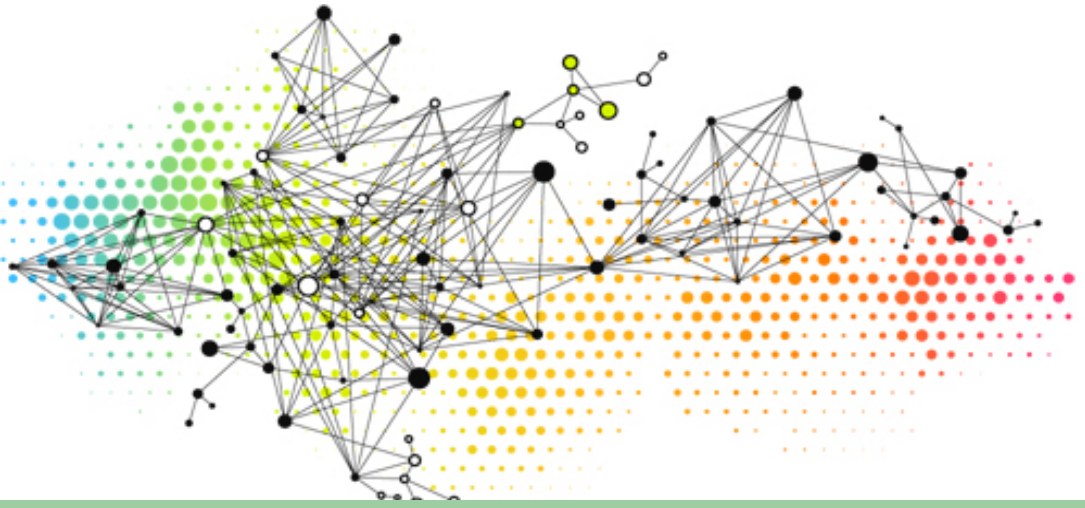

Statistics Department

Identifying and Closing Data Gaps in a Globalized World

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A Brief History of Data Gaps

- The traditional IMF view: data gaps identified through bilateral policy dialogue with member countries
  - Available data assessed in reference to core set needed for economic analysis and formulation of policy options at the national level
  - Set comprised of traditional, residence-based macro variables:
    - monetary and fiscal aggregates
    - interest rates
    - central bank and banking system balance sheets
    - current account balance, imports and exports, reserves
    - GDP
    - CPI
    - gross external debt

A Brief History of Data Gaps (cont'd)

- After the Global Financial Crisis: emphasis on multilateral surveillance, particularly in the financial sector, to identify risks and transmission channels, including cross-border
  - Financial Surveillance
    - Financial Soundness Indicators (FSI), including concentration and distribution measures
    - Shadow banking
  - Cross-border linkages and vulnerability to shocks
    - Sectoral accounts and balance sheets
    - International Investment Position, Coordinated Portfolio Investment Survey (CPIS)
    - Government Finance (GFS) and debt statistics
    - Residential and Commercial Property Price Index
  - Increased international coordination in identifying and closing data gaps

The G-20 Data Gaps Initiative

- DGI-1, launched in 2009, put in place immediately after the GFC to address identified gaps
  - Endorsed by the G-20 Finance Ministers and Central Bank Governors, and led by IMF staff and FSB Secretariat
  - Set up general framework and focused on conceptual issues
  - 20 recommendations under 4 categories: build-up of risks in the financial sector, cross-border financial linkages, vulnerabilities of domestic economies to shocks, and communication of official statistics
  - Concluded in 2015 with notable progress and a number of interim goals achieved
    - Significant conceptual advances, e.g., Global Systemically Important Banks
    - Improved data collection in areas where frameworks already existed (FSIs, CPIS)

The G-20 Data Gaps Initiative (cont'd)

- DGI-2 launched in September 2015
  - Closing of outstanding conceptual issues
  - Stepped up ambitions for the regular collection and dissemination of reliable and timely statistics for policy use
  - New recommendations (derivatives, Coordinated Direct Investment Survey (CDIS), promotion of data sharing)
  - Enhanced prioritization based on policy relevance: FSIs, IBS, CPIS, securities statistics, GFS, government debt data, and sectoral accounts and balance sheets

DGI Beyond G-20 Economies: the Case of Chile

IMPLEMENTATION OF THE DGI-2 RECOMMENDATIONS: CURRENT STATUS

Recommendation	Overall assessment	Aggregate Status for G20 countries	Chile
#II.2 FSI	• Reporting of seven FSIs w quarterly frequency, T+Q timeliness		
#II.3 CDM	• Contribute to the discussions		
#II.4 G-SIFIs	• Provision of Institution-to-Aggregate data with T+50 days timeliness		
# II.5 Shadow banking	• Report data to FSB annual shadow banking exercise		
#II.6 Derivatives	• Participate in the BIS 2016 Triennial Survey		
#II.7 Securities statistics	• Report core data on debt securities statistics in line with the Handbook on Securities Statistics		
#II.8 Sectoral accounts	• Disseminate non-financial, financial accounts and balance sheet data		
#II.9 Household distrib. Info.	• Participating countries encouraged to compile and disseminate distributional data.		
#II.10 IIP	• Provide quarterly IIP data including currency breakdown and OFCs		
#II.11 IBS	• Fully implement the agreed IBS enhancements		
#II.12 CPIS	• Reporting of semi-annual CPIS data including sector of holder		
#II.13 CDIS	• Reporting inward and outward data split by equity and debt		
#II.14 Cross-border exposures	• Reporting of standard reporting form 4SR (on OFCs).		
#II.15 GFS	• Disseminate quarterly general government data in line with GFSM 2014		
#II.16 PSDS	• Reporting general and central government debt data.		
#II.17 RPPI	• Compilation and dissemination of RPPI in line with the Handbook on RPPI.		
#II.18 CPPI	• Encouraged reporting of available CPPI.		

The Road Ahead

- Increased need for better statistics to understand risks and formulate policy options, e.g.:
  - Improved indicators for financial surveillance
  - Sectoral balance sheets to monitor build-up of vulnerabilities in key institutional sectors
  - Cross-border statistics to identify transmission channels
- Heightened expectations for statistics as a global public good
  - Timeliness and frequency
  - Increased use of non-official data, e.g., Big Data, to close gaps
  - Efficient dissemination to all relevant stakeholders (e.g., governments, financial markets, civil society, academia)
  - Greater statistical cooperation, at both the national and international levels

How the IMF Can Help

- Leverage universal membership and surveillance mandate to continuously assess new data needs for policy formulation, through closer integration of bilateral and multilateral surveillance
- Develop and promote methodological frameworks to ensure comparability and integrate new economic phenomena, in close cooperation with the international statistical community:
  - Collaboration with the OECD on the digital economy in the context of G-20 work stream
  - Fifth Statistical Forum to be held in November will focus on "Measuring the Digital Economy"

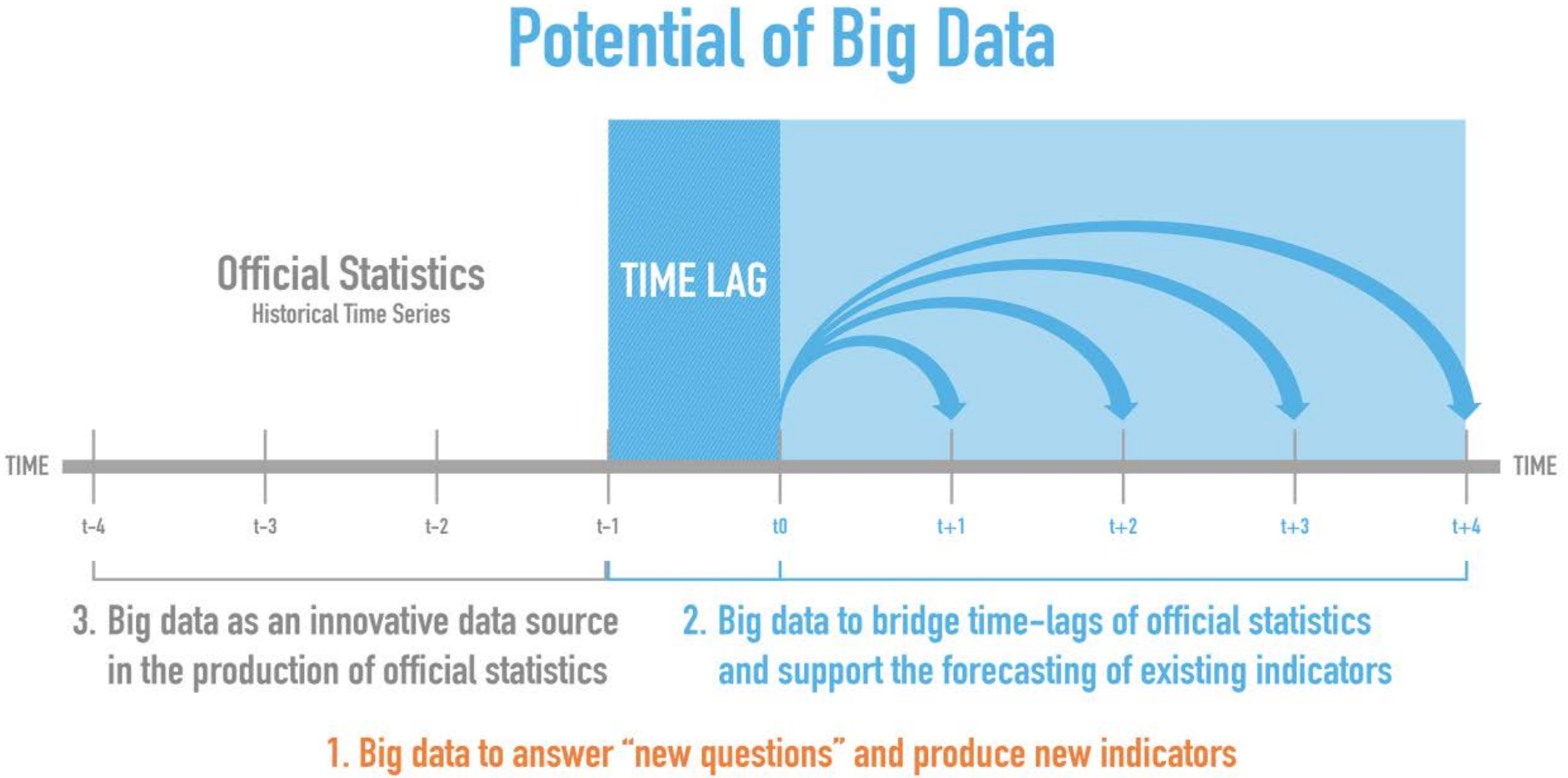
How the IMF Can Help (cont'd)

- Use unique convening power to facilitate the dissemination of high-quality data and the exchange of best practices across the membership
  - Data Standards Initiative:
    - Newest tier, Special Data Dissemination Standard (SDDS) Plus, launched in 2012, with strong synergies with DGI
    - 9 data categories added to SDDS requirements, with an emphasis on transparency in the compilation and dissemination of data
    - 14 adherents to date, of which 6 have joined in the last 18 months
  - Ongoing work on the implications of Big Data for macroeconomic and financial statistics
    - Focus on areas important to economic analysis and decision-making: now-casting, risk assessment, and turning points

Big Data: Potential, Challenges and Statistical Implications

Staff Discussion Note on Big Data

Potential of Big Data for Statistics



Challenges of Big Data

- Data quality
- Data access
- New skill profiles and technology

"DOs" of Big Data

- Big Data, particularly promising at helping measure:
  - ✓ "Soft" information: sentiment, alerts, reactions…
  - ✓ Consumer behavior and patterns (e.g., Amazon, Google searches and 'clicks', social networks,…)
  - ✓ Tourism (e.g., roaming information, Google searches, credit cards, click-stream data, …)
  - ✓ Financial flows (e.g., SWIFT, mobile phones, …)
  - ✓ Prices (scanner data,…)
  - ✓ Job vacancies and labor skills (e.g., LinkedIn,…)
  - ✓ Big Data provides granular, microdata

"DON'Ts" of Big Data

- Sample representativeness: bias towards more modern and dynamic economic activities and social behavior
- Big Data less suited for stocks, i.e., total financial assets and liabilities of firms, households, government, nonresidents, both at micro and macro levels
- Revaluation and other volume changes, particularly important in monetary and financial statistics
- As by-product, long time-series based on Big Data are inexistent and will be fragile because instability from business and technological changes, discontinuity in data provision
- Privacy and confidentiality of personal, firm-level data

THANK YOU

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