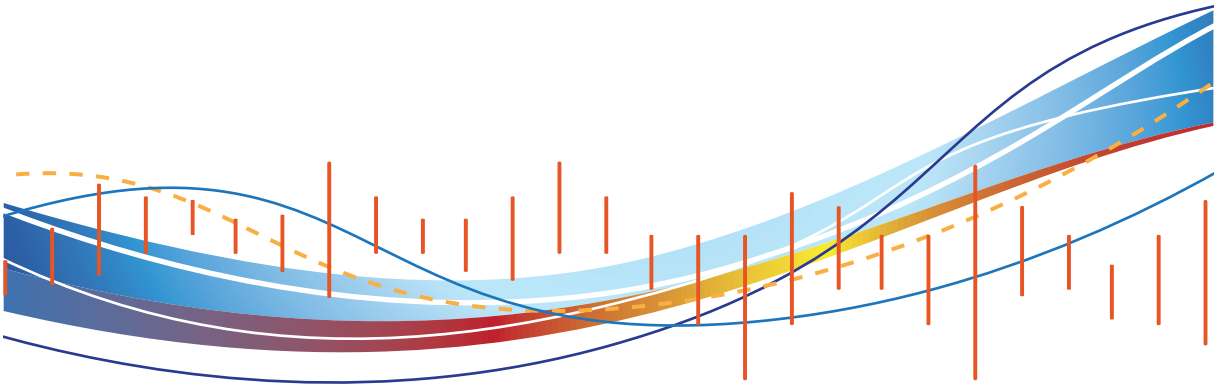
National Statistics Conference (MyStats 2012) Proceedings



Enhancing National Statistics to Meet Public and Private Sectors Needs During a Period of Transformation

7 November 2012 | Sasana Kijang

Organised by

BANK NEGARA MALAYSIA
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FOREWORD

On 7 November 2012, Bank Negara Malaysia, in collaboration with Department of Statistics Malaysia, hosted the inaugural national statistics conference, MyStats 2012, at Sasana Kijang, Bank Negara Malaysia. The theme of the conference is "Enhancing National Statistics to Meet Public and Private Sectors Needs during a Period of Transformation". MyStats 2012 has attracted a wide range of participants such as compilers, statisticians, analysts, economists, policy makers and academicians.

The key objective of MyStats is to provide a platform for compilers and users of statistics to share, discuss and highlight statistical issues in analysis and policy formulation as well as challenges in the compilation and communication of statistics. It also aims to achieve greater collaboration between the compilers and users of statistics, particularly in improving the compilation, communication and usage of statistics. The topics discussed during MyStats 2012 include: i) statistical best practices towards improving data integrity; ii) promoting data sharing and communication of statistics; iii) bridging statistical gaps during a period of transformation; and iv) new data requirements and standards for a transformed economy.

Ten papers were presented and more than 150 participants took part in the conference. The Opening Remarks was delivered by Dato' Muhammad Ibrahim, Deputy Governor, Bank Negara Malaysia and the Keynote Address was by Dr. Haji Abdul Rahman Hasan, Chief Statistician, Department of Statistics Malaysia. This conference volume is a collection of the Conference Summary, Opening Remarks, Keynote Address and the eight papers presented during the conference, and is also available on Bank Negara Malaysia and Department of Statistics Malaysia websites.

CONFERENCE SUMMARY

The theme of the inaugural National Statistics Conference (MyStats 2012), "Enhancing National Statistics to Meet Public and Private Sectors Needs during a Period of Transformation" was chosen given that Malaysia is embarking on an economic transformation programme (ETP) to achieve a high income high value-added economy. The ten presentations, which were organised in three sessions and one panel session, focused on four main areas:

1. Statistical best practices towards improving data integrity;
2. Promoting data sharing and communication of statistics;
3. Bridging statistical gaps during a period of transformation; and
4. New data requirements and standards for a transformed economy.

Session 1: Statistical Best Practices towards Improving Data Integrity

In the first session of MyStats 2012, "Statistical Best Practices towards Improving Data Integrity", the Chair, Yogeesvaran a/l Kumaraguru (Deputy Director General, Economic Planning Unit or EPU), began by acknowledging the importance of statistics during Malaysia's transformation to a high income economy by 2020. Indeed, quality statistics are not only required for the purpose of strategy and policy formulation but also to monitor outcomes as accurately as possible.

Dr. Mohd Uzir Mahidin (Director, Department of Statistics Malaysia or DOSM) as the first speaker for the session, presented his paper titled "Best Practices for Compilation of National Statistics: Where Are We?". He briefly introduced DOSM, particularly on its background and evolution since its establishment in 1949, and the adoption of the centralised statistical system. The latter integrates the process of collection, compilation and dissemination of national statistics.

He then emphasised that data quality is a fundamental element for official national statistics, and it is generally considered as 'fitness for purpose' among the statistical community. Thus, the concept of data quality is wider than accuracy. It also includes relevance, timeliness, coherence, interpretability, accessibility and reliability. He also explained DOSM's current practices on data collection, data interpretation and data dissemination.

Dr. Mohd Uzir further explained that financial and economic developments, such as the ASEAN financial crisis and the transformation programme, have also shaped DOSM's characteristics and its proactive role in producing more high frequency quality statistics for policy making. In order to continuously improve its operation and remain competitive in the challenging environment, DOSM leverages on the latest technology and emphasises on capacity building, such as the implementation of the National Enterprise-Wide Statistical System (NEWSS) in 2008 and the establishment of Statistical Training Institute of Malaysia in 2012. Initiatives are also undertaken to reach the community in the area of statistical literacy and leadership.

In conclusion, Dr. Mohd Uzir affirmed that DOSM will continue to strive, evolve and keep abreast of dynamic changes internally and externally, as well as being committed and responsive to changes in producing relevant and good statistics with the support from all relevant parties despite facing various constraints.

In the second presentation titled "International Best Practices to Ensure Data Credibility", Paul Van den Bergh (Head of Statistics and Research Support, Bank for International Settlements or BIS) focused on the challenges in ensuring the credibility of statistics from an international perspective. He started his presentation by sharing the findings of his review of the recent debates on the credibility of statistics in international forums before explaining in detail the key contributing elements.

Van den Bergh emphasised that, at the international level, discussions have moved from attempts to come up with a relatively structured and objective approach to define credibility to the recognition of the importance of softer and subjective criteria in measuring the credibility of statistics. In particular, the international statistical community moved from discussing 'criteria to assess quality' to 'measuring trust' of official statistics. In this internet age, in particular, gaining and maintaining trust is a big challenge.

Van den Bergh further explained that, in measuring the trust in statistics, the discussion has moved from pure statistical criteria to reputation and structural factors that contribute to the establishment of credibility. Discussion at the United Nations Economic Commission for Europe (UNECE) in 2010 confirmed that trust in statistics is not only measured by the characteristics of the institutions, which is tied to formal mechanisms such as professionalism, contracts and regulation, but also extended to other factors including individual or social expectations, interpersonal relationship and ethical principles.

At the end of his presentation, Van den Bergh emphasised that effective communication by statistical agencies is now generally recognised to strengthen the credibility of statistics. Hence, efforts such as knowing users' interests, engaging users with visualisation, engaging with media, proactive media strategy and communication with mass media will help to improve communications.

The discussant, Mohd Esa Abd. Manaf (Deputy Under Secretary of Ministry of Finance), commented that both presentations complemented each other, as Dr. Mohd Uzir covered the management part of the issue at national level while Van den Bergh discussed the international developments related to data credibility. He also acknowledged that data provided by DOSM and other agencies is indeed important for planning, implementation and monitoring purposes, especially at this juncture where transformation is taking place. Collaboration between data users, compilers and providers shall continue to achieve the common shared value of producing better quality data.

In the discussion, Toh Hock Chai (Bank Negara Malaysia) sought views from the panel and audience on the possible trade-off between data integrity and timeliness, as it is a big challenge for data compilers to achieve both to meet users' expectation. In this regard, Van den Bergh shared the experience of BIS in collecting global statistics which involves 30 central banks which in turn collect data from almost 1,800 financial institutions. The collection and dissemination process which might take up to one quarter to complete, have been reflected in the release calendar. In order to address the timeliness issue, preliminary data is also published earlier than the release date when responses reach an adequate level. The preliminary data are accompanied by proper explanation to facilitate users' analysis.

From DOSM's point of view, while improving timeliness is important, Dr. Mohd Uzir believes that it shall not undermine the effort in building up an efficient size of data sample which represents the real scenario, particularly in the heterogeneous market for developing countries like Malaysia. He thus stressed that comparison could not be made with other developed countries with homogenous market such as Singapore, which require only small sample size of data. He also commented that DOSM always ensures stability of data before their release due to the sensitivity and repercussions to the nation, and is therefore perceived as conservative in that sense.

From private sector perspective, Ramachandran Ramasamy (National ICT Association of Malaysia), confirmed that timely data is crucial for their projection and planning purposes, and he was of the view that timeliness could be improved by leveraging on the advancement

of technology. Sia Ket Ee (Hong Leong Investment Bank Berhad), suggested that DOSM alerts users when the response rate is below a certain threshold in order to allow the private sector to analyse data with caution and to avoid wrong judgement or misinterpretation of data.

On another note, Daud Vicary (International Centre for Education in Islamic Finance), referred to the result of the recent research in Europe quoted by Van den Bergh that 60% of its population did not believe in the data presented. He was interested to know the level of data credibility perceived by Malaysians and how to address the credibility issue. Dr. Mohd Uzir responded that there were no official statistics on Malaysians' perception on data credibility, but one of the benchmarks to assess this perception could be the acceptance by the general public of the policies formulated based on the data provided.

Ridzuan Zulkifli (PETRONAS), provided his view on the possibility for DOSM to be the one-stop data centre between the data providers and other government agencies which compile similar data. Dr. Mohd Uzir and Mohd Esa were of the view that such arrangements could be envisaged if there was a common understanding among all parties involved.

Session 2: Promoting Data Sharing and Communication of Statistics

The second session of MyStats 2012, "Promoting Data Sharing and Communication of Statistics", was introduced by the Chair, Professor Dr. Kamarulzaman Ibrahim (Universiti Kebangsaan Malaysia).

In the session's first presentation, "Existing Legislations on Data Privacy: A Challenge To Data Sharing?", Professor Abu Bakar Munir (Universiti Malaya) began his presentation by highlighting that data privacy does matter and it has a huge effect to the reputation of any entity. Personal data is generating a new wave of opportunity for economic and societal value creation and has become the new oil of the 21st century, as highlighted in the 2011 World Economic Forum (WEF).

Professor Abu Bakar shared the international data protection and privacy legislations which are available, such as OECD Guidelines 1980 and APEC Privacy Framework 2004, and new revision and work in progress legislations in the Europe and US respectively. Similarly at the national level, Personal Data Protection Act (PDPA), which criminalises the unauthorised use of personal data, will finally be enforced. In the financial sector, there are provisions concerning data protection in the Guidelines on the Provision of Internet Banking Services and Guidelines on Data Management and Management Information System issued by Bank Negara Malaysia.

On data sharing initiatives, he highlighted that the challenges lie not only in the data processing for statistical and research purposes but at the same time in ensuring the compliance with the law. Whilst there is no law governing data sharing involving public sector, PDPA principles are applicable to data sharing arrangement involving private sector. There are 7 broad principles in PDPA i.e. general, notice and choice, disclosure, security, retention, data integrity and access principles with partial and full exemptions in selected subject matters. There are full exemptions and partial exemptions for selected identified cases, for example, in the area of statistics and research, notice and choice, disclosure and access principles are not applicable. However, his view is that these exemptions shall not be applied across the board but be assessed on a case by case basis.

In the second presentation of the session, which covered Korean's experience in data sharing and communication of statistics, Joon Jung (Bank of Korea or BOK) noted that some measures have been undertaken by BOK following the global financial crisis which also led to the revision in international standards and increasing demand for new and quality statistics. He also stressed that the most important motivation of data sharing initiatives is to reduce the reporting burden and cost of both the compilers and the respondents.

Of significance, the Bank of Korea Act was revised in 2011 to strengthen the financial stability role of the central bank, which requires a close network for cooperation with relevant institutions through data sharing initiatives. There was also revision to the existing MOU with four financial authorities – the Ministry of Strategy and Finance, Financial Services Commission, Financial Supervisory Service and Korea Deposit Insurance Corporation – to expand the scope of data sharing and to improve the sharing procedure of financial information. He also highlighted the significance of the MOU signed with Statistics Korea to strengthen cooperation in conducting joint research, exchanging statistical compilation methods and sharing of raw data. Within BOK, an effort is underway to develop a micro data system to enhance the reliability and quality of statistics via systematic sharing and management of a variety of raw data sources.

In the area of communications, Joon Jung commented that BOK places as much importance to the presentation of data to users and stakeholders as producing high quality and reliable data. As evidence, BOK's Economics Statistics System (ECOS), which is the main channel for delivery of economic statistics to stakeholders in a timely and convenient manner, has been evaluated as one of the best communication channels in the Korean statistical community. It integrates processes from raw data collection through statistics distribution, and therefore increases the efficiency of statistics compilation and the productivity of economic research.

There are also various events initiated by BOK to effectively communicate statistics with the expert user groups and public. Among others are regular meetings with national experts from the industry and academia, appointment of professors as advisory board members for its Economic Statistics Department, lectures for college students, weekly BOK Friday Class involving the public, and press conferences and background briefings to journalists.

He concluded his presentation by emphasising that data sharing and communication of statistics shall not be perceived as a secondary task, and is indeed one of the main functions of modern central banks.

Suhaimi Ilias (Chief Economist, Maybank Investment Bank Berhad), in presenting his paper "Maximising the Value of Data through Greater Data Sharing between Public and Private Sectors", pointed out that statistics is crucial to present evidence for analysis on the transformation progress made by the Government, and facilitate policy recalibration and realignment in relation to the formulation of 11th Malaysia Plan (2016-2020).

Acknowledging that the key to achieving the transformation target is through investment, Suhaimi outlined the investment-related data issues that need to be addressed. Among others, these include: 1) too many public sector entities providing data on private investment resulting in confusion and duplication; 2) limited access to data of certain enterprises which are significant to the economy; 3) lack of information on actual investment, apart from statistics on approved investments by Ministry of International Trade and Industry (MITI) and Malaysian Investment Development Authority (MIDA) in the manufacturing and non-financial services sectors; and 4) inconsistency and absence of updates/announcements status and progress on the Entry Point Projects (EPP) that make up the ETP. He therefore proposed that a one-stop information centre to coordinate and consolidate all investment-related statistics should be considered by the existing set up such as MITI, EPU or Performance Management Delivery Unit (PEMANDU).

Suhaimi also highlighted the need to have a more comprehensive database on labour market, income and distribution, and raising the frequency of productivity statistics. In his paper, he listed some of the key statistics needed by the financial market economists to further deepen and broaden the current database such as retail sales, core Consumer Price Index (CPI), government finance, household debt and property market. He raised the common concern among private sector on the timing of release of high-frequency statistics (e.g. quarterly real Gross Domestic Product or GDP), monthly industrial output, external trade and inflation) by Malaysia, which is currently at noon or late afternoon/early evening instead of morning, as practised by the developed countries and several neighbouring countries. The earlier

release will enable private sector to have more time to go through the figures and stakeholders to benefit from more in-depth analysis and commentaries.

The last presentation by Dr. Yeah Kim Leng (Group Chief Economist, RAM Holdings Berhad) provided some insights on the perception of selected expert user groups on the current communication of economic and financial statistics in Malaysia, and proposals for improvements. A survey was conducted and responded by a small sample of 10 local users and 4 foreign users on the quality and adequacy of Malaysia's statistical system, particularly on the legal foundation, integrity assurance, methodological soundness and data coverage, accuracy and reliability, serviceability and accessibility. The results of the survey revealed that there is significant scope to further strengthen the quality, timeliness and adequacy of economic and financial statistics in the country.

Dr. Yeah concluded his presentation by reiterating that a forum such as MyStats would be very useful in understanding public and private sectors' needs and concerns on statistical matters.

Manokaran Mottain (Chief Economist, Alliance Investment Bank Berhad), as the discussant for the session, acknowledged the establishment of legal framework on data protection and sharing in Malaysia, and its similarities with Korean framework. He also appreciated Joon Jung's sharing of his country experiences, which provides input to further improve our statistical framework and system.

Manokaran agreed with Suhaimi on the importance of consistent updates on the EPP/ETP and early release of high-frequency statistics. He, who had the opportunity to participate in the survey conducted by Dr. Yeah, in general, is satisfied with the communication of statistics by Bank Negara Malaysia and DOSM. However, he believed that more detailed information such as inflation indices by state, which is currently only available upon request, should be shared with the private sector on a regular basis to better assist them in the market analysis and comparison. He also agreed with Dr. Yeah on the need to have an independent audit on statistics and regular engagement with the private sector particularly on changes to statistical methodology.

He concluded his remarks with a proposal to form a National Consultative Council for statistical data involving representatives from private and public sectors to focus on new statistical data needs.

In the discussion, Toh Hock Chai (Bank Negara Malaysia), provided his views on the challenges in data sharing, which is to ensure the balance between minimising reporting burden and maintaining data confidentiality. It is important for data compilers to obtain prior approval from data providers before sharing the data with various parties.

On the topic of communications, Paul Van den Bergh (BIS), highlighted the importance of distinguishing the audience in communicating data based on their data needs and data presentation preferences. Dr. Yeah suggested that apart from the standardised release for general public, a detailed series and metadata should also be made accessible to expert user groups to cater to their extensive data needs.

Session 3: Bridging Statistical Gaps during a Period of Transformation

In the third session of MyStats 2012, "Bridging Statistical Gaps during a Period of Transformation", the Chair, Dr Nungsari Ahmad Radhi (Executive Director, Khazanah Nasional Berhad), began the discussion by highlighting the challenges he faced as a user in relation to data availability and data sharing. He also highlighted that policy formation can only be understood and supported by good data.

In the session's first presentation, "Gaps in Socio-Economic and Financial Market Data for Analysis and Policy Making", Lee Heng Guie (Regional Head of Economic Research, CIMB Investment Bank Berhad), began his presentation by highlighting that evidence-based policy making requires high quality and reliable data. His paper attempts to look at data gaps from two perspectives, of the producers and the users. From the users' perspectives, it is important to understand the constraints faced by data compilers and to identify data gaps and deficiencies in the framework of data collection. From the producers' perspectives, they have to make available, both relevant and reliable statistical information, to stakeholders to be responsive to new and emerging data demands of users, to use advance tools/techniques in the compilation and dissemination process and to encourage public to incorporate statistics in their decision making process.

Lee Heng Guie identified data gaps in the areas of National Accounts, Balance of Payments, household data, banking and financial system data, Federal Government finance and national debt, consumer price index and house price index and other indicators. The gaps identified are mainly those with emerging importance, need further breakdown or should be published in higher frequency. He also raised the issue that some of the data are available but is not published for public use.

Furthermore, he highlighted that the timing of our data release, which is always at the end of the day in comparison with other countries, be fine-tuned to allow for a more rational digestion by users. He suggested that press statements, publications and information materials be accompanied with strong analysis. Regular reviews and assessment of existing structure of data collection, compilation and publication will ensure that only relevant data are collected and in efficient manner.

As a conclusion to his session, he gave some suggestions on how to bridge the gap between data producers and data users. He suggested to have a single lead national statistical agency, to leverage on more advanced and user friendly data download programs similar to US Federal Reserve and US Bureau of Economic Analysis system, and data requests to be provided with shorter time lag.

In the second presentation, "Statistical Data for Appropriate Poverty Measurements and Policy for Eradication: A Malaysian Case", Mohamed Saladin Abdul Rasool (Universiti Teknologi MARA), highlighted that Malaysia is currently employing calorie poverty measurement, which is an absolute measurement of poverty despite gearing towards a highly developed nation. As Malaysia is currently classified as an upper middle income country, adopting absolute measure of poverty may give wrong signals to policy makers.

Poverty can be measured in three different methods, absolute, relative and subjective poverty. Different poverty concepts are related to the status of development of economy where developed countries would normally adopt the subjective well-being method whereas less developed countries would adopt an absolute measurement. Currently in Malaysia, EPU is using the Cost of Basic Needs (CBN) method which identifies a consumption bundle deemed sufficient to meet basic needs and estimates the cost of purchasing the bundle. Those who are earning below the price of the consumption bundle are identified as living below the poverty line.

When using the relative approach to Malaysia's case, the poverty rate is higher than the absolute method which shows no large movement in poverty rate. This goes to show that using different methods can give wrong signal to policy makers as income gap is bigger but absolute poverty is decreasing.

As a conclusion to his paper, he recommended that relative and multidimensional poverty measurement be a near future method of poverty measurement. Poverty eradication efforts can only be carried out effectively if the right measurement is adopted.

In the third presentation titled "Property Indicators: Sufficient for Policy Makers and Investors?", speaker Praveena Naderan (Real Estate and Housing Developers' Association), who represented the author, Dato' Fateh Iskandar Mohamed Mansor, highlighted the importance of having good property market data due to its significant role in country's economic growth. The objective of the paper was to highlight the importance of good indicators and indices to help understand the dynamics of property market in terms of price, supply and demand to help market players make rational decisions.

There are various factors that can drive the real estate market. These include demographics, interest rates and financing, development costs, government policies, legislation and subsidies and stability of economy. As for indicators being used by developers and policy makers in making their analysis, they are GDP, financing and lending, disposable income, housing approval/licence issuance, house price index, annual transactions and new launches of property or overhang. These data are sourced from various data providers such as National Property Information Centre, Construction Industry Development Board Malaysia, Bank Negara Malaysia and Ministry of Housing and Local Government.

Praveena highlighted that the key challenges faced are lack of information and data on the demand side, lapse of time between transaction and reporting/publication of data, lack of inter-agency information sharing which leads to multiple similar reports being submitted by developers and piecemeal data at various agencies. The author proposed that property data be integrated in terms of collection and dissemination. To ensure this, it requires high level of coordination and need to encourage information sharing amongst agencies and stakeholders.

The last presentation entitled “Labour and Employment: Do Existing Statistics Facilitate Planning of Human Capital for Economic Transformation?”, was by Anthony Raja Devadoss (Vice President, Kelly Services (M) Sdn. Bhd.). He discussed the issues pertaining to human capital planning and the necessary information required to address them.

In Malaysia, average unemployment has been consistently below 3.5% for 14 years and there is a huge increase in job vacancies. However in 2010, almost a quarter of fresh graduates were unemployed, signalling possible mismatched skill sets between graduates and job market in Malaysia. Thus, this paper highlighted the factors and information useful for human capital planning.

One of the factors is population demographics. Statistics that show age, gender, education and profession in matrix format can help facilitate human capital planning. He also stressed that more detailed information on the quality of labour force and location of talents will be useful, especially for industries that require specific talent. Of equal importance is the data on re-entry into employment and re-employment which can help match these groups with available jobs, training for re-skilling and ultimately reduce the need to recruit foreign labour. He also stressed on the importance of having real time data on labour.

Professor Dr. Ahmad Zubaidi Baharumshah (Universiti Putra Malaysia), as the discussant for the session agreed with Lee Heng Guie’s point on how good, effective policy can only be made through good data,

and additionally, good models. In addition, he also raised the issues of limited data with missing variables, multiple sources of data which are not clearly explained and the length of our data series. These challenges proved to be difficult for academicians to make proper analysis on our country. He also added that revised data must be publicised in order to avoid wrong analysis and consequently wrong policy formation. Data must also be more granular as aggregated data can lead to loss of information.

As for Mohamed Saladin's presentation on poverty measurements, he emphasised how statistics have to be updated to ensure correct policy formulation. With the recent subsidy programmes by the Government, it is crucial that only deserving people benefit from them. As for property market, he commented on the importance of having longer data series to facilitate analysis as the market is illiquid. And finally for human capital planning, he concurred that to overcome the middle income trap, human capital planning requires good data.

To conclude, he stressed that good policy formulations and business decisions require good data and good models.

In the discussion, Saedah Hashim (DOSM), responded to Mohamed Saladin's presentation on poverty measurements' recent development plan, highlighting that the Government did adopt both absolute and relative measurements of poverty. She then commented that some of the thresholds used in his study may not be appropriate for Malaysia's case and suggested that further study needs to be done to determine the appropriate threshold. She clarified that the current threshold used is a result of various studies done by EPU and is the most appropriate for Malaysia.

Mahuran Sariki (Institute of Labour Market Information Analysis) provided clarification to Devadoss's presentation on the data needs for human capital development, and informed that currently Malaysia is developing and studying a human capital development plan. The study has targeted various industries and in particular the tourism and oil and gas sectors. The findings from this study will be shared with the relevant interested parties.

Paul Van den Bergh (BIS) asked the panel whether there is an existing mechanism to determine what data is needed to collect and what is not. In this regard, Lee Heng Guie (CIMB Investment Bank Berhad) stressed on improving the gap between users and producers to ensure that only relevant data are collected. He then suggested that the gap can be eliminated through inter-agency planning committee, forum to enhance awareness of data, regular engagement sessions with private sector, and promotion of new data. He also hoped that, in the future,

data requests could be provided without considerable time lag. From a financial sector perspective, access to timely data and information are very crucial to facilitate analysis and forming decisions. Devadoss added that private sector should be included in the government agencies' effort in identifying data gaps.

Omi Kelsom Elias (DOSM), on behalf of the compilers, responded that there are existing mechanisms in place, such as inter-agency discussions, to decide on the data needs. As to available data not made to public, she clarified that in ensuring the robustness, timeliness and accuracy of data, these data will go through reviews and assessments by DOSM and the relevant stakeholders before they are released to public.

Panel Session: New Data Requirements and Standards for a Transformed Economy

The panel session on "New Data Requirements and Standards for a Transformed Economy", was introduced by the Chair, Zubaidah Ismail (Senior Director, DOSM). She commented that as the Malaysian economy is transforming towards a high-income economy by 2020, the data requirements are evolving from macro to micro levels. Five panellists, representing various groups of data users and compilers, elaborated in detail on these new data requirements, the need for more forward looking and pre-emptive data collection and compilation, the best practices to enhance data integrity and communication of statistics, and the role that the private sector can play in contributing towards better data collation.

Dr. Yeah Kim Leng, as the first panellist, provided his views on the broad framework of new data requirements which is based on the New Economic Model announced by the Government in 2010. The new data should be in the areas to achieve high income, sustainability and inclusiveness with special focus on the intellectual property data, research and development, international competitiveness and the soft data i.e. consumer and market sentiments. Incentives should also be introduced to encourage more involvement of private sector data providers, such as market research firms, for greater innovation and entrepreneurship.

He suggested some pre-emptive actions that can be undertaken in identifying new data needs, such as institutionalising the feedback process between public and private sectors, develop sectoral data needs and promote partnership among industry, research institution and academia, such as, the recent set-up of Malaysian Tax Research Foundation to promote research on taxation. Involvement of private sector can also be strengthened through active participation in surveys, seminars and data sharing initiatives and formation of private information service providers via commercialisation.

From the academic community standpoint, Professor Dr. Rajah Rasiah (Universiti Malaya), explained that data collection and analysis should be made contemporary and available for the use of the university-based economic research as research spurs innovation and innovation is the basis of knowledge economy that we are heading to. The benefits of independent research in providing critical findings with no additional cost outweigh the possibility of data misuse or misinterpretation, which can be minimised with appropriate measures.

The third panellist, Barry Porter (Bloomberg Business News), emphasised the importance of transparency and communications of statistics in gaining and fostering market confidence. The media as the gateway to the public plays a crucial role in spreading the messages. Thus, well-established communications system with the media such as embargoes, schedules and background briefings is useful in ensuring that the intended messages are disseminated to the public correctly and in a timely manner.

While focusing on the current economic transformation, we were also enlightened by the discussion on child poverty by Dr. Roumiana Gantcheva (United Nations Children's Fund). As poverty during childhood might have detrimental effect throughout the life span of an individual, this issue shall be addressed separately from adult poverty. Apart from the need for granular and high frequency data such as social protection, health and child mortality, there is also a need for a comprehensive and consolidated database for these data to assist policymakers in developing effective policies for poverty eradication.

The last panellist, Fraziali Ismail (Director of Economics Department, Bank Negara Malaysia), addressed the issue of new data requirements from the central bank perspective, particularly in assuming its roles in the conduct of monetary policy and as the adviser to the Government. For the first role, comprehensive data is used to determine where the economy currently is, and to conduct projections as to where the economy is heading, the risks involved and what the monetary policy can do to address any issues or risks that the economy is facing.

In its role as adviser to the Government, staff at the central bank carefully undertakes surveillance and research to assess developments that may pose immediate, short-term and long-term risk to the economic performance of the country. A case in point is how projects in the ETP are progressing. Given the pickup in construction activity, risks of industry bottleneck are assessed closely. Thus, from a statistical perspective, more granularities in terms of types of construction activity, value and geographic region are of critical importance to the

central bank. Fraziali also noted that the challenge lies beyond the transformation period which requires more efforts on research at Bank Negara Malaysia, EPU and other relevant agencies.

He concluded that quality, timeliness, transparency, communications and more importantly sound understanding of statistics are crucial for policymakers to come out with good policies for the nation.

OPENING REMARKS

Dato' Muhammad Ibrahim[1]

Good morning distinguished speakers and fellow participants.
Selamat pagi para penceramah yang dihormati dan para peserta sekalian.

Saya berbesar hati untuk mengalu-alukan semua yang hadir pada persidangan yang julung-julung kali diadakan ini, MyStats 2012, yang memperlihatkan sekali lagi kejayaan dalam usaha kerjasama di antara Jabatan Perangkaan Malaysia dengan Bank Negara Malaysia. Saya juga amat gembira dan berbangga dengan sokongan yang ditunjukkan oleh para peserta yang mengambil bahagian hari ini, yang terdiri daripada sektor swasta dan sektor awam, pengguna dan perangkawan, di samping rakan-rakan saya daripada Irving Fisher Committee on Central Bank Statistics (IFC). Dengan kehadiran kumpulan yang mempunyai pelbagai kepentingan ini, saya yakin forum ini akan menjadi platform yang amat sesuai untuk kita berkongsi pandangan, bertukar-tukar pengetahuan dan pengalaman tentang statistik, dan akhirnya memperoleh manfaat besar daripada persidangan ini.

I am pleased to welcome all of you to this inaugural national statistics conference, MyStats 2012, a collaborative effort between Department of Statistics Malaysia and Bank Negara Malaysia. I am also very encouraged by the strong support from all of you present here today, representing both the private and public sectors, users and compilers of statistics, and Executive members from the Irving Fisher Committee on Central Bank Statistics (IFC). With such a diversified interest group, I believe this forum will be an important platform for us to share views, exchange statistical knowledge and experiences.

The objective of MyStats is to provide a platform for our statisticians, analysts, economists, policy makers, academicians and media to share, discuss and highlight insights and issues in statistical analysis and policy formulation as well as challenges in the compilation and communication of statistics. MyStats will not only discuss economic and financial data, but will also encompass other socio-economic statistics such as poverty measurement and indicators, labour and employment statistics, just to name a few.

[1] Deputy Governor, Bank Negara Malaysia

I hope that this collaborative effort will one day turn into an annual THE statistics event in Malaysia and MyStats will evolve into a regional conference, similar to the well-established statistical conferences organised by the International Statistical Institute (ISI), European Central Bank (ECB) and IFC. I must acknowledge that this conference was inspired by the efforts of the ECB and IFC, which the Bank and I, as the Chairman of IFC, have been actively engaging with on statistical initiatives, in particular over the last one year.

For those who are new to the IFC, allow me to mention a few words on the Committee. The IFC is a forum of central bank economists and statisticians as well as others who wish to participate in discussing statistical issues of interest to central banks. It is established and governed by the international central banking community and operates under the auspices of the Bank for International Settlements (BIS). Currently, the IFC has about 80 central bank members and is actively organising statistical initiatives, particularly conferences, seminars and workshops. These initiatives discuss the burning statistical issues confronting the central banking community and the issues discussed reflect contemporary concerns of central bankers themselves. More details on IFC and its activities can be found on the BIS website.

The theme of MyStats 2012 is "Enhancing National Statistics to Meet Public and Private Sectors Needs during a Period of Transformation". This theme is most appropriate given that Malaysia is embarking on an economic transformation programme (ETP) to achieve a high income high value-added economy.

The transformation process would demand richer, more reliable and timely data to assess the progress of various changed programmes being taken and ensure initiatives implemented are effective in achieving the transformation agenda. This is critical given that the transformation is taking place amidst a more challenging global economic environment. Downside risks to global growth are now more elevated, with heightened uncertainties surrounding the European sovereign debt crisis and fiscal issues in the US that would have an impact on global growth prospects. In this environment, it is of utmost importance that relevant and credible statistics are available to policymakers and analysts on a timely basis, to allow for an accurate and comprehensive diagnosis of the economy, so that appropriate and pre-emptive policy actions can be taken.

To my mind, there are three perennial issues facing statisticians and authorities; the extent of data coverage, granularity and timeliness. Indeed, it has been often noted that the surprise element at the onset of economic and financial crisis is often due to the lack of high quality, comprehensive and timely data. For example, the Asian Financial Crisis revealed major gaps in statistical coverage, especially on detailed cross

border exposures and indicators on financial soundness, which had permitted serious vulnerabilities to go undetected and unresolved for a long time.

Another key lesson learnt, was from the recent global financial crisis, where the lack of data and monitoring of financial innovation had allowed the build up of financial risks to go undetected until it was too late. Another good example was the existence of a large shadow banking system that is unregulated and unsupervised. At the same time, insufficient coverage and depth of information can potentially place policymakers at the risk of deriving the wrong conclusion and thus, prescribing the wrong policy measures or prescriptions.

The decisions that we make are only as good as the data on which they are based. In this respect, I would highlight two areas in particular that require further data compilation.

First, in the area of labour market statistics, there are notable gaps in terms of data collection on the economy-wide wages, hours worked per labour, productivity index, unit labour cost and duration of employment. We also do not have data and enough information on the kind of jobs that the economy is producing, neither by sector, wage level, type of jobs nor for whom the jobs are created.

The data gaps would complicate the assessment on key issues such as the sustainability of household indebtedness, whether we are creating the right type of jobs or whether our policies are providing long term or temporary employment.

Second, there are significant gaps in terms of balance sheet data, especially for households and corporates. This deficiency in data complicates detection of vulnerabilities, build up of risks and propagation of shocks from one sector to another. I hope the discussion today would provide insights in dealing with some of these issues I earlier mentioned.

At this conference, we will have the opportunity to examine areas which we can improve so that our statistics are credible, relevant and timely, that would facilitate informed policy formulation and decision making by the authorities, and enable informed decision making by economic agents such as investors, financial institutions and the general public at large.

In the first three sessions today, our distinguished speakers and discussants will share insights and experiences in many areas; the adoption of statistical best practices in data management, ways to promote data sharing and communication of statistics, and identification

of statistical gaps and limitations faced by analysts or authorities in the usage of data. The session would also explore and provide possible resolutions to challenges confronted by compilers and users of statistics.

In the concluding panel discussion, the panellists will deliberate on new data requirements, the need for more forward looking and pre-emptive data collection and compilation, identify best practices to enhance data integrity and communication of statistics, and the role the private sector can play in contributing towards better data collation.

Your views today are important as they would provide insights and assistance to statistical compilers, policymakers and regulatory authorities to facilitate planning and enhancement of existing data measurement or implementation of new statistical initiatives. The end game is to facilitate effective analysis, monitoring and surveillance of the economic and financial activities and provide accurate assessment of risks and the effectiveness of policy initiatives and the state of the economy. This forum will also provide analysts an opportunity to share their views on the type of data that would be useful to them.

While debating on the statistical needs of the public and private sectors, there are many areas that could be considered, amongst them:

1. Does the private sector benefit given the significant resources that have been invested by the national statistics office, regulatory authorities and government agencies to compile more comprehensive, timely and granular data?
2. What are the type of data required by private sector analysts that would improve their analytical capability to provide analysis for informed decision making to their clients?
3. Based on past experiences, data compilation always lags behind financial innovations and economic developments. Based on this premise, what should be the strategy, from the perspective of statisticians and users, to ensure the availability of new and appropriate data on a timely basis to meet future needs of users?
4. How can data compilers and users play a greater role in identifying new data needs of a high income and high value added economy?
5. How can statisticians play a more proactive role in advising or communicating with users on the availability of appropriate data for analysis and surveillance to avoid the redundancy of data collection?

These questions are by no means exhaustive but I hope our distinguished speakers and discussants today will address some of them. The speakers and discussants today represent a wide spectrum of group of compilers and users of statistics, who have vast experience in conducting significant research in many areas that uses national and

international statistics. Through their presentations and discussions, we hope to learn from their knowledge and thinking on relevant issues in the field of statistics.

We are also honoured to have two international speakers from the IFC who will talk about the international best practices in data management and country experiences in data sharing and communication of statistics. I would like to take this opportunity to thank them in advance. I would also like to record our appreciation to the representatives from various national organisations for chairing the sessions and sharing their views on the topics that we had identified.

Before I end my remarks, I thought it is worth emphasising again the importance of greater collaboration between statisticians, compilers and end users of statistics in improving data compilation, communication and its usage. In this respect, I believe that MyStats will be a strong foundation to facilitate and enhance this collaborative effort.

On that note, I wish you a productive and engaging conference.

Thank you.

KEYNOTE ADDRESS

Dr. Haji Abdul Rahman Hasan[1]

Assalamualaikum warahmatullahi wabarakatuh and Salam 1Statistik.
Honourable Dato' Muhammad Ibrahim, Deputy Governor, Bank Negara Malaysia,
Distinguished speakers,
Ladies and gentlemen,

It is my pleasure to address the distinguished guest speakers and participants of the National Statistics Conference here at Sasana Kijang, Bank Negara Malaysia. The Department of Statistics Malaysia (DOSM) has organised three National Statistics Conferences in 2005, 2007 and 2009. This year's National Statistics Conference (MyStats 2012) marks another milestone since this is the first national statistics conference conducted in collaboration with Bank Negara Malaysia. This also signifies the synergy that could result in elevating statistics to a higher level particularly in meeting public and private sector needs.

I would like to take this opportunity to welcome all of you to MyStats 2012, and my heartiest congratulations to Bank Negara Malaysia for hosting the conference in collaboration with DOSM. The statistics conference offers an opportunity for data users and producers to discuss issues of concern and this year's conference focuses on "Enhancing National Statistics to Meet Public and Private Sectors Needs during a Period of Transformation". The conference is timely, at the juncture where transformation is taking place and of course, data is needed to measure the performance of the transformation.

Distinguished guests, ladies and gentlemen,

I am very happy to note that this conference has attracted more than 150 participants, represented by a blend of representatives from the private sector, government agencies, universities as well as the participation of international agencies comprising of both users and producers of statistics. The key objective of the conference is to provide a platform for statisticians, analysts, economists, policy makers, academicians and media to share, discuss and highlight statistical issues in analysis and policy formulation as well as the challenges in the compilation and communication of statistics. Statistics produced will be of no value unless it is shared and thus, contribute to the body of knowledge and for the advancement of the society and country. Through this conference,

[1] Chief Statistician, Department of Statistics Malaysia

we can achieve greater collaboration between the statisticians, compilers and users of statistics in improving data compilation, communication and usage of statistics, especially in this period of transformation.

Ladies and gentlemen,

Quality statistics is a universal goal of official statisticians in fulfilling their mandate. In 1994, the United Nations Statistical Commission (UNSC) provided guidance on the features of an environment within which quality management can flourish by promulgating the United Nations Fundamental Principles of Official Statistics (UNFPOS) for national statistical systems. The essence of these principles will be shared and discussed further in the first session of this conference.

Discussion on Generic Statistical Business Process Model (GSBPM) was initiated more than ten years ago and this model is developed with quality as the main concern, which includes five areas, namely the need:

i. To define and describe statistical processes in a coherent way;
ii. To standardise process terminology;
iii. To compare/benchmark processes within and between organisations;
iv. To identify synergies between processes; and
v. To inform decisions on systems architectures and organisation of resources.

GSBPM Version 4.0 specifies the nine phases in generating statistics that include specifying needs, design, build, collect, process, analyse, disseminate, archive and evaluate. As the producer of official statistics, DOSM embraces both the UNFPOS and GSBPM.

Ladies and gentlemen,

Malaysia is currently facing numerous challenges due to global economic and social changes. To facilitate these challenges, the Government has embarked on various transformation programmes such as Economic Transformation Programme (ETP) and Government Transformation Programme (GTP) which can only be successful with efficient implementation and improvement of service deliveries through changes, innovations and continuous improvements in productivity by civil servants. The focus of these transformation programmes includes innovative service delivery system and the pursuance of high-income nation status by 2020. DOSM as a producer of national statistics as well as its counter parts, i.e. Economic Planning Unit, Bank Negara Malaysia and Ministry of Finance, play a crucial role in providing statistical inputs in the planning, implementing, monitoring and evaluation of these programmes.

In today's dynamic environment, the demand for quality and timely statistics in Malaysia has increased tremendously. DOSM has embarked on enhancing its data communication towards making statistics as public goods and ensuring statistics are used to make informed decisions. On DOSM's website, we have added more data and have also introduced free downloads since 2009. Currently, there are 102 publications available as free downloads. Besides the Malaysia External Trade Statistics and the recently added Malaysia Informative Data Centre (MysIDC), more interactive databases will also be added in the near future. DOSM has leveraged on ICT to communicate its product.

Through deep thought and structured planning and with its ICT Strategic Plans, DOSM has embarked further in terms of improving the systems of producing statistics. DOSM has moved from a silo environment to an integrated environment. National Enterprise-Wide Statistical System or NEWSS was introduced in 2008. NEWSS enables the nine phases of the GSBPM to be undertaken in an integrated manner and has contributed to the efficient production of statistics. It is now in the second phase where it is extended to three more surveys in addition to the present 33 surveys covered.

Distinguished guests, ladies and gentlemen,

No matter where we are or whether we like it or otherwise, we are now in one economy that is the global economy. The economic situation of another country's economy also has an impact to our economy such as the recent economic phenomena in Greece and Spain. This may lead to the call for transformation in economic monitoring, need of new economic indicators as well as better data communication.

A few developments that are worthy to note include the mushrooming of new industries especially in the services sector and the increase in cross border transactions. This necessitates more comprehensive balance of payments statistics, particularly in the International Trade in Services Sector as well as an extension of survey coverage to include the new industries. These would enable stakeholders and users to monitor the impact of liberalisation. To achieve the objectives outlined in the economic liberalisation, DOSM has already taken steps towards narrowing the data gaps.

Data for statistical purposes may be drawn from all types of sources, be it statistical survey or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents. DOSM has capitalised on administrative data for preparing statistics and has long standing institutional arrangements, to name a few, with the Royal Customs Department for trade data and National Registration Department for birth and death data. In compiling

social statistics, DOSM collects various data from other government agencies. Such data include environment statistics, crime statistics, related labour statistics that include job seekers, industrial relations, etc. In order to enhance the content of MysIDC, a one stop centre for indicators for Malaysia that is recently uploaded to DOSM's website, time series administrative data from Other Government Agencies (OGA) will be incorporated in the second and third phases of MysIDC's development.

Distinguished guests and participants,

The present society is highly knowledgeable and exposed to the various sources of global information. Economic analysis is no longer at a macro level, instead, it has become more complex, detailed and varied. More detailed analysis is required. As a result, DOSM has been receiving more and more requests for micro data, by both local and international users. In the context of micro data, guidelines for releasing micro data including the methods to safe guard the confidentiality of the respondents are outlined in the Micro Data Policy. Among the micro data released include an anonymous sample of 30% of variables or 30% number of households with all variables of Household Income Survey and a 2% sample for population census data.

Involving stakeholders in decision-making processes is not only confined to corporate social responsibility processes, but it is also a tool used by private and public sector organisations, especially when the agency wants to develop understanding and agree to solutions on complex issues or issues of concern. At DOSM, engagement with private sector started in 1990s with a few institutions and associations and later continued extensively with users and data providers. Currently, engagements are planned with various stakeholders and will be conducted regularly, especially in introducing new products, e.g. statistics on quarterly construction and seasonal adjustment.

One of the strategic thrusts stated in DOSM Strategic Plan is 'to create smart partnerships by signing Memorandum of Understanding (MOU) with key government agencies and institutions of higher learning' to enhance/strengthen the research and development, methodologies, knowledge sharing and continuous learning. These collaborations will provide exposure to new areas and encourage development of new ideas. With this synergy, a win-win situation is achieved whereas for DOSM, it increases the quality of data produced. DOSM has signed a number of MOUs encompassing various areas and one of the first few is with Bank Negara Malaysia on financial data, SME Corporation Malaysia for statistics on SMEs, Employees Provident Fund and Companies Commission Malaysia for list of new companies. DOSM is extending the horizon of engaging in MOUs with institutions of higher learning. In the pipeline is an MOU with Universiti Teknologi MARA.

Aside from the engagements or collaborations at the local level, the statistical community also need to be wary and be involved, where relevant, in the global statistics community activities, be it at ASEAN, Asia Pacific and global level. Such participations will enable us to keep up with developments of statistics, to benchmark with best practices as well as contributing to developments of global statistics.

Distinguished guests, ladies and gentlemen,

I am confident that this conference will be a successful medium for providing inputs in enhancing national statistics and in establishing networking, partnerships and collaboration in research and development at both local and international levels. It is of utmost importance for statisticians, compilers and users of statistics in improving data compilation, communication and usage of statistics from various disciplines to work together in line with the 10th Malaysian Plan whereby the Honourable Prime Minister Datuk Seri Najib Tun Razak urged Malaysians to be bold in exploring new ideas in a creative and innovative manner in an effort to achieve the desired success.

I would like to take this opportunity to thank the organisers for providing me the opportunity to deliver this keynote address. May all of you have active and lively deliberations and I sincerely look forward to the outcome of this conference.

Thank you.


NATIONAL STATISTICS CONFERENCE 2012
(MyStats 2012)
BEST PRACTICES FOR COMPILATION OF NATIONAL STATISTICS: WHERE ARE WE?
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BEST PRACTICES FOR COMPILATION OF NATIONAL STATISTICS: WHERE ARE WE?

Dr. Mohd Uzir Mahidin[1], Kanageswary Ramasamy[2], Suhaily Safie[3] and Mohd Firdaus Zaini[4]

1. Introduction

1.1 Background of DOSM

Department of Statistics Malaysia (DOSM) was formed in 1949 under the Statistics Ordinance 1949 and was formerly known as Bureau of Statistics. DOSM was established to resume as a leading statistical agency for the nation which is responsible to collect, interpret and disseminate national statistics.

In the early commissioning of the Bureau of Statistics, the data were produced mainly for the British Government's planning purposes and the main data available were on external trade and estate agriculture statistics.[5] From 1957 onwards, the Bureau initiated data collection based on surveys such as Household Budget Survey, Population Census of Malaya and Retail Price Index. Recognising the importance of statistical services, a special committee was established on 5 March 1960 by the Federal Government to strengthen the statistical system. Furthermore, the unification of Federation of Malaya, Sabah and Sarawak in 1963 required an integrated and cohesive statistical data which reflects the overall statistics of Malaysia. In tandem with the advancement of economic and social structure in Malaysia, the Statistics Ordinance 1949 was repealed and replaced with the Statistics Act 1965 whereby the Bureau of Statistics was rebranded as the Department of Statistics Malaysia with the expanded role as the official national statistics producer. Subsequently in 1989, the Statistics Act 1965 was revised to strengthen further the function of DOSM and enhance the jurisdiction power of the Chief Statistician in data collection, interpretation and dissemination. DOSM strictly adheres to the Statistics Act in safeguarding the usage and communicating the information provided by respondents. The respondents are made aware of the purpose of the survey and the confidentiality of the individual information. This is always stated on the front page of the survey questionnaire together with the key quotations of the Statistics Act. The rules and regulations as stipulated in the Statistics Act are available in DOSM website. In accordance to the international initiative, the DOSM's workflow is aligned with the Fundamental Principles of Official Statistics by United Nations Statistical Commission (UNSC) which was initiated in 1992. The UNSC has recommended ten fundamental requirements of official statistics.[6]

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[2] Department of Statistics Malaysia
[3] Department of Statistics Malaysia
[4] Department of Statistics Malaysia
[5] Department of Statistics Malaysia (2009a), p13.
[6] See Appendix 1

After 63 years, DOSM still remains relevant and vital in the nation's development process. The statistics provided by DOSM are the hard evidence statistics in measuring the performance of the economy, demographic, social and environment as well as to gauge the success of the Government's programmes and policies. By adhering to international standards, statistics produced by DOSM are comparable internationally and enable the Government in measuring the performance of its policies with counterparts.

1.2 Malaysia Statistical System

Every country upholds its own statistical system which is designed based on the country's requirements and specifications as well as the historical background. Appropriate national statistical system ensures the efficiency and effectiveness in compiling national statistics. Malaysia implements a centralised statistical system whereby the process of collection, compilation and dissemination of key national statistics is carried out by DOSM. This system is also applied by other developed countries through their national statistical agencies such as the Statistics Canada and the Australian Bureau of Statistics (ABS). Meanwhile, there are other countries that implement a decentralised system such as India, Japan and the United States of America (USA). However, some countries may practise a combination of both systems.[7]

In some countries, the centralised statistical system is viewed with scepticism, yet this system has its advantages. The centralised statistical system allows DOSM to coordinate and integrate the national statistics through standardised definition, concepts, methodology and classification. In addition, it provides a platform in integrating the entire process of data collection, interpretation and dissemination under one roof in order to produce sound statistics. This system is also convenient and efficient for users to secure statistical materials in various fields from a single source. Thus, DOSM plays the role as 'one stop centre' for users in obtaining national statistics, and consequently reduces time and cost.

2. Have We Met The Real Need of Statistics?

The ABS has evolved over 100 years and the Statistics Canada for more than 90 years, while the evolution of DOSM has taken over 60 years. Internationally, ABS and the Statistics Canada's statistical framework systems have become the benchmark for most of the national statistics offices (NSO). In line with DOSM's aspiration 'to become a leading statistical organisation internationally by 2020', the main questions and challenges are: i) Have we consistently served the nation in providing

[7] See Appendix 2 for the comparison of statistical systems between Japan, Canada and USA

appropriate and adequate statistics?; ii) Are users, stakeholders and the public satisfied with the statistics currently produced by DOSM?; and iii) Do the statistics shed light on the important issues at a particular period of time?

Since its existence, DOSM has delivered sound statistics that have conformed to international standards and in a timely manner. The rapid changes in economy and complexity of economic agents require comprehensive statistics to cater to the dynamic changes. Comprehensive and quality data on specific and frequent periods are vital to reflect the actual economy and social scenario which act as valuable ingredients to formulate good policies and informed decisions. On this front, the major determinant in measuring relevance of statistics is closely associated with the users and public. In achieving this aspiration, continuous engagements and mutual understandings coupled with maturity and professionalism among all the parties involved are paramount.

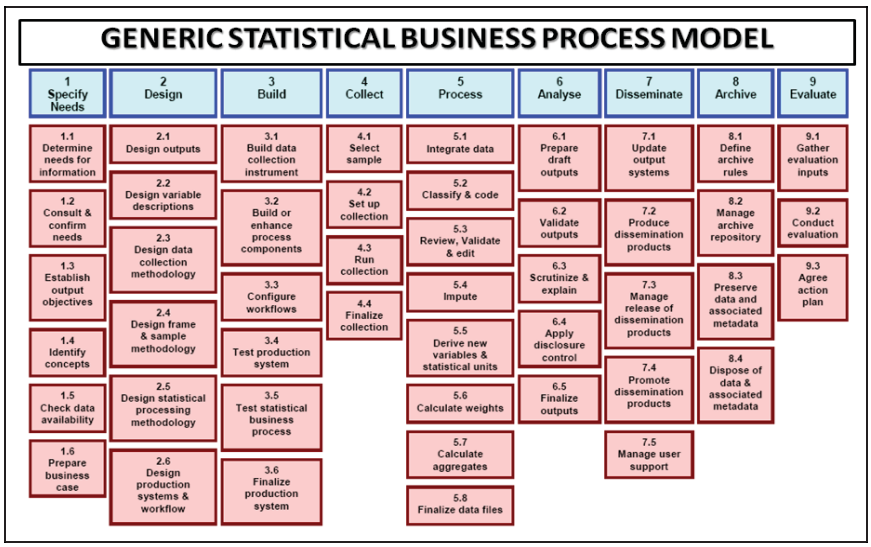
2.1 Quality Multidimensional

Quality data is fundamental for official national statistics. Statistics and quality are inseparable properties, and quality is always a 'must have' characteristic in any statistical data. In the dictionary of NSOs, quality is generally accepted as fitness for purpose. Fitness for purpose implies an assessment of an output, with specific reference to its intended objectives or aims. Quality is therefore a multidimensional concept which does not only include the accuracy of statistics, but also stretches to include other aspects such as relevance, timeliness, coherence, interpretability, accessibility and reliability.[8] These seven dimensions of quality must be built in each phase of statistical process. Consistent with the Fundamental Principles of Official Statistics, it is widely expected that DOSM as well as other international NSOs adhere to those qualities.

The United Nations Economic Commission for Europe Statistical Division (UNECE) has developed the Generic Statistical Business Process Model (GSBPM) which DOSM has adopted in the work process. The model was based on business process model developed by the Statistics New Zealand. Internationally, the implementation of GSBPM started since April 2009 with the main objective to define and describe statistical process in a consistent way. GSBPM has outlined nine important processes involved in the compilation of statistics which begins with 'specify needs' and ends with 'evaluate'. Each process signifies standard steps that are required in producing quality statistics as shown in the following diagram (Figure 1).

[8] Farrell, D. (2007), p9.

Figure 1: Generic Statistical Business Process Model (GSBPM)



2.2 Data Collection

The quality of national statistics depends largely on the cooperation of respondents in providing appropriate and reliable data to their NSOs. The most common challenge for all NSOs is to obtain the data from respondents without neglecting the quality of data. Statistics Canada highlighted that the main quality element in data collection is accuracy. This element measures the response rates, processing error rates, follow-up rates and rates of non-response by reason.[9] Trewin (2007) observes that lately most of the NSOs response rates on surveys are deteriorating. In this regard, he suggested that NSOs should formulate solutions to tackle the problems. DOSM practises good engagement with respondents and have managed to achieve substantial response rates for most of the surveys. Moving forward, and to lessen the burden of our respondents, DOSM is gradually moving away from conventional methods of data collection to e-surveys and online response via emails as alternative tools. Currently, the e-surveys and other forms of electronic medium recorded on average 40 per cent of response rates (e.g. Monthly Manufacturing Survey). Nevertheless, DOSM is gearing up to achieve at least 80 per cent in the near future. In the case of other countries such as Korea, they took about 3 to 5 years to reach the acceptable level of response rates. Furthermore, continuous engagements with private sector are held through dedicated seminars and "Hari Bersama Pelanggan" at every state to educate respondents and the public on the importance of their cooperation and submissions of questionnaires for the development of nation.

[9] Statistics Canada (2009), p37.

2.3 Data Interpretation and Processing

Data interpretation is the most important stage prior to dissemination of statistics to the public. Statisticians' comprehensive knowledge and experience as well as ICT tools will be integrated to produce reliable statistics. Statisticians need to be well equipped with knowledge and keep abreast of relevant issues to validate the data before it can be released. To ensure response errors are kept to a minimum, stringent verification and validation steps are embedded in the processing system.

Apart from human capabilities, ICT tools are also widely used to facilitate the work process. DOSM deals with huge volumes of data and ICT tools predominantly play an important role to minimise human error and able to assist staff in managing and processing the massive data volume more efficiently, and thus, shorten the processing time. After the process of verification and analysis, statisticians must know the most effective way to present the findings to the users.

2.4 Data Dissemination

One of the key functions of DOSM is to disseminate statistics which have been collected and interpreted. Dissemination is defined as a process of releasing statistical data through various media e.g. printed and electronic medium. Larry Hartke (1997) explains that effective data dissemination means that statistical agencies should fully identify the potential data user communities, actively solicit their needs and then respond promptly by providing the users with timely and affordable statistical data that meet those needs as close as possible. Therefore, it is essential for the produced data to be accessible, timely and relevant.

In accordance with international standards, the statistics provided by DOSM are accompanied with guidelines known as metadata. The metadata provides supporting information on the source, concept, definition, methodology and details on collection, processing, interpretation and dissemination as well as availability of disaggregated data. This information help users to have a better understanding on the published data, assisting in literature review and in locating the existence of required data. The metadata information is available on DOSM's website.

Accessibility: Enhancement of Data Dissemination Platform

Accessibility ensures statistics are easily reachable and in a readable format. Recognising statistics as public goods and to ensure it is widely used, the statistical services and products should be easy and fast to access (Chief Statistician of Malaysia, 2012). In the past, most of the information was disseminated in printed forms. In tandem with the recognition of statistics as public goods and the dynamic transformation of ICT, currently most of the statistics are made available and accessible via electronic medium such as website and mobile short messaging service (SMS).

DOSM's website http://www.statistics.gov.my provides extensive statistical information via internet. The website has received few commendable awards and recognitions for its contents and presentation format such as "5 Star Rating" under the Malaysia Government Portals and Websites Assessment 2011.

In ensuring the official statistical data are widely accessible, the data are also disseminated through other local and international agencies' websites such as various Ministries, Bank Negara Malaysia (BNM), Economic Planning Unit (EPU), Malaysian External Trade Development Corporation (MATRADE), Malaysian Investment Development Authority (MIDA), ASEAN Secretariat, International Monetary Fund (IMF) and United Nations Statistics Division (UNSD).

As at September 2012, more than 105 online publications in the format of MS Excel and Portable Document Format (PDF) were uploaded and currently the publications have recorded 268,688 hits by users. Online publications are conducive for users to obtain data quickly and have reduced red tape.

Online data dissemination was further enhanced by introducing the Malaysia Informative Data Centre (MysIDC) in 2012. MysIDC is a one stop information gateway of social and economic data for Malaysia through a user friendly system which contains data from DOSM and other government agencies. The available data in MysIDC include National Accounts, Balance of Payments (BOP) and Investment, External Trade, Indices, Industrial Production by Sector, Monetary and Banking, Labour Market, Population, Income and Expenditures Household, Agriculture, Environment, Education and Other Social Indicators. MysIDC can be accessed at http://mysidc.statistics.gov.my.

Figure 2: Malaysia Informative Data Centre (MysIDC)

In addition, in order to facilitate fast access to statistical information, since 2009, mySMS was introduced as part of e-KL initiatives for 'Delivering services through an integrated and connected Klang Valley' via one SMS short code that is 15888. Currently, seven data categories are disseminated via SMS i.e. population, Gross Domestic Product (GDP), Consumer Price Index, External Trade, Index of Industrial Production, labour force, and monthly manufacturing statistics. In future, more categories of data are planned to be disseminated via this platform.

As the national statistics producer, DOSM also has a responsibility pertaining to issues on sensitivity and misinterpretation of data. Some of the monthly and quarterly data are provided at aggregated level, as the information provided by respondents is still at preliminary/provisional stage and subject to revision upon completion of audit of the financial statements. The practice of providing monthly and quarterly data at aggregated level is to avoid recurrent revisions on the same set of data. In terms of timeliness, DOSM complies with the Special Data Dissemination Standard (SDDS) of IMF in producing key official statistics. DOSM exceeds the SDDS timeliness requirements for national accounts, labour market, balance of payments, merchandise trade and international investment position statistics. For example, recognising the urgency of obtaining quarterly GDP and BOP data by stakeholders, DOSM managed to reduce the compilation period from 9 weeks to 6-7 weeks.

Table 1: Special Data Dissemination Standard (SDDS)

SDDS Data Category	Periodicity		Timeliness	
	SDDS	DOSM	SDDS	DOSM
Production index	Monthly	Monthly	6 weeks	6 weeks
Labour market: Wages/Earning	Quarterly	Monthly	12 weeks	6 weeks
Price index: Consumer prices	Monthly	Monthly	4 weeks	3 weeks
Price index: Producer prices	Monthly	Monthly	4 weeks	4 weeks
Merchandise trade	Monthly	Monthly	8 weeks	6 weeks
National accounts	Quarterly	Quarterly	12 weeks	7 weeks
Labour market: Unemployment	Quarterly	Quarterly	12 weeks	7 weeks
Balance of payments	Quarterly	Quarterly	12 weeks	7 weeks
International Investment Position	Annually	Annually	3 quarters	Not later than 3 quarters
Population	Annually	Annually	nil	2 quarters

3. Evolution of DOSM in Steering the Nation's Transformation

DOSM has indeed evolved from a small organisation to become one of the leading statistical agencies in Asia and among developing countries. Malaysia's diverse culture and historical background requires different types of statistics. These differences have led to the special characteristics of DOSM as compared to other NSOs where DOSM has been producing more detailed statistics as compared to many NSOs in developed countries. The multi-culture and multi-ethnicity in Malaysia warrants more precise and specific social-economic policy that essentially requires comprehensive statistics. In the 1970s, the gap in income distribution among ethnic groups has given the need for a new economic policy. Thus, the New Economic Policy (NEP) was introduced and the policy formulation required more diverse, relevant and comprehensive statistics. During this juncture, the theme of development was 'a growth with distribution' and DOSM had stepped up its role to provide the meticulous statistics to the policy makers, especially statistics on demographic, household expenditure, household income and income distribution by ethnicity. Meticulous efforts made by policy makers who were equipped with profound statistics had successfully helped the Government to accomplish the best policies to elevate the quality of life of all Malaysians regardless of ethnicity.

It has been noted extensively in the economic literature that in early stage of development, the most important goal is to achieve higher rate of economic growth. This eventually translates into higher per capita income followed by higher employment rate; fair distribution of wealth among the population; and the stability of general price level. Economic

performance of a country can be measured at least by 6 key economic indicators namely real GDP, unemployment rate, inflation rate, interest rate, level of stock market and exchange rate. DOSM is producing 3 of these indicators which are real GDP, unemployment rate and CPI since the 1950's.

In 1997, most ASEAN countries were hit by financial crisis which started in Thailand and later in Malaysia. During the period, DOSM experienced insufficient and infrequent short term economic indicators such as quarterly GDP and BOP statistics. Hence, in 1999, the first quarterly GDP series were compiled and published with the time series from 1991 onwards. During that period, DOSM was considered to be 'reactive' rather than 'proactive'.

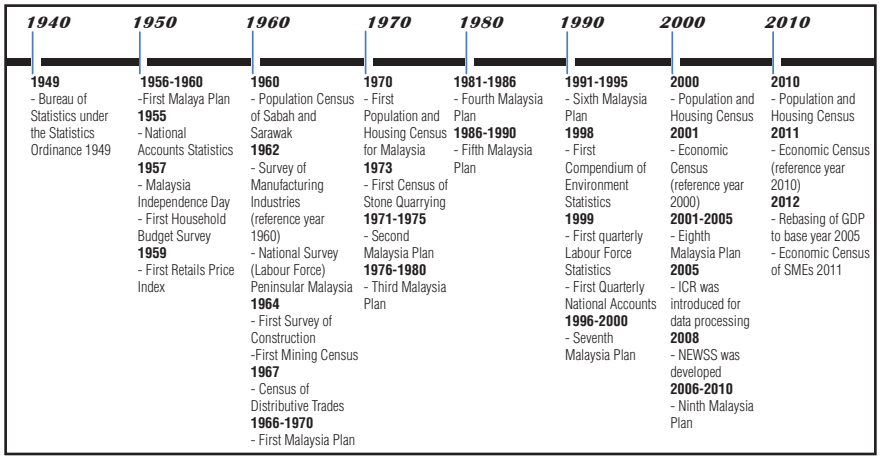
Understanding the importance of short–term indicators in monitoring economic condition, over the years, DOSM has developed various short-term indicators such as Index of Distributive Trade (IoDT), Index of Services (IoS), Monthly Distributive Trade (MDT), Quarterly Labour Force Survey and Quarterly Construction Statistics. Comprehensive and wide-ranging short-term indicators enable policy makers to foresee any calamity or distortion in the economy and to make timely and fast turnaround decision.

The borderless economies and the rapid structural changes have resulted in more complex management. This requires a new set of indicators and more frequent dissemination of statistics to monitor and identify these changes. Informal statistics is one of the key areas that DOSM has focused by conducting the Pilot Survey of Informal Sector in 2006 and this has become a regular survey. In 2009, DOSM had initiated the compilation of statistics on Small Medium Enterprises (SMEs). The statistics have been used extensively to examine the role of SME as the next engine of economic growth. Using these statistics, the SME Master Plan had been formulated with the goal of stimulating the SMEs contribution in the economy. The evidence shows that during the economic recession in 2009, SMEs recorded a positive growth of 0.2 per cent against a negative growth of 1.5 per cent posted by the national economy.

4. Technological Advancement

Technology enhances the effectiveness of NSOs, including DOSM, in expediting statistical workflow. Prior to the 1950s, DOSM used hand-pick system whereby data were collected and captured manually. This was insufficient to capture and process the data that might lead to momentous non-sampling error. In year 1954 and 1957, ICT tabulator and Key Punch Machine were introduced to speed up the process in producing statistics, and in 1967, the workflow had migrated from mechanical to electronic data processing following the installation of the

Figure 3: Evolution of DOSM



mainframe system. The system has been continuously upgraded and up to the 1980's, few generations of mainframe systems were installed to cope with the increasing usage and users' demand for timely data. DOSM started to use the Intelligent Character Recognition (ICR) for data processing in 2005. ICR has definitely reduced the time consumed in data processing and human error in data capturing.

4.1 National Enterprise-Wide Statistical System (NEWSS)

Recently, DOSM has taken new initiatives to integrate different system applications and all statistical workflow processes which include designing, processing, collecting, analysing, interpreting and disseminating activities in the GSBPM, through a computerised system known as NEWSS. The project kicked off in 2008 and the first phase development was completed and fully implemented in 2010. Ultimately, DOSM is moving towards developing NEWSS as a central repository and serves the following purposes:

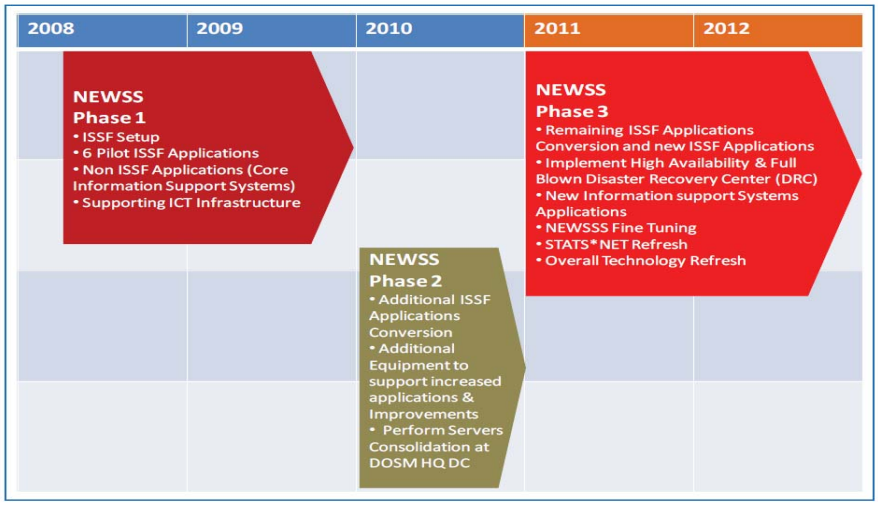
i. To standardise, consolidate and improve the existing system/ application to support the strategic requirement and the operation of DOSM;

ii. To simplify, improve and expedite the process of statistical data dissemination;

iii. To develop an integrated business process management that adheres to international statistics standards; and

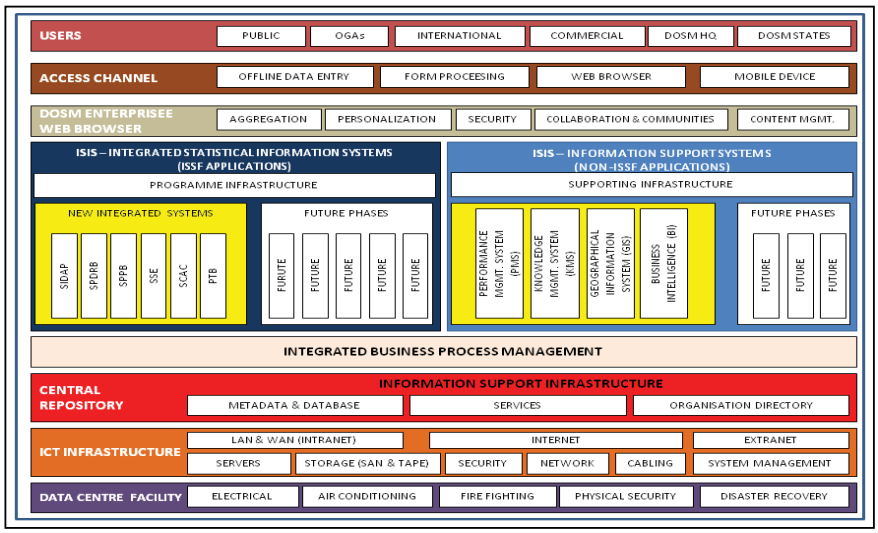
iv. To build up a central repository to facilitate data sharing between DOSM and other government agencies.

Figure 4: Implementation of NEWSS in Three Phases



NEWSS is made up of eight layers which formed the DOSM ICT Architecture. Figure 5 shows the components of the eight layers of DOSM ICT Architecture.

Figure 5: DOSM ICT Architechture



Integrated Statistical Systems Framework (ISSF)

Currently, DOSM has approximately 95 application systems which are operational and maintained in various platforms, databases and programming languages. The ISSF was developed to ensure applications produce quality statistics using standard mechanism that would increase efficiency and shorten the process of developing the census/surveys on the same platform. There are six major applications that have been revamped and selected as a pilot project which uses the same platform, database and programming language. These applications are:

i. *Sistem Daftar Pusat (SIDAP)* which is used to maintain the Enterprise and Establishment Frame;

ii. *Sistem Pangkalan Data Rangka Banci (SPDRB)* which is used to maintain Household Frame;

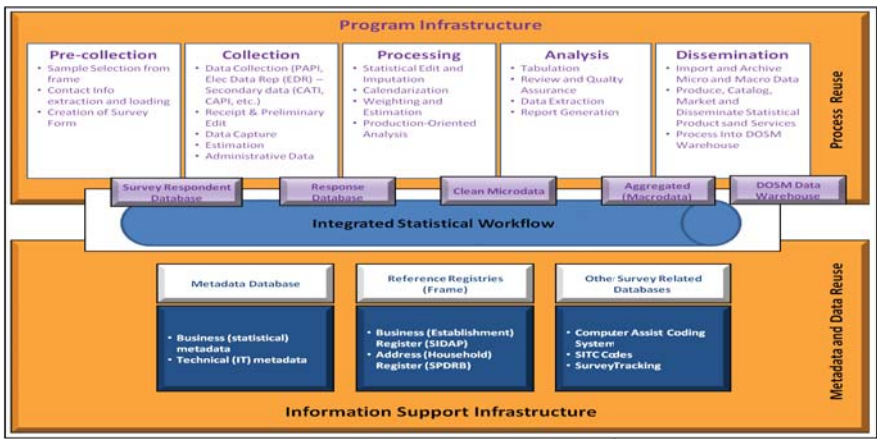
iii. *Sistem Penyiasatan Tenaga Buruh (SPTB)* which covers the surveys and analysis in the areas of labour force, migration, salaries and wages;

iv. *Sistem Soal Selidik Ekonomi (SSE)* which is used to process 35 types of economics surveys;

v. *Sistem Penyiasatan Pembuatan Bulanan (SPPB)* which is used to support the monthly manufacturing surveys; and

vi. *Sistem Pengkodan Bantuan Komputer* which maintains the codes used by DOSM.

Figure 6: Integrated Statistical Systems Framework (ISSF)



Information Support System (ISS)

Complementing the ISSF on assisting users in performing the effective and efficient process is the ISS. ISS enhances the capability of governance, digital mapping analysis, advanced analysis and create the knowledge sharing environment within DOSM. The systems within ISS are as follows:

i. Enterprise Portal (EP) which provides a single point of access to the contents and records of the various modules in NEWSS;

ii. Geographic Information System (GIS) which supports the analysis process using spatial data;

iii. Business Intelligence (BI) which is used for statistical analysis on structured data;

iv. Performance Management System (PMS) which allows DOSM to measure performance via key performance indicators; and

v. Knowledge Management System (KMS) which promotes collaboration and sharing of information within DOSM.

Advantages of NEWSS

The implementation of NEWSS was based on the DOSM ICT Architecture which will definitely move DOSM towards leveraging on the use of emerging technology. The impact of NEWSS on DOSM can be categorised into the following areas:

i. Stakeholders/users;

ii. Subject Matter Divisions;

iii. Frame;

iv. Central repository;

v. Dissemination; and

vi. Hardware and software.

5. Capacity Building

Personnel with well-equipped skills are a prerequisite to produce the right statistics. The increasing need for wide range and complex statistics requires skilled personnel with a diversified background and solid foundation in the field of statistics, economics, demographics and ICT. To date, DOSM has 3,254 personnel who are responsible in wide areas of social-economic statistics and involved in 9 important processes as outlined in GSBPM. Comparatively, the ABS has 3,542 employees while the Statistics Canada has approximately 6,000 workforce. The current ratio of statistician against total personnel is 1:10, which is comparatively lower than other developed NSOs. In shaping the statistics profession and reducing the ratio gap, DOSM is looking for a possible revision of the workforce at designated time-period when it is permitted. The appropriate ratio of professional and management group will spearhead more profound statistics analysis and interpretation.

In recognising the importance of the statistical services to cater to the increasing demand for new areas of statistics, in January 2008, the Government had reclassified the statistics profession from Administration and Supporting Service (N) Scheme into Economic Service (E) Scheme. This scheme acknowledges that the personnel in DOSM should be well equipped and specialised in statistical discipline along with technical and analytical knowledge in the macroeconomics discipline including national accounts, balance of payments, international trade, prices, population, demographic, labour and environmental. DOSM upholds to the expectation and is committed to meet the needs of users in the challenging environment. Equipped with the expertise, analytical knowledge and integrity, every statistics produced by DOSM are expected to be accompanied with quality reasoning and detailed elaborations.

In safeguarding a high level of proficiency and expertise in producing the official statistics of the nation, personnel need to be trained in appropriate subject matters/disciplines and exposed to hands-on training. Internationally, the developed NSOs with a long period of evolution have developed some degree of expertise in the designated subject matters. Besides the continuous collaboration and exchange programme with the renowned NSOs and international institutions for capacity building activity, DOSM has also developed its own programme that is tailored to the specific needs of personnel at all levels. In recognition of the importance of statistical services, the Government has approved the establishment of the Statistical Training Institute of Malaysia (ILSM) in 2009 and commenced its operation in 2012. With the dedicated training centre, more well-structured courses and established curriculums will be conducted, focusing on technical courses ranging from social, economic and generic modules. Moving forward, ILSM

thrives to become the best statistical centre of excellence, domestically and internationally. ILSM also plans to open its courses to government agencies and users as well as providing facilities for international courses.

Apart from training in ILSM, DOSM's personnel will continuously be engaged and attached with other NSOs and international bodies such as UNSD, IMF and Asian Development Bank (ADB) in enhancing knowledge to pursue DOSM's vision. Attachments with international statistical bodies was held in selected subjects to keep abreast of the latest international manuals and recommendations as well as in ensuring the methodology used is comparable internationally.

Contribution to the public is one of the important characteristics of DOSM, other than providing statistical data. DOSM highly encourages the personnel to share their technical expertise in journals and technical papers as well as presenting papers in seminars and workshops. Thus, public can have a better understanding and view on DOSM methodology and statistics findings.

DOSM aspires to become one of the catalysts in statistics community in the near future rather than being a follower by providing expertise internationally and regionally. Among the international contributions of DOSM includes being a member of the Advisory Expert Group (AEG) of System of National Accounts, Expert Group on Industrial Statistics of International Recommendations for Industrial Statistics and Quarterly National Accounts Manual.

6. Reaching to the Community

Statistical data are being used extensively not only for policy formulation and administrative purposes but they are also being referred to for research and analysis purposes by research institutions and private sector. As the country continues to develop, the community, mainly the general public, as well as media have shown increasing interest towards official statistics. With diversity of users from different groups and background, statistical literacy becomes an ongoing concern for DOSM. Issues such as 'how the public will perceive the data' and 'possibility of misinterpretation of the statistics by media' may lead to misconstruing and misleading implications to the community.

Statistical Literacy

Statistical literacy entails the capability to understand the connotation of the released statistics. Statistical literacy might not become an issue for researchers, analysts or even economists. However, it may be rather difficult for media, particularly journalists, to report and interpret statistics in the form of a story that can be comprehended by public and without misconstruing the statistics. Basically, there are two types of journalist; those statistically literate journalist and general news journalist who may be less statistically literate. It is a challenge for DOSM to facilitate these journalists in a way that each statistical release comes along with an understandable explanation for press release. The numbers or figures alone will not make up a story and it might not give any intended meaning and interest to the public. For example, quarterly GDP growth of 7.3 per cent has little statistical value by itself. Clear and concise explanation such as the trend of growth as compared to previous quarter or major contributors by industry must be included in the press materials. Hence, the readily understandable statistical explanation to journalists will be transmitted through simple and clear language to the general public. Subsequently, it can stimulate public interest towards statistics.

Statistical Leadership

Growing interest towards statistics leads to increasing number of statistics being produced, not only by the NSO but also by other agencies such as research houses. It is common for various agencies to compile statistics to serve their administrative purposes. Statistics which is compiled from diverse groups will produce different figures which are incomparable even on the same area of study. DOSM, as the national statistics producer, undertakes the role of statistical leadership by offering technical assistance, consultancy and support resources for any statistical work outside DOSM. To improve the confidence in the data produced by researchers, DOSM stepped in by educating them on the importance of appropriate methodology and concept, standards and classification in producing statistics. Continuous consultation is also given to any agencies that require advice on the methodology of data collection, questionnaire and sampling design. DOSM has frequently been asked to give consultation service and feedback on various studies done by other government agencies and selected statisticians are also frequently appointed as members in Technical Working Group (TWG) to assess/evaluate the studies carried out by consultants/private institutions on behalf of government agencies. Moving forward, DOSM has to develop the capability to become the national leading agency for statistical rating. This effort will give the assurance to the community that the statistics produced by other agencies are at acceptable standard and the quality is maintained.

DOSM's involvement in international cooperation in the field of statistics has expanded over the years. Since the past few years, DOSM has been actively providing technical assistance to other NSOs and has received several delegations under the study visit programmes.[10] DOSM has also actively participated in regional and international statistical coordination and capacity building cooperation[11] and concurrently as a sitting member in international communities such as Organisation of Islamic Cooperation (OIC), Asia Pacific and ASEAN. At ASEAN level, DOSM is also an active member in various programmes such as the ASEAN Community Progress Monitoring System (ACPMS), and more recently, was appointed as the Chairman of Working Group on Data Sharing Analysis, Dissemination and Communication of Statistics (WGDSA).

7. Way Forward

Building Smart Partnership

In Malaysia, DOSM has moved towards intensifying data tapping on secondary and administrative data from relevant agencies instead of relying on primary data to cater to the increasing demand for statistics. This is vital in order to avoid duplication of efforts and to reduce the respondents' burden as well as to use the resources more effectively. Prior to data tapping, it is important that respective agencies add in relevant statistical information in their surveys to meet the statistics needs by DOSM. In addition, full understanding of codes, classifications and concepts is a must to ensure standardisation and compliance with international recommendations in the produced statistics.

In line with our data tapping practices, several memorandum of understanding (MoU) have been signed with OGAs such as Malaysia Productivity Corporation (MPC), Companies Commission of Malaysia (CCM) and BNM. These MoUs serve to enhance mutual cooperation in garnering data, sharing expertise and providing current statistics. DOSM has extended its services to various relevant government agencies by placing statisticians (cadre) as technical arms to interconnect between DOSM and other agencies. As of today, a total of 180 cadres are placed in 34 government agencies. The cadre service is important in enhancing cooperation between DOSM and other agencies.

The Statistics Act establishes a mandate for DOSM and empowers it to virtually collect all information from individuals and businesses. However, unlike the Statistics Canada, DOSM does not have the mandate to access individual record in the possession of other government agencies. It should be noted that Statistics Canada has full access to all records held by the Government, and specifically identifies all taxation

[10] Refer Appendix 3
[11] Refer Appendix 4

and customs records as well as record of court.[12] Similar step needs to be taken to set up a working group to establish a mutual understanding that DOSM could also have full access to all records and statistics held by other government agencies.

Most of the developed countries impose a ruling that all companies must provide information to Inland Revenue Board and statistics office whenever they register their business. However, such practice is not implemented in Malaysia whereby companies are not obliged to report to DOSM. Although the legislation has armed DOSM with the power to penalise non-compliant individual or entity, diplomacy and persuasive approach is deeply practised. Thus, we hope that the working group will look into making it compulsory for any businesses which are registered with CCM to provide information to DOSM as well.

8. Conclusion

For the continuing development and affluence of the country, the national statistical system must be the point of reference for policy formulation. The national statistical system has to provide quality statistics so that confidence in the system will remain intact. In order to achieve this, the system requires help and co-operation of other relevant external parties such as other government agencies, the academia, the media, private sector as well as the general public. In addition, it is also pertinent that the roles of coordination and engagement with all prospective users continue to be expanded and shifted to a new level. These concerted efforts will lead to a successful statistical system that can contribute to the nation's social-economic legitimacy along with providing assistance in the implementation of vigorous national policies. Technology advancement has made a big headway in DOSM especially through the implementation of NEWSS and with this, the delivery of statistical services will continue to be strengthened.

Despite the key role of DOSM to provide official statistics to the stakeholders, the success of national statistical system is also measured by its ability to fulfil a variety of statistics that are requested by the community, businesses and researchers on daily and real time basis. On this front, DOSM understands the importance of the statistics needed. However, these parties have to understand that there are always potential constraints that may limit DOSM's ability to serve their needs. Skilled statisticians and advanced tools can never fully complement the non-response data from businesses and households. This is a real challenge where we believe that everyone plays an important role in creating awareness on the statistical enquiry.

[12] Chander, R. (2009) p5.

DOSM always strives to foresee incoming new emerging statistics and is never complacent on the statistics and services provided. DOSM continues to evolve and keep abreast with the dynamic changes internally and externally and is committed and responsive to these changes. DOSM will keep producing relevant statistics to reflect these changes and fulfil the users' needs. The availability of relevant statistics is becoming more paramount as international competition will get stiffer fuelled by globalisation and the gathering momentum of trade liberalisation. With these experiences, DOSM is currently providing expertise in the various statistical fields to assist developing countries to enhance their statistical acumen. There is no doubt that the country's past successes in attaining the economic prosperity were done through years of planning combined with invaluable statistics. To ensure this continues in the future, collective efforts by statistical community and policy makers will play a vital role in shaping the future and well-being of the nation.

Appendix 1: Fundamental Principles of Official Statistics

Principle 1: Relevance, Impartiality and Equal Access

"Official statistics provide an indispensable element in the information system of a 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."

Principle 2: Professional Standards, Scientific Principles and Professional Ethics

"To retain trust in official statistics, the statistical agencies need to decide according to strictly professional consideration, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data."

Principle 3: 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."

Principle 4: Prevention of Misuse

"The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics."

Principle 5: Sources for 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."

Principle 6: 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."

Principle 7: Legislation

"The laws, regulations and measures under which the statistical systems operate are to be made public."

Principle 8: National Coordination

"Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system."

Principle 9: 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."

Principle 10: International Cooperation

"Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries."

Appendix 2: Comparison between Centralised and Decentralised Statistical System

Item	Statistical System in Japan	Statistical System in U.S.	Statistical System in Canada
Statistical System	Decentralised statistical system which statistical function are spread out among individual administrative organisation.	Highly decentralised statistical system.	Centralised statistical system whereby the statistical function are assigned to a single organisation.
Year of Establishment	Established in year 1869.		Established in year 1867.
Statistics Organisation	• Cabinet Office; • Ministry of Internal Affairs and Communications; • Ministry of Justice; • Ministry of Finance; • Ministry of Education, Culture, Sports, Science and Technology; • Ministry of Health, Labour and Welfare; • Ministry of Agriculture, Forestry and Fisheries; • Ministry of Economy, Trade and Industry; • Ministry of Land, Infrastructure, Transport and Tourism; • Ministry of the Environment; • Local Branch Office of Central Government Agencies, and etc.	More than 100 agencies and each agency is responsible to produce social and economic federal statistics. The agencies include US Census Bureau, Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), Bureau of Justice Statistics, National Aeronautics and Space Administration, Bureau of Transportation Statistics, National Center for Health Statistics, Statistics of Income (IRS), National Center for Education Statistics, and etc.	Statistics Canada
Advantages	• Statistics that respond to changes in the social and economic trends can be compiled. • Enables each organisation/ agency to utilise knowledge and experiences on the administration under its jurisdiction for planning and conducting statistical surveys. • Each statistical agency receives current year appropriations, either as a specific line item in the budget or through allocations from its parent organisation's budget.	• Policy relevance. • Strong statistical linkages to administrative management and information systems.	• Easy to capitalise on the professionalism of statistics. • A consistent statistical system is built more readily. • Has a single budget for Statistics Canada which allows response to changing priorities through internal reallocations. • Convenient and efficient for users to secure statistical materials in a variety of fields from a single source.
Legal Framework	Statistics Act 1947 (Revised 2007) covers not only statistics compiled from census such as the Population Census and surveys, but also those compiled from administrative records and processed from other statistics such as the National Accounts. This Act is shared among agencies.	Statistical agencies generally operate under a number of laws, policies or regulations governing the collection, use and confidentiality of the statistical information for which they are responsible. Some of these laws, policies and regulations apply only to a specific agency. The legal framework also limits the extent of data sharing among agencies.	In Canada, a single law, the Statistics Act of 1971, provides the authority for all activities of Statistics Canada, including the coordination of those parts of the Canadian statistical system not included in Statistics Canada, and applies to all components of Statistics Canada. Under the Statistics Act, Statistics Canada has broad access to administrative records, the authority to use data from several sources to construct composite records, and the authority to share data among different components of Statistics Canada. The Statistics Act also provides for the protection of the confidentiality of individual data providers, as does Canada's Access to Information Act and Privacy Act.

Appendix 3: List of Meetings and Visits from International Agencies In 2011 and 2012

No.	Meetings And Visits	Agency	Year
1	Working Visit by the BANBEIS	Bangladesh Civil Services Officials (BANBEIS)	2011
2	Public Expenditure Review (PER) Meeting	World Bank	2011
3	Study Visit by the Embassy of the Islamic Republic of Iran	Planning and Strategic Supervision of Iran	2011
4	Discussion with the EASCAB Consultant	EU-ASEAN Statistical Capacity Building Programme (EASCAB)	2011
5	Discussion with the Agricultural Economics Institute, Netherlands	Agricultural Economics Institute, Netherlands	2011
6	Study Visit by the Population Census Organisation Government of Pakistan	Government of Pakistan	2011
7	Study Visit by the University Quebec, Canada	University Quebec, Canada	2011
8	Study Visit by the General Statistics Office, Vietnam	General Statistics Office, Vietnam	2011
9	Study Visit by the Central Statistical Agency of Ethiopia	Central Statistical Agency of Ethiopia	2012
10	EASCAB Technical Assistance: Statistics on International Trade in Services (SITS)	EU-ASEAN Statistical Building (EASCAB)	2012
11	Study Visit by the Reserve Bank of India (RBI)	Reserve Bank of India (RBI)	2012
12	Study Visit by the National Institute of Statistics of Mozambique	National Institute of Statistics, Mozambique	2012
13	2nd Workshop on Enhancing the ASEAN Community Progress Monitoring System (ACPMS) and the First Meeting of the Working Group on Data Sharing, Analysis, Dissemination and Communication of Statistics (WGDSA)	ASEAN Secretariat	2012
14	Institutional Capacity Building for ASEAN Monitoring and Statistics	Formulation Team Leader from EU	2012
15	Discussion on Asian International Input-Output Table (AIIO) 2005 project	Institute of Developing Economies – Japan External Trade Organization (IDE-JETRO)	2012

Appendix 4: Statistical Capacity Building (StatCaB) Programme under Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

No.	Training Programme	Country	Institution	Year
1	Quarterly National Accounts	Maldives	Department of National Planning	2012
2	Labour Force	Afghanistan	Islamic State of Afghanistan	2012
3	Price Statistics and Indices	Afghanistan	Islamic State of Afghanistan	2012
4	Short-term Business Statistics	Pakistan	Pakistan Bureau of Statistics	2012
5	National Accounts	Maldives	Department of National Planning	2010
5	National Accounts	Indonesia	Badan Pusat Statistik Indonesia	2007
6	General Statistics	Maldives	Ministry of Planning and National Development of Maldives	2007

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DATA SHARING AND COMMUNICATION OF STATISTICS, THE KOREAN EXPERIENCE

Joon Jung[1] and Hyejung Moon[2]

1. Introduction

Demand for new statistics or information to fill the existing data gaps has increased since the global financial crisis. However, collecting new data always involves time and costs. The re-use of existing data or information has thus become an important albeit challenging issue. Such use of information by more than one organisation or individual is called 'data sharing'. Through the sharing of existing data, the related reporting burdens and compilation costs can be reduced as the same information does not need to be collected more than once.

Data sharing requires effective coordination and communication among the institutions concerned. In particular, a system for efficient data transmission and processing among different organisations is helpful to the expansion of data sharing. One of the major difficulties related to data sharing is that of preserving data confidentiality. The protection of confidentiality in any statistical activities should be ensured and established in the relevant legal framework. Therefore, for the sake of efficient and safe data sharing, data sharing agreements should be built based on the support of technical and legal systems. The Australian Bureau of Statistics (2009) provides general advice and guidance on data sharing.

At the same time, the question of how to provide statistical information to users is just as important as that of how to produce reliable statistics with limited resources. In this context, statisticians need to 'communicate smartly' by utilising more diverse communication channels and by increasing their interactions with the statistics users. There are a variety of tools for such communication, for example issuing press releases, holding press conferences, giving interviews, delivering speeches, providing background briefings, operating statistical websites, and so on. As the Internet has become the main channel for communication, statisticians have made efforts to develop statistical websites that are more user-friendly, understandable and accessible to the public. Statisticians also need to make themselves available to the markets and the public through various meetings, workshops and seminars, which will enable them to better respond to changes in the statistical environment quickly and flexibly. The metadata containing the detailed methodology

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[2] Bank of Korea, Email: hjmoon@bok.or.kr

and sources used for compiling statistics is another prerequisite for transparent communication. Refer to paper by European Central Bank (2011) for more details regarding the role of statistics in central bank communication.

The Bank of Korea (BOK) has devoted efforts to enhancing both its data sharing and its communication of statistics. The purpose of this paper is to present Korea's experiences and share related information. The remainder of this paper is organised as follows. Section 2 describes the systems for data sharing in Korea and Section 3 details the BOK's activities undertaken to promote communication of statistics. Section 4 then concludes with some remarks.

2. Data Sharing in Korea

2.1 Legal Foundation for Data Sharing in Korea

Statistics Korea, the national statistical office in Korea, provides the services of overall planning and coordination of national statistics compilation, establishes statistical standards, produces and distributes various economic and social statistics, processes and manages statistical information, and supplies various statistical data. All of these functions are carried out in accordance with the Statistics Act, and its major provisions are presented in Table 1. Accordingly, any data sharing agreements should be built on the basis of this legal foundation.

The BOK has compiled major economic statistics since 1950, based on the Bank of Korea Act. According to Article 86 of the Act, regarding the collection and compilation of statistics, etc., "the Bank of Korea may, when necessary for the formulation of its monetary and credit policies, collect and compile statistics on money and banking, public finance, prices, wages, production, the balance of payments and other basic economic statistical series, and conduct economic research and for such purposes request any materials or information from the government organisation and any juridical or individual person." After the recent global financial crisis, the Bank of Korea Act was revised in 2011 to strengthen the financial stability role of the central bank. And in fulfilling this new responsibility, the BOK has worked to establish a close network for cooperation with the relevant institutions, and the demand for data sharing has therefore increased within the BOK as well.

Table 1: Major Provisions of the Statistics Act[3]

• Approval for Compiling Statistics

The agencies compiling the official statistics shall obtain in advance the approval from the Commissioner of the Statistics Korea. Approval should also be obtained in case of suspension or alteration of approved statistics.

• Obligation to Report a Designated Statistical Survey

An agency which conducts a designated census or survey may be obliged to report on the respondents. Penal regulations are provided for non-observance of this obligation.

• Confidentiality

Data collection by the statistical agencies must carry a legal guarantee of protection of the confidentiality of individuals. Private information obtained from individuals, juridical persons or bodies in the process of the compilation of statistics shall be kept confidential.

• Prohibition of the Use of Data for Other than Statistical Purposes

The utilisation of statistical data collected for designated or general statistics is prohibited for anything other than statistical purposes.

• Consultation and Approval of the Statistical Results for Publication

The heads of agencies compiling official statistics shall immediately submit the results of these statistics to the Commissioner of the Statistics Korea. After consultation with the Commissioner and upon his approval, the results shall be published. This provision aims at not only ensuring the timely publication of results, but also securing the truthfulness of official statistics.

• Quality Evaluation on Official Statistics

In order to reinforce the credibility of official statistics, the Statistics Korea will perform quality evaluations on the compilation and dissemination of official statistics both regularly and irregularly.

• Use of Administrative Data and Taxation Data

The Commissioner of the Statistics Korea can require the use of administrative data of other administrative organisations, and the taxation data can be utilised in the compilation of statistics due to the revision of the Framework Act on National Taxes (2009.2).

2.2 MOUs between Institutions

Data sharing requires both collaboration among, and commitment by, the relevant institutions, and so the data sharing agreement needs to clearly state the purposes, standards and procedures for data sharing. As for the type of data sharing agreement it prefers, the BOK has chosen a Memorandum of Understanding (MOU) for on-going data sharing between institutions.

[3] Statistics Korea

The BOK signed an MOU on financial information sharing with four financial authorities - the Ministry of Strategy and Finance (MOSF), the Financial Services Commission (FSC), the Financial Supervisory Service (FSS) and the Korea Deposit Insurance Corporation (KDIC). This MOU came into effect from September 2009, for the purpose of promoting close cooperation among the organisations to overcome the financial crisis. The original MOU has been revised, however, to expand the scope of data sharing and to improve the sharing procedure, and a new, amended version has been in force since September 2012. Under the MOU, there is a Macroeconomic and Financial Committee, which operates to promote effective cooperation and mediate disagreements.

This MOU defines the target data to be shared as all periodic and occasional reports submitted by financial corporations, and the processed data such as indices and ratios that the institutions make from these original reports. Excluded are data whose sharing is prohibited by law, based upon protection of confidentiality, and data approved for exclusion by the Macroeconomic and Financial Committee for special reasons.

The MOU prescribes the procedure for data sharing as follows: (i) all work processes related to data sharing should be based on official documents; (ii) requests for data sharing should be processed so that the data sharing is accomplished within 10 business days, or three business days in cases of emergency; (iii) if the requested data is confidential, the institution requested to provide it must offer relevant data after deletion of individual information or conversion of the original data to make it appropriate for sharing; (iv) when the requested data does not exist, the requesting institution can ask for it to be newly collected; (v) data that has not been sufficiently validated should be shared on the understanding of it having low reliability; and (vi) asking financial corporations to submit the same reports they have already submitted to any of the five financial authorities is not permitted.

In order to invigorate data sharing, the five financial authorities check the list and the formats of the shared reports every quarter, and exchange updated information on them. This kind of information exchange is done via the authorities' electronic systems. For example, the BOK has an Information Process System (IPS) for managing and uploading the reports it has received from financial corporations or made by itself. Likewise, the FSS has a Financial Information Sharing System (FISS) and the KDIC a Financial Information Analysis System (FIAS). These systems make financial information sharing more efficient and convenient.

The MOU also stipulates ways of protecting the confidentiality of financial information. First, the authorities must obtain prior approvals for data sharing from financial corporations when collecting their reports.

Second, they must take appropriate actions to ensure non-disclosure of confidential information that can have crucial influences on individual financial corporations or the financial market as a whole. Third, they must also set up regulations prohibiting staff with access to confidential information from disclosing it or making illegal investments by taking advantage of it.

Another good example of the BOK's MOUs is the MOU on statistical cooperation with Statistics Korea in September 2011, which facilitates development of the national statistics with a focus on improving the statistical methods and statistics compilation framework necessary to enhance the national statistics' quality. Through conclusion of this MOU, the two organisations agreed to strengthen their cooperation in conducting joint research, exchanging statistical compilation methods and sharing raw data. The MOU stipulates the formation of a Statistical Cooperation Council, with sub-divisions created under it to deal with specific issues. For example, the Division on Cooperation for 2008 System of National Accounts (SNA) Implementation discusses major issues involved in implementation of the 2008 SNA, and the Division on Cooperation for National Balance Sheet Development works on methods of estimation of financial and non-financial assets in order to develop the national balance sheet by 2014.

The principles of information sharing between the two organisations are as follows: (i) they will cooperate actively upon receipt of requests from each other for data provision; (ii) the provision of statistical data will comply with the relevant regulations of the two organisations, and that in cases where there are no related regulations conditions may be determined in consultation among them; and (iii) the statistical data provided will neither be used for other statistical purposes without consent of the providing party nor provided to third parties.

2.3 Data Sharing within the BOK

The BOK's Economic Statistics Department consists of 11 teams compiling major economic statistics and each team accumulates a considerable amount of raw data in the course of compilation. These economic statistics tend to be associated with each other; for example, the flow of funds statistics is closely related to the national income statistics, the monetary and financial statistics, and the balance of payments. The raw data collected for compiling each of these statistics can thus be partly used to compile the other statistics, too. Moreover, the demand for micro level data has increased, even for research purposes. There is an obvious need, therefore, for data sharing by different sections within the BOK itself.

Statistics Korea operates its own Micro Data Service System (MDSS), but most of the micro data provided through it are social statistics from population and household surveys. The BOK has therefore worked to develop a similar micro data system dedicated to economic statistics. The system aims to contain not only the micro data collected by the BOK itself, but also other relevant statistics from outside sources. Approaches such as data reduction, data distortion and synthetic data generation should of course be applied to protect the confidentiality of information of individual units. The new system will be launched in 2013, and is expected to enhance the reliability and quality of statistics by making possible the systematic sharing and management of a variety of raw data sources. Moreover, the micro data made available will also satisfy researchers' needs for carrying out deeper and more flexible research.

In addition to the micro data system, the Economic Statistics Department of the BOK established the BOK Statistical Council in July 2012, to consult on statistical issues concerning more than one department. Comprising the director generals of major BOK departments, the Council discusses issues including the development and improvement of statistics, measures to support statistics compilation and utilisation, statistics quality control and management, dissemination and provision of statistics, etc., and if necessary, makes decisions on specific issues, such as reducing the risks stemming from errors in compiling statistics. This internal council is expected to contribute to the promotion of information sharing between the producers and users of statistics within the BOK, and to eventually facilitate better BOK policy decision-making and higher credibility.

3. Communications of the BOK

3.1 Economic Statistics System

The BOK has operated its Economic Statistics System (ECOS) website since January 2004, as a main channel for delivery of economic statistics to policymakers and the public in a timely and convenient manner. The BOK has adopted a new technology to enable it to present up-to-date information on the ECOS in a user-friendly way, and the ECOS has as a result been evaluated as one of the best communication channels in Korean statistical society.

To be more specific, there are five main tabs (ECOS Guide, Search Stat, Press Release, Statistical Calendar and Principal Indicator) at the top of the ECOS homepage, as shown in Figure 1. First, ECOS Guide briefly explains the main functions of the ECOS. Second, Search Stat enables users to easily retrieve various statistics compiled by the BOK and other domestic and international statistical agencies with a simple and easy interface. Search Stat contains useful functions including fluctuation rate calculation, chart and graph drawing and data downloading. A click on

this tab links to a page with two search options - the Simple Search, and the Multiple Search with more extended functions, such as a change of unit function and a pivot function making it easy to switch columns with rows. Access to the Meta DB is also available, providing users with the related metadata for better understanding of the statistics concerned. Third, by clicking the Press Release tab, the public can easily access the latest press releases, or search among previous press releases dating back to 2004, through the use of keywords or the subjects in question. Fourth, Statistical Calendar displays the BOK's advance release calendars (ARC) for all of the statistics that it compiles. The ARC is useful for ensuring the sound management and transparency of statistical compilation as well as facilitating users' plans for analysis and related activities. Fifth, by clicking Principal Indicator users can access the principal published statistics on money & banking, securities, prices, the balance of payments, the national accounts, etc. of the Korean economy, which are updated every month.

In particular, at the bottom of the main ECOS page, on the left, there is a tab labelled 100 KOREAN STAT (Prompt), by which the public can access 100 principal statistics that are useful in policy making and the analysis of economic trends in Korea. If the user clicks on this tab, and then on any item in the list that appears, more detailed data series and the related charts and graphs can be found so that the users can understand quite easily and conveniently.

The above-described ECOS service to the public is available via various functions of several subsystems of the ECOS, as illustrated in Figure 2 and Table 2. Based upon its integration of processes from raw data collection through statistics distribution, the ECOS increases the efficiency of statistics compilation and the productivity of economic research. Therefore, it is considered as a dedicated website for provision of statistics services to the public, and the central data repository for improving the BOK's statistics management capability.

Figure 1: Economic Statistics System of the Bank of Korea

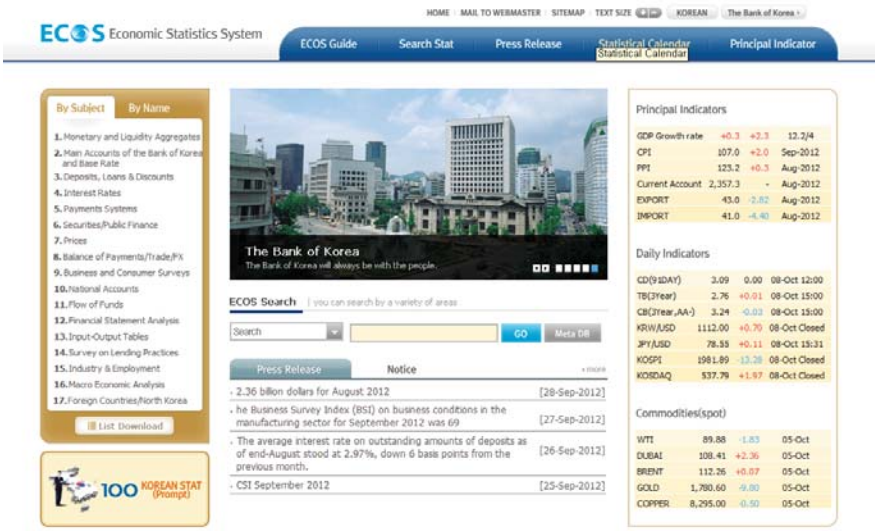

Figure 2: ECOS System Map

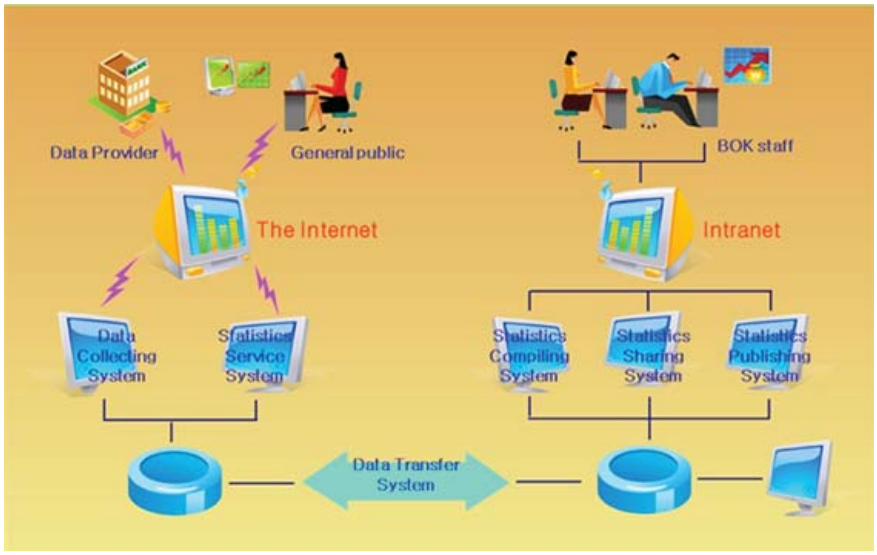

Table 2: ECOS System

Subsystem	Function
Data collecting system	Automation of statistical raw data gathering through Internet • Registering survey forms and information about institutes submitting raw data • Sending of survey forms through Internet, and allowing direct input of survey information on webpage • Encoding of data at time of collection, for information protection
Statistics compiling system	Enable officer in-charge to manage compilation processes • Standardisation of compilation processes using SAS and EXCEL • Compilation of statistics and printing out of reports linked with ECOS DB, using EXCEL • Requires permission of authorised person to complete compilation (to prevent modification of data)
Statistics sharing system	Enable the BOK staff to search for and use statistics through various methods • Conversion of original data into period changes and period change ratios, and drawing of related graphs • Rapid search using “My Statistics” and “Popular Statistics” • Searching for statistical periodicals linked with statistics publishing system • Retrieval of data from ECOS DB using EXCEL
Statistics service system	Provide general public with principal statistics of the BOK through Internet • Transfer of intranet data to Internet automatically, at point in time set by compiling staff • Enabling public user access of the ECOS through Internet • Providing graphs, period changes and period change ratios, with original statistics data • Provision of statistical periodicals (in EXCEL, PDF, etc. formats)
ECOS management system	Facilitate management team supervision of the ECOS • Managing user information and authorisations • Monitoring of statistics appearing in the ECOS • Managing metadata, such as tables and codes
Data transfer system	Automate transfer of data between intranet and Internet • Transfer of data from intranet to Internet or vice versa, at appointed time • Recording and managing of data transfer details
Statistics publishing system	Enable publication of statistical periodicals • Registering and managing contents and forms of periodicals • Organising statistics presentation forms using EXCEL • Uploading periodical files on Statistics sharing system and Statistics service system

3.2 Communication of Statistics with the Public

The BOK has arranged various events for communicating statistics with both expert groups and the general public. First, it has regular consultation meetings with national experts from both industry and academia, which help it to gain better understanding of economic reality and statistical needs through interaction with market participants. The BOK's Economic Statistics Department has in this regard also appointed three professors as advisory board members, to obtain advice on or assistance in statistical compilation.

The BOK undertakes diverse activities to boost public awareness concerning economic statistics. For example, it provides lectures for college students in local cities, to develop their abilities to read and interpret statistics - with senior economists in the BOK's Economic Statistics Department making lecture visits about 40 times per year. The BOK also conducts a weekly 'BOK Friday Class' programme for the general public, with the lectures subsequently uploaded on the BOK website every week, for free 'attendance' by the public without visiting the BOK. This class covers various issues concerning the central bank and the economy, but economic statistics are one of the most popular topics for the audience.

The BOK also emphasises communication with journalists, since its press releases reach the general public through them. In particular, the BOK holds press conferences or provides background briefings when the statistics released need explanation in greater detail.

4. Conclusion

In summary, the BOK has devoted a variety of efforts to enhancing both its data sharing and communication of statistics. However, the BOK still has a long way to go in order to support better policy making through effective data sharing and communication of statistics. For example, the BOK needs to improve the existing MOUs as the economic and statistical environments change. Building an integrated financial data reporting system, by harmonising the reporting templates, would be one means of further enhancing the current means of data sharing. The BOK also has to make continuous efforts to foster the micro data system since it is still in early stages. Although the BOK has the well-developed ECOS system for communicating its statistics effectively, the BOK must remain ever alert and aware of up-to-date information technology so as to improve its statistical communication tools. For effective communications, increasing the opportunities for information interchange with the public is also desirable.

Looking back from the Korean experience, data sharing and communication of statistics have been strengthened by the outward impulse such as the global financial crisis and the implementation of international statistical standards. However, it has been also clearer that they are not just a second task of central banks, but should be one of the main functions of modern central banks.

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NATIONAL STATISTICS CONFERENCE 2012
"Enhancing National Statistics to Meet Public and Private Sectors Needs during a Period of Transformation"
Organized jointly by
Department of Statistics Malaysia and Bank Negara Malaysia
Session 2: Promoting Data Sharing and Communication of Statistics
Enhancing the communication of statistics for better understanding of economic and financial conditions
RAM
HOLDINGS
RAM Economics Research

MAXIMISING THE VALUE OF DATA THROUGH GREATER DATA SHARING BETWEEN PUBLIC AND PRIVATE SECTORS

Suhaimi Ilias[1]

There is no such thing as 'too much information'

There are numerous issues when it comes to statistics since there is no such thing as 'too much information' – certainly not in this 'Information Age' where lack of information and transparency, as well as poor data integrity, reliability and accuracy is 'taboo'.

In view of the demand for greater flows of information as well as transparent, timely, reliable and accurate data, effective dissemination of statistics as well as greater exchanges and sharing of information between the public sector and the private sector is vital. This holds even greater significance and importance within the context of Malaysia's on-going economic transformation.

Malaysia is on a journey to become a high-income economy from the current upper middle-income levels. To realise this mission within the current decade, the Economic Transformation Programme (ETP) was unveiled and laid out the path to attain Vision 2020. The ultimate goal is to raise the country's Gross National Income (GNI) per capita to at least USD15,000 by 2020 from USD8,351 in 2010 (latest figure is USD9,779 for the period January-September 2012), i.e. 6% p.a. growth in GNI per capita.[2] Meanwhile, the implied real GDP growth target is 5% p.a., taking cue from the observed official real GDP growth forecasts for 2011, 2012 and 2013 in the Ministry of Finance's Economic Reports and Bank Negara Malaysia's Annual Reports since October 2010 when the ETP was officially launched.

Key to achieving the above GNI per capita and economic growth targets is investment, with private sector being the engine of investment, job creation, economic growth and income. ETP targets RM1.4 trillion new investments in the period 2011-2020, with 92% of this grand total coming from the corporate sector, out of which 73% are domestic direct investment (DDI) and 27% are foreign direct investment (FDI). Furthermore, 43% of the DDI will involve capital expenditures by the government-linked corporations and investment funds (GLCs/GLIFs).[3]

[1] Maybank Investment Bank Berhad, Email: suhaimi_ilias@maybank-ib.com
[2] ETP Roadmap, October 2010
[3] *Ibid*

In addition to these numerical or quantitative targets, qualitative targets are also set under the ETP, namely 'inclusive' and 'sustainable' growth. Inclusive growth mainly relates to narrowing disparities, raising equality in income/wealth distribution and enhancing economic opportunities among Malaysians, with special attention given to lifting the socio-economic well-being and the quality of life of the bottom 40% of the households. With regard to sustainable growth, the basic tenets are a private sector-led growth to reduce reliance on – and alter the role of – the public sector, underpinned by productivity, efficiency and innovation, to cut the dependence on unsustainable competitive factors such as subsidies and cheap foreign labour, as well as ensuring a well-managed public finance and preserving the environment and natural resources.[4]

Complementing ETP to deliver these outcomes and aspirations are the Government Transformation Programme (GTP) and the Strategic Reform Initiatives (SRIs). These three are the policy manifestations of the New Economic Model (NEM) for Malaysia.

As we need to track whether we are on track

Over the next few years and as we approach the mid-point of this decade of transformation, the key role of statistics is to present evidence whether Malaysia is on track to achieve Vision 2020. Statistics should enable us to gauge and analyse whether the transformation is yielding the intended results and producing the desired outcomes; as well as providing policymakers with the information that facilitate policy recalibration and realignment, if necessary, particularly in relation to the formulation of Eleventh Malaysia Plan (11MP, 2016-2020).

Given the above brief mention on Malaysia's transformation narrative, we therefore need timely, adequate, reliable and accurate statistics to monitor the country's evolution into a high-income economy where growth is investment-driven, inclusive and sustainable. Consequently and immediately, we see the key statistical issues revolving around investment, labour market, income distribution and productivity.

Enhancing information on investment. Given that investment, namely private investment is a critical element for Malaysia's desired growth dynamics in the current decade, a more organised and transparent investment dataset with greater levels of details are highly welcomed.

Currently, the impression or perception among the private sector economists/research analysts, is that there are perhaps too many public sector entities (e.g. Ministries; Department of Statistics Malaysia (DOSM); Bank Negara Malaysia (BNM); Ministry of International Trade

[4] ETP Roadmap, October 2010

and Industry (MITI)/Malaysian Investment Development Authority (MIDA); Performance Management & Delivery Unit (PEMANDU); Economic Planning Unit (EPU); regional development authorities; states' economic planning units, economic development corporations and/or investment promotion agencies) providing the numbers and talking about private investments, resulting in some confusion and doubt as to the real or actual investment statistics due to the duplication in information dissemination as well as questions over the methodological consistency and accuracy in compiling or computing the data.

At the same time, Non-Financial Public Enterprises (NFPEs) and GLCs/GLIFs are a sizeable block – but also a significant 'black box' – in the country's gross fixed capital formation (GFCF). Based on 2011's consolidated public sector finance that covers Federal, State and Local Governments; Statutory Bodies; and NPFEs, the RM50 billion development spending by NFPEs was 45% of the enlarged public sector development spending. This amount is also equivalent to 60% of the nominal public sector investment and 26% of the nominal GFCF in 2011. Even then, this NFPEs' development spending number reflects only the biggest 30 NFPEs with minimum annual sales of RM100 million.[5] Despite the significance of NFPEs and GLCs/GLIFs in the Malaysian economy, end-users in the private sector have somewhat limited access to their capital expenditure data, other than the information available from major entities like PETRONAS and large public-listed NFPEs/GLCs (e.g. Telekom Malaysia Berhad, Tenaga Nasional Berhad, Malaysia Airlines System Berhad) that are used as proxies to impute public sector investment, in addition to the Federal Government's development spending.

Another notable block – and 'black box' – in GFCF are investments via Public-Private Partnership (PPP)/Private Finance Initiatives (PFI). PPP/PFI was announced back in March 2006 as part of the Ninth Malaysia Plan (9MP, 2006-2010) to promote and facilitate greater private sector participation in improving the construction and delivery of infrastructure facilities and public service.[6] PPP/PFI is gaining momentum and importance, especially in providing an alternative to the conventional direct public funding of the development spending in the Federal Government's annual budget in financing and implementing socio-economic infrastructure and development projects. Under the Tenth Malaysia Plan (10MP, 2011-2015), the Government identified 52 PPP/PFI projects worth RM62.7 billion and in addition announced a RM20 billion Facilitation Fund to catalyse and make viable other strategic and high-impact PPP/PFI projects via infrastructure, grants and off-take agreements to attract at least RM200 billion private sector investments during the 10MP period.[7]

[5] Ministry of Finance's Economic Report 2012/2013, October 2012
[6] PPP Guidelines, Public-Private Partnership Unit, Prime Minister Department, 2009
[7] 10MP, June 2010

The prominent role of NPFEs, GLCs/GLIFs and PPP/PFI in driving investment will continue going forward given the recent proliferation of new entities and special purpose vehicles (SPVs) undertaking major investments – within or outside the ETP, and under PPP/PFI – such as the Mass Rapid Transit Corporation Sdn. Bhd. (public transport infrastructure - MRT), 1Malaysia Development Berhad or 1MDB (property/real estate – development of Tun Razak Exchange and Bandar Malaysia; power), EPF wholly-owned subsidiary Kwasa Land Sdn. Bhd. (property/real estate – development of RRIM land in Sungai Buloh), Perumahan Rakyat 1Malaysia or PR1MA (affordable housing) and Turus Pesawat Sdn. Bhd. (financing facilities for Malaysia Airlines System Berhad for the purchase of eight Airbus aircraft consisting of six A380 Super Jumbo, a single A330-200F freighter aircraft and a single A330-300 jetliner).

In addition, MITI/MIDA's statistics on approved investments in the manufacturing and non-financial services sectors should be complemented with statistics on actual investment. This is in view of the time lags between 'applications' to 'approvals' to 'implementation', due to the various processes and procedures involved, and depending on the approved investment types (i.e. expansion/diversification of existing investment or new investment), not to mention the influence of economic conditions and outlook on investors' decisions. Such additional information will definitely enhance the value of data coming from MITI/MIDA with regards to the status of the approved manufacturing and non-financial services investments.

Similarly, we also need constant and consistent updates on the status and progress of the Entry Point Projects (EPPs) that make up the ETP investments. Thus far, the regular announcements are on the number of confirmed EPPs, the value of investment commitments, and the projected GNI and job creation. There were sporadic updates on the status of these announced projects in 2011 (i.e. April, July, September and November 2011) that classified the announced EPPs into three categories – 'work-in-progress', 'commenced' and 'operational'. However, this has stopped in that there were no such progress updates in 2012.

Therefore, an idea for consideration is to have a one-stop information centre that coordinate and consolidate all the information and statistics on investments, especially into a centralised database on investments by the private sector (DDI and FDI) and NFPEs/GLCs/GLIFs, as well as under PPP/PFI. There is no need for the creation of a new entity for this purpose as it can be delegated to existing set up such as MITI, the EPU or PEMANDU.

More comprehensive database on labour market, income and distribution.
In the case of labour statistics, those available are essentially the principal data or basic information i.e. the size of labour force, employment and unemployment, labour participation rate and unemployment rate (seasonally and non-seasonally adjusted). The notable improvement in these basic statistics is they are now available on monthly basis, although the time series do not go back that far (i.e. from January 2009 only). There are also the quarterly data on active jobseekers, job vacancies (by sectors and categories) and retrenchments provided by the Ministry of Human Resources and published in BNM's Monthly Statistical Bulletin. Other labour market data such as employment/unemployment by age/ethnic groups, education/skill levels, occupation and industries/sectors are only published on annual basis. These should be made available on quarterly and/or monthly basis. A particularly useful addition to the existing labour database will be detailed and high-frequency statistics on workers' income. Currently, the only available related data is the manufacturing salaries and wages from the Monthly Manufacturing Statistics published by DOSM. At the same time, there is a need to reduce the time lag on household income statistics given the latest available data on this is for the year 2009 from the Household Income/Basic Amenities Survey. Moreover, it is also timely now to consider publishing GDP by income to complement the existing releases of GDP by output and demand. A more comprehensive labour market and income statistics will enable us to determine whether Malaysia's economic transformation is resulting in the desired shift in the labour market and income structures, e.g. higher income jobs, more demand and supply of skilled and knowledge workers, improvements in household income level and general income distribution.

Raising the frequency of – and 'mainstreaming' – productivity statistics.
Measuring the contribution of productivity to economic growth and the detailed breakdown of productivity measures by sectors is currently being undertaken by Malaysia Productivity Corporation (MPC). Of particular interest is total factor productivity (TFP). In the 10-year period between 2002 and 2011, TFP was 1.68% or almost a third of the 5.12% GDP growth during the period.[8] In its 18th Annual Productivity Report 2010/2011, MPC estimated that TFP needs to grow by an average of 2.3% p.a. until 2020. Against the implied official real GDP growth target of 5% p.a. stated earlier, this means TFP must account for at least 45% of economic growth. Presently, MPC publishes its reports annually, which in some way and to some extent contributes to the low, or lack of, coverage by the private sector economists and research analysts on such important issues and data. We propose for MPC, in collaboration with DOSM, to release productivity data at a more regular interval or higher frequency, at least on a quarterly basis. This can go a long way towards 'mainstreaming' MPC's important work on productivity measures and indicators into Malaysia's list of key statistical releases.

[8] MPC Annual Report 2012

Further deepening and broadening of current statistical base

In writing this paper, we also took the opportunity to engage with our peers, namely economists in the banking sector and the asset management industry. By and large, the comments and remarks revolved around the issue of critical basic statistics that are not available, or even if published, they are at low frequency and aggregated. The table below and in the next few pages outlines some of the key 'wish list' of the financial market economists. While acknowledging the major improvements in the quality, coverage, dissemination and communication of Malaysia's statistics, the 'wish list' essentially reflects the continuous need for further deepening and broadening of the current database as well as addressing the information gaps.

FINANCIAL MARKET ECONOMISTS' KEY STATISTICAL 'WISH LIST'		
Statistics/ Data	Frequency (Source)	Comments/Remarks
Retail Sales	Quarterly via Distributive Trade Statistics i.e. Wholesale, Retail and Motor Vehicle Sales (DOSM)	This is standard indicator of consumer spending and a vital data to have for Malaysia given that half of the country's GDP (by demand) is private consumption expenditure. It is a better and more comprehensive indicator on consumer spending compared with the likes of passenger car sales, consumer sentiment index and credit card transactions. Many regional countries publish monthly retail sales data (i.e. China, South Korea, Taiwan, Hong Kong, Singapore, Indonesia, Thailand, Vietnam). At the same time, Malaysia's existing quarterly time series on distributive trade statistics only goes back to 1Q 2010.
Core CPI	NA	Currently, core CPI is calculated by private sector economists via a simplistic/crude method of exclusion e.g. stripping Food and Non-Alcoholic Beverages component of CPI. An official core CPI would be a better option given the more detailed breakdown of CPI components at hand, and give confidence for private sector end-users/economists to make proper analysis on the underlying inflation trend.
Foreign Direct Investment (FDI)	Quarterly (DOSM Balance of Payments and BNM Monthly Statistical Bulletin)	More detailed breakdown or disaggregated data on FDI on top of existing classification by sectors and countries / regions e.g. types of FDI such as M&A, new fixed assets (e.g. structures, machinery and equipment), reinvestment of retained profits, inter-company loans. An interesting observation on Malaysia's FDI data from DOSM's quarterly BOP reports is the appearance of offshore financial centres (e.g. like Bermuda, Cayman Island, Mauritius) as top sources of FDI into Malaysia in certain period While this may not be a peculiarity specific to Malaysia, the issue is whether there is a risk of over-stating FDI as inflows from these sources could be from special purpose or financing vehicles owned by Malaysian companies rather than that of foreign companies.
Portfolio Capital Flows	Quarterly (DOSM Balance of Payments and BNM Monthly Statistical Bulletin).	More micro or disaggregated data e.g. classification of foreign ownership of domestic equities and bonds/sukuks by types of investors e.g. pension funds, central banks, insurance companies, fund/ asset management companies, hedge funds etc in addition to the current macro or aggregated data on foreign holdings of domestic equities and bonds/ sukuks.

FINANCIAL MARKET ECONOMISTS' KEY STATISTICAL 'WISH LIST'		
Statistics/ Data	Frequency (Source)	Comments/Remarks
Government Finance (Revenue, Expenditure, Budget Balance, Debts)	Quarterly, Annually (BNM Monthly Statistical Bulletin and MOF Economic Report)	Request for data on monthly basis. In addition, there are also indications of need for more details and regular updates on the Government's asset-liability position, including contingent liability.
Minutes of BNM's Monetary Policy Committee (MPC) Meetings	NA	Currently, BNM issues Monetary Policy Statement (MPS) after the MPC meetings. Release of minutes of MPC meetings can help private sector economists to analyse the dynamics of how monetary policy is being discussed among the committee members, and provides more guidance on the economic conditions and outlook as well as the issues and risks.
Household Debt (including Debt Service and Asset-Liability Ratios) and Income	Annually (BNM Annual Report / BNM Financial Stability and Payment Systems Report)	Given the high-profile issue of household debt, there is demand for these statistics to be made available on a more regular basis or at a higher frequency, at least quarterly, for close monitoring of the situation.
National Property/ House Price Index; Property Market Report (Stocks, Incoming Supplies, Transactions)	Quarterly, Half-Yearly (NAPIC/ Department of Valuation and Property Services)	Increase data frequency to monthly and reduce time lag, especially for large cities/urban areas like Klang Valley, Penang and Johor Baharu. A more frequent and timely database is deemed critical in monitoring and analysing the property/real estate market amid policy issues such as rising property prices, supply of affordable housing, and the impact of major property/real estate developments in government lands.

And some 'housekeeping' issues

Timing of high-frequency data releases. This is probably a common grouse among private sector end-users. From our quick run through on the timing of the official releases of high-frequency statistics (i.e. quarterly real GDP; monthly industrial output; monthly external trade; monthly CPI) by Malaysia and its regional peers, almost 60% of these data are released in the morning or during the first half of the financial market's trading hours. Presently, Malaysia's high-frequency economic data are released at noon (i.e. monthly industrial production, monthly external trade) or late-afternoon/early-evening (i.e. quarterly GDP,

monthly CPI), with the late-afternoon/early-evening releases referring to 5pm-6pm. We also noted that countries like Taiwan and Vietnam have shifted some of their key statistical releases to morning from afternoon. For the sample of developed countries that we looked at (i.e. US, EU, UK, Japan, Canada, Australia), the high-frequency statistics are invariably released early in the day. We believe earlier releases of these high-frequency data will enable private sector economists/research analysts to do justice to the data by having more time to go through the figures and all stakeholders – from data publishers to financial markets – will benefit from more in-depth analysis and commentaries. Early releases of these important high-frequency statistics can also profile Malaysia's economic news in international real-time electronic business media (e.g. Bloomberg, Reuters, CNBC), especially during the trading hours of the East Asian financial markets.

Asia: Timing of High-Frequency Data Releases, Jan – Sep 2012										
Key Indicator	China	India	Korea	Taiwan	HKSAR	Singapore	Malaysia	Indonesia	Thailand	Vietnam
GDP	AM	AM	AM	AM/ PM	AM/ PM	AM	PM	AM	AM	AM/ PM
IPI	AM/ NOON	AM	AM	PM	-	NOON	NOON	-	NOON/ PM	AM
CPI	AM	AM	AM	AM/ PM	PM	NOON	PM	AM	AM/ NOON	AM
Trade	AM	AM/ NOON	AM	PM	PM	AM	NOON	AM	AM/ NOON	AM/ PM
Source: Bloomberg										

Developed Countries: Timing of High-Frequency Data Releases, Jan – Sep 2012						
Key Indicator	US	EU	Japan	UK	Canada	Australia
GDP	AM	AM/NOON	AM	AM	AM	AM/NOON
IPI	AM	AM/NOON	AM	AM	AM	-
CPI	AM	AM/NOON	AM	AM	AM	AM/NOON
Trade	AM	AM/NOON	AM	AM	AM	AM/NOON
Source: Bloomberg						

Elevate the status of DOSM. The Government should explore the possibility of turning DOSM into an independent statutory body/national agency from its current position as a department under the Prime Minister's Office, with a bigger budget especially for human capital and ICT infrastructure, which DOSM, in its Strategic Plan 2010-2014, has identified as among the main issues and key challenges in meeting its Mission, Objectives and Client's Charter. In addition, this change in the organisational structure will enhance DOSM's independence, which includes greater discretion and flexibility to publish and 'monetise' its products and services. To note, this is not really a new idea – we understand that there was a proposal and subsequent discussion to corporatise DOSM in the early-90s, although this was not pursued.

ENHANCING COMMUNICATION OF STATISTICS FOR BETTER UNDERSTANDING OF ECONOMIC AND FINANCIAL CONDITIONS

Yeah Kim Leng[1]

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.

2. Principles of Official Statistics and Effective Communication

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.

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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.

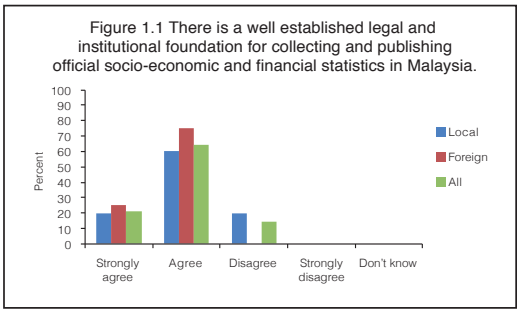
Finally, user satisfaction surveys are carried out periodically as part of the continuous process of quality improvement and maintaining relevance amidst the rapid pace of technological, economic and social advancement.

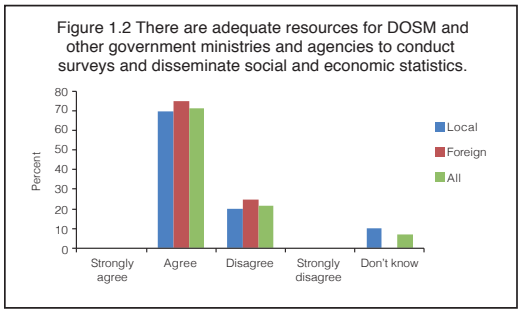
3. Identifying Statistical and Communication Gaps and Needs

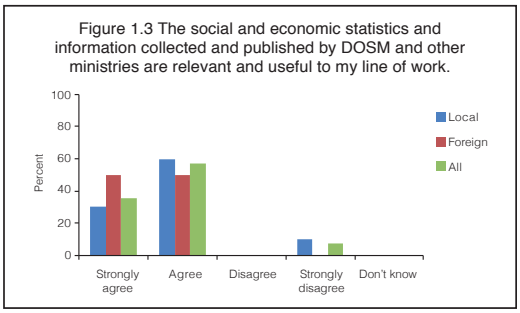
To identify areas where communication of economic and financial statistics can be enhanced, a purposeful survey of a selected focus group comprising core (expert) users, namely economists, analysts and researchers, was conducted. The main objective of the expert users' survey is to gauge the perception 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.

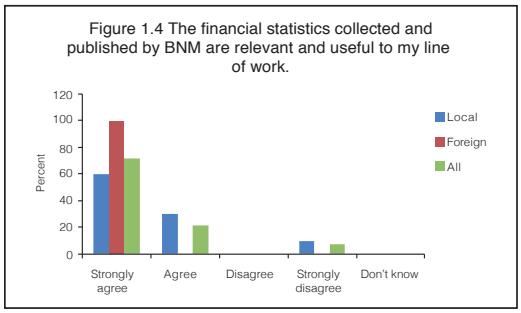
The feedback is divided into 6 areas based on the core principles that underlie an effective statistical system as discussed in Section 2. The responses are grouped by local and foreign users and the key findings are discussed below.

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).

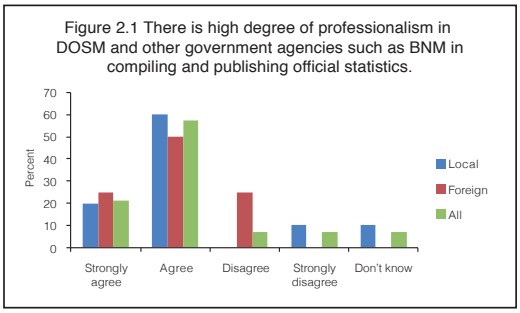


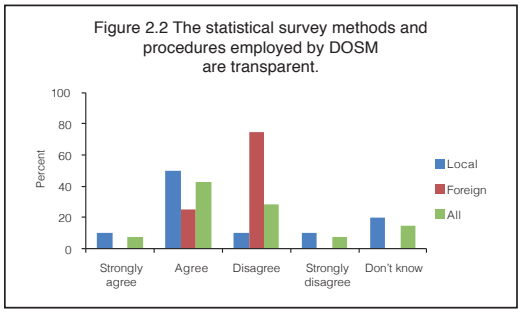


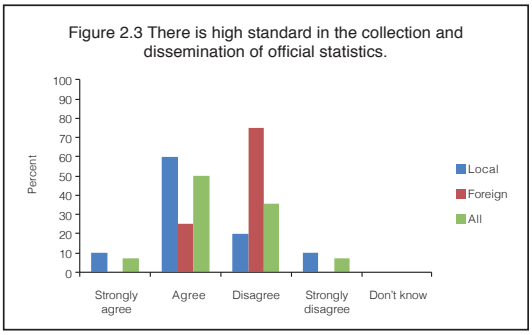




b) *Integrity assurance:* The question on data transparency and professionalism elicited more mixed responses especially among the foreign users who are less sanguine on transparency and standard of collection and dissemination (Figures 2.1 - 2.3).







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.

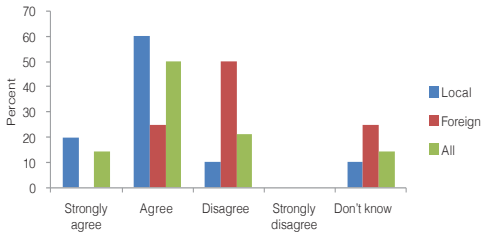
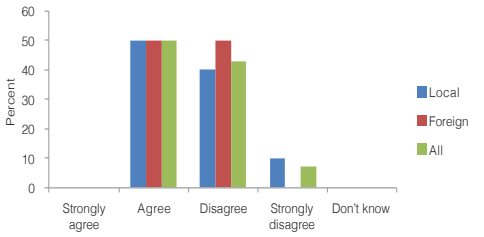


Figure 3.2 The scope of data covered is adequate for each area (eg. demographics, national accounts, trade, labor).



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.

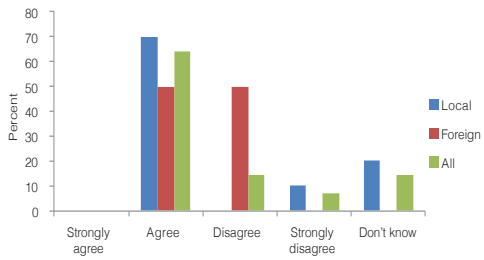
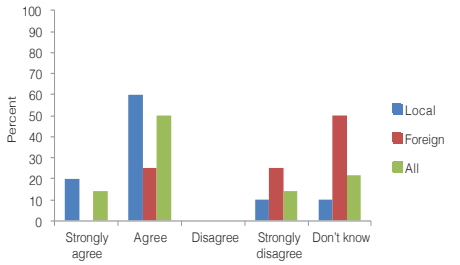


Figure 4.2 Statistical techniques are used in surveys and data collection methods.



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).

Figure 5.1 The published statistics are updated regulary and in a timely manner.

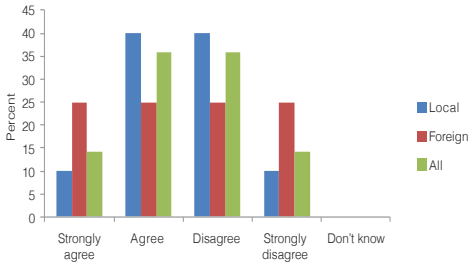


Figure 5.2 The statistics published by DOSM and other government agencies are generally coherent and structured.

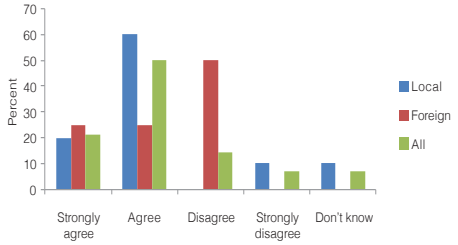
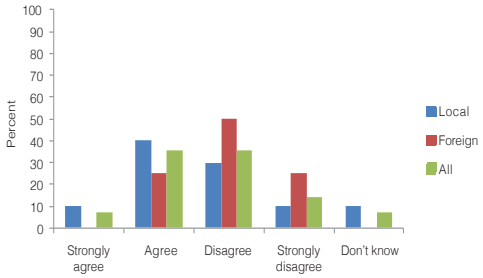


Figure 5.3 Policies and practices on revisions of surveys and data are clearly explained.



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.

Figure 6.1 There is easy access to official statistics in Malaysia.

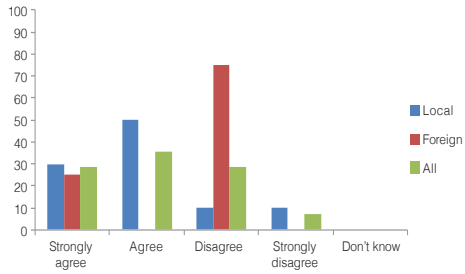


Figure 6.2 Information (metadata) describing the data series are available or accessible by users.

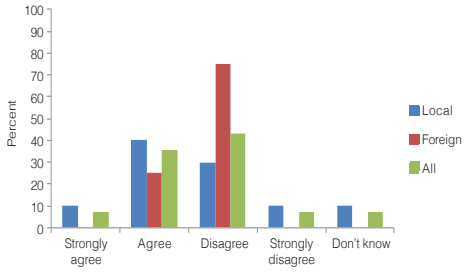
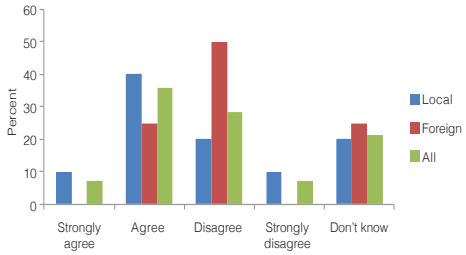


Figure 6.3 DOSM provides adequate assistance to users whenever required or requested.



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 are 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.


National Statistics
Conference (MyStats 2012)
7 November 2012 | Sasana Kijang
Enhancing National Statistics to
Meet Public and Private Sectors Needs
During a Period of Transformation
BANK NEGARA MALAYSIA

GAPS IN SOCIO-ECONOMIC AND FINANCIAL MARKET DATA FOR ANALYSIS AND POLICY MAKING

Lee Heng Guie[1]

1. Introduction

Policymakers around the world are challenged by the need to formulate effective economic and financial-management policies as well as good business practices that are both globally strategic and relevant to their specific countries. Malaysia is no exception: its policymakers endeavour to improve data quality as well as disseminate reliable statistical information to meet international standards while, at the same time, present a comprehensive database of macroeconomic and financial statistics for evidenced-based policy making.

The profound impact of the global financial crisis, shifts in domestic and regional economic structures, as well as the increasing and deepening regional economic integration have changed the relationships between the national authorities (such as the Ministry of Finance (MOF), Bank Negara Malaysia (BNM), the Department of Statistics Malaysia (DOSM), and the Malaysian Investment Development Authority (MIDA) and other regulators) and economic agents (such as investors, analysts, consumers and businesses), as well as the financial system.

Forward-thinking policymakers or regulators face the challenge of coordinating the activities of their various national statistical institutions in order to build a comprehensive statistical database, provide accurate information to the decision-makers enabling them to formulate sound policy decisions, and make available comprehensive aggregate data for researchers, scholars and other users. This paper attempts to look at data gaps from two perspectives, that of the user and of the producer.

2. The Importance of Comparable Data

The importance of reliable statistics and comparable data in supporting the socio-economic and financial markets development process of Malaysia and its presence in the regional sphere cannot be overemphasised. Yet, despite the increasing recognition of the significance of good statistics, Malaysia is still lacking in some areas. It needs to improve its statistical collection system in order to provide more complete and better quality information for evidence-based public policy and private decision making.

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In bridging the data gaps, we have to consider the issues from two perspectives: that of the user, and of the producer. From the producer's viewpoint, they should make available to stakeholders both relevant and reliable statistical information, and also be more responsive to new and emerging demands of data users including managing expectations better, like considering the implementation of new data collection, when necessary. The data producers also have to promote the use of advanced tools/techniques to process, generate as well as transform statistics into market knowledge and to encourage them to use these statistics to make informed decisions in an evidence-based policy environment. The user standpoint is driven by examining some of the constraints faced and identifying the data gaps and deficiencies in the framework of collecting data.

3. The Seven Principles of Data Collection

Good information is crucial to the success of any form of regulation, as it is to the efficient workings of any market and economic activity. But many features of economic and financial activity make the quality and timeliness of information flows even more significant for effective regulation. A range of data quality dimensions includes accuracy, coherence, frequency, reliability and timeliness.

A key aspect of enhanced market surveillance will be up-to-date and better quality information upon which policymakers can make credible decisions. There have traditionally been gaps in the data available to both government regulators and to market analysts. Over the past decades, Malaysia has made demonstrable progress in obtaining socio-economic and financial data through censuses, demographic and thematic surveys, and administrative returns. That said, there is scope to explore more data set and information flows that will help make informed macro-prudential decisions. There are two goals toward which agencies and regulators should be directed to improve data collection and analysis. 1) To ensure that supervisory agencies have access to high quality and timely data that are organised and standardised so as to enhance their regulatory and market surveillance; and 2) To ensure that such data which are available to other government agencies, market analysts and academics are in an appropriate usable form so that policymakers, investors and the public will benefit from its publication.

We outline below the seven principles that underlie the collection of data for the financial sector as enunciated by Daniel K. Tarullo, a member of the Board of Governors of the United States Federal Reserve System. These principles are suggestive of an organisational framework for data collection and data usage.

Principle #1: Timely, precise and consistent. What is considered to be "timely" will depend on its purpose, and decisions about how timely the data should be made available. In doing so, one should not ignore the costs of collecting and making the data usable.

Principle #2: Data collection must be user-driven. That is, there must be engagement between the users and producers to ensure the stakeholders fully understand the inter-connectivity between statistics collection and financial markets oversight.

Principle #3: Standardisation of data is required. Standardised reporting to regulators in a way that allows aggregation for effective monitoring and analysis is imperative.

Principle #4: Data to reflect risk management. The data collected and the associated reporting standards and protocols should enable better risk management by the institutions themselves and foster greater market discipline by investors.

Principle #5: Data collection must be nimble, flexible, and statistically coherent. Be agile to collect new information promptly in response to the rapid pace of financial innovation.

Principle #6: Data-sharing and dissemination. There must be a well co-ordinated process flow for making the data available to fellow regulators, other government entities, and the public. However, there is a need to protect proprietary and supervisory information, particularly where specific firm-based data are at issue.

Principle #7: Any data collection and analysis effort must be attentive to its international dimensions as financial activities and risk exposures are increasingly globalised.

In summary, the most desirable feature of data collection and data usage is one that serves the end users and the regulatory agencies. The processes of data collection, processing, and publication must be reliable, timely and comprehensive, and up-to-date. The consequences of gathering incomplete, inaccurate, or unreliable data can be disastrous as they can stymie decisive policy action in a crisis.

4. Questions and Gaps in Socio-economic and Financial Data

Any statistical function of gathering economic and financial data must meet the interests of both the users (those who will use the data) and producers (those who collect the data). There are issues involved: 1) Operational issues refer to how data is collected, investigated, compiled, stored and transmitted; and 2) policy issues refer to what data is required, and from whom and to whom it can be transmitted. In addition, the cost of data collection must be justified.

For forward planning, we should look into the issues of what data gaps might be relevant. Below are a series of recurring questions that form part of the data producers' stock take of data gaps (the table in the next few pages outlines the data gaps).

- ❏ Where and what data exist?
- ❏ Who keeps and is accountable for the data?
- ❏ Can the agency and public be given the data?
- ❏ Is the dataset complete, well-defined or needs further fine-tuning?
- ❏ Is the data reliable and consistent?
- ❏ Can the agency publish the data in current form or in some other possibly aggregated form?
- ❏ Is the data sensitive? Or open to speculation?

Subject	Data Gaps
National account	Longer-dated Gross Domestic Product (GDP) data of the rebased year (2005=100), i.e. from 1980 onwards - quarterly and yearly. The current data starts from 2005 onwards.
(a) Private Investment	i. Domestic vs. foreign investment - quarterly and yearly data. ii. Domestic and foreign investment by sector - quarterly and yearly data. iii. Private investment by nature of investment, that is new or diversification/expansion investment and by type of assets - quarterly and yearly data.
(b) Public Investment	i. Public investment by type of assets - quarterly and yearly data. Currently, DOSM only publishes total Gross Fixed Capital Formation by type of assets. ii. The government-linked companies' (GLC) investments - quarterly and yearly data
(c) Change in stocks • Inventories are a critical component of changes in GDP over the business cycle. If the economy is slowing down or possibly entering a recession, the bearer of the bad news will often be an undesired accumulation of inventories. As consumers reduce their purchases, sales of goods and services slow, inventories build up, and firms slash production (laying off employees) to reduce unwanted (and costly) inventories.	Inventories by type (i.e. finished goods, raw materials and intermediate goods).
(d) Private consumption	Private consumption by type of goods and services (i.e. durable goods, semi-durable goods, non-durable goods and services) - quarterly data.
(e) Construction	Construction data breakdown by civil engineering, residential sub-sector and non-residential buildings - quarterly data.

Subject	Data Gaps
Balance of payments (a) Financial account	i. Foreign direct investment (FDI) by sector and by country (quarterly and yearly data), which should be made available when DOSM releases the quarterly Balance of Payments (BOP) report. Currently, such data only available in BNM's Monthly Statistical Bulletin (MSB) - quarterly and yearly data. ii. Direct investment abroad (DIA) by sector and by country as per above. iii. Other investment - further breakdown to enhance analysis. iv. Portfolio investments by asset class and by country on BOP accrual basis (monthly, quarterly and yearly data). Previously, BNM provided the data (by asset class) on cash basis, which is useful for analysing short-term capital inflows.
(b) Errors and omissions (E&O)	i. Exchange revaluation losses/gains (quarterly and yearly data), which should be made available when DOSM publishes the quarterly BOP report. Currently, such data only disclosed in BNM Annual Report. ii. E&O breakdown by unrecorded trade and illicit outflow, if possible.
Household data (a) Financial account	i. Household debt/liabilities by type and by income category (quarterly and yearly data) to be published in BNM's MSB. Currently, BNM only releases the annual household debt data in its Annual Financial Stability and Payment System Report (FSPSR). ii. Household financial assets by type and by income category (quarterly and yearly data) to be published in BNM's MSB. Currently, BNM only releases the annual household financial asset and overall liquid assets in its FSPSR. iii. Debt repayment ratio by income category - quarterly and yearly data as per above. iv. Household net worth by income category - quarterly and yearly data. v. Household disposable income - annual data.

Subject	Data Gaps
Banking and financial system (a) Outstanding loans	i. Mortgage loans breakdown by new loans and refinancing on monthly basis as far back as possible. ii. Business loans - overall and breakdown by large corporate vs. SMEs. iii. Further breakdown of personal loans by purpose (i.e. investment, healthcare and etc) iv. Loans from unregulated entities or non-bank financial institutions by household and businesses. This data will reveal risks from leverage and maturity transformation outside regulated financial firms.
(b) External exposures domestic banks	Financial institutions' exposures to global and regional banks by country.
Federal Government finance or national debt (a) Contingent liabilities of Federal Government • To stress test the sustainability of the Government's financial balance sheet	Total government guaranteed loans (in total, domestic and external) should be published in BNM's MSB under the Federal Government finance section.
(b) Total national debt (including private and public)	Malaysia's total outstanding debt, including bank credit (external and domestic borrowings) of public and private sectors – quarterly and yearly data. Currently, BNM publishes national's external debt of public and private sectors. There is no official data of private sector's domestic debt, which includes bank credit, Private Debt Securities, and others.
(c) Government subsidy breakdown	Include time series data on Government's subsidy by type in the Appendix of Ministry of Finance Economic Report.
(d) Oil-related revenue contribution to Federal Government's revenue	Include time series data of oil-related revenue by sources (PETRONAS dividend, royalty and etc) in the Appendix of Ministry of Finance Economic Report.
Consumer price index and house price index (a) Consumer price index (CPI)	i. CPI by state in Malaysia. ii. Expand the weights of CPI items to 5-digit from 4-digit.
(b) House price index (HPI) • To enhance market research on the housing sector	i. HPI by primary and secondary markets - by type of property, by district on monthly, quarterly and yearly basis. Currently, HPI data for overall market by state and type of property is available on quarterly and yearly basis.

Subject	Data Gaps
	ii. Computing the House Price Index requires information from large institutional lenders whose loans comprise a majority of the mortgages taken out to buy homes in Malaysia. Also survey the price information from major property developers, real estate consultants. iii. Total number of houses built under the Rakyat Housing Programme (PPR) on a quarterly and yearly basis by state, type of property and price range. iv. Also track the housing data under PR1MA and My First Home Scheme by state and type of property - quarterly and yearly data. v. Foreign ownership of property by state, type of property and price range – quarterly and yearly data.
Other Indicators (a) Services sector and sub-components • The prime mover of overall GDP expansion	i. Total approved services investment projects by ownership, state, type of project and sector should be made available by MIDA on a quarterly basis, along with the release of manufacturing investment. Currently, MIDA only releases the overall approved services investment figures on a yearly basis in its Annual Investment Report. ii. Compile a leading index for services sector, covering all sub-sectors. iii. Tourism – Ministry of Tourism should resume the publication of monthly tourist arrivals data. The data is now available on a semi-annual basis. The longer time lag is not useful for real-time analysis. • Medical tourism data by country (where patients are coming from), state and type of medical treatment on monthly, quarterly and yearly basis. Such data are not disclosed in any Government's websites at the moment. • Publish regular data on tourist expenditure and tourist receipts by state, country, type of expenditure and average per capita on monthly and quarterly basis. Currently, only yearly data is available but no breakdown by state. • Total tourists' accommodation expenses by type (i.e. high-end hotels, budgeted hotels, motels and home-stay programme), state, country and length of stay on monthly, quarterly and yearly basis. The data available currently are overall tourist expenditure on accommodation by country on a yearly basis as well as general average length of stay by country on a yearly basis.

Subject	Data Gaps
(b) Manufacturing sector	i. Monthly or quarterly data of approved manufacturing projects (by ownership, sector, type of project, state, country and etc) should be made available instead of releasing year-to-date or cumulative numbers. MIDA should release its data based on a scheduled time table. ii. Monthly or quarterly data of realised investment projects (by ownership, sector, type of project, state, country and etc) should be made available. iii. Total manufacturing investment approvals by economic corridors, by source (domestic vs. foreign), type of investment (new vs. diversification/expansion projects) and by sector on a quarterly basis. iv. Capacity utilisation rate for the export-oriented and domestic market-oriented industries and also by major industries.

5. Timing of Economic Data Release

While we appreciate the timely releases of economic data by the respective agencies, we think that some fine-tuning in the timing of the data releases would be useful. This is especially the case for data that is not particularly market sensitive. Early releases will allow for a more rational digestion of the economic data.

The time gap between preliminary data and actual printed data should be eliminated, i.e. preliminary external trade numbers were released at 12:00 p.m. while the actual detailed of external trade figure will only be available at 6:00 p.m. on the same day. The time gap of data releases would give a bad impression to public that the government agencies lack of coordination.

Figure 1: Release time of monthly economic data by selected country

Key indicator	Kuala Lumpur Time (based on Bloomberg Terminal)					
	Malaysia	Singapore	Indonesia	Thailand	Korea	China
GDP	6:00 p.m.	8:00 a.m.	12:00 - 3:00 p.m.	10:30 a.m.	7:00 a.m.	10:00 a.m.
CPI	5:00 p.m.	1:00 p.m.	12:00 - 1:30 p.m.	12:00 - 3:00 p.m.	7:00 a.m.	9:30 a.m.
IPI	12:00 p.m.	1:00 p.m.	Not fixed	12:00 - 2:00 p.m.	7:00 a.m.	1:30 p.m.
External trade	12:00 p.m.	8:30 a.m.	12:00 - 1:30 p.m.	12:00 p.m.	8:00 a.m.	11:00 a.m.
Policy rate	6:00 p.m.	Not fixed	2:00 p.m.	3:20 p.m.	9:00 a.m.	Not fixed
BOP/CA	6:00 p.m.	Not fixed	4:00 - 5:00 p.m.	3:30 p.m.	7:00 a.m.	Not fixed

Notes:
1) Indonesia (Jakarta) time is KL time -1 hour.
2) Thailand (Bangkok) time is KL time -1 hour.
3) South Korea (Seoul) time is KL time +1 hour.
4) China (Beijing) time is same as KL time.

Press Statements, Publications and Information Materials

As part of the communication process to enhance the dissemination of information and data to users, we see the need to strengthen the analysis and content of the press releases and statements that accompany some of the economic data releases.

DOSM produces user-friendly information material as a way of popularising statistics to facilitate easy understanding among readers, thereby contributing to the goal of bridging the gap between users and producers of statistics.

As part of the data enhancement process, we think a regular review and assessment of the existing structure of data collection, compilation and publication is necessary to ensure that the data are still relevant to both the regulators and users, and that they also keep up with the pace of economic and financial transformation. Equally, the duplication of data is a waste of resources and man-hours.

6. Barriers to Effective Data Collection for Analysis

Once we have identified the data gaps and broad approaches to address deficiencies in the framework of data collection, the data producers will then have to study the practicalities of collecting and compiling the data requested by the users. Some of the barriers or issues to consider are: 1) the level of cooperation between the regulators and market participants (a case in point, financial regulators may be hampered by a lack of authority to collect and analyse information from unregulated entities); 2) how to balance the cost and benefit of data collection and analysis; 3) barriers can limit the quality of data collection and analysis as well as prevent the sharing of data due to privacy protection; and 4) to co-engage with private sector vendors to help fill the gaps in collecting market-based data such as for the real estate market.

7. Mechanisms for Bridging the Gap between Data Producers and Data Users

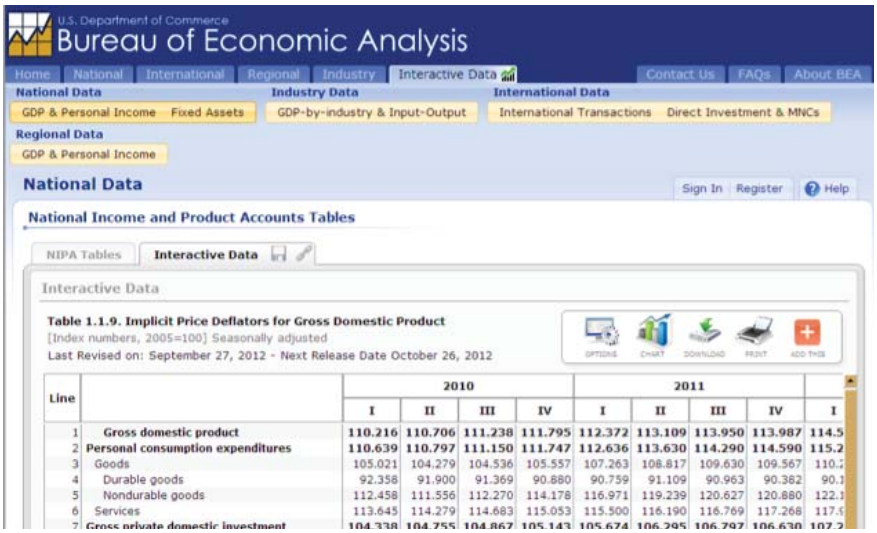
Given the diverse needs of data users and the limitations faced by data producers, we propose a single lead national statistical agency to provide statistical services that meet the needs of users in Government and general public. The agency will be tasked to coordinate the statistical services provided by monetary authority and government agencies so as to make the data they produce available and more accessible. The following mechanisms should be put in place to

bridge the gap between data producers and data users: 1) inter-agency planning committees, technical working groups and advisory committees; 2) users' forums and press conferences by data producers; 3) advocacy programmes of statistical publications and information material; and 4) regular meetings between key users and producers of statistics who will work in partnership to resolve problems and narrow data gaps.

Secondly, we propose that the Government should leverage on a more advanced as well as user-friendly data download program or electronic data retrieval to ease public access to data online. This tool will help users to download time series data as far back as possible and hence, eases the government agencies' workload to serve multiple requests from users. Below are the screenshots of data download program provided by the US Federal Reserve and US Bureau of Economic Analysis on their websites.

Figure 2: A screenshoot of US Federal Reserve's data download program (DDP)

Figure 3: A screenshoot of US Bureau of Economic Analysis's Interactive data



On the unpublished data, which can be obtained from DOSM, subject to availability and confidentiality, a shorter time lag to meet the user's request would be greatly appreciated.

8. Conclusion

There are emerging challenges for DOSM and other key agencies, including regulators, in their attempts to strengthen data building capacities as they adapt to the constantly evolving demands of data users. The data producers are mandated not only to collect and compile data and statistical information to meet the needs of data users and stakeholders, but they also have to ensure that the data is reliable and of a quality on which the authorities can make sound and timely decisions.

Among others, these challenges call for: 1) a thorough review and reassessment of the existing structure of data collection and data usage, with a view of developing new, as well as enhancing, statistical data systems, such as providing more disaggregated data, in response to current socio-economic trends at the national and state levels and 2) leveraging on ICT to provide greater access to statistics for users.

STATISTICAL DATA FOR APPROPRIATE POVERTY MEASUREMENTS AND POLICY FOR ERADICATION: A MALAYSIAN CASE

Mohamed Saladin Abdul Rasool[1] and Arifin Md Salleh[2]

1. Introduction

Poverty is a multifaceted phenomenon and different societies have different perceptions of poverty. There are three main classifications of poverty. Firstly, the absolute poverty concept, one is having less than objectively-defined thresholds. Secondly, the relative poverty concept, one is having less than others have in the same society. Thirdly, the subjective poverty concept, one is feeling that he or she does not have enough to get along. Literatures have shown that different poverty concepts are related to the development status of the countries; calorie poverty (absolute) in less developed countries, expenditure or basic needs (absolute) in developing countries, relative poverty in emerging economies and subjective well-being in developed countries. Absolute poverty may disappear as countries and regions become richer, but the relative deprivation and subjective poverty would persist. In a diverse country like Malaysia with vast regional differences, a person in Sabah and Sarawak (the highest poverty rate) might perceive poverty as the deprivation of basic needs while a person in Selangor (the most developed state) might perceive poverty as the relative deprivation.

Malaysia currently employs the calorie poverty measurement although she is gearing towards a fully developed nation. According to the Growth Report 2008, Malaysia is one of the thirteen countries that successfully sustained growth of more than 7% for at least 25 years since 1950 and is currently classified as an upper middle-income country as reported by Tenth Malaysia Plan 2011-2015 Report published by the Economic Planning Unit (EPU). Thus, this paper identifies the gap between poverty measurement employed and status of the nation whereas developed nations have shifted their focus to relative and subjective poverty. The objective of the paper is twofold. Firstly, to identify vital statistical data deemed necessary to measure poverty in the current Malaysian context using the relative poverty method introduced by EPU, which is suited to the development status of the nation. Secondly, to present a multidimensional poverty measurement for Malaysia based on our study comprising five dimensions, namely spirituality, knowledge, physical-self, offspring and wealth undertaken in the state of Selangor. This paper is organised as follows: Section 2 outlines the poverty measurement from global perspective whereas poverty measurement in the Malaysian scenario is deliberated in Section 3. Section 4 presents gap in Malaysian poverty measurement. Finally, the conclusion of the study is highlighted in Section 5.

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2. Poverty Measurement From The Global Perspective

The development in modern measurement of poverty has undergone various distinguished stages (Moisio, 2001). It started with the absolute poverty approach pioneered by Rowntree in the beginning of 19th century in England until the early of the 1970s, which saw the introduction of relative poverty pioneered by Peter Townshed (1979). Both of these income approaches were obviously measuring poverty as lack of material resources. The next stage began with the introduction of poverty as poor living conditions such as deprivation. Works by Ringe (1985) and Bergman (1995) supported works by Sen (1979, 1980 and 1987) who introduced deprivation, well-being and capability, widely known as multidimensional poverty which is conceptualised as objective and subjective well-being. Objective well-being explains measurable indicators such as number of rooms in a house, number of meals taken, type of dwelling ownership and assets acquired. The subjective poverty concept means that one is feeling that he or she does not have enough to get along and it is difficult to quantify such as happiness and satisfaction. Niemietz (2011) summarised the two definitions of subjective poverty: 1) self-assessment of the poor condition; and 2) self-reporting of the minimum income to maintain a minimum decent standard of living. Today, the subjective well-being concept is widely utilised by researchers in developed countries.

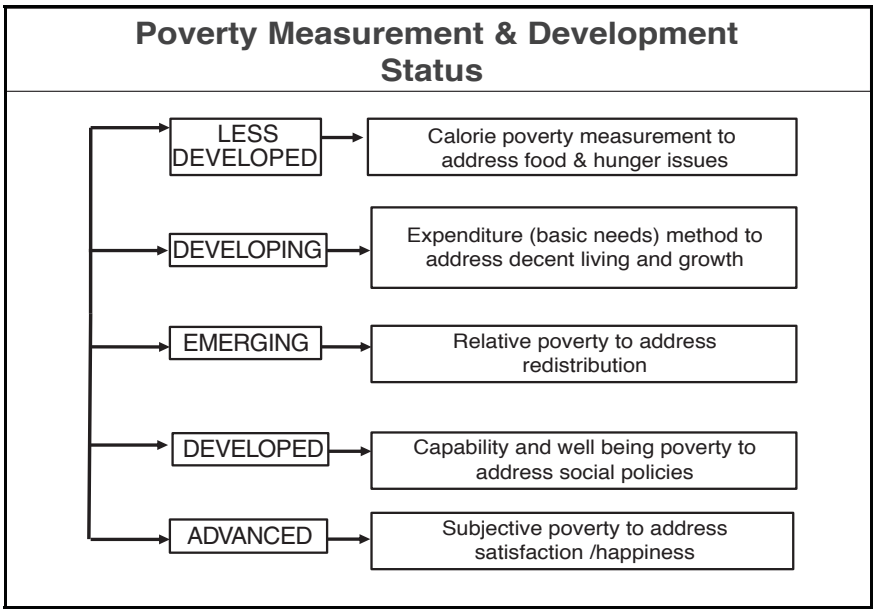
Researchers in developed nations have opted for multidimensional poverty measurement that includes non-monetary indicators as mentioned by Sen (1977, 1987 and 1992); Nasbaum (1997 and 2003); Laderchi (2000 and 2003); Waggle (2005, 2007 and 2008); Alkire (2002, 2007 and 2010) and Ravallion (1998 and 2012). Nolan and Whelan (2010 and 2012) highlighted that non-monetary indicators together with monetary data would be able to improve the measurement and understanding of poverty especially in rich countries. Acknowledging the relevance of multidimensionality in conceptualising poverty, the Oxford Poverty and Human Development Initiative (OPHI) recently introduced the Multidimensional Poverty Index (MPI) developed by Alkire and Santos (2010) for the United Nations Development Programme Report 2010. MPI has three dimensions, namely health, education and standard of living, based on ten indicators using data of 104 developing countries.

3. Poverty Measurement in the Malaysian Scenario

In the past, the EPU employed the concept of the Poverty Line Income (PLI) to measure poverty through the absolute poverty concept. Basically, there are two widely used nutrition-based approaches to selecting the absolute PLI: food energy intake (FEI) method and cost of basic needs (CBN) method (UNDP, 2007). Currently, EPU adopts CBN method in defining the absolute poor. CBN identifies a consumption

bundle deemed to be sufficient to meet basic consumption needs then estimates the cost of purchasing (or 'prices up') such a bundle. CBN is based on household utility and socially determined to be poor, if he or she consumes less than the basic needs, because he or she could achieve it with an appropriate reallocation of his or her budget. It is a way an individual might prefer a mix of food and non-food that he or she in the poor category to one that meets CBN threshold. The question that always arises is how to define the costing of a 'subsistence diet'.

FEI measures the actual per capita calorie food energy intake of each household; and household's total income (or expenditure) per capita. Currently, this method, which is named as had al kifayah, is adopted by zakat institutions in Malaysia taking into account shariah principles known as maqasid al-shariah (objective of the religion). There are two advantages of FEI method. Firstly, it automatically takes into account non-food spending. Secondly, the method is computationally simple. A common practice is to set PLI equal to mean income or expenditure of a sub sample of households whose actual caloric intakes are approximately equal to the stipulated requirements. The application of FEI can lead to some anomalous results due to it being based on actual food consumption such as a person who chooses to buy fewer and more expensive calories would be deemed as poorer than another person at the same real expenditure level (Ravallion, 1998 and 2012).



4. Gap In Measurement: Proposing Relative Poverty and Multidimensional Measurement For Malaysia

This section focuses on the two widely used poverty measurement in developed countries, namely relative poverty and multidimensional poverty approach which could be employed in Malaysia in near future in line with her status of a developing nation transforming to a developed nation. Relative poverty interprets poverty in relation to the prevailing standards of the society at the time. Townsend (1979) defined it as a 'failure to keep up with the standards prevalent in a given society'. This approach recognises explicitly the interdependence between poverty line and incomes throughout the entire distribution. This approach is based on the concept of 'relative deprivation', which denotes deprivation suffered by the worse-off persons in the society relative to the better-off persons. Under this definition, the poor are those who gain when income becomes more evenly distributed and the non-poor are those who lose. PLI under this approach changes with the average earnings of the wage and salary earners. For example, the European Union (EU) and Canada have adopted this approach. Relative poverty defines a household as poor if its income per adult equivalent is below 60% of the median income per adult equivalent. OECD countries set relative poverty between 40-60% (OECD, 2008).

Kakwani (2001) argues that relative approach is not appropriate to measure poverty in developing or less developed countries due to the fact that the concern is more with absolute standard of living, to ensure that nobody in the society should have a standard of living below the 'minimum necessary for physical efficiency'. A poverty measure based on a relative approach is, in fact, a measure of inequality and thus we should instead look at various measures of inequality. EPU has computed the relative poverty but found out that the rate was much higher compared to the absolute poverty rate (UNDP, 2007) as shown in Table 1. Thus, for that reason, it could be argued that absolute poverty did not give the correct signal to the authorities on the reality of poverty situation. In other words, the income gap could get bigger although the absolute poverty level was decreasing. Hence, it is recommended that the relative poverty method to be implemented in the Malaysian poverty computation so as to give the right signal to the authorities, so that appropriate measures could be undertaken.

Table 1: Absolute and Relative Poverty[3]

Year	Absolute Poverty (%)	Relative Poverty (%)
1995	9.86	24.5
1997	6.67	25.2
1999	8.14	24.4
2002	6.19	25.7
2004	5.96	25.6

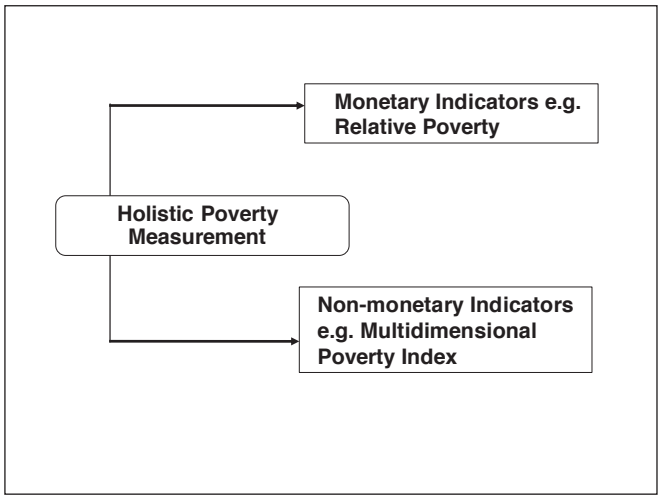
Note:
1. Poverty rates are based on headcount ratio of households
2. Relative poverty based on 60% of median equivalent

Another method that could be considered in the near future for Malaysian poverty computation is the multidimensional poverty measurement which was briefly explained earlier. In Malaysian context, Mohamed Saladin et al (2011a, 2011b, 2012) have used this method in their study, employing a non-monetary poverty indicator named as Islamic Poverty Index (IPI) in their study conducted in Selangor by using cross section data involving 258 households who received zakat aids (poor recipients). The dimensions in IPI were based on human needs (maqasid al-shariah) principles according to Islam as mentioned by JAWHAR (2007), Islamic Relief Worldwide (2008) and Rosbi and Sanep (2010). A comparison was made with calorie and basic need approaches. The calorie method identified only 34 or 13.2% of respondents as poor, 206 or 87.6% according to the basic need (had al-kifayah) and 168 or 71.4% according to IPI method. However, only 23 or 8% of respondents are poor in all three methods. As IPI is multidimensional in nature, taking into account various dimensions, it is logical that IPI has a higher number of poor.

From the above explanation, it is worthwhile for the authorities to explore relative poverty and multidimensional poverty methods (using indicators suited to the Malaysian scenario) so as to enhance the poverty measurement method in its efforts to identify the correct poor group which would be able to facilitate effective poverty eradication efforts as exemplified by Figure 2.

[3] UNDP, Malaysia (2007)

Figure 2: Proposed Holistic Poverty Measurement for Malaysia[4]



5. Conclusion

This paper highlights the current scenario of the poverty measurement from a global perspective. Specifically, the introduction of MPI is highlighted. From a Malaysian perspective, the paper identifies a gap in the poverty measurement. Thus, relative poverty and multidimensional poverty measurements are identified as a near future method of measurement in the Malaysian context, in line with the status of high middle income nation. The relevant statistical data related to this method could be utilised to appropriately measure poverty. Consequently, poverty eradication efforts could be carried out more effectively. In addition, Malaysia is undergoing transformation efforts towards a developed nation. When Malaysia realises a fully developed nation status, it would have to move towards subjective well-being measurement, following the footsteps of developed nations. For instance, Japan has developed the Well Being Framework in December 2011 to provide overall well-being for its people, consisting of subjective well-being, socio-economic and sustainability indicators.

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PROPERTY INDICATORS: SUFFICIENT FOR POLICY MAKERS AND INVESTORS?

Dato' Fateh Iskandar Mohamed Mansor[1]

1. Introduction

Over the past few decades, people have looked at property market as a good investment opportunity and today more people are gaining confidence to invest in property. From an individual's perspective, property often represents the single largest investment in their portfolio, which contributes to individual's wealth.

Generally, property market plays a significant role in a country's economic growth. As at 2011, our property market had maintained a double digit growth of 14.3% in volume and 23.8% in value.[2]

2. Objective

Property indicators or indices have become increasingly important in order to understand the dynamics of property market in terms of price change, availability of market supply and potential demand. It provides potential developers, investors and decision makers a certain level of comfort and ideas before embarking on a development or investment in a particular area.

The purpose of property indicators is intended to provide policy makers and investors some ideas on where the real estate is heading in the future and to strategise investment pattern that will fit the future market. The indicator can also act as a prediction of consumer spending that is affected by factors such as mortgage interest rates and the seasonal trends of the real estate business. Analysts, policymakers and financial institutions follow trends in house prices to expand their understanding of real estate and credit market conditions as well as to monitor the impact on economic activity and financial stability and soundness.[3]

3. Factors driving the real estate market

There are few factors that can influence the supply and demand of real estate:

i) Demographics
   Demographics describes the composition of population, such as age, population growth, marital status, home ownership, employment status, household size, household income and others. The information is very crucial to determine the types of property and range of selling price that are in demand.

[1] Real Estate and Housing Developers' Association, Email: secretariat@rehda.com
[2] NAPIC Property Market Report 2011
[3] Case and Wachter (2005), "Residential real estate price indices as financial soundness indicators: methodological issues"

ii) Interest Rate and Financing
Interest rates will influence the ability of individual to purchase properties as it will eventually increase or decrease the cost of the mortgage financing. Low interest rate will boost the property sales as the cost of borrowing would decrease and affordability increased. Bank lending is also important to determine the demand level for certain property. Loan-to-Value (LTV) ratio regulation by central bank will also have significant impact on the property market performance.

The performance of property market and banking are correlated, especially in terms of pricing. There is close relationship between property prices and bank credit as bank financing is the primary source of real estate funding. If property prices fall, banks which are mainly involved in property or property related lending businesses will be affected as well. Movements in real estate can have substantial impact on banking performance.

iii) Development Cost
Building cost which consists, amongst others, material and labour cost, is influential in affecting property prices and subsequently the performance of the real estate. Development cost is also a factor that determines the supply in the market.

iv) Government Policies, Legislation and Subsidies
Government can help to boost the demand for real estate by offering incentives such as exemption from stamp duty and tax. Subsidies in the form of relaxation of tax for house buyers can help enhance the demand of real estate property in the country.

v) Economy and Stock Market
The key indicator that influences the value of real estate is the stability of the economy. If the economy is sluggish, so is real estate performance. When economic condition is good, property price are normally on upward trend and vice versa when the economic condition is otherwise. Expansion in overall economic conditions tends to increase the average income of households and therefore boost the demand for property and eventually drive house prices upward. If there is a sharp fall in real estate prices, the effect will be a negative impact on the soundness of the financial sector and individual households and eventually affecting the economy.

The existing indicators used by the industry to gauge the performance of the property market are as follows:

- Gross Domestic Product (GDP)
- Financing/lending
- Disposable income
- Housing approval/license issuance
- House price index
- Annual transactions
- Property information such as new launches, overhang and others

4. Existing Data Sources

In Malaysia, there are various sources of property data made available by both the public and private sectors. Currently, the National Property Information Centre (NAPIC) is the primary property data portal used as the main reference point for market performance, prices, launches, available supply, transactions, unsold units and stock that cover residential and commercial sectors. Whereas, the Construction Industry Development Board Malaysia (CIDB) offers information on construction data such as the number and value of projects undertaken locally and globally. There is also information on the housing approvals, sales and advertising permits and house price indicators from Bank Negara Malaysia (BNM) and Ministry of Housing & Local Government (MHLG) website. Department of Statistics Malaysia (DOSM) also offers statistical information related to the economy, business, social and demography in Malaysia.

Other than the public produced data, there is also information provided by private property consultants, financial institutions' research houses, research institutions and property websites offering some indication on the property market.

The table below shows the types of data variables that are crucial to generate accurate types of data for real estate:-

Types of Data	Source
ECONOMIC	
GDP	DOSM, Economic Planning Unit (EPU), Malaysian Industrial Development Authority (MIDA), BNM, MIER
Inflation	
Unemployment Rate	
Interest rate	
Foreign Direct Investment	
Inflow of expatriates/foreigners	Malaysia My Second Home (MM2H), Malaysia Property Incorporated (MPI)
DEMOGRAPHIC	
Population Size	DOSM, EPU
Age Distribution	
Income Per Capita	
Household Size	
Migration Rate	
Urbanisation Rate	
Number of Marriages	
Forecast demographics characteristics	
PROPERTY INFORMATION	
Construction Statistics	CIDB, BNM
Housing Starts	
Housing Permit Approvals	
Launches	NAPIC, Local Authorities
New Completion	
Existing Stocks	
Transactions	
Unsold Units	
Overhang	
Vacancy	
Supply	NAPIC, Local Authorities
Demand	
Rental	NAPIC, Property Consultants
Yields	
Transaction Value and data on properties	Valuation Department, Land Office, Lawyers, Financial Institutions/Banks, Lembaga Hasil Dalam Negeri

Types of Data	Source
Existing Development/Projects	Local Authority, Real Estate Agents, Publications, Advertisements
Launches/Upcoming Development	CIDB, Architects, Land Surveyors, Land Valuers, Planners, Local Authority, Real Estate Agents
Available Land	Local Authority, Land Valuers, Planners
FINANCING	
Margin of Financing	BNM, Financial Institutions
Non-Performing Loan	
Loan Financing by Purpose	
Loan to Value (LTV) ratio	

5. Challenges

There is ample information on supply in the property market offered by various agencies but among the major challenges faced by stakeholders is the lack of information and data on demand for property in the market.

Other significant challenges include the lapse time between transaction and reporting or the publication of data. For example, the signing of Sales and Purchase Agreement of a strata residential property is recorded this month but the registration of property is only executed much later. Data quality and availability is very important as it will affect the accuracy of the indication but there is no single source that offers an integrated data portal for this information.

Another challenge faced is the lack of inter-agency information sharing. Developers throughout the delivery chain have actually submitted various information to various departments and agencies such as the local authorities, MHLG, NAPIC, CIDB through contractors and others. However, this information is not shared among the abovementioned agencies and remains as piecemeal data at these agencies. It is therefore difficult for stakeholders to access comprehensive information.

There is a need to integrate and coordinate all the statistical data made available by all agencies and sources in the country via the establishment of a single main portal to serve the different stakeholders in the market. Under current scenario, there is no single portal serving as an official reference point to the decision makers, developers, investors and also the public as some information is not made available to certain groups of people. In order to implement the system, we need to maximise the use of available administrative and property data for compilation and integration into the portal.

High level coordination is also needed to ensure the full cooperation of concerned agencies to get timely information. In the data collection process of the proposed integrated portal, all stakeholders need to pool together their information and data. Such integration amongst the relevant parties mentioned plays a significant role in the real estate market to allow analysts, developers, investors and decision makers to expand their understanding of the real estate condition, monitor the impact on economic activity and make decision using the available data.

For the property portal to work effectively and efficiently, it should comprise the following components:

- Accurate
- Consistent
- Localised
- Integrated
- Timely

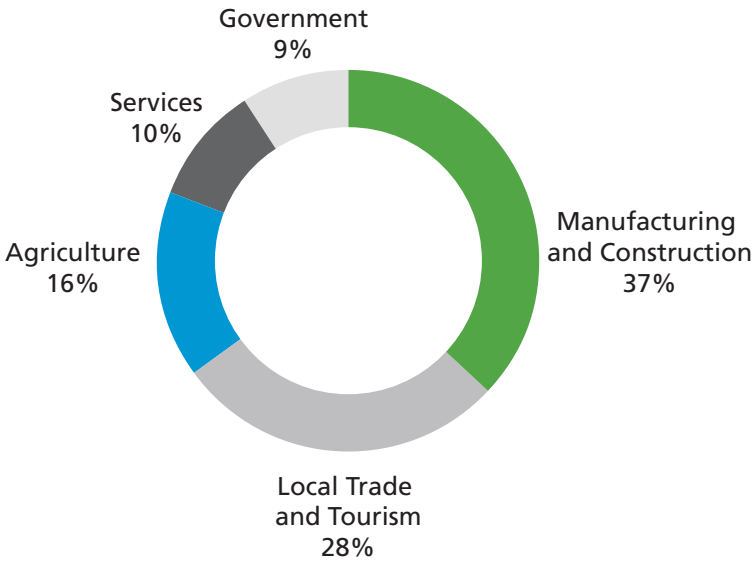
LABOUR AND EMPLOYMENT: DO EXISTING STATISTICS FACILITATE PLANNING OF HUMAN CAPITAL FOR ECONOMIC TRANSFORMATION?

Anthony Raja Devadoss[1]

1. Introduction

Talent scarcity remains as an issue the economy has to contend with. The country's unemployment rates averaged below 3.5% over the past 14 years. However, 2012 could see a slight increase due to slower industrial output growth. Literacy levels are high and those leaving school to enter the job market have at least 11 years of basic education, but 20% of highly educated Malaysians opt to leave for either OECD countries or Singapore. Further factors contributing to the skills shortage is the reality that 60% of immigrants have only primary education or less, the number of skilled expatriates has declined by 25% since 2004, and official campaigns have recently rid the country of thousands of illegal foreign workers.

Figure 1: Malaysia's Workforce Distribution[2]



Unemployment rates have been relatively stable, averaging at 3.45% between 2001 and 2010 as depicted in Table 1. However, despite the huge increase in job vacancies and low unemployment rates, almost a quarter of graduates were unemployed in 2010 as observed in Table 2. The percentage of unemployed graduates does not decrease despite

[1] Kelly Services (M) Sdn. Bhd., Email: anthonyraja_d@kellyyocg.com
[2] IHS Global Insight & Employment outlook 2012 Malaysia, Kelly Services 2012

an increase in job opportunities. This could signify the possible issue of mismatched skill sets between graduates and the job market in Malaysia. Most of the vacancies are in the Services and Manufacturing industries. With the current economic goal to be a high-income nation, vacancies in the services industry will most likely continue to grow. It is important to ensure that future graduates have the necessary skills, both soft skills and hard skills, for the industry.

Table 1: Unemployment rate by gender[3]

Gender	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	**3.5**	**3.5**	**3.6**	**3.5**	**3.5**	**3.3**	**3.2**	**3.3**	**3.7**	**3.4**
Male	3.4	3.3	3.6	3.4	3.4	3.3	3.1	3.2	3.6	3.3
Female	3.8	3.8	3.6	3.8	3.7	3.4	3.4	3.7	3.8	3.6

Table 2: % distribution of unemployed persons by educational attainment[4]

Gender	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
No formal education	2.8	4.0	3.6	3.0	2.6	3.0	2.2	3.9	3.1	3.8
Primary	13.4	13.5	12.4	13.3	11.5	11.6	11.1	10.4	11.6	10.0
Secondary	68.9	64.2	65.1	62.8	62.4	60.8	61.6	60.9	60.7	60.1
Tertiary	14.8	18.3	18.9	20.9	23.6	24.5	25.1	24.9	24.7	26.1

In terms of employment opportunities, the Economic Transformation Programme (ETP) expects to create 3.3 million jobs by 2020.

- Renewable energy plants – 50,000 jobs
- Oil, gas and energy – 52,300 jobs; with an estimated 21,000 (40%) for qualified professionals such as engineers and geologists
- Information and communication technology (ICT) – 43,162 jobs; with more than 75% of those for high-skilled workers
- Electronics and Electrical – 157,000 jobs
- Healthcare – 89,000 jobs
- Financial Services – 45,000 jobs, with strong demand for specialised talent in Islamic Finance; business opportunities and baseline growth will result in a further 229,000 jobs created.

[3] Department of Statistics Malaysia, June 2011: Key Indicator of the Labour Market, Malaysia, 2001-2010
[4] *Ibid.*, p.12.

In the short term, infrastructure construction is ramping up, and areas such as tourism, palm oil, agriculture, oil and gas, education, manufacturing and logistics, are expected to create 150,000 jobs in 2012. Hot jobs for 2012 include call centre professionals such as senior customer service officer, call centre team leader, outbound agent; and sales and marketing professionals in the services sector. The oleochemicals industry aims to create 86 highly-skilled jobs by 2015.

2. Statistics that Facilitate Planning for Human Capital

Labour in this context is effectively referred to supply of talent, whereas employment is referred to demand for labour or job opportunities. With the strong and aggressive Government initiatives to boost the economy, we need to ensure that there is enough supply of labour to the economy. As such, it is inevitable for the Government to develop human capital (HC) plan and this plan has to be robust, comprehensive and relevant in helping to forecast the supply of labour and the employment opportunities. Factors that affect the economy, population demographics, industry outlook and growth, wage trend and statistics related to them are useful for HC planning.

3. Economic Outlook

The global economic outlook and trend impact the labour and employment market. Reduced global demand will slow Malaysia's export-driven economy, as growth slackens from 5.0% in 2011 to an estimated 4.0%–4.5% in 2012.[5] Continued deficit spending will seek to mitigate the impact of Malaysia's reduced growth, with the Government focusing on more infrastructure development and higher wages for civil servants to boost domestic consumption. The adjustment between the global and local economic impact will affect demand for resources, including HC.

4. Population Demographics: Specification

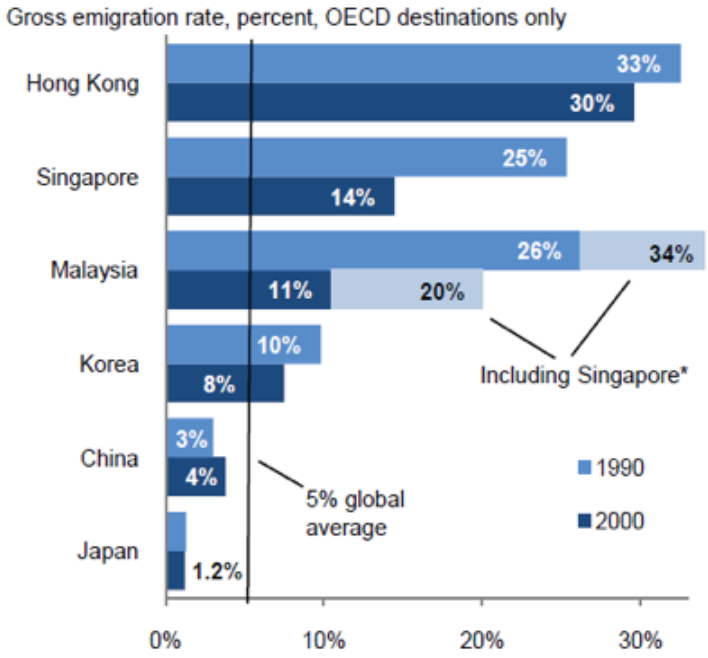
Population demographics such as age, gender, education and key professions form part of the planning for HC. Statistics that show the four categories (age, gender, education and profession) in matrix format, such as key professions for each working age group and genders; and gender for each age group and education, would further enhance the planning. Having an indication of the quality of our labour force (such as their education level, qualification and current profession) and correlate them with age and location, will be useful and relevant for the planning process. This information would give a more structured planning for industry development in alignment to labour availability and their skills for the specific region. It also allows necessary planning for infrastructure or facilities to encourage talent mobilisation, should they need to relocate specific skilled labour to another region.

[5] Global Market Brief and Labor Risk Index 2012

5. Malaysian Diasporas Effect

The Malaysian diasporas is estimated, conservatively, at one million as of 2010, of which about one-third of all migration represents brain drain.[6] For every ten skilled Malaysians born in Malaysia, one of them elects to leave the country. This is double the world average. It is important to study the brain drain trend, including the profession and industry that these diasporas are in. This helps to identify professions or skills that the country require to develop further in anticipation of brain drain and plan to retain them (See Figure 3).

Figure 3: Brain drain intensity fell, but remains high[7]



6. Re-entry into Employment and Re-employment

The country has recently begun registering up to 2 million illegal immigrant workers in an amnesty programme aimed at managing waves of foreigners seeking unskilled jobs not being filled by Malaysians.[8] Could this situation be improved should we be able to help Malaysians who are retired from services or retrenched workers who are seeking for job to be re-employed? When there is a correction in the economy, there will be a number of workforces 'released' back to the labour market, and there will be a substantial number of labour who retire each year but they

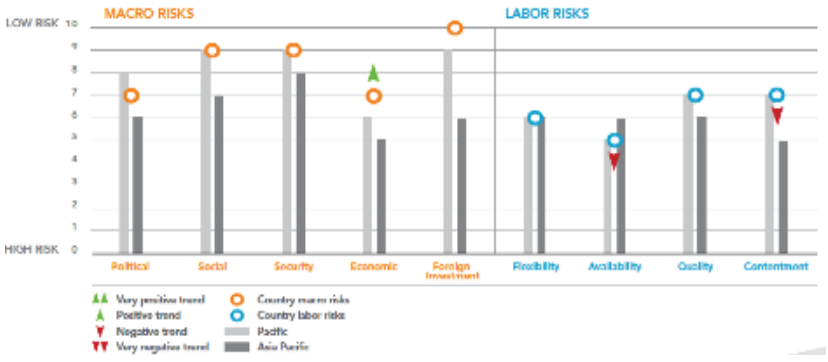
[6] Malaysia Economic Monitor, April 2011
[7] Malaysia Economic Monitor, April 2011
[8] Employment Outlook 2012 Malaysia, Kelly Services

are still in the productive age group. Hence, having the statistics for re-entry into employment (workers who are retrenched) and re-employment (retired) groups would be essential to improve the planning, in areas such as matching these groups with the available jobs, and providing training for re-skilling to reduce the need of recruiting foreign labour.

7. Investments Growth

Malaysia has low macro risk with positive investment trend, and hence, has been a favourite country for foreign investor. To encourage investment in Malaysia, authorities will continue to expand the ETP, which seeks to attract nearly $440 billion in foreign direct investment (FDI) in key areas such as energy and financial services, while adding 3.3 million jobs by 2020. In an effort to attract foreign investment, Malaysia will liberalise 17 currently closed sectors to 100% foreign ownership in 2012, including telecommunications, healthcare and accounting services. However, from the labour aspect, there is a possibility that we may fall into the 'risky' state.[9] As such, it is critical to ensure that there will be adequate talent with the right skill set available for these industries as they are developing. In order to have progressive planning for human capital, it is important that qualitative information pertaining to trend and scale of investment, industry types and respective locations, implementation timeframe, as well as qualification and quality of labour required are available. Figure 4 illustrates the macro and labour risks in Malaysia as well as Pacific and Asia Pacific.

Figure 4: Macro and Labour Risks Comparison: Malaysia vs Pacific and Asia Pacific[10]

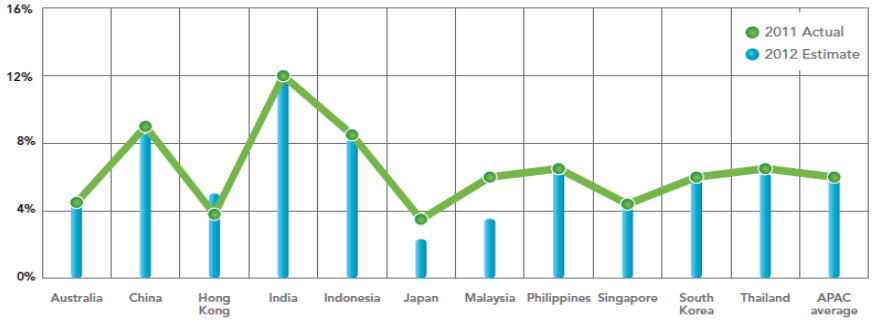


[9] Global Market Brief and Labor Risk Index 2013
[10] *Ibid*

8. Wage Trend

Salary is one of the top three priorities people look at when considering a job, beyond training, development and mentoring programmes. Malaysia's employment outlook for 2012/2013 remains optimistic despite lack of top talents. The employment opportunities or demand for talent was especially apparent in the banking and financial, information technology, business services and engineering industries. In these high growth industries, salary increase can be as high as 12% for a skilled talent with about 8 years experience.[11] Understanding of the regional wage trend is important to attract and retain skilled talent, and hence, planning for the key expertise is required. Refer to Figure 5 for wage growth trend 2011 and 2012.

Figure 5: Wage Growth 2011 - 2012[12]



9. Quality of Statistics

Obtaining the key statistics related to economic and social demographic is important for HC planning. The timeliness, integrity and reliability of these statistics are equally critical for policy makers and investors, particularly to utilise this information for subsequent planning and execution.

Industry developments are getting more dynamic and effective business management requires quick and right decisions to be made. Planning and execution period in current business dynamic can be as short as 3 to 6 months. As such, decision makers need to access to timely and high quality economic statistics. More short-term statistics releases to assist incremental planning and execution would be highly helpful in the current fast changing business environment.

[11] Malaysian employers lose out on skilled talent, HRM Asia, 13 September 2012
[12] APAC Talent Market Update, 2012/2013, Kelly Services

Accessibility to real-time information would be a standard moving forward. Real-time statistics on labour availability and shortage, and employment opportunities in different locations would be an ideal situation in narrowing the gap between demand and supply of labour. Realistically, if we could achieve the 'real-time' standard by providing updated information with one day to a week lapse, it will help to address gaps swiftly.

10. Non-qualitative Factors

HC planning should be a 'living' plan that allows adjustments from time to time to suit the socio economic environment, without changing the long term goals. Non-qualitative information related to politics, legal and technology will also impact HC planning. Legal enforcements such as minimum wage and retirement age, political stability and advancement in technology in replacing manual work, will have a direct impact on HC requirements. Major natural disaster, such as the Japan earthquake and tsunami in March 2011, will also have significant implication.

11. Conclusion

There are at least two aspects of information which are necessary for HC planning:

(i) Factors affecting the supply of labour and, employment or demand for labour. This would refer to economic outlook, population demographics, industry outlook and growth by industry, re-entry and re-employment, Malaysian diasporas, and wage trend; and

(ii) Relevance of the data and information available. Timeliness, integrity and reliability of the statistics. 'Real-time' information would be ideal especially for short-term planning.

Non-qualitative factors relating to politics, legal and technology as well as natural disaster would also have significant impact to HC planning.

Based on Kelly Services' survey[13], talent and employment opportunities for 2012/2013 include:

(i) Accounting and Finance: middle to senior levels of auditors, accountants and credit managers, and business partners who push for profitability;

(ii) Banking and Financial: expertise in niche banking areas such as Islamic Finance;

[13] APAC Talent Market Update 2012/2013, Kelly Services

(iii) Engineering and Technical: expertise in new growth areas encompassing renewable energy, oil and gas, utilities, and advanced electrical and electronic products;

(iv) Human Resources: professionals with a focus on compensation and benefits, learning and development, and talent acquisition and retention;

(v) Information Technology: hiring demand for ICT job positions, IT professionals in the middle level for e-payment, and mobile banking;

(vi) Procurement, Supply Chain and Logistics: expertise in improving processes and productivity, middle and senior management positions such as project managers, operations directors and supply/demand/inventory planners; and

(vii) Sales and Marketing: sales talent with strong performance, brand managers, marketing directors and channel managers.


What are the new data required?
R&D, IPs
Value added
Basic data
R&D & productivity gains
• Business R&D expenditure
• IT expenditures
• Trademarks & patents
• Venture capital
• Entrepreneurship data
• Structural change
• International competitiveness
• Emerging industries
• Knowledge-intensive industries
• Services producer price index
• Disaggregated income data
• Wage data
High income
Sustainability
Inclusiveness
• Income distribution
• Household balance sheet
• Wage data

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