Nowcasting

1st Technical Workshop
3 – 4 February, Geneva
If data is to be useful and support good decision-making, it has to be ready at the time when decisions are being made or where the opportunity for influencing the outcomes is there. Trade-offs between timeliness and other quality dimensions depend on the purpose to which data is being put. New technologies and innovations provide the opportunity for the public sector, citizens groups, individuals and companies to have access to data that, with due regard for privacy, security and human rights, is aligned with their own decision making cycles and information needs – available when and how they want it – and strengthen policy planning, crisis early warning, programme operations, service delivery, impact evaluation, and disaster response.
“The initiative addresses the urgent need for more accurate, timely, and comprehensive data to make the SDGs an actionable framework for sustainable development that can drive policies and programs in real time for all people. Today, new technologies, paired with existing data sources and methods, give us an unprecedented opportunity to solve this problem”
Meeting of the Committee of the Chief Statisticians of the UN System (CCS-UN)
Copenhagen, 11 September 2019 UNHCR, UN City

Item B. Data reporting and sharing for the 2030 Sustainable Development Agenda

Except from minutes:
The importance of nowcasting and the lack of (harmonized) methodologies for implementing it across the UN system;

Conclusions. The drafters of the CCS-UN paper for the HLCP will reflect some aspects of the discussion when finalizing the paper, in particular, the application of nowcasting. Given the very different level of use of nowcasting techniques amongst members, the Committee decided to organize a training session for agencies practitioners who want to adopt this technique. UNCTAD volunteered to organize such training with the help of UNIDO. Both members will report back on the training to the Committee at its next session.
Target 2.2 - To embed predictive analytics, including nowcast and forecast in UN system data/statistical programmes to ensure that UN system data can identify new threats
What is ‘nowcasting’?

Contemporaneous Forecasting (Now + Forecasting)

It is an assessment of the current state of a target variable based on information provided by relevant indicators.
What are they for?

Nowcasts are useful if you want real-time information for a target variable that is:

- published after a long delay
- available at low frequency
- subject to revisions
How do they work?

Nowcasts exploit all information provided available:

- many sources
- relevant
- Available and timely
- different frequencies
- non-synchronised publication
- varying publication lags
- possibly a large set
Correlation v causality

Indicators are not selected because of their causal or theoretical / structural relationship to the target variable, but because of their:

• Correlation with the target variable
• timeliness
Challenges in developing a nowcasting application:

- identifying relevant data sources
- working in a data-rich environment
- separating signal from noise
- summarising the information into a meaningful estimate
Common methodologies

- cycle analysis
- blocked linear systems
- bridge equations
- dynamic factor models
- mixed frequency (Bayesian) VARs
- mixed-data sampling (MIDAS)
Agenda & resources

Workshop conclusions

Important Questions - how do we deal with country level nowcasts?
• Who owns the nowcasted data?
• Must we consult with member states?
• Nowcasts use a combination of official and unofficial statistics – is this problematic?
• Should we consult with IAEG-SDG for guidance?

Dissemination should use existing standards and definitions
• SDMX standards
• Guidelines: UN and Eurostat – *Handbook on Rapid Estimates*
• Transparent metadata (distinguish between statistical and economic models)
• Definitions: adopt standards – flash estimates; nowcasts...
• Clear warning for users
3 main goals

1. Improve accessibility of **methods**: Make innovative methods for data production and analysis easily accessible to data producers and data users to support progress towards the SDGs.

2. Build technical **coalitions and capacity**: Develop technical collaborations to build skills and knowledge and increase the standardization and uptake of new methods at scale.

3. Catalyze **national** data innovation **partnerships**: Catalyze or take to scale new data partnerships in selected countries to increase the availability and use of timely data for decision-making on the SDGs.
Proposed next steps (nowcasting)

Improve accessibility of *methods*: Develop a dedicated resource page (*who hosts – CCSUN?*)
- Presentations
- Papers
- Links
- Code
- Tools
- Publish a ‘Proceedings’

Build technical *coalitions and capacity*: Create a network – where agencies request help/submit queries

Questions: do we create 2 sub-groups (data; methodology)?
identify a selection of SDG indicators to be nowcasted?
how do we link to / capitalize on similar work done by other networks?
Other questions

Catalyze *national* data innovation *partnerships*: How?

Are NSOs interested in Nowcasting?
Do NSOs have capacity/need capacity?
Thank you