Research at Work 2015: Turning Insight into Impact





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Section 1:

A Note from the Director

Asli Demirgüç-Kunt

Research plays a crucial role in learning from past policies and thinking about the future. Without the independent scrutiny of research, conceptual and empirical foundations for policymaking would be weak, "best practices" would be emulated without sufficient evidence, and new fads and fashions would get more attention and traction than they deserve.

To have impact on development policies, research must address relevant questions, answer them rigorously and persuasively, and the findings must be effectively communicated to policy makers. DECRG the World Bank's research department—undertakes and stimulates such catalytic research with the aim of generating new knowledge on the process of development and policies to enhance it. Although research activities occur throughout the World Bank, DECRG is the unit with a special mandate to conduct research.



Asli Demirgüç-Kunt Director of Research, Research Department

Box 1.1: Policy Research Talks

DECRG hosts monthly Policy Research Talks that showcase the department's latest research findings and their implications for development policy. These events facilitate an ongoing dialogue between researchers and operational staff, and challenge and contribute to the World Bank's intellectual climate.

To find out more about the Policy Research Talks, including future events in the series and videos of past events, visit: http://econ.worldbank. org/policyresearchtalks. The following is a list of recent events in the series.

Speaker	Торіс
Will Martin, Research Manager (former) Discussant: Anabel Gonzalez, Senior Director of the Trade and Competitiveness Global Practice	Managing Food Price Volatility
John Giles, Senior Economist Discussant: Xiaoqing Yu, Director of the Social Protection and Labor Global Practice	Employment, Demographic Change, and Well-Being: Avoiding Poverty among the Elderly in Aging Populations
Peter Lanjouw, Research Manager (former) Discussant : Ana Revenga, Senior Director of the Poverty Global Practice	A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals
<i>Michael Toman, Research Manager</i>	A 'Wicked Problem':
Discussant: Marianne Fay, Chief Economist for	Controlling Global Climate
Climate Change	Change
<i>Aart Kraay, Senior Adviser</i> Discussant: Marcelo Giugale, Senior Director of the Macroeconomics and Fiscal Management Global Practice	Growth, Inequality, and Social Welfare
<i>William Maloney, Lead Economist</i>	Five Growth Mysteries
Discussant: Gerardo Corrochano, Director of	in Search of a Broader
Innovation, Technology, and Entrepreneurship	Innovation Policy
Chad Bown, Lead Economist	Twenty-First Century Trade
Discussant: Sudhir Shetty, Chief Economist,	Policy: Pushing the Limits of
East Asia and Pacific Region	International Cooperation
Deon Filmer, Lead Economist	Schooling and Learning:
Discussant: Jesko Hentschel, Senior Director,	Understanding Inequalities
Human Development, South Asia Region	and What to Do about Them
Mary Hallward-Driemer, Lead Economist	Empowerment and Economic
Discussant: Jeni Klugman, Director, Gender	Opportunities: What Works
and Development	and for Whom?
Philip Keefer, Lead Economist	Organizing for Peace and
Discussant: Joel Hellman, Global Center on	Prosperity: Collective Action
Conflict, Security, and Development	and Development
Caglar Ozden, Senior Economist Discussant: Shantayanan Devarajan, Chief Economist, Middle East and North Africa Region	Patterns of Global Migration and Opportunities for Policy Makers
<i>Klaus Deininger, Lead Economist</i>	Leveraging Land Policies
Discussant: Somik Lall, Lead Urban Economist,	for Equity, Growth, and
Sustainable Development Network	Transparency
David McKenzie, Lead Economist	What Should We Do About
Discussant: Marialisa Motta, Director, Financial	Informal Firms? Why De Soto
and Private Sector Development, Latin America	Is Half-Right and the IRS Half-
and Caribbean Region	Wrong
Michael Woolcock, Lead Social Development	Taking Context Seriously:
Specialist	Expanding the Range of
Discussant: Junaid Kamal Ahmad, Sector	Ideas, Methods and Strategies
Director of Sustainable Development, Middle	to Enhance Development
East and North Africa Region	Effectiveness
<i>Jishnu Das, Senior Economist</i>	Delivering Education: How
Discussant: Elizabeth King, Director of	the Rise of Private Schooling
Education, Human Development Network	Changes Everything

By generating policy-relevant, high-quality research, DECRG seeks to shape development thinking. Being a producer of original research is also important in being able to keep abreast of advances in development thinking. Hence, for the Bank, DECRG also provides a window on all development research done outside the Bank. Given this mandate, DECRG's audience is not only World Bank senior management and operational colleagues, but also other researchers, national policy makers, the broader development community, and the general public. DECRG seeks to reach this wide audience through academic publications, books, conferences, blogs, and other social media channels (see Box 1.1 on the Policy Research Talks, a new initiative to extend DECRG's dissemination efforts). Despite limited resources—less than 1 percent of the administrative budget of the World Bank—Bank researchers produce a large volume of work that is of high guality and influential by academic standards, yet much more focused on development issues and developing countries when compared to the research of academic institutions (Das et al. 2013; World Bank 2012c).

Much of DECRG's interaction with operational colleagues takes place by working directly on projects with them. On average every researcher spends 30 percent of his or her time per year supporting operations, which not only facilitates the dissemination of research findings first hand but also gives researchers insight into the problems and challenges faced by client countries, hence informing and shaping DECRG's research agenda. This continuous exchange and tacit knowledge creation, in addition to the more formal publication and dissemination channels, allows researchers to reach broad audiences both inside and outside the World Bank (see Box 1.2). The discipline of policy analysis is increasingly sophisticated. In addition to research, new data and tools are required to address emerging challenges. Both research and data work in the World Bank have a long tradition of openness, with much of the research conducted jointly with outside academics and developing-country partners, findings debated publicly in a wide variety of external forums, and with Bank-generated datasets freely available and widely used and scrutinized in the broader development community (see Box 1.3 on DECRG conferences, one of the forums for such debate). This openness is integral to ensuring quality and rigor in research and data outputs, and it underlies the Bank's broader "Open Data and Open Knowledge" policy. Moreover, as analytical and computational tools used in development policy analysis have become more sophisticated, Bank researchers have been at the forefront of developing tools to facilitate high-quality analytical work by researchers in the developing world.

Box 1.2: Collaborating for Impact

Note: AFR: Africa, ECA: Europe and Central Asia, SAR: South Asia, LAC: Latin America and the Caribbean, EAP: East Asia and Pacific, MENA: Middle East and North Africa. Department researchers spend about one-third of their time every year working with World Bank operational staff. This ensures that the results of research are embedded in the advice provided to client countries and that research is relevant to the needs of client countries. Figure 1.1 shows the distribution of operational support across World Bank regions.

DECRG collaborates with operational colleagues both on a region-wide and country level (Figure 1.2). Regionwide engagements often involve support to regional flagship reports and thought leadership initiatives. Examples include reports such as

Youth Employment in Sub-Saharan Africa and Rise of the South: Challenges for Latin America and the Caribbean as well as an ongoing project to identify how South Asia can pursue regional energy security. Country-level engagements cover a range of needs, from data collection and analytics to background research to inform country dialogue. Examples include production of Haiti's Poverty Assessment, evaluation of a South African "edutainment" project, and assessment of the threat posed to Bangladesh by climate change. For more on DECRG's collaboration with the rest of the Bank, visit: http://econ. worldbank.org/collaboration.

Figure 1.1: Weeks of Support Provided in Fiscal Years 2013 - 2014



Figure 1.2: Share of Staff Weeks by Type of Cross-support



The work carried out in DECRG spans all sectors: with the purpose of not only maintaining core expertise in all sectors in which the World Bank is involved, but also striving to address the most important research issues within each sector. DECRG also tackles research themes that cut across sectors. One of the challenges of research is to anticipate topics sufficiently early, creating space for researchers to explore areas before demand for them is evident. Research management pays close attention to how the whole research program fits together, exploiting knowledge overlaps and synergies across sectors. Given limited resources, prioritization and selectivity are keys to ensuring that the research agenda is focused on strategic policy priorities for the World Bank and its clients (see Box 1.4 on the Research Academy, a new initiative to do more with less by incentivizing high-quality research across the entire World Bank).

Box 1.3: The Convening Power of Research

The World Bank enjoys a convening power that is based in large part on its role as a leader in generating new development knowledge. DECRG both contributes to and leverages off of this convening power by regularly bringing together economists, policy practitioners, and representatives of governments and international institutions to share new research, debate policy, identify emerging issues, and set the direction of future knowledge production.

Annual World Bank Conference on Land and Poverty

Now in its 16th year, this annual conference brings together representatives from governments, civil society, academia, the development community, and the private sector to discuss issues of concern to communities, land practitioners, and policy makers worldwide. With attendance regularly above 1,000 participants, this conference fosters dialogue and the sharing of best practices on the diversity of reforms, approaches, and experiences that are being implemented in the land sector around the world. http://econ.worldbank.org/ landconference2015

Urbanization and Poverty Reduction Conference

Now in its second year, the Urbanization and Poverty Reduction conference focuses on the reality that the world is urbanizing rapidly, with cities today concentrating more than half the world's population. This annual conference, hosted by the World Bank, George Washington University, and the Growth Dialogue, brings together academics and development practitioners to present and discuss the challenges of urbanization in developing countries. http://econ.worldbank.org/urbanizationandpovertyreductionconference

Trade, Poverty, and Shared Prosperity Conference

Spurred by the World Bank's adoption of the Twin Goals, this new conference brought together leading academics and senior policy experts to discuss how globalization can be harnessed to reduce poverty and increase shared prosperity. Participants drew on state-of-the-art research to examine the relationship between trade and household welfare.

http://econ.worldbank.org/ tradepovertyprosperityconference

Financial Sector Overview Course

Jointly organized by DECRG and the Finance and Markets Global Practice, this week-long annual event attracts officials from central banks, ministries of finance, and financial regulatory agencies, as well as staff involved in financial operations from international development organizations and the private sector. 2014's course, entitled "Challenges and Priorities for Financial Sector Policy Makers," was attended by over 70 participants from 45 countries. The event provides participants with a solid knowledge of the fundamentals of key areas of the financial sector and engages them in discussions of emerging issues of relevance for policy makers. http://econ.worldbank.org/ financialsectoroverview

DECRG sets its research agenda to reflect the needs and priorities of Bank operations and the development community at large. DECRG research managers serve as focal points with Global Practices and Regions and the Director of Research is part of the Council of Regional and Network Chief Economists. Discussions take place continuously in these forums as well as at periodic meetings with regional and practice management teams to discuss research priorities. Identifying the agenda is a bottom-up exercise: topics often emerge directly from work and consultations with operational colleagues and interactions with policy makers and researchers outside the World Bank (see Box 1.5 on the Visiting Experts Program, an initiative to further strengthen this collaboration). Strategic research priorities are defined collectively by the DECRG director and research managers, under the overall guidance of the Senior Vice President and Chief Economist. The DECRG management team is jointly responsible for the design and delivery of this work program.

Box 1.4: Research Academy

The Research Academy identifies and shares the findings of the best new policy-relevant research from across the World Bank Group. The regular competition is sponsored jointly by the Research Director and Global Practices Chief Economist Jeffrey Lewis, and incentivizes high-quality research from across the World Bank.

Staff and consultants from across the institution are invited to submit work that makes a significant contribution to our understanding of development policy. Winning submissions are selected based on technical quality, originality, and operational relevance. For more on the Research Academy, visit: http://econ.worldbank.org/ researchacademy.

WINNING PAPERS 2014

All in the Family: State Capture in Tunisia

Bob Rijkers (DECRG); Caroline Freund (Peterson Institute); Antonio Nucifora (Macroeconomics and Fiscal Management Global Practice)

Highway to Success: The Impact of the Golden Quadrilateral Project for the Location and Performance of Indian Manufacturing

Ejaz Ghani (Macroeconomics and Fiscal Management Global Practice); Arti Grover (Macroeconomics and Fiscal Management Global Practice); William R. Kerr (Harvard Business School)

Progress toward the Health MDGs: Are the Poor Being Left Behind? Adam Wagstaff (DECRG); Caryn Bredenkamp (Health, Nutrition, and Population Global Practice); Leander R. Buisman (Erasmus University, Rotterdam)

WINNING PAPERS 2013

Harnessing Emotional Connections to Improve Financial Decisions: Evaluating the Impact of Financial Education in Mainstream Media Bilal Zia (DECRG); Gunhild Berg (Finance and Markets Global Practice)

Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets Jishnu Das (DECRG); Tahir Andrabi (Pomona College); Asim Ijaz Khwaja (Harvard University)

Spillovers from Conditional Cash Transfers: Bolsa Familia and Crime in Urban Brazil

Laura Chioda (Latin America and Caribbean Region Chief Economist's Office); João M. P. De Mello (Pontifical Catholic University of Rio de Janeiro); Rodrigo R. Soares (Pontifical Catholic University of Rio de Janeiro)

Demand versus Returns? Pro-Poor Targeting of Business Grants and Vocational Skills Training

Renos Vakis (DECRG); Patrick Premand (Social Protection and Labor Global Practice); Karen Macours (Paris School of Economics)

Box 1.5: Visiting Experts Program

The Visiting Experts Program brings operational staff to DECRG for up to six months, and in some cases longer, to foster stronger links between operations and research. For more on the Visiting Experts Program, visit: http://econ. worldbank.org/visitingexperts. The following is a list of recent Visiting Experts.

Visiting Expert	Area of Research
Tijen Arin, Senior Environmental Economist , Environment and Natural Resources Global Practice	An expert on the use of environmentally friendly agriculture practices to reduce water pollution, Arin researched factors influencing farmers' willingness to accept compensation for switching practices.
Shantayanan Devarajan, Chief Economist , Middle East and North Africa Region	Devarajan joined to examine the question of how to address continuing government failures and meet the expectations of the public in the context of the Arab Spring.
<i>Mario Guadamillas, Practice Manager</i> , Finance and Markets Global Practice	Guadamillas examined the issue of financial sector regulatory reform in an effort to move past the current paradigmatic neoclassical model, and also to help bring greater focus to the needs of developing countries in the international financial regulatory agenda.
William Magrath, Lead Natural Resource Economist, Agriculture Global Practice	Magrath examined policy issues and law enforcement programming for natural resources crime, where international debate has generally been driven by anecdote rather than evidence and good research.
Julián Messina, Senior Economist , Office of the Regional Chief Economist, Latin America Region	Messina researched firm productivity and the flow of workers between sectors; the determinants of the reversal in wage inequality in Latin America; and the impact of the migration of Latin American workers
Mahmoud Mohieldin, President's Special Envoy	Mohieldin explored sources of long- term financing to support the post-2015 development agenda, and researched field examples of leveraging the private sector and the role of financial innovation.
Pierella Paci, Lead Economist , Poverty Global Practice	Paci's interests lay in the intersection of poverty reduction, growth, and jobs generation, and she sought to develop a new operational framework in this area.
Joana Silva, Senior Economist , Social Protection and Labor Global Practice	Silva extended previous research on the long-term impact of conditional cash transfers, and also examined the impact of international competition on the skill composition of firms.
Futoshi Yamauchi, Senior Economist , East Asia and Pacific Region	Yamauchi focused on food price spike impacts on farmgate prices and child nutrition status, and on the impacts of wage growth and labor shortages on small farm agricultural production in Asia.
Goran Sumkoski, Program Manager, Business Regulations Regional Lead for South Asia, IFC Advisory Services	Sumkoski focused on the links between infrastructure regulations and levels of private investment in the corresponding infrastructure sectors, for example gas, electricity, roads, and communications.

DECRG's current research priorities are organized into the following cross-cutting clusters: (i) Science of Delivery; (ii) Risk Management and Vulnerability; (iii) Productivity, Competitiveness, and Job Creation; (iv) Shared Prosperity and Inclusion; and (v) International Cooperation and Global Public Goods. Permeating all of DECRG's work is an emphasis on novel datacollection, rigorous empirical work, and innovative solutions to practical policy questions.

Science of Delivery research focuses on how to deliver development in a multi-sectoral fashion, including public service delivery, aid effectiveness, as well as good governance. DECRG's work covers the public sector (e.g., the courts, customs, and land registers) and the private sector (e.g., financial services), as well as sectors with public-private partnerships (e.g., education, health, and infrastructure). It covers the labor-intensive human development sectors, as well as the capital-intensive infrastructure sectors. DECRG's research in this area spans all aspects of the field: (a) measuring outcomes and aspects of the delivery process; (b) explaining why variations in delivery exist; (c) assessing the impacts of government reforms; and (d) designing and piloting innovative schemes to improve delivery.

Risk Management and Vulnerability research recognizes that risk management can be a powerful tool for development. In recent years, the occurrence of significant economic crises and natural disasters has underscored countries' vulnerability to systemic risks and the need to manage them. At the household or individual level, idiosyncratic risks such as losing a job, falling ill, or being the victim of a crime can have serious adverse effects and need to be managed, and they could also become systemic in certain circumstances like in the case of health epidemics. DECRG's research at the aggregate or macro level focuses on understanding the mechanisms that shape vulnerabilities (exposure to shocks and their propagation) and on identifying appropriate risk-management policies. At the micro-level, individuals and firms confront many shocks and the department has an extensive research agenda on specific kinds of risks and on policies (such as social protection programs) and financial products to address them. DECRG distinguishes between different sources of risks and potential policy responses.

Productivity, Competitiveness, and Job Creation research focuses on understanding the dynamics of economic growth and job creation and does this through four inter-related approaches: First, better measuring and understanding drivers of firm dynamics, examining their correlates with different internal and external factors within and across countries, and identifying potential areas where policy efforts could be used; Next, examining the two main avenues through which government policy actions influence private sector development and the productivity and growth prospects of a country through (a) establishing an enabling environment (general facilitation) and (b) more direct interventions (active catalyst), respectively; and finally researching the political economy of productivity policy to understand the conditions under which successful reform policies are undertaken. **Shared Prosperity and Inclusion** research continues the World Bank's leading role in measuring and monitoring poverty and addresses new areas of shared prosperity and environmental sustainability. The goal is to provide the international research community, civil society, and policy-makers with a better informational basis to guide poverty reduction efforts. A three-pronged approach is being pursued: (a) define and refine methods for measuring and tracking well-being and its distribution (including poverty and inequality) over time and space; (b) promote, generate, and disseminate improved data and methodological guidelines to foster the effective use of information and countries' capacity to monitor poverty and inequality; (c) continued research on longstanding, and fundamental, questions concerning the drivers and consequences of poverty, and the impact of policies to combat poverty and inequality.

International Cooperation and Global Public Goods research addresses the political economy, policy design and evaluation challenges that arise in international cooperation. Externalities across boundaries are varied and widespread. DECRG's research analyzes a wide range of attempts at international cooperation. These include (a) regional and multilateral trade; (b) climate change and environmental security; and (c) international coordination of macroeconomic and financial policies.

In addition to research, DECRG includes a team (Surveys and Methods) that focuses on data and computational tools, and another-the Development Impact Evaluation Initiative (DIME)—that focuses on impact evaluation, specifically in the context of projects implemented by the World Bank or other development organizations. These teams interact very closely with the research teams and provide important links to the rest of the World Bank and development community. Through its Surveys and Methods team, DECRG plays a valuable role in generating and maintaining original databases, as well as expanding and improving the tool kits routinely employed by policy makers and analysts in data collection and analysis. And through its impact evaluation team, the World Bank learns from its evaluative research, rigorously assessing whether development policies are effective, addressing design challenges when they are not, and disseminating knowledge on both policy successes and failures. DECRG researchers have the training and skills to inform the World Bank's practitioners and the development community as they search for operational solutions to pressing development problems, and these two teams facilitate this interaction.

Section 2:

The Leadership Role of DECRG

Least prepared quintile Most prepared quintile Missing data

Research produced at the World Bank—and particularly the work produced by the research department—must satisfy a variety of demands. It must meet standards of technical quality on par with any major research university. It must push forward the frontier of development research, both by adding to the available data on development topics and advancing research techniques. And it must achieve influence by expanding the base of policy-relevant knowledge for the World Bank's operational staff and for policy makers in developing countries.

testion facilities, and an indicator of fiscal space based on gross

What evidence is there that World Bank research is meeting these goals? A range of metrics—from web traffic to citation counts and survey data demonstrate that DECRG research is in demand, is influential, and is relevant.

The Demand for Bank Research

DECRG produces a wide range of research outputs, including working papers, books, datasets, policy reports, and peer-reviewed journal articles. Between 2011 and 2013, DECRG on average produced 155 peer-reviewed journal publications per year. The production of research begins with the Policy Research Working Paper (PRWP) series, established in 1988 as the primary vehicle for the dissemination of new research produced by the World Bank. The series is a stepping-stone to publication in a peer-reviewed journal, which ultimately certifies the quality of the research. This body of work then frequently feeds into outputs targeted to a broad audience of policy makers and other development stakeholders, whether in the form of a World Development Report, Policy Research Report, or other synthesis document.ⁱ

Given the central role of PRWPs in the production of research, download statistics for this series provide one useful indicator of overall demand for research. PRWPs are disseminated through multiple channels, including two of the world's largest online aggregators of social science research— Research Papers in Economics (RePEc) and the Social Science Research Network (SSRN)—and through the World Bank's own websites. Data from both RePEc and SSRN indicate high demand relative to comparator working paper series, while data from the World Bank's own websites indicate particularly high demand for work authored by DECRG.

RePEc provides an online bibliographic database of research in economics and related disciplines. As of October 2014 RePEc listed 1.4 million pieces of research by over 35,000 authors.[#] Download data from RePEc indicates that PRWPs are one of the most frequently downloaded series on a per paper basis compared to other major working paper series included on the site. PRWPs have been downloaded an average of 229 times per paper placing the Bank's working papers ahead of other major series such as the National Bureau of Economic Research, the Center for Economic and Policy Research, and the IMF Working Paper series, among others (Figure 2.1).



Figure 2.1: Downloads per Paper via RePEc

Source: RePEc, accessed September 29, 2014, http://logec.repec.org/scripts/seriesstat.pf.

Note: Based on lifetime downloads of all items in each working paper series. Includes only series with 1,000 or more working papers. RePEc directs site visitors to copies of Policy Research Working Papers hosted on the World Bank's website. The numbers reported in this figure reflect only downloads generated via RePEc-generated requests. A similar story emerges upon examination of data from SSRN. As suggested by its name, SSRN focuses on dissemination of research work in the social sciences, and contains a collection of over 473,000 downloadable documents. The PRWPs once again emerge as the most frequently downloaded working paper series on a per paper basis against the major comparators available in SSRN (Figure 2.2). PRWPs have been downloaded an average of 223 times per paper, compared to 212 times per paper for the New York Federal Reserve, the next closest series. The World Bank also far outstrips other multilateral development banks (i.e., the Inter-American Development Bank and the Asian Development Bank), which together average 57 downloads per paper.

Downloads from the World Bank's own websites extend the story, and also allow us to differentiate downloads of PRWPs produced by authors from different parts of the World Bank. Over the period 2008–2013, over 2,000 PRWPs were produced, with about one-third of these authored or co-authored by DECRG staff. Across the full set of PRWPs, papers were downloaded directly from the World Bank's own websites an average of 379 times—but with a large differential depending on authorship. DECRGauthored or co-authored working papers were downloaded 72 percent more often on average than non-DECRG authored papers.

While DECRG-authored working papers were more frequently downloaded on average, it is possible that this could be entirely due to a few "big hits"—a handful of DECRG-authored papers that generated great numbers of downloads. A closer analysis of working paper downloads by percentile demonstrates that this is not the case. Not only are DECRG-authored working papers more frequently downloaded on average, they are also more downloaded across the spectrum. DECRG-authored working papers are downloaded more frequently than non-DECRG working papers at every percentile of the distribution of downloads (Figure 2.3). At the 1st percentile, the least downloaded DECRG-authored working papers were downloaded 55 percent more often than non-DECRG-authored working papers (79 versus 55 downloads). And at the 99th percentile, DECRG-authored working



Paper via SSRN

Source: SSRN, accessed September 29, 2014, http://www.ssrn.com/en/index.cfm/rps/.

in each working paper series. Includes only series with 1,000 or more working papers. The category "Other Multilateral Development Banks" is composed of the Inter-American Development Bank and the Asian Development Bank



Figure 2.3: Document Downloads by Percentile, 2008-2013

Note: Original analysis of downloads of World Bank ESW due to Doemeland and Trevino (2014). The figure reflects updated analysis for the 2008-2013 timeframe. Downloads of working papers based on authors' own calculations.

papers were downloaded more than twice as often as non-DECRG-authored working papers (3,215 versus 1,540 downloads).

Regardless of authorship, the PRWP series outperformed World Bank Economic and Sector Work (ESW) in terms of downloads, both on average and at every percentile. ESW primarily consists of operational reports written by World Bank country economists in support of the policy dialogue with their client countries. Between 2008 and 2013, ESW reports were downloaded 148 times on average, with the median ESW report downloaded just 48 times (Figure 2.3). The corresponding figures for PRWPs were 379 and 260.

The Influence of Bank Research

While download data reflects the general demand for World Bank research, it does not provide a direct indication of the influence that this work has on the broader research discourse. For this, the tools of bibliometric analysis are required. Bibliometrics provide a quantitative assessment of the influence of published research through analysis of citations. The availability of large databases such as SCOPUS, an online bibliographic database containing abstracts and citations from some 21,000 journals, has vastly expanded the ability to carry out this kind of investigation.

Bibliometric analysis provides a range of tools to assess influence—reflecting different judgments about how best to value different types of citations. For example, it is clear that a citation in a top-ranking journal should carry more weight than a citation in a lesser-known journal focusing on a narrow subfield. But there is no agreement on exactly how to rank journals or weigh citations, which has given rise to a multitude of approaches to measuring influence (Engemann and Wall 2009). Given the lack of agreement, two different approaches to analyzing the influence of DECRG research are considered. The first uses a neutral metric: an unweighted average of the number of citations per paper, benchmarked against comparator institutions. The second draws on the well-known rankings produced by RePEc, which synthesizes a broad set of underlying bibliometric indicators that adjust for many factors such as quality of the journal in which a citation appears.

Figure 2.4: Average Number of Citations per Paper (Articles Published between 1995 and 2014)

Note: Citation data drawn from the SCOPUS database, which covers 21,000 titles from all journals. http://www.elsevier.com/online-tools/ scopus



How does DECRG-authored research stack up in terms of citations of its work? DECRG is clearly influential when compared against a broad set of academic and development institutions. Peer-reviewed journal articles and handbook chapters published by DECRG between 1995 and 2014 have been cited an average of 33 times in peer-reviewed journals, placing DECRG second only to Harvard University and far ahead of many other well-known research institutions (Figure 2.4). By this metric DECRG research clearly has wide influence.

DECRG research necessarily tackles both big questions of wide interest and less attention-grabbing questions that are still of vital importance to the World Bank's clients. Nevertheless, an analysis of citations by percentile demonstrates that the full spectrum of DECRG-authored research is cited frequently relative to comparators (Figure 2.5).

Consider an article at the 50th percentile of the distribution of citations for a given institution. This "typical" article for DECRG will have 12 citations, compared to 10 citations for Harvard University and 4 citations for the IMF. This puts DECRG in 1st place when ranked against comparator institutions. DECRG does well at the high end as well. An article at the 90th percentile for DECRG is cited 81 times, putting it in third place behind Harvard University (93 citations), and Princeton (83 citations).

(Articles published between 1995-2014)

Institution	25th percentile	50th percentile	75th percentile	90th percentile	99th percentile
Harvard University	2	10	36	93	433
University of Chicago	2	9	31	78	352
World Bank (DECRG)	3	12	33	81	291
Massachusetts Institute of Technology	2	10	33	78	278
Princeton University	1	9	33	83	297
New York University	1	8	28	70	293
Brown University	2	9	28	64	249
Yale University	2	7	22	54	275
Columbia University	1	6	21	55	225
Cornell University	1	5	18	48	185
International Monetary Fund	1	4	14	38	215
World Bank (Other)	1	4	15	39	285
EBRD	0	5	23	46	154
London School of Economics	1	4	16	41	203
Oxford University	0	4	13	35	155
Stanford University	1	4	15	36	146
University College of London	1	4	14	37	132
UNDP	0	2	7	43	171
Inter-American Development Bank	1	3	12	29	110
University of California, Berkeley	0	2	8	19	97
African Development Bank	0	1	5	17	116
Asian Development Bank	0	0	3	9	65

Figure 2.5: Number of Citations across a Range of Percentiles

Source: SCOPUS database, accessed October 3, 2014, http://www.scopus.com. Note: Institutions are colorcoded in each column based on their rank within that percentile. The highest-ranking institution is coded deep green, the median institution is coded midyellow, and the lowest-ranking institution is coded deep red. Others institutions are coded at intermediate colors in proportion to their distance from the median.

The more sophisticated set of rankings produced by RePEc provides a second way of measuring the influence of World Bank research. Instead of simply counting unweighted numbers of citations, RePEc aggregates across 32 different metrics. These metrics cover everything from number of works produced to citation counts, journal page counts, and RePEc web traffic. Over 40,000 registered authors are ranked on these 32 metrics, and these rankings are in turn used to rank the institutions to which the authors are affiliated.

Out of more than 6,700 institutions, DECRG ranked number 12 in economics research overall, and ranked first in development economics (Box 2.1).ⁱⁱⁱ This placed DECRG ahead of Brown University, Harvard University, and the London School of Economics in the domain of development economics. DECRG's high ranking as an institution is of course driven by the high ranking of many of the researchers who belong to it—and, in fact, a total of 19 DECRG researchers are ranked within the top 10 percent of the field of development economics. Since DECRG researchers work across many fields that are important for economic development, their expertise also reflects this diversity: 28 of them are ranked in the top 10 percent of their respective fields. DECRG researchers also rank in the top 1 percent of five different fields: Agricultural Economics, Banking, Human Migration, Health Economics, and Positive Political Economics.

Box 2.1: RePEc/IDEAS: Top 10 Institutions in the Field of Development Economics (as of October 2014)

Source: RePEc Top 10% Institutions and Economists in the Field of Development, accessed November 11, 2014, https://ideas. repec.org/top/top.dev.html.

Note: The World Bank and DECRG are both scored in REPEC's ranking methodology. However, REPEC does not separately rank institutions and their sub-entities, as in the case of the World Bank vis-à-vis DECRG, but DECRG's score places it just behind the World Bank as a whole (Zimmermann 2012).

RANK INSTITUTION

- 1. World Bank Group/DECRG
- 2. Brown University (Economics Department)
- 3. Harvard University (Economics Department)
- 4. London School of Economics
- 5. Yale University (Economics Department)
- 6. National Bureau of Economic Research
- 7. International Food Policy Research Institute
- 8. Massachusetts Institute of Technology (Economics Department)
- 9. International Monetary Fund
- 10. Oxford University (Economics Department)

The Relevance of Bank Research

While World Bank research is in demand and influential, this is not enough. It must also be relevant to the issues faced by the developing countries that the World Bank aims to serve. Given the broad range of challenges that developing countries experience, there is no single metric that allows us to gauge relevance. However, a number of metrics, each reflecting some aspect of relevance, suggest that DECRG research fills a gap in addressing the research needs of developing countries.

Map 2.1: Total Publications per Million Citizens Source: Das, Do, Shaines, and Sowmya, 2013.

One way of judging the relevance of World Bank research to the needs of developing countries is to consider how the geographical focus of Bank research stacks up against other producers of research. It turns out that startlingly little empirical research is done on low-income countries. For example, over the 20 year period 1985–2004, just four papers were published in the top 202 economics journals on Burundi, nine on Cambodia, and twenty-seven on Mali (Das et al. 2013). To put that into perspective, some 36,649 empirical economics papers on the U.S. were published over the same timeframe in the same journals (Map 2.1).

What is driving this distribution of research publications? Das et al. (2013) find that the most important factor is the per capita GDP of a country, which alone accounts for 75 percent of the variation in per capita publications across countries. But for the World Bank this "research-wealth relationship" does not hold. Instead, the distribution of World Bank research is clearly tilted in favor of Low and Lower-middle Income Countries (Figure 2.6). More than one-third of the World Bank's journal articles have been on Low-income Countries, compared to only 11 percent on High-income Countries. Among non-Bank authors the picture is reversed: around 8 percent have been on Low-income Countries and over 70 percent of the total global output of research on Low-income Countries. The World Bank alone accounts for 7 percent of the total global output of research on Low-income Countries. These findings underline the point that DECRG fills a gap that is left by purely academic research.

It is also possible to gauge the relevance of DECRG research via its impact on other World Bank knowledge products—specifically, Economic and Sector Work (ESW) reports targeted towards policy makers. A study by Doemeland and Trevino (2014) analyzed five years' worth of download statistics for ESW. They find a great deal of variation in report downloads, with nearly one-third of ESW reports never having been downloaded a single time.



Figure 2.6: Geographical Distribution of Research by Country Income Classification

Source: Authors' own calculations based on Das, Do, Shaines, and Sowmya, 2013.

Note: World Bank country income classification is as of 2000.

Figure 2.7: Downloads of Policy Reports by Percentile, 2008-2013

Note: Doemeland and Trevino (2014) do not report results at the departmental (i.e., DECRG) level. The figure reflects data for the Development Economics Vice Presidency (DEC), the administrative unit to which DECRG belongs.



Doemeland and Trevino (2014) also looked at the relationship between downloads and cross support, i.e., staff time provided across organizational units to support a project, and their findings were stark: DEC was the only vice presidential unit whose cross support was linked with greater downloads and greater citations. DEC-supported reports received 302 downloads on average—more than double the 129 downloads per report for non-supported reports (Figure 2.7). This relationship of increased downloads for DEC-supported reports also held at every percentile. This record of downloads points to the policy-driven nature of DEC research, which has helped enhance the relevance of ESW reports specifically geared towards a policy making audience. This policy relevance is also one of the policy-driven nature of DECRG research is frequently cited in major media outlets (Box 2.2).

Box 2.2: Research in the Media

The work of DECRG is frequently the go-to source for major media outlets around the world covering development economics and related areas of work, with numerous references in major outlets like The Economist, Financial Times, or Bloomberg. Journalists often turn to cross-country data produced by DECRG on topics where no other authoritative data is available or to innovative policy research that overturns received wisdom. The following headlines represent a small sample of the recent press coverage received by DECRG's work.

The Microfinance in Bangladesh Economist Rehabilitation and attack



China's Economy Surpassing U.S.? Well, Yes and No

The New York Times

Income Inequality Is Not Rising Globally. It's Falling.

FT FINANCIAL TIMES

World Bank: Emerging nations have borne brunt of protectionism

Box 2.3: Policy Reports: Translating Research Insights into Development Impact

When new policy findings are published in a peer-reviewed journal, the work of DECRG is still only partly done. Researchers devote considerable time and effort to synthesizing their findings into publications that are accessible to policy makers and the public at large. Some of the most significant of these are the Policy Research Report series and the Global Financial Development Report series, both of which have turned large bodies of research into policy-oriented publications that have spurred action both within the World Bank and in the World Bank's client countries.



A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals (2014)

In 2013, the World Bank adopted two new goals to guide its work: ending extreme poverty and boosting shared prosperity. The 2014 Policy Research Report A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals synthesizes a wide array of DECRG research products that both informed the development of these goals and help to assess the likelihood of reaching them. The list of products is long, but best starts with PovcalNet the public database of poverty data managed by a small team in DECRG for the last 20 years and serves as the basis for all global poverty estimates and projections. At the heart of the Policy Research Report is the extensive set of research papers written by Martin Ravallion and Shaohua Chen that provide base estimates, updates, and explanations of global poverty counts. The report also draws from DECRG research products that provide case studies of poverty measurement for country policy.

The report points the way forward on the World Bank's goals in a number of respects. Reaching the goal of reducing the percentage of the world's population living beneath the poverty threshold to 3 percent is achievable, but highly aspirational. Consequently, a greater focus on shared prosperity is required, as the two goals mutually reinforce each other. And the report provides guidance on how and where investments in data systems should be made, including in the kind of high-quality household survey data produced by the Living Standards Measurement Study (LSMS).



Global Financial Development Report 2014: Financial Inclusion (2013)



Policy Research Report: Finance for All? Policies and Pitfalls in Expanding Access (2007)

DECRG has done significant research on access to finance and financial inclusion for the last decade. examining issues like the importance of access to finance for development, identifying and filling data gaps, and providing practical, evidencebased advice on policies that support healthy financial inclusion. This research was synthesized in the Global Financial Development Report 2014: Financial Inclusion. The report built on a policy agenda first laid out in the 2007 Policy Research Report Finance for All?, which highlighted both the relevance of the topic and the large data gaps in this area.

The Global Financial Inclusion (Global Findex) database—produced with significant funding from the Bill and Melinda Gates Foundation—filled this data gap by providing the first public set of indicators that consistently measures people's use of financial products in 148 countries around the world. The data and research have been cited in presentations, webinars, and research papers by the G20 Global Partnership for Financial Inclusion, AFI Global, African Development Bank, the Microfinance India Summit, the Inter-American Development Bank, McKinsey & Company, CitiGroup, MIX Microfinance, the Reserve Bank of India, and Pew Charitable Trust, among others. Furthermore, four of the five "Basic Set" indicators of the G20 Global Partnership for Financial Inclusion use Global Findex data.

Box 2.3: Policy Reports: Translating Research Insights into Development Impact

continued



Localizing Development: Does Participation Work? (2012)

The World Bank has allocated over \$85 billion to local participatory projects over the last decade. Moreover, participatory development has been a central focus of almost all major development donors, making it one of the most important modalities of development assistance. While the topic has been the subject of a lot of controversy and debate, it has not received the analytic attention it deserves.

The Policy Research Report on Localizing Development: Does Participation Work? filled this gap by bringing analytic insight and evidence to bear on this important subject. It developed the conceptual foundations for participatory development; reviewed evidence on donors' attempts to induce participatory development; and laid out a policy proposal in which participatory development programs take a "sandwich" approach where bottom-up development is supported by top-down efforts.

The findings of the report have been put into practice in World Bank operations via the Social Observatory, which works closely with the \$2 billion portfolio of World Bank-assisted livelihoods projects in India. The report has also received praise from top experts in the field of development. Nobel laureate Roger Myerson has argued that "there are fundamental reasons to see the World Bank's report Localizing Development, by Ghazala Mansuri and Vijayendra Rao, as one of the most important books on development in recent years."^{iv}



Conditional Cash Transfers: Reducing Present and Future Poverty (2009)

The Policy Research Report Conditional Cash Transfers: Reducing Present and Future Poverty took stock of what is now thought of as the first large-scale wave of conditional cash transfer (CCT) programs around the world. At the time of its writing in 2008, 29 countries had relatively large-scale CCT programs underway; whereas 10 years earlier only 3 countries did. CCTs were often accompanied by impact evaluations, and the report systematically reviewed over 13 rigorous impact evaluations of those programs. The report documented consistent reductions in poverty and increases in consumption, school participation, and the utilization of health services. However, it also showed that impacts on "final outcomes" such as learning as measured by test scores, and health or nutrition status of children were hard to find.

The CCT Policy Research Report has been highly influential. It served as the basis for World Bank engagement with governments in many of the parts of the world in which CCTs were not yet prevalentin particular Africa and Asia. It launched critical discussions that fed into the second wave of CCT programs around the world, in particular the role of cash versus conditions, the complementarity between the role of service quality in translating increased utilization into outcomes, and the role of CCTs in mitigating the impact of shocks. And it was a pilot in the way that the World Bank's impact evaluation agenda is now structured—namely around key clusters of priority areas.

To find out more about the Policy Research Reports or the Global Financial Development Reports and download publications in the series, visit the following links: http://econ. worldbank.org/prr and http://econ. worldbank.org/gfdr.

Notes

- 1. To see listings of all of DECRG's outputs, visit http://econ.worldbank.org/ publications.
- 2.RePEc, accessed November 14, 2014, http://www.repec.org.
- 3. To rank institutions in a field, RePEc generates a score for each institution determined by a weighted sum of all authors affiliated with the respective institutions across 32 metrics. Rankings for each metric are then averaged using a harmonic mean after the highest and lowest scoring metrics for each institution are excluded. For a full discussion of RePEc's ranking methodology, see Zimmermann (2012).
- 4.http://home.uchicago.edu/~rmyerson/research/locgov.pdf, accessed March 4, 2015.

Section 3: Data and Tools

G ood research provides the theoretical and practical basis for creating and organizing useful datasets. Over the years, DECRG researchers have collected data from scratch if interesting policy questions could not be answered using existing data, with collection efforts spanning almost the full range of World Bank themes. In addition to enabling the exploration of key policy questions that could not be answered with the datasets available at the time, many of DECRG's data collection efforts have made it possible to compare countries and track progress over time. Box 3.1 provides examples of how these efforts make a difference for policy when data is credible and constructed with foresight.

Moreover, as analytical and computational tools used in development policy analysis have become more sophisticated, DECRG researchers have been at the forefront of making such tools widely available, thereby enabling and facilitating high-quality, policy-oriented analytical work by researchers around the world.

Box 3.1: Delivering Impact through Data

Monitoring and Measuring Protection and Its Implications

DECRG's new public databases and innovative techniques to measure trade restrictions and their consequences have helped restrain protection, advance policy reform, and inform international trade negotiations. DECRG identified relatively early the need for more effective monitoring and evaluation of policies affecting the exports and imports of developing countries. Many of the tools that were developed were adopted as part of the heightened trade policy surveillance during the recent financial crisis, and have continued to be used in the post-crisis period.

The Temporary Barriers to Trade Database and accompanying research revealed use of opaque instruments of protection like anti-dumping duties and emerged as a critical component of global monitoring efforts. The Overall Trade Restrictiveness Index made it possible to combine tariff and non-tariff measures into a single, transparent measure of protection in goods trade. The Services Trade Restrictions Database provided a first global view of applied policy in this previously overlooked area. The real-time information provided by the Bank's trade policy monitoring work was disseminated not only through traditional research outlets, but also through policy briefs, op-eds and citations in prominent media outlets such as the Economist, Financial Times, The Wall Street Journal, The Washington Post, Reuters, BusinessWeek, Xinhua, and CNN. Researchers from DECRG have been invited to present findings to the WTO Council, the European Union's Member States Committee on Trade

in Brussels, and the US House Ways and Means Committee. Every international negotiation—from the Trans-Pacific Trade Partnership to ASEAN—is using DECRG's research and data products as key resources.

For more on DECRG's public databases, visit http://econ. worldbank.org/tradedata

Worldwide Governance Indicators

Governance and institutions are central to understanding why some countries are poor and others rich and what can be done to achieve inclusive growth. The Worldwide Governance Indicators (WGI) project has made it possible to systematically evaluate the relationship of governance to development by supplying aggregate and individual governance indicators for 215 economies over the period 1996–2013. The WGI are a set of six composite indicators of governance measuring Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. The data website registers an average of 200,000 visits per year. The WGI have become very widely used among academics, policy makers, and in the private sector. Most notably, the WGI are used by the US Millennium Challenge Corporation for its crosscountry aid allocation system. Users of these indicators in the private sector include the major commercial risk rating agencies, as well as the Disney Corporation's corporate social responsibility team.

For more on WGI, visit http://econ. worldbank.org/wgi.

Data Compilation

Agreement is widespread that thoughtful data collection, guided by researchers who understand what types of information are most needed to address fundamental policy questions, is an important World Bank contribution to the field of development. The research-based data products generated by DECRG fall into three categories. Some are compilations of existing data series, while others are collections of primary data. The third category comprises datasets that are constructed by piecing together information from different sources and then performing some modeling. A vital characteristic of all three types of datasets is that they are valuable public goods: the same data can be used by many researchers and policy analysts to answer a broad range of development policy questions.

Table 3.1: Compiled Databases

Financial Development and Structure Database	For a broad set of countries since 1960, the Financial Development and Structure Database provides statistics on the size, activity, efficiency, and stability of banks, equity
	markets, and bond markets.
Database of Political	The world's most comprehensive compilation of data on political institutions, this
Institutions	database consists of annual data on 100 variables for 100 countries over the period
	1975–2010.
Worldwide Governance	This database reports the perceptions of and experience with governance of survey
Indicators	respondents and experts in the public and private sectors worldwide.

Data Collection

Data compilation relies on data being there to start with. When World Bank President Robert McNamara saw so many gaps in the poverty and inequality data series in the 1979 World Development Report, the reason was not that his staff had not bothered to compile the data needed for McNamara's reorientation of the Bank toward poverty reduction; the data simply did not exist. Most countries had never fielded a household survey, and those that had had not asked the necessary questions to accurately estimate a household's consumption.

To address this deficiency, the Living Standards Measurement Study (LSMS) team set about designing a consumption questionnaire that could be used in household surveys in different settings, and they fielded it in multiple countries. Other organizations subsequently embraced the philosophy of the consumption module, thanks in part to a three-part volume the World Bank produced explaining the idea. Building on this legacy, World Bank researchers continue to set the standard for data collection efforts in everything from financial inclusion to service delivery.

Absenteeism Surveys	Random unannounced surveys of schools and health facilities determine rates of staff absenteeism in an effort to discover why these institutions often fail to deliver results.
Agricultural Trade Distortions Database	Covering the period 1955–2007 and currently being updated, this database compiles detailed country-level information on taxes, tariffs, and other trade distortions in agriculture.
Bank Regulation and Supervision Database	A unique source of comparable world-wide data on how banks are regulated and supervised around the world, this database provides information on bank regulation and supervision for 143 jurisdictions.
Enterprise Surveys	Enterprise Surveys provide the world's most comprehensive company-level data in emerging markets and developing economies. Data are now available for 135 economies. The success of the initiative led to the project being spun off into its own dedicated unit outside of DECRG.
Global Financial Inclusion Indicators	The new Global Financial Inclusion Indicators gather data on access to financial services and the financial inclusion of individuals around the world.
Learning and Educational Achievement in Pakistan	Learning and Educational Achievement in Pakistan Schools (LEAPS) gathers data both on the distribution of schools throughout Pakistan and on the quality of education provided by a representative sample of over 800 public and private schools in rural Punjab.
Living Standards Measurement Study	The Living Standards Measurement Study has fielded multi-dimensional household surveys in many countries, collecting data on consumption, income, and various other indicators that help in assessing household welfare and living conditions.
Maximum Residue Level Database	The Maximum Residue Level Database collects maximum pesticide residue levels for agricultural products in a number of developed and developing countries.
Public Expenditure Tracking Surveys	Public expenditure tracking surveys track government spending as it flows from the finance ministry down to grass-roots schools and health facilities.
Service Delivery Indicators	A new Africa-wide initiative that tracks service delivery in education and health across countries and over time, this project collects nationally representative data that focus mainly on quality of service delivery in primary schools and at frontline health facilities.
Services Policy Restrictiveness Database	The Services Policy Restrictiveness Database contains information on policy and regulatory measures affecting international trade in services for a total of 102 countries, of which 78 are developing countries.

Table 3.2: Collected Databases

Data Construction

The Database of Political Institutions and the Worldwide Governance Indicators lie at one extreme of database creation, and LSMS and Enterprise Surveys lie at the other. The former are highly valued compilations of existing data series, while the latter are collected through questionnaires and observation in thousands of households and firms all over the developing world. Between these two extremes lies another type of dataset: one that is constructed by piecing together information from different sources and then performing some modeling.

Education Attainment and Enrollment Profiles Database	Using household surveys, this database constructs indicators of levels and inequalities in schooling attainment and participation. The data are periodically updated, and currently cover over 100 countries with on average three time periods per country.
Environmental Data	DECRG's environmental datasets are constructed by piecing together information from different sources, including information gleaned from maps and satellite images, and then performing some modeling to address various questions about the environment.
Exporter Dynamics Database	This database provides statistics on export growth and dynamics in the agriculture, mining, and manufacturing sectors, and is constructed using exporter-level customs transaction data as an input for 30+ developing countries and a handful of developed countries.
Global Bilateral Migration Database	The Global Bilateral Migration Database consists of five 226-by-226 bilateral matrices of migration stocks by gender for each decade over the period 1960–2000.
I2D2	A constructed "international income distribution database" assembling unit record survey data on incomes, consumption, and a wide range of ancillary variables.
Legal Data	Legal Data provides information on court decisions relating to public interest litigation by type of claim and social class of the claimant.
Overall Trade Restrictiveness Indices	The Overall Trade Restrictiveness Indices summarizes the trade policy stance of developing and developed countries by taking into account the structure of trade policy (both tariff and nontariff barriers), trade flows, and trade elasticities.
Temporary Trade Barriers Database	An outgrowth of the Global Antidumping Database, the Temporary Trade Barriers Database collects and freely disseminates detailed data on temporary trade barriers permissible in the World Trade Organization system.

Table 3.3: Constructed Databases

Tools

The range of computational tools produced by DECRG are designed to empower researchers and policy practitioners in developing countries to conduct their own research with minimal technical assistance. One case in point is Survey Solutions, which was developed to help national statistical organizations in developing countries by reducing the costs and improving the timeliness and quality of survey data. Since the release of the first version at the end of 2013 more than 30 countries have used Survey Solutions for data collection, including the National Sample Survey Office of India; Bangladesh Bureau of Statistics; Statistics South Africa; RosStat of Russia; and the Brazil Institute of Geography and Statistics. Survey Solutions has a wide presence in Africa with surveys currently being conducted in Niger, Cote D'Ivoire, South Sudan, Tanzania, and South Africa. Recent labor force surveys in Kuwait and Bhutan and an impact evaluation in the war zone of Peshawar, Pakistan conducted with minimal technical assistance from the World Bank demonstrated the flexibility and ease of use of Survey Solutions even in the most difficult environments.

To promote the adoption of methodological best practices and new tools, DECRG emphasizes building capacity across partner countries. Capacity building includes a combination of sustained hands-on training through long-term engagement and country presence, and more formal classroom as well as web-based and remote training. The assistance is delivered in partnership with other institutions and as part of broader global initiatives like the Global Strategy to Improve Agricultural and Rural Statistics and the National Strategy for the Development of Statistics, contributing to the sustainability of the work of LSMS. The success of this model can be seen with increasing government contributions to the maintenance and expansion of systems, expanding support by a large number of institutional partners, growing use of the information collected, and decreasing need over the years for technical assistance.

ADePT	A platform for automated economic analysis, ADePT software is widely used for policy analysis in
	governments, think tanks, and universities around the world. The ADePT project has generated
	five book publications; training seminars are conducted in all regions of the world.
PovCalNet	This software allows users to replicate the Bank's official global, regional, and internationally
	comparable country level poverty estimates as well as the shared prosperity indices.
PovMap PovMap lets users produce small area estimations of poverty, inequality, nutrition state	
	other indicators.
Survey	A software system that relies on tablet PCs to capture data and on cloud computing for data
Solutions	aggregation and survey management, Survey Solutions reduces the time lag between data
	collection and data analysis and dramatically improves data quality.

Table 3.4: Tools

To find out more about the data and tools supported by DECRG, visit: http://econ.worldbank.org/data



Measuring the causal links between policies and outcomes is fundamental for good policy making. Decisions based on weak inferences may result in ineffective or even damaging policies. Take, for example, the case of a government that reacts to an economic recession by tightening immigration policies—the slow-down in migration flows might be attributed to enforcement efforts, even though the recession itself may be directly reducing the pull on migrants. This type of error in evaluating the effect of policy often goes unnoticed.

When done well, impact evaluations can deliver precise estimates of the causal relationship between a policy and outcomes by comparing treatment and control groups before and after a policy intervention. This approach to causal inference has usefully expanded the economist's toolbox by allowing researchers to establish well-defined counterfactuals against which a policy can be evaluated. Establishing the direction and magnitude of causal relationships can guide policy makers and donors in identifying the right policies to achieve a desired objective, calculating the cost-effectiveness of various policy options, and justifying a response or a scale-up. Working hand-in-hand with operations, DECRG has played a central role in expanding the use of impact evaluations in World Bank projects, enhancing rigor and quality, and drawing global lessons from this body of work. The publication of the 2009 Policy Research Report *Conditional Cash Transfers: Reducing Present and Future Poverty* set a precedent for the way that the World Bank's impact evaluation agenda is now structured around key clusters of priority areas (see Box 2.3). A few years later, the Independent Evaluation Group (IEG) also specifically cited the role of DIME—a unit within DECRG with a mandate to produce high-quality impact evaluations—in improving quality control in impact evaluations (IEG, 2012). And DECRG's publication record demonstrates its outsized role in turning the results of impact evaluations into global knowledge: of the 35 papers published in 2014 as part of the World Bank Impact Evaluation working papers series, 28 were produced either jointly or solely by DECRG.ⁱ

The World Bank is the largest producer of impact evaluations among development institutions, with the stock of impact evaluations rising from less than 20 in 2003 to around 193 in 2014. DECRG is closely involved with a large fraction of these. DIME's portfolio alone contains 175 completed or ongoing impact evaluations (see below for further information). And DECRG's engagement in impact evaluations cuts across all sectors of the World Bank, with projects that range from boosting the productivity of the private sector (Box 4.1) to assessing results-based financing in healthcare (Box 4.2).

Box 4.1: Better Management Practices for a More Productive Private Sector

Can differences in management practices across firms explain differences in productivity, especially in developing countries where these gaps appear particularly large? To investigate this, a team of researchers from DECRG and Harvard University ran a management field experiment on large Indian textile firms. The team provided free consulting on management practices to randomly chosen treatment plants and compared their performance to a set of control plants. They found that adopting these management practices raised productivity by 17 percent in the first year through improved quality and efficiency and

reduced inventory, and within three years led to the opening of more production plants (Bloom et al., 2013). These findings have been influential in better understanding the role of management practices in explaining performance differences across firms. They have also grabbed the attention of policy makers: the government of Colombia has been influenced by this research to conduct a larger-scale program for improving management in the auto parts industry, and is evaluating the individualized consulting approach used in this research alongside a novel group-based approach designed by a World Bank team.

Box 4.2: Assessing Results-Based Financing in Healthcare

Established in 2007, the Health Results Innovation Trust Fund (HRITF) has a mandate to support resultsbased financing approaches in the health sector. The HRITF aims to improve maternal and child health around the world, and has committed \$420 million towards reaching the Millennium Development Goals to reduce child mortality and improve maternal health.

The HRITF takes a programmatic approach to developing the evidence base for implementing successful results-based financing mechanisms. Damien de Walque, a DECRG Senior Economist, coordinates a team of researchers who oversee the quality of the entire World Bank portfolio of HRITF impact evaluations, which includes 33 on-going evaluations as of Fiscal Year 2014. Initial evidence generated from these evaluations has shown that paying for results and empowering health workers and managers at the frontlines can improve access to quality health services and save lives. Evaluations have found that results-based financing helped boost HIV testing rates in Rwanda, especially among couples; increased the likelihood that pregnant women delivered in a facility and received post-natal care in Zimbabwe; and drastically cut the rate of in-hospital neonatal mortality of babies in Argentina.

For more information, visit: http:// www.hritfreport.org/

Development Impact Evaluation (DIME)

Established in 2005, the Development Impact Evaluation (DIME) team's mandate is to generate high-quality operationally relevant impact evaluation research to transform development policy. It works closely with World Bank operations to increase the use of impact evaluation in the design and implementation of public policy, improve the quality of World Bank projects, strengthen country institutions for evidence-based policy making, and generate knowledge in strategic development areas. DIME achieves these through (i) designing evaluations to inform decisions in collaboration with government partners, (ii) building counterpart agencies' capacity to do this systematically, and (iii) drawing lessons and sharing them face-to-face with global audiences.

A critical feature of DIME's approach to impact evaluation is the focus on both the question of "what works?" and "why/how it works?" DIME impact evaluations both evaluate the effectiveness of packages of interventions (the "what") and experiment with mechanisms (the "why/how") to better understand what drives impact. Examining both of these questions allows DIME to provide actionable evidence to its implementing partners. And to ensure evidence is turned into action, the DIME model transfers the knowledge and tools needed to support evidence-based policy making to country institutions through a learning-by-doing approach (Box 4.3).

DIME's 175 projects span nearly all of the World Bank's Global Practices (Figure 4.1). The largest concentration of projects fall under the Agriculture Global Practice (20 percent), with substantial shares in Health, Nutrition, and Population (15 percent), Social, Urban, Rural, & Resilience (13 percent), and Education (11 percent). A number of new initiatives are helping to broaden DIME's coverage even further, including the **ieGovern Initiative** that is pushing the frontier in terms of what works in governance reform, the **Evidence for Peace** designed to fill the knowledge vacuum about what works in settings characterized by fragility, conflict, and violence, and **Impact Evaluation to Development Impact (i2i)**, a World Bank fund supported by the Department for International Development (DFID) that will increase the use of impact evaluations in areas that have traditionally been under-evaluated.ⁱⁱ





Box 4.3: The Learningby-Doing Approach in Brazil: Piloting a High School Financial Literacy Program

In 2009, the government of Brazil approached the World Bank with a request to provide a credible and independent evaluation of their proposed financial education strategy, the Estratégia Nacional de Educação Financeira (ENEF). However, existing evidence on financial literacy programs around the world pointed to very little (if any) impact on program recipients. Thus, before the government could move from a national policy to a tangible national program, there was a need to evaluate the flagship school-based financial literacy curriculum and provide an evidence base for any national scale up plans.

DIME collaborated with the Ministry of Education, six State Secretaries, the financial regulatory board, the Central Bank, the Brazilian stock market, and other financial regulators to run the first and only randomized evaluation of a financial education program in schools encompassing nearly 26,000 students in 900 schools across Brazil. The evaluation tested the impact of a pilot that introduced new books, teacher training, and school incentives to deliver a comprehensive high-quality financial education.

The evaluation showed that the program was highly effective at improving financial knowledge, attitudes, and behavior, and also highlighted the underlying mechanisms that led to these improved outcomes (Bruhn et al. 2013). This impact evaluation also showed that, despite students' socio-economic background and the quality of schools, an intensive and curricula-integrated financial literacy program can impact students' financial outcomes with potential long-run implications on individuals' decision-making. The Ministry of Education decided to scale up the program nationally, seeking to improve students' long-run outcomes through changes in their financial behavior and knowledge. The scaleup is currently under implementation.

Notes

- 1. To see the full collection of Impact Evaluation Policy Research Working Papers, visit: http://documents.worldbank.org/curated/en/docsearch/ collection-title/Impact%20Evaluation%20series.
- 2. For more on the work of DIME, see: http://www.worldbank.org/dime.

DECRG Alumni: Where Are They Now?

DECRG has an impact not only through its own outputs, but also through the human capital and networks gained by the staff who pass through its doors. Many of the researchers who work in DECRG have gone on to take leadership positions elsewhere, whether within the World Bank or in senior positions outside of the institution. What follows is a selection of DECRG alumni, along with positions they have held since leaving DECRG.

World Bank			
Shantayanan Devarajan	William Maloney		
Chief Economist, Middle East and North Africa Region,	Chief Economist, Trade and Competitiveness Global		
World Bank	Practice, World Bank		
Francisco Ferreira	Martin Rama		
Chief Economist, Sub-Saharan Africa Region, World Bank	Chief Economist, South Asia Region, World Bank		
Mary Hallward-Driemeier	Ritva Reinikka		
Senior Principal Specialist, Jobs Cross Cutting Solution	Director (retired), Human Development, Africa		
Area, World Bank	Region, World Bank		

Elizabeth King

Former Director of Education, Human Development Network

External			
Thorsten Beck	Philip Keefer		
Professor of Banking and Finance, Cass Business School in	Principal Economic Advisor, Institutions for		
London	Development, Inter-American Development Bank		
Gerard Caprio	Peter Lanjouw		
William Brough Professor of Economics, Williams College	Professor of Economics, VU University Amsterdam		
Paul Collier	Ross Levine		
Professor of Economics and Public Policy, University of	Willis H. Booth Professor of Banking and Finance,		
Oxford & Director, Centre for the Study of African Economies	University of California Berkeley		
David Dollar	William Martin		
Senior Fellow, Brookings Institution	Senior Research Fellow, IFPRI		
William Easterly	Branko Milanovic		
Professor of Economics, New York University	Senior Scholar, Luxembourg Income Study Center,		
	City University of New York		
Caroline Freund	Lant Pritchett		
Former Chief Economist, Middle East and North Africa	Professor of International Development, Kennedy		
Region, World Bank & Senior Fellow, Peterson Institute	School of Government		

External continued			
Ahmed Galal	Claudio Raddatz		
Managing Director, Economic Research Forum, & Former	Division Director of Financial Policy, Central Bank of		
Finance Minister, Egypt	Chile		
Jeffrey Hammer	Martin Ravallion		
Professor of Economic Development, Princeton University	Edmond D. Villani Professor of Economics,		
	Georgetown University		
Bernard Hoekman	Norbert Schady		
Research Director of Global Economics, European University	Principal Economic Adviser, Social Sector, Inter-		
Institute	American Development Bank		
Patrick Honohan	Klaus Schmidt-Hebbel		
Governor, Central Bank of Ireland	Former Chief Economist, OECD		
Beata Javorcik	Emiliana Vegas		
Professor of Economics, Oxford University	Chief, Education Division, Inter-American		
	Development Bank		
Emmanuel Jimenez	Alan Winters		
Executive Director, 3ie (International Initiative for Impact	Former Chief Economist, DFID & Professor of		
Evaluation)	Economics, University of Sussex		

Research Leadership Team

The Research Director along with the Research Managers and Senior Advisers are responsible for providing DECRG with intellectual leadership. For a complete list of staff by Global Practice, visit: http://econ.worldbank.org/staff.

Director, Managers, and Senior Advisers			
Asli Demirguc-Kunt	Maria Soledad Martinez Peria		
Director of Research	Manager, Finance and Private Sector Development		
Aart Kraay	Aaditya Mattoo		
Senior Adviser	Manager, Trade and International Integration		
Arianna Legovini	Luis Serven		
Manager, Development Impact Evaluation	Senior Adviser, Macroeconomics and Growth		
Michael Lokshin	Michael Toman		
Co-Manager, Surveys and Methods	Manager, Environment and Energy		
Calogero Carletto	Adam Wagstaff		
Co-Manager, Surveys and Methods	Manager, Human Development and Public Services		
Francisco Ferreira			
Senior Adviser, Poverty and Inequality			

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