Issues on Big Data Governance –
Big Data work in Central Banks, HR and IT issues¹

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¹ This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.
Issues on Big Data Governance – Big Data Work in Central Banks and HR and IT Issues

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My own experience and environment is within a National Statistics Office (NSO), and not a Central Bank.

Nevertheless, I believe the two communities have much to learn from each other.

NSOs have a long history of handling governance of large and confidential datasets (such as census and administrative records).

The same is true with Banks in general.
The main difference: NSOs have an obligation to disseminate statistics (and also microdata) to the public to the maximum extent possible without breaking the confidentiality ‘contract / promise’.

There’s no such pressure on most Central Banks.

How did NSOs cope: developing and adopting sophisticated methodology for confidentiality protection based on ‘risk – utility framework’.
Big data is like *genetic medicine*: it is here to stay.

There are huge *promises of utility*, but also large risks.

However we will not give it up because of the potential utility.

The challenge is indeed how to manage the risks while maximizing the utility!
1 – Does the existing Data Governance in your CB/ institution cope with the Big Data needs?

No, if we consider some big data sources which are being created.

We are ‘cloud averse’ – few, if any, NSOs operate with ‘cloud computing’.

Reasons are simple: disclosure risks are seen as too high.
1 – Does the existing Data Governance in your CB/ institution cope with the Big Data needs?

13/03/2017 – Reuters

“Canadian statistics agency hacked, security flaw patched – officials said”

http://www.reuters.com/article/canada-cyber-idUSL2N1GQ1KH

Attack also affected Canada Revenue Agency!

Most NSOs will operate ‘secluded’ data environments for holding their data.
1 – Does the existing Data Governance in your CB/ institution cope with the Big Data needs?

Some big data sources are `public` and `cloud based`.

Thus we will need to use cloud computing at some stage.

For the confidential big data sources, some solution is needed that mitigates the risks while preserving utility ➔ methodological research!
2 – Which are the challenges posed by Big Data in terms of organization, human and IT resources, and data management responsibilities?

Need to mobilize skills which may not be currently available `in house`: IT, methodology, legal, etc.

Most likely need to upgrade IT resources & consider `cloud computing`.

But essential also to bring in the methodological expertise to operate the risk – utility approach.
3 – Will the use of Big Data encourage cooperation/partnerships between and within your institutions?

Yes! It seems unlikely that any organization can ‘do it alone’.

We will be forced to partner / cooperate if we are to fully benefit from the new opportunities created by the Data Revolution.

Many opportunities exist for us to learn from each other and cooperate.
4 – Is Big Data simply a new data source or does it call for changing the business model of your institutions?

Not simple to answer – depends on the NSO or Central Bank current position.

ISI organized a side event to the 48th Session off the UNSC on the 8th March.

4 – Is Big Data simply a new data source or does it call for changing the business model of your institutions?

Netherlands CBS reported having created a ‘Center for big data statistics’ jointly with Korean NSO.
4 – Is Big Data simply a new data source or does it call for changing the business model of your institutions?

Netherlands CBS also reported having created a ‘Data lake’, where Big Data can be sourced and used.
4 – Is Big Data simply a new data source or does it call for changing the business model of your institutions?

Slovenian NSO called for ‘continuous adaptation’. Mexican NSO relies on coordination role.

**SNIEG MODEL**

**State Units**

**MAIN ROLES**

Data users

Data producers

Data suppliers

*Their inputs allow*

Data generation and prioritization

Quality assurance

Enforce data sharing

State Units interaction takes place through executive & technical committees and is regulated by INEGI
Summarizing

Leadership.

Adaptation.

Cooperation.

Innovation.

Persistence.
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