REPUBLIC OF ARMENIA

SELECTED ISSUES

December 2023

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INTERNATIONAL MONETARY FUND

REPUBLIC OF ARMENIA

SELECTED ISSUES

November 17, 2023

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CONTENTS

ENHANCING ARMENIA'S MONETARY POLICY FRAMEWORK[1]

A. Introduction

1.   Armenia's inflation targeting framework has served the economy well. Notable progress has been achieved since the adoption of the framework, including establishing price stability as the primary objective of monetary policy and ensuring that the Central Bank of Armenia (CBA) considers the implications of its policy decisions on output and financial stability. The framework has been successful at anchoring inflation expectations and has bolstered the CBA's policy credibility. It has also contributed to the overall prudent economic policies in the country, helping maintain macroeconomic stability.

2.   However, Armenia's economy is subject to frequent shocks that complicate monetary policy. The nature, size, and propagation of these shocks is difficult to predict, making monetary policy decisions very challenging, especially when the direction of impact is not clear, and as the transmission mechanism of monetary policy is weak due to the lack of a well-established benchmark yield curve, underdeveloped financial markets, and still high financial dollarization. The problem is compounded by Armenia's ongoing structural changes in the economy.

3.   Addressing structural weaknesses that hamper the effectiveness of monetary policy is CBA's priority. The CBA has recently facilitated the introduction of an over-the-counter commercial trading platform for the overnight repo market as part of a broader money market development plan. Proactive measures have been taken to reduce dollarization, including through a recent prohibition of foreign exchange mortgage loans to residents under an amendment of the law on "Currency Regulation and Currency Control". The CBA is also in the process of developing an enhanced communication strategy and has sought technical assistance on strengthening the CBA's governance arrangements.

4.   Furthermore, the CBA is preparing to introduce a major reform of the monetary policy decision-making process. The new process will prioritize uncertainty through a risk-management approach to price stability. In this new approach, the traditional baseline scenario will be eliminated and replaced with scenario analysis for decision making and communication.

The CBA's Monetary Policy Decision-Making Process	
Forecasting and Policy Analysis System, FPAS (Since 2006)	**Risk Management approach to price stability, FPAS II (Expected to start in 2024)**

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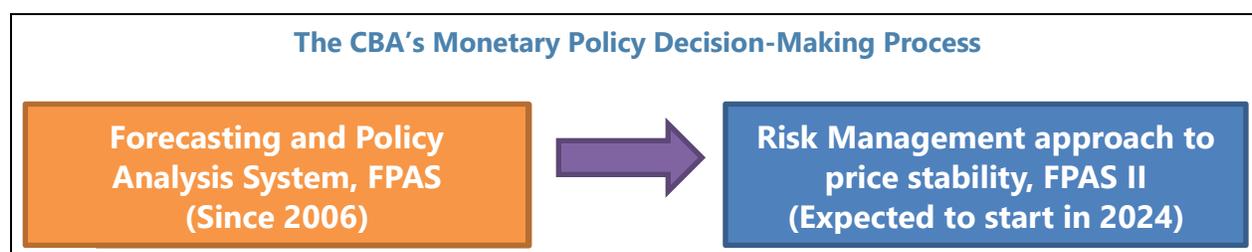
[1] Prepared by Maria Atamanchuk, with research assistance from Nathalie Reyes.

5.   This paper assesses the CBA's monetary policy framework. It discusses the CBA's track record with inflation targeting; describes the risk-based approach to price stability, offering insights on its potential benefits, while cautioning of likely pitfalls and highlighting the clear challenges for its operationalization in Armenia's context; and emphasizes areas in which the monetary policy framework needs to strengthen further to ensure its effectiveness, especially should the new monetary policy approach be fully implemented.

B. The CBA's Monetary Policy Framework

6.   The Central bank of Armenia adopted inflation targeting in 2006. The inflation target is set at 4 percent with tolerance bands of 1.5 percentage points. To maintain price stability, the CBA formulates, approves, and executes a monetary policy program. Every quarter the CBA's Forecasting Team presents macroeconomic projections for the upcoming 12 quarters with an endogenous policy path to minimize inflation deviations from the target within the 3-year medium-term horizon. These act as an input for policy discussions during the Board meeting. The CBA Board determines the level of the CBA refinancing rate (repo rate).[2]

7.   Notable progress towards best principles in inflation targeting has been achieved since the adoption of the framework. First, the CBA has a clear legal mandate and operational independence to implement the framework. Second, price stability is the primary objective with a numerical value to guide policy actions. Third, the CBA considers the implications of its policy decisions on output and financial stability.

8.   While the CBA's monetary policy framework has improved, some challenges remain:

- *Inflation targeting track record.* CBA's inflation management fares well compared to many of Armenia's country peers. Current inflation has often deviated from its target, with deviations occasionally persisting for extended periods, and the CBA's inflation targeting track record occasionally lagged that of some more established inflation targeting central banks (Figure 1). Nonetheless, the CBA has been successful at anchoring inflation expectations. In particular, consensus forecasts, a proxy for expectations, one year ahead have generally moved around the CBA's inflation target, while 2- and 3- year forecasts have been very close to the CBA's target. When assessing deviations of the average annual inflation from its target over the course of the last 10 years, Armenia is a strong performer among its peer group, showcasing its adeptness in maintaining a closer adherence to the targeted inflation rate than most inflation targeting peer countries.

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[2] For details on other CBA instruments, including indirect instruments see *Indirect instruments of the monetary policy and mechanisms of use.*

Figure 1. Armenia: Inflation Targeting Track Record

Inflation Performance against Inflation Target
(Percent)
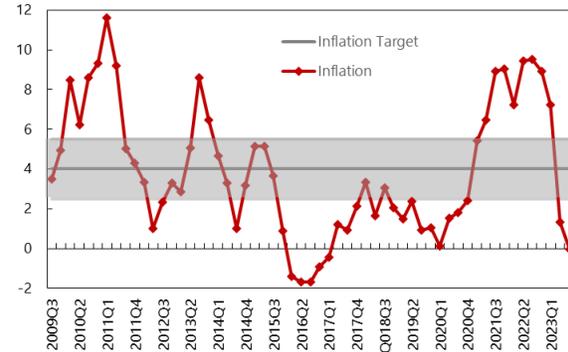
In-Band Probability*
(Measured based on quarterly data for 3 years)
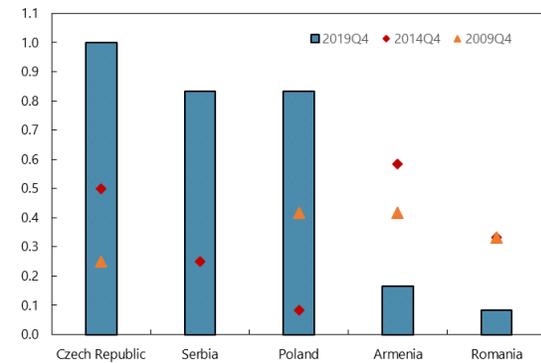
Consensus Forecast: Armenia Inflation
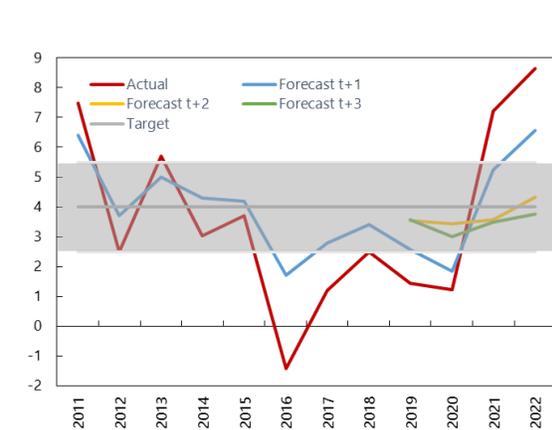
Deviation of Inflation from the Target**
(2012–22)
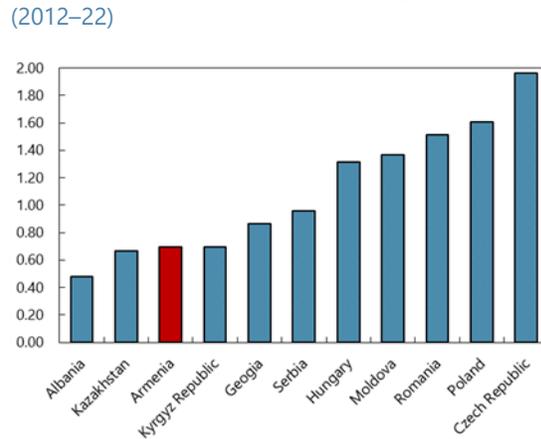
Sources: Consensus forecast, Haver, IMF World Economic Outlook and IMF staff calculations.

* The in-band probability measure computes the percentage of periods during which actual inflation stayed within the central bank's announced band in the last 3 years ending either in 2009, 2014, or 2019 (Zhang and Wang, 2022). A higher ratio indicates a stronger adherence to the inflation target.

** Deviation calculated as the ratio of the standard deviation of the average annual inflation from its target and the average inflation target between 2012 and 2022.

- **Transmission mechanism.** While the CBA's transmission mechanism of monetary policy has improved, some weaknesses remain. Government bond yields have shown progressively stronger correlation with the policy rate, marking a significant improvement over the past two years (Figure 2). However, the short-term lending and deposit rates demonstrate limited reaction to changes in policy rates. Structural weaknesses thus continue to hinder monetary policy transmission in Armenia. These include weak bank competition, the absence of a well-established benchmark yield curve, and shallow and illiquid capital markets. Financial dollarization also remains significant, despite a downward trend driven by prudent macroeconomic and macroprudential measures and the floating exchange rate (Poghosyan et al., 2023).

Figure 2. Armenia: Transmission of the Policy Rate to Market Interest Rates

Policy Rate and Government Bonds Rate
(Percent)

Interest Rates
(In percent)

Source: Central Bank of Armenia.
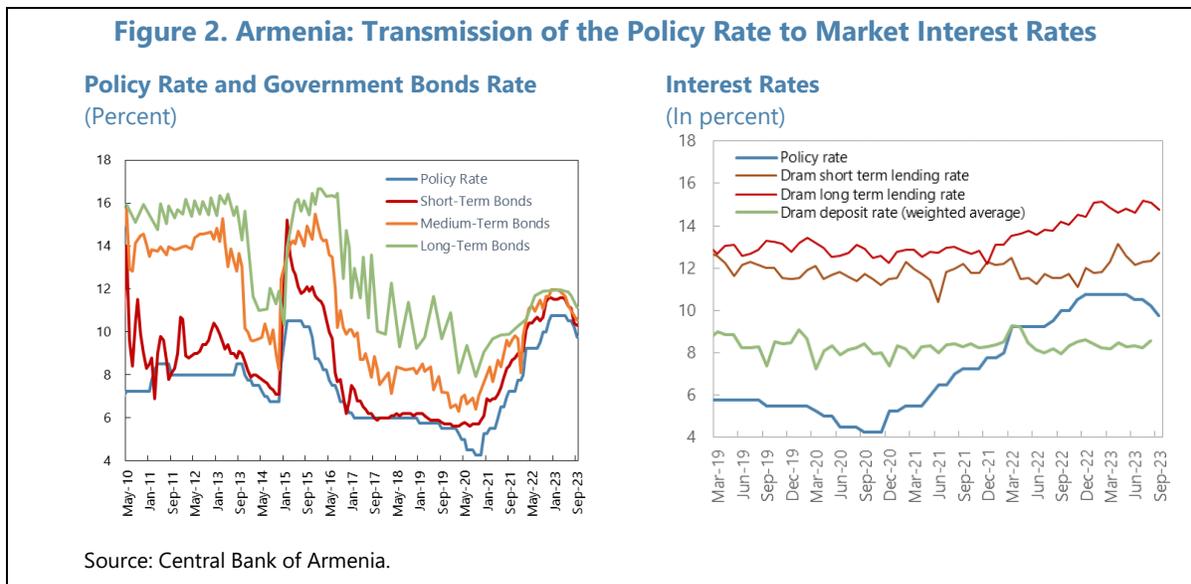
- ***Transparency.*** The CBA's monetary policy communication framework comprises crucial components such as a press release detailing the interest rate decision, minutes from the Board's rate-setting meeting, and a quarterly Inflation Report. The CBA routinely publishes brief information on alternative scenarios in its quarterly Inflation Reports. Furthermore, the CBA's outlook forecasts have generally outperformed consensus forecasters across key economic indicators, particularly inflation and current account balances (Figure 3). This underscores the robustness of CBA's analytical frameworks and forecasting methodologies. However, while the CBA's transparency index stands favorably in comparison to its peers, there is still room for improvement, especially when measured against global exemplars such as New Zealand, Czech Republic, and Chile.

Figure 3. Armenia: Forecast Precision and Central Bank Transparency

Projections Precision
(Difference between projected and actual values)

Transparency Index

Sources: CBA, consensus forecast, IMF WEO and DEG-December 2020-IJCB.xlsx (live.com) based on Central Bank Transparency and Independence: Updates and New Measures (ijcb.org).
Notes LHS chart: Consensus Forecast (CF) and Focus Economics (FE). It includes the forecast end of the previous year for years 2018–22. The projection precision is calculated as a root mean square error.

## C.   The Risk Management Approach to Price Stability

9.   The CBA's monetary policy framework relies on the forecasting and policy analysis system (FPAS). This is a collection of tools and associated processes designed to assist in formulating forward-looking monetary policy based on economic data and analysis. The FPAS concept emerged as a result of the initial efforts of early inflation targeting (IT) central banks in the late 1990s. These banks sought to develop methodologies and tools that could offer a more robust analytical framework for determining their interest rate policies (Mæhle et al., 2021). Although the FPAS incorporates a formal economic model for analysis and forecasting, the FPAS itself is not a "model." It is a structured and cohesive framework for gathering, processing, and examining economic data, analyzing economic processes, designing policy-relevant scenarios, and organizing the decision-making and communication of monetary policy. Its primary focus is on offering policymakers economic and policy analysis to assist them in making informed monetary policy decisions (Mæhle et al., 2021).

10.   The CBA's new approach—FPAS Mark II—has important differences compared to FPAS. The framework, developed by the CBA, combines elements of FPAS with a risk management approach to addressing uncertainty (Archer, 2022). Under FPAS Mark II, the central bank will explicitly account for uncertainty in the decision-making process by taking into account several "plausible" outlook scenarios. Further, the central bank will not prepare a baseline forecast, which in ideal conditions would be better represented by market expectations. Motivated by the uncertainty that is reflected in the history of central banks' imperfect and often poor baseline projections, FPAS Mark II also moves away from the conventional approach of optimizing the policy path based on a baseline scenario. The multiple-scenario approach assumes that policymakers would adapt to changing circumstances and make better informed decisions. By adopting this approach, the central bank is expected to transition from being an "expert forecaster", attempting to predict the most likely outcomes (baseline), to assuming the role of a "risk manager" that strives to minimize risks and navigate situations of high uncertainty.[3]

11.   Risk assessment has been a prominent feature of monetary policy decision making in many countries. Examples include New Zealand, Chile, and Canada, among others. Central banks often engage in scenario analysis as part of their economic and financial forecasting and policy-making processes. The need for monetary policy to consider a range of possible scenarios is well acknowledged (Bernanke, 2007; Weidmann, 2022, Lagarde 2023). As described in Blanchflower and Levin (2023), the monetary policy committee needs to participate in scenario analysis and contingency planning to recognize significant risks and evaluate potential policy measures to address or alleviate those risks in the event of their realization.

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[3] A detailed description of the framework and its analytical and institutional set-up (CBA, 2022) suggests modifying the FPAS by explicitly incorporating a discussion about non-linearities. An example of such model, described in Kostanyan and others (2022a), includes non-linearities in the inflation equation and introduces a loss function for monetary policy. The use of satellite models aims to provide an analytical toolkit to better estimate tail risks.

12.   The policymaking cycle of the FPAS Mark II consists of sketching and selecting ingredients, building and quantifying scenarios, and concluding with decision-making. The initial two phases engage decision makers in a transparent process that allows them to outline the key components of their individual scenarios (A and B) and formulate their views in a purely qualitative manner. In the next step, central bank staff constructs quantitative scenarios based on descriptive scenarios provided by decision makers. The final step includes decision makers setting the policy rate by referring to (not following) these scenarios in their deliberations (Table 1).

Table 1. Armenia: FPAS II—The 28-Day Policymaking Round

T - 28 — Kick-Off: Concise briefing to board about current economic drivers; robust discussion between board members and staff about major concerns & tail risks

Board members work with Level 2 GFS Coordinators to help create the ingredients of a one-page narrative of their favorite illustrative Case A and Case B scenarios.

T - 17 — Submission of One-Pagers

T - 14 — Issues Meeting

Projection Round: Chief Economist and Staff systematically build out Case A & Case B scenarios. Board members work with Level 2 GFS coordinators who help monitor the process to understand what ingredients are in the Case A and B scenarios, and what ingredients will be used to qualitatively discuss other types of Case A and B scenarios.

T - 3 — Lock In Case A and B Scenarios (and Case X and Y, when Necessary)
With endogenous policy paths, narratives, and (relative) welfare calculations (short-run output-inflation trade-off)

T — Policy Decision & Communication

Sources: FPAS Mark II: Avoiding Dark Corners and Eliminating the Folly in Baselines and Local Approximations, Working paper, the Central Bank of Armenia, 2022.

13.   Ideally, developing Case A and Case B scenarios should incorporate a reference to market expectations; however, this may be challenging in practice. Case A is a scenario where the policy rate path needs to be higher than market expectations (a hawkish scenario) to bring inflation back to the target. Case B represents a scenario where the policy rate path needs to be lower than market expectations (a dovish scenario). However, the reliance on market forecasts may present certain drawbacks, particularly in countries with underdeveloped financial markets with low liquidity such as Armenia. In such countries, market participants may not consistently form well-informed views on the economic outlook and central bank policies. Hence, relying on market forecasts could represent a step-back compared to utilizing a baseline prepared by central bank staff. In particular, in Armenia, government bond yields many not reflect true market expectations due to limited instrument diversification, thin trading volumes, and government influence on yields (the Ministry of Finance sets a cap on government bond yields at issuance).

D.   Considerations for Enhancing Armenia's Monetary Policy Framework

14.   The risk-based approach raises the premium on having a first-class monetary policy framework. Enhancements in the CBA's monetary policy framework should be guided by best principles, which are outlined in: (i) *Strengthening Monetary Policy Frameworks in the CCA* (IMF,

2023); and (ii) *Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries* (IMF, 2015). Reforms to enhance the framework, such as transparency, communication, governance, and the operational framework should take priority and are critical prerequisites should the CBA operationalize a risk-management approach to price stability.

15.   In particular, several strong areas of the CBA's monetary policy framework broadly align with best principles (IMF, 2015):

- *Clear Legal Mandate and Operational Independence.* Armenia generally scores well with respect to having a clear legal mandate and operational autonomy to diligently pursue its objectives.

- *Primary Focus on Price Stability.* The CBA prioritizes price stability as its primary objective and acknowledges that, in the medium term, monetary policy has a limited impact on real variables.

- *Numerical Target for Medium-Term Inflation.* The CBA has a specific numerical target for medium-term inflation, which supports effective implementation of CBA's price stability mandate and provides guidance for policy decisions.

16.   Nonetheless, enhancements to the CBA Law would allow further clarity in the CBA's mandate and operational independence.[4] In particular, requirements that the CBA consult with the government when drafting the monetary policy program (Article 7-3) and the authorization to issue short-term securities pursuant to "the procedure agreed upon with the authorized body of the Government" (Article 10-3) potentially impinge on the CBA's functional autonomy even if in practice this has not been the case. The CBA's legal mandate to equally pursue price and financial stability may also require further clarification. The CBA's request for IMF technical assistance on governance arrangements and legal framework provides an opportunity to address these shortcomings.

17.   Furthermore, there are areas in which the CBA needs to further strengthen the monetary policy framework and proactively address the challenges of FPAS Mark II, should it be operationalized:

18.   First, the central bank should have a robust operational framework revolving around management of short-term interest rates. Armenia has ample room for improvement in this area. Efforts should continue to focus on developing financial markets, establishing a robust yield curve, and reducing dollarization by strengthening macro fundamentals. The adoption of the "Action Plan on the Money, Foreign Exchange, Government Bond and Derivatives Markets Development" and the recent launch of an over-the-counter commercial trading platform for the overnight repo market are

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[4] Law HO-69 of 30 June 1996 "On the Central Bank of the Republic of Armenia."

positive developments, yet there is more work to be done to complete the implementation of the capital market development strategy.[5]

19.   Second, a critical objective of the central bank is to consider the implications of monetary policy decisions on output and financial stability. The CBA has generally performed well in this area, which was evident during the most recent monetary policy tightening cycle. However, discontinuing the baseline scenario could undermine this objective. The baseline scenario functions as a reference point in the forecasting and internal policy decision-making process. While the Board members may thoroughly weigh various risks, the baseline scenario provides a necessary reference point for assessing potential deviations. For outside stakeholders, including the public and financial markets, a well-defined baseline projection offers a clear and comprehensible anchor for the macroeconomic outlook. Furthermore, in a country with limited independent analytical capacity like Armenia, the absence of baseline projections prepared by the central bank may deanchor fiscal and broader economic policies and undermine overall policy credibility. Coordination of monetary and fiscal policy could lose transparency and become more intricate, creating undue reasons for finger-pointing and political pressure on the central bank.

20.   Third, the central bank should have a forward-looking strategy that aligns the objective of price stability with concrete policy decisions, keeping monetary policy agile in the face of uncertainty and external shocks. The focus on risks under the FPAS Mark II framework is welcome. The IMF 2021 Comprehensive Surveillance Review underlines the importance of tackling risks and uncertainties in policy discussions. It underscores that policymakers need to actively manage the risks of a highly uncertain outlook to ensure sustainable growth and economic and financial stability (IMF, 2021). Creating multiple economic scenarios helps policymakers to develop a more comprehensive understanding of potential risks and their consequences. However, given the difficulty in precisely identifying the sources of risks, there will always be factors and events that may occur outside the scope of the scenario analysis. While it is valuable to consider multiple economic scenarios based on various risks, constructing such scenarios does not guarantee increased accuracy in projections, including due to unforeseen shocks. In this regard, the IMF 2021 Comprehensive Surveillance Review underscores that after identifying and assessing the risks, the focus of risk mitigation should be on developing policies that help to address shocks, by reducing the effects of adverse ones and enhancing the opportunities arising from positive shocks. Indeed, the scenarios used in FPAS Mark II are crafted to elucidate policy-relevant risks rather than simply project potential future outcomes. But how the FPAS Mark II decision-making process—which nonetheless results in a single rate decision—will crystallize and communicate appropriate contingent policy reactions in the event that different scenarios materialize is yet to be fleshed out in practice.

21.   Fourth, decision-making responsibilities should be allocated to the most competent decision-making body. Central bank laws typically allocate four key decision-making roles to one

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[5] The Capital Market Development Strategy, approved in July 2020, is accessible in Armenian on the government's webpage: https://www.e-gov.am/gov-decrees/item/34438/.

or more bodies within the central bank. These include public policy formulation and regulatory decision-making (the central), as well as executive management and oversight (the bank) (IMF, 2019). The CBA Law currently allocates three functions to the CBA Board. With Board members overburdened by regulatory issues, the current legal framework jeopardizes the effective policy formulation and oversight functions of the Board. Most importantly, the CBA's governance structure needs a comprehensive review to ensure that—in the context of high uncertainty and growing demand for the Board's attention—the CBA continues to achieve its core objectives of price and financial stability. The upcoming technical assistance presents an opportunity to determine the most appropriate decision-making structure for the CBA.

22.   FPAS Mark II may create additional challenges in this regard. Elevating the level of Board engagement as suggested in the FPAS Mark II will likely raise the burden on Board members' time during the 28-day policymaking round of macro scenario preparations. Board members will be responsible for providing crucial inputs for different scenarios and collaborating closely with staff to create essential scenario descriptions. Under FPAS Mark II, over time Board members' monetary policy decision-making capacity and expertise will develop, and their accountability will improve. However, this may constrain their ability to carry out other Board functions. The reform of the CBA's governance thus needs to take priority should the FPAS Mark II approach be operationalized.

23.   Fifth, the central bank should have a clear and effective communication to explain the rationale behind policy decisions and their ensuing outcomes, while also offering guidance about the future. The CBA has scope for improvement in this area and is presently in the process of developing a comprehensive communication strategy. There are several areas in which the CBA could enhance its transparency. A regular press conference regarding interest rate decisions is yet to target a wider audience, individual votes (or the distribution of votes) remain confidential, and the projected interest rate path is not made public in Armenia.

24.   FPAS Mark II is likely to pose further communication challenges, requiring a robust and well-tested communication strategy. FPAS Mark II seeks to address the concern that communicating a single baseline projection could be misleading, and in the face of uncertainty, provide false sense of security even if alternative risk scenarios are considered. This and the fact the scenarios prepared under FPAS Mark II are only illustrative for the policy decision, deem the risk-management approach incompatible with the existence of a baseline forecast. However, the public may perceive one of the illustrative scenarios—if the scenarios are published—as a *de facto* baseline. Consequently, a baseline scenario could inadvertently form in the public's perception, even though policymakers did not intend for it to exist. Such confusion may hinder the effective communication of policy decisions and the underlying rationale behind them, undermining the transparency and clarity that FPAS Mark II aims to achieve. The CBA's enhanced communication strategy thus needs to be failproof to the policy decision that the CBA wants to communicate.

25.   Finally, there is a need for a comprehensive expert assessment of the CBA's monetary policy framework ahead of the introduction of a new monetary policy approach. The CBA has been in continuous discussions with experts and policymakers, whose insights have influenced the

development of FPAS Mark II.[6] Nonetheless, a comprehensive assessment of the current monetary policy framework is currently absent. Such published assessments have become a common central bank practice, especially in the aftermath of the recent global shocks (Honohan, 2023). Engaging individuals who serve on the Boards of other central banks and market participants in this assessment would help understand better the potential implications of introducing a risk-based approach to price stability and prioritize needed reforms.

E. Conclusions

26.   Enhancements in the CBA's monetary policy framework should be guided by best principles. While the CBA's monetary policy framework has substantially improved over the past decade and scores well compared to many peers, structural weaknesses continue to hamper its effectiveness. Addressing these weaknesses should remain a policy priority. The risk management approach to price stability would be more effective than the current framework only if it leverages monetary framework enhancements in the areas of transparency, communication, governance, and operational framework. The CBA's governance structure needs a comprehensive reform to ensure that—in the context of high uncertainty and growing demand for the Board's attention—the CBA continues to achieve its core objectives of price and financial stability. Publishing a comprehensive expert assessment of CBA's monetary policy framework will guide the reforms and raise the credibility of the enhanced framework.

27.   While such enhancements to the monetary policy framework are being put in place, an operationalization of the risk management approach to price stability may present important challenges. There is merit in the central bank paying close attention to risks—an advantage of the FPAS Mark II approach. However, its most crucial assumption to discontinue the CBA's baseline projection may pose significant challenges to monetary policy effectiveness, especially if market participants are not prepared for this change, financial markets remain shallow, and there is no alternative independent forecasting authority. Strengthening the forecasting capacity of other independent entities—for example, creating a fiscal council—would be critical to preserve overall policy credibility in Armenia. Importantly, placing emphasis on risks is only useful if there is clarity about the policy response in the event of shocks. The communication strategy should not only detail the decision-making process, but also strengthen the explanation of how policy will respond if risks materialize.

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[6] These discussions, held in seminars and meetings, are documented in video and paper formats, publicly accessible through the CBA and Better Policy Project channels.

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ARMENIA'S POTENTIAL GROWTH: LONG-RUN DYNAMICS, RECENT DEVELOPMENTS, AND IMPACT OF REFORMS[1]

1.   Armenia has experienced multiple economic shocks in recent years. This includes the COVID-19 pandemic; the war in Ukraine, which led to a large influx of foreign nationals and capital; and bouts of regional conflict with Azerbaijan, with the refugee inflow now reaching more than 100,000 people. These shocks have caused considerable volatility in real GDP, which contracted by 7.2 percent in 2020, rebounded by 5.7 percent in 2021, and accelerated by 12.6 in 2022. The inflow of workers, many of whom are highly qualified professionals, has also raised questions about the long-term impact on potential output through higher labor supply and productivity and how this growth can be harnessed further through ongoing and planned structural reforms. This paper estimates Armenia's long-term growth by (i) deriving a baseline estimate, which incorporates the impact of the pandemic; (ii) quantifying the possible impact of recent migrations on Armenia's potential growth; and (iii) assessing the additional output gains that may accrue from implementation of the reform package included in the SBA-supported program.

Estimating Armenia's Potential Growth

2.   A production function approach is used to estimate potential output, which is specified as:

$$\widehat{Y}_t = \widehat{A}_t \widehat{L}_t^{(\alpha)} K_t^{(1-\alpha)} \qquad\qquad (1)$$

Labor L is computed as the product of working age population (15–64), labor force participation, and employment rates.[2] The capital stock K is estimated through a perpetual inventory method based on gross capital accumulation with an annual depreciation rate of 7.4 percent (OECD 2009; IMF 2015). The share of labor α, which is computed as the average product of labor force and nominal wages over nominal GDP, is estimated at 55 percent (Penn World Table). Total factor productivity (TFP), A, is computed as the residual. HP-filter trends are used to extract the underlying potential for the labor force and productivity, $\widehat{A}$, $\widehat{L}$, while the existing stock of capital is assumed to fully contribute to potential output. Potential growth is defined as the annual percent difference in potential output, $\widehat{Y}$.

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[1] Prepared by Giulio Lisi, with contributions by Habtamu Fuje and research assistance from Nathalie Reyes.

[2] Labor force participation among retirees (65+ years old) is generally low, averaging at around 6 percent. Given the low productivity among this group, we have excluded it from the labor force and potential growth estimation.

	Average, percent*	
	Past 10 years	Past 5 years
Labor force participation, aged 15–64	70.9	72.0
Growth of working age population	-1.0	-1.2
Share of labor in nominal GDP	56.9	55.7
Total factor productivity/TFP growth	2.9	2.7
Capital depreciation *(single data point)*	7.4	
Public capital	3.5	
Private capital	8.1	

Table 1. Armenia: Assumptions for Estimating Potential Growth

Sources: The International Labor Organization/ILO, Penn World Table, IMF (2015), and IMF staff calculations.

Note: *With the exception of capital depreciation, which is assumed to be invariable in the medium term.

3. **The contributions of capital and labor to Armenia's growth have declined over time.**

- Armenia's stock of capital has increased steadily since 1994 but the pace of accumulation has slowed notably since 2008.A significant curtailment of access to finance since the Global Financial Crisis (GFC) was reflected in lower FDI and other external financing, and overall investment deceleration (Atamanchuk and Tokuoka, 2023).

- Armenia's working-age population has kept labor supply on a long-term declining trend due to aging and outward migration. And while labor force participation has increased, it remains low, especially among vulnerable groups (cf. ILO 2020). In addition, unemployment has been persistently high and rising over the last ten years, especially among younger population.

- TFP has been the key factor driving potential growth, especially after 2016. Armenia registered faster TFP growth than its neighbors including Georgia, Kirgizstan, and Kazakhstan (World Bank 2017; Our World in Data), supporting its potential growth. Improvements in productivity of agriculture and service sectors contributed to the fast TFP growth, while relatively subdued manufacturing productivity growth created headwinds (Ahmadov 2022).

4. **A no-migration, no-reform scenario of potential growth would depend solely on long-term TFP and population growth**. With TFP growth estimated at 2.7–2.9 percent per year, labor share of 55–57 percent—in line with their historical levels—and working-age population (labor force) decline of about 0.5 percent, the long-term growth of the Armenian economy is projected to be around 4.5 percent. This is slightly higher than Armenia's long-term growth during the pre-COVID decade. In the transition period, the contribution of capital is expected to rise in line with staff's projection of an increase of public investments to GDP ratio of about 2 percent during 2023–28. The contribution of labor is projected to be negative in line with UN's medium-term population projections (UN, 2022).

Figure 1. Armenia: Potential Growth and Its Drivers

Total Factor Productivity
(Index)

Labor Force
(Population million)

Capital Stock
(Billion dram)

Potential Growth, Contributions
(Percent)
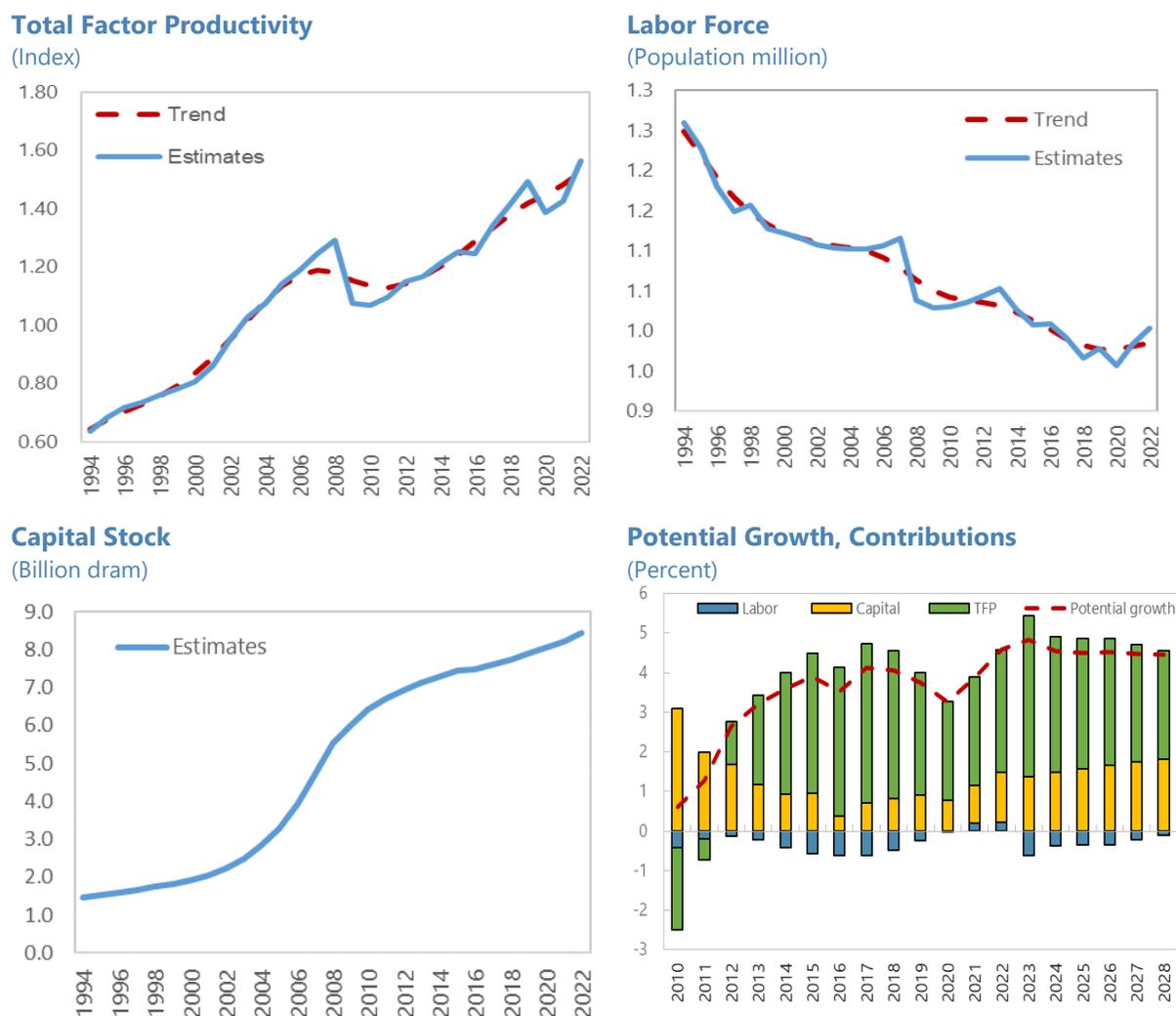
Source: Staff calculations.

The Impact of Migration on Potential Growth

5.   Migration can affect growth in the receiving economy through the size of the labor force as well as productivity gains (Ortega and Peri 2014; Aiyar et al. 2016). The following assumptions are used to capture these effects:

- *Labor.* Of an estimated 90,000 foreign workers who have relocated to Armenia (staff estimates), 57 percent already have a fulltime job. Assuming that all recent migrants will remain in Armenia for the foreseeable future, the remaining 43 percent are expected to enter the labor force in 2023–27. This implies an increase of 3.5 percent in the size of the country's labor force relative to

2021 levels, or 0.5 percent increase relative to a counterfactual with no inflow of labor migrants.[3] About 75 percent of the estimated 100,000 NK refugees are assumed to be of working age and would gradually be integrated into the labor market during 2024–28.

- *Productivity.* A significant share (about 40 percent) of migrants from Russia have tertiary education and are engaged in the highly productive ICT sector (Chervyakov and Giucci 2023). The impact of their high productivity is estimated using simulated elasticities of the TFP to the number of workers with tertiary education.[4] This impact is estimated only in relation to workers migrating from Russia, where the Human Capital Index (HCI)—an indicator of productivity—is about 14 percent higher than the HCI in Armenia as learning-adjusted schooling in Russia is about 2–3 years higher than in Armenia.[5]

6.   The inflow of migrants could have a substantial but diminishing impact on Armenia's medium-term growth. Estimates show that Armenia's potential GDP growth could be on average 0.5 percent higher relative to a no-migration scenario. Nevertheless, the effects of migration are projected to weaken over time. Most of the residual impact on productivity and labor is projected to accrue in 2023–24. In outer years, growth is projected to slow to the no-migration levels (approximately 4.5 percent) towards the end of the projection horizon once labor force dynamics revert to the long-term pre-Ukraine war trend.

Figure 2. Armenia: Decomposition of Potential Growth and the Contribution of Migration


Potential Growth
(Percentage points, 2023–28 average)
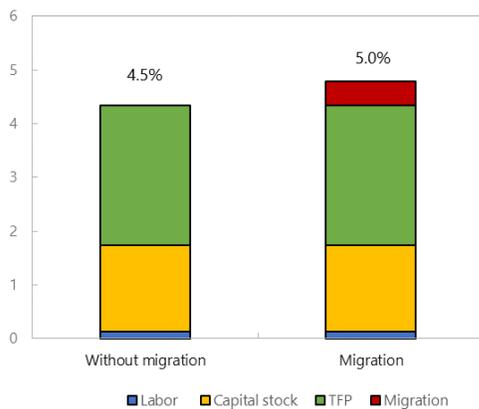
Potential Growth Decomposition, Including Migration
(Percentage points)
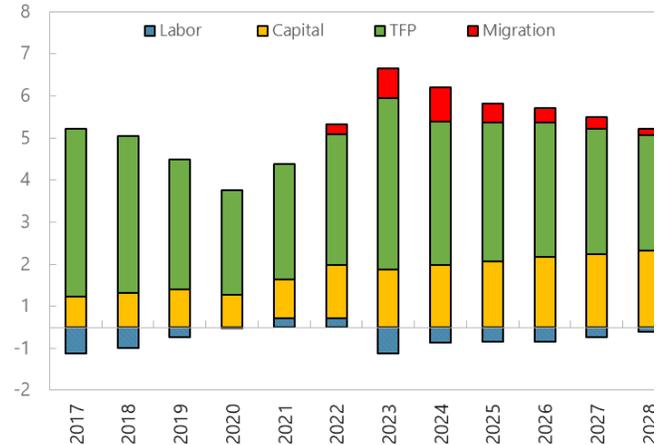
Sources: World Development Indicators, National authorities, and staff estimates and projections.
Note: 'Migration' refers to increases in potential growth due to labor and TFP gains associated with foreign migrants and NK refugees.

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[3] Effects of migration on TFP and labor are assumed to accrue linearly over 2023–28.

[4] The median of the simulated interval (0.71) is taken as reference.

[5] See World Bank 2018. The productivity of NK refugees is assumed to be the same as the productivity of Armenian workers. For comparison, the difference in HCI and learning-adjusted years of schooling in Armenia and Azerbaijan is marginal.

7.   The above estimates are subject to several caveats. On one hand, higher productivity of migrants relative to the local population could result in additional TFP gains with respect to the above baseline scenario, especially if the migration flows are permanent and there are significant spillover effects to other sectors than the ones in which the migrants are employed. The higher HCI in Russia also implies that the productivity impact may be more than proportional to the number of workers with tertiary education. On the other hand, a faster than expected decline in the labor force or a reversal in migration—e.g., due to persistent regional insecurity—could add downward pressures on potential growth.

Raising Long-Term Potential with Structural Reforms

8.   Implementation of structural reforms under the SBA-supported program could have a substantial impact on long-term potential growth. The reforms assessed in this analysis are also part of the Government's 2021–26 program and aim to: (i) increase labor force participation; (ii) enhance access to credit; and (iii) raise the efficiency of public capital spending. Their impact is simulated using a calibrated general equilibrium model building on Babajanyan, Baksa et al. (2022), which captures key features of the Armenian economy. It consists of a small open economy with price and wage rigidities, two sectors (trade and non-traded), and two types of households (savers and non-savers). More specifically, the model is used to evaluate the following reforms:

- *Labor force participation*. As noted, the projected decline of Armenia's labor force is an important constraint on its long-term growth. Domestic labor markets are characterized by prominence of informality and persistent high unemployment, especially among vulnerable groups (e.g., female, young, and agricultural workers) (IMF 2021). A new employment strategy seeks to raise labor force participation, including by enhancing the efficiency of existing labor market policies. The effect of raising participation is captured by assuming a positive shock of 7.4 percent in the labor supply (equally distributed in the tradable and non-tradable sectors) during 2024–28. This is equivalent to a decline in Armenia's female and youth unemployment in line with historical averages observed for 2017–22 in emerging economies in Eastern Europe and Central Asia.

Youth and Female Unemployment
(Percent)
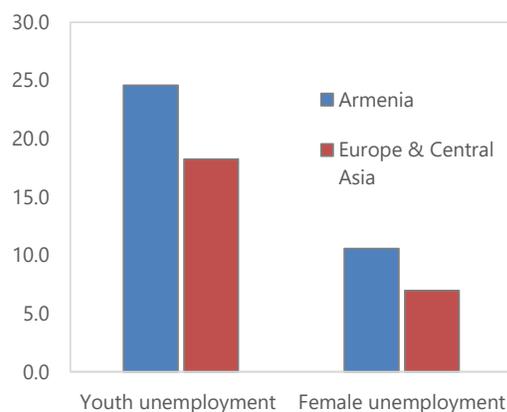
Sources: World Development Indicators and staff calculations.

- *Public capital investments*. Expanding the existing infrastructure system is critical to support exports and enhance private investments, including in the CCA region (Gigineishvili et al. 2023: 7). Infrastructure development in Armenia is severely constrained by weak planning and low execution rates, especially for foreign-funded capex projects. A recent IMF technical assistance has made several recommendations to strengthen the implementation of the Public Investment Management process, regulatory quality, and the capacity of project implementation units. The effect of these reforms is mapped in the model by assuming (i) a further increase of the public investments to GDP ratio of 2 percent for the duration of the program (0.8 percent in 2024, 0.1 percent in 2025–

Public Investment Efficiency Frontier (Perceived Quality)
(Index)
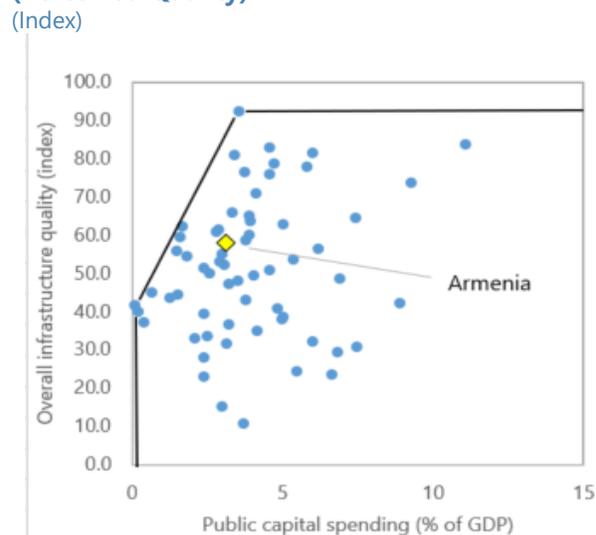
Source: IMF Staff estimates.

Note: Results should be interpreted with caveats as they are derived from perceptions-based data.

26), relative to the baseline, together with (ii) an increase in the rate of efficiency of public investments by about 25 percent. The latter is calibrated as the distance of Armenia's public investment efficiency from an efficiency frontier, computed as the perceived quality of infrastructure in EMs with similar levels of public investment spending (cf. IMF 2019, Text Chart).

- *Access to finance.* Limited access to finance and high collateral requirements constitute key constraints on investments, especially for private companies (IMF 2021). To address financial market frictions, the authorities are working on: (i) a bankruptcy reform to strengthen creditors' rights, streamline the process for the recovery of collateral, and improve the efficiency of the insolvency process (IMF 2022: Annex VI) and (ii) a revised corporate governance code to improve transparency in financial reporting. The implementation of these reforms is captured in the model by assuming a decline in the marginal costs for final good producers of 5.5 percent the size of the rented capital used in production (Babajanyan et al. 2022: 24). This is equivalent to the difference in the

Collateral Requirements
(Percent of total loan amount)
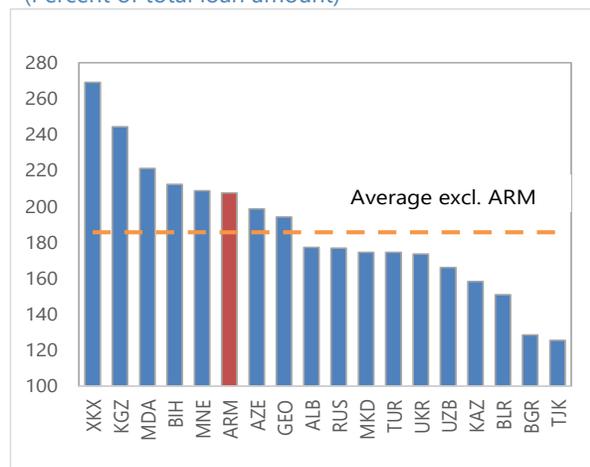
Sources: Global Financial Development database (November 2021 edition) and staff calculations.

ratio of collateral requirements relative to peers (World Bank Global Financial Database), scaled by the number of credit-constrained firms as reported in the 2020 World Bank Enterprise Survey.

9.   The analysis suggests that envisaged reforms may have large effects on medium-term growth. The estimates reflect three scenarios, first considering only labor market reforms, then including improvements in public investment efficiency, and lastly by integrating reforms to increase access to credit. In all cases, real GDP growth would be considerably higher as a result of reform implementation relative to forecast scenario where migrants remain in the country (augmented baseline). The cumulative effect of the reforms on potential GDP (defined as the difference in real GDP between the calibrated scenarios and the augmented baseline) is 0.9 percent in the case of reforms to increase labor participation; 1.9 percent in a scenario where labor market reforms are accompanied by measures to improve the efficiency of public investments; and 3.3 percent when additional measures to improve access to credit are implemented. The corresponding effect on 2024–28 potential growth is about 0.5 percent, on average, relative to the augmented baseline projections.


Figure. 3. Armenia: Impact of Reforms on Potential Growth

Reform Scenarios
(Percent, deviation from the baseline)

Impact of Full Reform Implementation
(Percentage points, 2023–28 average)

Sources: IMF staff calculations and projections.
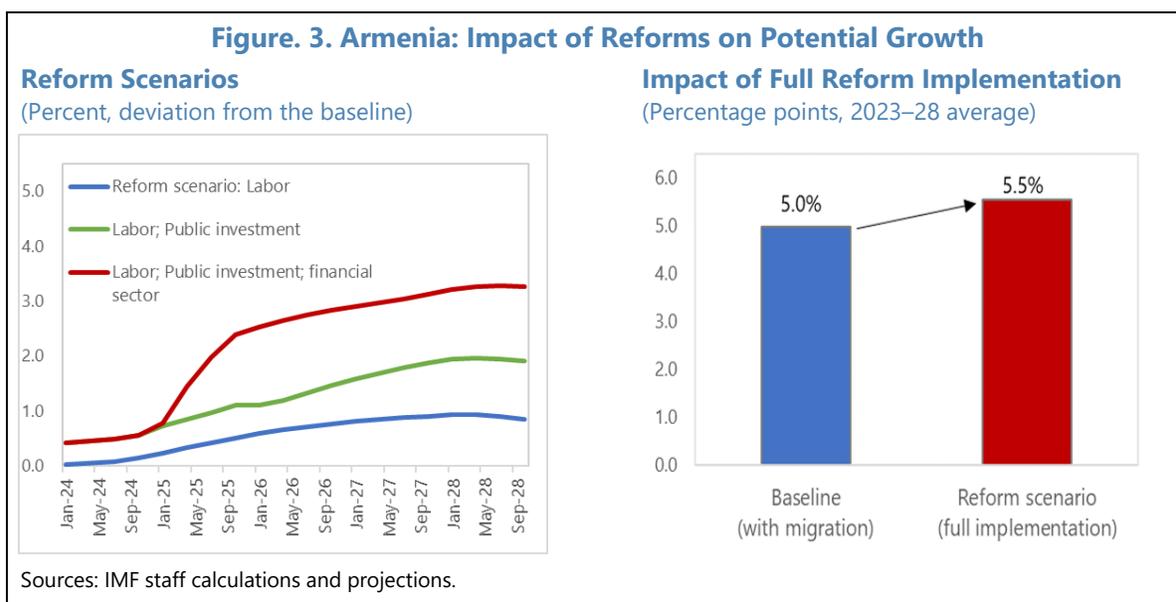
10.   The envisaged reforms would also help rebalance Armenia's growth towards greater investments, including in the private sector. The growth in private investments is estimated at about 2.2 percent in the case of full reform implementation, with most of the gains being initally concentrated in the tradable sector. Further yields in investment would materialize in later years, as positive externalities from the production of public investment and growth are incorporated in private investment decisions. Growth in consumption, while positive, would be lower.

11. Estimates of the yields from the reforms outlined above are subject to significant uncertainties. Errors in the measurements of key model parameters, external economic shocks, or implementation challenges may limit the gains of the envisaged reforms. Faster than expected implementation and complementarities with other measures planned under the 2021–26 Government Program may enhance the gains of the reform package.

12. Overall, the analysis indicates the importance of reform implementation to support long-term growth. Although recent migration flows are projected to substantially affect Armenia's potential growth, including through positive contributions on labor force and productivity, the growth effects of migration could weaken over the time. Timely implementation of structural reforms planned under the SBA-supported program could help address Armenia's long-term structural challenges. Specifically, policy measures that reduce unemployment and enhance labor force participations, including through investment in health; enhance execution rates for public investments; and enhance access to finance, could help reverse declining trends in labor supply, raise productivity and investments, and rebalance growth towards export-oriented sectors in line with the 2021–26 Government program.

Impact of Reforms on Investments and Consumption
(Percent deviation from the baseline)
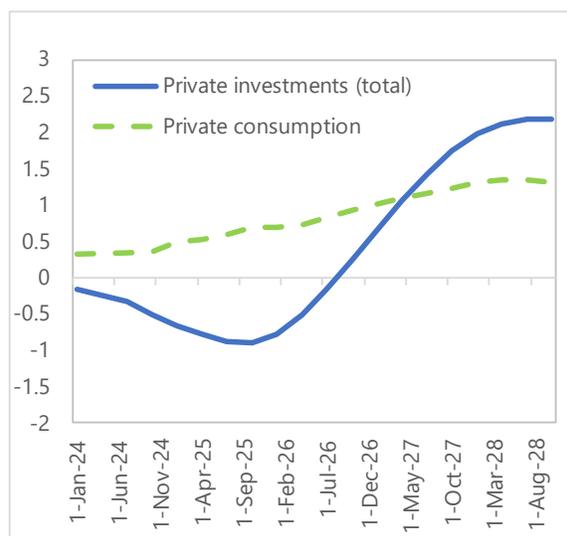
Sources: IMF staff calculations and projections.

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STRENGTHENING ARMENIA'S SOCIAL SAFETY NET[1]

1.   Armenia's social safety net (SSN) performed well during recent economic shocks. It provided protection to the vulnerable and helped contain poverty and inequality during the COVID crisis. More recently, it also ensured emergency humanitarian support to ethnic Armenian refugees from the NK region in the wake of regional tensions. However, when assessed against standard measures of quality of social assistance programs, Armenia's SSN has room for improvement in terms of coverage, adequacy and targeting of certain programs. Strengthening the SSN will help build automatic stabilizers, support fiscal sustainability amidst growing expenditure pressures and improve the economy's resilience in the face of shock. The paper discusses the areas in which Armenia's SSN needs strengthening.

Armenia's Social Safety Net

2.   A good social safety net (SSN) has three attributes. First, it provides *broad coverage and adequate benefits* to vulnerable groups in a progressive way within the overall tax-benefit system— that is, more generous benefits accruing to the poorest beneficiaries. Second, it aims to be *cost effective* by avoiding program fragmentation and beneficiary overlaps. Third, it is *financially sustainable* within the overall fiscal expenditure envelope and consistent with other social protection programs (Grosh et al. 2008 and IMF 2020).

Box 1. Armenia: Terminology

- **Social spending** includes education, health, social protection, housing and community services, and environmental protection (IMF 2019).

- **Social protection** comprises social insurance and social assistance.

- **Social insurance** aims at protecting households from shocks that can adversely impact their incomes and welfare and is typically financed by contributions or payroll taxes.

- **Social assistance** aims at protecting households from poverty and vulnerability/deprivation and is financed by general government revenue. The terms social assistance and social safety net are used interchangeably.

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3.   Several programs provide social assistance in Armenia. These include: (i) Family Living Standards Enhancement Benefits (FLSEB; commonly known as the "*Family Benefit Program*"); (ii) Childcare; (iii) Other benefits; (iv) Stipendium and Scholarships[2]; and (v) Old-age, disability, and survivor allowances. The general structure of social assistance benefit system is provided below (see also Core Diagnostic of the Social Protection System in Armenia).

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[2] Includes total stipendium regardless of the recipients' welfare status.

Table 1. Armenia: Social Assistance Programs

Family Living Standards Enhancement Benefits	• Family allowances • Social allowances • Emergency allowances
Childcare	• Childcare benefits up to 2 years of age
Other benefits	• Child benefits • Maternity leave benefits • Housing assistance to families with children • Childcare and upbringing financial support to foster families • Funeral allowances
Stipendium	• Stipendiums to the vulnerable
Old-age, disability, and survivor allwances	• Allowances for old age, disability, and loss of breadwinner

Source: Armenia – Law on State Benefits.

Assessing Armenia's Social Safety Net

4.   Armenia's social assistance spending is relatively low. Social assistance spending in Armenia was around 2.6 percent of GDP in 2021 (including support associated with Covid-19 and the 2020 war). This was comparable to the CCA mean (2.7 percent of GDP) [3], but significantly lower than the OECD mean (12.9 percent of GDP). The breakdown of social assistance spending in 2021 suggests that the Family Benefit Program, childbirth and other child benefits and temporary Covid-19 & war-related social assistance spending received the highest share (0.5 percent of GDP each). Prior to Covid-19 and the 2020 war, the Family Benefit Program was the single leading social assistance scheme in Armenia.

Figure 1. Armenia: Social Assistance Spending
(As percent of GDP)

By Program
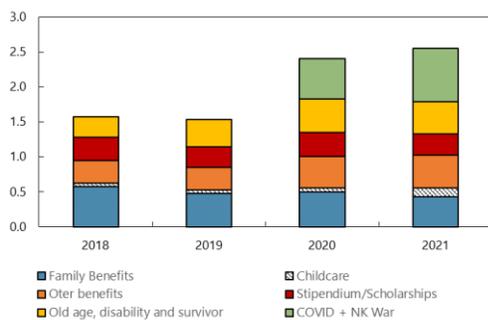
Regional and International Comparison
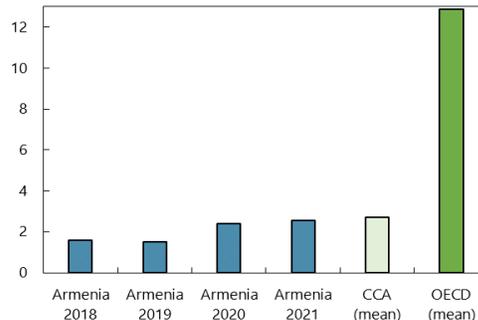

Source: IMF Staff estimates.

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[3] CCA data are computed based on the latest available year for CCA countries (i.e., before the COVID-19 pandemic).

5.   Social assistance coverage of Armenia's poorest population is adequate, but some programs need improvement. Coverage is referred to as the share of a population or subpopulation (e.g., quintiles) that receives social assistance (World Bank, 2018, IMF, 2020). In 2021, coverage of social assistance programs in Armenia (26.1 percent) was higher than the CCA mean (18.6 percent). The coverage of the poorest quintile (65.6 percent) is also considerably better than the CCA mean (33.3 percent). Coverage of the richest quintile (10.1 percent) is lower than the CCA mean (11.6 percent), reflecting relatively lower leakage. Among different SSN schemes, the family benefits reach the poor, but their coverage is low (41 percent for the poorest quintile). For all other programs, coverage is negligible across schemes including due to the design of the programs.

Figure 2. Armenia: Coverage

By Quintile

By Program

Q1 (poorest) vs Q5 (richest)

Quintile (program-wise), 2021

Sources: Integrated Living Conditions Survey (ILCS) and IMF Staff estimates.
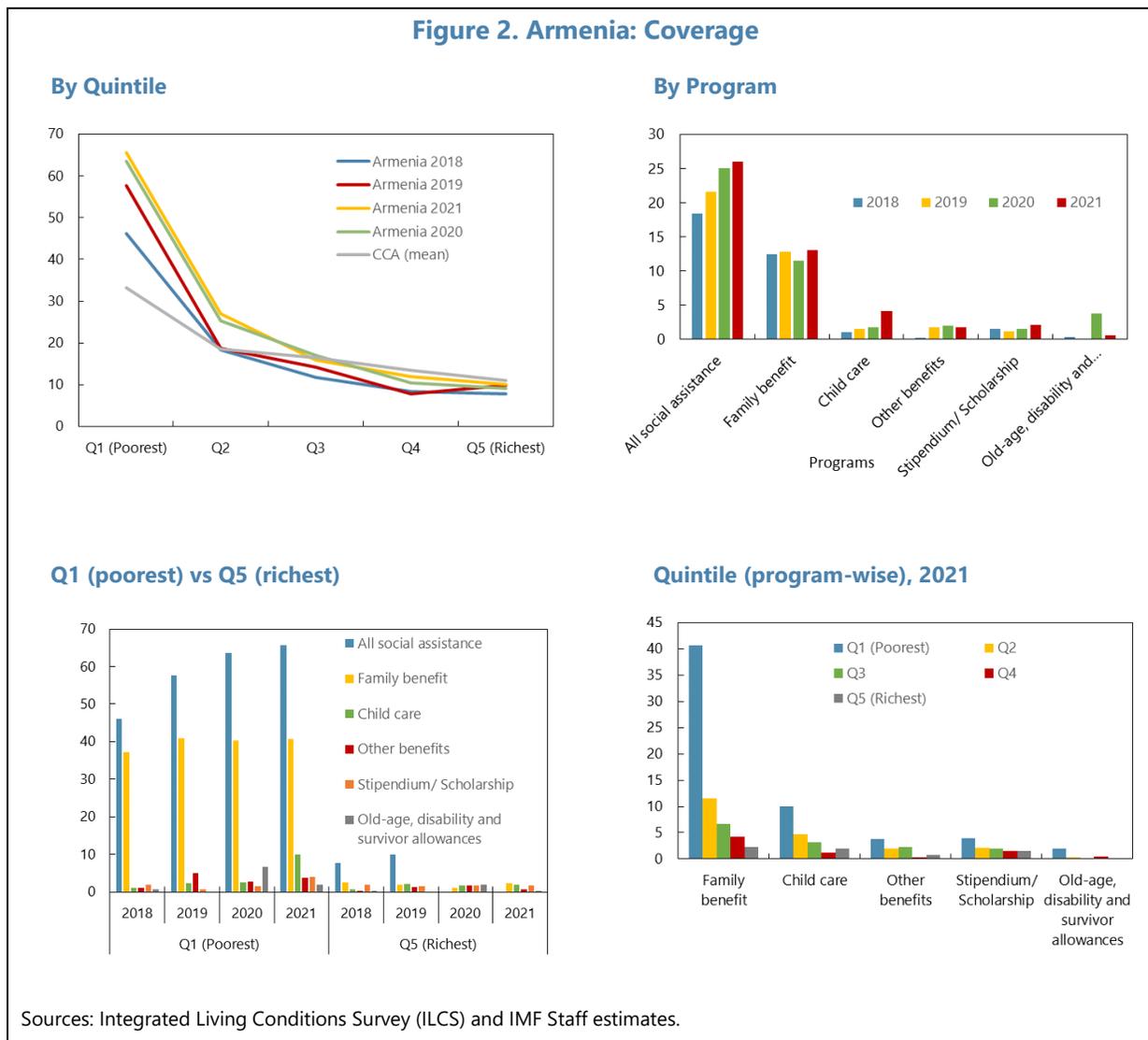
6.   The adequacy of social assistance programs in Armenia could be strengthened to avoid disincentives to work. The adequacy of social assistance is defined as the total transfer amount received by all beneficiaries in the population (or pre-transfer quintile) as a share of the total income/expenditure of beneficiaries in that quintile (World Bank, 2018, IMF, 2020). In 2021, the amounts received as a percentage of total income were 20 percent for the beneficiaries in the overall population compared with a CCA average of 14 percent. For quintile 1 (poorest) and quintile

5 (richest), the social assistance transfers constitute 32 percent and 9 percent of total income, respectively. This is slightly more generous than the CCA average of 26 percent and 5 percent. While the adequacy of SSNs in the poorest quintile seems reasonable, it is still considerably low for the overall population including for the family benefit program (i.e., 25 percent) as well as for quintile 2 (17 percent) and 3 (14 percent). The adequacy of the SSNs (excluding the Family Benefit Program) could be improved, with a ratio of 25–30 percent considered to be adequate to support incomes while discouraging disincentives to work.

Figure 3. Armenia: Adequacy

Sources: Integrated Living Conditions Survey (ILCS) and IMF Staff estimates.
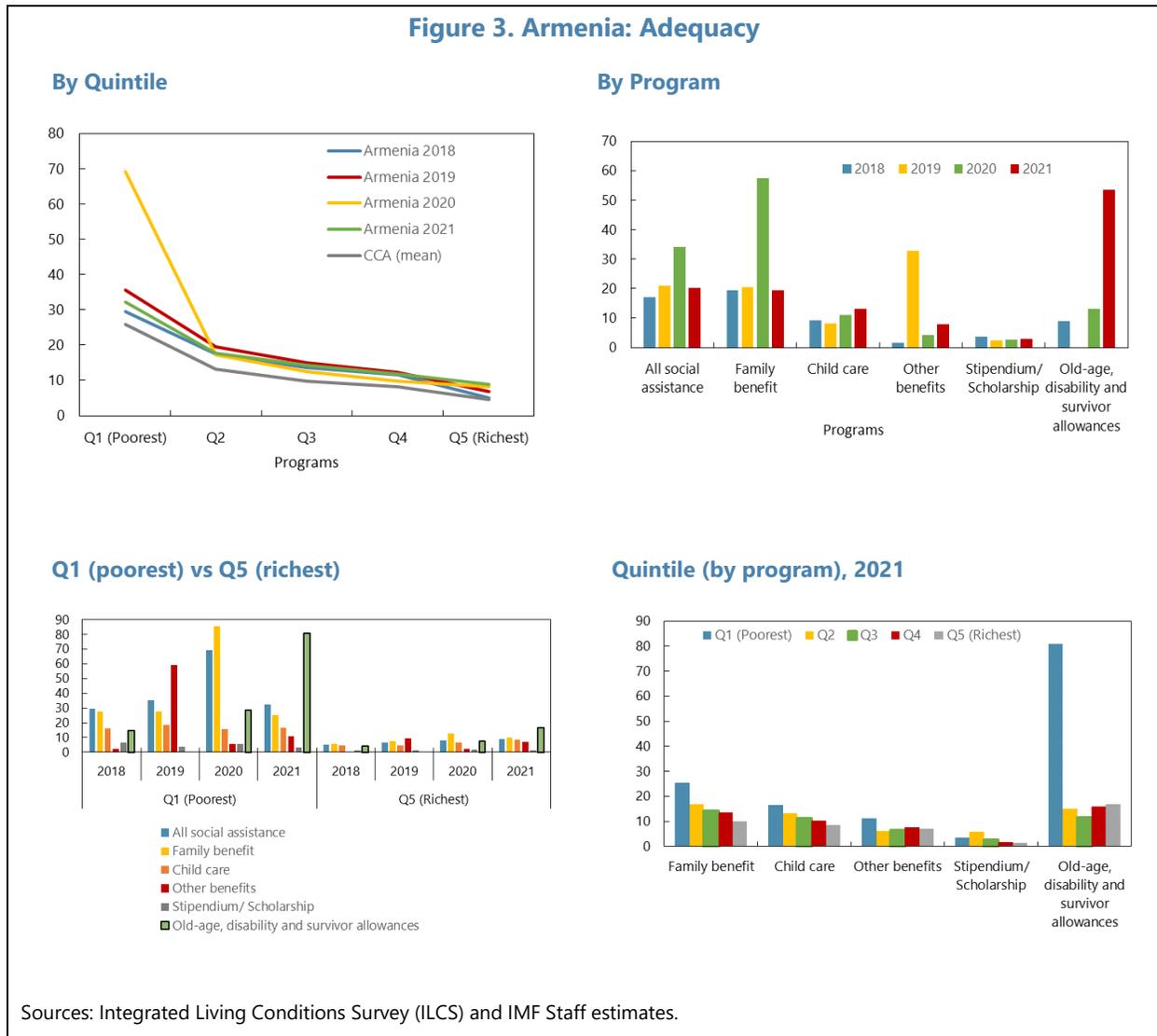
7.   Most social assistance programs in Armenia could be better targeted by allocating greater share of benefits to the poorest. Benefit incidence, which measures targeting of a social assistance program, is defined as the percentage of benefits going to each group (e.g., quintile) of the pre-transfer welfare distribution relative to the total benefits going to the population (World Bank, 2018 and IMF, 2020). In 2021, the poorest quintile received 56 percent of all social assistance transfers (vs. 47 percent in the CCA) and the richest quintile received 7.5 percent (vs. 12 percent in the CCA). Since the benefit incidence is relatively even across quintiles for all programs other than the Family Benefit Program, improvements could be made in the targeting of these programs.

Figure 4. Armenia: Benefit Incidence
(In percent)

Sources: Integrated Living Conditions Survey (ILCS) and IMF Staff estimates.
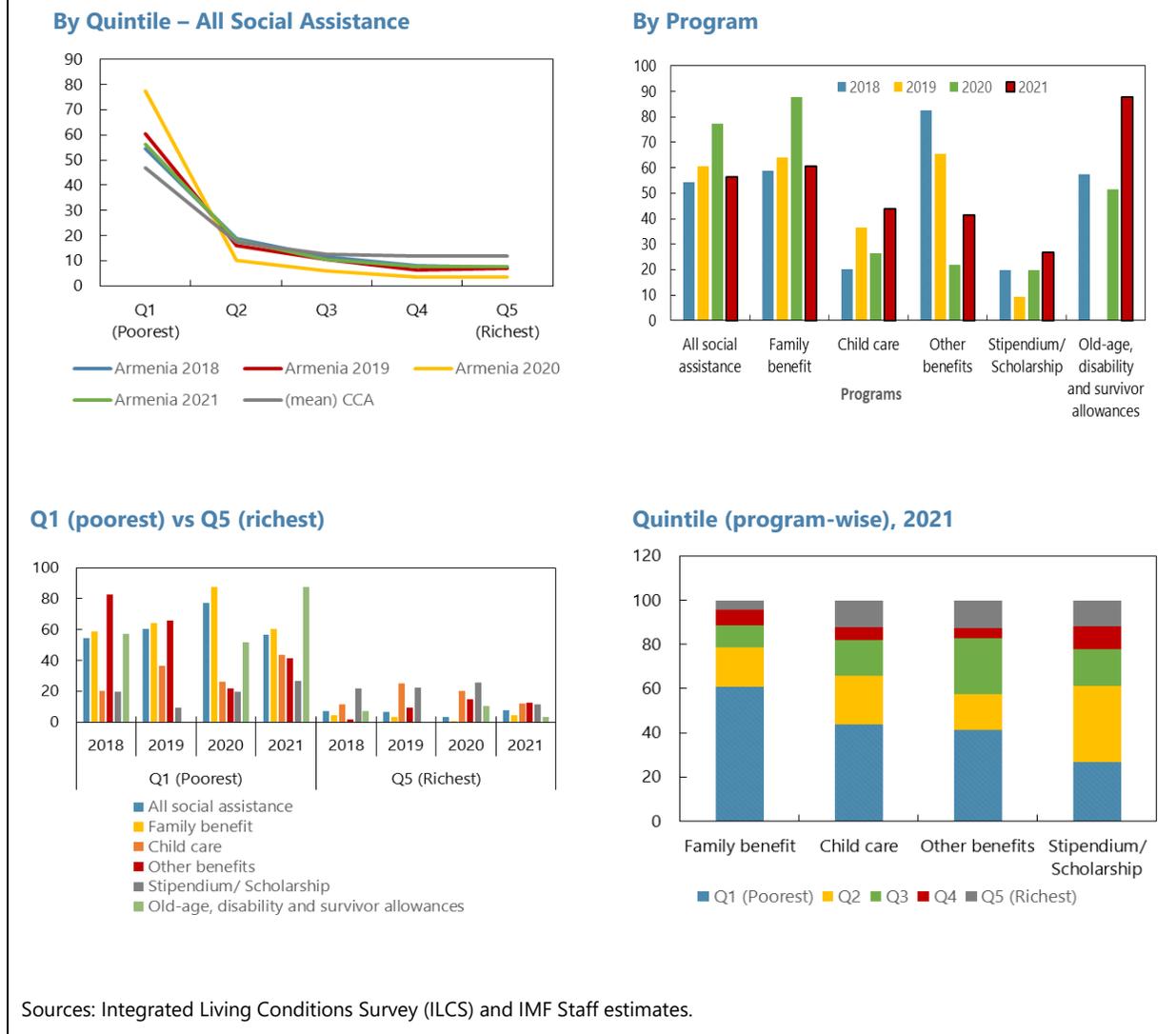
8.   **Most programs could also be better targeted towards beneficiaries among the poorest and reducing leakages to richer.** Beneficiary incidence is the percentage of program beneficiaries in a quintile relative to the total number of beneficiaries in the population (World Bank, 2018, IMF, 2020). Beneficiary incidence at the poorest quintile for Armenia at 50 percent is better than the CCA average of 40 percent. Quintile-wise distribution is also better than the CCA, but still around 17 percent of the beneficiaries reside in the richer two quintiles. Beneficiary incidence is more even across quintiles for all programs other than the family benefit program, which partly reflects the universality of the programs (e.g., childbirth and childcare benefits[4], and some share of stipendium that is distributed regardless of the income status). For the family benefit program, the authorities are working with the World Bank and the United Nations International Childrens Emergency Fund (UNICEF) to adopt a new methodology for family vulnerability assessment (to improve targeting,

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[4] However, since 2022 the size of childcare benefit differs depending on whether the parent is employed or unemployed and whether they are employed in urban or rural areas.

minimize inclusion and exclusion errors and encourage employment activation) as well as administrative improvements (through unified information systems).

Figure 5. Armenia: Beneficiary Incidence
(In percent)

Sources: Integrated Living Conditions Survey (ILCS) and IMF Staff estimates.
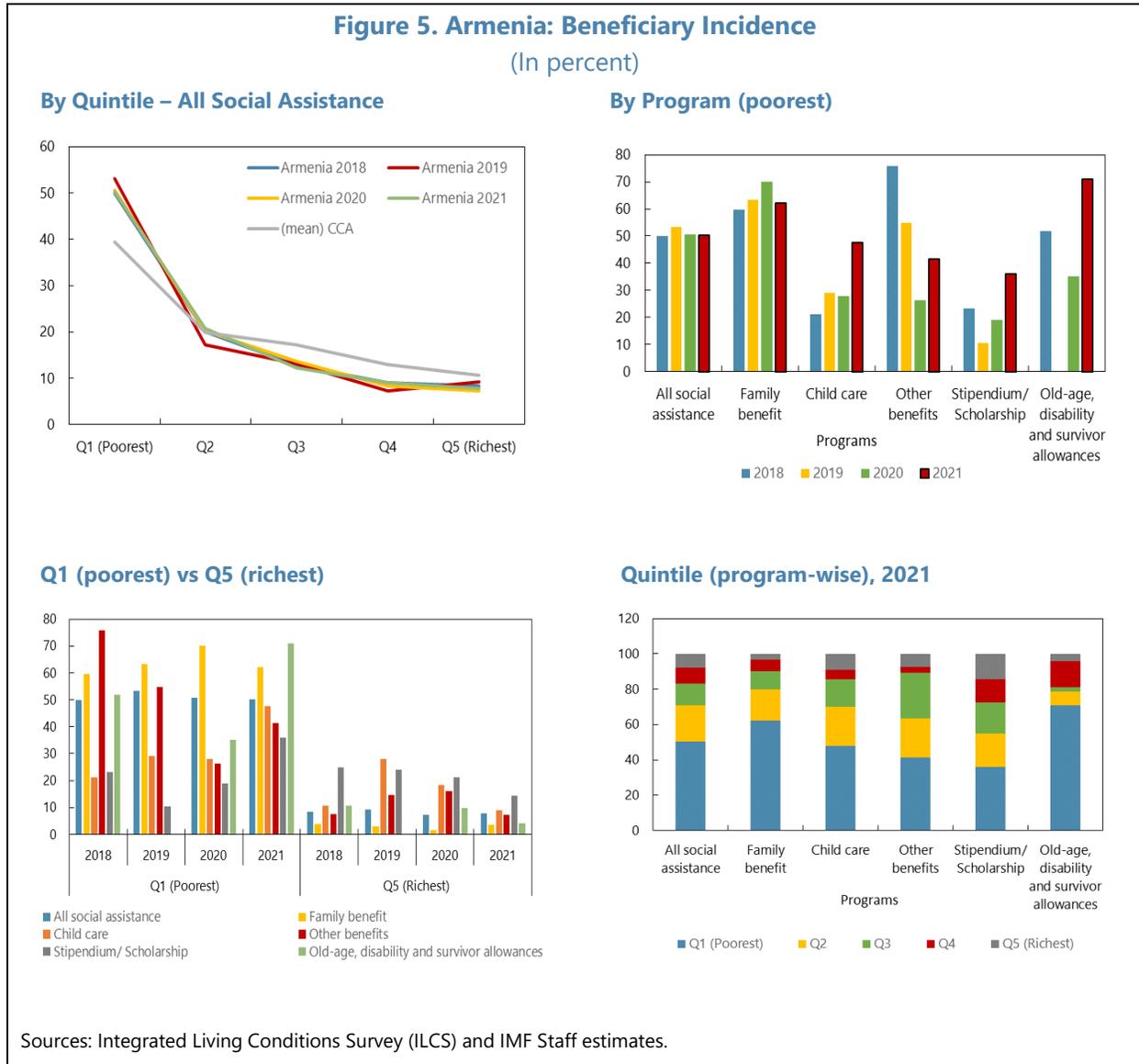
9.   There is a significant scope to reduce the under-coverage and leakage of the social assistance programs to support the poor. Under-coverage refers to the percent of poor individuals that do not receive social assistance, while leakage is the percent of individuals that receive transfers and are not poor. The targeting differential measures the difference between the coverage rate and the participation rate for the non-poor. Under-coverage and leakage exist within Armenia's overall social safety net and across programs. Under-coverage of the poor is 68 percent and leakage of benefits around 31 percent for the family benefit program, which fairs better than other programs. For other programs, the large under-coverage (>90 percent) and leakage reflect the design of the programs, which is intended to target specific socio-economic groups (e.g., families with children) rather than poverty.

Table 2. Armenia: Social Safety Nets: Coverage and Leakage (2021)

Social Assistance Programs	Coverage of the poor (1)	Under-coverage (2)	Leakage (# of beneficiaries) (3)	Leakage (benefits) (4)	Targeting differential (5) = (1) - (3)
All social assistance	52.9	47.1	36.1	32.6	16.7
Family benefit	32.3	67.7	29.4	31.3	2.9
Childcare	8.9	91.1	42.5	46.7	-33.6
Other benefits	3.3	96.7	52.6	54.3	-49.3
Stipendium/ Scholarship	3.4	96.6	58.6	68.6	-55.2
Old-age, disability, and survivor allowances	1.6	98.4	25.9	11.0	-24.3

Under-coverage is the percent of total poor individuals that do not receive transfer.

Leakage is the percent of individuals that receive transfer and are not poor.

Sample of all households. under coverage and leakage are calculated across this sample, setting as expansion factor the household expansion factor multiplied by the household size.

The targeting differential is the difference between the coverage rate and the participation rate for non-poor.

Source: Integrated Living Conditions Survey.

Table 3. Armenia: Impact of Social Assistance Transfers in 2021

Reduction in Index	Armenia	CCA (mean)
Poverty Headcount Index	20 percent	8 percent
Poverty Gap Index	72 percent	20 percent
Gini Index	11 percent	3 percent

Source: Integrated Living Conditions Survey.

Table 4. Armenia: Impact of Programs on Poverty and Inequality Measures in 2021: Simulating the Absence of a Program in All Households

Social Assistance Programs	Poverty headcount	Poverty Gap	Squared Poverty Gap	Gini
Post-transfer Indicators	0.262	0.047	0.014	0.232
Indicators without listed transfer				
All social assistance	0.315	0.081	0.035	0.259
Family benefit	0.286	0.063	0.023	0.245
Childcare	0.270	0.050	0.015	0.234
Other benefits	0.264	0.048	0.014	0.233
Stipendium/ Scholarship	0.263	0.047	0.014	0.232

The simulated impact is the change in a poverty or inequality indicator due to transfer, assuming that household welfare will diminish by the full value of that transfer.

Source: Integrated Living Conditions Survey.

10.   Armenia's social assistance programs are effective at achieving better social outcomes, especially compared to peer countries. In 2021, the Gini index (a measure of inequality) improved by 11 percent, the poverty gap index (measuring the average shortfall in consumption from the

poverty line) improved by 72 percent, and the poverty headcount index (a measure of poverty) declined by 20 percent owing to SSNs alone. The improvement in all indexes was better than the average in the CCA region.

11.   The social assistance programs in Armenia have also been cost-effective. With considerable contribution towards reducing poverty in 2021, their benefit-cost ratio was near 0.8 overall[5]. The benefit-cost ratio exceeded 0.8 for the Family Benefit Program, which contributed the most to reducing the poverty gap in Armenia.

Table 5. Armenia: Benefit-Cost Ratio (2021) (In billions of Armenian drams)					
Social Assistance Indicators/Programs	Simulated poverty gap without transfer	Actual poverty gap	Difference (dPG)	Total amount spent (X)	Benefit-Cost (dPG0/X)
All social assistance	293.2	241.1	52.1	68.0	0.77
Family benefit	265.0	241.1	23.9	28.7	0.83
Childcare	246.4	241.1	5.3	6.7	0.79
Other benefits	242.4	241.1	1.2	1.7	0.71
Stipendium/ Scholarship	241.7	241.1	0.6	0.9	0.61
Old-age, disability and survivor allowances	243.7	241.1	2.5	3.9	0.65

Benefit-cost ratio is the poverty gap reduction in a unit of local currency for each 1 unit spent on the social program and is a function of effective targeting and generosity of the program.

Source: Integrated Living Conditions Survey.

Reforming Armenia's Social Safety Net

12.   Several reforms are under way to strengthen the effectiveness of Armenia's SSN. The Armenian authorities, with support of international development partners, are working on several measures to improve the SSNs, aiming to:

- **Improve targeting:** Hybrid Means Testing based on incomes and assets for vulnerability assessment for the family benefit program is planned to be rolled out by January 2024. The new system is expected to improve the targeting by 10–15 percentage points, decrease the number of beneficiaries through better targeting and increase the effectiveness of the program (i.e., families with high dependency ratio could overcome extreme poverty). Introduction of PIT declaration system to reduce informality and better assess the beneficiaries' incomes will help improving the beneficiary and benefit incidence of the SSNs.

- **Enhance adequacy and coverage:** Mandatory activation for all persons able to work aged 18–62 and support for skill upgradation by putting in place an employment strategy and active labor

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[5] A benefit-cost ratio higher than 0.75 is considered good, and Armenia ranks high among the regional peers in terms of benefit-cost ratio of the social assistance programs.

market programs will reduce the number of beneficiaries for various social assistance programs, including the family benefit program, and help increase coverage and adequacy of the SSNs.

- **Modernize and improve efficiency of the system:** Modernization of social assistance laws to provide for expansion of types of social assistance services, improved shock responsiveness and strengthening unified social system will strengthen the legal basis and coordination for improving coverage and reducing leakages in social assistance programs. Preparation of a Strategy on integrated Social Services will help improve overall efficiency of the system.

- **Strengthen the SSNs for disabled persons:** Disability reforms to switch from medical model to functional model (health, education, etc.) of assessment will enable better targeting of programs for disabled persons and introduction of E-disability platform would improve employment activation and efficiency of the system.

13.   These measures are timely considering the lessons learnt from the COVID episode, limitations of the current system, and growing fiscal expenditure pressures. The COVID-19 crisis underscored the importance of strong SSN in protecting the vulnerable. The Armenian authorities responded well by employing good international practice in expanding social safety nets. Improved targeting and coverage of the social assistance spending helped reduce poverty, poverty gap and poverty severity in Armenia. However, the adequacy of benefits for 2020 was unusually high. Hence, it was imperative to normalize the adequacy of the SSN, including the family benefit program to avoid creating disincentives to work post COVID. Distortions could arise from two sources: (1) a high participation tax (i.e., if benefit withdrawal rates are steep, once a beneficiary becomes employed); (2) A strong income effect (from generous benefits), which appears to be the case for Armenia, might encourage low-income workers to stop looking for jobs and fall into poverty traps. The lessons learnt during the COVID crisis could help in adequately expanding the SSN to accommodate the additional emergency humanitarian and development spending pressures arising from the recent refugee inflow. In this context, improving the efficiency of the SSN would complement revenue mobilization and expenditure prioritization measures to support medium-term fiscal sustainability.

Conclusions

14.   Armenia's Social Assistance programs are cost-effective with high benefit-cost ratios. SSN has helped contain poverty, the poverty gap, and inequality, but leakage and under-coverage is still very high for the social assistance programs. While the SSN fares well on average relative to those in CCA peers, the social assistance spending is still very low compared with that in other emerging and advanced economies.

15.   SSN reforms could help improve automatic stabilizers in Armenia. The SSN can be strengthened by expanding the coverage, improving the adequacy, and strengthening the targeting of the programs. Armenia's SSN should encourage activation of the vulnerable and steady transition to the labor market. Government plans to strengthen the SSN by improving the vulnerability assessment mechanism, modernizing the legal, policy and strategic frameworks, and developing integrated social services will help achieve these objectives.

Annex I. Social Assistance Programs, Eligibility, and Size[1]

Type of Social Assistance	Eligibility	Size of assistance (as of end 2021)
Family Living Standards Enhancement Benefits, o/w		
Family allowance	Vulnerable families with minors, registered in the family benefit system and assigned a vulnerability score above the threshold	Consists of a basic benefit (18,000) and a supplementary benefit (AMD 5,500–8,000 a month for each eligible child depending on geographical location and the vulnerability score).
Social allowances	Vulnerable families without minors, registered in the family benefit system and assigned a vulnerability score above the threshold	AMD 18,000
Emergency allowance, o/w		
Lump sum allowance	Those eligible for family allowance	(1) childbirth - AMD 50,000, (2) Child of school entry age - AMD 25,000, (3) Diseased family member - AMD 50,000
Allowance for a quarter	Vulnerable families that do not receive family allowances or social allowances, but have a vulnerability score above 0 and face urgent distressed life periods	Equals to social allowance and is paid for 3 months
Childcare benefits up to 2 years of age	All parents	AMD 26,500 per month, per child
Other benefits, o/w		
Child benefits	All citizens	1st and 2nd child - AMD 300,000 3rd and 4th child - AMD 1,000,000 5th and following child - AMD 1,500,000
Housing assistance for families with children	Parent (citizen) of the child who owns a residential real estate acquired or under construction on a mortgage loan	2020–23 state housing support programs for families with children include: (1) One-time financial assistance for purchasing an apartment in the regional settlements; (2) Financial assistance to families for prepaying mortgage liability insurance; (3) Assistance to families repaying a mortgage loan once a child is born.
Maternity leave	All citizens	For employed citizens – pregnancy and childbirth period is 140 days. Amount of benefit depends on average salary. For unemployed citizens – AMD 156,600

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[1] After 2021, base benefit, old age and other benefits have increased and eligibility criteria for some programs have been modified. In addition, government introduced financial support program for families with 3 or more children.

Type of Social Assistance	Eligibility	Size of assistance (as of end 2021)
Childcare and upbringing financial support to foster families	Foster parents	General-type foster families receive the minimum monthly salary Specialized-type foster families receive the minimum monthly salary plus 30 percent as supplement Crisis-care foster families receive the average monthly salary on a pro rata basis (i.e., depending on the number of days they care for child).
Funeral allowance	In case of death of person receiving pension, old-age allowance, benefit for loss of breadwinner or disability benefit	AMD 200,000
Stipendiums	Students with high grades, good ethics, and socially active (also winners of professional competitions/examinations in art universities), as well as students from border or highland settlements and in training	Depends on vulnerability score of student's family and tuition amount
Old age, disability, and survivor allowances	Those in old age, with disability, and loss of breadwinner	AMD 26,500
Sources: Armenia – Law on State Benefits.		

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