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Monetary Policy Frameworks and Communication in the Caucasus and Central Asia

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ABSTRACT: Central banks in Caucasus and Central Asia (CCA) have been enhancing their monetary policy frameworks in the last decade, and are at different stages of the transition to a type of inflation targeting regimes. This paper documents their progress and the current state of their monetary policy framework, utilizing the IAPOC index developed by Unsal and others (2022) covering Independence and Accountability, Policy and Operational Strategy, and Communications, as well as drawing from central banks' laws and websites. Additionally, an analysis of press releases from CCA central banks is conducted to evaluate their features, content, and tones. The findings highlight the need for further improvements in the areas of Independence and Accountability, as well as Communications, despite some recent advancements in the latter.

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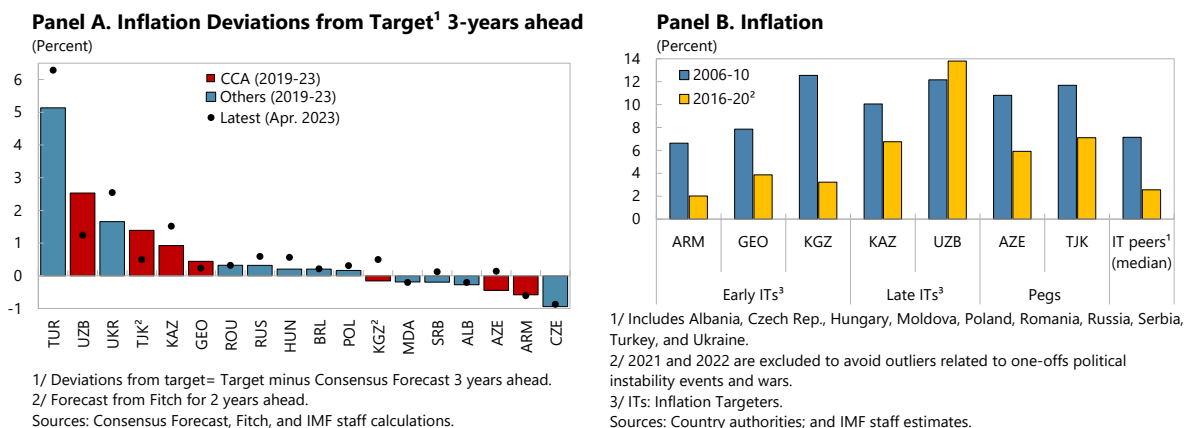
Contents

I.   Caucasus and Central Asia Context

1. Several Caucasus and Central Asia (CCA)[1] central banks (CBs) still face credibility challenges, which can influence their ability to anchor expectations and hinder an important channel of monetary policy transmission. In fact, these CBs exhibit significant gaps between inflation expectations and their targets, compared to peers (Figure 1 Panel A). Furthermore, the need for enhanced credibility in monetary policy is one of the driving factors behind the persistent and high dollarization observed in these countries.[2] Boosting monetary policy credibility can be achieved through a sound monetary policy framework (MPF). MPFs that prioritize an enhanced transparency and clearer communication can increase monetary policy predictability and therefore contribute to manage expectations, and ultimately make monetary policy more credible (Blinder and others, 2008). In this paper, we follow Unsal, Papageorgiou, and Garbers (2022) in defining the MPF as *"the structures in place that enable and guide the conduct of monetary policy. This encompasses both the legal basis—which shapes independence and accountability—and the design, implementation, and communication practices of monetary policy.*"

Figure 1. CCA Inflation and Inflation Gaps

Panel A. Inflation Deviations from Target[1] 3-years ahead
(Percent)

1/ Deviations from target= Target minus Consensus Forecast 3 years ahead.
2/ Forecast from Fitch for 2 years ahead.
Sources: Consensus Forecast, Fitch, and IMF staff calculations.

Panel B. Inflation
(Percent)

1/ Includes Albania, Czech Rep., Hungary, Moldova, Poland, Romania, Russia, Serbia, Turkey, and Ukraine.
2/ 2021 and 2022 are excluded to avoid outliers related to one-offs political instability events and wars.
3/ ITs: Inflation Targeters.
Sources: Country authorities; and IMF staff estimates.

2. In recent years, most of CCA CBs have been upgrading their monetary policy frameworks by progressing towards inflation targeting regimes (IT). As of 2021, all CCA countries, except Azerbaijan and Tajikistan, have announced IT regimes, with Armenia pioneering this shift in 2006.[3] Azerbaijan[4] and Tajikistan[5] have, however, expressed interest to start the transition towards it in the future. These CCA CBs that adopted the IT regime have made notable progress in terms of modeling and forecasting, monetary operations, and communications.[6] For example, significant improvements have been observed in communication practices, with these CBs now providing enhanced press releases and inflation reports, streamlined websites detailing monetary policy, and improved reporting of statistics. Figure 1 panel B shows that the CCA CBs which made the transition to IT earlier (Armenia, Georgia, and Kyrgyz Republic) have also achieved larger reductions in inflation.[7] Overall,

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[1] In this paper CCA includes the following countries: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan.

[2] Dollarization measured by FX deposits ranged 37-59 percent in CCA for 2021. See Cakir and others (2022) for a discussion of dollarization in CCA.

[3] Countries started of the transition into IT regimes in the following years: Armenia in 2006, Georgia in 2009, and Kyrgyz Republic in 2014, Kazakhstan in late 2015, and Uzbekistan in 2020.

[4] Main Directions of Monetary Policy 2020 (https://uploads.cbar.az/assets/STATEMENT-29.12.2019.pdf).

[5] National Bank of Tajikistan "Monetary Policy Objectives and Tasks" (https://nbt.tj/en/monetary_policy/maksad.php).

[6] In a broader context, investment in skilled human capital would benefit accurate inflation rate forecasting, supported by well-articulated narratives.

[7] For this paper, inflation refers to CPI (headline) inflation.

many CCA countries are still in transition to a fully-fledged IT consistent with the general idea of transition noted in Laurens and others (2015).

3. A well-structured monetary policy framework is key to improve transmission and to manage shocks. This is particularly important for CCA CBs, given their weak monetary policy transmission.[8] A solid framework underpinned by clear communication, among other key factors as Independence and Accountability, and Policy and Operational Strategy, strengthens the transmission to market interest rates. Blinder and others (2008) found that transparency and communication enhance the effectiveness of monetary policy, pointing out the importance of communication in the framework.

4. Communication plays a vital role in managing expectations by making policy more predictable. First, transparency in communication reduces uncertainty regarding the economic outlook.[9] Second, communication signals a conditional path of interest rates, reducing uncertainty of the policy itself. Market interest rates can incorporate this information and adjust accordingly. In this sense, improved communication facilitates management of monetary policy trade-offs (IMF, 2018). For example, when countries face a negative terms of trade shocks, they tend to also face depreciation pressures. In this context, if the inflation expectations are also affected, CBs can communicate the trade-off between increasing interest rates to contain second round effects and reducing interest rates to mitigate the negative income effect from the shock as well as the policy response.[10] This approach may help to manage expectations if the CB is deemed credible.

5. However, shallow financial markets and low financial literacy in the region may hinder the effectiveness of CBs' communication. While CBs' communication influences financial market expectations in advance economies, CCA's shallow financial markets may undermine such a channel. As CCA interbank markets are limited, yield curve for benchmarking assets is nearly non-existent and unreliable, thus impairing the price discovery mechanism in the financial sector. Consequently, information from the CBs may not be incorporated in a timely manner. CBs' communication can also influence households and firms' expectations to anchor inflation —although the effectiveness has been found lower in the case of a low inflation environment (Coibion and others, 2020). In the CCA, influencing economic agents may be even more challenging due to the low financial literacy[11] and the population mistrust of official institutions as in many transition economies.[12]

6. This paper aims to document the state of monetary policy frameworks and to analyze the monetary policy communications in CCA countries. It addresses two key questions for CCA: i) What is the state of their CBs' monetary policy frameworks and, particularly in terms of communication? ii) How are these frameworks evolving? The second section documents the improvements in CBs' monetary policy frameworks, transparency, and communication in CCA. The third section examines the main features of monetary policy press releases. Given the limited literature related to CCA CBs' communication, this paper aims to document the progress made and highlight areas for further improvement.

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[8] Poghosyan and others (2023).

[9] In principle CBs have more capacity to forecast than private sector and households so, disclosing forecasts, CBs can help to anchor inflation expectations.

[10] This reduces the need to increase short term interest rates as the CB explains the nature of the shock and signals a conditional tight monetary policy outlook.

[11] For instance, Georgia is the only CCA included in the 'financial literacy 'performance index (PISA data) by OECD. Georgian mean score for "Student performance in financial literacy" is 403 while the OECD countries scored 505 on average. Klapper and others (2020) report that the percent of adults who are financially literate are: 18 percent in Armenia, 35 percent in Azerbaijan, 30 percent in Georgia, 40 percent in Kazakhstan, 19 percent in Kyrgyz Republic, 17 percent in Tajikistan, and 21 percent in Uzbekistan. These percentages are below the average for the World average, which is of 37 percent.

[12] Based on "Government at a glance 2021" survey data by OECD, in the category "Trust in government, the civil service, the parliament, and the police" for year 2018, the percentage of answers "Not very much" or "None at all" in CCA countries is between 66.8 percent and 22.7 percent (49 percent is the OECD average). This survey does not include CBs.

II. Assessing Monetary Policy Frameworks (MPFs) in CCA

7. The institutional quality of the MPFs in CCA countries is relatively aligned with that of other developing economies, but there are still gaps with respect to best practices. To assess the overall institutional quality of MPFs, this paper used the IAPOC index,[13] developed by Unsal and others (2022). This novel index covers three pillars: i) Independence and Accountability, ii) Policy and Operational Strategy, and iii) Communications (see Annex I). An advantage of this index is its comprehensive evaluation of the MPFs, scoring between 0-1. This analysis focuses on four CCA countries—Armenia, Georgia, Kazakhstan, and the Kyrgyz Republic—due to data availability. The indexes for 2020 registered sizable improvements compared to their early stages of IT regime (Figure 2). The results also suggest that there is still room for improvements especially in two areas: Independence and Accountability, and Communications (Figure 3).

Figure 2. IAPOC, 2020
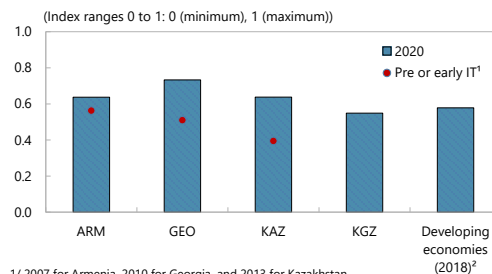
(Index ranges 0 to 1: 0 (minimum), 1 (maximum))

1/ 2007 for Armenia, 2010 for Georgia, and 2013 for Kazakhstan.
2/ Includes Argentina, Brazil, Chile, China, Colombia, Ghana, India, Indonesia, Kenya, Malawi, Malaysia, Mozambique, Mexico, Nigeria, Pakistan, Philippines, Poland, Rwanda, Serbia, South Africa, Tanzania, Turkey, Uganda, Ukraine, and Zambia.
Source: Unsal and others (2022).

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[13] Index of Independence and Accountability, Policy and Operational Strategy, and Communications (IAPOC).

Figure 3. Monetary Policy Frameworks – IAPOC Index, 2020

Panel A: CCA Average
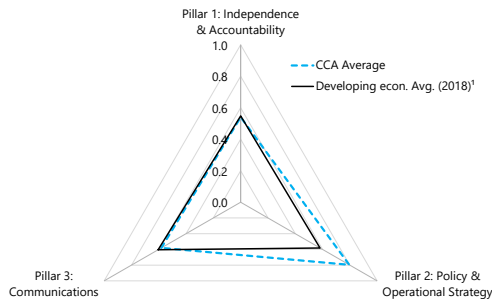
Panel B: IAPOC by Country
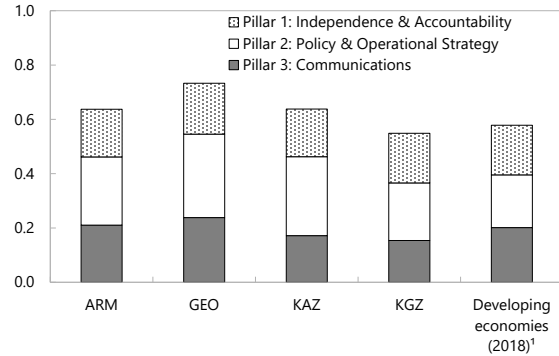
Panel C: Armenia
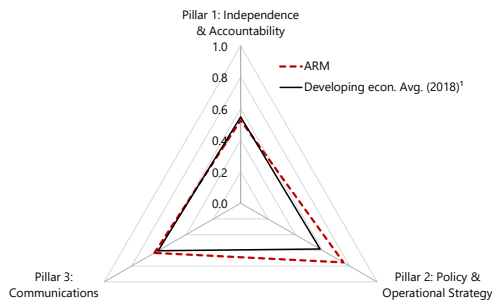
Panel D: Georgia
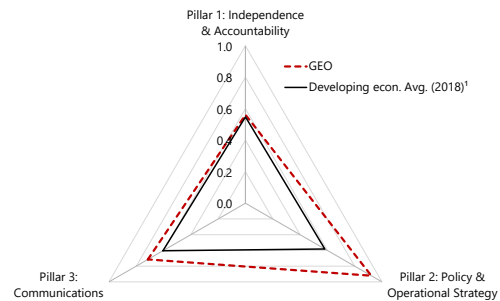
Panel E: Kazakhstan
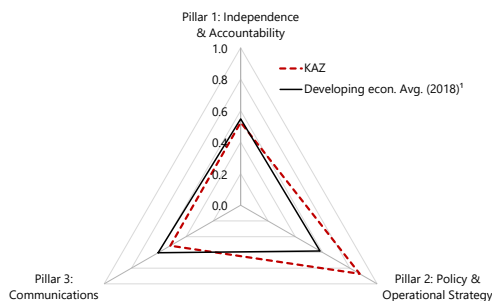
Panel F: Kyrgyz Republic

1/ Includes Argentina, Brazil, Chile, China, Colombia, Ghana, India, Indonesia, Kenya, Malawi, Malaysia, Mozambique, Mexico, Nigeria, Pakistan, Philippines, Poland, Rwanda, Serbia, South Africa, Tanzania, Turkey, Uganda, Ukraine, and Zambia.
Source: Unsal and others (2022).

Pillar 1: Independence and Accountability

8.   CCA CBs have clear mandates that establish price stability as an objective and grant them the authority to conduct monetary policy. Most CBs in the region have price stability as the main objective (Table 1). In addition, these CBs possess the necessary powers to implement monetary policy, including full

control over policy tools, and ability to set their own targets.[14] Typically, the responsibility for monetary policy decisions is assigned to a committee within the CB or its executive board, as specified by the respective laws and regulations.

Table 1. Main Independence and Accountability – De Jure Features - 2022[15]

	ARM	GEO	KGZ	KAZ	UZB	TJK	AZE
Independence							
Primary mandate of price stability	√	√	√	√	√	√	√
Chairman tenure longer than government[2]	√	√	√	√			
Board members tenure longer than government[2]	√	√	√				
Independent members to total number of board members[2] [3]	5 of 8	5of 9[16]	0 of 7	0 of 9	2 of 9	0 of 7	2 of 7
Chairman appointment	Parliament	Parliament based on presidential[1] recommendation	Parliament based on presidential recommendation	President with the consent of the Senate.	Parliament based on presidential nomination	Parliament based on presidential nomination	Parliament based on presidential nomination
Monetary Policy Committee	Board	Committee	Board	Committee	Board	Committee	Board
Of which independent members[2] [3]	5 of 8	0 of 13	0 of 7	0 of 9	2 of 9	0 of 10	2 of 7
Government financing							
Not permitted	√	√	√	√	√		
With limitations						√	√
Accountability							
Formal report to parliament	√	√	√		√	√	

[1] President of Georgia is a ceremonial position. Prime minister is the head of the government.

[2] Information on this table is drawn from some of the criteria on the MPF and is complemented with information from central banks' laws.

[3] This table considers independent board members as members who are independent of the chairman and the executive branch. It excludes board members who are central bank staff with management responsibilities, government officials, and board members whose appointment depends entirely on the chairman and the executive government.

Source: IMF staff based on central banks' laws, and Unsal and others (2022).

9.   Despite the legal provisions stating the independence of CCA CBs to implement monetary policy, de facto independence can be compromised in some countries within the region. Several loopholes exist that can undermine the independence of CBs in the following ways:

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[14] In some cases, the CB's targets are set in coordination with the government.

[15] Table 1 and Table 2 rely on information taken from both the MPF assessments based on Unsal and others (2022) and from other aspects covered in CCA CBs websites.

[16] The number board members increased from 7 to 9 by the amendment from Jun 25, 2020, law no. 6492-RS, the law was effective upon publication i.e., on July 2, 2020.

a. **Government influence over CB governors.** In most CCA countries, the CB governor is nominated and dismissed by the head of the government (president or prime minister) and approved by the parliament. This ensures independence of the CB governor on paper, in line with best practice.[17] In practice, the parliament performs limited oversight and checks on the proposals made by the head of government. Additionally, although CB laws establish conditions for dismissals, the judiciary systems provide limited protection for governors to appeal against dismissals, as courts rarely rule against government initiatives. Furthermore, the tenure safeguards for governors become less effective when the head of government remains in office for multiple terms, which is the case in several CCA countries.

b. **Composition of monetary policy committees.** In several CCA countries, the monetary policy formulating body — typically the executive board— lacks independent members.[18] As a result, the committee primarily consists of CB officials who answer to the governor. This setup gives the CB governor a significant influence,[19] and if there is government's influence over the governor, central bank independence might be compromised. These arrangements are partly driven by shortages of experts for these roles — the CCA CBs have been facing a trade-off between limited human capital and safeguarding independence.[20]

c. **Governance issues related to board members.** First, as mentioned, the majority of the CCA CBs have a limited number of independent board members.[21] This can directly affect monetary policy formulation when the board is responsible for monetary policymaking. Although not always disclosed, the board members' term is, in practice, shorter or equal to the government term except in Armenia, Georgia, and Kyrgyz Republic (Table 1).[22] Finally, the role of deputy governors can be undermined as they are appointed and dismissed based on the CB governor's recommendation. These issues can undermine independence, trust, and therefore credibility of monetary policy.

10. **CCA CBs are granted financial independence**. In most CCA countries, CB financing to the government is prohibited. Only Azerbaijan and Tajikistan allow narrow advances from the CB to the government within legal limits. The CCA CBs are not allowed to participate in primary government bond auctions,[23] while they can buy government bonds in the secondary market for monetary policy purposes. Actual participation of CBs in the secondary markets has followed this principle in recent years. At the same time, most CBs have clear rules to distribute profits, set up of reserves funds, and require government to recapitalize the CBs if their capital falls below the minimum capital.

11. **Accountability mechanisms are at an early stage in the region.** Most of the countries report de facto to the parliament (except Kazakhstan and Azerbaijan) on general central banks activities, and most countries publish CBs' audited financial statements (except Uzbekistan). However, accountability mechanisms are stronger in countries where parliament has a more prominent role such as Armenia, Georgia, and Kyrgyz Republic. The role of external audit committees is limited, and external evaluations of the monetary policy performance or governor's term have not been published.

Pillar 2: Policy and Operational Strategy

12. **Policy and Operational Strategy has significantly improved.** The four CCA countries assessed by Unsal and others (2022) have developed their monetary policy instruments and clearly set the policy interest rate as their main tool with price stability as objective. These CBs have reduced their policy rates corridors over time,

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[17] Best practices to insulate the governor from undue influence suggest i) tenures longer than the body that selects the governor (or asynchronized terms for the two bodies); or ii) a double veto arrangement where one arm of the government nominates, and another arm appoints the governor.

[18] For example, Georgia, Kazakhstan, Kyrgyz Republic, and Tajikistan have this setup.

[19] Lybek and Morris (2004) noticed this issue in a sample of 113 countries.

[20] Tuladhar (2005), highlights —for a sample of advanced and emerging economies— that committees dominated by insiders can be more consistent in the decisions process, communication, and accountability in particular during early transition to IT where competent experts are short in supply.

[21] In some countries, government officials are part of the board (Kazakhstan) or can express opinions on the board (Armenia).

[22] Term is not always disclosed in practice.

[23] Except in Georgia for rolling over of existing portfolios.

and some have been able to reduce the volatility of the interbank interest rates. Figure 4 shows Armenia and Georgia have reduced the volatility of market interest rates around the policy rate substantially, while others are still working to curb interest rate volatility suggesting the countries are still in transition to a full-fledged IT. On the other hand, other aspects, such as considering future risks and contingency plans in formulating monetary policy, still require further improvements.

Figure 4. Interbank Market Rates – Daily Indicators[1]

Panel A: Armenia
(Percent)

Panel B. Georgia
(Percent)

Panel C. Kyrgyz Republic
(Percent)

Panel D. Kazakhstan
(Percent)

Panel E. Uzbekistan
(Percent)

Panel F. Azerbaijan
(Percent)
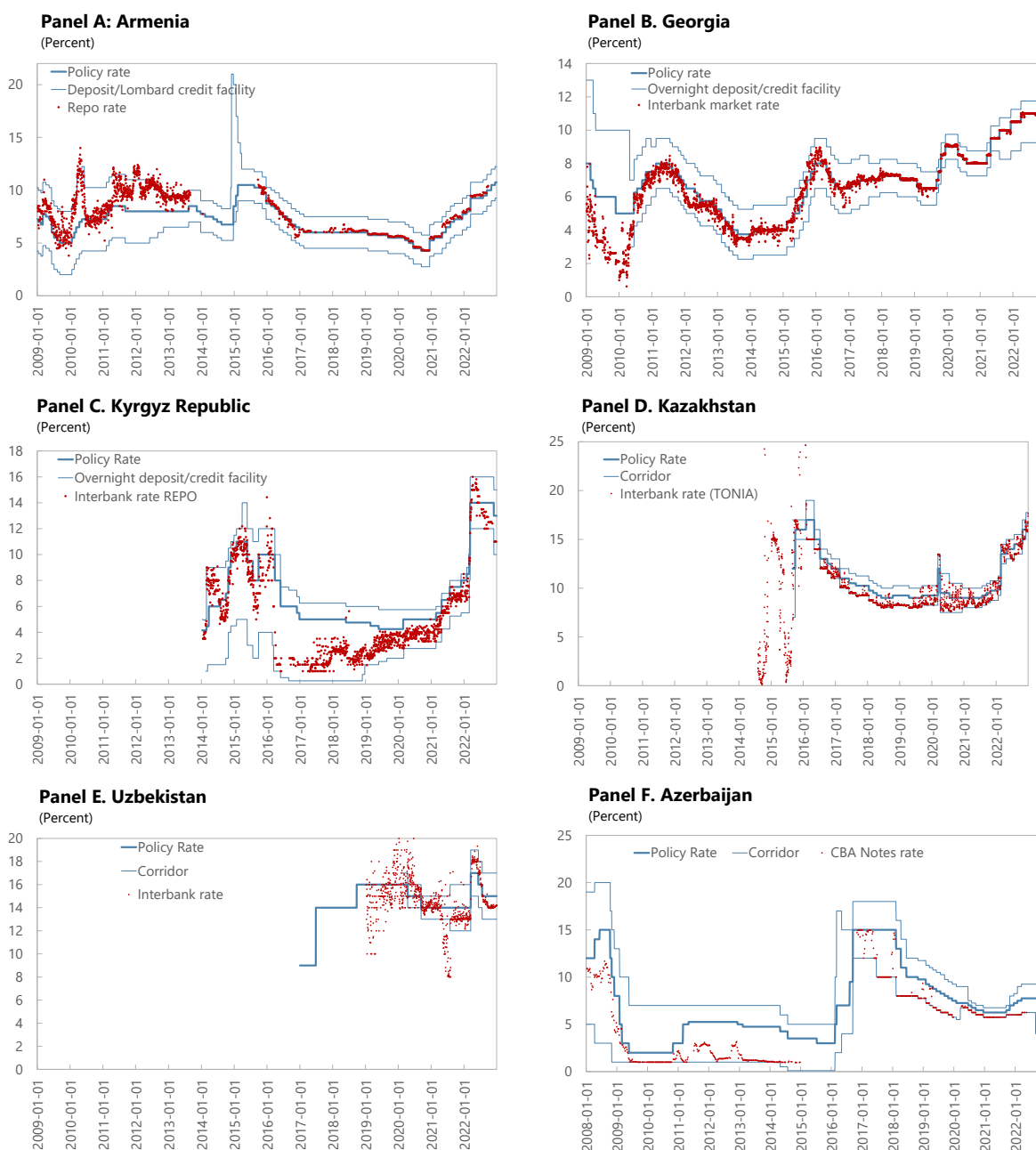
Source: IMF based on central banks' data.

1/ Corridors data are at daily frequency, and interbank rates are at the highest frequency available (as for some, the market interest rate is determined weekly during the central bank auctions). Latest data as: December 30, 2022 for Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, and Uzbekistan; and Sepember 30, 2022 for Armenia.

13. Moreover, while the policy rates have been the main monetary policy tool, CBs have been less clear regarding the role of FX intervention policy.[24] Several CBs are vague or are not always clear in terms of their FX intervention strategy and the details on interventions are not disclosed every time, despite the significant exchange rate transmission channel (Poghosyan, 2020). Few countries, including Kyrgyz Republic and Georgia, release daily data on FX interventions, often with lag. Other CCA CBs report only monthly aggregated information which may muddle public understanding of their FX policy implementation. The population may perceive the exchange rate as a key anchor for prices, especially in more fixed FX regimes. CBs might also tend to avoid disclosing information that can be misinterpreted and consequently destabilize the FX market, in particular when their de jure and de facto regimes do not coincide (see as in case of "fear of floating"). This dynamic is usually observed during the transition to from a peg to IT, or what Stone (2003) denoted as "inflation targeting lite".[25]

14. Overall, the CBs in the region could gain from improving de facto Independence and Accountability, and also refining their Policy and Operational strategies. Ensuring the independence of the monetary policy formulating body is not only a legal requirement but also requires practical implementation. While circumstances vary across countries, the region can benefit from strengthening safeguards against political interference, improving check and balance within the CB, and appointing more independent members to the monetary policy formulating body. Achieving de facto independence takes time and involves changing the prevailing political culture. However, in the near term, two key actions can be pursued. First, upgrading the legislation to the best practices and in particular enhancing the skills requirements for the monetary policy formulating body[26] including the governor and tightening the dismissal requirements. Second, the CBs can highlight the role of independence on their communications, a message that can gradually be internalized by the government, politicians, and the public. In addition, CBs that intervene in the FX market can benefit from ex-ante explanation of such actions, including their relationship with the main tool and how they are balanced, in the context of their Policy and Operational Strategies.

III. Zooming into Communication and Transparency in CCA

Pillar 3: Communications

15. Effective communication plays a crucial role in anchoring inflation expectations and enhancing the predictability of monetary policy. Specifically, within the IT framework, the goal of communication is to persuade economic agents that policy formulation and implementation are oriented to achieve the inflation target. Blinder (2009) states that *"successful central bank communication efforts should make policy more predictable and market expectations about future short-term rates more accurate"*. The predictability enhances the pass-through of monetary policy transmission and reduces deviations of inflation expectations from the CB's target. Communication can build up CB's credibility if economic agents realize CBs' messages are informative and valid.

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[24] These interventions and their disclosures can be also linked to the de facto FX regimes of the country. Based on IMF AREAER 2020, Armenia since 2020 has increased its flexibility and was reclassified to floating from stabilized. Georgia and Kazakhstan are de jure and de facto floating. In these countries, FXI are likely not applied to manage FX or its volatility. This instrument is assumed to be in place instead in Azerbaijan, the Kyrgyz Republic, Tajikistan, and Uzbekistan as they have de facto stabilized or "Crawl-like" arrangements.

[25] These countries announce inflation targets in a broad sense and aim to bring inflation into the single digits, including through a relatively interventionist exchange rate policy.

[26] This higher human capital implies less room for government influence as board members or governors will stand more strongly to their mandates. At the same time, the government will have less incentives to replace members as it will be more difficult to find replacements that can be open to government influence.

16. The IAPOC Index shows in its Communications pillar that CCA countries are generally in line with those of developing economies. Notably, the Kyrgyz Republic receives the lowest score, whereas Georgia exhibits the highest one (Figure 5). More broadly, there remains room for improvement in several aspects of communication within these countries. Specifically, there is a need to place a greater emphasis on disclosing forecasts and inflation expectations surveys, as well as ensuring the timely release of press conferences on the CBs' websites. Moreover, certain CCA countries would benefit from enhancing their communication vehicles by providing a more comprehensive explanation of their policy stance and articulating the path it is likely to take in the future.

Figure 5. IAPOC – Communications, 2020

(Index ranges 0 to 1: 0 (minimum), 1 (maximum))
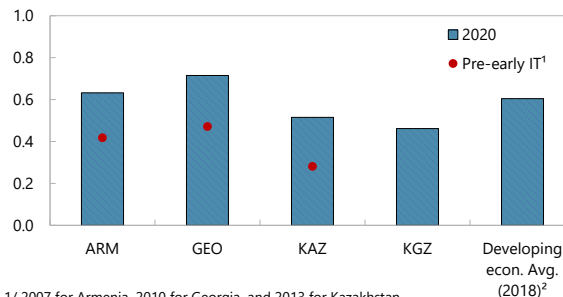
1/ 2007 for Armenia, 2010 for Georgia, and 2013 for Kazakhstan.
2/ Includes Argentina, Brazil, Chile, China, Colombia, Ghana, India, Indonesia, Kenya, Malawi, Malaysia, Mozambique, Mexico, Nigeria, Pakistan, Philippines, Poland, Rwanda, Serbia, South Africa, Tanzania, Turkey, Uganda, Ukraine, and Zambia.
Source: Unsal and others (2022).

Table 2. Main Communications Features - 2022

		ARM	GEO	KGZ	KAZ	UZB	TJK	AZE
Selected Framework Features								
Start of IT transition		Jan-2006	Dec-2009	Mar-2014	Sep-2015	Jan-2020	—	—
Inflation Target (as set end 2022)		4 ±1.5% (over 3 years)	3% (Medium term)	5-7% (Medium term)	4-6% 2021-22 4-5% 2023-24 3-4% 2025+	10% 2021 5% 2024+	6 ±2% (Medium term)	4 ±2% (Medium term)
Communications Vehicles								
Objectives	Monetary Policy Guideline	√	√ (Annually)	√	√ (Annually)	√ (Annually)	√	√ (Annually)
Policy decisions	Press release	√	√	√	√	√	√	√
	Committee Minutes	√						
	Monetary Policy Report (F: incl. forecast)	√ (F)	√ (F)	√ (F)	√ (F)	√ (F)	√ (F)	√ (No F)
Accountability	Annual report	√	√	√	√	√	√	√
	Audited financial statements	√	√	√	√		√	√
Active on Social Media		Facebook Youtube	Facebook Youtube	Facebook Youtube	Facebook Youtube Telegram	Facebook Youtube Telegram		Twitter Facebook Youtube

Source: IMF based on central banks' websites and Unsal and others (2022).

17. CCA CBs utilize the same vehicles of monetary policy communication as in other countries around the World. CBs communicate greater volume of information through a range of vehicles including monetary policy reports, press releases and conferences, but recently also via social media (see Table 2). Most CBs have a monetary policy strategy document explaining the policy objectives and tools. They also use press releases to communicate the decision on the main monetary policy tool (interest rates) and monetary policy reports that disclose inflation and activity forecasts. A survey of CCA CBs (Box 1) points out that CBs view press releases and monetary policy reports as their main communication vehicles. They also follow the different stages of transition to IT. While countries that are more advanced in the transition to IT (Armenia and Georgia) use monetary policy reports as their main communication vehicle, countries at an early transition uses press releases for the purpose.


Box 1. Views from CCA Central Bankers

A survey of central bank officials (June 2021) developed by the Joint Vienna Initiative (JVI)-IMF offers some insights into communications vehicles.

CBs point out that monetary policy reports and press releases are the most relevant for

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monetary policy. CBs were asked to rank them by relevance. CBs ranked monetary policy reports and press releases at the top, and social media posting at lower rankings. This highlights that while CBs try to directly contact wider audiences, social platforms still have a secondary role.

What are the CBs main communication vehicles according to CCA CBs?

|	ARM	GEO	KGZ	KAZ	UZB	AZE
Inflation/Monetary Policy reports						
Press releases						
Press conferences						
Social media postings						
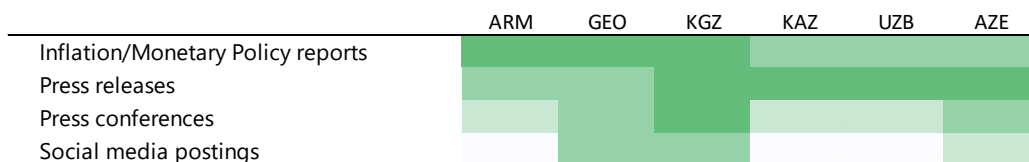
Note: Darker = more relevant.

Source: IMF based on JVI survey of central bank officials (June 2021).

CB officials had heterogenous views on the impact of communication on key economic variables. Officials were asked to assess if the impact of communication on 3 economic variables were high, low, or none. All officials assessed CB communication has an impact (either low or high) on interest rates, inflation expectations, and exchange rate. All CBs rejected view that communication has no impact on these variables. The distributions among high or low impact showed even views. Two highlights are: First, 4 out of 6 CB consider the impact of communication on inflation expectations is high. Second, 5 out of 6 CBs consider that the impact of communication on retail interest rates is low.

What is the impact of CB communication on the following variable and their volatility?
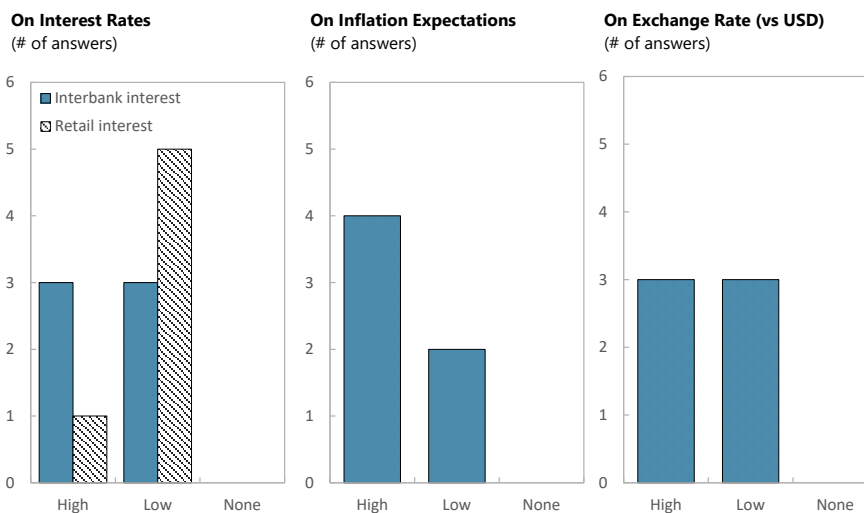
Source: JVI and IMF staff calculations based on central banks responses.

18. The press releases —one of the main communication vehicles— have been upgraded across the region. To document the progress in communication, we look at the press releases of monetary policy decisions in detail.[27] Unsal and others (2022) suggests that press releases —among other topics— should communicate i) the economic conjuncture, ii) the risks to outlook for objectives and target; iii) the explanation of monetary policy decisions and how they help to achieve the CB's goals and iv) the monetary policy stance and its future path. We find that CCA CBs have improved their press releases, by increasing their length and focusing the discussion on topics consistent with central bank objectives, but there are still issues that can be improved.

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[27] We cover press releases available for the period January 2006 to December 2021.

Figure 6. Press Release Length and Readability¹

Panel A. Armenia
(# of words) (Index; higher = easier reading)
- Length of text
- Text easy readability (Flesch)
- <- IT announced (2006)

Panel B. Georgia
(# of words) (Index; higher = easier reading)
IT announced

Panel C. Kyrgyz Republic
(# of words) (Index)
IT announced

Panel D. Kazakhstan
(# of words) (Index)
IT announced

Panel E. Uzbekistan
(# of words) (Index)
IT announced

Panel F. Azerbaijan
(# of words) (Index)
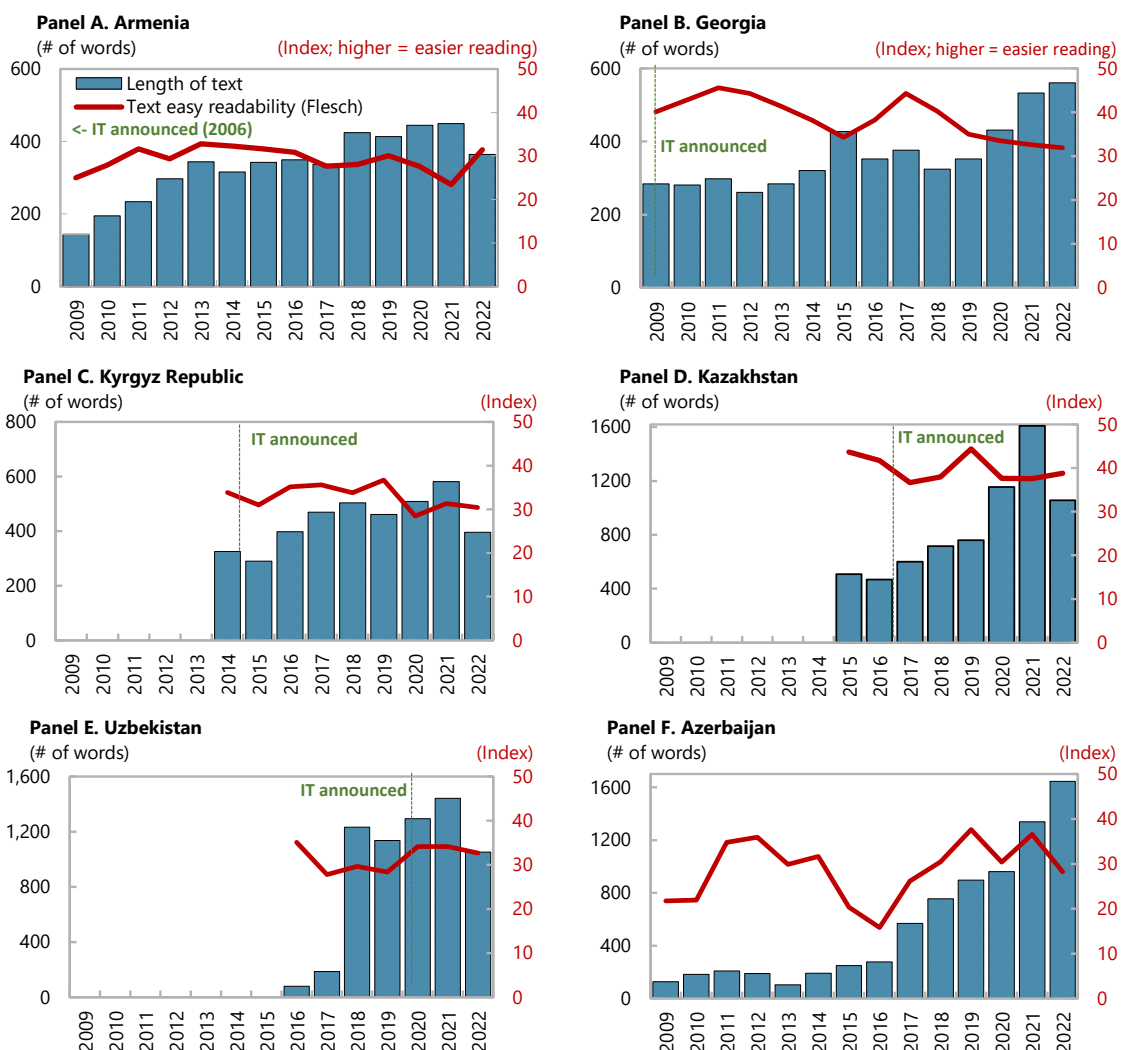
1/ The (Flesch) easy readability (RE) index is defined as RE = 206.835 – (1.015 x ASL) – (84.6 x ASW), in which ASL = average sentence length, and ASW = average number of syllables per word.
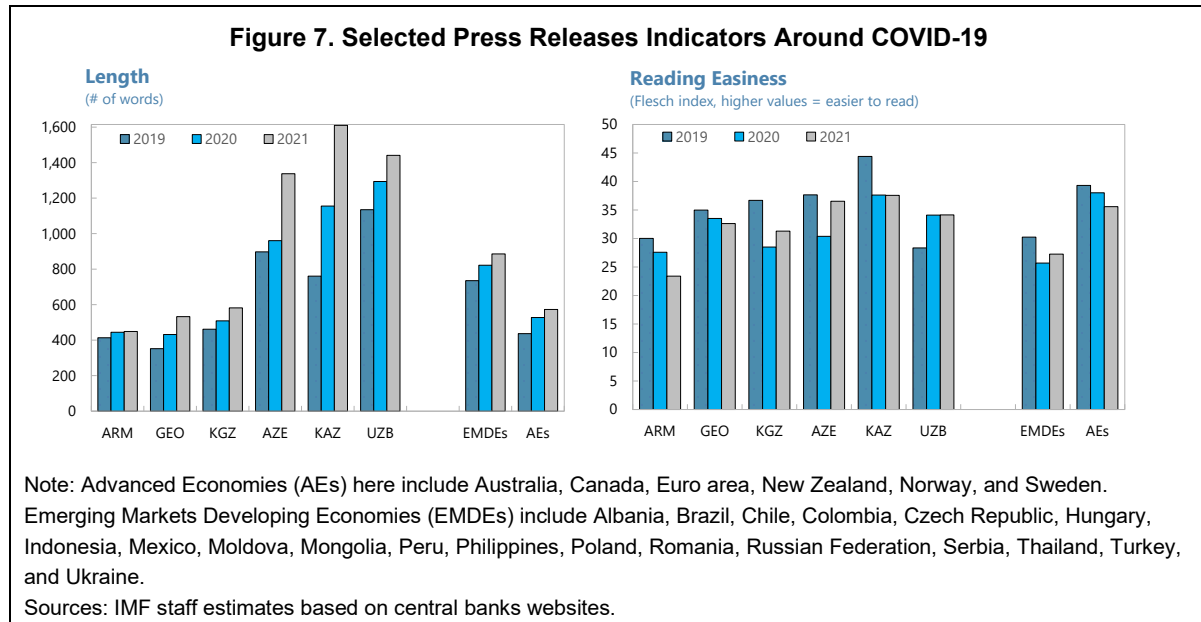Sources: IMF staff estimates.

19. CCA CBs increased the length of press releases in the last decade. The number of words in the statements stepped up around the time the CBs started the transition to IT and showed a smooth upward trend in the following years (Figure 6). The analysis also points out that during periods of uncertainty press releases expanded. This is observed during the COVID-19 pandemic in 2020, but also in specific countries such as in Georgia during 2008 (conflict Russia-Georgia) and 2015 (political instability). While there is no standard for press release length, a few CCA countries show long press releases from a cross country perspective (Figure 7). Overall, CBs aimed to provide more information and context of the monetary policy decisions. However, long press releases can distract audience with some other details, and this not necessarily imply better communication.

20. The quality of information also matters, but the clarity indicators of CCA CBs communications do not show evident improvements in readability. Clarity indicators —measures by the Flesch readability

index[28]— show irregular patterns in general. However, the COVID-19 pandemic in 2020 presented deteriorations in the clarity indexes across most countries as observed around the World (Figure 7), pointing out at a trade-off. As there is more uncertainty, CBs try to explain more, which requires to use more complex language and communication loses clarity (Bulir, Cihak, and Jansen, 2012; and IMF, 2018). However, these measures are only a partial approximation to quality or readability, as it may not reflect the CBs efforts to improve quality by publishing releases in multiple languages.[29]
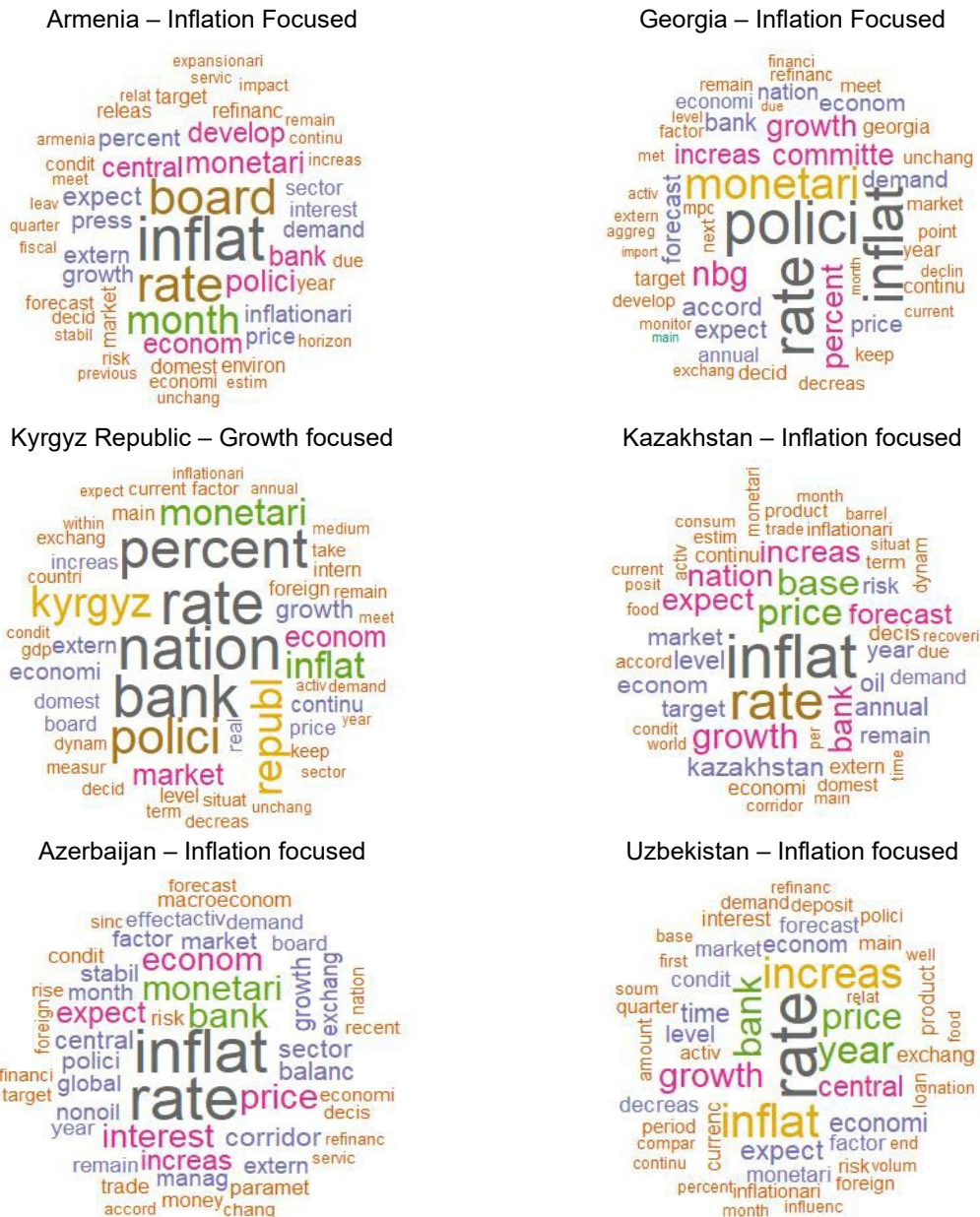
Figure 7. Selected Press Releases Indicators Around COVID-19

Note: Advanced Economies (AEs) here include Australia, Canada, Euro area, New Zealand, Norway, and Sweden. Emerging Markets Developing Economies (EMDEs) include Albania, Brazil, Chile, Colombia, Czech Republic, Hungary, Indonesia, Mexico, Moldova, Mongolia, Peru, Philippines, Poland, Romania, Russian Federation, Serbia, Thailand, Turkey, and Ukraine.

Sources: IMF staff estimates based on central banks websites.

21. The press releases focused on CB's price stability objective and IT. Word clouds – representation of most frequent words – suggest inflation is a key topic discussed in press releases (Figure 8), as the terms "inflation" or "price" were the most frequently mentioned in most CCA countries.[30] The context of the inflation discussion revolved around monetary policy ("monetary", "rate") and financial market ("bank", "deposit", "loan"). Most CBs also discussed growth - Georgia, Kazakhstan, and Uzbekistan did so more frequently as "growth" appeared among their top 10 terms. The discussion has some forward-looking components, as indicated by frequency of terms such as "expect" or "forecast". Overall, word cloud analysis suggested the press releases of the CCA CBs were consistent with forward-looking IT regime.

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[28] The Flesch index penalizes texts with long sentences and words with many syllables. Higher value imply texts are easier to understand and low values imply text are more complex. The index is constructed as RE = 206.835 – (1.015 x ASL) – (84.6 x ASW). RE = Readability Ease, ASL = Average Sentence Length (i.e., the number of words divided by the number of sentences), and ASW = Average number of syllables per word (i.e., the number of syllables divided by the number of words).

[29] It is good noting, however, that in the IAPOC metric a criterion for the Communications pillar is included that looks if the information is available in all the official languages of the country (together with the language of business).

[30] A size of a word in a word cloud reflects relative frequency of that terms in documents. The larger the size is, the more frequent the term is used. Heimerl and others (2014) provided detailed explanation on the word cloud construction.

Figure 8. Focus of Press Releases

Armenia – Inflation Focused

Georgia – Inflation Focused

Kyrgyz Republic – Growth focused

Kazakhstan – Inflation focused

Azerbaijan – Inflation focused

Uzbekistan – Inflation focused

Sources: IMF staff estimates.

22.   Further analysis on topic coverage reveals strong emphasis on economic conjuncture and rooms to discuss inflation target more. To assess the topics covered, we analyzed the press release checking for specific topics or wordings (Table 3) inspired on selected topics of press releases that are relevant for the Communication pillar according to Unsal and others (2022). CCA CBs' press releases have strong emphasis on the current economic conjuncture. However, having much other details can reduce clarity of the overall texts and, more specifically, on the explanation of monetary policy decisions. For example, some CCA CBs devote substantial portion of their texts to explain the contribution of food inflation and the global oil context but miss discussing other key issues related to the monetary policy. Most CBs explain the reasons of the monetary policy decisions and risks, with some sense of short-term outlook. Press releases' content scarcely cites their numerical

inflation targets —which helps to anchor expectations[31]—, states the monetary stance, and suggests the direction of (conditional) future policy.

Table 3. Selected Content Included in Press Releases - 2020-21
(Observed feature in precent of press releases)

	Reasons for the decision	Monetary policy stance	Current state of the economy	Short term outlook	Risks	Direction of the future policy	Mentioning numerical target
ARM	93	67	100	100	87	13	60
GEO	100	100	100	93	87	67	7
KGZ	100	7	100	100	53	0	40
KAZ	94	12	100	94	100	29	65
AZE	80	47	100	80	93	7	33
UZB	100	53	100	87	100	33	40
TJK	100	10	100	20	100	0	10

Sources: IMF staff estimates based on Unsal and others (2022) and country authorities.
Note: Annex II provides methodological details.

23. Texts in press releases were highly similar to the ones previously released. In recent years, texts in the press releases of selected CCA countries are over 50 percent similar to the previous press releases in terms of word choice, and word frequency. This suggested elements of copy-and-paste in the press releases. In particular, Armenia and Georgia press releases have been consistently highly similar to their previous ones. Dissimilarity in the press releases can create surprise to market participants and is found to affect macroeconomic outcomes (Ehrmann and Talmi, 2020).

24. Tones in the press releases were mostly negative. To further assess communication content, we measure tones by sentiment scores for press releases (Figure 9). In selected CCA countries except Azerbaijan, the press releases contain more negative words than positive words, resulting in negative sentiment score.[32] Tones of CB communication are found to affect macroeconomic outcomes (Schmeling and Wagner,2019; Neuhierl and Weber,2019).

Figure 9. Tone and Similarity of Press Releases

Sources: IMF Staff Calculation
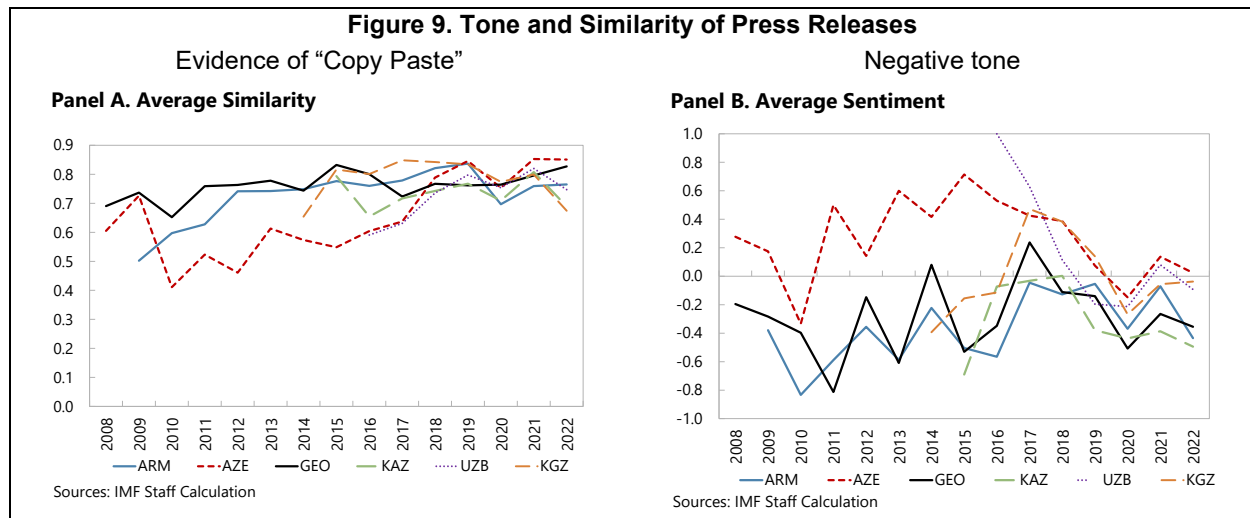
[31] Coibion, Gorodnichenko, and Weber (2019).

[32] Sentiment is measured using a Loughran and McDonald (2011). Dictionary that contains lists of positive and negative words.

Transparency

25. To increase credibility, transparency and communication are key. Transparency increases the agents understanding of CB objectives and monetary policy decisions. Transparency also increases accountability and therefore strengthens the framework and its credibility. Within the transparency features, communication plays a key role to enhance predictability of monetary policy.

26. IAPOC Indexes, show that transparency has increased in the CCA region. Transparency indexes—based on the IAPOC methodology in Unsal and others (2022)[33] — suggest that there have been upgrades in the CCA region, also consistently with the general improvement in their monetary policy frameworks (Figure 10). The overall IAPOC-transparency index rose significantly up to 2016 triggered by the transitions to IT.[34] This increase in transparency reflected both enhancements in their Policy and Operational Strategy, as for example the countries started stating their numerical targets, but also is related to Communications, as now they all disclose their monetary policy decisions. The average IAPOC-transparency index slightly deteriorated in 2018, driven, for instance, by not fully motivating and communicating the changes introduced to the MPF in some cases.

Figure 10. Central Bank Transparency – IAPOC Indexes

Panel A: IAPOC-transparency and its Pillars   Panel B: IAPOC-transparency, 2010-2020
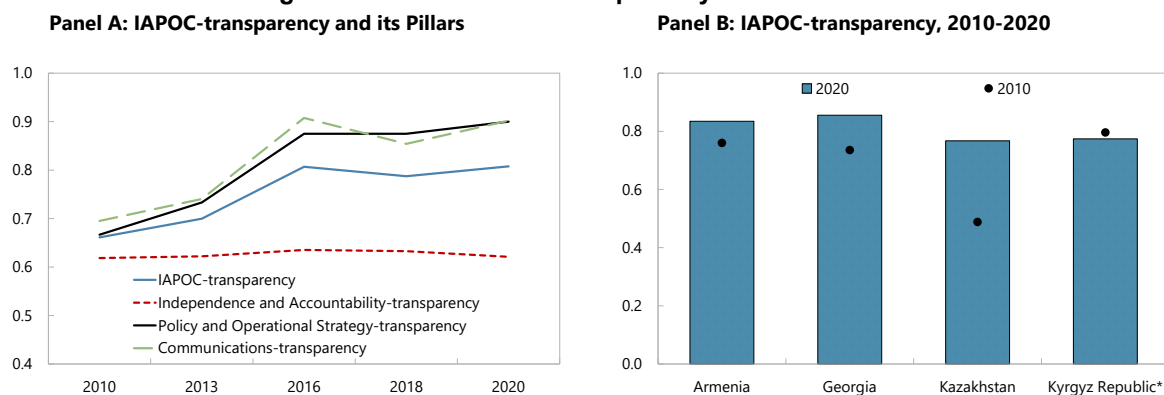
Source: Unsal and others (2022), and IMF Staff calculations.
Note: In Panel A we show the average scores for the CCA countries included in Unsal and others (2022): Armenia, Georgia, Kazakhstan, and Kyrgyz Republic.
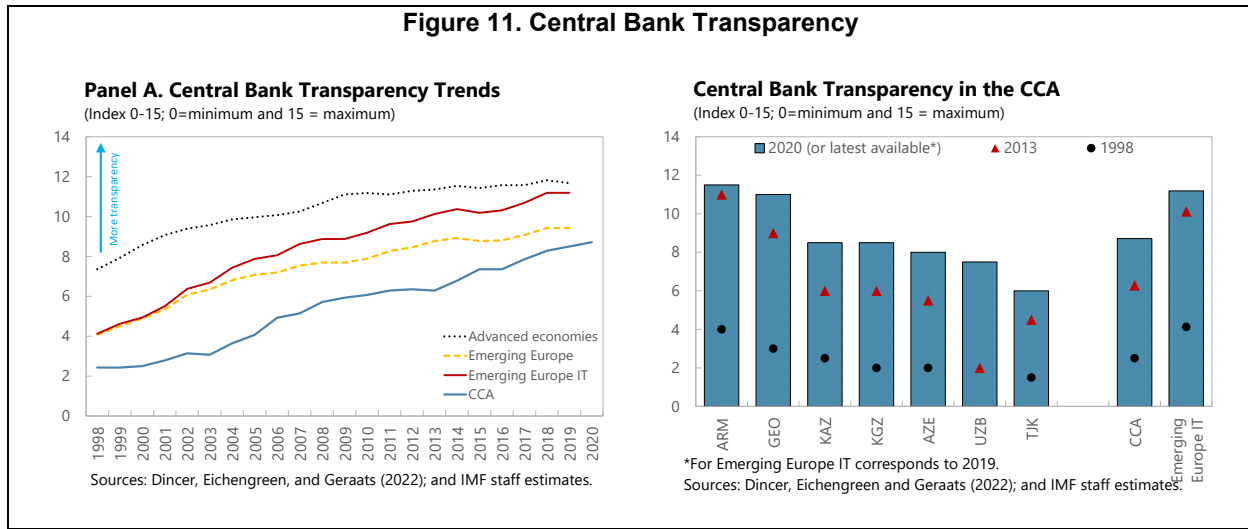* For Kygryz Republic the first assessment available is for 2016.

27. The index based on Dincer and Eichengreen (2014)[35] also points out that transparency has increased in the CCA region along global trends. This index, which goes further back in time for a larger number of countries, is in line with the more comprehensive assessment in Unsal and others (2022). Dincer and Eichengreen index shows that CCA transparency had an upward trend as observed in other economies (Figure 11). This index also suggests that transparency increased significantly via improvements in disclosing policy decisions and their motivation in the CCA region.

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[33] Unsal and others (2022) define transparency as the provision of the information necessary for the public to understand the MPF and associated policy actions, following (Blinder and others, 2001). In the IAPOC metric, transparency is an axiom that characterizes the MPF across the three pillars and is embedded in each of them (Independence and Accountability, Policy and Operational Strategy, and Communications). As stated in Unsal and others (2022), while there is an extensive literature on the transparency indicators, transparency is often (mis)used to refer to coherence, consistency, or predictability of monetary policy or, sometimes even regarded synonymously with "good policy".

[34] The CCA countries in the IAPOC sample started the transition to IT at different times: Armenia in 2006, Georgia in 2009-10, Kyrgyz Republic in 2014, Kazakhstan in 2015.

[35] Transparency is here defined as Dincer and Eichengreen (2014) which was also covered in Dincer, Eichengreen, and Geraats (2022). Transparency is measured based on five areas: 1) political transparency, 2) economic data transparency, 3) policy formulation transparency, 4) policy transparency, and 5) operations transparency. For each area, the index summarizes several observed features. For example, for economic transparency the index captures the availability of economic data, the disclosing of models, and publication of forecasts. Later the indicators are combined into an (overall) index of transparency.

Figure 11. Central Bank Transparency

Panel A. Central Bank Transparency Trends
(Index 0-15; 0=minimum and 15 = maximum)

Central Bank Transparency in the CCA
(Index 0-15; 0=minimum and 15 = maximum)

*For Emerging Europe IT corresponds to 2019.
Sources: Dincer, Eichengreen, and Geraats (2022); and IMF staff estimates.

28. Central banks are generally expected to uphold a high level of transparency in their operations.[36] However, there may be exceptional circumstances in which deviations from these transparency practices could be deemed acceptable. One such instance is during times of crisis, wherein central banks may opt to provide less information on forecasts, including the associated confidence bands. The rationale behind this approach is to mitigate the potential amplification of uncertainty in financial markets and to minimize the risk of misinterpretation regarding the conditionality and implications of the forecasts (Reid and Siklos, 2020). However, these deviations are contingent upon the unique circumstances and challenges presented by the crisis situation. In most cases, they should be carefully balanced with the need for maintaining public trust and confidence in the central bank's monetary policy actions and decisions (Unsal and Garbers, 2020).

IV. Conclusion

29. The paper concludes that CCA countries have made progress in upgrading their monetary policy frameworks, although they are at different stages of transition. Nevertheless, there are still some gaps in terms of communications when the region is compared to international best practices. Furthermore, efforts to improve communications face challenges due to relatively low trust in state institutions and low financial literacy in the region. As a result, CCA CBs need additional time to refine this aspect of their monetary policy frameworks. As for other pillars of the monetary policy framework and of transparency, there are some steps that can be done to improve.

- **To enhance the institutional design, strengthening safeguards the CB Independence and Accountability is key.** This can be achieved by including more independent board members in the executive boards and monetary policy committees. At the same time, the CBs should emphasize the role of independence when they communicate with the public aiming to raise awareness among politicians and government officials about the significance of central bank independence.

- **Regarding Policy and Operational Strategy, CBs should enhance transparency regarding monetary operations and FX intervention strategies.** Improving data availability can contribute to better understanding of policy responses, strengthen transmission mechanism and enhance credibility. It is crucial

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[36] Central banks high transparency standards should apply to both core and noncore activities. Moreover, some central banks in the CCA also perform quasi-fiscal activities that have spillovers on monetary policy. Disclosing these activities can help to improve transparency.

to provide timely and comprehensive information on monetary operations and foreign exchange interventions, a practice currently adopted by only a few CCA central banks.

- **In terms of Communications, CCA CBs have made significant progress but there are further gains from being more transparent and consistent.** Clear communication is essential to enhance the pass-through of interest rates and anchor inflation expectations. Streamlining press releases in some countries and explicitly stating the monetary policy stance, including numerical values of inflation targets, can contribute to anchoring inflation expectations more effectively.

Annex I. Methodology: the IAPOC index

The **IAPOC** index is a metric developed by Unsal and others (2022) that provides a multidimensional characterization of monetary policy frameworks (MPFs) across 50 countries and over time.

More specifically, the IAPOC index consist of three pillars: Independence and Accountability (**I and A**), Policy and Operational Strategy (**P and O**), and Communications (**C**).

   i.   **Independence and Accountability** provides the foundations of monetary policy and covers the central bank's monetary policy mandate and associated goals, together with (de jure and de facto) operational independence and public accountability in pursuit of these goals.
   ii. **Policy and Operational Strategy** includes the strategy that guides the formulation and implementation of monetary policy; that is, how the monetary policy stance is set using the tools (based on the objectives and associated numerical targets) and how changes in the tools are implemented.
   iii. **Communications** capture how the monetary policy in all its elements, and its rationale, are conveyed to the public.

For the IAPOC metric to cover all aspects of MPFs and their interactions thoroughly, a set of 225 criteria are listed and assessed by using public information collected manually from central banks' laws and websites. To each criterion, a score is assigned as either 0 or 1 (or 0.5 for some rare cases). Criteria scores are collected in five sub-pillars as unweighted average of their evaluations, and so are the respective pillars. The resulting IAPOC index is finally the average of the three pillars above (see Figure A.I.1).

Due to its scope and granularity, this index provides a holistic view of MPFs which goes beyond existing measures of transparency or independence, as well as monetary policy or exchange rate regime classifications. It can be used to show how the MPF evolved over time, and how it compares to other countries or country groups. Moreover, it helps to identify remaining challenges and concrete steps on how the MPF can be improved.

Figure A.I.1 Monetary Policy Framework, Pillars, and Sub-Pillars
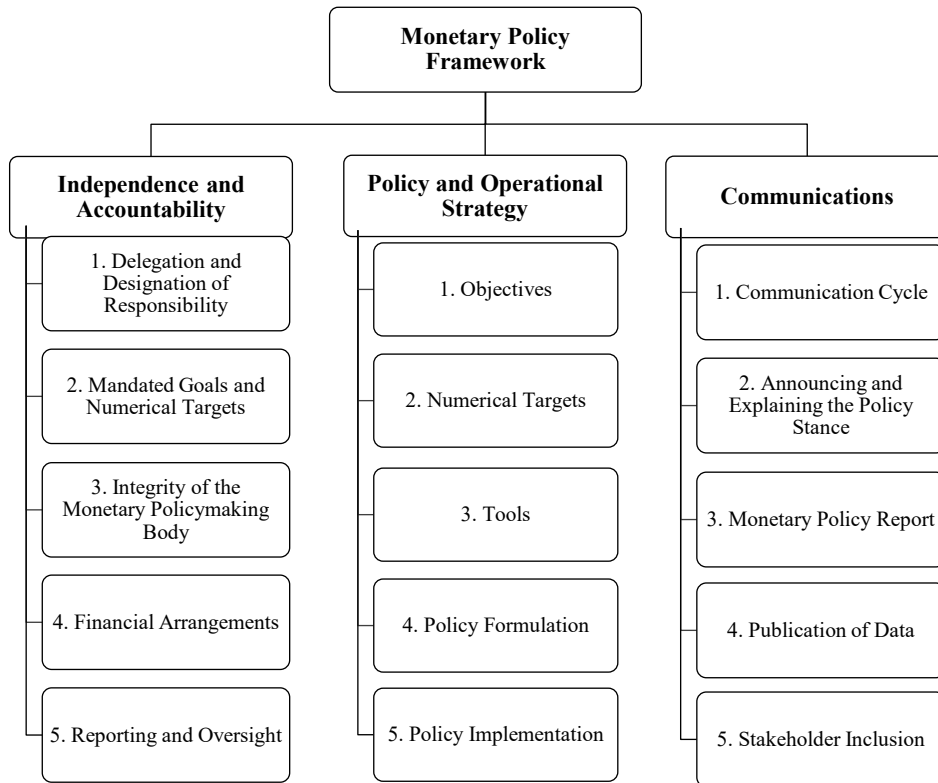
Source: Unsal and others (2022).

Annex II. Press Releases Content

Table 3 analyzed is certain features or topics are observed in the press releases. For this purpose, we read the press releases during 2020-21 and try to determine if the topics in Table 3 are observed or not. For each of the selected features below "1" or "0" was assigned if the feature was observed or not respectively for each press release. Then the result for each country averages over the press releases are computed. For example, for Armenia only 60 percent of the press releases mention the numerical targets in the press release.

Table A.II.1: Methodology to Assess Press Releases Content

Feature	Description
Reasons for the decision	Capture if the text describes the reasons for the monetary policy decisions
1	If the text clearly mentions the reasons for the decisions. Key wording for assigning 1 is "For these reason…", "because…", "in order to…", "aiming to…", "keep/change rate to….", "taking into account …. the board decided…", and others. Similar wording was also classified in this way.
0	If not clear the reasons for the rate decision. An enumeration of different indicators without the clear wording or explanation is assigned zero.
Monetary policy stance	Capture if the text describes the monetary policy stance.
1	If the text state the monetary policy is "tight", "neutral", "lose". Synonyms and close wording were also classified in this way.
0	Otherwise.
Current state of the economy	Capture if the text provides some sense of the inflation and output developments
1	If the text includes a description of recent inflation and output gap or growth. At the minimum a text describing the recent trend or latest figures.
0	Otherwise
Short term outlook	Capture if the text provides some sense of inflation and output in the next year.
1	If the text includes a description of the expected inflation and output gap or growth dynamics for the next year.
0	Otherwise
Risks	Capture if the text states some risks.
1	If the text states risks or uncertainties. The words "risk", "uncertainty", "vulnerable" among others were used to narrow the analyzes.
0	Otherwise
Direction of future monetary policy	Capture if the text provides any indication of future monetary policy.
1	If the text provides any indication of the future monetary policy. This can be qualitative, numeric, or expectation on the monetary stance.
0	Otherwise
Mentioning numerical target	Capture if the text mentions the value of inflation target of the central bank.
1	If the text mentions the value (number) of the inflation target (E.g., 5 precent).
0	Otherwise

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