

Comments on WDR2021: Data for better lives

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Workshop on WDR2021

July 27, 2021

Contributions

Novelty of view: Governance of data generation/use in development
As opposed to digital technologies and their applications (existing WB/IFC reports, WDR2016). Data as a factor of production. Need institutions for efficient and ethical uses.

Breadth of scope: Put pieces together Existing literature discusses about the parts (platformer behaviours, user-AI feedback loops, competition laws, and uses of nontraditional data in assessing poverty), but no work has put them in a framework of data governance.

Generality of framework: Applies to all income levels.

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- But data can be used against citizens, corporates, governments.
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- But data can be used against citizens, corporates, governments.
- A social contract among them can forge trust, further sharing.
 - *Necessary components of trustful environment are laid out: Data protection laws, data protection authorities, data standard setters, data intermediaries, antitrust agency, human capital, funding, etc.*

Not there yet. In most low and middle income countries, except China (and India):

- Data has not become a productive asset, thanks to little use of data and AI.
- Data production is predominantly from mobile phones while data sharing is at a nascent stage.
- The poor are not much connected. They are mostly left out.
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- ② How can we construct a social contract under a limited trust while protecting the poor?
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- 1 What is in for the poor?

WDR2021 gives a big picture of data driven economy.

It discusses extensively about something currently inaccessible to the poor.

Limited use cases of private intent data based on the poor's demand.

▶ Examples

Private intent data: Short term gains on the poor's welfare may be limited.

Takes improvements in privacy protection (digital identity), incentive compatibility (digital report aggregation), user costs (ag techs, telemedicine), data portability (supply chain on a blockchain).

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Report puts a blind faith on a government.

Government: Please enroll in a platform, so we can serve you better. I promise I stay trustworthy. I also have Data Protection Authority and laws.

Majority: Yes, I will. Thank you for serving us better.

The poor: No, staying online is too much for me. ← WDR2021

"Informed": No, aren't you already spying on me?

→ [Data Trust for European Citizens](#)

Counting on a government agency to check the misuse is not convincing, incentive wise or capacity wise.

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- With decreasing average costs, or a market failure, the growth of data driven economy may be inefficient. Can governments hold monopolists in check when you cannot even tax them?
- Some say, in high income countries (van Reenen, 2018):
 - Platforms ⇒ customers become more price aware
 - ⇒ intensified "winner takes most/all" competition
 - ⇒ increased mark up of surviving firms
 - ⇒ declining labour sharesLow and middle income countries are having declining labour shares (van Treeck, 2020). Should not we worry about employment consequences of data driven economy?
- Moreover, my digital footprints are shallow copies of myself. Is it fun to have your choice set dominated by suggestions out of digital footprints without you knowing it? Consumer sovereignty?

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Examples with public intent data:

- Cost saving technologies. Used by governments.
 - ☞ Poverty mapping, gender based violence mapping, disaster prevention/responses.
- Empowering technologies. (To be) Used by citizens.
 - ☞ Digital report aggregation (to increase accountability; need voluntary reports by citizens), digital identity (to interact online without a fraud; ongoing attempts to solve privacy issues on a permissionless blockchain)

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Leading use cases based on the poor's demand: Digital loans

- Mobile money and phone usage data \Rightarrow credit scores \Rightarrow loans
- *M-Shwari*: 4.5 million (2015)
- But at high interest rates. (Inflation rate 6-7% p.a.)
 - ☞ *M-Shwari* 7.5% per month = 90% p.a.
 - ☞ *Fuliza* 1.083% per day = 32.5% per month = 395.3% p.a.
- Financial inclusion?
 - ☞ An emergency loan for a short duration.
 - ☞ Opens a pathway to regular finance for some graduating borrowers.
- High default rates in smaller loans. Market failure not resolved?
- AI-based credit scoring: Welfare impacts are unclear.

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References I

van Reenen, John, “Increasing differences between firms: Market power and the macro-economy,” 2018.

van Treeck, Katharina, “Measuring the Labor Income Share of Developing Countries: Lessons From Social Accounting Matrices,” *Review of Income and Wealth*, 2020, 66 (3), 584–612.