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Volume Growth and Valuation Contraction

Global Microfinance Equity Valuation Survey 2012

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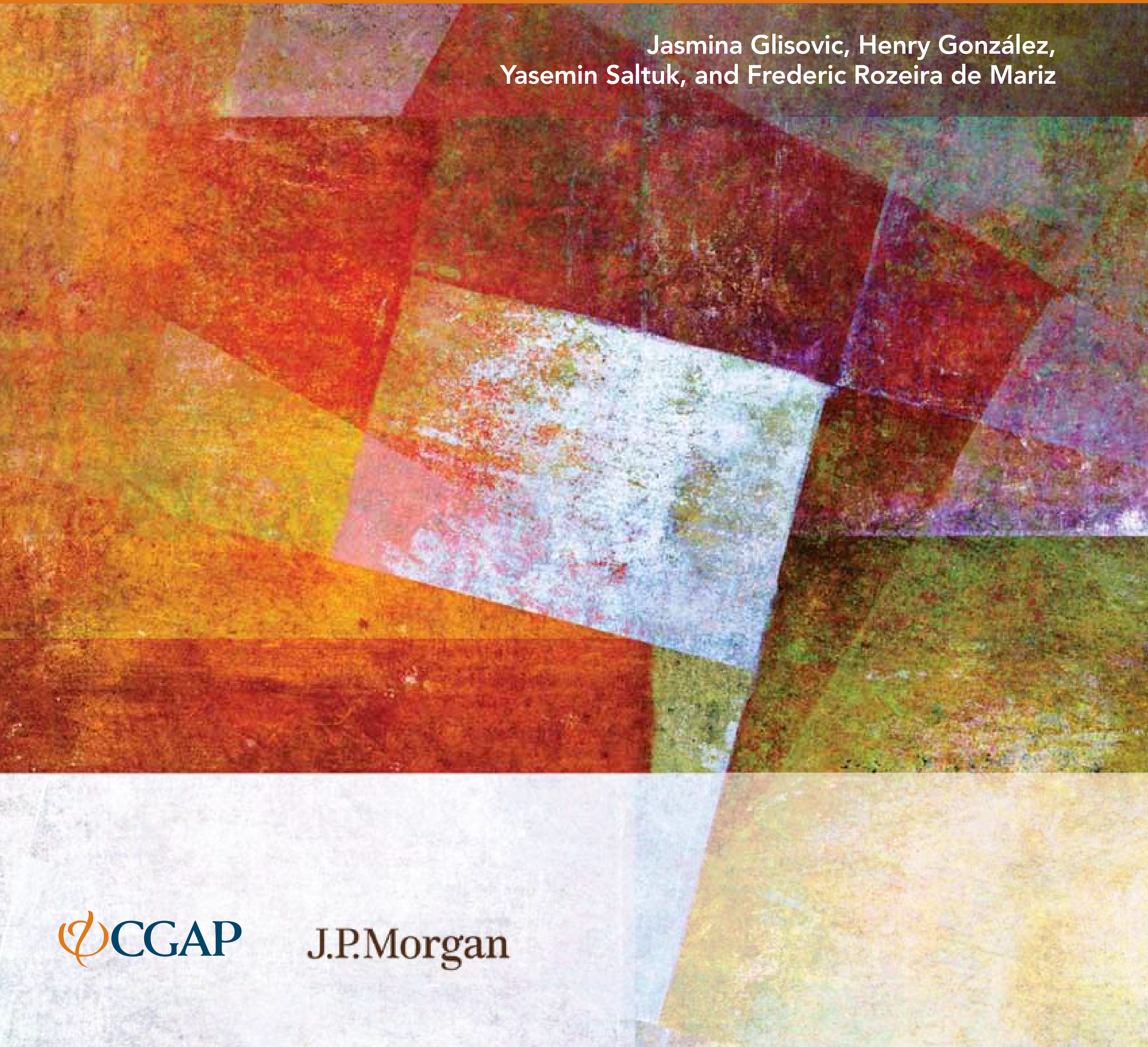

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Equity capital flows into microfinance have been increasing for many years, with both retail and institutional investors showing interest in this sector of financial services. Despite this growth, the vast majority of equity investments are still made in the form of private placements, as there are only three publicly traded microfinance institutions (Equity Bank in Kenya, Compartamos in Mexico, and SKS in India). The difficulty in accessing private data and the scarcity of publicly listed entities have limited the scope of the market research available to equity investors in microfinance institutions.

To address this research gap, CGAP and J.P. Morgan joined efforts in 2009 to publish an annual Global Microfinance Equity Valuation Survey Report. This partnership benefits from the deep microfinance market knowledge of CGAP and the emerging markets equity research skills of J.P. Morgan. In the past two years, it has also benefited from the support and industry experience of the Council of Microfinance Equity Funds (CMEF). The aim of these yearly publications is to provide benchmarks for the valuation of microfinance equity, both private and publicly listed, to promote market transparency and identify industry trends.

This year's report is the fourth edition of this research partnership. Previous editions of the report are available on the J.P. Morgan and CGAP Web sites.

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This report is the result of a collaborative effort between CGAP and J.P. Morgan. J.P. Morgan analysts are solely responsible for the investment opinions and recommendations, if any, in this report.

See page 17 for important disclosures.

Introduction

Toward the end of 2010, the asset quality of many microfinance institutions (MFIs) began to recover from a crisis of client over-indebtedness and unsustainable growth, particularly in India, Bosnia, and Nicaragua.[1] During 2011 and into 2012, this recovery continued to bring higher microfinance equity transaction volumes.[2] Based on the responses gathered in this year's survey, the private equity (PE) markets experienced an important increase in deal activity from the slower pace recorded in 2010. Large transactions in Latin America and the Caribbean (LAC) as well as strong flows from development finance institutions (DFIs) in India drove the increase in both the volume and the number of transactions.

While asset quality improved and transaction volumes increased, equity valuations continued to decline in 2011 from their peak in 2010, reversing the multiple expansion that had taken place up until then. This is likely due to lingering uncertainties about asset quality in some markets and continued public scrutiny, which was most pronounced in a few countries making up a significant portion of our sample (and the market), such as India. In 2011, our comparables in the public market also declined with a drop in the average valuation of the Lower Income Finance Institutions (LIFIs) Index.[3] We believe this reflects a wider trend where LIFI and microfinance valuations in the public and private markets are beginning to converge toward those of traditional financial institutions in emerging markets.

Section 1 of this report examines the landscape of PE deals. It follows the methodology of previous surveys and discusses valuation trends and new market developments (see Box 1 for more details on this methodology). This section also delves into deeper regional analysis and key country developments. We estimate that our sample covers 70–80 percent of the microfinance PE activity in 2011.

Section 2 looks at the valuation trends in the public market for LIFIs in developing countries. This analysis includes banks that are not exclusively offering microfinance but are also offering consumer loans and other financial services. Since LIFIs serve similar markets to microfinance, their valuation can be a useful comparable for MFIs. This report looks at the same 11 constituents of the LIFI Index that were reviewed in the 2011 edition.

1. As evidenced by the percentage of loan portfolios where the loans are 30 days in arrears (known as portfolio-at-risk or PAR 30) for the average of 50 MFIs with significant foreign capital investments (as measured by Symbiotics SYM 50 index).
2. For example, the average PAR 30 dropped from a high of 5.5% in early 2010 to its current level at 3.5%, as measured by Symbiotics SYM 50 index.
3. As measured by the Price/Book Value ratio in this report and the previous editions.

BOX 1

Methodology and sources

The analysis in this paper is based on two original samples: (1) a private transaction data set that includes 68 transactions in 24 countries during 2011 and (2) a sample of 11 publicly traded LIFIs. We estimate that this sample of PE transactions represents 70–80 percent of the PE market. Combined with surveys from prior years, our sample now covers 302 transactions that occurred between January 2005 and December 2011, with an aggregate value close to US$1,057 million. We believe this is the most comprehensive data set on PE investments in microfinance to date.

Private transaction data set

This year's data on PE transactions were collected and processed by CGAP in a strictly confidential survey conducted in the first quarter of 2012. Twenty-nine investors comprised of asset managers of microfinance investment vehicles (MIVs) and DFIs provided data on their PE transactions for 2011 (for a list of contributors see Appendix 1). During this survey cycle, covering January–December 2011, CGAP collected data on 84 individual transactions that amounted to US$382 million. However, only 68 transactions were included in our sample. Transactions were dropped if they were executed at nominal value where no valuation process could be assumed; were part of loans being converted into equity; were part of a preagreed investment stage, the price of which had been set during prior years; or were other deal types where valuation was not done during this cycle. Transactions that involved several parties that had done the valuation jointly are treated as one single transaction. This avoids a potential bias caused by including the same transaction information several times in the database.

CGAP followed strict procedures to ensure full confidentiality of the data reported. These included confidentiality agreements with all survey participants and restricted access policies to the database. Only three CGAP staff and consultants had access to the underlying data. CGAP was responsible for quality control of the data and preliminary analysis. Only aggregated benchmarks were shared with J.P. Morgan's team, and the team did not have access to the underlying database.

Publicly traded LIFIs

LIFIs are publicly traded commercial institutions that provide financial services to customers who overlap significantly with those of MFIs—the lower income population in emerging markets. However, in many cases LIFIs do not necessarily have an explicit social agenda, and their loan portfolios tend to feature more consumer loans than microenterprise loans. The companies selected as LIFIs must meet the following conditions: (1) offer financial services; (2) serve the low-income segment; and (3) be listed on an exchange, with daily liquidity of at least US$0.1 million.

PART 1

Valuation of Private Equity Transactions

For this year's report, we gathered data from 29 investors who are asset managers of MIVs as well as of bilateral and multilateral DFIs.[4] This section examines the following questions:

- What are the global growth and valuation trends for PE microfinance transactions in 2011?
- What trends in growth and valuation emerge at the regional or country levels?

1.1. Overall Growth and Valuation Trends

This year's survey of PE investments in microfinance included 84 transactions totaling US$382 million. For the analysis in this report, we selected a sample of 68 transactions totaling US$292 million to include only direct investments into MFIs where a valuation methodology was used as part of the investment process (for more information, see Box 1).

Overall, the microfinance PE market experienced stronger deal flow in 2011, with almost twice the number of transactions compared to 2010. In 2011, there was also a 43 percent increase in capital from the previous year and the largest flow of capital reported to date. The key drivers that contributed to the strong growth in the number of transactions and investment amounts in 2011 were as follows:

1. **Several large transactions.** The increase in volume of flows was supported by several very large transactions where existing MFIs or networks tapped new markets, mainly in LAC, as part of an international expansion strategy mostly to sustain growth.
2. **Expectations of an improved regulatory environment in India.** Investors welcomed progress toward a more stable regulatory framework, and PE activity resumed in India in 2011. However, market participants remain sensitive to the progress of the Microfinance Institutions Bill currently under discussion.
3. **Lower valuations.** In most regions, except Eastern Europe and Central Asia (ECA), valuations compressed year-over-year in 2011, which had a positive effect on the number and size of transactions.

TABLE 1—Historical private equity transactions

Year	Transactions (no.)	Transactions (US$ mm)
2005	28	106
2006	37	20
2007	37	60
2008	63	144
2009	32	230
2010	37	205
2011	68	292
Total	302	1057

Source: CGAP Research, Global Microfinance Equity Survey 2012.

Note that the number of respondents for this year's survey was higher (29 compared to 21 in 2010), which also slightly impacted the reported volume of capital flows.

While transaction volumes rebounded in 2011, the valuations for those transactions remained compressed. Valuations contracted in 2011, as measured by the forward book value multiple. This contraction began in 2010 after several years of steady rise. The forward book value multiple, the key benchmark for equity valuation in the microfinance PE market,[5] dropped to an average of 1.4x book value from a high of 1.7x in 2009. This recent average is at the same level as in 2008.

4. Unless otherwise noted, all amounts are in U.S. dollars, and comparisons are between 2011 and 2010.

5. For more discussion on valuation methodologies, see O'Donohoe et al. (2009).

TABLE 2 P/E multiples have reversed since 2010, while P/BV multiples decreased

Year	Historical P/E Average	Median	Forward P/BV Average	Median
2005	9.1	7.9	1.1	0.9
2006	8.5	7.3	1.0	0.9
2007	10.4	7.2	1.2	1.0
2008	10.3	8.1	1.4	1.1
2009	12.8	13.0	1.7	1.4
2010	20.1	23.4	1.6	1.4
2011*	11.4	11.3	1.4	1.2

*2011 calculations reflect data from 44 transactions where valuation information was provided for both Historical P/E and Forward P/BV.
Source: CGAP Research, Global Microfinance Equity Survey 2012.

The key drivers that contributed to the contraction in valuation multiples in 2011 were continued uncertainties about asset quality seen in some markets since 2009 and the ongoing regulatory uncertainties in India (discussed later in the paper).[6]

Type of Deals[7]

In terms of total volume of transactions, secondary issuances continued to dominate the PE space in microfinance following the 2010 trend, but at a slower pace. In 2011, the secondary markets represented 56 percent of total transaction volume in U.S. dollar terms, a decrease from 69 percent in 2010, as shown in Figure 1. LAC overwhelmingly captured the most volume of secondary issuance—perhaps due to its more mature nature. In addition, LAC continued its wave of acquisitions, and three of these larger acquisition transactions in the secondary markets contributed over US$99 million (62 percent of total amount transacted in LAC). As for primary issuance, the volume of activity globally grew more than 13 percent, with an important concentration in India.

6. For more information about MFI performance, see MixMarket (http://www.mixmarket.org/).
7. Primary issuance refers to the issuance of new shares to increase the MFI capital base; secondary issuance is the exchange (buy or sell) of existing shares of MFIs.

1.2. Regional Growth and Valuation Trends

Share and growth of equity investments

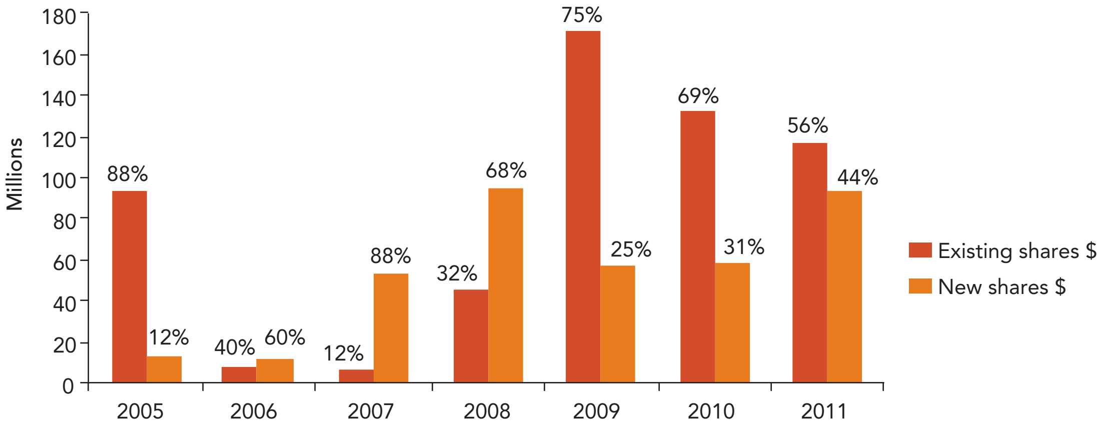
In dollar terms, LAC accounts for more than half of the total amount of investments followed by Asia (notably India with over 92 percent of all investments in Asia), as shown in Figure 2. The highest growth in investments since 2009 was experienced by sub-Saharan Africa (SSA). Despite coming from a low base in absolute terms, the volume of investments in SSA has more than tripled compared to 2009. Asia also had important growth, while LAC has recovered from the drop in volume experienced in 2010, and continues to lead as the region with the largest share of capital flows. ECA lagged behind all the other regions this year.

Regarding median transaction size in 2011, LAC experienced an increase, SSA and Asia experienced a decrease, while ECA remained at the same level compared to 2010, as illustrated by Figure 3.

The following are some key trends in the most active regions that impacted PE flows in 2011.

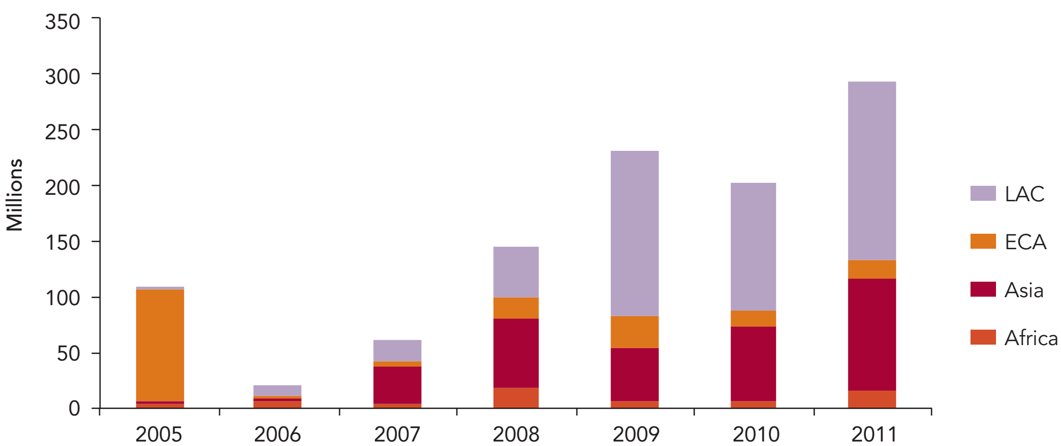
LAC. The bulk of the investments channeled to LAC (70 percent of the total amount invested in the region) was represented by capital flows that came from established microfinance players growing into new international markets as majority shareholders. Within the region, Peru again had the most transactions and the largest size of investments.

FIGURE 1 Volume of transactions, by type of deals



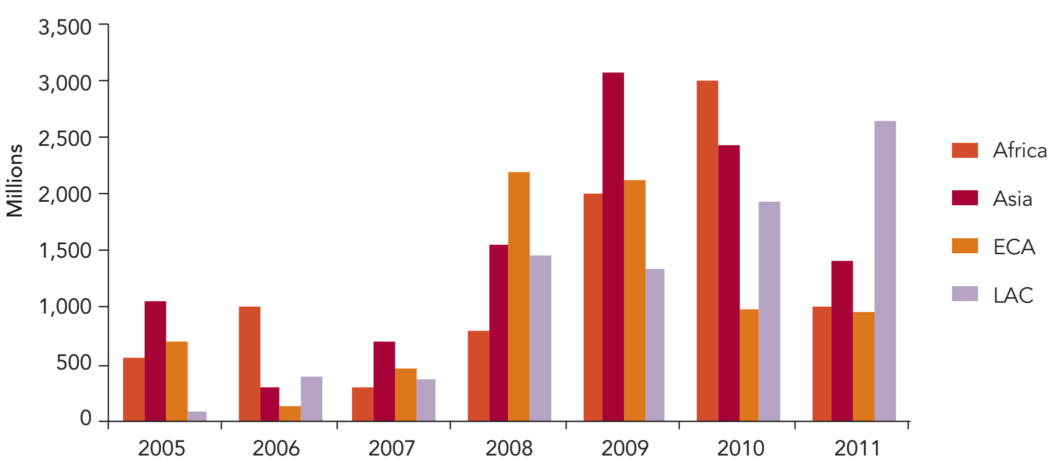
Source: CGAP Research, Global Microfinance Equity Survey 2012.

FIGURE 2 Regional share of microfinance equity investments (volume US$)



Source: CGAP Research, Global Microfinance Equity Survey 2012.

FIGURE 3 Median transaction size 2005–2011 (US$)



Source: CGAP Research, Global Microfinance Equity Survey 2012.

TABLE 3 **Key acquisitions in LAC in 2011**

Month 2011	Target	Acquirer	Transaction Amount US$ mm
June	Financiera Crear (Peru)	Compartamos SAB de CV (Mexico)	63
April	Financiera Confianza (Peru) (Peru)	Fundación Microfinanzas BBVA (Spain)	33
May	Fondo Esperanza (Chile)	Fundación Microfinanzas BBVA (Spain)	13

Source: MicroCapital Monitor.

TABLE 4 **Countries with more than 5 transactions in 2011**

	Total # Transactions	Transaction Amount (US$ mm)	4-yr average P/BV (fwd)	2011 average P/BV (fwd)
Peru	10	116.5	1.5	1.8
India	19	88.4	2.0	1.9
Mongolia	7	7.7	1.3	1.0

Source: CGAP Research, Global Microfinance Equity Survey 2012.

Asia. Investments reported in Asia mainly included deals in India (92 percent of the total volume in the region) with a few other transactions in Pakistan, Indonesia, and Cambodia. Despite the microfinance crisis in the Indian state of Andhra Pradesh, India had 19 deals closed and priced, amounting to over US$88 million compared to 10 deals that amounted to over US$45 million in 2010. The composition of investors in India included a mix of commercial banks, MIVs, and DFIs, but the most significant share in terms of volume of transactions came from DFIs (74 percent).

SSA. Public and private microfinance investors made more efforts to channel investments to SSA in 2011, and they are expecting an increase in their SSA portfolio in 2012. However, there is still a high concentration of capital flowing into a few African countries.[8] In addition, SSA continued to be an active region in the number of greenfield operations.[9] However, greenfield transactions, usually valued nominally at book value, are excluded from the survey analysis so as not to skew the survey valuation results downward.

Country-specific trends. India and Peru were once again the leading markets accounting for around 70 percent of the total volume. Several large acquisitions took place, making Peru the single country with the largest volume transacted. India attracted the second highest volume of all capital flows per country. Most of that capital was concentrated in a few transactions funded by DFIs. Mongolia was the third country that attracted most deals; however, the total amount was significantly lower compared to India and Peru.

Valuations: Trends and breakdown by region

Overall, SSA and LAC each showed lower average valuations in 2011, Asia remained stable, while ECA showed a slight increase compared to 2010.

8. In 2011, flows were mostly to mature MFIs in Tanzania and Zambia.

9. A Greenfield MFI is a new MFI built from scratch, without pre-existing structures, that uses a set of standard operating procedures disseminated by a central group. The central group—a holding company or international network—typically provides equity finance and technical assistance to the greenfield entity and holds a majority stake in its investees.

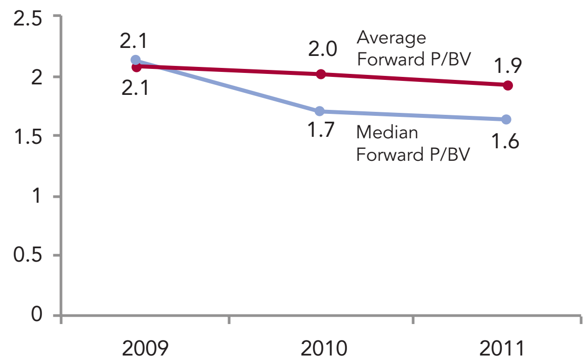
TABLE 5 **Historical valuation breakdown, by region**

	Average Forward P/BV							# of Deals
	2005	2006	2007	2008	2009	2010	2011	2011
SSA	0.6	0.8	1.5	1.5	1.0	1.1	0.8	5
Asia	1.3	1.7	1.5	1.5	1.9	1.8	1.8	19
ECA	1.1	1.1	1.0	1.6	2.1	0.9	1.1	10
LAC	1.2	0.8	1.0	1.2	1.2	1.5	1.4	10

Source: CGAP Research, Global Microfinance Equity Survey 2012.

The microfinance industry in India continued to be impacted by the crisis that erupted in the state of Andhra Pradesh in October 2010. As illustrated in Figure 4, the average and median multiple of price-to-book value dropped in 2011, though by a smaller degree than between the years 2009 and 2010. Note that several of the MFIs that attracted capital in 2011 had distressed portfolios, especially in Andhra Pradesh, and this likely reduced valuations.

FIGURE 4 **India median and average forward P/BV**



Source: CGAP Research, Global Microfinance Equity Survey 2012.

PART 2

Valuation of Publicly Listed Companies: LIFIs

LIFIs provide financial services (consumer, microenterprise loans, payments, savings, and insurance) to lower-income segments of the population, but they do not necessarily have a stated social mission. As they operate largely in the same market as MFIs, they offer interesting comparables for MFI valuations.

Based on these criteria, 11 listed LIFIs that have a broad microfinance focus were identified. The purpose of this section is to answer the following key questions:

- What is the current composition of the LIFI Index?
- What is the performance of the LIFI Index in absolute and relative terms?
- Do LIFIs continue to outperform traditional banks?

Composition of the LIFI Index

The LIFI Index is a market cap-weighted index of 11 companies, encompassing various geographies and business models. The index includes banks that are not exclusively offering working capital loans to microentrepreneurs, broadening the scope to include consumer loans and other financial services. It includes the same 11 constituent list of LIFIs as discussed in last year's report.

Basket Methodology and Composition

Companies selected as LIFIs must meet the following conditions:

1. Offer financial services
2. Serve the lower-income segment of the population
3. Be listed on an exchange, with daily liquidity of at least US$0.1 million[10]

10. Stock liquidity ensures that the price reported by data providers, such as Bloomberg, is not distorted by temporary imbalances between supply and demand of shares.

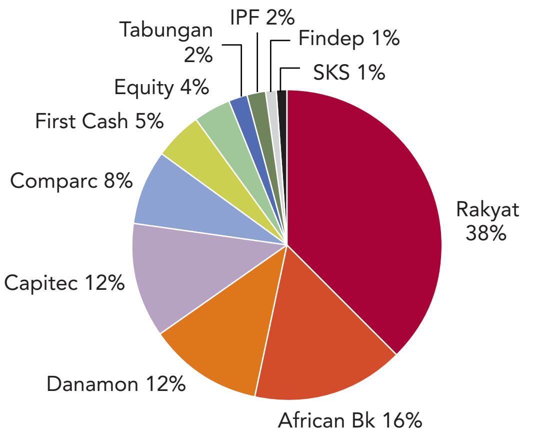
The individual weightings of each stock depend on the market capitalization of the companies. That said, the weight of some stocks was reduced in the index to reflect the percentage of the operations of the company that correspond to lower income finance. For example, the weight of Bank Rakyat is only 50 percent of what its actual market cap would correspond to in the index, as roughly 50 percent of the bank's operations and revenues correspond to lower income finance.

Indonesian stocks constitute the highest weight ~56 percent, while stocks listed in Kenya and India comprise 4 percent and 1 percent of the basket, respectively. The resulting weights show that Indonesia combines one of the most mature markets for public equity in microfinance (Bank Rakyat was founded in 1895) with an especially well-developed stock market (unlike Bangladesh, for example).

The breakdown of countries in the LIFI Index (i.e., on public markets) is different from the breakdown on the PE market described in the first section of this report. The countries attracting meaningful interest from PE players in microfinance—such as India or Peru—are not represented with the same weight in the LIFI Index. India—a major market for PE until recently—represents only 1 percent of the index (via SKS,the only listed LIFI in India). The weight of SKS reached a peak of 10 percent of the index in September 2010, but its market capitalization, and hence weight in the index, fell significantly due to the Andhra Pradesh crisis in October 2010.

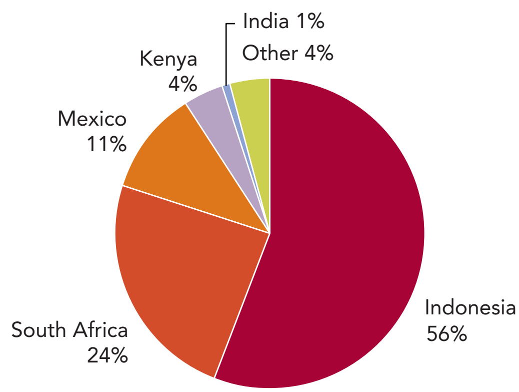
Figures 5 and 6 show the current breakdown of the LIFI Index, by stock and by country.
Table 6 includes the main country of operations of those LIFIs as well as their focus. The last column indicates the current weight of each institution in the index.

FIGURE 5 **Stock breakdown of the LIFI Index**



Source: J.P. Morgan, as of April 24, 2012.

FIGURE 6 **Country breakdown of the LIFI Index**



Source: J.P. Morgan, as of April 24, 2012.[11]

TABLE 6 **Institutions in the LIFI Index**

Company	Country	Focus
Bank Rakyat	Indonesia	Government-owned bank (57%) focusing on rural microlending (>4,400 outlets across Indonesia). Micro- and payroll loans represent ~50% of the loan book, but a higher stake in revenues.
Bank Danamon	Indonesia	Consumer mass market lending, with more than 1,000 outlets. Self-employed entrepreneurs are ~20% of loans, while segment of 2- and 4-wheelers represents ~40% of total loans.
Bank Tabungan Pensiunan	Indonesia	Mostly focused on pensioners, while ~20% of loans go to microborrowers.
SKS	India	Largest MFI in India, with loan growth of ~15x before the crisis. Andhra Pradesh represents ~30% of total loans of SKS.
African Bank	South Africa	Individual consumer lending. African Bank owns a furniture retailer (~25% of group's revenues).
Capitec	South Africa	Individual consumer lending. Capitec offers a full suite of transactional banking services.
Equity Bank	Kenya	Microlender offering credit, savings, and fund transfer services in Kenya, southern Sudan, and Uganda. The bank accounts for roughly half of Kenyan bank accounts.
Compartamos	Mexico/Peru	Microloans to entrepreneurs in Mexico, Peru, and a greenfield operation in Guatemala; group lending methodology (more than 80% of total loans).
Financiera Independencia	Mexico	Microloans to individual consumers (~80% of total) and group lending to entrepreneurs (~20% of total loans).
First Cash Financial	Mexico/USA	Pawn store, with half of revenues coming from interest income and half coming from inventory sales.
IPF	Eastern Europe/Mexico	Consumer lending present in six countries, originated through independent workforce.

Source: J.P. Morgan.

11. Others include the operations of International Personal Finance (IPF), present in six countries in Eastern Europe and Mexico. The category also includes the revenues derived from the U.S. operations of First Cash Financial (approximately half of the total for First Cash).

LIFI Index generally outperforms, but not in the first months of 2012

The LIFI Index has outperformed significantly the MSCI World Financials Index and the MSCI EM Banks Index since its inception and over different time periods. In Figure 7, the performance of the LIFI Index is compared to global financial institutions (as measured by the MSCI World Financials Index) and emerging markets banks (as measured by the MSCI EM Banks Index).

The annualized return of the LIFI Index was +26 percent since its inception in November 2003, while the annualized MSCI World Financials Index and the MSCI EM Banks Index during the same period were -3 percent and +13 percent, respectively.

As in previous editions of this report, LIFIs have generally outperformed both emerging markets and developed markets banks over different time periods. Table 7 summarizes the compound annual growth rate (CAGR) of the three indices over four distinct time periods: since its inception (November 2003), since the precrisis peak (November 2007), since the Lehman failure (September 2008), and since the Andhra Pradesh crisis (October 2010). In those four time periods, the LIFI Index mostly outperformed the other two indices.

Table 8 shows the annual performance of the indices considered (LIFI, MSCI World Financials, and MSCI EM Banks) since January 2004. LIFIs outperformed World Financials and EM banks for six of the nine years since 2004, all but 2005 and 2007.

Figure 8 shows the performance of each of the 11 individual stocks comprising the LIFI Index since the last edition of this report (July 2011). The chart shows that the performance of stocks has been unequal and mostly driven by country specific factors.

The top three outperformers since 1 July 2011 were Capitec (South Africa, +42 percent), Danamon (Indonesia, +19 percent), and Tabungan (Indonesia, +13 percent). South African and Indonesian stock markets were up, outperforming global markets, at +6 percent and +6 percent versus +2 percent for the S&P500 (all performance since 1 July 2011). South African banks did well in 2011 on resilient earnings and stable revenue delivery. Indonesian banks remained immune to Europe-related stress in 2011 and received positive impetus from the central bank moving to an easing bias in the fourth quarter of 2011, and a sovereign upgrade to investment grade.

The top three underperformers were SKS (India, -69 percent), Findep (Mexico, -51 percent), and Compartamos (Mexico, -33 percent). The microfinance crisis in India continued, with significant write-offs in banks' portfolios, despite new decisions taken by the Reserve Bank of India (RBI) to help the sector following the Andhra Pradesh crisis of October 2010. In Mexico, the focus over the past few months has been on increasing competition in the sector, increasing loan delinquencies (still at a relatively low level, however), and general elections (due July 2012).

LIFIs show a high correlation with EM Banks

The correlation of the LIFI Index to the MSCI EM Banks Index returns has been 66 percent on average since November 2003. Figures 9 and 10 show the correlation of the LIFI Index to the MSCI EM Banks Index. The correlation between the two indices decreased meaningfully in the second half of 2011 to reach a low of 41 percent and is now back to average levels of 89 percent. This was mostly due to the LIFI Index being relatively resilient to global turmoil (U.S. rating downgrade and European sovereign crisis) in August and September 2011.

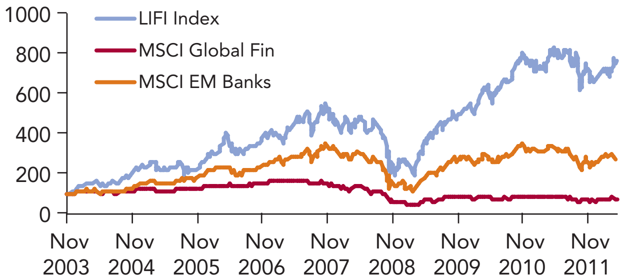
Current Valuation of the LIFI Index

Table 9 shows the current valuation of the constituents of the index and of the index itself. We also compare these to global financial companies.[12]

The LIFI Index currently trades at 13.5x 2011A earnings and 2.7x 2012E book value.[13] This repre-

12. For the historical valuation of the LIFI Index, please see the previous editions of this report.
13. 2012E stands for "expected" at the end of 2012 and is used for future expectations of earnings or book value. By contrast, 2011A corresponds to actual data, as financial information for 2011 is already known.

FIGURE 7 **LIFI Index outperformed has other banks indices since inception (November 2003)**



Source: J.P. Morgan, Bloomberg, as of April 24, 2012. The index is set with a value of 100 in November 2003.

TABLE 7 **Annualized performance of indices over four time periods (%)**

	LIFI Index	MSCI World Financials	MSCI EM Banks
Since launch (November 2003)	26	–3	13
Since precrisis peak (November 2007)	6	–14	–4
Since Lehman (September 2008)	20	–6	7
Since AP crisis (October 2010)	–4	–2	–9

Source: J.P. Morgan, Bloomberg prices as of April 24, 2012.

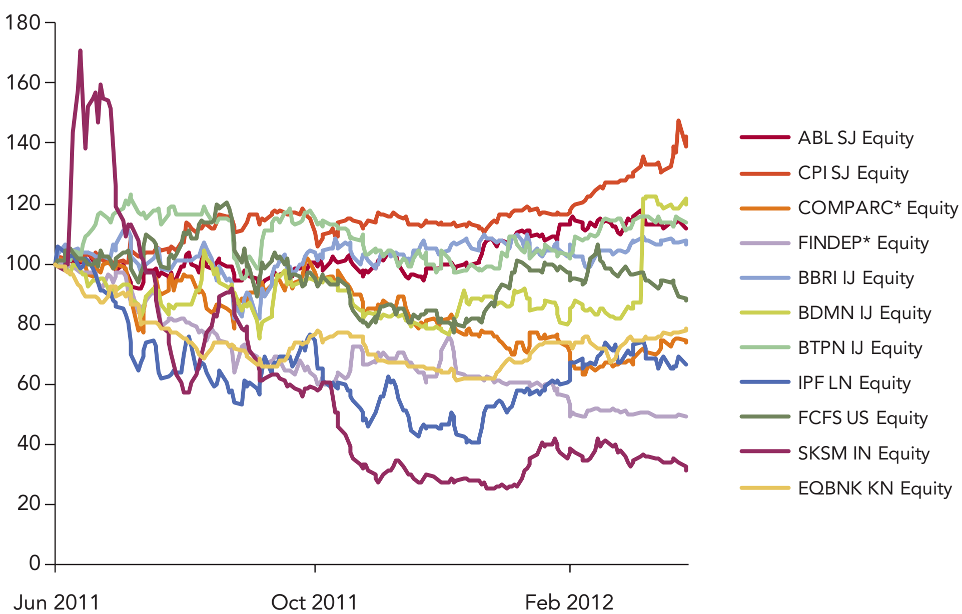
TABLE 8 **Annualized performance of indices for each year (%)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012 YTD
LIFI Index	108	10	53	14	–42	93	46	–13	13
MSCI World Financials	15	9	21	–11	–56	28	2	–21	11
MSCI EM Banks	39	32	32	23	–53	83	17	–24	10

Source: J.P. Morgan, Bloomberg, prices as of April 24, 2012. We highlight the top performing index for each year. * year-to-date (YTD) performance.

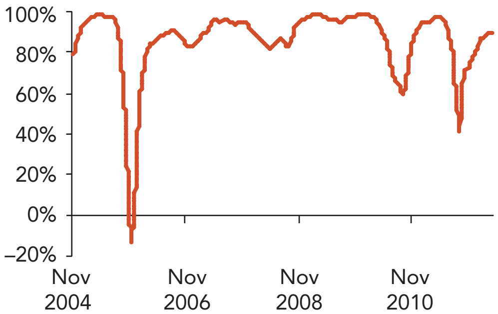
FIGURE 8 **Performance of the underlying stocks in the LIFI Index**

Since July 2011 (the last edition of this report)



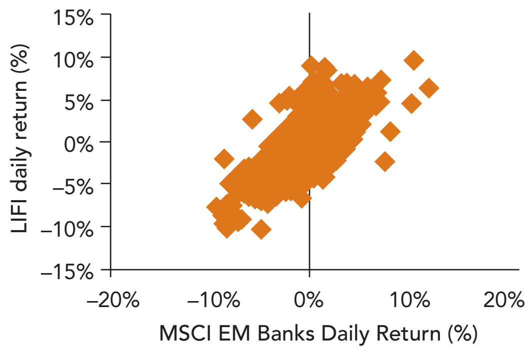
Source: J.P. Morgan, Bloomberg data since July 1, 2011, as of April 24, 2012. ABL: African Bank; CPI: Capitec; COMPARC*: Compartamos; FINDEP*: Financiera Independencia; BBRI IJ: Bank Rakyat Indonesia; BDMN IJ: Danamon; BTPN IJ: Tabungan; IPF: International Personal Finance; FCFS: First Cash Financial; SKSM IN: SKS; EQBNK KN: Equity Bank.

FIGURE 9 **LIFI Index vs. MSCI EM Banks: 12M correlation is currently 89%**



Source: J.P. Morgan, Bloomberg prices through Apriil 24, 2012.

FIGURE 10 **Daily returns of the LIFI Index vs. MSCI EM Banks Index returns: Average correlation of 66%**



Source: J.P. Morgan, Bloomberg prices through April 24, 2012. Sample since November 2003.

TABLE 9 **Valuation summary: Comparing the LIFI index with traditional banks**

Company	Ticker	Country of Listing	Mkt. Cap (US$ mm)	ADTV (US$ mm)	Local Price	EPS growth (%) 2011–12E	P/E 11A	P/BV 12E	ROE (%) 12E
African Bank	ABL SJ	S. Africa	3,965	18.8	3,845.00	25	12.9x	2.1x	21
Capitec	CPI SJ	S. Africa	2,852	4.2	22,400.00	44	30.3x	4.7x	26
Equity Bank	EQBNK KN	Kenya	905	0.7	20.25	14	7.4x	2.1x	35
Bank Rakyat	BBRI IJ	Indonesia	18,526	23.4	6,900.00	17	12.7x	2.8x	29
Danamon	BDMN IJ	Indonesia	6,572	4.5	6,300.00	10	16.9x	2.1x	15
Tabungan	BTPN IJ	Indonesia	2,272	0.2	3,575.00	25	15.6x	2.8x	26
SKS	SKSM IN	India	147	3.0	106.80	-86	(1.0)x	0.8x	NA
Compartamos	COMPARTO MM	Mexico	1,924	7.2	15.68	8	12.4x	2.9x	32
Fin. Independencia	FINDEP*	Mexico	272	0.1	5.00	59	17.2x	1.3x	16
First Cash Financial	FCFS US	USA / Mexico	1,153	13.1	39.13	20	17.4x	3.1x	22
IPF	IPF LN	UK	1,017	0.9	245.00	-12	8.2x	1.7x	19
LIFI Index						17	13.5x	2.7x	27
Market Cap. Weighted Averages for Banks Covered by J.P. Morgan						2011–12E	12E	12E	12E
Middle East/Africa						15	11.0x	1.8x	17
Developed Asia Pacific						5	11.2x	1.5x	14
Emerging Asia Pacific						15	7.9x	1.6x	21
Emerging Europe						23	9.4x	1.1x	17
LAC						12	10.9x	1.8x	19

Source: J.P. Morgan, Bloomberg estimates, prices as of April 24, 2012. ADTV = average daily trading volume for the past three months; EPS = earnings per share; ROE = return on equity.

Notes for the LIFI Index: We used Bloomberg consensus estimates (EPS GAAP, and ROE) for the individual stocks composing the LIFI Index. LIFI is a market capitalization-weighted index. **Notes for Global Emerging Markets Banks:** We show market capitalization-weighted averages of banks covered by J.P. Morgan analysts, representing a sample of 109 banks across global markets.

sents higher earnings and book multiples than traditional global banks. We focus more on the book value multiples, as earnings of traditional banks have been under pressure, therefore inflating earnings multiples. In fact, global banks, as measured by an average of 109 banks covered by J.P. Morgan analysts, trade at average multiples of 10.1x 2012E earnings and 1.6x 2012E book value.

The LIFI Index currently trades at 2.7x 2012E book value, for an average expected return on equity (ROE) in 2012 of 27 percent. As Figure 11 shows, this suggests that the valuation of the index is close to fair value (i.e., close to the trend line) in 2012. In 2010 and 2011, the LIFI Index was above the trend line, suggesting a slight overvaluation. This indicates that current valuations are in line with the broader emerging market banks universe reflected in the regression.

Interestingly, the main difference from last year is that the expected ROE of institutions included in the LIFI Index is relatively stable around 27 percent, but book value valuations contracted from 4.2x in last year's edition to 2.7x using most recent data.

We think this correction in average multiples is mostly due to the pressure on the individual stock valuations of Bank Rakyat (38 percent of the LIFI Index) and Compartamos (8 percent of the index). In the case of Bank Rakyat, the P/BV multiple contracted from 4.7x actual book in last year's edition of this report to 3.6x actual book. For Compartamos, the multiple decreased from 6.6x to 3.4x actual book. Other stocks' multiples were also down, although not as much as the two banks mentioned.

TABLE 10 **Matrix of equivalence for global banks**

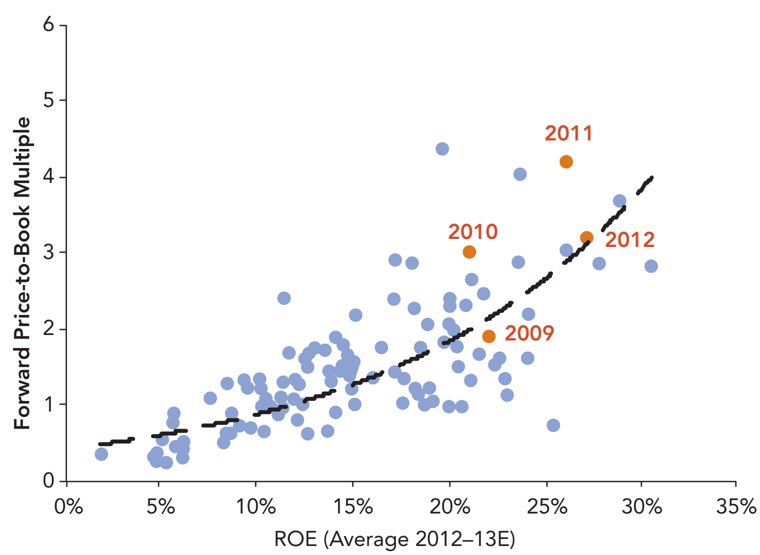
Theoretical ROE (%)	Corresponding P/BV
0	0.4x
5	0.6x
10	0.9x
15	1.3x
20	1.8x
25	2.7x
30	3.9x

Source: J.P. Morgan estimates, using the relation between ROE and price-to- book multiples. The correlation reaches 68%.

Note: According to this matrix, a bank with a ROE of 20% would trade at a fair multiple of 2.0x book.

FIGURE 11 **LIFIs are below the regression line; i.e., LIFIs are undervalued**

Regression of ROE and price-to-book multiples for 109 banks across global markets



Source: J.P. Morgan estimates, Bloomberg. Prices as of April 24, 2012. Price-to-book multiples use the current price divided by 2012-end estimated book value per share. The axis for ROE uses the average of ROE for those institutions for 2012e and 2013e.

Conclusion

Overall, the microfinance PE market experienced stronger activity in 2011, picking up from 2010, with an increase in the volume of transactions. However, some lingering effects of the crisis remain, and 2011 saw the continued compression of valuation multiples for MFIs and LIFIs from the highs in 2009. We believe there is a wider convergence trend between the valuation of emerging market banks and microfinance providers, be it specialized MFIs or LIFIs.

For 2012, we do not expect microfinance equity valuations to decouple significantly from the valuation of emerging market banks. We expect valuations to be stable in most markets, with the exception of SSA and certain countries of LAC, which could see some increase in valuations.

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Appendix: Survey Participants

We would like to thank the following survey participants for contributing valuable data for the 2012 Global Microfinance Equity Valuation Report. Data published in this report is only at the aggregate level.

Aavishkaar Goodwell India Microfinance Development Company
ACCION
Advans SA SICAR
BlueOrchard Investments
CAF Development Bank of Latin America
Caspian Advisors Private Limited
Compartamos SAB de CV
Creation Investments Capital Management, LLC
Developing World Markets (DWM)
Développement International Desjardins (DID)
Elevar Equity, LLC
European Bank for Reconstruction and Development (EBRD)
FINCA
FMO, Netherlands Development Finance Company
Fundación Microfinanzas BBVA
Incofin Investment Management
MicroCred
MicroVentures Investment SICAR
MicroVest Capital Management, LLC
Norwegian Investment Fund for Developing Countries (Norfund)
Norwegian Microfinance Initiative AS (NMI)
Omidyar-Tufts Microfinance Fund
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