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## Making sense of central bank data – The Banco de Portugal’s experience in communicating statistics

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*“Statistical information is necessary to decide what policy actions to take, to explain them publicly, and to assess their effects after the event. Unless policy can be justified and explained, it will not be understood and the institution carrying it out will lack credibility”.*

Alexandre Lamfalussy

### 1. Introduction

Statistics are everywhere. Yet, on their own, statistics are just numbers. And numbers alone do not tell a story – to mean something, their inner value must be brought to life. This could be a major challenge for an efficient statistical communication. Indeed, communicating is about catching the addressee’s attention and *statistical* communication is no different: it is about providing the story behind the numbers in an easily understood, attention-grabbing and entertaining fashion; and it is about encouraging the media and others recipients to consider how statistics might add impact to every reality they have to work with. Central banks, in their different capacities, both as users and producers of statistical data, should look for the continuous improvement of the way they communicate statistics. Firstly, because it is part of their mission to inform the general public about, *inter alia*, the economy or the financial situation of the country. Data on credit stocks and on interest rates is just an example of information that could guide citizens in making purchases or asking for a loan, and in taking many other economic and financial decisions that might impact significantly their lifecycles. Secondly, but not less important, because central bank statistics are of chief interest to policy-makers, financial analysts and other market participants. Lastly, but not least, because other stakeholders like the media or the Academia can also benefit from such data to inform their analysis, research and decision making.

This variety of involved stakeholders increases the complexity inherent to statistical communication. If on the one hand, a well-thought out communication plan is not limited to define the target audiences but also focuses on how to reach them effectively, on the other hand, the communication channels chosen depend on the nature of the relationships with those specific audiences.

Against this background, we discuss in this paper the communication strategy that *Banco de Portugal* (hereinafter also referred to as “the Bank”) has been following to bring together producers and users of central bank statistics and to foster the understanding and more frequent use of such data. To that extent, section 2 outlines the strategic communication plans pursued by the Bank, and describes concrete initiatives currently in place aimed at publishing and promoting statistical content in a simpler and clearer fashion. Section 3 measures the success of some such initiatives already taken by the Bank to promote its statistics and finally, section 4 sheds light on the next strategic communication steps that are currently being envisaging over the medium/long term.

## **2. The *Banco de Portugal*'s strategic orientations regarding statistical communication**

The legal framework currently in force requires the Bank to produce and disseminate statistics in multiple domains, which span from traditional aggregated data – such as, monetary and financial statistics, external statistics or national financial accounts –, to very detailed, micro-data-based, statistics – as it is the case with the statistical outputs built on the Bank's Central Balance Sheet Database.

Pursuant to its attributions, the Bank produces statistical data that are accurate, reliable, internationally comparable and consistent. Moreover, it is the Bank's premise to produce and disseminate its statistics with complete transparency in line with the international reference manuals applicable. In particular, this means that, *inter alia*: (i) statistics are compiled on an objective basis; (ii) choices of sources and statistical methods, as well as decisions about the dissemination of statistics, are determined by statistical considerations only; (iii) information on the methods and procedures used (metadata) is publicly available, (iv) statistical release dates and times are pre-announced in the Bank's official website; (v) advance notice is given on major revisions or changes in methodologies; and (vi) errors discovered in published statistics are corrected at the earliest possible date and publicised. These practices strengthen the Bank's integrity, independency and unbiasedness.

Over the last decades the Bank has been facing many different statistical and communication challenges, which have reinforced the need and the resolve to constantly question its communication strategy and enhance it.

More recently, in the context of the Great Financial Crisis, there was an increased demand for comprehensive, high quality and more detailed statistics – *e.g.* in the euro area, the pursuit of unconventional monetary policies by the European Central Bank and the creation of the Single Supervisory Mechanism have been particularly relevant in stressing the need to go beyond the aggregates in the domain of monetary and financial statistics.

Concurrently, the users' interest for the statistics published by the Bank have been increasing significantly, as shown by the existing quantitative indicators on the demand for statistical data and metadata, and for statistical services made available by the Bank.

Moreover, the challenges brought about by an ever-evolving information society are driving radical change in the lives of citizens and businesses, with the constant creation of new products and services fuelled by innovation. In this context, the Bank understood that it had to be ready for these and other emerging challenges to maximise the potential benefits of the new technologies of communication and social media.

To this extent, the Bank realized that, in this new era, it needed to react more quickly to new inquiries, demands and concerns of its audiences, which is why it started to look for new ways of disseminating statistical data and communicating with the public. This new emphasis on communication strategies aimed to promote the public understanding of the Bank's mission and functions, through a transparent information policy that enhances the right balance between accountability and independence, but at the same time, sophistication and modernity.

In what concerns its statistical function, the Bank has been evolving from a traditional, one-way, statistical dissemination model to more collaborative communication channels, thus making good use of innovative tools and formats.

In this respect, there are already some tangible initiatives in place which are worth highlighting, *inter alia*:

- a. The publication on the Bank's official channel on Twitter<sup>1</sup> and on YouTube of statistical content, such as videos, announcements of new studies, reports and data, etc.;
- b. The organization of domain-specific workshops and seminars with representatives of other national central banks, to share experiences in the various statistical domains for which the Bank is accountable;<sup>2</sup>
- c. The setting up of conferences directly targeted to specific user groups (*e.g.*, non-financial corporations, as in the case of the conferences of the Bank's Central Balance-Sheet Office), with the objective of bringing together users and producers of statistical data on specific economic sectors;<sup>3</sup>
- d. The setting up of interviews (*e.g.*, to newspapers and national televisions), speeches and briefings focused on particular statistical issues, aimed at sharing the Bank's knowledge on statistical topics of interest to the public at large (*e.g.* the dynamics of remittances or the international investment position);
- e. The organization of regularly scheduled meetings with media representatives, both from general and specialised media, to discuss and clarify distinctive statistical developments and to foster the message pass-through role of the media;
- f. The realization of thematic sessions in universities, carried out by the Bank's statistical representatives, to sensitize the students about the actual and potential uses of the official statistics produced by the Bank;
- g. The use of stalls and posters at specific events, targeted at addressing particular statistical issues to foster the understanding and uses of the Bank's statistical outputs;
- h. The publication of statistical press releases at the same moment that new data are divulged, where one can find related relevant metadata, brief insights on the data developments and trends, and contextual information, using predominantly non-technical language and terms. Most of these

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<sup>1</sup> Following its strategic orientation of greater openness to society and in line with other Eurosystem central banks (including the ECB), Banco de Portugal created, in February 2017, its channel on Twitter (<https://twitter.com/bancodeportugal>). With this initiative, the Bank intended to disseminate all the information that could improve the knowledge and understanding of the population about its *modus operandi* and about its contributions to society. All initiatives of the Bank that are placed on the site, such as studies, reports, interventions or interviews of the members of the Board of Directors are object of specific tweets announcing their publication and mentioning the appropriate links.

<sup>2</sup> A good example of this initiative was the organization of the Workshop on Integrated Management of Micro-databases, which brought together senior experts of more than four dozens of countries around the world and promoted the debate on how to best manage the information available at central banks to meet the user's needs.

<sup>3</sup> For instance: the regular organization of sector-specific conferences between the Bank, industrial organizations and academics with expertise on such sectors, to discuss the dynamics of such sectors and how to best embrace their upcoming challenges

press releases are standardized, which is important for consistently meeting user-expectations from month to month. Additionally, these normalized press releases ensure the transparency quality dimension of statistics, since there is no hidden information from one month to another.

- i. The production of short videos, to be disseminated in the Bank's online channels, describing the latest statistical developments in a particular domain and briefly explaining the causes of such phenomena, in order to further promote an increased awareness and understanding of the Bank's statistics.
- j. The continuous improvement of the Statistical Bulletin. According to the available customer feedback, the frequent content and layout improvements to the (electronic) publication have been very much appreciated and encouraged by the users. By combining data, tables, graphics and comparisons, the Statistical Bulletin has succeeded in maximizing its potential to transmit various types of useful information to the users. This policy has already a visible impact, for instance, in the sections on the main macroeconomic indicators and on the indebtedness of the non-financial sector.

Overall, the main guiding principle behind all these initiatives is the recognition of the need to simplify and reduce messages to the most important facts. By reducing complex information the Bank increases the success of the messages conveyed and escapes from overwhelming the public with excessive information, especially the non-professional users who usually need a simpler and more "digested" message.

### **3. Measuring the success of current communication initiatives**

Measuring the success of each communication initiative is at the heart of a good communication strategy. Indeed, it is considered a good practice for statistical disseminators to monitor the impact of their statistical outputs on the different communication channels.

In this respect, the Bank understands that evaluating the outreach of the published message – how far it has gone and how many people it has affected positively – is just as important as publishing its content. Accordingly, the Bank periodically collects data that allows it to understand the success of the promoted initiatives.

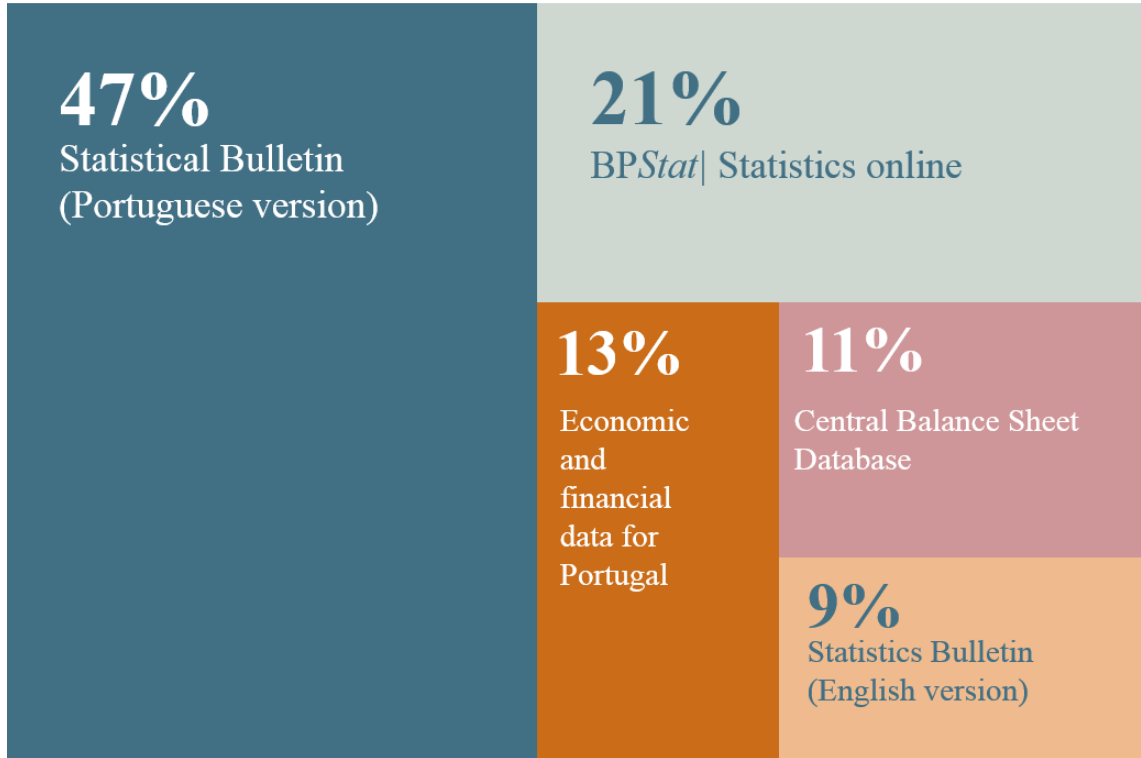
To this extent, looking to the Internet traffic or to the number of followers and visualizations in social media can be considered a helpful tool to determine the most demanded data and information.

In November 2016, on the occasion of its 170th anniversary, the Bank launched a new institutional website with a contemporary design, refreshed content and navigation logic tailored to users' needs, which enables it to keep up with new trends in digital channels, making information more accessible and communication more effective.

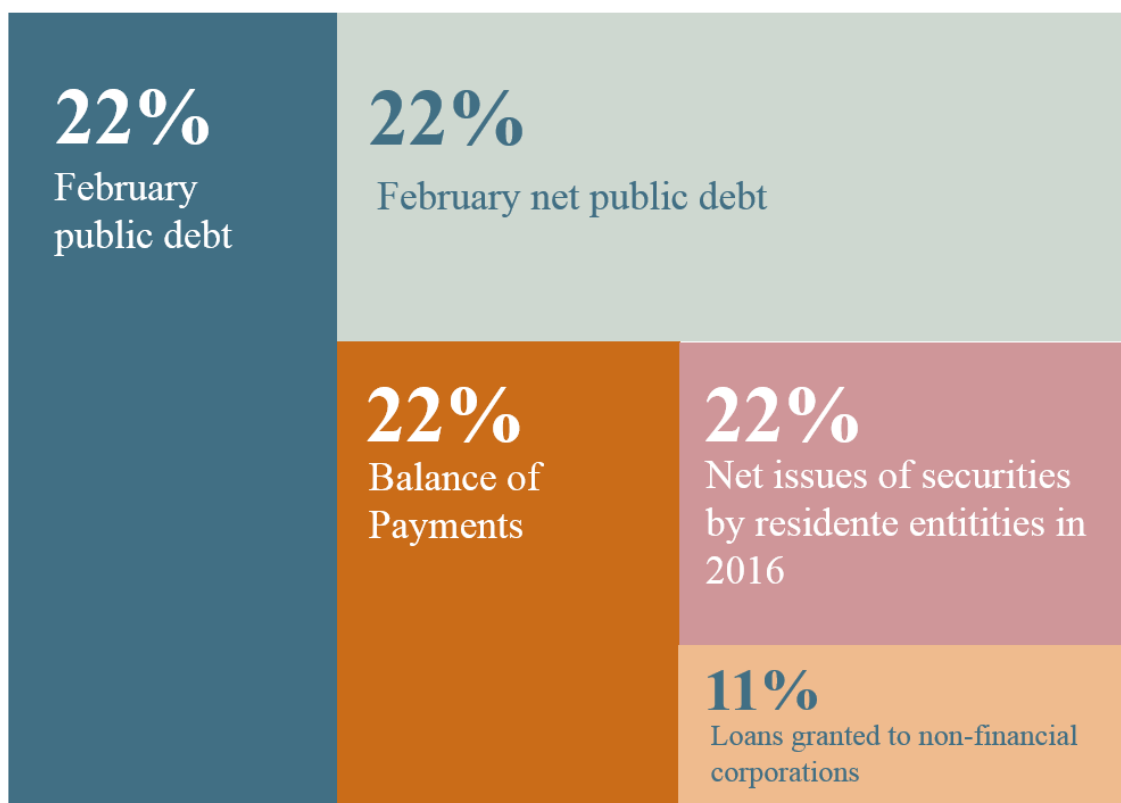
Since then and, until the end of May 2017, the website counts almost 9 million page views.

Figure 1 shows that during the period under analysis, the Statistical Bulletin is being the most demanded statistical content in the Bank's website, followed by *BPStat | Statistics Online*. Figure 2 shows the engagement rate of the 5 main statistical tweets. Public debt, balance of payments and securities issued statistics are the most outreached.

**Figure 1: Top 5 statistical web site pageviews  
From November 2016 until the end of May 2017**



**Figure 2: Top 5 statistical Tweets – Engagement rate<sup>4</sup>  
From February 2017 until the end of May 2017**



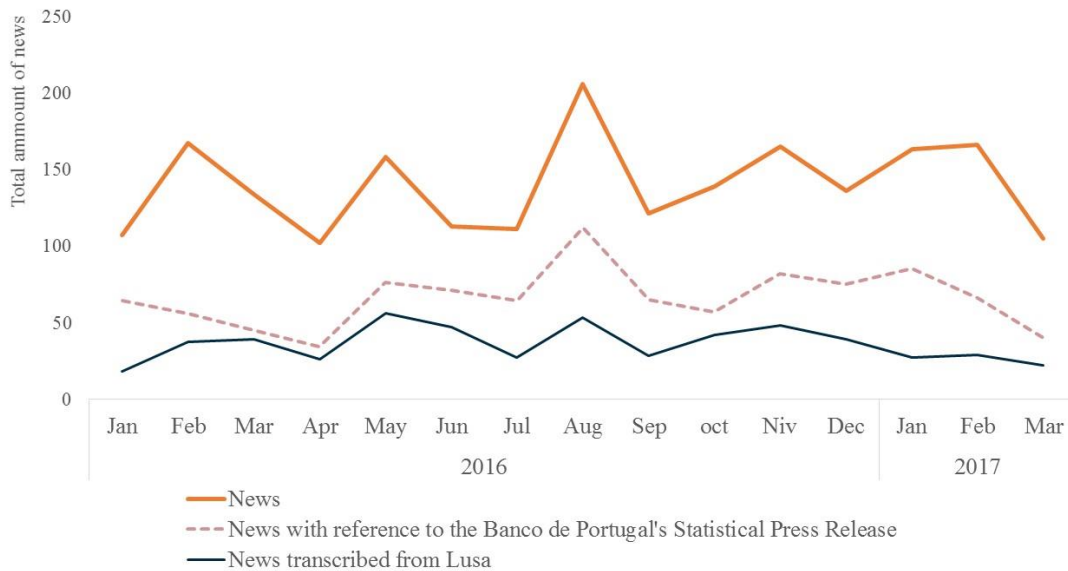
In the same vein, it is worth for a statistical disseminator to evaluate the impact of its statistical releases in print and electronic media from the point of view of both the number of “hits” and the quality of coverage. Monitoring coverage can help managers determine if more work is needed to coach journalists or key stakeholders about better ways of conveying the meaning of numbers in language that laypeople can understand.

Figure 3 shows the evolution of the number of published press news that were written based on statistical information released by the Bank. As one can notice, about 50 per cent of them have at least one reference to the *Banco de Portugal’s* Statistical Press Releases. Indeed, this initiative is being very welcomed by journalists given that, in general terms, Statistical Press Releases answer to the very nature of their data requirements: “fast”, “spot-on” and “easy-to-read” information. Mainstream media reporters constantly exert pressure on the Bank to get faster explanations on data developments or additional details, which would allow them to publish the news while the subject is still trending. As soon as the statistical data are disclosed by the Bank, the reporters have to write an as concise and accurate as possible news release or article, to be swiftly broadcasted by radio or television, and/or posted on the Internet – including social media – and to accommodate the need for mobile and smartphone users to have constantly updated and

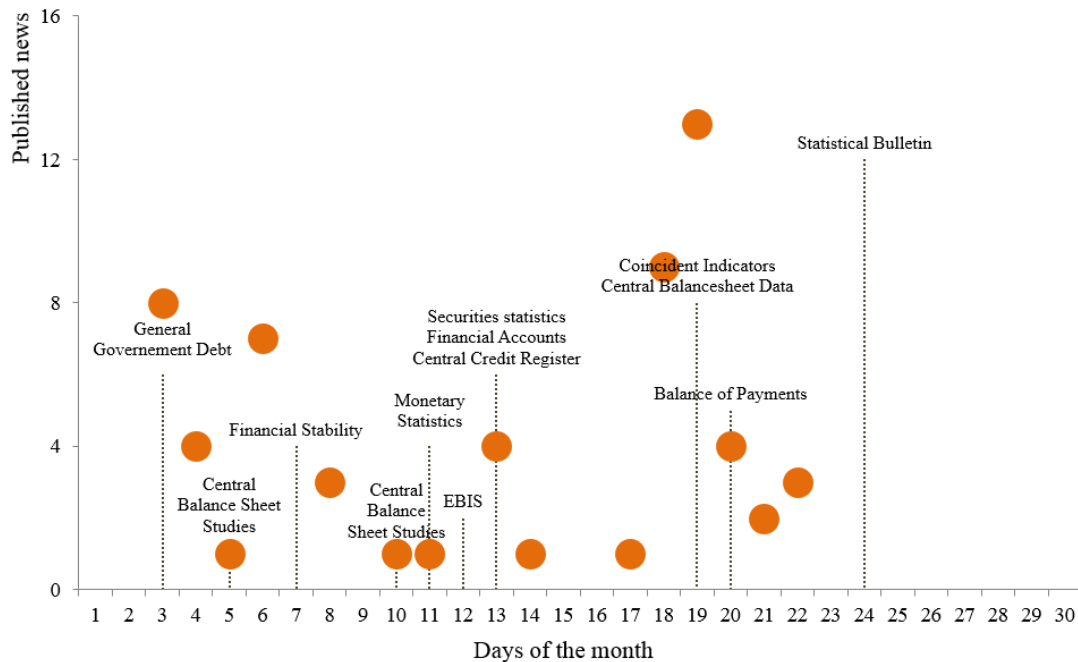
<sup>4</sup> Engagement rate is computed as the “number of engagements” divided by “impressions”. Engagements are defined as the total number of times a user interacted with a Tweet (retweets, replies, follows, likes, links, cards, hashtags, embedded media, username, profile photo, or Tweet expansion). When we say “impression”, we mean that a tweet has been delivered to the Twitter stream of a particular account.

easy-to-read information. Figure 4 shows the amount of news published daily during the month of April 2017 as well as the dates of publication of data and respective Statistical Press Releases.

**Figure 3: Published news based on *Banco de Portugal's* statistical information**



**Figure 4: Date of the release of statistical outputs and related published news (April 2017)**



#### 4. Next steps and medium/long term vision

As a part of the above discussed challenge of communicating statistical content in a more attractive and understandable manner, the Bank currently envisages to develop new initiatives to bring statistics closer to

the citizens and to deliver content in a user-friendlier way, thus meeting more closely the above debated contemporaneous statistical communication challenges.

Having acknowledged that statistical information has to be explained to the public at large – rather than just being presented as a collection of numbers in a table or chart – and the intuitive principle that people tend to pay closer attention when an interesting story is told, the Bank plans to strengthen the application of storytelling techniques when delivering statistics, while preserving accuracy and reliability.

To make this vision a reality, the Bank currently foresees the development of three impactful projects in the domain of statistical communication: the creation of a strategy to publish regularly different infographics alongside their relevant statistics; the publication of short and thematic statistical videos, explaining, in non-technical language, statistical issues of interest for the general public; and the launch of a Statistics Portal.

In the spirit of the aforementioned initiatives, the Bank has decided that one of the best ways to easily convey the latest statistical developments it publishes is through an intuitive schematic representation – an infographic – which portrays the underlying phenomena in a visually creative and clear fashion, with or without a “story” – or main message – behind it. By accompanying the publication of the Bank’s official statistics with such infographics, the Bank would both promote the increased awareness of its statistics – given that infographics are very easily spread throughout the several communication channels used by the Bank – and, more importantly, the understanding of such information in a meaningful and functioning way.

Although this principle is quite simple in concept, its fulfilment is still proving to be rather difficult, given that, *inter alia*, it demands hard and soft skills that are not typically available among the staff of a central bank’s Statistics Department. To that extent, the Bank is already working to promote internal seminars aimed at training its staff with a view to create the communication of the (near) future.

Following the recent publication by the Bank of short videos aimed at maximizing its statistical communications outreach and the relative success that this initiative has achieved, the Bank is also considering creating a new video publication series, focusing on thematic inter-temporal statistical issues of interest to the public at large. The rationale behind this idea is to convey relevant explanations in a rather clear, non-technical and easily understandable way, drawing on the same storytelling basis as the infographics and further promoting awareness and understanding about the Bank’s statistics. Moreover, it would also have the advantage of being relatively “timeless”, thus optimising its use not only across the Bank’s digital communication channels, but also in the context of the currently developed initiatives with statistical stakeholders.

Finally, the Bank is also making significant efforts to substitute its main online statistical communication tool – the *BPStat* – by a new, state-of-the-art, statistics portal, with significantly higher statistical and visual contents. Concurrently, the principles underlying this process are the same as those of the Bank’s statistical communication strategy – a deep concern for user-friendliness, increased awareness and usability of the statistics of the Bank – and several analytical and visual features have already been discussed and tailored to meet such critical communication challenges, such that the Bank is already finalizing the informational and technological architecture features, with a view to launching the a new statistical portal very soon.



All in all, with these initiatives the *Banco de Portugal* is changing the way it relates to the general public: from boring to dynamic, from longstanding to modern. In an ever-changing world, central banks' communications have to be effective, simple and credible. It's not only an instrument, it's not an add-on of the core business; much rather it's a core task and an important asset treasured by our audiences.

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