Measuring disbursement efficacy of Universal Service Funds

Case studies from India, Malaysia, Pakistan & Sri Lanka

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Universal-service subsidies

- Intended to achieve policy objective of providing services sooner
 - To a larger area OR
 - To a larger population
 than suppliers may consider commercially viable
- For the most part, are funded through levies/taxes on existing customers of ICT services, depressing use (and are thus work against policy objective of greater ICT use)

Assessment by Independent Evaluation Group on World Bank's support for universal service programs, 2000-2010

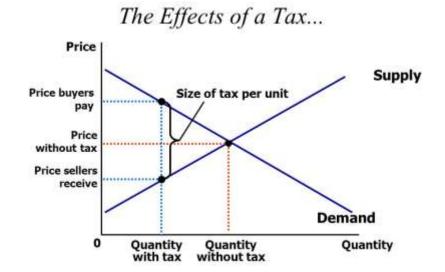
 4.28 Equity and integration of marginalized groups have been more effectively supported by Bank support for ICT policy and sector reform than by operations specifically designed to achieve these goals. ICT operations that supported reforms to introduce competition into the sector, when successful in supporting those reforms, have had significant impact, especially in access to cellular telephony services. This increase in overall access has had a spill-over effect of providing access to the underserved. Lower tariffs (especially in cellular telephony), falling handset prices, and the expansion of prepaid cellular services are all channels that facilitate access by the poor.

How do we measure success?

- Outcome: How many people who would not be connected through market mechanisms were connected as a direct result of universal-service subsidy programs?
- Output: Were the funds utilized as intended by the legislation/policy?
 - Necessary condition: were funds disbursed?
 - Sufficient condition: were funds spent for purposes intended by legislation/policy in a transparent and fair manner?

Necessary condition of policy efficacy

- Money that has been withdrawn from a reasonably competitive sector must be disbursed
 - Otherwise, it's only doing harm by depressing demand



Sufficient condition is not principal focus of this paper

ASSESSING NECESSARY CONDITION NECESSARY CONDITION = ZERO EFFICACY

Ways of assessing necessary condition across time & in comparison to other countries

Accumulated disbursement rate (ADR) $_{t}$ Funds accumulated in USF $_{t-1}$ Funds accumulated in USF $_{t-1}$

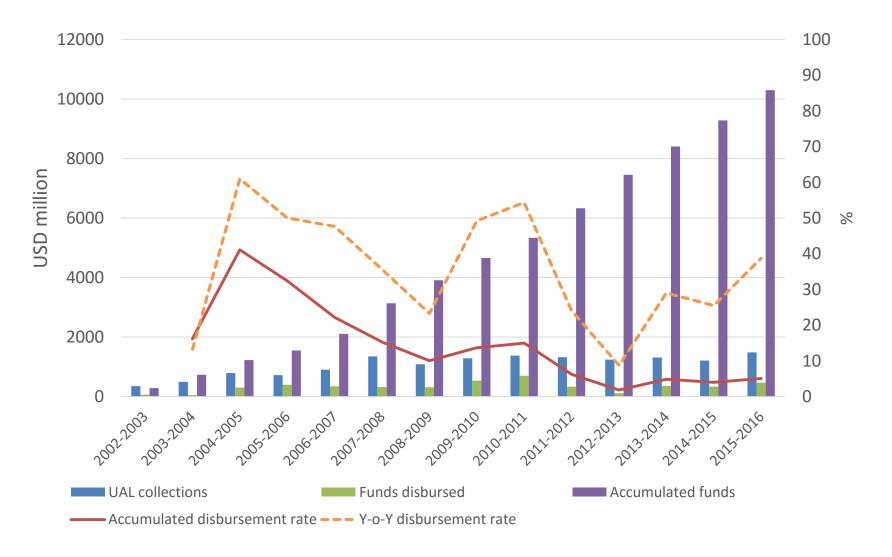
Y-o-Y disbursement rate (YDR)

Disbursement of funds $_{\rm t}$ Inflow of funds $_{\rm t-1}$

YDR is kinder to fund administrators

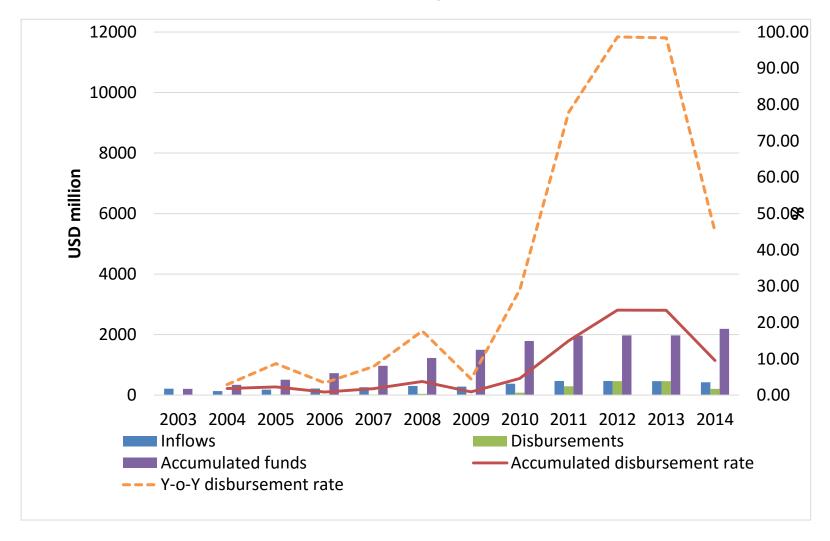
- YDR is simply about how much of last year's inflows were disbursed this year
 - Leaves aside the accumulated balance
 - Also leaves aside this year's inflows
- But ADR must be measured because something has to be done about accumulated funds
 - Once ADR has declined, YDR must exceed 100% for at least a few years, for ADR to come back to acceptable levels

India



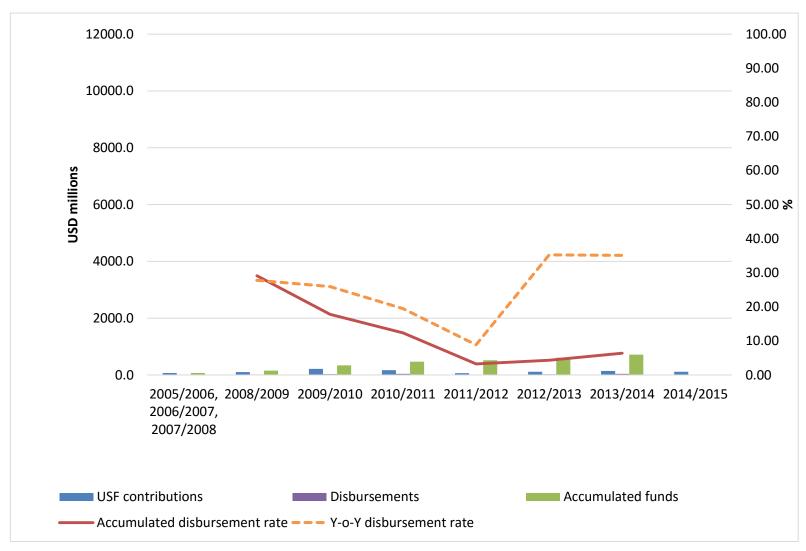
Source: Universal Service Obligation Fund of India (2016, Oct. 02) Fund status. Calculations by authors

Malaysia



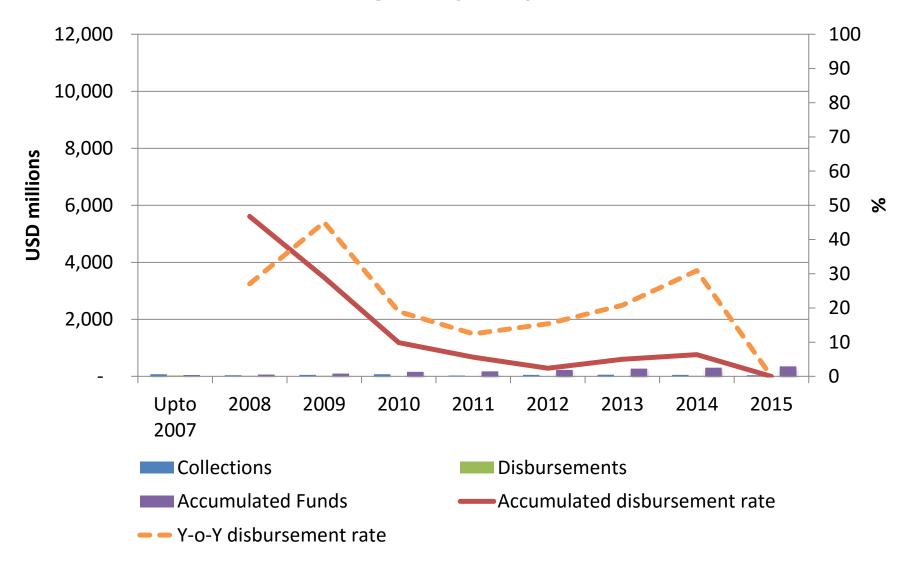
Source: Universal Service Provision Fund of Malaysia (2015) Annual report 2014. Calculations, graphics by authors

Pakistan



Source: Iftikhar, P. (2015) Proceedings from A4AI Myanmar coalition meeting. Experiences & lessons from the region- Pakistan. Calculations, graphics by authors

Sri Lanka



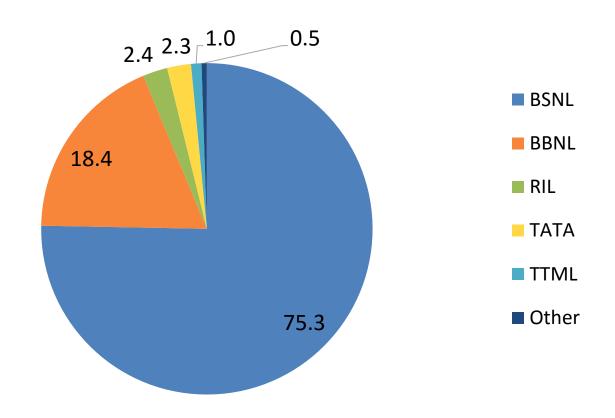
Source: Sri Lanka Telecommunications Regulatory Agency. Calculations, graphics by authors

→ ADR declines in all 4 countries over time

India (FY April-March)		Malaysia (FY Jan- December)		Pakistan (FY July-June)		Sri Lanka (FY Jan- June)	
Year	YDR	Year	YDR	Year	YDR	Year	YDR
2003/2004	12.72	2003				2003- 2007	
2004/2005	62.79	2004	2.90				
2005/2006	51.88	2005	8.68	2005/2006, 2006/2007,			
2006/2007	45.62	2006	3.39	2007/2008		Highest	
2007/2008	36.70	2007	7.90				
2008/2009	25.83	2008	17.68	2008/2009	27.79	2008	27.03
2009/2010	42.35	2009	4.46	2009/2010	25.94	2009	45.04
2010/2011	55.77	2010	29.09	2010/2011	19.47	2010	18.91
2011/2012	26.16	2011	77.91	2011/2012	8.86	2011	12.42
2012/2013	8.24	2012	98.66	2012/2013	35.24	2012	15.39
2013/2014	28.94	2013	98.37	2013/2014	35.08	2013	20.81
2014/2015	26.10		44.99	2014/2015		2014	30.92

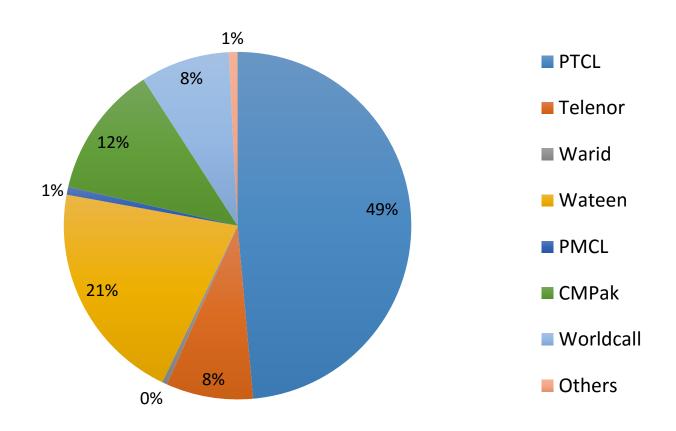
EXAMPLES OF WHAT COULD BE DONE RE SUFFICIENT CONDITION

India: Subsidy disbursed per operator (%)



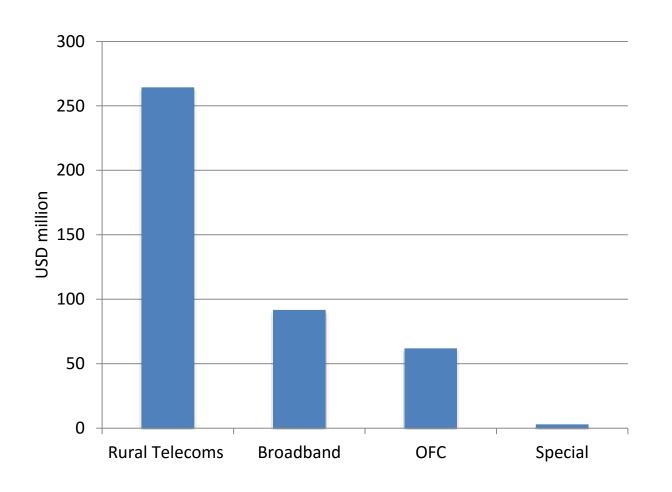
Source: Universal Service Fund of India (2016, Oct 05) Share of service providers in total subsidy disbursed.

Pakistan: Subsidy per operator



Source: Universal Service Fund (2014) Financial statements. Graphic by authors

Pakistan: Subsidy by project



Special projects include pilot projects to enable connectivity

- For the visually impaired
- Between 3 main hospitals and 12 health care centers in semi urban areas

Source: Universal Service Fund of Pakistan (2016, Oct 07) Projects. Graphic by authors

RECOMMENDATIONS

Compile ADRs and YDRs for all countries with universal-service programs, or for subsets that have comparative or persuasive value

- The proposed metrics may easily be applied to document the necessary conditions of performance
- Regular reporting, at least of underlying data essential
 - Third parties such as LIRNEasia or ITU/APT/ESCAP type international organizations can compile
 - Right to Information laws can be used, in instances when agencies are recalcitrant

Develop acceptable and broadly objective accounts of how the funds have been expended

- Even in instances where funds are being disbursed, it is important to assess whether the disbursements are for stated purposes
 - Credibility of assessing organization is important
 - IGOs are credible, but timid
 - Research organizations are forthright, but may lack credibility and may lack resources

Take remedial actions to improve necessary and sufficient conditions of performance or reduce inflows

- Based on the conclusions drawn from the assessments, remedial action can be taken
 - Systematic evaluations by national governments/boards
 - New programs (e.g., BharatNet)
 - Improved administration
 - Emergency brakes
 - Percentages of tax/levy decreases may be triggered