

ARMENIA
2021-2041
ideas in action

Armenia

2021-2041

Macroeconomic diagnostic

May, 2021



Executive summary

Over the course of the past 10–15 years, Armenia's macro parameters (e.g., GDP CAGR of ~6%) have evolved in line with global and regional trends, which has not allowed the country to make a breakthrough given the low starting baseline.

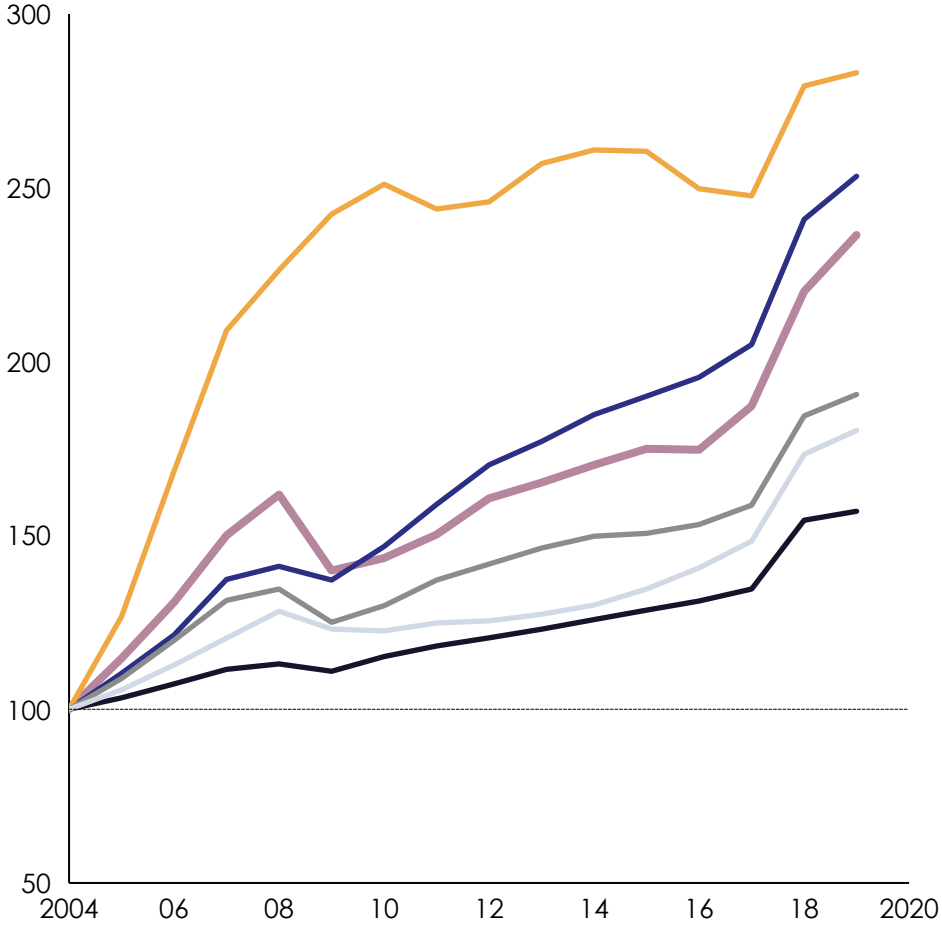
Moreover, overly relying on consumer spending to drive economic growth cannot be sustainable and sufficient in the future. Three main levers need to be addressed to grow sustainably:

- Closing the import gap and becoming a net exporter of goods and services
- Boosting labor productivity (i.e., human capital)
- Attracting sizeable investments (e.g., for infrastructure)

Through collective efforts Armenia can overcome these barriers and leap towards achieving sustainable, high economic growth

In the last 15 years Armenia's economy has grown at ~6% per annum, which has not been sufficient to make a leap

Cumulative GDP per capita PPP growth, Index to 2004



CAGR, percent	04-'19
Azerbaijan	+7.2%
Georgia	+6.4%
Armenia	+5.9%
FSU ¹	+4.4%
Eastern Europe ²	+4.0%
World	+3.1%

Key takeaways

Armenia has grown faster than many other Former Soviet Union countries

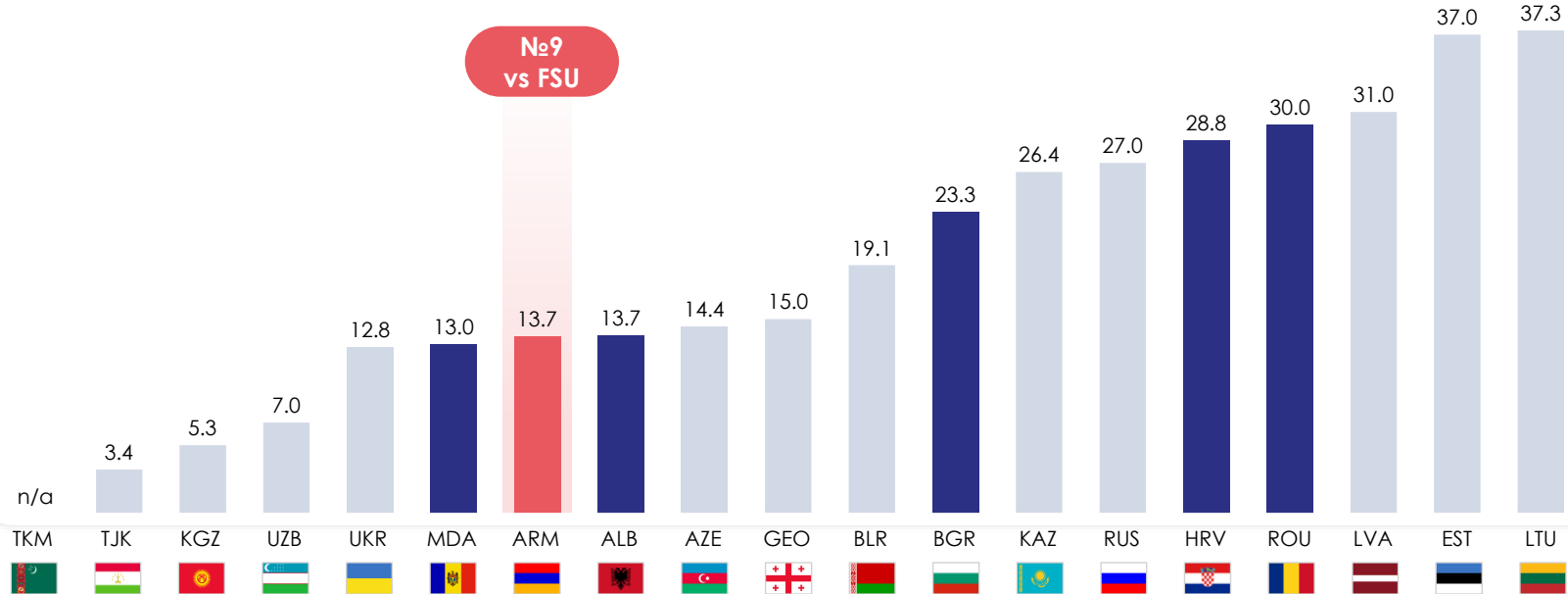
However, regional neighbors have managed to grow faster than Armenia in the same period

1. Former Soviet Union; 2. Eastern Europe consists of Bulgaria, Romania, Croatia and Albania
Source: World Bank

Due to the low starting base, Armenia's growth has not been enough to significantly change its position relative to peer countries

■ Armenia ■ Eastern Europe ■ FSU

GDP per capita PPP 2019, constant USD thousands 2017



Armenia moved from 10th place in 2003 to 9th place in 2019

Key takeaways

Despite Armenia's growth rate, its **low starting base for GDP per capita did not enable the country to significantly improve its position** vs. its FSU peers

Armenia could aspire to accelerate its development to reach the GDP per capita levels of Eastern European countries

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Moreover, overly relying on consumer spending to drive economic growth cannot be sustainable and sufficient in the future. Three main levers need to be addressed to grow sustainably:

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Main factors affecting Armenia across 5 dimensions

Dimension

Factors

1 Consequences of Artsakh War

Human Capital Loss

- Casualties
- Wounded & PTSD
- Captives

Refugees (IDPs)

2 Economy

Unsustainable economic growth engines

Unemployment

Underleveraged exports, driven by commodities

Labour Productivity

Mono-ethnic country

3 Social

National Trust

Ample and accessible healthcare

Role of Church in the XXI century

Social justice, equal opportunities through education

4 Governance

Government structures still in formation (e.g. judicial system)

Common Vision

Diaspora Institutions

Decision making and execution capabilities

Quality Assurance and Standards

5 Diplomacy

International relations

Disinformation and misinformation & Fake News

Post-war trauma

Defense and border governance

Decreasing FDI and investment activities

Food Security

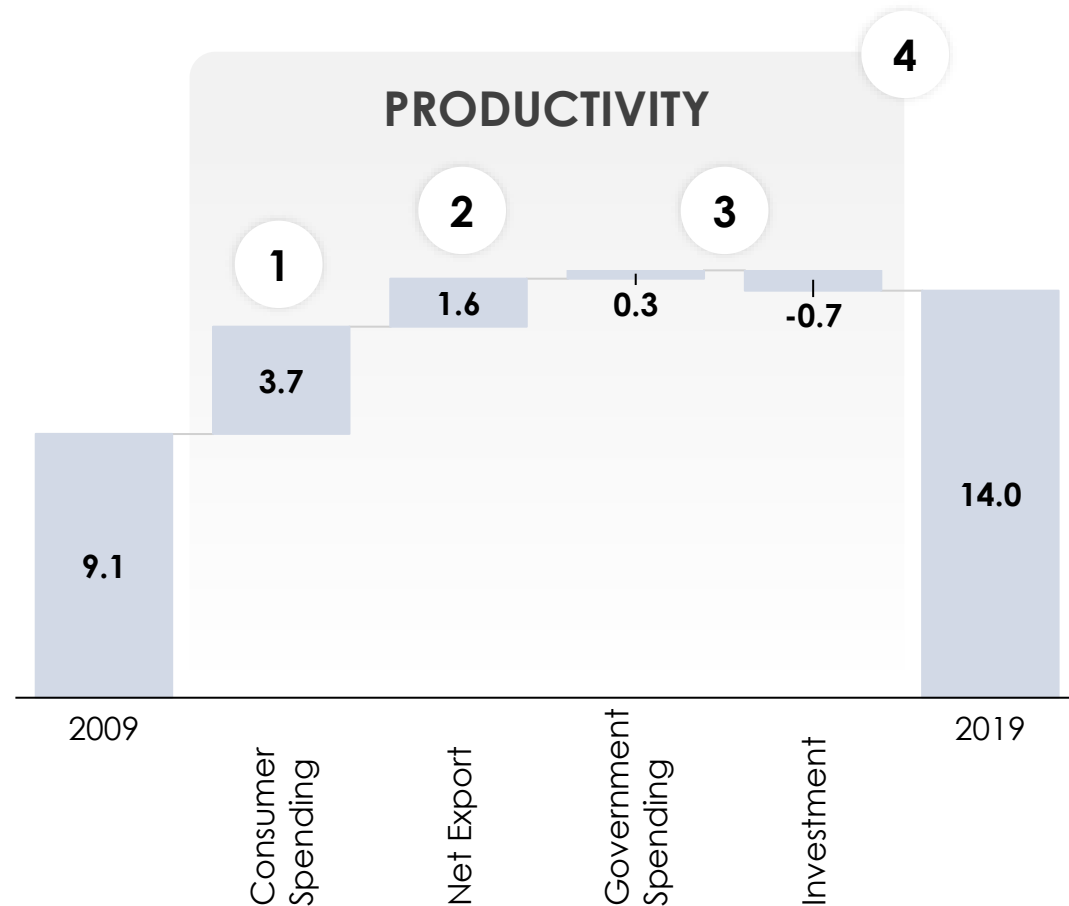
Energy Security

Transport Security

Human capital and growing social imbalances

4 main structural factors have hindered Armenia from achieving its full potential

Armenia GDP growth drivers, constant USD bn



Source: World Bank

Unsustainable growth engines

- 1 The main growth engine has been consumer spending, driven by increasing debt levels

Imports exceed exports

- 2 Armenia's exports are growing faster than its imports but not enough to overtake them

Lack of investment

- 3 Armenia has a low investment share of GDP vs its peers, and investment growth has stalled in the last decade

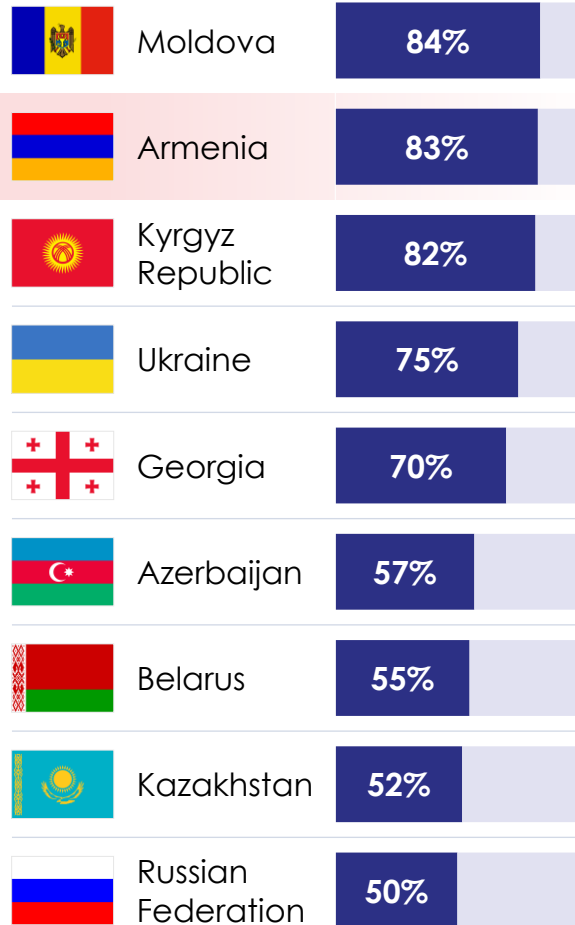
Low labor productivity

- 4 Though productivity has grown, it remains below peer level and continues to hinder Armenia's economic growth

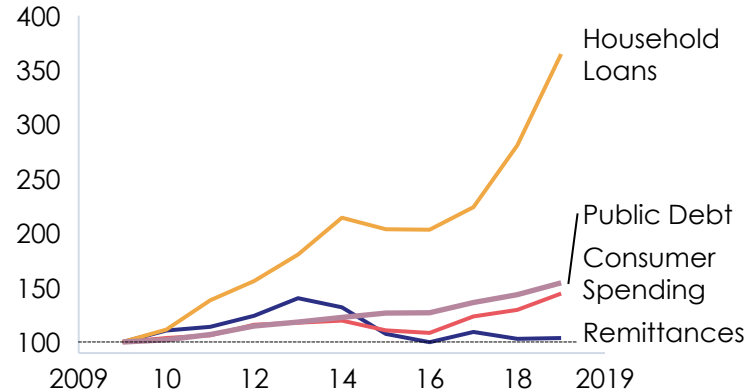
Addressing these 3 challenges first could help unlock Armenia's potential in the mid-to-long term

1. Armenia's consumer spending has recently been driven by increased debt

Consumer spending % of GDP 2019



Consumer spending dynamics, index to 2009



CAGR '09-'19, %

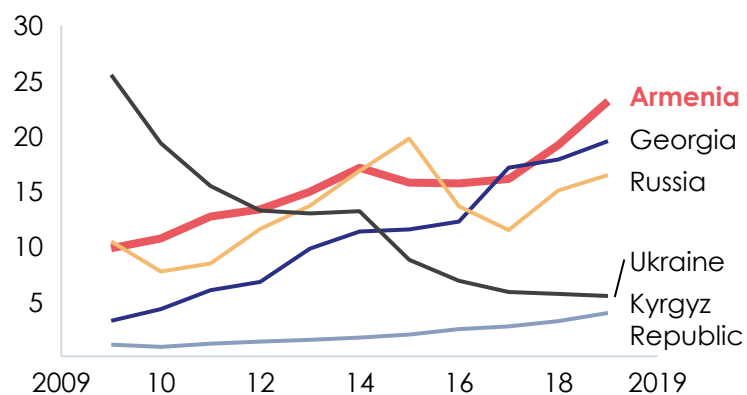
+13.8%

+4.4%

+3.8%

+0.4%

Household loans, % of GDP 2019



Change '09-'19, %

+13.3

+16.3

+6.0

-20.0

+2.9

Key takeaways

Remittances were supporting consumer spending growth before 2014

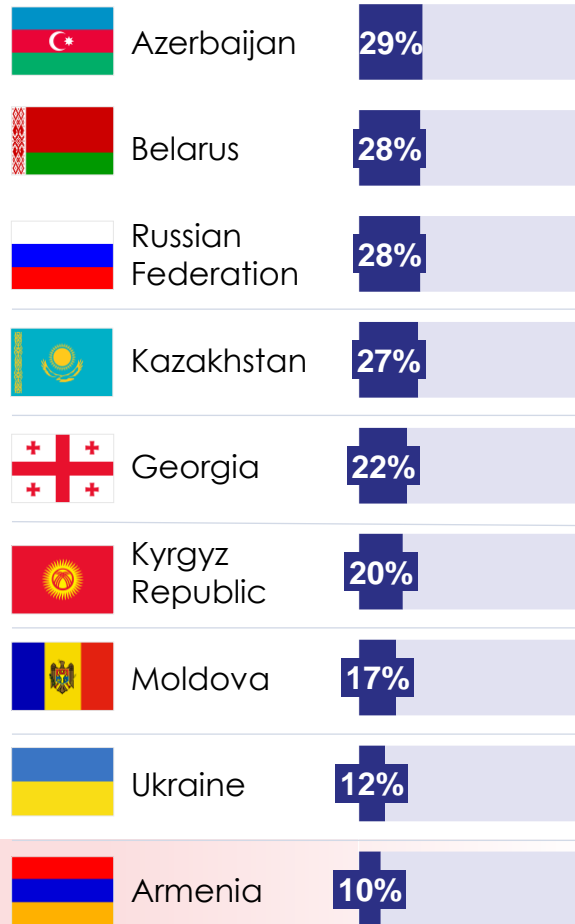
After they started to decline and stagnate, Household Loans became the key driver of Consumer Spending

Additional consumption through household loans is not sustainable due to **growing debt**

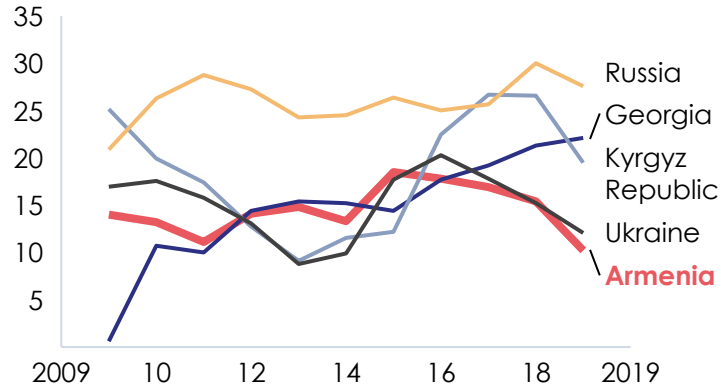
Public debt reached 53,9% of GDP in 2019- international borrowing for CAPEX projects has also indirectly supported consumer spending

1. Armenia's low savings rate and aging population point to potential vulnerabilities in the future

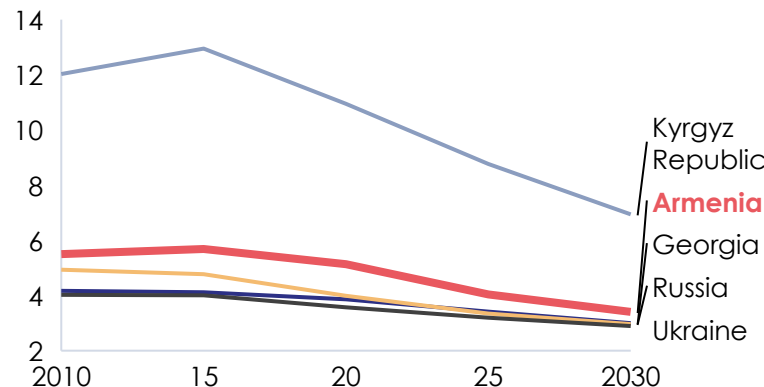
Gross savings % of GDP 2019



Gross savings, % of GDP 2009–2019



Support ratio (people age 20–64 per one 65+) 2010–2030



Key takeaways

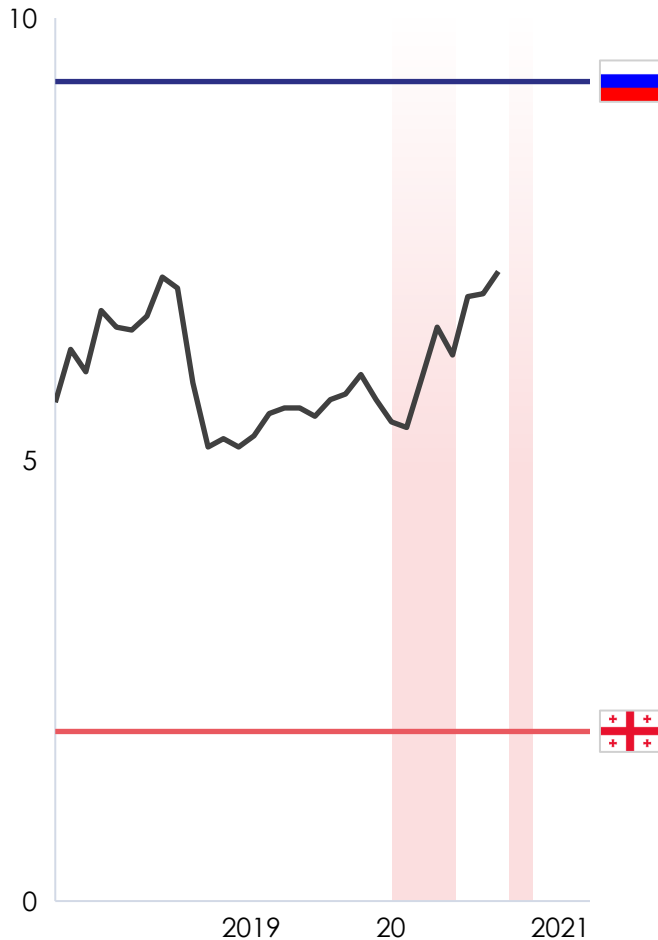
Armenia's gross savings rate **has declined over the years**, as in some of its FSU peers (Kyrgyz Republic, Ukraine)

The fall in the support ratio highlights the **strain on the pension system** as more and more older people become dependent on the working age population

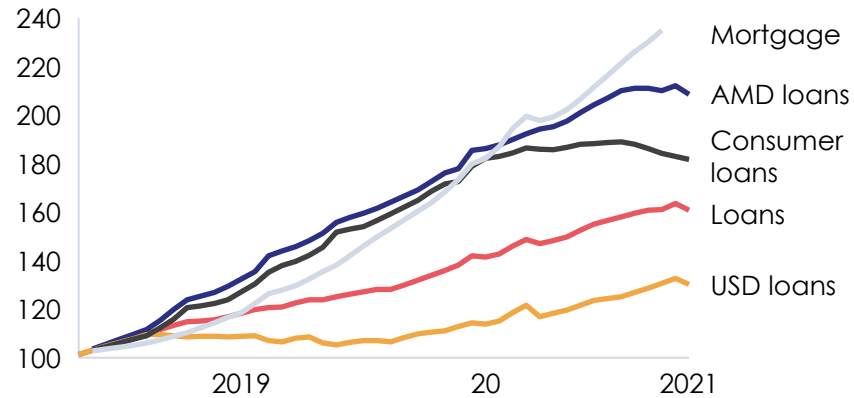
This issue is further highlighted in Armenia as the **government matches 7.5%** of salary into the pension fund, which is **higher than its FSU peers** (e.g. Georgia matches only 2%)

1. Consumer lending has been on the rise since 2018

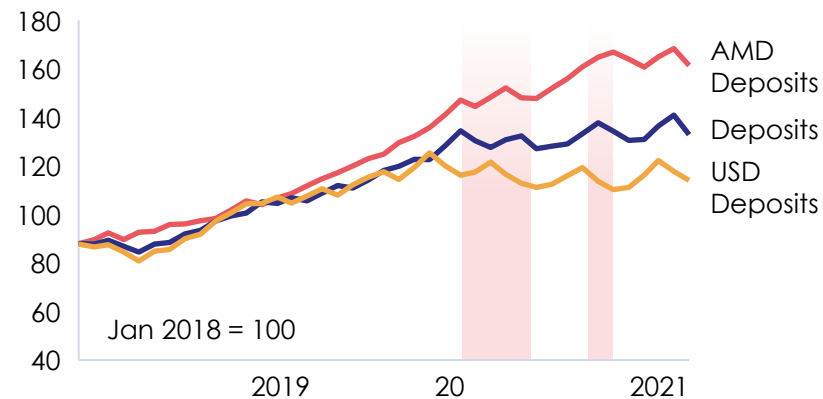
Nonperforming loans to total gross loans, %



Banking loan portfolio, %



Deposits growth, %



Key takeaways

Nonperforming loans remained fairly high at around 5%

Among peers this indicator varies: In Georgia, only 2% of loans are non-performing, while in Russia it is nearly 10%

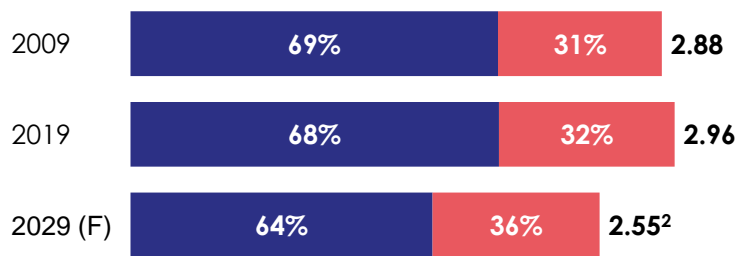
1. Socio-economic imbalance is fueled by deteriorating human capital and growing inequality

Human Capital

mln people

Armenia's population

Millions of people



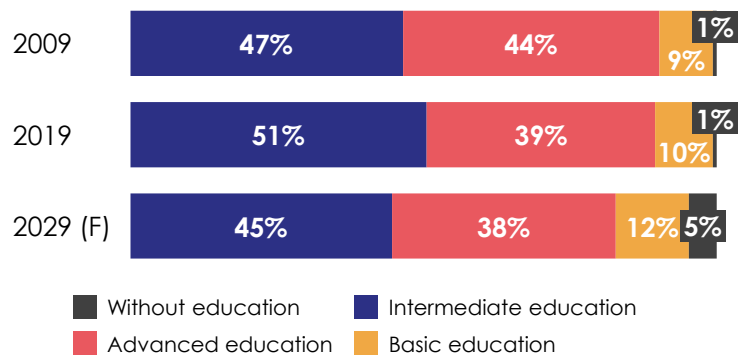
Working age population



Population below or over working age

Education penetration

% of population



Without education

Intermediate education

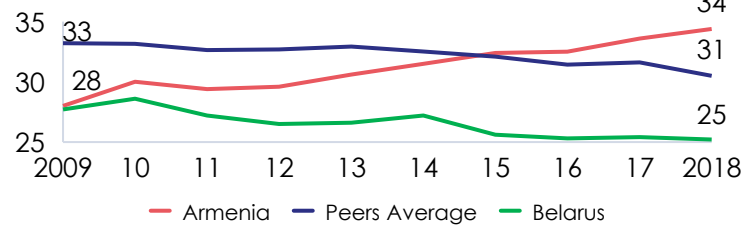
Advanced education

Basic education

Wealth and inequality

Gini coefficient

Index with 0 – perfect equality, 100 – perfect inequality



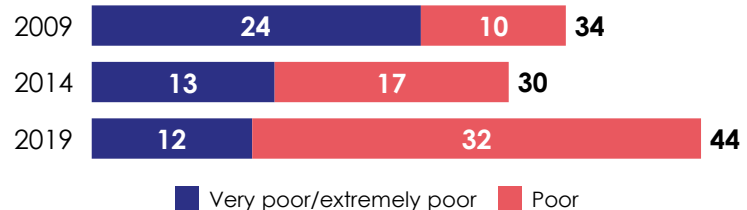
Income held by highest 10%

% of income



Poverty in Armenia¹

% of population



Very poor/extremely poor

Poor

Key takeaways

Lower birth rate and emigration could be the key drivers of population's decline

The share of working age population is projected to fall due to **emigration of 15–24-year olds** and aging of the population (growth in share of 65+year olds)

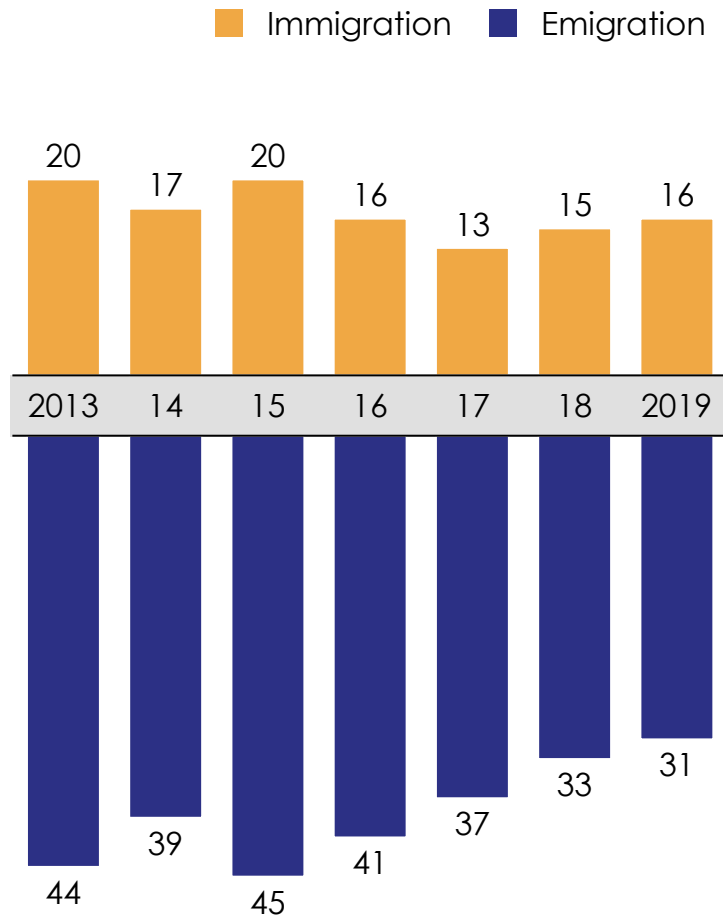
The quality of human capital may decline due to a rise in the share of the population without education

Inequality is growing and remains higher than in peer countries

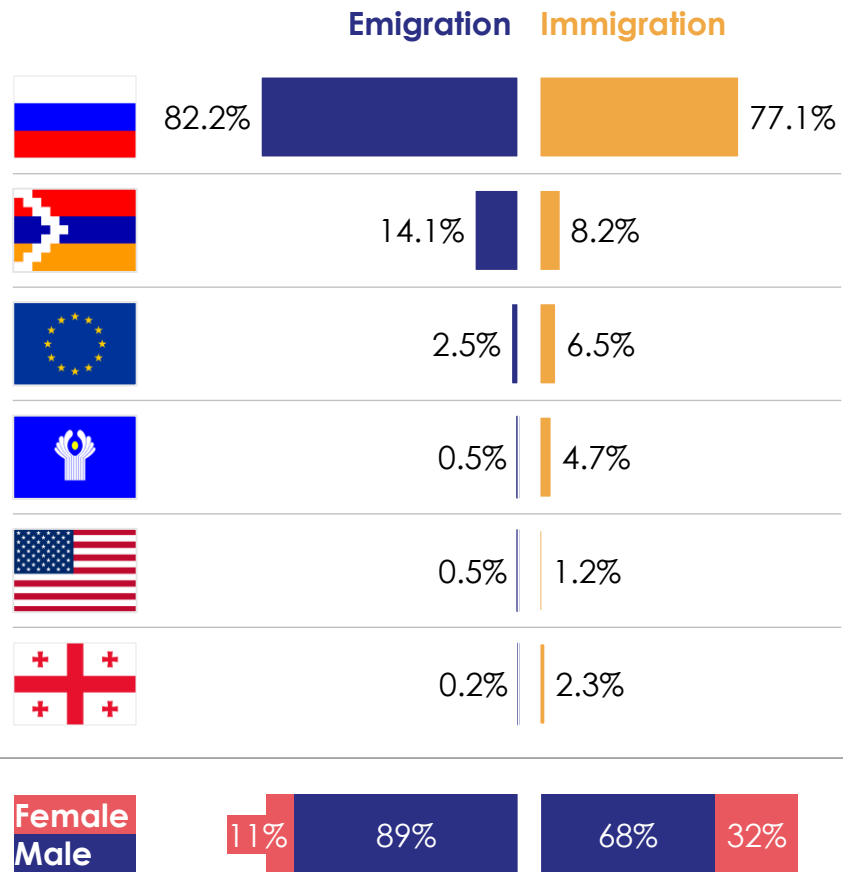
1. Very poor: Consumption per adult below the lower poverty line of AMD 24,400 in 2008 and 30,500 in 2012 Extremely poor: Consumption per adult below the food poverty line of AMD 17,600 in 2008 and 21,700 in 2012
2. Worst Case scenario in which nearly 300,000 people leave because of the war – details to follow

1. Over the last decade, Armenia has experienced more emigration than immigration

Migration dynamics in Armenia, thousands of people



Destinations and structure of migration, cumulative 2013–2018



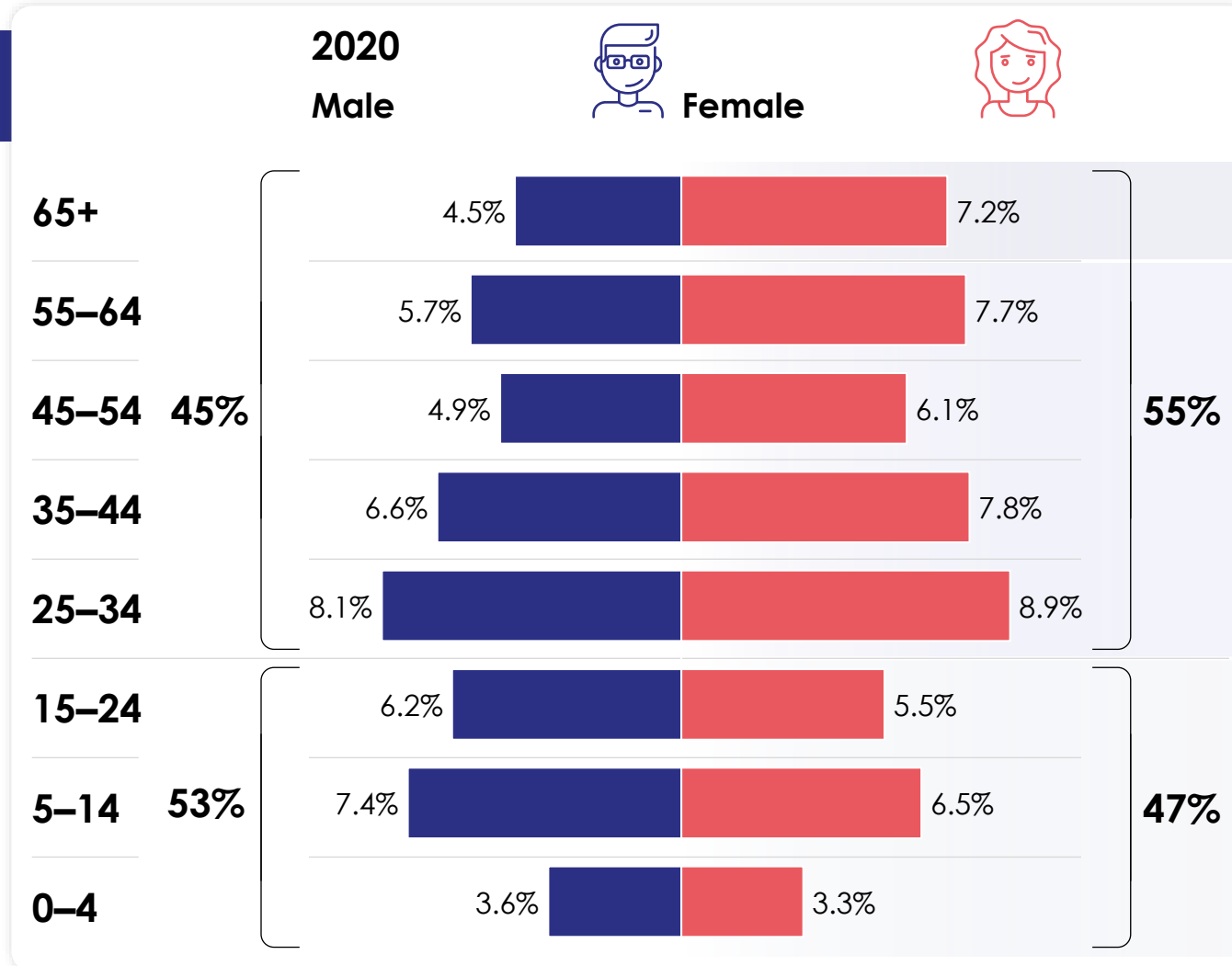
Key takeaways

Over the last 6 years, Armenia has lost **over 150,000 citizens due to net migration**

Most emigrants were **men of active working age** emigrating to Russia **for work**

The majority of immigrants were also **men**, who immigrated for a variety of reasons including **work, education/training, family formation and reunification**

1. Demographic changes are already influencing the composition of Armenia's population



Key trends

Life expectancy for men is ~5 years lower than for women (<2% of women smoke)

The gender split in the 25+ age group is significantly skewed towards women due to higher emigration by men seeking better sources of income for their households

As a result of the war, the share of the **working age population will continue to decline** due to **war casualties, disabilities**, thus creating vulnerabilities for the pension system

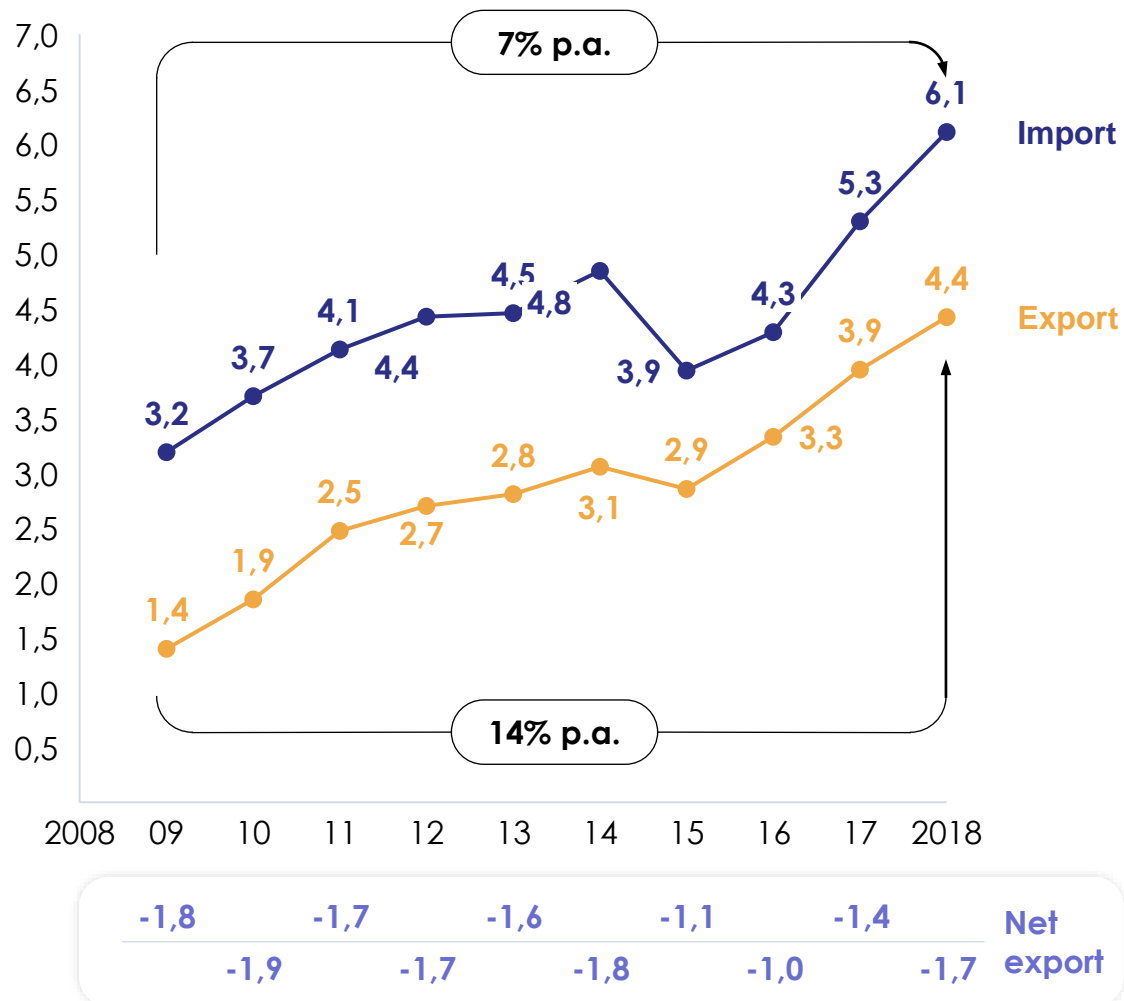
In addition, **perceived insecurity** and fear of another escalation may encourage **parents to move their 14-18 year-old children** out of the country, thereby exacerbating the problem

The threat of the **declining birth rate is linked to "gender-based abortions"**, which are dramatically affecting the gender split of people under 24

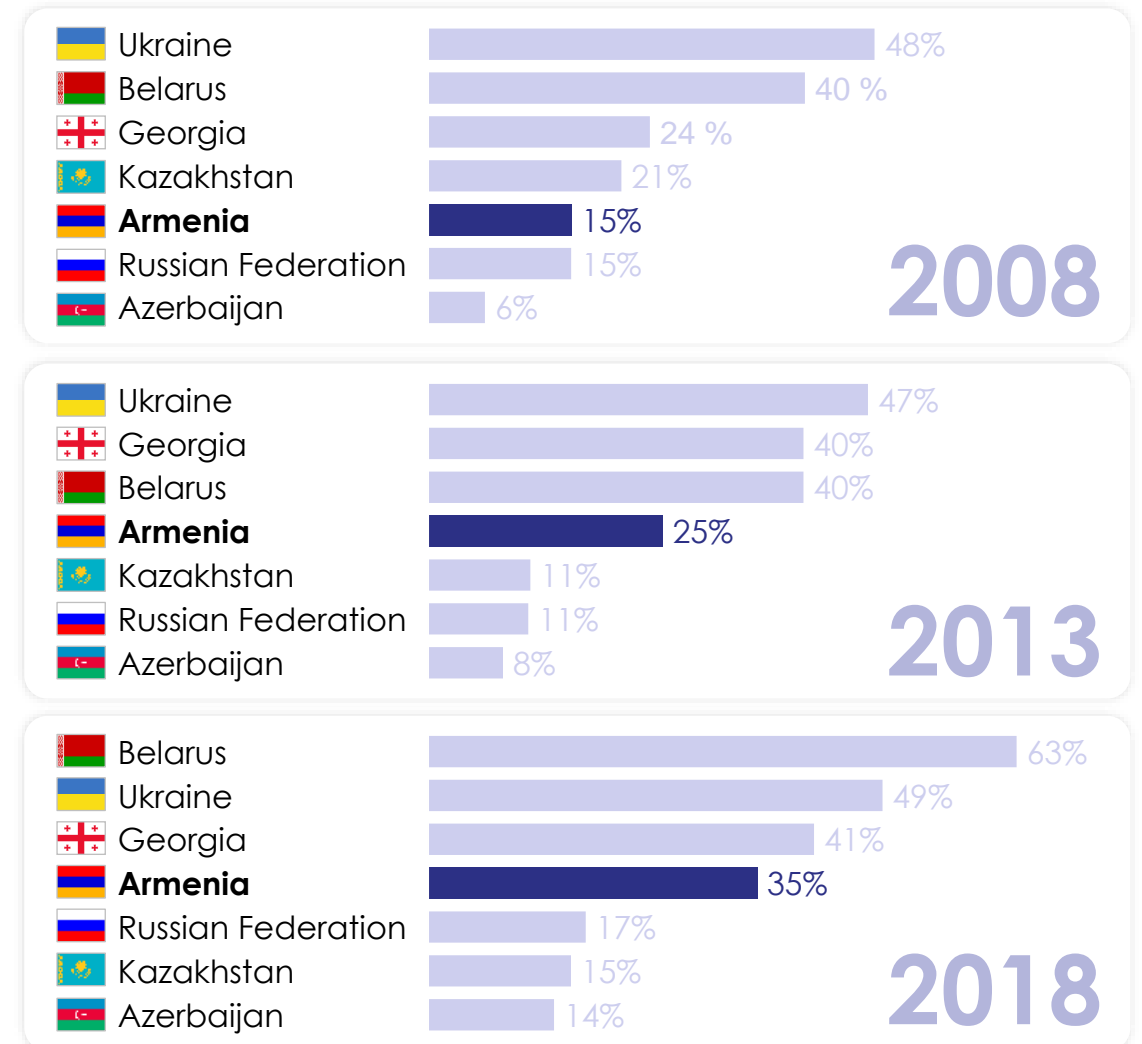
In the context of **stagnating incomes and low savings**, **households tend to have as few children as possible**

2. Armenia has been able to significantly increase exports but remains a net importer

Trade volume, current USD bln

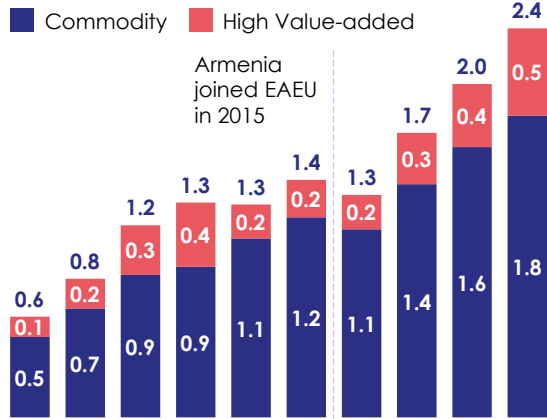


Export of goods & services vs selected peers, % GDP



2. Armenia's goods exports have been driven by growth in commodity export volumes

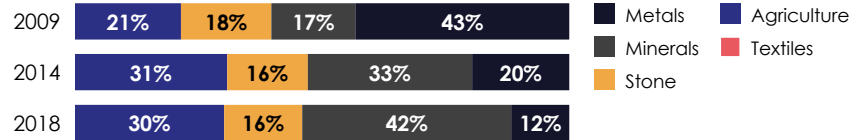
Armenia's goods exports, current USD bn



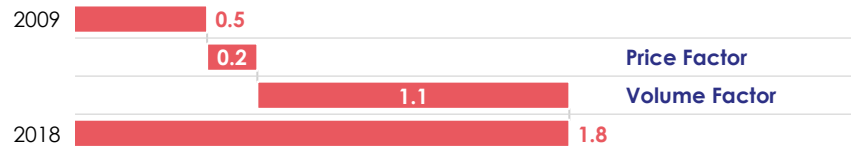
CAGR, percent '09-'18

Structure and drivers of commodities exports

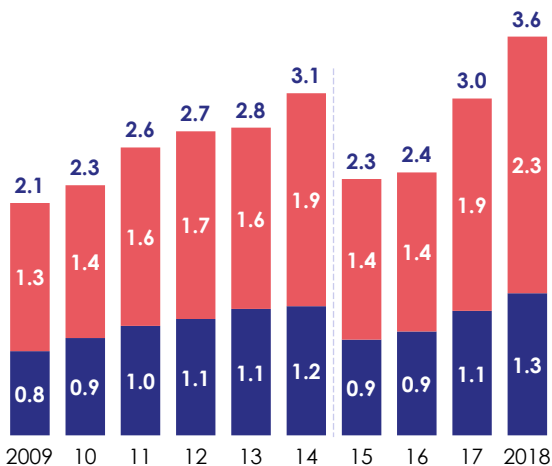
Structure of commodities export, percent



Commodities growth drivers



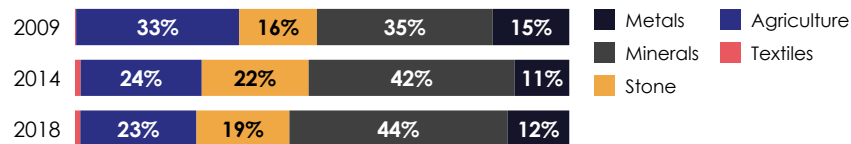
Armenia's goods imports, current USD bn



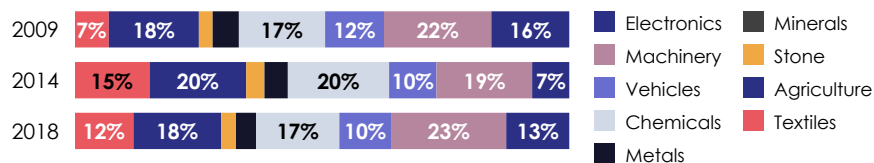
CAGR, percent '09-'18

Structure of imports

Structure of commodities imports, percent



Structure of high value-added imports, percent



Key takeaways

Armenia's goods exports consist primarily of commodities – minerals, metals and agricultural products

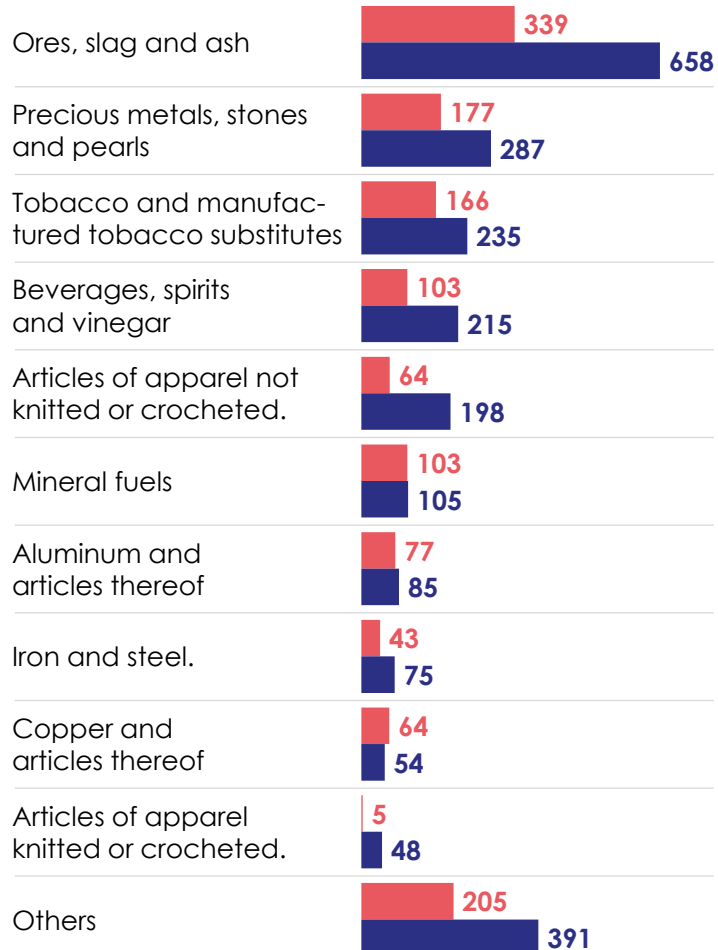
Though commodity exports have been primarily driven by increased volumes in certain categories, the price factor has been more noticeable (e.g. in Metals, growth has been driven by prices only, while in Stones, prices contributed ~1/3 of growth)

On the other hand, Armenia imports high value-added goods

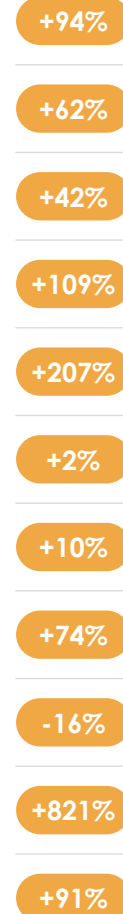
2. Though trade with Russia has intensified, joining EAEU has not significantly changed the profile of Armenia's exports

2015 2018

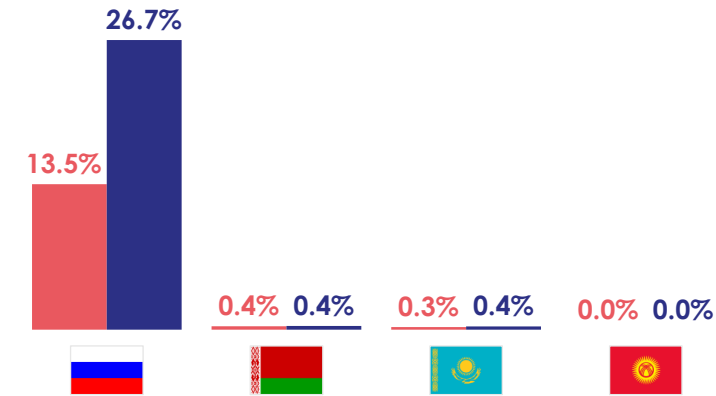
Armenia's goods exports: top 10 categories, 2015 vs 2018, current USD, mln



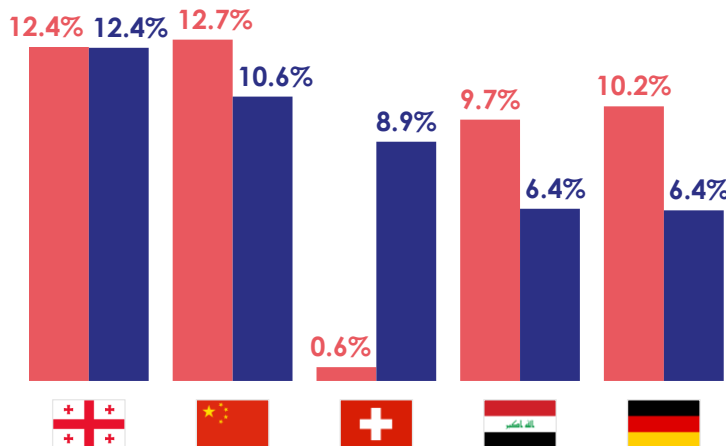
Change, percent



Armenia's goods exports to EAEU countries, 2015 vs 2018, share



Armenia's goods exports to non-EAEU countries, 2015 vs 2018, share



Key takeaways

The new opportunities generated by Armenia's accession to the EAEU remain insufficient to shift exports away from extractive activities

Copper ore and gold accounted for the largest segment of Armenia's exports in 2018

Trade with members of the Union increased mainly due to trade with the Russian Federation

3. While FDI played an important role in Armenia's economic development until 2009, it has since declined

FDI inflows, USD mln

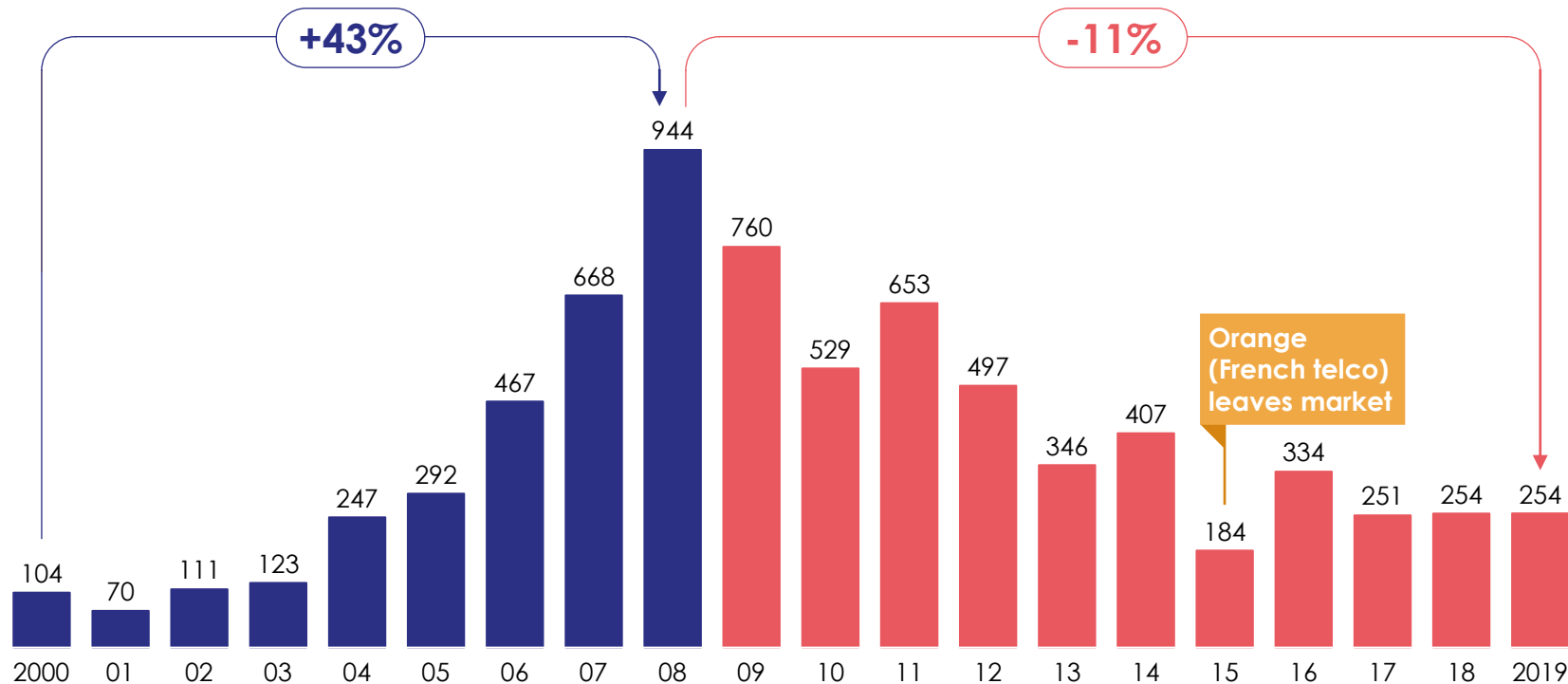
Growth driven by

- Diaspora capital flowing into real estate
- Privatization of mining, telecom and airport infrastructure



Decline driven by

- Global economic crisis
- Slowdown of infrastructure development
- Decline in investments from other countries



Source: Armenian Development Agency; UNCTAD bilateral FDI statistics; Global Insight; NSSRA

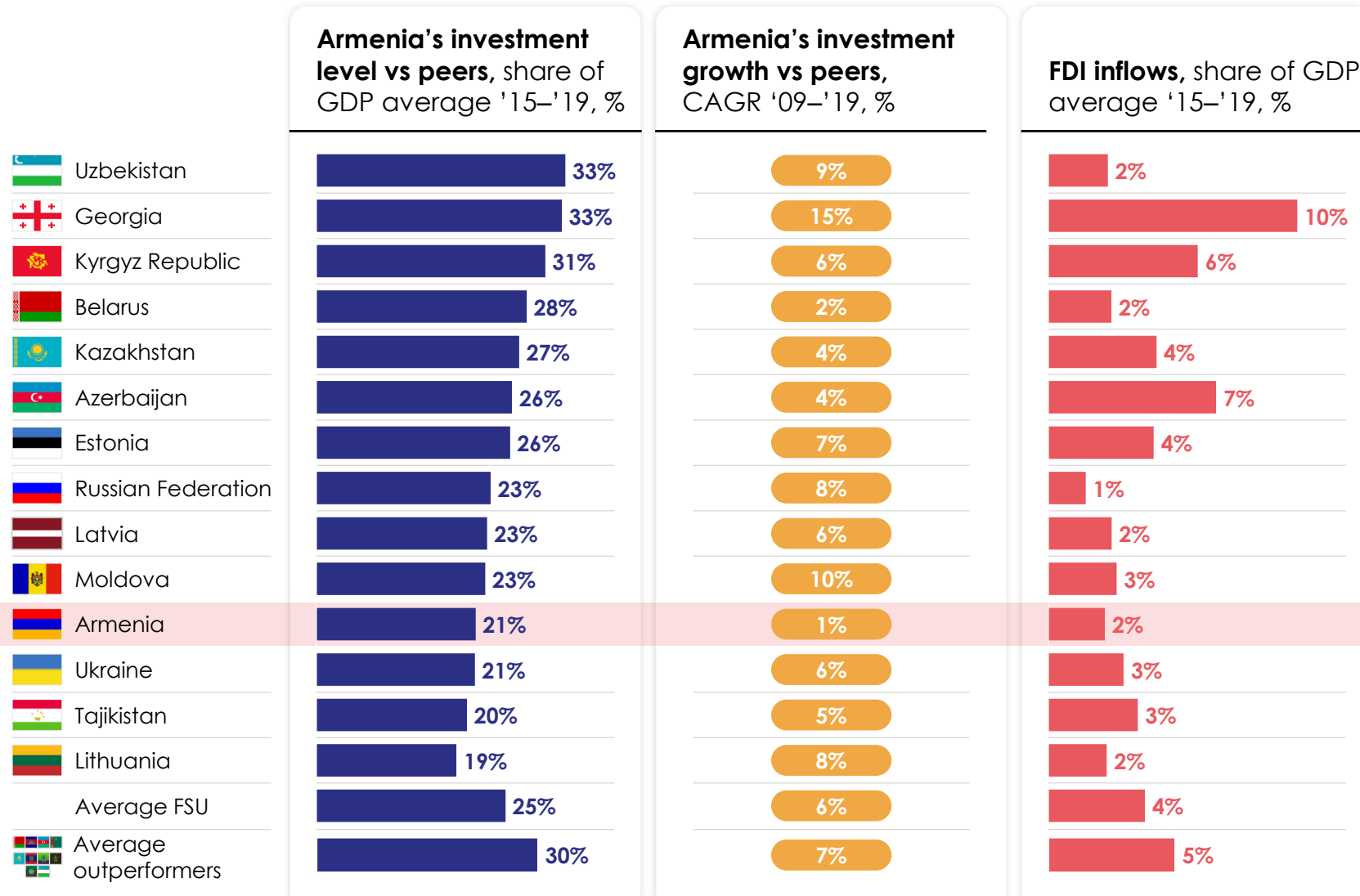
The strong increase in FDI since the late 1990s were driven by

- Privatization
- Foreign companies granted **same rights** as local companies
- **Investment guarantees** for foreign investors
- Attraction of FDI in the **real estate sector**

Since 2009, the decline has been driven by both external and internal factors such as

- Slowdown of the Russian economy
- Investment protection issues

3. Armenia has the fourth lowest investment share of GDP among its peers, and investment growth has stalled in the last decade



Source: World Bank World Development Indicators

Key takeaways

Armenia's investment (gross fixed capital formation) share of GDP declined from 34% in 2009 to 23% in 2019

From 2009 to 2014, Armenia saw a contraction in investment of -4% annually

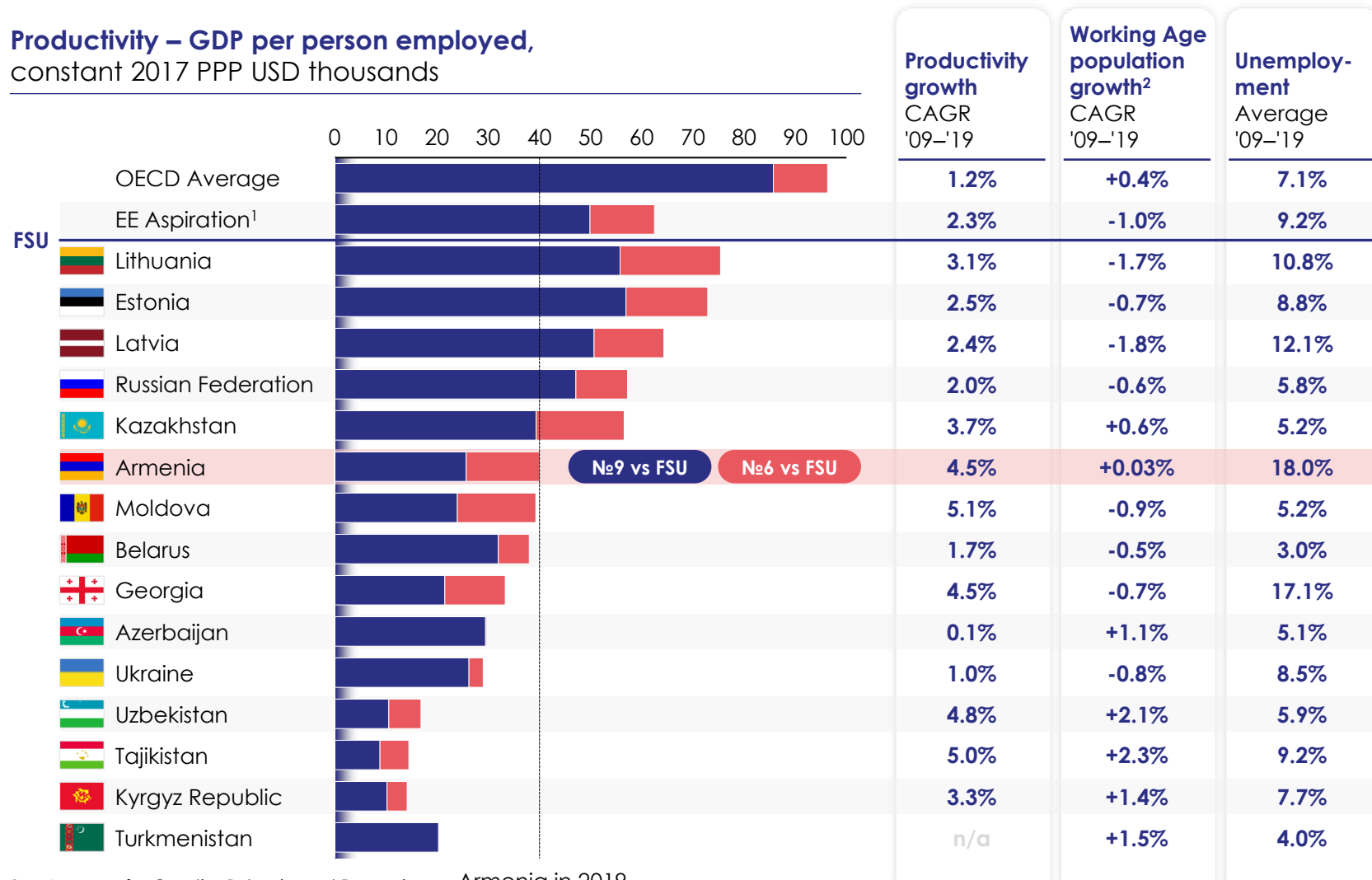
In 2019, FDI account for 8% of total investment in Armenia, compared to 26% in 2009

FDI inflow from Russian investors declined from 53% of total FDI in 2009 to 22% in 2019

4. Armenia's economic growth could be boosted by higher productivity growth

■ 2009 ■ 2019

Productivity – GDP per person employed, constant 2017 PPP USD thousands



1. Average for Croatia, Bulgaria and Romania

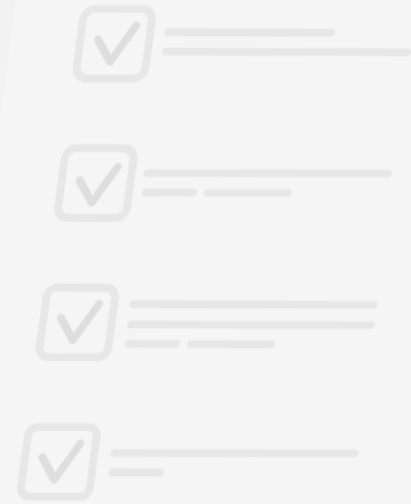
Armenia in 2019

2. Population ages 15–64, total

Source: World Bank

Key takeaways

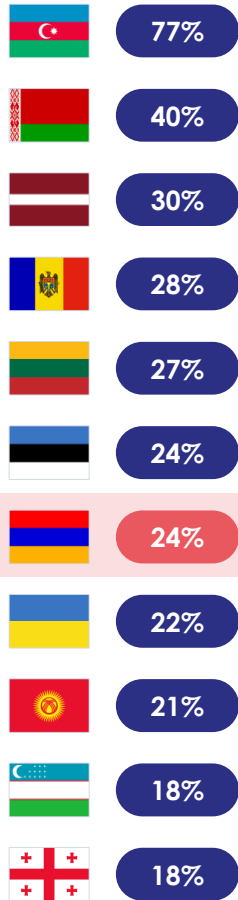
Armenia has been **closing the productivity gap with its FSU peers** with one of the highest productivity growth rates, but the gap with the TOP-5, EE Aspiration and OECD is still substantial



4. The public sector employs 24% of the total workforce in Armenia

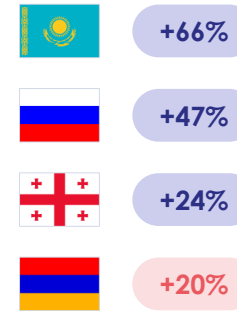
Public Private

Share of public sector employees in total workforce



Sector breakdown	Share of sector workforce, percent	Share of total workforce, percent	Average monthly salary, AMD thousand, 2019
Public administration	99%	8.7	274
Education	91%	9.7	116 / 171
Human health and social work activities	53%	2.6	166 / 180
Arts, entertainment and recreation	48%	0.9	114 / 227
Professional, scientific and technical activities	27%	0.5	148 / 200
Real estate activities	23%	0.1	133 / 131
Transportations and warehouse economy	22%	1.1	199 / 182
Electricity, gas, steam and air conditioning supply	13%	0.3	378 / 246
Water supply, waste management	8%	0.0	121 / 192
Administrative and supportive service activities	6%	0.1	145 / 127
Information and communication	4%	0.1	196 / 454
Others	5%	0.1	
Total	24%	24.0	162 / 193 (+20%)

Salaries in private vs public sectors, percent



Key takeaways

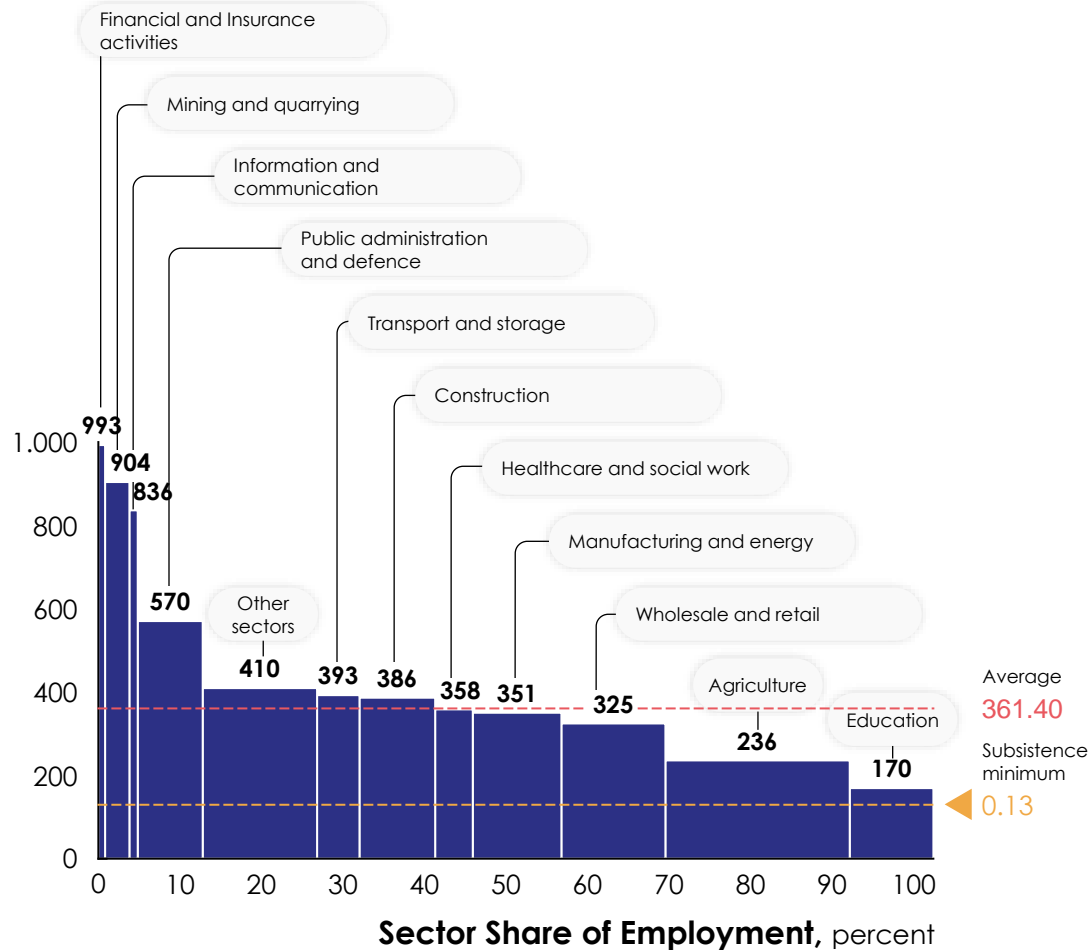
In comparison with its FSU peers, Armenia has **one of the lowest shares of workforce employed by the public sector**

Public administration, education and health account for **nearly 90% of public sector employees** in Armenia

On average in Armenia, the gap between public and private sector salaries is nearly **20%**

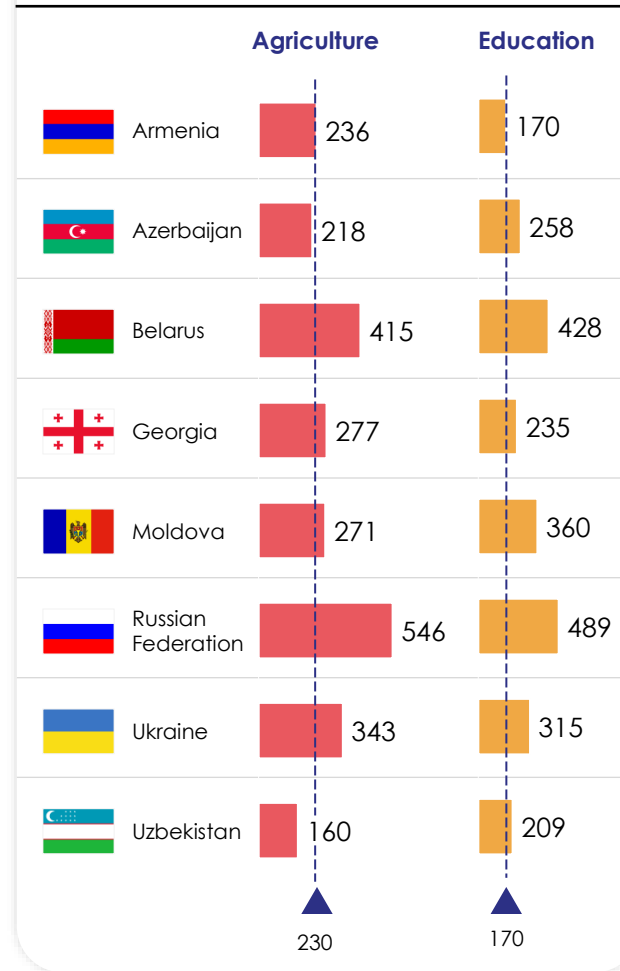
4. Wages are distributed unequally in Armenia; the lowest-paid jobs are in Agriculture and Education, which employ 30% of the workforce

Average nominal wage by sector, 2019, USD



Source: Armstat, International Labour Organization (Agriculture and Education sectors)

Average monthly wage vs peers, 2019, USD



Key takeaways

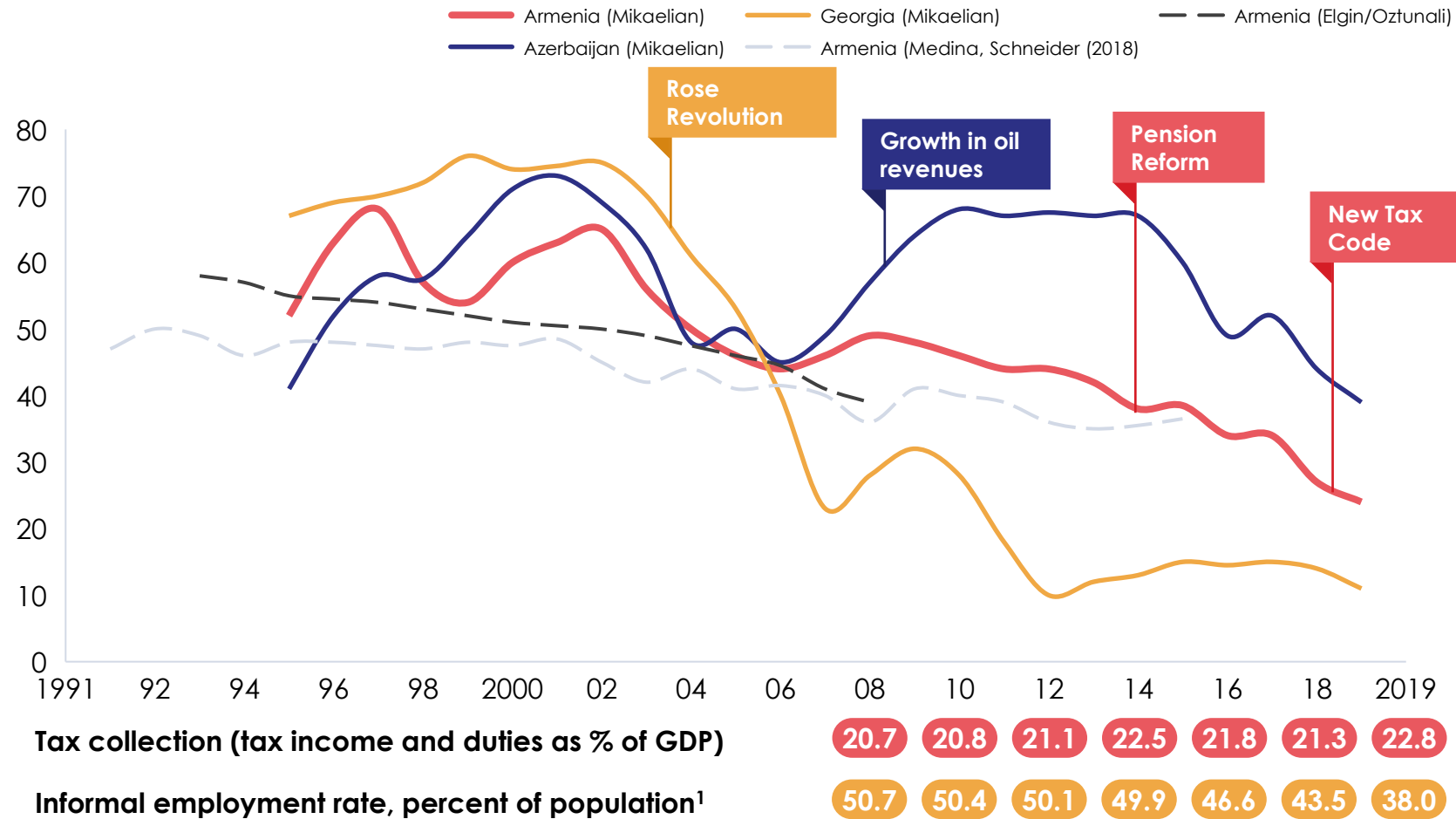
Mining, IT and Finance sectors offer the **highest paid jobs** and employ only 5% of the workforce

Agriculture and Education employ 30% of the entire workforce but they are **among the lowest-paid sectors**

Attracting more people into higher-salary industries such as IT could also have a positive impact on overall productivity, and consequently, on salaries

4. The share of the informal economy in Armenia has declined from 37% to 24% in the last 5 years

Informal economy share in Armenia



Key takeaways

Most estimates show that the **share of the informal economy** in Armenia is gradually **declining** due to

- Continuous development of government institutions (tax and customs reforms)
- Increasing transparency in the economy (e.g. sales receipts monitoring)
- Anti-corruption activities

This has resulted in an **increasing tax collection ratio** and a substantial **decrease** in the **informal employment rate** (especially after the pension reform), while also contributing to GDP growth

1. Informal employment rate is the share of employed holding informal jobs among total employment

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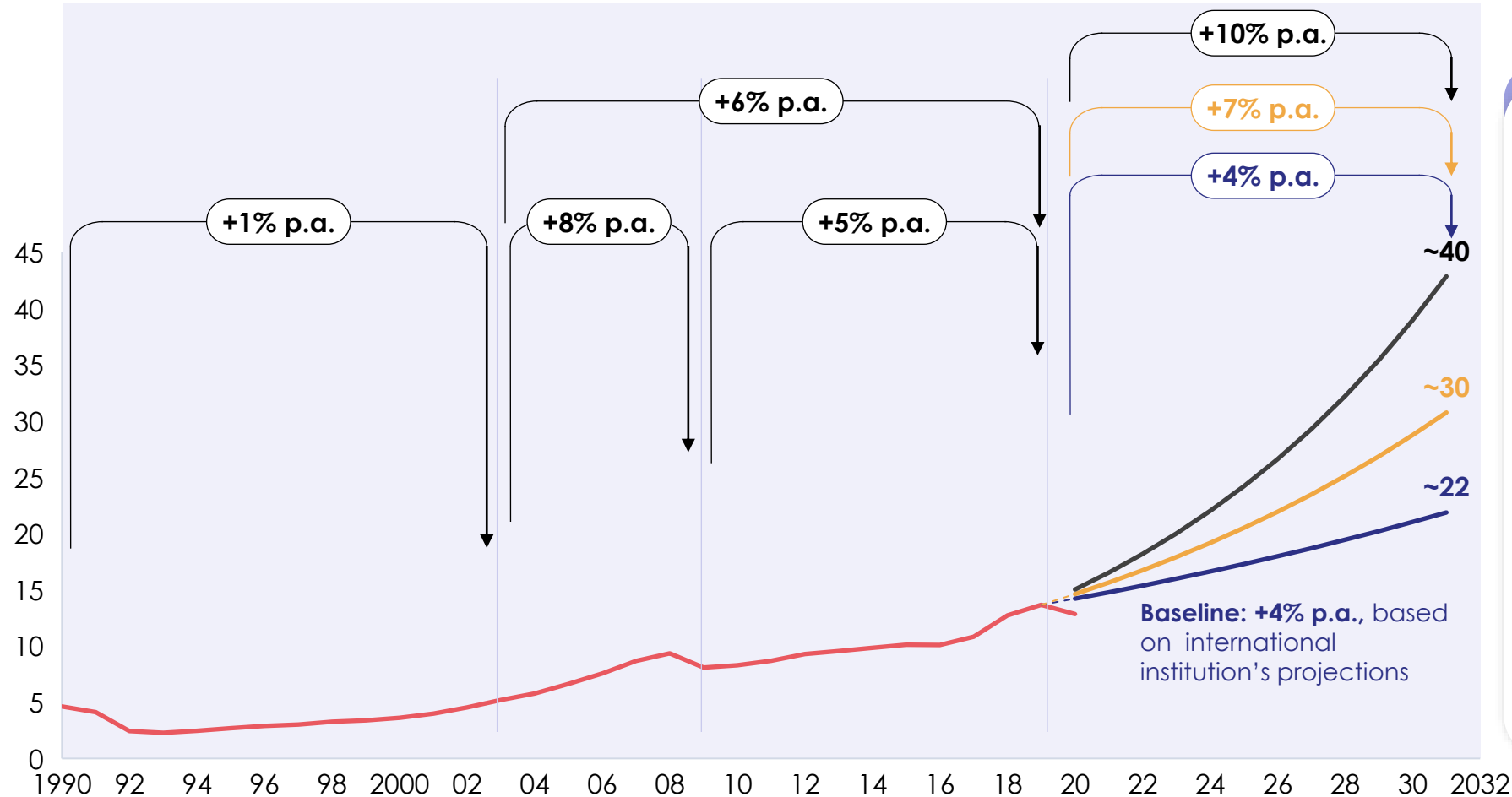
Moreover, overly relying on consumer spending to drive economic growth cannot be sustainable and sufficient in the future. Three main levers need to be addressed to grow sustainably:

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- Boosting labor productivity (i.e., human capital)
- Attracting sizeable investments (e.g., for infrastructure)

Through collective efforts Armenia can overcome these barriers and leap towards achieving sustainable, high economic growth

Through collective efforts Armenia overcome main barriers and leap towards achieving sustainable, high economic growth

Armenia's GDP per capita PPP, constant USD thousands 2017



2031 ASPIRATION:
10% growth p.a.

Through consistent policies, focused implementation of initiatives and close collaboration, **Armenia can become a mid-high income country**

1. Middle income

Source: World Bank; 2020 data is Armenia forecast as of February 2021