and Social Services, accessed on June 20, 2020.

62. **Fiscal policy has therefore been an important workhorse since the outbreak of the COVID-19, which is reflected in central budget numbers.** The budget changed rapidly between March and May this year when the crisis peaked. Direct and indirect tax collections dropped by 2 percent each in real terms relative to the same period in 2019 (Figure 78). Overall revenue collections dropped by 5 percent in real terms due to economic contraction, unemployment, and tax relief measures.[35] Central government spending on the other hand increased by 20 percent in real terms in March-May 2020 compared to the same period in 2019 (Figure 79). More than half of the increase as expected was driven by public transfers. Though a sustained increase in borrowing requirements over the past year and a half has also led to an increased burden of interest expenses (Figure 80).

63. **Monetary easing in response to COVID-19 has also aided fiscal expansion (**Figure 81). Three points to note in this regard. First, the reduction in central bank policy rates over the last 12 months will have reduced government borrowing costs, even though the overall interest burden has risen and remains high because of increased debt; yields on two-year bond yields have declined from a peak of 25 percent in October 2018 to less than 9 percent most recently. Second, a new asset ratio rule[36] issued by the Banking Regulation and Supervision Agency (BRSA) designed to encourage bank lending has led to a 60 percent increase in government bond issuances between May 2019 and May 2020 (Figure 82). These will have also contributed to declining bond yields. Third, the Central Bank has increased its Government Domestic Debt Securities (GDDS) portfolio for OMO purposes from an average of TL 15 billion in 2019 to TL 88 billion in June 2020 through outright purchase operations on the secondary market.[37]

64. **At the same time, the average maturity of domestic borrowing has declined slightly whilst domestic FX bond issuances have increased, with implications for refinancing and currency risk.** The average maturity has fallen from 4 years in early 2017 to 3 years more recently (Figure 83). The share of domestic FX bond issuances on the other hand has risen from an average of 10 percent of net financing needs in 2017 and 2018, to just over 40 percent in 2019 and H1 2020 (Figure 84). This may help absorb excess FX liquidity from the banking sector, though the amounts are relatively small compared to overall FX deposits in the banking sector (less than 5 percent). Shorter tenor and more FX-linked borrowing will contribute to refinancing and currency pressures in the budget.

[35] Reduced employment also had negative impact on current transfers to the Social Security Institution because of the decrease in premium payments, in addition to postponement of social security premium.

[36] This rule is designed to (i) boost credit, (ii) encourage commercial banks to hold more government bonds and (iii) promote swap operations with the central bank. Discussed further below in the financial sector section.

[37] This total portfolio value also includes the bond purchases of the CBRT from Primary Dealer banks where the PDs are given the opportunity to sell the GDDS purchased from the Unemployment Insurance Fund. Within this framework, through the auctions conducted, a sum of 12.2 billion nominal of GDDS amounting TL 20.7 billion has been purchased from Primary Dealer banks. The secondary market effect of these purchases is negligible.

65. **The cost of external financing has remained steady whilst the maturity has declined sharply**. Weighted average maturity has declined from 16 years in 2017 to just over 6 years in 2019, whilst the average cost has hovered between 5 and 6 percent (Figure 86). There have been two Euro bond issuances since the start of the year, which took place in February just ahead of the COVID-19 crisis. External financing has tended to be frontloaded in recent years, so it may be that the authorities decide to rely on domestic liquidity to finance the budget deficit. Though the authorities will need to roll over around $9 billion in external financing by the end of 2020.

Figure 78: Revenues contract since the onset of COVID-19

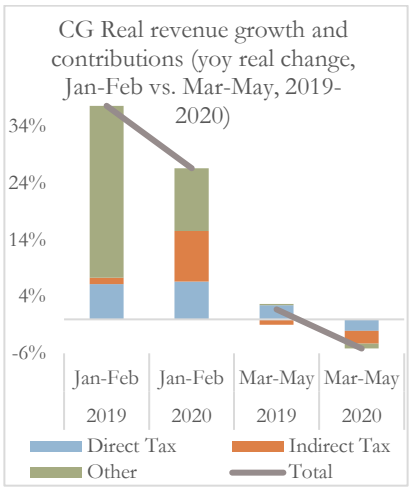


Figure 79: Whilst public transfers drive spending growth

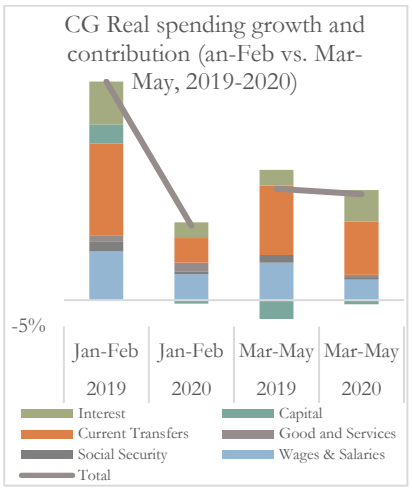


Figure 80: As well as rising interest payments

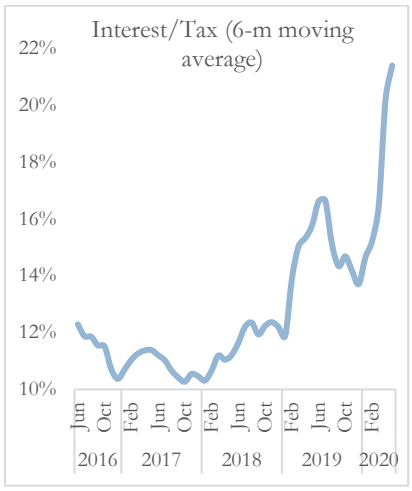


Figure 81: Fiscal imbalances reach record levels in March-May

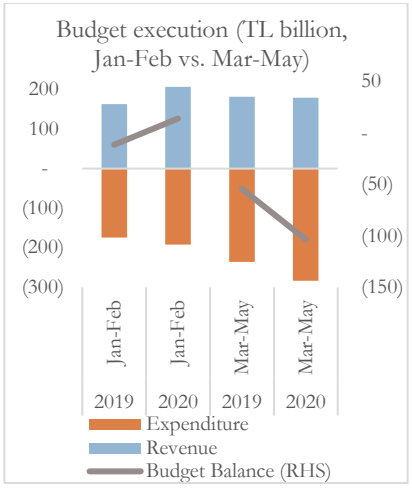


Figure 82: Whilst monetary expansion helps finance the deficit

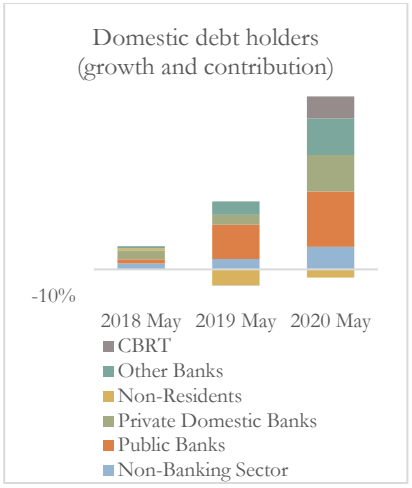


Figure 83: Domestic borrowing cost and tenor have declined

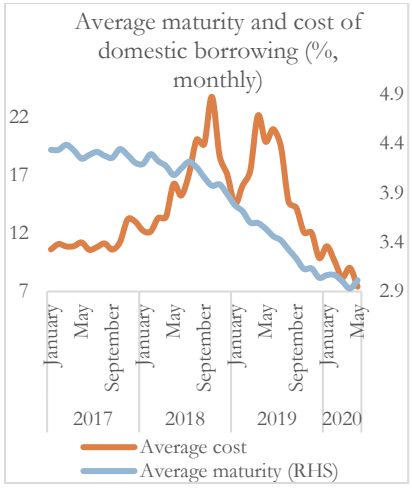


Figure 84: With rising issuance of FX denominated bonds

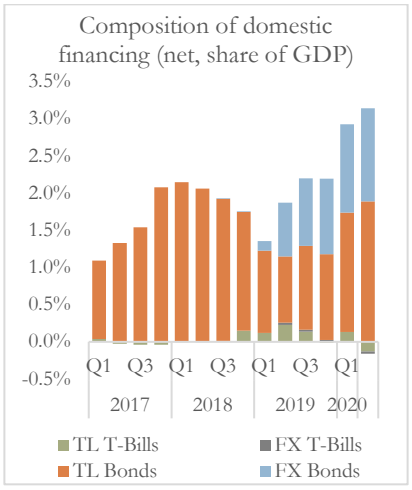


Figure 85: Shift from external to domestic borrowing

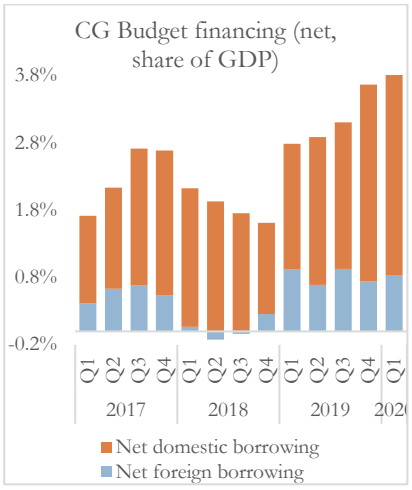
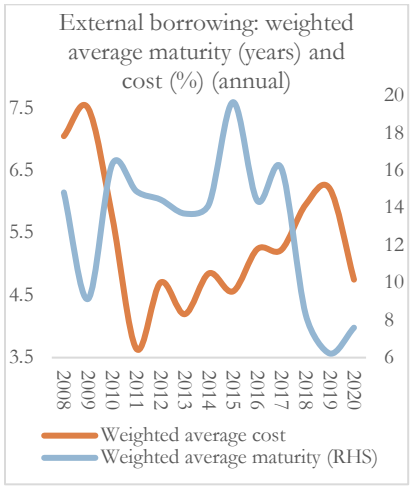


Figure 86: External debt profile remains favorable



Sources: Ministry of Treasury and Finance, WB Staff estimates.

66. **Central government debt levels, which have consistently declined since the Global Financial Crisis, have recently started to pick up**. Both domestic and external debt stocks have started to pick up gradually since end 2018 in line with above mentioned developments (Figure 87). This has led to a slight pickup in overall central government debt from 28 percent of GDP in mid-2018 to 31 percent by end Q1 2020 (Figure 88). As discussed in the last Turkey Economic Monitor, prior to the COVID-19 crisis, this did not pose a major challenge for fiscal sustainability. It provided buffers for Turkey to be able to absorb limited shocks. This analysis is updated further in the second half of the TEM.

Figure 87: Steady increase in domestic and external debt since end 2018

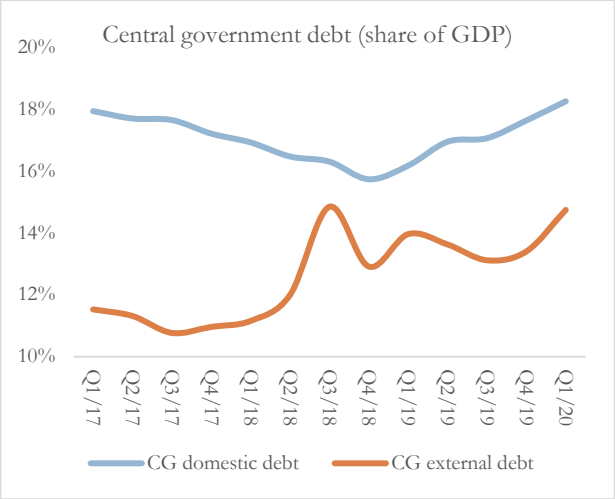
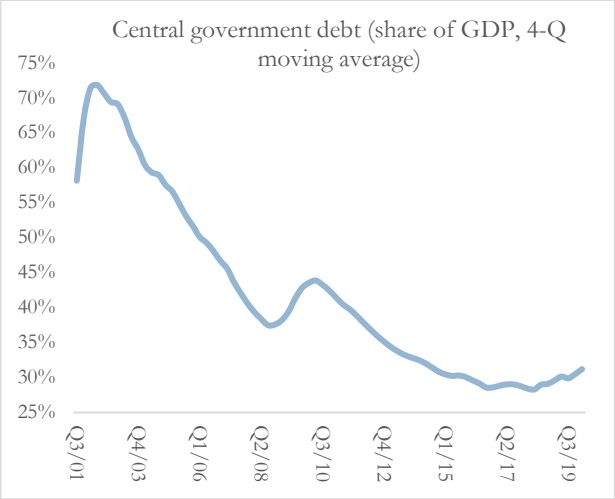


Figure 88: Contributing to an uptick in Central Government debt, which remains generally low



Sources: MOTF, Haver Analytics, WB Staff estimates.

Monetary expansion reaching its limits and adding to macroeconomic pressures

67. **The authorities have loosened monetary policy further to fight COVID-19 following a sustained period of already assertive policy rate cuts with inflation abating in the first three quarters of 2019.** Prior to the onset of the crisis in March, monetary policy was already on a loosening cycle with 6 consecutive cuts to the 1-week repo rate, which fell from 24 percent in July 2019 to 10.75 percent in February 2020 (Figure 89). Since the start of the crisis in early March, the authorities cut policy rates a further three times, bringing it to 8.25 percent. This had the effect of lowering the overall cost of financing in the economy, but it took place in the context of a weakening Lira and growing external imbalances linked to COVID-19, and large external financing needs.

68. **Consumer prices have been relatively high and sticky since they started rebounding in 2019 Q4** (Figure 90). This follows a period of sustained disinflation since late 2018 and is in line with the pick-up in demand in late 2019 and early 2020, as well as the depreciation of the Lira in 2020 Q1. Inflation pressures abated temporarily in April thanks to declining energy prices and falling demand (Figures 91 and 92). But broad-based price pressures remain very real (Figure 93) with the partial recovery in global energy prices pent up demand from the period of containment in March-May, and delayed exchange rate pass-through.

Figure 89: Turkey was already on a strong monetary easing cycle ahead of the pandemic

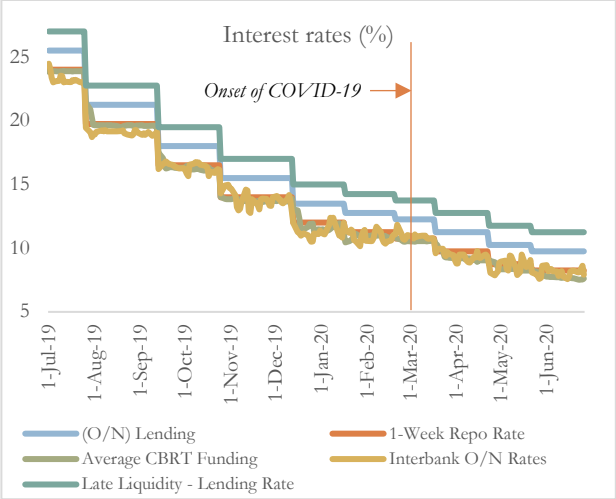


Figure 90: Inflation has remained high and sticky

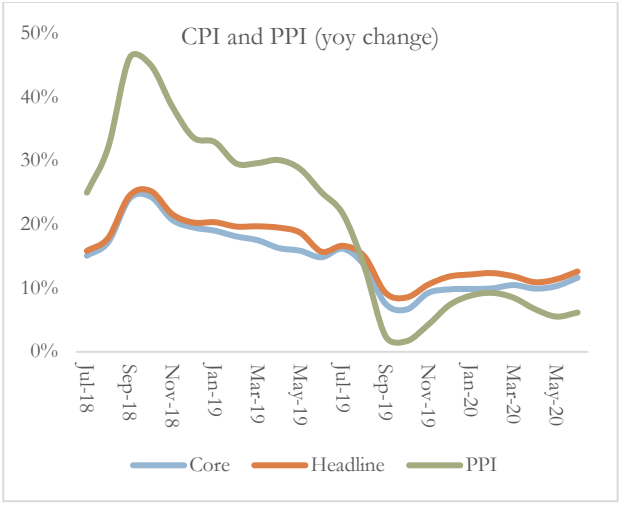


Figure 91: With some reprieve in April

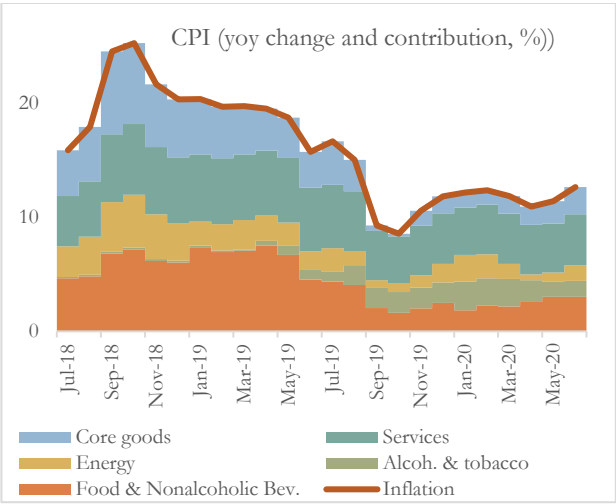
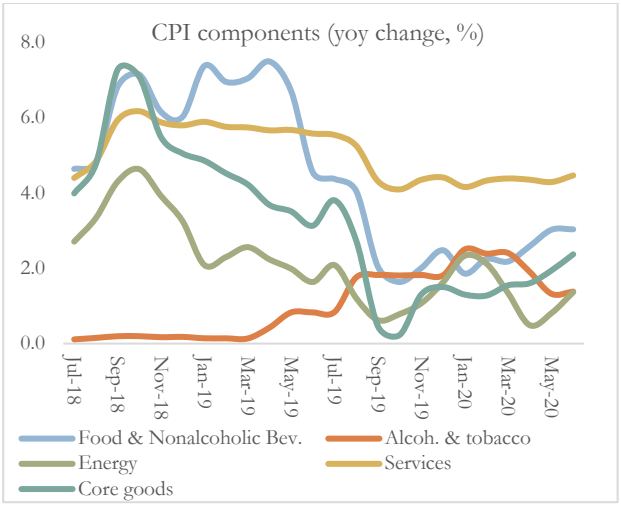


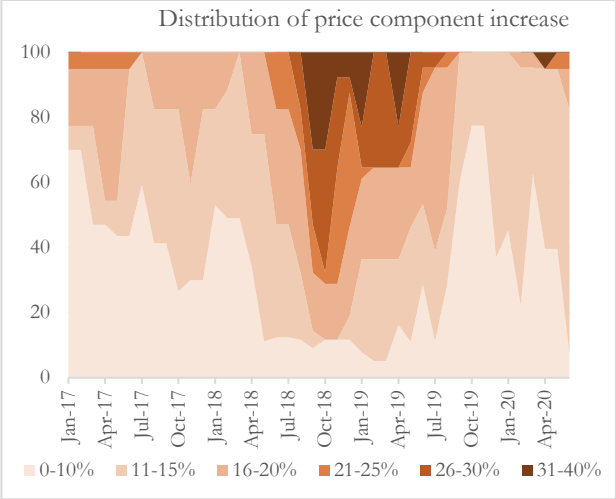
Figure 92: Thanks in part to declining energy prices



Sources: Haver Analytics, CBRT, WB Staff estimates.

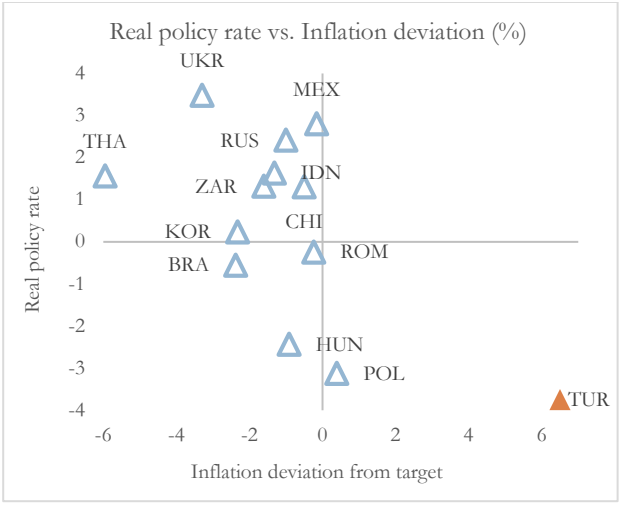
69. **Monetary easing and high inflation prior to the COVID-19 shock suggest that Turkey had less space for further rate cuts going into the crisis relative to peer countries**. By June, ex-post real policy rates in Turkey were more negative and inflation deviation from its official target was higher than selected peer countries (Figure 94), prompting the central bank to rightly pause the easing cycle at its June and July Monetary Policy Committees.

Figure 93: But broad-based price pressures remain strong



Source: Haver Analytics, WB staff estimates.

Figure 94: Leaving relatively less space for further cuts given already elevated inflation



Sources: Haver Analytics, IMF WEO, WB Staff estimates.
Notes: Real policy rates deflated by projected average inflation for 2020 (IMF WEO). Inflation deviation is May (or latest available) inflation minus official target.

70. **In addition to rate cuts, the authorities took steps to inject liquidity in the economy**. The prime objective has been to sustain credit flow to cash strapped businesses and thereby also try and preserve financial stability. By end 2018, credit flows had clammed up – and remained so for much of 2019, particularly for private banks – due to high interest rates and banks' focus on cleaning up their balance sheets. This contributed to some excess liquidity in the system, which prompted sterilization (Figures 95, 96), albeit very limited relative to the injection in liquidity. Since end 2019, credit had started to accelerate but the depth of the shock led to a very large and rapid response from the CBRT.

71. **The CBRT implemented unconventional liquidity support due to COVID-19.** In addition to lowering the policy rates and liquidity injection, other important steps include:[38] (i) extension of TL currency swap transactions, which enables commercial banks to close open FX positions and provided a large portion of Lira liquidity support; (ii) introduction of longer-maturity (up to 91 days) repo transactions; (iii) expansion of the collateral pool for CBRT's Lira and foreign exchange operations to include asset and mortgage-backed securities; and (iv) quantitative easing, including a sharp rise, albeit form a low base, in purchase of government securities on the secondary market (Figures 97, 98).

[38] CBRT (2020), "Inflation Report," (Box 5.1).

Figure 95: Large and rapid injection of liquidity

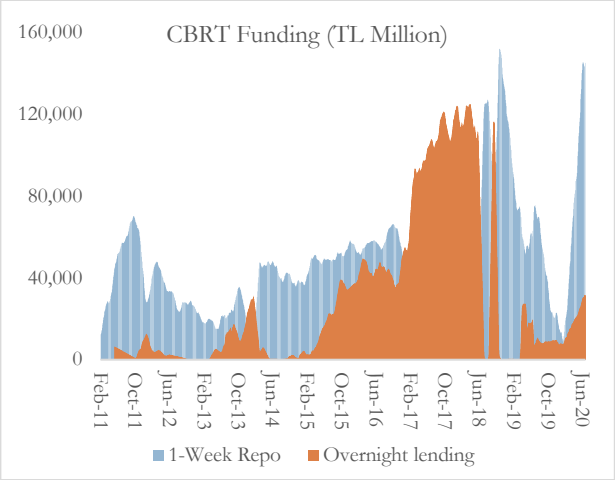


Figure 96: Limited sterilization relative to liquidity boost

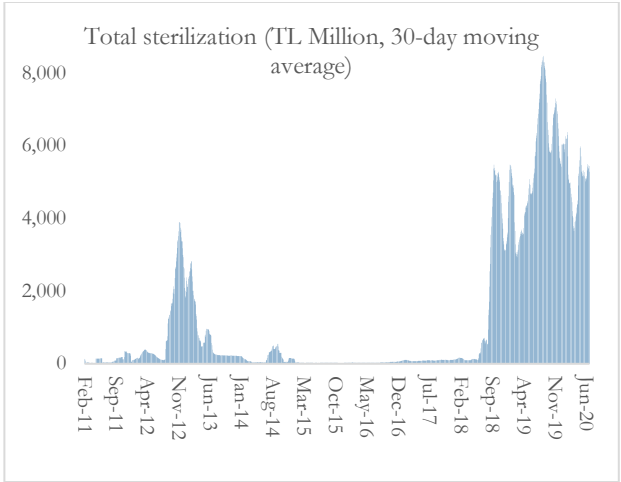


Figure 97: CBRT accelerates quantitative easing

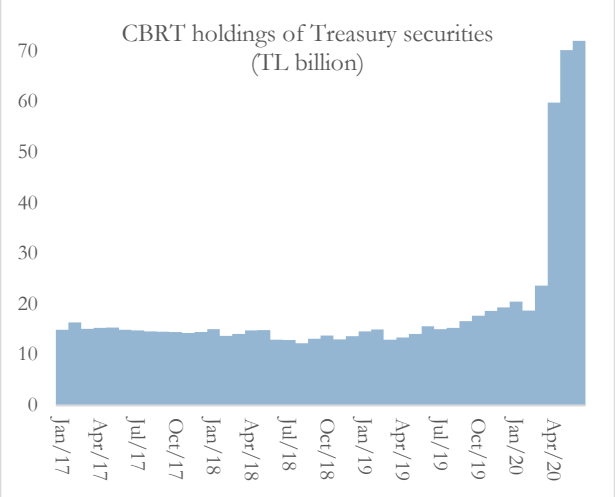


Figure 98: CBRT balance sheet expands rapidly

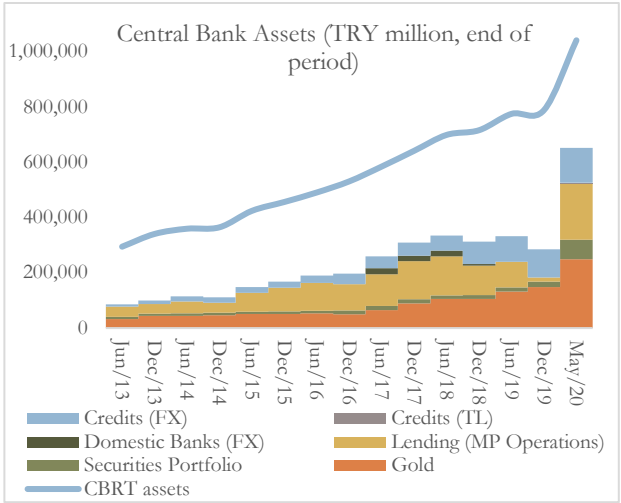
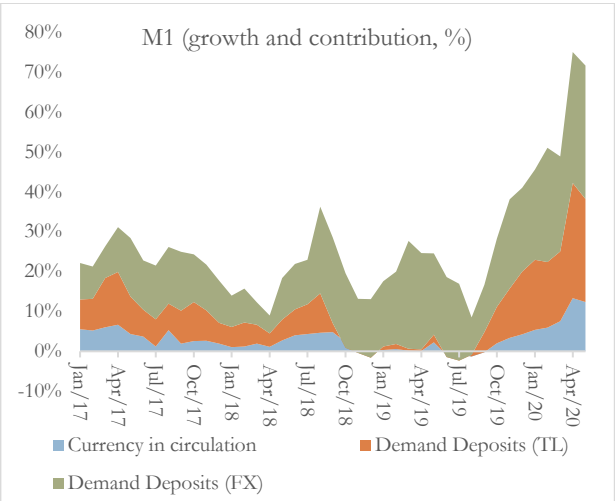
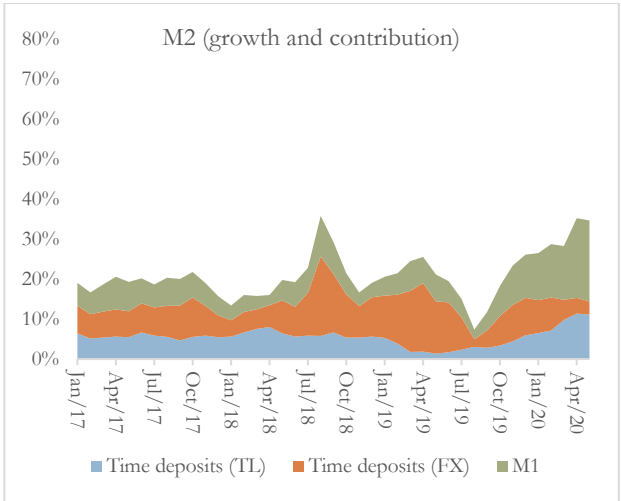


Figure 99: Contributing to a sharp expansion in monetary aggregates





Sources: CBRT, Haver Analytics, WB Staff estimates.

72. **The need for CBRT to inject liquidity in the financial system was critical, though monetary aggregates have expanded rapidly**: annual M1 growth averaged over 70 percent in April-May 2020, which is partly due to a base effect but nevertheless remains massive, and annual M2 growth averaged 35 percent[39] over the same period (Figure 99). M2 had started to pick up since 2019 Q4 with credit expansion and accelerated further in 2020 Q2 with the Central Bank's COVID-19 response (Figure 100). This supported households and private businesses. Monetary easing was not meant to stimulate the economy given the containment imperative. Therefore, part of the expansion reflects increased money demand for precautionary reasons and reduced velocity of money due to lower transactions. This may have helped contain pressure on prices, but any effort to stimulate spending may feed into pressure on prices, which are already relatively high (Figure 101).

73. **The effectiveness of monetary expansion seems to have more recently reached its limits** (Figure 102). Most countries are grappling with low growth and low inflation. In Turkey however, low growth has combined with high and persistent inflation for a while. Despite this, monetary expansion, largely driven by easing of monetary and macroprudential policies, has been relatively stronger than most peer countries. This signals the importance of containing any further loosening, as seems to be underway, to ensure that expectations are anchored, the absence of which could lead to further imbalances.

Figure 100: M2 consistently accelerated since 2019 Q4

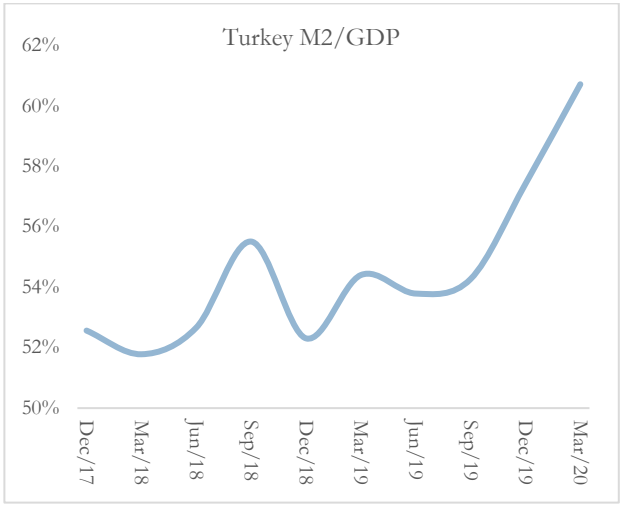


Figure 101: Supported economy but adds price pressure

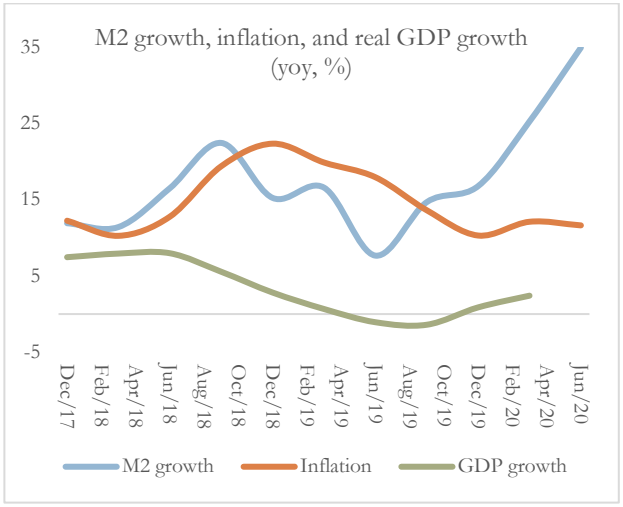
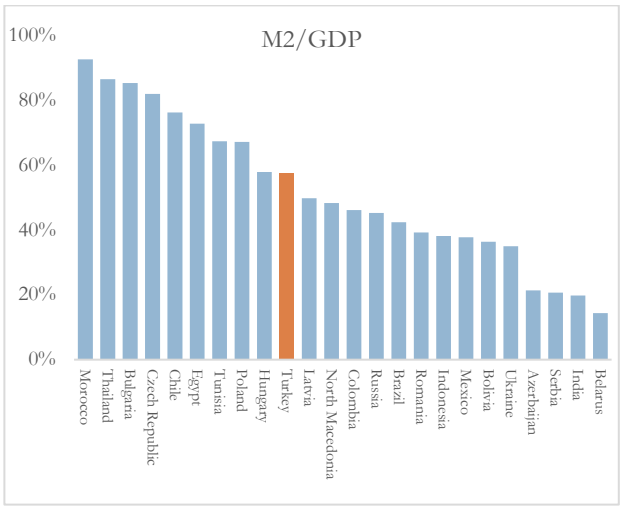
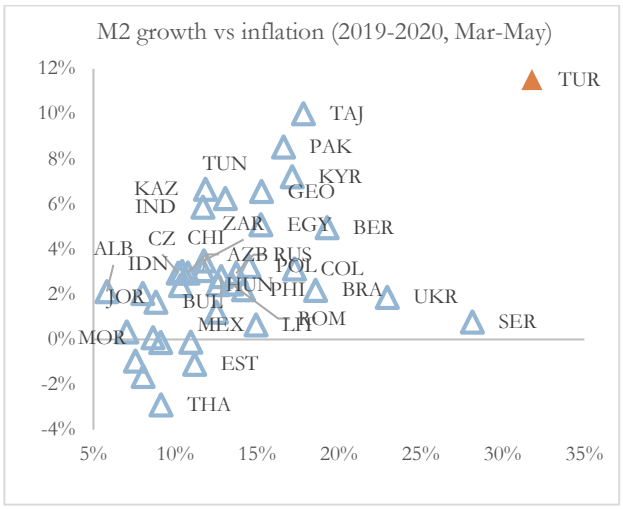


Figure 102: Turkey's monetary response has been large relative to its inflation challenge





Sources: Haver Analytics, WB Staff estimates.

[39] The exchange rate adjusted M2 growth rate is around 9.9 percent for the same period.

Turkey relies on credit expansion to provide liquidity to the private sector

74. **After the 2018 currency shock and before the onset of COVID-19, financial institutions had been working on strengthening their balance sheets**. The period after mid-2018 marked a turning point for external borrowing. Banks had until then accumulated external liabilities over a sustained period since the GFC (Figure 103). A sharp depreciation in the Lira in August 2018 followed by deteriorating economic conditions, prompted banks to rapidly deleverage; external debt rollover ratios fell to an average of 90 percent since mid-2018 (compared to an average of 110 percent between the end of the GFC and mid-2018) (Figure 104). Private financial institutions as a result reduced their external debts from 18.6 percent of GDP ($165 billion) to 13.8 percent of GDP ($104 billion) between 2018 Q1 and 2020 Q1 (Figure 104). Public financial institutions on the other hand have increased their external liabilities from 4.9 percent of GDP to 7.2 percent over the same period.

75. **Lower external debt of banks has helped abate external financing pressures from the banking system, amid general concerns over external vulnerabilities** (see section B). Banks maintain adequate FX liquid assets to cover short-term FX liabilities falling due in the coming months. Short-term liabilities of the banking sector as of 2020 Q1 amounted to US$ 76 billion (Figure 105). Banks are of course expected to rollover part of this financing. Since early 2020, banks seem to have maintained access to short-term syndications at reasonable cost. However, a shortage of long-term financing (both external and domestic) coupled with ongoing maturity mismatches, will contribute to refinancing risks.

76. **Despite declining external liabilities currency risk in bank balance sheets increased quickly in early 2020, particularly for public banks**. Private banks have maintained positive FX net positions (Figure 107). Public banks' FX net position on the other hand deteriorated since early 2020, coinciding with: (i) a bout of currency depreciation; and (ii) rising FX deposits[40] relative to FX loans – FX loans declined due to low demand and because of efforts to boost Lira lending to help corporates refinance their debt (Figure 108). A weaker Lira reduced the foreign exchange value of Lira denominated assets relative to foreign exchange liabilities, which as noted above has risen for public banks. To manage currency risk, plus given limitations on off-shore FX swaps and the recent introduction of a new Asset Ratio (see below), banks expanded swap transactions with the CBRT. This contributed to a temporary increase in foreign exchange reserves in exchange of Lira liquidity (see above discussion on external vulnerability).

77. **A second source of ongoing balance sheet vulnerabilities are large maturity mismatches.** Loan maturities have moderately increased thanks to macroprudential measures taken by the CBRT and BRSA in 2019. But as of 2019 Q4, 75 percent of the total banking sector liabilities have a maturity of less than one year, whilst 44 percent of its assets have a remaining maturity more than one year. In this context, when market conditions deteriorate, as they did in early 2020, it becomes more difficult for banks to acquire liquid assets to cover short-term liabilities – at the same time borrowing costs also tend to rise. The authorities' monetary response helped to ease these market pressures. But much of the new liquidity is also short-term, which constrains loan tenors and feeds additional vulnerabilities through heightened rollover risks of corporates.

78. **A third source of balance sheet vulnerabilities going into the COVID-19 period was asset quality**. Declining asset quality compounds the impact of currency and maturity mismatch risks on the balance sheet by further raising the value of non-performing assets relative to liabilities; this in turn dampens overall net worth. Official Non-Performing Loans (NPLs) across all banks rose from 3 percent in mid-2018 to 5.4 percent in December 2019, before declining to 4.4 percent as of July 10, 2020 (Figure 109). Stage 2 loans on the other hand, rose from 8 percent in August 2018 to over 11 percent in 2019, reaching 15 percent in some top private banks (Figure 110). As of 2020 Q1 the share of stage 2 loans declined below 11 percent.

[40] Share of FX deposits in total deposits was 51 percent as of June, 2020.

Figure 103: Sustained period of external borrowing

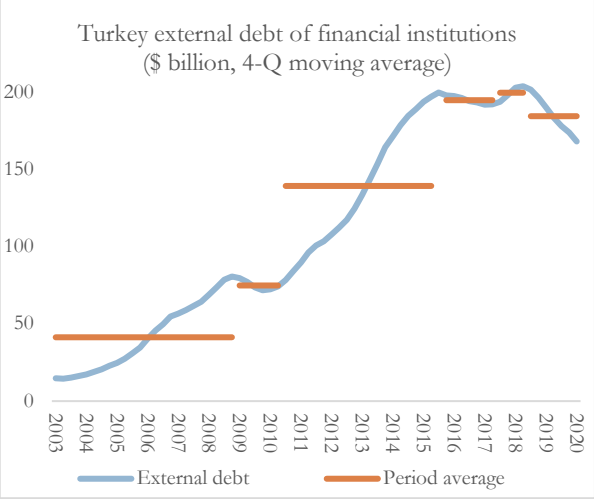


Figure 104: Rapid FX deleveraging since mid-2018

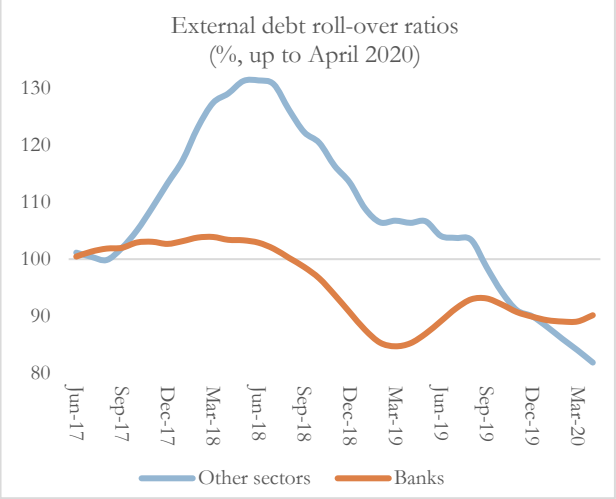


Figure 105: Drop in foreign debt of private FIs

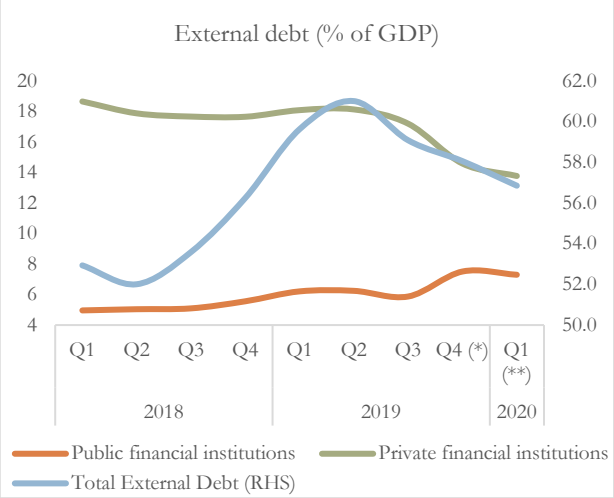


Figure 106: Banks' liquidity to meet ST FX liabilities

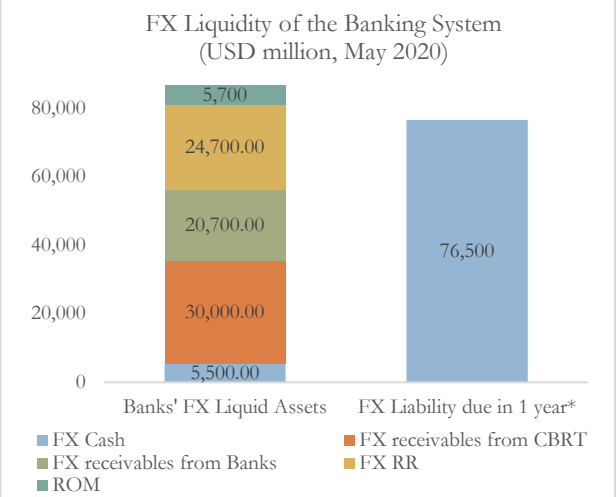


Figure 107: Public banks' FX net open position deteriorates

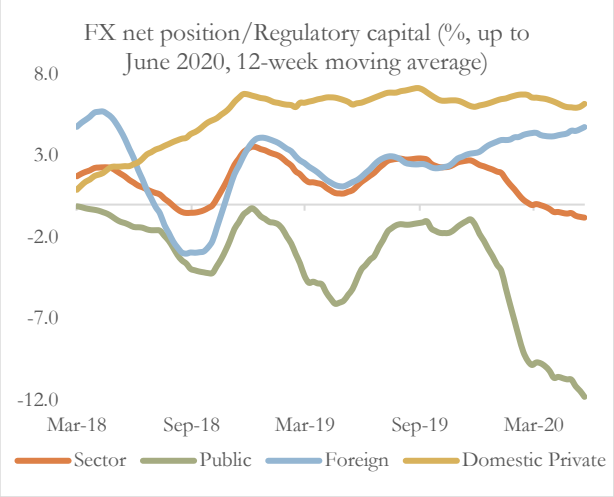
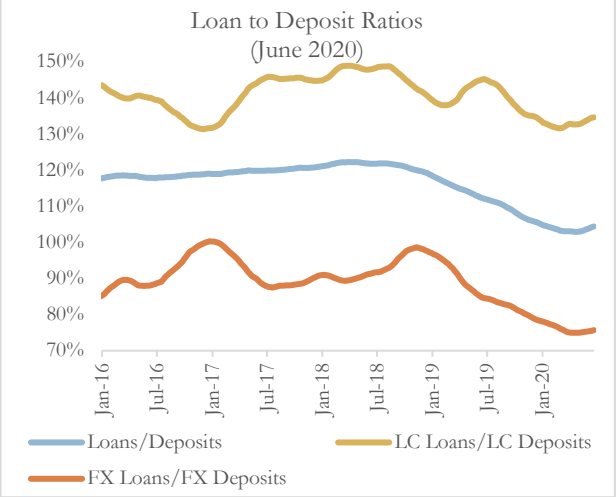


Figure 108: Declining FX loans to deposits contribute to FX net open position



Sources: Haver Analytics, MOTF, CBRT, WB Staff estimates.

79. **Recent improvements in asset quality indicators are linked to the short-lived economic upturn in late 2019/early 2020, sharp expansion in credit, restructuring of stage 2 loans, and forbearance measures introduced for COVID-19**. Regulatory forbearance measures make it more difficult to assess banks' true asset quality,[41] which, realistically, will have declined due to the combination of existing corporate leverage (see looking ahead section) and increased corporate vulnerability (Figure 112).

Figure 109: NPL ratios have improved recently

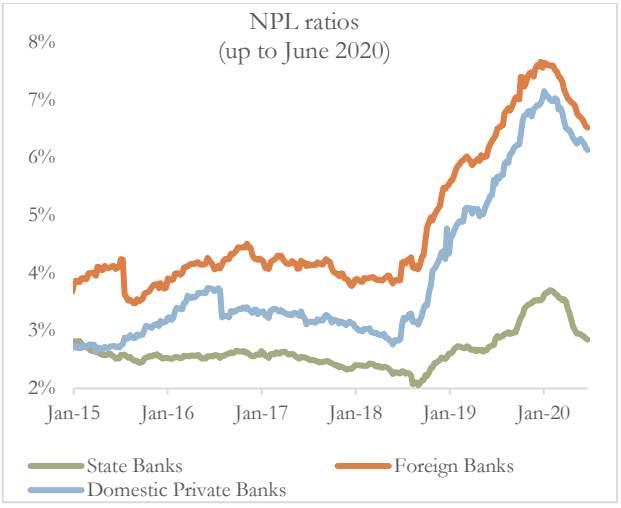


Figure 110: Share of state 2 loans has declined

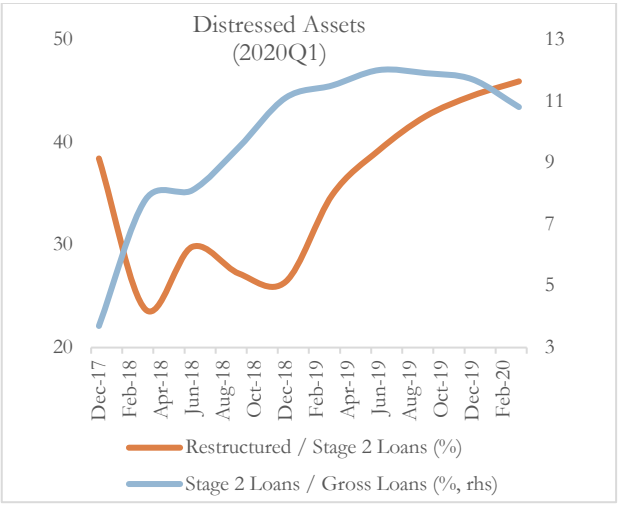


Figure 111: NPL provisioning has risen

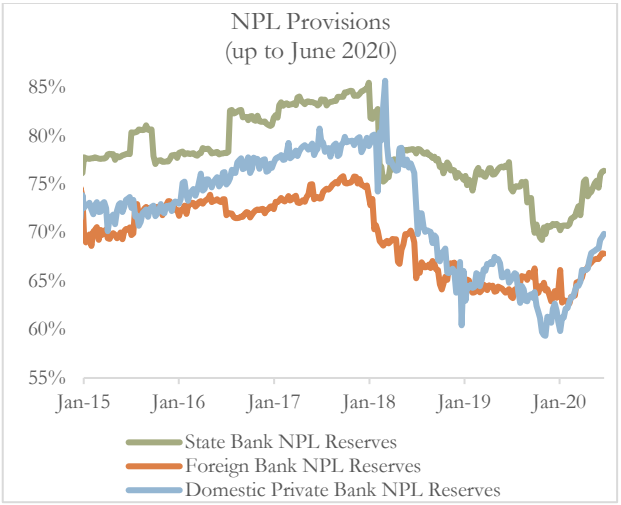
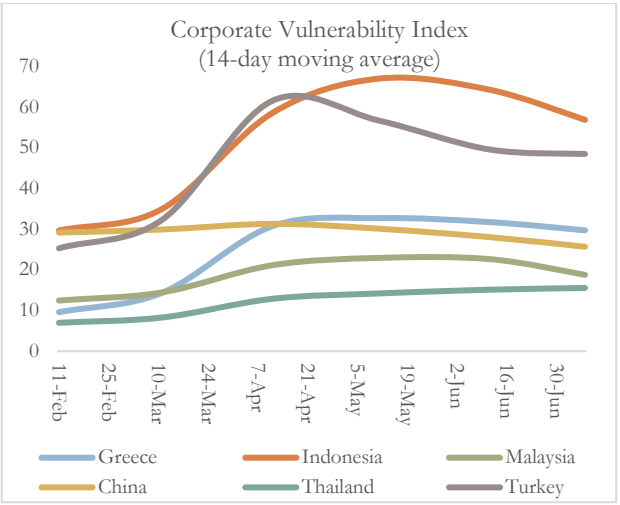


Figure 112: As has corporate vulnerability



Sources: Haver Analytics, BRSA, https://www.rmicri.org/en/cvi/, WB Staff estimates.

80. **Though the banking system overall had been building up buffers since the economic stress experienced in the second half of 2018, the COVID-19 shock presents new challenges**. The capital adequacy ratio had risen from 16 percent in July 2018 to 18.4 percent by December 2019 (Figure 113). CAR declined slightly in 2020 Q1 before rising to 19.4 percent in May. Moreover, the Turkey Wealth Fund (TWF) has contributed TRY 21 billion (USD 3 billion) to shore up the capital of three public deposit banks. However, the impact of COVID on households, the private sector and banks present negative risks for asset quality, and the profitability of banks in case of extension of forbearance measures amid strong loan growth.

[41] A recent policy report by FinSAC on *Borrower Relief Measures in the ECA Region*, cautioned against relaxing regulatory definitions for NPLs and forborne exposures as this can undermine market discipline and distorts the reliability of bank's financial information. The paper suggested that policymakers need to prepare and set clear exit strategies.

Figure 113: Improved capital buffers

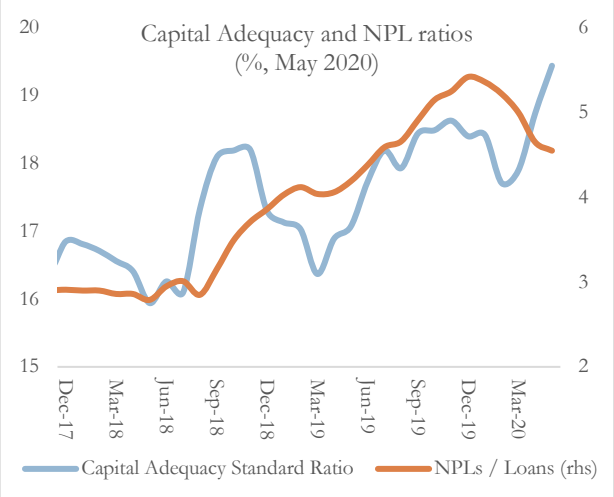


Figure 114: and strengthened liquidity

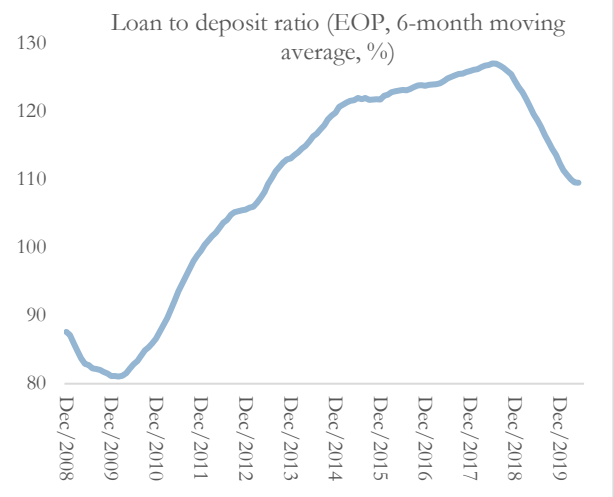


Figure 115: Private banks remain cautious

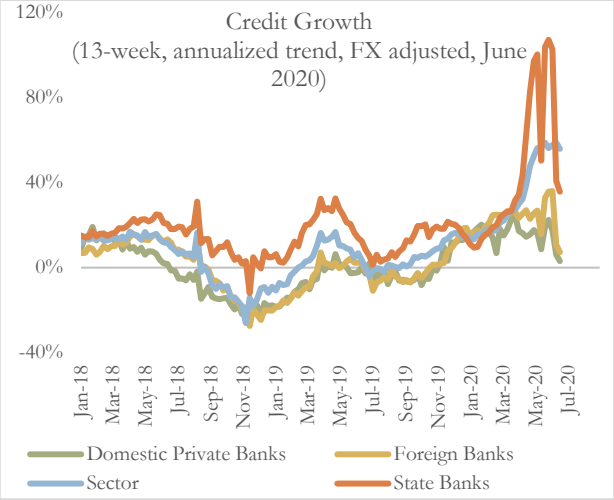
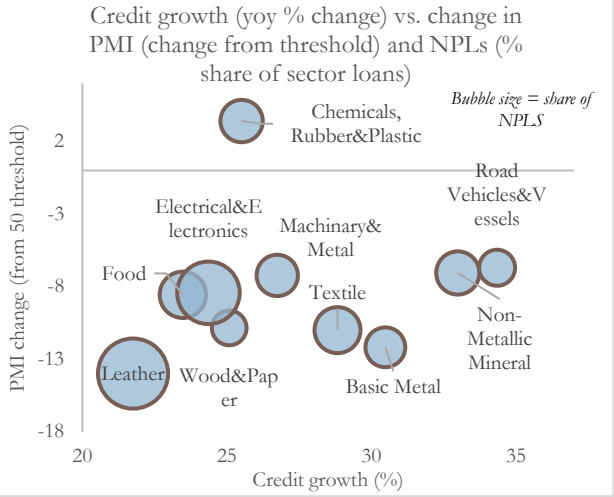


Figure 116: Credit expanding to worse affected sectors



Sources: Haver Analytics, BRSA, WB Staff estimates.

81. **In recognition of these challenges, the authorities introduced financial and macroprudential measures to channel liquidity to struggling enterprises through the banking system**. The measures included a mix of: (i) relaxation of macroprudential regulations to accelerate credit growth (e.g. increased loan to value ratio for mortgages, introduction of a new Asset Ratio[42]); (ii) expansion of forbearance measures to contain deterioration of asset quality (e.g. relaxation of conditions for classifying a loan as NPL from 90 to 180 days, firms that have fallen into default in April, May and June will be given a "force majeure" note in their credit registry); (iii) extensions to the Credit Guarantee Fund for lending to SMEs through risk sharing; and (iv) relief on liquidity pressures through extension of loan repayment periods.

[42] BRSA introduced and then revised a new asset ratio. Banks are required to maintain a new consolidated and individual asset ratio of at least 100% starting at the beginning May, failing which they will need to pay an administrative fee. The sum of a bank's loans, 75% of its securities portfolio and 50% of its central bank swap balances must exceed the sum of its Turkish lira deposits and 175% of foreign currency deposits (For participation banks, which follow Islamic banking regulations, the loans, securities and swaps should equal at least 80% of the deposits):

$$\text{Asset Ratio} = \frac{[\text{Loans}+(\text{Securities x } 0.75)+(\text{CBRT Swap x } 0.5)]}{[\text{TRY Deposits}+(\text{FX Deposit x } 1.75)]} > 100 \text{ percent of Lira deposits; and} > 125 \text{ percent of FX deposits}$$

The objectives to accelerate loans, promote purchase of government securities, promote swap operations with the central bank, and increase reliance on Lira rather than FX deposits.

82. **Private commercial banks have nevertheless remained cautious.** Private banks' lending contracted between mid-2018 and mid-2019 (Figure 115); they were focused on cleaning up their balance sheets whilst investment demand was low due to difficult economic conditions. Loan-to-deposit ratios experienced a sustained decline for the first time in the past 10 years from over 120 percent in mid-2018 to just below 110 percent in May (Figure 114). Lending started to pick up from the second half of 2019, most noticeably in consumer loans. Going into the COVID-19 pandemic, private banks have taken a conservative approach, despite large monetary stimulus, due to balance sheet vulnerabilities discussed above.

83. **Public banks on the other hand have acted countercyclically and rapidly expanded credit in response to government policy to tackle COVID-19** (Figure 115). In 2020 Q2, public bank credit expanded by over TL 250 billion (US$ 36 billion) compared to TL 126 billion (US$ 18 billion) for private banks; about 49 percent of public bank lending in 2020 Q2 went to SMEs – TL 122 billion (US$ 18 billion) – compared to 22 percent for private banks (TL 27 billion, or US$ 4 billion). The biggest expansion in credit has gone into the most underserved segments and worse affected sectors of the economy (Figure 116). Ensuing risks will need to be carefully monitored to avert financial stability concerns.

II. LOOKING AHEAD

The global economy and Turkey face a difficult year in 2020 followed by an uncertain rebound in 2021. The Turkish economy is projected to contract by 3.8 percent in 2020 in the baseline scenario. Important sectors in the Turkish economy are highly vulnerable to COVID-linked economic strains, which could further lower employment, reduce labor force participation and increase the poor population by 1.2 million in 2020. Like other emerging market economies impacted by the crisis, Turkey will likely experience a decline in potential output, which is estimated to have fallen below 4 percent in 2019, its lowest level in 15 years. Though short-term external debt obligations seem manageable, a growing current account deficit and the sharp decline in reserves have heightened external vulnerabilities. Policy measures have provided important relief to households and businesses – the challenge now is to build resilience and accelerate recovery. This may require: (i) maintaining fiscal responsiveness and flexibility, whilst containing further monetary easing; (ii) scrutinize impact of forbearance measures and adjust to maintain financial sector stability; (iii) expand household support programs to protect livelihoods and human capital; and (iv) rebuild better by accelerating structural reforms.

A. Bracing for a challenging road ahead

A difficult year in 2020 followed by an uncertain rebound in 2021

84. **The 2020 baseline growth projection for Turkey estimates a sharp contraction in GDP**. The economy is projected to contract by 3.8 percent, followed by an uncertain rebound in the medium term (5 percent in 2021 and 4 percent in 2022)[43] (Figure 117). The baseline projection assumes: (i) the need for ongoing restrictions, albeit more targeted and less stringent than in the first phase; and (ii) continued social distancing measures for the remainder of the year and most likely until a vaccine is found. The forecast is also grounded in the World Bank's latest global economic forecasts, which estimate a deep global recession (Box 9).

85. **All demand side drivers of GDP are expected to contract in 2020 except for public consumption amid large fiscal support.** Public consumption is projected to increase by 6.2 percent in 2020. The general government fiscal deficit is forecast to peak in 2020 (5.6 percent of GDP). As growth picks up and the crisis subsides, public consumption growth is projected to decelerate and revenue growth to accelerate. Despite a big spike in credit growth and decline in borrowing cost, investment is projected to remain depressed in 2020 and first half of 2021 amid cash shortage needs, debt overhang and high level of uncertainty.

86. **Private consumption, which tends to be more resilient during, and rebound more quickly after, crises is projected to be more muted.** Unlike other crises, private consumption has understandably been weaker due to containment measures. This creates pent up demand, which will rebound. However, the pace of the rebound may be a little slower as households could increase precautionary savings due to uncertainty and difficult labor market conditions. Credit stimulus measures, lower interest rates and measures to protect households' income will help to contain some of the drop in private consumption. This is evident in some pick up in durable consumption (car, white goods or furniture purchases), but this makes up only 10 percent of private consumption. The big bulk of private consumption is in services (Figure 118). Leisure, travel and tourism constitute more than half of services consumption. Such discretionary spending could be affected due to necessary social distancing and travel restrictions. While a strong pickup in services consumption was observed during the recovery periods in previous downturns, the nature of this health crisis is expected to hinder recovery in services consumption (Figure 119).

[43] Despite the rebound, by 2022 real GDP will be 7 percent lower than it would have been if the pre-COVID scenario had played out.

Figure 117: 2020 Contraction with subsequent rebound

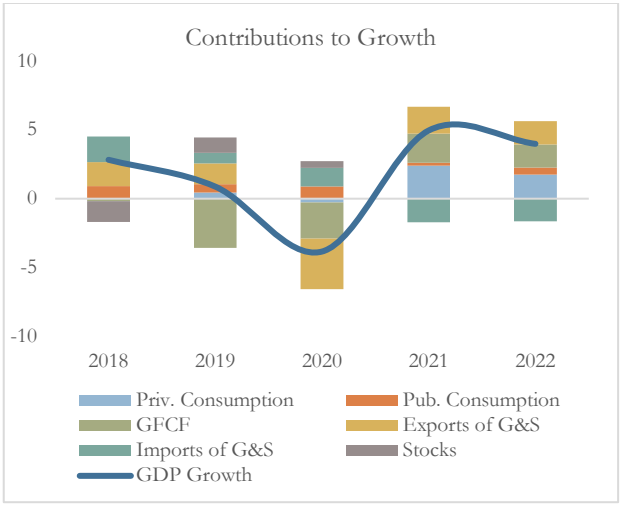


Figure 118: Services are a big share in consumption

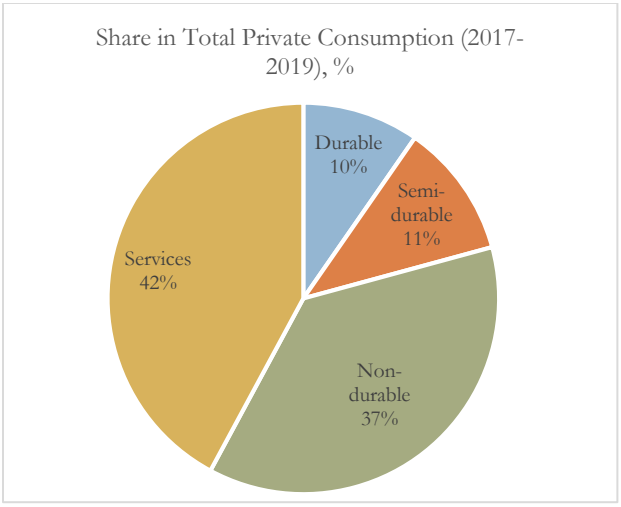


Figure 119: Which tend to rebound quickly after crises

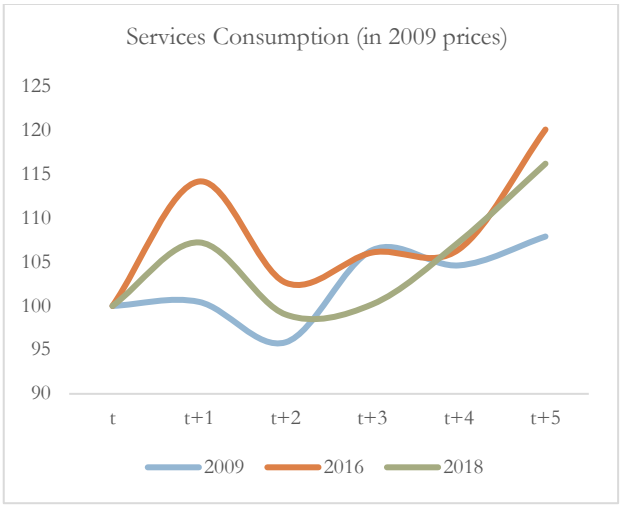


Figure 120: Corporate sector is highly leveraged

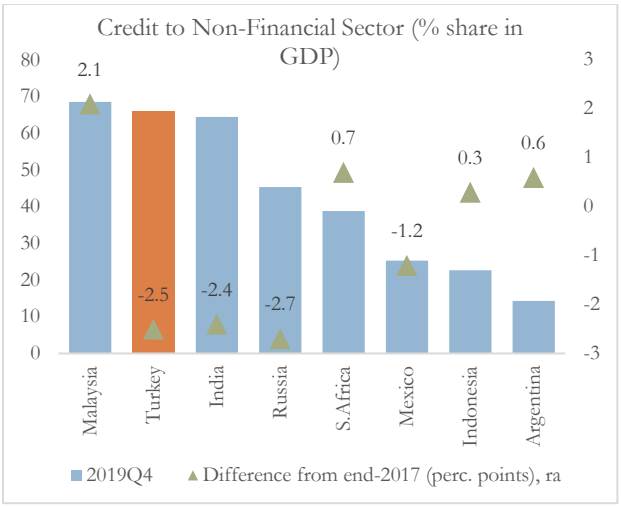


Figure 121: with relatively high debt overhang

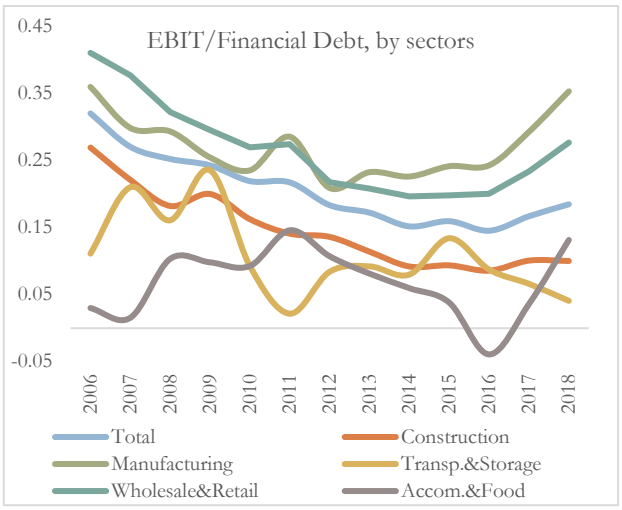
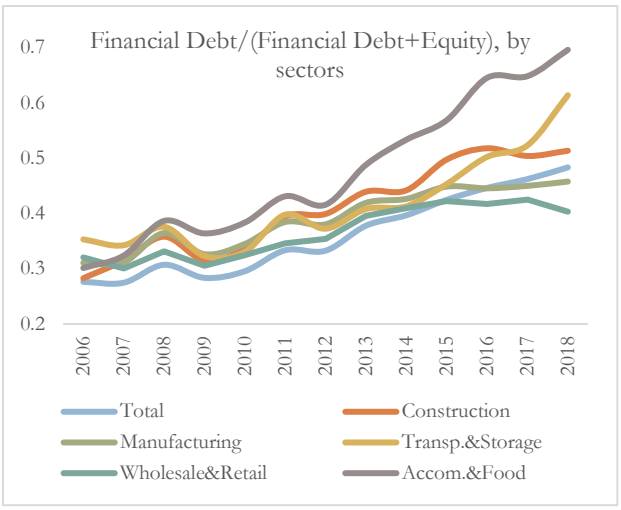


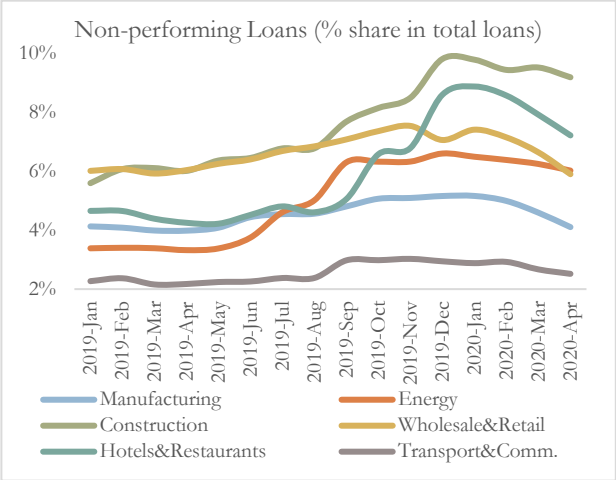
Figure 122: Leverage ratio highest in hard hit sectors



Sources: Entrepreneur Information System (MOIT), Bank for International Settlements, Haver Analytics, WB Staff estimates.

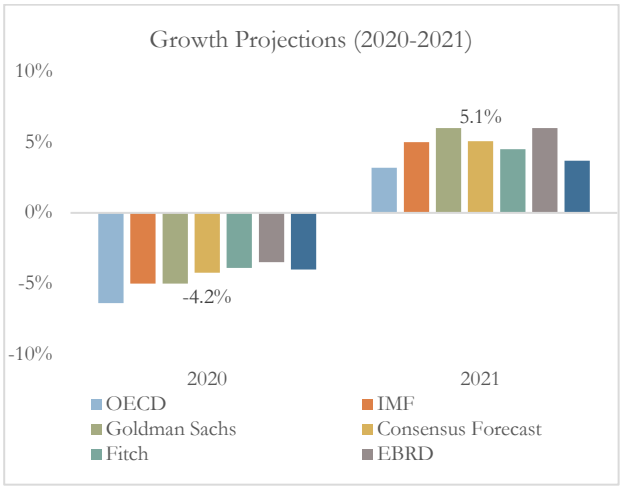
87. **Investment in the short-term is likely to pick up as companies restore production capacity but debt overhang will be an important drag on new investments.** After mid-2018, corporates started deleveraging. The corporate debt to GDP ratio declined slightly to 66 percent at the end of 2019 but remained high compared to peer countries (Figure 120). The pandemic hit against a backdrop of already high corporate debt and falling investment. Although leverage helped some of the sectors to improve their solvency ratios to some level in the recent past, corporate stress[44] has been accumulating particularly in sectors most hit by the pandemic. Accommodation and food, transportation and storage and construction sectors have the highest debt overhang, mostly driven by rising corporate debt rather than decline in earning or equity[45] (Figures 121, 122). Hardest hit construction and accommodation and food sectors have also the highest NPL ratios (Figure 123). Given the pressure on balance sheets coupled with a high degree of uncertainty, corporates might prefer to alleviate cash shortages than expand capacity.[46]

Figure 123: Reflected in rising NPL ratios till 2019



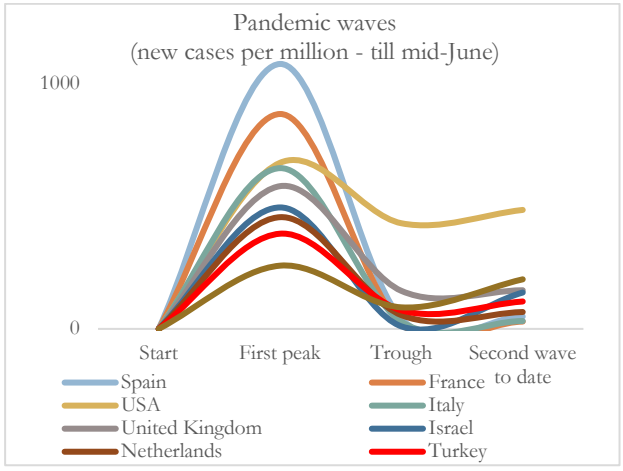
Sources: BRSA

Figure 124: Outlook subject to high uncertainty



Sources: Various institutions and Consensus Economics

Figure 125: Risks of a second wave remain real



Sources: Our World in Data, JHU CSSE, Consensus Economics, TURKSTAT, Haver Analytics, WB Staff estimates.

[44] EBIT/financial debt is a short-term debt overhang indicator. It shows the ability of firms to generate cash flows to repay its debt and is a proxy for short run solvency. Leverage ratio (financial debt/sum of financial debt and equity) proxies for long run solvency. EBITDA/financial debt indicator can display relatively a better picture for capital intensive sectors.

[45] EBIT/financial debt showed a slight increase in the last couple of years as turnover increased due to rise in inflation.

[46] Borensztein and Ye (2018) find evidence of a nonlinear effect, in which debt overhang discourages investment more severely under high levels of indebtedness, based on an analysis for emerging market and developing economies including Turkey.

88. **CPI inflation is projected to decelerate though remain in double digits in 2020 and with upside risks**.[47] Inflation is projected to average 10.5 percent in 2020 supported by a negative output gap, relatively low energy prices and a high base effect in Q3. However, strong monetary expansion, the depreciation in the Lira, administrative and customs tax rises, and a surge in production costs associated with the pandemic and containment measures are likely to add pressure on prices. CPI inflation is expected to gradually decline and projected to average 9.5 percent in 2021 and 9 percent in 2022.

89. **There is a large band of uncertainty around the baseline forecast, with both upside and downside risks** (Figure 124). On the downside, reopening too much too soon could trigger a second wave of infections in Turkey – risks of which remain very real (Figures 125) – that could necessitate a new lockdown and further dent domestic demand and production capacity, exacerbate uncertainty, and erode policy space. A similar flaring up of COVID-19 in important partner markets for Turkey, such as the EU, would also lower growth for Turkey via reduced exports and a possible new wave of supply chain disruptions. On the upside, the contraction in the global economy could be less severe than projected, there could be progress on prevention and treatment of the coronavirus, and/or effective policies could lead to a more rapid recovery. Turkey's experience to date provides important lessons on responding quickly and in a targeted manner, which should help limit the likelihood of a downside scenario.

Table 7 Key Economic Indicators

	2017	2018	2019	2020	2021	2022
Population (mid-year, million)	80.3	81.4	82.6	83.4	84.4	85.4
GDP (current US$, billion)	852.6	789.0	753.7	660.9	684.5	726.1
GDP per capita (current US$)	10616	9693	9127	7924	8110	8502
CPI (annual average, in percent)	11.1	16.3	15.2	10.0	9.5	9.0
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	7.5	2.8	0.9	-3.8	5.0	4.0
Private Consumption	6.2	0.0	0.7	-0.5	3.9	2.9
Government Consumption	5.0	6.6	4.4	6.2	1.4	3.3
Gross Fixed Capital Formation	8.2	-0.6	-12.4	-10.5	9.0	7.0
Exports	12.0	7.8	6.4	-15.0	9.0	7.5
Imports	10.3	-7.8	-3.6	-6.5	8.6	8.0
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
General Government Balance	-1.8	-2.4	-3.0	-5.6	-3.2	-2.9
Government Debt Stock	28.2	30.4	32.8	38.8	39.1	38.1
Primary Balance	0.1	-0.3	-0.4	-2.6	0.3	0.3
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-4.8	-2.6	1.1	-3.2	-4.0	-4.7
Trade Balance	-3.8	-1.2	2.7	-1.5	-2.3	-3.3

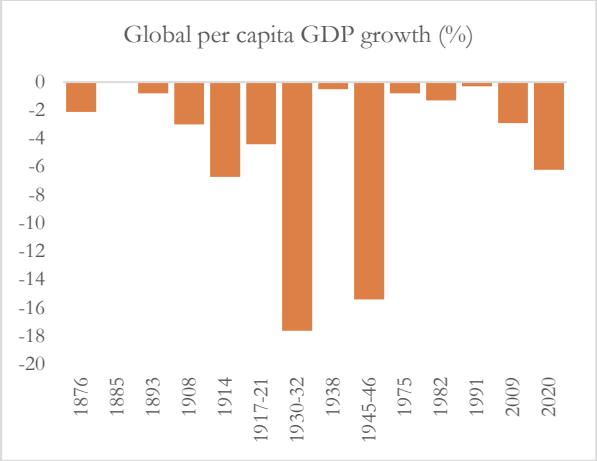
Source: TURKSTAT, CBRT, Strategy and Budget Presidency, WB Staff calculations.

[47] See CBRT (July 29, 2020), "Inflation Report 2020 III" for the Central Bank's latest inflation assessment.

Box 9: Global recession in 2020

The COVID-19 recession is likely to be the deepest global recession since World War II. This is the first recession to have been triggered solely by a pandemic during the past 150 years. The recession this year is likely to be the first output contraction in EMDEs in at least the past six decades. Importantly, it is also expected to trigger per capita GDP contractions in the largest share of economies since 1870. A 6.2 percent decline in global per capita GDP is projected in 2020 (Figure 126), making it the deepest global recession since 1945-46, and more than twice as deep as the recession associated with the global financial crisis. The current global recession is expected to register a contraction in global GDP of 5.2 percent.

Figure 126: A significant deterioration in per capita GDP



Source: Bolt et al. (2018); Kose, Sugawara, and Terrones (2019, 2020); World Bank.

Figure 127: With most countries in recession

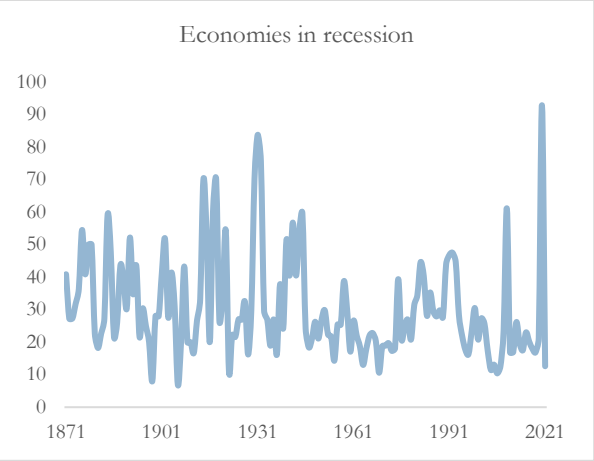


Figure shows the proportion of economies in recession, defined as an annual contraction in per capita GDP.

This recession is the first recession, solely driven by a pandemic. The COVID-19 recession is unique as it is the only such episode, at least since 1870, to have been triggered solely by a pandemic and the actions taken to contain it. The prolonged global recession of 1917-21 was partly driven by the 1918-20 Spanish flu pandemic but it also stemmed from the conclusion and aftermath of World War I (Barro, Ursúa, and Weng 2020). In 2009, the Swine flu pandemic was not a contributory factor to the global recession triggered by the financial crisis.

It has highly synchronized nature. The fraction of economies experiencing annual declines in national per capita GDP tends to increase sharply during global recessions (Figure 127). Current forecasts suggest that in 2020, the highest share of economies will experience contractions in per capita GDP since 1870—more than 90 percent, even higher than the proportion of about 85 percent of countries in recession at the height of the Great Depression of 1930-32.

It is a broad-based plunge in multiple sectors. The COVID-19 global recession is expected to be reflected in the sharpest contractions in six decades in many indicators of global activity. Most notably, while services-related activities were often relatively resilient during previous global recessions, high frequency indicators suggest that the COVID-19 shock has led to a near sudden stop in a large swath of services, reflecting both regulated and voluntary reductions in human interactions that could threaten infection. Current forecasts suggest that, partly owing to an unprecedented weakening in services-related activities, global trade and oil consumption will see record drops this year, and the global rate of unemployment will climb to its highest level since at least 1965, when available data begin. In addition, industrial production and retail sales are likely to register record drops this year.

The current global recession is projected to last only one year. In other words, the growth rate of global per capita GDP is projected to turn positive in 2021. This is mostly consistent with experience of prior global recessions: although recoveries took longer to begin in a few deeper recessions prior to 1960, global recessions since then have lasted only one year in terms of annual data. The quarterly data show more variation in the duration of global recessions, but the average is still about one year. Many private forecasters expect the COVID-19 global recession to last only two quarters, with major advanced economies returning to growth in the third quarter of 2020 after recording sharp contractions in the first and second quarters of the year.

Figure 128: The largest contraction for advanced economies and EMDEs in the past 60 years

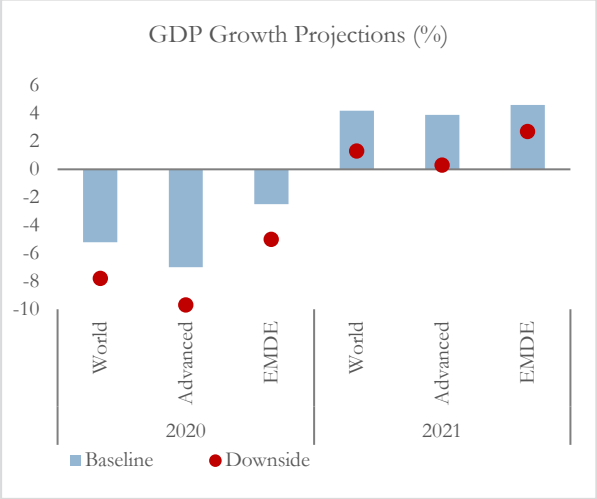
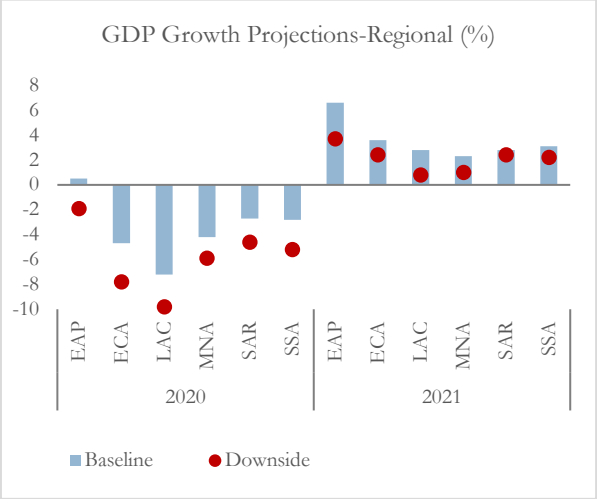


Figure 129: LAC is the hardest hit region



Source: World Bank, GEP June 2020.

Global recession will involve most advanced economies and EMDEs. In 2020, both groups will experience the largest declines in their growth rates of the past sixty years. Advanced economies are expected to experience a 7 percent drop in output, while EMDEs will mark their first output contraction, by 2.5 percent, in at least the past sixty years[48] (Figure 128). Under the assumption that restrictions will begin easing worldwide from mid-2020 and subsequent waves do not require them to be widely reimplemented, the global economy is expected to rebound in 2021, with growth of just above 4 percent, with EMDEs projected to grow by 4.6 percent and advanced economies 3.9 percent. Should lockdown measures need to be implemented for longer, the economic impact would be even more devastating. Under the assumption that economies cannot move toward normalization until around the end of the third quarter of 2020, the global decline in output is projected to be close to 10 percent in 2020, with global growth hardly recovering in 2021 – growing by only 1.3 percent on this much-lowered base.

Regionally, Europe and Central Asia is expected to be the worst-hit region in 2020, after Latin America and the Caribbean. The decline in EMDE economies in ECA in 2020 is projected to be 4.7 percent. In a downside scenario it could be almost 8 percent, around twice as large a fall as EMDEs overall. LAC is the hardest hit region in 2020 while EAP, given the early onset and relatively robust management of COVID, is the only EMDE region that is expected to avoid negative growth in 2020. On the other hand, after EAP, the ECA regions is forecast to recover most strongly in 2021, although at 3.6 percent, this is still modest given the scale of the losses in the previous year (Figure 129).

Source: World Bank Global Economic Prospects (June 2020).

[48] These economies are expected to register a much weaker growth performance than in the global financial crisis partly because they entered the current episode with larger external and fiscal imbalances than they had a decade ago, so that they have less room for policy maneuver (Kose and Ohnsorge 2019).

Box 10: Responding to the impact of COVID-19 in developing countries

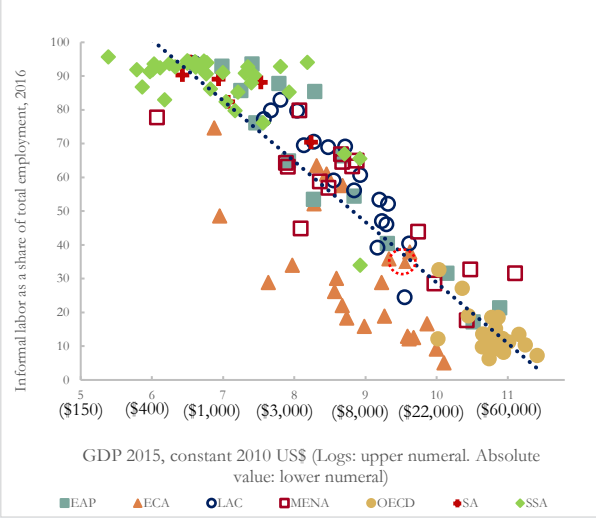
The COVID-19 crisis may hurt low- and middle-income countries disproportionately because they lack the resources and capacity to deal with large systemic shocks. For a shock of the same magnitude, low- and middle-income countries suffer more than advanced countries do in terms of worsening poverty, inequality, human capital losses, and economic disruption. Three structural factors impact on these outcomes.

Labor informality: In developing countries, the informal sector employs between 70 and 90 percent of the labor force (Figure 130). Relief and recovery policies aimed at formal labor (e.g. unemployment insurance, reducing payroll and income taxes, and paid sick leave) have very limited effects. Informality and lack of skills also reduce workers' ability to adapt by working from home. In advanced countries, about 35 percent to 45 percent of jobs could be performed at home compared to only 5 to 25 percent in developing countries.

Fiscal space: Although developing countries do not have larger public-debt-to-GDP ratios than developed ones, their debt is more subject to exchange rate and maturity risks, their credit rating is lower, and their financial markets are shallower. In addition, a small tax base and less efficient tax administration mean that countercyclical fiscal policy are harder to implement in developing than developed countries.

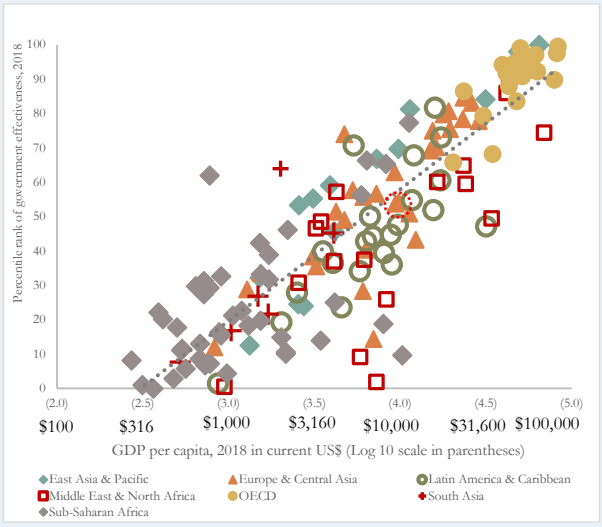
Government effectiveness: Capacity constraints may affect governments' abilities to respond to such a complex crisis (Figure 131). This may require: (i) reliance on relief and recovery policies (e.g. cash transfers); (ii) adoption of strategies that can benefit from community-level enforcement and household action; and (iii) expanding complementary support by nongovernmental organizations, the private sector, and international organizations.

Figure 1300: High labor informality in EMDEs



Sources: ILO 2018, WB Staff estimates.

Figure 131: Low government effectiveness in EMDEs



Sources: WDI, WGI, WB Staff estimates.

For developing countries, the challenge in preserving lives and avoiding crushed livelihoods is stark. Different trade-offs call for context-specific strategies. For countries with older populations and higher incomes, more radical suppression measures may be optimal; while for poorer, younger countries, more moderate measures may be best. Since "smart" mitigation strategies (such as shielding the vulnerable and identifying and isolating the infected) pose substantial challenges for implementation, a combination of ingenuity for adaptation, renewed effort by national authorities, and support of the international community is needed.

Source: Loayza, Norman V..2020. Costs and Trade-Offs in the Fight Against the COVID-19 Pandemic: A Developing Country Perspective (English). Research & Policy Briefs no. 35. Washington, D.C.: World Bank Group

Vulnerability to the COVID-19 shock varies across industries and across the labor market

90. **The impact of COVID-19 across sectors and industries will vary**. A preliminary of industry level vulnerabilities to demand and supply shocks is carried out based on different transmission channels.[49] This is augmented by an analysis of financial vulnerability, namely the extent of solvency and liquidity pressures across different industries. Supply and demand shocks can exacerbate financial pressures depending on liquidity and solvency concerns.

91. **The analysis finds high vulnerability for large service sectors – and some important industries – with extensive economic linkages**. For example, some of the most vulnerable sectors such wholesale and retail trade, transport and storage, and construction are large employers and contribute significantly to value addition (Figure 132). These sectors also happen to have big backward and forward linkages to other sectors (Figure 133), which implies potential spillover. Firms within these sectors, however, do not tend to be as liquidity strained as smaller, but important, sectors within services (e.g. ICT, professional services, accommodation and food) (Figure 134). At the same time, some of the vulnerable sectors are also among those with weaker performing assets in the banking system (e.g. construction, leather, accommodation and food) (Figure 135).

92. **The implications of the above for the labor market outlook will depend on the capacity of firms to adjust to the COVID-19 shock.** A preliminary analysis of the vulnerability of employment[50] across sectors in Turkey shows similar patterns to those seen in other countries.[51] Most notably, employment is most vulnerable in textile and apparel, food and accommodation, leather, agriculture, and furniture sectors vulnerable to shocks (Figure 136). Interestingly yet not surprisingly given the propensity for independent work, employment in some sectors such as electrical and computer is less vulnerable than in others.

93. **Sectors in which workers can adjust by working from home are not large employers or the most vulnerable.** Out of 32 sectors,[52] information and communication technology (ICT), finance, and health sectors have the highest potential for working from home, accounting for 10 percent of total employment at best, assuming all workers in these sectors had the skill level, digital competencies and ICT infrastructure needed to work from home as expected from surveys (Figure 137). Sectors with the least potential for working from home, as expected, include wood and paper products, rubber and plastic, metal, hospitality (accommodation and food), textile and apparel, agriculture, furniture, wholesale and retail, and food, beverage and tobacco, collectively accounting for nearly 51 percent of all employment. These are mostly the sectors with lower productivity due to several reasons such as low skills and high informality.

[49] The index is a simple average of sub-indices of demand, supply and financial vulnerability. Demand sub-index is a simple average of these sub-categories (i) reduced consumer demand for goods and services; (ii) reduced external demand and (iii) forward linkages. Supply sub-index is a simple average of these sub-categories (i) reduced access to imported inputs; (ii) closures, reduced hours, lockdowns; iii) labor supply shock and (iv) forward linkages. Financial sub-index is a simple average of these sub-categories (i) non-performing loans (NPLs); (ii) debt to equity; iii) cash on hand and (iv) cash conversion ratio. 0 to 1 means no/little vulnerability, 2 is serious, 3 severe.

[50] Based on WBG Background note, "Turkey: Covid-19 and Employment Vulnerability Index by Sector and Potential for Home-Based Work", May 2020, unpublished. Methodology is based on the Employment Vulnerability Index (EVI), which uses the sector vulnerability index, and expands it to investigate which sectors are more likely to face job-related vulnerabilities inspired from Bazillier et al, 2016, and the Australian Employment Vulnerability Index. Employment is defined as the number of jobs and vulnerability is an index using the Principal Component Analysis (PCA) method. The index includes nine indicators related to the average economic, financial and sectoral viability of the sector (i.e. sector vulnerability index); average degree of protection of workers (self and unpaid workers, part-time and informal employment, overtime work); average level of difficulty for workers to generate income (minimum wage non-compliance); average level of education and skills among workers, and amenability to working from home.

[51] Amenability to working from home analysis is based on the methodology developed by Hatayama, Viollaz and Winkler (Hatayama, Maho; Viollaz, Mariana; Winkler, Hernan. 2020. Jobs' Amenability to Working from Home: Evidence from Skills Surveys for 53 Countries. Policy Research Working Paper; No. 9241. World Bank, Washington, DC). The methodology uses OECD PIAAC (Survey of Adult Skills) 2014/2015 wave which has over 5 thousand respondents. Job is less amenable to working from home if it has high physical and manual intensity, requires significant face-to-face interaction, there is low ICT use at work, and low ICT infrastructure at home. More information will be available in the WBG Background note, "Turkey: Covid-19 and Employment Vulnerability Index by Sector and Potential for Home-Based Work", May 2020, unpublished.

[52] Due to the data constraints, certain sectors are excluded from the analysis such as Services of households as employers.

Figure 132: Large sectors vulnerable to contraction

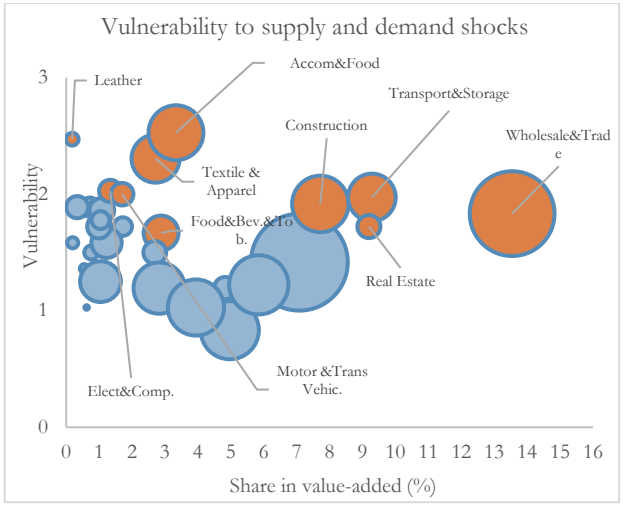


Figure 133: With potential spillover

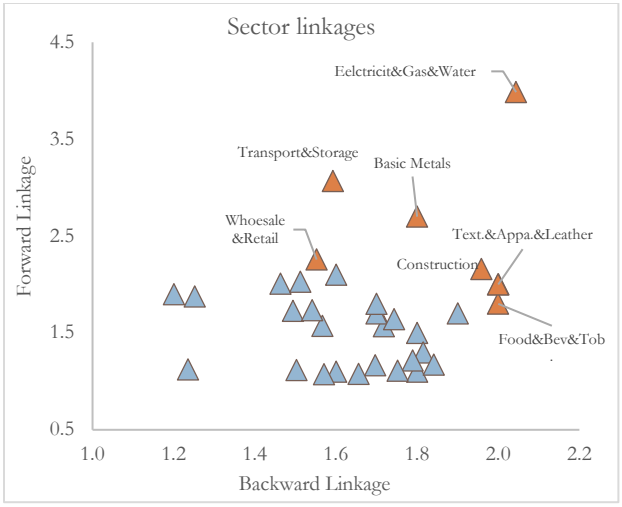


Figure 134: Smaller services more liquidity strained

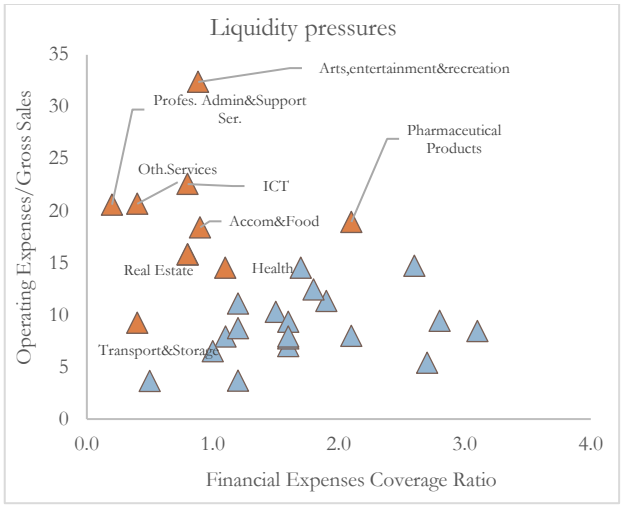


Figure 135: But solvency issues in larger sectors

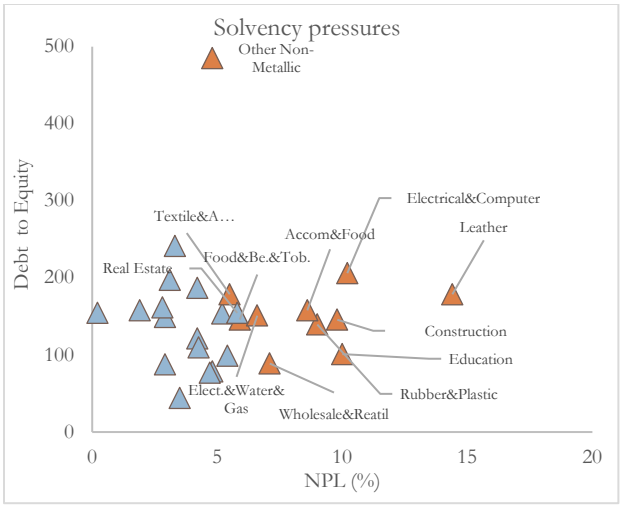


Figure 136: Sector vulnerability feeds employment vulnerability

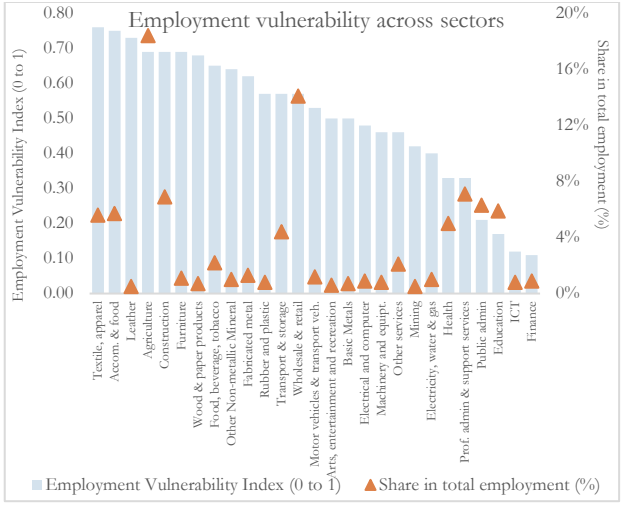
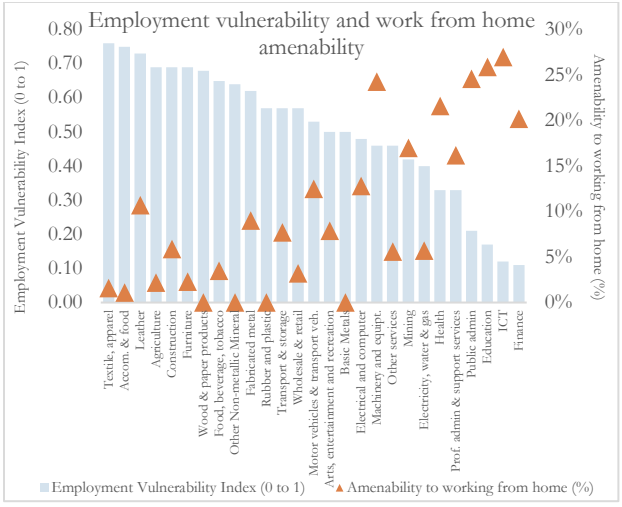


Figure 137: Working from home does not provide much reprieve



Sources: World Bank staff estimates using EIS (MOIT), Turkey Labor Force Survey 2018, PIAAC 2014/2015 for Turkey.

Poverty projected to increase due to COVID-19 crisis

94. **It follows from the above analysis that the COVID-19 will have seriously affected households' welfare in Turkey, particularly the poor and vulnerable.** Loss of income and employment as well as health problems have been among the leading concerns during the pandemic. Sectors that have been most impacted by the shock i.e. retail, accommodation and food, transport and construction are those where a large share of the poor and vulnerable households is usually employed, and households are at greatest risk of falling into poverty in case of a loss of income.

95. **To better understand the effects of the downturn on household welfare, the effects of the COVID-19 pandemic in Turkey are simulated on the income of households at different positions of the welfare distribution.** Per capita income is used to measure welfare. Households are categorized into three groups by using the World Bank international poverty lines; poor, vulnerable and middle class.[53] The analysis looks at how different income groups were linked to the labor market in 2018 to understand how the incidence of the 'income shock' varied across the welfare distribution.

96. **The simulation results show that poverty would increase by around 40 percent, from 10.4 to 14.4 percent, due to the COVID-19 pandemic but government's measures would decrease the poverty rate significantly from 14.4 percent to 11.8 percent** (Table 8). This would increase the poor population by 1.4 percentage points, corresponding to 1.2 million people in 2020. The COVID-19 crisis caused a widespread slowdown in economic activity where many firms were forced to ask employees to take unpaid leave or had to lay off their informal workers. The government's short-term allowance support covered around 60% of the gross wages of formal workers[54]. The Social Support Program, which delivered a thousand TL to beneficiary households, also helped to further reduce poverty. While much remains unknown about the effect of the COVID-19 on households, poverty could increase significantly in 2020 despite of government's measures.

[53] Poor refers to proportion of people with per capita income below $5.5 per capita a day 2011 PPP, Vulnerable refers to proportion of people with per capita income above $5.5 and below $11 per capita a day 2011 PPP and Middle class refers to proportion of people with per capita income above $11 per capita a day 2011 PPP.

[54] Our simulation displays an upper bound for short-term allowance support. While the short-term allowance is given to around 4 million workers, our simulation assumes that each formal worker receives short-term allowance.

Table 8: Simulations of the impact of COVID-19 on poverty[55]

Scenarios	Description	Fiscal Cost (in TL)	Poverty Rate	Vulnerability Rate	Middle Class Rate
Scenario 0	*Pre-COVID situation*		10.4	28.3	61.3
Scenario 1	*Shock in labor income by sectors due to Covid19*		14.4	31.4	54.3
Scenario 2	*Short-term Allowance wage-support of up to 150% of minimum wage to formal*	51.2 billion	12.5	30.0	57.5
Scenario 3	*Social Support Program transfers of 1,000TL per household*	1.9 billion	12.1	30.4	57.6
Scenario 4	*Social Support Program transfers of 1,000TL per household for existing beneficiaries of irregular transfers*	1.3 billion	12.0	30.3	57.7
Scenario 5	*Social Support Program transfers of 1,000TL per household for new applicants via online*	0.9 billion	11.8	30.4	57.7
Final	*Net impact of Covid19 after policy responses*	55.4 billion	1.4 percentage point increase, 14% increase	2.1 percentage point increase, 7% increase	3.6 percentage point decrease,6% decrease

Sources: WB Staff estimates using Household Budget Survey 2018.

97. **The COVID-19 pandemic could push an additional 1.4 million people[56] under the poverty line in Turkey in 2020.** Understanding the characteristics of the new poor is required for policymakers to develop support mechanisms for these households. Table 9 displays the characteristics of the new poor in comparison to other different households at different positions within the welfare distribution.

98. **The new poor shows similar characteristics with poor households.** Household characteristics of the new poor, such as household size, dependency ratio and education level of the main breadwinner tend to be more similar to those of poor households rather than vulnerable or middle-income households. Around 10 percent of the main breadwinners among the new poor households have no school degree, while 72 percent of the main breadwinners have only primary education.

99. **The new poor are more attached to the labor market compared to other household types.** A large share of the main breadwinner of the new poor is employed and labor income constitutes a very significant share of their household income, 92.6 percent. This could imply that the new poor could rapidly return to employment and labor force with relevant and effective policies. Informality is much higher among the new poor; 49.4 percent of the breadwinners are employed informally. Dependency of the new poor households on income of the main breadwinner is also much higher than in any other household type, 84.9 percent.

100. **Construction and services are the sectors most affected from the COVID-19 pandemic, and the new poor are mainly employed in those sectors.** Around half of the main breadwinners of the new poor households are employed in the services sector. Another 32 percent of breadwinners earn their income from the construction sector. Both the services and the construction sectors tend to hire low-skilled workers without social security protection.

[55] The poverty rate estimates used here are based on household income. The World Bank also monitors poverty rate by using consumption that refers to proportion of people with per capita consumption below $5.5 per capita a day 2011 PPP. The latest poverty rate by using consumption was measured at 9.2 percent in 2018 by using Household Budget Survey 2018.

[56] According to our simulation results, 1.4 million people who were not poor before the pandemic could fall into poverty. The policy measures of the government could push around 200 thousand poor people out of poverty. Thus, increasing the number of poor by 1.2 million people in 2020.

Table 9: Characteristics of households by income class

	Poor	Vulnerable	Middle Class	National	New Poor
Household Size	5.5	4.5	2.9	3.4	5.5
Dependency ratio	1.1	0.7	0.3	0.5	1.0
Characteristics of the main breadwinner					
%female head	18.2	10.5	23.0	20.0	4.1
Education of the main breadwinner					
No degree	26.7	11.3	6.8	9.0	10.1
Primary	59.0	64.8	46.1	50.9	72.0
Secondary	12.4	18.5	20.4	19.5	15.2
Post-secondary	1.9	5.4	26.7	20.6	2.7
Age of breadwinner	44.1	43.3	48.2	46.9	39.3
Employment status of the main breadwinner					
Employee	45.4	59.4	53.5	54.2	69.2
Self-employed	18.3	15.9	14.5	15.1	23.1
Employer	1.3	2.9	5.3	4.5	5.4
Unpaid family worker	0.2	0.2	0.1	0.1	0.0
Unemployed	11.1	4.2	1.7	2.9	1.2
Out of labor force	23.7	17.5	24.9	23.3	1.2
Dependency on main breadwinner: income of the main breadwinner/total income	77.7	79.8	75.7	76.3	84.9
Formality of work of the breadwinner					
Formal	27.1	57.1	53.9	52.9	48.2
Informal	38.1	21.2	19.5	21.0	49.4
Worked but currently unemployed or out of labor force	34.8	21.7	26.6	26.1	2.4
Sector of work of the main breadwinner					
Agriculture	15.3	9.7	8.3	9.1	5.1
Industry	8.6	21.9	15.0	16.1	9.8
Services	29.7	36.6	44.9	42.2	50.9
Construction	11.7	10.1	5.1	6.6	31.8
Worked but currently unemployed or out of labor force	34.8	21.7	26.6	26.1	2.4
Income shares					
Labor income	71.9	78.6	70.0	71.1	92.6
Non-labor income	28.1	21.4	30.0	28.9	7.4

Source: WB Staff estimates using Household Budget Survey 2018.

101. **Three quarters of the new poor can be easily reached by the government since they are in the social protection system** (Table 10)**.** Those households are in the social security system through formal employment or contributory transfers (i.e. retirement pension, contributory disability transfer, unemployment benefit and contributory widow transfer) and in social assistance system since they currently receive social assistance transfers. Only around a quarter of the new poor are not in the social protection system of the government and it requires more effort to reach those households.

Table 10: The new poor and linkages with the Social Protection System in Turkey

Categories of households in	Share of the new poor
SSI system	51.5
Social Assistance & Contributory Program beneficiaries in the SSI system	2.2
Contributory Program beneficiaries in the SSI system	2.6
Social assistance system only	20.3
Not in any government system	23.4
Total	**100.0**

Source: WB Staff estimates using Household Budget Survey 2018.
Note: SSI refers to Social Security Institution and those households in this category have at least one member paying social security contributions through formal employment. Contributory programs beneficiaries in the SSI system includes households that have at least one member receiving retirement pension, contributory disability transfer, unemployment transfer and contributory widow transfer.

External imbalances remain an ongoing source of vulnerability

102. **Global trade is set to suffer its largest drop since WWII.** Recent indicators suggest that global trade is on track to fall more in 2020 than it did during the global financial crisis, partly owing to the disruptions the COVID-19 pandemic has caused to international travel and global value chains. Trade is typically more volatile than output and tends to fall particularly sharply in times of crisis. Investment, which is more cyclical and more trade-intensive than other categories of expenditure, has declined worldwide as firms face financing problems and delay expansion. The fall in activity has been concentrated in services sectors that are otherwise typically stable. The sharp fall in activity in the first half of this year is expected to contribute to a contraction in global trade of about 13 percent in 2020. A gradual recovery is assumed to start during the second half of the year as controls are lifted, travel returns to more typical levels, and manufacturers rebuild inventories. This recovery is expected to be historically feeble, however, reflecting the exceptional character of the present crisis, with a rebound of around 5 percent in trade volumes expected for 2021.

103. **Broad-based recession in global economy, particularly in the EU is likely to put pressure on Turkish exports**. Exports are expected to contract by 15 percent and imports by 6.5 percent in 2020.[57] Lower imports, and to some extent energy prices, will contain the pressure. But a deterioration in tourism revenues and exports are expected to widen the deficit to 3.2 percent in 2020. As the shutdown restrictions are lifted and the COVID-19 spread is contained, GVC-trade may recover faster than non GVC-trade. For example, China has seen initial recovery largely driven by GVC-intensive sectors. This is because the stickiness of the GVC relationships, similarly to the impact of uncertainty, tends to dominate in the short-term, rendering resilience to GVC trade.[58]

104. **Financial markets are likely to see heightened yields for higher-risk and EMDE assets while uncertainty around the COVID pandemic remains.** Global efforts by central banks to maintain liquidity in financial markets appear to have successfully averted a severe liquidity crisis. Nonetheless, financial conditions remain fragile for many market participants. Disruptions in activity have interrupted cash flows and interfered with debt financing around the world. Spreads on high-yield debt have risen substantially amid widespread corporate bond downgrades, suggesting investors may have become more skeptical about the ability of riskier borrowers to finance their debt. Many EMDEs have also experienced significant pressures on their currencies, with depreciations broadly correlated with current account deficits. Foreign direct investment in many countries is expected to fall considerably. In a number of EMDEs, banking system profitability is being eroded by a rise in nonperforming loans.

[57] Imports of goods and services increased by 22.1 percent (yoy) in real terms in 2020Q1, restricting the whole year contraction.
[58] Constantinescu, C., A. Mattoo. and M. Ruta. "Policy Uncertainty, Trade and Global Value Chains: Some Facts, Many Questions," forthcoming in Review of Industrial Organization.

105. **Though short-term external debt repayment obligations seem manageable, increased current account imbalances, declining reserves, and currency pressure raise Turkey's overall external vulnerability**. The external financing requirement[59] for the 12 months from February 2020 is estimated to be around US$150 billion (around 6 percent of 2019 GDP) or just over US$12 billion a month including trade credits, and US$96 billion excluding trade credits (Figure 138). The in-year peak for external debt rollover was in May and June. Average monthly external financing requirements from July 2020 to January 2021 are estimated to be around US$9 billion, including trade credits. Despite the volatility in external flows, Turkey has been able to rollover much of its external debt since early 2020 (Figure 139), and it is expected to continue to do so over the remainder of the year barring an extraordinary external shock.

106. **Gross international reserves (GIR) of the CBRT fell sharply but have recently been buttressed by raising the limits on an existing swap line with the Qatari Central Bank.**[60] With the agreement of an additional US$10 billion-equivalent to their existing US$5 billion-equivalent deposit swap line, the two central banks increased their foreign currency reserves and CBRT's GIR rose above US$92 billion as of May 2020. However, this remains well below the level of US$105 billion at the beginning of the year (Figure 140) and well below the prudential levels recommended by the IMF, of approximately US$ 125 billion.[61]

Figure 138: GEFR peaked in 2020 H1

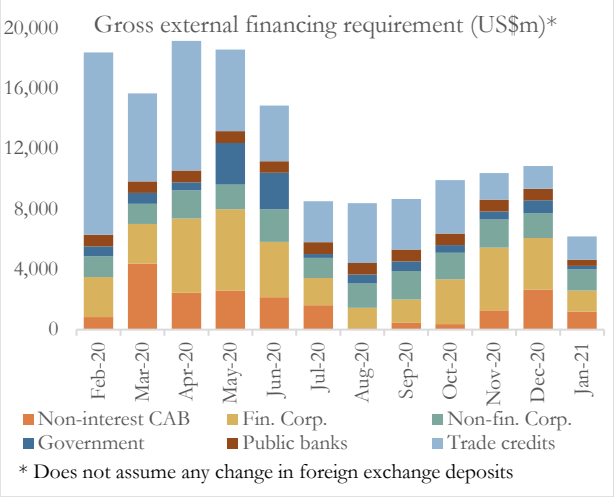
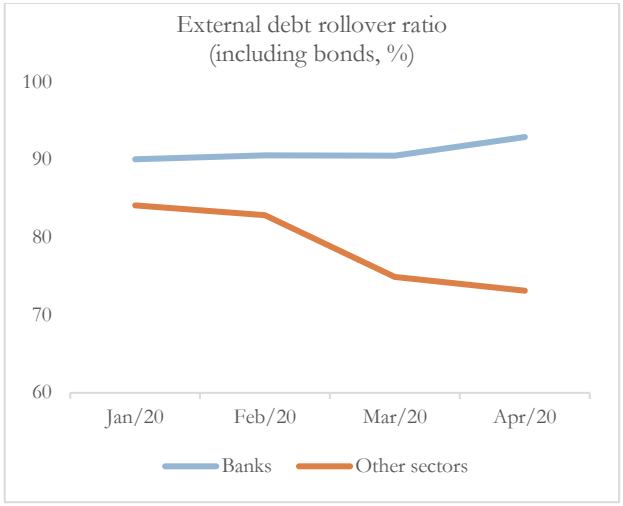


Figure 139: High external debt rollover



Sources: Haver Analytics, CBRT, WB Staff estimates.

107. **Most GIR are commercial bank foreign exchange and gold held to fulfil reserve requirements.** A breakdown of GIR according to their purpose (rather than the instrument) shows that US$24bn is held in blocked accounts either as required reserves against FX liabilities or under the reserves option mechanism, $32bn is held as free reserves of commercial banks, $9bn are government deposits, $9bn are held under swap with commercial banks, and $18bn are held under other arrangements or the central bank's own reserves[62].

[59] Based on maturing debt and current account deficit. This does not include callable debt such as deposits of non-residents and FX currency, which have no maturity date.

[60] https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Announcements/Press+Releases/2020/ANO2020-29

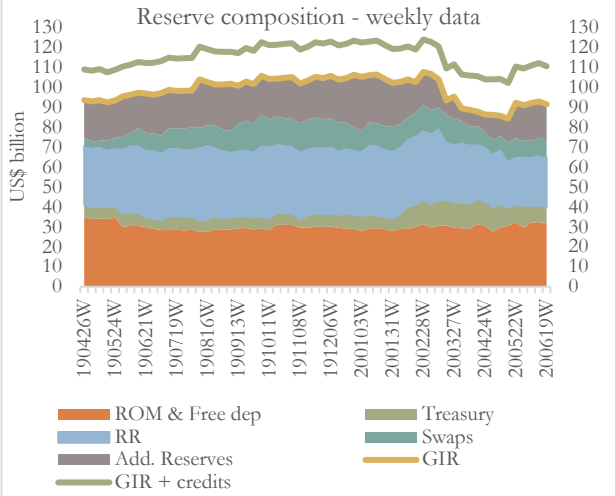
[61] Based on figures presented in the IMF's 2019 AIV consultation report.

[62] Not included in GIR are the export rediscount credits payable issued by CBRT. Currently, CBRT offers export rediscount credits in two separate programs, one being the FX export rediscount credits and the other Turkish Lira export rediscount credits. The repayments of FX export rediscount credits can only be made in foreign currency. With a decision on **March 31, 2020**, another program has been launched by the CBRT. With this program, CBRT started to offer Turkish lira export rediscount credits. Both extension and repayments of Turkish lira export rediscount credits are made in Turkish liras. No FX transactions are involved in these Turkish lira export credit operations.

108. **International reserves held by both the central bank and commercial banks is roughly equivalent to all debt maturing in the next 12 months.** Together they were just under US$130bn at end March 2020. In addition to foreign exchange reserves held at CBRT, commercial banks hold sizable amounts of international reserves separately, amounting to US$35bn in March. On a national basis, these two sets of reserves both constitute international liquidity, providing some additional buffer for external debt repayments.

Figure 140: Substantial drop in GIR

Figure 141: Most GIR are commercial bank reserves



Sources: Haver Analytics, CBRT, WB Staff estimates.

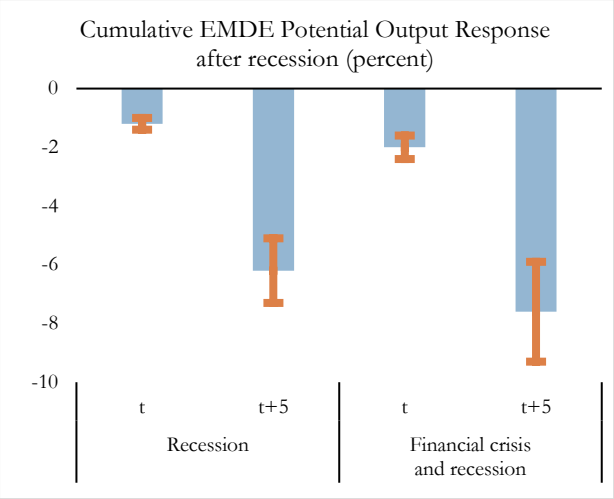
Headwinds have increased for medium-term growth

109. **A combination of the above factors resulting from COVID19 is likely to leave lasting scars, eroding productivity and potential output for extended periods in EMDEs, including Turkey.** Many emerging and developing economies including Turkey were already experiencing weaker growth before this crisis. The World Bank's most recent Global Economic Prospects highlights that the 2020 global recession will exacerbate a multi-decade trend of slowing potential growth and productivity growth. The analysis shows that recessions have in the past caused lower potential output for four to five years after their onset in the past. Five years after the average recession, potential output was about 6 percent below baseline in EMDEs. Recessions that were accompanied by financial crises caused larger long-term potential output losses in EMDEs than recessions without financial crises (Figure 142). Potential output losses were found to be lower when countries entered these events with lower external debt or current account deficits, and with an inflation-targeting monetary policy framework. The long-term damage of COVID19 will be particularly severe in economies that suffer financial crises and structural weaknesses.

110. **Stagnation in productivity growth coupled with decline in labor force participation are likely to suppress potential output in the medium term.** Turkey has been caught in the COVID19 shock with long-lasting structural challenges and a deterioration in quality of growth. The prolonged stagnation in productivity has been accompanied by muted investment in the recent period. Thus, TFP did not contribute to potential output whilst the contribution of potential employment increased supported by a rise in participation rates, particularly female participation. This hurt potential output and its growth fell below 4 percent in 2019, the lowest growth in the last 15 years (Figure 143).

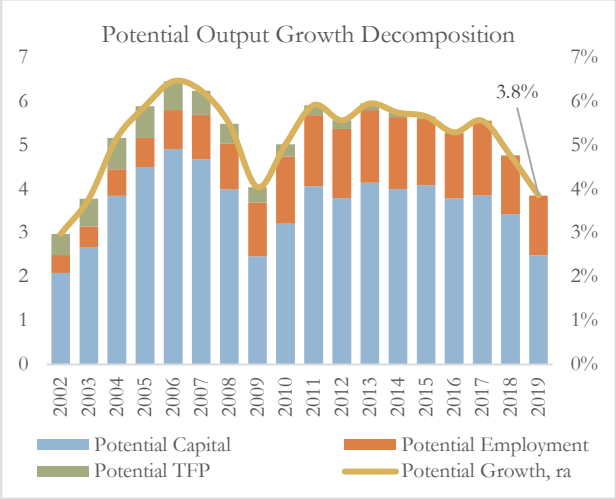
111. **The low level of labor force participation despite rising working age population and productivity stagnation hint a negative outlook for potential growth**. Moreover, depressed productive investment is also a drag on potential output. But this is not to say that the current shock would amount to hysteresis with a permanent drop in supply capacity including a sustained period of long-term unemployment. The Turkish economy is resilient, and despite the uncertainties, there are many factors that support its ability to rebound. This is evident in relatively strong expansions during recovery phases compared to peer countries.[63] Going forward, reform actions to deepen supply capacity and reducing the macroeconomic imbalances are key to sustainably recovering from this shock and accelerating potential output.

Figure 142: Recessions have deep impact on potential output



Source: WB, GEP (June 2020).

Figure 143: Turkey has been caught in the pandemic crisis with long-term challenges



Source: TURKSTAT, WB Staff calculations.

B. Prioritizing policies to move from relief to recovery and resilience

Anchoring economic expectations

112. **The pandemic has warranted an extraordinary policy response, though it is important to take stock of the implications for medium-term recovery and adjust course where needed**. Turkey confronted the COVID-19 shock with relatively more fiscal space than monetary policy space to react to the shock. Yet the relative burden of the response seems to have fallen on monetary policy as discussed in the taking stock section. But it is increasingly clear that monetary policy has reached a limit in terms of its ability to further support the economy without widening external and internal imbalances.

113. **Turkey can afford to maintain responsive and flexible fiscal policy to manage the difficult recovery ahead.** As illustrated in the last TEM, Turkey's medium-term fiscal framework under different macroeconomic scenarios suggests that the country can absorb limited shocks even with the recent increase in fiscal imbalances. The public sector has a big role to play in compensating economic actors for a shock that is entirely exogenous. This can help avert significant social and economic costs.

[63] WBG (June 2019), "Firm Productivity and Economic Growth in Turkey," Country Economic Memorandum.

114. **Ensuring that short-term responses are consistent with fiscal efficiency and sustainability is of course critical**. Short-term measures that lead to too much debt or unaffordable expenditure, for example, could reverse economic recovery. Measures should be transparent, timely, targeted and temporary. Risks to fiscal sustainability can also be mitigated through discretionary measures that can be easily reversed when the effects of the pandemic shock are over. The authorities' fiscal response to date seems to have been largely consistent with these principles.

115. **The upcoming Medium-Term Program could helpfully set out an updated fiscal strategy to help support a strong recovery**. This should include options to rationalize expenditures and reduce budget rigidities on the one hand, and options to improve revenue mobilization on the other, including through improved tax compliance and rationalization of tax expenditures.

116. **Combining this with monetary discipline could help anchor economic expectations and support a more sustainable recovery, particularly as inflation risks remain elevated in 2020**. Given relatively high inflation expectations for the end of the year, already negative interest rates and weak capital flows, there is limited room for further rate cuts. Going forward, further monetary loosening without a permanent fall in inflation and inflationary expectations could hurt Lira stability and the disinflation process.

117. **Inflation in Turkey has remained high and persistent over recent years, with costs in terms of competitiveness, stability and growth.** Inflation in Turkey has been among the highest in comparison to selected emerging market economies (Figure 144). This has contributed to strong growth in nominal wages, the highest on average among emerging markets except for recent years (Figure 145). Rising labor costs is a concern for competitiveness particularly when combined with decelerating productivity. Though a floating exchange rate (Figure 146) has helped to maintain external competitiveness (Figure 147), Turkey's high external exposure has also forced the authorities to defend the currency leading to an erosion of external buffers (Figure 148). This in turn has contributed to high risk premia on sovereign credit (Figure 149) and fueled a vicious cycle of capital outflows, currency pressures, erosion of external buffers, price pressures and back around again.

118. **This warrants a more concerted monetary policy effort to tackle inflation**. In the 2012-2017 period, the abundance of global capital and low interest rates may have made it more difficult to focus on inflation, as this would have likely been at the expense of exchange rate stability. Since then, however, the environment has changed. There is now a greater competition for external capital – therefore a focus on inflation could have positive payoffs in terms of capital flows, exchange rate stability, and lower risk premia.

Figure 144: Turkey has had high inflation

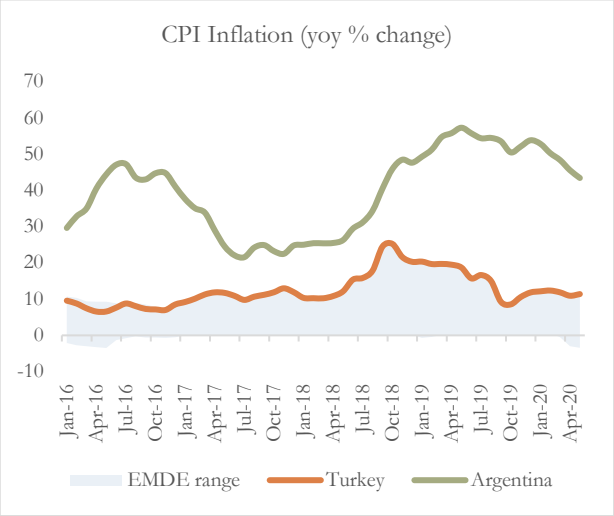


Figure 145: Fueling nominal wage growth

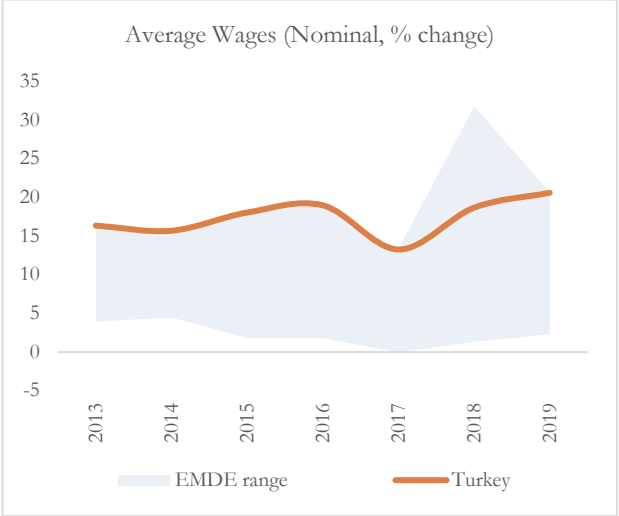


Figure 146: And currency volatility

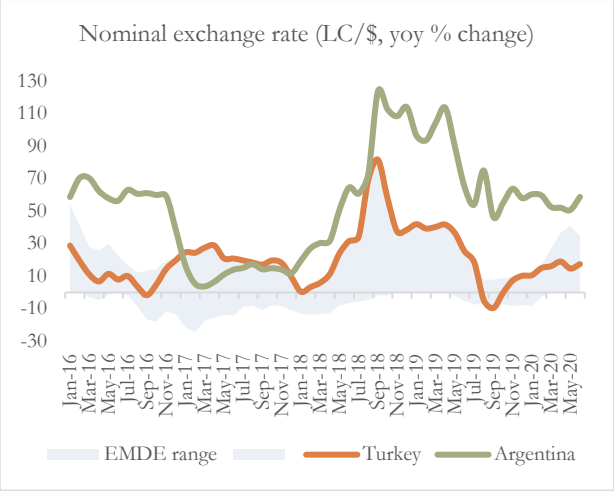


Figure 147: Floating rate maintains competitiveness

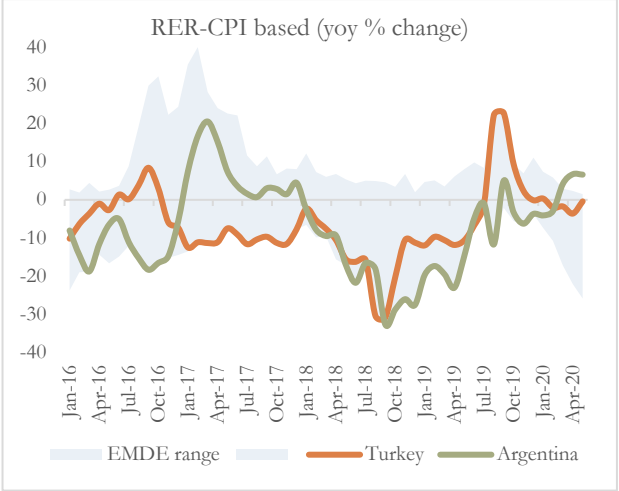


Figure 148: But external exposure erodes buffers

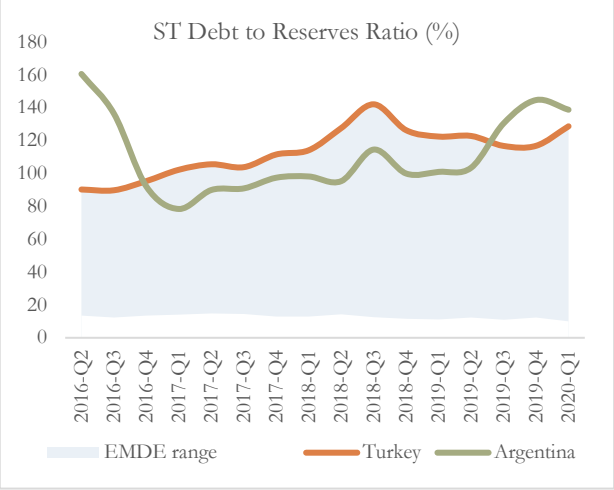
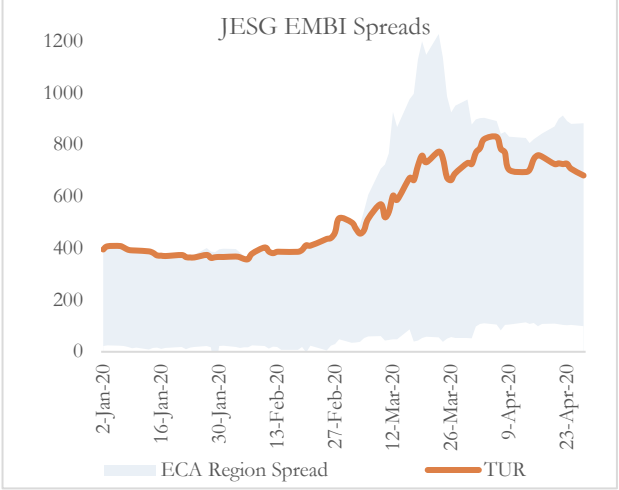


Figure 149: Contributing to high risk premia



Sources: Haver Analytics, JPM Markets, WB Staff estimates. The EMDE group includes Turkey, Brazil, Russia, S. Africa, Malaysia, Indonesia, India, Mexico, Thailand, China, Romania and Bulgaria. EMDE range shows the area between maximum and minimum values of the relevant indicator among this group. As Argentina is an outlier in most of cases, it is shown separately in the figures.

Maintaining financial stability

119. **The financial sector has been critical in fighting the effects of COVID-19, but it is also subject to risks, which could become a source of instability in the event of an amplified shock.** Banks in Turkey were just coming out of a period of stress ahead of the COVID-19 shock and continuing to restore their balance sheets.

120. **Turkish financial markets mitigated the market risk well despite sharp adjustments in global investor sentiment.** Compounded by heightened global uncertainty, markets faced a persistent surge in risk premia. Market volatility has already spurred demand for liquidity, and CBRT and other regulators have stepped in. Demand for cash by the agents, including the public sector, could have tightened funding and liquidity conditions for banks and, subsequently, lending to the private sector. But, CBRT, BRSA and CMB ensured the smooth functioning of critical financial infrastructures and credit flow.

121. **Nevertheless, potential financial risks remain in Turkey like in most EMs.** Funding and liquidity risk have been mostly mitigated despite some investor confidence deterioration. Any economic and health related confidence bouts will heighten funding and liquidity risks, adversely impact NPLs, and constrain banks' capacity to lend and support real activity. Credit risks can be compounded when cash-constrained firms – particularly SMEs, which rely more on bank funding – and households fail to secure financing to cover for an income loss or delays in trade receivables. Asset-quality deterioration risks for both financial institutions and firms are significant in Turkey due to a lingering demand and supply shock, policy responses that would temporarily hide the true financial conditions of lenders and borrowers, and sharp lira depreciation.

122. **Rise in credit risk may put further pressure on earnings and the profitability of the financial sector.** The first stage impact is through lower bank loan growth, reduced fee income, and, in a second stage, weaker asset quality. Some banks may also experience mark-to-market losses due to any declines in financial markets. Extended monetary policy easing beyond its aimed time to support the economy may compress margins and reduce financial sectors' profitability. In the extreme case scenario, this may lead to the erosion of bank buffers and undermine their resilience and trigger a credit crunch. In this case, capital buffers could be under stress due to monetary policy easing in the short-term and rise in NPLs in medium term.

123. **Globally, most regulators have interpreted their financial stability mandate, as** (i) ensuring that banks can support the economy and the implementation of Government emergency measures, and (ii) avoiding the accumulation of excessive risks that could end up jeopardizing financial stability.[64] In some cases, they were able to ensure at an early stage that the stress which banks face is also accounted for and convey realistic expectations on the role banks *alone* would be able to play (Box 12).

124. **While a swift policy response is welcome and necessary, aggressive measures may be pushing the authorities deep into uncharted territory, with possible unintended effects over financial stability.** Easing financial conditions particularly through the first line of defense (i.e., liquidity and capital buffers created in good times to handle crises) and carefully exercising some temporary regulatory forbearance were warranted to mitigate the initial impact of the external shock. However, prudence in regulatory and supervisory responses should prevail in order to avoid a financial stress at a later stage that would amplify the current impact of the COVID shock.

[64] As highlighted by the Basel Committee on Banking Supervision (BCBS), "One of the lessons learnt from the financial crisis is that supervisors and investors could not always understand and compare information about credit categorization presented in banks' financial statements. Banks used different (and often undisclosed or insufficiently disclosed) methodologies and assumptions for valuations, provisioning and risk weightings, increasing opacity and reducing comparability for end users. This inconsistency increased uncertainty at the height of the crisis" (a key factor in financial panic). Supervisors globally need to ensure consistency in approaches by communicating their expectations to take into account exceptional factors (e.g. ensure public support measures are appropriately taken into account for provisioning or capital purposes, indicate how to value assets where markets have frozen etc.).

125. **Improvement in the asset quality indicators will help to operate in the short term but more measures are needed to keep the banking system healthy in the longer term.**[65] Particularly asset classification measures could rapidly entail serious risks for the banks and customers alike, let alone making supervisory responses even more challenging unless these are temporary and closely monitored.

126. **The forbearance measures need to be carefully assessed on a case by case basis being very mindful of the implications they have; banks' financial soundness could be compromised through deterioration of their portfolios.** Other measures such as credit moratoria, even if voluntarily implemented by banks, might lead to new risks, especially if not implemented with clear due diligence requirements and properly disclosed. In segments with a poor credit risk record and high NPLs, the relaxation of standards could further encourage the practice of ignoring loans with long lasting negative consequences favorable to possible zombie firms. Supervisors need to closely monitor implementation of these measures and their potential impacts, failing which assessment of new risks could be obscured and distort regulatory risk measurements.

127. **Turkey should in the long term move from a credit driven growth model to one driven by structural reform and productivity growth through a set of structural reforms and policies geared toward, among others, deepening of the financial system and enhancing its resilience.** Although the current nature of the credit impulse is countercyclical, its continuity could turn into a credit glut. Corporate financial debt in this period could deepen that glut and considering possible further demand weaknesses due to a second wave in pandemic may reduce investment over an extended period, dragging down potential output. This should focus policy attention on the development of alternative finance and capital markets, which in Turkey are relatively small.

128. **Considering the credit impulse created by the authorities this year and the ongoing concerns on banking sector asset quality, it is expected that the banking system will have more deleveraging and balance sheet repairing next year.** Financial sector policy priorities on safety nets, NPL resolution and insolvency regime have been under discussion by authorities in recent years. Strengthening the financial sector safety nets, including the regulatory and institutional framework for dealing with potential problems is important. Moreover, strengthening insolvency regime may enable corporates and consumers to cope with the anticipated rise in financial stress.

129. **The authorities have taken several steps to accelerate financial market deepening when the macro-financial environment becomes more conducive**. Recent changes in capital market and banking legislations including easing loan securitization, introducing board of debt instrument holders, the concept of a security trusts, project bonds and project finance funds, and expanding the fields of activity of development and investment banks as well as establishing a single public insurance company will support further development and deepening in capital markets. These developments may help reduce financial vulnerabilities emanating from foreign currency borrowing and high debt rollover risks, which are all challenges in Turkey.

Box 11: How should financial sector regulators respond to COVID crisis responsibly?

Globally, some countries have changed the asset classification status and provisioning requirements for loans that were performing before the start of the pandemic or have changed the definition of non-performing loans by extending the number of past due days. While temporary measures may help buy time until a clearer view on the impact of the pandemic is possible, supervisory actions should ensure that banks continue to monitor their asset quality using well-established standards and build adequate provisions over time. This approach ensures that the banks' vital signs are properly measured, which facilitates management actions and prompts early supervisory actions if and when warranted. To lay the foundation for a sustainable recovery, it is also essential to provide clear guidance on asset classification and provisioning and to ensure that measures are well designed, time-bound and targeted.

[65] https://worldbankgroup.sharepoint.com/sites/gge/Documents/COVID-19%20Response%20Documents/COVID-19-The-Regulatory-and-Supervisory-Implications-for-the-Banking-Sector.pdf

By encouraging the use of the flexibility in the framework, while upholding minimum standards, the recommendations seek to ensure that the healthy vital signs of the banking system are transparently maintained and supervised. This will help minimize the risks of a damaging financial crisis that would compound the major economic costs of the pandemic.

While the COVID-19 crisis calls for flexibility and pragmatism in the supervisory and regulatory responses, it is equally crucial to ensure that their costs don't overshadow their benefits in the short and medium term. BRSA's and CBRT's regulatory and supervisory measures are likely to be impactful as they come along other public interventions (funding, guarantees etc.).

It is critical that in designing measures, policymakers have fully assessed how the measures are likely to impact the banking sector in the near term. They should ensure that proposed measures do not present an unacceptable risk to banks' safety and soundness. Techniques such as scenario analysis and stress-testing tools might be particularly useful to gauge the impact of the measures.

Authorities should prepare well-defined exit strategies in order to boost confidence and to prevent further market stress in case of incompliance. It is essential to avoid a status where COVID measures constitute a "new normal". Therefore, to manage expectations, public communication about these preconditions for revoking the borrower relief measures is important, with reliable, frequent, up-to-date, and comparable information regarding loan quality.

Any extension of the relaxation of regulatory definitions for NPLs, classification and provisioning requirements may undermine market discipline and comparability within and across countries. It also distorts the accuracy of financial information and blurring the distinction between borrowers negatively affected by COVID-19 and the zombie firms. An independent asset quality review, drawing on international expertise, could further build market confidence. It can be followed by adoption of time-bound remedial action plan to address any weaknesses and post-COVID recovery. This step may incentivize the problem debt restructuring, and for maintaining stakeholder confidence.

International financial institutions have taken a unified position to assist and support their member countries. These joint recommendations aid the development, monitoring, and strengthening of policies to sustain financial health during this pandemic and, equally important, for the road to recovery.

Recommendations to guide bank supervisors in their response to the pandemic:

- Use the flexibility in the regulatory and supervisory framework while upholding minimum prudential standards and preserving consistency with international standards.
- Facilitate well-designed public and private support interventions that target affected borrowers and sectors.
- Minimize opportunities for moral hazard and maintain adherence to sound credit risk management practices, while facilitating the effective allocation of new credit.
- Provide guidance on asset classification and provisioning, building on the guidance from standard-setting bodies, and refrain from relaxing the regulatory definition of nonperforming exposures.
- Maintain transparency and provide additional guidance on risk disclosure.
- Suspend the automatic triggers of corrective supervisory action while dealing with the extraordinary circumstances of the pandemic.
- Review supervisory priorities and maintain close dialogue with the industry.
- Coordinate actively with supervisory colleagues, domestically and internationally.
- Ensure the smooth functioning of critical market infrastructures.

Sources: Borrower Relief Measures in ECA region, Worldbank, FinSac Policy Note, April 2020.
COVID-19: The Regulatory and Supervisory Implications for the Banking Sector: A Joint IMF-World Bank Staff Position Note, May 2020.

Protecting households

130. **COVID-19 will have varying impacts across different households and individuals in society based on their vulnerability to the virus and its health and economic effects.** As discussed above, poorer households, workers in lower skilled jobs, and the elderly are more vulnerable to the virus and affected more severely by its economic effects. Impacts may vary for example based on an individual's place of residence, type of employment, and income. They may also vary depending on individual characteristics such as gender, age, refugee status, or disability (Table 11).

131. **Formal and informal mechanisms that support households' and individuals' ability to cope with the virus and its health and economic effects can have both positive and negative impacts**. For example, formal measures include emergency government support and access to services, whilst informal mechanisms could include family and community support, sale of assets, adjustment to consumption patterns. Some groups may be able to sustain their livelihoods thanks to formal support, but others may be forced to resort to drastic measures that have more long-lasting negative impacts. Understanding how specific groups are likely to be affected can inform strategy, policies and operational responses, making sure that these are addressing both immediate impacts and the longer-term factors that have made these groups vulnerable.

132. **The authorities' response has covered many vulnerable groups in society, though there may be gaps to be filled (Table 11)**. As discussed above, the impact of the COVID-19 shock on the poor could be mitigated by expanding social assistance to currently uncovered households. In addition: (i) recent surveys by the Turkish Red Crescent illustrate the large negative impact of the crisis on refugees in terms of jobs, access to services, and poverty – it also suggests risks of malnutrition, despite measures to protect food security (Box 13); (ii) women are likely to be disproportionately affected because caretaking responsibilities and household tasks will have increased during the crisis, whilst many of the temporarily closed enterprises have women employees (section I.B above); (iii) labor market challenges for the youth are exacerbated by fewer employment opportunities, which has prompted many to exit the labor force or not enter in the first place; (iv) specific groups like the disabled are likely experiencing a deterioration in economic opportunities and access to services.

133. **Given these challenges, policy options for supporting jobs and welfare in Turkey will need to address both short- and long-term needs through an integrated approach**. Consolidation across programs will be needed to help formal workers, informal workers and the non-working poor transition between sectors, transfer skills and boost resilience against risks. Key policy aims include the need to: (i) stem immediate pandemic transmission, enhance disease management and boost preparedness for ensuring access to therapy and treatment; (ii) enhance job creation, safeguard employment retention, wages and benefits and facilitate skills transition to new jobs for vulnerable workers; (iii) preserve human capital in terms of learning and enhance skills among children, young adults and vulnerable workers for changing economic realities; and (iv) compensate loss of income and mitigate the impact of high prices on consumption, food security and health care.

134. **Recommended policy options regarding jobs should consider the specific policy constraint and objective.** These objectives could include: protecting jobs, protecting earnings and benefits, compensating income losses, or fostering job creation and skills transfer. While emergency one-off, universal measures are useful early on, as impacts manifest, targeted approaches may eventually be more beneficial and cost-effective. Key options include: (a) protecting jobs through financial and technical assistance to MSMEs for integrated jobs strategies; (b) protecting earnings and benefits through employment subsidies (wage and social security provisions), such as programs managed by SGK and ISKUR earmarked to wages or through lump-sum grants to firms; (c) compensating lost income through unemployment benefits and the severance payment mechanism as well as unconditional cash support to vulnerable households; and (d) stimulating job creation and skills transfer by linking MSMEs and financial intermediaries more directly to Active Labor Market Policies and vocational training programs and systems managed by ISKUR and MoNE alike.

135. **Moreover, targeting specific profiles of workers would help avoid a prolonged economic depression**. Vulnerable workers and households can be targeted for emergency support either through firms or through the social assistance and labor registries (namely the Integrated Social Assistance Registry, Family Information System and SGK social security registry). Emergency financial support to targeted firms (size, sector and labor-intensity) can reach key workers registered with SGK on short-term contracts and new and existing on-the-job training beneficiaries (through the Turkish Employment Agency ISKUR). In terms of poorer and informal households and workers, expanding the delivery system would allow services and emergency, one-off cash support (i.e., for three to six months, renewable) and key services to older persons, children and special needs. Over the mid- to long-term, a comprehensive approach fostering institutional linkages between the demand and supply sides will help further accelerate the economic and jobs recovery.

Table 11: Vulnerabilities and coping mechanisms across different types of households

Types and sources of vulnerabilities	Impacts of COVID-19	Coping mechanisms and mitigation measures
Poor households		
• Low income and savings (10 percent poverty rate with a further 28 percent vulnerable to falling into poverty) • Low education (72 percent of main breadwinners have only primary education) • Larger household size (5.5 vs. 3.4 national average) and high dependency ratio (1.1 vs. 0.5 average) • Large share is informally employed (40 percent)	• Loss of income due to sickness or lockdowns: inability to make rental and utility payments • Lack of access to internet limits children's access to online education and hinders families' ability to access information on emergency services • Around one quarter of 'new poor' not in any government assistance system.	Positive • Social assistance system • ST allowance wage-support of up to 150 percent of minimum wage (formal employees only) • Social assistance for poor households (TL 1,000 per hh) Negative • Sale of assets leading to drop in permanent income • Taking children out of school
Informal and seasonal migrant workers		
• High dependence on labor income (75 percent for poor hh, 80 percent for vulnerable hh) • Loss of income not directly covered by government programs • Migrant workers likely to be most affected.	• Migrant workers face difficulties returning home due to movement and transport restrictions • Migrant workers more likely to live in crowded areas, where risks of transmission are highest.[66] • Seasonal farmworkers travel from the southeast and east to areas of high agricultural production in crowded and unsafe vehicles, and have little access to healthcare	Positive • Health, accommodation and transportation support provided to seasonal agriculture workers for food security • Loan support package for farmers up to TL250.000 with 60-month maturity • Deferral of social security premium payments of micro enterprises, craftsmen, and farmers • Transfers of TL1.5 billion to farmers to secure food supply • Agricultural land and 2/B land purchase related repayments to Treasury is deferred by 3 months • Social assistance programs to households may benefit informal and seasonal migrant workers
Women		
• Less likely than men to be in the labor force (34 percent vs. 73 percent)[67] or to have a job (32 percent vs. 72 percent). • Working in sectors that are impacted by COVID: 28% in agriculture, 15 percent in manufacture, 11	• Increase in both women's caretaking responsibilities and household tasks, as care centers have limited their activities or closed altogether during peak of the crisis	Positive: • Short term work allowance and unpaid leave support • Cash support to HHs. • Increased credit opportunities

[66] World Bank, 2020. COVID-19 Crisis through a Migration Lens. KNOMAD.
[67] Cebeci, T. 2014. Performance of Female Employers in Turkey. Ministry of Family and Social Policies of the Republic of Turkey and the World Bank.; Okten, K. 2014. Female Entrepreneurship in Turkey: Patterns, Characteristics and Trends. Ministry of Family and Social Policies of the Republic of Turkey and the World Bank.

Types and sources of vulnerabilities	Impacts of COVID-19	Coping mechanisms and mitigation measures
percent in wholesale and retail, 10 percent in education, and 9 percent in human, health and social work. • Primary caregivers for children and the elderly. Responsible most household tasks.[68] • Less likely to be entrepreneurs than men (22 percent of men and 9 percent of women are self-employed).[69]	• With families staying home, household chores have likely also increased • Women-owned firms likely hit harder as women will have less time to manage their companies and are less likely to access finance to continue to operate their businesses in times of crisis	
Refugees		
• Turkey is the largest host of refugees.[70] • Of 1.5 million displaced Syrians that benefit from the Emergency Social Safety Net (ESSN) program, 76 percent are poor and 12 percent are close to the poverty line.[71] • Many refugees do not receive formal support[72] • Labor is the main source of income for 85% of refugee households[73] • Over half of refugees receiving the ESSN were working informally.[74] • Among ESSN beneficiaries that are working, 20 percent were working as unskilled workers or in services, with others working in the textile industry (19 percent), construction (12 percent), and artisanship (10 percent).[75]	• A survey by the Turkish Red Crescent found that: - 69 percent of refugee recipients of the ESSN lost their jobs (93 percent were sole earners in the family).[76] - 87 percent said they had access to health care before COVID-19, but only 25% had access after - Food has been identified as a "priority need" by 95 percent of households (hh). - 22 percent of hh have members that require health services (disabilities, chronic illnesses or pregnancy) but 61 percent of those report that COVID-19 has affected access to services - 31 percent of children in refugee hh do not have access to online education	Positive • ESSN reaches 1.7 million displaced Syrians (and other nationalities who have international protection) • EU announced additional ESSN funding and CTTE cash transfer programs of Euro 485 million • According to the Turkish Red Crescent survey: 43 percent of respondents reported seeking support from families and relatives, 18 percent from centers and NGOs, 12 percent from friends of neighbors, and 28% from other sources. Negative • Food-related coping mechanisms likely to increase in the upcoming period: reducing portions, reducing protein content, reducing diversity, reducing frequency

[68] Cinar, K. & Kose, T., 2018. The Determinants of Women's Empowerment in Turkey: A Multilevel Analysis. South European Society and Politics. Vol. 23. 7.
[69] World Bank, 2018. Turkey Country Gender Assessment.
[70] 3.6 million Syrians under Temporary Protection (SuTP), and approximately 330,000 refugees and asylum seekers (eligible for international protection) from Afghanistan (170,000), Iraq (142,000), Iran (39,000), Somalia (5,700), and other nationalities (11,700) - UNHCR (2019) Turkey: Key Facts and Figures July 2019.
[71] Cuevas, F. & Twose, A. (2019). Turkey's Safety Net for Refugees: The Largest Humanitarian Cash Assistance Program in the World. World Bank.
[72] Spahl, W. & Osterle, A. 2019. Stratified membership: health care access for urban refugees in Turkey. Comparative Migration Studies. 7:42.; Amnesty International, 2016. No Safe Refuge: Asylum-Seekers and Refugees Denied Effective Protection in Turkey.
[73] World Bank Staff estimates
[74] Turkish Red Crescent and World Food Program (2019). Refugees in Turkey: Livelihood Survey Findings.
[75] Turkish Red Crescent and World Food Program (2019). Refugees in Turkey: Livelihood Survey Findings.
[76] Turkish Red Crescent, 2020. Impact of COVID-19 on refugee populations benefitting from the Emergency Social Safety Net (ESSN) Program Assessment Report.

Types and sources of vulnerabilities	Impacts of COVID-19	Coping mechanisms and mitigation measures
Youth		
• Higher unemployment than the rest of the population affecting both skilled and unskilled • Study fines that higher education graduates (ages of 20-24) less likely to be employed than others.[77] • Most likely to be employed in the services sector	• Recent fall in labor force participation rate was mostly driven by younger people (section I.B above): - Men: fall in participation of those below the age of 30 drives half of the decline in participation rates for males. - For females in the 20-39 age group, the drop is sharper compared to males in the same age group. • Youth might see their options for employment narrow in the long term, and might need to accept jobs that are below their skill level	
Elderly and people with disabilities		
• 10.2 percent of the Turkish population is aged 65 years and over.[78] • 63 percent of older people in Turkey[79] live alone and face difficulties accessing basic goods and services • More than 6% of the population of Turkey have a severe disability[80], though this may be an underestimate[81] • 23% of Turkish persons with disabilities are illiterate.[82] • Women who are disabled are more vulnerable than men[83]	• Elderly people have had the highest mortality rate from COVID-19 (section I.A) • COVID-19 could decrease further disabled people's: employment rates; access to education (online methods might not take into consideration the needs of people with visual, hearing, intellectual or emotional disabilities); access to services due to limitations in public transportation options	• Movement restrictions for those above 65 years (until June 9). • Most elderly persons in Turkey receive pensions (88 percent)[84] • The lowest pension salary increased to TL 1500 • Pension salaries for elderly over 70 years old can be delivered directly by public banks if needed. • Introduction of social services and home health services for the elderly over 80 years old living alone

[77] Celik, K. (2018). Unemployment as a chronic problem facing youth in Turkey. Research and Policy on Turkey. Vol 3: 2.
[78] World Bank, 2020. Project Appraisal Document. Turkey Emergency COVID-19 Health Project.
[79] Yan, E. & Fang, G. 2017. Elder Abuse and Neglect in Asia. In Dong, X. 2017. Elder Abuse: Research, Practice and Policy. Springer. Cham, Switzerland.
[80] Turkish Statistical Institute, 2011. Cited in Aydemir-Doke, D. & Emir-Oksuz, E., 2017. Rehabilitation Services in Turkey. Disability and Vocational Rehabilitation in Rural Settings.
[81] A disability survey carried out in 2002 stated that in Turkey there were 8,431,937 persons with disabilities, which at that time made up 12.29 percent of the population of the country. (Demir, O. & Aysoy, M., 2002. Turkey Disability Survey. Ankara: State Institute of Statistics. Cited in Meral, B. & Turnbull, H., 2016. Comparison of Turkish Disability Policy, the United Nations Convention on the Rights of Persons with Disabilities, and the core concepts of U.S. disability policy. Alter. Vol. 10, Issue 3. The 2011 national census data estimated that 6.6% of the population of Turkey had at least one disability. (Turkish Statistical Institute, 2011. Cited in Aydemir-Doke, D. & Emir-Oksuz, E., 2017. Rehabilitation Services in Turkey. Disability and Vocational Rehabilitation in Rural Settings.)
[82] Aydemir-Doke, D. & Emir-Oksuz, E., 2017. Rehabilitation Services in Turkey. Disability and Vocational Rehabilitation in Rural Settings.
[83] Aydemir-Doke, D. & Emir-Oksuz, E., 2017. Rehabilitation Services in Turkey. Disability and Vocational Rehabilitation in Rural Settings.
[84] Helpage, 2015. AgeWatch Report Card: Turkey.

Box 12: COVID-19 and agriculture

The Government has implemented several measures to protect farmers and seasonal workers (Table 10) and to ensure uninterrupted supply of food. For example, it has lowered import tariff rates for cereals and legumes/pulses (from 40% to 0%), crude sunflower oil (from 30% to 18 %), and sunflower seed (from 13% to 9%). It has eased the requirement for importers to present veterinary health certificates by allowing a three-months grace period to importers to present certificates. It announced the development of some new agricultural land held by the State for cultivating strategic products, such as cereals, pulses, oilseeds, and animal feed. The Government is also subsidizing 75 percent of seed costs for beans and lentils in selected provinces. Workers in food processing and agriculture have been exempted from the country-wide weekend curfews. There may be additional issues to consider as noted below.

COVID-19 related risks and impacts

The COVID-19 crisis as driver of domestic food price inflation. Turkey relies on imports of wheat, barley, corn, soybeans, sunflower seeds, paddy, haricot, red lentils and chickpeas to meet domestic demand. While global markets for food staples are well supplied and aggregate international prices are generally stable, the depreciation of the Turkish Lira may stimulate domestic food price inflation, including for food staples.

Impacts on consumers and low-income populations. Food inflation has picked up recently, increasing 3 percent (yoy) in June and contributing roughly 25 percent of headline inflation. Low income households in Turkey are disproportionally affected by high food prices, as illustrated by recent surveys of refugees (Table 10). A typical Turkish household devotes, on average, 20% of its expenditures to food. This share is even higher for low-income groups. Higher food prices will hence further raise affect household incomes, reduce access and affordability of nutritious diets, and may likely spill-over into lower consumption of essential services, such as education and health care.

Impacts on producers. Turkish agriculture relies on imports of agricultural inputs (fertilizer, feed, pesticides, seeds). Input prices may increase due to a weaker Lira and declining trade, impacting food prices. In February 2020 seed prices were up 19 percent (yoy), 18 percent for fertilizer, 12 percent for fodder, and 8 percent for pesticides.[85] The authorities have taken steps to help relieve farmers' short-term financing pressures, which should help (Table 10). At the same time, declining consumer income and expenditure on higher-value food items (dairy, meat) may negatively impact producers.

Export sector. Turkey recorded a nearly 5% growth in agricultural exports in March due to the global increase in food demand against an overall drop in total exports (section I.B). Turkey has a comparative advantage in some specialized segments of high value products (nuts, dried fruits). However, quarantine restrictions at the borders, especially with neighboring countries, and market and demand shrinkage in the EU could affect these.

Processing sector. The processing sector could be affected by a breakout of COVID-19 infections among the work force and create additional supply-chain bottlenecks. For example, in the US, positive tests for COVID-19 among workers at meat processing plants has disrupted regional markets.

Potential policy priorities

Keeping trade flows open. Concerns about short-term supply issues could be managed using market mechanism, such as forward contracts as deliberate crisis management instrument to secure critical food staples.

Digitizing supply chains and service delivery. Digitalization of agriculture and food supply and delivery channels can provide ways to modernize the agri-food system. This could include expansion of e-commerce, digital technologies to link producers and traders, processors and buyers. Digital platforms can support access to key inputs and labor for the upcoming planting season, provide information on production and post-harvest methods.

[85] https://www.al-monitor.com/pulse/originals/2020/04/turkey-coronavirus-hit-food-prices-spike-agriculture-import.html

Promoting agricultural productivity in the face of climate change. Higher agricultural productivity is imperative to improve the supply of food in the country. Climate-smart technologies, such as improved water and soil management, access to irrigation networks, new breeds and better production techniques will be critical to address climate change risks and enhance productivity along with adaptation capacity. In addition, access to credit and better extension services can help improve productivity. These measures need to be matched and complemented with agricultural risk insurance mechanisms to allow for the transfer of production and markets risks, as well as disaster risk management mechanisms to address disaster impacts.

Institutional development and innovation. Farmers organizations are important institutions that can play a critical role in facilitating farmers' access to markets by reducing production costs, helping meet market standards, adding value, and integrating small producers into value chains. They can contribute to dampen inflationary pressures by increasing farm productivity and supply. The government can facilitate the creation and functionality of farmers organization by simplifying relevant legal and regulatory framework.

Source: World Bank staff.

Box 13: Global measures adopted to protect the most vulnerable since COVID-19

A range of policy instruments have been expanded or introduced since the COVID-19 outbreak to protect consumption and build employment resilience of vulnerable workers and households. Within two to four weeks from the start of the outbreak, 45 countries have introduced new measures or adapted existing social protection and labor programs to mitigate the impacts. Most of the programs have focused on direct income support (30 programs), wage subsidies (11), subsidized sick leave through employers (10) and other forms of subsidies or deferrals to social security contributions and social pensions, as well as unemployment benefits.

Out of 30 cash transfer programs, 13 new emergency cash transfer measures have been introduced to address COVID-19 worldwide, including in Bolivia, India, Iran and Peru. A universal, one-off cash payment to all citizens will occur in Hong-Kong and Singapore. New in-kind schemes have also been launched, such as food vouchers in Taiwan and Seattle in the United States.

The demand for job support is especially acute. Applications for public employment support has skyrocketed in a short period, raising the alarm on long-term job loss. The ILO estimates that up to 25 million jobs could be lost worldwide. Countries in Europe, Canada and the United States have taken measures to curb job loss, most markedly in the United Kingdom, where the Government has announced that up to 80 percent of wages will be covered for targeted firms to retain workers for up to three months.

Source: World Bank staff.

Economic integration and trade

136. **In parallel to addressing macro, financial and household needs, the pandemic shock offers an opportunity to refocus attention on economic integration.** An important element to this is Turkey's integration in the global economy. Barriers to trade, both tariff and non-tariff reduce the potential for firms to expand their markets, while implicit import substitution policies lower the quality of subsequent products and cut out an important source of technology transfer from imports. With the most productive firms increasingly operating across national barriers, barriers to travel, financial flows and foreign investment restrictions also hamper Turkey's ability to move up the value chain, and call for substantively deep trade agreements.

137. **The COVID-19 crisis is likely to cause disruptions that lead to a restructuring of supply chains across different countries**. The implications for Turkey would then depend on how firms reassess their risk management strategies in light of COVID-19. First, the pandemic may accelerate the shift away from China as an input supplier or export platform, towards developing countries with revealed comparative advantage in similar inputs and processes.[86] This shift had started before COVID-19, amid the U.S.-China trade war and the rising concern surrounding excessive reliance on China. Its acceleration may benefit developing countries that are prepared to reap the opportunity. Second, reshoring or moving production home, albeit unlikely to occur just for economic reasons as a result of COVID-19,[87] may have negative effects on Turkey and other developing countries if it materializes. As for nearshoring and diversifying, these may be a mixed blessing for Turkey, with benefits due to geographical position, on the one hand - particularly as relates to EU-centric GVCs -, and increased competition from neighboring countries, on the other.

138. **In the short-run, several policy measures can help maintain trade flows and limit GVCs disruptions during and in the aftermath of the COVID-19 pandemic.**[88]

(i) Reduce the level of tariffs and other taxes on imports to support the flow of goods and services

(ii) Refrain from limiting exports through bans or taxes. If exports restrictions are used, ensure they are targeted, proportionate, transparent and temporary.

(iii) Streamline regulatory procedures and facilitate trade at borders to expedite movement, release and clearance of goods and services exchange. Also, implement reforms that reduce the need for close contact between traders, transporters and border officials, to limit the spread of virus.

(iv) Intervene when necessary to sustain and enhance the efficiency of logistics operations to avoid disruptions to distribution networks and hence to regional and global value chains.

139. **In the longer term, it is important for Turkey to think how to make its market more open and attractive.** While GVC-trade has been relatively resilient so far, it could face additional challenges going forward. Turkey should be alert of the possibility of supply chains reconfiguration, as firms reassess their risk management strategies in light of COVID-19. Deep economic reforms to increase competitiveness as well as open and predictable trade policies, all in the context of socio-political stability would help Turkey to reap the opportunities and minimize the risks associated with potential supply chain reconfigurations (Freund, Mattoo, Mulabdic and Ruta, 2020).

[86] This is suggested in Freund, Mattoo, Mulabdic and Ruta (2020) based on an analysis of the impact of the 2011 earthquake in Japan on the auto supply chains. The authors find that imports shifted away from the affected input source, especially if it had a high share in imports, and towards developing countries that had a revealed comparative advantage in the input.
Freund, C, A. Mattoo, A. Mulabdic and M. Ruta (2020), "The supply chain shock from COVID-19: Risks and opportunities," in S. Djankov and U. Panizza (eds.) "COVID-19 in Developing Economies", VoxEU e-book.

[87] Freund (2020) argues that bringing supply chains home, because of COVID-19, would defy economic rationality.

[88] Do's and Don'ts of Trade Policy in the Response to COVID-19

Annex 1: Medium-Term Outlook

Key Macroeconomic Indicators

	2017	2018	2019	2020	2021	2022
Population (mid-year, million)	80.3	81.4	82.6	83.4	84.4	85.4
GDP (current US$, billion)	852.6	789.0	753.7	660.9	684.5	726.1
GDP per capita (current US$)	10616	9693	9127	7924	8110	8502
CPI (annual average, in percent)	11.1	16.3	15.2	10.0	9.5	9.0
Real Economy	TL Billion, unless otherwise indicated					
Real GDP	1694.1	1742.0	1757.3	1689.8	1773.6	1844.2
Private Consumption	1025.0	1025.4	1033.1	1028.3	1068.9	1099.9
Government Consumption	230.5	245.6	256.5	272.3	276.0	285.0
Gross Fixed Capital Formation	504.2	501.2	438.8	392.7	428.6	458.2
Net Exports	-32.0	29.1	68.6	-10.1	-15.8	-24.2
Fiscal Accounts	TL Billion, unless otherwise indicated					
Total Revenues	1028.2	1238.5	1423.1	1501.1	1790.8	2022.0
Total Expenditures	1085.5	1327.2	1552.4	1753.3	1952.9	2191.3
General Government Balance	-57.3	-88.7	-129.3	-252.2	-162.1	-169.3
Government Debt Stock	878.3	1134.0	1404.2	1742.9	2010.8	2211.4
Primary Balance	3.0	-9.4	-184.	-118.8	14.3	16.8
Monetary Policy	TL Billion, unless otherwise indicated					
Broad Money (M3)	1686.4	1994.7	2554.0	-	-	-
Credit Growth (FX-adjusted, eop, y-o-y)*	18.6	1.1	8.7	-	-	-
Average Funding Rate (annual average, in percent)	11.5	17.7	20.7	-	-	-
Gross Reserves (in US$ Billion)	107.7	93.0	105.7	-	-	-
o/w Gold Reserves	23.5	20.1	27.1	-	-	-
o/w Net Reserves	36.1	30.2	33.7	-	-	-
External Sector	US$ Billion, unless otherwise indicated					
Current Account Balance	-40.6	-20.7	8.7	-21.0	-27.4	-34.3
Trade Balance	-32.2	-9.7	20.2	-10.1	-15.8	-24.2
Exports	222.7	237.9	247.2	196.2	212.4	227.4
Imports	254.9	247.6	226.9	206.3	228.3	251.6
Net Foreign Direct Investment	8.4	9.4	5.9	4.8	7.0	8.7

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

**FX-adjusted credit growth is calculated using end-year average exchange rate value of US$/TRY since 2010 for adjustment.*

Annex 2: Medium-Term Outlook

Key Macroeconomic Indicators

	2017	2018	2019	2020	2021	2022
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	7.5	2.8	0.9	-3.8	5.0	4.0
Private Consumption	6.2	0.0	0.7	-0.5	3.9	2.9
Government Consumption	5.0	6.6	4.4	6.2	1.4	3.3
Gross Fixed Capital Formation	8.2	-0.6	-12.4	-10.5	9.0	7.0
Exports	12.0	7.8	6.4	-15.0	9.0	7.5
Imports	10.3	-7.8	-3.6	-6.5	8.6	8.0
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
Total Revenues	33.1	33.3	33.2	33.4	34.8	34.8
Total Expenditures	34.9	35.6	36.3	39.0	38.0	37.7
General Government Balance	-1.8	-2.4	-3.0	-5.6	-3.2	-2.9
Government Debt Stock	28.2	30.4	32.8	38.8	39.1	38.1
Primary Balance	0.1	-0.3	-0.4	-2.6	0.3	0.3
Monetary Policy	Percent of GDP, unless otherwise indicated					
CPI (annual average, in percent)	11.1	16.3	15.2	10.5	9.5	9.0
Broad Money (M3)	54.2	53.6	59.7	-	-	-
Gross Reserves	12.6	11.8	14.0	-	-	-
In months of merchandise imports c.i.f.	5.4	4.8	6.0	-	-	-
Percent of short-term external debt	89.6	79.1	85.5	-	-	-
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-4.8	-2.6	1.1	-3.2	-4.0	-4.7
Trade Balance	-3.8	-1.2	2.7	-1.5	-2.3	-3.3
Exports	26.1	30.2	32.8	29.7	30.9	31.3
Imports	29.9	31.4	30.1	31.2	33.3	34.7
Net Foreign Direct Investment	1.0	1.2	0.8	0.7	1.0	1.2

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

Annex 3: Gross Domestic Product

Gross Domestic Product: Production Approach

	2015	2016	2017	2018	2019
GDP (current, TL billion)	2338.6	2608.5	3110.7	3724.4	4280.4
Agriculture	161.4	161.3	189.2	216.7	275.1
Industry	462.0	511.8	642.4	830.6	954.1
Construction	190.6	223.4	266.1	267.1	231.9
Services	1246.7	1402.4	1659.1	2020.9	2393.1
GDP (constant prices, TL billion)	1527.7	1576.4	1694.1	1742.0	1757.3
Agriculture	104.1	101.4	106.4	108.4	111.9
Industry	298.5	311.4	340.2	344.6	344.9
Construction	111.6	117.6	128.2	125.5	114.7
Services	834.6	861.4	926.7	969.1	993.3
Real GDP Growth (%)	6.1	3.2	7.5	2.8	0.9
Agriculture	9.4	-2.6	4.9	1.9	3.3
Industry	5.0	4.3	9.3	1.3	0.1
Construction	4.9	5.4	9.0	-2.1	-8.6
Services	5.6	3.2	7.6	4.6	2.5
GDP (constant prices, % share)					
Agriculture	6.8	6.4	6.3	6.2	6.4
Industry	19.5	19.8	20.1	19.8	19.6
Construction	7.3	7.5	7.6	7.2	6.5
Services	54.6	54.6	54.7	55.6	56.5

Source: TURKSTAT, WB Staff calculations.

Annex 4: Gross Domestic Product

Gross Domestic Product: Expenditure Approach

	2015	2016	2017	2018	2019
GDP (current, TL billion)	2338.6	2608.5	3110.7	3724.4	4280.4
Private Consumption	1411.8	1560.5	1836.2	2111.3	2456.9
Government Consumption	324.6	387.0	450.6	552.4	671.1
Gross Fixed Capital Formation	694.8	764.7	935.7	1114.1	1116.8
o/w Construction	380.2	424.5	536.2	644.1	580.8
o/w Machinery and Equipment	263.1	283.9	327.2	381.1	429.8
Net Exports	-61.0	-75.3	-140.3	-40.9	78.5
Change in Inventories	-31.5	-28.4	28.4	-12.5	-42.9
GDP (constant prices, TL billion)	1527.7	1576.4	1694.1	1742.0	1757.3
Private Consumption	930.7	964.8	1025.0	1025.4	1033.1
Government Consumption	200.4	219.5	230.5	245.6	256.5
Gross Fixed Capital Formation	455.5	465.8	504.2	501.2	438.8
o/w Construction	242.1	248.8	279.7	286.3	233.1
o/w Machinery and Equipment	182.4	184.5	186.0	173.4	163.8
Net Exports	-14.2	-33.9	-32.0	29.1	68.6
Change in Inventories	-44.7	-39.8	-33.5	-59.3	-39.7
Real GDP Growth (%)	6.1	3.2	7.5	2.8	0.9
Private Consumption	5.4	3.7	6.2	0.0	0.7
Government Consumption	3.9	9.5	5.0	6.6	4.4
Gross Fixed Capital Formation	9.3	2.2	8.2	-0.6	-12.4
o/w Construction	4.7	2.8	12.4	2.4	-18.6
o/w Machinery and Equipment	18.5	1.2	0.8	-6.8	-5.5
Exports	4.3	-1.9	12.0	7.8	6.4
Imports	1.7	3.7	10.3	-7.8	-3.6
Change in Inventories	48.4	-11.0	-15.8	77.1	-33.0
GDP (constant prices, % share)					
Private Consumption	60.9	61.2	60.5	58.9	59.3
Government Consumption	13.1	13.9	13.6	14.1	14.7
Gross Fixed Capital Formation	29.8	29.5	29.8	28.8	25.2
o/w Construction	15.8	15.8	16.5	16.4	13.3
o/w Machinery and Equipment	11.9	11.7	11.0	10.0	9.3
Exports	22.3	21.2	22.1	23.2	24.7
Imports	23.2	23.4	24.0	21.5	20.7
Change in Inventories	-2.9	-2.5	-2.0	-3.4	-2.3

Source: TURKSTAT, WB Staff calculations.

Annex 5: Prices

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

	2015	2016	2017	2018	2019
CPI (All items)	8.8	8.5	11.9	20.3	11.8
CPI (Food and non-alc. Beverages)	10.9	5.7	13.8	25.1	10.9
CPI (Core C)	9.5	7.5	12.3	19.5	9.8
Alcoholic beverages, tobacco	5.7	31.6	2.9	2.4	43.1
Clothing and footwear	9.0	4.0	11.5	14.8	4.5
Housing & Energy	6.7	6.4	9.6	23.7	9.9
Health	7.2	9.7	11.9	16.7	13.6
Transport	6.4	12.4	18.2	16.0	12.2
Communication	3.6	3.2	1.4	9.6	3.2
Recreation and culture	11.6	5.9	8.4	20.9	7.0
Education	6.4	9.5	10.5	10.2	14.5
Restaurants and Hotels	13.2	8.6	11.5	19.8	13.2
Miscellaneous goods and services	11.0	11.1	12.8	28.8	13.6
PPI (All items)	5.7	9.9	15.5	33.6	7.4

Consumer and Producer Prices: Annual average, percentage change

	2015	2016	2017	2018	2019
CPI (All items)	7.7	7.8	11.1	16.3	15.2
CPI (Food and non-alc. Beverages)	11.1	5.8	12.7	18.0	19.5
CPI (Core C)	8.0	8.5	10.1	16.5	13.4
Alcoholic beverages, tobacco	4.5	18.1	15.4	1.5	24.4
Clothing and footwear	6.2	7.4	7.1	13.6	5.6
Housing & Energy	7.6	6.6	8.0	15.8	13.4
Health	7.3	9.6	12.4	12.4	17.1
Transport	1.5	7.4	16.8	21.8	9.8
Communication	3.1	2.8	2.7	4.6	6.4
Recreation and culture	9.0	7.1	9.8	12.9	14.5
Education	7.0	8.2	10.0	10.5	13.5
Restaurants and Hotels	13.5	10.2	10.3	15.1	17.6
Miscellaneous goods and services	10.1	11.3	12.3	19.9	22.0
PPI (All items)	5.3	4.3	15.8	27.0	17.6

Source: TURKSTAT, WB Staff calculations.

Annex 6: Balance of Payments

Balance of Payments Statistics

	2015	2016	2017	2018	2019	2020-Mar
	US$ Billion, unless otherwise indicated					
Current Account	-27.3	-26.8	-40.6	-20.7	8.7	-1.3
Trade Balance	-19.0	-19.4	-32.2	-9.7	20.2	13.3
Exports	154.9	152.6	169.2	178.9	182.3	180.4
Imports	203.9	192.6	227.8	219.7	198.9	203.9
Services Balance	30.0	20.5	26.3	31.1	36.9	36.8
Primary Income Balance	-9.7	-9.2	-11.1	-11.9	-12.5	-12.6
Secondary Income Balance	1.4	1.7	2.8	0.9	1.0	0.6
Capital Account	0.0	0.0	0.0	0.1	0.0	-0.0
Financial Account	-9.4	-22.5	-38.6	-0.5	-5.9	-8.2
Direct Investment	-14.2	-10.8	-8.4	-9.4	-5.7	-5.3
Portfolio Investment	15.3	-6.4	-24.1	3.1	1.2	16.3
Other Investment	-10.6	-5.3	-6.2	5.7	-1.5	-5.9
Net Errors & Omissions	6.1	5.1	-6.3	9.8	-8.3	-9.5
Reserve Assets	-11.8	0.8	-8.2	-10.4	6.3	-13.3
Overall Balance	-11.8	0.8	-8.2	-10.4	6.3	-13.3
memo item:						
Energy Balance	-10.3	-9.0	-12.4	-15.2	-7.0	-7.0
Gold Balance	4.0	1.8	-10.0	-8.7	-9.3	-11.6
	Percent of GDP, unless otherwise indicated					
Current Account	-3.2	-3.1	-4.8	-2.6	1.2	-0.2
Trade Balance	-2.2	-2.2	-3.8	-1.2	2.7	1.8
Exports	18.0	17.7	19.8	22.7	24.2	23.8
Imports	23.7	22.3	26.7	27.8	26.4	26.9
Services Balance	3.5	2.4	3.1	3.9	4.9	4.9
Primary Income Balance	-1.1	-1.1	-1.3	-1.5	-1.7	-1.7
Secondary Income Balance	0.2	0.2	0.3	0.1	0.1	0.1
Capital Account	0.0	0.0	0.0	0.0	0.0	0.0
Financial Account	-1.1	-2.6	-4.5	-0.1	-0.8	-1.1
Direct Investment	-1.6	-1.3	-1.0	-1.2	-0.8	-0.7
Portfolio Investment	1.8	-0.7	-2.8	0.4	0.2	2.2
Other Investment	-1.2	-0.6	-0.7	0.7	-0.2	-0.8
Net Errors & Omissions	0.7	0.6	-0.7	1.2	-1.1	-1.3
Reserve Assets	-1.4	0.1	-1.0	-1.3	0.8	-1.8
Overall Balance	-1.4	0.1	-1.0	-1.3	0.8	-1.8
memo item:						
Energy Balance	-1.2	-1.0	-1.5	-1.9	-0.9	-0.9
Gold Balance	0.5	0.2	-1.2	-1.1	-1.2	-1.5

Source: CBRT, WB Staff calculations.

Annex 7: Monetary Policy

Monetary Survey (TL Billion)

	2015	2016	2017	2018	2019	2020-May
Total Assets	1625.0	1894.5	2225.0	2717.9	3348.2	3958.8
Net Foreign Assets	-65.8	-42.3	-80.0	-3.1	187.8	120.7
Foreign Assets	443.6	561.8	631.2	876.0	1065.8	1099.6
Monetary Authorities	326.6	380.3	417.1	499.1	638.6	630.7
Deposit Money Banks	116.9	181.5	214.0	376.9	527.1	468.9
Foreign Liabilities	509.3	604.1	710.8	879.1	878.0	978.9
Monetary Authorities	9.7	10.5	11.6	21.7	24.8	28.4
Deposit Money Banks	499.6	593.6	699.2	857.4	853.2	950.5
Domestic Credits	1690.7	1936.8	2304.6	2721.1	3160.4	3838.1
Net Claims on Central Government	172.9	174.5	178.2	289.3	421.1	603.1
Claims on private sector	1456.3	1687.0	2025.9	2307.3	2590.6	3076.2
Total Liabilities	1625.0	1894.5	2225.0	2717.9	3348.2	3958.8
Money	217.1	270.1	297.4	290.2	392.2	564.0
Currency in Circulation	91.9	111.3	118.5	119.1	140.7	210.8
Demand Deposits	125.3	158.8	178.9	171.1	251.6	353.1
Quasi Money	1071.6	1245.5	1453.9	1794.8	2252.7	2588.8
Time and saving deposits	589.7	682.4	764.1	876.9	991.8	1075.2
Residents' foreign exchange deposits	439.2	517.6	631.4	862.2	1152.3	1369.5
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)	336.2	378.9	473.7	632.9	703.3	806.1

Source: CBRT.

Annex 8: Monetary Policy

Central Bank of Turkey Balance Sheet (TL Billion)

	2015	2016	2017	2018	2019	2020-May
CBRT Assets	293.2	345.4	396.2	461.2	646.5	728.6
Foreign Assets	326.7	381.0	436.8	506.9	638.1	631.7
Domestic Assets	-0.8	18.2	16.4	-0.7	58.1	165.4
Treasury Debt: Securities	9.0	13.9	14.5	13.7	19.4	70.2
Cash credits to Public Sector	8.9	13.8	14.4	13.5	19.3	70.0
Cash credits to Banking Sector	22.7	37.6	48.1	80.9	102.6	127.9
Credits to SDIF	0.0	0.0	0.0	0.0	0.0	0.0
Other Items	-32.4	-33.1	-46.1	-95.1	-63.7	-32.4
FX Revaluation Account	-32.7	-53.8	-57.0	-45.0	-49.8	-68.6
CBRT Liabilities	293.2	345.4	396.2	461.2	646.5	728.6
Total FX Liabilities	244.1	260.9	299.7	347.2	419.8	472.9
Foreign Liabilities	9.7	10.0	9.1	21.7	24.7	28.4
Domestic Liabilities	234.4	251.0	290.6	325.5	395.1	444.6
Central Bank Money	49.1	84.5	96.5	114.0	226.7	255.7
Reserve Money	122.3	168.0	174.1	192.2	203.8	368.6
Other Central Bank Money	-73.3	-83.5	-77.6	-78.2	22.9	-112.9

Source: CBRT.

Annex 9: Fiscal Operations

General Government Budget

	2014	2015	2016	2017	2018	2019
	TL Billion, unless otherwise indicated					
Revenues	691.2	799.3	904.3	1028.2	1238.5	1423.1
Tax Revenues	361.9	418.7	470.4	549.8	632.7	681.1
o/w Indirect	243.7	285.7	315.1	367.2	391.3	412.3
o/w Direct	106.0	118.9	138.1	164.3	219.0	243.7
Non-Tax Revenues	38.9	42.8	46.3	47.8	83.9	75.8
Factor Incomes	99.4	112.7	129.6	144.8	177.0	264.9
Social Funds	178.9	212.9	248.4	280.7	338.7	395.3
Privatization Revenues	12.1	12.1	9.6	5.0	6.2	6.0
Expenditures	701.9	801.5	940.5	1085.5	1327.2	1552.4
Current Expenditures	314.6	357.6	426.5	480.1	594.5	710.8
Investment Expenditures	66.9	81.1	91.4	115.1	141.6	113.3
Transfer Expenditures	320.4	362.8	422.6	490.3	591.1	728.3
o/w Current Transfers	295.8	339.4	399.9	466.4	564.2	701.2
o/w Capital Transfers	24.6	23.4	22.7	23.9	26.9	27.1
Overall Balance	-10.6	-2.3	-36.2	-57.3	-88.7	-129.3
Interest Expenditures	51.7	54.9	52.7	60.3	79.3	110.9
Government Debt Stock	585.4	643.3	735.4	878.3	1134.0	1404.2
Primary Balance	41.1	52.6	16.6	3.0	-9.4	-18.4
	Percent of GDP, unless otherwise indicated					
Revenues	33.8	34.2	34.7	33.1	33.3	33.2
Tax Revenues	17.7	17.9	18.0	17.7	17.0	15.9
o/w Indirect	11.9	12.2	12.1	11.8	10.5	9.6
o/w Direct	5.2	5.1	5.3	5.3	5.9	5.7
Non-Tax Revenues	1.9	1.8	1.8	1.5	2.3	1.8
Factor Incomes	4.9	4.8	5.0	4.7	4.8	6.2
Social Funds	8.8	9.1	9.5	9.0	9.1	9.2
Privatization Revenues	0.6	0.5	0.4	0.2	0.2	0.1
Expenditures	34.3	34.3	36.1	34.9	35.6	36.3
Current Expenditures	15.4	15.3	16.4	15.4	16.0	16.6
Investment Expenditures	3.3	3.5	3.5	3.7	3.8	2.6
Transfer Expenditures	15.7	15.5	16.2	15.8	15.9	17.0
o/w Current Transfers	14.5	14.5	15.3	15.0	15.1	16.4
o/w Capital Transfers	1.2	1.0	0.9	0.8	0.7	0.6
Overall Balance	-0.5	-0.1	-1.4	-1.8	-2.4	-3.0
Interest Expenditures	2.5	2.3	2.0	1.9	2.1	2.6
Government Debt Stock	28.6	27.5	28.2	28.2	30.4	32.8
Primary Balance	2.0	2.2	0.6	0.1	-0.3	-0.4

Source: Strategy and Budget Presidency, Treasury and Finance Ministry, WB Staff calculations.

**2019 data indicates provisional figures.*

Annex 10: Banking Sector Balance Sheet

Money and Banking Statistics of Financial Institutions

	2015	2016	2017	2018	2019	2020-May
Assets	Billion TL, unless otherwise indicated					
Total assets	2338.3	2732.6	3263.0	3936.6	4659.4	5481.7
Net foreign assets	-397.5	-433.2	-521.4	-543.7	-514.9	-585.9
Claims on nonresidents	117.3	182.2	214.9	378.7	430.2	472.7
Liabilities to nonresidents	514.8	615.4	736.3	922.4	945.0	1086.1
Claims on Central Bank	260.3	295.8	355.3	372.6	396.7	407.9
Currency	12.9	13.6	15.2	15.8	15.7	19.1
Reserve deposits and securities	247.3	282.2	339.7	356.4	379.8	409.9
Other claims	0.1	0.0	0.3	0.4	1.2	1.1
Net claims on central government	231.0	242.9	279.5	395.1	571.2	808.7
Claims on central government	287.8	307.1	353.8	470.3	666.1	907.4
Liabilities to central government	56.8	64.2	74.3	75.3	94.9	98.7
Claims on other sectors	1533.7	1790.7	2168.0	2492.8	2821.7	3349.3
Claims on other financial corporations	40.8	48.8	61.8	69.9	84.5	89.7
Claims on state & local governments	17.6	23.4	34.4	36.9	35.6	38.7
Claims on public nonfinancial corporations	3.7	3.8	5.5	11.4	31.8	32.5
Claims on private sector	1471.6	1714.7	2066.3	2374.5	2669.8	3188.4
Liabilities	Billion TL, unless otherwise indicated					
Liabilities to Central Bank	112.9	106.8	99.2	119.7	105.1	250.5
Transfer deposits included in broad money	230.4	282.3	343.9	398.4	617.9	881.7
Other deposits included in broad money	881.7	1028.7	1184.3	1442.5	1734.8	1875.3
Securities other than shares included in broad money	27.4	26.3	38.9	36.4	50.2	76.7
Deposits excluded from broad money	0.0	0.0	0.0	0.0	0.0	0.0
Securities other than shares excluded from broad money	1.2	1.5	2.3	1.6	11.3	10.9
Loans	12.3	17.4	30.4	53.5	56.7	70.3
Financial derivatives	1.6	2.7	2.7	4.1	4.2	5.8
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0
Shares & other equity	269.0	308.3	366.2	429.4	507.0	563.4
Other items (Net)	91.1	122.2	213.5	231.3	187.4	265.5

Source: CBRT, BRSA, IFS.

Annex 11: Banking Sector Ratios

Selected Ratios for Banking Sector (end of period)

	2015	2016	2017	2018	2019	2020-May
Liquidity Position						
Liquidity Requirement Ratio	143.5	135.6	144.5	143.8	147.7	149.8
Loan-to-Deposit Ratio	123.4	123.6	126.6	122.6	109.6	111.7
Capital Adequacy						
Core Capital Adequacy Ratio	13.3	13.2	14.1	13.8	14.2	15.1
Capital Adequacy Standard Ratio	15.6	15.6	16.9	17.3	18.4	19.4
Total Risk Weighted Assets (Net) / Total Risk Weighted Assets (Gross)	68.6	43.3	64.4	64.2	64.7	60.1
Regulatory Capital / Total Risk Weighted Assets	15.6	15.6	16.9	17.3	18.4	19.4
Profitability						
Profit (Loss) Before Tax / Average Total Assets	1.5	1.9	2.0	1.8	1.4	0.7
Net Income / Average Total Assets	1.2	1.5	1.6	1.5	1.2	0.6
Net Income / Average Shareholder's Equity	11.3	14.3	15.9	14.8	11.5	5.5
Net Interest (Profit) Revenues (Expenses) / Average Total Assets	3.5	3.7	3.8	3.9	3.9	1.8
Asset Quality						
Non-Performing Loans (Gross) / Total Cash Loans	3.1	3.2	2.9	3.9	5.4	4.6
Provision for Non-Performing Loans / Gross Non-Performing Loans	74.6	77.4	79.3	68.3	65.1	70.7
Credit Growth (FX-adjusted, y-o-y, in percent)*	10.9	10.3	18.6	1.1	8.7	24.3
Interest Rates (end-of-period)						
Weighted average of Central Bank Cost of Funding	8.8	8.3	12.5	24.0	12.6	8.3
Weighted average Interest Rate for Deposits	11.0	9.6	12.8	22.5	10.1	7.4
Consumer Loans Rate	16.4	14.5	17.9	31.7	14.7	11.3
Commercial Loans Rate	15.8	14.5	17.7	27.2	12.7	9.7
Off Balance Sheet Transactions						
Derivative Financial Instruments / Commitments	76.9	79.3	78.3	81.5	80.5	78.1

Source: CBRT, BRSA, IMF, WB Staff calculations.

**FX-adjusted credit growth is calculated using end-year average exchange rate value of US$/TRY since 2010 for adjustment.*

Annex 12: Doing Business Index (2020)

Doing Business Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Global Rank	93	50	33	40	126	84	52	12
Starting a business								
Rank	100	63	77	128	141	139	87	126
Procedures - Men (number)	7	5	7	5	12	7	6	8
Time - Men (days)	24	11	7	37	11.5	40	7	17
Cost - Men (% of income per capita)	16	4	6	11.6	5.0	0.2	4.5	11.1
Procedures - Women (number)	7	5	7	5	12	7	6	9
Time - Women (days)	24	11	7	37	11.5	40	7	18
Cost - Women (% of income per capita)	16	4	6	11.6	5.0	0.2	4.5	11.1
Minimum capital (% of income per capita)	2	5	0	9.3	0	0	36.2	0
Dealing with construction permits								
Rank	89	63	53	39	155	98	108	2
Procedures (number)	15	14	18	12	17	20	22	9
Time (days)	154	152	100	137	318	155	192.5	53
Cost (% of Warehouse value)	3	2	3.6	0.3	3.1	1.9	0.6	1.3
Building quality control index (0-15)	10	11	13	10	11	12	13	13
Quality of building regulations index (0-2)	2	2	2	1	2	2	2	2
Quality control before construction index (0-1)	1	1	1	1	1	1	1	1
Quality control during construction index (0-3)	2	2	2	2	2	2	2	2
Quality control after construction index (0-3)	3	3	3	2	3	3	3	3
Liability and insurance regimes index (0-2)	1	1	1	2	1	0	1	1
Professional certifications index (0-4)	2	3	4	2	2	4	4	4

Getting electricity

Rank	92	50	41	60	111	114	125	4
Procedures (number)	5	4	4	4	6	5	5	3
Time (days)	79	66	34	113	92	109	257	24
Cost (% of income per capita)	328	76	62.3	16.3	15.5	158.4	74.7	25.6
Reliability of supply and transparency of tariff index (0-8)	5	7	5	7	5	4	7	8
Total duration and frequency of outages per customer a year (0-3)	1	2	0	2	0	0	2	3
System average interruption duration index (SAIDI)	16	12	44.7	1.1	4.5	30.5	2.6	0.5
System average interruption frequency index (SAIFI)	9	1	19.5	1.1	14.4	6.0	1.2	0.5
Minimum outage time (in minutes)	5	3	5	3	3	5	3	1
Mechanisms for monitoring outages (0-1)	1	1	1	1	1	1	1	1
Mechanisms for restoring service (0-1)	1	1	1	1	1	1	1	1
Regulatory monitoring (0-1)	1	1	1	1	1	1	1	1
Financial deterrents aimed at limiting outages (0-1)	0	1	1	1	1	0	1	1
Communication of tariffs and tariff changes (0-1)	1	1	1	1	1	1	1	1

Registering property

Rank	93	62	27	92	123	108	29	33
Procedures (number)	6	5	6	6	7	7	4	6
Time (days)	33	37	27	19	51.5	15.5	26	26.5
Cost (% of property value)	5	4	3	0.3	6.6	8	5	3.5
Quality of land administration index (0-30)	16	21	27	19	13.5	15.7	26	26.5
Reliability of infrastructure index (0-8)	5	6	8	7	5	5	8	7
Transparency of information index (0-6)	3	3	4	2.5	2.5	4	3.5	4.5
Geographic coverage index (0-8)	3	5	8	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	80	37	37	104	80	37	37
Strength of legal rights index (0-12)	6	6	7	7	2	5	9	7
Depth of credit information index (0-8)	5	6	8	8	8	7	6	8
Credit registry coverage (% of adults)	21	23	80.2	0	48.1	0	0	64.9
Credit bureau coverage (% of adults)	38	53	0	100	100	66.5	91.1	89.1
Getting Credit total score	11	12	15	15	10	12	15	15
Protecting minority investors								
Rank	90	61	21	51	61	13	97	2
Extent of disclosure index (0-10)	6	6	9	7	7	8	2	10
Extent of director liability index (0-10)	5	6	5	2	2	8	4	9
Ease of shareholder suits index (0-10)	6	7	6	9	6	8	7	8
Extent of shareholder rights index (0-6)	3	4	6	5	6	5	4	5
Extent of ownership and control index (0-7)	3	4	6	4	5	6	5	6
Extent of corporate transparency index (0-7)	3	5	6	4	5	6	5	6
Strength of minority investor protection index (0-50)	27	31	38	33	31	40	27	44
Paying taxes								
Rank	100	50	26	77	170	54	56	80
Payments (number per year)	21	14	10	7	9	7	11	9
Time (hours per year)	283	146	170	334	312	210	277	174
Total tax and contribution rate (% of profit)	39	36	42.3	40.8	106.3	29.2	37.9	38.7
Profit tax (% of profit)	16	14	20	14.5	3.6	21.8	9.4	19.6
Labor tax and contributions (% of profit)	16	19	19.7	25.3	29.9	4	26.4	16.7
Time to comply with corporate income tax correction (hours)	13	13	2	6	6	11	4	11
Time to complete a corporate income tax correction (weeks)	14	11	0	18	0	32	0	26
Post filing index (0-100)	57	76	100	77.4	47.9	60.8	87.5	51.0

Trading across borders

Rank	93	52	44	1	119	145	1	49
Trading across borders (score)	73	87	91.6	100	67.1	59.6	100	88.5
Time to export: Documentary compliance (hours)	43	12	4	1	25	68	1	10
Time to import: Documentary compliance (hours)	40	16	2	1	166	36	1	7
Time to export: Border compliance (hours)	49	25	10	0	21	92	0	28
Time to import: Border compliance (hours)	50	23	7	0	60	87	0	36
Cost to export: Documentary compliance (US$)	127	67	55	0	60	55	0	35
Cost to import: Documentary compliance (US$)	102	74	55	0	120	73	0	60
Cost to export: Border compliance (US$)	467	227	358	0	150	1257	0	213
Cost to import: Border compliance (US$)	448	255	46	0	1200	676	0	213

Enforcing contracts

Rank	87	60	24	55	97	102	25	35
Time (days)	637	623	623	685	995	600	605	425
Filing and service (days)	44	36	44	60	90	30	60	35
Trial and judgment (days)	405	444	450	480	540	490	365	270
Enforcement of judgment (days)	188	143	129	145	365	80	180	120
Cost (% of claim)	30	22	24.9	19.4	22.5	33.2	15	37.9
Attorney fees (% of claim)	19	15	12	12	15	22.6	5	30
Court fees (% of claim)	5	5	3	5.4	6.5	7.6	8	1.7
Enforcement fees (% of claim)	5	3	9.9	2	1	3	2	6.2
Quality of the judicial processes index (0-18)	9	11	15.0	11.0	12.5	8.5	12.5	13.0
Court structure and proceedings (0-5)	3	4	3.5	5	4.5	3.5	3	4
Case management (0-6)	2	3	5	1.5	4	2	4	4
Court automation (0-4)	1	2	4	1.5	2.0	0.5	2.5	2.5
Alternative dispute resolution (0-3)	2	2	2.5	3	2	2.5	3	2.5

Resolving insolvency

Rank	98	52	120	25	111	68	66	40
Outcome (0 as piecemeal sale and 1 as going concern)	0	1	0	1	0	0	0	1
Time (years)	3	2	5	3	2.4	2	2	1
Cost (% of estate)	16	11	14.5	15	16.5	18	14.5	10
Recovery rate (cents on the dollar)	34	59	10.5	60.9	19.2	34.7	44.2	81
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
Reorganization proceedings index (0-3)	1	1	1.5	3	2	0.5	0.5	0.5
Creditor participation index (0-4)	2	2	3	2	1	2	2	2

Source: WB, Doing Business.

Annex 13: Logistics Performance Index (2018)

Logistics Performance Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Logistics performance index: Overall	2.7	3.5	3.2	3.5	2.9	3.4	3.4	3.2
Lead time to export, median case (days)	4.8	2.4	3.0	1.0	4.0	2.0	2.0	2.0
Lead time to import, median case (days)	5.2	2.6	3.0	1.0	5.0	3.0	3.0	2.0
Ability to track and trace consignments	2.7	3.5	3.2	3.5	3.1	3.4	3.7	3.2
Competence and quality of logistics services	2.6	3.5	3.1	3.6	2.8	3.2	3.2	3.3
Ease of arranging competitively priced shipments	2.7	3.3	3.1	3.7	2.9	3.5	3.2	3.4
Efficiency of customs clearance process	2.5	3.3	2.7	3.3	2.4	3.2	3.4	2.9
Frequency with which shipments reach consignee within scheduled or expected time	3.2	3.8	3.6	4.0	3.4	3.7	3.8	3.5
Quality of trade and transport-related infrastructure	2.6	3.5	3.2	3.2	2.8	3.2	3.3	3.2

Score, 1=low to 5=high

Source: WB, Logistics Performance Index.

Annex 14: Health Statistics (2018)

Health Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Life expectancy at birth, total (years)	75.7	80.7	77.4	77.8	76.5	63.9	75.8	76.0
Life expectancy at birth, male (years)	73.2	78.2	74.4	73.9	73.1	60.5	72.5	74.1
Life expectancy at birth, female (years)	78.5	83.4	80.3	81.8	79.9	67.4	79.3	78.2
Mortality rate, infant (per 1,000 live births)	10.8	4.3	9.1	3.8	8.8	28.5	3.6	6.7

Source: WB, World Development Indicators.

Annex 15: Education Statistics (2018)

Education Statistics Indicators

	UMC	HIC	Turkey	Poland	Argentina	S. Africa	Hungary	Malaysia
Educational attainment, at least completed primary, population 25+ years, total (%) (cumulative)	-	-	89.5	99.2	92.7	82.4	99.6	94.0
Primary completion rate, total (% of relevant age group)	95.3	98.0	89.7	106.2	100.0	87.3	105.1	99.5
Educational attainment, at least Master's or equivalent, population 25+, total (%) (cumulative)	-	-	2.3	19.3	-	-	8.7	-
Educational attainment, Doctoral or equivalent, population 25+, total (%) (cumulative)	-	-	0.4	0.4	-	-	0.7	0.3
School enrollment, secondary (% net)	82.2	90.8	87.2	94.1	90.8	71.9	89.3	72.2
Educational attainment, at least completed upper secondary, population 25+, total (%) (cumulative)	-	-	39.0	84.9	-	64.6	76.1	58.3
Educational attainment, at least completed lower secondary, population 25+, total (%) (cumulative)	-	-	60.1	85.3	57.2	77.2	97.2	74.2
Adjusted net enrollment rate, primary (% of primary school age children)	96.3	96.1	94.9	97.2	99.5	92.4	96.5	99.5
School enrollment, primary (% net)	95.5	96.2	87.9	96.0	99.2	87.0	90.1	99.6

Source: WB, World Development Indicators.

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