Measuring Financial Inclusion

According to a new database, only 50 percent of adults worldwide have an account with a formal financial institution.

Well-functioning financial systems serve a vital purpose, offering savings, credit, payment, and risk management products to people with a wide range of needs. Inclusive financial systems—allowing broad access to financial services, without price or nonprice barriers to their use—are especially likely to benefit poor people and other disadvantaged groups. Without inclusive financial systems, poor people must rely on their own limited savings to invest in their education or become entrepreneurs—and small enterprises must rely on their limited earnings to take advantage of promising growth opportunities.

Until now little had been known about the global reach of the financial sector—the extent of financial inclusion and the degree to which such groups as the poor, women, and youth are excluded from formal financial systems. Systematic indicators of the use of different financial services had been lacking for most economies.

With funding from the Bill & Melinda Gates Foundation, the Global Financial Inclusion (Global Findex) database provides such indicators, measuring how people in 148 economies save, borrow, make payments, and manage risk. These new indicators are constructed with survey data from interviews with more than 150,000 nationally representative and randomly selected adults age 15 and above. The survey was carried out over the 2011 calendar year by Gallup, Inc. as part of its Gallup World Poll survey.

The data show that 50 percent of adults worldwide have a formal account. They also reveal sharp disparities in the use of financial services across regions, economies, and individual characteristics. In high-income economies 89 percent of adults have a formal account. In developing economies only 41 percent of adults do. Among those living on less than $2 a day, only 23 percent do. Worldwide, 55 percent of men have a formal account, compared with 47 percent of women. And in the developing world the poorest fifth of adults within an economy are on average less than half as likely to have an account as the richest fifth.

Worldwide, by far the most common reason for not having a formal account—cited by 65 percent of non-account-holders—is lack of enough money to use one. Other common reasons reported for not having an account are that banks or accounts are too expensive (cited by 25 percent of adults without a formal account) and that banks are too far away (cited by 20 percent).

Globally, 22 percent of adults report having saved at a formal financial institution in the past 12 months. Of those with a formal account, 43 percent report having saved formally. In developing economies community-based savings clubs are one common alternative (or complement) to saving.

(continued on page 8)
FOCUS
Aid Effectiveness

Donors are more likely to use country systems, and untie their aid, where they have a large share of the aid market

Donor organizations recognize that political support for maintaining or increasing levels of aid depends on improving perceptions of its effectiveness. In 2005, in response to concerns about the quality of aid, the Paris Declaration on Aid Effectiveness moved implementation issues to the top of the international aid effectiveness agenda. Donors committed to improving inter-donor coordination and to practices more consistent with the principle of country “ownership” of development strategies. But these commitments are justified largely by intuition and anecdotes, not by rigorous and systematic theory and evidence. Two recent papers add to our understanding of donors’ behavior relating to aid practices—and of whether there may be tradeoffs among some of the Paris Declaration’s objectives.

Tying aid to purchases from the donor country is widely believed to reduce its effectiveness. More recently a consensus has also emerged on the importance of reducing aid fragmentation and the transactions costs it imposes on recipient countries. Knack and Smets analyze theoretically and empirically the impact of aid fragmentation on decisions to tie aid to purchases from contractors based in the donor country.

Building on collective action theory, they argue that a donor with a larger share of the aid market in a country has stronger incentives to maximize the development impact of its aid, by tying less of it. In countries with severe corruption problems, however, aid tying can be an efficient response by donors. Empirical tests strongly and consistently support the prediction that higher donor aid shares are associated with less aid tying.

When recipient countries are grouped by their scores on corruption perception indexes, higher shares of aid are significantly related to lower aid tying only in the less corrupt subsample. When aid tying is more costly, as proxied by donor country size and income, it is less prevalent. Aid tying is lower in the least developed countries, consistent with the recommendation of the OECD Development Assistance Committee (DAC).

The study reassuringly finds that the Paris Declaration’s objective of untieing more aid does not conflict with another of its goals: sharpening donors’ division of labor among recipients. Results instead are consistent with the view that reducing fragmentation—by increasing donors’ share of aid in the countries they assist—enhances their reputational stake in producing favorable development outcomes.

Donors’ reputational stake, as proxied by their share of the aid market in a country, also turns out to matter for another objective: increasing the use of recipient country systems for managing aid. The Paris Declaration urges recipient countries, with technical assistance from donors, to strengthen their public financial management systems. In the meantime, using these systems—despite their flaws—is believed to strengthen them, while bypassing them undermines them by diffusing accountability and fragmenting policy and planning processes.

Where recipient aid management systems are weaker, corruption scandals tarnishing the donor agency’s reputation are more likely to occur, and aid-funded programs are less likely to be selected and implemented more efficiently. These costs are short term and fully internalized by the donor. The benefits of using country systems are mostly external (benefiting other donors) and realized only over the long term. Donors’ use of country systems in the aggregate is therefore likely to be suboptimal. When a donor undertakes any action to strengthen recipient country systems, it is in effect providing a public good for other donors. The benefits are not wholly external, however: when a donor has a larger share of the aid market in a country, it will internalize more of the benefits from any investments in strengthening country systems. A donor’s use of country systems is then expected to be positively related to its share of the aid received by a given country, controlling for quality of recipient systems.

Knack tests this prediction using a panel data set based on three OECD-DAC surveys designed to monitor progress toward Paris Declaration goals. Tests show that a donor’s use of the recipient country’s systems is positively related to the donor’s share of aid provided to the recipient, perceptions of corruption in the recipient country, and public support for aid in the donor country (a proxy for the donor’s risk tolerance).

Despite pressure from the Paris Declaration campaign, there were no significant increases in the use of country systems in 2005–10. Such increases may depend largely on quality improvements in public financial management systems or on progress in donors’ division of labor by country and sector. Quality improvements often occur only over long periods, however, and concentrating aid in fewer countries and sectors risks reducing a donor’s visibility. But the rate of aid tying has fallen sharply since the OECD-DAC began measuring it.


Good Jobs for South Asia

Absorbing the growing labor force in South Asia will require adding 12 million jobs every year between 2010 and 2030

South Asia will account for 40 percent of the growth in the world’s working-age population (ages 15–64) until 2050. In a region that is also home to 40 percent of the world’s absolute poor, creating more and better-quality jobs, the most durable route out of poverty, is therefore of global importance.

The track record in the region is encouraging. The growth rate of employment has broadly tracked the growth rate of the working-age population. And not only have jobs increased in number. Their quality has improved as well. Real wages rose for wage workers—both for casual laborers and for regular wage earners. Poverty declined for the self-employed—employers, independent workers, and unpaid family labor.

But there is no room for complacency. Absorbing the growing labor force in South Asia will require adding 12 million jobs every year between 2010 and 2030. And if rates of female labor force participation in Bangladesh, India, and Pakistan—now among the lowest in the developing world—increase as they have in some East Asian countries, that figure will rise to nearly 15 million, the equivalent of adding the population of Jakarta every year.

The employment challenge for the region is to absorb labor force entrants at rising levels of output per worker. This requires accelerating the movement of labor out of agriculture into industry and services, where output per worker is higher, as well as moving labor from lower-productivity to higher-productivity firms within manufacturing and services.

Here, the demographic cloud has a silver lining. Population growth will swell the numbers entering the labor force. But the age composition of that growth could potentially mitigate the employment challenge. The “demographic transition”—the period during which the number of working-age people grows more rapidly than the number of their dependents—can provide a tailwind in support of policy reform. The resources saved as a result of fewer dependents provide a “demographic dividend,” which can be used for the physical and human capital investments necessary to move labor into industry and services.

But harnessing the dividend requires a conducive business environment that allows potential savings to be turned into actual investments. Because it takes time for policies to bear fruit and the demographic window of opportunity is expected to close around 2040 for most of South Asia, strengthening policy reforms is particularly urgent.

A flagship report of the World Bank’s South Asia Region, produced by a team led by Reema Nayar and Pablo Gottret, has proposed a cross-cutting reform agenda. Priorities include electricity, early childhood intervention, and labor regulations.

Job-creating firms in South Asia’s urban formal sector report electricity as among the top three constraints on their ability to operate and grow. Firms in Afghanistan, Bangladesh, and Nepal face greater electricity constraints than similar firms in countries at similar income levels elsewhere. In 2000–10 virtually 100 percent of firms in these three countries experienced power outages every month. The use of generators to cope with uncertain power supply is more common in South Asia than in other countries with similar income levels. Access to electricity is also among the top constraints reported by rural industry and service firms in Bangladesh, Pakistan, and Sri Lanka and by urban informal sector firms in India. Reforms in the power sector require public and private investment to reduce the large gap between demand and supply as well as improved governance of the utilities.

Another priority is to improve the quality of learning at all levels of education. But the greatest payoffs may well come from interventions before children enter formal schooling. South Asia has the world’s highest rates of malnutrition for children under age five and some of the highest levels of anemia and iodine deficiency. And there is considerable evidence, including from South Asia, that improved nutrition enhances lifetime learning and labor market productivity. Early childhood interventions must address nutrition, hygiene, and early cognitive stimulation if irreversible cognitive impairment is to be prevented.

Addressing labor regulations will also be important. Employers in formal sector manufacturing in India are much more likely to adjust their workforce by creating and eliminating jobs for nonpermanent contract workers than for regular wage earners. This is in part because of labor regulations, which managers in India as well as Nepal and Sri Lanka report as a significantly more severe constraint than do similar firms in countries with similar income levels.

The high cost of dismissing regular workers is in effect a tax on hiring them. Reforms to encourage job creation in the formal economy should lower these costs, which protect only a minority of workers. Such reforms should go hand in hand with those that help both formal and informal workers adjust to labor market shocks and improve their future earning potential.
Retirement Behavior among China’s Older Workers

In China the rural elderly are often unable to retire—while urban women often drop out of the labor force early

In China as in other countries, developing and developed, population aging raises the prospect that both formal and informal mechanisms for supporting the elderly will come under strain over the next 20 years. Like Indonesia and other developing countries, however, China is experiencing population aging at lower income levels and before the extension of pensions to rural residents and to urban residents in the informal sector. In a sense China has two retirement systems: a formal system, under which urban employees receive generous pensions and face mandatory retirement by age 60, and an informal system, under which rural residents and urban residents in the informal sector rely on family support in old age and have much longer working lives.

The retirement patterns presented in a recent paper by Giles, Wang, and Cai illuminate the employment context for the decisions that China’s policy makers are facing today as they work to extend new pension programs in rural areas and to the urban informal sector. The authors raise several issues that warrant consideration when thinking about employment-related policy for an aging population.

First, as researchers have found in the United States, the United Kingdom, and other OECD economies, there is a strong association between pension eligibility and exit from productive employment in China, Indonesia, and the Republic of Korea. Moreover, in rural areas of China and Indonesia, where work is physically demanding, the authors observe a strong correlation between employment status and physical functioning abilities. In China this raises concerns that the “ceaseless toil” characterization of rural elderly lives may remain accurate for a significant share of the rural elderly population. A rural pension

allowing retirement for rural residents over age 65 (or even age 70) could help eliminate differences in the labor supply of older residents between rural and urban areas.

Second, the gender disparity in mandatory retirement and pension eligibility ages for formal sector workers creates strong incentives for women to exit productive work at younger ages. While labor force participation rates of women are similar to those of men at younger ages, they fall precipitously after age 40. The evidence presented and reviewed by the authors suggests that the probability that an urban woman is employed is strongly related to pension eligibility, which also corresponds to working in an industry sector where mandatory retirement is enforced.

Changing the age of pension eligibility rapidly may cause hardship for women who are close to the current retirement age and want to retire. But allowing women to retire at the same age as their male counterparts would remove an obstacle that women face relative to men when looking for work later in life. In Indonesia and Korea, where there is no difference in mandatory retirement ages for men and women in the civil service or formal sector, women’s labor force participation declines after age 45, but these declines are not nearly as steep as those observed for urban Chinese women.

Apart from the gender disparity in mandatory retirement ages in the formal sector, retirement ages are quite low for formal sector employees in urban China. Given the rate of population aging, the argument that mandatory retirement is important for providing opportunities for younger workers makes less sense. Indeed, both macroeconomic and fiscal considerations warrant encouraging workers to remain employed until older ages. Eliminating (or raising) mandatory retirement ages will be less problematic than raising the age of pension eligibility, but both are likely to be unpopular because they force changes in expectations and long-term planning.

One politically palatable approach may be to gradually raise the retirement age in three-month increments. If such a reform was started during the 12th Five-Year Plan period, the retirement age for men would reach 65 by 2030, though it would take longer at this pace for full equalization for women. Research conducted in the United States and Europe, however, suggests that incentives could be provided within the pension system to encourage retirement later in life. Moreover, correlations in retirement of spouses, reflecting coordination of retirement planning, raise the prospect that eliminating disincentives for women to remain in the labor force after 50 may encourage delayed retirement of their husbands as well.

The precipitous decline in urban women’s labor force participation after age 40 is likely driven by gender disparities in the mandatory retirement age

Do Middle Classes Bring Institutional Reforms?

When the middle class grows in size, social policy becomes more active and the quality of governance improves

The question of how the middle class affects institutions and the social contract has received wide attention. Most empirical analyses have focused on the middle class as a relative position in the income distribution, demonstrating that lower inequality and a larger “class in the middle” lead to better institutional outcomes. Yet middle-class status is defined as much by people’s absolute income and ability to escape poverty as it is by their relative position. Indeed, many of the positive effects of middle-class societies emphasized in the theoretical literature depend on people exiting poverty and earning higher incomes rather than on their relative position in the income distribution.

Theoretical models postulate a positive effect of a larger middle class on economic and social outcomes through two main channels. A first channel emphasizes the effect of middle-class endowments and preferences on economic growth. Some studies suggest that members of the middle class are less vulnerable to the credit market imperfections and fixed costs in physical and human capital accumulation that prevent poor people from investing and building up assets. Others highlight the importance of domestic markets for industrialization and the importance of a higher demand from the middle class for quality goods.

A second channel of the theoretical literature directly explores the link between the size of the middle class and institutional outcomes. Particular attention has been given to the “modernization theory,” which looks at the extent to which more affluent societies favor the creation and consolidation of democracies and good institutions. Conceptually, higher incomes may reduce conflict over the distribution of income, and citizens with higher human capital may be more effective in sustaining good institutions.

A new paper by Loayza, Rigolini, and Llorente makes two contributions to the literature. First, it presents a new panel data set that contains information about inequality, the mean income and expenditures of households, and head-count indexes for several income and expenditure thresholds. The data set, which spans 672 yearly observations across 128 countries, complements existing large cross-country data sets reporting poverty and inequality measures. To build the data set, the authors drew both from a collection of nationally representative household surveys and from parameterized distributions of income and expenditures using parameters from the World Bank’s PovCal database. Second, the authors use this new data set to test the extent to which policy and institutional outcomes are affected by an expansion of the middle class, which they measure as the share of the population who have achieved income above $10 a day (adjusted for purchasing power parity).

The joint endogeneity of the size of the middle class (and of the income distribution in general) is a concern. So is the likely presence of unobserved country-specific effects. The authors use an econometric methodology that, by taking advantage of the panel nature of the data, attempts to gauge the causal effect of expansions of the middle class while controlling for country-specific effects.

The authors estimate the effect of the middle class on policies and institutions in three broad categories: social policy relating to public expenditures on health and education, market-oriented economic policy on international trade and finance, and quality of governance relating to democratic participation and absence of official corruption. The analysis thus also relates to the literature investigating the association between poverty, institutions, and growth.

The findings show that when the size of the middle class increases, social policy on health and education becomes more active and the quality of governance relating to democratic participation and official corruption improves. This does not occur at the expense of economic freedom, as an expansion of the middle class also implies more market-oriented economic policy on trade and finance. The effect of a larger middle class appears to be more robust than the effect on the same outcomes of lower poverty, lower inequality, and higher GDP per capita.

Overall, the findings suggest that the expansion of the middle class can play a part in reforming government policies and institutions to promote economic development.

Evidence suggests that introducing product patents on drugs in India led to a limited overall increase in drug prices with no effect on use

Government policy toward the pharmaceutical sector can potentially affect incentives for innovation as well as the use of available treatments. While there has been much work on policies affecting the pharmaceutical sector in the United States and other industrial countries, relatively little empirical work has been done on developing countries. This is surprising given the profound changes affecting the pharmaceutical market in developing countries in recent years.

One type of policy recently implemented in India, China, and Brazil and now being considered in many African countries is an increase in patent enforcement. From the 1970s through the 1990s in India, for example, patents were issued on the process of manufacturing a product rather than on the product itself. This meant that a slight modification in the synthesis of a molecule yielded a new patent and thus allowed several firms to produce essentially the same drug. Indeed, copies of global brands such as Lipitor and Prozac were manufactured and sold in India by generic firms within two years of being introduced in the United States.

The policy controversy over the impact of stronger intellectual property rights (IPRs) in developing countries is stark. A weak IPR regime might benefit developing countries by allowing domestic firms to imitate foreign technologies to enhance access to pharmaceuticals. But it might also reduce incentives for R&D investments in drugs that could especially benefit developing countries. Perhaps in part because of this second point, the World Trade Organization recently started to require member countries to change their enforcement of patents. The implementation of the Uruguay Round agreement in 1995 entailed putting in place a system of product patents and legal protection for all Trade-Related Intellectual Property Rights (TRIPs), including pharmaceuticals. As a result, beginning in January 2005 firms in India (and in 2002 for China and 1997 for Brazil) could no longer reverse-engineer patented products.

The debate about the merits of implementing TRIPs has also been contentious in the economics literature. Patent enforcement is likely to lead to higher prices for drugs, which might lower their use and adversely affect health. Several recent academic papers have echoed these concerns, using theory and empirics to forecast the potential welfare losses for current and future consumers through higher drug prices. But prices may not rise if most drugs affected by the patent reform have therapeutic substitutes and thus face substantial competition from other products. In addition, the innovator patent holder might be somewhat more efficient at production than generic imitators, and its lower costs might to some extent offset the market power effect.

A new paper by Duggan and Goyal explores the effects of introducing product patents for one segment of the Indian pharmaceutical market—central nervous system drugs. In terms of retail sales, this is the second largest therapeutic category in the world and one of the fastest-growing segments in India. The authors use proprietary data on pharmaceutical sales in India during 2003–08 and link these data to product patents granted by the government of India provides a unique opportunity to empirically examine the impact of product patents on pharmaceutical prices and use. The preliminary analysis undertaken by Duggan and Goyal underscores the importance of heterogeneous effects on prices by the type of product patent granted on drugs, implying the need for a careful examination of the product patent portfolio.

Can We Trust Shoestring Evaluations?

A rapid appraisal method cuts the cost of evaluating the impact of a development project—but produces unreliable results

There are a great many interventions that we would like to evaluate for which no baseline (pre-intervention) data are available. Think of all the development projects for which no impact evaluation was ever planned. While there has been substantial growth in impact evaluations of World Bank development projects, only 9 percent of World Bank investment loans in 2009/10 had an impact evaluation. Without baseline data we cannot do the standard “double difference” estimator—comparing changes in outcomes in treated units with those in untreated units since the baseline.

But there is a potential way out: we can ask postintervention questions of both the treatment and comparison groups about how much their welfare has improved since the intervention began. This would dramatically lower the costs of impact evaluations, and it would open up many new opportunities for learning about policy effectiveness.

But how confident can we be about the potential for using retrospective recall of outcome changes as a proxy for the actual changes in an impact evaluation? We know very little about how well such a rapid appraisal method works in practice.

A new paper by Ravallion tries to help fill this gap in our knowledge. It reports on an experiment that was designed to test the idea of using retrospective data as a substitute for baseline data from a contemporaneous survey. After baseline and post-intervention data were collected for treatment and comparison units to allow estimation of a standard double difference (DD), a series of recall questions were asked about how different dimensions of welfare had changed since the time the project was introduced. The paper studies two versions of a rapid DD (RDD) estimator.

- RDD1, which assumes that no baseline data are available, so that only an ex post survey can be done. Thus no adjustments are made for selection bias based on contemporaneously observed preintervention differences that might influence subsequent trajectories.
- RDD2, which assumes that only the data on outcomes are missing. Thus standard corrections can be made for selection bias based on other observables at the baseline.

The difference is in whether an allowance is made for selection on observables. If the recall of changes since the introduction of the project works well, both RDD1 and RDD2 will be able to address selection based on (time-invariant) unobserved factors. The rapid appraisal method was “tacked onto” a full-scale evaluation. This was for a large anti-poverty program, supported by a World Bank loan, in poor areas of rural southwest China. The paper is thus able to compare RDD1 and RDD2 with the “actual” DD, as estimated from high-quality, comprehensive, and contemporaneous baseline and follow-up surveys. It also examines the implications for the structure of recall errors.

The findings of the study suggest that rapid appraisal methods are vulnerable to serious biases that confound identification. Respondents’ perceptions of how their living standards have changed provide a weak and biased signal of consumption changes measured from contemporaneous surveys. With the actual change in consumption controlled for, the recalled improvement in living standards tends to be higher for initially richer households.

There are clear signs of telescoping in the recall responses, but the bulk of the benefits occurred in the earlier half of the recall period, which is given too little weight by respondents in treatment villages. Recall is clearly also affected by many idiosyncratic factors not attributable to consumption.

Because of the inability to effectively address the problem of selection bias based on the unobserved factors that determined which villages were selected for the program, the rapid appraisal method using the recall method becomes vulnerable to spurious impact signals. In this case the recall method suggested positive impacts after controlling for observed differences between treatment and comparison villages at the baseline. The paper argues that a plausible interpretation of this finding is that the selection bias based on observables is working in the opposite direction to that based on unobserved factors. Thus reducing only the first bias (by balancing the distribution of observables between treated and comparison units) makes matters worse.

So the case study offers little encouragement on the reliability of the rapid appraisal method. Further tests are needed.

The case study offers little encouragement on the reliability of the rapid appraisal method. Further tests are needed

people’s use of financial products across economies and over time, the Global Findex database fills a big gap in the financial inclusion data landscape. The data set can be used to track the effects of financial inclusion policies globally and develop a deeper and more nuanced understanding of how people manage their finances.

By making it possible to identify segments of the population excluded from the formal financial sector, the data can help policy makers prioritize reforms accordingly and, as future rounds of the data set become available, track the success of those reforms.

The complete database of country-level indicators (disaggregated by gender, income, age, education, and rural or urban residence), along with related reports, is available at http://www.worldbank.org/globalfindex.

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Recent Policy Research Working Papers

<table>
<thead>
<tr>
<th>Working Paper</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>6046</td>
<td>How Bribery Distorts Firm Growth: Differences by Firm Attributes</td>
</tr>
<tr>
<td>6053</td>
<td>Transfers, Diversification and Household Risk Strategies: Experimental Evidence with Lessons for Climate Change Adaptation</td>
</tr>
<tr>
<td>6054</td>
<td>Orderly Sovereign Debt Restructuring: Missing in Action!</td>
</tr>
<tr>
<td>6055</td>
<td>Gender, Geography and Generations: Intergenerational Educational Mobility in Post-reform India</td>
</tr>
<tr>
<td>6057</td>
<td>What Has Driven the Decline of Infant Mortality in Kenya?</td>
</tr>
<tr>
<td>6058</td>
<td>A Cost Effective Solution to Reduce Disaster Losses in Developing Countries: Hydro-Meteorological Services, Early Warning, and Evacuation</td>
</tr>
<tr>
<td>6060</td>
<td>The Spatial Development of Indias</td>
</tr>
<tr>
<td>6061</td>
<td>Female Wages in the Apparel Industry Post-MFA: The Cases of Cambodia and Sri Lanka</td>
</tr>
<tr>
<td>6062</td>
<td>Together We Stand? Agglomeration in Indian Manufacturing</td>
</tr>
<tr>
<td>6065</td>
<td>Long-Term Impacts of Global Food Crisis on Production Decisions: Evidence from Farm Investments in Indonesia</td>
</tr>
<tr>
<td>6074</td>
<td>Is the Baby to Blame? An Inquiry into the Consequences of Early Childbearing</td>
</tr>
<tr>
<td>6076</td>
<td>Patterns and Correlates of Intergenerational Non-Time Transfers: Evidence from CHARLS</td>
</tr>
</tbody>
</table>

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