1. Introduction

Official statistics play a crucial role in conveying the social and economic reality of a country. They provide basic information for decision-making, evaluations and assessments at all levels of the economy. For the Government, such statistics are essential not only for planning and monitoring the progress of development but also for improving governance and accountability of public agencies.

While statistical data are integral to illuminating social, economic and financial conditions, they are subject to different interpretation by users, which in turn shape their expectations and behaviour. Given that expectations play an important part in the behaviour of consumers and investors, the effective communication of official statistics has become an essential aspect in understanding and predicting the behaviour of the various stakeholders in an economy.

This paper examines the role of official statistics in an economy with emphasis on how their dissemination and communication can be enhanced to improve users’ understanding and behavioural response. The paper is organised as follows. In section 2, the key principles of a sound statistical system are examined as they form the foundation for effective communication and understanding, thereby fulfilling the primary goal of the statistical compilation. Section 3 examines the adequacy of official statistics dissemination and communication in Malaysia based on a questionnaire survey of a selected group of expert users, comprising largely of economists, market analysts and researchers. This group is targeted because it is one of the main user groups that plays an important part in analysing and interpreting the data and whose analyses and viewpoints are widely disseminated for public consumption.


Effective communication of official statistics rests on a well-established and trusted system of data collection, compilation and reporting. The key principles underlying such system have been established for universal observance. These principles are first described followed by an examination of the attributes of effective communication.
2.1 Principles for Management of Official Statistics

In 1992, the United Nations Economic Commission for Europe (UNECE) adopted the fundamental principles of official statistics in the UNECE region. These principles became universal when they were embraced by the United Nations Statistical Commission in 1994. These succinct principles are reproduced below:

a) **Relevance, impartiality and equal access:** Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens’ entitlement to public information.

b) **Professional standards and ethics:** To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

c) **Accountability and transparency:** To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

d) **Prevention of misuse:** The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

e) **Sources of official statistics:** Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

f) **Confidentiality:** Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

g) **Legislation:** The laws, regulations and measures under which the statistical systems operate are to be made public.

h) **National coordination:** Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

i) **Use of international standards:** The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.
j) International cooperation: Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

These broad principles are helpful in guiding efforts by national statistical agencies to improve information efficiency that underpins the efficient functioning of markets and industries. Importantly, effective application of these principles will strengthen public trust in the integrity and professionalism of the statistical collection agency, thereby enhancing its ability to communicate the statistics more effectively in terms of timely and correct understanding of the country’s economic and financial conditions.

2.2 Effective Dissemination and Communication

An institutionalised system of official statistics is characterised by effective dissemination and communication to meet three objectives common to all national statistical agencies:

a) Meet the needs of the general public for statistics on the social, economic and general conditions of the country.

b) Show the importance of statistical information for informed decision-making by public and private-sector organisations and businesses as well as the general public.

c) Generate public awareness of, and support for, statistical programmes and services.

Dissemination and communication effectiveness shares similar principles enunciated in the preceding section. Besides the assurance of data quality and adequacy in terms of definitions and compilation methods, another key requirement is that the statistics are disseminated simultaneously to all users and presented in an objective and impartial manner, independent of political influence. The presentation should also facilitate proper interpretation and meaningful comparison. Explanatory or analytical comments should be included to assist non-expert users.

To enhance better understanding of economic and financial conditions, there is also a need to use various communication tools and channels such as mass media interviews and coverage of speeches as well as increasing the frequency of financial and monetary policy announcements during periods of heightened uncertainty or anxiety.

Effective dissemination also includes the provision of statistical services to cater to additional requests by specific user groups. Where revisions affect comparability over time, they are announced in advance and in accordance to a schedule with clearly identified preliminary, final and revised results. While comments on government policies are avoided when communicating the statistics impartially, value judgment or normative comments are generally accepted where they assist non-expert users to better comprehend the meaning of the statistical results.
Finally, user satisfaction surveys are carried out periodically as part of the continuous process of quality improvement and maintaining relevance amidst the rapid pace of technological, economic and social advancement.

3. Identifying Statistical and Communication Gaps and Needs

To identify areas where communication of economic and financial statistics can be enhanced, a purposeful survey of a selected focus group comprising core (expert) users, namely economists, analysts and researchers, was conducted. The main objective of the expert users’ survey is to gauge the perception of this important group of users on the quality and adequacy of Malaysia’s statistical system. Altogether 14 responses, comprising 10 local users and 4 foreign users, were received out of 15 targeted users. Given the small sample, it is cautioned that the findings should be interpreted as representative of the selected focus group.

The feedback is divided into 6 areas based on the core principles that underlie an effective statistical system as discussed in Section 2. The responses are grouped by local and foreign users and the key findings are discussed below.

a) Foundation: There is broad consensus among both local and foreign users that the legal and institutional foundation is well established (Figure 1.1) and resources are adequate (Figure 1.2). The relevance of statistics to the user group is also recognised. Not surprisingly, the respondents expressed stronger relevance of BNM statistics to their work given the importance of monetary and financial conditions to this user group (Figure 1.3 and Figure 1.4).
Figure 1.1 There is a well established legal and institutional foundation for collecting and publishing official socio-economic and financial statistics in Malaysia.

Figure 1.2 There are adequate resources for DOSM and other government ministries and agencies to conduct surveys and disseminate social and economic statistics.

Figure 1.3 The social and economic statistics and information collected and published by DOSM and other ministries are relevant and useful to my line of work.

Figure 1.4 The financial statistics collected and published by BNM are relevant and useful to my line of work.

b) Integrity assurance: The question on data transparency and professionalism elicited more mixed responses especially among the foreign users who are less sanguine on transparency and standard of collection and dissemination (Figures 2.1 - 2.3).

Figure 2.1 There is high degree of professionalism in DOSM and other government agencies such as BNM in compiling and publishing official statistics.

Figure 2.2 The statistical survey methods and procedures employed by DOSM are transparent.

Figure 2.3 There is high standard in the collection and dissemination of official statistics.
c) **Methodological soundness and data coverage:** More foreign users view the subscription to international standards and best practices by the country’s statistical agencies less favourably compared to local users (Figure 3.1). Both categories however, are equally split in the adequacy of data coverage (Figure 3.3). On coverage, there were suggestions for DOSM/BNM to make available data on household and corporate balance sheets. They should also be generated on a higher frequency as well as a more granular basis to aid in a better understanding of the economic and financial conditions. Other data gaps highlighted include inventory and new orders for tracking the manufacturing cycle as well as greater coverage of the services sector.

![Figure 3.1 International standards and best practices are applied in the collection, processing and dissemination of data.](image1)

![Figure 3.2 The scope of data covered is adequate for each area (eg. demographics, national accounts, trade, labor).](image2)

d) **Accuracy and reliability:** Though a majority of users view the data sources to be reliable, a sizeable number of respondents, particularly the foreign users, disagreed (Figure 4.1). The high number of respondents who do not know if statistical techniques are used in surveys point to the need for greater dissemination of information on survey methods (Figure 4.2). This is important given the high level of public scepticism, even among expert users, on the reliability of key economic variables such as GDP and CPI.

![Figure 4.1 The sources of data collected by DOSM and other agencies are reliable.](image3)

![Figure 4.2 Statistical techniques are used in surveys and data collection methods.](image4)
e) Serviceability: A high proportion of users in the sample do not think that the published statistics are updated regularly and on time (Figure 5.1) although a majority of the respondents (80%) agree that the official statistics in the country are generally coherent and structured (Figure 5.2). Augmentations needed include the provision of more detailed balance of payments statistics (particularly portfolio and other investment flows) as well as more detailed breakdown of CPI weights which will allow expert users to reconstruct their own indices to meet their analytical needs. On timeliness, a respondent noted that the country’s trade and industrial production data are released with a 2-month lag – compared to 1 month for Korea, where trade data is available on the 1st day of the following month. Revision is another area eliciting strong disagreement. A high number of respondents, especially among the foreign users, expressed the view that policies and practices on revisions of surveys are not clearly explained (Figure 5.3).

f) Accessibility: The perception on data accessibility is split with 64 percent agreeing that there is easy access and the rest disagree. Within each category, three of the four foreign users polled disagree that there is easy access (Figure 6.1). Half of the respondents do not agree that the metadata is readily accessible (Figure 6.2). Likewise, there is a high number of respondents who perceive inadequate assistance provided by the national statistical agency (Figure 6.3). Of note is the sizeable number of respondents who do not know (20%), suggesting the need for more public exposure to the statistical services provided by DOSM.
4. Suggestions for Enhancing Communication of Statistics

In focusing efforts to enhance the communication of statistics for better understanding of economic and financial statistics, a distinction can be made between fulfilling the needs and expectations of sophisticated users and the general populace that rely on analyses and viewpoints communicated by the expert users. Another category that is often neglected is the public sector especially those who are involved only in peripheral official statistics but whose role has become increasingly important because of rising sophistication and complexity of the economy.

Suggested thrusts and proposals for enhancing dissemination and communications of statistics are as follows:

**Thrust 1: Meeting the Needs and Expectations of Expert Users**

Given its function in monitoring economic performance and providing economic forecasts and market analysis, the main user group (economists, market analysts and researchers) plays an integral role in enhancing society’s understanding of economic and financial conditions. Meeting the needs and expectations of this user group is therefore crucial to efforts aimed at enhancing the effectiveness of communication of statistics and promoting better understanding of economic and financial conditions.
As revealed by the focus group survey, the respondents’ perception of the service quality and adequacy of the country’s official statistical system showed mixed results. The findings suggest that efforts to raise credibility, quality, timeliness and service standard of government agencies involved in official statistics will greatly boost the ability of the users to provide more accurate, transparent and timely economic and market analyses. To counter doubts over the reliability of key indicators such as GDP, CPI, unemployment and other indices such as the house price index, the custodian organisation could conduct independent audit using experts from the academia or international agencies. Subscribing to international standards such as the IMF’s Special Data Dissemination Standard (SDDS) launched in 1996 and SDDS Plus launched this year would greatly boost the quality and adequacy of the country’s statistical system.

Specific suggestions highlighted by the respondents include:

- **Explanation of revision in statistics:** The statistical agency should provide explanation for revision that deviates by more than a specified percentage from the published data. Likewise, if survey returns are lower-than-expected during the cut-off period, the statistical agency should be transparent so that users can analyse the data with care.
- **Provision of online database:** A comprehensive online database (with the ability to extract and save in Excel format) will greatly assist in analysis and reduce the need to re-key the data.
- **Availability of archived time series:** To facilitate more rigorous research and analyses that include modelling and quantitative estimation, expert users could be given access to the older time series (due to change in base year) or making them available online.

**Thrust 2: Deepening Media Engagement**

While there is continuing coverage by the mass media on economic and financial statistics, a broader and deeper engagement with the media, specifically the economic or business journalists and reporters, is one of the most effective and indispensable means of informing the general public, stimulating wider discussion and raising the level of public understanding of economic and financial conditions. Fostering a good working relationship with the media should therefore be an organisational priority for statistical agencies.

Given the media’s focus on newsworthiness, the presentation and interpretation of the statistics is of crucial importance. Allowing journalists and reporters ready access and support, including training, to understand statistical methods, concepts and classifications and to correctly interpret statistical information should be part of the statistical agency’s strategy to raise the level of public knowledge and understanding of economic and financial conditions.
A good practice prescribed universally is for the statistical agency to distinguish clearly between comments that are statistical or analytical in nature and those that contain value judgments or policy prescriptions. Likewise, the national statistical agency and other organisations involved in the release of official statistics should have a policy or strategy in place to counter misuse of statistics or wrong interpretations either through timely response or inclusion of explanatory notes and warning boxes to accompany statistical reports that are subject to misinterpretation.

Media monitoring has become an integral function of statistical agencies to detect such incidences, respond quickly to errors in dissemination and gather feedback to improve policies and services. With internet and mobile communications widely used by businesses and individuals, communications units within government organisations involved in official statistics dissemination have a range of tools that have global reach. These include interactive web blogs, audio podcasts, videos and networking sites that can be utilised to enhance public understanding of the country’s socio-economic and financial conditions.

These internet-based media are already being used widely by data users to disseminate market analyses and viewpoints. Government institutions involved in official statistics can use similar platforms to build trust and achieve their communication objectives. While most government agencies tend to proceed cautiously in embracing the new media due to security and confidentiality concerns, the benefits of openness, transparency and timeliness are likely to outweigh the direct and indirect costs.

**Thrust 3: Improving Clarity and Comprehensiveness in Statistical Reports, Media Releases and Press Briefings**

Related to a more holistic approach to media engagement is the need for clarity in the presentation of statistics and explanations.

While statistical agencies tend to adopt the positive approach to reporting, avoiding value judgment especially on government policies, they could nonetheless inject their interpretation if these are helpful for non-expert users to understand what is significant (explanatory comments) and why (analytical comments).

Increasingly, summary or presentation tables, sometimes referred to as demonstration tables, are being used to highlight key statistics in press releases and statistical publications, thereby improving clarity and facilitating understanding of key messages. The other form of tables is reference tables which are used more as analytical tools for expert users. Such reference tables are increasingly being replaced with interactive databases that allow users to generate their own
tables online. Such databases could eventually be linked to provide longitudinal datasets that are highly sought after by researchers and sophisticated users. Interactive databases are now the norm for international and regional multilateral agencies such as the World Bank, the IMF and the Asian Development Bank. National agencies, including DOSM and BNM, could work towards achieving a similar level of sophistication in data dissemination.

Thrust 4: Strengthening Capabilities and Interactions through User Group Training Workshops, Seminars and Feedback Sessions

With the economy rapidly changing and transforming, statisticians in the public sector are confronted with the challenge of maintaining reconcilability of data with the past while expanding coverage to meet current and future needs. Communicating these changes via seminars, workshops and focus group meetings have become an important part of a well functioning and effective national statistical system. The workshop organised by DOSM to explain the rebasing of Malaysia's GDP in May this year is an example of best practice in keeping the users informed on revisions to data. Similar workshops on methods of data collection and compilation, especially for new surveys, will strengthen further the transparency and trust in the methodologies and statistical output. This is important not only for keenly followed series such as those pertaining to the GDP, labour market, balance of payments and prices but also for additions such as statistics on emerging industries and newly introduced economic and financial indicators produced by BNM as part of its financial stability monitoring.

5. Summary and Conclusion

Effective dissemination and communication of official statistics play a crucial role in a country’s development process. This role assumes a greater significance as the country becomes more developed and complex, largely because information is the most basic input to economic, business and financial planning and decision making at all levels of the economy.

The results of an expert user group perception survey conducted for the purpose of this paper revealed that there is a significant scope to further strengthen the quality, timeliness and adequacy of economics and financial statistics in the country.

It is emphasised that ensuring trusted sources of data and developing the integrity, credibility and independence (that is, free from political or market influence) of the producing institutions are the cornerstones of effective communication of statistics for better understanding of economic and financial conditions.
Four thrusts have been identified to focus efforts on enhancing the communication of statistics. They are: (a) meeting the needs and expectations of the expert users, who play an influential role in researching, analysing, interpreting and forecasting economic and financial conditions; (b) engaging the media more extensively to broaden coverage, respond swiftly to erroneous reports or misinterpretation and raise the level of general public’s grasp of economic and financial issues; (c) improve clarity and comprehensiveness in media releases and statistical publications, and (d) strengthening capabilities and interactions through user group training workshops, seminars and feedback sessions.