## **On-Line Appendix for:**

## *Hybrid Regimes* for Local Public Goods Provision: A Framework for Analysis

Table A.1. Empirical studies\* of Local Public Goods Provision\*\* in the Developing World

| Author/Date                                                              | Country                   | Sector/service                                                                   | Focus                            | If NSP***                                                          |
|--------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------|
|                                                                          | Focus                     |                                                                                  | on/assumes<br>state<br>delivery? | described, what type?                                              |
| Agostini,<br>Brown, Zhang<br>(2016)                                      | China                     | Spending in infrastructure, land projects                                        | Yes                              |                                                                    |
| Ahlborg,<br>Boran, Jagers,<br>and Soderholm<br>(2015)                    | Cross-country<br>(Africa) | Electricity consumption                                                          | Yes                              |                                                                    |
| Akin,<br>Hutchinson,<br>and Strumpf<br>(2005)                            | Uganda                    | Spending on health services                                                      | Yes                              |                                                                    |
| Alesina,<br>Devleeshauwer,<br>Easterly, Kulat,<br>and Wacziarg<br>(2003) | Cross-country             | Infrastructure<br>quality, infant<br>mortality,<br>educational<br>attainment     | Yes                              |                                                                    |
| Anbarci,<br>Escaleras, and<br>Register (2009)                            | Cross-<br>Country         | Access to water and sanitation                                                   | Yes                              |                                                                    |
| Arvate (2013)                                                            | Brazil                    | Social services (health, education)                                              | Yes                              |                                                                    |
| Auerbach<br>(2016)                                                       | India                     | Access to trash<br>service, health<br>care, quality<br>roads, street<br>lighting | No                               | Considers<br>community self-<br>provision                          |
| Baldwin (2013)                                                           | Zambia                    | Classroom construction                                                           | No                               | Examines coproduction between traditional authorities (chiefs) and |

|                                                |                         |                                                                                                                                 |                                      | politicians                                                              |
|------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------|
| Baldwin and<br>Huber (2010)                    | Cross-country           | Contract<br>enforcement,<br>infrastructure<br>spending and<br>access, etc.                                                      | Yes                                  |                                                                          |
| Bandiera and<br>Levy (2011)                    | Indonesia               | Spending on<br>Infrastructure,<br>social services                                                                               | Yes                                  |                                                                          |
| Banerjee, Iyer,<br>and<br>Somanathan<br>(2005) | India                   | Infrastructure (access)                                                                                                         | Yes                                  |                                                                          |
| Banerjee and<br>Somanathan<br>(2007)           | India                   | Infrastructure (facilities built)                                                                                               | Yes (with caveat about water sector) |                                                                          |
| Barr, Lindelow,<br>and Serneels<br>(2009)*     | Ethiopia                | Health services                                                                                                                 | Yes                                  |                                                                          |
| Beekman,<br>Bulte, Nillesen<br>(2014)*         | Liberia                 | Public investment                                                                                                               | No                                   | Examine private willingness to contribute to efforts of chief/government |
| Bell (2011)                                    | Cross-country           | Expenditures on health, education, welfare, as well as educational attainment, literacy, human capital stock, death rates, etc. | Yes                                  |                                                                          |
| Bernauer and<br>Koubi (2009)                   | Cross-country (by city) | Air pollution                                                                                                                   | Yes                                  |                                                                          |
| Besley, Pande,<br>Rahman, and<br>Rao (2004)    | India                   | Infrastructure access                                                                                                           | Yes                                  |                                                                          |
| Besley, Pande,<br>and Rao (2007)               | India                   | Spending on infrastructure, targeting of ration cards, social services                                                          | Yes                                  |                                                                          |
| Burgess,<br>Gedwab,<br>Miguel,                 | Kenya                   | Spending on,<br>construction of<br>roads                                                                                        | Yes                                  |                                                                          |

|                 | T            | 1                | T     |                    |
|-----------------|--------------|------------------|-------|--------------------|
| Morjaria, Padro |              |                  |       |                    |
| I Miquel (2015) |              |                  |       |                    |
| Caldeira,       | Benin        | Expenditures     | Yes   |                    |
| Foucault, Rota- |              | _                |       |                    |
| Graziosi (2015) |              |                  |       |                    |
| Cammett and     | Lebanon      | Location of      | No    | Examines           |
| Issar (2010)    | Lecunon      | welfare          | 110   | services offered   |
| 13341 (2010)    |              | agencies         |       | by sectarian       |
|                 |              | agencies         |       |                    |
| G 1             | X7.          | E 1              | NT    | organizations      |
| Carlsson,       | Vietnam      | Financial        | No    | Field experiment   |
| Johansson-      |              | contributions    |       | involves           |
| Stenman,        |              | toward bridge    |       | community          |
| Khanh Nam       |              | construction     |       | contributions      |
| (2015)*         |              |                  |       |                    |
| Carpenter,      | Thailand,    | Financial        | No    | Lab in field       |
| Daniere and     | Vietnam      | contributions    |       | experiment         |
| Takahashi       |              | towards          |       | examining          |
| (2004)*         |              | services         |       | differences in     |
| (2001)          |              | Services         |       | contribution rates |
|                 |              |                  |       | in absence or in   |
|                 |              |                  |       | tandem with        |
|                 |              |                  |       |                    |
| G 11: 1         | D '1         | T 11:            | **    | government         |
| Caselli and     | Brazil       | Expenditures     | Yes   |                    |
| Michaels        |              | on local         |       |                    |
| (2013)          |              | services, access |       |                    |
|                 |              | to services      |       |                    |
| Casey,          | Sierra Leone | Stock and        | No    | Co-production      |
| Glennersten,    |              | quality of local |       | between            |
| and Miguel      |              | public services  |       | government-        |
| (2012)          |              | infrastructure   |       | sponsored CDD      |
|                 |              |                  |       | program and        |
|                 |              |                  |       | local              |
|                 |              |                  |       | communities        |
| Chattopadhyay   | India        | Infrastructure   | Yes   | Communics          |
| and Duflo       | illuia       |                  | 1 05  |                    |
|                 |              | quality and      |       |                    |
| (2004)          | ) / 1:       | access           | N.T.  | D                  |
| Chauvet,        | Mali         | Access to        | No    | Examines impact    |
| Gubert,         |              | infrastructure,  |       | of Home Town       |
| Mercier,        |              | education        |       | Associations       |
| Mesple-Somps    |              |                  |       | (migrant           |
| (2015)          |              |                  |       | associations)      |
| Chen, Huhe      | China        | Public           | Yes   |                    |
| (2013)          |              | expenditures     |       |                    |
| ( )             |              | (various)        |       |                    |
| Chhibber and    | India        | Spending,        | Yes   |                    |
| Nooruddin       | IIIdid       | voter            | 1 0.5 |                    |
| TYOUTUUUIII     |              | 10101            |       | 1                  |

| (2004)          |               | perceptions of  |                |                    |
|-----------------|---------------|-----------------|----------------|--------------------|
| (2004)          |               | electricity,    |                |                    |
|                 |               | water           |                |                    |
| Clay and Thomas | China         |                 | Vac            |                    |
| Chu and Zheng   | Cillia        | Expenditures    | Yes            |                    |
| (2013)          |               | on              |                |                    |
|                 |               | infrastructure  |                |                    |
| G (2014)        | G ' T 1       | and education   | **             |                    |
| Cooray (2014)   | Sri Lanka     | Infrastructure  | Yes            |                    |
| (2000)          |               | access          | **             |                    |
| Deacon (2009)   | Cross-country | Secondary       | Yes            |                    |
|                 |               | school          |                |                    |
|                 |               | enrollment,     |                |                    |
|                 |               | water and       |                |                    |
|                 |               | sanitation      |                |                    |
|                 |               | access, road    |                |                    |
|                 |               | infrastructure  |                |                    |
| Deininger and   | Uganda        | Infrastructure, | Yes            |                    |
| Mpuga (2005)    |               | social services |                |                    |
| Dell (2010)     | Peru          | Roads           | No             | Public goods       |
|                 |               | construction,   |                | provided both by   |
|                 |               | literacy and    |                | state and          |
|                 |               | schooling       |                | hacienda owners    |
| Desmet,         | Cross-country | Variety of      | Yes (implicit) |                    |
| Ortuno-Ortin,   |               | measures of     |                |                    |
| Wacziarg        |               | access to and   |                |                    |
| (2012)          |               | quality of      |                |                    |
|                 |               | services and    |                |                    |
|                 |               | infrastructure  |                |                    |
| Diaz-Cayeros,   | Mexico        | Infrastructure  | No             | Traditional        |
| Magaloni, and   |               | access          |                | institutions (usos |
| Euler (2014)    |               |                 |                | y costumbres)      |
| Duan and Zhan   | China         | Local public    | Yes            |                    |
| (2011)          |               | spending        |                |                    |
| Duquette-Rury   | Mexico        | Water and       | No             | Examines           |
| (2014)          |               | sanitation,     |                | coproduction       |
| (====)          |               | drainage,       |                | between            |
|                 |               | electricity     |                | government and     |
|                 |               | access          |                | migrant            |
|                 |               |                 |                | associations       |
| Egel (2013)     | Yemen         | Education       | No             | Examines           |
|                 |               |                 |                | allocation of      |
|                 |               |                 |                | donor-funded       |
|                 |               |                 |                | teachers and       |
|                 |               |                 |                | classrooms         |
| Enikolopov and  | Cross-country | Immunization    | Yes            | VIGSSI COIIIS      |
| Zhuravskaya     | C1033 Country | rates, infant   | 103            |                    |
| Liiuiavskaya    | 1             | races, illialit |                | 1                  |

| (2007)                      |               | mortality,                 |      |                                |
|-----------------------------|---------------|----------------------------|------|--------------------------------|
| (2007)                      |               | illiteracy,                |      |                                |
|                             |               | teacher/student            |      |                                |
|                             |               | ratio                      |      |                                |
| Faguet (2004)               | Bolivia       | Government                 | Yes  |                                |
| raguet (2004)               | Donvia        | expenditure                | 1 03 |                                |
| Franck and                  | Cross-country | Education,                 | Yes  |                                |
| Rainer (2012)               | (Africa)      | health                     | 1 65 |                                |
| Gajwani and                 | India         | Infrastructure             | Yes  |                                |
| •                           | Illula        |                            | 1 65 |                                |
| Zhang (2015)                | Cross sountry | David roads                | No   | Examines                       |
| Gennaioli, N.               | Cross-country | Paved roads,               | INO  |                                |
| & Rainer, I.                | (Africa)      | immunizations, school      |      | efficacy of co-                |
| (2007)                      |               | attainment                 |      | production of local chiefs and |
|                             |               | attaininent                |      | central                        |
|                             |               |                            |      |                                |
| Gibson and                  | Zambia        | Public                     | Yes  | government                     |
| Hoffman                     | Zaiiillia     |                            | 1 68 |                                |
| (2013)                      |               | expenditure                |      |                                |
|                             | Zambia        | Coording on                | Yes  |                                |
| Gisselquist,                | Zamoia        | Spending on, enrollment in | i es |                                |
| Leiderer, Nin-              |               | health and                 |      |                                |
| Zarazua (2016)              |               | education                  |      |                                |
|                             |               |                            |      |                                |
| Clamparatan                 | Sierra Leone  | services Infrastructure    | No   | Community                      |
| Glennersten,<br>Miguel, and | Sierra Leone  | (facilities built,         | INO  | Community participation in     |
| Rotherberg                  |               | `                          |      | efforts to                     |
| (2013)                      |               | etc.)                      |      | improve local                  |
| (2013)                      |               |                            |      | infrastructure                 |
|                             |               |                            |      | and services;                  |
|                             |               |                            |      | traditional                    |
|                             |               |                            |      | authorities                    |
|                             |               |                            |      | (chiefs)                       |
| Golooba-                    | Rwanda and    | Access to                  | No   | Compares public                |
|                             |               | water                      | INO  | with private                   |
| Mutebi (2012)               | Uganda        | water                      |      | sector and                     |
|                             |               |                            |      |                                |
|                             |               |                            |      | community provision            |
| Gonzalez                    | Mexico        | Spending on                | Yes  | provision                      |
| (2002)                      | IVICATO       | infrastructure             | 1 68 |                                |
| Grossman                    | Uganda        | Agricultural               | No   | Studies farmer                 |
| (2014)                      | Oganua        | community                  | 110  | associations                   |
| (2017)                      |               | services                   |      | associations                   |
| Habyarimana,                | Uganda        | Variety of                 | No   | Focus on                       |
| Humphreys,                  | Oganua        | services                   | 110  | community-                     |
| Posner, and                 |               | provided                   |      | _                              |
| rosher, and                 |               | provided                   |      | level,                         |

| Weinstein (2009)*                      |                    | cooperatively                                                                  |     | cooperative initiatives related to security, drainage, etc.                                         |
|----------------------------------------|--------------------|--------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------|
| Hoop, van<br>Kempen and<br>Fort (2011) | Peru               | Community sanitation education                                                 | No  | Individual contributions to NGO training for community                                              |
| Huhe, Chen,<br>Tang (2015)             | China              | Access to water, expenditure on social welfare and agricultural infrastructure | Yes |                                                                                                     |
| Jack and                               | Bolivia            | Environmental                                                                  | No  | Community                                                                                           |
| Recalde (2015) Jackson (2013)          | Cross-             | education Access to                                                            | No  | contributions Considers                                                                             |
| Jackson (2013)                         | country,<br>Africa | drinking water,<br>electricity,<br>education                                   | NO  | possibility of<br>community self-<br>provision (but<br>not private<br>providers)                    |
| Javaid and Falk (2015)*                | Pakistan           | Cooperation with community irrigation systems                                  | No  | Examine how existence of traditional authorities, legal pluralism affect contributions, sanctioning |
| Joshi and<br>Mason (2011)              | Nepal              | Access to sanitation, primary education                                        | Yes | 5                                                                                                   |
| Kochar (2008)                          | India              | Education expenditures                                                         | Yes |                                                                                                     |
| Kochar, Singh<br>and Singh<br>(2009)   | India              | Spending on infrastructure and social services                                 | Yes |                                                                                                     |
| Kramon and Posner (2016)               | Kenya              | Educational attainment                                                         | Yes |                                                                                                     |
| Kung, Cai, Sun<br>(2009)               | China              | Expenditures on infrastructure, education                                      | Yes |                                                                                                     |
| Khwaja (2009)                          | Pakistan           | Infrastructure                                                                 | No  | Examines                                                                                            |

|                                                                  |                               | maintenance                                                      |     | community maintenance of government and NGO-sponsored projects        |
|------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------|-----|-----------------------------------------------------------------------|
| La Porta,<br>Lopez-de-<br>Silanes,<br>Shleifer,<br>Vishny (1999) | Cross-country                 | Quality of infrastructure and social services                    | Yes |                                                                       |
| Lee, Walter-<br>Drop, Wiesel<br>(2014)                           | Cross-country                 | Access to health, education, water, electricity, health outcomes | No  | Show that state capacity doesn't predict local public goods provision |
| Li (2014)                                                        | China                         | Access,<br>expenditures<br>on education,<br>health               | Yes |                                                                       |
| Lu (2015)                                                        | China                         | Education spending                                               | Yes |                                                                       |
| Luo, Zhang,<br>Huang, Rozelle<br>(2007)                          | China                         | Spending on infrastructure and social services                   | Yes |                                                                       |
| Luo, Zhang,<br>Huang, Rozelle<br>(2010)                          | China                         | Spending on infrastructure and social services                   | Yes |                                                                       |
| MacLean (2011)                                                   | Cross-<br>Country<br>(Africa) | Access to social services                                        | No  | Measures<br>consumption of<br>public and<br>private services          |
| Meng and Zhang (2011)                                            | China                         | Local public spending                                            | Yes |                                                                       |
| Meseguer and<br>Aparicio (2012)                                  | Mexico                        | Spending on local infrastructure                                 | No  | Co-production between government and migrant hometown associations    |
| Miguel (2004)                                                    | Kenya,<br>Tanzania            | Spending on education, water                                     | No  | School committee contributions to                                     |

| Miguel and Gugerty (2005)  Mu and Zhang (2014)  Mu sasachio, Brazil Education Yes expenditures  Mussacchio, Fritscher, Viarengo (2014)  Mussacchio, Brazil Education Yes expenditures  Mooruddin and Simmons (2015)  Okten and Osili (2004)  Olken (2010)  Indonesia Infrastructure expenditures, quality  Olken (2010)  Indonesia Infrastructure expenditures, quality  Olken (2010)  Olken (2010)  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014)  Rosacks and Levi (2010)  Sarkhel (2015)  Sarkhel (2015)  Sarkhel (2015)  China Various Yes education  No Examining community contributions of finances and labor  Pesqué-Cela, Cross-country Social programs  Access to education, social programs  Sacks and Levi (2014)  Sarkhel (2015)  Sarkhel (2015)  Sato (2008)  China Various Yes  Silva-Ochoa Mexico Infrastructure Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |               |                                  |     | state schools (co-<br>production)                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|----------------------------------|-----|----------------------------------------------------|
| Mussacchio, Fritscher, Viarengo (2014)   Brazil   Education   Yes   Education   Education   Education   Examining   Education   Education   Examining   Education   Education   Examining   Education   Ed | _                                  | Kenya         | -                                | No  | Parental contributions to                          |
| Fritscher, Viarengo (2014)  Nooruddin and Simmons (2015)  Okten and Osili (2004)  Olken (2007)  Indonesia  Infrastructure expenditures, quality  Olken (2010)  Indonesia  Infrastructure access  Olken and Singhal (2009)  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014)  Sacks and Levi (2010)  Sarkhel (2015)  Sarkhel (2015)  India  Expenditures, quality  Various  Various  Various  Ves  Access to education, social programs  Sacks and Levi (2010)  Sarkhel (2015)  India  River bank preservation  Examining community contributions of finances and labor  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014)  Sacks and Levi (2010)  Sarkhel (2015)  India  River bank preservation  No  Examine conditions under which households would contribute to private efforts  Sato (2008)  China  Various  Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | _                                  | China         | spending                         | Yes |                                                    |
| Simmons (2015) Okten and Osili (2004) Olken (2007) Indonesia Infrastructure expenditures, quality Olken (2010) Indonesia Infrastructure access Olken and Singhal (2009) Olken (2010) Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009) Rosas, Johnston, and Hawkins (2014) Sacks and Levi (2010) Sarkhel (2015) India River bank preservation  development, education Broad set of No Community organizations  No Examining community contributions of finances and labor  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009) Rosas, Johnston, and Hawkins (2014) Sarkhel (2015) Sarkhel (2015) Cross- Country (Africa)  River bank preservation  No Examine conditions under which households would contribute to private efforts  Sato (2008) China  Various  Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Fritscher,<br>Viarengo             | Brazil        |                                  | Yes |                                                    |
| College (2007)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Simmons                            | India         | development,                     | Yes |                                                    |
| Olken (2010) Indonesia Infrastructure access  Olken and Singhal (2009) Informal taxation for public goods  Pesqué-Cela, V., Tao, R., L.iu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014) Sacks and Levi (2010) Country (Africa)  Sarkhel (2015) India  Examining community contributions of finances and labor finances and labor servation  No Self-governing, rural social organizations  Yes  Access to education, social programs  Access to food Yes  Examine conditions under which households would contribute to private efforts  Sato (2008) China Various Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                    | Indonesia     |                                  | No  |                                                    |
| Olken and Singhal (2009)  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014) Sacks and Levi (2010) Sarkhel (2015)  Sarkhel (2015)  Informal taxation for public goods  Various  No Self-governing, rural social organizations  Yes  Venezuela Access to education, social programs  Access to food Yes  Cross-Country (Africa)  Sarkhel (2015)  India River bank preservation  River bank preservation  River bank preservation  No Examine conditions under which households would contribute to private efforts  Sato (2008)  China  Various  Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Olken (2007)                       | Indonesia     | expenditures,                    | Yes |                                                    |
| Singhal (2009)  Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014)  Sacks and Levi (2010)  Sarkhel (2015)  India  River bank preservation  Lixatation for public goods  No Self-governing, rural social organizations  Yes  education, social programs  Access to food Yes  Examine conditions under which households would contribute to private efforts  Sato (2008)  China  Various  Various  Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Olken (2010)                       | Indonesia     |                                  | Yes |                                                    |
| V., Tao, R., Liu, Y., & Sun, L. (2009)  Rosas, Johnston, and Hawkins (2014)  Sacks and Levi (2010)  Sarkhel (2015)  India  River bank preservation  Sato (2008)  China  Various  Yes  rural social rural social organizations  Rives  Access to Access to food Yes  Examine conditions under which households would contribute to private efforts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                    | Cross-country | taxation for                     | No  | community contributions of finances and            |
| Johnston, and Hawkins (2014) social programs  Sacks and Levi (2010) Country (Africa)  Sarkhel (2015) India River bank preservation Preservation  Sato (2008) China Various Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | V., Tao, R.,<br>Liu, Y., & Sun,    | China         | Various                          | No  | rural social                                       |
| (2010) Country (Africa)  Sarkhel (2015) India River bank preservation  No Examine conditions under which households would contribute to private efforts  Sato (2008) China Various Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Johnston, and<br>Hawkins<br>(2014) | Venezuela     | education,<br>social<br>programs |     |                                                    |
| preservation conditions under which households would contribute to private efforts  Sato (2008) China Various Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | (2010)                             | Country       | Access to food                   | Yes |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |               |                                  |     | conditions under which households would contribute |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |               |                                  |     |                                                    |

| (2009)                                             |                | access, quality                                                                                              |      |                  |
|----------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------|------|------------------|
|                                                    |                | of social                                                                                                    |      |                  |
|                                                    |                | services                                                                                                     |      |                  |
| Rosenzweig                                         | Tanzania       | Access to                                                                                                    | Yes  |                  |
| (2015)                                             |                | electricity,                                                                                                 |      |                  |
|                                                    |                | piped water                                                                                                  |      |                  |
| Thachil and                                        | India          | Public                                                                                                       | Yes  |                  |
| Teitelbaum                                         |                | expenditures                                                                                                 |      |                  |
| (2015)                                             |                | on                                                                                                           |      |                  |
|                                                    |                | development                                                                                                  |      |                  |
|                                                    |                | projects                                                                                                     |      |                  |
| Tsai (2007)                                        | China          | Infrastructure                                                                                               | Yes  |                  |
|                                                    |                | access, social                                                                                               |      |                  |
|                                                    |                | services                                                                                                     |      |                  |
| Tsai (2011)                                        | China          | Infrastructure                                                                                               | No   | Examines variety |
|                                                    |                |                                                                                                              |      | of               |
|                                                    |                |                                                                                                              |      | "coproduction"   |
|                                                    |                |                                                                                                              |      | arrangements     |
| Tu, Mol,                                           | China          | Land                                                                                                         | No   | Examine citizen  |
| Zhang, Ruben                                       |                | conservation                                                                                                 |      | contributions to |
| (2011)                                             |                |                                                                                                              |      | public program   |
| Uchimura,                                          | China          | Health                                                                                                       | Yes  |                  |
| Jutting (2009)                                     |                | outcomes                                                                                                     |      |                  |
| Visser and                                         | South Africa   | Cooperation                                                                                                  | No   | Focus on fishing |
| Burns (2015)*                                      |                | and sanctioning                                                                                              |      | communities      |
|                                                    |                | related to                                                                                                   |      |                  |
| W : (2011)                                         | T 1'           | fishing quotas                                                                                               | NT   | Examines         |
| Waring (2011)                                      | India          | Community                                                                                                    | No   |                  |
|                                                    |                | irrigation                                                                                                   |      | voluntary        |
|                                                    |                |                                                                                                              |      | contributions to |
|                                                    |                |                                                                                                              |      | local irrigation |
| Xu and Yao                                         | China          | Spanding on                                                                                                  | Yes  | institutions     |
| (2015)                                             | Cillia         | Spending on schools,                                                                                         | 1 68 |                  |
| (2013)                                             |                | infrastructure,                                                                                              |      |                  |
|                                                    |                | i initiastructure.                                                                                           |      |                  |
| 1                                                  |                |                                                                                                              |      |                  |
| Vi Hara                                            | China          | forestation                                                                                                  | Vac  |                  |
| Yi, Hare,                                          | China          | forestation Spending on,                                                                                     | Yes  |                  |
| Yi, Hare,<br>Zhang (2011)                          | China          | forestation Spending on, access to                                                                           | Yes  |                  |
|                                                    | China          | forestation Spending on, access to infrastructure,                                                           | Yes  |                  |
| Zhang (2011)                                       |                | forestation Spending on, access to infrastructure, social services                                           |      |                  |
| Zhang (2011)  Zhan, Huan,                          | China<br>China | forestation Spending on, access to infrastructure, social services Spending on                               | Yes  |                  |
| Zhang (2011)                                       |                | forestation Spending on, access to infrastructure, social services Spending on education,                    |      |                  |
| Zhang (2011)  Zhan, Huan, Zeng (2015)              | China          | forestation  Spending on, access to infrastructure, social services  Spending on education, health           | Yes  |                  |
| Zhang (2011)  Zhan, Huan, Zeng (2015)  Zhang, Fan, |                | forestation Spending on, access to infrastructure, social services Spending on education, health Spending on |      |                  |
| Zhang (2011)  Zhan, Huan, Zeng (2015)              | China          | forestation  Spending on, access to infrastructure, social services  Spending on education, health           | Yes  |                  |

| Zhang, Luo, | China | Public projects | Yes |  |
|-------------|-------|-----------------|-----|--|
| Lui, Rozell |       |                 |     |  |
| (2006)      |       |                 |     |  |
| Zheng, Kahn | China | Transit, green  | Yes |  |
| (2013)      |       | space           |     |  |

<sup>\*</sup>Table only includes laboratory or "laboratory in the field" experiments if they were tailored to specific institutional or organizational contexts. Such experiments are noted with an asterisk.

<sup>\*\*</sup>Contains results of article searches using the term "public good" and "local public goods," using major academic search engines.

<sup>\*\*\*</sup>Non-state provider.

Figure A.1 Example Hybrid Regimes for Local Public Goods Provision

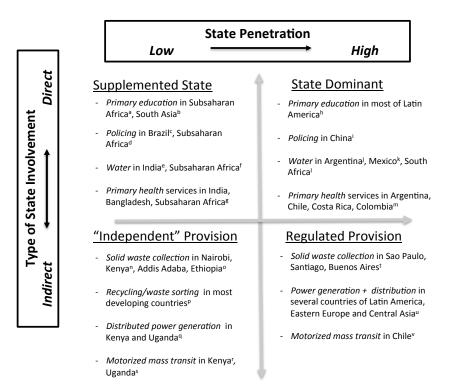


Figure 3 notes: <sup>a</sup>Kramon and Posner (2013); <sup>b</sup>The Economist (2015); <sup>c</sup>Caldeira (2000); <sup>d</sup>LeBas (2013); <sup>e</sup>Burt and Ray (2014), McKenzie & Ray (2009); <sup>f</sup>Keener et al. (2010); <sup>g</sup>Bloom et al. (2011), Sudhinaraset et al. (2013); <sup>h</sup>Wolff et al. (2005); <sup>i</sup>Zhong & Grabosky (2009); <sup>j</sup>Post (2014); <sup>k</sup>Herrera (2017); <sup>1</sup>Mazengia (2005), <sup>m</sup>Atun et al. (2015); <sup>n</sup>Njoroge et al. (2014); <sup>o</sup>Alemu (2017); <sup>p</sup>Ezeah et al. (2013); <sup>q</sup>MacLean and Brass (2015); <sup>f</sup>Klopp et al. (2014); <sup>s</sup>Goodfellow (2015); <sup>t</sup>Bartone et al. (1991); <sup>m</sup>Besant-Jones (2006); <sup>v</sup>Muñoz & Gschwender (2008)

## **Prevalence of the four system types:**

The tables below illustrate and indicate the prevalence of the four types of "hybrid systems" introduced in the paper. To assemble these tables, we surveyed the policy literatures on water and sanitation and urban transport. Our engagement with these literatures helped us develop sector-specific metrics appropriate for placing systems in a particular cell. Note that because the strength and mode of state involvement in each sector can vary within a given country, some of our examples constitute particular urban systems rather than country systems.

- For water and sanitation systems, we place in the **state dominant** category systems where state-managed water and sanitation utilities deliver potable water close to 24 hours a day. In such contexts, households on the network will have less need to turn to alternative providers. Systems where more than 50% of the urban population does not have access to household connections are excluded from this category, as the majority of the population will need to turn to alternative providers, regardless of the quality of state services.
- The **supplemented state** category includes cases where state-managed water and sanitation services are intermittent and/or water quality is poor, so that households on the network face incentives to supplement state services. Relatedly, systems where less than 50% of the population possesses household connections to state-managed utility services fall in this category.
- The **regulated provision** category for urban transit includes cases in which the public sector explicitly delegates the provision of mass transit to non-state providers through concession contracts or franchise agreements, and then actively regulates fares, schedules, routes, and safety. These state-sanctioned providers service the majority of those reliance on mass transit.
- The **independent provision** category for urban transit includes cases in which the majority of the population reliant on mass transit turns to non-state providers without explicit contracts to operate services. Rather, loosely regulated or completely unregulated providers service the bulk of the population.

Table A.2. Examples of "State-Dominant" Water and Sanitation Systems

| Coun   | GNI per | System Characteristics | Studies         |
|--------|---------|------------------------|-----------------|
| try/Ci | capita  |                        | describing this |
| ties,  | (2013)* |                        | example         |
| or     |         |                        |                 |
| regio  |         |                        |                 |
|        |         |                        |                 |

| Mexi          | 9,770  | - 100% of the population has access to utility water (Berg & Danilenko, 2011)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Herrera                                                                                  |
|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| со            |        | <ul> <li>Services are provided 24hrs/day, but some regions have service intermittency and receive water only a few hours a week and based on unpredictable schedules</li> <li>2,571 state-owned, legally autonomous water utilities provide services in Mexico (the majority are municipal operators, 10 are inter-municipal and 5 are state-level operators)</li> </ul>                                                                                                                                                                                                                | (Unpublished<br>Manuscript)                                                              |
| Brazil        | 12,310 | <ul> <li>- 84% of the population has access to utility water (Berg &amp; Danilenko, 2011)<sup>1</sup></li> <li>- 98% of the urban population has piped water on premises</li> <li>- Services are provided 24hrs/day in 2015 (WHO-UNICEF, 2015)</li> <li>- In 3,706 municipalities out of 5,507 (67%), services are provided by state water companies; in 1,676 (30%) services are provided by a mix of municipal water providers, private concessionaires, private and social organizations; and in the remaining 2% water was supplied through standpipes and water tankers</li> </ul> | Marin (2009)<br>Gamper-<br>Rabindran,<br>Khan &<br>Timmins (2010)                        |
| Urug<br>uay   | 15,640 | <ul> <li>- Publicly owned and operated Obras Sanitarias del Estado is the main water provider</li> <li>- Approximately 98% of the population has access to piped utility water</li> <li>- Services are provided 24hrs/day</li> <li>- Water quality is generally excellent (less so in informal settlements)</li> <li>- High income households consume bottled water</li> </ul>                                                                                                                                                                                                          | Spronk, Crespo,<br>& Olivera<br>(2014)<br>Borraz,<br>Pampillón, &<br>Olarreaga<br>(2013) |
| Costa<br>Rica | 9,780  | <ul> <li>- 100% of the urban population has access to water piped on premises (WHO-UNICEF, 2015)</li> <li>- In 2004, services provided 24hrs/day, 7days/week (Berg &amp; Danilenko, 2011)</li> <li>- In 2007, most urban areas serviced by autonomous state agency, The Costa Rican Institute of Aqueducts and Sewers (AyA)</li> </ul>                                                                                                                                                                                                                                                  | de Albuquerque (2009)                                                                    |

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<sup>&</sup>lt;sup>1</sup> Note that this estimate most likely overstates access, because utilities typically calculate coverage ratios only for "authorized" urban areas (see Gamper-Rabindran, Khan, & Timmins, 2010; Marin, 2009 for alternative measures).

| South<br>Afric | 7,410 | - In 2015, 92% of the urban population had access to piped water on premises (WHO-UNICEF, 2015) - In 2006, services provided 24hrs/day (Berg & Danilenko, 2011) | von Schnitzler (2008) |
|----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| a              |       | - Water service provision is shared by various entities including: municipalities who can create water                                                          | (n.d.)                |
|                |       | companies and subcontract provision, and government water boards                                                                                                |                       |
|                |       | -South Africa enshrines the right to the water in its constitution and has established the basic right to                                                       |                       |
|                |       | free water for poor South African citizens                                                                                                                      |                       |

<sup>\*</sup>GNI per capita, Atlas method (current US\$), Source: World Development Indicators database, World Bank Last updated: 11/15/15

Table A.3. Examples of "Supplemented State" Water and Sanitation Systems

| Country/<br>Cities, or<br>region | GNI per<br>capita<br>(2013)* | System Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Studies<br>describing<br>this<br>example                                                         |
|----------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Ghana<br>(Accra)                 | \$1,750                      | <ul> <li>State provides services directly via the Ghana Water Company Limited (GWCL)</li> <li>GWCL only services about 60% of urban/peri-urban residents</li> <li>Water services intermittent (ranging from not at all to once a week to seven days a week)</li> <li>Urban poor rely heavily on informal vendors, community standpipes and surface water sources, and small-scale storage to cope with intermittency</li> </ul>                                                                                                                                                                             | Gerlach & Franceys (2010); Peloso and Morinville (2014)                                          |
| Tanzania<br>(Dar es<br>Salaam)   | \$840                        | <ul> <li>In early 2000, 22% of urban households had access to piped water, 45% had access to standposts and 19% to wells and boreholes</li> <li>Roughly as many illegal as legal connections</li> <li>Low rates of billing and collection efficiency, tariffs dry far below operating costs and a host of other problems make the urban water authority unable to meet demand for water</li> <li>Many areas go for several days without supply; water rationing is common</li> <li>Vendors common in areas where public supply is lacking or of poor quality, especially in informal settlements</li> </ul> | Banerjee & Morella (2011); Kjellén (2000); Kyessi (2005); Solo (1999); Water Aid Tanzania (2003) |
| Nepal<br>(Kathmandu)             | \$720                        | <ul> <li>Water provided by the Kathmandu Valley Water Supply Management Board, an autonomous government body</li> <li>70% of Kathmandu's population possesses a household connection</li> <li>Services intermittent (&lt;4 hours a day in most of city)</li> <li>Households cope with deficient state services by collecting water from public taps or purchasing from vendors and neighbors, investing in tube wells, storage tanks, and filtration systems, and boiling water before drinking or cooking</li> </ul>                                                                                       | Pattanayak,<br>Yang,<br>Whittington<br>, & Bal<br>Kumar<br>(2005)                                |

| Nigeria<br>(Lagos)    | \$2,700 | <ul> <li>Service provision by state water corporations</li> <li>In early 2000s, approximately 15% of the urban population had access to piped water, 17% had access to standposts, and 48% had access to boreholes and wells; by 2015 access to piped urban water decreased to 3%</li> <li>Lagos state water corporation sells water to small-scale providers at 500+ public standpipes, who in turn sell water to households outside network</li> <li>Public perceives utility employees to benefit financially from water sales to private tankers</li> </ul>                              | Asian Developme nt Bank (2012) Acey (2011); Banerjee & Morella (2011); Larbi et al. (2004); WHO- UNICEF (2015) |
|-----------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Yemen<br>(San'a City) | \$1,300 | <ul> <li>Urban water provided by the National Water and Sanitation Authority, non-urban water provided by 15 local corporations and autonomous public utilities</li> <li>71% of the urban population had access to piped water in 2010</li> <li>Supply intermittent (service every other day)</li> <li>Low water pressure leads to shortages even on service days for some households with official connections, who turn to private suppliers</li> <li>Within and outside of the public network, households rely on private vendors (e.g. costly water kiosks and tanker trucks)</li> </ul> | Al-Hamdi<br>& Alaerts<br>(2000);<br>WHO-<br>UNICEF<br>(2015);<br>Lichtenthael<br>er (2010)                     |
| Ethiopia              | \$470   | <ul> <li>- 48% of the urban population possess household connections to piped utility water, and 41% have access to standposts</li> <li>- Services provided approximately 23 hrs/day</li> <li>- A number of water utilities provide piped water including Addis Ababa Water Services Authority (AWSA), Nazareth Water Company (ADAMA), and Dire Dawa</li> <li>- In Addis Ababa, 100% of standposts are community-managed with oversight from utilities</li> <li>- 26% of households resell water; water resale is legal and not licensed by utilities</li> </ul>                             | Banerjee & Morella (2011); Keener, Luengo, & Banerjee (2010)                                                   |

| - Water vending also exists |  |
|-----------------------------|--|

Note: Many urban systems in Sub-Saharan Africa would fall in this category as well. See Collignon, B., & Vézina, M. (2000). \*GNI per capita, Atlas method (current US\$), Source: World Development Indicators database, World Bank. Last updated 11/15/15

Table A. 4. Examples of "Regulated Provision" Hybrid Transport Systems

| Country/Ci<br>ties, or<br>region<br>Chile<br>(Santiago) | GNI per capita (2013)* \$15,270 | - State out-sources provision to private companies via concession contracts (trunk lines), and licensing and tendering (for feeder services) - State-regulated providers service most of urban population in major metro areas                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Studies describing case Barter (2008); Ferro,                   |
|---------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
|                                                         |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Munoz, &<br>Behrens<br>(2012);<br>Finn &<br>Walters<br>(2010)   |
| Brazil<br>(Curitaba,<br>Recife,<br>Porto<br>Alegre)     | \$12,310                        | <ul> <li>Formal sector bus transport is usually delivered by private firms with long-term service concessions from public agencies (municipalities regulate city routes, and state governments intercity routes)</li> <li>Regulation governs fares, routes, schedules, labor rules, curbside operations, market entry standards, as well as maintenance and equipment specifications</li> <li>Informal carriers are mainly absent in Belo Horizonte, Porto Alegre, Goiânia, Curitiba, Florianópolis, Belém, and Porto Velho; in São Paulo, Rio de Janeiro, Recife, Fortaleza, Salvador, and Brasilia informal providers also provide services (to a minority of riders)</li> </ul> | Cervero<br>(2000);<br>Ferriera &<br>Golub<br>(2004)             |
| Argentina<br>(Buenos<br>Aires<br>Metro<br>Area)         | \$14,220                        | <ul> <li>- Bus services for Metropolitan Buenos Aires out-sourced to private companies via franchises since the 1990s</li> <li>- The national government regulates fares, routes, etc. and subsidizes urban transport to restrain price increases</li> <li>- Shared taxis ("remises") carried approximately 8% of ridership (relative to 43% for public transit) in the metropolitan area in 2000</li> </ul>                                                                                                                                                                                                                                                                       | Bril-<br>Mascarenha<br>s & Post<br>(2015);<br>Kralich<br>(2005) |
| South                                                   | \$7,410                         | - The South African government contracts with private bus operators for commuter services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ahmed                                                           |

| Africa | - The government subsidizes fares on a per ticket basis, but is attempting to amend all contracts so payments are linked to the kilometers operated (Walters, 2010)  - A large fraction (21%) of trips made via public transit involve full-size buses operated by private companies, while 14% involve publicly-managed rail transport  - In Capetown, 74% of trips are provided by institutional, rather than informal, providers (Godard 2005; data from 1998); informal operators provided 26% of the trips | (2004); Barrett (2003); Finn & Mulley (2011); Finn & Walters (2010); Godard (2005); Lomme (2008); Schalekamp & Behrens (2010); Venter (2013); Walters (2010) |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|

<sup>\*\*</sup>GNI per capita, Atlas method (current US\$), Source: World Bank national accounts data, and OECD National Accounts data files.

Last updated: 14/10/15

Table A. 5. Examples of "Independent" Hybrid Transport Systems

| Country/Ci<br>ties, or<br>region  | GNI per<br>capita<br>(2013)** | System Characteristics                                                                                                                                                                                                                                                                                                                                                                                                   | Studies<br>describing<br>case                    |
|-----------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Georgia<br>(Tsibilis)             | \$3,560                       | <ul> <li>Paratransit providers called "marshrukta" provided 75% of mass transit by 2001</li> <li>Owned by individual entrepreneurs and loosely allocated to routes – granted the rights to operate on a specified line on a month-to-month basis</li> <li>The municipally-owned Tsibilisi Bus Company (TBS), successor to the Soviet-era bus enterprise, services roughly 30% of the surface transport market</li> </ul> | Finn<br>(2008);<br>Finn<br>(2012)                |
| Philippines (Manila) <sup>2</sup> | \$3,300                       | <ul> <li>Paratransit comprised by "jeepneys," jeeps refurbished for small passenger loads, which both compete with and complement Manila's official bus and lightrail services</li> <li>Informal transport represented approx. 76% of total public transport in 1998</li> </ul>                                                                                                                                          | Cervero (2000);<br>Finn (2012);<br>Godard (2005) |
| Thailand (Bangkok)                | \$5320                        | -Paratransit includes 14-18 passenger minibuses, 6-11 person microbuses, three wheelers, and motorcycles and pedicabs -The number of informal vehicles operating in Metro Bangkok on a weekday is 50,000                                                                                                                                                                                                                 | Cervero &<br>Golub<br>(2011)                     |
| Ghana<br>(Accra)                  | \$1,750                       | <ul> <li>- Paratransit operators called "trotros" serviced 71.4% of the market in metropolitan areas in 2008</li> <li>- Legal buses serviced roughly 9% of the market by 2008</li> <li>- These legal bus services are provided by a government bus company, Metro Mass Transit, in major cities</li> </ul>                                                                                                               | Abane (2011);<br>Finn (2012)                     |

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<sup>&</sup>lt;sup>2</sup> Georgia, Philippines, Thailand, and to a lesser extent Ghana, exhibit "free market" hybrid transport systems despite reasonably high state capacity scores. (In the case of Georgia, its percentile ranking rose from 35 in 2003 to 69 in 2013.) While the Philippines and Georgia clearly fall in the lower-middle income category, Thailand does not. Clearly, state capacity in particular sectors can deviate from state capacity in other areas of government.

| Senegal<br>(Dakar)           | \$1,050 | -Paratransit in form of "Car Rapids" (converted vans for 23-32 passengers) dominates mass transport -roughly 95% of marked serviced by paratransit -A small fraction of the market is serviced by a privatized bus operator with large vehicles | World<br>Bank<br>(2005)                                                                         |
|------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Ethiopia<br>(Addis<br>Ababa) | \$470   | -Roughly 73% market share for informal providers in 1986  -Conventional bus services also provided by the publicly owned Anbessa City Bus Enterprise, which has had trouble expanding services in line with urban growth                        | Gebeyehu & Takano (2007); Takano & Mintesnot (2006); Transportat ion Research Laboratory (2002) |
| Uganda<br>(Kampala)          | \$620   | -Public transport in Kampala almost completely dominated by matatus (informal minibuses) and boda-bodas (motorcycle taxis) -The number of <i>boda-boda</i> operators in Uganda reportedly grew by 58.7% per annum in the 2000s.                 | Goodfello<br>w (2015)                                                                           |

<sup>\*\*</sup>GNI per capita, Atlas method (current US\$), Source: World Bank national accounts data, and OECD National Accounts data files. Last updated: 14/10/15

## **Works Cited:**

- Abane, A. M. (2011). Travel behaviour in Ghana: empirical observations from four metropolitan areas. *Journal of Transport Geography*, 19(2), 313–322. https://doi.org/10.1016/j.jtrangeo.2010.03.002
- Acey, C. (2011). The Challenge to Delivery of Public Goods in Rapidly Expanding Cities in Africa: Financing and Implementing Water and Sanitation Policies in Lagos, Nigeria. Presented at the The 4th European Conference on African Studies. Retrieved from https://www.academia.edu/2043669
- Agostini, C. A., Brown, P., & Zhang, X. (2016). Neighbour Effects in the Provision of Public Goods in a Young Democracy: Evidence from China: Neighbour Effects and Provision of Public Goods. *Pacific Economic Review*, 21(1), 13–31. https://doi.org/10.1111/1468-0106.12057
- Ahlborg, H., Boräng, F., Jagers, S. C., & Söderholm, P. (2015). Provision of electricity to African households: The importance of democracy and institutional quality. *Energy Policy*, 87, 125–135. https://doi.org/10.1016/j.enpol.2015.09.002
- Ahmed, Y. (2004). Transformation of Public Transport operations from informal to formal services: An Examination of initiatives by the Western Cape Provincial Department of Transport to transform the minibus-taxi industry. In *Proceedings*.
- Akin, J., Hutchinson, P., & Strumpf, K. (2005). Decentralisation and government provision of public goods: The public health sector in Uganda. *Journal of Development Studies*, 41(8), 1417–1443.
- Alemu, K. T. (2017). Formal and Informal Actors in Addis Ababa's Solid Waste Management System. *IDS Bulletin*, 48(2). https://doi.org/10.19088/1968-2017.116
- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth*, 8(2), 155–194.
- Al-Hamdi, M. I., & Alaerts, G. J. (2000). Structure and Cost of the Water Supply Market in Sana'a City, Yemen. In *Building Partnerships* (pp. 1–10). American Society of Civil Engineers.
- Anbarci, N., Escaleras, M., & Register, C. A. (2009). The ill effects of public sector corruption in the water and sanitation sector. *Land Economics*, 85(2), 363–377.
- Arvate, P. R. (2013). Electoral Competition and Local Government Responsiveness in Brazil. World Development, 43, 67–83.
- Asian Development Bank. (2012). *Nepal Kathmandu Valley Water Supply Improvement Project* (Project Brief No. ARM125066-2) (p. 2). Asian Development Bank.
- Atun, R., De Andrade, L. O. M., Almeida, G., Cotlear, D., Dmytraczenko, T., Frenz, P., ... others. (2015). Health-system reform and universal health coverage in Latin America. *The Lancet*, 385(9974), 1230–1247.
- Auerbach, A. M. (2016). Clients and Communities. World Politics, 68(01), 111-148. https://doi.org/10.1017/S0043887115000313

- Baldwin, K. (2013). Why vote with the chief? Political connections and public goods provision in Zambia. *American Journal of Political Science*, 57(4), 794–809.
- Bandiera, O., & Levy, G. (2011). Diversity and the power of the elites in democratic societies: Evidence from Indonesia. *Journal of Public Economics*, 95(11-12), 1322–1330.
- Banerjee, A., Iyer, L., & Somanathan, R. (2005). History, social divisions, and public goods in rural india. *Journal of the European Economic Association*, *3*(2-3), 639–647.
- Banerjee, A., & Somanathan, R. (2007). The political economy of public goods: Some evidence from India. *Journal of Development Economics*, 82(2), 287–314. https://doi.org/10.1016/j.jdeveco.2006.04.005
- Banerjee, S. G., & Morella, E. (2011). *Africa's Water and Sanitation Infrastructure: Access, Affordability, and Alternatives*. World Bank Publications.
- Barr, A., Lindelow, M., & Serneels, P. (2009). Corruption in public service delivery: An experimental analysis. *Journal of Economic Behavior & Organization*, 72(1), 225–239. https://doi.org/10.1016/j.jebo.2009.07.006
- Barrett, J. (2003). *Organizing in the informal economy: a case study of the minibus taxi industry in South Africa* (ILO Working Paper No. 358158). International Labour Organization. Retrieved from http://ideas.repec.org/p/ilo/ilowps/358158.html
- Barter, P. A. (2008). Public planning with business delivery of excellent urban public transport. *Policy and Society*, 27(2), 103–114.
- Bartone, C. R., Leite, L., Triche, T., & Schertenleib, R. (1991). Private sector participation in municipal solid waste service: experiences in Latin America. *Waste Management & Research*, *9*(6), 495–509.
- Beekman, G., Bulte, E., & Nillesen, E. (2014). Corruption, investments and contributions to public goods: Experimental evidence from rural Liberia. *Journal of Public Economics*, *115*, 37–47. https://doi.org/10.1016/j.jpubeco.2014.04.004
- Bell, C. (2011). Buying Support and Buying Time: The Effect of Regime Consolidation on Public Goods Provision1. *International Studies Quarterly*, *55*(3), 625–646. https://doi.org/10.1111/j.1468-2478.2011.00664.x
- Berg, C. V. den, & Danilenko, A. (2011). The IBNET Water Supply and Sanitation Performance Blue Book: The International Benchmarking Network of Water and Sanitation Utilities Databook. World Bank Publications.
- Bernauer, T., & Koubi, V. (2009). Effects of political institutions on air quality. *Ecological Economics*, 68(5), 1355–1365. https://doi.org/10.1016/j.ecolecon.2008.09.003
- Besant-Jones, J. E. (2006). *Reforming power markets in developing countries: what have we learned?*. World Bank Washington, DC. Retrieved from http://siteresources.worldbank.org/EXTSDNETWORK/Resources/3167627-1183641151284/3959912-1183652588345/besant paper.pdf
- Besley, T., Pande, R., Rahman, L., & Rao, V. (2004). The politics of public good provision: Evidence from Indian local governments. *Journal of the European Economic Association*, 2(2-3), 416–426.

- Besley, T., Pande, R., & Rao, V. (2007). Just rewards? Local politics and public resource allocation in South India. Retrieved from http://eprints.lse.ac.uk/3763/
- Bloom, G., Standing, H., Lucas, H., Bhuiya, A., Oladepo, O., & Peters, D. H. (2011). Making health markets work better for poor people: the case of informal providers. *Health Policy and Planning*, *26*(Suppl. 1), i45–i52. https://doi.org/10.1093/heapol/czr025
- Borraz, F., Pampillón, N. G., & Olarreaga, M. (2013). Water Nationalization and Service Quality. *The World Bank Economic Review*, 27(3), 389–412. https://doi.org/10.1093/wber/lht001
- Bril-Mascarenhas, T., & Post, A. E. (2015). Policy Traps: Consumer Subsidies in Post-Crisis Argentina. *Studies in Comparative International Development*, *50*(1), 98–120. https://doi.org/10.1007/s12116-014-9158-y
- Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., & Padró i Miquel, G. (2015). The Value of Democracy: Evidence from Road Building in Kenya. *American Economic Review*, 105(6), 1817–1851. https://doi.org/10.1257/aer.20131031
- Burt, Z., & Ray, I. (2014). Storage and non-payment: Persistent informalities within the formal water supply of Hubli-Dharwad, India. *Water Alternatives*, 7(1), 106–120.
- Caldeira, E., Foucault, M., & Rota-Graziosi, G. (2015). Decentralisation in Africa and the nature of local governments' competition: Evidence from Benin. *International Tax & Public Finance*, 22(6), 1048–1076.
- Caldeira, T. P. do R. (2000). City of Walls: crime, segregation, and citizenship in São Paulo. University of California Press.
- Carlsson, F., Johansson-Stenman, O., & Khanh Nam, P. (2015). Funding a new bridge in rural Vietnam: a field experiment on social influence and default contributions. *Oxford Economic Papers*, 67(4), 987–1014. https://doi.org/10.1093/oep/gpv039
- Cervero, R. (2000). Informal transport in the developing world. (UN-HABITAT).
- Cervero, R., & Golub, A. (2011). Informal Public Transport: A Global Perspective. Retrieved from http://trid.trb.org/view.aspx?id=1116825
- Chattopadhyay, R., & Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*, 72(5), 1409–1443. https://doi.org/10.1111/j.1468-0262.2004.00539.x
- Chauvet, L., Gubert, F., Mercier, M., & Mesplé-Somps, S. (2015). Migrants' Home Town Associations and Local Development in Mali: Migrants' HTAs and local development in Mali. *The Scandinavian Journal of Economics*, 117(2), 686–722. https://doi.org/10.1111/sjoe.12100
- Chen, J., & Huhe, N. (2013). Informal Accountability, Socially Embedded Officials, and Public Goods Provision in Rural China: The Role of Lineage Groups. *Journal of Chinese Political Science*, *18*(2), 101–116. https://doi.org/10.1007/s11366-013-9237-3
- Chhibber, P., & Nooruddin, I. (2004). Do Party Systems Count?: The Number of Parties and Government Performance in the Indian States. *Comparative Political Studies*, *37*(2), 152–187. https://doi.org/10.1177/0010414003260981

- Chu, J., & Zheng, X.-P. (2013). China's Fiscal Decentralization and Regional Economic Growth. *The Japanese Economic Review*, 64(4), 537–549.
- Collignon, B., & Vézina, M. (2000). *Independent Water and Sanitation Providers in African Cities: A ten-country study* (Water and Sanitation Program) (p. 68). Washington, D.C.: The World Bank.
- Cooray, A. (2014). Ethnic or Political Fractionalisation? A District Level Analysis of the Provision of Public Goods in Sri Lanka: Ethnic or Political Fractionalisation? *Growth and Change*, 45(4), 640–666. https://doi.org/10.1111/grow.12060
- Deacon, R. T. (2009). Public good provision under dictatorship and democracy. *Public Choice*, *139*(1-2), 241–262. https://doi.org/10.1007/s11127-008-9391-x
- De Albuquerque, C. (2009). Report of the independent expert on the issue of human rights obligations related to access to safe drinking water and sanitation- MISSION TO COSTA RICA\* (Mission Report No. GE.09-14363 (E) 280709) (p. 25). United Nations Human Rights Council.
- Deininger, K., & Mpuga, P. (2005). Does Greater Accountability Improve the Quality of Public Service Delivery? Evidence from Uganda. *World Development*, *33*(1), 171–191. https://doi.org/10.1016/j.worlddev.2004.09.002
- Dell, M. (2010). The Persistent Effects of Peru's Mining "Mita." Econometrica, 78(6), 1863–1903.
- Desmet, K., Ortuño-Ortín, I., & Wacziarg, R. (2012). The political economy of linguistic cleavages. *Journal of Development Economics*, 97(2), 322–338. https://doi.org/10.1016/j.jdeveco.2011.02.003
- Diaz-Cayeros, A., Magaloni, B., & Ruiz-Euler, A. (2014). Traditional Governance, Citizen Engagement, and Local Public Goods: Evidence from Mexico. *World Development*, *53*, 80–93.
- Duan, H., & Zhan, J. V. (2011). Fiscal Transfer and Local Public Expenditure in China: A Case Study of Shanxi Province. *China Review*, 11(1), 57–88.
- Duquette-Rury, L. (2014). Collective Remittances and Transnational Coproduction: the 3 × 1 Program for Migrants and Household Access to Public Goods in Mexico. *Studies in Comparative International Development*, *49*(1), 112–139. https://doi.org/10.1007/s12116-014-9153-3
- Egel, D. (2013). Tribal heterogeneity and the allocation of publicly provided goods: Evidence from Yemen. *Journal of Development Economics*, 101, 228–232. https://doi.org/10.1016/j.jdeveco.2012.10.008
- Ezeah, C., Fazakerley, J. A., & Roberts, C. L. (2013). Emerging trends in informal sector recycling in developing and transition countries. *Waste Management*, *33*(11), 2509–2519. https://doi.org/10.1016/j.wasman.2013.06.020
- Faguet, J.-P. (2004). Does decentralization increase government responsiveness to local needs? *Journal of Public Economics*, 88(3-4), 867–893. https://doi.org/10.1016/S0047-2727(02)00185-8
- Ferriera, E., & Golub, A. (2004). The big-bus trap: what formal bus operators could learn from the informal sector. In *Proceedings of the 11th CODATU (Cooperation for Urban Mobility in the Developing World) Conference, Bucharest.* Retrieved from

- http://www.codatu.org/wp-content/uploads/The-big-bus-what-formal-bus-operators-could-learn-from-the-informal-sector-E.-FERRIERA-A.-GOLUB.pdf
- Ferro, P. S., Muñoz, J. C., & Behrens, R. (2012). The Interface between Trunk and Feeder Services: Lessons from South American Cities. In *CODATU XV: The role of urban mobility in (re) shaping cities*.
- Finn, B. (2008). Market role and regulation of extensive urban minibus services as large bus service capacity is restored Case studies from Ghana, Georgia and Kazakhstan. *Research in Transportation Economics*, 22(1), 118–125.
- Finn, B. (2012). Towards large-scale flexible transport services: A practical perspective from the domain of paratransit. *Research in Transportation Business & Management*, *3*, 39–49.
- Finn, B., & Mulley, C. (2011). Development in market structure and regulation of urban bus services in developing countries and countries in transition. *Journal of Public Transportation*, *14*(4). Retrieved from http://ascelibrary.org/doi/abs/10.1061/41123(383)10
- Finn, B., & Walters, J. (2010). Workshop report Public transport markets in development. *Research in Transportation Economics*, 29(1), 354–361.
- Franck, R., & Rainer, I. (2012). Does the Leader's Ethnicity Matter? Ethnic Favoritism, Education, and Health in Sub-Saharan Africa. *American Political Science Review*, 106(02), 294–325. https://doi.org/10.1017/S0003055412000172
- Gajwani, K., & Zhang, X. (2015). Gender and Public Goods Provision in Tamil Nadu's Village Governments. *The World Bank Economic Review*, 29(2), 234–261. https://doi.org/10.1093/wber/lhu001
- Gamper-Rabindran, S., Khan, S., & Timmins, C. (2010). The impact of piped water provision on infant mortality in Brazil: A quantile panel data approach. *Journal of Development Economics*, 92(2), 188–200. https://doi.org/10.1016/j.jdeveco.2009.02.006
- Gebeyehu, M., & Takano, S. (2007). Diagnostic evaluation of public transportation mode choice in Addis Ababa. *Journal of Public Transportation*, 10(4), 27.
- Gerlach, E., & Franceys, R. (2010). Regulating Water Services for All in Developing Economies. *World Development*, 38(9), 1229–1240.
- Gisselquist, R. M., Leiderer, S., & Niño-Zarazúa, M. (2016). Ethnic Heterogeneity and Public Goods Provision in Zambia: Evidence of a Subnational "Diversity Dividend." *World Development*, 78, 308–323. https://doi.org/10.1016/j.worlddev.2015.10.018
- Glennerster, R., Miguel, E., & Rothenberg, A. D. (2013). Collective Action in Diverse Sierra Leone Communities. *The Economic Journal*, 123(568), 285–316. https://doi.org/10.1111/ecoj.12030
- Godard, X. (2005). Kyoto et la double trappe dans laquelle tombe le transport collectif institutionnel. *Recherche, Transports, Sécurité*, 88, 225–242.
- Golooba-Mutebi, F. (2012). In Search of the Right Formula: Public, Private and Community-Driven Provision of Safe Water in Rwanda and Uganda. *Public Administration and Development*, *32*(4-5), 430–443.

- Gonzalez, M. de los A. (2002). Do changes in democracy affect the political budget cycle? Evidence from Mexico. *Review of Development Economics*, 6(2), 204–224.
- Goodfellow, T. (2015). Taming the "Rogue" Sector: Studying State Effectiveness in Africa through Informal Transport Politics. *Comparative Politics*, 47(2), 127–147.
- Grossman, G. (2014). Do Selection Rules Affect Leader Responsiveness? Evidence from Rural Uganda. *Quarterly Journal of Political Science*, 9(1), 1–44. https://doi.org/10.1561/100.00013012
- Habyarimana, J., Humphreys, M., Posner, D. N., & Weinstein, J. M. (2009). *Coethnicity: Diversity and the Dilemmas of Collective Action*. Russell Sage Foundation.
- Herrera, V. (Unpublished Manuscript). Cities and Services in Young Democracies: From Clientelism to More Accountable Government.
- Herrera, V. (2017). Water and Politics. University of Michigan Press.
- Huhe, N., Chen, J., & Tang, M. (2015). Social trust and grassroots governance in rural China. *Social Science Research*, *53*, 351–363. https://doi.org/10.1016/j.ssresearch.2015.06.010
- Jack, B. K., & Recalde, M. P. (2015). Leadership and the voluntary provision of public goods: Field evidence from Bolivia. *Journal of Public Economics*, 122, 80–93. https://doi.org/10.1016/j.jpubeco.2014.10.003
- Jackson, K. (2013). Diversity and the Distribution of Public Goods in Sub-Saharan Africa. *Journal of African Economies*, 22(3), 437–462. https://doi.org/10.1093/jae/ejt002
- Javaid, A., & Falk, T. (2015). Incorporating local institutions in irrigation experiments: evidence from rural communities in Pakistan. *Ecology and Society*, 20(2), 28–83. https://doi.org/10.5751/ES-07532-200228
- Joshi, M., & Mason, T. D. (2011). Peasants, Patrons, and Parties: The Tension between Clientelism and Democracy in Nepall. *International Studies Quarterly*, 55(1), 151–175. https://doi.org/10.1111/j.1468-2478.2010.00639.x
- Keener, S., Luengo, M., & Banerjee, S. (2010). *Provision of water to the poor in Africa: experience with water standposts and the informal water sector* (No. WPS5387) (pp. 1–65). The World Bank.
- Khwaja, A. I. (2009). Can good projects succeed in bad communities? *Journal of Public Economics*, 93(7–8), 899–916. https://doi.org/10.1016/j.jpubeco.2009.02.010
- Kjellén, M. (2000). Complementary Water Systems in Dar es Salaam, Tanzania: The Case of Water Vending. *International Journal of Water Resources of Development*, 16(1), 143–154.
- Klopp, J. M., Mutua, J., Orwa, D., Waiganjo, P., White, A., & Williams, S. (2014). Towards a Standard for Paratransit Data: Lessons from Developing GTFS Data for Nairobi's Matatu System. In *Transportation Research Board 93rd Annual Meeting* (Vol. 14–5280).

- Kochar, A. (2008). Schooling, wages and profits: Negative pecuniary externalities from schooling and their consequences for schooling investments. *Journal of Development Economics*, 86(1), 76–95. https://doi.org/10.1016/j.jdeveco.2007.12.003
- Kochar, A., Singh, K., & Singh, S. (2009). Targeting public goods to the poor in a segregated economy: An empirical analysis of central mandates in rural India. *Journal of Public Economics*, 93(7-8), 917–930. https://doi.org/10.1016/j.jpubeco.2009.04.004
- Kralich, S. (2005). Crisis Urbana y Transporte Alternativo: La Opción Remise. *Revista Electrónica de Geografía Y Ciencias Sociales*, 9(194). Retrieved from www.ub.edu/geocrit/sn/sn-194-66.htm
- Kramon, E., & Posner, D. N. (2013). Who Benefits from Distributive Politics? How the Outcome One Studies Affects the Answer One Gets. *Perspectives on Politics*, 11(2), 461–474.
- Kramon, E., & Posner, D. N. (2016). Ethnic favoritism in primary education in Kenya. *Quarterly Journal of Political Science*, 11(1), 1–58.
- Kung, J., Cai, Y., & Sun, X. (2009). Rural cadres and governance in China: incentive, institution and accountability. *The China Journal*, (62), 61–77.
- Kyessi, A. G. (2005). Community-based urban water management in fringe neighbourhoods: the case of Dar es Salaam, Tanzania. *Habitat International*, 29(1), 1–25. https://doi.org/10.1016/S0197-3975(03)00059-6
- La Porta, R., Lopez-de-Silanes, F., Schleifer, A., & Vishny, R. (1999). The Quality of Government. *The Journal of Law, Economics & Organization*, 15(1), 222–279.
- Larbi, G., Adelabu, M., Rose, P., Jawara, D., Nwaorgu, O., & Vyas, R. (2004). *Non-State Providers of Basic Services: Country Studies Nigeria* (No. 0 7044 2262 X). UK: Department for International Development (DFID). Retrieved from http://www.birmingham.ac.uk/documents/college-social-sciences/government-society/idd/research/non-state-providers/southafrica-report-23march05.pdf
- LeBas, A. (2013). Violence and Urban Order in Nairobi, Kenya and Lagos, Nigeria. *Studies In Comparative International Development*, 48, 240–262.
- Lee, M. M., Walter-Drop, G., & Wiesel, J. (2014). Taking the State (Back) Out? Statehood and the Delivery of Collective Goods. *Governance*, 27(4), 635–654. https://doi.org/10.1111/gove.12069
- Lichtenthaeler, G. (2010). Water Conflict and Cooperation in Yemen. Middle East Report, (254), 30–35.
- Li, Y. (2014). Downward accountability in response to collective actions: The political economy of public goods provision in China. *Economics of Transition*, 22(1), 69–103. https://doi.org/10.1111/ecot.12033
- Lomme, R. (2008). Should South African minibus taxis be scrapped? Formalizing informal urban transport in a developing country. In *Proceedings of the CODATU XIII Conference*. Ho Chi Minh City, Vietnam.
- Luo, R., Zhang, L., Huang, J., & Rozelle, S. (2007). Elections, fiscal reform and public goods provision in rural China. *Journal of Comparative Economics*, *35*(3), 583–611. https://doi.org/10.1016/j.jce.2007.03.008

- Luo, R., Zhang, L., Huang, J., & Rozelle, S. (2010). Village Elections, Public Goods Investments and Pork Barrel Politics, Chinese-style. *Journal of Development Studies*, 46(4), 662–684. https://doi.org/10.1080/00220380903318061
- Lü, X. (2015). Intergovernmental transfers and local education provision Evaluating China's 8-7 National Plan for Poverty Reduction. *China Economic Review*, *33*, 200–211. https://doi.org/10.1016/j.chieco.2015.02.001
- MacLean, L., & Brass, J. (2015). Foreign Aid, NGOs and the Private Sector: New Forms of Hybridity in Renewable Energy in Kenya and Uganda. *Africa Today*, 62(1), 56–82.
- MacLean, L. M. (2011). The Paradox of State Retrenchment in Sub-Saharan Africa: The Micro-Level Experience of Public Social Service Provision. *World Development*, *39*(7), 1155–1165. https://doi.org/10.1016/j.worlddev.2010.10.005
- Marin, P. (2009). *Public-private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries*. World Bank Publications.
- Mazengia, W. (2005). Redressing racial Inequalities through Water Policy: The South African Experience. *Journal of Development and Social Transformation*, 2, 41–50.
- McKenzie, D., & Ray, I. (2009). Urban water supply in India: status, reform options and possible lessons. Water Policy, 11(4), 442.
- Meseguer, C., & Aparicio, F. J. (2012). Migration and Distributive Politics: The Political Economy of Mexico's 3 × 1 Program. *Latin American Politics and Society*, *54*(4), 147–178. https://doi.org/10.1111/j.1548-2456.2012.00176.x
- Miguel, E. (2004). Tribe or Nation? Nation Building and Public Goods in Kenya versus Tanzania. *World Politics*, *56*(03), 328–362. https://doi.org/10.1017/S0043887100004330
- Miguel, E., & Gugerty, M. K. (2005). Ethnic diversity, social sanctions, and public goods in Kenya. *Journal of Public Economics*, 89(11), 2325–2368.
- Muñoz, J. C., & Gschwender, A. (2008a). Transantiago: A Tale of Two Cities. Research in Transportation Economics, 22(1), 45–53.
- Muñoz, J. C., & Gschwender, A. (2008b). Transantiago: A tale of two cities, 22(1), 45–53.
- Mu, R., & Zhang, X. (2014). Do elected leaders in a limited democracy have real power? Evidence from rural China. *Journal of Development Economics*, 107, 17–27. https://doi.org/10.1016/j.jdeveco.2013.10.009
- Njoroge, B. N. K., Ndunge, D., & Kimani, M. (2014). Review of municipal solid waste management: A case study of Nairobi, Kenya. Retrieved from http://erepository.uonbi.ac.ke/handle/11295/77292
- Nooruddin, I., & Simmons, J. W. (2015). Do voters count? Institutions, voter turnout, and public goods provision in India. *Electoral Studies*, *37*, 1–14. https://doi.org/10.1016/j.electstud.2014.10.006
- Okten, C., & Osili, U. O. (2004). Contributions in heterogeneous communities: Evidence from Indonesia. *Journal of Population Economics*, 17(4), 603–626. https://doi.org/10.1007/s00148-004-0189-y
- Olken, B. A. (2007). Monitoring Corruption: Evidence from a Field Experiment in Indonesia. *Journal of Political Economy*, 115(2), 200–249.

- Olken, B. A. (2010). Direct Democracy and Local Public Goods: Evidence from a Field Experiment in Indonesia. *American Political Science Review*, 104(02), 243–267. https://doi.org/10.1017/S0003055410000079
- Olken, B. A., & Singhal, M. (2009). *Informal Taxation* (Working Paper No. 15221). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w15221
- Pattanayak, S. K., Yang, J.-C., Whittington, D., & Bal Kumar, K. C. (2005). Coping with unreliable public water supplies: averting expenditures by households in Kathmandu, Nepal. *Water Resources Research*, 41(2).
- Peloso, M., & Morinville, C. (2014). "Chasing for water": Everyday practices of water access in peri-urban Ashaiman, Ghana. *Water Alternatives*, 7(1), 121–139.
- Pesqué-Cela, V., Tao, R., Liu, Y., & Sun, L. (2009). Challenging, complementing or assuming "the Mandate of Heaven"? Political distrust and the rise of self-governing social organizations in rural China. *Journal of Comparative Economics*, *37*(1), 151–168. https://doi.org/10.1016/j.jce.2008.08.004
- Post, A. E. (2014). Foreign and Domestic Investment in Argentina: The Politics of Privatized Infrastructure. Cambridge University Press.
- Republic of South Africa. (n.d.). Water affairs | South African Government. Retrieved November 17, 2015, from http://www.gov.za/about-SA/water-affairs
- Rosas, G., Johnston, N. P., & Hawkins, K. (2014). Local public goods as vote-purchasing devices? Persuasion and mobilization in the choice of clientelist payments. *Journal of Theoretical Politics*, 26(4), 573–598. https://doi.org/10.1177/0951629813511549
- Rosenzweig, S. C. (2015). Does electoral competition affect public goods provision in dominant-party regimes? Evidence from Tanzania. *Electoral Studies*, *39*, 72–84. https://doi.org/10.1016/j.electstud.2015.04.004
- Sacks, A., & Levi, M. (2010). Measuring Government Effectiveness and Its Consequences for Social Welfare in Sub-Saharan African Countries. *Social Forces*, 88(5), 2325–2352.
- Sarkhel, P. (2015). Flood risk, land use and private participation in embankment maintenance in Indian Sundarbans. *Ecological Economics*, 118, 272–284. https://doi.org/10.1016/j.ecolecon.2015.08.003
- Sato, H. (2008). Public Goods Provision and Rural Governance in China. China: An International Journal, 6(2), 281–298.
- Schalekamp, H., & Behrens, R. (2010). Engaging paratransit on public transport reform initiatives in South Africa: A critique of policy and an investigation of appropriate engagement approaches. *Research in Transportation Economics*, 29(1), 371–378.
- Silva-Ochoa, E. (2009). Institutions and the provision of local services in Mexico. *Environment and Planning C: Government and Policy*, 27(1), 141–158. https://doi.org/10.1068/c07115r
- Solo, T. M. (1999). Small-scale entrepreneurs in the urban water and sanitation market. *Environment and Urbanization*, 11(1), 117–132.

- Spronk, S., Crespo, C., & Olivera, M. (2014). Modernization and the boundaries of public water in Uruguay. In D. A. McDonald (Ed.), *Rethinking Corporatization and Public Services in the Global South* (p. 240). Zed Books.
- Sudhinaraset, M., Ingram, M., Lofthouse, H. K., & Montagu, D. (2013). What Is the Role of Informal Healthcare Providers in Developing Countries? A Systematic Review. *PLoS ONE*, 8(2), e54978. https://doi.org/10.1371/journal.pone.0054978
- Takano, S., & Mintesnot, G. (2006). Application of logical planning model for public transportation improvement programs in the city of Addis Ababa. Studies in Regional Science. *Journal of JSRSAI*, 36, 663–682.
- Thachil, T., & Teitelbaum, E. (2015). Ethnic Parties and Public Spending New Theory and Evidence From the Indian States. *Comparative Political Studies*, 48(11), 1389–1420.
- The Economist. (2015, August). Learning unleashed. *The Economist*. Retrieved from http://www.economist.com/news/briefing/21660063-where-governments-are-failing-provide-youngsters-decent-education-private-sector
- Transport Research Laboratory. (2002). *Scoping Study: Urban Mobility in Three Cities* (SSATP Working Paper No. 70). World Bank and Economic Commission for Africa. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/17691/273240PAPER0SS110Scoping0Study1web1.txt?sequenc e=2
- Tsai, L. L. (2007). Solidary Groups, Informal Accountability, and Local Public Goods Provision in Rural China. *American Political Science Review*, 101(2), 355–372.
- Tsai, L. L. (2011). Friends or Foes? Nonstate Public Goods Providers and Local State Authorities in Nondemocratic and Transitional Systems. *Studies in Comparative International Development*, *46*(1), 46–69. https://doi.org/10.1007/s12116-010-9078-4
- Tu, Q., Mol, A. P. J., Zhang, L., & Ruben, R. (2011). How do trust and property security influence household contributions to public goods? *China Economic Review*, 22(4), 499–511. https://doi.org/10.1016/j.chieco.2011.07.011
- Uchimura, H., & Jütting, J. P. (2009). Fiscal Decentralization, Chinese Style: Good for Health Outcomes? *World Development*, *37*(12), 1926–1934. https://doi.org/10.1016/j.worlddev.2009.06.007
- Venter, C. (2013). The lurch towards formalisation: Lessons from the implementation of BRT in Johannesburg, South Africa. *Research in Transportation Economics*, 39(1), 114–120.
- Visser, M., & Burns, J. (2015). Inequality, social sanctions and cooperation within South African fishing communities. *Journal of Economic Behavior & Organization*, 118, 95–109. https://doi.org/10.1016/j.jebo.2015.03.009
- Von Schnitzler, A. (2008). Citizenship Prepaid: Water, Calculability, and Techno-Politics in South Africa. *Journal of Southern African Studies*, *34*(4), 899–917.

- Walters, J. (2010). Is the bus transport contracting system in South Africa leading to trusting relationships between contracted parties? An analysis of funding issues and the impact on relations between government and operators. *Research in Transportation Economics*, 29(1), 362–370. https://doi.org/10.1016/j.retrec.2010.07.046
- Waring, T. M. (2011). Ethnic Forces in Collective Action: Diversity, Dominance, and Irrigation in Tamil Nadu. *Ecology and Society*, *16*(4).
- WaterAid Tanzania. (2003). Water Reforms and PSP in Dar es Salaam.
- WHO-UNICEF. (2015). Joint Monitoring Programme for Water Supply and Sanitation: Estimates on the Use of Water Sources and Sanitation Facilities. Geneva, Switzerland.
- Wolff, L., Navarro, J. C., González, P., & Programa de Promoción de la Reforma Educativa en América Latina y el Caribe (Eds.). (2005). *Private education and public policy in Latin America*. Washington, DC: PREAL.
- World Bank. (2005). A Study of Institutional, Financial and Regulatory Framewroks of Urban Transport in Large Sub-Saharan Cities. SSATP Working Paper 82.
- Xu, Y., & Yao, Y. (2015). Informal Institutions, Collective Action, and Public Investment in Rural China. *American Political Science Review*, 109(02), 371–391. https://doi.org/10.1017/S0003055415000155
- Yi, H., Hare, D., & Zhang, L. (2011). Does the Provision of Public Goods Correspond to Local Demand? *Contemporary Economic Policy*, 29(1), 115–137. https://doi.org/10.1111/j.1465-7287.2010.00207.x
- Zhang, L., Luo, R., Liu, C., & Rozelle, S. (2006). Investing in Rural China: Tracking China's Commitment to Modernization. *Chinese Economy*, 39(4), 57–84. https://doi.org/10.2753/CES1097-1475390404
- Zhang, X., Fan, S., Zhang, L., & Huang, J. (2004). Local governance and public goods provision in rural China. *Journal of Public Economics*, 88(12), 2857–2871. https://doi.org/10.1016/j.jpubeco.2003.07.004
- Zhan, J. V., Duan, H., & Zeng, M. (2015). Resource Dependence and Human Capital Investment in China. *The China Quarterly*, 221, 49–72. https://doi.org/10.1017/S0305741014001556
- Zheng, S., & Kahn, M. E. (2013). Does Government Investment in Local Public Goods Spur Gentrification? Evidence from Beijing. *Real Estate Economics*, 41(1), 1–28. https://doi.org/10.1111/j.1540-6229.2012.00339.x
- Zhong, L. Y., & Grabosky, P. N. (2009). The pluralization of policing and the rise of private policing in China. *Crime, Law and Social Change*, 52(5), 433–455. https://doi.org/10.1007/s10611-009-9205-1