

# BRIEF

## Financial Inclusion and Stability: What Does Research Show?

A growing body of research suggests that whether broad-based access to formal financial services promotes financial stability depends on how that access is managed within the regulatory and supervisory framework, especially in terms of financial integrity and consumer protection. Four factors come into play: financial inclusion, financial consumer protection, financial integrity, and financial stability. These factors are inter-related and, under the right conditions, positively related. Yet failings on one dimension are likely to lead to problems on others. This Brief explores what research to date shows about the linkages and potential beneficial relationships among these factors, and it identifies gaps that remain to be explored.

Focus to date: linkages among financial development and economic growth, reduction of income inequality, and poverty alleviation. There is limited empirical work exploring the specific linkages between financial inclusion and financial stability. Studies have focused largely on the impact of financial development on growth, income inequality, and poverty reduction. The evidence strongly indicates that, when effectively regulated and supervised, financial development spurs economic growth, reduces income inequality, and helps lift households out of poverty.<sup>1</sup>

Most cross-country evidence relates to the benefits of financial depth rather than to broad financial inclusion. Deep financial sectors are not necessarily inclusive ones, if financial access is tilted heavily toward the wealthy. Our lack of knowledge about the macro-level effects of financial inclusion stems, in part, from the challenges associated with measuring it on a consistent basis both across countries and over time based on surveys of users and potential users of those services.<sup>2</sup> In contrast, the effects of financial depth have been studied extensively precisely because data from suppliers of financial services are readily available.

Macroeconomic evidence indicates that well-developed financial systems have a strong positive impact on economic growth over long time

periods.3 Multiple studies have documented a robust negative relationship at the country level between indicators of financial depth and the level of income inequality as measured by the Gini coefficient.<sup>4</sup> Financial depth is also associated with increases in the income share of the lowest income quintile across countries from 1960 to 2005 (Beck, Demirgüç-Kunt, and Levine 2007). It comes as little surprise, therefore, that countries with higher levels of financial development also experienced swifter reductions in the share of the population living on less than \$1 per day in the 1980s and 1990s. The magnitude of the impact is also large. Controlling for other relevant variables, almost 30 percent of the variation across countries in rates of poverty reduction can be attributed to cross-country variation in financial development (Beck, Demirgüç-Kunt, and Levine 2007).

The benefits work not only through direct use of financial services, but through the indirect positive effects that financial development has on low-income population segments, especially through labor markets. For example, careful empirical studies have shown that the deregulation of bank branching can not only intensify competition and improve bank performance, it can also boost the incomes of the poor, tightening income distribution by increasing relative wage rates and working hours of unskilled workers.<sup>5</sup> Financial development is therefore

<sup>1</sup> See World Bank (2008) for an overview.

See Cull, Demirgüç-Kunt, and Morduch (2012), especially chapter 1, for discussion.

<sup>3</sup> See Levine (2005) and Demirgüç-Kunt and Levine (2008) for reviews of the literature on the causal effect of financial development on growth.

See Clarke, Xu, and Zhou (2006), Li, Xu, and Zou (2000), and Li, Squire, and Zou (1998).

<sup>5</sup> For the United States, see Jayaratne and Strahan (1998) and Beck, Levine, and Levkov (2010).

pro-poor not only in the sense that economic growth lifts households above the poverty line, but also in a relative sense because it narrows income differentials. Do narrower income differentials and improved labor prospects for low-income households contribute to a more cohesive, stable society and thus to market stability in the broader sense? Likely so, though that link could be explored more explicitly, as could the possible connection to financial system stability.

Which broad channels of financial inclusion promote income equality and reduce poverty? While the challenges associated with measuring financial inclusion are now being better met, we still lack clear understanding about the specific ways in which financial inclusion promotes income equality and reduces poverty<sup>6</sup>—though recent user studies in individual developing countries are beginning to offer important clues.<sup>7</sup> For example, field experiments based on randomized controlled trials are helping to identify the causal pathways through which access to formal financial services improves the lives of the poor in developing countries, especially with respect to savings products.<sup>8</sup> Savings bolster stability at the individual and household level and, given their very large numbers, small savers potentially contribute to stability at the financial system level—though stability effects of savings at both levels could be explored in greater detail, especially at the level of the financial system.

What are the micro-level links among financial access, improved livelihoods, and financial stability? If financial inclusion leads to a healthier household and small business sector, it could also contribute to enhanced macroeconomic (and financial system) stability, though again we are unable to point to specific research that supports that conjecture at this point. Also more research needs to be done to identify the specific financial

tools needed by the poor. The "wrong" financial tools—or irresponsibly delivered financial services—have been correlated with adverse effects, such as lower levels of educational attainment, suggesting the importance of effective consumer protection in particular to ensure positive effects on micro stability.

Another link between inclusion and micro stability is through the entry, capitalization, and growth of new nonfinancial firms. At the firm level, the macrolevel evidence shows that financial development is associated with more efficient allocation of capital (Wurgler 2000). The entry rate of new firms and their growth are also positively associated with financial development (Klapper, Laeven, and Rajan 2006), and the effects of relieving financial constraints are especially strong for small firms' growth rates (Beck, Demirgüç-Kunt, and Maksimovic 2005). Moreover, recent evidence, for example with respect to the portfolios of Chilean banks, 10 suggests that losses on small loans pose less systemic risk than the large, infrequent, but also less predictable, losses associated with large loans. Thus, greater financial inclusion in terms of access to credit might also coincide with greater stability at the level of providers of financial services.

What are the macro-level links between financial inclusion and financial stability, and what about financial exclusion? At the country level, evidence suggests that financial inclusion can lead to greater efficiency of financial intermediation (e.g., via intermediation of greater amounts of domestic savings, leading to the strengthening of sound domestic savings and investment cycles and thereby greater stability) (Prasad 2010).<sup>11</sup> Greater diversification in clientele served associated with financial inclusion might also be expected to lead to a more resilient and more stable economy. The reduction of income inequality through financial development and inclusion could lead to

<sup>6</sup> On improved measurement of financial inclusion, see Demirgüç-Kunt and Klapper (2012).

<sup>7</sup> On the effects of bank branch expansion, see Burgess and Pande (2005) for India and Bruhn and Love (2009, 2012) for Mexico.

<sup>8</sup> On the effects of commitment savings devices in Africa see Dupas and Robinson (2011) and Brune et al. (2011). See also Citi Foundation (2007).

<sup>9</sup> Zhan and Sherraden (2011) find that the accumulation of nonfinancial and financial assets by parents is generally associated with greater educational attainment by children, but their unsecured debt is negatively related to children's college completion.

<sup>10</sup> See Adasme, Majnoni, and Uribe (2006).

<sup>11</sup> We acknowledge that savings accumulation associated with greater financial inclusion does not always lead to more efficient intermediation. Whether it does so depends crucially on the quality of financial infrastructure, regulation, and supervision.

greater social and political stability, which in turn could contribute to greater financial system stability (though here, too, the links merit further exploration).

If financial inclusion can promote greater stability, could financial exclusion likely lead to greater instability? Evidence here is not well developed, but it is clear that financial exclusion imposes at the very least large opportunity costs. Also, the evidence suggests that underdeveloped financial systems have disproportionately negative effects on small firms and low-income households, which in turn is likely to have adverse effects on societal cohesion. Moreover, the Financial Action Task Force (FATF) has recently explicitly acknowledged financial exclusion as an important risk in its efforts to combat money-laundering and terrorist financing, 12 underscoring the link between financial integrity and pro-stability financial inclusion. Additionally, in countries with high levels of financial exclusion, the informal financial services that households (and small firms) must rely on can be poor substitutes for formal services (Collins et al. 2009). In the extreme, informal services can themselves be a source of instability. For example, pyramid schemes organized as informal savings and investment opportunities have been known to trigger both political and social unrest and lack of confidence in the banking system. 13

Standard-setting bodies (SSBs) and the virtuous circle linking financial inclusion, financial consumer protection, financial integrity, and financial stability. Until recently, most of the relevant empirical research and evidence on links between financial inclusion and financial stability has come from research institutions, and not from policy makers, regulators, supervisors, or global SSBs. Yet SSBs-and policy makers, regulators, and supervisors attempting to follow the SSBs' standards and guidance while pursuing a financial inclusion agenda—are both among the most interested parties and also among the best positioned to contribute to articulating the research questions that will help SSBs consider financial inclusion in their work while remaining true to their core mandates.

In addition to FATF's recent recognition that financial exclusion poses risks in combating money-laundering and terrorist financing, the soon-to-be-completed revision of the Basel Core Principles (BCPs) has offered an opportunity for the Basel Committee on Banking Supervision (BCBS) to work the principle of proportionality (i.e., the balancing of risks and benefits against costs of regulation and supervision and allocating supervisory resources accordingly) into all the relevant BCPs, permitting consideration of (1) the changing risks and benefits of increased financial inclusion, given the expanding and changing set of providers and products involved, and (2) the adaptability of BCBS standards and guidance to widely varying country contexts (especially with respect to supervisory capacity). The recently revised Insurance Core Principles of the International Association of Insurance Supervisors offer a similar opportunity in the insurance realm. Finally, the recent financial crisis has further underscored the importance of promoting consumer protection and financial literacy and capability, a role that is relevant for multiple SSBs.

**Evidence gaps and the road ahead.** Notwithstanding the progress SSBs have made and the substantial volume of empirical research reviewed above, important gaps remain, including the following:

- How does financial inclusion contribute to political and social stability, and in turn to financial stability?
  What threats to financial stability flow from financial exclusion?
- What specific contributions to making financial inclusion pro-stability do effective financial consumer protection and financial integrity offer? How do we measure responsible financial inclusion (i.e., quality, not just quantity)?
- What financial "tools" best suit the needs of excluded households? What consumer protection and financial capability measures will ensure responsible delivery?
- What channels of financial inclusion work best to promote income equality and reduce poverty?
- What specific impact can increased formal savings have?

<sup>12</sup> See FATF (2011).

<sup>13</sup> See CGAP (2011) for discussion.

#### Bibliography

Adasme, Osvaldo, Giovanni Majnoni, and Myriam Uribe. 2006. "Access and Risk: Friends or Foes? Lessons from Chile." World Bank Policy Research Working Paper 4003. Washington, D.C.: World Bank.

Basel Committee on Banking Supervision. 2010. "Microfinance Activities and the Core Principles for Effective Banking Supervision." Basel: BIS, August.

Beck, Thorsten, Aslı Demirgüç-Kunt, and Ross Levine. 2007. "Finance, Inequality, and the Poor." *Journal of Economic Growth* 12(1): 27–49.

Beck, Thorsten, Aslı Demirgüç-Kunt, Luc Laeven, and Vojislav Maksimovic. 2006. "The Determinants of Financing Obstacles." *Journal of International Money and Finance* 25(6): 932–52.

Beck, Thorsten, Aslı Demirgüç-Kunt, and Vojislav Maksimovic. 2005. "Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?" *Journal of Finance* 60(1): 137–77.

Beck, Thorsten, Ross Levine, and Alexey Levkov. 2010. "Big Bad Banks? The Winners and Losers from Bank Deregulation in the United States." *Journal of Finance* 65(5): 1637–67.

Bruhn, Miriam, and Inessa Love. 2009. "The Economic Impact of Banking the Unbanked: Evidence from Mexico." World Bank, Policy Research Working Paper 4981. Washington, D.C.: World Bank.

——. 2012. "The Economic Impact of Expanding Access to Finance in Mexico." In Robert Cull, Aslı Demirgüç-Kunt, and Jonathan Morduch, eds., *Banking the World: Empirical Foundations of Financial Inclusion*. Cambridge, Mass.: MIT Press.

Brune, Lasse, Xavier Giné, Jessica Goldberg, Dean Yang. 2011. "Commitments to Save: A Field Experiment in Rural Malawi." World Bank, Policy Research Working Paper 5748. Washington, D.C.: World Bank.

Burgess, Robin, and Rohini Pande. 2005. "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment." *American Economic Review* 95(3): 780–95.

CGAP. 2011. "Global Standard-Setting Bodies and Financial Inclusion for the Poor: Toward Proportionate Standards and Guidance." White paper prepared on behalf of the G-20 Global Partnership for Financial Inclusion. Washington, D.C.: CGAP.

Citi Foundation. 2007. "Global Savings, Assets & Financial Inclusion: Lessons, Challenges & Directions." Report from a Global Symposium, Singapore, June. Global Assets Project.

Clarke, Geroge R. G., L. Colin Xu, and Heng-fu Zou. 2006. "Finance and Inequality: What Do the Data Tell Us?" Southern Economic Journal 72(3): 578–96.

Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven. 2009. *Portfolios of the Poor*. Princeton, N.J.: Princeton University Press.

Cull, Robert, Aslı Demirgüç-Kunt, and Jonathan Morduch, eds. Forthcoming. *Banking the World: Empirical Foundations of Financial Inclusion*. Cambridge, Mass.: MIT Press.

Demirgüç-Kunt, Aslı, and Leora Klapper. 2012. "Measuring Financial Inclusion: The Global Financial Inclusion Index," Washington, D.C.: World Bank. http://siteresources.worldbank.org/DEC/Resources/FinInclusionBrochureFINALWEB.pdf.

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Demirgüç-Kunt, Aslı, and Ross Levine. 2008. "Finance, Financial Sector Policies, and Long Run Growth." M. Spence Growth Commission Background Paper, No. 11. Washington, D.C.: World Bank.

Dupas, Pascaline, and Jonathan Robinson. 2011. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." NBER working paper 14693.

Financial Action Task Force (FATF). 2011. "Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion." Paris: FATF.

Hannig, Alfred, and Stefan Jansen. 2010. Financial Inclusion and Financial Stability: Current Policy Issues. ADBI Working Paper Series, no. 259. Manila: Asian Development Bank Institute.

Jayaratne, Jith, and Philip E. Strahan, 1996. "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation." Quarterly Journal of Economics 111, 639–70.

——. 1998. "Entry Restrictions, Industry Evolution and Dynamic Efficiency: Evidence from Commercial Banking." *Journal of Law and Economics* 41, 239–74.

Khan, H. R. 2011. "Financial Inclusion and Financial Stability; Are They Two sides of the Same Coin?" Address at BANCON 2011, Chennai, 4 November. Mumbai: Reserve Bank of India.

Kim, Youngmi, and Michael Sherraden. 2011. "Do Parental Assets Matter for Children's Educational Attainment? Evidence from Mediation Tests." *Children and Youth Services Review* 33(6): 969–79.

Klapper, Leora, Luc Laeven, and Raghuram Rajan. 2006. "Entry Regulation as a Barrier to Entrepreneurship." Journal of Financial Economics 82(3): 591–629.

Laeven, Luc. 2003. "Does Financial Liberalization Reduce Financing Constraints?" Financial Management 2003 (Spring): 5–34.

Levine, Ross E. 2005. "Finance and Growth: Theory and Evidence." In Philippe Aghion and Steven Durlauf, eds., *Handbook of Economic Growth*. Amsterdam: North-Holland Elsevier Publishers.

Li, Hongyi, Lyn Squire, and Heng-fu Zou, 1998. "Explaining International and Intertemporal Variations in Income Inequality." *Economic Journal* 108(446): 26–43.

Li, Hongyi, Lixin Colin Xu, and Heng-fu Zou. 2000. "Corruption, Income Distribution, and Growth." *Economics and Politics* 12(2): 155–82.

Prasad, Eswar S. 2010. Financial Sector Regulation and Reforms in Emerging Markets: An Overview. IZA Discussion Paper Number 5233. Bonn: Institute for the Study of Labor, October.

World Bank. 2008. Finance for All? (Policies and Pitfalls in Expanding Access). World Bank Policy Research Report. Washington, D.C.: World Bank.

——. 2001. Finance for Growth (Policy Choices in a Volatile World). World Bank Policy Research Report. Washington, D.C.: World Bank.

Wurgler, Jeffrey. 2000. "Financial Markets and the Allocation of Capital." *Journal of Financial Economics* 58(1–2): 187–214.

Zhan, Min, and Michael Sherraden. 2011. "Assets and Liabilities, Educational Expectations, and Children's College Degree Attainment." Children and Youth Services Review 33(6): 846–54.

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