



Irving Fisher Committee on  
Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

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IFC-Bank Indonesia Satellite Seminar on “*Big Data*” at the ISI Regional Statistics Conference 2017

Bali, Indonesia, 21 March 2017

## Issues on Big Data Governance – Big Data work in Central Banks, HR and IT issues<sup>1</sup>

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<sup>1</sup> 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.

# Panel Discussion at IFC-BI Seminar on “Big Data”

21 March 2017



Rhys Mendes  
Managing Director/Chief, Economic and Financial Research  
Bank of Canada

# Agenda for Discussion

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- Big Data's impact on:
  - Data Governance
  - Organizational Structure, Human Resources, Information Technology
  - Cooperation/Partnerships
  - Business Models

# Data Governance

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- Traditionally, CBs have been data users
- Big Data is increasingly making us data collectors/generators
- Data governance needs to evolve with this shift
- Illustrative Example: Web scraping retail price data

# Data Governance

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- The example raises several questions:
  - Legal/ethical questions
  - Who should have responsibility for authorizing collection?
  - Need for legislative change?
  - Is greater coordination with statistical agency a better route?
  - How should processes change when going from experimental phase to production phase?

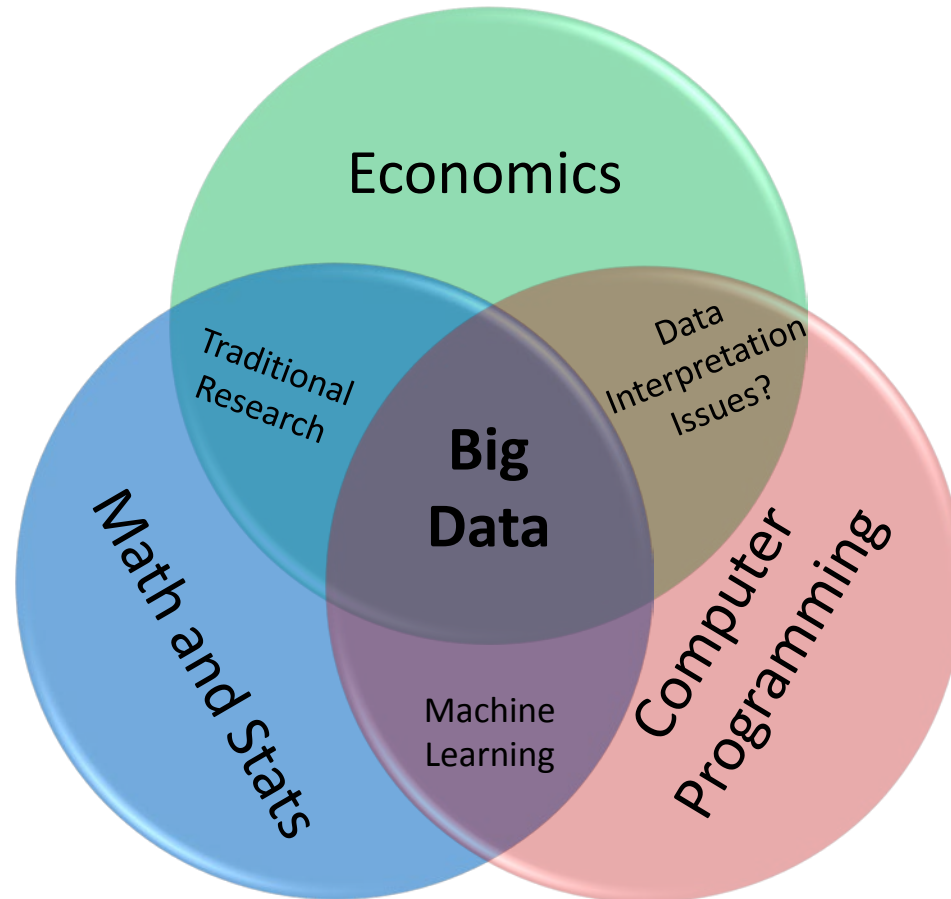
# Organizational Structure

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- Where should big data resources reside?
  
- Many departments pursuing big data projects.
  - Should each build its own technical expertise?
  - Should the technical expertise reside with some central office to maximize cross-pollination?
  
- Some departments generate operational data that others want to use. How to share costs?

# Human Resources: Challenges Created by Multidisciplinary Nature of Big Data Analytics

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# Human Resources

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- Hiring challenges depend on existing HR structure
  - Job profiles
  - Pay lines
  
- Impact of organizational structure on hiring/retention:
  - Economists managing data scientists?
  - Career paths for data scientists, etc.
  
- Critical mass for hiring



# Information Technology

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- Critical mass
- Flexibility of IT funding
- Ability to experiment

## Cooperation/Partnerships

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- Right now lots of learning from one another
  - Very valuable as we all ramp up big data capacity
- Not clear that increase in cooperation will persist as this becomes a more mature area of work

# Business Models

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- Won't fundamentally change what central banks do
- But has potential to eventually change how certain areas work.  
Examples:
  - Short-term forecasting
  - IT Security

# Conclusions

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- Still in a learning phase
- Cooperation/partnerships will accelerate learning
- Experimentation is key

Thank you

