

GDP forecast for 2021 and 2022: Dampened recovery in the context of uncertainty

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Summary

Results of GET forecast

	Actual	Forecast	
	2020	2021	2022
GDP growth, % yoy	-7.6	2.9	4.3
Total consumption*, % yoy	-10.1	4.0	3.3
Investment**, % yoy	-8.6	2.4	6.4
Exports, % yoy	-31.4	5.2	10.4
Imports, % yoy	-32.1	6.8	7.1

Source: GET calculations, *private and public consumption, ** gross fixed capital formation

- Recovery process after COVID-19 and military conflict in 2020 protracted, mainly due to uncertainty; economy on lower growth path, pre-crisis levels not reached until 2023
- 2021: Private consumption and investment weak in 2021, main growth impact comes from government spending (expected to be higher than in current budget plan)
- 2022: Armenia catches up, as world economy recovers and political uncertainty subsides, stimulating external trade and private investment, respectively

Structure

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3. Main assumptions for 2021 and 2022
4. Forecast for 2021 and 2022: annually
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7. GDP components
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 - ii. Private and public consumption
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1. The GET macro model

- The forecast was produced using the structural macroeconomic model of the German Economic Team (GET macro model)
- In its approach, it is comparable to the [FRB/US Model](#) of the Federal Reserve, the [FR-BDF Model](#) of the Banque de France or the new ECB semistructural model [ECB-BASE](#)
- It is grounded in the system of national accounts
- The model looks at GDP and its components based on expenditures
- The whole model is estimated and afterwards simulated over the forecast period with a non-linear solver (Gauss-Seidel)
- The final result of the GDP forecast is based on forecasts for each component
- Quarterly data of 62 variables, annual data of 18 variables and monthly data of 43 variables are employed
- The model can be used for two purposes: forecasting economic developments and simulation of country-specific exogenous shocks, i.e. a remittance shock, a copper price shock and a shock that reflects the Nagorno-Karabakh conflict

2. Data sources and data availability

- The first quarter of observation is Q1 1995, the last quarter of observation is Q4 2020
- Most data series are not seasonally adjusted. Here, those variables were seasonally adjusted with the ARIMA-X12 methodology
- Most relevant data sources:
 - Statistical Committee of the Republic of Armenia
 - Ministry of Finance
 - IMF International Financial Statistics (including forecast data)
 - OECD Economic Outlook (including forecast data)
 - European Commission (including forecast data)

3. Main assumptions for 2021 and 2022

2021

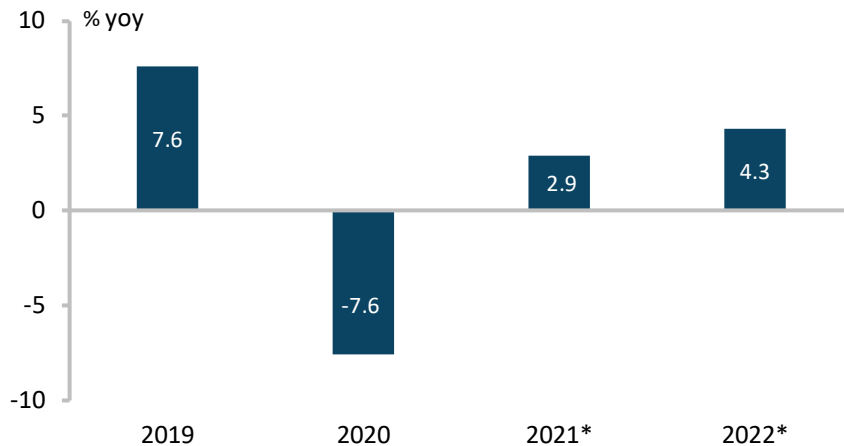
- No further lockdowns imposed as COVID-19 pandemic is contained, vaccination campaigns in Armenia and main trading partners (incl. tourist origin countries) are successful
- Political uncertainty at least in 1H-2021, but uncertainty subsides if snap elections are not contested nor uncertain outcome
- Trilateral agreement with Russia and Azerbaijan on Nagorno-Karabakh holds, no further military flare-ups
- Revision of public budget for 2021, with higher expenditure to be allocated mainly to public consumption, but also to public investment

2022

- No restrictions due to COVID-19 or similar pandemics
- No external shocks
- Fiscal consolidation

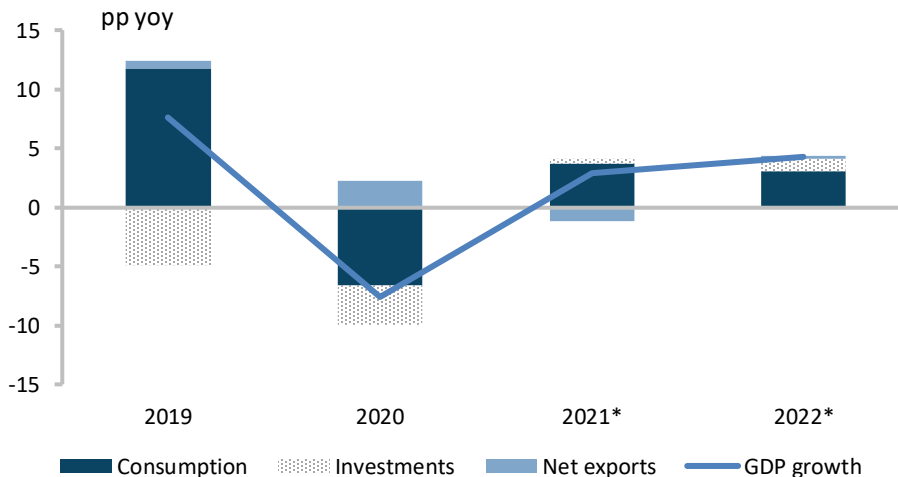
4. Forecast for 2021 and 2022: annually

Real GDP growth



Source: Armstat, *GET forecast

Contribution to economic growth (real)



Source: IMF, *GET forecast

Annual real GDP change, 2021

- GET forecast: 2.9%
- Private investment is likely to remain weak in 2021, see chapter 7 on investment

Annual real GDP change, 2022

- GET forecast: 4.3%
- After weak growth in 2021, more pronounced recovery is expected in 2022
- Private consumption is stimulated by previous year's government spending
- Private investment improves, as political uncertainty subsides, and confidence returns

4. Forecast for 2021 and 2022: annually

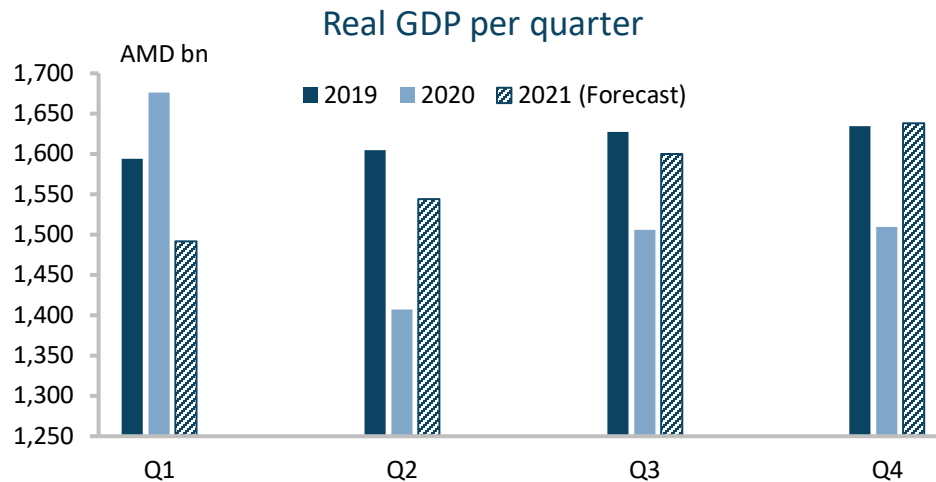
Real GDP forecast: demand side

	2020 (actual)		2021 (forecast)		2022 (forecast)	
GDP growth, % yoy	-7.6		2.9		4.3	
Growth and contribution to GDP	% yoy	pp	% yoy	pp	% yoy	pp
Total consumption*	-10.1	-6.6	4.0	3.7	3.3	3.1
Investment**	-8.6	-3.3	2.4	0.4	6.4	1.0
Exports	-31.4	-12.9	5.2	1.6	10.4	3.2
Imports	-32.1	15.2	6.8	-2.8	7.1	-3.0

Source: GET calculations, * private and public consumption, ** gross fixed capital formation

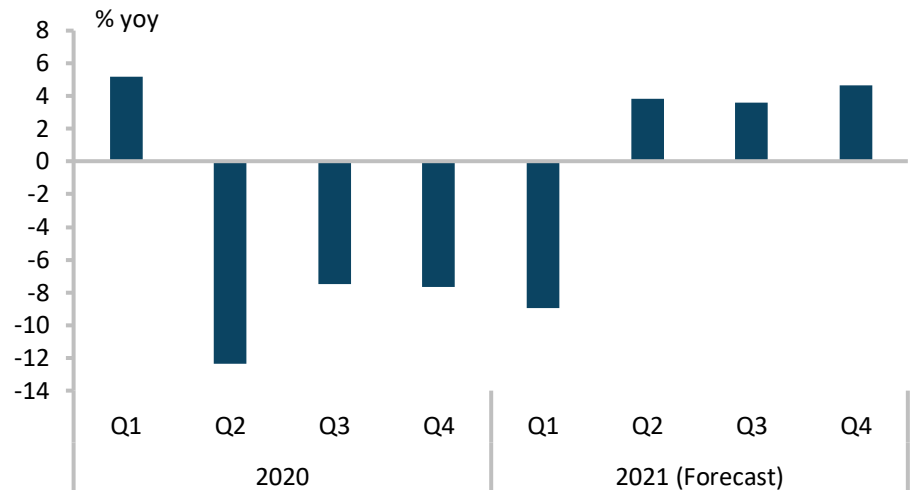
- Mainly government consumption spending is expected to support weak growth in 2021 (2.8 pp)
- In 2022, trade recovery combined with improved confidence and a pick up in private consumption provides more modest growth

5. Forecast for 2021: quarterly



Source: Armstat, GET forecast

Quarterly GDP growth (annualised)



Source: Armstat, GET forecast

Quarterly GDP, 2020

- Q1: High consumption as in previous years
- Q2: Strong impact of COVID as well as the measures designed to combat the spread (lockdown: March to May)
- Q3: Impact of COVID not as strong
- Q4: Impact of the military conflict (27 Sep to 9 Nov), e.g. effect on supply (through mobilisation), on investment (because of instability)

Quarterly GDP, 2021, forecast

- Q1: Aftereffect of military conflict and resulting political uncertainty, esp. on private investment
- Q2-Q3: Expected increase in public spending and subsequent effect on growth
- Q4: Growth accelerates if no further COVID waves and uncertainty subsides

6. Key risks of the forecast in 2021

Downside risks

- **Political uncertainty** could continue to dampen investment outlook, depending on the outcome of the snap elections in June and forming of new government
- **Difficulties in effectively tackling the pandemic coupled with slow vaccination campaign** in Armenia as well as main trading partners could further delay economic recovery

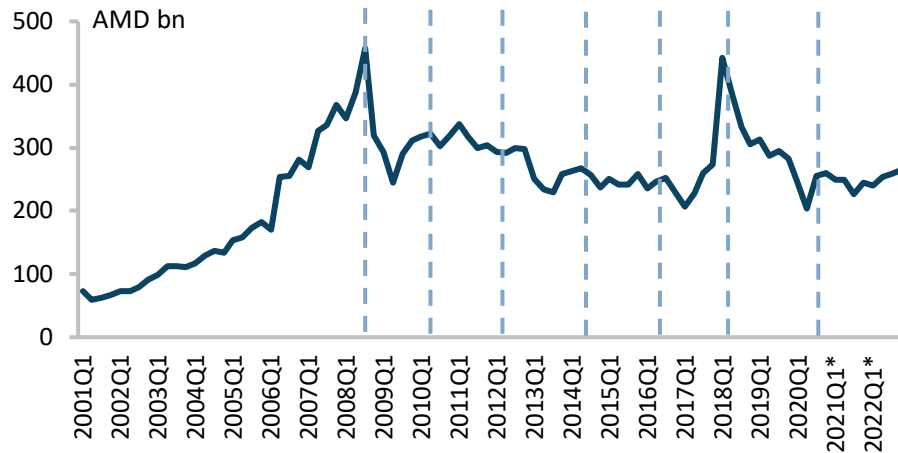
Upside risks

- **Swift vaccination campaign** could inoculate the Armenian economy
- **Strong mandate for reform-oriented government** could increase investment

7. GDP components

i. Investment

Reactions of investment to conflict flare-ups



Source: Armstat, *GET forecast, note: real investment seasonally adjusted

Modelling the effect of the war

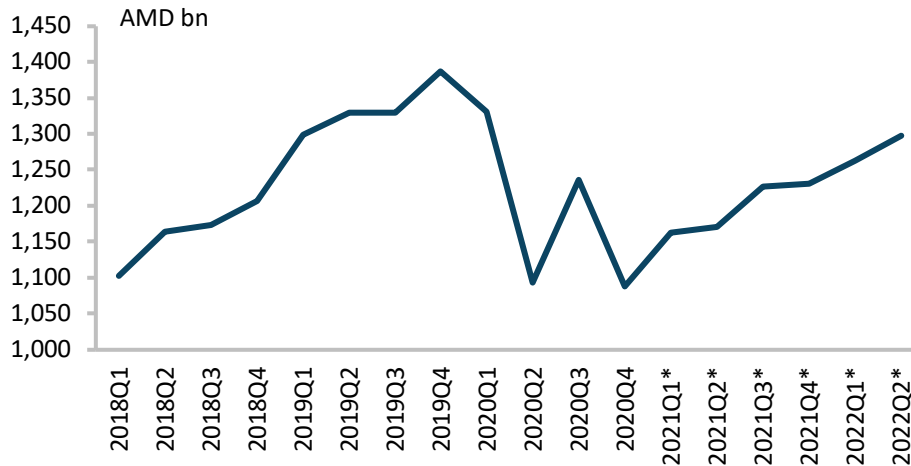
- Historically, conflict flare-ups have had a negative effect on investment, waning over two to four quarters
- GET forecast accounts for the effect of the 2020 military conflict by modelling this trend

Investment outlook

- Private investment subdued due to political uncertainty
- Public capital expenditures expected to moderately grow in the context of expected budget revision

ii. Consumption

Private consumption

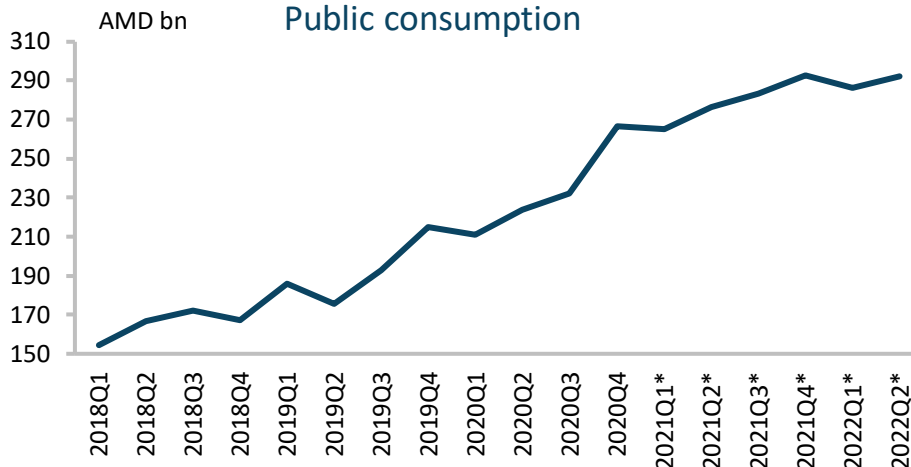


Source: Armstat, *GET forecast, note: in previous year's prices

Private consumption

- After two shocks in 2020, private consumption is expected to pick up again, albeit on a lower path
- Reasons: even though restrictions in ARM have been lifted, confidence is expected to remain low amid rising infection rates and political uncertainty

Public consumption



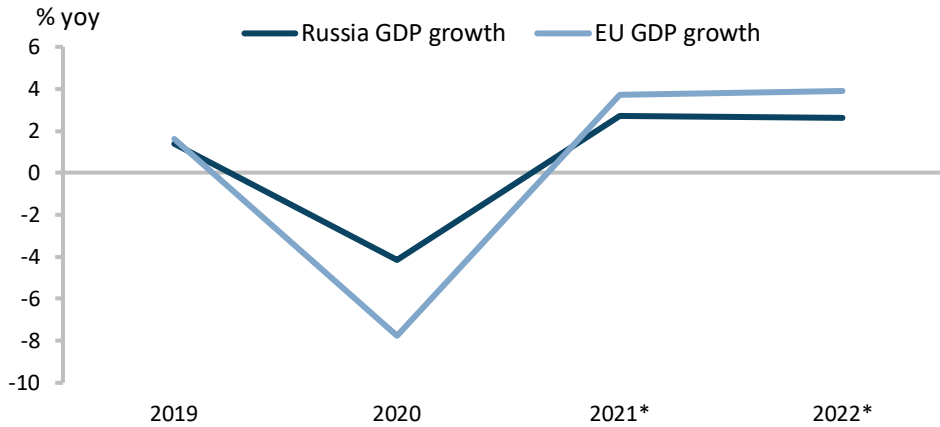
Source: Armstat, *GET forecast, note: in previous year's prices

Public spending

- Fiscal consolidation not expected in 2021, but in 2022
- Rather: Revision of the budget with increased expenditure likely, as costs in the aftermath of the military conflict have to be borne

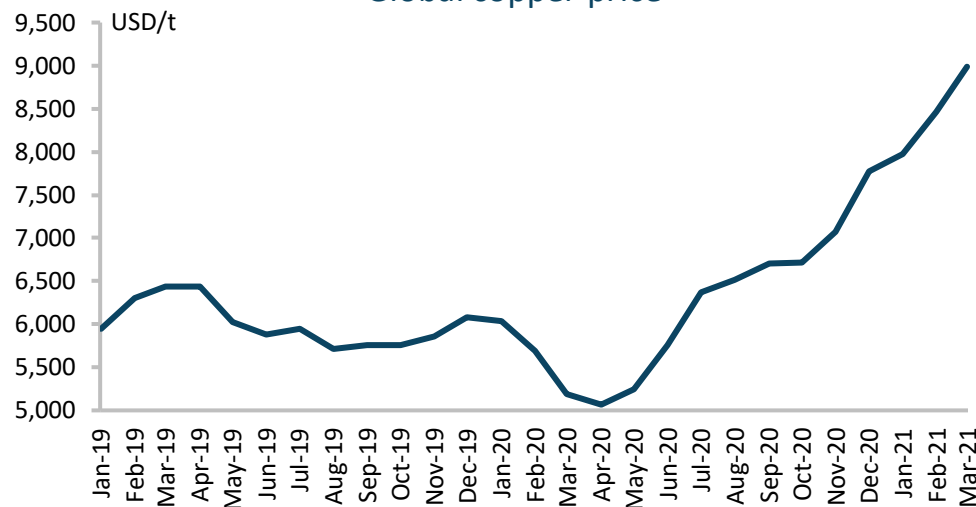
iii. Exports and imports

Real GDP growth



Source: OECD, European Commission

Global copper price



Source: IMF

Global trade

- As global trade recovers, Armenia too will benefit
- Armenia's main trading partners are expected to recover growth in 2021

Export

- Export is likely to benefit from rising metal prices, Armenia's main exports, as well as expected recovery in EU and Russia

Import

- Economic recovery promotes growth in imports in 2021 and 2022

About the German Economic Team



Financed by the Federal Ministry for Economic Affairs and Energy, the German Economic Team (GET) advises the governments of Moldova, Georgia, Ukraine, Belarus and Uzbekistan on economic policy matters. Furthermore, GET covers specific topics in other countries, such as Armenia. Berlin Economics has been commissioned with the implementation of the consultancy.

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