

TURKEY ECONOMIC MONITOR

FEBRUARY 2022

**SAILING AGAINST
THE TIDE**



TURKEY ECONOMIC MONITOR,
FEBRUARY 2022:
SAILING AGAINST THE TIDE



WORLD BANK GROUP

© 2022 International Bank for Reconstruction and Development / The World Bank
1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

Standard Disclaimer:

This volume is a product of the staff of the International Bank for Reconstruction and Development/ The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Copyright Statement:

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development/ The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, telephone 978-750-8400, fax 978-750- 4470, <http://www.copyright.com/>.

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA, fax 202-522-2422, e-mail pubrights@worldbank.org.

Contents

EXECUTIVE SUMMARY.....	i
I. TAKING STOCK.....	1
A. COVID-19 and other headwinds are slowing the global economic recovery	1
B. Turkey made significant progress on vaccination rollout but with variation across regions	5
C. Turkey carried strong growth through 2021	9
The economy continued its strong performance in the first three quarters of 2021.....	9
Turkey's external balance improved, supported by both goods and services exports	16
Goods export growth was broad based, benefiting from global supply chain disruptions.....	17
Services exports grew as travel and transport activity picked up	24
Robust economic activity supported government revenues, but expenditure jumped.....	28
D. Changes in the monetary policy setting followed by monetary easing raised macrofinancial vulnerabilities.....	31
Monetary policy affected macroeconomic volatility	31
Inflation has accelerated to its fastest rate since 2002	35
External pressures emerged as the Lira reached a series of record lows	41
Corporate vulnerabilities increased with Lira depreciation and continued pandemic uncertainties.....	44
Financial sector's exposure to risks remains elevated.....	49
E. The Turkish labor market regained momentum in 2021 but challenges remain.....	54
At the national level, employment recovered with economic activity.....	54
Turkey's regions entered the COVID-19 pandemic with varying degrees of socio-economic vulnerability.....	58
Labor market outcomes confirm the uneven regional effects of the COVID-19 pandemic	60
II. LOOKING AHEAD	65
A. Bracing for a bumpy road	65
B. Several risks can affect the path of economic growth and poverty	69
Slowing vaccine uptake may derail good vaccination progress.....	69
Continued Lira depreciation and heightened global tightening prospects increase financing risks	71
A deterioration in macro-financial conditions may dislodge the fiscal anchor.....	72
Persistent inflation poses risks to poverty	74
Climate-related disasters and extreme events pose risks to agriculture and water resources.....	76
C. Policy should adjust to boost confidence, mitigate macrofinancial risks and protect the poor	77
Tight monetary policy effort is warranted to restore confidence and anchor inflation expectations	77
Macroeconomic instability warrants a cautious, well targeted, and countercyclical fiscal policy	79
Policies should also focus on supporting vulnerable groups and improving labor market outcomes.....	80
Macroprudential policies are needed to mitigate further erosion of capital buffers and a chronic shortage of long-term financing.....	80
NPL resolution and corporate insolvency frameworks will be vital in 2022	82
D. Boosting Turkey's external competitiveness	87
Attracting FDI to capture productivity and competitiveness gains	87
Anticipating the impacts of the EU's Carbon Border Adjustment Mechanism.....	95
Annexes	98

List of figures

Figure 1: COVID-19 cases continued to rise globally including Turkey.....	i
Figure 2: Turkey's exports surpassed pre-pandemic levels.....	ii
Figure 3: Over 3 million jobs were regained between November 2020 and November 2021	ii
Figure 4: Among EMs, Turkey is the only country that reduced the policy interest rate between March and end 2021	ii
Figure 5: The Turkish Lira is the most depreciated currency across all EMs.....	iii
Figure 6: Headline inflation climbed to 48.7 percent, the highest reading over the last 20 years	iii
Figure 7: Core capital buffers declined despite an uplift from forbearance.....	iii
Figure 8: Several Eastern regions experienced increases in poverty during the 2018-19 economic turmoil.....	iv
Figure 9: Exports will continue to be the main driver of growth	iv
Figure 10: Gross reserves rose compared to March 2021 but are still lower than short-term possible drains	v
Figure 11: Public debt is highly vulnerable to exchange rate depreciation.....	v
Figure 12: Extreme events in Turkey accelerated over the last two decades.....	vi
Figure 13: Inflation expectations have become unanchored, warranting a tight monetary stance.....	vi
Figure 14: Turkey has talent and cost advantages but lags competitors on other key investment drivers	vii
Figure 15: The pandemic waves continue... ..	2
Figure 16:...with different impacts among European countries	2
Figure 17: Sequential output growth.....	2
Figure 18: Recovery pace in trade is plateaued	2
Figure 19: Global shipping times and costs have risen sharply amid ongoing supply bottlenecks	3
Figure 20: International tourist arrivals remain depressed, but with wide regional variation.....	3
Figure 21: Headline CPI inflation is rising	4
Figure 22: Oil, natural gas, and coal prices went up	4
Figure 23: Financial conditions across EMDE remain tight.....	5
Figure 24: Industrial production is slowing down in Europe	5
Figure 25: COVID-19 cases continue to rise globally... ..	5
Figure 26: ...while Turkey is experiencing the 5 th wave.....	5
Figure 27: There were frequent lockdowns and travel restrictions in the first half of 2021	6
Figure 28: The vaccine rollout accelerated in June 2021, but has since slowed	7
Figure 29: The vaccination program has been slower in the east... ..	7
Figure 30:...which has reflected on the COVID-19 incidence rates.....	7
Figure 31: Province level vaccination rates had a clear correlation with case numbers at the beginning of the fourth wave	8
Figure 32: Turkey's testing capacity is increasing... ..	8
Figure 33: ...but remains slightly below its European comparators.....	8
Figure 34: Case-to-Fatality rates increased during COVID-19 peaks except for the latest wave	9
Figure 35: Economic activity remained robust in 2021... ..	10
Figure 36: ...with a sizeable positive contribution of net exports to growth.....	10
Figure 37: A recovery in services sector picked up... ..	10
Figure 38:...largely driven by wholesale trade, transportation and accommodation and food sectors	10
Figure 39: Turkey's PMI remained comfortably above the benchmark level 50	11
Figure 40: Capacity utilization surpassing pre-pandemic levels.....	11
Figure 41: Large exporting sectors, particularly apparel recovered fast.....	11
Figure 42: Labor productivity is recovering strongly.....	11
Figure 43: The recovery in most of the service sub-sectors gained pace	12
Figure 44: Tourism activity picked up starting from May 2021	12
Figure 45: Confidence index in construction sector slightly rose, still below 100.....	13
Figure 46: The pace of house sales has moderated in 2021H1 but accelerated recently	13
Figure 47: House sales climbed in 2020Q3 with the public banks' mortgage campaign.....	14
Figure 48: House sales per day and mortgage rates are highly correlated	14
Figure 49: Share of mortgage-backed sales recently declined due to high mortgage rates.....	15
Figure 50: House price increases reached historic highs in both nominal and real terms recently	15

Figure 51: Prices went up across Turkey, Mediterranean provinces positively diverged	15
Figure 52: Foreign interest has been on a rising trend due to the citizenship opportunity	15
Figure 53: Although Turkey was the top country with the highest house price increases... ..	15
Figure 54: ...price-to-income metrics do not indicate a significant overvaluation.....	15
Figure 55: Construction permits started to pick up, but occupancy permits remain stable	16
Figure 56: NPLs of construction sector pose risks to financial stability while mortgage NPLs remain low	16
Figure 57: Current account balances are improving thanks to rising tourism revenues... ..	16
Figure 58:...and narrowing trade deficit.....	16
Figure 59: Turkey's exports surpassed pre-pandemic levels.	17
Figure 60: ...and its share in global exports surged.....	17
Figure 61: Industrial exports rebounded strongly	18
Figure 62: But export growth has been driven by the intensive margin.....	18
Figure 63: Export growth was mainly driven by Germany, UAE, USA, UK, and Italy... ..	19
Figure 64:...EU 28 countries have been the main driver of past export slumps and recoveries	19
Figure 65: Shipping rates are at multi-year highs.....	20
Figure 66: Suppliers' delivery time lengthened at near record pace.....	20
Figure 67: Since the beginning of the pandemic the global shipping reliability dropped dramatically... ..	20
Figure 68: ...and average delays increased for late vessel arrivals	20
Figure 69: Most of Turkey's exports are shipped by sea... ..	21
Figure 70: ... especially heavier products.....	21
Figure 71: Turkey benefitted from the decrease in shipping reliability by expanding exports to close countries... ..	23
Figure 72: ... with increases ranging between 5 and 15 percent for export value and volume.....	23
Figure 73: Turkey increased exports of relationship sticky products to close countries	23
Figure 74: Turkey international visitor arrivals by month, January 2019 - November 2021	25
Figure 75: Cumulative international tourism revenue	25
Figure 76: International arrivals and travel restrictions; Russia, Germany and UK, Jan 2019 – Nov 2021	26
Figure 77: Relatively strong recovery in Turkey's foreign visitor numbers	26
Figure 78: Cost of holidaying has been falling... ..	27
Figure 79:...and is now amongst the lowest in Europe	27
Figure 80: Declining international visitors from United Kingdom... ..	28
Figure 81:...was partially offset by visitors from Ukraine	28
Figure 82: Fiscal improvements were reversed at the end of 2021... ..	29
Figure 83: ...and primary surplus turned into deficit... ..	29
Figure 84: ...driven by a jump in expenditures	30
Figure 85:...but robust revenue growth helped in 2021	30
Figure 86: The interest burden remains high... ..	30
Figure 87:...and tax measures to dampen inflation reduced revenues.....	30
Figure 88: Central government debt is increasing... ..	31
Figure 89: ...and financed via TL-denominated bonds with increased yields	31
Figure 90: Money growth remained high in 2021	32
Figure 91: Turkey remains an outlier for monetary expansion and inflation.....	32
Figure 92: The Central Bank cut the interest rates in September 2021 while inflation was rising... ..	32
Figure 93: ...this led to a rise in bond yields, risk premia, further depreciation and expected inflation	33
Figure 94: Among EMs, Turkey is the only country that reduced the interest rates in 2021	33
Figure 95: Turkey has the most negative real policy rates across EMs.....	33
Figure 96: Real policy rate declined to negative territory once again and gap is growing	34
Figure 97: Real Treasury yields also declined significantly	34
Figure 98: Despite reductions in the policy rate, lending rates surged.....	35
Figure 99: CPI inflation jumped to 48.7 percent, the highest reading over the last 20 years.....	36
Figure 100: ...amid large depreciation of the Lira and high energy prices	36
Figure 101: CBRT revised up its end-year inflation forecast substantially for 2021 and 2022.....	36
Figure 102: Market based inflation expectations are at an all-time high.....	36
Figure 103: High CPI inflation was largely driven by the rise in food and energy prices in 2021	37
Figure 104: Rising international food prices put pressure on domestic prices.....	37

Figure 105: Turkey is among the OECD countries facing the highest food price inflation...	37
Figure 106: Rising agricultural costs contributed to the rise in food inflation	38
Figure 107: The rise in PPI was largely fueled by higher intermediate goods prices	38
Figure 108: Energy prices are affected more by exchange rate developments than international markets prices.....	39
Figure 109: The gap between consumer and producer energy inflation widened in 2021	39
Figure 110: Buoyant economic activity in Turkey's major trade partners boosted Turkish exports...	42
Figure 111: ...allowing Turkey to slowly build up its FX buffers...	42
Figure 112:...but stabilization in the Turkish Lira was short-lived...	42
Figure 113:...and the Turkish Lira is now the most depreciated currency against the US\$ across all EMs	42
Figure 114: Capital flows were on a positive trend...	42
Figure 115:...and portfolio flows were lower relative to other EMs' average	42
Figure 116: Required reserves were increased	43
Figure 117: Export rediscount credits' contribution was rising	43
Figure 118: Gross reserves were building up...	44
Figure 119: ...but started to decline in December while net reserves went down to negative territory	44
Figure 120: Corporate debt as a share of GDP slightly declined.....	44
Figure 121: Net FX position of corporates improved in 2021 compared to end-2020.....	44
Figure 122: Commercial lending rates are on an increasing trend	45
Figure 123: Rollover rates remained above 100 percent in 2021	45
Figure 124: Turkish traded companies' leverage remained high.....	46
Figure 125: ...Adding to solvency pressures	46
Figure 126: Corporate vulnerability remains high...	47
Figure 127: ...And currency depreciation put strains on highly FX leveraged corporates.....	47
Figure 128: Orders cancelled due to lack of inputs	48
Figure 129: Large firms performed relatively better.....	48
Figure 130: Financial risk remained high...	48
Figure 131: ...especially for smaller and younger firms.....	48
Figure 132: Around 61 percent of firms reported facing difficulties in accessing external finance	49
Figure 133: Wage subsidies and credit support were the most used public support measures	49
Figure 134: Credit growth reaccelerated.....	50
Figure 135: ...While retail lending remained largely stable	50
Figure 136: Corporate lending picked up in 2021Q4	51
Figure 137: FX lending remains subdued.....	51
Figure 138: Loan growth and forbearance support NPL ratios...	51
Figure 139: ...and Stage 2 loan ratios amid an uptick in loan restructuring	51
Figure 140: Provisioning continues to be conservative	52
Figure 141: Core capital buffers declined despite an uplift from forbearance	52
Figure 142: Deposit growth supported a moderate decline in loan-to-deposit ratios	53
Figure 143: Banking sector maintains liquidity to meet short-term FX liabilities...	53
Figure 144: ...with net long FX position.....	53
Figure 145: Deposit dollarization continued to rise	53
Figure 146: Total employment surpassed its pre-2018 crisis level.....	55
Figure 147: Over 3 million jobs were regained between November 2020 and November 2021	55
Figure 148: Formal jobs have expanded more than four times faster than the pace of informal jobs	56
Figure 149: The job recovery was skewed towards young workers, growing from a low base.....	56
Figure 150: Employment grew relatively faster for females in 2021Q3, compensating the losses	56
Figure 151: Services sector employment surpassed its pre-COVID levels in 2021.....	56
Figure 152: The number of positions reached levels closer to those in early 2018	57
Figure 153: Total applications recovered partially, but still remain below 2018 levels.....	57
Figure 154: A surge in the participation rate limited the decline in the unemployment rate while employment growth helped	58
Figure 155: Real wages started to rise in 2021, particularly in hard-hit sectors.....	58
Figure 156: There was a clear difference in poverty rates in the regions of Turkey prior to the COVID-19 pandemic.....	59

Figure 157: Around half of the number poor reside in Eastern regions	59
Figure 158: Several Eastern regions experienced the increases in poverty during the 2018-19 economic turmoil....	60
Figure 159: Some of the greatest job losses occurred in the Eastern regions	60
Figure 160: Gender inequalities in the effects of COVID-19 on labor outcomes were larger in lagging regions.....	61
Figure 161: Skilled women were much more likely to drop out the labor force... ..	62
Figure 162: ...and thus less likely to be unemployed.....	62
Figure 163: Transition into inactivity was strongest for women in professional occupations, among technicians and clerical support.....	62
Figure 164: Skilled women were much more likely to drop out the labor force.....	63
Figure 165: Graduates of social sciences seem particularly at risk of being NEET.....	63
Figure 166: Higher job informality in Eastern regions added to their high vulnerability to the effects of the pandemic.....	64
Figure 167: Exports will continue to be the main driver of growth.....	66
Figure 168: Consumer confidence dropped to its historic low, signaling moderation in consumption... ..	66
Figure 169: ...Accompanied by rises in the cost of production	67
Figure 170: Currency depreciation will exert pressures on balance sheets of corporates	67
Figure 171: Consensus global growth forecasts for 2021 and 2022	68
Figure 172: Europe's consensus growth forecasts for 2021	68
Figure 173: Private-sector forecasts envision inflation to gradually ease in 2022.....	68
Figure 174: Vaccination progress recently moderated	69
Figure 175: Short-term payables due put further strains on corporate and banking sector financials	71
Figure 176: External financing needs remain substantial	72
Figure 177: Gross reserves rose compared to March 2021 but are still lower than short-term possible drains.....	72
Figure 178: Public debt is highly sensitive to exchange rate depreciation... ..	73
Figure 179:...and shortening average time to maturity for debt stock	73
Figure 180: Eurobond spreads are high relative to peers and rising	73
Figure 181: Rising burden of PPP guarantees on budget balances.....	73
Figure 182: Elevated inflation is likely to hit the poor hardest.....	75
Figure 183: Extreme events in Turkey accelerated over the last two decades.....	76
Figure 184: Turkey's inflation expectations' anchoring worsened over recent years	78
Figure 185: The degree of anchoring is positively correlated with the degree of independence of the Central Bank	78
Figure 186: Turkey's Central Bank CEO independence deteriorated over the last decade	78
Figure 187: Strong investment and current transfer multipliers.....	79
Figure 188: Social assistance expenditures in Turkey lag behind	79
Figure 189: Turkey lags behind comparators in terms of FDI inflows... ..	88
Figure 190: ...and inward FDI has been largely driven by real estate investments in 2021	88
Figure 191: Globally, stability factors amongst most important in attracting FDI	88
Figure 192: Investors consider Turkey to be an attractive investment destination	91
Figure 193: Investors consider Turkey to be an attractive investment destination, but in limited 'mid-tier' activities	91
Figure 194: Turkey has talent and cost advantages but lags competitors on other key investment drivers	92
Figure 195: The recent depreciation increases exports after one quarter, but the impact completely disappears after two years	94
Figure 196: Turkey lags behind its peers in terms of high-tech exports.....	94
Figure 197: The sector of most concern is iron and steel for Turkey in CBAM.....	96
Figure 198: Emissions intensity for Turkey is higher than that for EU	96
Figure 199: The long-run impact of the CBAM could be sizable for particular CBAM sectors	96

List of tables

Table 1: Sea Transport Reliability and Turkey's Exports	22
Table 2: European Union import shares in 2019H1 and 2021H1	24
Table 3: Fiscal operations (CG, percent of GDP)	29
Table 4: Selected monetary measures taken in Turkey since April 2021	35
Table 5: ...And among the top 10 countries in the world	37
Table 6: Summary of Cumulative Responses in Food Price Models	40
Table 7: Summary of Cumulative Responses in Energy Price Models	41
Table 8: Informality declined in many sectors in 2020	63
Table 9: Regional Share in National Employment/Labor Force vs Losses in 2020	64
Table 10: Inflation Elasticity of Poverty	75
Table 11: NPL and Debt Relation (Whole Sample)	86
Table 12: NPL and Debt Relation (Sectors)	86
Table 13: NPL and Debt Relation (Difference-in Differences Estimation)	87
Table 14: NPL and Debt Relation (Difference-in Differences Estimation with Vulnerability Interaction)	87
Table 15: Free Zones can enable the provision of key drivers of high-tech investment.....	90

List of boxes

Box 1: Real estate sector developments in Turkey	13
Box 2: Sea Transport Reliability and its impact on Turkey's Exports.....	22
Box 3: The impact of pandemic related restrictions on Turkey's key tourism markets	25
Box 4: Pass through of International Food and Energy Prices in Turkey	39
Box 5: Turkey Business Pulse Survey-Second Wave Results.....	47
Box 6: Pandemic Impacts on Labor	61
Box 7: Global Outlook.....	67
Box 8: Status of COVID-19 vaccine development program in Turkey	70
Box 9: Preconditions for Capital Market Development in Turkey.....	81
Box 10: Recent regulatory changes to address the potential NPL stock and flow challenges	83
Box 11: The Relationship between Corporate Debt and NPLs.....	85
Box 12: Turkey FDI Attractiveness Survey.....	90

List of abbreviations

ADV	Advanced Economies
AFR	Africa
ALMP	Active labor market programs
ALB	Albania
AR	Asset Ratio
BAT	Banks Association of Turkey
BGR	Bulgaria
BPS	Business Pulse Survey
BRA	Brazil
BVAR	Bayesian Vector Auto Regression
BRSA	Banking Regulation and Supervision Agency
CAB	Current Account Balance
CAR	Capital Adequacy Ratio
CB	Central Bank
CBAM	Carbon Border Adjustment Mechanism
CBRT	The Central Bank of the Republic of Turkey
CG	Central Government
CGF	Credit Guarantee Fund
CDS	Credit default swap
CHN	China
CMB	Capital Markets Board
COVID-19	2019 Novel Coronavirus Disease
CPI	Consumer Price Index
CVI	Corporate Vulnerability Index
ECA	Europe and Central Asia
EFI	Equitable Growth, Finance and Institutions
EMDE	Emerging Markets and Developing Economies
EMBI	Emerging Markets Bond Index
EM	Emerging Markets
ENB	Environment, Natural Resources and Blue Economy
ERP	Economic Reform Package
ESG	Environment, Social and Governance
EU	European Union
FCI	Finance, Competitiveness and Innovation
FinSAC	Financial Sector Advisory Center
FX	Foreign exchange
G-20	Group of 20
GDP	Gross Domestic Product
GEFR	Gross External Financing Requirement
GEO	Georgia
GIR	Gross International Reserves

GP	Global Practice
GW	Gigawatt
HCI	Human Capital Index
HD	Human Development
HICES	Household Income Consumption Expenditure Survey
HRV	Croatia
HUN	Hungary
ICT	Information and Communication Technologies
ICR	Interest Coverage Ratio
ICLS	International Conference of Labour Statisticians
IDN	Indonesia
IFC	International Finance Corporation
IFRS-9	International Financial Reporting Standard 9
ILO	International Labor Organization
IMF	International Monetary Fund
IND	India
ISKUR	Turkish Employment Agency
ITA	Italy
KGZ	Kirgizstan
LAC	Latin America and Caribbean
LFPR	Labor Force Participation Rate
LHS	Left Hand Side
MAR	Morocco
MAX	Maximum
MENA	Middle-East and North Africa
MFN	Most favored nation
MIN	Minimum
MOTF	Ministry of Treasury and Finance
MOM	Month-on-month
MSCI	Morgan Stanley Capital International
MSME	Micro, Small and Medium Enterprises
MTI	Macroeconomics, Trade and Investment
NEET	Not in Education, Employment, or Training
NEP	New Economic Program
NGA	Nigeria
NSA	Not seasonally adjusted
NPL	Non-performing Loan
OECD	Organization for Economic Co-operation and Development
OJT	On-the-Job Training Program
OxCGRT	Oxford COVID-19 Government Response Tracker
PAK	Pakistan
PISA	Program for International Student Assessment
PMI	Purchasing Managers' Index

POL	Poland
POV	Poverty
PPP	Purchasing power parity
PPI	Producer Price Index
PTA	Preferential Trade Agreement
QOQ	Quarter-on-quarter
R&D	Research and development
RHS	Right hand side
ROM	Romania
ROU	Romania
RUS	Russia
RWA	Risk-weighted assets
SA	Seasonally adjusted
SD	Sustainable Development
SDIF	Savings-Deposit Insurance Fund
SGK	Social Security Institution
SME	Small and medium size entrepreneurs
SPJ	Social Protection and Jobs
SSI	Social Sustainability and Inclusion
TEM	Turkey Economic Monitor
TFP	Total factor productivity
TL	Turkish Lira
TJK	Tajikistan
TRY	Turkish Lira
TUR	Turkey
TURKSTAT	Turkish Statistical Institute
TWF	Turkey Wealth Fund
UK	United Kingdom
UKR	Ukraine
US	United States of America
USA	United States of America
US\$	United States of America Dollar
UZB	Uzbekistan
VT	Vocational and Technical Courses Program
WB	World Bank
WBG	World Bank Group
YOY	Year-on-year
ZAR	South Africa

The Turkey Economic Monitor (TEM) periodically analyzes economic developments, policies and prospects in Turkey. The TEM was prepared under the guidance of Auguste Tano Kouame (WB Country Director, Turkey), Lalita Moorty (Regional Director for Equitable Growth, Finance and Institutions, ECA) and Sandeep Mahajan (Practice Manager, Macroeconomics, Trade and Investment GP) by a core team including Hans Anand Beck (Program Leader, EFI Turkey), Pinar Yasar (Senior Country Economist, MTI GP), Erdem Atas (Country Economist, MTI GP), Claire Honore Hollweg (Senior Country Economist, MTI GP), Javier Baez (Senior Economist, POV GP), Cigdem Celik (Economist, POV GP), Etkin Ozen (Senior Financial Sector Specialist, FCI GP), Gunhild Berg (Senior Financial Sector Specialist, FCI GP) and Alen Mulabdic (Economist, MTI GP).

The team is very grateful to the following colleagues for advice and technical inputs: Heba Elgazzar (Program Leader, HD Turkey), Abhishek Saurav (Senior Economist, FCI GP), Ryan Chia Kuo (Young Professional, FCI GP), Ulla Heher (Private Sector Specialist, FCI GP), Umut Kilinc (Economist, FCI GP), Nicolo Dalvit (Young Professional, FCI GP), Mattia Makovec (Senior Economist, SPJ GP), Sirma Seker (Senior Economist, SPJ GP), Safir Sumer (Human Development Specialist, Health GP), Nadwa Rafeh (Senior Health Specialist, Health GP), Efsan Nas Ozen (World Bank Consultant), Collette Mari Wheeler (Senior Economist, MTI GP), Justin Damien Guenette (Senior Economist, MTI GP), Vasiliki Papagianni (Research Analyst, MTI GP), Dhruv Devesh Gandhi (World Bank Consultant), Ileana Cristina Constantinescu (Economist, MTI GP), Hasan Dudu (Senior Economist, MTI GDP), Daniel Besley (Senior Climate Change Specialist, Climate Change Advisory and Operations), Tom Farole (Lead Economist, Climate Change Advisory and Operations), Clare Anne Lonergan (World Bank Consultant), John Grinyer (World Bank Consultant), Eray Yucel (World Bank Consultant), Seyit Mumin Cilasun (World Bank Consultant), Merve Demirel (World Bank Consultant), Gunes Asik (World Bank Consultant), and Francesca Gaia Caselli (Economist, International Monetary Fund).

The team is very grateful to Miguel Eduardo Sanchez Martin (Senior Economist, MTI GP) and Rong Qian (Senior Economist, MTI GP) for peer review comments and advice.

The team is very grateful to colleagues from the Central Bank of the Republic of Turkey, the Ministry of Treasury and Finance, the Presidency of Strategy and Budget, the Ministry of Trade, and the Banking Regulation and Supervision Agency for very helpful discussions on economic developments and policy priorities. The team greatly appreciates insights provided by business associations and the private sector during the preparation of the TEM.

The TEM is a product of the staff of the World Bank Group. The findings, interpretations, and conclusions expressed in this report do not necessarily reflect the views of the Executive Directors of the World Bank (or the governments they represent), or the Government of the Republic of Turkey.

EXECUTIVE SUMMARY

I. TAKING STOCK

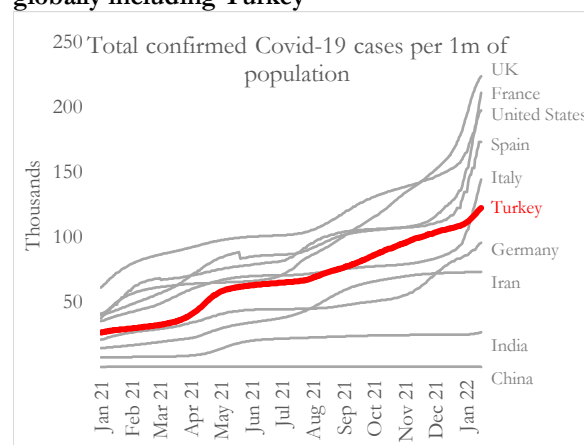
Turkey experienced an accelerating economic recovery in 2021 amidst the COVID-19 pandemic, but also rising macro-financial volatility, with significant impacts on households. In the recovery, the economy grew 11.7 percent year-on-year in the first three quarters of 2021 supported by external and domestic demand; the external and fiscal balances improved, and unemployment fell. However, the Lira depreciated to record low levels in 2021Q4, losing over half its value by early December before appreciating but remaining volatile; consumer price index (CPI) inflation in January 2022 accelerated to its fastest rate (48.7 percent, year-on-year) since 2002; and corporate and financial sector were adversely affected. This volatility added to stresses on poor and vulnerable groups as they had not benefited equally from the employment recovery, and as poverty is estimated to rise at twice the rate of the general increase in prices.

Turkey has dramatically accelerated its vaccine rollout, but the COVID-19 pandemic persists. Following the reopening and loosening of restrictions, Turkey entered the fourth wave of infections, driven by the Delta variant, in early July 2021, and the Omicron wave has hit Turkey in December 2021 driving daily cases to record high levels. The expansion of COVID-19 cases in the second half of 2021 followed a similar path to many European countries and the U.S. (Figure 1). The recent surge in cases has not led to reintroduction of stringent measures thanks to low fatality rates. An accelerated vaccine rollout helped bring the share of Turkey's adult population (18+ years old) with at least two vaccinations to over 84 percent as of January 2022. The equivalent share for the population as a whole is 62 percent.

Turkey's recovery remained very strong in the first three quarters of 2021 thanks to buoyant domestic and external demand, and good progress in vaccination rollouts. Turkey's economy grew by 7.4 percent, 22 percent, and 7.4 percent year-on-year in Q1, Q2 and Q3 of 2021,

respectively, corresponding to 11.7 percent year-on-year cumulative growth in the first three quarters of the year – the highest among G-20 countries. This was driven by strong domestic and external demand, and an effective vaccine rollout. On the supply side, starting from mid-May, a gradual normalization process led to a quick rebound in most of the services sectors. Leading indicators signal gradual moderation of economic momentum in 2021Q4 as negative macro-financial conditions have begun to erode real incomes and disrupt price signals and production.

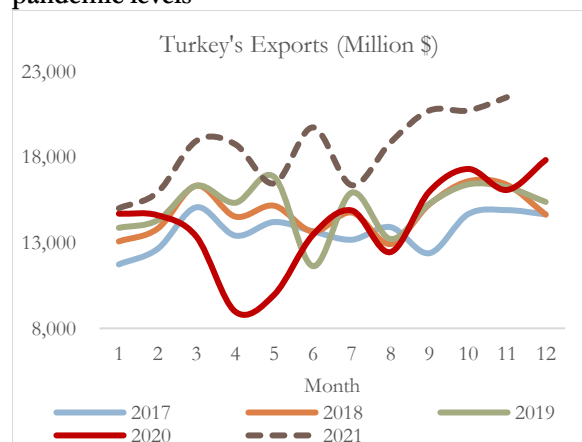
Figure 1: COVID-19 cases continued to rise globally including Turkey



A sharp acceleration in both goods and services exports narrowed the current account deficit. Exports of goods reached record high levels in 2021 supported by buoyant external demand, improved price competitiveness and demand shifts to Turkey due to rising shipping costs (Figure 2). The current account deficit narrowed to \$10.8 billion in January-November 2021 compared with \$32.1 billion a year ago. Turkey's share in global exports surpassed 1 percent for the first time in 2021Q2. Turkey's goods exports have benefitted from the deterioration of global shipping reliability as multinationals sourced more intensively from Turkey, instead of from less reliable and more distant exporters who began charging higher freight prices. Transport service revenues also benefited, supporting the services trade balance, as did

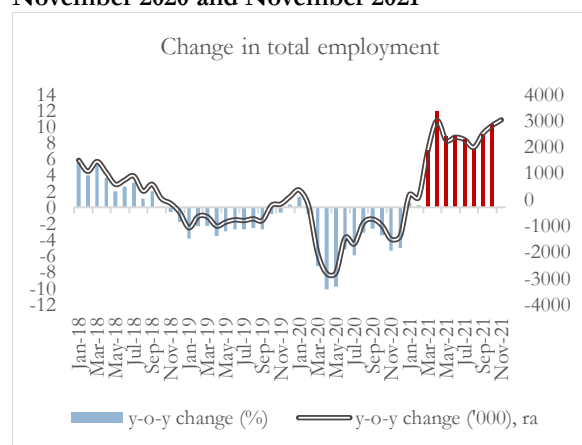
tourism revenues, as depreciation of Lira coupled with removal of travel restrictions led to a stronger recovery in foreign visitor numbers than in Turkey's European competitors.

Figure 2: Turkey's exports surpassed pre-pandemic levels



Strong revenue growth helped fiscal balances improve, but a surge in expenditure limited the improvement. The central government budget balance recovered to -3.0 percent of GDP as of Q3 2021 from -3.5 percent in 2020. The improvement in fiscal balances was primarily driven by high tax collection as strong domestic demand and the depreciation of Lira led to higher international trade VAT collection. However, the fiscal deficit widened in the last quarter of 2021 relative to the first three quarters, driven by large transfers to SOEs, other transfers, and interest expenses.

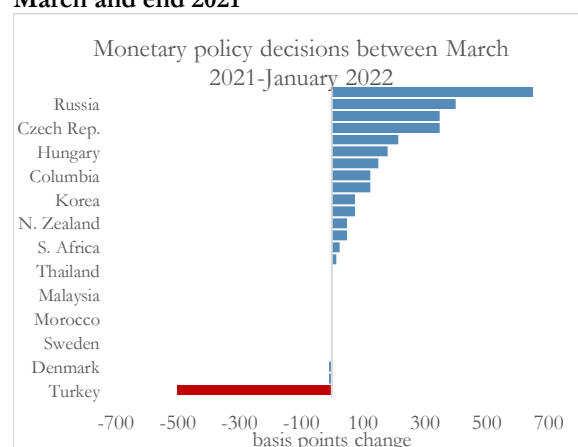
Figure 3: Over 3 million jobs were regained between November 2020 and November 2021



Employment recovered to pre-pandemic levels supported by the rebound in economic activity.

Over 3 million jobs were regained in November 2021 compared to a year ago (Figure 3). The employment recovery helped the seasonally adjusted unemployment rate to fall slightly from 12.7 percent at the end of 2020 to 11.2 percent in November 2021. Services sector employment, which had been worst hit during the pandemic, recovered the most. The labor market recovery was weaker among informal workers but stronger among young and female workers.

Figure 4: Among EMs, Turkey is the only country that reduced the policy interest rate between March and end 2021

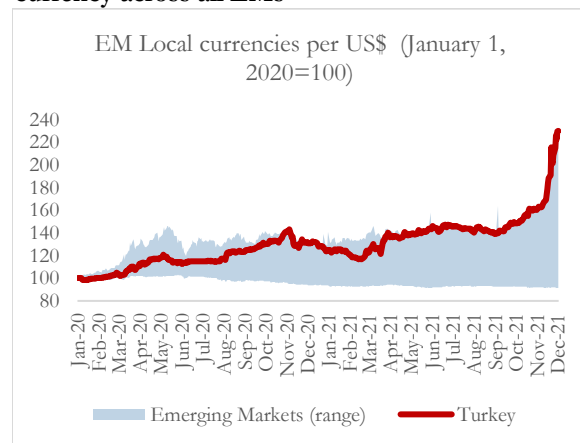


The markets' interpretation of frequent changes in monetary policy's direction and objective combined with an aggressive monetary easing since September 2021 have adversely affected macro-financial conditions.

Uniquely among peers, and despite tightening global monetary conditions, Turkey has cut interest rates - by 500 bps between 23rd September 2021 (Figure 4) and end 2021. The Turkish Lira reached record low levels, depreciating by more than 130 percent year to date in mid-December 2021, before easing in late December (Figure 5). At the same time, gross reserves increased from \$86.7 billion in March 2021 to \$111.2 billion in December 2021, thanks to swap deals, a global allocation of IMF SDR, expansion of the rediscount credit facility, and changes in reserve requirement ratios. However, the Central Bank started to intervene in markets through direct FX sales in early December for the first time since 2014 to stabilize the exchange rate and sold \$7.3 billion in a month. Turkey's sovereign credit default risk reached 630

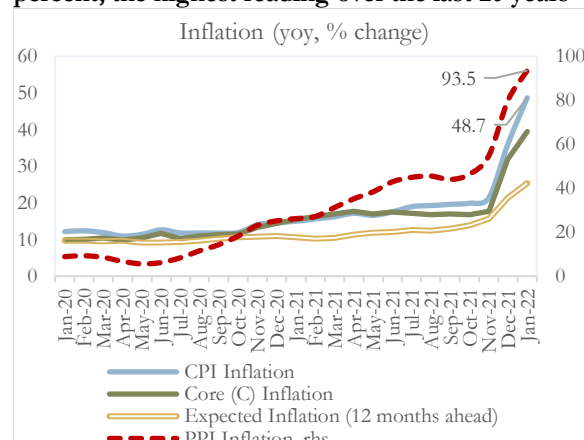
in mid-December for the first time since the August 2018 currency shock. Turkey has also attracted less portfolio inflows in 2021 than the EM market average. Under these conditions, inflation has accelerated, and corporate and financial sector exposure to risks are growing.

Figure 5: The Turkish Lira is the most depreciated currency across all EMs



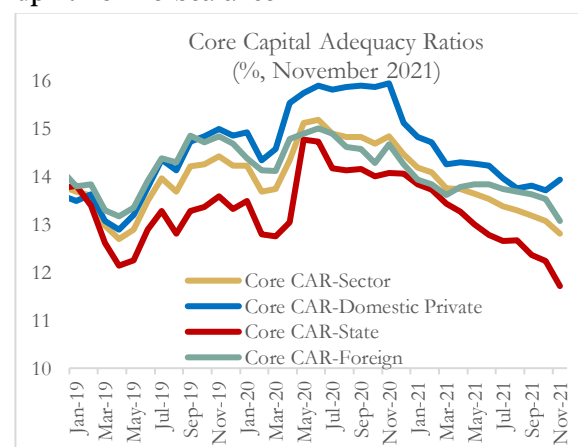
Inflation has accelerated in 2021 with the sharp Lira depreciation, rising international commodity prices, and rising inflation expectations. In January 2022, official CPI inflation reached 48.7 percent (year-on-year) – against an official target of 5 percent- and domestic producer price inflation hit 93.5 percent, the highest levels in the last two decades (Figure 6). The sharp depreciation of the lira coupled with high exchange rate pass-through, rising demand pressures and deteriorating inflation expectations led to a jump in inflation. Food price inflation is the largest contributor to headline inflation. In producer prices, energy producer prices, which are directly associated with oil prices, and even more with exchange rate movements, picked up sharply in 2021.

Figure 6: Headline inflation climbed to 48.7 percent, the highest reading over the last 20 years



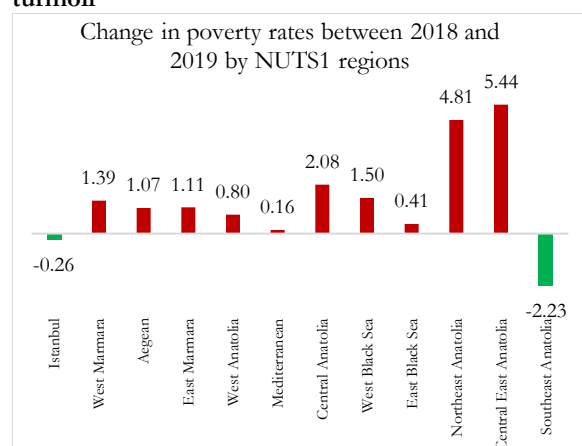
Corporate and banking sector challenges remained high despite deleveraging. Corporate debt levels remain high, especially FX debt. Recent volatility in financial markets and the sharp currency depreciation led to a rise in corporate vulnerability, straining already stretched corporates' balance sheets. The World Bank Pulse Survey in March 2021 showed that around one third of the interviewed businesses expected to fall into arrears on their financial liabilities in the following 6 months. On the banking sector side, credit growth accelerated again after slowing down in the first three quarters of 2021 and core capital buffers declined, especially for state banks despite an uplift in overall buffers from forbearance measures and Tier-2 capital (Figure 7). Heightened Lira volatility weakened banks' core capital ratio from 14.5 percent in December 2020 to 12.8 percent in November 2021.

Figure 7: Core capital buffers declined despite an uplift from forbearance



The COVID-19 pandemic amplified existing income and labor disparities. Going into the pandemic, the poverty incidence and poverty density were significantly higher in the Eastern provinces than those in the Western regions. Overall, half of all the poor people in Turkey are found in eastern regions. The COVID-19 pandemic also manifested in larger impacts for women from Eastern regions, widening pre-existing gender gaps. The shock created by the pandemic hit skilled female labor the hardest. Eastern regions are also characterized by having higher levels of job informality, hovering around 60 percent. Informal workers are one of the groups most disproportionately affected by the COVID-19 crisis, as they were not eligible to benefit from any of the measures that were put in place by the government to support businesses, such as short-term work allowance and unpaid leave support although many may have benefited from transfers to households. During the economic turmoil in 2018-19 the less developed regions of the country witnessed the largest increases in poverty (Figure 8), which provides some indication of vulnerabilities to the current macro-financial conditions. Inflation is also estimated to raise poverty posing risks to progress in this area (see Looking Ahead section). Some of these risks have been mitigated by a recent increase in minimum wages and minimum pensions.

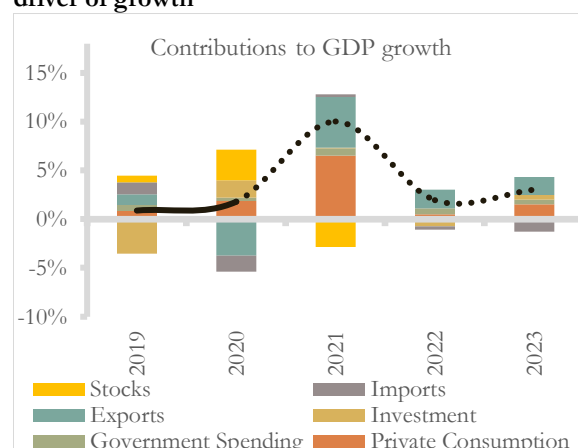
Figure 8: Several Eastern regions experienced increases in poverty during the 2018-19 economic turmoil



II. LOOKING AHEAD

Following very high growth in 2021, Turkey's economic growth outlook is beset by macro-financial uncertainty. While GDP growth in 2021 is expected to reach 10.0 percent, momentum is expected to moderate gradually in 2021Q4 as macro-financial volatility intensifies. This situation combined with the high base effect of growth in 2021 will drive the decline in growth in 2022. Economic growth is expected to moderate to 2.0 percent in 2022, assuming appropriate restraints on both monetary and fiscal policies, and prudent financial sector policies.

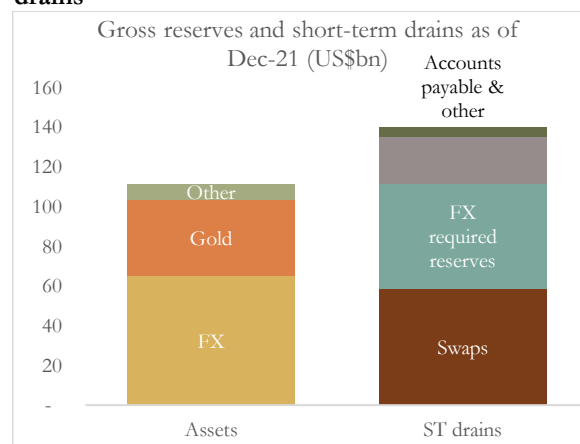
Figure 9: Exports will continue to be the main driver of growth



As in 2021, growth in 2022 is expected to be largely driven by a continued strong rebound in exports. The composition of growth is projected to continue shifting towards external demand. Net exports are projected to account for more than half of growth in 2021 (Figure 9). Net exports are expected to drive more than two thirds of growth in 2022, offsetting the drag in domestic demand from low investment, private consumption, and high inflation. The rise in exports coupled with sluggish import demand will help the current account deficit to narrow to 2.0 percent in 2021 and 2.6 percent in 2022. Private investment is expected to contract as corporates face rising FX debt service and production costs, and the cost of borrowing for corporates remains high despite domestic monetary easing.

On the production side, the services sector is expected to increase its contribution to growth in 2022-23. The services sector would generate around two thirds of the growth in 2022, on the back of the strong recovery in the tourism sector. Industrial sector growth, on the other hand, is expected to slow to 1.5 percent in 2022 due to a high 2021 base effect and supply-side frictions driven by heightened price uncertainty.

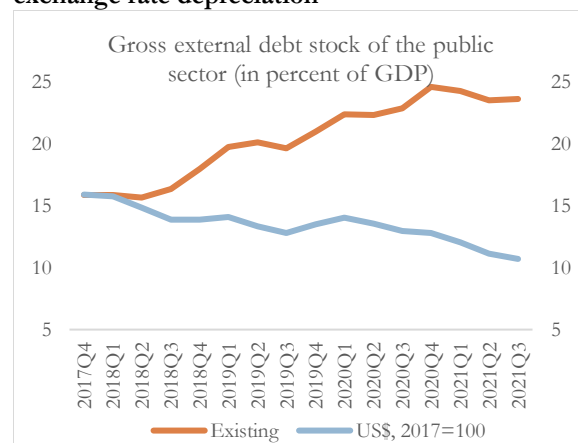
Figure 10: Gross reserves rose compared to March 2021 but are still lower than short-term possible drains



While external risks to growth are balanced, domestic risks are tilted significantly to the downside. Vaccine challenges may undermine good vaccine progress to date; continued Lira depreciation and high inflation may further exacerbate macro financial vulnerabilities, erode real incomes, distort price signals, and disrupt production and supply channels. High inflation also poses a risk to Turkey's progress on poverty reduction as it is estimated that a one percent increase in CPI prices raises poverty by 2 percent (see section B in Looking Ahead). Turkey has more gross reserves and less gross financing needs in 2022, thanks to a declining current account deficit. However, short-term possible drains still remain higher than gross reserves (Figure 10). Turkey is also vulnerable to tightening global liquidity conditions given its high external financing requirements as well as its heavy reliance on financial flows rather than long-term finance like FDI, which is low relative to peers. Turkey has fiscal space, but rising inflation and recent financial turbulence may erode fiscal room significantly in the near term (Figure 11). Climate related disasters

and extreme events also pose risks to agriculture and water resources (Figure 12).

Figure 11: Public debt is highly vulnerable to exchange rate depreciation

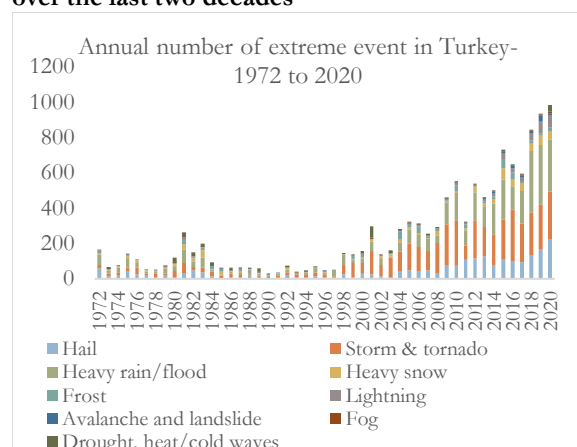


Macroeconomic policy settings should adjust to boost confidence and mitigate macro financial risks. Further monetary policy loosening will likely continue widening external and internal imbalances. Tight monetary policy effort is warranted to restore investor confidence and anchor inflation expectations (Figure 13). Cross country evidence shows that improving Central Bank independence helps to anchor expectations and support policy credibility. Fiscal and monetary policy need to be closely coordinated to avoid eroding efficacy and overstimulating the economy. The impacts of recently announced exchange-rate-protected time deposit instrument have potential to put burden on the fiscal space. Macroeconomic instability warrants a cautious, well targeted, and countercyclical fiscal policy. Effective use of available fiscal space to support vulnerable households and firms whilst maintaining fiscal sustainability will be important going forward.

Macroprudential policies are needed to mitigate financial risks of further erosion of capital buffers and a chronic shortage of long-term financing. While credit growth in 2021 has been muted until 2021Q4, increased loan growth amid challenging economic conditions could potentially cause a deterioration in asset quality in the medium term and risks to stability. Banks' capital buffers are likely to further erode, and their liquidity and refinancing risks may remain material in the forthcoming period. Strengthening insolvency and debt resolution frameworks will be

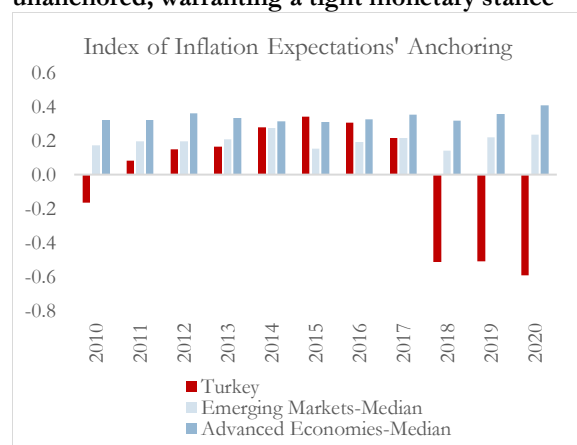
important to de-risk the corporate and financial sectors.

Figure 12: Extreme events in Turkey accelerated over the last two decades



Policies should also focus on supporting vulnerable groups and improving labor market outcomes. The rapid recovery in economic activity in 2021 has helped reverse the pandemic's impact on employment, but underlying challenges have resurfaced. There is a greater need to stimulate the demand for labor and increase the inclusion of women and vulnerable youth including those not in employment, education, or training (NEET). Going forward, targeted policies will be needed to support jobs recovery over the next phase of COVID, coupled with an advancing green, digital transformation in Turkey.

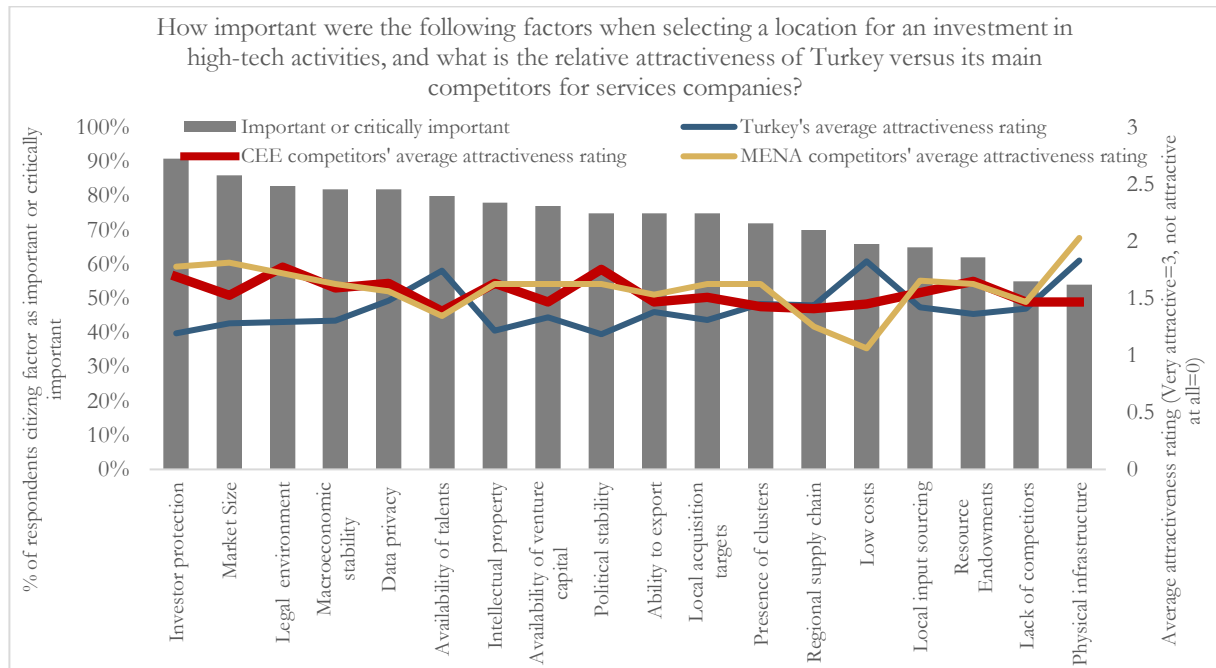
Figure 13: Inflation expectations have become unanchored, warranting a tight monetary stance



Focus should remain on the long-term determinants of competitiveness to sustain the short term and intermittent gains in competitiveness attributable to the rapid Lira depreciation. Analysis shows that the positive impact of the Lira depreciation on exports is found to dissipate rapidly. At the same time surveys show that Turkey remains an attractive destination for competitiveness-enhancing FDI in high-tech sectors, and in light of disruptions to global supply chains, if deterrents like macroeconomic instability, legal and regulatory deficiencies, and limited long-term finance opportunities, can be overcome (Figure 14). Investment promotion agencies (IPAs) can play a critical role in FDI attraction given their role as governments' key interlocutors with foreign businesses. Analysis shows that Turkey's Free Zone model has the potential attract investment particularly for high-tech manufacturing and knowledge-intensive services. Turkey has a low level of FDI relative to peers and can enormously benefit from FDI that supports productivity and high value-added exports.

Turkey can take several steps to anticipate the impact of the EU's Carbon Border Adjustment Mechanism and boost trade. Analysis shows that the long-run impact of the CBAM in Turkey could be sizable for particular CBAM sectors. It is important to consider the implications of border adjustment mechanisms on other ongoing bilateral and multilateral trade policy initiatives such as the modernization of the EU Turkey customs union. Turkey can take meaningful steps to raise its competitiveness and participation in global trade by: improving market access especially by reducing barriers to trade in services; entrenching macroeconomic and regulatory stability; scaling up public provision of market information; supporting firm capability and workforce development; lifting market-distorting measures like import barriers, domestic content requirements and weakly functioning incentives; building economic infrastructure and workforce skills in lagging regions, and addressing constraints to female employment.

Figure 14: Turkey has talent and cost advantages but lags competitors on other key investment drivers



I. TAKING STOCK

Turkey's economic performance has been a tale of two economies—overall high growth, matched by a deterioration in macro-financial conditions. Good progress in vaccination rollouts allowed Turkey to reopen gradually in 2021 despite a continued rise in COVID-19 cases. Real economic activity remained strong, driven by strong broad-based export growth and domestic demand. Exports of goods reached record high levels in 2021 supported by buoyant external demand, improved price competitiveness and demand shifts to Turkey due to rising shipping costs. Turkey's GDP grew by 22 percent year-on-year in 2021Q2—the second highest among G-20 countries—and 7.4 percent in 2021Q3. Strong goods and services export performance helped current account deficit to narrow significantly. Robust economic activity led to strong revenue growth and supported fiscal balances. The labor market saw a good recovery in 2021 and employment levels surpassed pre-pandemic levels, supported by buoyant economic activity. The regional inequalities of the COVID-19 shock manifested in larger impacts for women from Eastern regions, widening pre-existing gender gaps. The authorities began to cut interest rates in September, by 500 basis points by the end of 2021, despite rising inflation and inflation expectations. This has exacerbated macro-financial conditions and impacted investor confidence - causing financial market turbulence, large depreciation of the Lira, higher inflation, and increased dollarization. The Lira has been the most depreciating currency among emerging market economies this year. The large depreciation of the Lira coupled with rising international prices caused inflation to increase to its highest rate since the August 2018 shock.

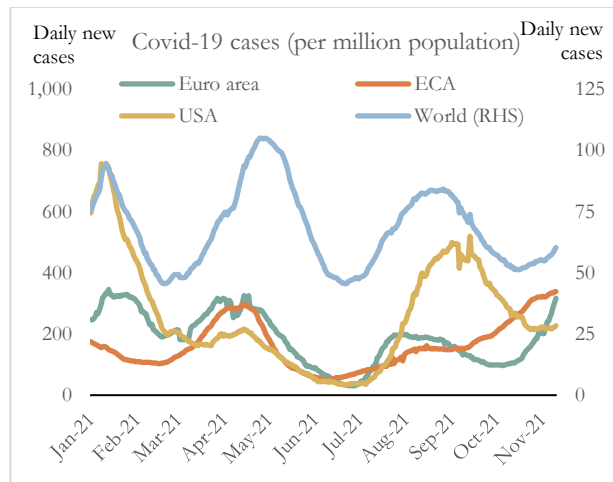
A.COVID-19 and other headwinds are slowing the global economic recovery

As of December, Turkey was seeing a slow decline in its fourth wave of COVID-19 infections – driven by the Delta variant. From early-July 2021, case levels began to accelerate in the east of the country. The wave spread westwards into August with nationwide case numbers averaging around 25,000 per day, considerably lower than the 60,000 cases per day seen in the third wave in May 2021 (Figures 25, Figure 26). The latest data suggest that more than 90 percent of cases in the fourth wave were of the Delta variant, with the wave coinciding with a general level of reopening and loosening of restrictions; on July 1, 2021 limitations on public transport and travel between provinces were lifted and quarantine restrictions on arrivals from high-risk countries ended, and on September 5, 2021, schools were fully reopened. As of mid-December, Omicron cases were beginning to be detected, but there was yet to be a noticeable uptick in case numbers in the daily statistics.

Global economic activity is moderating after a strong rebound that followed the pandemic-induced recession.¹ Following a sharp rebound in the second half of 2020, the pace of the global recovery eased in the first half of 2021, held back by renewed COVID-19 outbreaks of the more transmissible Alpha and Delta variants (Figure 17). Global growth moderated further in the third quarter, as sharp slowdowns in the United States and China more than offset robust growth in the euro area. Much of the recent deceleration in global economic activity reflects mounting supply bottlenecks and energy shortages in China, which combined, have severely hampered global industrial production.

¹ This, and all projections presented in this section draw on the World Bank Group's [Global Economic Prospects](#) report, published in June 2021.

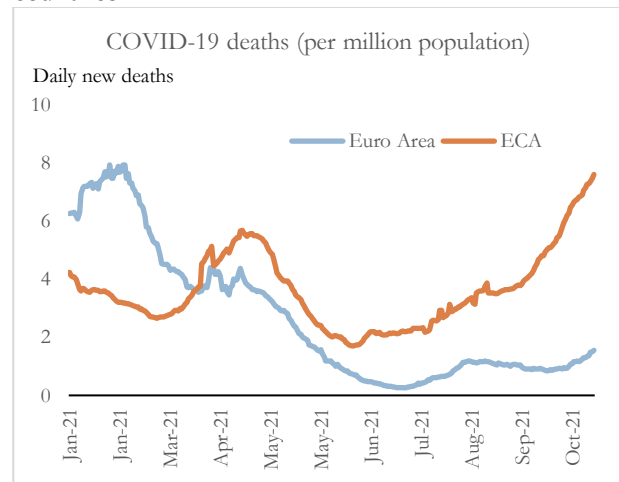
Figure 15: The pandemic waves continue...



Source: Our World in Data.

Notes. Figure shows 7-day moving averages of daily new COVID-19 cases per capita. Sample includes 23 ECA and 19 Euro Area countries. Last Observation is November 10, 2021.

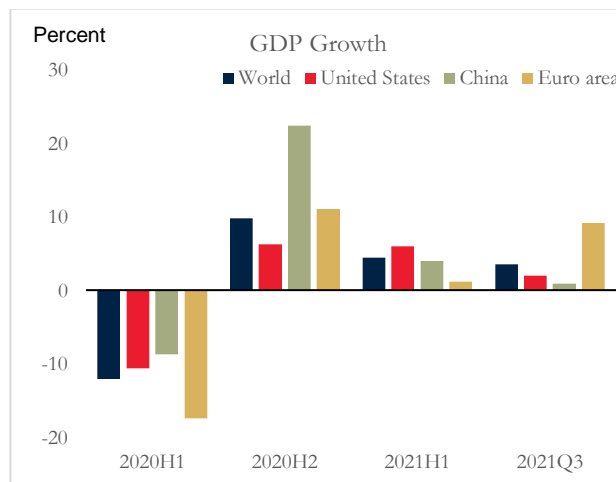
Figure 16: ...with different impacts among European countries



Source: Our World in Data.

Notes. Figure shows 7-day moving averages of daily new COVID-19 deaths per capita. Sample includes 23 ECA EMDEs and 19 Euro Area countries. Last Observation is November 10, 2021.

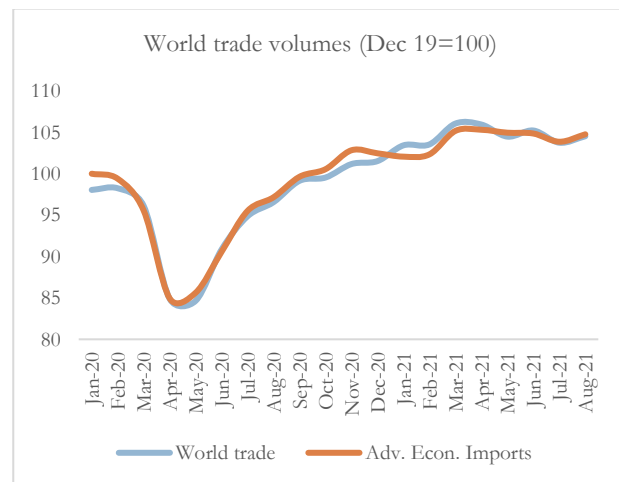
Figure 17: Sequential output growth



Source: Oxford Economics; World Bank.

Figure 17: Sequential growth for 2020H1 is computed as the annualized growth of 2020H1 over 2019H2. Sequential growth for 2021Q3 (q/q SAAR) is an Oxford Economics November 2021 nowcast.

Figure 18: Recovery pace in trade is plateaued



Source: Haver Analytics.

Following a contraction of 8.3 percent in 2020, global trade quickly rebounded from its 2020Q2 trough, with goods trade volumes surpassing pre-pandemic levels by November 2020 (Figure 18). The recovery has plateaued in 2021, with global goods trade growth slowing sharply in 2021Q2 and 2021Q3, as ongoing pandemic disruptions weighed on global economic activity and supply chains, particularly in the United States and China. Staggered shutdowns and reopening across regions, coupled with congestion at ports and a shortage of trucking services, have led to severe bottlenecks in the global supply chains (Figure 19). Survey data at the start of 2021Q4 point to a further softening in global trade growth, due to a slowdown in new export orders dampened by supply shortages, higher input costs, and extended supplier delivery times, particularly in the euro area and United States. Although global container shipping rates and traffic eased recently, backlogs reached record highs at key ports in the United States in October.

The recovery in services trade and tourism has been more subdued than goods trade, reflecting repeated pandemic waves and related mobility restrictions. Services trade and travel have yet to regain their pre-pandemic levels. Services trade is expected to continue to face headwinds amid sustained weakness in tourism, which accounted for a quarter of global services trade prior to the pandemic. By July 2021, international tourist arrivals remained nearly 70 percent below 2019 volumes. There was wide regional variation, however, with tourist arrivals remaining depressed in East Asia and the Pacific and South Asia, while volumes continued to recover in Europe, especially in Turkey (Figure 20, see Box 3). Despite improvement in some regions, tourism is likely to remain muted for some time owing to lingering mobility restrictions and reluctance to travel while the virus is not completely under control (UNWTO 2021).

Figure 19: Global shipping times and costs have risen sharply amid ongoing supply bottlenecks

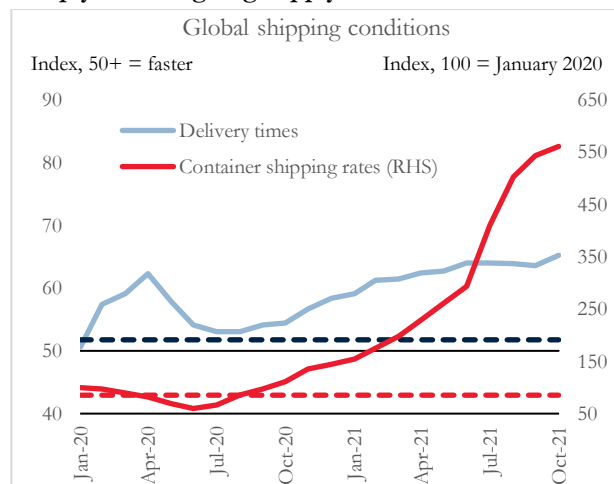
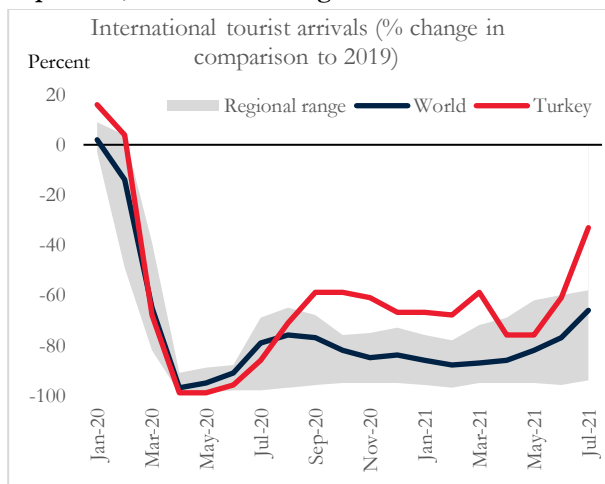


Figure 20: International tourist arrivals remain depressed, but with wide regional variation



Source: WB *Global Economic Prospects*, June 2021; Harper Petersen; Haver Analytics; United Nations World Tourism Organization; World Bank.

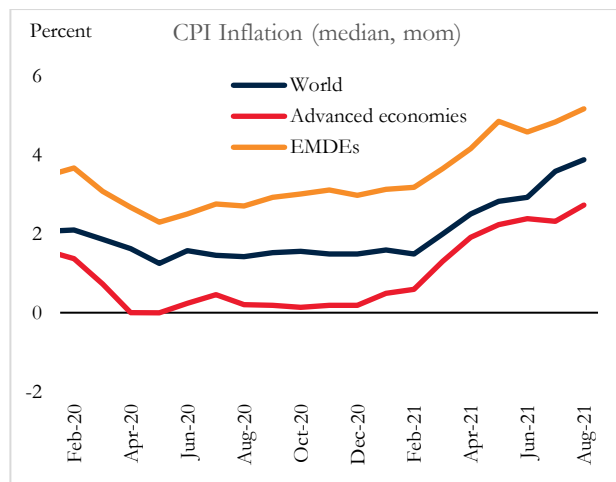
Figure 19: Figure shows the global manufacturing suppliers' delivery times Purchasing Managers' Index (PMI) and the Harper Petersen Charter Rates Index (HARPEX) for container shipping rates. PMI data are inverted by subtracting data from 100; therefore, increasing (decreasing) PMI data indicate faster (slower) delivery times. Container shipping rates are monthly averages of weekly data and reflect price developments on the charter market for container ships. Dashed lines indicate long term averages over the period January 1998 – December 2019 for delivery times and February 2018 – December 2019 for container shipping rates. Last observation is September 2021 for delivery times and container shipping rates.

Figure 20: Figure shows the percentage change in international tourist arrivals in comparison to 2019. Last observation is July 2021.

A mixture of demand and supply factors have contributed to an acceleration in global inflation. Global median headline inflation increased steadily in 2021, reaching 4.2 percent (yoy) in September—2.3 percentage points above its pre-pandemic level in January 2020 (Figure 21). The rise in inflation was broad-based across regions and components, reflecting a combination of robust global demand for goods, sharp increases in energy and food prices, and worsening global supply bottlenecks. Further increases are likely in the fourth quarter of 2021 on the back of sharply higher natural gas and coal prices, which are raising the cost of electricity and home heating.

Commodity prices experienced a broad-based surge in the first half of the year, buoyed by the rapid recovery of global economic activity and various supply constraints. Energy prices continued to rise throughout the second half of the year, while the majority of non-energy prices plateaued. The price of Brent crude oil hit \$86 per barrel in October, a seven-year high, as OPEC+ producers reaffirmed plans for modest production increases in an environment of steadily rising global demand. Natural gas and coal prices surged in the second half of the year, propelled by strong demand, and in the case of coal, weather-related supply disruptions (Figure 22).

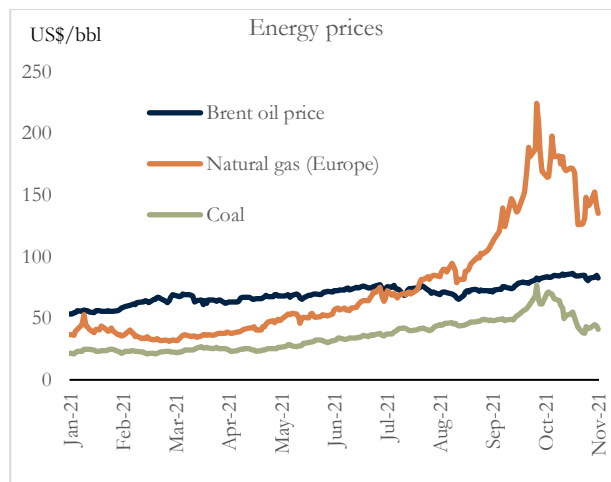
Figure 21: Headline CPI inflation is rising



Source: Haver Analytics; Oxford Economics; World Bank.

Figure 21: Year-on-year median inflation for 81 countries, of which 31 are advanced economies and 50 are emerging market and developing economies (EMDEs). Last observation is August 2021.

Figure 22: Oil, natural gas, and coal prices went up



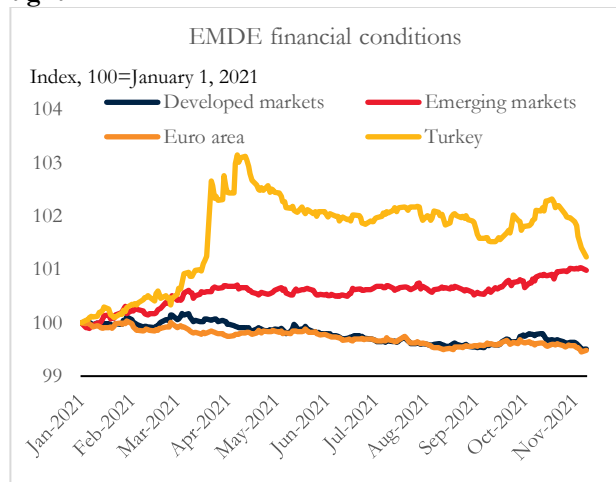
Source: Bloomberg; World Bank.

Figure 22: Last observation is November 10, 2021.

Global financial conditions are tightening amid withdrawal of supportive policies. Global financial conditions have tightened this year, owing to rising long-term interest rates in advanced economies and further removal of monetary policy support in EMDEs (Figure 23). In advanced economies, financial conditions remain broadly accommodative, with equity prices experiencing a broad rise throughout the year while corporate credit spreads remained near record low levels. Despite rising inflation and the Federal Reserve reducing the pace of asset purchases in November, 10-year government bond yields have edged up only modestly in the United States, especially in comparison to the Taper Tantrum episode of 2013. EMDEs have experienced a more pronounced tightening of financial conditions in 2021, due to pandemic setbacks, country-specific risks, and more recently, a broad-based increase in policy rates. Since the start of the year, 27 EMDE central banks hiked interest rates amid rising inflation pressures and in some cases, concerns about a de-anchoring of inflation expectations. Credit spreads on EMDE sovereign bonds have increased somewhat since mid-2021 but remain near post-pandemic lows, facilitating a rise in EMDE international bond issuance in the third quarter across all EMDE regions and ECA in particular.

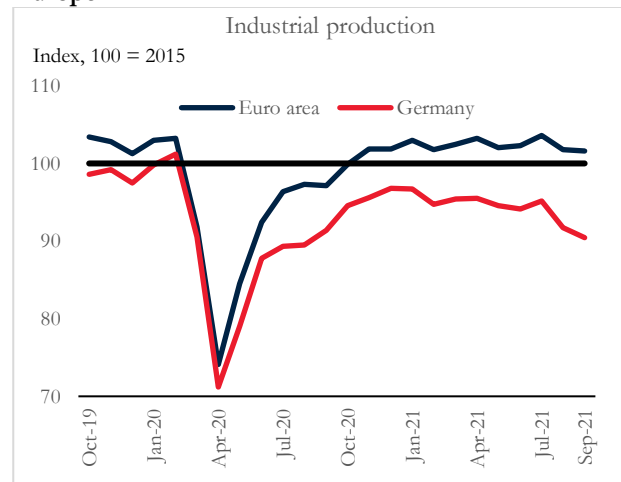
Turkey is likely to benefit from a robust economic recovery in the euro area. The euro area experienced a brisk and resilient economic recovery in 2021. GDP growth bounced back strongly, to an average of 8.9 percent (qoq, saar) in the second and third quarters, following two consecutive quarters of contraction. The rebound in activity reflected a sustained easing of pandemic restrictions amid vaccination progress, allowing for the release of substantial pent-up demand for services. Activity appears to have remained broadly resilient at the start of 2021Q4 despite new headwinds from supply chain disruptions and a steep rise in energy prices. Inflation pressures have increased steadily this year, with headline and energy price inflation reaching 4.1 percent and 23.5 percent (yoy), respectively, in October. Area-wide services and manufacturing PMI indices have declined somewhat but remained well above the 50-point level demarcating expansion in October. Moreover, tourism activity has experienced a steady improvement throughout the year, with euro area hotel occupancy rates more than doubling from April to August. Still, member countries with greater exposure to global supply chains and energy shortages are experiencing notable drags to activity, with industrial production slowing particularly sharply in Germany (Figure 24). Economic momentum going into 2022 could also be further dampened by the recent resurgence in new COVID-19 cases, which have prompted tighter mobility restrictions in some member states.

Figure 23: Financial conditions across EMDE remain tight



Source: Bloomberg; World Bank.
Figure 23: Last observation is November 8, 2021.

Figure 24: Industrial production is slowing down in Europe

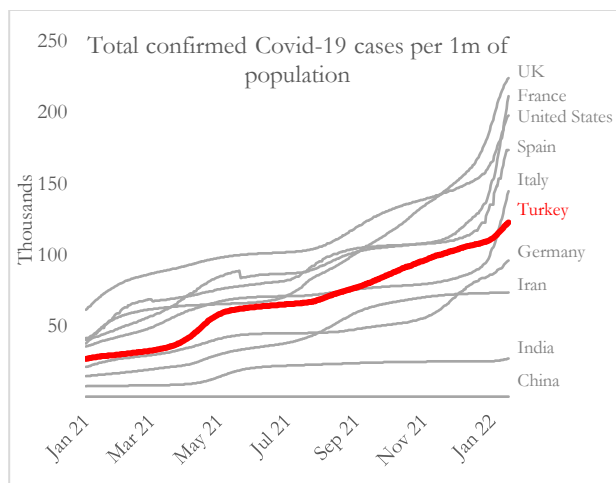


Source: Consensus Economics; Haver Analytics; World Bank.
Figure 24: Excluding construction. Last observation is September 2021.

B. Turkey made significant progress on vaccination rollout but with variation across regions

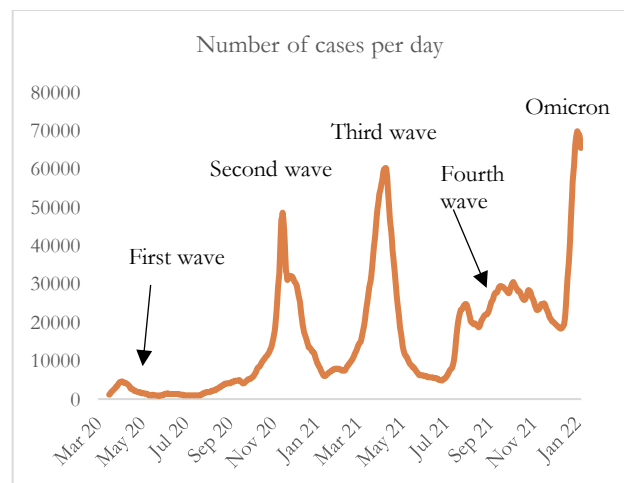
Turkey is now experiencing a fifth wave of COVID-19 infections – driven by the Omicron variant. From early-July 2021, case levels began to accelerate in the east of the country. The wave spread westwards into August with nationwide case numbers averaging around 25,000 per day, considerably lower than the 60,000 cases per day seen in the third wave in May 2021 (Figures 25, Figure 26). This period coincided with a general level of reopening and loosening of restrictions; on July 1, 2021 limitations on public transport and travel between provinces were lifted and quarantine restrictions on arrivals from high-risk countries ended, and on September 5, 2021, schools were fully reopened. However, starting from end-August, Turkey started to be heavily affected by the Delta variant. The latest data as of January 2022 show that cases are again on an upward trend, reaching record level of cases since the beginning of the pandemic. The latest data suggest that a big proportion of reported cases in the latest wave were of the highly infectious Omicron variant. The latest wave has not led to any major restrictions so far.

Figure 25: COVID-19 cases continue to rise globally...



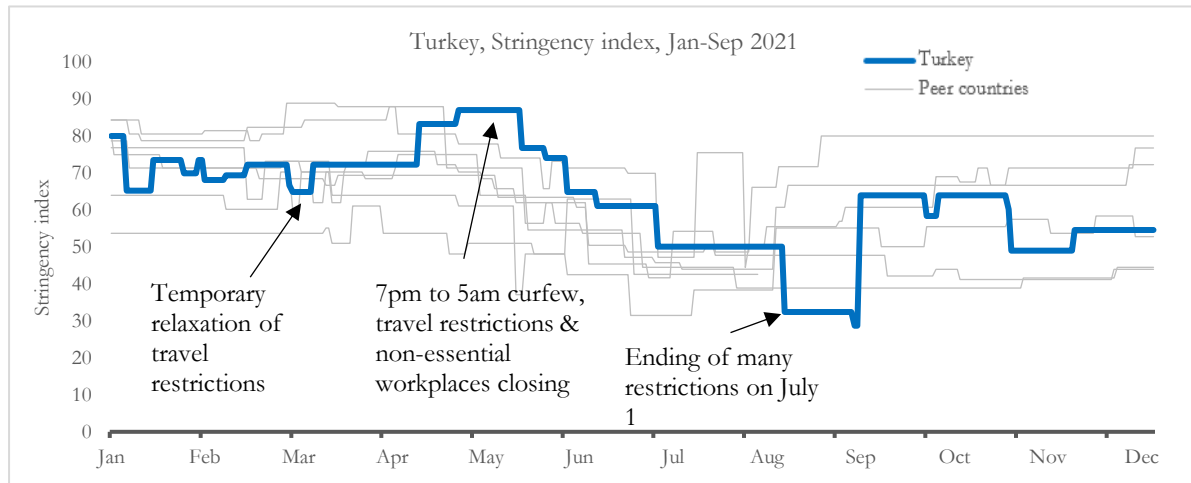
Source: Ministry of Health, Turkey, Our World in Data, World Bank staff calculations.
Note: Cases for Turkey prior to November 26, 2020 are estimated using the methodology described in the April 2021 Turkey Economic Monitor pg4.

Figure 26: ...while Turkey is experiencing the 5th wave



Lockdown restrictions have been fluctuating since the start of 2021, with a downward trend that started in May getting reversed in September. Turkey imposed internal travel restrictions on-and-off between January and July 2021, and officially a stay-at-home order was in place between February and June 2021. Many restrictions were lifted in July and on August 12, 2021. However, from September PCR tests became required for people not fully vaccinated to visit establishments such as concerts, cinemas, theaters, and crowded events, and to use public intercity transport (Figure 27).

Figure 27: There were frequent lockdowns and travel restrictions in the first half of 2021



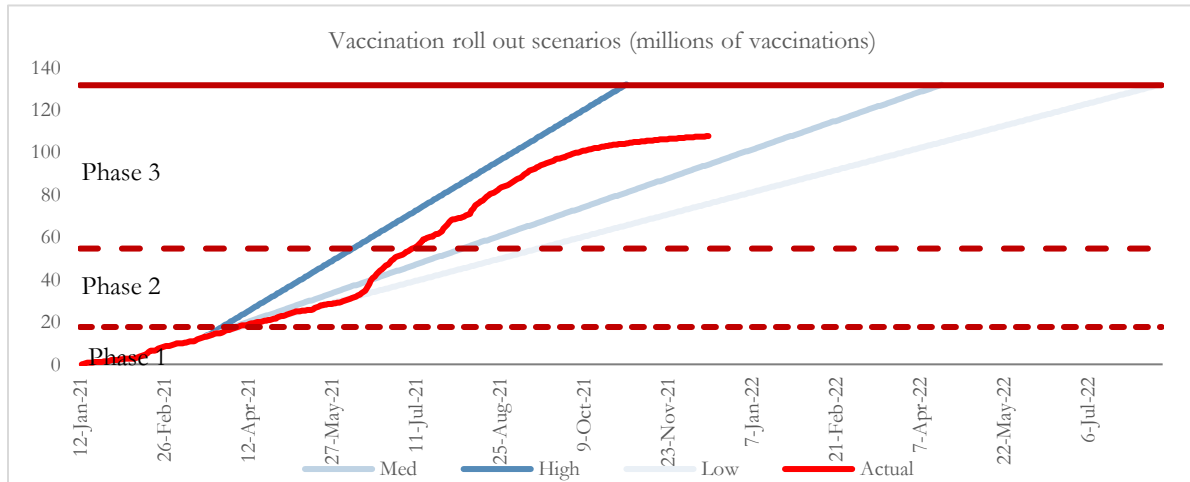
Source: Oxford COVID-19 Government Response Tracker, WB staff calculations.

Note: Recent spike in the stringency index is largely driven by the PCR test requirement for those who did not get vaccinated for the intercity travel which may not have this high stringency impact.

The vaccination program has accelerated. The April 2021 edition of this publication projected three vaccination trajectories (Figure 139 in the report) based on UK/US vaccination rates (high), a steady rate of increase in daily vaccinations (medium), and continuation of the vaccination rate achieved between January and March 2021 (low). In June 2021, the rate of vaccination increased sharply from 240,000 jabs per day between February and May, to 600,000 jabs per day, as deliveries of Pfizer/BioNTech stepped up, and eligibility for vaccinations was gradually broadened. As of September 2021, those aged 12 and over were able to get the jab. This increased rate of vaccination has helped push up Turkey's fully vaccinated adult rate to over 84 percent, with 92 percent of adults receiving at least 1 dose. Around 38 percent of adults have received their booster jabs by January 2022. From September however the daily vaccination rate slowed down significantly, in line with many countries where vaccination drives drop off once rates go above 80 percent of the adult population (Figure 28).

There are some regional variations in vaccination rates. The vaccination rollout has been slower in the east, where in some provinces over 1-in-3 adults were yet to receive their first dose as of mid-September 2021 (Figure 29). The lower take-up in the east reflects both a more dispersed and rural population, where households can less afford the time and the expense to travel to the nearest town to get a jab, and some vaccine hesitancy in the young fueled by rumors circulating on social media. In response there are welcomed efforts being made to 'take the jab to the people' using mobile clinics and other methods to immunize hard-to-reach populations.

Figure 28: The vaccine rollout accelerated in June 2021, but has since slowed



Sources: Ministry of Health, Turkey, Our World in Data, World Bank staff calculations.

Figure 29: The vaccination program has been slower in the east...

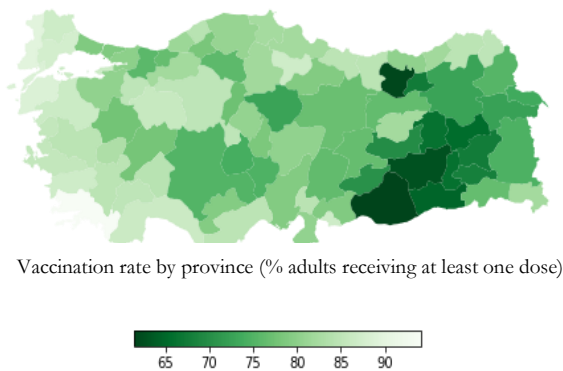
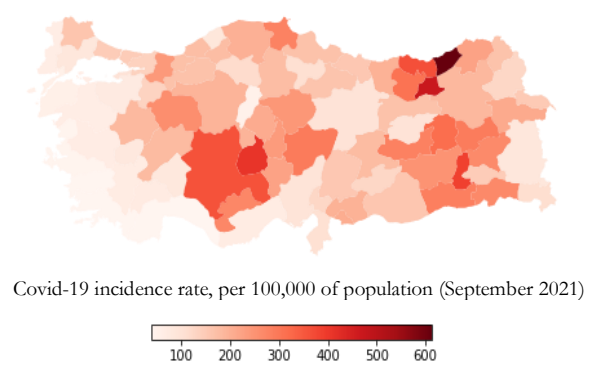


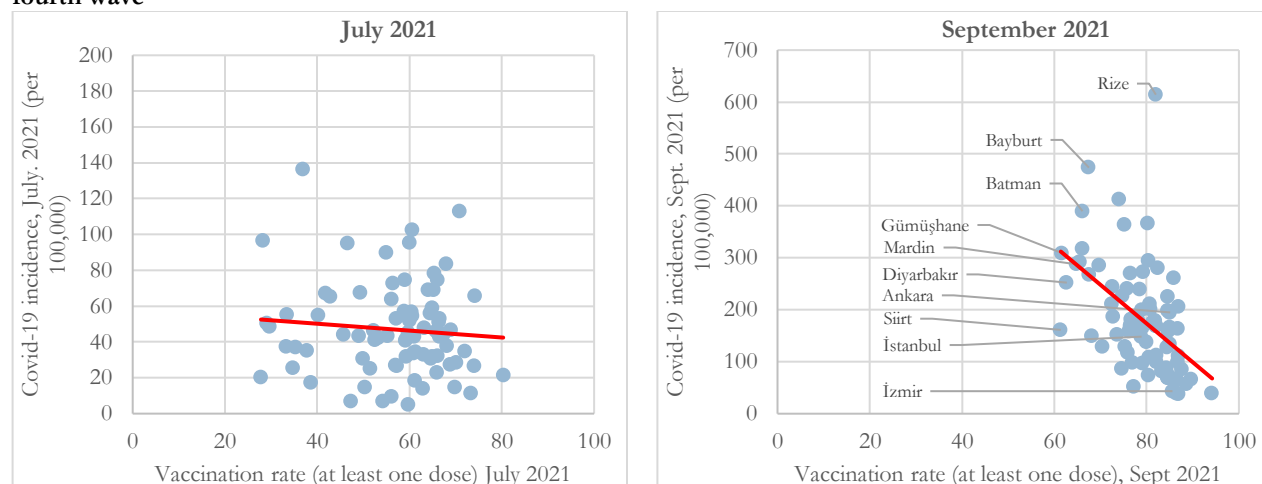
Figure 30:...which has reflected on the COVID-19 incidence rates



Source: Ministry of Health, Turkey. Data from September 14, 2021.

As the fourth wave gathered speed there was a clear correlation between vaccine take-up rates and case levels. In July 2021, when case numbers were low following the third wave and vaccination rates lower, there was no clear relationship between vaccination rates and case levels. However as of early September 2021, and with the emergence of the fourth wave, a clear correlation can be seen at province level between vaccine take-up rates and lower levels of COVID-19 cases (Figure 31). At the time, even though all provinces reported that at least 60 percent of adults have received at least one shot, those with higher vaccination rates, predominantly in the central and western provinces, experienced lower case rates.

Figure 31: Province level vaccination rates had a clear correlation with case numbers at the beginning of the fourth wave



Sources: European Centre for Disease Prevention and Control, Our World in Data, World Bank staff.

Levels of testing have improved and are now comparable to other large European countries. Testing levels have continued to increase, averaging 250 tests per 100,000 people per day in 2021, and peaking at 420 tests per 100,000 people per day (360,000 tests in total per day). European Union countries have been averaging around 800 tests per 100,000 people per day at peak times, although this rate is lower for large countries (Figure 32, Figure 33).

Figure 32: Turkey's testing capacity is increasing...

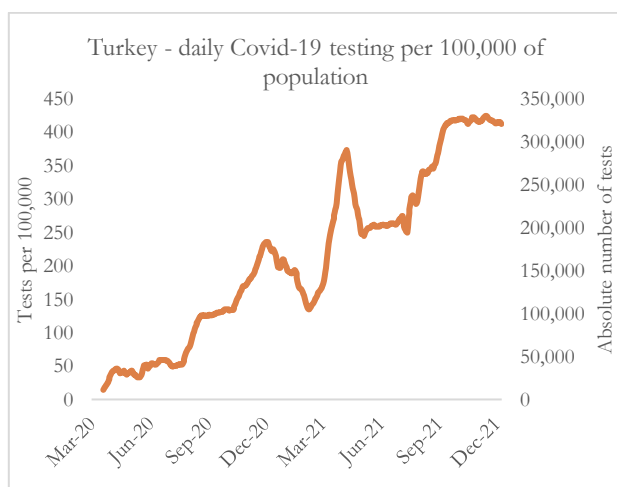
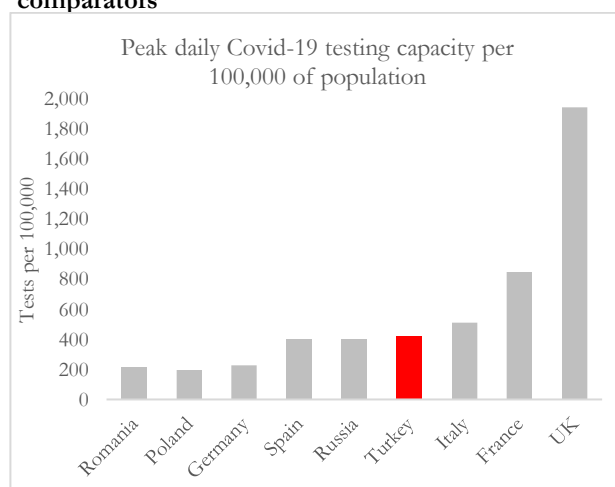


Figure 33: ...but remains slightly below its European comparators

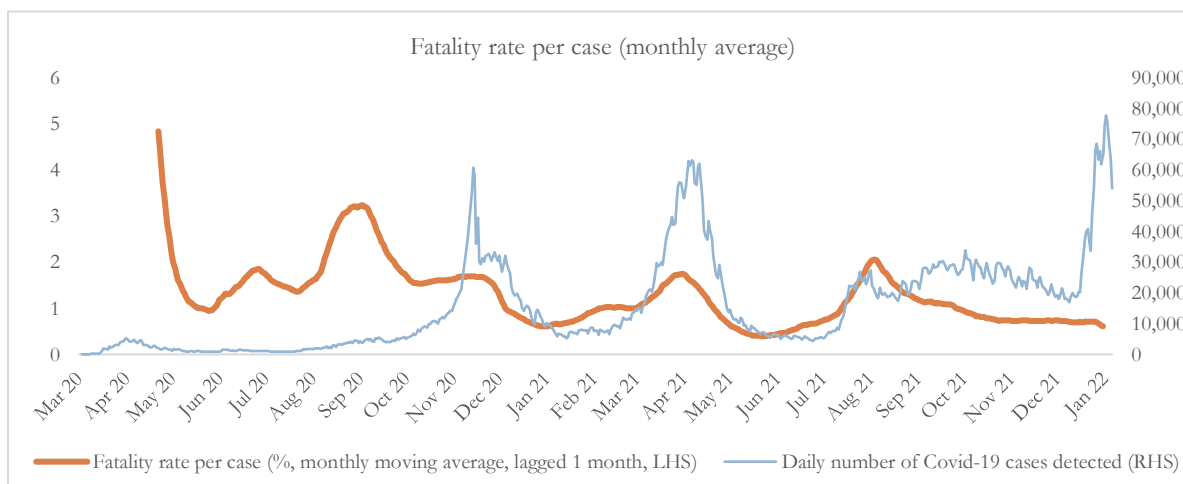


Sources: European Centre for Disease Prevention and Control, Our World in Data, World Bank staff.

The Ministry of Health has reported that in the fourth wave, 90 percent of both hospitalizations and deaths have been for patients who were not fully vaccinated. Similar to other countries with high vaccination rates among the elderly, COVID-19 cases are now most common amongst 15-45 year olds, for whom COVID-19 outcomes are more benign than for older cohorts. Risks still exist however, chiefly for the elderly, for whom vaccination greatly reduces the risks, but does not totally eliminate them. Consequently, the Ministry of Health is now focusing on lowering the spread of the disease through widespread vaccination amongst younger age groups to lower the likelihood of the most at risk groups contracting the disease and suffering poor health outcomes.

The case fatality rate has averaged around 1 percent in 2021 and continued to decline during the Omicron wave. The increase in the fatality rate during the previous peak episodes of COVID-19 waves may reflect the pressure on health systems during the peak periods of COVID-19 outbreaks, as well as a higher number of undetected cases during COVID-19 peaks. However, the fatality rate declined to 0.6 percent in January 2022 while Turkey was experiencing the Omicron variant wave, which may in part be driven by the good vaccination progress and increased immunity. Unlike the Delta variant that was in place in Turkey during the fourth wave, the Omicron variant has a lower fatality rate, and this may also be contributing to Turkey's declining fifth wave fatality rate. However, the evidence behind Turkey's declining fatality rate is not yet conclusive whether this decline is driven by the good vaccination progress or the effectiveness of Omicron variant (Figure 34).

Figure 34: Case-to-Fatality rates increased during COVID-19 peaks except for the latest wave



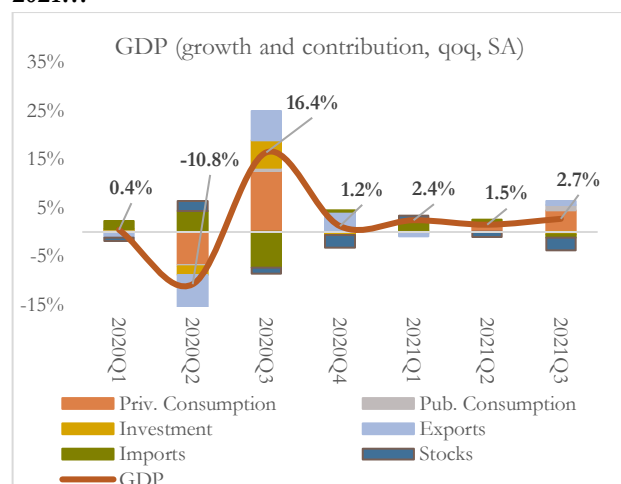
Sources: Ministry of Health, Turkey, World Bank staff calculations.

C. Turkey carried strong growth through 2021

The economy continued its strong performance in the first three quarters of 2021

Economic activity remained strong in the first three quarters of 2021, fueled by strong external and domestic demand. GDP recorded strong growth (2.4 percent, qoq and 7.4 percent yoy) in 2021Q1 (Figures 35 and Figure 36) After five consecutive quarters of negative contribution in 2019Q4-2020Q4, net exports made a positive contribution to growth and domestic demand continued its support though at a slower pace. In 2021Q2, GDP grew by 22 percent year-on-year (1.5 percent qoq)-the second highest among G-20 countries. This is followed by a 2.7 percent qoq GDP growth in 2021Q3, and the economy expanded at a rate well above potential growth which is estimated to have dropped below 4 percent in 2021. Good progress in expanding vaccination coverage allowed pandemic-related restrictions to be relaxed in May and supported a sharp recovery in domestic demand. Private investment (particularly machinery and equipment investment) and consumption of durables have been major contributors to growth, despite the persistently high cost of borrowing and easing of fiscal support. Exports were buoyed by a strong recovery in external demand, currency depreciation, and an opportunity for Turkey to gain market share in the EU as Asian exporters grappled with rising logistic costs and global supply chain constraints. Both industry and services contributed to this strong growth in the first three quarters of 2021 (Figure 37). Whilst the contribution of tourism to the services growth picked up, finance sector's contribution declined with the slowdown in credit momentum (Figure 38).

Figure 35: Economic activity remained robust in 2021...



Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 36: ...with a sizeable positive contribution of net exports to growth

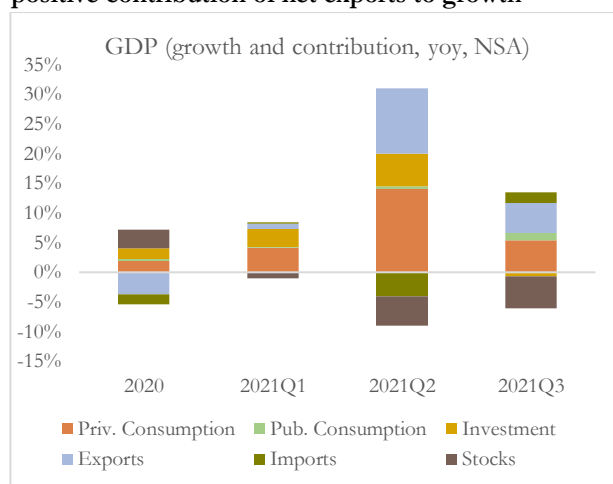
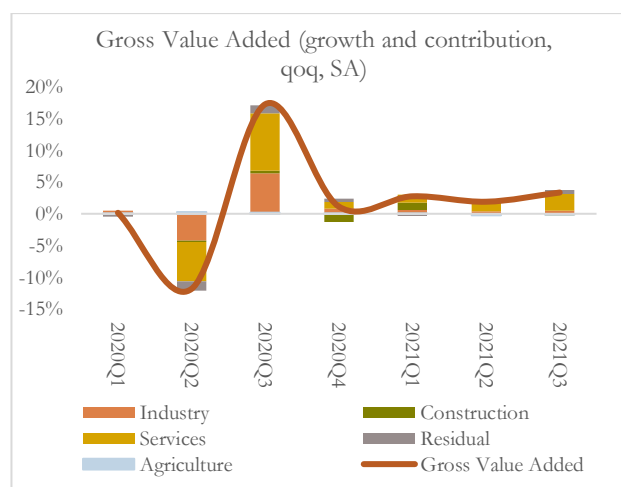
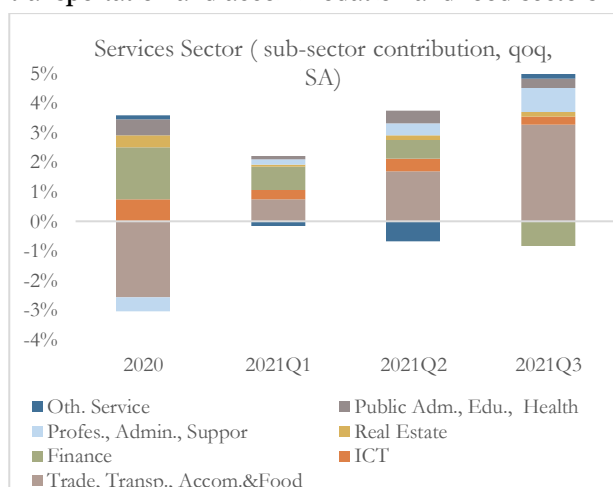


Figure 37: A recovery in services sector picked up...



Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 38: ...largely driven by wholesale trade, transportation and accommodation and food sectors



Manufacturing continued its robust performance in 2021 with the easing of containment measures and supportive external demand. The manufacturing Purchasing Managers' Index (PMI) remained above its crucial level of 50 (indicating expansion) in 2021 (Figure 39), buoyed by the pickup in Turkey's vaccination program, relaxation of pandemic-related restrictions coupled with continued global recovery. Turkey's manufacturing PMI rose to 54 in August 2021, hitting a one-year high, and capacity utilization rates surpassed pre-pandemic levels (Figure 40). The pre-production inventory accumulation of Turkish manufacturers reached its fastest growth since end-2017 to help protect against supply chain delays. The rebound of manufacturing in Euro area and the U.S. was much sharper than the rebound of Turkey's manufacturing. Manufacturing PMI in Euro area in June rose to its highest level since 1997, despite ongoing global supply chain disruptions. Similarly, PMI in the U.S. ticked up to a record high in May. This strong rebound in external demand, particularly in the Euro area, helped Turkish exports to bounce back sharply. The latest data shows that the PMI in the Euro area and the U.S., after peaking in 2021Q2, declined in the second half of 2021. The PMI in Turkey showed a slight decline in 2021Q4.

Figure 39: Turkey's PMI remained comfortably above the benchmark level 50

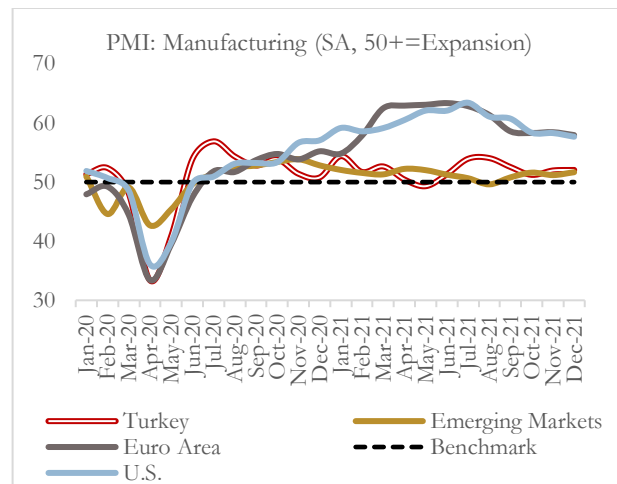
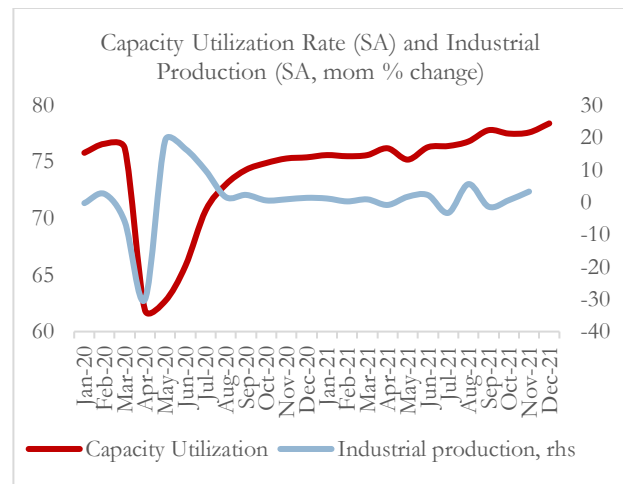


Figure 40: Capacity utilization surpassing pre-pandemic levels



Sources: Haver Analytics, TURKSTAT, CBRT and IHS Markit Economics.

Almost all manufacturing sectors recorded notable output increases. The apparel and leather sector, which was severely hit following the onset of the pandemic, recorded a strong rebound (more than 15 points) in its PMI output in 2021Q3 compared to end-2020 (Figure 41). Most of the sectors recorded output increases and their PMI levels remained above 50 in 2021Q3, thanks to continued external demand support. However, the non-metallic mineral products sector, which had the sharpest rise in input costs, posted a decline in its production, despite rising export orders. Similarly, the land and sea vehicles sector's PMI (output) fell below 50 as the Turkish automotive industry also experienced the global semiconductor shortage. Many large Turkish automotive companies had to temporarily cease their production in the past months due to semiconductor supply disruption. The supplier's delivery time index remained below 50 for all sectors and it lengthened further in recent months. The recent PMI data shows that manufacturing output growth slowed coupled with rising cost pressures and output prices and slowdown in exports orders in 2021Q4. This is more evident in land and sea vehicles, basic metal, machinery, metal, and electronics sectors.

Figure 41: Large exporting sectors, particularly apparel recovered fast

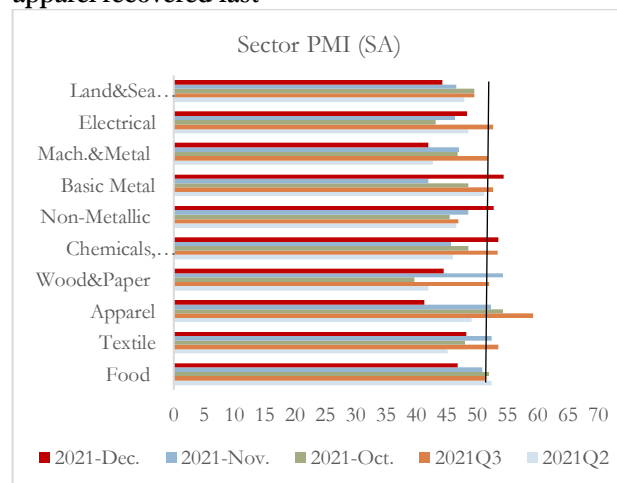
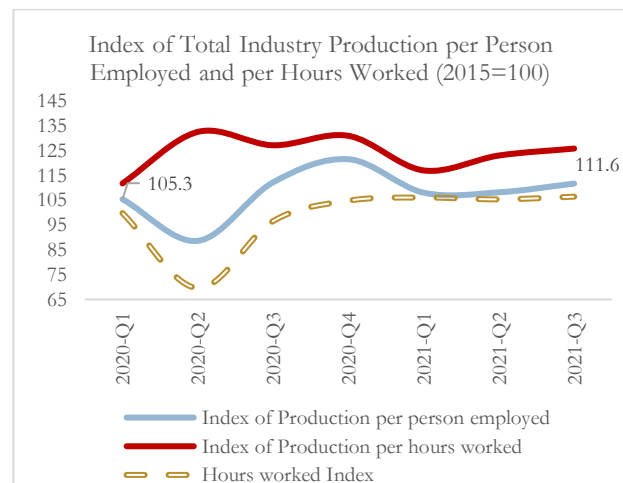


Figure 42: Labor productivity is recovering strongly



Sources: IHS Markit Economics, TURKSTAT, Ministry of Industry and Technology and CBRT.

Labor productivity of the industrial sector is recovering to pre-pandemic levels. Labor productivity in the industry sector, which declined by around 20 percent in 2020Q2, fully recovered this loss in 2021Q2 to reach pre-pandemic levels with the recovery in aggregate demand as the economy bounced back sharply. Industry production per hour worked also returned to its normal levels (Figure 42) as workhours normalized amid the easing of pandemic related restrictions.

The recovery in most of the services sub-sectors gained pace with the reopening process and acceleration in vaccine rollouts in mid-2021. Turnover indices of all services sub-sectors except ICT recorded a contraction in April, as containment measures got tightened. However, starting from mid-May, a gradual normalization process coupled with acceleration in vaccine rollouts led to a quick rebound in most of the services sectors (Figure 43). Reopening of restaurants and cafes and the resumption of some international flights supported the rebound in accommodation and food sectors. Foreign visitor arrivals picked up and reached nearly 4 million in August (corresponds to around 60 percent of tourist arrivals in August 2019) and hotel occupancy rates increased to 71 percent by August (Figure 44).

Figure 43: The recovery in most of the service sub-sectors gained pace

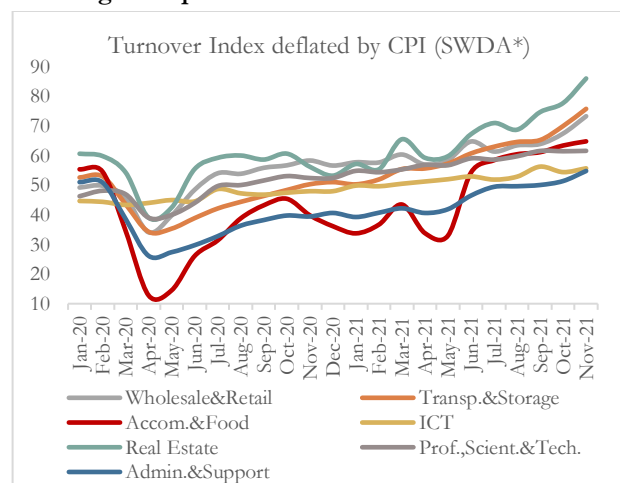
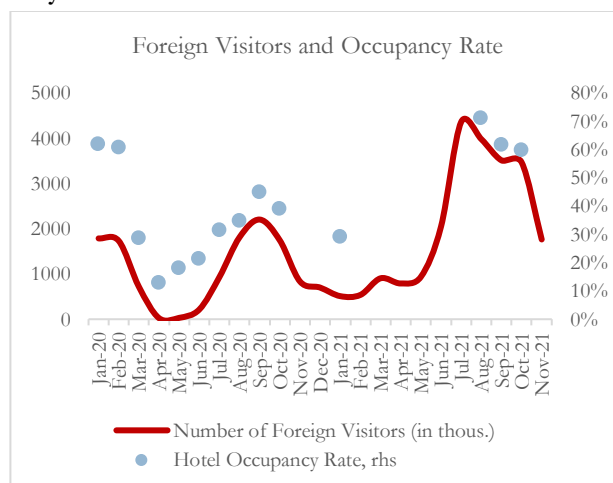


Figure 44: Tourism activity picked up starting from May 2021



Sources: Haver Analytics, TURKSTAT and Hotel Association of Turkey. * Seasonally and working day adjusted.

Confidence in the services sectors surpassed its pre-pandemic levels, but confidence in the construction sector remained relatively low. Following a decline in confidence in early 2021, confidence in retail trade and other services sectors picked up quickly, mainly driven by the improvements in demand (Figure 45). Confidence in the construction sector displayed a declining trend in early 2021. It started to rise again following the relaxation of restrictions in May but still remained at low levels. The construction sector was hit hard by the 2018 currency shock and had contracted for eight straight quarters when the pandemic hit in early 2020. House sales boomed on the back of state bank driven credit expansion in 2020Q2-Q3 (Figure 46), but lost momentum until the last quarter of 2021. The sector has been severely affected by currency depreciation and experienced a sharp rise in production costs in 2021. However, production in agriculture decreased in the third quarter of 2021 compared to the same period of the previous year, as currency depreciation weighed on the cost of production and drought started to have an adverse impact.

Figure 45: Confidence index in construction sector slightly rose, still below 100

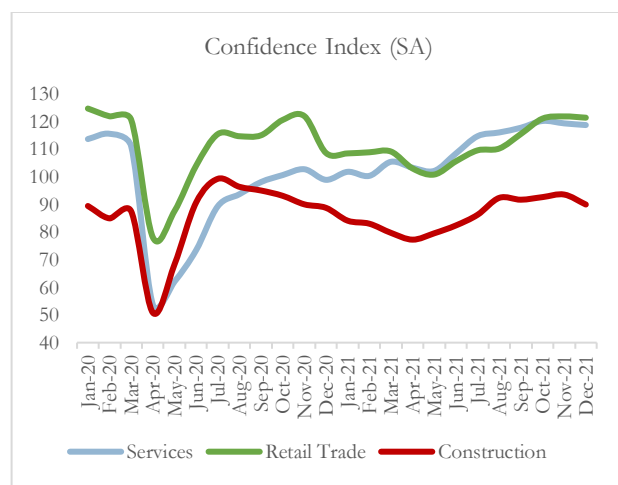
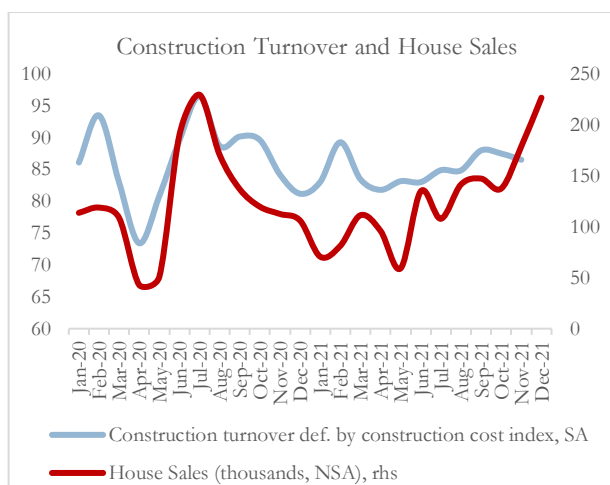


Figure 46: The pace of house sales has moderated in 2021H1 but accelerated recently



Sources: Haver Analytics, TURKSTAT.

Box 1: Real estate sector developments in Turkey

Conditions in the real estate sector can have an impact on the real and financial sector. Following a sharp correction in 2018 and 2019, the property prices in Turkey increased to their historic highs in Turkey in the last two years. This rise was driven by the construction cost increases primarily driven by exchange rate shocks, robust demand conditions in the housing market, and declined countrywide housing unit production by the construction firms after 2018 financial shock. The changes in house prices potentially have a direct impact on households' wealth and consumption; housing developers' and suppliers' profits and solvency; and the health of the financial sector.

Turkey's housing market was badly hit by the August 2018 currency shock. In the aftermath of the shock in 2018, and a strong monetary tightening afterwards led to a period of supply and price corrections in the construction sector in 2019. The construction sector firms have been negatively affected, NPLs climbed significantly, growth in house sales declined, and year-on-year house price changes declined to historic lows in May 2019, both in nominal and real terms.

These developments led the authorities to provide a big push to the housing sector during the pandemic in 2020. With declining cost of funding, the public banks introduced well-advantaged mortgage programs in the third quarter of 2020, which led to more than 590.000 units of houses to be sold in 2020Q3, the highest sales amount in a quarter, and house prices to rise fast again (Figure 47). The mortgage-backed house sales in total house sales in Turkey are quite sensitive to the mortgage rates and it dropped from the peak of 55 percent in August 2020 to 20 percent in December 2021 (Figure 48, Figure 49).

Together with declining unsold housing unit stocks and rising construction costs, house price increases reached historic highs in 2021. The housing developers who had experienced a sharp cost increase in 2018, driven by the exchange rate shock, had the opportunity to reflect the cost increases into the sales prices starting from the end of 2019 thanks to robust demand (Figure 47). Recently, construction cost increases reached another historic high of 48.9 percent in November 2021, which is expected to generate further rises in house prices in the future. As of October 2021, the annual nominal house price increase recently reached the historic high level of 40 percent, and 20.1 percent in real terms (yoy, deflated with CPI) (Figure 50). Furthermore, the top holiday destinations in Turkey such as Aydin and Antalya have experienced the highest nominal price increases in 2020 and 2021, more than 52 percent on a year-on-year basis as of October 2021, while house prices in the major provinces of Turkey such as Istanbul, Ankara, and Izmir went up by 38.3 percent on average over the same period (Figure 51). This differential in house price increases has become obvious during the pandemic since the top rises has taken place in

summer house and vacation destinations with less human activity and private houses where there has been an increasing interest of both locals and foreigners especially after the pandemic.

Foreign interest for Turkey's property market has increased thanks to the citizenship opportunity. There has been an increasing foreign interest for the real estate sector in Turkey, and in particular from the Middle Eastern countries, especially after the introduction of the citizenship opportunity with a \$250,000-worth house purchase in September 2018, which has led to an increase in the share of foreigners for house purchases in Turkey from 2 percent on average prior to 2018 to 4 percent by 2021 (Figure 52).

Although Turkey has experienced the highest house price increases globally, the price-to-rent ratio does not signal asset price bubble issues. Globally, Turkey has experienced the highest house price increases in 2020Q3 on year-on-year basis in real terms (Figure 53). Since 2015, house prices went up by 18.2 percent more than the rent prices in Turkey, which is close to the global and EU average, pointing that Turkey's housing markets are not extremely overvalued (Figure 54).

Construction permits show signs of recovery for housing unit production in the near future. The construction permits granted to buildings increased from 81,000 units in September 2020 to 131,000 in September 2021. However, recent currency volatility has been impacting the housing developers since the construction costs are rising rapidly and may delay the completion of the house projects unless the cost increases are reflected to the house prices (Figure 55). The stabilization in the number of issued occupancy permits since May 2020 confirms that the construction sector is struggling to finish the construction as planned.

High levels of non-performing loans in the construction sector raises concerns over solvency problems in the sector and has potential to spillover to the rest of the economy. Although the NPLs for mortgages is very low at 0.3 percent as of July 2021, the NPLs of the construction sector, which started to rise sharply from 3.2 percent in August 2018 and peaked at 11.2 percent in January 2020, it was at 9.5 percent as of July 2021, posing solvency and financial stability risks going forward (Figure 56).

Figure 47: House sales climbed in 2020Q3 with the public banks' mortgage campaign

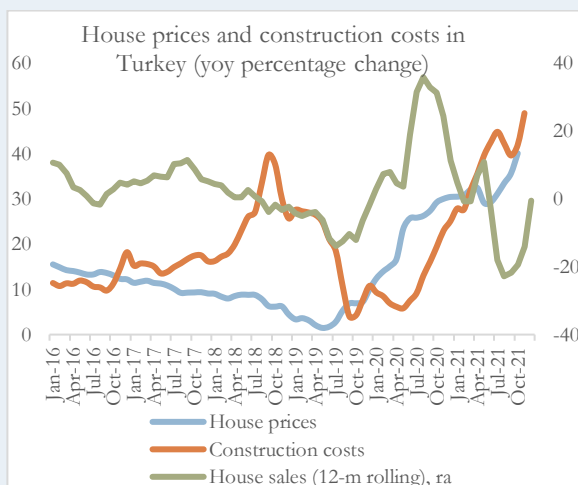


Figure 48: House sales per day and mortgage rates are highly correlated

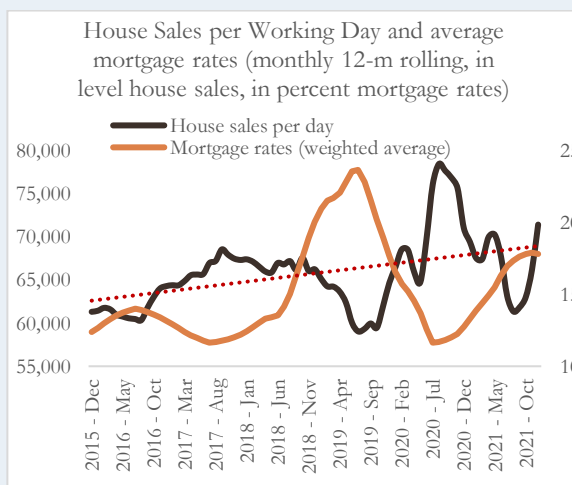


Figure 49: Share of mortgage-backed sales recently declined due to high mortgage rates

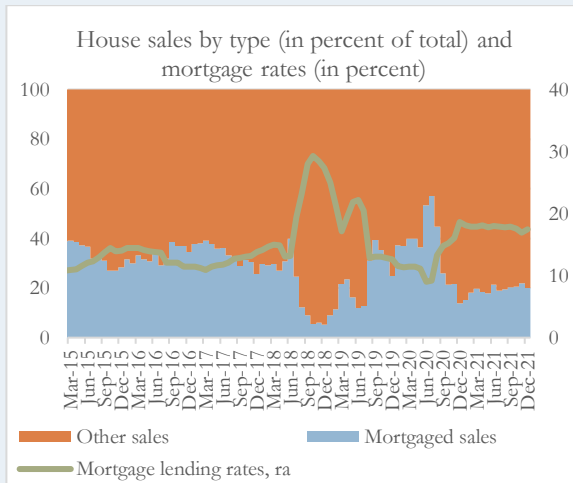


Figure 51: Prices went up across Turkey, Mediterranean provinces positively diverged

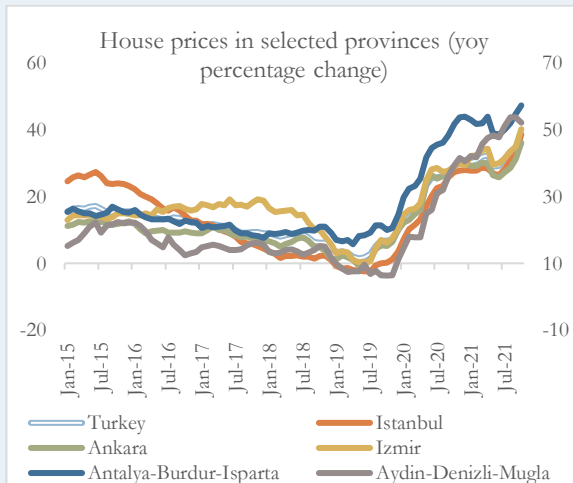


Figure 53: Although Turkey was the top country with the highest house price increases...

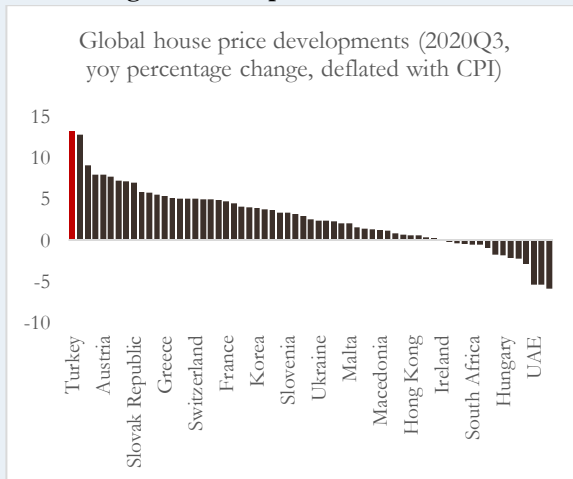


Figure 50: House price increases reached historic highs in both nominal and real terms recently

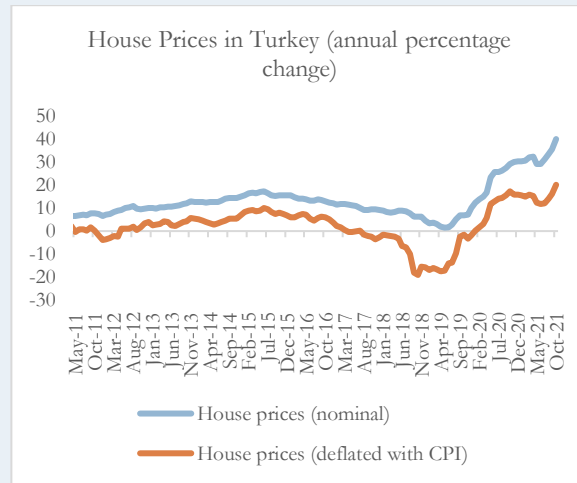


Figure 52: Foreign interest has been on a rising trend due to the citizenship opportunity

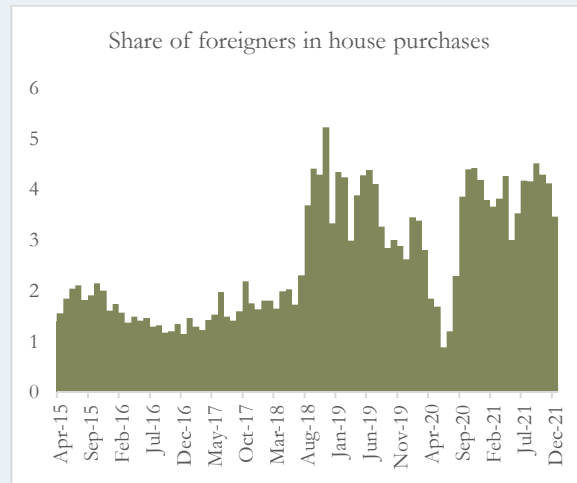


Figure 54: ...price-to-income metrics do not indicate a significant overvaluation

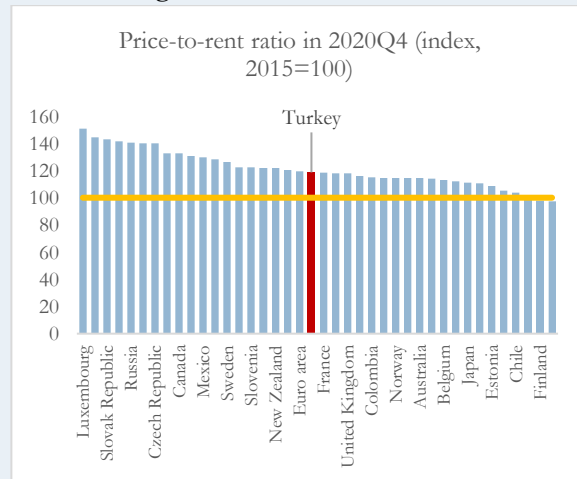


Figure 55: Construction permits started to pick up, but occupancy permits remain stable

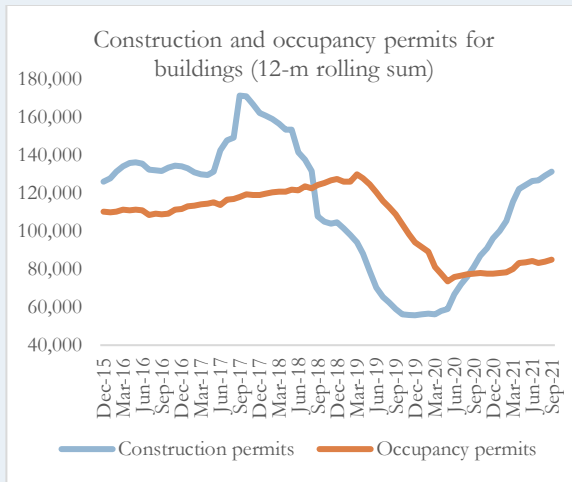
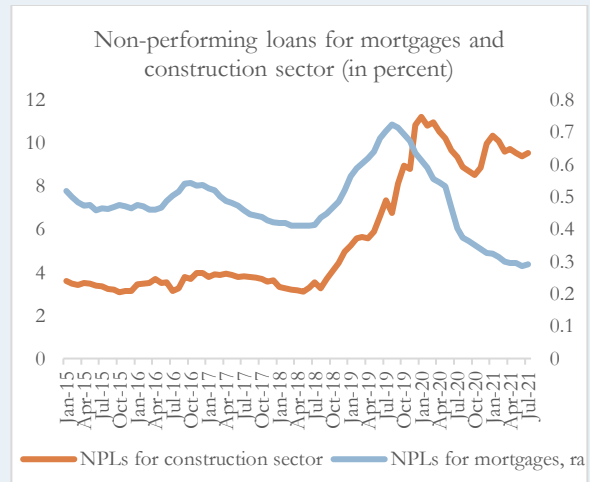


Figure 56: NPLs of construction sector pose risks to financial stability while mortgage NPLs remain low



Sources: TURKSTAT, CBRT, IMF Global Housing Watch, BRSA, Haver Analytics, Turkey Data Monitor, WB Staff calculations.

Turkey's external balance improved, supported by both goods and services exports

Improved net goods exports and services trade helped improve the current account balances in 2021.

The current account balance improved by \$21.3 billion in January-November 2021 compared to the same period of 2020 and posted a \$10.8 billion deficit thanks to a decline in the goods trade deficit and a pickup in services trade (Figure 57). The decline in the trade deficit accounted for almost half of the improvement in the current account balance in this period, despite the rising energy bill. Strong merchandise export growth helped improve the trade deficit, as did a lower gold import (Figure 58). The services balance, which accounted for the other half of the improvement in the current account balance, was supported by the recovery in tourism and transportation.

Figure 57: Current account balances are improving thanks to rising tourism revenues...

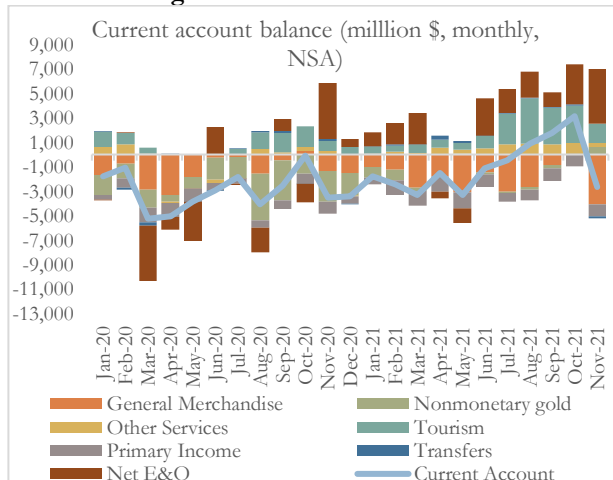
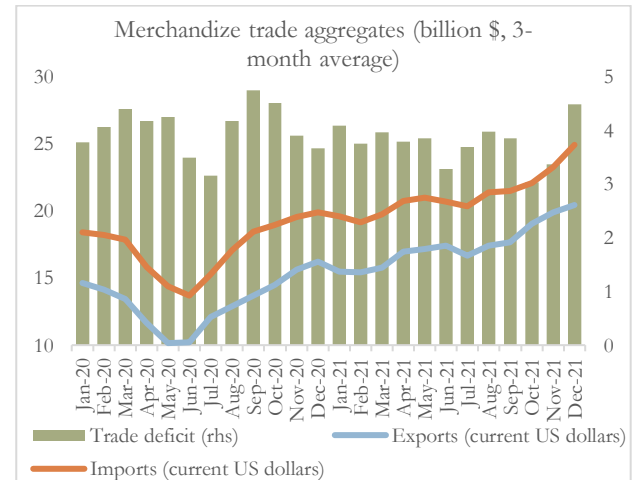


Figure 58:...and narrowing trade deficit



Source: Haver Analytics, CBRT.

Goods export growth was broad based, benefiting from global supply chain disruptions

Turkey's merchandise exports have been recovering since June 2020. The steady and robust recovery in merchandise exports since June 2020 has carried on throughout 2021. Exports were 43 percent higher than the 2019 average as of November 2021 (Figure 59). As a result of the strong export performance, the trade deficit narrowed in 2021 despite a rising energy bill. Turkey's share in global exports passed 1 percent for the first time in 2021Q2 on a 4-quarter rolling basis (Figures 60).

Figure 59: Turkey's exports surpassed pre-pandemic levels...

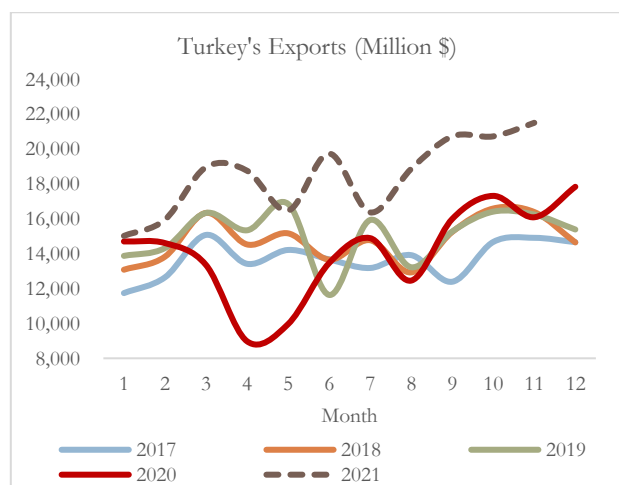


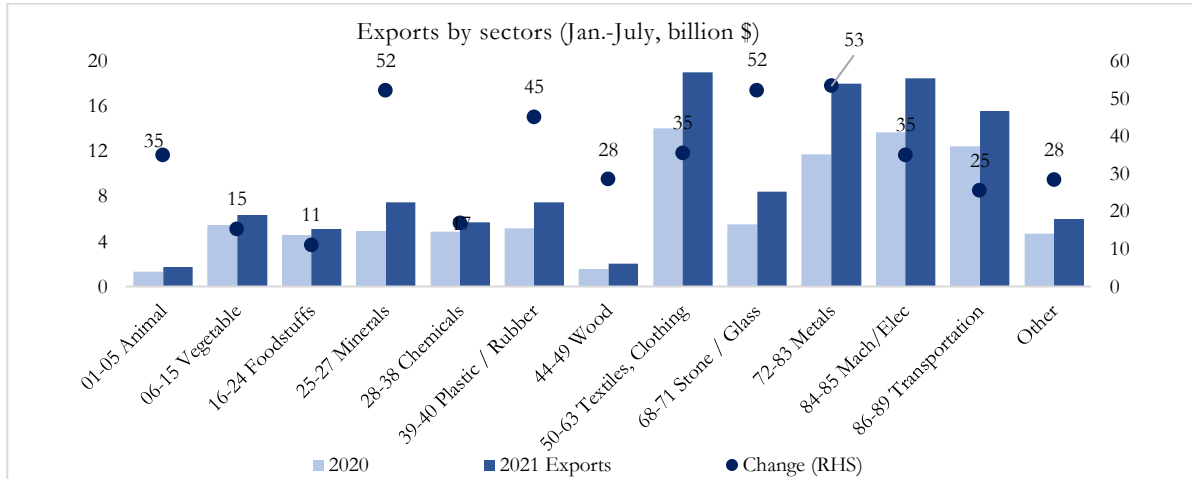
Figure 60: ...and its share in global exports surged



Sources: Haver Analytics, TURKSTAT, World Bank Trade Watch, WB Staff calculations.

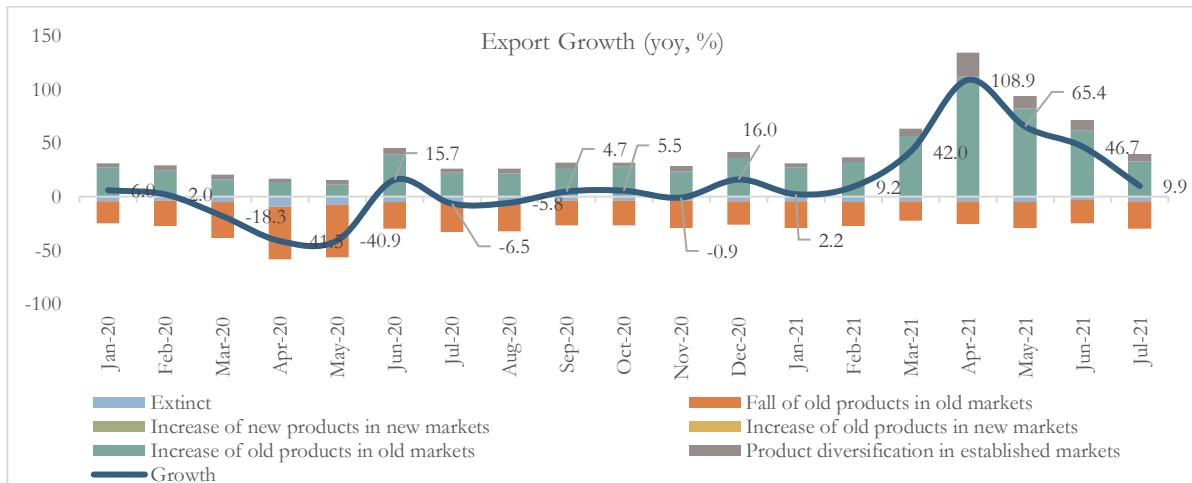
Exports of textiles and clothing, machinery and electronics, and metals increased by more than 35 percent in January-July period of 2021 compared to the same period of 2020 (Figure 61). Textile and clothing accounted for 16 percent of exports in January-July period of 2021 (the highest of any product category), while machinery and electronics as well as metals accounted for 15 percent of exports each. Another important export industry that expanded is transportation which accounted for 13 percent of exports in January-July period of 2021 and increased by 25 percent compared to the same period of 2020. There are no industries for which exports contracted compared to the previous year. Exports of foodstuffs, the sector with the lowest export performance, increased by 11 percent year-on-year. Figure 62 shows that export growth was mainly driven by an expansion in exports of existing country-product lines (i.e., intensive margin of trade) with a smaller contribution of exports of existing products to new destinations (i.e., product diversification in established markets).

Figure 61: Industrial exports rebounded strongly



Sources: TURKSTAT, WB Staff estimates.

Figure 62: But export growth has been driven by the intensive margin



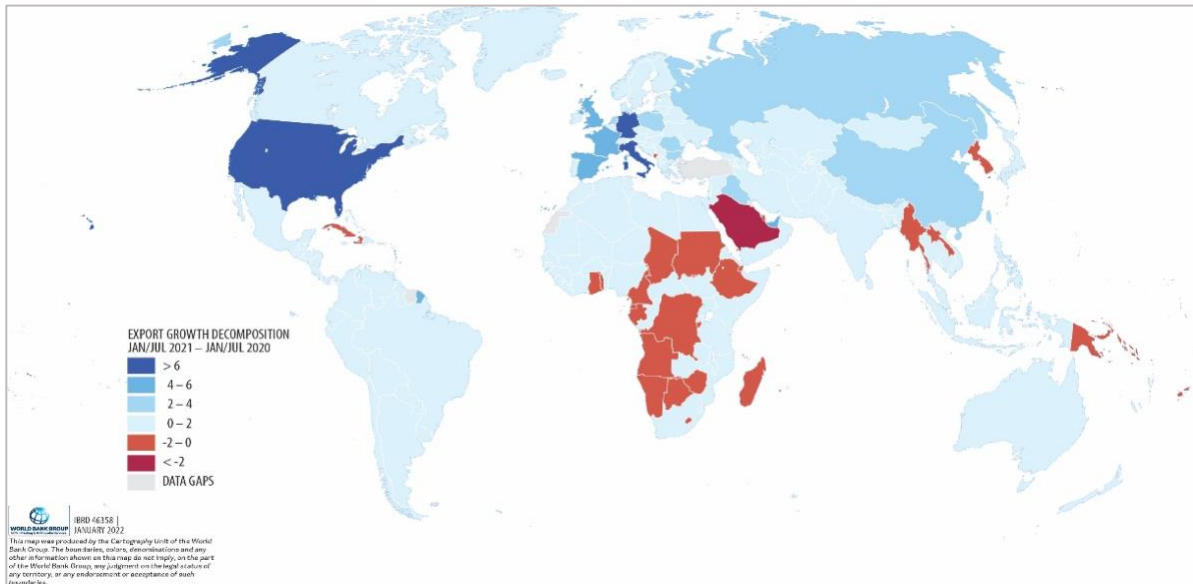
Sources: TURKSTAT, WB Staff estimates.

Note: The analysis is based on disaggregated exports data (4 digit HS classification).

Export growth in 2021 was driven by exports to the United States, Germany, Italy and the United Arab Emirates, which accounted for 27 percent of export growth (Figure 63). The European Union is Turkey's most important trading partner and was the largest contributor to export changes over the 2020-21 period (Figure 64). The United Kingdom, Spain, and France are other important trading partners that contributed positively to export growth. Middle East and North Africa is the second most important region for Turkey's recent export growth. The average contribution of the region to overall export growth has been around 10 percent during the March-July 2021 period.

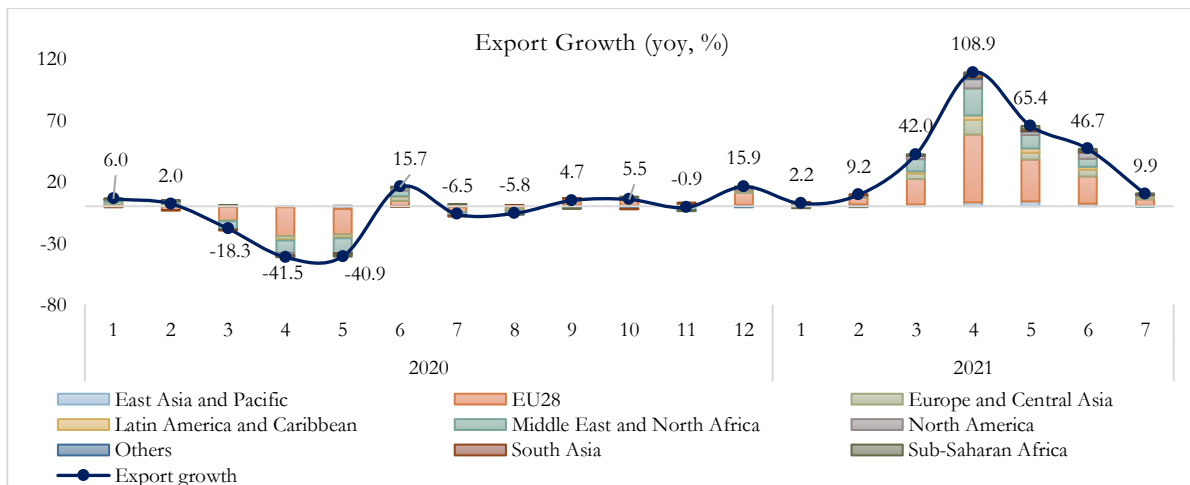
Figure 63: Export growth was mainly driven by Germany, UAE, USA, UK, and Italy...

Export Growth Decomposition, Jan/July 2021 – Jan/July 2020



Sources: TURKSTAT, WB Staff estimates.

Figure 64:...EU 28 countries have been the main driver of past export slumps and recoveries



Sources: TURKSTAT, WB Staff estimates.

The COVID-19 pandemic has disrupted global maritime supply chains

Global shipping costs have spiked to record levels due to sharp recovery in demand and shipping capacity constraints. Shipping costs have been growing since the last quarter of 2020, as the global economy bounced back from the pandemic and supply chains clogged up. Companies have experienced significant shipping delays and the suppliers' delivery times lengthened at near record pace in many countries, particularly in advanced economies (Figure 66). It costs over seven times more to ship a container from China to Europe in 2021 than it did in early 2020 (Figure 65).

Figure 65: Shipping rates are at multi-year highs

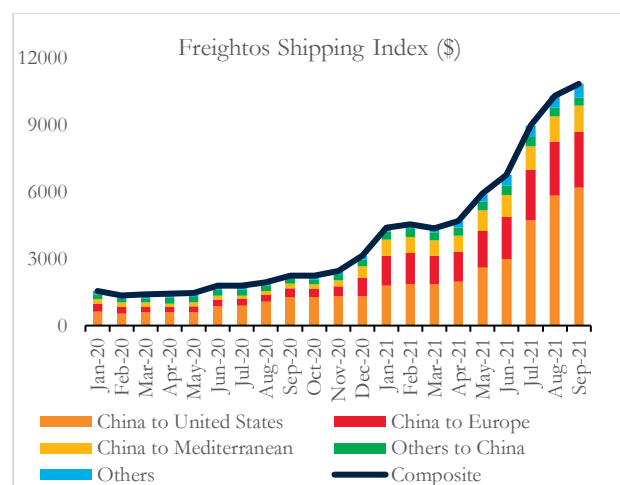


Figure 67: Since the beginning of the pandemic the global shipping reliability dropped dramatically...

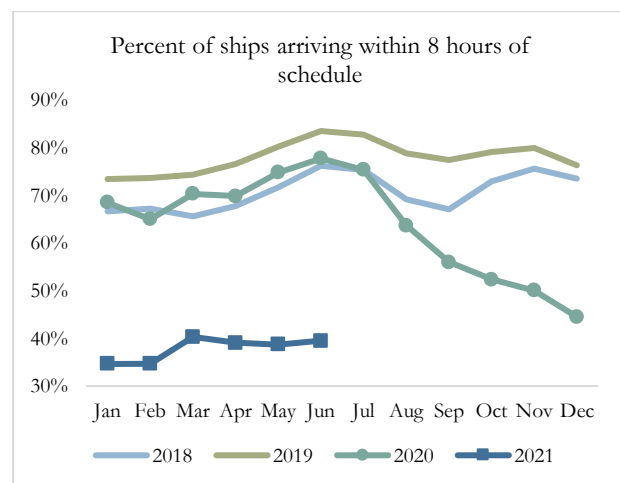


Figure 66: Suppliers' delivery time lengthened at near record pace

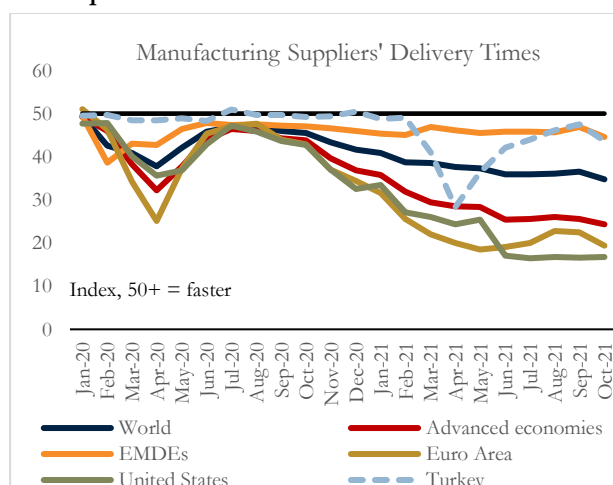
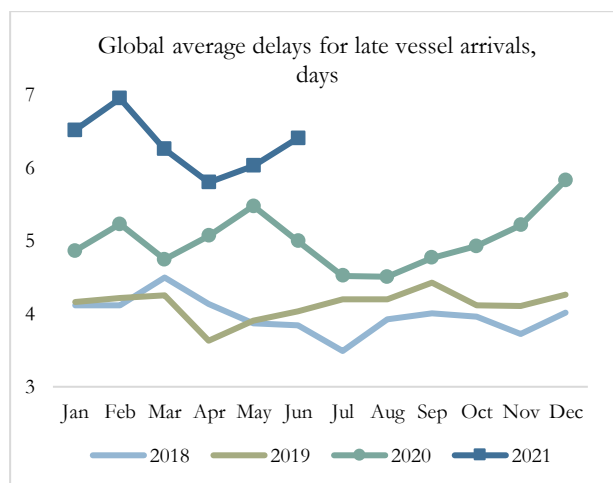


Figure 68: ...and average delays increased for late vessel arrivals



Source: Bloomberg, harperpetersen.com, Haver Analytics, HIS Markit, Sea-Intelligence, GLP report issue 119, WB staff calculations.

The reliability of sea transport has deteriorated significantly. Figure 67 shows the deterioration in the global schedule reliability since the beginning of the pandemic. The percentage of vessels arriving within 8 hours of schedule decreased from an average of 75 percent in the second quarter of 2020 to less than 40 percent in the second quarter of 2021. This deterioration in reliability was accompanied by an increase in the average delays for late vessel arrivals, which increased by one day in the second of quarter of 2021 compared to the same period in 2020 (Figure 68).

Most of Turkish exports are shipped by sea, especially the heavy products. The share of export value shipped by sea was around 60 percent in 2021 (Figure 69). As sea transport reliability decreased, Turkish exporters did not shift to an alternative mode of transport to ship their goods. Figure 70 shows that over 80 percent of export volumes are shipped by sea and it confirms that the share remained relatively stable over the recent period. Industries rely on maritime transport differently. For instance, on average, over 80 percent of exports of minerals rely on maritime shipping, while animals are mainly exported by road. The share of containerized exports of total Turkish exports stands at around 30 percent.

Figure 69: Most of Turkey's exports are shipped by sea...

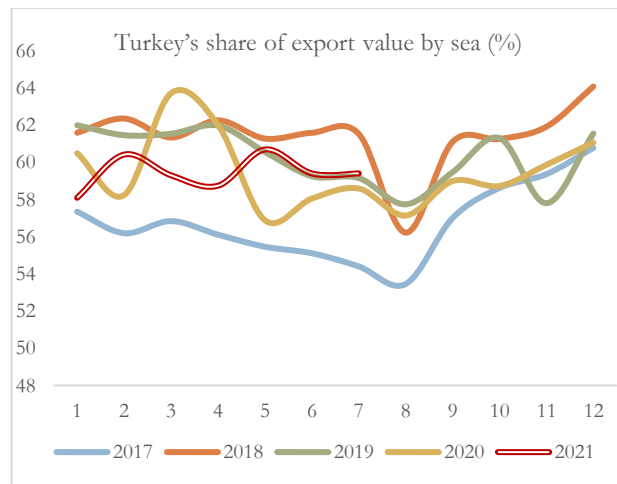
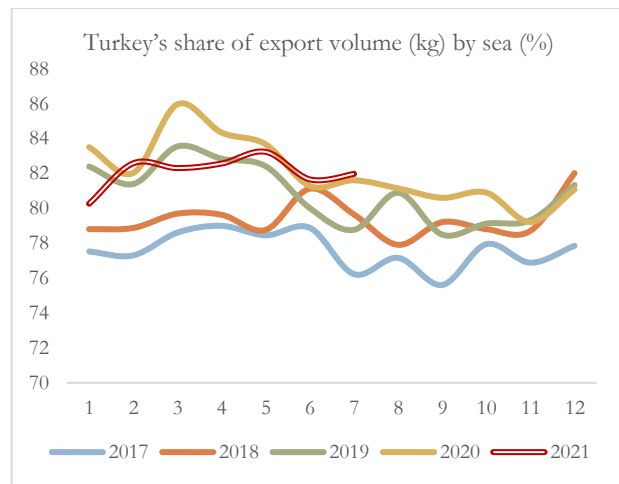


Figure 70: ... especially heavier products



Source: TURKSTAT, WB Staff estimates.

The disruption has benefitted Turkey's merchandise exports

A regression analysis suggests that Turkey's exports benefitted from the deterioration of global shipping reliability. On average, a 10 percentage points decrease in shipping reliability increased Turkey's exports by around 5 percent (Box 2). The analysis suggests that the deterioration of shipping reliability had a strong positive effect on products that were relying on maritime, rail, and road transport, while exports by air and other modes of transport were not affected. For instance, exports of auto parts, which are exported mainly by sea, and motorcycles, which are exported by road, benefitted from the decrease in shipping reliability. This could be explained by European multinationals sourcing more intensively from Turkey, instead of Asia, as shipping reliability increases over smaller distances, and freight prices are lower.

Turkey benefitted by expanding exports to geographically close countries. In times of uncertainty about shipping delivery times, Turkey's proximity and preferential access to the European Union provides the country with a competitive edge over more distant competitors. Figure 71 and Figure 72 show that as shipping reliability decreased, Turkey expanded exports more to geographically closer destinations than those far away. Exports to nearby countries such as Bulgaria and Greece are estimated to have increased by around 15 percent in terms of export value and 12 percent for volumes. If European multinationals continue to rely on the just-in-time production method, which depend on lean inventories and a seamless flow of goods, Turkey might be able to attract some investment by firms trying to move closer to Europe.

Box 2: Sea Transport Reliability and its impact on Turkey's Exports

How did global shipping reliability affect Turkish exports? To answer this question, we use a simple regression analysis and quantify the effects of shipping reliability on product-level exports by exploiting the time variation in the data. We then explore product characteristics, namely the mode of transport intensities based on the pre-shock period, to better understand the mechanisms at work.

The main variable of interest is the lag of shipping reliability, which measures the percentage of ships arriving within 8 hours of schedule. The variable is constructed by Sea-Intelligence and it is based on data on more than 12,000 vessel arrivals across all deep-sea liner services in the World. To identify the impact of reliability on products that rely differently on diverse modes of transport, we use 2017 data on export volumes to construct indices transport intensities at the product level.

Results in Table 1 suggest that a 10 percentage points decrease in shipping reliability increased exports by around 5 percent (columns 1-2 and 5-6). Decreases in shipping reliability had a strong impact on exports of products that are usually predominantly exported by railway (columns 3-4 and 7-8). The analysis shows that deterioration of shipping reliability also boosted Turkey's exports of goods exported by road as well those exported by sea. There is no statistically significant evidence that products that are exported by air and other modes of transport react to changes in shipping reliability.

Table 1: Sea Transport Reliability and Turkey's Exports

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log of Exports (value)				Log of Exports (volume)			
Lag of Reliability	0.513*** (0.065)	0.561*** (0.061)	-	-	0.432*** (0.070)	0.480*** (0.066)	-	-
(Lag of Reliability) x (Sea Intensity)			0.592*** (0.147)	0.632*** (0.149)			0.487*** (0.160)	0.549*** (0.163)
(Lag of Reliability) x (Rail Intensity)			-1.163* (0.672)	-1.551** (0.705)			1.951*** (0.693)	2.365*** (0.732)
(Lag of Reliability) x (Road Intensity)			-0.427** (0.182)	-0.466** (0.186)			-0.291 (0.195)	-0.343* (0.202)
(Lag of Reliability) x (Air Intensity)			-0.176 (0.627)	-0.455 (0.722)			-0.926 (0.566)	-0.841 (0.693)
(Lag of Reliability) x (Other Intensity)			-3.440 (2.271)	-3.011 (2.144)			-1.776 (2.155)	-1.612 (1.970)
Observations	44,483	43,962	44,387	43,918	44,443	43,922	44,347	43,878
R-squared	0.909	0.938	0.908	0.938	0.924	0.949	0.924	0.949
Product FE	YES	YES	YES	YES	YES	YES	YES	YES
Month FE	YES	YES	YES	YES	YES	YES	YES	YES
Product-Month	NO	YES	NO	YES	NO	YES	NO	YES

*** p<0.01, ** p<0.05, * p<0.1

Note: Reliability of shipping is measured as a percent of ships arriving within 8 hours of schedule. Robust standard errors, clustered at the product level, are in parentheses. Product HS 4 transport intensities are equal to the 2017 share of export volumes exported by each mode of transport based on Turkey customs data. Product FE are HS 4-digit products fixed effects, month FE are month of the year fixed effects (e.g., seasonality), and product-month FE are product and month of the year fixed effects (e.g., product level seasonality). The sample period is February 2018-May 2021.

Source: WB Staff calculations.

Figure 71: Turkey benefitted from the decrease in shipping reliability by expanding exports to close countries...

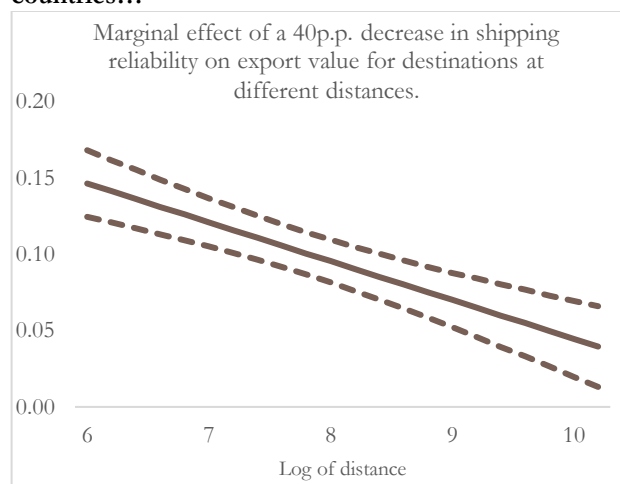
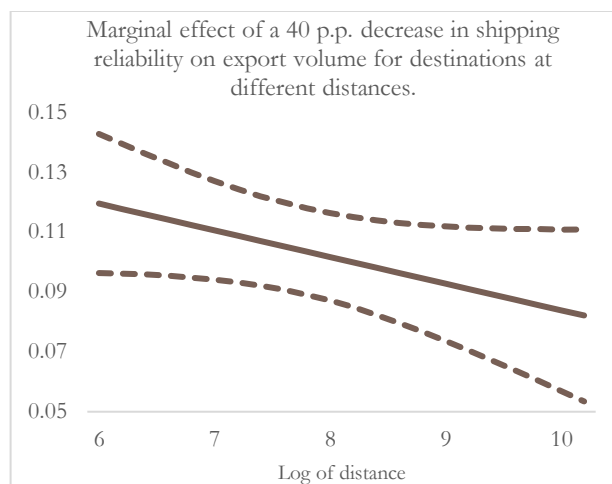


Figure 72: ... with increases ranging between 5 and 15 percent for export value and volume



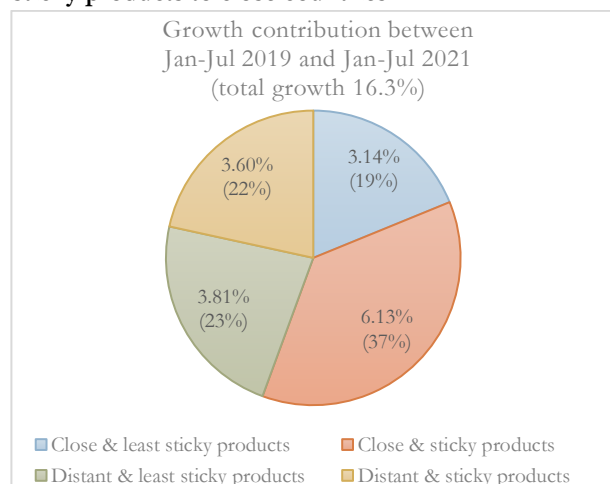
Source: TURKSTAT, World Bank staff estimates.

Note: The figures plot the sum of the coefficients of the lag of the reliability index and the interaction term between that variable and the log of distance obtained from a regression on the log of Turkey's exports of HS 4-digit product to different destination markets, which includes controls for product-destination and destination-product-month of the year fixed effects. The 95 percent confidence intervals use robust standard errors, clustered at the product-time level.

Turkey has increased its market share in the European Union of textile and clothing, agricultural and food, and plastic and wood products 2021 (Table 2). The expansion in textile and clothing, equal to an increase in market share of 1.5 percentage points, was accompanied by a decrease in market share of East and South Asia. China, a large exporter of textile, also increased its market share in the first half of 2021 compared to the same period in 2019, despite the higher shipping costs. Turkey's small expansion in market share of agricultural and food products, as well as plastic and wood products, is not matched by a clear decrease in imports from Asian economies, which suggest that this increase is probably unrelated to the turmoil in the shipping industry. Overall, the sectors in which Turkey expanded its market share do not appear to require large investments or to be particularly complex, such as in transportations and electronics, which could suggest that some of these market gains might be temporary.

Export growth between January-July 2019 and January-July 2021, when shipping reliability decreased, was mainly driven by exports of relationship-specific products to geographically close countries (Figure 73). Industrial chemical, pharmaceutical, and mineral products are among the products with the highest values of relationship stickiness. Since this type of goods are highly differentiated and often customized, they tend to be characterized by long-lasting relationships between firms and their clients (Martin, Mejean, and Parenti, 2021). Figure 73 shows that 37 percent of Turkey's growth between

Figure 73: Turkey increased exports of relationship sticky products to close countries²



Source: TURKSTAT, WB Staff estimates.

² The figure plots Turkey's exports by geographic distance, close (distant) countries are those with distance below (above) the median, and by products with different levels of relationship stickiness (Martin, Mejean, and Parenti, 2021). A higher degree of stickiness implies a lower probability of switching and longer firm-to-firm trade relationships.

January-July of 2019 and January-July of 2021 was in relationship-specific products. As these goods are characterized by a combination of high switching costs, relationship-specific sunk investments, information asymmetries, or informational frictions, it is likely that these export gains will be preserved when shipping reliability returns to pre-pandemic levels. On the other hand, increases in exports of least sticky products to close countries are likely to be temporary as these are, for instance, non-differentiated primary goods (such as ferro-alloys) or capital goods that are purchased infrequently, which will be sourced from the most competitive supplier.

Table 2: European Union import shares in 2019H1 and 2021H1

	Turkey		China		E.Asia & Pacific		South Asia		Other	
	2019H1	2021H1	2019H1	2021H1	2019H1	2021H1	2019H1	2021H1	2019H1	2021H1
01-05 Animal	2.07	2.50	9.37	7.17	10.29	8.20	4.07	4.34	74.19	77.79
06-15 Vegetable	3.32	3.75	3.79	3.88	15.30	15.67	4.15	3.55	73.44	73.15
16-24 Foodstuffs	4.48	5.11	5.41	4.83	11.14	11.10	2.90	3.72	76.07	75.24
25-27 Minerals	0.72	0.98	0.33	0.36	1.95	1.60	1.09	0.53	95.91	96.53
28-38 Chemicals	0.96	1.11	10.11	14.68	13.41	13.94	3.79	3.82	71.73	66.44
39-40 Plastic / Rubber	6.73	7.28	22.23	24.43	25.47	27.28	3.89	3.52	41.68	37.50
41-43 Hides, Skins	2.08	2.36	42.66	41.73	13.95	15.67	12.13	13.06	29.19	27.18
44-49 Wood	2.35	2.90	17.00	18.31	7.58	6.83	0.72	0.93	72.35	71.02
50-63 Textiles, Clothing	13.13	14.61	29.49	32.19	13.74	11.98	28.83	27.12	14.80	14.11
64-67 Footwear	1.40	1.61	45.45	44.75	30.51	31.95	7.18	6.50	15.45	15.18
68-71 Stone / Glass	3.99	3.23	12.51	9.45	10.83	8.94	6.29	5.34	66.37	73.04
72-83 Metals	8.25	8.66	21.18	20.13	12.86	13.03	3.97	4.67	53.75	53.50
84-85 Mach/Elec	2.66	2.79	41.59	46.56	27.46	26.67	1.34	1.52	26.95	22.46
86-89 Transportation	13.58	11.98	8.75	13.61	27.98	27.60	1.56	1.35	48.13	45.46
90-97 Miscellaneous	1.67	1.74	34.95	39.19	17.41	16.86	1.60	1.60	44.36	40.60
98-99 Special	1.69	1.67	4.05	4.06	8.06	7.33	0.66	0.59	85.54	86.35
TOTAL	4.00	4.11	19.87	23.37	16.16	16.55	3.85	3.64	56.12	52.34

Source: Eurostat

Note: The data excludes intra-EU trade and trade with the United Kingdom.

Services exports grew as travel and transport activity picked up

Recovery trend in services balances in 2021 was largely driven by pick up in travel and transportation revenues. The services balance posted a surplus of \$23.4 billion in January-November period of 2021. The surplus in services was \$11 billion in the same period of the previous year. Recovery in travel revenues, though remaining below pre-covid levels, and pick up in net transportation revenues drove this improvement. Net transportation revenues surged to \$10.7 billion in January-November of 2021 from \$7.4 billion in the same period of 2020. Travel revenues rose to \$19.4 billion in the same period in 2021 from \$9.5 billion in 2020.

With the easing of travel restrictions, international visitor numbers to Turkey have begun to recover. In Turkey's usual peak tourist month, July, international visitor numbers in 2021 were around 66 percent of 2019 levels, although for the first eleven months of 2021 arrival numbers were about half of 2019. Nevertheless, visitor numbers in 2021 are a clear improvement over 2020 with arrivals up 90 percent between January and November (Figure 74). Whilst the average amount spent per night in Euros has been falling in recent years, reflecting the depreciation of the Lira, the average visitor is staying longer, averaging 11.4 nights in Q3 2021 compared to 9.0 nights in Q3 2019 – all this means that average spending has been broadly stable at around €708 per visitor. Projecting these trends to the end of the year (Figure 75) suggests that total foreign visitor revenues will be around €17.6 billion in 2021, down by 43 percent on 2019 (over €13 billion, equivalent to 1.9 percent of GDP).

Figure 74: Turkey international visitor arrivals by month, January 2019 - November 2021

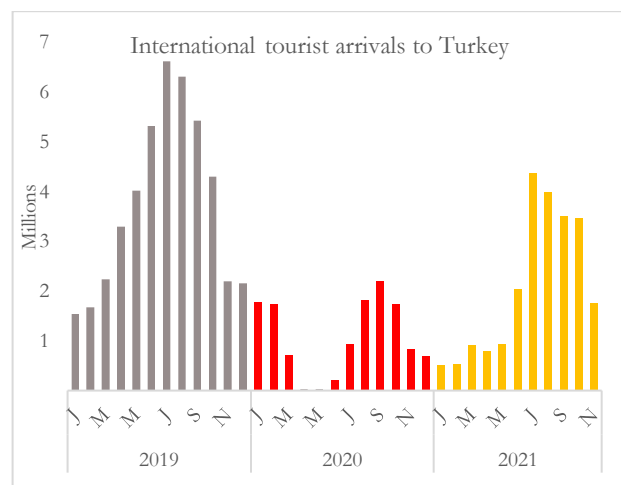
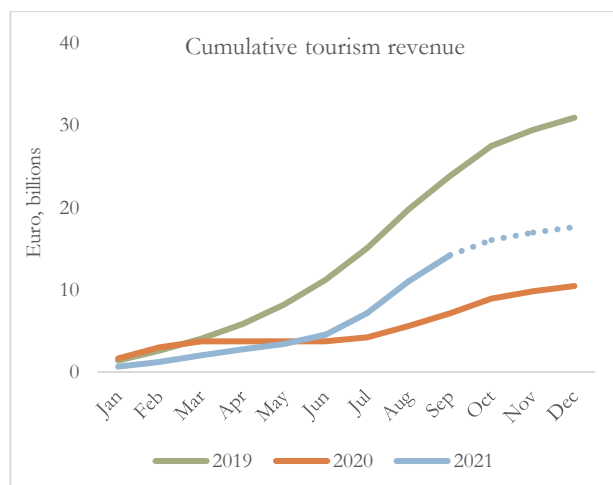


Figure 75: Cumulative international tourism revenue



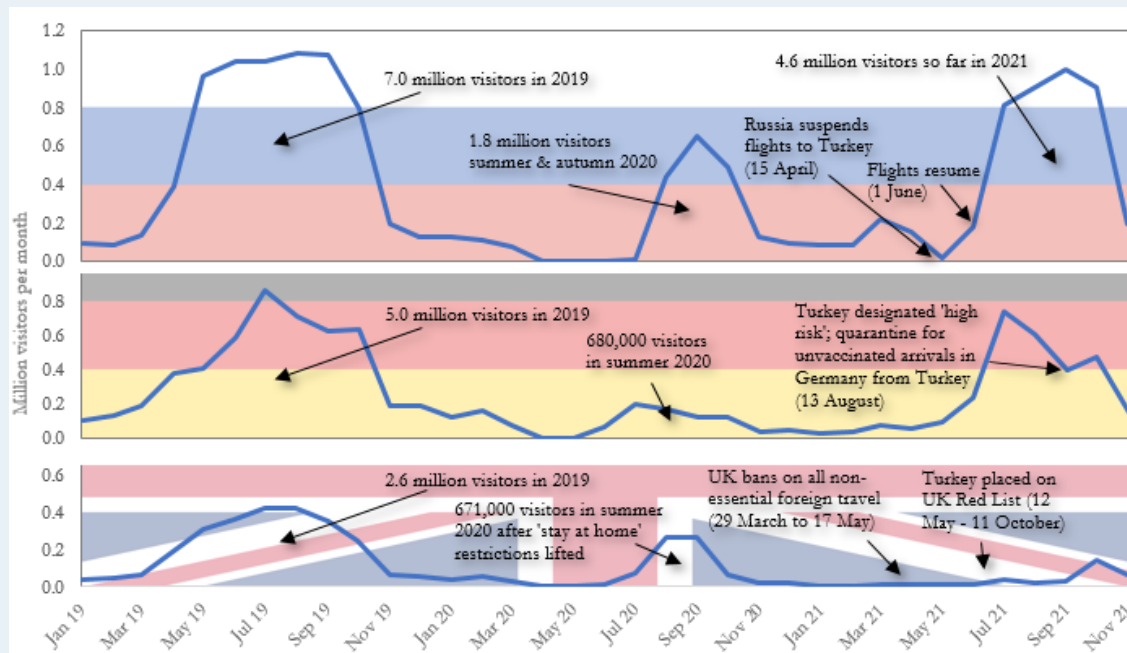
Source: Turkey Ministry of Culture and Tourism, TURKSTAT Departing Visitors Survey, Eurostat, World Bank staff calculations.

Box 3: The impact of pandemic related restrictions on Turkey's key tourism markets

Looking at the key tourism markets of Russia, Germany and the United Kingdom, the impact of travel bans, and quarantine requirements has been severe. Figure 76 shows the peaks and troughs of arrivals from Turkey's three largest visitor countries; Russia, Germany and the United Kingdom.

- Russia continues to be Turkey's most important country for tourist arrivals, with Turkey benefiting from a flight ban between Russia and Egypt since the 2015 bombing of a Russian chartered flight. During 2020, there were very few restrictions on tourist travel between Russia and Turkey, with 1.9 million visitors between June and October that year. Between April 15 and June 22, 2021, during Turkey's third wave, flights between Russia and Turkey were banned. Since the lifting of this ban tourist numbers have rebounded, reaching 906,000 in August 2021, 16 percent below 2019 levels.
- Turkey received 5 million visitors from Germany in 2019, falling to 1.1 million in 2020, and 2.9 million to November 2021. Germany introduced home quarantine requirements for travelers coming from most non-EU countries (including Turkey) in the summer of 2020, extinguishing any rebound in tourist visits that year. Turkey has been on Germany's list of high-risk countries for much of 2021, with visitor numbers surging following Turkey's removal from this list as of June 6, 2021. However, Turkey moved back on the high-risk list on August 12 (valid starting from August 17th) for which caused visitor numbers to fall back from their July peak.
- Around 2.6 million visitors from the United Kingdom entered Turkey in 2019, and following the end of the UK's 'stay-at-home' requirements, 700,000 visitors from the UK travelled to Turkey over the summer of 2020 in June-September period. 2021, however, has been a much more restricted year – caused by Turkey being put on the UK's 'red list' on May 17 requiring travelers to book into hotel quarantine for 10 days on their return at a cost of £2,285 (\$3,200) – effectively killing any tourism related travel between the UK and Turkey. Whilst Turkey was removed from the 'red list' as of 22nd of September, this came too late in the season for any significant tourism rebound.

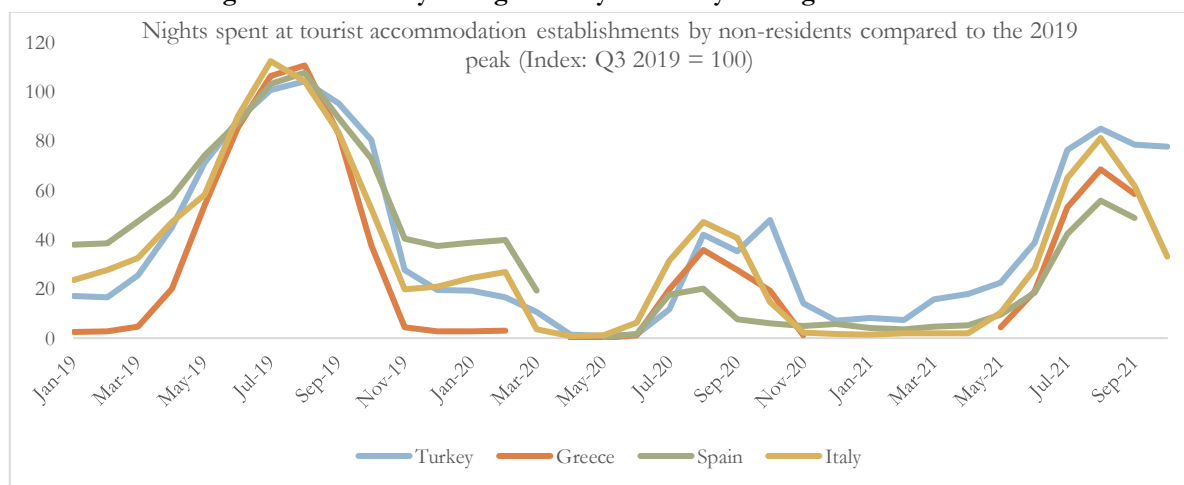
Figure 76: International arrivals and travel restrictions; Russia, Germany and UK, Jan 2019 – Nov 2021



Sources: Ministry of Culture and Tourism, World Bank staff calculations.

Turkey is seeing a stronger recovery in foreign visitor numbers than its European competitors. Turkey competes with countries such as Greece, Spain and Italy for European tourist income. Available data suggests that in 2021 Turkey is seeing a stronger rebound in hotel nights stayed by foreign visitors than the European competition – between January and October 2021 the number of nights stayed by foreign visitors has been 66 percent compared to the same period in 2019, compared to just 30 percent in Spain, 43 percent in Greece and 45 percent in Italy. July has been particularly strong with visitor numbers 76 percent of 2019 levels, with Spain only managing 42 percent and Greece 53 percent. The popularity of Turkey as a destination for Russian and Ukrainian tourists, who are less prominent in European markets, partly explains the strength of this rebound (Figure 77).

Figure 77: Relatively strong recovery in Turkey's foreign visitor numbers



Sources: Eurostat, World Bank staff calculations.

Measured in foreign currency, the cost of holidaying in Turkey continues to fall. Measured in Lira prices, peak-season (June-September) package holidays and accommodation have increased 60 percent since the summer of 2017. However, the Lira has fallen in value by 70 percent over the same period, meaning that, measured in Euro, the cost of a holiday in Turkey has fallen by around 30 percent since the summer of 2017. (Figure 78). This is in contrast to other European markets (Spain, Italy, Greece, Croatia) where prices have been generally stable up to 2019 and have modestly fallen since the pandemic; only Bulgaria has seen an increase in costs. Comparing prices per day in Turkey to other European destinations, we see Turkey as the most affordable, with costs of accommodation, meals and local transport less than half the cost of many EU countries (Figure 79).

The tourism recovery has been hampered by Turkey being included on the UK’s “red” and Germany’s “high risk” lists, but the increase in visitors from Russia and Ukraine has partly offset this. Whilst 2019 saw over 1.5 million summer visitors from the UK arrive in Turkey (7 percent of the total), this has fallen to less than 100,000 in June-September 2021 period (less than 1 percent of the total). Tourism from Germany have similarly dried up. Meanwhile, Ukraine has seen its share of visitors increase from 3 percent to 10 percent over the same period, and visitor numbers could surpass 1 million this year, up from 670,000 in June-September 2019 period to June-September 2021 period. On the other hand, the share of tourists from Russia remained stable at 18 percent. This increase in the popularity of Turkey for Ukrainian holidaymakers may well reflect the lack of COVID-19 testing and vaccination requirements – whilst Turkey does not ask for PCR tests from visitors, Russia, Germany and other EU countries do require testing for the return leg – however Ukraine has no such requirement (Figure 80, Figure 81).

Figure 78: Cost of holidaying has been falling...

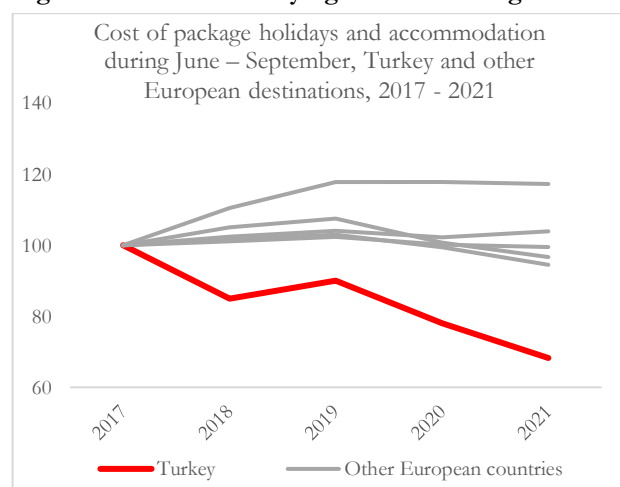
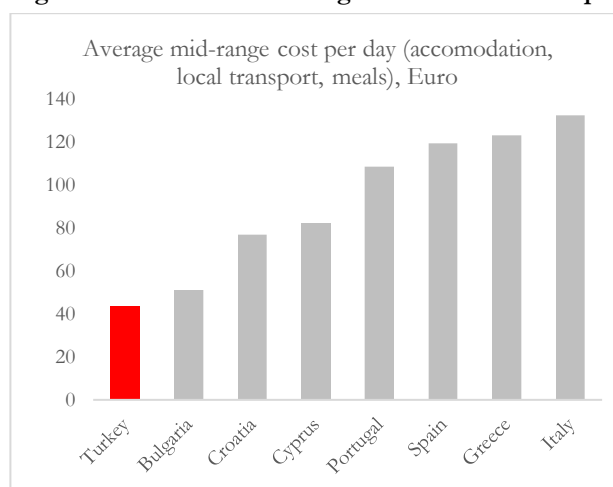


Figure 79:...and is now amongst the lowest in Europe



Source: Eurostat, <https://www.budgetyourtrip.com>, World Bank staff calculations.

Figure 80: Declining international visitors from United Kingdom...

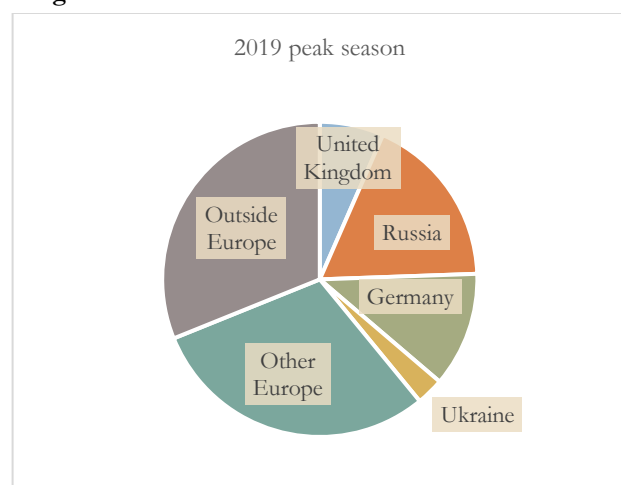
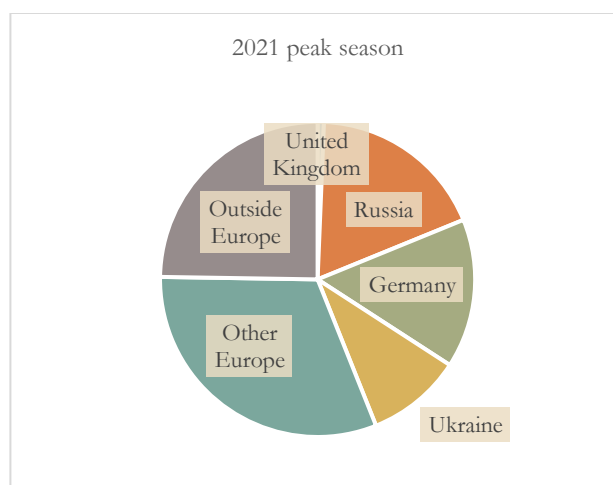


Figure 81: ...was partially offset by visitors from Ukraine



Source: Turkey Ministry of Culture and Tourism, World Bank staff calculations.
 Note: Share of international visitor arrivals (June-September 2019 and June-August 2021)

Robust economic activity supported government revenues, but expenditure jumped

Strong revenue growth helped fiscal balances improve in 2021, but a surge in expenditure limited the improvement. The central government budget balance recovered to -3.0 percent of GDP as of 2021Q4³ from -3.5 percent in 2020 (Figure 82), lower than many countries around the world, while the 12-month rolling primary deficit increased to TL192.2 billion in December 2021 from TL172.7 billion a year earlier (Figure 83). Strong tax collection, namely taxes on international trade, domestic tax on goods and services, and tax on household and firm income, contributed to the improvement in budget balances in 2021. The revenue increase was positively affected by strong domestic economic activity, as well as the depreciation of the Lira. However, the fiscal deficit widened in the last quarter of 2021 relative to the first three quarters with sizeable transfers to SOEs, other transfers, and interest expenses.

Tax collections continued to increase in 2021, as direct and indirect tax revenues climbed. The share of direct taxes in GDP (4-quarter rolling) increased to 6.5 percent at the end of 2021 (Table 3). On the other hand, indirect tax also went up by 0.7 percentage points to 11.6 percent of GDP. Whilst tax collection for international trade in real terms increased by 6.5 percent (yoy) in 2021Q4, largely driven by surge in nominal imports and currency depreciation, domestic tax on goods and services in real terms displayed a decline of 6.7 percent (Figure 85).

³ Based on the calculations using 4-quarter rolling GDP covering 2020Q4-2021Q3 period.

Table 3: Fiscal operations (CG, percent of GDP)

	2018	2019	2020	2021*
Revenue	20.2	20.3	20.4	21.3
Direct Tax	6.2	6.0	5.6	6.5
Indirect Tax	10.4	9.6	10.9	11.6
Other	3.6	4.7	3.9	3.2
Expenditure	22.1	23.1	23.9	24.9
Comp. of Employees & Soc. Sec. Contr.	6.3	6.8	6.7	6.3
G&S Purchases	1.9	2.0	1.9	2.0
Current Transfers	8.6	9.3	9.9	9.8
Capital Transfers & Expenses	2.8	2.2	2.1	2.4
Interest	2.0	2.3	2.7	2.8
Other	0.6	0.6	0.6	1.6
Overall Balance	-1.9	-2.9	-3.5	-3.0
Primary Balance	0.0	-0.6	-0.8	-0.2
Memo items				
GDP growth (as of 2021Q3, yoy)	3.0	0.9	1.8	10.2
Inflation (annual average, yoy)	16.3	15.2	12.3	19.6

Sources: Haver Analytics, MOTF, WB Staff estimates.

* Based on the calculations using 4-quarter rolling GDP covering 2020Q4-2021Q3 period.

Expenditures as a share of GDP sharply increased, largely driven by the rise in capital transfers and other expenses. Total expenditures as a share of GDP increased by 1.0 percentage points as of 2021 compared to 2020, driven primarily by a surge in current and capital transfers and expenses, good and services purchases, and other expenses including the lending item (Figure 84). The increase in other expenses was 1.0 percentage point of GDP in 2021 relative to 2020. Furthermore, compensation of employees and social security contributions by the government declined by 0.4 percentage points as a share of GDP from the end of 2020 to 2021, possibly driven by real income erosion due to high inflation. Interest costs rose to 2.8 percent of GDP as of the end of 2021 while the tax-to-interest ratio remained stable at 16 percent (4-quarter rolling) in a year over the same period (Figure 86).

Figure 82: Fiscal improvements were reversed at the end of 2021...

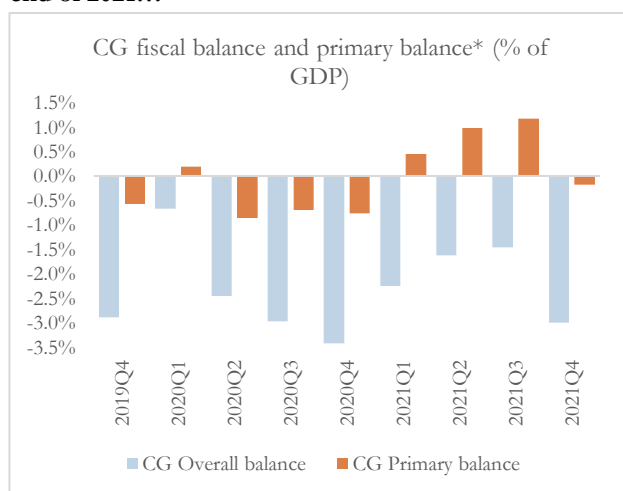


Figure 83: ...and primary surplus turned into deficit...

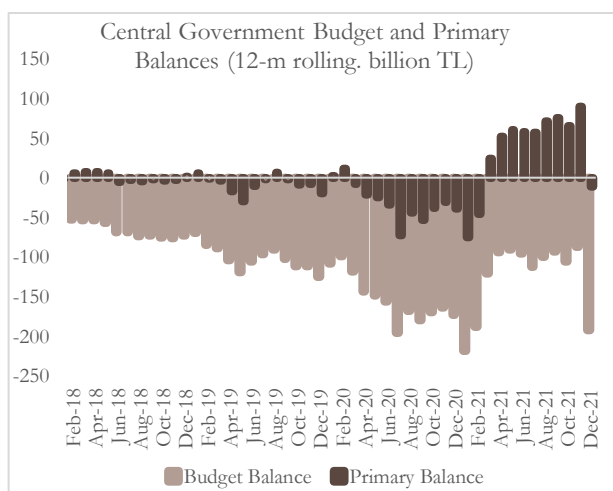


Figure 84: ...driven by a jump in expenditures

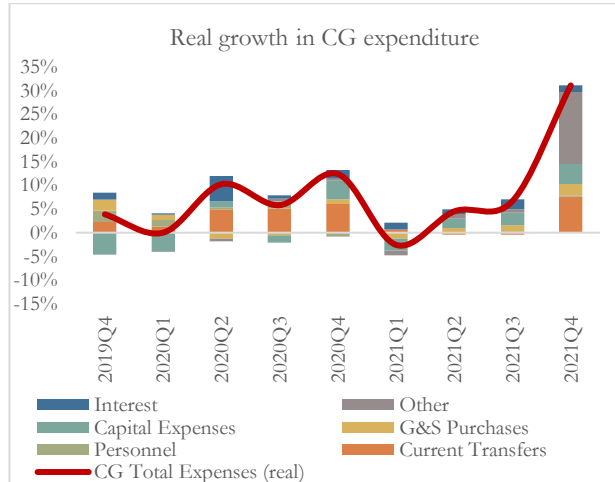


Figure 86: The interest burden remains high...

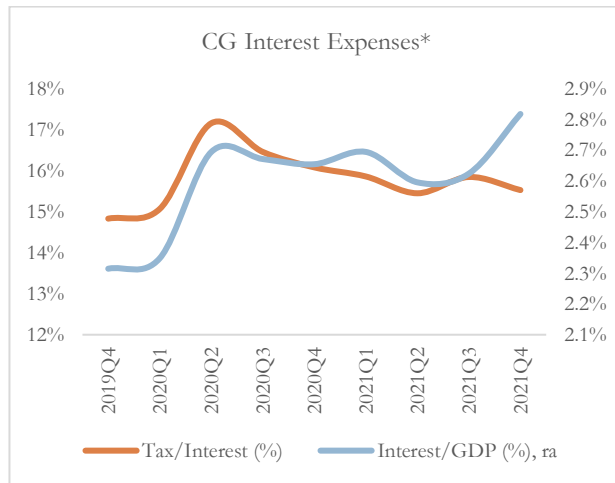


Figure 85:...but robust revenue growth helped in 2021

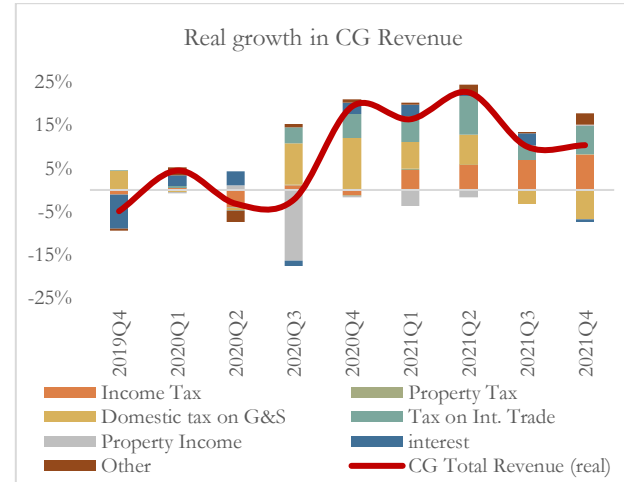
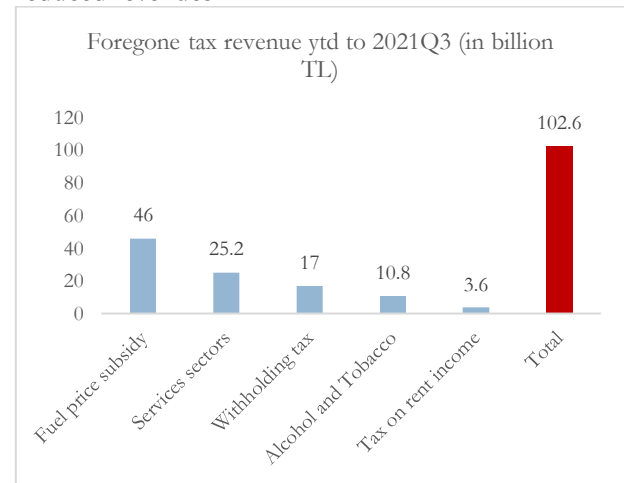


Figure 87:...and tax measures to dampen inflation reduced revenues



Sources: Haver Analytics, MOTF, WB Staff estimates.

*4-quarter rolling. For 2021Q4 calculations, 4-quarter rolling 2021Q3 GDP figures were used.

The authorities forewent a total of TL102.6 billion in tax revenue (1.5 percent of GDP) in the first three quarters of 2021 in order to ease inflationary pressures. The authorities lowered the sliding scale special consumption tax (SCT) on fuel and VAT to dampen rising inflation⁴, which led to TL46 billion in lost revenues. Moreover, tax discounts that were introduced for some services sectors as a relief measure during the pandemic are expected to generate a TL25.2 billion loss for the central government budget while the discount for the tax on rental payments from 20 percent to 10 percent for businesses have generated a TL3.6 billion loss in the first 9 months of 2021. In addition, lump-sum tax on alcohol and tobacco were not raised in the second half of 2021, and the SCT on tobacco was reduced from 67 percent to 63 percent, which led to a TL10.8 billion tax revenue loss. In order to encourage TL-denominated deposit savings, the income tax was reduced on deposit-related capital gains, which has had a cost of TL17 billion in the first 9 months of 2021 (Figure 87). In the absence of a tight monetary stance, fiscal policy had to take the blow to combat inflation (See Section C in Looking Ahead).

⁴ MOTF Public Finance Report, September 2021.

<https://ms.hmb.gov.tr/uploads/2021/10/Kamu-Maliyesi-Raporu-Eylul-2021.pdf>

Figure 88: Central government debt is increasing...

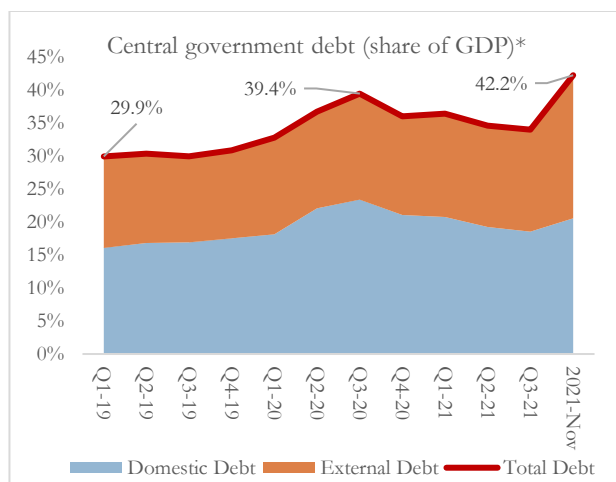
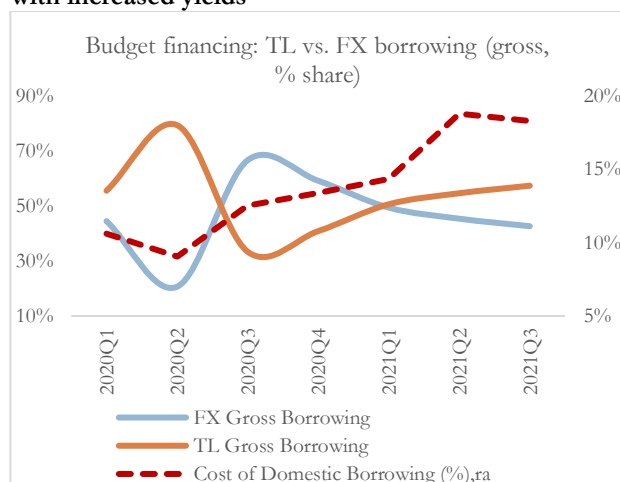


Figure 89: ...and financed via TL-denominated bonds with increased yields



Sources: Haver Analytics, MOTF, WB Staff estimates.

*4-quarter rolling. For 2021Q4 calculations, 4-quarter rolling 2021Q3 GDP figures were used.

Central government debt as a share of GDP increased above 40 percent in 2021. The downward trend in central government debt was reversed by a sharp depreciation of the Lira as the share of FX denominated debt in total debt stands at 66 percent (Figure 88). Central government debt as a share of GDP increased above 40 percent at the end of 2021 from 34 percent in 2021Q3. In terms of financing, the share of TL-denominated borrowing went up by 24 percentage points to 57 percent of total borrowing in 2021Q3 compared to the same period of 2020, while the share of FX-denominated borrowing declined to 43 percent of total borrowing over the same period (Figure 89). However, with the deterioration in the inflation outlook, the cost of domestic borrowing for fixed-income bonds (monthly average cost) went up from 13.6 percent in December 2020 to 21.6 percent in December 2021.

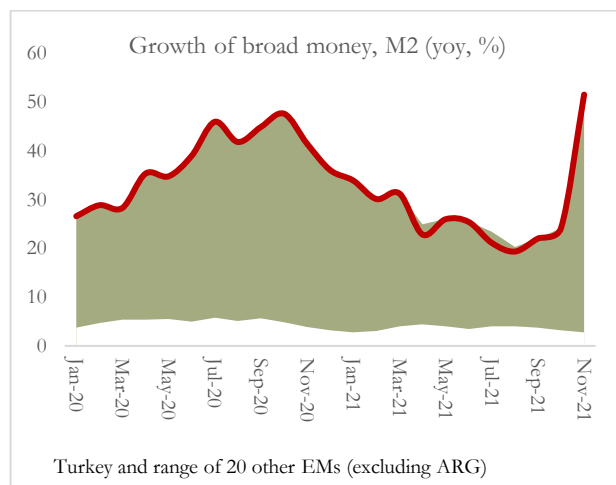
D. Changes in the monetary policy setting followed by monetary easing raised macro-financial vulnerabilities

Interest rates remained unchanged in the April-September 2021 period following the last interest rate increase of 200 bps to 19 percent in March 2021. Broad money growth declined, and real interest rates remained positive. Buoyant economic activity in Turkey's major trade partners boosted Turkish exports (Figure 110) and supported the accumulation of foreign exchange reserves (Figure 111). However, the personnel changes in the Central Bank in March 2021, statements about loosening of monetary policy in June and the monetary easing cycle since September 2021 have adversely affected macro-financial conditions. Inflation accelerated, the Lira depreciated sharply, corporate and financial sector vulnerabilities grew, and foreign exchange reserves started to decline in December.

Monetary policy affected macroeconomic volatility

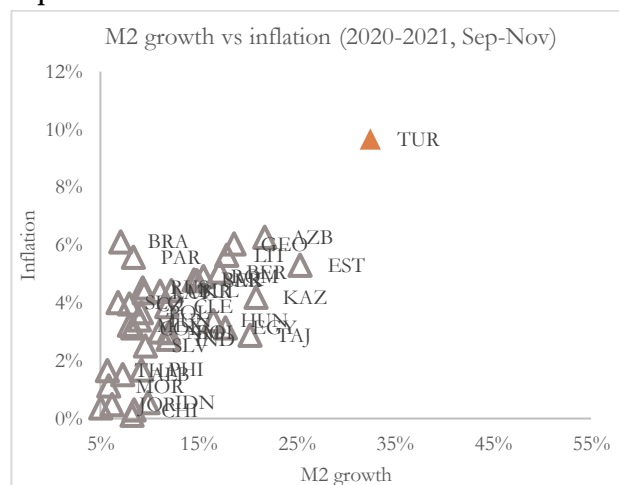
Following a deceleration in 2021H1, money supply growth accelerated in November and was the highest amongst EMs in 2021. Broad money growth declined from a peak of 48 percent to 24 percent year-on-year in October 2021 (Figure 90), well below nominal GDP growth of 40 percent over the same period. After the policy rate cut decisions, broad money growth accelerated to 52 percent in November 2021. Turkey stood out among EMs and several other advanced economies for its high money growth and high inflation in 2021 (Figure 91).

Figure 90: Money growth remained high in 2021



Sources: Haver Analytics, World Bank Staff estimates.

Figure 91: Turkey remains an outlier for monetary expansion and inflation

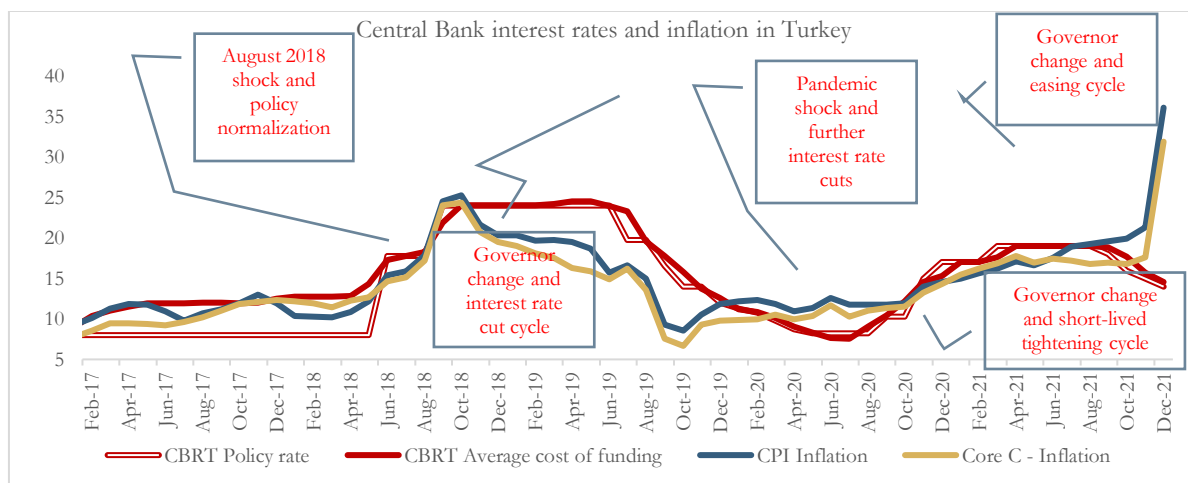


Sources: Haver Analytics, World Bank Staff estimates.

Note: The figures compare the 3-month averages of Sep-Nov period of 2020 and 2021 period for nominal M2 growth and inflation rate.

The authorities initiated a series of interest rate cuts on the 23rd of September 2021 that sharply affected macro-financial conditions. The Central Bank cut the policy rate by 100 bps, 200 bps, 100 bps, and 100 bps on September 23, October 21, November 18, and December 16, 2021 respectively, bringing it down to 14 percent. With inflation running at 36 percent, this implies real policy rates running deeply into negative territory. The Central Bank has pinned the move on the need to shift the focus from CPI inflation to core inflation⁵ and to reduce the current account deficit.⁶ This policy shift has elevated uncertainty over the inflation outlook, hurt investor confidence, and caused a significant depreciation of the Lira. As a result, bond yields have sharply risen, the Turkish Lira depreciated sharply, and inflationary pressures have increased further (Figure 92, Figure 93).

Figure 92: The Central Bank cut the interest rates in September 2021 while inflation was rising...

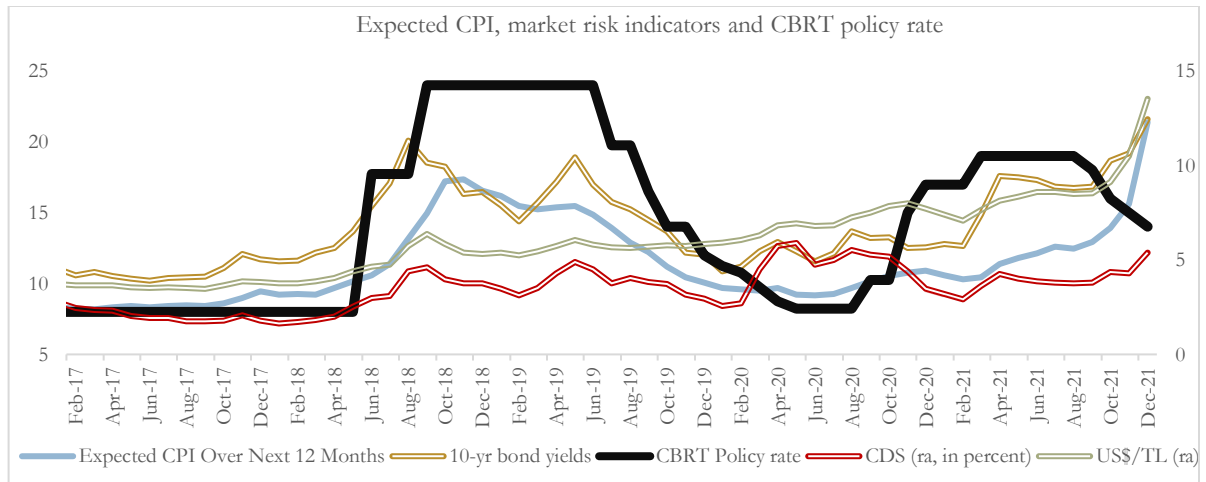


Sources: CBRT, Turkstat, Haver Analytics.

⁵ <https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Announcements/Press+Releases/2021/ANO2021-44>

⁶ <https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Announcements/Press+Releases/2021/ANO2021-47>

Figure 93: ...this led to a rise in bond yields, risk premia, further depreciation and expected inflation



Amongst all EMs, Turkey stands out as the only country that cut the policy interest rates since April 2021 (Figure 94). It is also among the countries with the most negative real interest rate among all EMs (Figure 95). The difference between policy interest rate and annual inflation figures implies that the real policy interest rate declined to -22 percent in Turkey as of the end of 2021. This gap further widened in early 2022 with rising inflation.

Figure 94: Among EMs, Turkey is the only country that reduced the interest rates in 2021

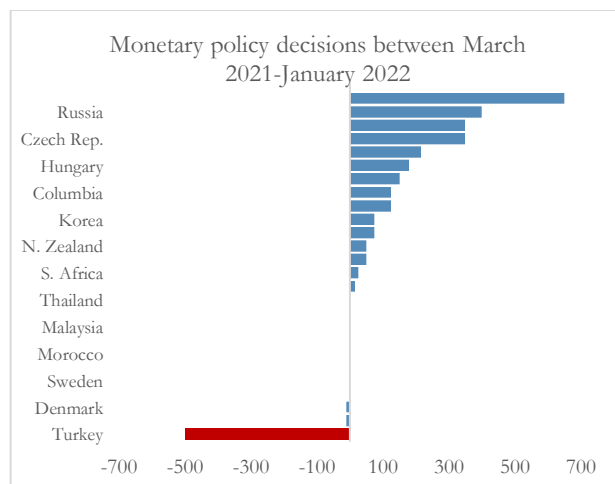
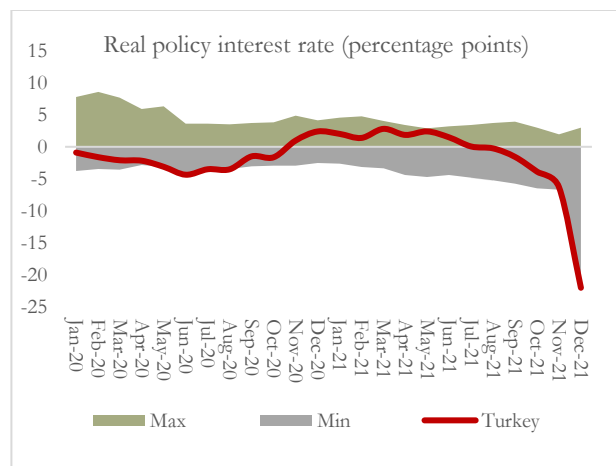


Figure 95: Turkey has the most negative real policy rates across EMs

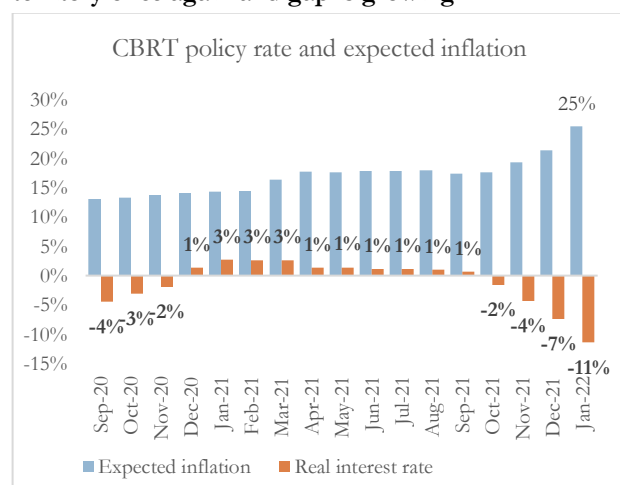


The policy rate cuts have shifted real expected yields into negative territory. Real expected yields (not adjusted for risk) on Treasury bonds moved slightly into positive territory in November 2020. However, both the policy rate and widely used instruments such as the 2-year Treasury bond yields adjusted for year-ahead expected inflation turned negative as of November 2021 (Figure 96, Figure 97). Between April 2021 and September 2021, when the policy rate was 19 percent, banks lowered the interest rates for general purpose loans down to 23 percent in July, and the automobile and corporate loan rates to 20.7 percent in August. Starting from September, together with the CBRT's interest rate cut decisions, all lending rates except general purpose and automobile loans started to decline. Mortgage rates went down to 16.9 percent and commercial loan rates declined to 18.9 percent in November. On the other hand, general purpose loans remained high at 23.6 percent

due to some regulatory changes as the authorities aimed to reduce lending to households (Figure 98, Table 4). However, with the heightened market volatility and the high deposit dollarization trend that started in late November, lending rates for all types of loans started to rise again and diverged significantly from the policy rate, despite monetary loosening.

To reverse the heightened dollarization trend, tackle inflation and support investments, the authorities introduced several heterodox monetary and fiscal measures. These include introduction of an FX protected Turkish Lira time deposit scheme to maintain the real value of TL deposits and prevent (or even reverse) the dollarization trend. In this deposit scheme, the interest to be accrued on lira-denominated time deposit accounts will be compared with the change in the foreign exchange rates on maturity dates and Turkish Treasury will compensate for the difference if depreciation of Lira against hard currencies exceeds the interest rate. The scheme was offered to households first with 3, 6, 9, and 12-month maturity options, and then extended to corporates with 6- and 12-month maturities. Furthermore, Turkish citizenship will be granted to foreigners that invest in this instrument with \$500.000 for 3 years. Moreover, the government increased its contribution to the personal retirement system from 25 percent to 30 percent and working population over the age of 45 are now able to join the auto-enrollment system upon their request. In order to mitigate the exchange rate risk for corporates, the Central Bank also started to offer forward contracts to importer and exporter SMEs directly. Corporate income tax was reduced by 1 percentage point to 19 percent for exporters. To boost gross reserves, a regulation was introduced to collect 25 percent of exporters' revenues directly at the Central Bank. Additionally, the authorities removed the withholding tax on the returns from government bonds and reduced the withholding tax on corporate dividends to 10 percent in December 2021.

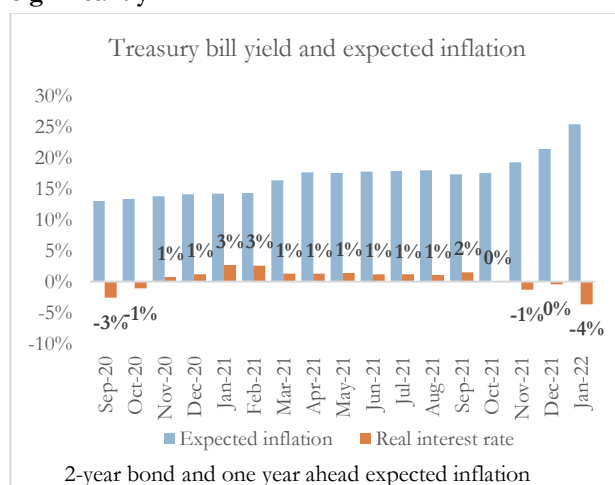
Figure 96: Real policy rate declined to negative territory once again and gap is growing



Sources: Haver Analytics, Central Bank of Turkey and World Bank Staff estimates.

Notes: Based on end of period CBRT policy (one-week repo) rate and one-year ahead expected inflation from CBRT Market Participants Survey.

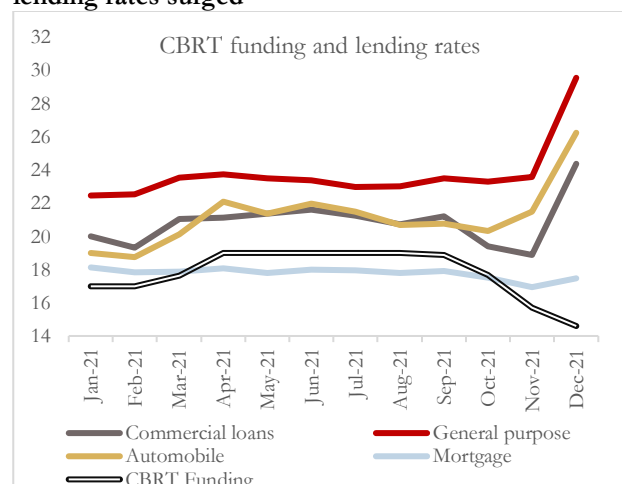
Figure 97: Real Treasury yields also declined significantly



Sources: Haver Analytics, Central Bank of Turkey and World Bank Staff estimates.

Notes: Based on average monthly two-year Treasury bond yields and one-year ahead expected inflation from CBRT Market Participants Survey.

Figure 98: Despite reductions in the policy rate, lending rates surged



Sources: BRSA, CBRT, Haver Analytics.

Table 4: Selected monetary measures taken in Turkey since April 2021

29 Apr	Loan repayment deferral for small firms and farmers suffering from droughts until July
14 Jun	Additional \$3.6 billion swap deal with China
17 Jun	Extension of forbearance measures on NPLs until end-September
1 Jul	FX reserve requirements were raised by 200 bps
1 Jul	Number of credit card installments was reduced for jewelry, furniture, and electronic goods
1 Jul	Maturity for automobile loans was reduced
1 Jul	Risk weight on retail loans was raised
12 Aug	\$2 billion swap deal with South Korea
15 Sept	FX reserve requirements were raised by 200 bps
16 Sept	Rediscount credits for export and foreign exchange earning services limit was raised to \$30 billion.
17 Sept	Maturity of retail loans for which loan amount higher than 50 thousand TL was reduced from 36 months to 24 months
23 Sept	MPC decision to lower the interest rate by 100 bps
21 Oct	MPC decision to lower the interest rate by 200 bps
9 Nov	FX reserve requirements were raised by 200 bps
18 Nov	MPC decision to lower the interest rate by 100 bps
8 Dec	Extension of existing swap deal with Qatar
16 Dec	MPC decision to lower the interest rate by 100 bps

Source: CBRT statements.

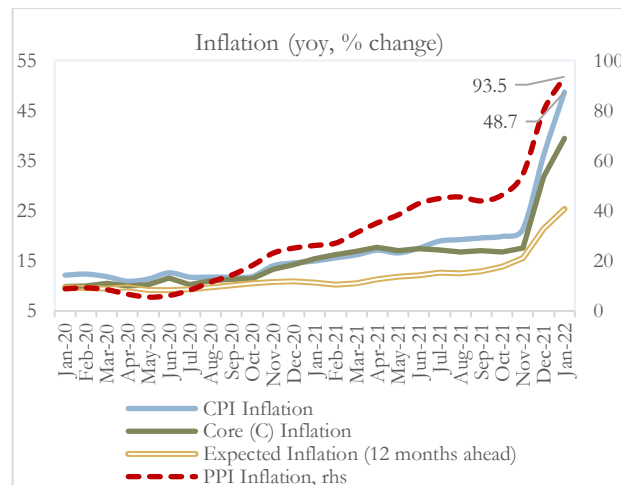
Inflation has accelerated to its fastest rate since 2002

Inflation has accelerated in 2021 with depreciation of the Lira, rising international commodity prices, and increasing inflation expectations. Consumer price index (CPI) inflation reached 48.7 percent –against an official target of 5 percent- and domestic producer price inflation hit 93.5 percent in January 2022, the highest level in two decades (Figure 99). The gap between producer and consumer prices reached record levels (44.8 percentage points) in January. The sharp depreciation of the lira coupled with high exchange rate pass-through, rising demand pressures (positive output gap) and deteriorating inflation expectations led to a jump in consumer and domestic producer prices (Figure 100), exacerbated by the easing of monetary policy in September. Supply constraints and rising international commodity prices also exerted pressures on producer prices in addition to effects of exchange rate depreciation. While oil prices hit their highest levels in years, the sliding scale tax scheme⁷ eased the pressures on consumer fuel prices and cushioned the impact on headline consumer inflation in 2021. The headline inflation would be around 2.5 percentage points higher than its current level without the support of the sliding scale tax scheme⁸.

⁷ Turkey introduced a new regulation during the 2018 economic stress to lower the special consumption tax (SCT) on fuel products to keep the headline prices stable for consumers. This policy measure led to foregone tax revenues. This system was reactivated during the pandemic as of September 2020.

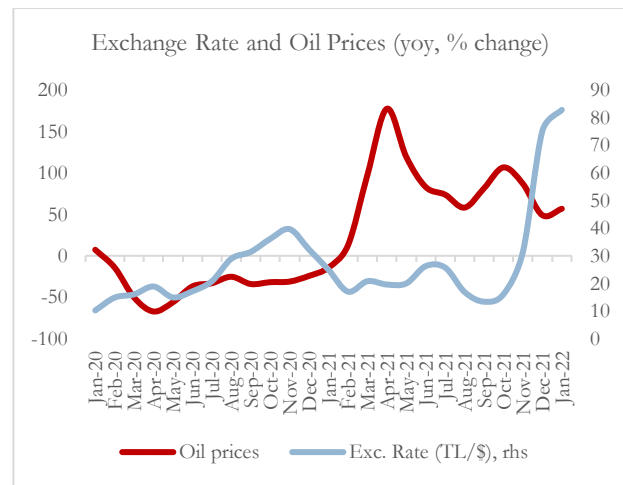
⁸ Ministry of Treasury and Finance (2021), Public Finance Report 2021-II. This calculation reflects both direct and indirect impact of the sliding scale system on CPI inflation.

Figure 99: CPI inflation jumped to 48.7 percent, the highest reading over the last 20 years...



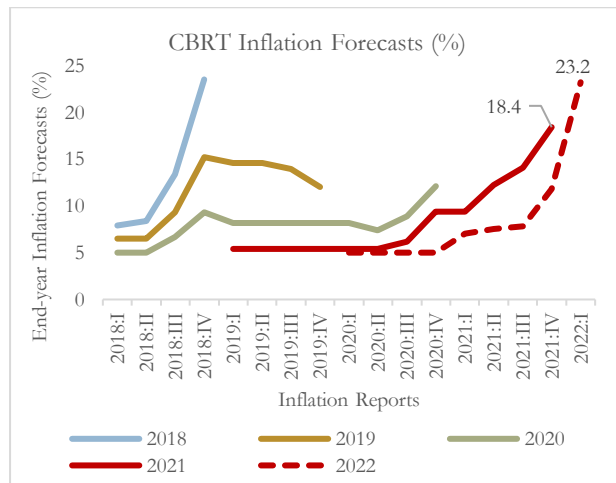
Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 100: ...amid large depreciation of the Lira and high energy prices



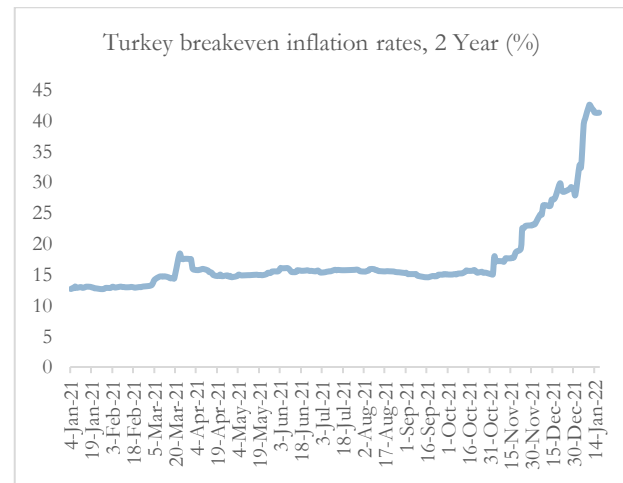
Turkey recorded the highest deviation of inflation from its target among many peer countries in 2020 and this gap widened further in 2021. The difference between the inflation target and its realization surged to 31.1 percentage points as of December 2021 and further to 43.7 percent in January 2022. As a response to the sharp surge in inflation, the Central Bank had to make frequent and sizeable revisions its end-year inflation forecasts in 2021. The Central Bank's end-year inflation, which was 9.4 percent at the beginning of 2021, was revised up by almost 10 percentage points to 18.4 percent in October 2021 (Figure 101). In parallel, market-based inflation expectations, which reflect investors' perception of future inflation, rose sharply to around 41 percent in early 2022 (Figure 102).

Figure 101: CBRT revised up its end-year inflation forecast substantially for 2021 and 2022



Source: Central Bank of Turkey Inflation Reports (2018-2022), CBRT.

Figure 102: Market based inflation expectations are at an all-time high



Source: Bloomberg Terminal.

Food inflation continued to be the largest contributor to inflation in 2021. Food and beverages accounted for more than one-third of the rise in inflation in the second half of 2021. The contribution of core goods declined slightly in the second half of the year but picked up markedly in December 2021 and January 2022. The contribution of energy and services displayed a continuous upward trend (Figure 103). Prices of both unprocessed and processed food accelerated in the second half of 2021 and early 2022 and recorded an increase of 55 percent and 56.2 percent (yoy) in January 2022, respectively. Cumulative impacts of currency depreciation,

adverse weather conditions and high international food prices were the main drivers of high food inflation (Figure 104). Rising food prices and the reopening process had a knock-on impact on hotels, cafes and restaurants services inflation, which reached 50.4 percent in January 2022 from 12.9 percent in January 2021. Transportation inflation remained elevated and reached 39.3 percent and core goods inflation surged to 48.5 percent (yoy) in January 2022, mainly driven by an acceleration in durable goods inflation (56.2 percent yoy).

Figure 103: High CPI inflation was largely driven by the rise in food and energy prices in 2021

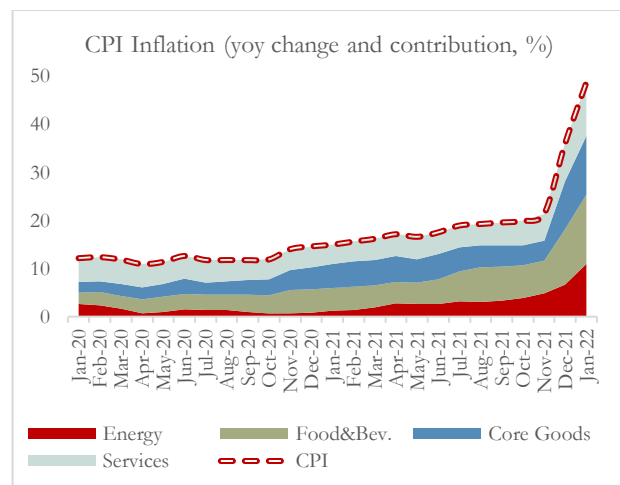
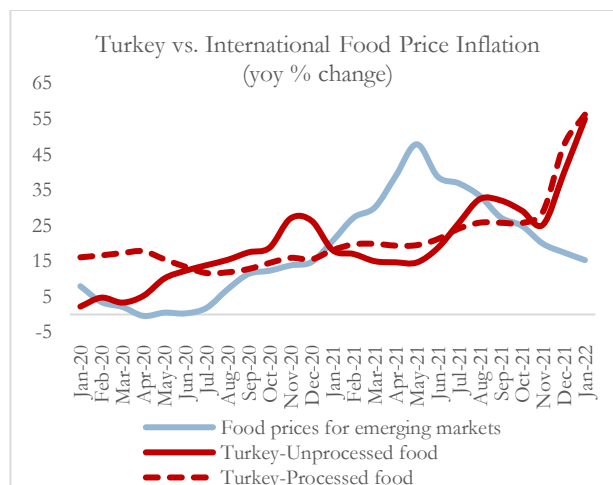


Figure 104: Rising international food prices put pressure on domestic prices



Sources: Haver Analytics, WB Commodity Price Database, TURKSTAT, WB Staff estimates.

Figure 105: Turkey is among the OECD countries facing the highest food price inflation...

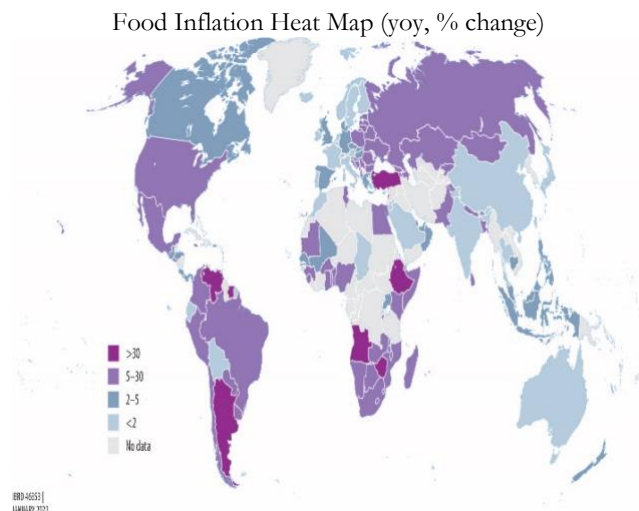


Table 5: ...And among the top 10 countries in the world

Food Price Inflation: Top 10	
Country	Food Inflation (yoy, % change)
Venezuela	1037
Lebanon	358
Suriname	68.3
Zimbabwe	64.9
Turkey	55.6
Argentina	50.3
Iran	41.8
Ethiopia	38.9
Angola	36.5
Sri Lanka	22.1

Source: International Monetary Fund and Trading Economics. "COVID-19 and Food Security" bi-weekly update" by the Global Engagement (GE) Unit in the Agriculture and Food (AGF) Global Practice of the World Bank.

Note: Food price inflation is based on the month for which the latest information is available: September 2021 to January 2022.

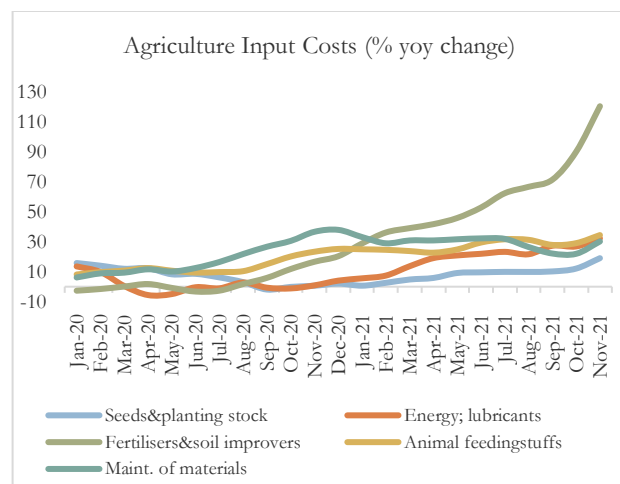
Turkey has one of the highest domestic food price inflation rates in the world, but much of the increase is caused by the depreciation of the Lira. International food prices have surged by around 30 percent (yoy) on average since the beginning of 2021, which led to a sharp rise in domestic food prices in many countries, particularly in low- and middle-income countries (Figure 105). Turkey has the highest domestic food inflation among the OECD countries, largely driven by currency depreciation, and ranks second in food inflation among

upper middle-income countries after Lebanon (Table 5). The agricultural drought in 2021 also contributed to the rise in food inflation in Turkey.

Unlike many countries, Turkey faced sharp currency depreciation and rising international food and energy prices simultaneously. Whilst international food prices exert pressures on domestic food prices⁹, the exchange rate plays an important role through the costs of energy, transport, and imported inputs. Fertilizer prices recorded more than a 120 percent (yoy) increase and energy costs, surging by around 32 percent (yoy) in November 2021 (Figure 106). The estimated exchange rate pass-through is quite significant and well above international food price pass through to the CPI (Box 4). The analysis shows that exchange rate pass through to headline CPI is around 28 percent while international food price pass through is around 8.5 percent.

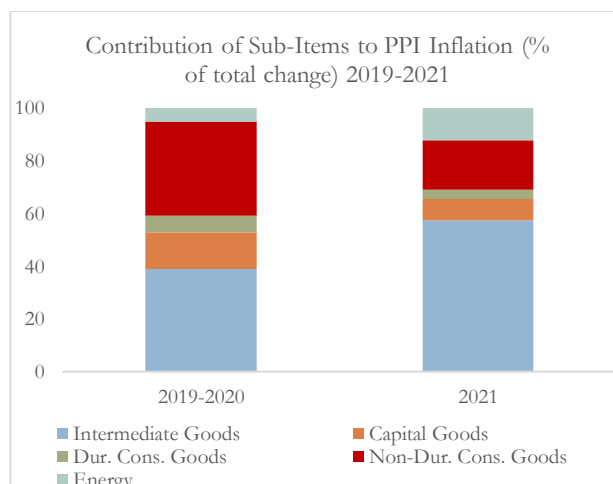
Producer price index (PPI) inflation peaked in January 2022. Producer price inflation in 2021 was driven primarily by imported intermediate goods (Figure 107). Producer price inflation surged to 79.9 percent (yoy) in December 2021 and 93.5 percent (yoy) in January 2022, the highest reading of the last two decades. Intermediate goods contributed more than half of the price increase over this period. Within intermediate goods, most sub-categories experienced sharp price increases. The chemicals, basic metals, and fabricated metal products industries experienced the biggest price increases. Unsurprisingly, these sectors are among the most import dependent sectors. The contribution of non-durable consumer goods declined whilst energy's contribution to PPI inflation rose significantly with rising energy prices in 2021 compared to the 2019-2020 period.

Figure 106: Rising agricultural costs contributed to the rise in food inflation



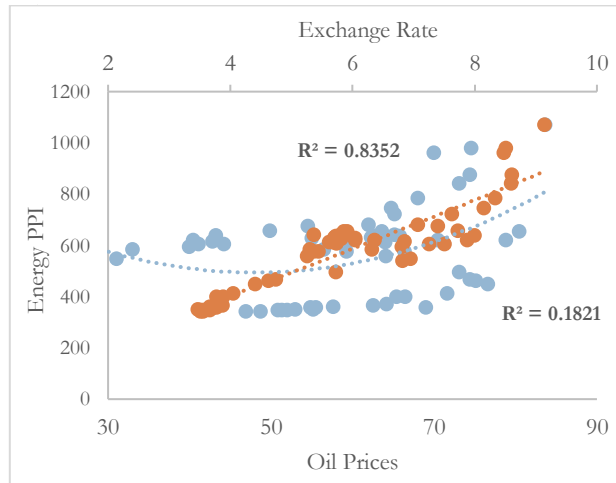
Sources: Haver Analytics, TURKSTAT, WB Staff estimates.

Figure 107: The rise in PPI was largely fueled by higher intermediate goods prices



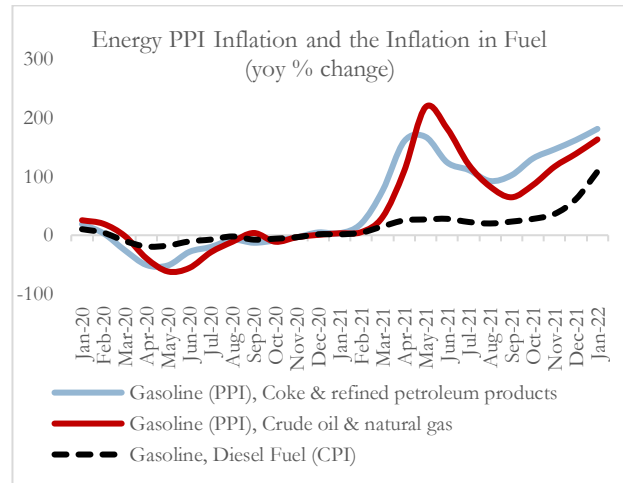
⁹ According to CBRT, a 10 percent increase in international food prices leads to 1.2-1.5 percentage points contribution to food price inflation excluding fresh food and vegetables (CBRT, Presentation: Macroeconomic Outlook and Monetary Policy in Turkey, October 7, 2021)

Figure 108: Energy prices are affected more by exchange rate developments than international markets



Sources: TURKSTAT, WB Staff estimates.

Figure 109: The gap between consumer and producer energy inflation widened in 2021



Energy producer prices are directly associated with oil prices and even more with exchange rate movements (Figure 108). Energy prices were impacted through both international oil and gas prices and depreciation of the Lira as Turkey is a net importer of energy. The electricity and gas industries make up more than half of the energy PPI basket. This is followed by crude petroleum, and the natural gas sub-sector represents around one-third of the basket. Electricity and gas industries are highly import dependent and thus very sensitive to exchange rate developments. The sector's import dependency is around 46 percent and is also highly dependent on natural gas as an input. These two sub-sectors have been the main drivers of the sharp rise in energy prices. The pass-through analysis confirms the sizable impact of the exchange rate compared to international oil prices on producer prices. The results suggest that the pass through of oil prices to the domestic PPI is around 6.5 percent whilst the exchange-rate pass through to producer prices is around 70 percent (Box 4). On the other hand, the gap between producer inflation and fuel inflation for consumers widened due to the impact of taxes and the sliding scale system in 2021 (Figure 109).¹⁰ While refined petroleum products in producer prices experienced sharp price hikes, the impact on final consumer prices remained relatively limited until the end of 2021. However, fuel prices for consumers have started to accelerate in 2022.

Box 4: Pass through of International Food and Energy Prices in Turkey

Over the last year, global food and oil prices increased sharply and impacted the domestic prices across the world. As past international commodity price hikes have been associated with the rise in inflation rates, the spike in international prices has again raised interest in the impact of international commodity prices on domestic inflation.

In order to investigate the pass-through effect of international food and oil prices, an array of Vector Autoregressive (VAR) models have been estimated using monthly data from December 2010 to July 2021. All variables in the models are first seasonally adjusted and introduced into the models in first logarithmic differences. In each specification, the lag order was chosen based on the Schwarz Information Criterion. Apart from the usual Cholesky ordering, some block exogeneity (subset restrictions in the individual equations of VAR) was introduced to VAR specifications specially to turn off the feedback from domestic

¹⁰ Domestic producer prices compile sales prices of domestically produced products excluding taxes, while the CPI compiles final prices including taxes. While an increase in international oil prices by 10 percent affects refined petroleum products of D-PPI at the same rate, its effect on consumer prices is approximately one third due to the tax burden on domestic fuel prices.

variables to international ones as Turkey is a small open economy. Domestic variables, on the other hand, have their usual interactions as managed by their orderings in VAR specifications¹¹.

The impulse response results are displayed in Table 6 for food prices and in Table 7 for energy prices. Cumulative responses are summarized in terms of the percentage of the initial impulse along with the duration (in months) to reach their respective peaks. All responses in the analyses are statistically significant at the level of 95 percent. The non-cumulative response values attain their peak values no later than the first three months in each specification.

Table 6: Summary of Cumulative Responses in Food Price Models

Specification 1		Impact on	
		Domestic Food PPI	CPI
Impact of	Int. Food Price	13.6%, 4 mo.	8.5%, 4 mo.
	Exchange rate	45.6%, 7 mo.	28.0%, 6 mo.
	Domestic Food PPI	123.3%, 5 mo.	37.4%, 4 mo.
	CPI	-	85.8%, 2 mo.
Specification 2		Impact on	
		Domestic Food PPI	Domestic Food CPI
Impact of	Int. Food Price	13.6%, 4 mo.	8.1%, 4mo.
	Exchange rate	46.0%, 7mo.	34.8%, 7 mo.
	Domestic Food PPI	123.3%, 5 mo.	52.5%, 5mo.
	Domestic Food CPI	-	93.3%, 1 mo.
Specification 3		Impact on	
		Domestic Food PPI	Domestic Rest-Hotels CPI
Impact of	Int. Food Price	13.6%, 4 mo.	3.4%, 4 mo.
	Exchange rate	45.4%, 7 mo.	17.1%, 7 mo.
	Domestic Food PPI	122.4%, 5 mo.	39.8%, 5 mo.
	Domestic Rest-Hotels CPI	-	94.2%, 3 mo.

The model results in Table 6 suggest that the transmission of the international food price shocks to domestic prices takes place largely through exchange rates. While the cumulative transmission of international food price changes to domestic food PPI is around 13.6 percent, peaking after 4 months, the impact of exchange rate depreciation accumulates to 45 percent on average, reaching the peak in 7 months. A similar trend is observed for the headline CPI, food and non-alcoholic beverages CPI and restaurants and hotels CPI components; while the cumulative direct effect of international food price on these indices remains between 3.4 percent and 8.5 percent, the pass-through of exchange rate changes (mainly depreciations) ranges between 17.1 percent and 34.8, reaching a peak in 6 to 7 months. It is crucial to underline the very high accumulated self-responses of the mentioned PPI and CPI sub-items. These findings as a whole are indicative of large impacts of the exchange rate pass-through and inertia effects on domestic prices compared to the distortionary effects of international food price fluctuations on domestic price dynamics.

The results of VAR analyses for energy prices show a similar picture. Along the several specifications of Table 5, responses of domestic PPI, domestic manufacturing PPI, headline CPI and transportation CPI to crude oil prices (Brent, USD/barrel) are estimated to be between 2.4 percent and 8.7 percent, reaching a peak ranging from 3 to 10 months. On the other hand, the exchange rate pass-through effects for the same components are between 24.4 percent and 76.3 percent, reaching a peak value in 5 to 12 months. The pass-through from crude oil prices to producer prices is more than double the pass through to consumer prices.

In the last two specifications of Table 7, domestic retail prices of diesel fuel (Energy Market Regulatory Authority dealer price) is used to assess the impact of rising oil prices on pump prices. Cumulative responses

¹¹ Upon estimating the VAR equations as described, the Impulse-Response Functions (IRFs) are computed as usual and they are accompanied by 95 percent Efron percentile confidence intervals (Efron and Tibshirani, 1993) bootstrapped via 1,000 replications for each VAR specification. Technical background of the modeling choices maintained can be seen in Lütkepohl (1991), Lütkepohl and Krätzig (2004) and Lütkepohl et al. (2006). Alternatively, output gap measure is used in the specifications for robustness purpose and similar results are obtained. The output gap of the seasonally adjusted Industrial Production Index (for all specifications) and a level dummy variable that mark the period of sliding scale tax scheme (in energy price specifications) were further considered as exogenous variables in the analyses. The findings presented have been robust up to the inclusion of these controls.

in these specifications reveal that the transmission of brent price shocks to diesel prices average approximately 25 percent, reaching a peak in 5 months. Just one-fourth of the change in international brent oil prices passes into domestic fuel prices due to a significant impact of the tax burden on oil products. Considering the exchange rate pass-through to domestic diesel prices, these estimates are approximately 40 percent (peak in 5 months). The pass-through from exchange rates to fuel prices is higher than that from oil prices. Direct effects of domestic diesel prices on CPI are not as strong as the other effects described above. These results are consistent with Akcelik and Ogunc (2016).

Table 7: Summary of Cumulative Responses in Energy Price Models

Specification 4		Impact on	Specification 5	Impact on
		Domestic PPI		Domestic Manuf. PPI
Impact of	Brent	6.5%, 7 mo.	Brent	8.7%, 10 mo.
	Exchange rate	70.1%, 8 mo.	Exchange rate	76.3%, 12 mo.
	Domestic PPI	106.9%, 7 mo.	Domestic Manuf. PPI	112.6%, 10 mo.
Specification 6		Impact on	Specification 7	Impact on
		CPI		Transportation CPI
Impact of	Brent	2.4%, 3 mo.	Brent	8.7%, 3 mo.
	Exchange rate	24.4%, 5 mo.	Exchange rate	41.2%, 5 mo.
	CPI	104.0%, 3 mo.	Transportation CPI	70.6%, 2 mo.
Specification 8		Impact on	Specification 9	Impact on
		Diesel Fuel		Diesel Fuel
Impact of	Brent	24.9%, 4 mo.	Brent	24.7%, 4 mo.
	Exchange rate	39.3%, 5 mo.	Exchange rate	39.5%, 5 mo.
	Diesel Fuel	75.2%, 3 mo.	Diesel Fuel	75.2%, 3 mo.
				CPI
				2.6%, 4 mo.
				25.0%, 5 mo.
				0.93%, 2 mo.

In sum, the estimates highlight the augmented and dominant impact of exchange rate changes on domestic inflation. Going forward, ensuring exchange rate stability will be critical to anchor expectations, ensure price stability and support disinflationary process.

References

- Akcelik, F and Ogunc, F. (2016) Pass-through of Crude Oil Prices at different stages in Turkey, Central Bank Review, Research and Monetary Policy Department, Central Bank of the Republic of Turkey, Vol. 16(1), pp.41-51.
- Efron, B. and Tibshirani, R. J. (1993). An Introduction to the Bootstrap, Chapman & Hall, New York.
- Lütkepohl, H. (1991). Introduction to Multiple Time Series Analysis, Springer Verlag, Berlin.
- Lütkepohl, H. and Krätzig, M. (2004). Applied Time Series Econometrics, Cambridge University Press, Cambridge.
- Lütkepohl, H., Krätzig, M. and Boreiko, D. (2006). VAR Analysis in JMulTi.

External pressures emerged as the Lira reached a series of record lows

While gross FX reserve buffers grew, supported by external demand in the first half 2021 (Figure 110, Figure 111) and the brief reprieve experienced by the Lira in 2021Q1, they have been sliding since 2021Q2 (Figure 112). As of December 2021, the Turkish Lira has become the most depreciated currency across all emerging market economies against the US\$ (Figure 113).¹² Turkey's sovereign credit default risk spread price went up from 283 in February to 630 in December 2021. Financial flows have declined but remained positive, thanks to recovery of portfolio flows after a big drop in March 2021 (Figure 114), which moved to negative territory once again in October 2021. Relative to other EMs' average, Turkey has attracted less portfolio inflows in 2021 (Figure 115).

¹² The Lira was the most depreciated currency amongst currencies of a group of emerging market economies, which are Argentina, Brazil, South Africa, Malaysia, Chile, Mexico, Czech Republic, Hungary, Poland, Russia, China, India, and Indonesia.

Figure 110: Buoyant economic activity in Turkey's major trade partners boosted Turkish exports...

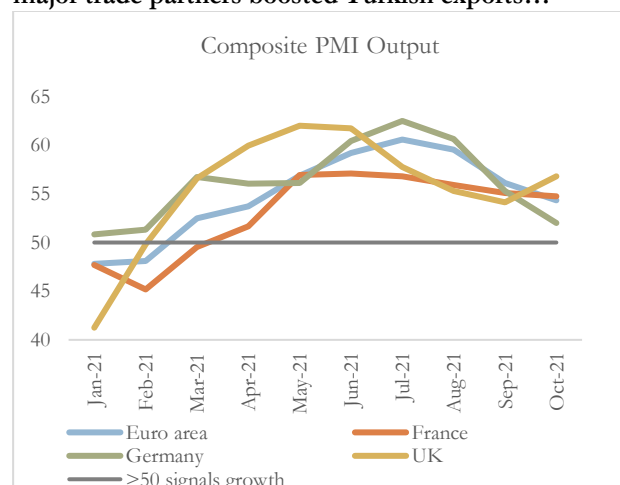


Figure 111: ...allowing Turkey to slowly build up its FX buffers...

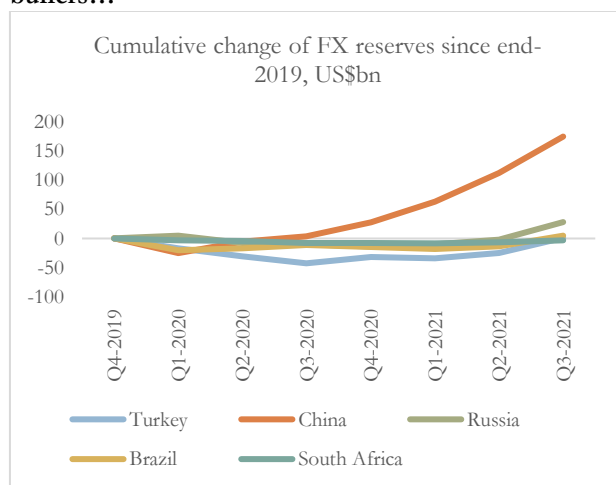


Figure 112: ...but stabilization in the Turkish Lira was short-lived...

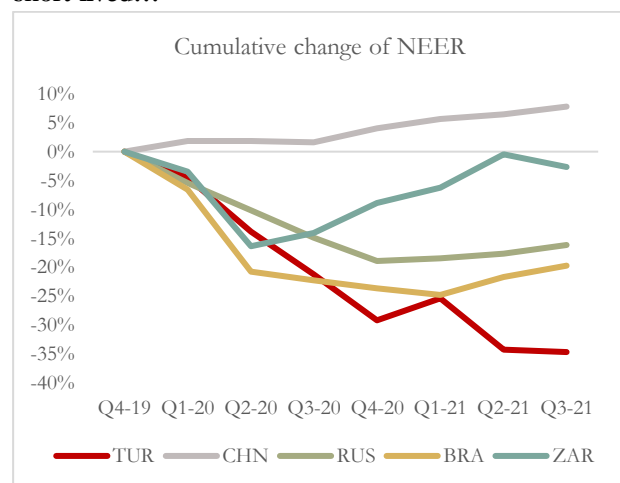


Figure 113: ...and the Turkish Lira is now the most depreciated currency against the US\$ across all EMs

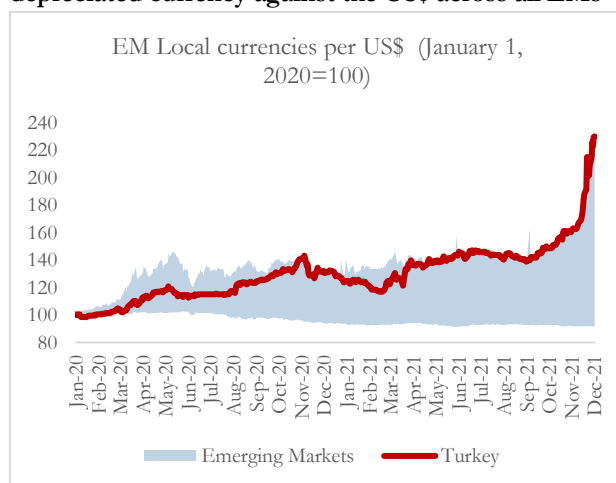


Figure 114: Capital flows were on a positive trend...

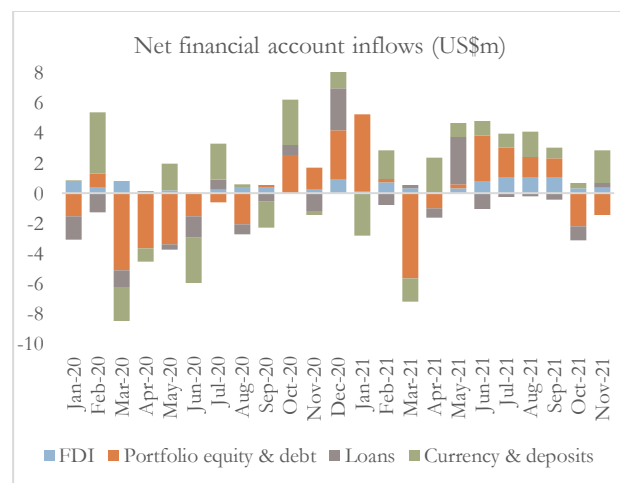
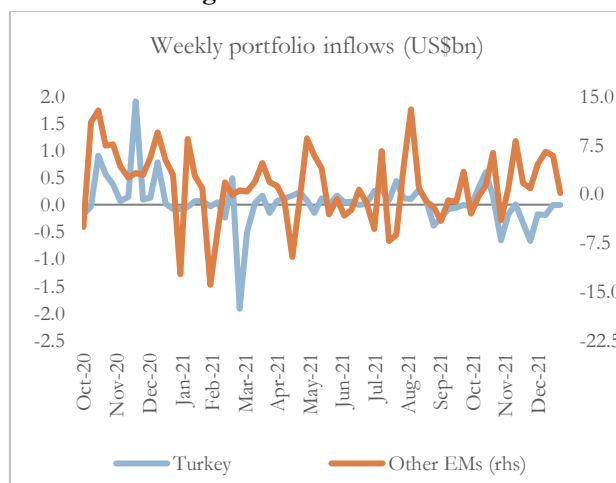


Figure 115: ...and portfolio flows were lower relative to other EMs' average



Source: Haver Analytics, IMF, IHS Markit, CBRT, IIF, WB Staff calculations.

Note: Figure 115 includes Brazil, South Africa, Malaysia, Chile, Mexico, Czech Republic, Hungary, Poland, Turkey, Russia, China, India, and Indonesia.

In order to boost reserves, the Central Bank signed new swap deals and increased FX reserve requirements and the rediscount credit utilization limits for exporters (Table 4). The Central Bank has been gradually building gross reserves, which stood \$25 billion higher by the end of December compared to their level of \$86.7 billion in March 2021. This sharp increase in gross reserves was driven by two new swap deals, IMF's SDR allocation, an increase in the required reserves for FX deposits (Figure 116), and the increase in rediscount credit utilization limits of EXIMBANK for exporter loans from \$20 billion to \$30 billion (Figure 117). As of December 2021, gross reserves declined to \$111 billion from \$126 billion a month earlier and net reserves excluding swaps also declined to -\$48.1 billion from -\$27.6 billion, driven by the Central Bank's intervention to the FX market (Figure 118, Figure 119).

Following actions taken to boost reserves, the Central Bank started to sell reserves again to ease the pressures on the Lira in December 2021. The Central Bank intervened directly in the FX market for the first time since 2014, using direct FX interventions to support the Lira after it depreciated to 13.9 TRY/US\$ in early December. The Central Bank sold \$7.3 billion in December through five different direct interventions. At the end of 2021, the Central bank posted a profit of TL60.2 billion from a loss of TL70 billion on December 30th, implying a TL130 billion change in a single day. This was driven by a change in accounting methodology on recording swap transactions in the balance sheet.

Figure 116: Required reserves were increased

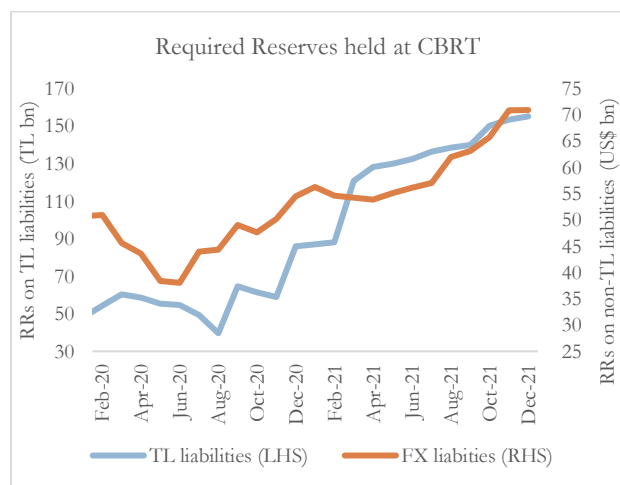
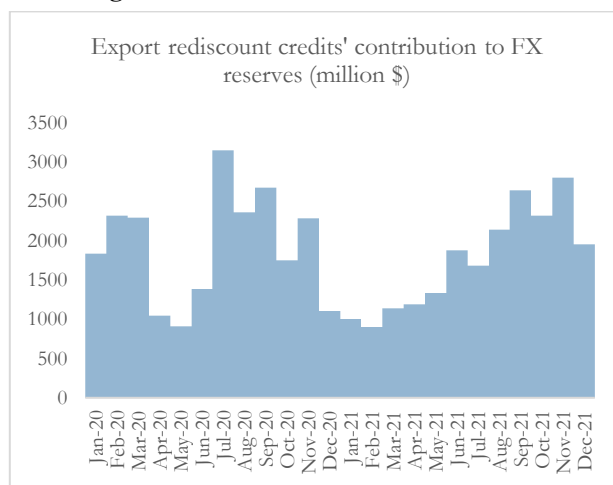
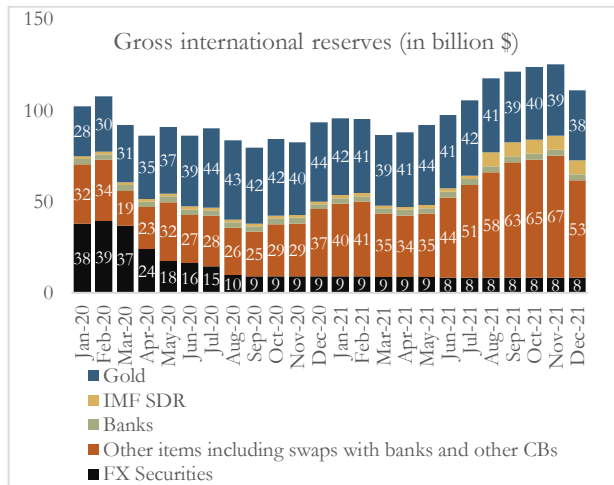


Figure 117: Export rediscount credits' contribution was rising



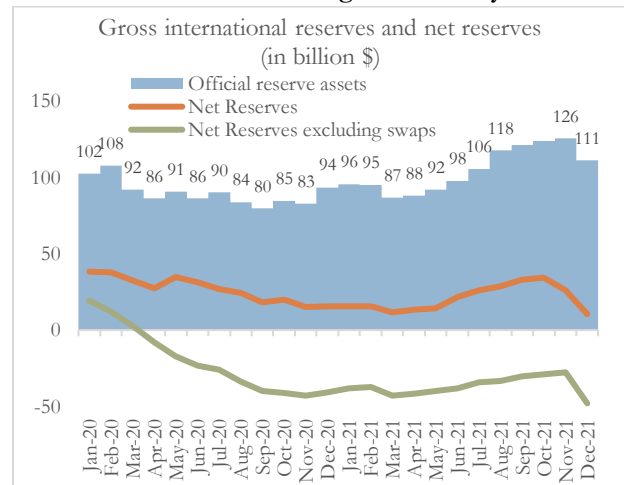
Sources: CBRT, Haver Analytics, World Bank Staff estimates.

Figure 118: Gross reserves were building up...



Sources: CBRT, Haver Analytics, World Bank Staff estimates.

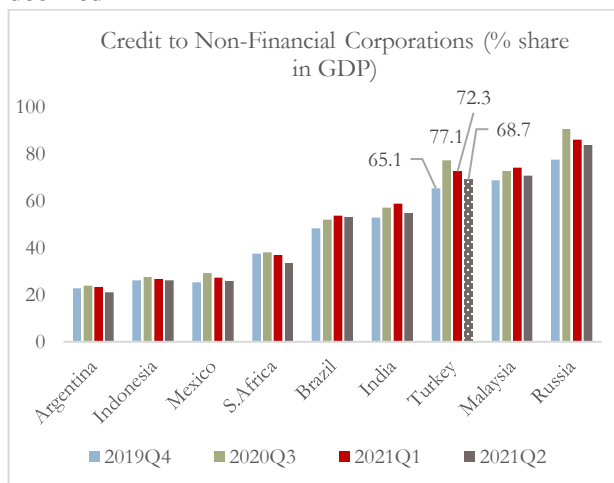
Figure 119: ...but started to decline in December while net reserves went down to negative territory¹³



Corporate vulnerabilities increased with Lira depreciation and continued pandemic uncertainties

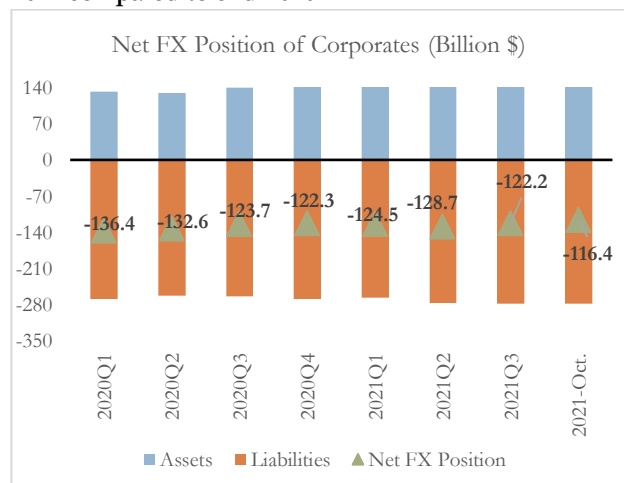
Despite some signs of deleveraging, the corporate debt burden remains high. Corporate debt as a share of GDP reached a peak level of 77.1 percent in 2020Q3, driven by increased domestic TL borrowing and an increase in the Lira equivalent of FX debt due to Lira depreciation (Figure 120). Turkey saw a sharp increase in its corporate debt to GDP ratio in this period, standing out among peers. With financial tightening and a slowdown in credit momentum coupled with a strong rebound in economic activity through the end of 2020, corporate debt as a share of GDP fell to 68.7 percent in 2021Q2. The decline in corporate debt in 2021Q2 compared to 2020Q3 was much sharper for Turkey compared to peer countries. Nevertheless, Turkey has one of the highest corporate debt to GDP ratios among peer countries¹⁴.

Figure 120: Corporate debt as a share of GDP slightly declined



Sources: BIS and CBRT.

Figure 121: Net FX position of corporates improved in 2021 compared to end-2020



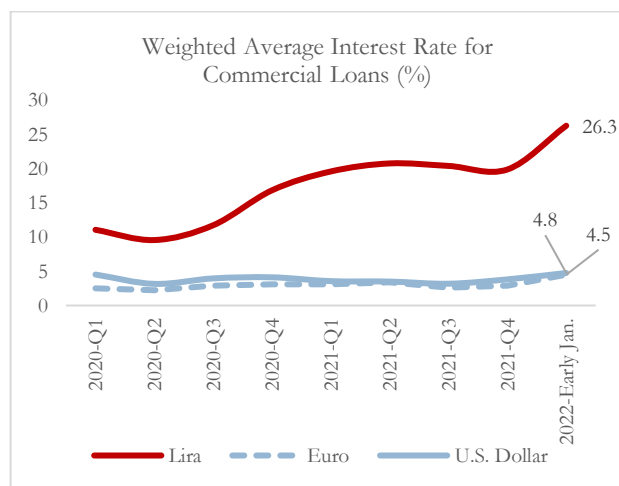
¹³ Net reserves are calculated using the CBRT's analytical balance sheet items of foreign assets, total FX liabilities, and public sector and other deposits, and converted to US\$ terms using end-of-month CBRT US\$ buying rate. Swaps are obtained from the CBRT's International Reserves and Foreign Currency Liquidity database.

¹⁴ While Turkey's corporate debt as a share of GDP is higher compared to peer countries, it is below the emerging market average (115.2 percent) according to BIS database.

The net FX position of corporates¹⁵ improved in October 2021 compared to end-2020. FX liabilities increased by \$8.7 billion over 2021 as corporates refinanced with external FX debt (Figure 121). While corporates continued to decrease their domestic FX debt to the banking sector, around 80 percent of the increase in FX liabilities was due to a rise in long-term external FX loans. FX assets of corporates on the other hand have increased by around \$15 billion through deposits in domestic banks and direct investment abroad. As a result of these changes, the net FX position improved by around \$5.9 billion to \$116.4 billion (around 15 percent of GDP).

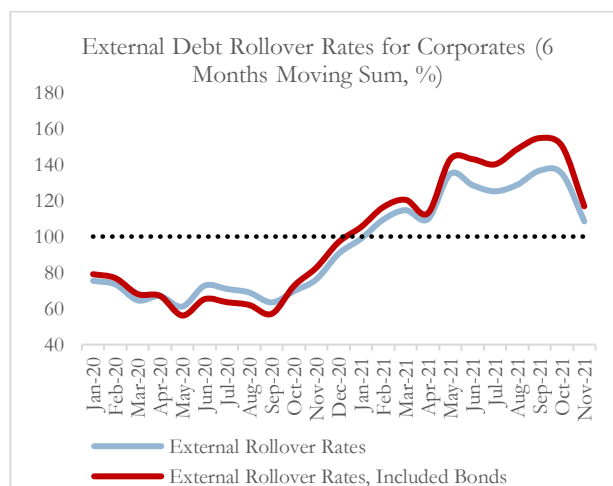
Turkish Lira commercial lending rates remained relatively high despite monetary loosening. TL lending rates increased by around 10 percentage points in early 2021 compared to mid-2020 amid monetary tightening that started in late November 2020. However, the policy shifted in late March 2021 when the CBRT started to cut rates in September 2021 and decreased the policy rates by 5 percentage points to 14 percent. Despite monetary loosening, the weighted average interest rates for commercial loans increased to 26.3 percent in early 2022 (Figure 122). High cost of TL borrowing accompanied by moderation in domestic credit growth led corporates to increase their borrowing in FX terms. This resulted in rising external debt rollover rates above 100 percent for corporates in the first three quarters of 2021 (Figure 123), supported by relatively lower cost of borrowing in FX. However, the cost of borrowing in USD and Euro terms started to rise at the end of 2021 and reached 4.8 percent and 4.5 percent in early 2022, respectively. External debt rollover rates fell remarkably at the end of the year.

Figure 122: Commercial lending rates are on an increasing trend



Source: CBRT.

Figure 123: Rollover rates remained above 100 percent in 2021



The debt-to-equity ratio of Turkish traded companies remains high, diverging from the average of emerging market economies. Corporates trading on Turkey's BIST 100 are more leveraged than those trading on the MSCI Emerging Markets Index¹⁶ as reflected in debt-to-equity indices (Figure 124). The gap between the two has widened further in 2021 as the debt-to-equity index fell significantly in emerging markets. Elevated corporate debt coupled with high borrowing costs put pressure on the interest coverage ratio (ICR, ratio of earnings before interest and tax to interest expenses) and confirms the persistence of solvency pressures.

¹⁵ In order to improve data quality, increase compliance with international standards, the CBRT initiated a study in 2020, in cooperation with TURKSTAT, to compile data at the company level with the direct reporting method and made some data revisions in August 2021 on short-term external debt, international investment position and FX assets and liabilities of non-financial corporates. These revisions led to changes in trade credits (export receivable and import payables) and an improvement in net FX position of non-financial corporates compared to earlier data. For details, please see CBRT blog: <https://www.tcmb.gov.tr/wps/wcm/connect/blog/en/main+menu/analyses/an+assessment+of+revisions+in+debt+statistics>

¹⁶ The MSCI Emerging Markets is an international equity index, which tracks stocks from 24 emerging market countries, including Turkey. All corporates both financial and non-financial are presented to compare with the other emerging market economies.

The ICR fell to the levels below sustainability thresholds in the first half of 2021 despite a recovery in nominal earnings (Figure 125).

Figure 124: Turkish traded companies' leverage remained high...

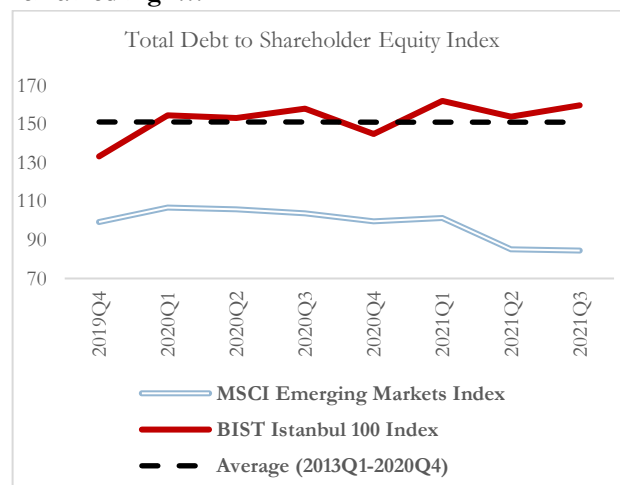
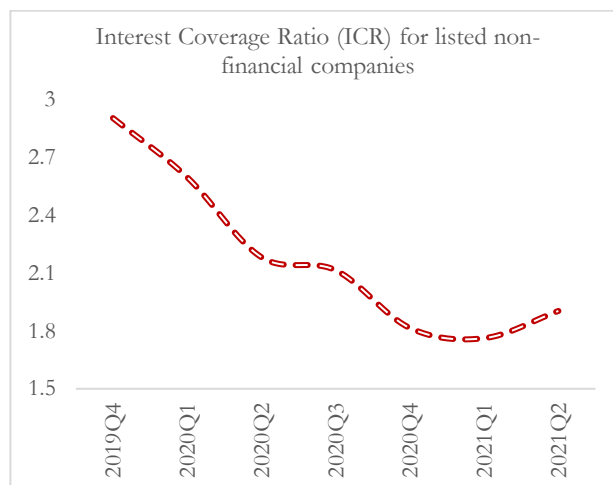


Figure 125: ...Adding to solvency pressures



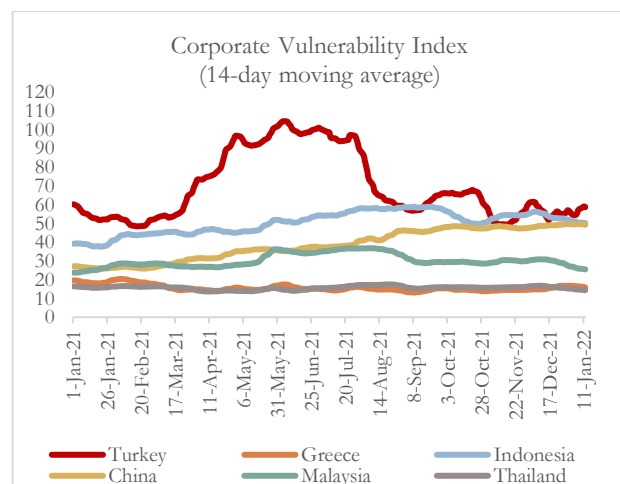
Source: WB Staff estimates based on Bloomberg. ICR represents EBIT divided by interest expenses for listed non-financial corporations based on 4-quarter rolling figures. The MSCI Emerging Markets is an international equity index, which tracks stocks from 24 emerging market countries, including Turkey. All corporates both financial and non-financial are presented to compare with the other emerging market economies.

Recent volatility in financial markets and the sharp depreciation of the Lira led to a rise in corporate vulnerability, straining corporates' balance sheets. Corporate vulnerability – as measured by probability of (corporate) default – has recently resurged again amid market turmoil and it remains high compared to selected peer countries (Figure 126). Turkish corporates are vulnerable¹⁷ to exchange rate shocks as approximately 60 percent of corporate debt is FX denominated. Indeed, the rising ratio of net FX loss¹⁸ to gross profit confirms the detrimental impact of currency depreciation on the balance sheets of corporates in 2020. While the manufacturing sector, which has a natural FX hedge, experienced FX gains in 2020, net FX losses in transportation, tourism, construction, and utilities sectors accounted for a large share of gross profits and constrained net profits substantially (Figure 127). The recent World Bank Pulse Survey results confirm that despite some improvement, financial risk of firms still exists. The results show that 33.2 percent of businesses interviewed expected to fall into arrears on their financial liabilities in the following 6 months (Box 5).

¹⁷ Big bulk of foreign currency loans belong to larger corporates that are hedged through exports and other mechanisms.

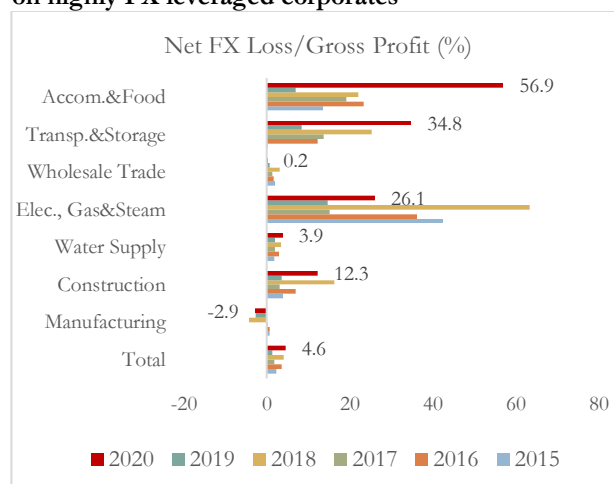
¹⁸ Net FX loss is defined as losses minus gains incurred by foreign exchange, under income statement item of expenses or income from other operations.

Figure 126: Corporate vulnerability remains high...



Source: <https://nuscree.org/en/cvi/>, WB Staff estimates.

Figure 127: ...And currency depreciation put strains on highly FX leveraged corporates



Source: CBRT Company Accounts, WB Staff estimates.

Box 5: Turkey Business Pulse Survey-Second Wave Results

The Business Pulse Survey (BPS) was first implemented by the World Bank in 2020 to assess how firms around the world were coping with the COVID-19 pandemic. The first wave (BPS-1) for Turkey was conducted in June-July 2020, while the second wave (BPS-2) was conducted in March-April 2021. In total 2646 different firms responded to the survey, 1508 in the first round and 1547 in the second, with 409 of them being interviewed in both. This box presents on the results of BPS-2 with comparison to BPS-1¹⁹, specifically focusing the impact of pandemic on value-chain disruptions, financial constraints, and policy.

Difficulties in obtaining inputs of production remained a major challenge for Turkish firms. Almost one quarter of the firms interviewed during BPS-2 had to cancel orders due to lack of inputs in their last 30 days of operation (Figure 128). For the average firms experiencing these difficulties, cancelled orders amounted to 27 percent of monthly sales, a number that drops to an average of 18 percent of monthly sales when weighting for firm sizes. Disruptions induced by a lack of inputs were common across firms of all size and age categories, even though large firms performed better and had a lower share of their sales affected by these supply shocks (Figure 129).

Firms' cash constraints relaxed between June 2020 and March 2021, but financial risk remained high. At the time BPS-2 was conducted, the average firm reported that it had available cash sufficient to cover operational cost for 15.4 weeks, compared to a mere 1.2 weeks among BPS-1 firms (Figure 130). Even if on average firms had larger buffers of cash to run their operations, 33.2 percent of businesses interviewed in BPS-2 expected to fall in arrears on their financial liabilities in the following 6 months (Figure 131). The fraction of firms expecting difficulties decreased by 7.7 pp. compared to June 2020 but remained high especially among smaller and younger firms.

Difficulties in accessing finance represented an important constraint for Turkish firms. Out of the firms that responded to the related BPS-2 survey question, 61 percent reported facing difficulties in accessing external finance (Figure 132). High interest rates were by far the most cited constraint, with 36 percent of respondents mentioning them as a factor limiting their access to external sources of finance. High repayment risk and lack of collateral were also cited as common concerns by 13 percent and 10 percent of interviewed firms respectively. High interest rates, lack of collaterals and high repayment risk remained the most important reasons for the reported lack of access to external finance among firms of all size categories, but larger firms were less likely to report difficulties compared to smaller firms.

¹⁹ Comparisons of the full sample of BPS-1 and BPS-2 rest on the assumption that the two waves represent two comparable samples of the Turkish private sector.

Figure 128: Orders cancelled due to lack of inputs

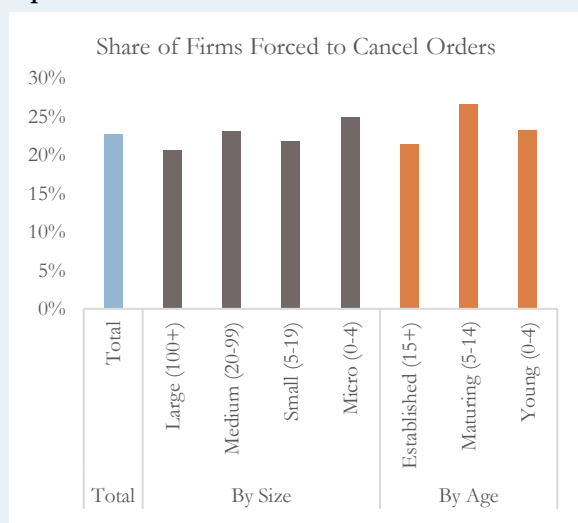


Figure 130: Financial risk remained high...

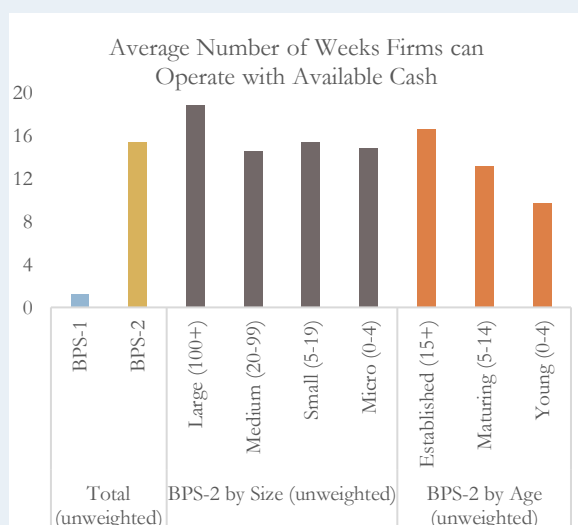


Figure 129: Large firms performed relatively better

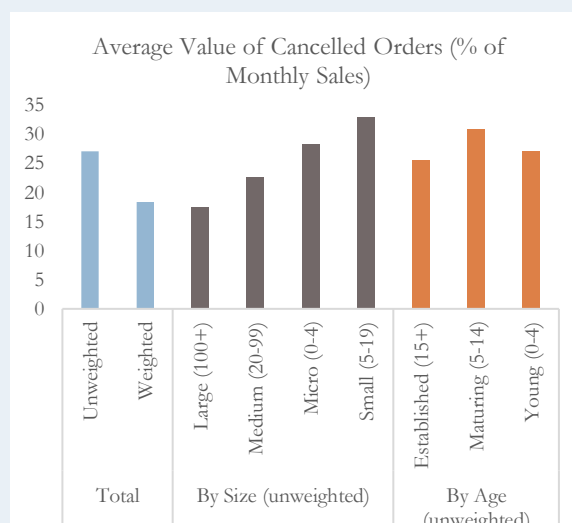
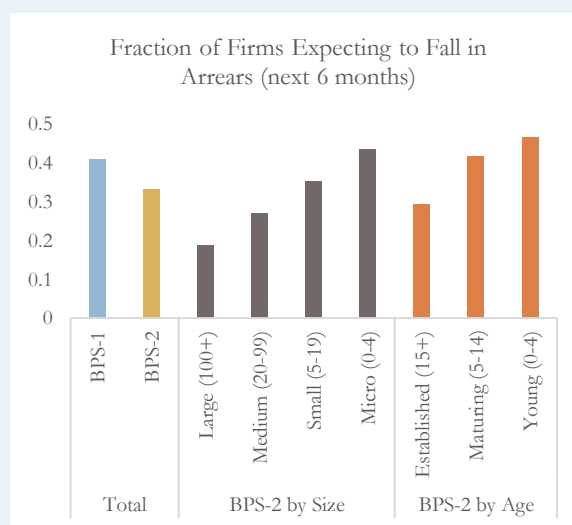


Figure 131: ...especially for smaller and younger firms



A large share of Turkish firms benefited from some form of public support since the onset of the pandemic, but public support was more frequently received by larger firms. Of the firms interviewed during BPS-2, 46.3 percent had received public support since the beginning of the pandemic, up from 36.8 percent in BPS-1 firms. The data show evidence of large differences in the coverage of public support across firms of different sizes. While in BPS-2 62.5 percent of large firms received some form of public support, coverage drops to 43.5 percent among small firms and to 36 percent among micro firms.

While many firms did not apply for public support simply because they did not need it, a considerable share of small firms applied but were rejected. Compared to BPS-1, as information about policy support spread, the share of BPS-2 firms who were not aware of public support dropped considerably from 13.4 percent to 2.1 percent. Considering differences by firm size, if a larger share of micro and small firms did not receive public support, only 43 percent of them said that they did not need it, compared to 53.9 among medium and large firms. Smaller firms were also more likely to have applied for public support and be rejected compared to larger firms and were more likely to find the application process too cumbersome.

Wage subsidies and credit support were the most used public support measures during the pandemic. Around 54 percent of firms interviewed in BPS-2 had received public support in the form of wage subsidies since the onset of the COVID-19 pandemic (Figure 133). Another 42 percent of them received support in the form of new loans and credit. Tax exemptions, deferral of payments, and direct grants were used less frequently with only 21 percent, 15 percent, and 4 percent reporting to have received each of these forms of support.

Figure 132: Around 61 percent of firms reported facing difficulties in accessing external finance

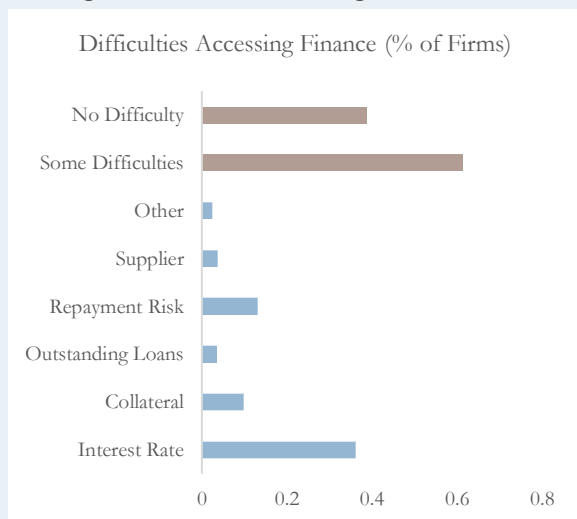
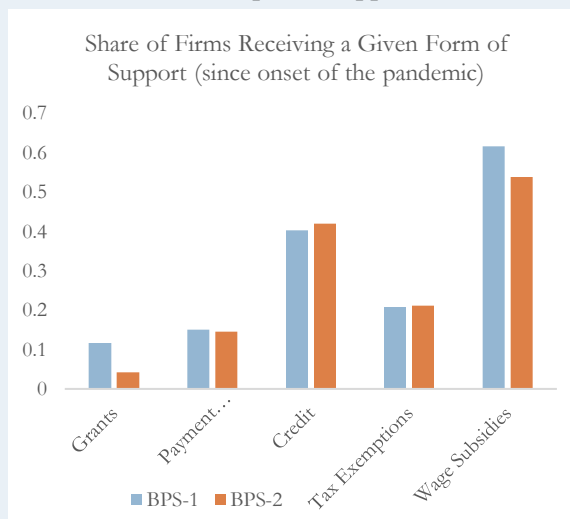


Figure 133: Wage subsidies and credit support were the most used public support measures



Source: World Bank COVID-19 Business Pulse Survey.

Financial sector's exposure to risks remains elevated

After rapid credit growth in 2020, led by state banks, the credit momentum slowed down in the first three quarters of 2021. Credit growth was driven by state banks in recent years, countering economic headwinds through the credit channel in line with their policy roles. However, as government stimulus waned and interest rates increased at the end of 2020, state banks' credit growth decelerated to safeguard asset quality and capitalization (Figure 134). Instead, credit growth in the first three quarters of 2021 has been led by private banks, which focused on local currency retail lending as the economy started to recover.

Macroprudential measures curbed retail loan growth after June 2021 to prevent excessive risk-taking but loan growth picked up in 2021Q4. First, BRSA increased the risk weighting of general-purpose loans and credit cards issued after June 2021 in the Capital Adequacy Ratio (CAR) calculation. Second, the maximum maturity for general-purpose loan amounts over TL50,000 was decreased to 24 months from 36 months. Third, to make Turkish Lira funding and, as a consequence, lending slightly costlier, CBRT terminated the reserve option mechanism for FX deposits in September 2021, the rule that its upper limit of the facility for holding FX was decreased from 20 percent to 10 percent of Turkish Lira reserve requirements in July 2021. BRSA also took additional measures on automobile loans to limit the growth in this segment. The maximum maturity of these loans was decreased and the loan/value ratio for these loans were reduced for higher priced automobiles. During the heightened FX volatility in November and December, following the CBRT's policy rate cuts, state banks subdued retail loan growth increased again (Figure 135). In the last quarter of 2021, both private and state banks increased the growth of their corporate and commercial loan portfolios, but with subdued FX lending (Figure 136, Figure 137). The recent CBRT policy rate cuts are contributing to loan demand.

Figure 134: Credit growth reaccelerated...

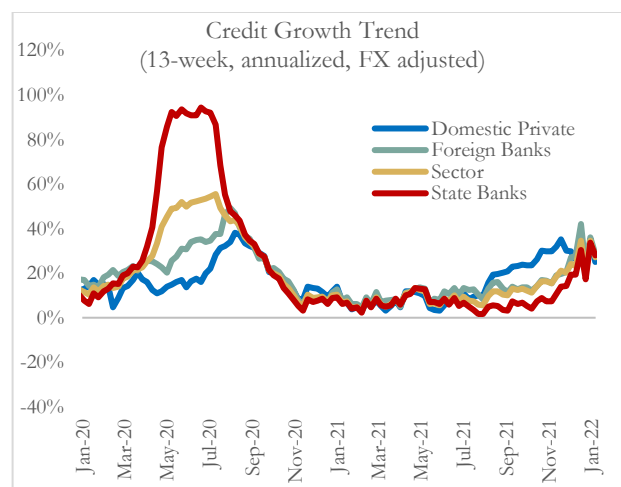
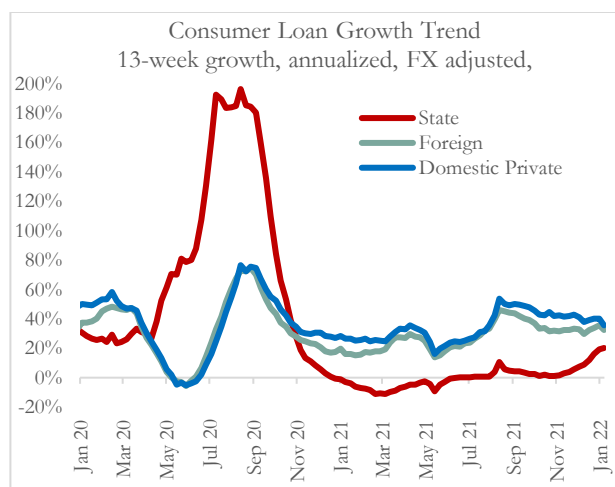


Figure 135: ...While retail lending remained largely stable



Sources: Haver Analytics, BRSA, CBRT, WB Staff calculations.

Asset quality metrics were supported by loan growth, payment deferrals, and forbearance on loan classification. Official non-performing loan (NPL) ratios across banks declined from 5.4 percent in December 2019 to 3.2 percent as of January 2021 (Figure 138). Stage 2 loans also declined from 12 percent in 2019 to 10.8 percent as of 2021Q3 (Figure 139). Strong loan growth supported these metrics, with absolute Stage 2 loan numbers increasing to TL406 billion in 2021Q3 (12 percent yoy increase). Regulatory forbearance measures related to the classification of NPLs and Stage 2 loans, effective since March 2020, were phased out as of September 2021 with a transitory period.²⁰ The effect of this reversal will only become visible in the coming months. State banks' reported NPL ratios are lower than those of private banks, reflecting high loan growth and a focus on mortgages and secured retail lending. Nevertheless, high credit growth, especially in economically turbulent times, makes state banks' loan portfolios exposed to seasoning risk from Stage 2 loans amid high single-name exposure.²¹

²⁰ In March 2020, the NPL definition was temporarily changed from a minimum of 90 days past due (DPD) – the international standard – to 180 DPD, while the minimum number of DPD for monitoring loans under the Stage 2 category increased 90 DPD from 30 DPD. This forbearance measure was extended twice, first in December 2020 and second in June 2021. Relaxations in regulatory definitions of NPLs have been infrequent and only few other countries have implemented such wide-ranging measures as Turkey. As of October 1, loans with more than 30 DPD and continuing to be categorized as Stage 1 may continue to be categorized as Stage 1 until the 90 DPD limit expires. Loans with more than 90 DPD as of October 1 and continuing to be categorized as Stage 2 may continue to be categorized as Stage 2 until the 180 DPD limit expires.

²¹ IFRS 9, which was introduced in 2018, is aimed to increase financial stability by introducing a *forward-looking expected loss impairment model* that requires banks to provision when they expect a significant increase in credit risk. However, approaches used differ between banks. <https://www.bis.org/fsi/fsisummaries/ifrs9.pdf>

Figure 136: Corporate lending picked up in 2021Q4

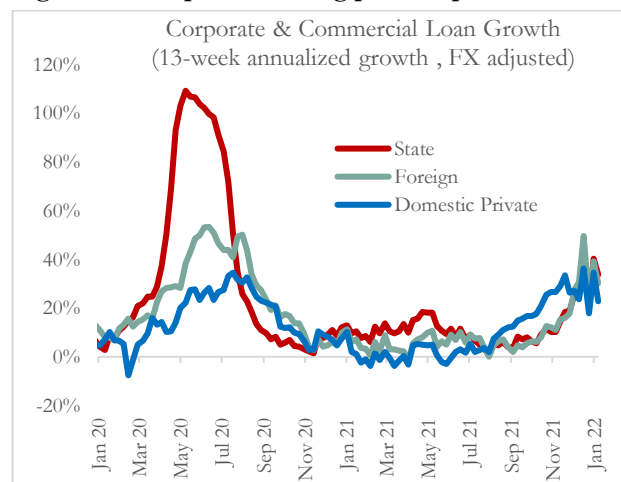


Figure 137: FX lending remains subdued

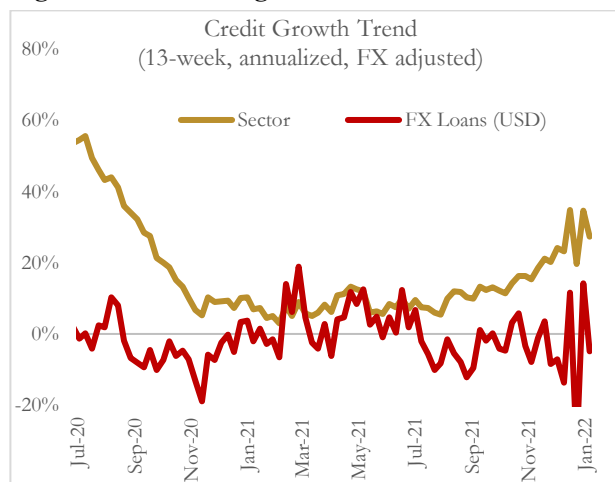


Figure 138: Loan growth and forbearance support NPL ratios...

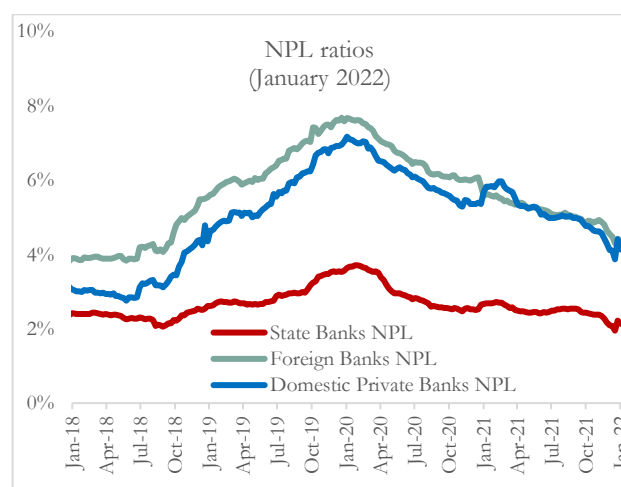
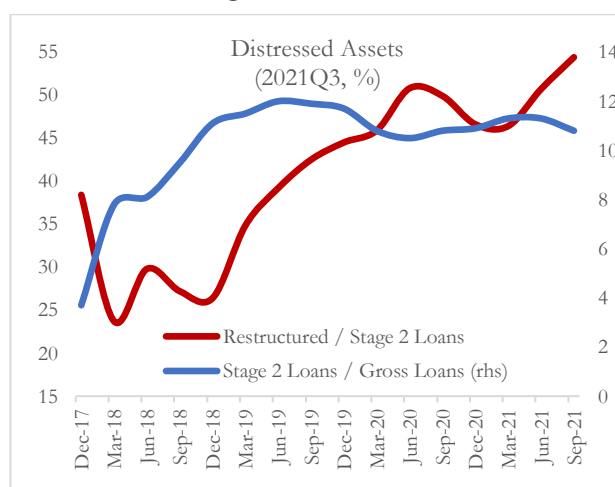


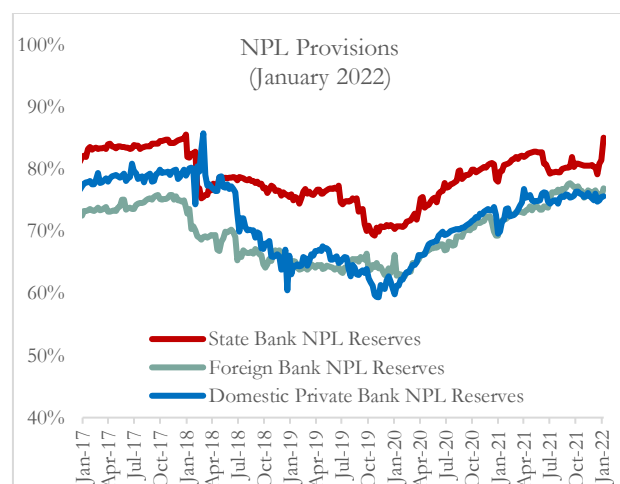
Figure 139: ...and Stage 2 loan ratios amid an uptick in loan restructuring



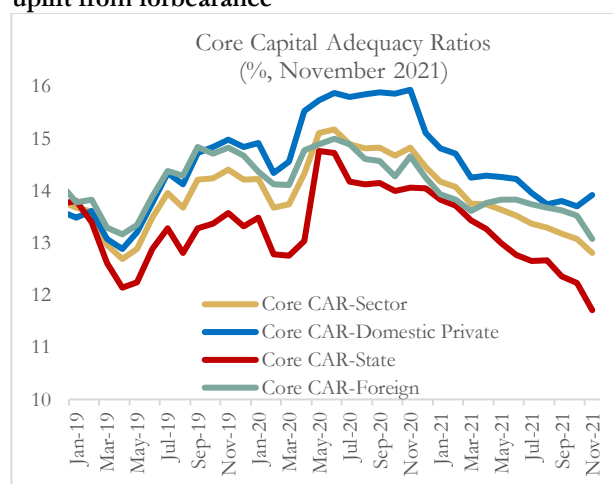
Sources: Haver Analytics, BRSA, CBRT, WB Staff calculations.

Loan restructuring has picked up in 2021, reaching about half of Stage 2 loans. Turkish banks have engaged in significant loan restructuring in the aftermath of the 2018 currency shock and interest rate volatility. According to the Bankers Association of Turkey (TBB) data, as of September 2021, the amount of restructured loans reached TL246 billion (27 percent yoy increase). Restructured loans reached 6.1 percent of total loans as of September 2021 and 54.4 percent of Stage 2 loans (Figure 139). In addition to banks' own initiatives, companies are also provided with opportunities under the financial restructuring agreement. Loan restructurings picked up as the deteriorating macro-financial environment and Lira depreciation put pressure on balance sheets particularly in sectors exposed to FX lending, e.g., energy, construction, and those highly impacted by the COVID-19 induced economic downturn, e.g., tourism. Some large restructurings of PPPs and big conglomerates in 2021Q3 reflect downside risk to banks' asset quality from high single exposures.

Banks continued to keep relatively high provisions for NPLs. Extended forbearance measures helped alleviate pressures on reporting asset quality deterioration until the end of 2021Q3. Banks have continued to increase IFRS-9 based provisions to build buffers against the expected rise in NPLs, and the reserve coverage ratios for NPLs in January 2022 (Figure 140) increased to 85 percent (70.8 percent in 2019Q4), 75.6 percent (60.8 percent in 2019Q4), and 76.9 percent (64.1 percent in 2019Q4) for state banks, domestic private banks, and foreign banks, respectively. Most banks also set aside free provisions as an extra precautionary measure for NPL increases.

Figure 140: Provisioning continues to be conservative

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

Figure 141: Core capital buffers declined despite an uplift from forbearance

Core capital buffers declined despite an uplift from forbearance measures, especially for state banks.

Banks had gradually built up their buffers after the 2018 currency shock, increasing the Capital Adequacy Ratio (CAR) from 16 percent in July 2018 to 18.4 percent by December 2019. Since then, the CAR has declined to 17.3 percent as of September 2021 despite supportive forbearance measures (Figure 141).²² The decline was most pronounced for state banks, despite capital injections in 2020, given high credit growth (16.2 percent as of November 2021, down from 18.2 percent in December 2020). While most forbearance measures were phased out in recent months, the measure allowing banks to use the rolling 252-day average FX rate when calculating FX denominated risk-weighted assets (RWAs) remains active and extended for 2022, providing temporary support given considerable Lira depreciation and reacceleration of loan growth. In November, an increase in domestic private banks' Tier-2 capital buffers, supported by the TL value rise of the FX denominated subordinated debt stock, a decrease in general provisions, and NPL sales contributed to a moderate increase in the sector's CAR to 17.8 percent. While the aforementioned CAR levels are higher than the regulatory level of 12 percent, slower growth, an increase in distressed assets, and further Lira depreciation could weigh on RWAs and capital adequacy going forward. Depreciation of Lira volatility weakened banks' core capital ratio, declining from 14.5 percent in December 2020 to 12.8 percent in November 2021, despite the buffer provided by FX denominated capital instruments in Tier 1 capitals. State banks are particularly vulnerable given the need for improvement in their buffers and capital injections are being considered.²³

Deposit-taking state banks are particularly exposed to capital adequacy risks. The forbearance measures have supported the capital buffers. However, the state banks' core capital adequacy ratio declined to 10.5 percent in November 2021 from 12.8 percent in December 2020. National development banks are also exposed but to a slightly lower degree given somewhat higher capital buffers. Slower GDP growth, an increase in distressed assets, and further TL depreciation are the major risks for capital adequacy going forward. The likelihood of government support is high, making bank solvency problems unlikely. However, capital injections may lead to additional lending, which could create pressure for further capital injections unless macro-financial conditions stabilize while also creating tail risks for asset quality.

²² Capital adequacy related forbearance measures include the use of 2019 year-end FX rates in calculating foreign currency denominated risk-weighted assets (RWA) and the suspension of mark-to-market losses on securities in capital adequacy calculations (both due to be retracted at end-1H21), as well as a 0 percent risk-weighting on government FX-denominated bonds. The FX rate has been changed to a rolling 252-business day average in December 2020, which decreased the impact of forbearance. BRSA amended this measure in December 2021 and decided that the 252-business day average FX rate at the end of 2021 will be used for CAR calculations until further notice. Apart from forbearance, CGF loans also have a low-risk weighting for RWAs.

²³ <https://www.bloomberg.com/news/articles/2022-01-20/turkey-plans-to-spend-3-8-billion-to-boost-state-banks-capital>

Bank's access to liquidity and funding remained stable despite the exposure to volatile macroeconomic conditions, persistent maturity mismatches, and refinancing risks. While corporates increased their external financing significantly, banks managed to moderately lower their loan to deposit ratios (Figure 142) and external debt rollover ratios. As of 2021Q3, the share of assets having a remaining maturity of less than a year increased to 50 percent from 44 percent in 2019Q4, signaling the impact of macroeconomic uncertainty. The percentage of liabilities having a remaining maturity of less than a year also increased to 78.2 percent from 75 percent. Turkish banks and corporates remain vulnerable to further bouts of external volatility given the chronic shortage of long-term financing (both external and domestic) coupled with persistent maturity mismatches, which expose them to liquidity and refinancing risks. Investor sentiment already affected by monetary easing and heightened FX volatility may become even more acute given the expected monetary tightening in advanced economies. Investors also closely watched the October 21st 'grey-listing' by the Financial Action Task Force (FATF) and the proposed remedial response by the authorities.

Figure 142: Deposit growth supported a moderate decline in loan-to-deposit ratios

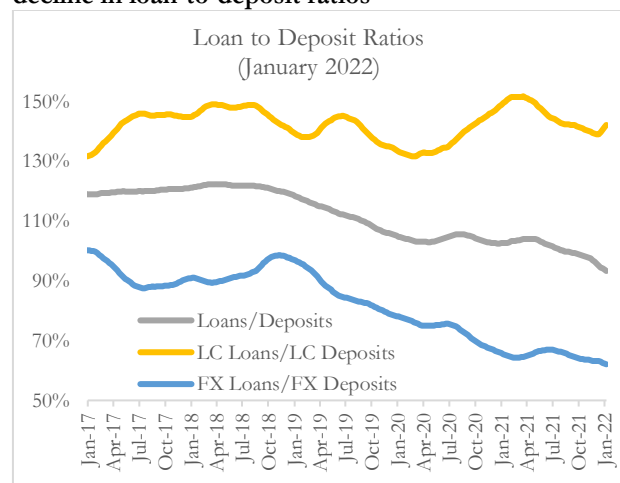


Figure 143: Banking sector maintains liquidity to meet short-term FX liabilities...

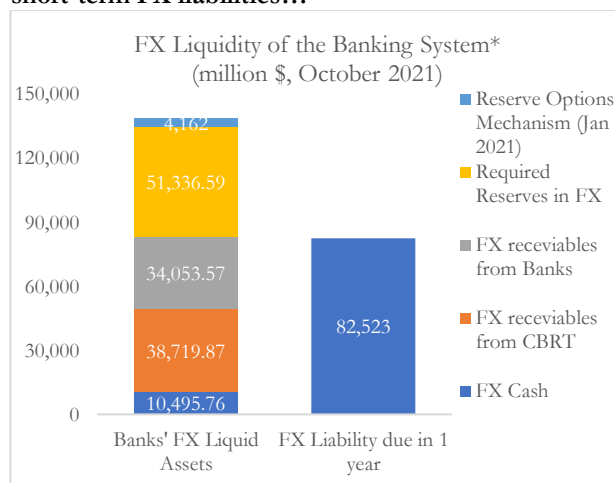


Figure 144: ...with net long FX position

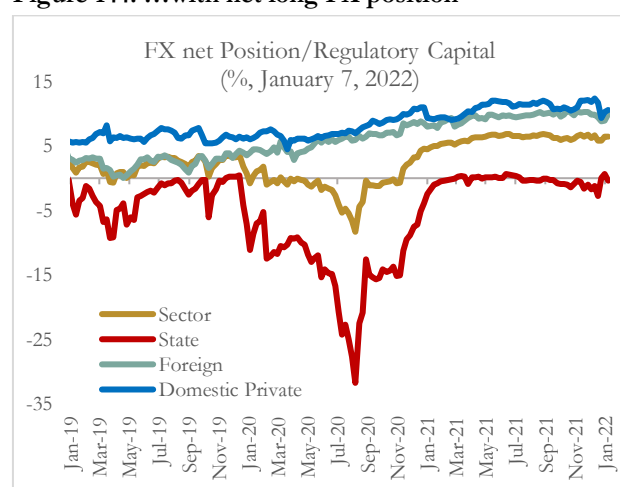
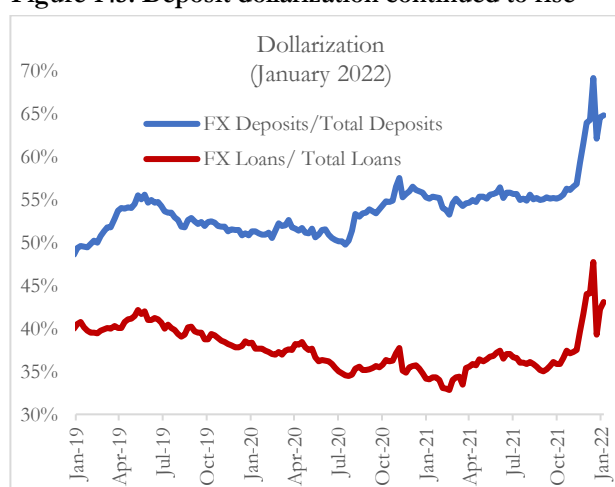


Figure 145: Deposit dollarization continued to rise



Sources: Haver Analytics, BRSA, CBRT, WB Staff calculations.

The banking sector continues to have adequate FX liquidity to cover short-term liabilities amid exposure to the CBRT via FX swaps (Figure 143).²⁴ While private banks are net long in FX positions, state banks continue to have a marginally open position, however considerably reduced from mid-2020 (Figure 144). Any FX liquidity concern in the banking sector would cause a reduction in CBRT FX reserves and add to pressures on the exchange rate and interest rates. Although banks' external financing pressures have been reduced with deposit growth outpacing loan growth, increasing deposit dollarization (Figure 145) - a result of high inflation, TL depreciation, and increasing uncertainty - poses a risk to banks' liquidity and FX positions. It is too early to assess the fallouts of the recently introduced FX-protected TL deposit instrument on the banking sector balance sheets, deposit rates, lending costs, and bank competition. Although this instrument may contribute to maturity mismatch improvements and de-dollarization, macro-fiscal risks may require careful consideration.

The banking sector profitability remains stable, benefitting from the lower cost of risk and the economic recovery. The net interest margin (NIM) tightened after the policy rate hike in late 2020, while improving again with the more recent CBRT rate cuts, which should provide some support to NIM for the rest of the year. The cost of risk is likely to be lower in 2021, given conservative provisioning in 2020 and the economic recovery currently underway, supporting profitability. However, while monetary easing supports profitability in the short term, the heightened market volatility that results from it could undermine asset quality and profitability going forward.

E. The Turkish labor market regained momentum in 2021 but challenges remain

At the national level, employment recovered with economic activity

Key sectors have started to regain 2018 job levels along with the reopening and buoyant economic activity. Labor market conditions deteriorated sharply during the pandemic, with sizeable drops in employment and labor force participation. By May 2020 the economy had lost 2.8 million jobs compared to a year before. However, labor markets staged a partial recovery through the end of 2020 and reversed the losses. Monthly labor force surveys show that aggregate employment has been showing active recovery in 2021. Over 3 million jobs were regained in November 2021 compared to a year ago, which corresponds on average to 250,000 jobs added every month (Figure 146) and a year-on-year increase of 11.3 percent (Figure 147). Job figures in November show that total employment is above its pre-2018 crisis level. The recovery has helped to make up for the job losses recorded along with relaxation of pandemic related restrictions.

²⁴ As of August 2021, the banking sector's net off-balance sheet FX position, including the swaps with CBRT and others, is 59.5 billion dollars.

Figure 146: Total employment surpassed its pre-2018 crisis level

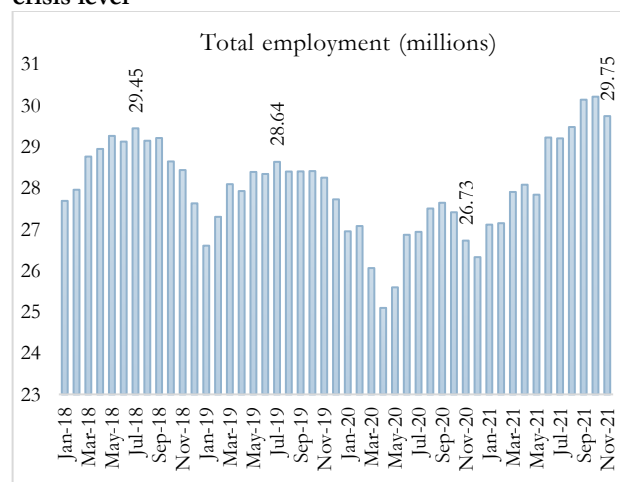
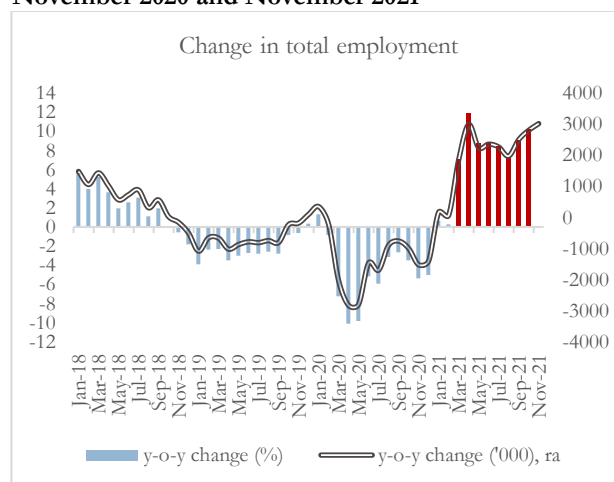


Figure 147: Over 3 million jobs were regained between November 2020 and November 2021



Sources: Haver Analytics, Labor Force Survey TURKSTAT.

The labor market recovery was weaker among informal workers but stronger among young and female workers. While employment growth among formal workers has been positive since August 2020, informal jobs experienced a continuous contraction since January 2020 (Figure 148). Informal employment reversed the trend in March 2021 and are now back at the levels in June 2020 but still below the number of jobs in 2018, prior to the economic shock. The share of formal workers in the labor market rose to 71 percent in November 2021 from 66 percent a year ago. Employment among younger workers – male and female, which was hit the hardest during the crisis –has been growing faster than among adult workers. The recovery has helped to make up for the job losses recorded since June 2020. Around 17 percent of the jobs regained over the last year have been filled by young workers (Figure 149). Female jobs were lost at a faster pace in every month in 2020. However, female employment expanded faster than male employment, particularly in recent months and surpassed its pre-pandemic levels (Figure 150).

Sectors and type of employment contributed differently to the rate of jobs regained by women. While base effects played a role in the relatively faster rising level of female employment, employment expansion in the formal sector stood out in particular, rising by around 12 percent year-on-year in November 2021 - much higher than the corresponding decline in formal female employment during the COVID-19 pandemic. In terms of sectoral distribution, female employment in the industrial sector also increased by 17.8 percent in November 2021 compared to a year ago – surpassing its pre-COVID level. In contrast, the pickup in female employment in the services sector was lower compared to other sectors in 2021.

Figure 148: Formal jobs have expanded more than four times faster than the pace of informal jobs

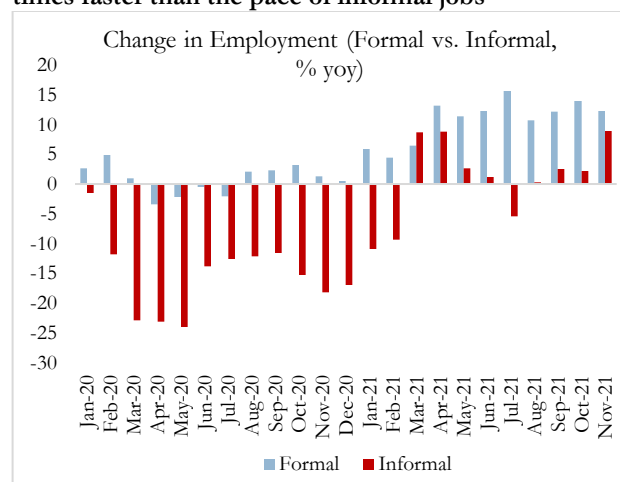


Figure 149: The job recovery was skewed towards young workers, growing from a low base

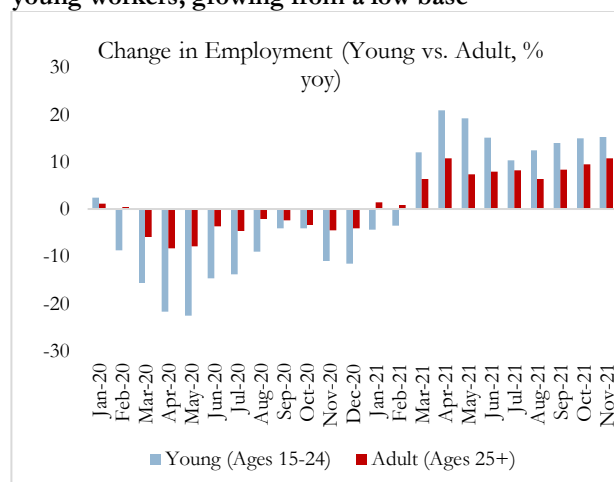


Figure 150: Employment grew relatively faster for females in 2021Q3, compensating the losses

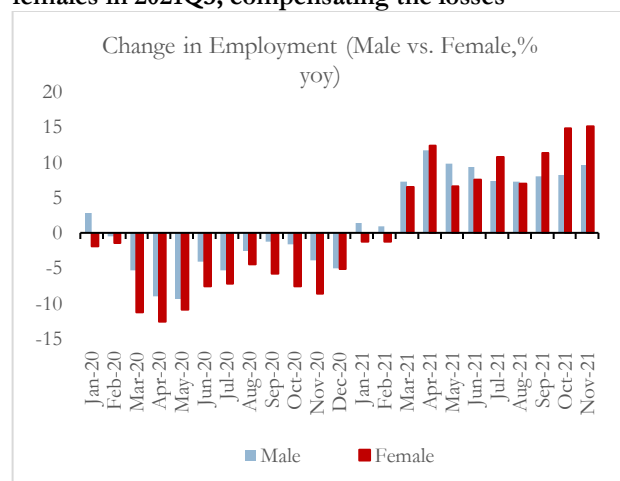
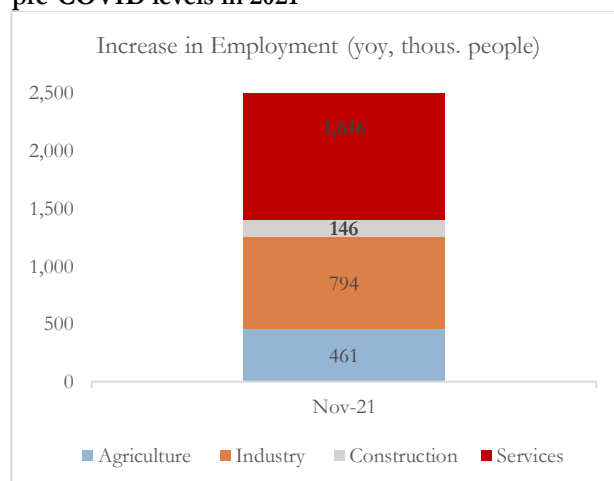


Figure 151: Services sector employment surpassed its pre-COVID levels in 2021



Sources: Haver Analytics, Labor Force Survey TURKSTAT.

The services sector, which recorded the biggest job losses, was the key driver of employment generation in 2021. Due to the unprecedented nature of the shock in 2020, services sector employment was hard hit in 2020. The number of jobs posted in the services sector turned positive in March 2021 and increased its pace of recovery over time along with strong economic activity and relaxation of travel restrictions. The services sector accounted for more than half of job creation over the last year (Figure 151), supported by the pickup in tourism activity that contributed to employment growth in services sector. The industrial sector showed an impressive performance in terms of employment activity and its employment surpassed pre-crisis levels, thanks to strong export performance. In relative terms, the pace of the recovery in the industry sector was also higher than services throughout 2021. The construction sector, which has been suffering since the 2018 currency shock, regained some of job losses. However, employment levels remain below 2018 pre-crisis levels.

The demand for labor in the formal sector based on analysis of vacancies²⁵ shows that job growth is driven both by latent demand for workers and an uptake of active job search. The increase in the total number of job vacancies continued from late 2016 until early 2018 but has been almost steadily decreasing since

²⁵ World Bank staff analysis based on data from Turkey's Kariyer Net Job Portal, the main private sector jobs portal for online vacancies in the formal sector.

then even before COVID-19 hit. Total positions posted decreased by about 40 percent between January to March 2020 as a first response to the COVID-19 induced lockdowns. More recently though, seasonally adjusted data show that the number of positions posted has recovered to levels closer to those in early 2018 (Figure 152). Job application figures also show recovery in labor markets in 2021 although the total applications are yet to surpass the levels in 2018 (Figure 153).

The strength of the recovery in manufacturing and to an extent construction is evident from analysis of job vacancies. According to seasonally adjusted data, vacancies in manufacturing decreased since early 2018, with a large shock at the beginning of COVID-19 but picked up to reach the 2018 levels by September 2021. Jobs in construction have been steadily decreasing since mid-2018, but levels have so far not reached those in 2018.

Figure 152: The number of positions reached levels closer to those in early 2018

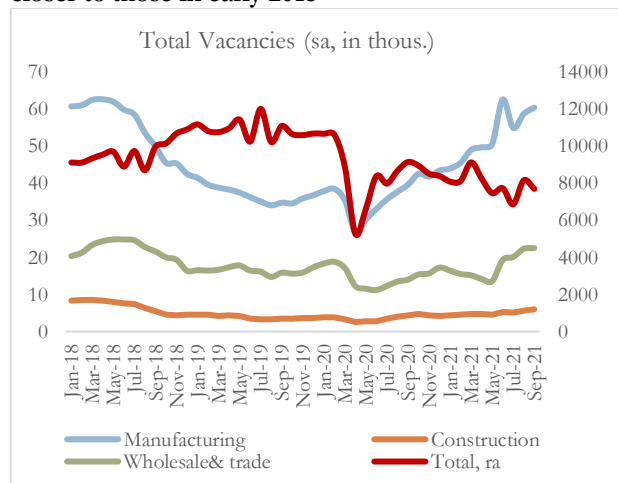
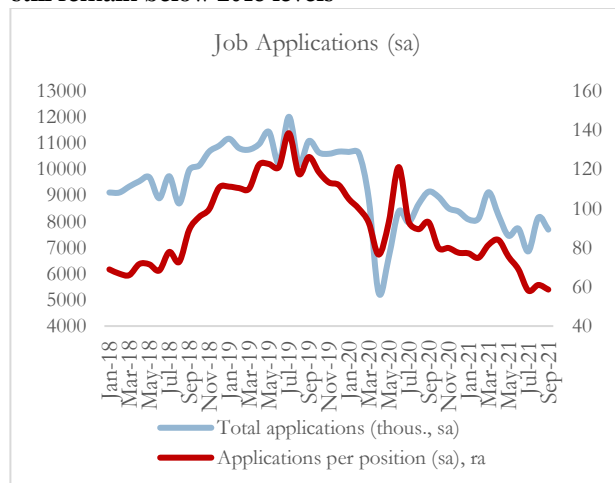


Figure 153: Total applications recovered partially, but still remain below 2018 levels

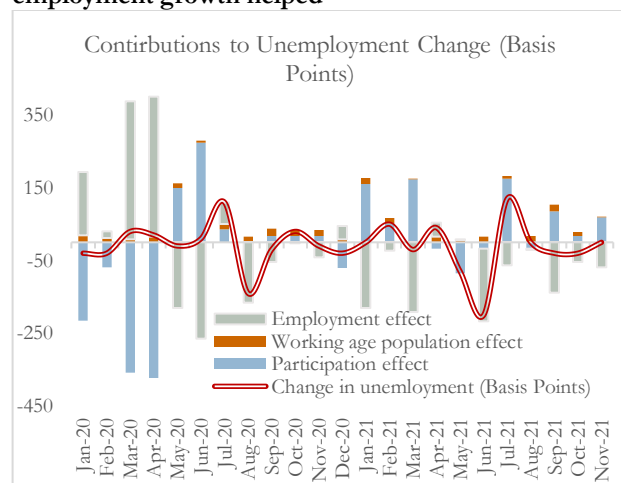


Source: WB staff calculations based on data from Kariyer.net.

Job search data shows that the number of applications per position has been decreasing since 2019 for various reasons (Figure 153). Despite a brief peak in June 2020 when the COVID-induced lockdown measures were eased, the decreasing trend is still visible as of September 2021. Looking at patterns and profiles of job search applicants²⁶, seasonally adjusted data show a similar pattern of job search increases and decreases over time by gender. The overall number of applicants is still below the 2018-2019 levels for both men and women. As observed in general labor force statistics, persistent gender gaps in labor force participation are reflected in the trend that 6 out of 10 jobs were filled by male workers as of 2020. The female labor force participation (seasonally adjusted) showed a gradual improvement and rose to 34.1 percent in November 2021. Overall job search declines may be driven by declining labor force participation rates, a mismatch between available competencies and occupational skills most in demand over time and regional changes in the demand for jobs.

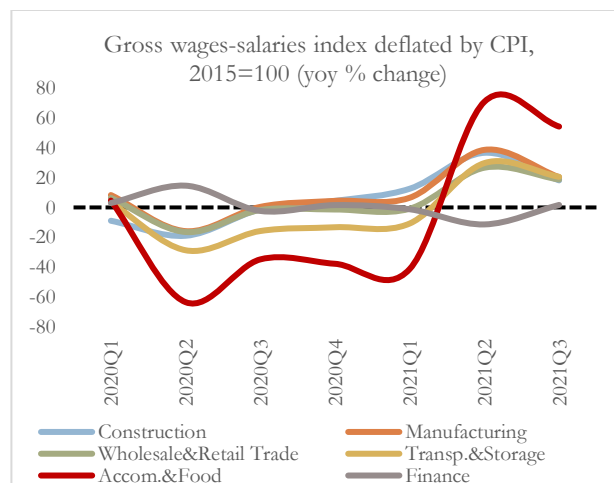
²⁶ One applicant may apply to more than one job.

Figure 154: A surge in the participation rate limited the decline in the unemployment rate while employment growth helped



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

Figure 155: Real wages started to rise in 2021, particularly in hard-hit sectors



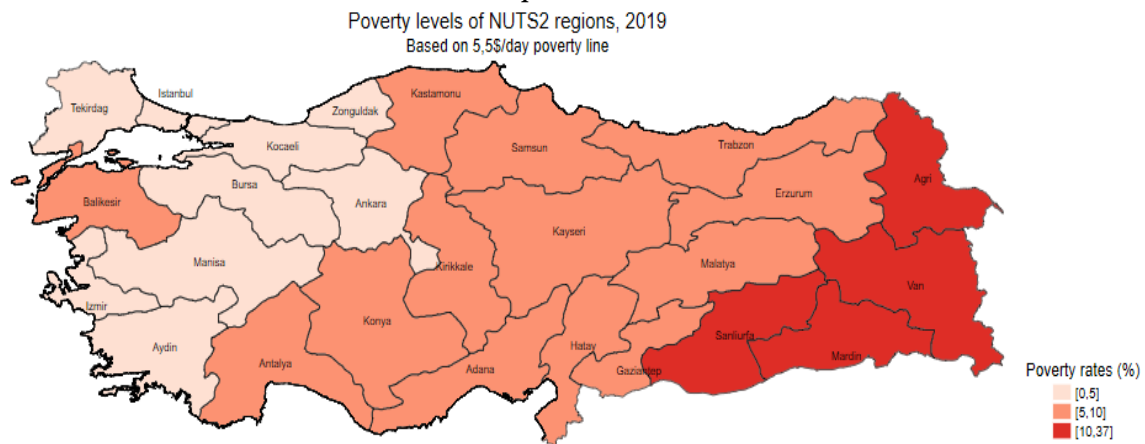
Source: Haver Analytics, TURKSTAT

The employment recovery helped the unemployment rate to fall slightly in 2021. The unemployment rate (seasonally adjusted) fell by 1.5 pp from 12.7 percent at the end of 2020 to 11.2 percent in November 2021. Whilst employment creation helped the rates to go down moderately in 2021, a higher increase in labor force participation rates by 3.4 pp pushed the unemployment rates in the opposite direction (Figure 154). At the same time as economic activity picked up and base effects kicked in, average real wages started to compensate some of the losses in early 2021 after the deep contraction in 2020. This pickup in 2021 could partially reflect the low base due to the impact of the withdrawal of employment support measures such as unpaid leave and short-term work allowance that suppressed the wages in 2020. All sectors except finance recorded sharp rises in real wages (at least 25 percent yoy) in 2021Q2. Real wages in the accommodation and food sector, which suffered the most, recorded the highest growth among sectors and rose by around 70 percent and 55 percent in 2021Q2 and 2021Q3, respectively (Figure 155).

Turkey's regions entered the COVID-19 pandemic with varying degrees of socio-economic vulnerability

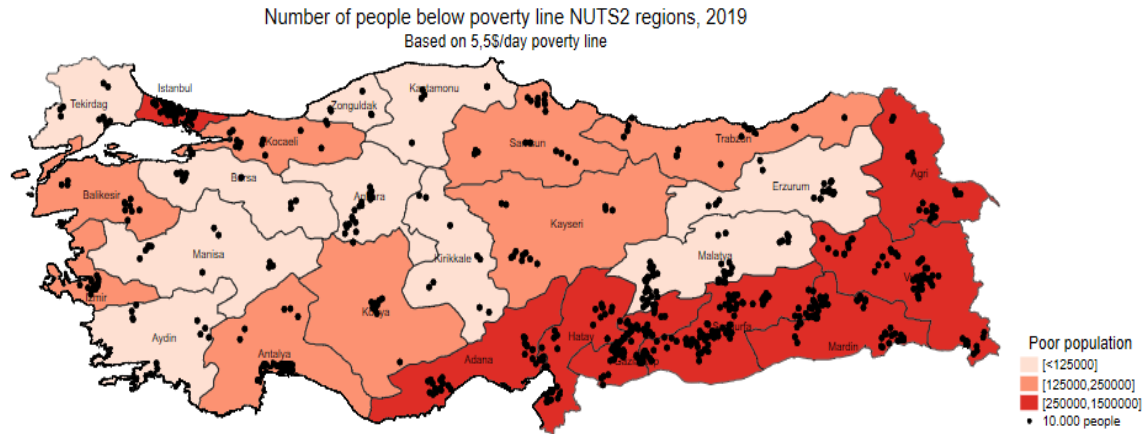
Poverty varied significantly at the onset of the COVID-19 pandemic. The SILC-2020 survey, which offers a snapshot of the socioeconomic conditions in 2019, shows that Eastern provinces had remarkably higher incidence of poverty compared to those in Western regions. For instance, poverty rates (measured at the \$5.5 per capita per day (2011 PPP) poverty line) in Eastern subregions such as Van and Sanliurfa were 36.5 percent and 32.6 percent, which is in stark contrast with the levels in the most prosperous parts of the country (for instance, Bursa (2.1 percent), Ankara (2.2 percent), Tekirdag (2.9 percent) and Istanbul (2.9 percent)) (Figure 156). Similarly, poverty is denser in Eastern areas of the country. In Şanlıurfa, for instance, 1.3 million live below the poverty line, about one in five of all poor people in the country (Figure 157). Overall, half of all the poor people in Turkey are found in Eastern regions.

Figure 156: There was a clear difference in poverty rates in the regions of Turkey prior to the COVID-19 pandemic



Source: Turkstat, World Bank Staff estimates.

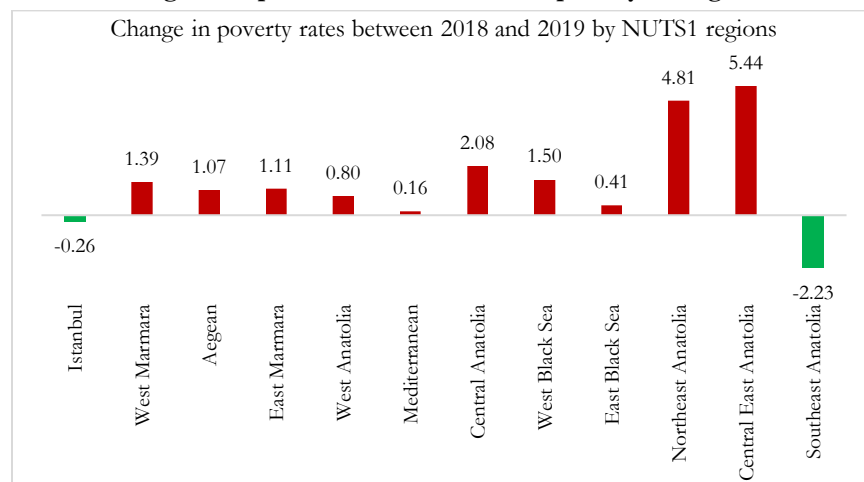
Figure 157: Around half of the number poor reside in Eastern regions



Source: Turkstat, World Bank Staff estimates.

Prior to COVID-19, Turkey experienced an economic turmoil in 2018-19, which reversed the declining poverty trend experienced in preceding years and exacerbated income inequalities. The setback in poverty alleviation was felt broadly across the country, with 10 out of the 12 NUTS1 regions recording an increase in poverty. But, with the exception of the Southeast Anatolia subregion, the less developed regions of the country witnessed the largest increases in poverty, going up by 4.1 and 5.4 percentage points in Northeast Anatolia and Central East Anatolia (Figure 158).

Figure 158: Several Eastern regions experienced the increases in poverty during the 2018-19 economic turmoil

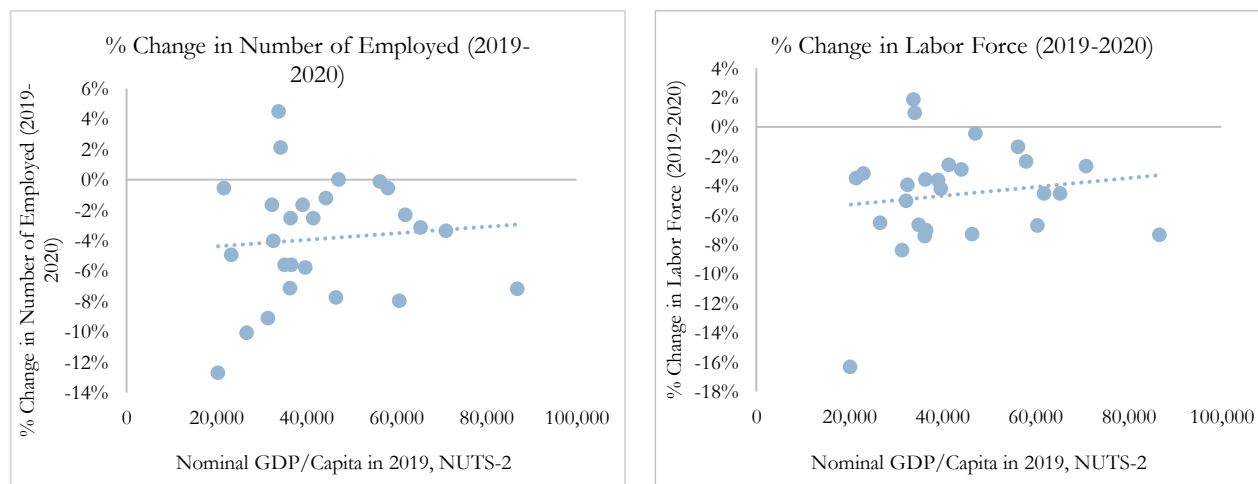


Source: Turkstat, World Bank Staff estimates.

Labor market outcomes confirm the uneven regional effects of the COVID-19 pandemic

Data from the Labor Force Survey show that employment declined in Turkey by 4.6 percent between 2019 and 2020, from 28.1 million to 26.8 million²⁷. In relative terms, some of the greatest job losses occurred in the Eastern regions. In subregions such as Şanlıurfa and Mardin, for instance, 13 percent and 11 percent of jobs were cut during the shock, respectively. This contrasts the lower scale of the jobs crisis in Istanbul, the main economic pole in the country, where 7 percent of jobs were cut (Figure 159). Overall, whereas regions in the East comprised 10 percent of the overall employment prior to the shock, they represent 19 percent of all job losses during the pandemic.

Figure 159: Some of the greatest job losses occurred in the Eastern regions



Sources: Turkstat, World Bank Staff estimates.

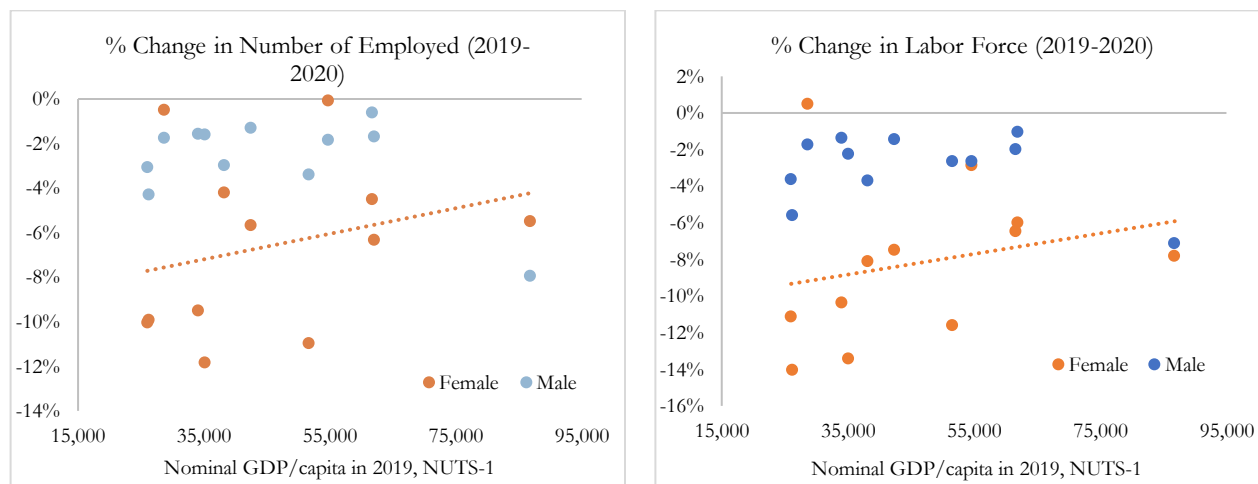
There are also significant disparities in the labor supply response to the shock across the Turkish geography. After Istanbul, Şanlıurfa subregion was the part of the country that experienced the largest contraction of its labor supply (16 percent), either because labor participants dropped out of the market or

²⁷ The figures are based on the results of 2019 and 2020 Household Labor Force Surveys, which provide annual averages of labor market indicators.

those considering entering the market opted to stay out (Figure 159). Nearly 11 percent of the total labor supply of the country originates from Eastern regions, yet the reduction during the crisis was almost twice that share (19 percent).

The regional inequalities of the COVID-19 shock also manifested in large impacts for women from Eastern regions, widening pre-existing gender gaps. Indeed, compared to the rest of the country, female jobs and labor force participation shrank relatively more in all lagging regions, except for the Northeast Anatolia subregion (Figure 160). In particular, female employment in the food, accommodation, storage, trade and transport sectors declined at a faster rate in regions with lower GDP per capita. On the national scale, female employment in agriculture and other services sectors fell at a higher rate compared to male employment.

Figure 160: Gender inequalities in the effects of COVID-19 on labor outcomes were larger in lagging regions



Sources: Turkstat, World Bank Staff estimates.

Box 6: Pandemic Impacts on Labor

Determinants of employment reveal that the shock created by the pandemic hit high-skilled female labor hardest. Although there were significant labor force losses among Turkish men, a closer look at the composition of inactive individuals by gender shows women were much more likely to drop out of the labor force in 2020, and especially women in the skilled education group (Figure 161). Labor force participation rates by women aged 25+ with college degrees fell from 71.5 percent in 2019 to a staggering 65.6 percent in 2020. Unemployment rates for women declined in 2020 (from 16.5 percent in 2019 to 15 percent in 2020), but only because many women dropped out of the labor force in 2020 (with female labor force participation declining from 34.4 percent in 2019 to 30.9 percent in 2020) (Figure 162). These trends could be explained by a combination of factors: highly educated women with children of school age, usually more likely to rely on privately provided formal childcare, might have opted out of the labor market to support children's education during the periods of school closures. Also, highly educated women could benefit (by resigning) from compensation packages relatively more generous if compared to the subsidy paid to the average (and low-skilled) employee during the crisis via the Temporary Employment Fund (equal to maximum 80 percent of the Minimum Wage). Finally, high-skilled women might have been relatively less likely to be employed in essential sectors and occupations during the pandemic (e.g. food production, health) compared to low-skilled women. On the other hand, labor force participation of less educated women is lower and might be more rigid to changes in economic situations.

Data on employment by occupation validate the dropping out of skilled women from employment. The loss in skilled female labor is evident in the analysis by occupation groups (ISCO-based classification). Transition into inactivity in 2020 was strongest for women in professional occupations, among technicians

and clerical support (Figure 163). Looking at men who dropped out of labor force in 2020 but who were employed in 2019, 34 percent were employed in wholesale, retail, transportation and storage, accommodation and food services while 18 percent were employed in construction and 19 percent were employed in manufacturing. As for women, 27 percent of the women who are inactive in 2020 but had a job in 2019 were employed in wholesale, retail, transportation and storage, accommodation and food services, while 18 percent were employed in public administration, education and human health services and 20 percent were employed in manufacturing.

Figure 161: Skilled women were much more likely to drop out the labor force...

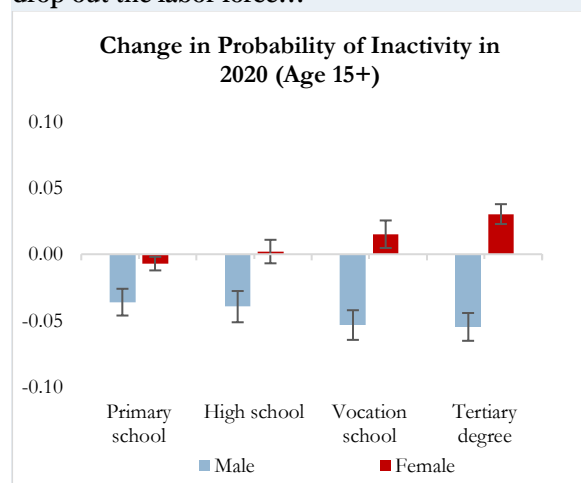
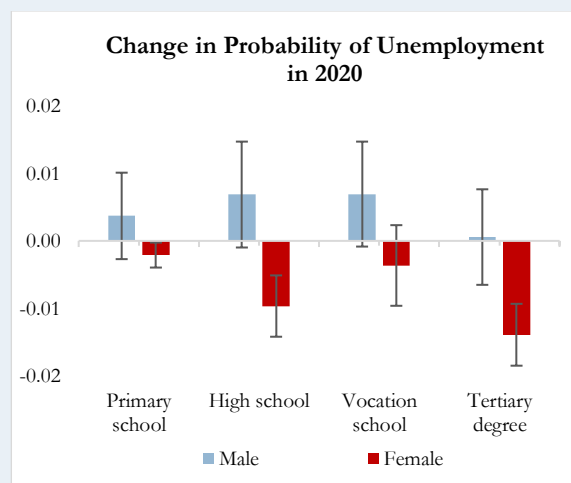
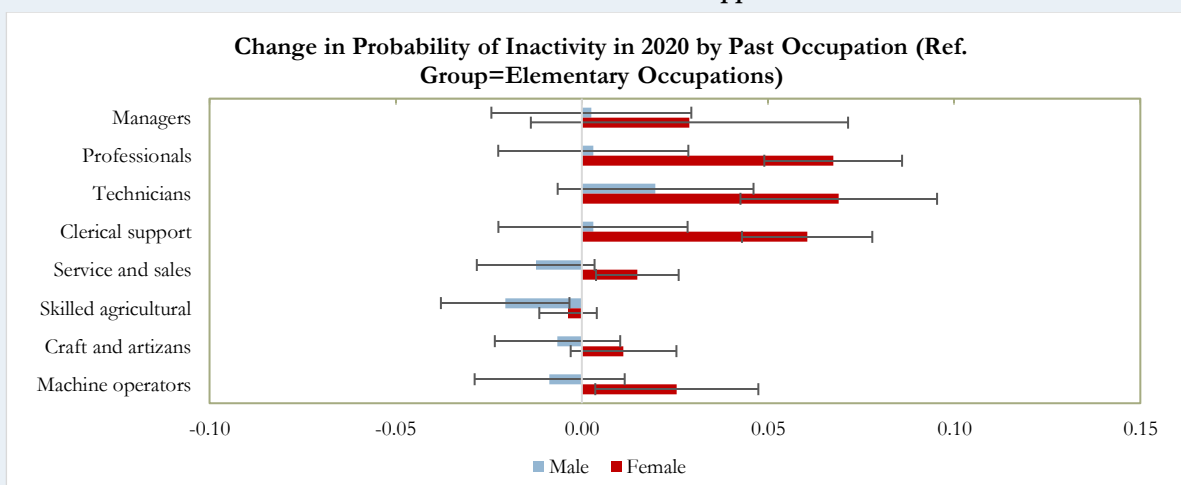


Figure 162: ...and thus less likely to be unemployed



Sources: TURKSTAT, World Bank staff calculations based on a linear regression. Education categories are interacted with year 2020. The reference category is individuals with no degree.

Figure 163: Transition into inactivity was strongest for women in professional occupations, among technicians and clerical support



Sources: TURKSTAT, World Bank staff calculations based on a linear regression. Occupations that individuals reported that they were working at year ago are interacted with year 2020. The reference category is elementary occupations.

While informal employment appears to have declined in 2020, and more so for women, this may be due to losses to labor force participation rates among women. For women, the sharpest decline is in accommodation and food services, wholesale and retail, administrative support and manufacturing (between 3 and 7 pp). For men, the sharpest decline is in construction, manufacturing, accommodation and food services, wholesale and retail and arts, entertainment and recreation (between 3 and 10 pp). The decline in informality during the pandemic could be due to several reasons. The reduced demand for labor in sectors with high informality due to depressed consumer demand may have led to major exits by workers, particularly

in services, which tend to be less productive. On the other hand, firms may have formalized previously informal workers to benefit from pandemic-related subsidies, although the extent that this occurred has yet to be evaluated (Table 8).

Table 8: Informality declined in many sectors in 2020

Informality by Sector and Gender	Female		Male	
	2019	2020	2019	2020
Agriculture	96%	94%	79%	76%
Mining	2%	3%	5%	5%
Electricity, Gas, Water Sewerage	21%	30%	29%	28%
Manufacturing	27%	23%	17%	14%
Construction	8%	5%	39%	36%
Administrative Support	44%	41%	8%	8%
Finance, Insurance, Real Estate	11%	10%	17%	16%
Accommodation and Food Services	28%	21%	34%	29%
Wholesale, Trade, Transport. & Storage	26%	19%	31%	27%
Public Adm., Education, Health	18%	16%	3%	2%
Arts, Entertainment and Recreation	25%	24%	46%	36%
Other	55%	45%	43%	38%

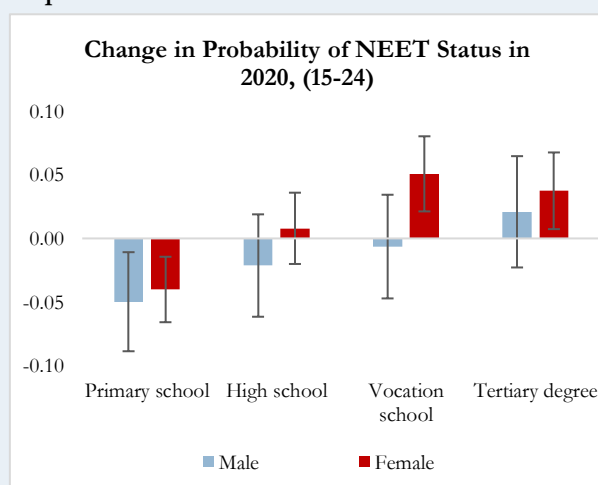
Sources: TURKSTAT, World Bank staff calculations based on LFS.

Note: Declines between 3 to 10 pps are marked in red.

Youth NEET has been increasing over time in Turkey, with determinants revealing different drivers depending on age group and educational status. Due to past education reforms, more and more young women graduate from high school and tertiary education. The share of female NEET (15-24) who reported that they were in education one year ago was 10 percent in 2014 whereas the same share was 18 percent in 2019 and 22 percent in 2020. The share of female NEET who reported that they were busy with household chores a year ago was 74 percent in 2014 whereas the same figure is 54 percent in 2020. Similar trends are observed for individuals in NEET status who are aged 15-29. In terms of reasons for NEET, “being a housewife” is listed as the main reason of inactivity for female NEET but its share declined from 69 percent in 2014 to 49 percent in 2020. By contrast, the share of female NEET who listed “transition to education” as a reason for inactivity increased from 4 percent in 2014 to 13 percent in 2020.

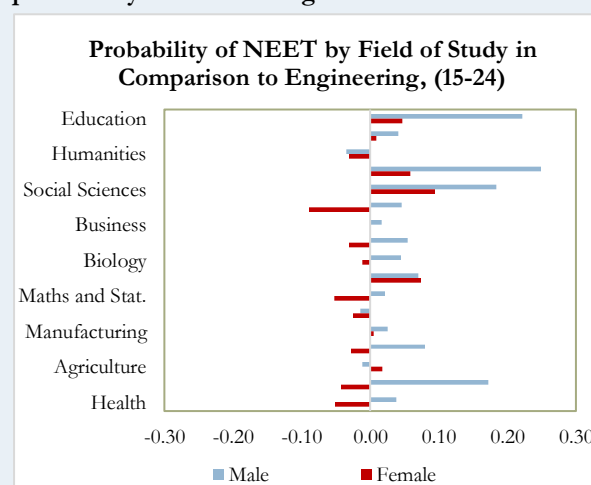
The probability of being in NEET status was significantly higher for women and men with vocational and tertiary degrees in comparison to other education categories in 2020 for the 15-24 cohort. As for 15-29 cohorts, the probability of being in NEET status was higher for women with vocational and tertiary degrees but not for men in 2020 (Figure 164). Taking a closer look at the individuals with tertiary degrees who are in NEET status, graduates of social sciences and languages seem to be particularly at risk of NEET in comparison to engineering degrees (Figure 165).

Figure 164: Skilled women were much more likely to drop out the labor force



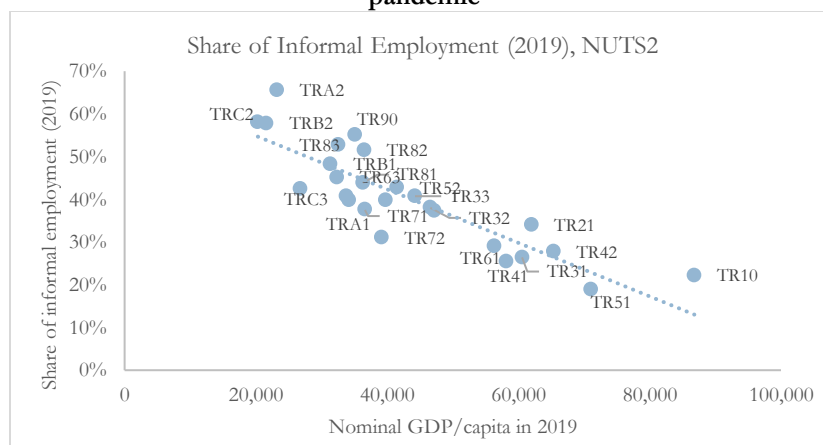
Source: World Bank staff calculations based on LFS.

Figure 165: Graduates of social sciences seem particularly at risk of being NEET



Higher job informality in Eastern regions added to their high vulnerability to the effects of COVID-19 (Figure 166). The rate of job informality in the Eastern regions is roughly 60 percent. Informal workers are one of the groups most disproportionately affected by the outbreak, as they were not eligible to benefit from any of the measures that were put in place by the government to support businesses, such as short-term work allowance and unpaid leave support. The uneven impacts on informal workers were particularly high in regions at both the higher and lower end of the income spectrum. Wealthier regions made up 35 percent of the unregistered workforce in 2019 but generated 41 percent of the losses over 2020. The poorest regions made up 15 percent of the unregistered workforce and generated 17 percent of the losses.

Figure 166: Higher job informality in Eastern regions added to their high vulnerability to the effects of the pandemic



Sources: Turkstat, WB Staff calculations.

Table 9: Regional Share in National Employment/Labor Force vs Losses in 2020

		“More Advanced Regions”	“Transition Regions”	“Less Developed Regions”
Total (15+)	% of total employment in 2019	50%	40%	10%
	% of employment loss over 2020	54%	29%	18%
	% of total labor force in 2019	51%	39%	11%
	% of labor force loss over 2020	51%	30%	19%
Female	% of total employment in 2019	50%	41%	9%
	% of employment loss over 2020	36%	50%	14%
	% of total labor force in 2019	51%	40%	9%
	% of labor force loss over 2020	40%	46%	15%
Male	% of total employment in 2019	51%	39%	10%
	% of employment loss over 2020	71%	8%	21%
	% of total labor force in 2019	65%	38%	11%
	% of labor force loss over 2020	50%	11%	23%
Youth (15-24)	% of total employment in 2019	48%	37%	15%
	% of employment loss over 2020	68%	11%	21%
	% of total labor force in 2019	48%	35%	16%
	% of labor force loss over 2020	64%	15%	22%
Unregistered Employment	% of total employment in 2019	41%	42%	17%
	% of employment loss over 2020	35%	49%	15%

Notes: “More Advanced Regions” = per capita income >90% national mean in 2019, “Transition Regions” = Per capita income b/w 90%-60% national mean in 2019, “Less Developed Regions” = Per capita income <60% national mean in 2019. *highlighted cells indicate instances where a region's share in total loss of employment/labor force is greater than its share in previous year's total employment/labor force. Source: World Bank calculations using data from TUIK.

II. LOOKING AHEAD

Turkey's economic growth outlook is affected by ongoing macro-financial conditions, following very high growth in 2021. Economic growth is expected to moderate to 2.0 percent 2022 but assumes appropriate restraints on both monetary and fiscal policy and prudent financial sector policies. Risks to growth are tilted to the downside in 2022. Regional vaccine challenges may undermine good vaccine progress to date. The recent emergence of Omicron further underscores the importance of vaccination and boosters. Continued Lira depreciation and high inflation may further exacerbate macro financial vulnerabilities, erode real incomes, distort price signals, disrupt production and supply channels, and stress corporate and banking balance sheets. High inflation also poses a risk to Turkey's progress on poverty reduction. Macroeconomic policy settings should adjust to boost confidence and mitigate macro financial risks. Tight monetary policy effort is warranted to restore confidence in monetary policy and anchor inflation expectations. The fiscal impact of recent deposit guarantee scheme to reverse dollarization and other fiscal risks should be closely monitored. Strengthening insolvency and debt resolution frameworks will be important to de-risk the corporate and financial sectors. To support Turkey's growth potential, ensuring macroeconomic stability and a predictable regulatory environment will help attract more and high-quality foreign direct investment and boost productivity and high-tech exports. Taking measures now to adapt to the EU carbon border adjustment mechanism will also help Turkey to boost exports and remain competitive in the EU market.

A. Bracing for a bumpy road

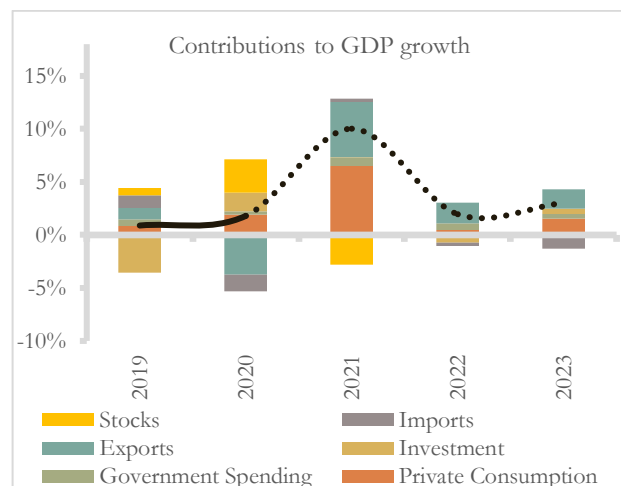
Economic growth is expected to be significantly lower in 2022 than 2021. While GDP growth in 2021 is expected to reach 10.0 percent, with upside risks, momentum is expected to have waned in Q4 2021 as macro-financial turbulence intensifies. This turbulence combined with the high base effect of growth in 2021 will drive the decline in growth next year. Growth is expected to decline to 2.0 percent in 2022 and recover slightly to 3.0 percent in 2023. These baseline projections assume neither severe COVID-19 restrictions in Turkey and its major export markets due to new variants, nor a disruptive macro-financial event.

As in 2021, growth in 2022 is expected to be largely driven by continued strong growth in exports. The composition of growth is projected to continue shifting towards external demand. Net exports are projected to account for more than half of growth in 2021 (Figure 167). While external demand and price competitiveness due to the sharp depreciation of the Lira would fuel the expansion of exports, Turkey would also continue benefitting from the relocation of global supply chains, particularly in the EU market. This contribution of external demand is expected to rise, and net exports are expected to drive more than two thirds of growth in 2022, offsetting the drag in domestic demand from weak investment and high inflation. While the contribution of exports in 2021 was mostly driven by goods exports, a continued recovery in tourism activity is expected to increase its support to export and GDP growth in 2022, as pandemic related travel restrictions are further eased. The rise in exports coupled with sluggish import demand will help the current account deficit to narrow to 2.0 percent in 2021 and 2.6 percent in 2022.

Real private consumption expenditure is expected to decelerate markedly in 2022. Private consumption growth will moderate in 2022 from the peak it reached in the first half of 2021. The consumer confidence survey in recent months signals the upcoming moderation in private consumption growth (Figure 168). Private consumption growth is forecasted to decline to 0.8 percent in 2022 from 11.0 percent in 2021. While the effect of pent-up demand on private consumption is expected to fade out, elevated inflation and high cost of borrowing will preclude strong private consumption growth. Employment and wages have started to pick up in the second half of 2021 from a low base. The minimum wage was raised by over 50 percent and wages of

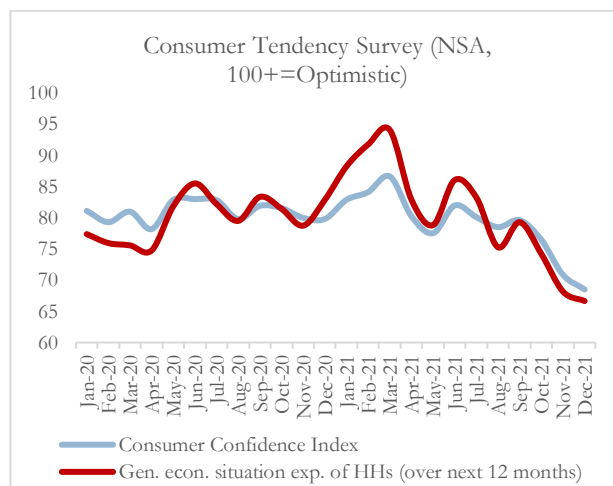
civil servants were increased by around 30 percent for 2022. The authorities took some actions (e.g. removal of income tax and stamp tax on the minimum wage) to reduce the burden of this increase on employers and mitigate possible adverse impact on employment. However, the cost for employers rose by around 40 percent, despite these measures. A downside risk that could further dampen consumption growth next year is that corporates could reduce their employment levels to compensate for high cost of production triggered by currency depreciation and spikes in the cost of personnel. Public consumption is projected to make a positive contribution to growth and to increase by 5.2 percent in 2021 and 4.5 percent and 3.3 percent in 2022 and 2023. The general government deficit is projected to widen to 4.6 percent in 2022 and 2023, largely driven by rising wage bills, interest expenses, and current transfers.

Figure 167: Exports will continue to be the main driver of growth



Sources: TURKSTAT and WB staff calculations.

Figure 168: Consumer confidence dropped to its historic low, signaling moderation in consumption...



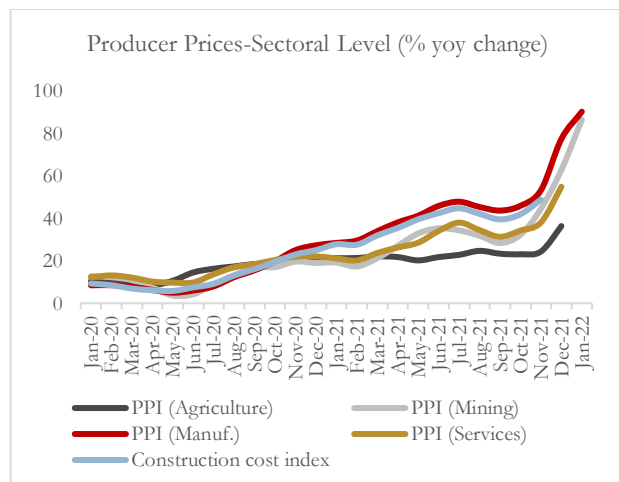
Sources: Haver Analytics, TURKSTAT.

Corporate debt overhang coupled with high financing and operating costs, heightened macro-financial risks, and a depreciated Lira will be a drag on private investment in 2022. Sharp depreciations of the Lira impact Turkish corporates through several channels. First, corporates are already highly leveraged and run a substantial currency risk with around 60 percent of their loans being denominated in FX. Lira depreciation exacerbates debt service difficulties and weakens the balance sheet of domestic corporates. Currency mismatches are common in many sectors. Sectors like construction and utilities that do not have FX hedges against exchange rate movements are more vulnerable. Over the last 3 years, the share of FX losses in total costs of corporates increased sharply due to depreciation, particularly in vulnerable sectors (Figure 170). Second, sharp depreciation of the Lira coupled with a surge in international energy prices led to a spike in production costs in almost all sectors (Figure 169). Lastly, due to deterioration of inflation expectations, heightened risk premium and global tightening prospects, the cost of borrowing for corporates is likely to remain high despite domestic monetary easing. Personnel cost and raw materials, much of which is imported, represent the largest costs to corporates. Recent increase in the minimum wage will lead to an increase in cost of employment by around 40 percent in 2022. Given the pressure on balance sheets coupled with a high degree of uncertainty, corporates are more likely to alleviate cash shortages than expand capacity. Therefore, investment is expected to record a contraction of 3.0 percent in 2022, followed by a modest rebound of 2.2 percent in 2023.

On the production side, GDP growth is expected to be driven increasingly by the services sector. With the acceleration of vaccine rollouts, a more pronounced medium-term rebound is projected in the services sector, including the tourism sector. The services sector will generate around two thirds of growth in 2022. The industrial sector, on the other hand, is expected to grow by 1.5 percent in 2022 due to a high base effect and supply-side frictions driven by heightened price uncertainty. The agriculture sector is expected to grow below its long-term trend, at 0.7 percent and 2.0 percent in 2022 and 2023, respectively.

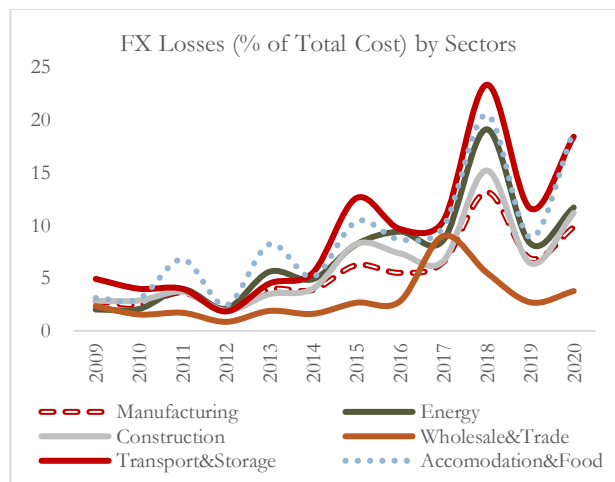
High and persistent inflation will be the main macroeconomic challenge in the medium-term. Amid market interpretation over the future direction and objective of monetary policy, including the weight it puts on controlling inflation, market-based inflation expectations rose sharply from around 13 percent in early 2021 to around 41 percent in early 2022. Exchange rate pass through, high inflation expectations, global price pressures and substantial tax and wage adjustments are expected to keep inflation elevated in the medium term. Inflation is projected to accelerate further to 47 percent in 2022 in an environment of a loose monetary policy stance. Risks on inflation for 2022 are tilted to the downside. Efforts to tighten monetary policy and enhance monetary policy credibility are important to contain the pressure on the Lira and stabilize inflation expectations.

Figure 169: ...Accompanied by rises in the cost of production



Sources: TURKSTAT and WB staff calculations.

Figure 170: Currency depreciation will exert pressures on balance sheets of corporates



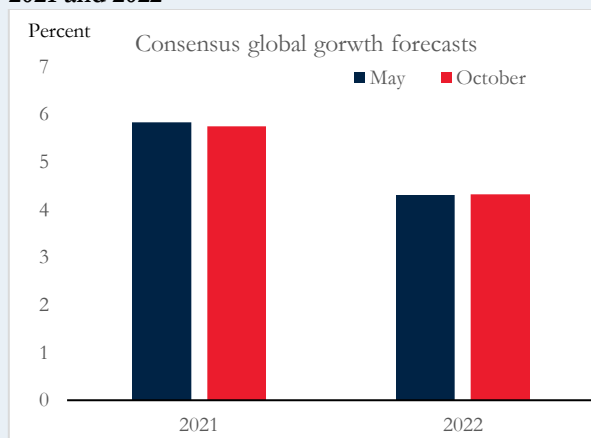
Sources: CBRT Company Accounts and WB staff calculations
Note: FX expenses covers items such as FX differences and sales losses in foreign currency.

Box 7: Global Outlook

According to June World Bank forecasts, global growth is set to reach 5.6 percent this year, before slowing to a still-robust 4.3 percent in 2022. This outlook remains broadly in line with the latest Consensus Economics growth estimates (Figure 171). After rebounding to an estimated 5.4 percent in 2021, advanced economy growth is expected to slow to 4 percent next year, benefiting from a continued release of pent-up demand. Growth in EMDEs is envisioned to slow from 6.0 percent in 2021 to 4.7 percent in 2022, owing to diminishing monetary and fiscal support, a less supportive external environment, and the effects of COVID-19 flare-ups amid continued unequal vaccination.

Euro area growth is expected to reach 5.1 percent in 2021 after the pandemic-induced contraction of 2020. This growth estimate is substantially stronger than envisioned, owing to the much stronger pace of recovery earlier in the year (Figure 172). Next year, GDP growth is envisioned to slow to 4.4 percent according to the June GEP and the latest Consensus estimates, with the further release of pent-up demand and disbursements of Next Generation EU funds helping to sustain the economy's momentum. In Germany, the recovery is expected to strengthen markedly in 2022, with Consensus growth estimates rising from 2.8 percent to 4.4 percent, as headwinds from global supply bottlenecks dissipate.

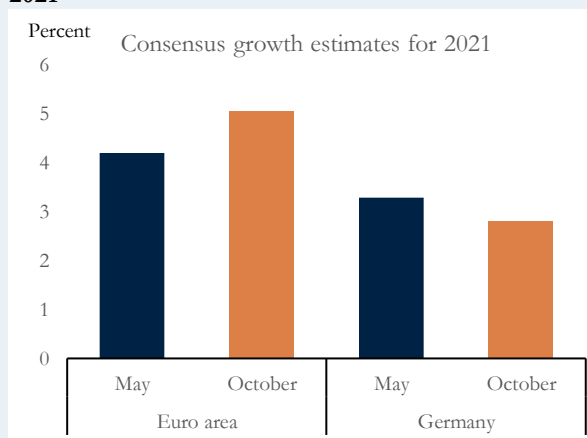
Figure 171: Consensus global growth forecasts for 2021 and 2022



Sources: Consensus Economics, Haver Analytics, World Bank, Global Economic Prospects, June 2021.

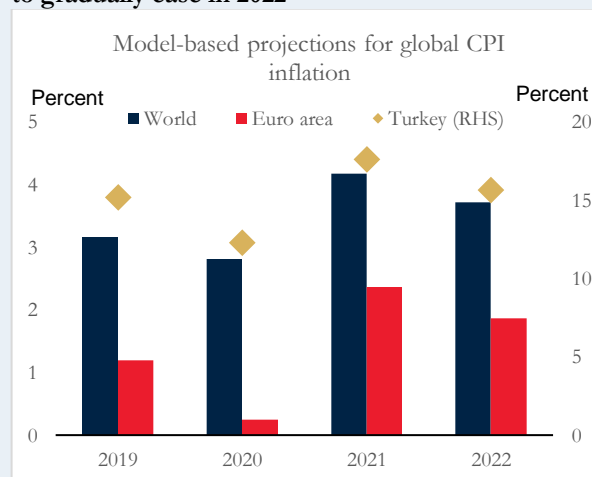
Note: Both figures show growth forecasts based on the May 2021 and October 2021 *Consensus Economics* surveys.

Figure 172: Europe's consensus growth forecasts for 2021



Model-based World Bank projections in June envisaged global inflation to ease in 2022, and recent private-sector forecasts also indicate a moderation in inflation. Record-long global manufacturing PMI suppliers' delivery times—especially in Turkey's key trading partners, the euro area and the United States—point to ongoing bottlenecks at the start of 2022, while the composite PMI input and output price subindexes suggest further inflationary pressures in the near term. Still, global price pressures should ease as production and trade bottlenecks dissipate, global demand softens, and energy prices stabilize amid increased supply (Figure 173). Looking ahead to 2022, crude oil prices are projected to increase 6 percent—from \$70 per barrel in 2021 to \$74 per barrel in 2022—while natural gas and coal prices cool from record high levels. Nevertheless, the contribution of energy to headline inflation should fade as energy prices eventually plateau. Likewise, stabilizing agricultural prices should also help ease inflationary pressures, but the outlook faces upside risks, including those related to adverse weather and large swings in fertilizer prices.

Figure 173: Private-sector forecasts envision inflation to gradually ease in 2022



Sources: Haver Analytics, Oxford Economics, World Bank, Global Economic Prospects, June 2021. World Bank, Commodity Markets Outlook, October 2021.

Note: Inflation Projections for 2021 and 2022 are baseline estimates by Oxford Economics extracted from the October 2021 vintage of the Oxford Global Economics Model.

There is considerable uncertainty over the baseline forecast, with risks heavily tilted to the downside. External risks are balanced, with the upside of a quicker-than-expected recovery in global demand countered by continuing supply chain constraints and potential global financial market disruptions caused by faster than expected normalization of monetary policy in advanced economies. However, on the domestic side downside risks dominate. The continuation of loose monetary policy in Turkey may have negative effects on both domestic and foreign investor confidence, heighten market volatility, increase risk premia, and threaten macro-financial stability. In addition, the introduction of the local currency deposit protection guarantee against the currency depreciation provided by the Ministry of Treasury and Finance in December 2021 appears to have helped stabilize the exchange rate. On the other hand, it might have adverse consequences on budget balances, and fiscal space. Supply-side constraints are already emerging, as the sharp depreciation of the Lira and the attendant uncertainty around imported intermediate goods prices disrupts procurement at the same time as

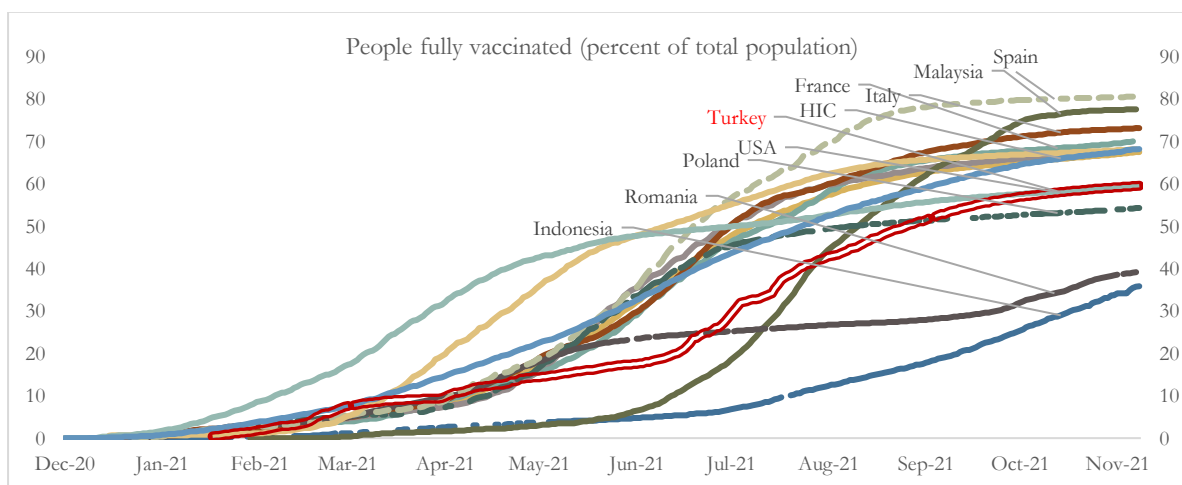
consumption and investment slows. While the banking sector remains highly capitalized and with adequate foreign exchange buffers, recent macro-financial instability would put further pressure on banks' balance sheets. Further deterioration in macro financial conditions may dislodge the fiscal anchor and leave less space for countercyclical fiscal policy. Risks also remain from climate change related adverse weather events, another global or domestic COVID-19 flare-up, and vaccine challenges that may delay vaccination progress.

B. Several risks can affect the path of economic growth and poverty

Slowing vaccine uptake may derail good vaccination progress

Turkey's vaccination rate slowed down earlier than in other countries and can be attributed to hesitancy and to a lesser extent access. Turkey rapidly accelerated vaccinations in July 2021, bringing the rate of fully vaccinated to 82 percent for adults and 60 for the population as a whole – close to the high-income country average of 68 percent (Figure 174). However, the daily vaccination rollout has recently slowed down due to vaccine hesitancy, especially among the young and adolescent population and in the eastern regions of Turkey. The recent emergence of Omicron further underscores the importance of vaccination and boosters. An IPSOS survey conducted in June 2021 suggests that 11 percent of the Turkish population are not planning to get vaccinated against COVID-19, citing concerns about side effects of the new vaccines. The survey also highlighted that 30 percent of those who do not plan to get vaccinated said they are trying to convince people around them not to get vaccinated. While vaccine access has improved considerably, recent results from a global survey²⁸ suggests that the share of unvaccinated people in Turkey trying to get vaccinated decreased from 10 percent in September 2021 to 8 percent in October 2021, citing not having a vaccination appointment, inability to provide required documentation to get vaccinated, difficulty to travel to the vaccination site and inability to get the preferred vaccine type.

Figure 174: Vaccination progress recently moderated



Source: Ourworldindata.org.

The authorities are pursuing a Turkish Vaccine (Box 8) and responding to the risk of rising hesitancy with a number of measures:

Strong use of mass media: Ministry of Health (MoH) is using both traditional and internet-based communication platforms. A comprehensive and clear website (COVID-19 Vaccine Information platform²⁹) aims to inform people specifically through the FAQ and informative video sections and the MOH has made

²⁸ Delphi Group at Carnegie Mellon University, University of Maryland Social Data Science Center, Johns Hopkins Center for Communication Programs in collaboration with Facebook <https://covidbehaviors.org/>

²⁹ <https://covid19asi.saglik.gov.tr/>

agreements with major social media providers to emphasize their webpage in internet searches and has mobilized YouTube interview videos of top Turkish YouTubers with the members of Turkey's Scientific Board. MoH is also monitoring social media for false claims about vaccinations. On more traditional media, messages encouraging vaccination are integrated in popular TV shows, and several Turkish celebrities appear in public service advertisements to advocate precautionary behavior and vaccination.

Role of the health sector: MoH has developed a *Vaccination Communication Guide* for healthcare workers to communicate with the public. Mobile teams have also been organized to go to remote areas to reach out to these communities with the right messages.

Mitigation policies: Starting from September 6, 2021³⁰ the Turkish Government requires a vaccine certificate or negative PCR test for intercity travel and social and sporting gatherings. There is also a vaccine certificate or negative PCR test requirement for teachers and school personnel.³¹ The Ministry of Labor and Social Security issued a circular that authorizes employers to ask for a vaccine certificate or negative PCR test result in all 81 provinces.³²

Box 8: Status of COVID-19 vaccine development program in Turkey

There are currently 15 pre-clinical and 4 clinical vaccine development studies conducted in Turkey.³³ Among those, two clinical studies stand out:

ERUCOV-VAC, later renamed as TURCOVAC is an inactivated COVID-19 vaccine candidate developed by the Health Institutes of Turkey and Erciyes University. Phase 1 and Phase 2 trials were completed in December 2020 and July 2021 respectively. There are currently two separate Phase 3 trials. One is called the '*primary Phase 3*' and was launched in June 2021. It is currently being carried out by administering TURCOVAC to volunteers who have never been vaccinated. Primary Phase 3 trial aimed to reach nearly 8,000 volunteers. The other Phase 3 trial began in October 2021³⁴ and aims to evaluate TURCOVAC's efficacy, safety, and immunogenicity as a booster shot against CoronaVac.³⁵ Phase 3 efficacy trials against CoronaVac were carried out in 41 centers in 28 provinces and aimed to reach approximately 3,000 volunteers between the ages of 18-59 who have received two doses of inactivated vaccine and have not had their third dose.³⁶ At the end of December 2021, it was stated by the Ministry of Health that the emergency use approval for the COVID-19 vaccine TURCOVAC has been obtained and mass production has begun.³⁷

A Virus-Like Particle (VLP) vaccine is currently being developed by a team of Turkish researchers at the Middle East Technical University and Bilkent University in Turkey. VLPs are multiprotein structures that copy the basic features of the virus without replicating the viral genome. Therefore, the VLP vaccine produces an immune response without producing an infection.³⁸ A small Phase 1 trial sponsored by the Scientific and Technological Research Council of Turkey (TUBITAK) was registered in March 2021 and the Phase 2 trial was registered in July 2021.³⁹

Sources: The Ministry of Health, WB Staff.

³⁰ <https://www.icisleri.gov.tr/bazi-faaliyetler-icin-pcr-testi-zorunlulugu-genelgesi-gonderildi>

³¹ <https://www.meb.gov.tr/salgin-doneminde-okullarda-alinmasi-gereken-onlemler/haber/23905/tr>

³² <https://www.csgb.gov.tr/duyurular/is-yerlerinde-covid-19-tedbirleri/>

³³ <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>

³⁴ <https://www.gavi.org/vaccineswork/covid-19-vaccine-race>

³⁵ <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>

³⁶ <https://www.haberturk.com/prof-dr-akdogan-dan-yerli-asi-aciklamasi-3230588>

³⁷ <https://www.saglik.gov.tr/TR,86920/bakan-koca-turkovacin-acil-kullanim-onayi-aldigini-acikladi.html>

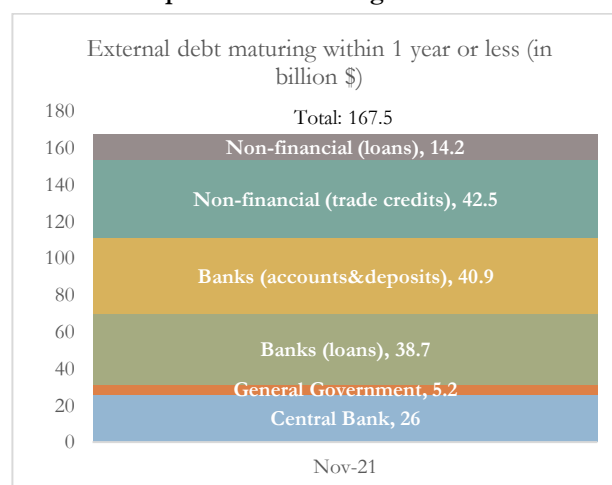
³⁸ <https://w3.bilkent.edu.tr/bilkent/covid-19-vaccine-from-dr-gursel/>

³⁹ <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>

Given Turkey has high external financing needs and has been easing monetary policy while others have been tightening, an abrupt tightening of global financial condition can have significant negative effects on Turkey.

Advanced and emerging economies have already started or indicated actively tightening their monetary policy stance amid rising inflationary pressures. The Fed has recently taken a more hawkish stance and signaled the prospect of three or four interest rates hikes in 2022. However, Turkey's rate cuts since September 23rd have run counter to the global trend. Real yields on Turkey's debt are among the lowest in emerging markets. Turkey's external balance sheet also remains vulnerable, given high external financing requirements and a reliance on portfolio flows rather than long-term finance like FDI⁴⁰. As of November 2021, external debt maturing within a year or less remains high at \$167.5 billion, or 21 percent of GDP (including trade credits), largely belonging to banks and corporates (Figure 175). Turkey's credit default swap (CDS) spreads have risen to record high levels and spreads on government securities and corporate Eurobonds may extend further as global liquidity conditions tighten. A faster than expected tightening of monetary policy in advanced economies may result in a sharp tightening of Turkey's financing conditions, adversely affecting capital flows, and exacerbating refinancing risks.

Figure 175: Short-term payables due put further strains on corporate and banking sector financials



Source: CBRT.

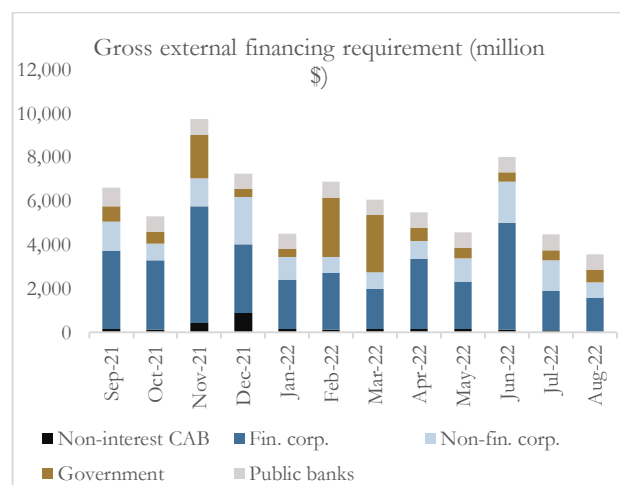
Monthly external payment obligations are manageable but prone to risks. The average monthly Gross external financing requirement (GEFR) is expected to decline to \$5.4 billion in 2022 relative to the average of \$7 billion in 2021 thanks to declining repayments of public and private institutions. (Figure 176) However, GEFR will be high again in June 2022 due to the repayment of financial corporations. Financial corporations are expected to account for 48 percent of total external financing needs in the next 12 months. Under normal market conditions, a large proportion of debt maturing is rolled over, resulting in a much lower net external financing requirement. In addition, gross reserves went up to \$111.2 billion in December 2021 compared to \$86.7 billion in March 2021, improving the external buffer. However foreign exchange interventions to defend the Lira that started in December for the first time since 2014 may erode this buffer. Furthermore, gross reserves cover only 70 percent of short-term external debt on a remaining maturity basis. Should market sentiment deteriorate when large external repayments are due, then Turkey may face refinancing risk, triggering external volatility. Volatility may be exacerbated by high level of short-term FX drains, such as CBRT swaps in gross reserves and FX required reserves, by a surge in rollover costs due to global liquidity tightening, and the high-risk premia of Turkey (Figure 177).

Volatility unleashed by monetary policy actions adversely impacted corporate and banking sector balance sheets, exacerbating the risk of debt repayments and disruptive external adjustments. As noted, the banking sector, which dominates financial corporations, is expected to account for the majority of external financing needs over the next 12 months. On the other hand, the banking sector in Turkey has shown resilience, including an ability to hold enough foreign currency liquidity to meet its short-term FX debt, despite financial market stress over the last 3 years. However, the banking sector's buffers have recently declined. The sector is vulnerable to exchange-rate depreciation due to the impact on capitalization, asset quality, refinancing risk, and high deposit dollarization. Similarly, corporate distress remains high, and further depreciation is likely

⁴⁰ This is discussed in detail in section D.

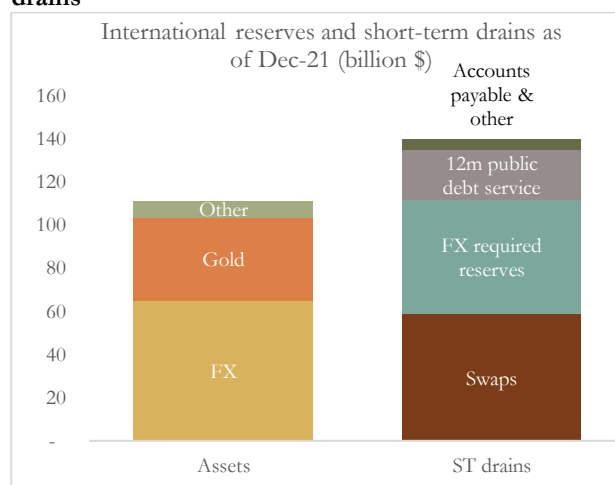
to put more pressure on already stretched balance sheets of corporates, particularly the highly FX leveraged ones with less FX buffers. The net FX position of corporates remained high in October at \$116.4 billion, despite some improvements since the 2018 currency shock. Sustained currency depreciation coupled with a decline in economic activity and stagnant profits could lead to a wave of restructurings and bankruptcies. And this could have a spillover impact on the banking sector.

Figure 176: External financing needs remain substantial



Sources: Central Bank of Turkey, Turkish Ministry of Treasury and Finance, World Bank staff estimates and calculations
Notes: Figure 176 excludes trade credits and foreign exchange deposits.

Figure 177: Gross reserves rose compared to March 2021 but are still lower than short-term possible drains



Source: Central Bank of Turkey.
Notes: Data as of end-November 2021. Short-term drains consist of predetermined and contingent drains within 12 months.

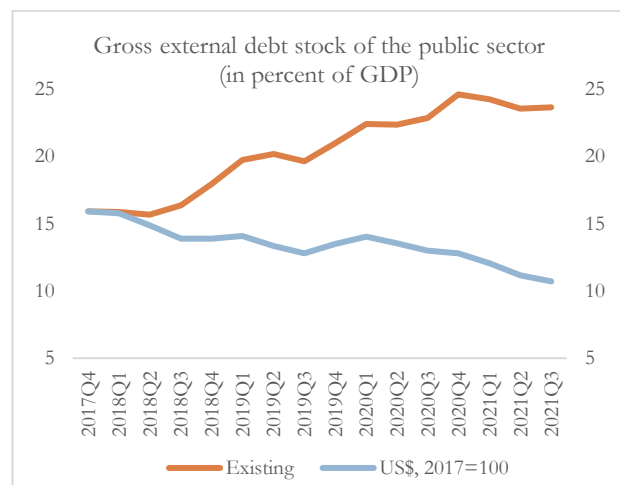
A deterioration in macro-financial conditions may dislodge the fiscal anchor

Turkey has built fiscal space, but rising inflation and recent financial turbulence may significantly erode this in the near term. Turkey's fiscal anchor was strengthened throughout 2021, especially after the reopening in June thanks to declining pandemic-related spending and tax expenditures and robust economic activity that led to a significant amount of tax collection. However, monetary loosening risks reducing fiscal space in the near-term through (i) rising FX-denominated debt stock due to exchange rate depreciation; (ii) rising borrowing costs; (iii) rising contingent liabilities through PPP guarantees and usage (differential) payments denominated in foreign currency; (iv) capital injection needs to public banks and SOEs.

Lira depreciation poses risk to the public debt burden. The gross external debt stock of the public sector has risen by \$50 billion in the last 3 years to around \$188.2 billion as of 2021Q3. Exchange rate depreciation raises the value of the debt stock, and debt service, in Lira terms, and raises both the interest and FX risk of public debt. FX denominated debt currently accounts for around 66 percent of the central government's total debt stock. Measuring the 2021Q3 debt stock at current exchange rates, the public sector's gross external debt stock stands at 23.6 percent of GDP. If valued at the 2017 average exchange rate, then gross external debt would only be 10.7 percent of GDP in 2021Q3 assuming other factors remained constant – an indication of the sensitivity of the external debt stock to Lira depreciation (Figure 178).

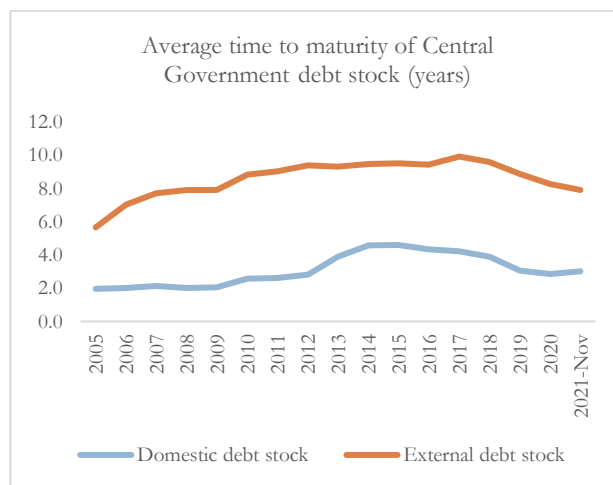
Rising risk premia from continued macroeconomic volatility, exacerbated by a tightening of global financial conditions, is likely to worsen government's borrowing conditions further. Turkey's 10-year bond yields rose to 25 percent in January, reaching record levels, and high long-term interest rates make the government to borrow with shorter maturities. Turkey's CDS spiked to 630, close to August 2018 levels. Turkey's domestic debt stock's average maturity declined from 3.9 years in 2018 to 3.0 years in November 2021. Furthermore, Turkey's public external debt stock's average maturity fell from 9.6 years to 7.9 years over the same period (Figure 179). Reflecting this, Turkey faces one of the highest Eurobond spreads among EMs. The Eurobond spreads, which was 421 in February 2021, rose to 577 as of early January 2022 (Figure 180).

Figure 178: Public debt is highly sensitive to exchange rate depreciation...



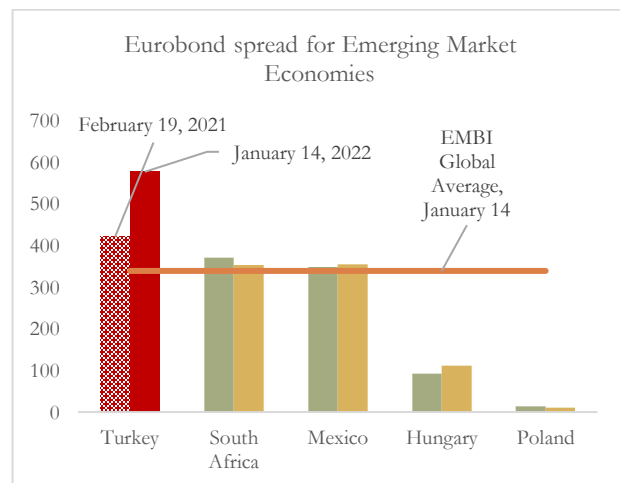
Sources: Ministry of Treasury and Finance, CBRT, WB Staff calculations.
Note: Impact of depreciation on other factors such as GDP deflator was not considered.

Figure 179: ...and shortening average time to maturity for debt stock



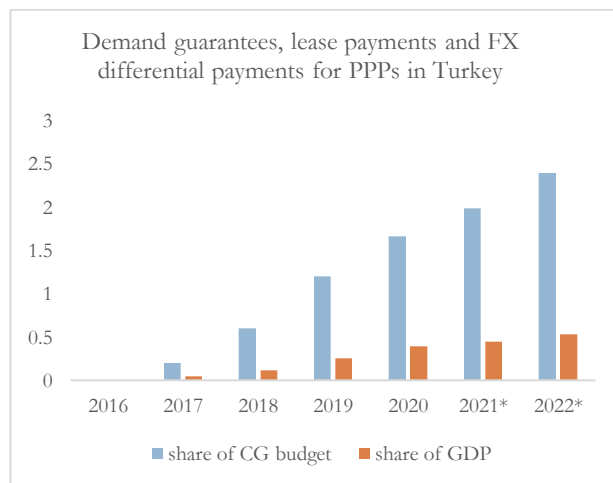
Sources: Ministry of Treasury and Finance.

Figure 180: Eurobond spreads are high relative to peers and rising



Sources: JP Morgan, Haver Analytics.

Figure 181: Rising burden of PPP guarantees on budget balances



Sources: Ministry of Treasury and Finance, Strategy and Budget Presidency, Ministry of Health, Ministry of Transport and Infrastructure, WB Staff calculations.
Note: MTP projections are used for 2021 and 2022 calculations

Lira depreciation will increase PPP-related liabilities. The Lira value of PPP FX-denominated guarantees and usage fees has been rising in Lira terms. Turkey has used PPP projects as a complementary procurement mechanism to develop its infrastructure especially since 2011, which exerts pressures on the fiscal balances through the realization of contingent liabilities. Turkey's overall PPP investment portfolio reached \$77.9 billion (10.3 percent of GDP) at the end of 2019. On the other hand, payments for pre-determined demand guarantees, and FX differentials and lease payments, provided to PPP contractors are increasingly adding pressure on government finances. The combined amount of these two types of payments is estimated in the Medium-Term Program to rise from 1.2 percent of the central government budget in 2019 to 2.4 percent in 2022 (Figure 181). However, given the recent sharp Lira depreciation, the PPP burden on the budget is likely to be well above the official projections.

Another contingent liability, the exchange rate-protected Lira time deposit instrument, which was introduced in December 2021, might have adverse consequences on fiscal balances. The authorities announced this new financial instrument with an aim to ease market pressures and reverse recent dollarization trends in the economy, assuring that households and corporates will be compensated by the Treasury for the potential depreciation losses in excess of the interest rate on the deposit, without being subject to the withholding tax. This may lead to the Treasury compensating savers for the losses generated by exchange rate depreciation and has potential to put burden on the fiscal space. However, the fiscal impacts of the policy need to be assessed under different assumptions for depreciation and interest rate paths in order to measure risks to fiscal sustainability.

Similarly, the need for capital injection to state owned banks and energy SOEs will rise. In 2020, state owned banks provided loans under very favorable terms to support the economy during the pandemic, supported by a TL21 billion capital injection via a bond issuance by the Treasury. Capital injection needs for state owned banks are expected to remain high if the monetary policy stance remains loose and the authorities continue to support economic activity with credit growth. Moreover, BOTAS and EUAS, the natural gas, petroleum and electricity production SOEs, fixed the energy prices for consumers, supported by state capital injections, in order to lower inflationary pressures amid rising global costs and exchange rate depreciation. The Presidency's 2022 Annual Program indicates government's plans to continue to inject capital to those SOEs⁴¹.

Persistent inflation poses risks to poverty

Turkey has made considerable progress in reducing poverty, but the inflation outlook poses a risk to this. The share of people below the \$5.50 per day poverty line fell by three-quarters to 8.5 percent between 2002 and 2018. Double-digit inflation, economic volatility and the COVID-19 Pandemic have since set back poverty progress. The share of people below the \$5.50 poverty line rose to 10.2 percent in 2019, and it is projected that the global pandemic pushed an additional 1.6 million below the poverty line in 2020 raising the poverty rate to 12.2 percent, totaling over 10 million poor people in Turkey. The projection that inflation (year average CPI) will accelerate to 29.5 percent in 2021, poses significant risks to progress on poverty reduction.

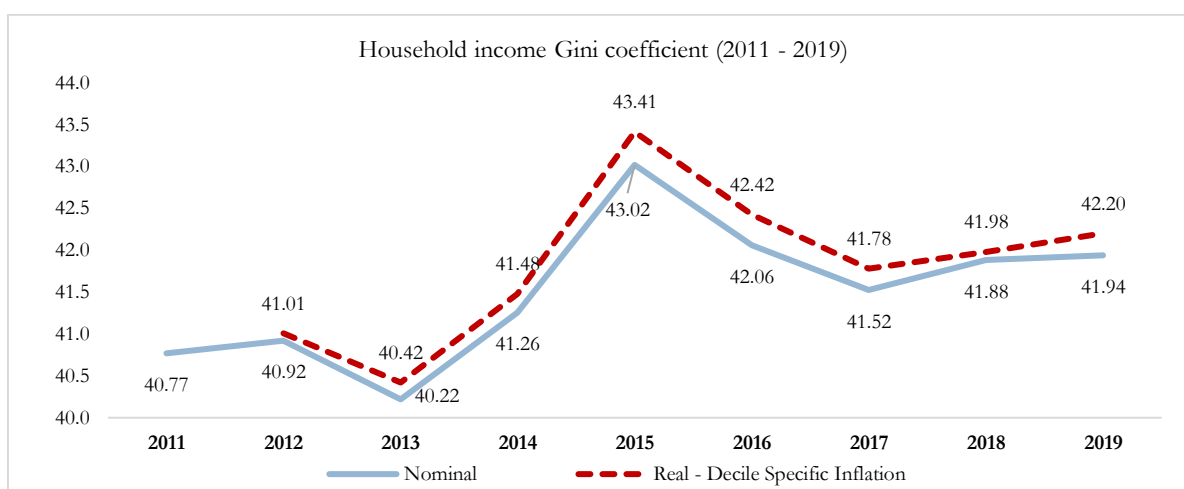
Inflation does not affect everyone equally – the poor often bear the brunt of price rises. Households from the bottom decile allocate nearly 70 percent of their budget to food and housing, twice as much as the corresponding share for the typical household in the highest (10th) decile –and also well above the share for the median household (54 percent). Therefore, inflation episodes driven by fast price increases of food and housing expenditures have a higher burden for low-income households. When compared to households in the 10th decile, the annual inflation rate experienced by households in the 1st decile was higher in six out of the 10 years between 2011 and 2020. In 2019, for instance, the increases in food prices contributes 49 percent of the total inflation borne by families from the bottom decile, a share that drops to 33 percent and 18 percent for the median and wealthiest households, respectively. With food inflation above 40 percent year-on-year at the end of 2021, recent price developments have especially weakened the purchasing capacity of low-income households.

⁴¹ <https://www.sbb.gov.tr/wp-content/uploads/2021/10/2022-Yili-Cumhurbaskanligi-Yillik-Programi-26102021.pdf>

The heterogeneities in expenditures and price changes also have consequences on the measurement of poverty and inequality. In fact, elevated inflation is likely to affect the poor hardest, also with implications for inequality (Figure 182).

The poverty rate in Turkey is highly sensitive to inflation in Turkey given the high concentration of people with incomes just above the poverty line. The value of the poverty line can be increased to mimic the effects of price increases on poverty in 2019, keeping everything else constant. Estimates of the elasticity of poverty to changes in inflation are high, ranging from 2.04 to 2.76, underscoring the high vulnerability of households to the negative effects of fast price increases on purchasing power. This is particularly true for families right above the poverty line when inflation is pushed by price hikes of food, non-alcoholic beverages, housing, education and health items. The average elasticity, 2.37, suggests that the poverty rate increases more than twice as fast as price increases that are not offset by income (labor and non-labor) growth or substitution of consumption (Table 10).

Figure 182: Elevated inflation is likely to hit the poor hardest



Sources: WB staff calculations using data from TURKSTAT.

Table 10: Inflation Elasticity of Poverty

% Increase in poverty line (A)	Poverty Line (\$, 2011 PPP) (B)	Poverty Rate (C)	% Increase in poverty rate (D)	Elasticity (D/A)
-	5.5	10.20	-	-
1%	5.555	10.40	2%	2.04
5%	5.775	11.60	14%	2.76
10%	6.05	12.61	24%	2.37
15%	6.325	13.79	35%	2.35
20%	6.6	14.97	47%	2.34
25%	6.875	16.21	59%	2.36
30%	7.15	17.34	70%	2.33

Note: Poverty is measured as proportion of people with per capita consumption below \$5.5 a day 2011 PPP.

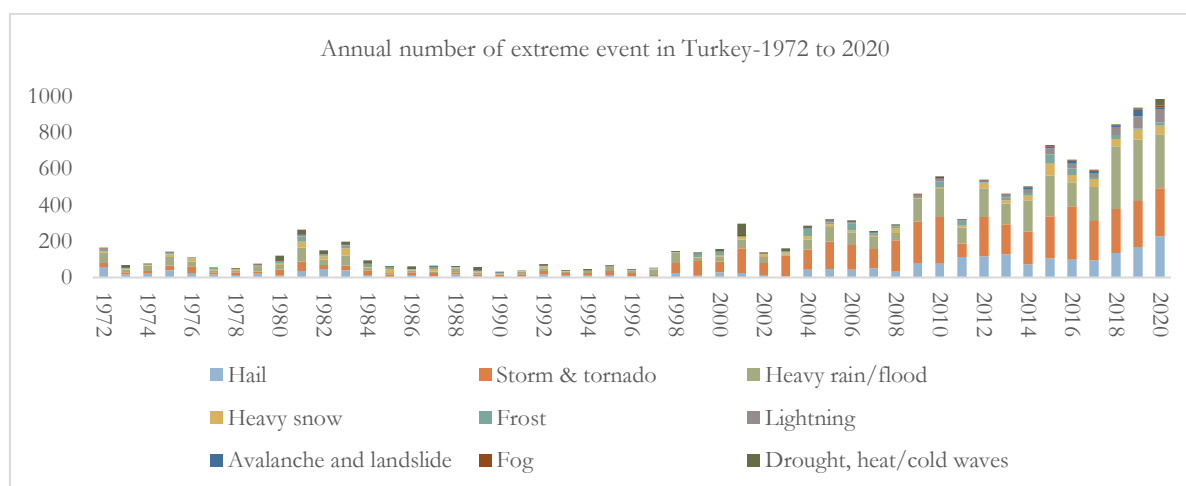
Source: WB staff calculations using HBS-2019 of TURKSTAT.

Climate-related disasters and extreme events pose risks to agriculture and water resources

Climate-related disasters and extreme events⁴² have become more frequent in Turkey in the last two decades (Figure 183). 2018 saw the first hurricane in Turkey's modern history and 2019 saw a historical high of 984 extreme events, with the main extreme events being heavy rain/floods (30 percent), windstorms (27 percent) and hail (23 percent).

Agriculture and water resources are especially vulnerable to the increased frequency and intensity of extreme weather-related and climate induced events. Agriculture and water resources are heavily exposed to the impacts of climate change. The recent rise in frequency of climate related events has been increasingly impacting agriculture production. The amount of insurance payment to farmers for production losses due to climate related events (e.g., drought, frost, hot winds, heat waves, excess moisture, and excessive precipitation) has been increasing - from TL1.06 billion in 2018 to TL1.23 billion in 2019 and TL1.39 billion in 2020⁴³. Due to its large population and already high levels of water resource use, Turkey faces a significant water security threat from climate change, which will manifest through potential drying associated with rising temperatures, changes in precipitation patterns, and reduced seasonal snow storage. About 30 percent of 23.1 million hectares of arable land in Turkey is irrigated land, and irrigated agriculture currently consumes about 75 percent of total water consumption, corresponding to about 30 percent of renewable water availability.⁴⁴ The availability of water for growing irrigation demand is critical to maintain food security in Turkey, especially for the 2.5 percent of population that is facing severe food insecurity.

Figure 183: Extreme events in Turkey accelerated over the last two decades



Sources: Turkish State Meteorological Service, State of the Climate in Turkey in 2019 (2020) and OECD (2019)

Another threat is through the effect on long-term changes and trends on agricultural productivity, rural incomes and employment, and food security. The Global Food Security Index (GFSI) ranks Turkey 47th among 113 countries with respect to the overall food security environment.⁴⁵ Turkey lags behind its peer countries (and 77th in the overall GFSI ranking) due to its high level of drought stress and variability in renewable water supply, which have important impacts in agriculture production, as it is the sector with highest

⁴² In line with IPCC (2012), extreme events are a weather or climate events that are above (or below) the range of naturally observed events. A disaster is a severe alteration in the normal functioning of a community, society or economy (e.g. requiring emergency responses) due to hazardous physical events, such as extreme weather or climate events. See https://www.ipcc.ch/site/assets/uploads/2018/03/SREX_Full_Report-1.pdf

⁴³ 2020 Activity Report of TARSIM Subsidised agricultural insurance in Turkey.

⁴⁴ Cakmak, E. (2010), Agricultural Water Pricing: Turkey, OECD Publishing, Paris.

⁴⁵ The index is a function of affordability, availability, quality and safety, and natural resources and resilience. Among these categories, Turkey does particularly poorly on affordability and natural resources and resilience.

water use in Turkey. In the mid-long term, climate change patterns are expected to significantly impact yields and the viability of producing certain crops in specific regions. Agriculture's vulnerability to climate change can exacerbate food price pressures and overall food security concerns in Turkey.

C. Policy should adjust to boost confidence, mitigate macrofinancial risks and protect the poor

Given recent turmoil in the economy and uncertainty, policies should focus on reducing volatility and boosting investor confidence, even at the cost of some foregone growth in the short-term as in the aftermath of the August 2018 shock. Policy settings should be tilted towards stabilization until risks have been lowered and buffers increased. This would include stabilizing inflation around a credible policy anchor, building external reserves to comfortably withstand the external volatility that Turkey will likely continue to face, resolving corporate distress, cleaning bank balance sheets and maintaining a prudent level of public debt, as well as accounting for contingent liabilities and possible debt service shocks.

Tight monetary policy effort is warranted to restore confidence and anchor inflation expectations

Inflation expectations have become unanchored, warranting a tight and more predictable monetary stance. The anchoring of inflation expectations deteriorated significantly over recent years. Actual inflation has remained persistently above target in recent years, moving Turkey's inflation expectations anchoring index⁴⁶ into negative territory in the last 3 years and reversing earlier gains (Figure 184). The level of anchoring in Turkey is relatively weak and the index value is substantially lower than the median value of emerging and advanced economies. Deterioration in anchoring of expectations signifies an erosion of confidence in monetary policy and its forward guidance ability. Recent empirical evidence confirms that persistent and sizable upside breaches of the inflation targets have weakened the anchoring power of the targets in Turkey⁴⁷. Cross country analysis shows that the persistence of inflationary shocks (e.g. an exchange rate shock or a terms of trade shock) is larger when inflation expectations are poorly anchored, as in the case of Turkey⁴⁸. Going forward, a tight and more predictable monetary stance is key for disinflation process and anchoring inflation expectations.

Improving central bank independence can anchor expectations and boost monetary policy credibility.

An independent and transparent central bank is a key prerequisite for monetary policy credibility. The IMF (2021)⁴⁹ draws attention to the critical role of institutional characteristics in anchoring inflation expectations and finds that variation across countries in the degree of inflation expectations anchoring is positively correlated with the degree of independence of the central bank (Figure 185) – in other words, the more independent a central bank is, the better inflation expectations are anchored. Central bank independence is itself heavily determined by the independence of its management. The value of the chief executive officer (CEO) independence index⁵⁰ in Turkey has deteriorated significantly over the last decade to 0.31 in 2021 from 0.65 in

⁴⁶ The index of inflation expectations' anchoring was constructed by using (i) the variability of long-term inflation forecasts over time: if expectations are anchored, revisions to long-term forecasts should be small, and thus the average forecast relatively stable over time; (ii) the dispersion of expectations across agents; (iii) the sensitivity of long-term expectations to expectations about short-term inflation or macroeconomic surprises; and (iv) the deviation of medium- or longer-term inflation expectations from the central bank's target. For details on the construction of the index, see Bems and others (2021) and IMF WEO (2021).

⁴⁷ Gulsen and Kara (2021) "Policy Performance and the Behavior of Inflation Expectations", *International Journal of Central Banking*, Vol.70.

⁴⁸ Bems, R., Caselli, F. Grigoli, F. and B. Gruss (2021) "Expectations' Anchoring and Inflation Persistence", *Journal of International Economics*, Vol. 132, 103516.

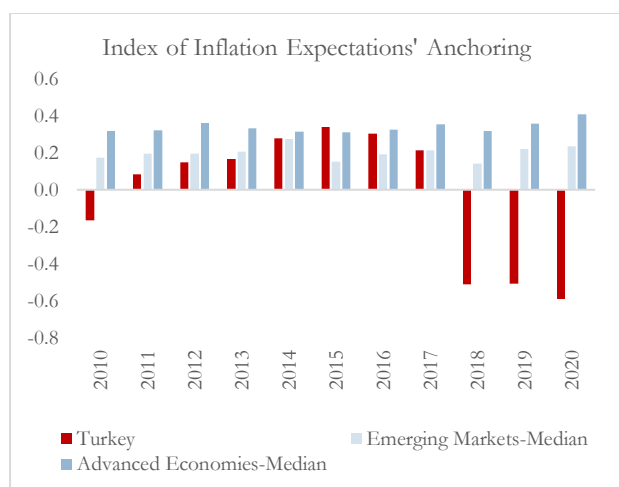
⁴⁹ IMF (2021), *World Economic Outlook*, Chapter 2 Inflation Scars.

⁵⁰ For details, please see Dincer and Eichengreen (2014), "[Central Bank Transparency and Independence: Updates and New Measures](#)," *International Journal of Central Banking*, Vol. 10(1), pp.189-259. The CEO index, which has 20 percent share in overall central bank independence index, is composed of four sub-pillars with equal weights. These are (a) Terms of office of CEO (b) Who appoints CEO? (c) Dismissal procedure of CEO (d) May CEO hold other offices in government? The index is available for all the countries for 2010. The authors updated the index value of Turkey for 2021 (Dincer, Eichengreen and Martinez (2022) "Central Bank Independence through the Ages").

2010⁵¹ (Figure 186). The frequent turnover in the management of the Central Bank including governor and deputy governors have had an impact upon expectations. Steps to return Central Bank independence through previous practices including criteria for appointments and dismissals would help to anchor expectations and support policy credibility.

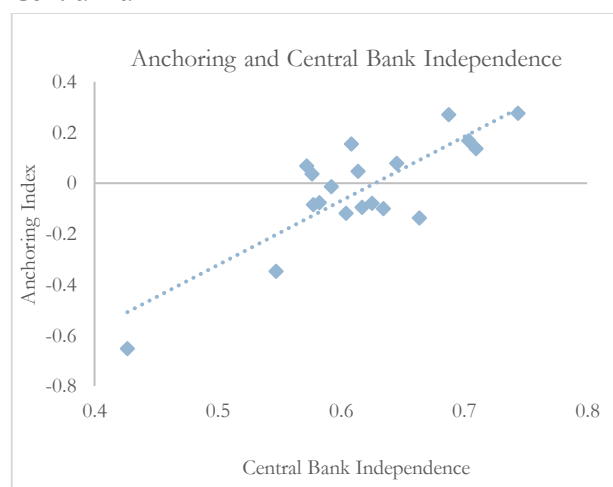
Monetary policy tightening with clear forward guidance could help tackle inflation and strengthen monetary policy credibility. Considering high inflation expectations, global liquidity tightening and rising competition for external capital, the authorities may consider reversing recent interest rate cuts. A tight and more predictable monetary policy stance will help avoid excessive volatility in capital markets, address dollarization, anchor inflation expectations and contain pressures on the Lira. A tight monetary stance needs to be complemented by a stronger monetary policy communication strategy and clearer forward guidance.

Figure 184: Turkey's inflation expectations' anchoring worsened over recent years



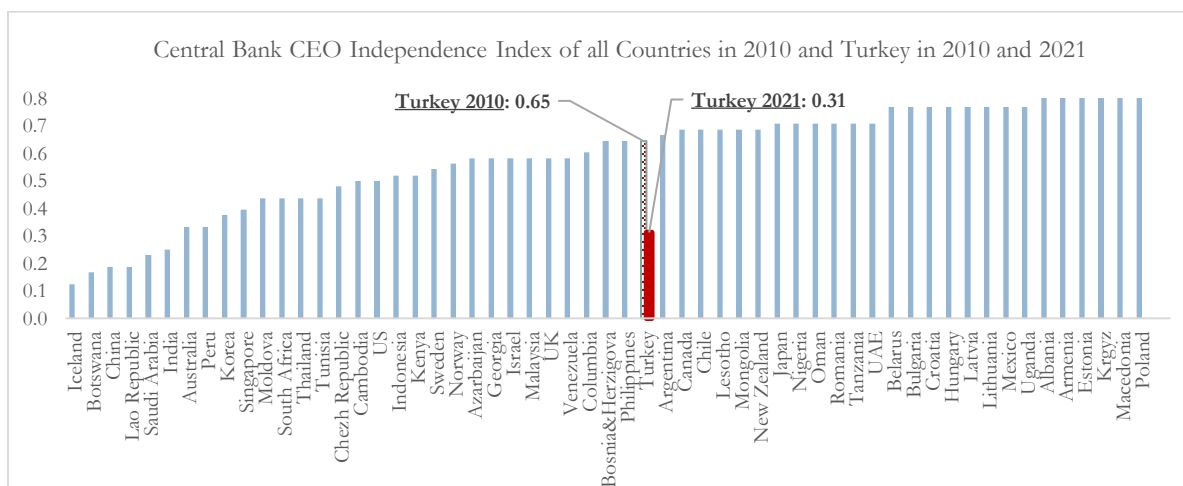
Sources: Bems and others (2021), IMF World Economic Outlook Chapter 2 Inflation Scores

Figure 185: The degree of anchoring is positively correlated with the degree of independence of the Central Bank



Sources: Bems and others (2021), IMF World Economic Outlook Chapter 2 Inflation Scores

Figure 186: Turkey's Central Bank CEO independence deteriorated over the last decade



Sources: Dincer and Eichengreen (2014) and corresponding authors' calculations.

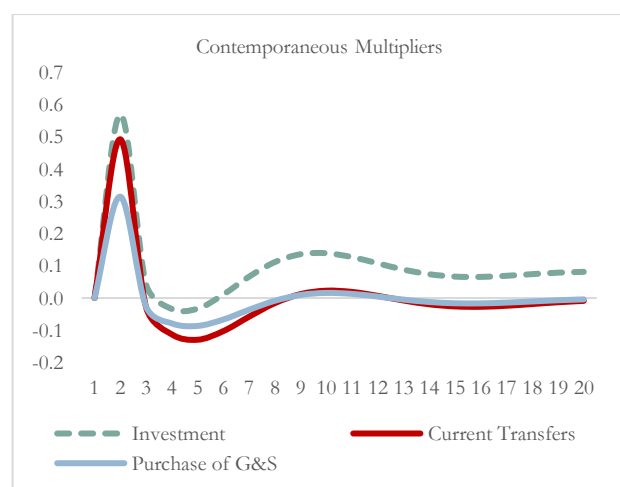
⁵¹ The value of the CEO index is calculated based on central bank laws. It is expected the laws not to change frequently suggesting the index to remain stable in the short run, which makes it possible to compare between the values of the index in 2010 of other countries to the values in 2021 of Turkey.

Macroeconomic instability warrants a cautious, well targeted, and countercyclical fiscal policy

Turkey can afford to maintain a countercyclical fiscal policy under a tight monetary stance. It is increasingly clear that further monetary policy loosening may further widen external and internal imbalances. Fiscal and monetary policy need to be closely coordinated to avoid eroding efficacy and overstimulating the economy. As discussed in section B, the existing monetary policy stance may put burden on the budget and may lead to misallocation of resources. For instance, the foregone revenue due to fuel price subsidies, tax cuts on alcohol and tobacco, and the reduction in capital and rental gain taxes in 2021 -introduced to contain inflation- is far higher than total social assistance expenditures in Turkey. Effective use of available fiscal space whilst maintaining fiscal sustainability will be important going forward.

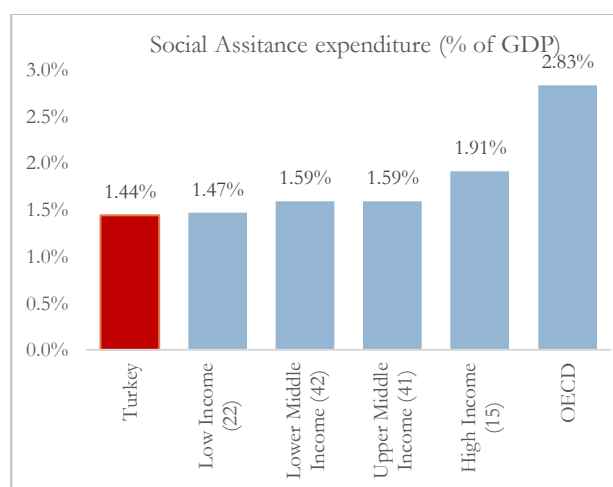
Turkey's fiscal strategy needs to factor in several priorities to manage the difficult period ahead. First, fiscal policy should support the short-term health system and social protection needs. Particularly, there is a need to increase adequacy and coverage of social assistance expenditures, which stand at 1.4 percent of GDP and are relatively low compared to other countries (Figure 188). Second, as the multiplier effects from public transfers can be strong in the short-term, public transfers could support vulnerable households and firms. However, they need to be designed to clearly provide temporary relief, be well-targeted and not create any budget rigidity. In the medium term, there is a need to gradually rebalance spending towards capital expenses and longer-term expenditures to sustain growth (Figure 187). The consolidation of transfers should be anchored in clear trigger points, including increasing in purchasing power of households and improvements in labor market conditions. Lastly, on the revenue side, policy efforts to help broaden the tax base, increase compliances, and reduce the complexity of the tax system are needed as frequent tax policy changes have made the tax system more complex and reduced the efficiency of tax collection. Reducing informality and increasing labor force participation especially for women; increasing VAT compliance; and reviewing tax incentives could help to generate higher tax revenues.

Figure 187: Strong investment and current transfer multipliers



Sources: MOTF, WB staff calculations.

Figure 188: Social assistance expenditures in Turkey lag behind



Source: The Atlas of Social Protection Indicators of Resilience and Equity, WB.

Policies should also focus on supporting vulnerable groups and improving labor market outcomes

The rapid recovery in economic activity in 2021 has helped reverse the pandemic's impact on employment, but underlying challenges have resurfaced⁵². While a labor market recovery appears to have started, it is likely that the pandemic will have long-lasting consequences on excluded cohorts. As vaccination rates increased and economic sectors reopened to consumer demand, employment levels began recovering, led by construction and followed by industry. However, underlying exclusion has been amplified through persistently low female labor force participation, high number of youth not in education, employment or training (NEET), and slow pick up in informal employment. Even when controlling for key factors, exclusion is evident, reflecting structural reforms needed to promote the demand for labor.

Taken together, the trends emerging from uneven employment gains during COVID-19 reveal a greater need to stimulate the demand for labor and increase the inclusion of women and vulnerable youth including NEET. Given the drivers of employment losses in key sectors such as professional services, manufacturing and industry, leveling the playing field will depend on the extent to which investments favor labor-intensive technologies for stimulating job growth. In addition, labor policies will play an important role in protecting and promoting job growth, as evident during COVID-19 for selected workers.

Going forward, targeted policies will be needed to even out the jobs recovery over the next phase of COVID-19, coupled with an advancing green, digital transformation in Turkey. Learning from COVID-19 - related jobs measures in Turkey and elsewhere, a better balance is needed between supporting workers already well-integrated in the formal sector and those excluded due to multiple barriers. Barriers post-COVID include a latent demand for labor in key sectors, uneven job-skills matching and lagging female youth labor force participation among both vocational students and the highly skilled exiting for household reasons.

The post-COVID reality, with a greater reliance on technology and green sectors in light of Turkey's vision to boost to climate investments, will require an integrated demand- and supply-side approach to promote new jobs. Moving forward, measures would include: (i) expanding temporary income support during a transition period conditional upon active job search in key sectors; (ii) expanding eligibility and financing for skills upgrading by expanding on-the-job training that is firm (demand) driven; (iii) broadening job matching mechanisms and counseling to reach informal sector workers; and (iv) linking these measures to finance for labor-intensive firms, including occupations boosted during COVID-19 in manufacturing, construction, professional services, logistics, health care equipment manufacturing, and renewable energy. Over the next phase, more structural reforms to barriers to the demand for labor and job search will mean tackling Turkey's policies regarding labor regulations in terms of sectors restricting female participation; flexible work arrangements in terms of remote support and technology solutions; expansive wage subsidies that have tended to benefit selected firms and retaining formal workers; social insurance benefits across the spectrum and linkages to severance pay policies that may impede hiring; and finally, optimizing minimum wage policy and labor costs in Turkey relative to OECD and comparable countries.

Macprudential policies are needed to mitigate further erosion of capital buffers and a chronic shortage of long-term financing

While credit growth in 2021 has so far been muted, the recent CBRT rate cuts are likely to change this. Following the CBRT interest rate cuts, state deposit banks reflected rate cuts to loan rates. This is likely to fuel loan demand from corporates and individuals. It could also provide further impetus to debt restructuring as struggling corporates may try to take advantage of lower interest rates to restructure their debts. Loan growth momentum moved back to state banks. Private banks led loan growth in the first three quarters of 2021 but will be less keen to offer loan interest rates below inflation. As real interest rates for bank lending move deeper into negative territory while bond yields converge to high inflation expectations, it becomes more favorable to

⁵² The government announced a detailed set of policy to increase labor market outcomes and support vulnerable groups in reform package in March 2021. Pls see the link for details: <https://ms.hmb.gov.tr/uploads/sites/2/2021/05/Economic-Reforms-Action-Plan-1.pdf>

lend to the private than the public sector. This could negate the desired impact of credit growth on the real economy.

Higher credit growth may dilute a deterioration in asset quality in the short run and increase tail risks for financial stability. Similar to past years, high credit growth will support NPL and Stage 2 ratios to total credit, even if forbore exposures are expected to increase in absolute terms given the combined effects of seasoning credit risk and the phase-out of forbearance measures related to loan classification. While credit growth will support banks in the short run, heightened market volatility coupled with rapid loan growth in economically turbulent times amid substantial corporate leverage could undermine asset quality and banks' profitability going forward. In essence, high credit growth may dilute challenges in the short run, allowing them to build up and materialize in the longer run.

Banks' capital buffers may further decrease. Capital buffers have declined already in 2021 across the banking sector, despite extensive forbearance measures. This decline is expected to continue as credit growth picks up, especially for state banks that already need improvement in their buffers. A lifting of the forbearance measure that allows banks to use a more favorable historical FX rate for valuing RWAs would put further pressure on CARs. Capital injections may be required for some banks, especially once forbearance measures have been fully phased out.

Banks' liquidity and refinancing risks will remain material in the forthcoming period. Market volatility is expected to remain substantial given monetary easing, sensitive investor sentiment, US prosecution of a state bank on violation of Iran sanctions, and potential global monetary tightening. This could harm external capital flows, on which banks, as well as corporates, depend.⁵³ However, historical performance shows that access to funding has remained relatively stable even in heightened macro-financial stress. Lowering banks' and corporates' vulnerability to external volatility would require addressing the market's chronic shortage of long-term financing. Successful but limited private sector bond issuances in FX terms have shown that the necessary regulatory frameworks are conducive, and capital markets could play a key role. However, preconditions for enhancing long-term finance, especially in local currency, through capital markets in Turkey are currently lacking (Box 9).

Box 9: Preconditions for Capital Market Development in Turkey

The development of domestic sources of long-term finance through capital markets requires several key preconditions to be in place:⁵⁴ (a) a stable macroeconomic environment, which mainly translates into economic growth, low inflation, and robust fiscal policies, (b) a certain level of development of the financial sector, including a robust banking sector, institutional investors, and financial openness, and (c) a robust legal and institutional environment, including mechanisms to ensure the protection of investors and, more generally, that the country abides by the rule of law.

- **Macroeconomic preconditions:** Macro-financial constraints inhibit capital markets and long-term finance development in Turkey. Persistently high inflation, high nominal interest rates, and a volatile exchange rate with limited and costly hedging tools have posed challenges to maintaining an attractive macroeconomic environment to both foreign investors (who will invest less in the country) and domestic investors (who prefer financial products with lower risks and shorter tenor). High dollarization of bank deposits is also related to these macro-financial constraints and risk averseness of the investors.
- **Financial sector and capital markets preconditions:** Financial sector and capital market preconditions limit Turkey's options to promote long-term finance. With a bank-centric financial

⁵³ A recent IMF report linked grey listing to a large negative impact on capital flows, including FDI. <https://www.imf.org/en/Publications/WP/Issues/2021/05/27/The-Impact-of-Gray-Listing-on-Capital-Flows-An-Analysis-Using-Machine-Learning-50289>

⁵⁴ Ana Fiorella Carvajal, Ricardo Bebczuk (2019), Capital Markets Development Causes, Effects, and Sequencing.

sector exposed to substantial refinancing, liquidity, and credit risks – the latter partly because of high corporate leverage – a limited domestic investor base and a relatively shallow capital market, Turkey is behind its peers, despite demonstrating basic preconditions in financial development and openness. Government bonds have a significant share while the corporate debt market is very shallow and equity financing is still in its early stages. In addition, the government bond market with its high local currency government bond yields across the yield curve is discouraging the development of corporate markets.

- **Legal, regulatory, policy, and institutional preconditions:** The policy and regulatory frameworks are conducive to capital market development with positive developments in the policy and regulatory frameworks, including recent changes in the Capital Markets Law. Authorities have also made a series of efforts to improve corporate governance, investor protection, the credit and contractual environment, and the market infrastructure. However, policy predictability remains a concern for market participants and undermines investor confidence.

The success of any capital markets solution relies heavily on improving key preconditions and implementation capacity, including governance standards. A stable macro environment is critical. Fundamental improvements of capital market segments should go hand-in-hand with demonstration initiatives that may have potential despite the apparent lack of important preconditions. A forthcoming World Bank Technical Note on Capital Markets Options to Promote Long-Term Finance for Turkey will shed more light on such opportunities.

NPL resolution and corporate insolvency frameworks will be vital in 2022

Forbearance measures played a key role in easing the economic impact of COVID-19 on the financial sector. Banks have played a vital role in responding to the pandemic, providing credit to corporates and households struggling with a drop in liquidity. Forbearance measures that supported asset quality and CARs provided support to banks during this period. Following the economic recovery, most of the forbearance measures have expired as of 2021Q3. However, credit classifications will revert to international standards after a transitory period while the CAR is still supported by applying a more favorable FX rate.

The gradual phase-out of forbearance measures related to loan classification is expected to lead to a rise in forborne exposures. Strong credit growth in 2020 amid weak economic prospects and loan repayment deferrals have led to a deterioration in underlying asset quality, which should start to materialize given the reversal of forbearance measures. However, the economic recovery this year and heavy restructurings may delay the recognition of NPLs even once forbearance measures are fully phased out. Banks that have led the credit boom in 2020 will likely see the most significant increase in forborne exposures.

The authorities should prevent an expected surge in NPLs from becoming a drag on economic growth during the economic recovery. First, a robust regulatory and supervisory framework is needed to correctly identify NPLs and provide for credit losses. Uncertainty about the extent of the problem and delayed action can make a challenging situation worse for NPLs. Second, banks need to get operationally ready to resolve rising volumes of NPLs. This requires functional workout units in banks, internal policies for the management and resolution of NPLs, and methodologies for assessing the viability of distressed borrowers. Finally, the insolvency and debt resolution frameworks will become key to supporting the orderly and efficient resolution of distressed assets to avoid a disruption to the economic recovery.

Guidelines and regulatory amendments are being issued. The Banking Regulation and Supervision Authority (BRSA), and recently Capital Markets Board (CMB), introduced several amendments and guidelines to prepare the banking sector for potential NPL stock and flow challenges during the post-forbearance period. Turkey's current challenges with NPL resolution require a broad-based, comprehensive approach, encompassing elements such as: robust regulatory and supervisory frameworks; banks that are operationally prepared for the task of working out rising volumes of NPLs; and an enabling (legal) environment that facilitates

the exit of unviable borrowers and the rehabilitation of distressed but potentially viable ones. Amendments including regulations on loan classifications, credit transactions, asset management companies (AMCs), and guidelines on NPL resolution are meant to pro-actively address the NPL problems, including solutions such as securitization and enabling state banks to sell their NPL portfolios (Box 10).

Box 10: Recent regulatory changes to address the potential NPL stock and flow challenges

Recently amended regulations and newly introduced guidelines since the last TEM aim to create the appropriate loan classification, monitoring, rehabilitation, and distressed asset resolution processes and policies for banks to give viable companies a chance to survive through financial and operational restructuring. These were prepared to create a proactive structure in which the receivables due to assets are cleared from the bank balance sheets by methods such as write-off, transfer to asset management companies, and special funds.

Regulation on Loan Classification

With the amendment made in the “Regulation on the Procedures and Principles Regarding the Classification of Loans and Provisions to be Allocated for These,” banks are now obliged to put their criteria regarding loan class changes in writing and make them ready for auditing. A provision was added to the regulation to assess the debtor's repayment capacity before restructuring by banks. Within the scope of the regulation changes, write-off provisions were also developed to use the resources efficiently in the banking system. Since determinants such as receivables, borrower-specific conditions, and the macroeconomic environment create difficulties in defining the reasonable write-off period, the suitability of the write-off time is left to the banks' discretion on the condition that they keep their justifications ready for audit.

Regulation on Credit Transactions

“Regulation on Amending the Regulation on Banks' Credit Transactions” enforces the establishment of resolution units in the banks independent of the credit allocation unit, the preparation of a three-year NPL management strategy, and annual operational plans for the resolution process, which is defined as the management and mitigation activities of the banks' distressed receivables.

This amendment aims to strengthen the institutional capacity of banks regarding their applications in the credit life cycle, improve allocation processes and monitoring practices, and improve the bad debt management of banks.

Guidance on NPL Resolution

This guidance provides details on the action specified in the Regulation on Credit Transactions, namely a distressed assets management strategy, annual operational plans, and resolution units. Banks' NPL strategy should be based on a self-assessment by banks, have a three-year time horizon, include time-bound quantitative targets for the resolution of NPLs and management of assets acquired due to receivables, and be implemented within the framework of an operational plan. Banks will set written criteria for the reclassification of their non-performing loans.

Before restructuring a non-performing loan, banks will assess the debtor repayment capacity and decide accordingly. Banks are required to dispose of the properties acquired in return for non-performing loans in three years of the acquisition. This obligation now applies to “shares” and “other assets” acquired in return for non-performing loans. Further, the BRSA is currently authorized to change the three-year limitation.

Banks are now required to have a fair market valuation for commodities, properties, shares, and other assets they will acquire in return for non-performing loans in line with the principles and procedures specified in the Communiqué on Credit Risk Mitigation Techniques before they acquire such assets. They will need to record these assets over the lower of (i) the amount deducted from the non-performing loan and (ii) the fair market value less sales.

Amendment to the Regulation of AMC

Within the scope of actions aimed at strengthening the capacity of Asset Management Companies (AMCs) included in the Economy Reform Package, a new system was created for asset management companies, and comprehensive regulations were made. According to the new regulation, all banks, including state banks, and non-bank financial institutions, which are subject to the supervision and control of the BRSA, as well as organizations operating in money-capital markets and insurance, can sell not only their NPLs but also their stage 1 and 2 loans to asset management companies, according to the new regulation. With the regulation, the jurisdiction of asset management companies and the processes related to the transfer of receivables were rearranged, while new provisions were established for accounting, financial reporting, and internal systems. Additionally, the Banking Law, which sets forth the tax exemption applicable to AMCs, was amended to remove the five-year time limitation on AMCs tax exemptions.

Lastly, CMB amended a communiqué on Asset or Mortgage-Backed Securities, enabling the establishment of AMCs funds to issue asset-backed securities, allowing for the securitization of loan portfolios, including NPL portfolios that could not be securitized before. Therefore, AMCs have been given the opportunity to securitize their own portfolios and loans purchased from the banks. Any subsequent assets or rights acquired after the transfer date must also be transferred. AMCs can only sell asset-backed securities to offshore investors.

Recent amendments and guidelines are a step in the right direction; however, they need to go hand-in-hand with strengthening the existing firm insolvency frameworks. Encouraging and improving out-of-court workouts for distressed borrowers remains a top priority. SMEs, accounting for three-quarters of employment, may be particularly hard hit by the absence of this process. At the same time, it will be critical to assess firm viability and identify zombie firms⁵⁵ to free up capital for lending in future periods. Turkey successfully prevented viable firms from being prematurely pushed into insolvency due to COVID-19, but now a growing number of firms may need an insolvency process to survive.

This is supported by analysis showing that taking on more corporate debt affects the quality of that debt requiring attention to corporate debt overhang. Results of recent empirical analysis on corporate debt suggest that a 10 percent increase in financial debt leads to a 0.9 percent increase in NPLs in the post 2018 currency shock period. It also finds that the impact on NPLs is higher in vulnerable sectors of the economy. The increase in corporate debt in vulnerable sectors leads to higher NPLs for the credit portfolio that extended to those sectors. (Box 11). However, the detrimental impact on bank lending extends beyond lending to the vulnerable sectors⁵⁶, since banks also decrease their credit to the resilient sectors⁵⁷. Thus, it is important to address the debt overhang⁵⁸ of corporates, including by ensuring the smooth functioning of debt-restructuring mechanisms.⁵⁹ This can help preserve employment and reduce pressure on bank balance sheets, which would otherwise be affected by a surge in NPLs. An enabling environment for corporate and consumer debt

⁵⁵ Zombies are firms that earn just enough money to continue operating and servicing debt, but are unable to pay off their debt, thus diverting resources away from healthy, viable firms. Adalet McGowan et al (2017): “The walking dead: zombie firms and productivity performance in OECD countries,” and Ricardo Caballero et al (2008) “Zombie Lending and Depressed Restructuring in Japan.”

⁵⁶ Although the 3-digit sub sectors differ in terms of vulnerability, as to the main sectors, energy, tourism and construction are relatively more vulnerable and have higher NPLs.

⁵⁷ Akgunduz, Y. E., S. M. Cilasun, O. Dursun-de Neef, Y. S. Hacıhasanoglu and I. Yarba (2021). “How Do Banks Propagate Economic Shocks?”. SSRN Working Paper Series, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3933697

⁵⁸ Improving corporate governance and transparency, including by broadening audit scope, encouraging publishing annual audit reports on the web pages of the corporates, and enhancing the quality assurance system of independent auditors are important going forward. For instance, on and off-balance sheet transactions are usually not reported properly and in a detailed format by large corporates which makes difficult for the CBRT to assess the risk level of corporates (e.g. sufficiently hedged or not for FX borrowing). Thus, improving the capacity of large corporates and external audit mechanism are critical especially for better policy design on the hedging process of corporates.

⁵⁹ <https://blogs.worldbank.org/voices/strengthen-insolvency-frameworks-save-firms-and-boost-economic-recovery>.

restructuring and a practical out-of-court debt restructuring framework is essential to prevent a surge in insolvency filings, value-destroying liquidations, and asset fire sales ⁶⁰.

Box 11: The Relationship between Corporate Debt and NPLs

Firm financing in Turkey is largely through bank loans, which increased rapidly since 2017 beginning with the massive credit growth supported by the Credit Guarantee Fund (KGF) (Akçigit et al., 2021).⁶¹ This increase accelerated further during the COVID-19 period due to the expansionary monetary policy implemented to alleviate the negative effects of the pandemic. A possible consequence of this high level of corporate indebtedness is a rise in firm defaults and NPLs and hence a deterioration in bank balance sheets and the financial system as a whole.

As a first step to investigate the possible effect of the size of corporate debt, the relationship between corporate debt and nonperforming loans (NPL) is analyzed by using annual sectoral information on 3-digit NACE 2 sectors for the period 2009-2019.^{62,63} In terms of debt, particular emphasis is given to financial debt and trade credits.⁶⁴ The estimation models are structured as follows:

$$NPL_{i,t} = \alpha + \beta FinDebt_{i,t} + \delta Export_Sh_{i,t} + \theta Vulnerability_{i,t} + \mu_i + \sigma_t + \varepsilon_{i,t} \quad (1)$$

$$NPL_{i,t} = \alpha + \gamma TradeDebt_{i,t} + \delta Export_Sh_{i,t} + \theta Vulnerability_{i,t} + \mu_i + \sigma_t + \varepsilon_{i,t} \quad (2)$$

where i and t refer to 3-digit NACE 2 sectors and years, respectively. NPL is the natural logarithm of non-performing loans, $FinDebt$ is the logarithm of the financial debt and $TradeDebt$ is the logarithm of the trade credits. To control for the possible hedging by export revenues, sector level export share ($Export_Sh$) is added to the model. Sectoral vulnerabilities are controlled for by the vulnerability index variable ($Vulnerability$)⁶⁵. Finally, μ_i and σ_t are sector and year fixed effects respectively.

The results of the estimations for the full sample are presented in Table 11. According to the results, both financial debt and trade debt are positively associated with NPLs.⁶⁶ While a 1 percent increase in financial debt is associated with a 0.39 percent increase in NPLs (or equivalently a 10 percent increase in financial debt is associated with a 3.9 percent increase in NPLs), a 10 percent increase in trade debt is associated with a 7.3 percent in NPL.

This positive and statistically significant relation holds for the manufacturing and service sectors as well. On the other hand, for the construction sector, only trade credit is positively related with NPLs (Table 12). Moreover, export revenues seem to act as a buffer for NPLs.

⁶⁰ See also Box 7 and Table 5 in Turkey Economic Monitor: Navigating the Waves.

⁶¹ Akçigit, U., Ü. Seven, İ. Yarba and F. Yılmaz (2021), “Firm-Level Impact of Credit Guarantees: Evidence from Turkish Credit Guarantee Fund”, Central Bank of the Republic of Turkey Working Paper Series, No:21/10.

⁶² The data used is publicly available on the web page of the Central Bank of the Republic of Turkey (CBRT) for 216 3-digit NACE 2 sectors and covers the balance sheets and sectoral risk information. The variables from balance sheets and the NPL variable are yearly stock variables.

⁶³ Due to the heterogenous nature of the relationship, the corporate debt-NPL relationship would better be analyzed at the micro-level. However, NPL information is not available in publicly available firm-level data sets, such as Entrepreneur Information System (EIS) of MOIT. Hence, in this study, the most detailed publicly available micro-data, 3-digit NACE 2 level data, is used.

⁶⁴ As the debt structure of the sectors exhibit different patterns, instead of focusing the total debt, this study focuses on financial debt and trade debt separately.

⁶⁵ The vulnerability index is constructed via principal component analysis using the following variables: Interest coverage ratio (earnings before interest and taxes (EBIT)/firm’s financial expenses), leverage ratio (total debt/total assets), net debt to EBIT ratio ((total debt-cash and cash equivalents)/ EBIT), ratio of current liabilities to long-term liabilities (liabilities maturity equal or less than 1 year/liabilities maturity more than 1 year), quick (liquidity) ratio ((current assets-inventories)/current liabilities). Higher values indicate higher vulnerability. Among those variables, quick ratio and interest coverage ratio was found to be the statistically significant with highest coefficients in estimation where instead of the index, each variable of the index is individually included in the model. In other words, liquidity and rollover capacity of the sectors act as important determinant for NPL.

⁶⁶ Instead of NPL, estimations were also carried using NPL ratio, defined as the ratio of bad debt to total credits, and similar results were obtained.

Table 11: NPL and Debt Relation (Whole Sample)

Variables	Specification (1)	Specification (2)
FinDebt	0.3839*** (0.0837)	---
TradeDebt	---	0.7301*** (0.1241)
Export_sh	-1.5939** (0.7074)	-1.9855*** (0.7329)
Vulnerability	0.0254 (0.0415)	0.0826* (0.0443)
Constant	3.8680*** (1.0822)	-0.6209 (1.6144)
Observations	2,376	2,376
R-squared	0.860	0.862

Note: Statistical significance *** at the 1 percent level, ** at the 5 percent level, * at the 10 percent level. Robust standard errors are reported in parenthesis.

Table 12: NPL and Debt Relation (Sectors)

Variables	Manufac. FinDebt	Services FinDebt	Construction FinDebt	Manufac. TradeDebt	Services TradeDebt	Construction TradeDebt
FinDebt	0.5498*** (0.2031)	0.3300*** (0.1023)	0.2187 (0.4280)	---	---	---
TradeDebt	---	---	---	0.7540** (0.3046)	0.7269*** (0.1616)	1.2286*** (0.4302)
Export_sh	-2.9700** (1.5062)	-2.8132*** (0.9203)	1.4562 (1.3638)	-3.0638** (1.5329)	-3.6770*** (0.9985)	1.0147 (1.3537)
Vulnerability	0.2521 (0.1744)	-0.0308 (0.0405)	0.4251 (0.3562)	0.3748*** (0.1289)	0.0190 (0.0443)	0.1883 (0.2915)
Constant	2.4833 (2.8373)	4.2578*** (1.2741)	8.2767 (6.3080)	-0.1262 (4.2369)	-0.8357 (2.0404)	-6.7641 (6.3644)
Observations	902	1,188	99	902	1,188	99
R-squared	0.798	0.876	0.931	0.799	0.879	0.941

Notes: Statistical significance *** at the 1 percent level, ** at the 5 percent level, * at the 10 percent level. Robust standard errors are reported in parenthesis.

As a second step, the exchange rate shock in 2018 on top of the 2017 acceleration in corporate indebtedness can be used to establish the ‘causal’ effect of high indebtedness on NPLs. It should be noted that, during the post-global financial crises period, corporate debt in Turkey increased more than in peer countries, yet only reached critical levels in 2017. Moreover, as Turkey was experiencing high economic growth during that period, corporate debt would not necessarily have led to more NPLs. However, the high level of corporate indebtedness that arose following the Treasury backed CGF support and the exchange rate shock experienced in 2018 put pressure on firms’ balance sheets.⁶⁷ In this respect, to unveil the “causal” effect of high-level indebtedness on NPLs for recent years, a difference-in-differences framework is employed that uses the exchange rate depreciation in 2018 as an exogenous shock. The financial and trade debt levels at the end of 2017 (pre-currency shock year) are used as the treatment variables. 2015-2017 is defined as the pre-treatment period and 2018-2019 as the post-treatment period.

According to Table 13, a 10 percent increase in financial debt leads to a 0.9 percent increase in NPLs. This effect seems driven by the service sector. A 10 percent increase in financial debt increases NPLs in the service sector by 11 percent.⁶⁸ Trade debt, on the other hand, is not found to increase NPLs in a statistically significant way.

⁶⁷ The high import dependency of production and high FX denominated debt share of firms make exchange rate shocks particularly important.

⁶⁸ The coefficients from the sector level regressions are not reported due to space limitation.

Table 13: NPL and Debt Relation (Difference-in Differences Estimation)

Variables	Financial Debt	Trade Debt
FinDebt	0.0911** (0.0413)	---
TradeDebt	---	0.0438 (0.0452)
Export_sh	-0.3642 (1.4050)	-0.0784 (1.4214)
Vulnerability	0.0565 (0.0455)	0.0537 (0.0470)
Constant	8.7196*** (0.2340)	8.9344*** (0.2546)
Observations	1,080	1,080
R-squared	0.921	0.920

Table 14: NPL and Debt Relation (Difference-in Differences Estimation with Vulnerability Interaction)

Variables	Financial Debt	Trade Debt
FinDebt	0.0642 (0.0411)	---
TradeDebt	---	0.0220 (0.0446)
VulnerDum	-0.1398 (0.1301)	-0.1531 (0.1313)
VulnerDum#FinDebt	0.0267*** (0.0088)	
VulnerDum#TradeDebt		0.0304*** (0.0091)
Constant	8.8708*** (0.2310)	9.0586*** (0.2509)
Observations	1,080	1,080
R-squared	0.922	0.921

Note: Statistical significance *** at the 1 percent level, ** at the 5 percent level, * at the 10 percent level. Robust standard errors are reported in parenthesis.

The probability of loans becoming NPLs is expected to be increasing with a sector's vulnerability. In order to test this hypothesis, first a dummy variable (VulnerDum) is defined which takes the value of 1 if the vulnerability of the sector is above the median and 0 otherwise. Then, this dummy is interacted with the debt variables and the difference-in-difference setup explained above is estimated. A significant and positive interaction coefficient implies that an increase in financial debt leads to a higher increase in NPLs for highly vulnerable sectors compared to low vulnerable sectors.⁶⁹ As stated above, trade debt was not found to affect NPLs in general (Table 13), however, it is found that an increase in trade debt leads to an increase in NPLs for the highly vulnerable sectors (Table 14).

D. Boosting Turkey's external competitiveness

Focus should remain on the longer-term determinants of competitiveness to sustain the short term and intermittent gains in competitiveness attributable to the rapid Lira depreciation. Analysis shows that the positive impact of the Lira depreciation on exports is found to dissipate rapidly. The EU's CBAM also risks eroding Turkey's price advantages in carbon emission intensive exports to the EU. At the same time, surveys show that Turkey can remain an attractive destination for competitiveness-enhancing FDI in high-tech sectors if deterrents like macroeconomic instability, legal and regulatory deficiencies and limited long-term finance opportunities can be overcome. Turkey has a low level of FDI relative to peers and can enormously benefit from FDI that enhances productivity and high value-added exports. As noted in Section C, restoring macroeconomic stability is vital for boosting external competitiveness.

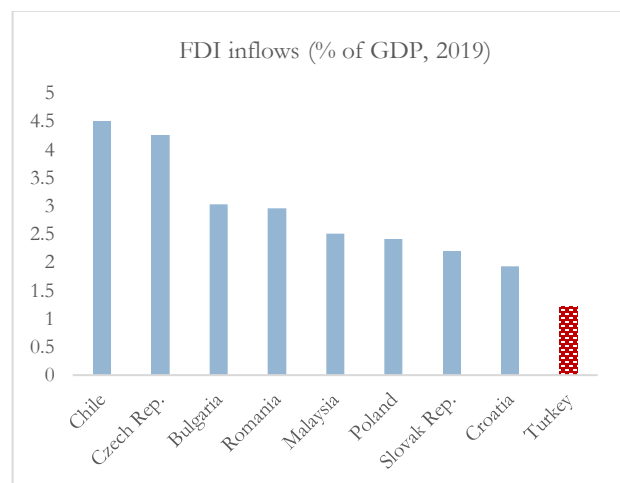
Attracting FDI to capture productivity and competitiveness gains

Turkey has not been attracting as much FDI as in the past or compared to other emerging markets. Good quality FDI, in particular FDI that is productive and higher tech, is important for countries like Turkey that aim to catch-up to high income levels. Not only does it bring needed capital, but it is an essential mechanism through which global best practices and technology are transferred domestically, elevating total factor productivity. However, Turkey has for some time lagged behind other high-performing emerging markets in terms of FDI inflows such as Malaysia, Bulgaria, Romania, and Poland (Figure 189). Turkey's FDI inflows as a share of GDP currently stands at around 1.1-1.2 percent and it falls to 0.7-0.8 percent of GDP when it is netted out with FDI outflows. Furthermore, FDI flows in the last two years declined further, and the share of real

⁶⁹ Although the 3-digit sub sectors differ in terms of vulnerability, as to the main sectors, energy, tourism, and construction are relatively more vulnerable and have higher NPLs.

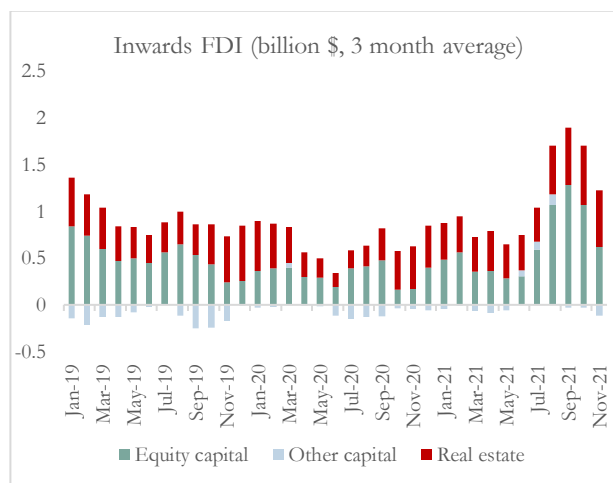
estate captured more than half of total flows (Figure 190). The increase in the share of real estate is most likely driven by the recent sharp depreciation of the currency. In terms of sectoral distributions, the services sector received around 70 percent of total FDI inflows with the finance sector accounting for one third of it. Around one fourth of total flows went to the manufacturing sector.

Figure 189: Turkey lags behind comparators in terms of FDI inflows...



Source: World Bank, WDI.

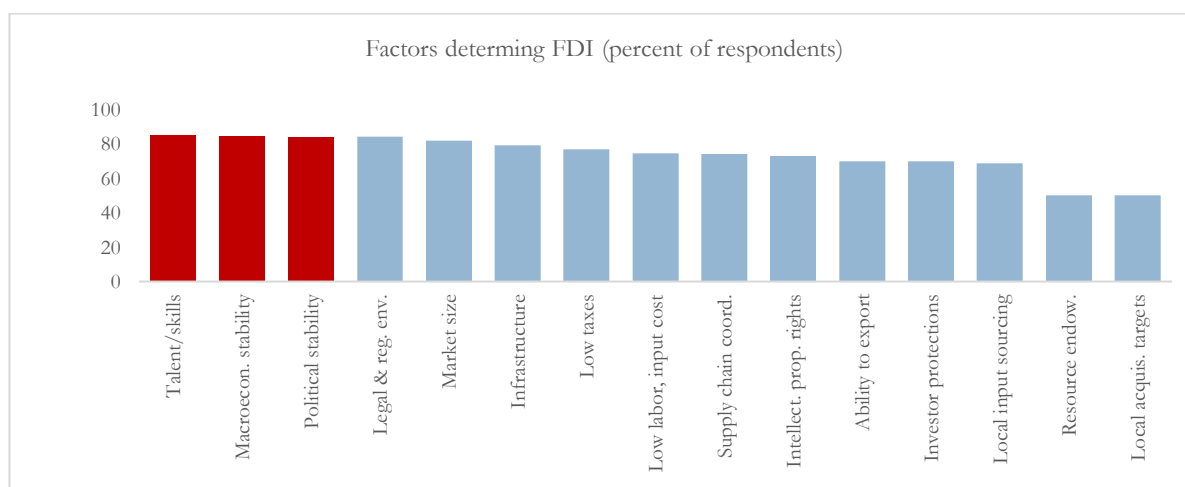
Figure 190: ...and inward FDI has been largely driven by real estate investments in 2021



Source: CBRT.

According to a global survey, macroeconomic stability is an important consideration for potential foreign direct investors. The World Bank's Global Investment Competitiveness Survey 2019-2020 shows that stability factors are two of the three most important considerations in choosing a location to invest. The vast majority of respondents, 85 percent, said 'macroeconomic stability' was a critically important or important factor and 84 percent said 'political stability' was similarly critically important or important (Figure 191).

Figure 191: Globally, stability factors amongst most important in attracting FDI



Sources: World Bank Group, Global Investment Competitiveness Report 2019/2020.

Note: Respondents citing factor was a 'important' or 'critically important' factor in determining location of FDI in developing countries.

Turkey has an open FDI regime, but investors are concerned about macroeconomic and political predictability. Turkey's FDI framework is considered liberal - at par with the OECD average. However, political predictability, macroeconomic stability, and the legal and regulatory environment are among the top

concerns for FDI decisions in Turkey (World Bank 2020b)⁷⁰. Country risk - whether actual or perceived - is difficult to manage and thus deters investors by tilting their risk-return calculations. In Turkey, CEOs cite exchange rate volatility (69 percent), policy uncertainty (52 percent) and geopolitical uncertainty (45 percent) as the main factors depressing confidence in 2020 (PWC 2020)⁷¹. In addition, foreign investors are concerned about regulations and procedures and rate investment approvals, market restrictions and FDI limits as top regulatory obstacles to FDI (World Bank 2020b). The key policy challenge on this front (as discussed earlier) is to lower inflation, stabilize the currency, revive investor confidence, and enhance policy predictability.

A recent Turkey FDI attractiveness survey of selected high-tech and knowledge intensive firms confirms global findings (Box 12). Survey results suggest that in comparison to competitors in Central and Eastern Europe (CEE) and Middle East and North Africa (MENA), the availability of talent and low input costs are Turkey's strengths. In contrast, respondents see Turkey as lagging behind CEE and MENA competitors with respect to other key investment drivers such as investor protections, macroeconomic stability, access to large markets such as the European Union, and the legal environment. Turkey is also lagging behind its competitors on factors specific to high-tech investment such as intellectual property rights protections and availability of venture capital.

Investment promotion agencies (IPAs) can play a critical role in FDI attraction given their role as governments' key interlocutors with foreign businesses. Empirical evidence shows that IPAs can help increase FDI inflows and attract higher-quality FDI.⁷² Turkey's Investment Office already reflects many good practices that are found to be important in maximizing the potential for FDI, including high-level government support, strong strategic alignment, a clear, uncontested mandate, a high degree of institutional autonomy and flexibility, strong private sector orientation and sufficient and sustained resources. Evidence suggests that IPAs that are governed by a strong Board of Directors that has strong and active private sector representation also tend to be more successful and the authorities could consider establishing a similar arrangement for the Investment Office. Further, any reforms that can strengthen the two-way communication links between the IPA and investors – both existing and potential – is likely to be an important means of maximizing responsiveness and effectiveness. Last but not least, the Investment Office could assume a stronger role in advocating and prioritizing necessary investment climate reforms in the areas outlined above to sustainably improve the investment competitiveness of Turkey.

The Free Zone model has the potential to help Turkey with investment attraction particularly for high tech sectors. Recent work⁷³ on free zones in Turkey suggests that Free Zones could positively shape the key drivers of investment in high-tech manufacturing and knowledge-intensive services. First, Free Zones should provide enterprise services, accelerator facilities, and investment facilitation to support zone tenants. Second, Free Zones should improve the legal and regulatory framework for FDI to reduce risks and uncertainty. Survey evidence shows that the regulatory environment and investor protections in areas of intellectual property and data privacy shape investment decisions of MNEs when considering Turkey as an investment location. Third, Free Zones need to move away from the heavy reliance on fiscal incentives, such as tax holidays and export subsidies. Fourth, Free Zone location and design should ensure that zone tenants can attract and retain high-skill talent (Table 15).

⁷⁰ Global Investment Competitiveness Survey 2019/2020.

⁷¹ PwC. 2020. "24th Annual CEO Survey – Turkey." www.ceosurvey.pwc.

⁷² Charlton and Davis 2007; Freund and Moran 2017; Harding and Javorcik 2012; Moran et al. 2018; Morisset and Andrews-Johnson 2004; Wells and Wint 2000.

⁷³ This is drawn on the recent WB study "A Policy Action Plan for Specialized Free Zones in Turkey", October 2021. To analyze the performance of existing free zones, the Ministry of Trade (MoT) and World Bank jointly conducted an assessment of the existing 18 free zones to analyze their performance. The assessment carried out between September 2020 and March 2021, revealed that public services, zone-level governance, basic infrastructures, location and connectivity, and market demand emerged as the key factors that determine the success or failure of a zone.

Table 15: Free Zones can enable the provision of key drivers of high-tech investment

Key drivers of high-tech investment	How free zones can help?	Enabling free zone features
Ecosystem of local suppliers, customers, competitors, and financing sources	Crowd in investment and nurture development of local ecosystems	<ul style="list-style-type: none"> Enterprise support and accelerator facilities Non-tax support for firms (e.g., promotion efforts and information for prospective investors)
Regulatory environment and investor protections (incl. intellectual property and data privacy)	Streamline and harmonize regulations to reduce risks and uncertainty	<ul style="list-style-type: none"> Streamlined product market regulations and harmonization with EU Streamlined registration and entry procedures Special investor protection and dispute resolution mechanisms
Talent attraction and retention	Improve quality of life and facilitate onboarding of local and foreign talent	<ul style="list-style-type: none"> Location in desirable geographies Quality of life improvements (e.g., public spaces, schools) Facilitation of company-university linkages Streamlined visa requirements

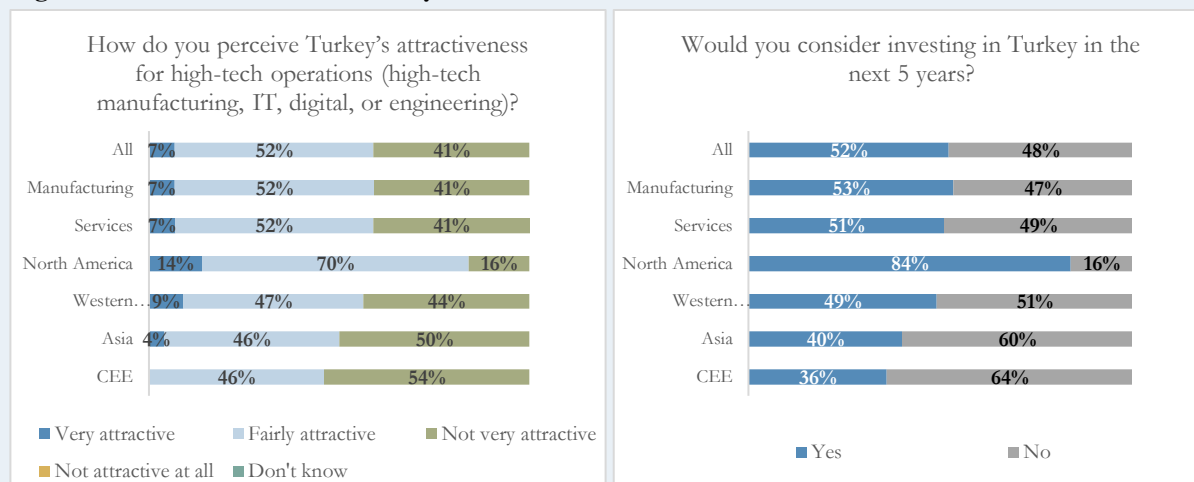
Box 12: Turkey FDI Attractiveness Survey

The World Bank conducted a survey of prospective foreign investors to understand Turkey's potential to attract high-tech investment. In February 2021, the 15-question online Turkey FDI Attractiveness Survey was administered to 205 respondents -split in half between high-tech manufacturing and knowledge-intensive services sectors -who had not yet invested in Turkey.⁷⁴ The objective of the survey was to understand the perception of Turkey as an investment destination and gauge investors' experiences. The survey resulted in a sample of 205 multinational enterprises (MNEs). In addition, 10 in-depth interviews were conducted with select investors to provide further detail on survey findings. This analysis is based on the resulting survey data and insights from in-depth interviews.

Overall, survey results confirm that investors consider Turkey an attractive investment destination for high-tech manufacturing and knowledge-intensive services. Across both manufacturing and services, 59 percent of respondents perceive Turkey as an attractive investment destination. About half of the sample (52 percent) indicated that they would consider investing in Turkey in the next five years (Figure 192). Within Turkey, Istanbul is seen as the most attractive investment destination, mainly due to investors' greater familiarity with the location. For the sectors covered in the survey, the country is perceived as much more attractive by North American companies (84 percent) as compared with MNEs in other surveyed regions. While still fairly encouraging, MNEs originating in Central and Eastern Europe have a more modest assessment of Turkey's attractiveness.

⁷⁴ For the purposes of the survey, high-tech manufacturing was defined as pharmaceuticals manufacturing, electronics manufacturing, electrical equipment manufacturing, aerospace manufacturing, and medical instrument manufacturing. Knowledge-intensive services included computer programming, computer consultancy, information services (e.g., data centers), and architectural and engineering activities.

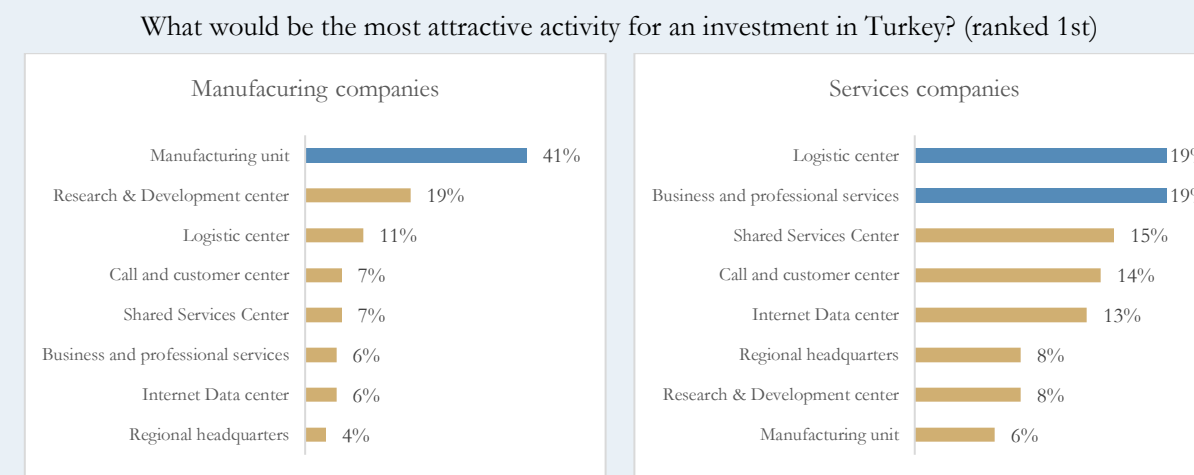
Figure 192: Investors consider Turkey to be an attractive investment destination



Source: Turkey FDI Attractiveness Survey (n = 205)

Within high-tech sectors, Turkey is seen as a destination for manufacturing and 'mid-tech' services. In the *high-tech manufacturing* sector, the country is primarily perceived as a destination for setting up manufacturing production units (Figure 193), but 19 percent of investors also consider higher value-add activities such as R&D. In *knowledge-intensive services* sectors, foreign investors are focused on 'mid-tech' services such as logistics, business and professional services, and shared services. Few investors currently consider Turkey for higher-end activities such as regional headquarters or R&D. The still developing information technology ecosystem is a key barrier identified by respondents.

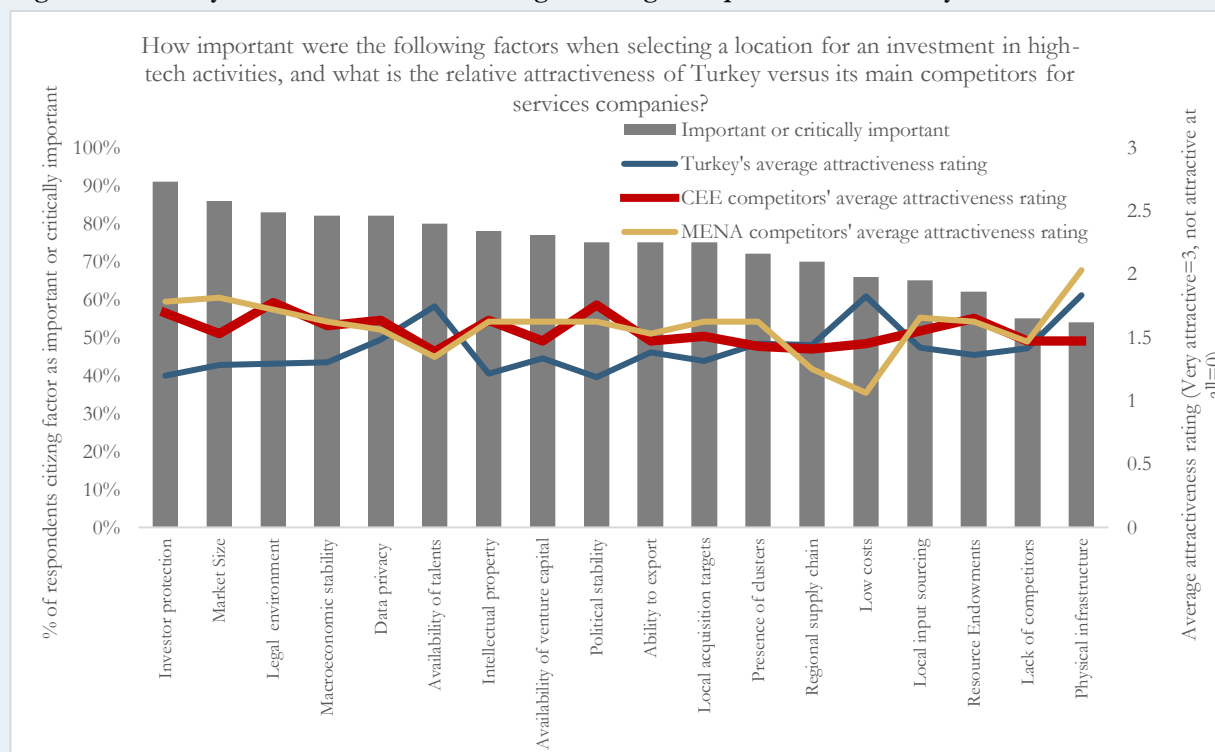
Figure 193: Investors consider Turkey to be an attractive investment destination, but in limited 'mid-tier' activities



Source: Turkey FDI Attractiveness Survey (n = 205)

As an investment destination, Turkey mainly competes with countries in Central and Eastern Europe and the Middle East. According to interviewees from European companies, Turkey is mainly perceived as a potential location for serving European client markets with a pool of sizeable and low-cost labor. Thus, it faces regional competition from countries that offer similar workforce advantages. Survey respondents based in Europe most commonly identified Hungary, Poland, Romania, and Bulgaria as Turkey's main competitors in their investment considerations. Interviewees from companies headquartered in North American and Asia were more likely to see Turkey as a potential hub through which to serve the MENA market. Therefore, survey respondents from these regions identified Saudi Arabia and Israel as posing the greatest competition to Turkey as a regional hub.

Figure 194: Turkey has talent and cost advantages but lags competitors on other key investment drivers



Source: Turkey FDI Attractiveness Survey (n = 205)

The availability of talent and input cost competitiveness are key aspects of Turkey's value proposition to foreign investors. High-tech activities, across manufacturing and services, require human capital inputs. And the thick labor markets that supply the skills for such activities are a key differentiator. We also know from previous research that low input costs are important for MNEs, and more so for MNEs that are majority exporters (Kusek, Saurav, Kuo 2019, Saurav and Kuo 2019). Survey data suggest that in comparison to competitors in CEE and MENA, the availability of talent and low input costs are Turkey's strengths (Figure 194).

At the same time, Turkey lags its FDI competitors with respect to investor protections, legal and regulatory environment, and intellectual property protections. In contrast, respondents see Turkey as lagging behind CEE and MENA competitors with respect to other key investment drivers such as investor protections, access to large markets such as the European Union, macroeconomic stability, and legal environment. Turkey is also perceived as underperforming relative to competitors on factors specific to high-tech investment such as intellectual property rights protections and availability of venture capital. These factors are key drivers of high-tech investment and can be address through public policy.

The findings are consistent with survey evidence (GIC 2019/2020) and empirical literature on FDI showing that higher instability related to the macroeconomic environment (volatility in inflation and real exchange rate) imposes significant additional transaction costs and risks for businesses. It thus plays a critical role in shaping long-term investment decisions. Empirical research shows that political risk and uncertainty have a significant negative effect on FDI inflows.⁷⁵ Relatedly, a transparent and predictable regulatory environment is crucial for attracting new investment as well as for retaining existing foreign investors. A large body of research suggests that the quality of a country's legal and regulatory environment is positively associated with FDI inflows.⁷⁶

Turkey's Positioning vis-à-vis Competitors (Investor Voices)	
Turkey offers skilled talent	<ul style="list-style-type: none"> Turkey offers high-quality IT talent and local IT partners for IT services companies and companies looking to establish shared services centers (French light manufacturing company, US software company, Indian IT services company, Luxembourg IT company, Spanish IT company, US fintech company) Turkey's engineering talent and flexible workforce regulations are also attractive for high-tech manufacturing companies (US manufacturing company, US aerospace company)
<ul style="list-style-type: none"> Multiple companies stated they ruled out Turkey primarily due to political stability, inflation, and currency volatility (French light manufacturing company, Indian IT services company, Luxembourg IT company, Spanish IT company, US fintech company) Even companies that chose to invest in Turkey have sometimes had to adjust their strategies in Turkey due to inflation and currency volatility (US e-commerce company) 	Investors do not like macroeconomic and political instability
Being outside the EU has disadvantages	<ul style="list-style-type: none"> Being outside EU data privacy regulations also carries risks for IT companies and shared services centers (French light manufacturing company, Indian IT services company) All else equal, manufacturing companies generally prefer the EU for manufacturing for ease of customs processing and other trade considerations (French light manufacturing company, European pharmaceutical company)
<ul style="list-style-type: none"> Lack of shared service center track record hurt Turkey's attractiveness both for fundamental business reasons (e.g., lack of established talent pipeline, local service provider ecosystem) because of increased risk perceptions of less-established locations by external clients (European pharmaceutical company, Luxembourg IT company) However, the ecosystem of local IT companies is evolving very quickly and could ease these concerns in the future (US e-commerce company, European pharmaceutical company, US software company) 	Turkey's services ecosystem is less developed, but improving

Note: Key insights were derived from 10 qualitative interviews with senior executives of MNEs. All interviewees have had recent high-tech manufacturing or knowledge-intensive services projects. There is a balance between investors that have considered Turkey in the past and those who have not.

FDI could also help boost productivity and facilitate high value-added exports. Thanks to reforms in early 2000s and increased integration into the world economy, Turkey recorded a high TFP growth and attracted a significant amount of FDI until the GFC. In periods of stable exchange rates, Turkey succeeded to boost its exports through significant productivity growth and trade integration and a gradual substitution of low-tech for mid-tech products. Recently, Turkish exports have benefitted from higher price competitiveness due to Lira depreciation. The real effective exchange rate index declined to its record low of 47.8 in December representing a sharp real depreciation. But the impact of depreciation on real exports is empirically found to be short lived, statistically insignificant after two quarters and completely disappearing after two years (Figure 195). Currently, Turkey's export sophistication is very low (Figure 196) relative to peers. There is robust evidence indicating that FDI inflows helps boost sophistication of production structure (Javorcik et al. 2018)⁷⁷ and lead to positive and large knowledge spillovers to domestic firms as well as productivity gains in Turkey (Kalemli-Ozcan et al. 2016).⁷⁸ Going forward, Turkey needs to restore macro stability and promote FDI to upgrade and boost exports.

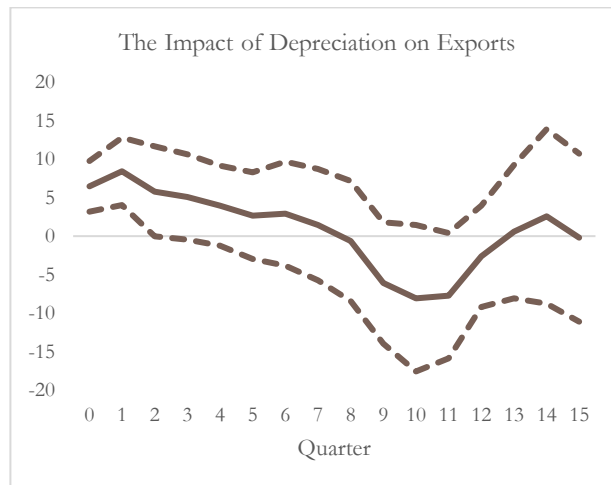
⁷⁵ Asiedu 2006; Busse and Hefeker 2007; Jun and Singh 1996; Krifa-Schneider and Matei 2010.

⁷⁶ Akame, Ekwele, and Njei 2016; Buchanan, Le, and Rishi 2012; Daude and Stein 2007; Globerman and Shapiro 2002; Wei 2000; Wernick, Haar, and Singh 2009.

⁷⁷ Javorcik, B.S., Lo Turco, A., and D. Maggioni (2018), "New and Improved: Does FDI Boost Production Complexity in Host Countries?," Economic Journal, Royal Economic Society, Vol. 128(614), pp.2507-2537.

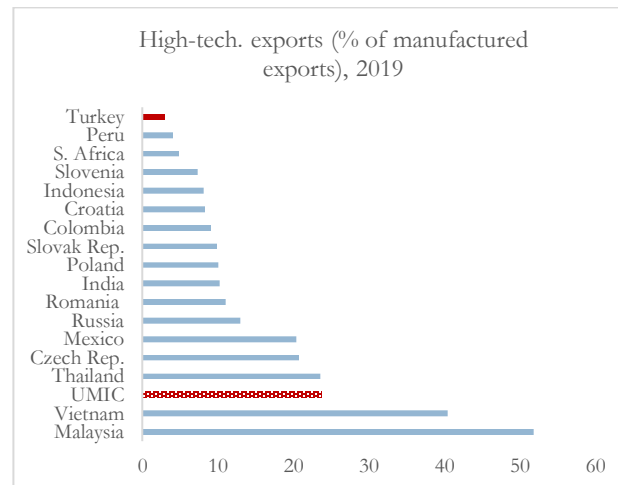
⁷⁸ Kalemli-Ozcan, S., Sanchez Martin, M.E., and G. Thirion (2016), "A Difficult Relationship: Declining (but productive) FDI inflows in Turkey," Policy Research Working Paper Series 7918, The World Bank.

Figure 195: The recent depreciation increases exports after one quarter, but the impact completely disappears after two years⁷⁹



Sources: WB staff calculations based on data from IMF IFS and Bruegel.

Figure 196: Turkey lags behind its peers in terms of high-tech exports



Sources: World Bank, WDI.

The COVID-19 pandemic and the resulting massive supply chain disruptions are likely to lead to a major reshaping of global supply chains. Supply chain disruption and rising costs due to high shipping costs forced many suppliers to temporarily pause their production or make plans to move their production. Many companies have started to move production closer to their markets to be cost-effective and less vulnerable to shocks. Turkey's deep integration with the EU and other countries benefited the country for a quarter of a century, but it makes Turkey's economy sensitive to restructuring of production networks. Turkey, with its geographical location and production capabilities, has become a more attractive location for a regional manufacturing and trade and logistics hub.

Turkey could benefit if multinational corporations implement strategies to move their supply chains closer to the EU market. As a response to the COVID-19 shock and deteriorating reliability of sea transport, there is a possibility that European multinational corporations might diversify their suppliers to those closer to final consumers, to limit their exposure to country specific shocks and delays. Turkey's high specialization in some industries that heavily rely on sea transport, such as automotive industries, makes Turkey an attractive location for companies that want to serve the European market. For instance, the auto industry heavily relies on suppliers in South Korea and Thailand for auto parts, which expose some companies to geographically localized shocks in these two countries. Some of these firms may want to reduce their reliance on these countries by investing in production in other locations such as Turkey.

Some multinational corporations have recently announced their plans to shift their production closer to Europe amid high shipping costs and delays. Many multinational corporations have already started to move production away from Asia. One of the world's top retailers of furniture⁸⁰ announced in October 2021 its plans to shift more production to Turkey to minimize problems with global supply chains and increased shipping costs. Similarly, a fashion retailer⁸¹ recently announced having talks on moving some part of production to Turkey. A big clothing company⁸² has already cut its production in Bangladesh, Vietnam, China and India this year to have more control on the production process and also on transport costs. The company

⁷⁹ Estimates are obtained using local projection estimations on quarterly Turkish real exports and real effective exchange rate (REER), controlling for real GDP growth, quarter of the year dummies, and four lags of exports, real GDP, and REER growth variables. The 90 percent confidence intervals are constructed using Newey-West heteroskedastic and autocorrelated standard errors. The impact is statistically significant only for 2 quarters.

⁸⁰ <https://www.reuters.com/business/retail-consumer/ikea-shift-more-production-turkey-shorten-supply-chain-2021-10-06/>

⁸¹ <https://www.reuters.com/article/poland-lpp-idCNL8N2R234A>

⁸² <https://www.reuters.com/article/benetton-reshoring-idAFL8N2QQ3N0>

aims to bring production closer to Europe, boosting manufacturing in Turkey, Serbia, Croatia, Tunisia, and Egypt and halve the production in Asia by the end of 2022.

While Turkey has benefitted from the initial turmoil in maritime shipping, its future success will depend on its ability to remain an open and predictable destination for trade and foreign direct investment. In addition, Turkey should strive to stay well connected to global markets with continuous investment in soft and hard infrastructure as well as keeping a predictable environment for doing business. Investment in information and communications technology and in healthcare could help to mitigate the adverse effects of Covid-like shocks and boost Turkey's attractiveness as an investment destination. Recent evidence shows that the efficiency of remote work arrangements mitigated the negative effects of lockdown policies on the economic activity.

Anticipating the impacts of the EU's Carbon Border Adjustment Mechanism

New large-scale EU-wide policy initiatives that have the potential to impact Turkish competitiveness are largely outside Turkey's control. The EU, through the EU Green Deal⁸³, could impose border adjustment taxes affecting Turkey's exports. The carbon border adjustment mechanism (CBAM) is designed for the price of certain imports to the EU under in the EU's Emissions Trading Scheme (ETS) to reflect their carbon content. The CBAM acts like a tariff increase on EU imports, with tariff levels based on products' emissions intensities. An important feature is that they are either in the design phase or under construction. Thus, non-EU firms operating in the EU market – including Turkish firms – face significant policy uncertainty going forward.

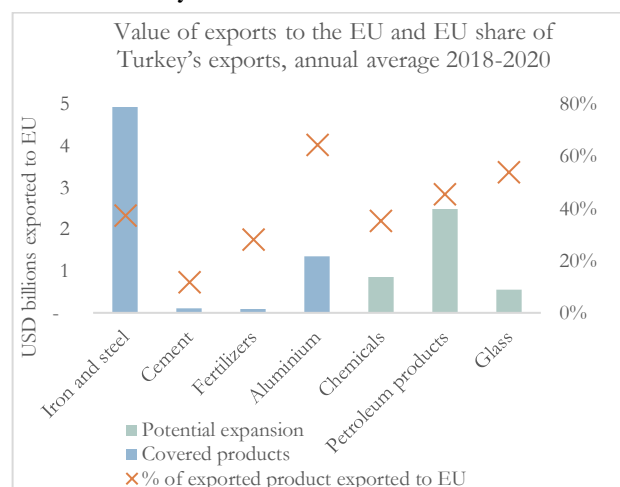
This is the case especially in emissions-intensive industries with high trade exposure to the EU market (Figure 197 and Figure 198). The sector of most concern is iron and steel, where 37 percent of Turkey's iron and steel exports are absorbed by the EU, valued close to \$5 billion annually on average since 2018. When compared with other major exporters, the emissions intensity of Turkey's ferrous metals sector is higher than that for the EU and the Republic of Korea, though lower than China and Russia. Aluminium production is also highly exposed, with 64 percent of Turkey's exports of covered aluminium products going to the EU, worth nearly US\$1.4 billion a year. The emissions intensity of Turkey's production of non-ferrous metals (including aluminium) fares slightly better when compared with other major exporters including the EU and China.

The World Bank has undertaken macroeconomic modelling to quantify the potential impact of the EU's CBAM⁸⁴ on Turkey's economy. The baseline assumes all countries reduce emissions in line with their NDCs. For Turkey, its current NDC target of 1,000 MtCO₂e by 2030 would be met without additional policy action of a carbon tax. The first and second scenarios model the 'current proposal' and an 'expanded CBAM' with both scope 1 (cement, electricity, aluminum, iron and steel, and fertilizers) and scope 2 (chemicals, petroleum products, and glass) emissions included. Starting in 2026, exporters would pay the forecast EU ETS price after factoring in (i) level of carbon price domestically (i.e., EU credits for carbon pricing policy so that the exporter pays the EU's ETS price less the domestic price), and (ii) free allocation (i.e., CBAM is reduced in line with the level of free allocation to each industry in the EU's ETS). A third scenario, 'US', includes the introduction of a CBAM by the United States covering the same emissions and sectors as the EU. A fourth scenario includes an expanded ETS whereby CBAM is applied to all products in all ETS sectors in both the EU and the US, labelled 'all ETS, US'.

⁸³ Turkish government released a Green Deal Action Plan in July 2021 which aims to establish Turkey's compliance with the EU Green Deal (<https://ticaret.gov.tr/data/60f1200013b876eb28421b23/MUTABAKAT%20YE%C5%9E%C4%B0L.pdf>).

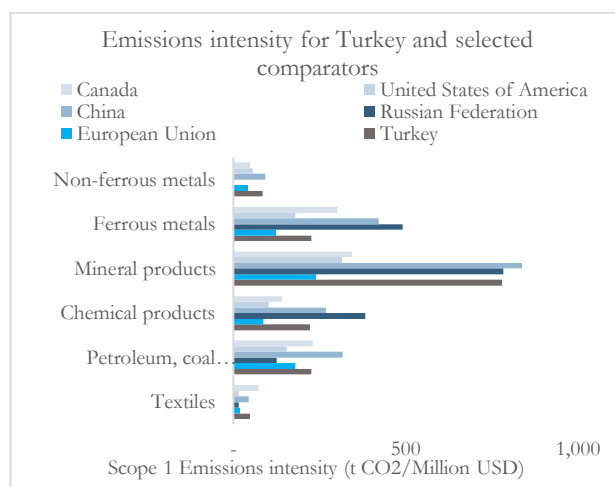
⁸⁴ This is preliminary result from forthcoming WB analysis.

Figure 197: The sector of most concern is iron and steel for Turkey in CBAM



Source: World Bank analysis using Global Trade Analysis Project (GTAP) data.

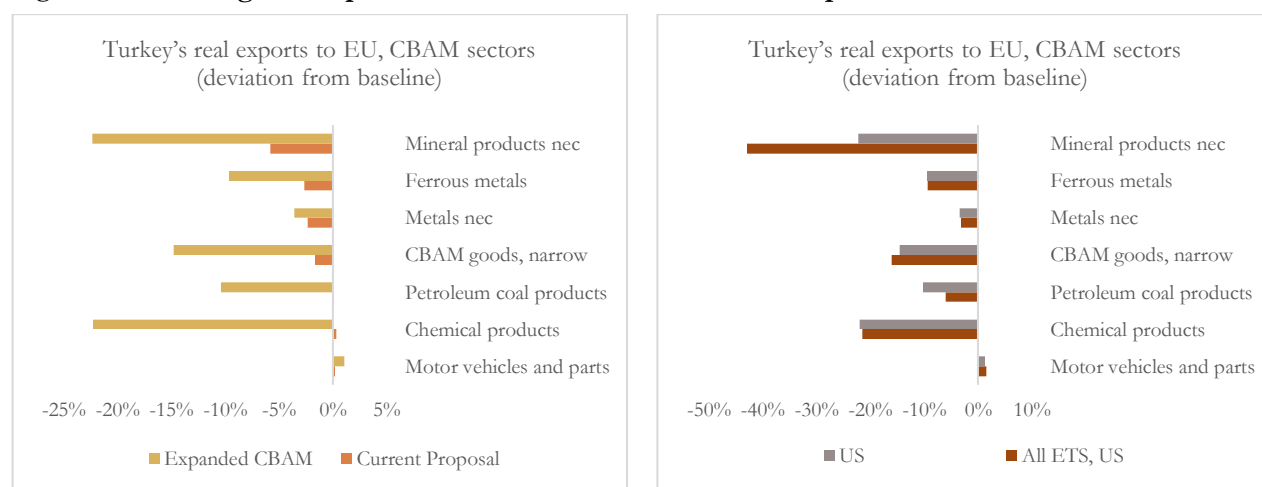
Figure 198: Emissions intensity for Turkey is higher than that for EU



Source: World Bank analysis using Global Trade Analysis Project (GTAP) data.

According to the analysis, the long-run impact of the CBAM could be sizable for particular CBAM sectors. Exports of mineral products, such as cement and glass, to the EU is modeled to be around 5.8 percent lower under the current proposal; scope 1 emissions from most cement products are covered but other mineral products are not subject to the CBAM. The impact could be as much as 42.9 percent lower with coverage of the sector broadened beyond cement and scope 2 emissions included. Similarly, the impact on the chemicals sector is expected to be substantial if it is captured broadly by the CBAM and scope 2 emissions are included, where exports to the EU are more than 20 percent lower than under the baseline. Countering the declines are potential increases in production in some sectors. For example, some manufacturing sectors like machinery and equipment, which are not subject to the CBAM, benefit from improved competitiveness compared with EU producers who will face higher input costs under the CBAM (Figure 199).

Figure 199: The long-run impact of the CBAM could be sizable for particular CBAM sectors



Source: World Bank analysis using Global Trade Analysis Project (GTAP) data.

While CBAM policies are still evolving and further assessment is warranted, Turkey can already take several steps in anticipation to boost trade. Further impact assessment should account for uncertainties around the scope and timing of CBAM implementation, implications of other countries implementing similar carbon border adjustment initiatives, and CBAM's impact on global value chains that Turkey may, or may seek

to, participate in. It is also important to consider the implications of border adjustment mechanisms on other ongoing bilateral and multilateral trade policy initiatives such as the modernization of the EU Turkey customs union. Nevertheless, existing analysis shows that Turkey can take meaningful steps to raise its competitiveness and participation in global trade by: improving market access especially by reducing barriers to trade in services; entrenching macroeconomic and regulatory stability; scaling up public provision of market information; supporting firm capability and workforce development; lifting market-distorting measures like import barriers, domestic content requirements and weakly functioning incentives; building economic infrastructure and workforce skills in lagging regions, and addressing constraints to female employment.

Annex 1: Medium-Term Outlook, Nominal

Key Macroeconomic Indicators

	2018	2019	2020	2021	2022	2023
Population (mid-year, million)	81.4	82.6	83.4	84.4	85.4	86.4
GDP (current US\$, billion)	797.2	760.4	716.9	757.5	566.1	589.5
GDP per capita (current US\$)	9793	9208	8597	8975	6628	6822
CPI (annual average, in percent)	16.3	15.2	12.3	19.6	47.0	20.5
Real Economy	TL Billion, unless otherwise indicated					
Real GDP	1756.5	1772.1	1803.9	1984.7	2023.6	2084.9
Private Consumption	1025.9	1041.2	1074.8	1192.6	1202.1	1233.3
Government Consumption	245.6	255.7	261.2	274.8	287.1	296.4
Gross Fixed Capital Formation	501.8	439.4	471.2	472.7	458.5	468.7
Net Exports	41.6	82.3	-12.4	86.9	118.1	128.6
Fiscal Accounts	TL Billion, unless otherwise indicated					
Total Revenues	1238.5	1429.9	1637.2	2187.3	2792.9	3407.9
Total Expenditures	1327.1	1560.9	1835.5	2408.5	3239.3	3946.7
General Government Balance	-88.6	-131.0	-198.2	-221.3	-446.4	-538.8
Primary Balance	-9.3	-23.1	-56.1	-7.5	-129.5	-127.8
Monetary Policy	TL Billion, unless otherwise indicated					
Broad Money (M3)	1994.7	2554.0	3421.5	-	-	-
Credit Growth (FX-adjusted, eop, y-o-y)*	1.0	8.5	37.5	-	-	-
Average Funding Rate (annual average, in percent)	17.7	20.7	10.5	-	-	-
Gross Reserves (in US\$ Billion)	93.0	105.7	93.6	111.2	-	-
o/w Gold Reserves	20.1	27.1	43.5	38.5	-	-
External Sector	US\$ Billion, unless otherwise indicated					
Current Account Balance	-21.7	5.3	-35.6	-14.9	-14.6	-19.6
Net Foreign Direct Investment	8.9	6.6	4.6	7.7	5.9	6.9

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

Note: 2021-2023 figures are WB projections excluding current account balance, net foreign direct investment, gross reserves and CPI figures in 2021.

*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, Percent of GDP

Key Macroeconomic Indicators

	2018	2019	2020	2021	2022	2023
Real Economy	Annual percentage change, unless otherwise indicated					
Real GDP	3.0	0.9	1.8	10.0	2.0	3.0
Private Consumption	0.6	1.5	3.2	11.0	0.8	2.6
Government Consumption	6.5	4.1	2.2	5.2	4.5	3.3
Gross Fixed Capital Formation	-0.2	-12.4	7.2	0.3	-3.0	2.2
Exports	8.8	4.6	-14.8	24.5	8.0	7.0
Imports	-6.2	-5.4	7.6	-1.3	1.8	6.5
Fiscal Accounts	Percent of GDP, unless otherwise indicated					
Total Revenues	32.9	33.1	32.4	32.4	29.0	28.9
Total Expenditures	35.3	36.2	36.4	35.7	33.7	33.5
General Government Balance	-2.4	-3.0	-3.9	-3.3	-4.6	-4.6
Government Debt Stock	30.2	32.7	39.8	46.5	45.0	44.3
Primary Balance	-0.3	-0.5	-1.1	-0.1	-1.3	-1.1
Monetary Policy	Percent of GDP, unless otherwise indicated					
CPI (annual average, in percent)	16.3	15.2	12.3	19.6	47.0	20.5
Broad Money (M3)	53.1	59.1	67.8	-	-	-
Gross Reserves	11.9	13.9	13.0	-	-	-
In months of merchandise imports c.i.f.	5.1	6.4	5.4	-	-	-
Percent of short-term external debt	79.2	86.0	67.3	-	-	-
External Sector	Percent of GDP, unless otherwise indicated					
Current Account balance	-2.7	0.7	-5.0	-2.0	-2.6	-3.3
Net Foreign Direct Investment	1.1	0.9	0.6	1.0	1.0	1.2

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

Note: 2021-2023 figures are WB projections excluding CPI in 2021.

Annex 3: Gross Domestic Product, Production Approach

Gross Domestic Product: Production Approach

	2016	2017	2018	2019	2020
GDP (current, TL billion)	2626.6	3133.7	3758.8	4317.8	5046.9
Agriculture	161.3	189.2	217.1	276.4	337.2
Industry	514.9	646.8	837.6	942.7	1149.2
Construction	222.7	266.1	267.7	233.3	264.9
Services	1418.0	1677.7	2047.2	2435.6	2735.4
GDP (chained volume, TL billion)	1586.6	1705.7	1756.5	1772.1	1803.9
Agriculture	101.3	106.3	108.5	112.1	118.7
Industry	312.7	341.8	346.7	343.6	354.3
Construction	117.3	128.3	125.9	115.1	108.8
Services	870.3	936.1	980.9	1007.4	1013.8
Real GDP Growth (in percent)	3.3	7.5	3.0	0.9	1.8
Agriculture	-2.6	4.9	2.1	3.3	5.9
Industry	4.4	9.3	1.4	-0.9	3.1
Construction	5.1	9.4	-1.9	-8.6	-5.5
Services	3.4	7.6	4.8	2.7	0.6
GDP (chained volume, share)					
Agriculture	6.4	6.2	6.2	6.3	6.6
Industry	19.7	20.0	19.7	19.4	19.6
Construction	7.4	7.5	7.2	6.5	6.0
Services	54.9	54.9	55.8	56.8	56.2

Source: TURKSTAT, WB Staff calculations.

Annex 4: Gross Domestic Product, Expenditure Approach

Gross Domestic Product: Expenditure Approach

	2016	2017	2018	2019	2020
GDP (current, TL billion)	2626.6	3133.7	3758.8	4317.8	5046.9
Private Consumption	1560.4	1836.6	2111.9	2456.1	2864.0
Government Consumption	387.0	450.6	552.0	668.6	766.0
Gross Fixed Capital Formation	764.5	935.6	1115.0	1117.5	1382.1
o/w Construction	424.4	536.0	643.7	581.0	627.0
o/w Machinery and Equipment	279.8	323.5	379.0	416.5	575.6
Net Exports	-56.8	-115.4	-9.3	111.5	-192.3
Change in Inventories	-28.6	26.2	-10.7	-35.9	227.2
GDP (constant prices, TL billion)	1586.6	1705.7	1756.5	1772.1	1803.9
Private Consumption	963.4	1020.5	1025.2	1041.5	1075.3
Government Consumption	219.5	230.5	245.6	255.7	261.2
Gross Fixed Capital Formation	464.6	503.0	501.8	439.4	471.2
o/w Construction	247.7	278.5	285.3	233.2	215.9
o/w Machinery and Equipment	182.0	184.0	172.8	158.8	192.2
Net Exports	-22.8	-19.0	41.6	82.3	-12.4
Change in Inventories	-38.0	-29.3	-58.7	-46.7	8.6
Real GDP Growth (in percent)	3.3	7.5	3.0	0.9	1.8
Private Consumption	3.8	5.9	0.6	1.5	3.2
Government Consumption	9.5	5.0	6.5	4.1	2.2
Gross Fixed Capital Formation	2.2	8.3	-0.2	-12.4	7.2
o/w Construction	3.0	12.4	2.4	-18.3	-7.4
o/w Machinery and Equipment	0.2	1.1	-6.1	-8.1	21.0
Exports	-1.7	12.4	8.8	4.6	-14.8
Imports	3.0	10.6	-6.2	-5.4	7.6
Change in Inventories	-9.4	-22.9	100.3	-20.4	-118.4
GDP (constant prices, share)					
Private Consumption	60.7	59.8	58.4	58.8	59.6
Government Consumption	13.8	13.5	14.0	14.4	14.5
Gross Fixed Capital Formation	29.3	29.5	28.6	24.8	26.1
o/w Construction	15.6	16.3	16.2	13.2	12.0
o/w Machinery and Equipment	11.5	10.8	9.8	9.0	10.7
Exports	22.2	23.2	24.6	25.4	21.3
Imports	23.7	24.3	22.2	20.8	22.0
Change in Inventories	-2.4	-1.7	-3.3	-2.6	0.5

Source: TURKSTAT, WB Staff calculations.

Annex 5: Prices

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

	2017	2018	2019	2020	2021
CPI (All items)	11.9	20.3	11.8	14.6	36.1
CPI (Food and non-alc. Beverages)	13.8	25.1	10.9	20.6	43.8
CPI (Core C)	12.3	19.5	9.8	14.3	31.9
Alcoholic beverages, tobacco	2.9	2.4	43.1	0.7	20.0
Clothing and footwear	11.5	14.8	4.5	-0.3	20.1
Housing & Energy	9.6	23.7	9.9	9.6	28.6
Health	11.9	16.7	13.6	16.7	20.5
Transport	18.2	16.0	12.2	21.1	53.7
Communication	1.4	9.6	3.2	5.7	8.8
Recreation and culture	8.4	20.9	7.0	10.4	25.5
Education	10.5	10.2	14.5	6.8	17.2
Restaurants and Hotels	11.5	19.8	13.2	12.7	40.8
Miscellaneous goods and services	12.8	28.8	13.6	28.1	35.4
PPI (All items)	15.5	33.6	7.4	25.1	79.9

Consumer and Producer Prices: Annual average, percentage change

	2017	2018	2019	2020	2021
CPI (All items)	11.1	16.3	15.2	12.3	19.6
CPI (Food and non-alc. Beverages)	12.7	18.0	19.5	13.9	24.8
CPI (Core C)	10.1	16.5	13.4	11.2	18.3
Alcoholic beverages, tobacco	15.4	1.5	24.4	16.4	4.8
Clothing and footwear	7.1	13.6	5.6	5.7	8.4
Housing & Energy	8.0	15.8	13.4	12.4	17.7
Health	12.4	12.4	17.1	14.4	18.4
Transport	16.8	21.8	9.8	12.2	26.6
Communication	2.7	4.6	6.4	4.3	6.5
Recreation and culture	9.8	12.9	14.5	7.0	12.8
Education	10.0	10.5	13.5	10.5	11.8
Restaurants and Hotels	10.3	15.1	17.6	12.1	21.5
Miscellaneous goods and services	12.3	19.9	22.0	22.6	19.5
PPI (All items)	15.8	27.0	17.6	12.2	43.9

Source: TURKSTAT, WB Staff calculations.

Annex 6: Balance of Payments

Balance of Payments Statistics

	2015	2016	2017	2018	2019	2020
US\$ Billion, unless otherwise indicated						
Current Account	-27.3	-27.0	-40.8	-21.7	5.3	-35.6
Trade Balance	-19.0	-19.4	-32.2	-10.6	17.3	-26.3
Exports of goods	154.9	152.6	169.2	178.9	182.2	168.4
Imports of goods	203.9	192.6	227.8	219.6	199.0	206.3
Services Balance	30.0	20.5	26.3	30.2	34.1	11.5
Primary Income Balance	-9.7	-9.2	-11.1	-11.9	-12.8	-8.8
Secondary Income Balance	1.4	1.5	2.5	0.8	0.8	0.1
Capital Account	0.0	0.0	0.0	0.1	0.0	0.0
Financial Account	-6.3	-17.5	-41.7	11.6	-1.1	-7.7
Direct Investment	-14.2	-10.7	-8.3	-9.2	-6.3	-4.3
Portfolio Investment	13.9	-8.4	-24.4	0.9	2.8	9.6
Other Investment	-6.0	1.6	-8.9	19.9	2.4	-12.9
Net Errors & Omissions	9.2	10.3	-9.1	22.9	-0.1	-4.5
Reserve Assets	-11.8	0.8	-8.2	-10.4	6.3	-31.9
Overall Balance	-11.8	0.8	-8.2	-10.4	6.3	-31.9
memo item:						
Energy Balance	-33.5	-24.1	-32.9	-37.8	-33.3	-24.2
Gold Balance	4.0	1.8	-10.0	-8.7	-9.3	-22.4
Percent of GDP, unless otherwise indicated						
Current Account	-3.1	-3.1	-4.7	-2.7	0.7	-5.0
Trade Balance	-2.2	-2.2	-3.7	-1.3	2.3	-3.7
Exports of goods	17.9	17.6	19.7	22.4	24.0	23.5
Imports of goods	23.5	22.2	26.5	27.5	26.2	28.8
Services Balance	3.5	2.4	3.1	3.8	4.5	1.6
Primary Income Balance	-1.1	-1.1	-1.3	-1.5	-1.7	-1.2
Secondary Income Balance	0.2	0.2	0.3	0.1	0.1	0.0
Capital Account	0.0	0.0	0.0	0.0	0.0	0.0
Financial Account	-0.7	-2.0	-4.9	1.5	-0.1	-1.1
Direct Investment	-1.6	-1.2	-1.0	-1.2	-0.8	-0.6
Portfolio Investment	1.6	-1.0	-2.8	0.1	0.4	1.3
Other Investment	-0.7	0.2	-1.0	2.5	0.3	-1.8
Net Errors & Omissions	1.1	1.2	-1.1	2.9	0.0	-0.6
Reserve Assets	-1.4	0.1	-1.0	-1.3	0.8	-4.4
Overall Balance	-1.4	0.1	-1.0	-1.3	0.8	-4.4
memo item:						
Energy Balance	-3.9	-2.8	-3.8	-4.7	-4.4	-3.4
Gold Balance	0.5	0.2	-1.2	-1.1	-1.2	-3.1

Source: CBRT, Ministry of Treasury and Finance, WB Staff calculations.

Annex 7: Monetary Survey

Monetary Survey (TL Billion, end of period)

	2016	2017	2018	2019	2020	2021-Nov
Total Assets	1894.0	2224.7	2705.5	3334.0	4438.6	6319.5
Net Foreign Assets	-42.3	-79.6	-3.2	187.8	84.8	672.0
Foreign Assets	561.8	631.2	876.0	1065.7	1196.7	2517.3
Monetary Authorities	380.3	417.1	499.1	638.6	700.6	1612.1
Deposit Money Banks	181.5	214.0	376.9	427.1	496.1	905.2
Foreign Liabilities	604.2	710.8	879.2	878.0	1111.9	1845.2
Monetary Authorities	10.5	11.6	21.7	24.8	41.6	163.5
Deposit Money Banks	593.6	699.2	857.4	853.2	1070.3	1681.8
Domestic Credits	1936.3	2304.3	2708.7	3146.7	4353.8	5647.5
Net Claims on Central Government	174.5	178.2	278.3	408.8	697.2	812.6
Claims on private sector	1686.5	2025.5	2306.0	2583.6	3471.3	4566.3
Total Liabilities	1894.0	2224.7	2705.5	3334.0	4438.6	6319.5
Money	270.1	297.4	290.2	392.2	478.0	688.4
Currency in Circulation	111.3	118.5	119.1	140.7	173.7	226.0
Demand Deposits	158.8	178.9	171.0	251.6	304.3	462.4
Quasi Money	1244.9	1453.1	1793.2	2251.7	3064.1	4669.4
Time and saving deposits	682.0	763.7	875.4	990.6	1222.6	1525.4
Residents' foreign exchange deposits	517.6	631.4	862.1	1152.2	1746.1	3007.7
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)	379.0	474.2	622.1	690.5	896.5	961.7

Source: CBRT.

Annex 8: Central Bank Balance Sheet

Central Bank of Turkey Balance Sheet (TL Billion)

	2016	2017	2018	2019	2020	2021-Oct
CBRT Assets	345.4	396.2	461.2	646.5	820.2	1315.4
Foreign Assets	381.0	436.8	506.9	638.1	699.5	1191.6
Domestic Assets	18.2	16.4	-0.7	58.1	188.6	230.3
Treasury Debt: Securities	13.9	14.5	13.7	19.4	89.5	73.7
Cash credits to Public Sector	13.8	14.4	13.5	19.3	89.4	73.6
Cash credits to Banking Sector	37.6	48.1	80.9	102.6	138.4	169.7
Credits to SDIF	0.0	0.0	0.0	0.0	0.0	0.0
Other Items	-33.1	-46.1	-95.1	-63.7	-39.1	-13.0
FX Revaluation Account	-53.8	-57.0	-45.0	-49.8	-67.9	-106.6
CBRT Liabilities	345.4	396.2	461.2	646.5	820.2	1315.4
Total FX Liabilities	260.9	299.7	347.2	419.8	673.5	998.7
Foreign Liabilities	10.0	9.1	21.7	24.7	41.7	123.9
Domestic Liabilities	251.0	290.6	325.5	395.1	631.8	874.8
Central Bank Money	84.5	96.5	114.0	226.7	146.6	316.7
Reserve Money	168.0	174.1	192.2	203.8	382.3	520.6
Other Central Bank Money	-83.5	-77.6	-78.2	22.9	-235.7	-203.9

Source: CBRT.

Annex 9: Fiscal Operations

General Government Budget

	2015	2016	2017	2018	2019	2020
TL Billion, unless otherwise indicated						
Revenues	799.2	904.3	1028.2	1238.5	1429.9	1637.2
Tax Revenues	418.7	470.4	549.8	632.7	686.3	846.4
o/w Indirect	285.7	315.1	367.2	389.4	416.4	552.7
o/w Direct	118.9	138.1	164.3	221.3	245.0	265.7
Non-Tax Revenues	42.8	46.3	47.8	83.9	81.0	89.1
Factor Incomes	112.7	129.6	144.8	177.0	261.2	262.0
Social Funds	212.9	248.4	280.7	338.7	396.3	435.1
Privatization Revenues	12.1	9.6	5.0	6.2	5.1	4.7
Expenditures	801.5	940.5	1085.5	1327.1	1561.3	1835.5
Current Expenditures	357.6	426.5	480.1	594.5	712.6	817.8
Investment Expenditures	81.1	91.4	115.1	141.6	115.2	130.7
Transfer Expenditures	362.8	422.6	490.3	591.1	733.0	886.9
o/w Current Transfers	339.4	399.9	466.4	564.2	698.0	850.1
o/w Capital Transfers	23.4	22.7	23.9	26.9	35.3	36.8
Overall Balance	-2.4	-36.2	-57.3	-88.6	-131.0	-198.2
Interest Expenditures	54.9	52.7	60.3	79.3	107.9	142.1
Government Debt Stock	642.4	733.3	875.6	1130.1	1406.4	2001.6
Primary Balance	52.5	16.6	3.0	-9.4	-23.1	-56.1
Percent of GDP, unless otherwise indicated						
Revenues	34.0	34.4	32.8	32.9	33.1	32.4
Tax Revenues	17.8	17.9	17.5	16.8	15.9	16.8
o/w Indirect	12.2	12.0	11.7	10.4	9.6	11.0
o/w Direct	5.1	5.3	5.2	5.9	5.7	5.3
Non-Tax Revenues	1.8	1.8	1.5	2.2	1.9	1.8
Factor Incomes	4.8	4.9	4.6	4.7	6.0	5.2
Social Funds	9.1	9.5	9.0	9.0	9.2	8.6
Privatization Revenues	0.5	0.4	0.2	0.2	0.1	0.1
Expenditures	34.1	35.8	34.6	35.3	36.2	36.4
Current Expenditures	15.2	16.2	15.3	15.8	16.5	16.2
Investment Expenditures	3.4	3.5	3.7	3.8	2.7	2.6
Transfer Expenditures	15.4	16.1	15.6	15.7	17.0	17.6
o/w Current Transfers	14.4	15.2	14.9	15.0	16.2	16.8
o/w Capital Transfers	1.0	0.9	0.8	0.7	0.8	0.7
Overall Balance	-0.1	-1.4	-1.8	-2.4	-3.0	-3.9
Interest Expenditures	2.3	2.0	1.9	2.1	2.5	2.8
Government Debt Stock	27.3	27.9	27.9	30.1	32.6	39.7
Primary Balance	2.2	0.6	0.1	-0.3	-0.5	-1.1

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

Annex 10: Banking Sector Balance Sheet

Money and Banking Statistics of Financial Institutions

	2016	2017	2018	2019	2020	2021-Sep
Assets	Billion TL, unless otherwise indicated					
Total assets	2732.6	3263.0	3936.6	4659.4	6314.6	7321.5
Net foreign assets	-433.2	-521.4	-543.7	-514.9	-691.6	-689.8
Claims on nonresidents	182.2	214.9	378.7	430.2	496.9	656.6
Liabilities to nonresidents	615.4	736.3	922.4	945.0	1188.4	1346.4
Claims on Central Bank	295.8	355.3	372.6	396.7	640.2	809.0
Currency	13.6	15.2	15.8	15.7	18.2	18.5
Reserve deposits and securities	282.2	339.7	356.4	379.8	613.0	787.8
Other claims	0.0	0.3	0.4	1.2	8.9	2.7
Net claims on central government	242.9	279.5	395.1	571.2	902.4	1076.5
Claims on central government	307.1	353.8	470.3	666.1	1035.1	1187.7
Liabilities to central government	64.2	74.3	75.3	94.9	132.6	111.2
Claims on other sectors	1790.7	2168.0	2492.8	2821.7	3767.3	4224.1
Claims on other financial corporations	48.8	61.8	69.9	84.5	112.1	136.1
Claims on state & local governments	23.4	34.4	36.9	35.6	40.2	37.2
Claims on public nonfinancial corporations	3.8	5.5	11.4	31.8	35.6	50.0
Claims on private sector	1714.7	2066.3	2374.5	2669.8	3579.3	4000.7
Liabilities	Billion TL, unless otherwise indicated					
Liabilities to Central Bank	106.8	99.2	119.7	105.1	228.3	389.2
Transfer deposits included in broad money	282.3	343.9	398.4	617.9	1072.1	1313.6
Other deposits included in broad money	1028.7	1184.3	1442.5	1734.8	2114.9	2544.8
Securities other than shares included in broad money	26.3	38.9	36.4	50.2	45.9	51.9
Deposits excluded from broad money	0.0	0.0	0.0	0.0	0.0	0.0
Securities other than shares excluded from broad money	1.5	2.3	1.6	11.3	10.9	11.5
Loans	17.4	30.4	53.5	56.7	73.2	70.5
Financial derivatives	2.7	2.7	4.1	4.2	5.5	5.3
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0
Shares & other equity	308.3	366.2	429.4	507.0	612.1	669.5
Other items (Net)	122.2	213.5	231.3	187.4	455.4	363.6

Source: CBRT, BRSA, IFS.

Annex 11: Banking Sector Ratios

Selected Ratios for Banking Sector (end of period)

	2015	2016	2017	2018	2019	2020
Liquidity Position						
Liquidity Requirement Ratio	143.5	135.6	144.5	143.8	147.7	148.2
Loan-to-Deposit Ratio	123.4	123.6	126.6	122.6	109.6	108.3
Capital Adequacy						
Core Capital Adequacy Ratio	13.3	13.2	14.1	13.8	14.2	14.5
Capital Adequacy Standard Ratio	15.6	15.6	16.8	17.3	18.4	18.7
Total Risk Weighted Assets (Net) / Total Risk Weighted Assets (Gross)	68.6	43.3	64.4	64.2	64.7	59.1
Regulatory Capital / Total Risk Weighted Assets	15.6	15.6	16.9	17.3	18.4	18.7
Profitability						
Profit (Loss) Before Tax / Average Total Assets	1.5	1.9	2.0	1.8	1.4	1.4
Net Income / Average Total Assets	1.2	1.5	1.6	1.5	1.2	1.1
Net Income / Average Shareholder's Equity	11.3	14.3	15.9	14.8	11.5	11.4
Net Interest (Profit) Revenues (Expenses) / Average Total Assets	3.5	3.7	3.8	3.9	3.9	3.9
Asset Quality						
Non-Performing Loans (Gross) / Total Cash Loans	3.1	3.2	3.0	3.9	5.4	4.1
Provision for Non-Performing Loans / Gross Non-Performing Loans	74.6	77.4	79.3	68.3	65.1	75.0
Credit Growth (FX-adjusted, y-o-y, in percent)*	10.7	10.2	18.2	1.0	8.5	37.5
Interest Rates (end-of-period)						
Weighted average of Central Bank Cost of Funding	8.8	8.3	12.8	24.1	11.4	17.0
Weighted average Interest Rate for Deposits	10.7	9.6	12.4	22.2	10.6	15.1
Consumer Loans Rate	16.4	14.7	17.7	33.1	15.3	21.9
Commercial Loans Rate	15.7	14.3	17.1	28.3	13.5	19.0
Off Balance Sheet Transactions						
Derivative Financial Instruments / Commitments	76.9	79.3	78.3	81.5	80.5	79.6

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

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



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

World Bank
<http://www.worldbank.org/tr>
turkeywebfdbk@worldbank.org