

Irving Fisher Committee on Central Bank Statistics

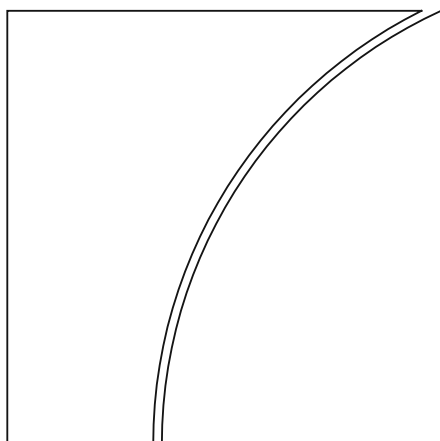
IFC Report

No 15

How central banks communicate on official statistics

2022 survey conducted by the Irving Fisher Committee on
Central Bank Statistics (IFC)

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Executive summary

The statistical departments of many central banks have recently taken steps to strengthen their communication function. Yet, despite these ongoing efforts, the dissemination of official statistics remains a constant challenge, not least in view of the difficulties posed by new data sources and the need to secure public confidence. In this context, **the IFC organised a survey in 2022 to review the recent evolution of the statistical communication function in central banking and to identify potential actions for improvement.**

The survey's findings were as follows:

- **Almost all central banks are proactively developing communication initiatives as a complement to their statistical production work.** They are, however, not alone in this field, as national statistical offices (NSOs), other public agencies, international organisations, private data providers and the general media represent important players. Certainly, central banks are well positioned, not least in terms of credibility, visibility and trusted independence. But they are also judged to be lagging behind when communicating statistics, especially as regards the use of advanced tools to provide visualisation content effectively.
- **Central banks have also been adopting a more segmented communication strategy,** with the production of specific content tailored to pre-defined audiences. The measures undertaken vary significantly across the main target groups, eg the general public, journalists, researchers, students and teachers. In addition, most central banks actively seek feedback from these groups to further enhance their outreach.
- **An increasingly diversified range of channels is being used to support statistical communication.** Traditional practices, such as the holding of events or the use of websites and emails, continue to play an important role. But the real momentum relates to the use of social media, which has seen a remarkable increase in recent years and is expected to progress further in the near term. In particular, Twitter is heavily used by central banks, and other channels such as LinkedIn, Facebook and Instagram are making progress, though to a lesser extent. Interestingly, a still limited but reportedly rising number of central banks are considering the use of more specialised, video-based vectors such as TikTok.
- **The content of the statistical information communicated to users is multifaceted,** comprising for instance the publication of textual analyses or the use of more modern instruments. Yet there is an overwhelming preference for providing statistical information in a rather "traditional" way. In particular, press releases continue to be thought of as well suited for dealing with important messages and/or for reaching to as many people as possible. Yet this relatively static approach is increasingly complemented by new instruments. This is particularly the case for graphic visual representations ("infographics"), as already used by a large majority of central banks, and for richer audio and video channels to a more limited extent.
- **Looking ahead, central banks are considering ways to better organise their statistical communication initiatives.** Many have established regular outreach events for scheduled statistical releases, as well as in a more flexible way depending on circumstances. In general, their statistical departments prefer to avoid developing their own communication channels and instead to rely on common, bank-wide channels. A second feature is the preference for pursuing a multichannel ("omnichannel") statistical strategy – that is, to communicate the same message using different channels so as to provide various levels of details depending on target audiences.
- Despite these new initiatives, **central banks still face significant challenges when communicating statistical content to the public.** A major difficulty is the need to deal with

sometimes complex concepts, which are often perceived of limited interest by the public, and to ensure that the messages are well understood by a variety of different users.

- **These challenges call for a wide range of staff skills to be applied.** In practice, defining and creating user content require most of the resources dedicated to statistical communication. In contrast, the actual management of data dissemination channels and the analysis of communication metrics tend to be performed by a more limited number of staff. Moreover, the approach often has to be cross-departmental. Statistics departments are typically in charge of defining the content and timeliness of communication initiatives, not least to ensure a strong involvement of subject matter experts – to ensure a deep understanding of the information to be published. But content creation also requires a number of specialised IT skills, for instance to support data visualisation and design. Lastly, the contribution of the central bank’s communication departments can be critical for certain tasks such as metrics analysis and channel management.

1. Introduction

Central banks are paying increased attention to setting strong data governance standards to cover a wide range of statistical issues, from data management to the techniques involved, and also to the user side – for instance, to ensure that the data are fit for purpose and that their value is maximised. From this perspective, **a major element supporting the value of official statistics relates to communication** (Andrei et al (2014)). This should not be considered simply as an appendix to statistical production, but as “a key function that can determine the success or the failure of an official data provider”, as argued by Giovannini (2008).

Central banks, like other compilers of official statistics, are well aware of **the need to share with users, in a clear and understandable way, a comprehensive picture of the analytics provided.** Communicating on the degree of uncertainty associated with official statistics and the techniques applied is also essential (Kapetanios et al (2021)). This puts a premium on developing statistical literacy in the population, and on ensuring that the public understands and accepts what official statisticians are doing (UNECE (2009)).²

Statistical departments in various central banks have accordingly taken steps to strengthen their communication function. These initiatives have typically covered a broad range of information products, namely the raw data disseminated as well as the accompanying materials in terms of press releases, infographics, videos, social media content or workshops organised to enhance users’ understanding of the statistics displayed. Yet, despite ongoing efforts, the communication of official statistics remain a constant challenge, not least in view of the difficulties posed by new data sources and the importance of securing public confidence in trusted information (IFC (2021)).

To take stock on these issues, the Committee surveyed IFC members on the communication of central bank statistics in 2022.³ The aim was to review such initiatives, analyse the recent evolution of the statistical communication function in central banking, and identify potential measures for improvement looking forward. The survey focused on the following six main areas (see Annex 1): (i) a general assessment of central banks’ ongoing communication initiatives and plans; (ii) the way in which

² In the United Kingdom, the code of practice for official statistics explicitly aims to ensure the publication and communication of statistics “in a way that inspires public confidence” (UK Office for Statistics Regulation (2022)).

³ Other important statistical dissemination issues relate to the transmission of data to other statistical bodies and international organisations, as well as the technical features used for posting data (such as Excel files or dashboards) on central bank websites. These issues were not covered by the IFC survey.

specific actions can be tailored to different target groups; (iii) the various channels that can be used for that purpose; (iv) the review of the different types of content to be considered when communicating official statistics; (v) the assessment of the impact of these initiatives; and (vi) the related human resources requirements in this context.

2. Central banks’ statistical communication initiatives – taking stock

Responses to the **IFC survey came in from 50 IFC member jurisdictions**, with well diversified geographic representation especially from Europe and Asia/Oceania (representing about one half and one fourth of the answers, respectively), as well as from the Americas and Africa to a lesser extent (see Annex 2 and Graph 1, left-hand panel).

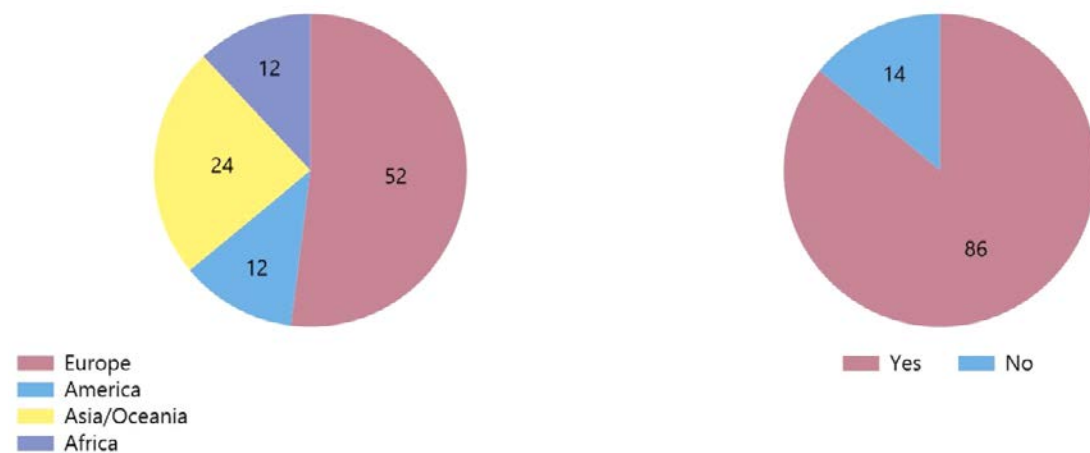
Almost 90% of central banks have developed a statistical communication initiative

In per cent

Graph 1

Survey geographical coverage¹

Do you have any kind of communication initiatives on the statistics produced by your central bank?



¹ Number of survey respondents by region.

Sources: IFC statistical communication survey (2022); authors’ calculations.

A key lesson is that almost nine out of 10 central banks (86%) are in fact proactively developing communication initiatives as a complement to their statistical work (Graph 1, right-hand panel). For the very limited number of central banks that reported no such initiative, the main reasons were apparently the lack of resources and uncertainty on how to proceed.

Moreover, **these actions are usually well aligned with the central banks’ strategy supporting their public missions**, as emphasised by the vast majority of the respondents – it was reported to be the case for about three fourths of those having a statistical communication initiative. In many cases, this close alignment reflects the important coordination work achieved between central banks’ statistical and communication departments, and also the fact that reaching out to the general public in a trustworthy way is a core element supporting central banks’ public mandates (Blinder et al (2008); Draghi (2014); Weidmann (2018)). More generally, it reflects the growing importance of conducting evidence-based

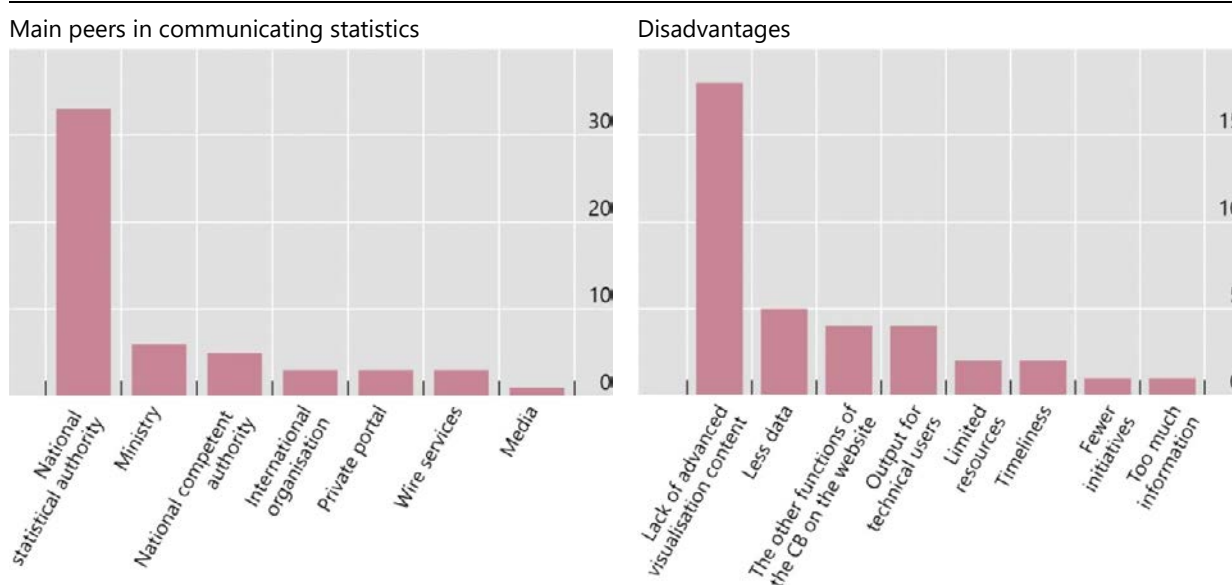
policies in today's societies (Buch (2019)) and the powerful role played by numbers⁴ in this regard (Dilnot (2012)).

Central banks are not alone in the field of data communication. Two thirds of respondents indicated that NSOs were their main counterparts in communicating official statistical content. Government departments and other relevant national authorities are also active in statistical communication, although in a more limited way (mentioned in only about 10% of cases). To a lesser extent, international organisations, private data portals (such as Pordata⁵ in Portugal), wire services (eg Bloomberg, Reuters) and the general media are also important players (Graph 2, left-hand panel).

Central banks often lack advanced visualisation content compared with counterparts providing statistical information

Number of respondents¹

Graph 2



¹ Respondents could select multiple options.

Sources: IFC statistical communication survey (2022); authors' calculations.

In such a competitive situation, **central banks have several advantages according to the survey.** First, they produce, and communicate on, very specific types of statistics, with important differences across countries. For instance, central banks are typically active in the "core" areas of monetary aggregates, financial institutions' balance sheets, payments statistics, balance of payments and exchange and interest rates; but many also cover a wider range of topics, from the compilation of financial accounts (IFC (2020)) to property prices (IFC (2019a)) or even natural resource accounting (IFC (2022)). Second, central banks usually have a very good knowledge of the data involved (especially financial data) and ensure that these are of good quality (in particular as regards their timeliness and the provision of sufficiently long series). Third, they tend to provide effective ways for users to access published statistics as well as transparent information ("metadata") about the data themselves (UNECE (2013)); these

⁴ With an increasing focus on the potential offered by granular data in this context (Tissot (2017)).

⁵ Pordata is the Contemporary Portugal Database developed by the Francisco Manuel dos Santos Foundation, which is involved in the collection, compilation and dissemination of data on multiple areas for Portugal and the European countries.

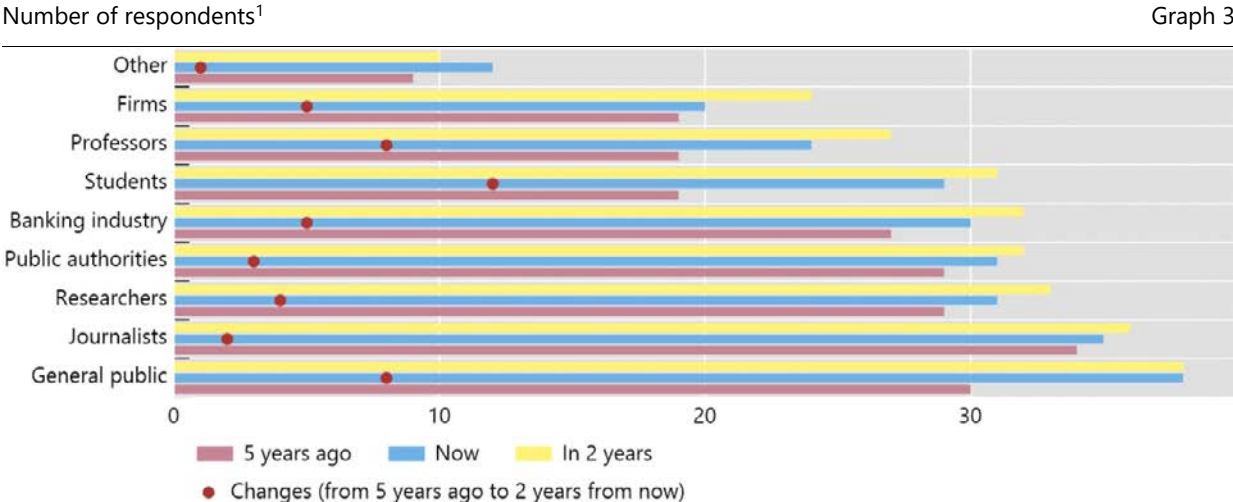
transparency efforts have been supported by the development of business intelligence (BI) tools eg dashboards (IFC (2019b)) and the adoption of international dissemination standards such as SDMX (Statistical Data and Metadata eXchange; IFC (2016)) or the IMF SDDS (Special Data Dissemination Standard; IMF (2013)). Important supporting factors in this context have been the credibility of central banks, their visibility and their independence (Gardt et al (2021)).

However, central banks have also a number of handicaps according to the respondents (Graph 2, right-hand panel). The main one is that they lack advanced tools to provide visualisation content effectively, which has become essential to support the dissemination of official statistics (Ten Bosch and de Jonge (2008)). This situation can be difficult to address, as it may reflect the combination of multiple factors, such as security concerns, limited IT and/or staff resources, high licensing costs for some BI tools etc. To a lesser extent, another drawback is that the statistical information produced by central banks tends to raise only limited interest among members of the public, especially in comparison with other types of data – eg the inflation, unemployment and GDP figures that are usually disseminated by NSOs.

3. Communication target groups

The statistical communication of central banks typically targets a diverse range of user groups, from “normal” citizens to professionals in the public and private sectors and academics/students. Indeed, the survey showed that they have adopted an increasingly segmented communication strategy so as to produce content designed for specific main audiences. This practice is reported by almost 90% of the respondents and appears to have gained momentum in recent years: Graph 3 points to an upward trend (blue bars) in the provision of dedicated content reported by central banks, compared with five years ago (pink bars).

Central banks developing specific content for each communication target group



¹ Respondents could select multiple options.
 Sources: IFC statistical communication survey (2022); authors' calculations.

Central banks appear to have focused most of their efforts on providing specific content to the general public and journalists, as reported by more than 70% of the surveyed institutions. Another important category, mentioned in about 60% of the cases, comprises researchers, public authorities,

financial professionals and students. In contrast, limited content appears to be provided to firms on an ad hoc basis (40% of the cases).

In addition, **the specific communication measures undertaken can vary significantly across target groups** – see Gardt et al (2021) for an analysis in the ECB context. While the use of the website and social networks appears adapted for dealing with the general public, communication with journalists often involves the production of specific press releases and meetings. As regards researchers, the demand is generally to provide specific databases, working papers and methodological notes. Turning to students and teachers, respondents have pointed to the increasing use of animated infographics, conferences and lectures.

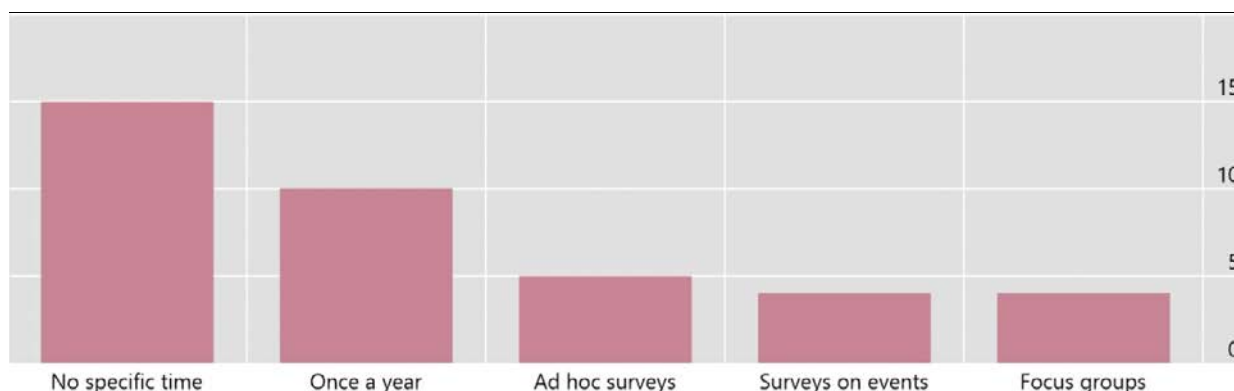
Looking forward, **the trend observed in the provision of dedicated content, tailored to specific communication target groups, is expected to continue** at least over the next two years (yellow bars). Interestingly, efforts are reported to be concentrated towards academia: central banks’ provision of specific content is expected to progress the most vis-à-vis students (red circles).

Lastly, **a large majority of central banks (almost 80% of those that have developed specific target-oriented content) are actively seeking feedback from their focus groups.** In many cases, such feedback is collected through email or the website’s “contact us” button. A more limited number of institutions also organise annual feedback exercises, ad hoc event surveys, or regular consultations with specific user forums (Graph 4).

How central banks receive feedback from their target groups

Number of respondents¹

Graph 4



¹ Respondents could select multiple options.

Sources: IFC statistical communication survey (2022); authors’ calculations.

4. Central banks’ use of communication channels

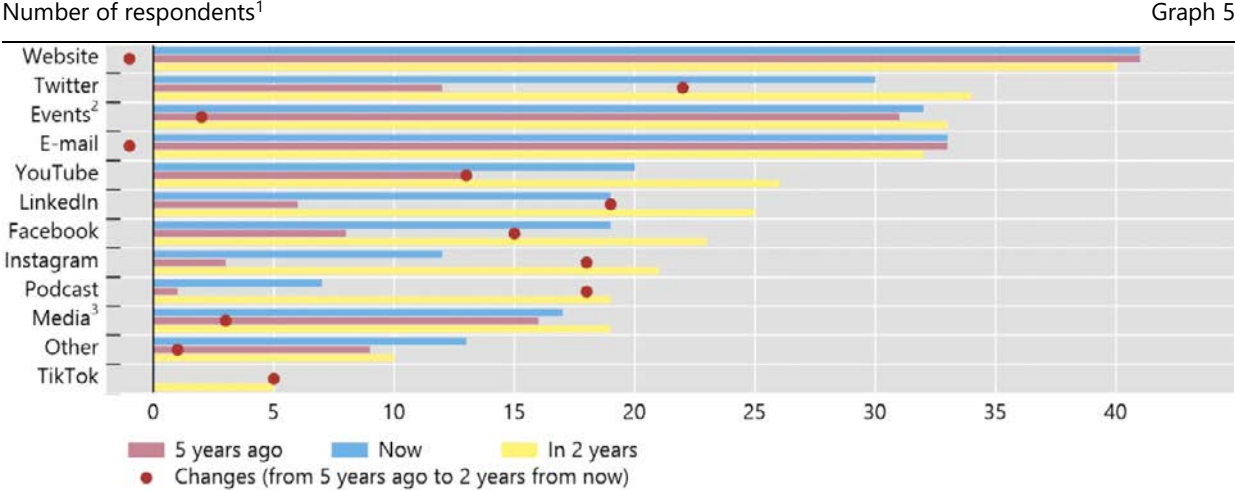
An important lesson of the report is that central banks across the world have been using an increasingly diversified range of communication channels when reaching out to their target

audience.⁶ According to the survey, more than 10 of such channels are used by an important fraction of central banks, despite significant disparities across jurisdictions.

Moreover, **this trend is expected to accelerate in the next two years:** across all the central banks involved in the survey, the number of communication use cases based on a specific channel is expected to increase by 70%, compared with five years ago. There are however some exceptions. For instance, in recent years a number of central banks have actually stopped using certain channels, such as YouTube, email, CDs and mobile applications. This may be for cost issues, as well as the perception that some tools may have become outdated.

Among the various channels available, the website continues to be the most used, as mentioned explicitly by the vast majority of surveyed central banks (Graph 5, blue bars). The usual practice is to put on the web all the created content related to a statistical area, namely the data themselves, the related metadata, and relevant analysis (eg press releases). Turning to **more traditional channels**, such as the holding of events or simple correspondence (eg use of emails), they continue to play an important role.

How central banks reach out to their communication target groups



¹ Respondents could select multiple options. ² Including conferences and webinars. ³Including agreements with TV and press.

Sources: IFC statistical communication survey (2022); authors' calculations.

The use of social media has increased remarkably and is expected to progress further in the next two years (yellow bars), as in other statistical agencies such as NSOs (Petcu et al (2016)). In particular, Twitter is heavily used among central banks, and its use has expanded more than that of any other channel over the past five years. This trend is also reflected, although to a lesser extent, in the use of other channels such as LinkedIn, Facebook and Instagram. Twitter and Facebook appear to be well suited for conveying key messages, and presenting summary facts and analyses in a concise and user-friendly way. LinkedIn is reported to be used mainly for job advertisements and communication on specific events. Interestingly, a (still limited but apparently rising) number of central banks are considering the use of more specialised, video-based vectors such as TikTok. Moreover, a large majority (60% of the related answers) of those central banks that use social media to communicate report that they already give their

⁶ This is consistent with international recommendations regarding the communication strategy of statistical organisations (see UNECE (2021)).

users the opportunity to interact; however, a significant number of respondents do not yet engage with their users in this way (except for letting the public post comments on their website).

The survey also **sheds interesting light on how central banks organise their statistical communication initiatives:**

- In terms of **frequency**, about two thirds of the respondents establish regular initiatives, most of them when issuing scheduled statistical releases. In addition, around one half of central banks indicate that they communicate in a quite flexible way, namely when there is something to highlight on the occasion of, say, an original publication, the provision of innovative visualisation tools, new economic phenomena, new statistical series or important methodological developments.
- In terms of **internal organisation**, the usual practice is to avoid having an autonomous communication channel in statistical departments – for instance, by having a dedicated Instagram page independent of the organisation’s page. In fact, in almost 90% of central banks, the channels used for supporting statistical communication are bank-wide, being used by other departments too (Graph 6, left-hand panel).
- Third, central banks tend to pursue a **multichannel (“omnichannel”) statistical communication strategy** – ie to communicate the same message using different channels and providing various levels of detail. Two thirds of the surveyed central banks apply such a strategy (Graph 6, right-hand panel). For instance, they typically prepare a detailed press release together with a lighter version for social media as well as shorter tweets when disseminating statistical information.

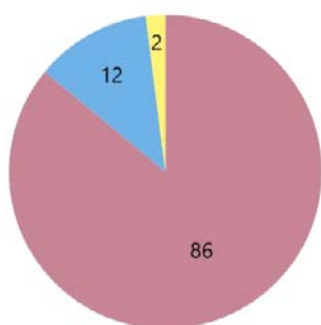
Organisation of central banks’ statistical communication channels

In per cent

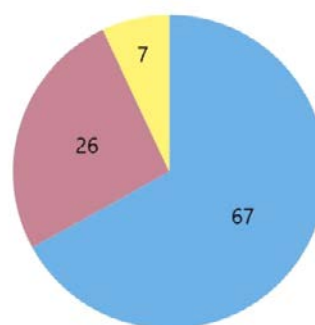
Graph 6

Are there autonomous communication channels in the statistics department?

Do you have an omnichannel communication strategy?



Yes No N/A



Yes No N/A

Sources: IFC statistical communication survey (2022); authors’ calculations.

5. Content of central banks' statistical communication

In terms of content, **central banks have various ways to communicate statistical information to users**, via, for instance, traditional press releases or more modern approaches such as videos or graphic visual representations to convey information quickly and clearly (“infographics”).

To start with, the survey shows that **central banks aim to have a relatively stable way of communicating**. Most of the respondents indicate that their institution has developed a regular process in order to present similar statistical information in the same way over time. However, a very few surveyed central banks do change the analysis conveyed to users more frequently so as to include the most relevant information available. For instance, a regular press release might be complemented with a podcast if new data are judged to be particularly informative or depending on external circumstances.

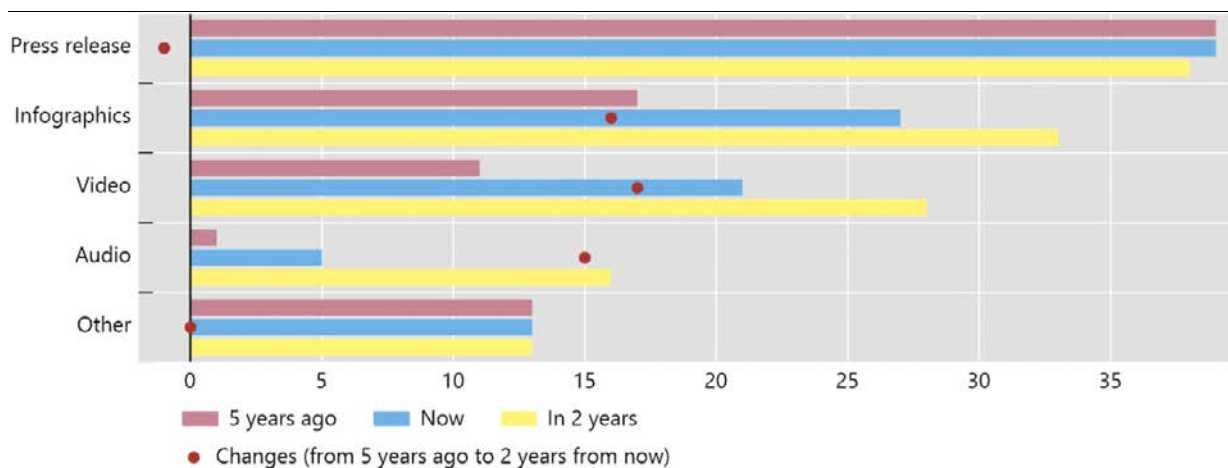
A second insight is that **almost all central banks put value in providing “traditional” content when publishing statistical information**, namely via dedicated press releases (Graph 7, blue bars), despite the slight decline expected over the next two years (yellow bars). One important, often mentioned, factor is that a press release is particularly suited to dealing with the need to communicate an important message and/or to reach to as many people as possible.

Traditional content is increasingly complemented by new media. This is particularly the case for infographics, which are key to supporting data visualisation (Carson (2009)), and are already used by a large majority of central banks. Such usage is expected to expand further, to a degree almost comparable with the one currently observed for press releases. Reliance on audio and video channels has also increased in terms of relative importance in recent years, and this trend is expected to continue in the next two years (red circles).

Type of content supporting central banks' statistical communication

Number of respondents¹

Graph 7



¹ Respondents could select multiple options.

Sources: IFC statistical communication survey (2022); authors' calculations.

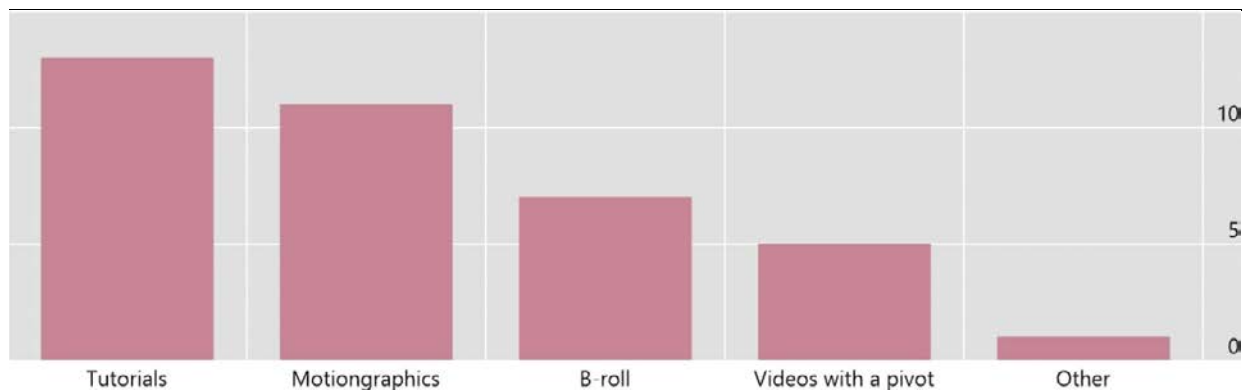
In this context, the **variety of video media available to support communication has become quite rich**, comprising tutorials, motiongraphics (ie videos with animated images), so-called b-rolls (ie main videos complemented by supplementary footage for a better contextualisation of the topic) and videos with pivots (eg short-form video content used interactively). The survey shows that tutorials and

motiongraphics are the video media most commonly used to communicate central bank statistics, but that the usage of other, more sophisticated, media has also become quite important (Graph 8).

Types of video media supporting statistical communication

Number of respondents¹

Graph 8



¹ Respondents could select multiple options.

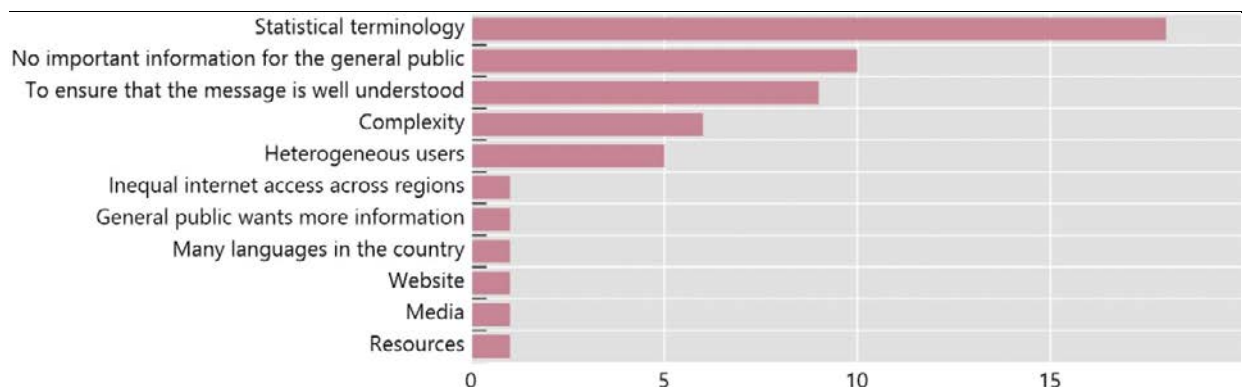
Sources: IFC statistical communication survey (2022); authors' calculations.

Despite the use of innovative techniques as reported above, **central banks are still facing important challenges when communicating statistical content to the public** (Graph 9). A major difficulty is the need to deal with sometimes complex statistical concepts, even though plain language is often required to clarify the messages for users. Other challenges relate to the fact that the information conveyed may not raise sufficient public interest, as well as to the difficulty of properly assessing whether the message is well understood. Lastly, further issues are posed by the complexity of statistical information and the diversity of users, especially in terms of their degree of economic and statistical literacy.

When you communicate to the general public, which are the main difficulties?

Number of respondents¹

Graph 9



¹ Respondents could select multiple options.

Sources: IFC statistical communication survey (2022); authors' calculations.

6. Impact assessment

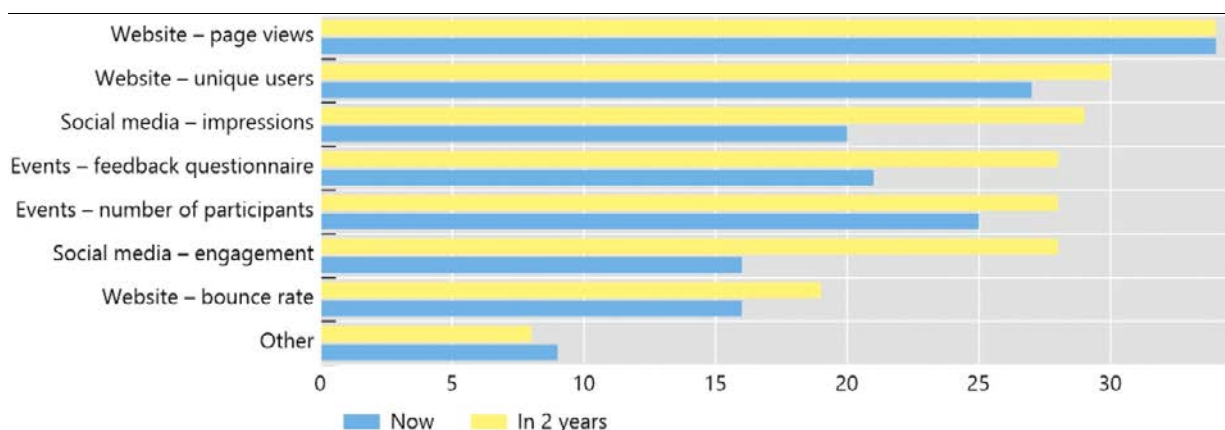
As seen in Graph 10, **there are many potential indicators to look at when evaluating the impact of statistical communication initiatives**. According to the survey, a very large number of central banks focus primarily on measuring the number of webpage views and of unique users visiting their websites (blue bars). A second approach is to measure the number of event participants, or to analyse their feedback through questionnaires.

Measures derived from social media, eg through the compilation of users' impressions (eg the number of people who have seen a post on, say Twitter, Facebook, Instagram, or LinkedIn) and engagement (eg number of users' reactions to a communication action, eg by posting likes, comments and shares) are less common on average; however, the collection of this information has become quite common and is expected to progress fast in the next two years (yellow bars).

Ways to assess central banks' statistical communication initiatives

Number of respondents¹

Graph 10



¹ Respondents could select multiple options.

Sources: IFC statistical communication survey (2022); authors' calculations.

The various metrics detailed above are reportedly used by a large majority of central banks (about three quarters of the related answers) to assess the effectiveness of their communication initiatives as they seek to make further progress. The approach is typically step by step, by selecting the best channel to disseminate the information to a selected target group, choosing the most relevant indicators to be monitored, and then developing new content for more effective communication.

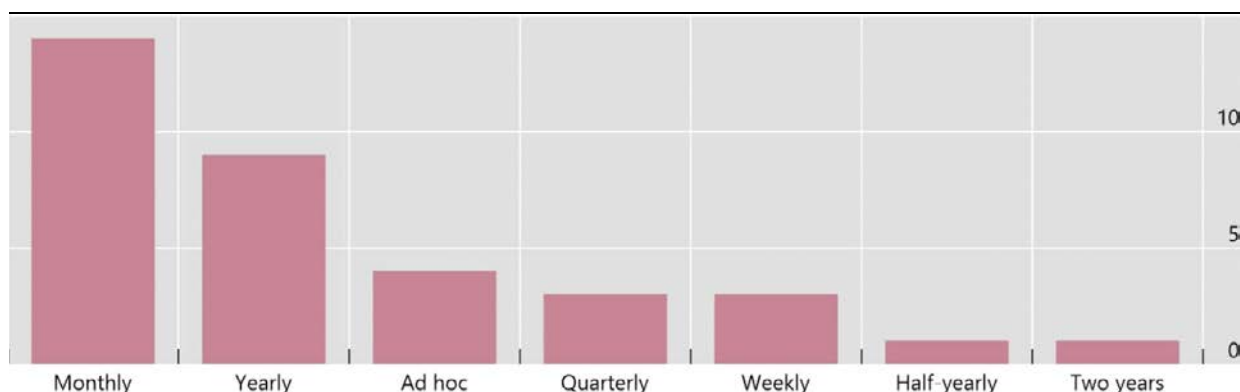
Lastly, **the metrics collected are typically analysed on a more frequent than annual basis**, eg on a quarterly, weekly or (especially) monthly basis (Graph 11). Even so, a significant number of central banks conduct such exercises only once a year. In addition, anecdotal evidence shows that many institutions see value in complementing any indicator-based impact assessment with the survey of "soft" sentiment indicators to assess public perceptions.⁷

⁷ See ECB (2022) for an example of a central bank survey on citizens' attitudes and opinions that, in particular, covers a number of key statistical communication aspects, such as the level of public trust and the use of regular news sources including social media.

How often do central banks analyse statistical communication metrics?

Number of respondents

Graph 11



Sources: IFC statistical communication survey (2022); authors' calculations.

7. Human resources supporting central banks' statistical communication

Having sufficiently **skilled staff members is essential to effectively support the communication initiatives of central banks as producers of official statistics**. The survey underscored the variety of the tasks involved in this area, with a remarkable dispersion across national situations (Table 1). For instance, a number of central banks rely on just a few staff members to communicate their statistics, while others can call on much greater resources – up to 50 staff members in some cases.

A second insight is that **the staff skills needed are quite diverse**. The definition and the creation of the content supporting statistical communication are typically the resource-intensive tasks, requiring the support of around 10 staff members in each case (on average across jurisdictions). The resources involved in the actual management of the communication channels and for metrics analysis are reported to be more modest, equivalent to three or four staff members on average.

Staff resources supporting the central banks' statistical communication function

Table 1

| Number of people in charge of: | Average | Minimum | Maximum |
|--|---------|---------|---------|
| Defining the type of content and the timeliness of its publication | 10 | 1 | 48 |
| Creating the content (scripts, infographics etc) | 10 | 1 | 50 |
| Managing the channels | 4 | 1 | 20 |
| Analysing the metrics | 3 | 1 | 8 |

Sources: IFC statistical communication survey (2022); authors' calculations.

Third, an important feature is **the cross-departmental nature of the staff resources involved in central banks**, partly reflecting the variety of the related tasks as mentioned above. In fact, the staff resources supporting statistical communication are potentially located in four groups (Graph 12): (i) the statistical units themselves, which are in charge of data compilation; (ii) other teams in central bank statistical departments (for instance their dedicated statistical communication units); (iii) the central bank

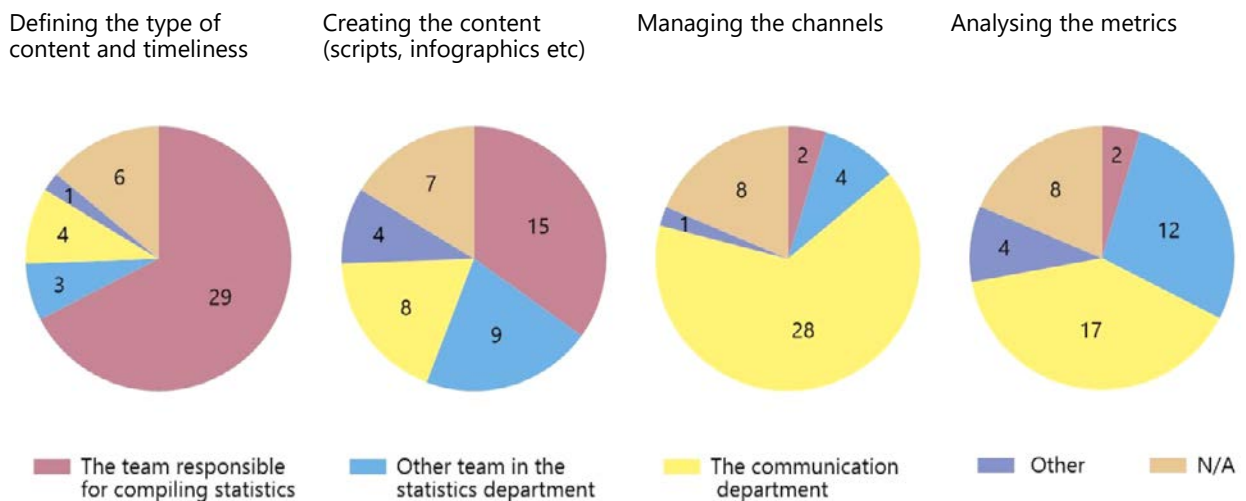
cross-departmental communication function; and (iv) other units either in the central bank (eg the IT department) or outside (eg external contractors/firms), especially when specific skill sets are in demand.

A number of common features are seen across central banks. For instance, the main resources in charge of the definition of the content and timeliness of statistical communication initiatives usually belong to statistics departments, and often work closely together with the colleagues responsible for actual compilation work. The same applies to the creation of content, which usually relies on a strong collaboration with subject-matter statisticians. In contrast, the contribution of the staff located in the central bank overall communication function is much more substantial, and often critical, for tasks such as metrics analysis and channels management.

Location of staff resources supporting statistical communication in central banks

Number of respondents

Graph 12



Sources: IFC statistical communication survey (2022); authors' calculations.

The survey also sheds light **on the technical skills required to support statistical communication initiatives.** A clear message is that **business knowledge** (ie a deep understanding of the information to be conveyed to the public) is essential, especially when defining the type of content and the timeliness of the related actions.

Other important technical skills are required outside the "traditional" statistical area, namely those related to communication, information management, and economics. In particular, content creation calls for a number of specialised IT tools and skills, for instance, to support data visualisation and design (Drozdova (2017)). Specialised skills are also in strong demand for the people in charge of managing communication channels. For instance, creativity and analytical skills can be key when evaluating communication metrics. In contrast, the importance attached to soft skills (eg interpersonal skills, leadership etc) appears more secondary.

References

- Andrei, T, I Dumitrescu and D Ștefanescu (2014): "What is the value of official statistics and how do we communicate that value?", *Romanian Statistical Review*, vol 62, no 3, pp 3–10.
- Blinder, A, M Ehrmann, M Fratzscher, J De Haan and D-J Jansen (2008): "Central bank communication and monetary policy: a survey of theory and evidence", *NBER Working Papers*, no 13932, April.
- Buch, B (2019): "Evidence-based policy – progress and next steps", speech at the reception hosted by the Deutsche Bundesbank on the occasion of the Annual Meeting of the Verein für Socialpolitik, Leipzig, 23 September.
- Carson, C (2009): "Numbers as pictures: examples of data visualisation from the Business Employment Dynamics program", *Statistical Survey Paper*, US Bureau of Labour Statistics, October.
- Dilnot, A (2012): "Numbers and public policy: the power of official statistics and statistical communication in public policymaking", *Fiscal Studies*, vol 33, no 4, pp 429–48, December.
- Draghi, M (2014): "Central bank communication", opinion piece published in *Handelsblatt*, 4 August.
- Drozdova, A (2017): "Modern informational technologies for data analysis: from business analytics to data visualization", *IFC Bulletin*, no 43, March.
- European Central Bank (ECB) (2022): *Knowledge & Attitudes Survey 2021*, January.
- Gardt, M, S Angino, S Mee and G Glöckler (2021): "ECB communication with the wider public", *ECB Economic Bulletin*, Issue 8.
- Giovannini, E (2008): "The role of communication in transforming statistics into knowledge", in *A strategic view for statistics: challenges for the next 10 Years*, European Central Bank.
- International Monetary Fund (IMF) (2013): *The special data dissemination standard*.
- Irving Fisher Committee (IFC) (2016): "Central banks' use of the SDMX standard", *IFC Report*, no 4, March.
- (2019a): "Mind the data gap: commercial property prices for policy", *IFC Report*, no 8, March.
- (2019b): "Business intelligence systems and central bank statistics", *IFC Report*, no 9, October.
- (2020): "Using financial accounts", *IFC Bulletin*, no 51, February.
- (2021): "Issues in data governance", *IFC Bulletin*, no 54, July.
- (2022): "Statistics for sustainable finance", *IFC Bulletin*, no 56, May.
- Kapetanios, G, M Marcellino, F Kempf, G Mazzi, J Eklund and V Labhard (2021): "Measuring and communicating uncertainty in official statistics: State of the art and perspectives", *Eurostat Statistical working papers*, KS-TC-20-006-EN-N.
- Petcu, I-R, A, Mirica and B Firtescu (2016): "The use of social media for communication in official statistics at European level", *Romanian Statistical Review*, vol 64, no 4, pp 37–49, December.
- Ten Bosch, O and E de Jonge (2008): "Visualising official statistics", *Statistical Journal of the International Association of Official Statistics (IAOS)*, vol 25, pp 103–16.
- Tissot, B (2017): "Using micro data to support evidence-based policy", paper presented at the 61st Congress of the International Statistical Institute, Marrakesh, July.
- UK Office for Statistics Regulation (2022): *Code of practice for statistics*, May.
- United Nations Economic Commission for Europe (UNECE) (2009): *Making data meaningful*, parts 1–4, ECE/CES/STAT/NONE/2009/4.

——— (2013): *Getting the facts right – A guide to presenting metadata*, ECE/CES/29.

——— (2021): *Strategic communications framework for statistical institutions*, ECE/CES/STAT/2021/1.

Weidmann, J (2018): “Central bank communication as an instrument of monetary policy”, lecture at the Centre for European Economic Research, Mannheim, 2 May.

Annex 1: IFC survey on communication of central bank's statistics

This is a survey among IFC members on the future of central banks' statistics communication. The results will be discussed at the conference "Communication on central bank statistics: unlocking the next level", to be held on 19 and 20 September in Lisbon. This survey has two main goals: (i) to look at the recent past and analyse how central banks' statistics communication evolved during the last years and (ii) to look forward and identify what central banks expect to do in the near future (or what they would like to improve in this context). For the purpose of this survey, by communication initiatives, we consider every action built upon the data produced, such as, press releases, infographics, videos, social media content, workshops etc. We do not consider as communication initiatives data dissemination to international organisations (such as the ECB or IMF) or via central bank websites (such as databases, Excel or csv files or tables).

General

- Do you have any kind of communication initiatives on the statistics produced by your central Bank? Yes/No

Note: For the purpose of this survey, by communication initiatives, we consider every action built upon the data produced, such as, press releases, infographics, videos, social media content, workshops etc.

If "Yes",

- Who are your main competitors, ie, other entities that communicate official statistical content in your country?
- Comparing to the identified entities, which are your main competitive advantages? (eg higher transparency, better content etc)
- Comparing to the identified entities, which are your disadvantages? (eg poor visuals)
- Do you guarantee the alignment between your communication strategy and the mission, vision and objectives of your central bank? How do you do it?
- Could you provide the contact (email) of one person responsible for the initiatives in your central bank that we could ask our doubts/discuss some ideas?

If "No",

- If you answered "no", please indicate the reason(s):

Check all that apply

- Lack of resources (IT/HR)
- Lack of support from the Board
- We don't know how to start
- Other
- Who are your main competitors, ie, other entities that communicate official statistical content in your country?

Target

Do you have a strategy of segmentation, ie, do you produce specific content for specific targets?

Five years ago, to which targets did you communicate statistics?

| | Yes | No |
|--------------------------|-----|----|
| General public | | |
| Journalists | | |
| Researchers | | |
| Banking industry | | |
| Firms | | |
| Governmental authorities | | |
| Professors | | |
| Students | | |
| Other | | |

Currently, to which targets do you communicate statistics?

| | Yes | No |
|--------------------------|-----|----|
| General public | | |
| Journalists | | |
| Researchers | | |
| Banking industry | | |
| Firms | | |
| Governmental authorities | | |
| Professors | | |
| Students | | |
| Other | | |

Within two years, to which target groups do you expect to communicate statistics?

| | Yes | No |
|--------------------------|-----|----|
| General public | | |
| Journalists | | |
| Researchers | | |
| Banking industry | | |
| Firms | | |
| Governmental authorities | | |
| Professors | | |
| Students | | |
| Other | | |

- Please describe specific actions that you take with these targets, how they evolved over time (including why did you decide to reach or leave specific targets) and what are you planning to do in a near future:
- Do you receive feedback from the targets? Yes/No
- If you indicate "yes", please describe how and indicate how often do you do it.

Communication channels

Which channels do you use to communicate statistics? Which ones did you leave and which ones do you predict starting to use?

Five years ago, which channels did you use?

| | Yes | No |
|---|-----|----|
| Website | | |
| Email | | |
| Agreements with media (TV, press) | | |
| Events (such as conferences and webinars) | | |
| Podcast | | |
| Social media: Instagram | | |
| Social media: Twitter | | |
| Social media: LinkedIn | | |
| Social media: YouTube | | |
| Social media: Facebook | | |
| Social media: TikTok | | |
| Other | | |

Currently, which channels do you use?

| | Yes | No |
|---|-----|----|
| Website | | |
| Email | | |
| Agreements with media (TV, press) | | |
| Events (such as conferences and webinars) | | |
| Podcast | | |
| Social media: Instagram | | |
| Social media: Twitter | | |

| | | |
|------------------------|--|--|
| Social media: LinkedIn | | |
| Social media: YouTube | | |
| Social media: Facebook | | |
| Social media: TikTok | | |
| Other | | |

Within two years, which channels do you expect to be using?

| | Yes | No |
|---|-----|----|
| Website | | |
| Email | | |
| Agreements with media (TV, press) | | |
| Events (such as conferences and webinars) | | |
| Podcast | | |
| Social media: Instagram | | |
| Social media: Twitter | | |
| Social media: LinkedIn | | |
| Social media: YouTube | | |
| Social media: Facebook | | |
| Social media: TikTok | | |
| Other | | |

- If five years ago you were using a channel that you do not use anymore, could you explain the reason you left it?
- If you are currently using social media to communicate, could you explain your moderation policy (ie, do you allow interaction with users through comments, reactions etc or do you reply to the comments you receive)?
- How do you use each channel?
Note: Please indicate if you use each channel according to the type of content, the target, how often you publish content and describe the process of publication (how you select the most appropriate channel for each target)
- Are there autonomous channels in the statistics department? Yes/No
Note: For example an Instagram page only for the statistics department or for the central bank as a whole
- When do you communicate?

Comment only when you choose an answer.

- When we have something to highlight:
- We have regular initiatives – please indicate the frequency of the publications:
- Do you have an omnichannel communication strategy (ie communicate the same message in different channels with different levels of detail)? Yes/No
Note: For example when you publish a report, do you prepare a lighter version for social media, a video, a press release, a relatable summary or an infographic along with the main report?

Content

- If you publish reports, press releases or similar products, do you always focus your analysis in the same statistical information (or do you change your analysis according to what you consider the most relevant information)? Yes/No
- If you answer "no" in the previous question (ie, that you favour different statistical indicators), please describe your strategy to define the relevant statistical series that you will promote:
- Which type of content do you produce?

Five years ago, we produced:

| | Yes | No |
|---------------|-----|----|
| Audio | | |
| Video | | |
| Press release | | |
| Infographics | | |
| Other | | |

Currently, we produce:

| | Yes | No |
|---------------|-----|----|
| Audio | | |
| Video | | |
| Press release | | |
| Infographics | | |
| Other | | |

Within two years, we expect to be producing:

| | Yes | No |
|---------------|-----|----|
| Audio | | |
| Video | | |
| Press release | | |
| Infographics | | |
| Other | | |

- When you need to communicate an important message and you need to reach as many people as possible, which type of content do you choose? Please explain the reason for that selection.
- When you communicate to the general public, which are the main difficulties?
Note: For example, it is not easy to avoid technical concepts, some information is not interesting for the general public etc.
- Which type(s) of videos do you have?

Check all that apply

- Videos with a pivot
- Motiongraphics
- Tutorials
- B-roll
- Other:

Results

Do you evaluate your statistics communication initiatives? Which indicators/metrics do you look at?

Currently, we analyse:

| | Yes | No |
|---------------------------------|-----|----|
| Website – Page views | | |
| Website – Unique users | | |
| Website – Bounce rate | | |
| Social media – Impressions | | |
| Social media – Engagement | | |
| Events – Number of participants | | |
| Events – Feedback questionnaire | | |
| Other | | |

Within two years, we pretend to be analysing:

| | Yes | No |
|---------------------------------|-----|----|
| Website – Page views | | |
| Website – Unique users | | |
| Website – Bounce rate | | |
| Social media – Impressions | | |
| Social media – Engagement | | |
| Events – Number of participants | | |
| Events – Feedback questionnaire | | |
| Other | | |

- What do you do with the analysis of the indicators/metrics? (identification of the purpose and the impact in future initiatives)
Note: Do you test new channels? Do you terminate some initiatives?
- Please indicate how often you analyse these metrics.
- Do you measure the impact of your initiatives on statistics communication in society's perception of the role of the central bank (eg sentiment surveys etc)?

Human resources

How many people are in charge of...?

- Defining the type of content and the timeliness of the publications
- Creating the content (scripts, infographics etc)
- Managing the channels
- Analysing the metrics

Which soft/hard skills should people in charge of...have?

- Defining the type of content and the timeliness of the publications
- Creating the content (scripts, infographics etc)
- Managing the channels
- Analysing the metrics

Who is principally responsible for...?

| | The team responsible for compiling statistics | Other team in the Statistics Department | The Communication Department | Outsourcing | Other |
|---|---|---|------------------------------|-------------|-------|
| Defining the type of content and the timeliness of the publications | | | | | |
| Creating the content (scripts, infographics etc) | | | | | |
| Managing the channels | | | | | |
| Analysing the metrics | | | | | |

- If you indicate "Other" in the previous question, please specify:

Other

- If your central bank has developed/is developing/is planning to develop a statistical communication project that is innovative, impressive, inspirational, that you are proud of, and that you consider that should be shared with other central banks, please describe it.
Note: For example, a communication initiative that you are proud of it, a collaboration between different teams etc.

Annex 2: List of IFC jurisdictions that responded to the survey

1. Albania
2. Algeria
3. Angola
4. Argentina
5. Armenia
6. Austria
7. BIS
8. Canada
9. Canada (Statistics Canada)
10. Chile
11. Estonia
12. European Union
13. Germany
14. Greece
15. Hungary
16. India
17. Indonesia
18. Ireland
19. Israel
20. Italy
21. Japan
22. Korea
23. Latvia
24. Lithuania
25. Luxembourg
26. Macao
27. Macedonia
28. Malaysia
29. Malta
30. Mauritius
31. Montenegro
32. The Netherlands
33. New Zealand
34. Nigeria
35. North Macedonia
36. Peru
37. The Philippines
38. Portugal
39. Romania
40. Singapore
41. Slovakia
42. Slovenia
43. South Africa
44. Spain
45. Sweden
46. Switzerland
47. Tunisia
48. Turkey
49. United States
50. Vietnam