



# Efficiency and Productivity of Microfinance: Incorporating the Role of Subsidies

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The social nature of MFIs is mainly financed by subsidies from donors. Therefore, the role of subsidies cannot be underestimated in MFIs efficiency and productivity analysis. This paper is a first attempt to measure the financial efficiency and productivity of Microfinance Institutions (MFIs) worldwide taking into account the subsidies received by MFIs by using the non-parametric Data Envelopment Analysis (DEA). Towards this aim, a three-stage analysis is carried out. Firstly, technical and pure efficiency scores are calculated by splitting subsidies into input and output and entered into the DEA framework specifications depending on whether they are generating benefits (negative subsidies) or cost (positive subsidies) to the society. Secondly DEA-based Malmquist indices are calculated to analyze the intertemporal productivity change. Thirdly, Tobit Regression analysis are carried out to test a series of hypotheses concerning the relationship between financial efficiency and other indicators related to MFIs productivity, organization, outreach, sustainability and social impact. Overall subsidies contribute to financial efficiency of MFIs albeit marginally. Results uphold the tradeoff between outreach to the poor and financial efficiency. Thus MFIs which cater to the poor tend to be more inefficient than those with clients relatively well off. Also evident is the fact that lending to women is efficient only in the presence of subsidies. MFIs in South Asia and Middle East & North Africa tend to be less efficient than the others.

JEL Classifications: G21, H2, H21, C14

Keywords: Microfinance, Subsidies, Efficiency, Non-parametric analysis

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# Efficiency and Productivity of Microfinance: Incorporating the Role of Subsidies\*

Ahmad Nawaz<sup>†</sup>

**Abstract:** *The social nature of MFIs is mainly financed by subsidies from donors. Therefore, the role of subsidies cannot be under estimated in MFIs efficiency and productivity analysis. This paper is a first attempt to measure the financial efficiency and productivity of Microfinance Institutions (MFIs) worldwide taking into account the subsidies received by MFIs by using the non-parametric Data Envelopment Analysis (DEA). Towards this aim, a three-stage analysis is carried out. Firstly, technical and pure efficiency scores are calculated by splitting subsidies into input and output and entered into the DEA framework specifications depending on whether they are generating benefits (negative subsidies) or cost (positive subsidies) to the society. Secondly DEA-based Malmquist indices are calculated to analyze the intertemporal productivity change. Thirdly, Tobit Regression analysis are carried out to test a series of hypotheses concerning the relationship between financial efficiency and other indicators related to MFIs productivity, organization, outreach, sustainability and social impact. Overall subsidies contribute to financial efficiency of MFIs albeit marginally. Results uphold the tradeoff between outreach to the poor and financial efficiency. Thus MFIs which cater to the poor tend to be more inefficient than those with clients relatively well off. Also evident is the fact that lending to women is efficient only in the presence of subsidies. MFIs in South Asia and Middle East & North Africa tend to be less efficient than the others.*

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## 1.1 Introduction

Microfinance promises poverty reduction and financial self-sustainability<sup>3</sup>. Recently, from a research perspective, much focus has been shifted to the issues in financial sustainability and efficiency of Microfinance Institutions (MFIs). Among other things, this increased focus on financial sustainability and efficiency is an outcome of a number of developments the microfinance business has been recently confronted with, such as the increasing competition among MFIs, the commercialization of microfinance, technological change that also has become available for, and implemented in microfinance, and financial liberalization and regulation policies of the government (Rhyne and Otero, 2006). These developments have induced microfinance institutions to change their behavior, and to broaden their services and activities (Hermes, et al., 2008).

Like the conventional financial institutions, the efficiency and productivity of MFIs has generally been measured by conventional financial ratios. In addition to applying conventional financial ratios, their assessment can also be done by employing non-parametric efficiency techniques on the premise that like the conventional banking institutions, microfinance institutions also do care about their sustainability especially in recent times when private investors eye it as a good investment opportunity. In traditional Banking Literature, the evaluation of financial performance by using non parametric efficiency techniques i.e. Data Envelopment Analysis (DEA), is a very common practice<sup>4</sup>. However, its application to the microfinance institutions is more recent phenomenon. Nevertheless, some researchers have replicated these techniques for the efficiency analysis of MFIs<sup>5</sup>.

However the efficiency analysis of MFIs based on conventional production and intermediation model approach in non-parametric efficiency analysis framework is hard to justify because of their reliance on subsidies. The overall equation linking capital and labor inputs into profits and social change still proves difficult to master without accommodating the subsidized inputs (Cull et al. 2007). Therefore, measuring their efficiency demands the role of subsidies to be accounted for, an area, largely neglected in the efficiency and productivity analysis of microfinance institutions. To date only a few studies have been done which have taken into account the role of subsidies into the assessment of financial

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<sup>3</sup> Armendáriz de Aghion and Jonathan Morduch(2004); Morduch (1999a); Morduch (1999b); Goodman (2005); Cull et al. (2007)

<sup>4</sup> Examples of the use of DEA in banking are Sherman and Gold (1985), Athanassopoulos (1997), Seiford and Zhu (1999), and Camanho and Dyson (2005) among others.

<sup>5</sup> See for example Gutierrez-Nieto et al. (2007, 2009); Balkenhol, 2007b; Hermes et al. 2008

performance of MFIs by employing parametric techniques<sup>6</sup>, let alone non-parametric efficiency analysis.

In this backdrop, this essay is a first attempt to address the issue of incorporating the role of subsidies in the efficiency and productivity analysis of MFIs. This quality financial information has been generated directly from the audit reports<sup>7</sup> of the 204 MFIs with 23 million borrowers in 54 Countries worldwide for years 2005 and 2006. This constitutes a significant part of the whole microfinance outreach worldwide. As a starting point, this essay calculates subsidies using Yaron's Subsidy Dependence Index<sup>8</sup> (SDI) which measures the social cost of subsidized MFIs.

With subsidy data at our disposal, this study aims to resolve some key issues. Can we incorporate these subsidies into the non-parametric DEA framework in order to gauge their impact on the financial efficiency of microfinance? Do these subsidies improve the performance of microfinance institutions by enhancing their efficiency? What is the impact of different organizational, structural, financial and social variables on the efficiency of microfinance both with and without subsidies? To that extent, this study aims to investigate in particular, some specific hypothesis related to the efficiency of microfinance by employing with and without subsidy analysis. Does staff productivity enhance the financial efficiency whereas financial costs reduce it? An interesting relationship to investigate is about the impact of outreach on MFIs efficiency. Where Loan size is used as a proxy for the outreach of MFI and the lower the loan size, the more MFI reaches to the poor (outreach). Another important relationship to be estimated is between the efficiency of MFIs with their financial sustainability and subsidization. The impact of lending to women borrowers on the financial efficiency of MFIs amid subsidies is another important issue to investigate. Last but not the least, the presence of many categorical variables allows us to find out the efficient MFIs notwithstanding their regional location, lending methodologies and organizational features i.e. status, regulations and savings.

For the proponents of the Win-Win proposition<sup>9</sup>, the overall evidence is not a good one. Based on our subsidy calculations, for the year 2005, 153 MFIs out of 204 are subsidy dependent while for year 2006 it is 122 out of 179 MFIs. The DEA efficiency scores and

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<sup>6</sup> Hudon & Traca, (2006, 2008); Cull et al.(2007) ; Hudon (2006)

<sup>7</sup> The audit reports have been taken from the Mix Market Website (<http://www.mixmarket.org>). The MIX MARKET is a global, web-based microfinance information platform. It provides information to sector actors and the public at large on Microfinance Institutions (MFIs) worldwide, public and private funds that invest in microfinance, MFI networks, raters/external evaluators, advisory firms, and governmental and regulatory agencies

<sup>8</sup> To examine SDI calculations in past studies see for example Hulme and Mosley(1996); Schreiner (1997); Schreiner and Yaron (1999 and 2001) and Jehangir (2005); Congo (2002); Sharma (2004);

<sup>9</sup> That microfinance reduces poverty and in the course of that becomes subsidy free or sustainable

Malmquist productivity index show a marginal positive impact of subsidies on the financial efficiency of MFIs. However, the empirical evidence based on the regression analysis to identify the determinants of efficiency, is revealing in many respects. From a social perspective, the empirical evidence suggests that lending credit to the poor is financially inefficient. Further, MFIs which lend predominantly to women are found to be efficient only in the presence of subsidies. From financial perspective, the negative impact of costs and subsidization on the efficiency of microfinance is confirmed by the empirical evidence. On the other hand, staff productivity contributes to efficiency.

The paper is organized as follows. In the next section, to start off, some descriptive statistic about the inputs and output used in the efficiency analysis in general and subsidy dependence index (SDI) in particular are given. The third section provides the theoretical background of non parametric efficiency analysis followed by an overview of the efficiency of microfinance sector. The fourth section illustrates the role of subsidies into the non-parametric efficiency analysis of MFIs. The fifth section highlights the empirical evidence by employing the regression analysis. Finally, a conclusion is given at the end.

## 1.2 Microfinance Horizon

### 1.2.1 Subsidy Dependence Index (SDI)

After carefully reviewing the Audit Reports of more than 300 MFIs, 204 MFIs in 54 countries have been chosen based on the clarity of their respective Balance sheets in general and subsidy<sup>10</sup> figures in particular. All the MFIs adhere to the International Accounting Standards (IAS). Subsidies have been calculated for the years 2005 and 2006 in a unique way using Yaron's Subsidy Dependence Index<sup>11</sup> (SDI) which measures the social cost of subsidized MFIs in a short time frame (Yaron, 1992a). Table 1.1 depicts the calculated SDI values for years 2005 & 2006. SDI values for 26 MFIs for the year 2006 are missing due to the

<sup>10</sup> Extracting subsidy information from the balance sheet needs deliberation. These are subsidized/public funds from government or donors and come in six forms :

Type	Notion	Type of Grant
1. Direct Grant	DG	Equity Grant (EG)
2. Paid-up-capital	PC	Equity Grant (EG)
3. Revenue Grant	RG	Profit Grant (PG)
4. Discount on Public Debt	A.(m-c)	Profit Grant (PG)
5. Discount on Expenses	DX	Profit Grant (PG)
6. True Profit	TP	Equity Grant (EG)

<sup>11</sup> SDI = subsidies (S) / revenues from lending (LP \* i)  
= (E \* m + A (m - c) + K - P) / (LP \* i)

Where: E = average annual equity; m = Market Interest rate/Interest rate the MFI is assumed to pay for borrowed funds if access to concessional borrowed funds were eliminated.; A = Average annual outstanding concessionary-borrowed funds/ Average public debt ; c = interest rate paid on concessionary borrowed funds/ interest rate paid on Public debt ; P = Reported annual profit /accounting profits; K = Other Subsidies received by the MFI i.e. Revenue Grant (RG) + Discount on Expenses (DX)  
LP = Average annual outstanding loan portfolio of the MFI ; i = lending interest rate/ yield on lending

unavailability of their Audit Reports. Out of 204 MFIs in year 2005, 153 MFIs are subsidy dependent while for year 2006, it is 122 out of total 179 MFIs.

Table 1.1  
Subsidy Dependence Index (SDI)

AFRICA			MFIs	2005	2006	MFIs	2005	2006	MFIs	2005	2006
MFIs	2005	2006	HORIZON	0.124	0.076	FIE	0.218	0.099	EDPY.EDYF	0.230	0.436
CDS	0.161 <sup>12</sup>	0.109	INECO	-0.028	0.068	FONCRESOL	0.359	-	FINCA-PER	0.269	0.380
ACSI	-0.250 <sup>13</sup>	-0.388	CRED-AGRO	0.687	0.000	FUNBODEM	0.416	0.172	FONDESURCO	0.264	0.519
ADCSI	0.179	0.704	ACCESS	0.461	0.404	PRODEM	0.157	0.012	IDESI-LL	0.022	-
BG	0.809	0.026	NORMICRO	0.183	0.290	PROMUJAR	0.407	0.241	MIBANCO	-0.089	0.034
DECSI	-0.074	-0.108	VIATOR	-0.121	0.082	CMM-BOG	0.122	0.096	MOVIM.-M-R	0.114	0.222
OMO	0.484	-0.003	EKI	0.146	-0.173	FINAMERICA	0.121	0.170	PROMUJER	0.256	0.167
WISDOM	0.427	-0.061	MIKROFIN	-0.045	-0.354	FMM-BUCA	-0.174	-0.183	MCHL	0.490	-
NOVOBANCO	2.774	0.347	PARTNER	0.091	-0.125	FMM-POP	-0.135	0.047	BANGENTE	0.664	0.351
ALIDE	1.169	0.588	SUNRISE	0.021	-0.176	WMM-MED	0.212	0.023	ME & NA		
FECECAM	0.054	1.382	C-FUND	0.216	0.309	WWB-CA	0.020	0.075	AL-TADAMUN	0.975	-0.720
PADME	0.287	4.565	CONSTANTA	0.548	0.369	CREDIMUJER	0.623	0.292	DBACD	0.242	0.025
VF	0.205	0.254	CREDO	0.728	0.426	FUNDECOCA	0.826	-	LEAD	1.330	-0.470
RCPB	-0.051	-0.094	LAZIKA	0.850	0.346	ADEMI	0.170	-	TAMWELCOM	-0.062	-0.040
ACEP-CAM	1.246	-	KMF	-0.098	-0.097	BANCO-SOL	0.003	0.156	MFW	-0.125	0.010
KSF	0.196	-	AIYL-BANK	0.937	0.886	COAC-JARDIN	0.122	0.118	AL-AMANA	-0.008	0.012
OI-SASL	0.189	-0.092	BTFF	1.164	0.554	COAC-S-JOSE	0.045	0.147	AL-KARAMA	-0.110	0.011
PROCRED-GHA	-0.068	-0.028	FMCC	0.508	-0.004	COAC-SAC	0.137	0.140	FONDEP	-0.022	-0.330
SAT	-0.013	0.053	CRED. MONGOL	0.457	0.407	D-MIRO	-0.075	-0.278	INMAA	-0.004	-0.090
EBS	-0.238	-0.320	KHAN-BANK	0.052	-0.063	FINCA-ECU	-0.611	-0.275	ZAKOURA	-0.037	0.061
KADET	0.582	0.849	FORUS	0.095	0.332	FODEMI	-0.055	-0.091	ENDA	-0.044	-0.320
KREP	0.188	0.038	AGROINVEST	0.258	0.125	FUNDACION-ES	-0.315	-0.423	SOUTH ASIA		
KWFT	0.134	0.160	BANK ESKHATA	0.0075	0.272	PROCRED-ECU	0.055	-0.001	ARMP	0.653	0.182
MDSL	0.151	-1.914	FMFB-TAJ	1.509	0.815	AMC-DE-RL	0.164	0.401	BRAC-AFG	1.200	0.646
SMEP	0.232	0.309	IMON	0.824	0.301	FUNDACION	0.242	0.469	FMFB-AFG	1.034	0.077
FINCA-MAL	0.313	-	MICROINVEST	0.237	0.261	FAFIDESS	-0.117	-	ASA	-0.286	-0.226
KANDO-JAGIMA	-0.380	-	E. ASIA & PACIFIC			FUNDACION-M	0.794	-	BRAC-BAN	1.035	0.859
SORO-Y	0.952	1.506	ACLEDA	0.099	0.066	FUNDEA	0.219	-	B-TANGAIL	-0.136	-0.023
FCC	1.46	0.180	AMRET	0.132	0.070	GENESIS-EM	0.131	0.155	DESHA	0.045	-
NOVO-BANCO	0.377	-0.104	SATHAPNA	0.194	0.383	ACME	0.188	0.261	IDF	-0.071	-0.059
SOCREMO	0.350	0.193	HKL	0.242	0.086	FINCA-HON	0.194	0.124	RDRS	1.195	1.287
TCHUMA	0.255	0.217	PRASAC	0.347	0.301	HDH	0.240	0.890	SHAKTI	0.179	-0.008
LAPO	0.012	-0.072	MBK-VENTU	0.384	0.211	WORLD-REL	0.122	0.098	TMSS	0.753	0.591
SEAP	-0.180	-0.305	ASHI	0.331	0.082	ACODEP	-0.113	-0.154	BANDHAN	0.095	-0.215
SEF-ZAF	0.300	0.161	BCB	-0.272	-0.196	FAMA	-0.218	-	BASIX	0.119	0.088
ACEP	0.421	-	BANGKO-KA	-0.113	-0.157	FDL	-0.176	-0.051	CASHPOOR	0.746	0.386
CMS	0.361	0.313	CBMO	-0.227	-0.253	BANEX	0.006	-0.037	ESAF	0.243	-0.083
PAMECAS	0.052	-0.103	DIGOS	-0.010	-0.099	FJN	-0.149	-	GK	0.130	-0.059
FINCA-TAN	0.065	-	GREEN	-0.003	-	FUNDENUSE	-0.482	-	IASC	0.088	-
PRIDE	0.017	0.074	IST-VALLEY	0.1982	-0.234	PROCRED-NIC	0.031	0.116	KBSLAB	0.462	0.478
CBANK	0.009	-0.074	NWFT	0.0767	-0.013	PRODESA	-0.282	-0.311	MAHASEMAN	-0.100	-
CML	0.024	0.189	SOLANO	-0.241	-0.269	FIELCO	0.049	0.091	SHARE-MF	-0.116	0.158
FAULU	0.211	0.436	TSPI	-0.050	-0.070	INTERFISA	0.128	0.002	SNFL	0.639	0.531
FINCA-UGA	0.047	0.125	SPBD	0.503	0.371	BANTRA	0.053	0.158	CBB	0.296	-0.029
MEDNET	0.179	3.008	CEP	-0.070	-0.117	CAJA-NOR	0.030	0.087	NIRDHAN	0.250	0.265
UML	0.759	-	TYM	-0.110	-0.010	CARITAS	0.646	0.438	NSSC	0.105	-
CETZAM	2.342	0.830	AGROCAPITAL	0.615	0.265	CMAC-ARQ	-0.084	-0.073	PGBB	0.533	-
FINCA-ZAM	0.519	0.034	LATIN AMERICA			CMAC-CUS	-0.082	-	VYCCU	-0.182	-
C. ASIA & E. EUROPE			BANCOSOL	0.114	0.000	CMAC-MAY	0.078	0.070	ASASAH	0.211	1.015
BESA	0.2403	0.010	BNACO-L-A	0.311	0.124	CMAC-TAC	0.056	0.138	FMBL	2.125	0.514
PROCRED-ALB	0.052	0.006	CRECER	0.039	-0.028	CMAC-TRU	0.033	0.018	KASHF	0.036	0.045
Opportunity	0.285	0.059	ECO-FUTURO	0.118	0.013	EDPY.-C-T	0.196	0.370			
ACBA	0.283	0.271	FADES	0.547	0.249	EDPY.-COF.	0.256	0.631			

Source: Author own calculations based on the Balance sheets of 204 MFIs for year 2004 & 2005

<sup>12</sup> SDI value of 0.161 means that the MFI has to raise the interest rates on loans by 16.1% to be subsidy free

<sup>13</sup> SDI value of -0.250 means that the MFI is subsidy free even if it reduces interest rate on loans by 25%

## 1.2.2 Description of the Data

Table 1.2 presents a summary statistics of the variables used in this essay as an inputs and outputs in the DEA framework along with other social and organizational variables used in the regression framework. The subsidy figures for the 25 MFIs for the year 2006 are missing due to the unavailability of the data. Therefore, the sample in Table 1.1 consists of 383 observations (204 for the year 2005 plus 179 for the year 2006).

Table 1.2  
*Variable Description and Summary Statistics*

<b>Inputs &amp; Outputs</b>	<b>Obs</b>	<b>Definition</b>	<b>Unit</b>	<b>Mean</b>	<b>Med.</b>	<b>Min</b>	<b>Max</b>
Average annual asset (A)	383	Average of current year ( <i>t</i> ) and previous year ( <i>t-1</i> ) assets. It includes all asset accounts net of all contra-asset accounts, such as the loan-loss allowance and accumulated depreciation.	\$	37000	12000	323	521000
Subsidy (S)	383	$[E \times m + A(m - c) + K - P]$	\$	967	220	-18100	76900
Average Loan Portfolio	383	Average annual outstanding loan portfolio	\$	89100	8411	48	241000 00
Financial Revenues	383	Revenue generated from the gross loan portfolio and from investments plus other operating revenue	\$	85470	3100	71	149800
Operational cost (C)	383	Expenses related to operations, such as all personnel expenses, rent and utilities, transportation, office supplies, and depreciation	\$	4400	1900	18	77300
<b>Organizational variables</b>							
GNI per capita (current)	383	Gross national income divided by the population.	\$	1402	1000	160	10300
Borrowers	383	The number of individuals who currently have an outstanding loan balance with the MFI or are responsible for repaying any portion of the Gross Loan Portfolio	In '000'	104	23	0.949	5163
MFI age	383	The years since MFI has started operations	No.	14.15	12	3	51
Women borrowers	371 <sup>14</sup>	Percentage of borrowers who are women	%	64.47	61.5	8.6	100
Average loan size	383	Gross Loan Portfolio / Number of active borrowers	\$	797.88	487	34	11198
Staff (E)	383	The number of individuals who are actively employed by the MFI.	No.	578	204	7	24457
Operating Cost per Staff	383	Operating cost per staff	\$	12.127	11.906	3.89	47.714
Borrower per Staff*	383	Borrower per Staff	No.	143.89	136.74	2.83	454.8
Loansize/GNIpc	383	Average loan size/ GNI per capita	\$	0.911	0.444	.026	33.93
Subsidy Dependence Index (SDI)	383	Subsidy(S)/ Revenue from lending(R)		0.214	0.122	-1.914	4.568
Operational Self Sufficiency(OSS)	383	Financial Revenue (Total)/ (Financial expense + Loan loss provision expense + Operating expense)	(%)	123.4	120.7	3.57	254.9
Interest rate/Yield	383	Average on lending interest rate/yield on lending	(%)	30.2	26.7	0	1.281

Source: Author's own calculation based on the Audit Reports of MFIs taken from Microfinance Information eXange Inc website. All the values in USD are in 000s. Exchange rates are also taken from Mixmarket website. Some definitions are taken from CGAP (2003)

<sup>14</sup> 12 observations have been reduced because Six MFIs have no women borrowers information available.

Table 1.3 presents the categorical variables used in this essay. The classification of all the categorical variables is based on the information provided on the Mix Market web site.

Table 1.3  
*Categorical Variables*

<b>Variables</b>	<b>Description</b>
Region	Geographic region in which the MFI operates classified into 6 regions: Africa (A); East Asia and the Pacific (EA&P); Eastern Europe and Central Asia (EE&CA); Middle East and North Africa (MENA); Latin America and the Caribbean (LAC); South Asia (SA).
Lending Methodology	Lending methodology is classified into 4 categories: Individual (I); Individual & Solidarity/Group (IS); Group/Solidarity (S); Village banking (V).
Status	Classified into 5 categories: Nongovernmental organizations (NGO); Bank (B); Non-banking financial intermediaries (NBFi); Rural Bank (RB); Cooperatives (Coop.).
Other services	Whether MFI provides other services i.e. health, education etc in addition to providing financial services or not.
Saving	Whether saving (voluntary or Compulsory) is a feature of MFI or not.
Regulated	Whether MFI is regulated by some authority like central bank etc. or not.

\*Data for all the categorical variables have been taken directly from the Mix market Website

Table 1.4  
*Correlations*

	<b>SDI</b>	<b>Subsidy</b>	<b>OSS</b>	<b>Age</b>	<b>Women</b>	<b>Loan size</b>	<b>borr/ staff</b>	<b>cost/ staff</b>	<b>True Profit</b>	<b>Equity</b>	<b>Rev.</b>
<b>SDI</b>	1.00 (381)										
<b>Subsidy</b>	0.228* (381)	1.00 (381)									
<b>OSS</b>	-0.402* (378)	-0.029 (378)	1.00 (397)								
<b>Age</b>	-0.139* (381)	0.154* (381)	0.089 (397)	1.00 (406)							
<b>Women</b>	-0.033 (369)	0.046 (369)	-0.136* (384)	0.044 (389)	1.00 (389)						
<b>Loan size<sup>15</sup></b>	0.047 (378)	0.004 (378)	0.069 (394)	-0.125* (399)	-0.270* (386)	1.00 (399)					
<b>Borr/ Staff</b>	-0.204* (381)	0.012 (381)	0.197* (397)	0.106* (402)	0.343* (389)	-0.315* (399)	1.00 (402)				
<b>Cost/ Staff</b>	-0.046 (381)	-0.053 (381)	-0.042 (390)	0.026 (393)	-0.380* (381)	0.001 (390)	-0.100* (393)	1.00 (393)			
<b>True Profit</b>	-0.273* (381)	-0.885* (381)	0.219* (380)	-0.067 (383)	-0.085 (371)	0.020 (380)	0.047 (383)	0.111* (383)	1.00 (383)		
<b>Equity</b>	0.017 (381)	0.664* (381)	0.319* (381)	0.219* (385)	-0.027 (373)	0.014 (382)	0.148* (385)	0.041 (384)	-0.259* (381)	1.00 (385)	
<b>Rev.</b>	-0.075 (381)	0.463* (381)	0.148* (386)	0.173* (389)	-0.111* (377)	0.021 (386)	-0.055 (389)	0.302* (389)	-0.113* (383)	0.720* (384)	1.00 (389)

Source: Authors own calculations. Numbers of Observations are in parentheses

\*Significance level at 5% or better

The correlation matrix in Table 1.4 reveals important relationships among the financial, organizational and social variables used in this study. Most of the relationships are

<sup>15</sup> loan size divided by the GNI per capita is used as a proxy for the outreach. The lower the ratio, the higher the Outreach i.e. MFI caters to poor who can only afford small loan sizes



in line with the theory. The next section describes the theory behind the non-parametric efficiency analysis and its application to the microfinance institutions.

## 1.3 Efficiency Analysis

For the efficiency analysis of the microfinance institutions, a two-stage analysis has been carried out. Firstly, Data Envelopment Analysis (DEA) approach is used to estimate technical and pure efficiency scores of the MFIs for the year 2005 and 2006 separately. Secondly, DEA-based Malmquist indices are calculated to analyze inter-temporal productivity change. The advantages of using the DEA technique to gauge efficiency are well documented in the literature. DEA framework can handle multiple outputs and inputs. Thus, in the context of MFIs efficiency analysis, it can incorporate both the outputs of outreach and sustainability along with other inputs into a single framework. Neither has it required any price information for the dual cost function nor parametric functional form for the production function. In the next subsections only a brief description of DEA approach and Malmquist productivity index will be given.

### 1.3.1 Methodology

#### 1.3.1.1 Data Envelopment Analysis

DEA was first introduced by Charnes, Cooper and Rhodes (1978), famously known as the CCR model after their names, as a generalization of efficiency proposed by Farrell (1957). We assume that there are  $n$  Decision Making Units (DMUs), and each DMU has  $m$  inputs to produce  $s$  outputs. This model measures the relative efficiency ratio of a given DMU ( $h_o$ ) by the sum of its weighted outputs to the sum of its weighted inputs. It can be formulated as follows, known as the input-oriented CCR model:

$$\max h_o = \frac{\sum_{r=1}^s u_r y_{ro}}{\sum_{i=1}^m v_i x_{io}}$$

subject to

$$\frac{\sum_{r=1}^s u_r y_{rj}}{\sum_{i=1}^m v_i x_{ij}} \leq 1, \quad (1)$$

$$u_r, v_i \geq 0, \quad i = 1, \dots, m, \quad j = 1, \dots, n, \quad r = 1, \dots, s,$$

where  $h_o$  is the efficiency ratio of the DMU<sub>*o*</sub>;  $v_i, u_r$  are virtual multipliers (weights) for the  $i$  th input and the  $r$  th output, respectively;  $m$  is the number of inputs,  $s$  is the number of outputs and  $n$  is the number of DMUs;  $x_{io}$  is the value of the input  $i$  for DMU<sub>*o*</sub>,  $y_{ro}$  is the value of the output  $r$  for DMU<sub>*o*</sub>.

The equation (1) is fractional programming and has an infinite number of solutions. It can be solved by adding an additional constraint,  $\sum_{i=1}^m v_i x_{io} = 1$ . The form then converts to the multiplier form of the DEA LP problem:

$$\max h_o = \sum_{r=1}^s \mu_r y_{ro}$$

subject to

$$\sum_{r=1}^s \mu_r y_{rj} - \sum_{i=1}^m v_i x_{ij} \leq 0, \quad j=1, \dots, n, \quad (2)$$

$$\sum_{i=1}^m v_i x_{io} = 1,$$

$$\mu_r, v_i \geq \varepsilon > 0, \quad i=1, \dots, m, \quad r=1, \dots, s,$$

To reflect the transformation, the variables from  $(u, v)$  have been replaced by  $(\mu, v)$ .  $\varepsilon$  is a non-Archimedean quantity defined to be smaller than any positive real number. The dual form of equation (2) can be written as an equivalent envelopment form as follows:

$$\min h_o = \theta_o - \varepsilon (\sum_{i=1}^m s_i^- + \sum_{r=1}^s s_r^+)$$

subject to

$$\sum_{j=1}^n x_{ij} \lambda_j + s_i^- = \theta x_{io}, \quad i=1, \dots, m, \quad (3)$$

$$\sum_{j=1}^n y_{rj} \lambda_j - s_r^+ = y_{ro}, \quad r=1, \dots, s,$$

$$\lambda_j, s_i^-, s_r^+ \geq 0, \quad \varepsilon > 0, \quad j=1, \dots, n,$$

Where  $\theta_o$  is the proportion of DMU<sub>*o*</sub>'s inputs needed to produce a quantity of outputs equivalent to its benchmarked DMUs identified and weighted by the  $\lambda_j$ .  $s_i^-$  and  $s_r^+$  are the slack variables of input and output respectively.  $\lambda_j$  is a  $(n \times 1)$  column vector of constants and can indicate benchmarked DMUs of DMU<sub>*o*</sub>. If  $h_o^* = 1$  is meant efficient and  $h_o^* < 1$  is meant inefficient where the symbol "\*" represents the optimal value.

However, the CCR model is calculated with the constant returns to scale (CRS) assumption. This assumption is not supportable in imperfectly competitive markets. The BCC model proposed by Banker, Charnes and Cooper (1984) modifies the CCR model by allowing variable returns to scale (VRS). The CRS LP problem can be easily modified to account for VRS by adding the convexity constraint

$$\sum_{j=1}^n \lambda_j = 1 \text{ to equation 3 to provide}$$

$$\min h_o = \theta_o - \varepsilon (\sum_{i=1}^m s_i^- + \sum_{r=1}^s s_r^+)$$

subject to

$$\sum_{j=1}^n x_{ij} \lambda_j + s_i^- = \theta x_{io}, \quad i = 1, \dots, m, \quad (4)$$

$$\sum_{j=1}^n y_{rj} \lambda_j - s_r^+ = y_{ro}, \quad r = 1, \dots, s,$$

$$\sum_{j=1}^n \lambda_j = 1,$$

$$\lambda_j, s_i^-, s_r^+ \geq 0, \quad \varepsilon > 0, \quad j = 1, \dots, n,$$

The Overall Technical Efficiency (*OTE*) from CCR model can be decomposed into Pure Technical Efficiency (*PTE*) and Scale Efficiency (*SE*). The *PTE* can be obtained from BCC model. We can measure the *SE* for a DMU<sub>o</sub> by using CCR and BCC model as follow:

$$SE = OTE / PTE, \quad (5)$$

If the ratio is equal to 1 then a DMU<sub>o</sub> is scale efficient, otherwise if the ratio is less than one then a DMU<sub>o</sub> is scale inefficient.

### 1.3.1.2 The Malmquist Productivity Index

To define the Malmquist index, Fare et al. (1994) defined distance functions with respect to two different time periods:

$$D_0^t(x^{t+1}, y^{t+1}) = \inf\{\theta \mid (x^{t+1}, y^{t+1} / \theta) \in S^t\} \quad (6)$$

and

$$D_0^{t+1}(x^t, y^t) = \inf\{\theta \mid (x^t, y^t / \theta) \in S^{t+1}\} \quad (7)$$

The distance function in (6) measures the maximal proportional change in output required to make  $(x^{t+1}, y^{t+1})$  feasible in relation to technology at time  $t$ . Similarly, the distance function in (7) measures the maximal proportional change in output required to make  $(x^t, y^t)$  feasible in relation to technology at time  $t + 1$ . The output Malmquist TFP productivity index can then be expressed as:

$$M_o(x^{t+1}, y^{t+1}, x^t, y^t) = \frac{D_o^{t+1}(x^{t+1}, y^{t+1})}{D_o^t(x^t, y^t)} \left[ \frac{D_o^t(x^{t+1}, y^{t+1})}{D_o^{t+1}(x^{t+1}, y^{t+1})} \frac{D_o^t(x^t, y^t)}{D_o^{t+1}(x^t, y^t)} \right]^{\frac{1}{2}} \quad (8)$$

The term outside the brackets shows the change in technical efficiency while the geometric mean of the two ratios inside the brackets measures the shift in technology between the two period's  $t$  and  $t + 1$ ; this could be called technological progress. So:

$$\text{Efficiency change} = \frac{D_o^{t+1}(x^{t+1}, y^{t+1})}{D_o^t(x^t, y^t)} \quad (9)$$

$$\text{Technical change} = \left[ \frac{D_o^t(x^{t+1}, y^{t+1})}{D_o^{t+1}(x^{t+1}, y^{t+1})} \frac{D_o^t(x^t, y^t)}{D_o^{t+1}(x^t, y^t)} \right]^{\frac{1}{2}} \quad (10)$$

### 1.3.2 DEA Model and Input Output Variable

Table 1.5 depicts the summary of inputs and outputs selected for this study. The main objective of estimating a production function is to explain the quantity of output produced given certain levels of inputs and other relevant factors that might explain the quantity of output produced. In traditional financial literature two models i.e. Production Model and Intermediation Model are popular depending upon what one thinks an institution do. The majority of the studies in banking efficiency literature are based on the input oriented constant returns to scale CCR model (Charnes *et al*, 1978). In the production model approach, financial institutions are treated as firms that use physical input, employees and expend money in order to obtain deposits, grant loans and collect revenues. We assume the output oriented Production model with variable returns to scale is better suited to microfinance institutions rather than constant returns to scale model. Because MFIs are more interested in increasing outreach i.e. lending loans to poor people which commensurate with not only their social mission but also contributes towards sustainability as well by collecting more revenues from lending. In addition to that they compete in an imperfect economic environment as the

markets for MFIs are not as well developed as the conventional banking sector<sup>16</sup>. And they always have restricted amount of money and human resource (Inputs) to spend on unlike commercial banks which can generate money from shareholders. In the context of output oriented model, this essay asks a specific question “By how much the output quantities be proportionally expanded without altering the input quantities used?. The selection of specifications with correct inputs and outputs in the context of MFIs is very important. This study uses LR-ACE<sup>17</sup> as a general specification where gross loan portfolio and financial revenues are taken as an output and assets, operating costs and number of staff as an input. In addition to that, we have also used specifications L-ACE and R-ACE, where the former put emphasis on granting loan as main objective of MFIs and latter signifies revenue collection as main objective of MFIs. The other specifications used are basically the different combination of treating subsidies as an input and output with the above general specifications.

Table 1.5  
*Inputs and Outputs in Efficiency Specifications*

Variable	Variable name	Not.	Definition	Unit
Input	Total assets <sup>18</sup>	A	Total of all net asset accounts	(\$)
Input	Operating Cost <sup>19</sup>	C	Expenses related to operations, such as all personnel expenses, rent and utilities, transportation, office supplies, and depreciation	(\$)
Input	Number of Staff <sup>20</sup>	E	The number of individuals who are actively employed by the MFI. This includes contract employees or advisors who dedicate the majority of their time to the MFI, even if they are not on the MFI’s roster of employees	No.
Input	Total subsidies	S <sup>i</sup>	(E * m + A (m - c) + K - P) in case a positive value	(\$)
Output	Total subsidies	S <sup>o</sup>	(E * m + A (m - c) + K - P) in case a negative value	
Output	Gross loan portfolio <sup>21</sup>	L	Outstanding principal balance of all of the MFI’s outstanding loans including current, delinquent and restructured loans, but not loans that have been written off. It does not include interest receivable	(\$)
Output	Financial revenue <sup>22</sup>	R	Revenue generated from the gross loan portfolio and from investments plus other operating revenue	(\$)
Output	Revenue- Subsidy	R <sup>s</sup>	Financial revenues without subsidies (R-S)	(\$)

Source: Authors own calculation based on data taken from audit reports and MixMarket website.

### 1.3.3 Incorporation of Subsidies into DEA Framework

In this study, subsidies have been splitted between the positive subsidies and negative subsidies. They have entered into the DEA framework on the premise that positive subsidies

<sup>16</sup> Stiglitz and Weiss (1983) provides the analytical underpinnings of the imperfect information paradigm

<sup>17</sup> The left part in all the specifications show outputs and the right part depict inputs.

<sup>18</sup> Berger and Humphrey (1997), Seiford and Zhu (1999) and Luo (2003).

<sup>19</sup> Athanassopoulos (1997), Berger and Humphrey (1997) and Pastor (1999).

<sup>20</sup> Athanassopoulos (1997), Berger and Humphrey (1997), Sherman and Gold (1985), Seiford and Zhu (1999) and Luo (2003) among others

<sup>21</sup> (Sherman and Gold, 1985; Athanassopoulos, 1997; Berger and Humphrey, 1997; Wheelock and Wilson, (1999).

<sup>22</sup> Pastor (1999) and Seiford and Zhu (1999)

distort public wealth while negatives subsidies create it. Where positive subsidies have been treated as an input, while negative subsidies as an output in all the efficiency specifications. This is due to the fact that our calculated subsidies are in fact the social cost to the society of subsidized MFIs. Where a positive subsidy ( $E * m + A (m - c) + K - P > 0$ ) means the MFI is distorting public wealth so it is entered into the efficiency model as an input. While a negative subsidy ( $E * m + A (m - c) + K - P < 0$ ) shows that MFI is creating public wealth so it is entered into the efficiency framework as an output. Subsidies as an input and output have been denoted by  $S^i$  and  $S^o$  respectively, where superscripts  $i$  and  $o$  refers to input and output respectively.

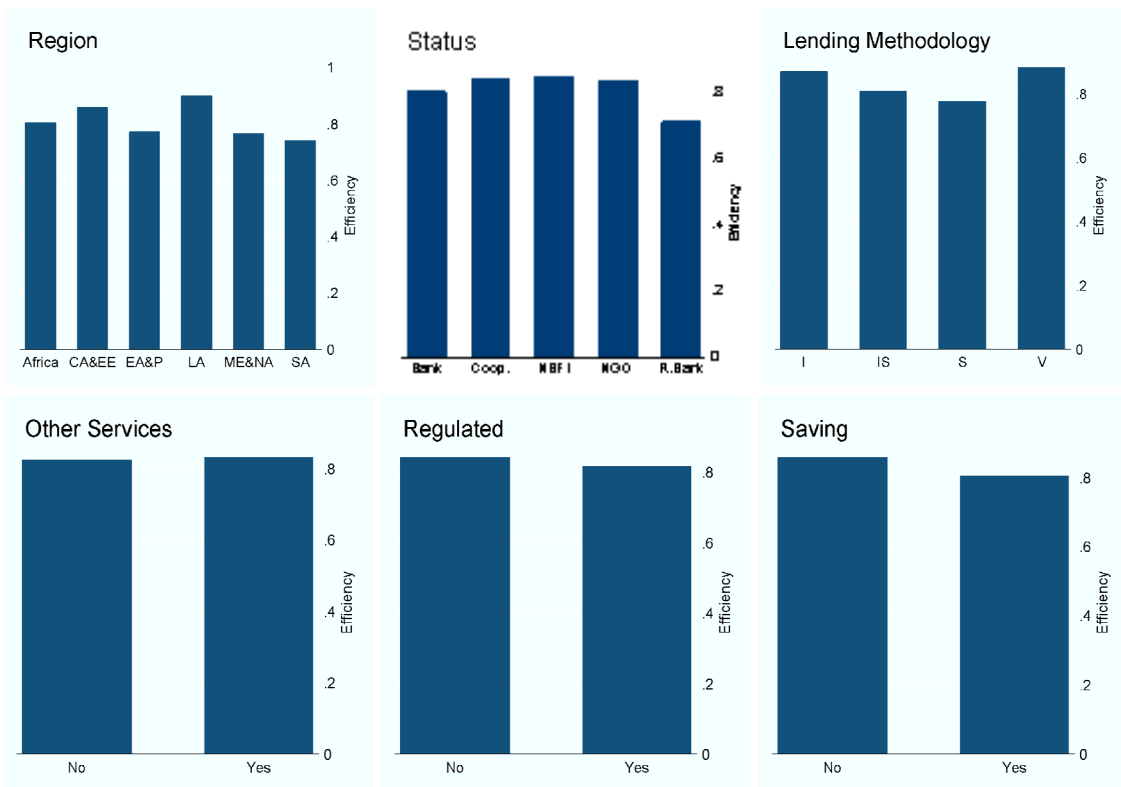
## 1.4 Efficiency Analysis

The efficiency analysis have been carried out for both years i.e. 2005 and 2006 separately and also jointly by calculating Malmquist productivity index for year 2006 relative to the year 2005. The results for technical efficiency have been bifurcated into constant returns to scale efficiency (crs), variable return to scale efficiency (vrs) and scale efficiency (Scale). In this paper, the focus of the analysis is on the variable returns to scale efficiency scores for the reasons as described in section 3.3.2. Nevertheless the average efficiency scores of constant returns to scale and scale efficiency have also been presented in the following figures.

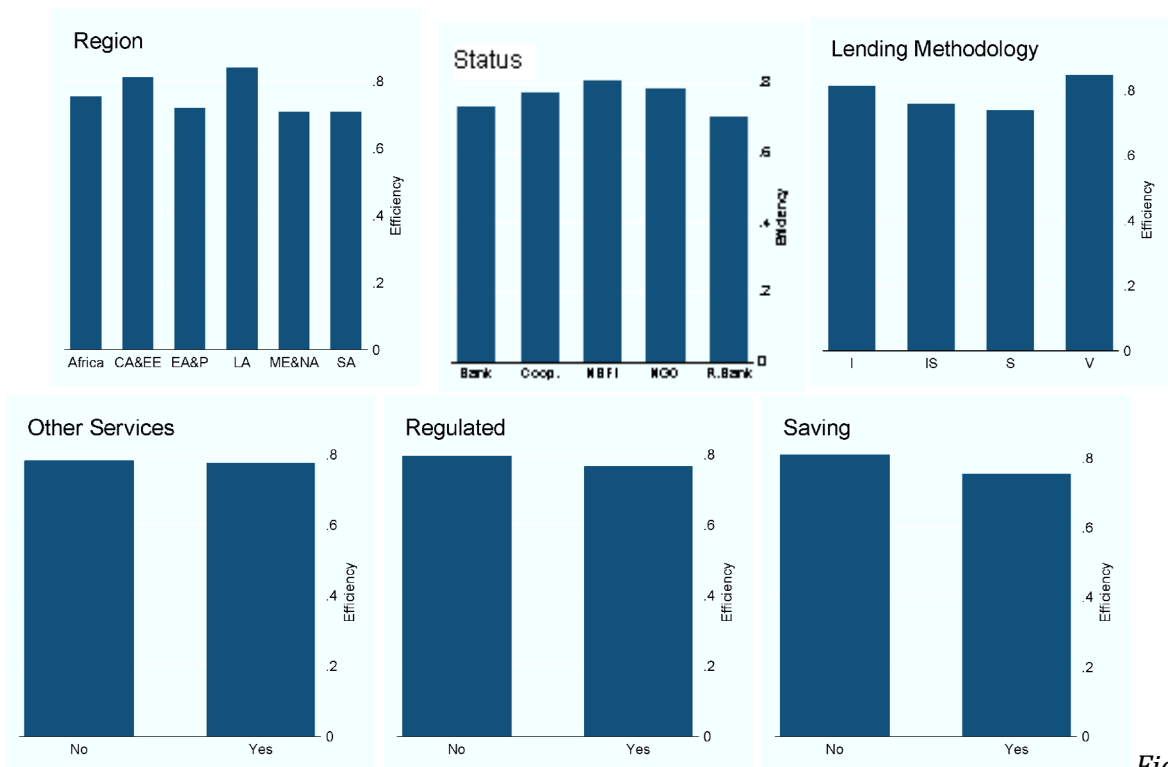
Fig 1.1 shows the average efficiency scores for specification LR-ACE employing variable returns to scale. Latin American MFIs are the efficient ones while South Asians are the worst ones relatively. MFIs with Non-banking financial intermediary status are more efficient than others while MFIs with individual and village lending methodology are more efficient than others.

Fig 1.2 presents the average efficiency scores assuming constant returns to scale. The results are by and large same as with variable returns to scale. Latin American MFIs are found to be efficient ones whereas South Asian MFIs turn out to be less efficient than the rest. MFIs with status "NBFI" are the efficient one while MFIs with individual and village lending methodology are the efficient one relative to others. Again MFIs with no saving designs and are not regulated are more efficient than their counterparts.

The average scale efficiency scores have been presented in Fig. 1.3. The average scores show that NBFIs along with Rural Banks are scale efficient. MFIs located in South Asia are on average more scale efficient than others.

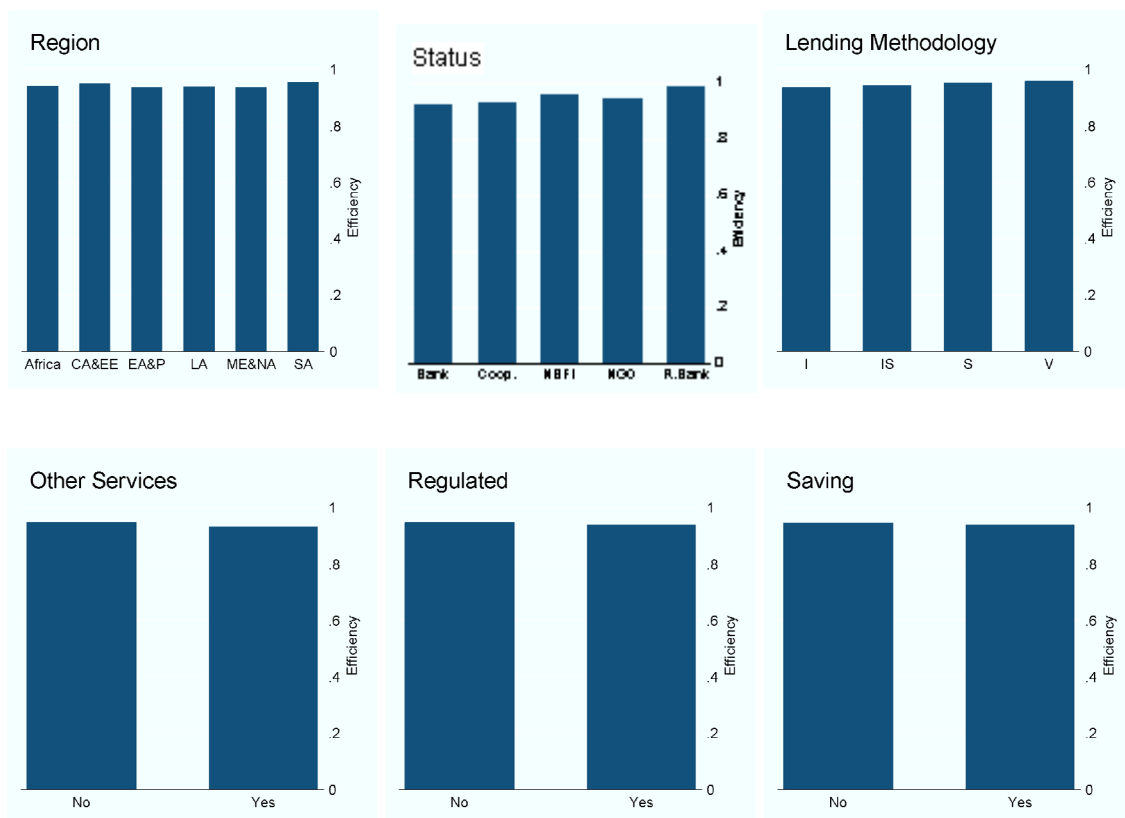


*Fig.1.1 Composition of Efficiency Scores for Specification LR-ACE (vrs)*  
 Source: Based on authors own calculations.



*Composition of Efficiency Scores for Specification LR-ACE (crs)*  
 Source: Based on authors own calculations.

*Fig.1.2*



*Fig.1.3 Composition of Efficiency Scores for Specification LR-ACE (scale)*  
 Source: Based on authors own calculations.

## 1.5 With and Without Subsidy Analysis

### 1.5.1 Efficiency Analysis 2005

Table 1.6 presents the average values of the technical efficiency results of with and without subsidy specifications. The specifications entertained are LR-ACE vs. LR<sup>s</sup>-ACE (without subsidies) and R-ACE vs. R<sup>s</sup>-ACE (without subsidies). The sample consists of all the MFIs in the data for year 2005. The detailed efficiency results of all the MFIs are presented in Appendix B. Comparing the general specification LR-ACE vs. LR<sup>s</sup>-ACE (without subsidies); averages of CRSTE, VRSTE and SE have decreased from 0.786, 0.833, and 0.945 to 0.700, 0.881 and 0.900 respectively. The average efficiency scores can also be interpreted in another way. For example, score of 0.833 shows that average output of MFIs can be increased by 16.7% with the same use of inputs assuming variable returns to scale. Considering specification R-ACE (where MFIs objective is to increase revenues), the decrease in efficiency is more resounding when subsidies have been subtracted from the revenues in specification R<sup>s</sup>-ACE (without subsidy). MFIs which were previously 100% efficient under LR-ACE become less efficient after taking subsidies out of the revenues, are FADES, CredMujer, ADEMI, C Fund, ACME, FINCA-Mali, SEF-ZAF, Finca-UGA, PRIDE and CETZAM. The exceptions are INNMA and



DIGOS which become 100% efficient by taking out subsidies. MFIs remained 100% efficient for both with and without subsidies are BESA, ASA, ALIDE, MIKROFIN, FMM Pop, WWB CA, Fundecoca, Bancosol, Coac Jardin, Coac Sac, FINCA-ECU, ADCSI, DECSI, KSF, AIYL Bank, Al AMANA, VYCCU, Prodesa, SEAP, BANTRA, CMAC Arq, CMAC Cus, Mibanco and ACEP.

Table 1.7 shows the average efficiency values of MFIs for year 2005 with positive subsidies entering into the specifications as an input. The sample consists of only subsidy dependent MFIs with positive subsidies. The detailed efficiency results of all the MFIs are presented in Appendix C. There is only a slight increase in the average efficiencies for specification LR-ACES<sup>i</sup> where subsidy enters into the model as an input i.e. from 0.790, 0.843 and 0.939 to 0.812, 0.860 and 0.946 respectively. For other specifications of L-ACE and R-ACE, adding subsidies as an input also result in a small increase in the efficiencies. However considering the base specification LR-ACE, MFIs which become 100% efficient with subsidies are SUNRISE, Coac S Jose, C Fund, MDSL, FINDESA, ASASAH, FIELCO, Bank Eskhata and CMFL. For specification L-ACES, those MFIs are DESHA, SUNRISE, COAC S JOSE, NSSC, FINDESA and Bank Eskhata. While for specification R-ACE, HORIZON, MDSL, LAPO, BANTRA, Bank Eskhata and PRIDE become fully efficient.

Table 1.6  
*Efficiency Analysis 2005 (With and Without Subsidies)*

technical efficiency	LR-ACE		R-ACE	
	with subsidies	without subsidies	with subsidies	without subsidies
constant (CRSTE)	0.786	0.700	0.707	0.222
variable (VRSTE)	0.833	0.781	0.735	0.369
scale efficiency (SE)	0.945	0.900	0.966	0.691

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.7  
*Efficiency Analysis 2005 (Subsidies as an Input)*

technical efficiency	LR-ACE		L-ACE		R-ACE	
	without subsidy	with subsidy Input	without subsidy	with subsidy Input	without subsidy	with subsidy Input
constant (CRSTE)	0.790	0.812	0.656	0.688	0.691	0.737
variable (VRSTE)	0.843	0.860	0.745	0.767	0.739	0.780
scale efficiency (SE)	0.939	0.946	0.889	0.903	0.940	0.948

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.8 depicts average efficiency results for MFIs with negative subsidies entering into the model as an output. The sample consists of only those MFIs with negative subsidies. The detailed efficiency results of all the MFIs are presented in Appendix D. Again treating

subsidies as an output only slightly improves the average efficiency scores for all the specifications. Only Fundenuse becomes 100% efficient once subsidies enter into the specifications as an output for specifications LR-ACE and R-ACE. Whereas for specification L-ACE, FMM Pop, Finca-ECU, and Fundenuse become fully efficient.

Table 1.8  
*Efficiency Analysis 2005 (Subsidies as an Output)*

	LR-ACE		L-ACE		R-ACE	
	without subsidy	with subsidy output	without subsidy	with subsidy output	without subsidy	with subsidy output
technical efficiency						
constant (CRSTE)	0.894	0.897	0.837	0.853	0.812	0.816
variable (VRSTE)	0.912	0.915	0.857	0.875	0.839	0.842
scale efficiency (SE)	0.980	0.980	0.977	0.973	0.968	0.969

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

## 1.5.2 Efficiency Analysis 2006

Like year 2005, the efficiency analysis has been carried out on the same lines for the year 2006. Table 1.9 presents the average efficiency results for all the MFIs in year 2006 with and without subsidies. The detailed efficiency analysis for all the MFIs in the sample for year 2006 has been presented in Appendix E. Again average efficiencies decrease for both specifications LR-ACE and R-ACE once subsidies have been removed from the revenues. Like previous year analysis, for base specification LR-ACE, this decrease in efficiency is small. But for the specification R-ACE, the decrease in efficiency is more pronounced. The MFIs previously 100% efficient but after removing subsidies become less efficient are C FUND, INTERFISA, Promujer-PERU, IMON, and CETZAM for specification LR-ACE. Whereas for specification R-ACE, ASA, BRAC-BAN, C FUND, Interfisa and CETZAM become less efficient. MFIs which remain fully efficient irrespective of subsidies for specification LR-ACE are BESA, Cred. Agro, IDF, EKI, Mikrofin, Partner, Sunrise, WWB Ca, C Mujer-CR, Bancosol-ECU, C Jardin, Finca-ECU, ACSI, DECSI, Bandhan, SNFL, MDSL, SMEP, AIYL, Khan Bank, Al Amana, Fondep, Vovo Banco, Acodep, Bantra, Findesa, CMAC Arq, EDPY C Tac and Mibanco.

Average efficiency results for treating positive subsidies as an input is presented in Table 1.10. The detailed efficiency analysis for all the MFIs in the sample for year 2006 is being presented in Appendix F. The Specifications entertained are LR-ACE, L-ACE and R-ACE. The average efficiency scores increase slightly after adding subsidy input in all the specifications. The MFIs becoming 100% efficient after subsidy input for base specification LR-ACE are Procred-ALB, Horizon, Viator, BANCOSOL, FMM Pop, DBACD, BG, MFW, AL Karama, SEF-ZAF, PRIDE, and Finca-ZAM. For specification L-ACE, MFIs become 100%

efficient with subsidy input are Procred-ALB, Bancosol, FMM Pop, BG and Al Karama. Similarly for specification R-ACE, Besa, Procred-ALB, Horizon, Bancosol, BG, DBACD, Al Karama, and Finca-ZAM have become fully efficient after subsidy input.

Table 1.9  
*Efficiency Analysis 2006 (With and Without Subsidies)*

	LR-ACE		R-ACE	
	with subsidies	without subsidies	with subsidies	without subsidies
technical efficiency				
constant (CRSTE)	0.835	0.776	0.732	0.428
variable (VRSTE)	0.859	0.823	0.751	0.561
scale efficiency (SE)	0.973	0.944	0.976	0.773

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.10  
*Efficiency Analysis 2006 (Subsidies as an Input)*

	LR-ACE		L-ACE		R-ACE	
	without subsidy	with subsidy Input	without subsidy	with subsidy Input	without subsidy	with subsidy Input
technical efficiency						
constant (CRSTE)	0.844	0.864	0.758	0.768	0.758	0.783
variable (VRSTE)	0.864	0.881	0.793	0.806	0.776	0.799
scale efficiency (SE)	0.977	0.981	0.961	0.957	0.978	0.980

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.11  
*Efficiency Analysis 2006 (Subsidies as an Output)*

	LR-ACE		L-ACE		R-ACE	
	without subsidy	with subsidy output	without subsidy	with subsidy output	without subsidy	with subsidy output
technical efficiency						
constant (CRSTE)	0.868	0.868	0.778	0.786	0.765	0.773
variable (VRSTE)	0.901	0.901	0.825	0.839	0.801	0.809
scale efficiency (SE)	0.964	0.964	0.946	0.941	0.958	0.958

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Average efficiency scores for treating negative subsidies as an output is presented in Table 1.11. The detailed efficiency analysis for all the MFIs in the sample for year 2006 is being presented in Appendix G. Overall the average efficiency scores remain the same for the base specification LR-ACE but increased marginally for specification L-ACE and R-ACE. For specification L-ACE, only EBS becomes 100% efficient after subsidy output whereas for specification R-ACE, Mikrofin and ACSI becomes 100% efficient after subsidy output.

### 1.5.3 Malmquist Productivity Index

Now we turn to the Panel Data efficiency analysis where the Malmquist Productivity indices are presented. All the efficiency scores in this analysis are for year 2006 relative to the previous year 2005. The five indices are technical efficiency change, technological change, pure technical efficiency change, scale efficiency change and total factor productivity (TFP) change. Table 1.12 presents the overall average efficiency scores for specifications LR-ACE, L-ACE and R-ACE. A detailed efficiency analysis of all the MFIs is given in Appendix H. Average scores for all the indices have increased for 2006 relative to previous year except for technological change indices which has a value less than one.

Table 1.13 compares averages of Malmquist productivity indices with and without subsidies for base specification LR-ACE. A detailed efficiency analysis of all the MFIs is given in Appendix I. Taking subsidies out of the revenues decreases the average scores slightly for the technological change and total factor productivity indices. While for the technical efficiency, pure technical efficiency and scale efficiency, it actually increases the average efficiency score marginally. Moreover without subsidy, total factor productivity indices become less than one.

Table 1.14 depicts averages of malmquist indices for treating positive subsidies as an input into the specification LR-ACE and L-ACE. A detailed efficiency analysis of all the MFIs is given in Appendix J. For specification LR-ACE, average indices scores show little improvement when subsidy as an input enters into the model for all the efficiencies except scale efficiency. For specification L-ACE, the average productivity indices scores decrease with subsidy input except for technological change and total factor productivity indices.

Table 1.15 presents the average efficiency indices of treating negative subsidies as an output in to the specifications LR-ACE, L-ACE and R-ACE. A detailed efficiency analysis of all the MFIs is given in Appendix K. For all the three specifications, the magnitude of change in efficiency indices before and after subsidy output is same. For technical, pure technical and

Table 1.12  
*Malmquist DEA indices for 2006*

	<b>LR-ACE</b>	<b>L-ACE</b>	<b>R-ACE</b>
technical efficiency (CRS)	1.081	1.127	1.123
technological change	0.935	0.903	0.899
pure tech. efficiency (VRS)	1.034	1.049	1.059
scale efficiency	1.046	1.074	1.061
total factor productivity	1.011	1.017	1.011

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Scale efficiencies, the average indices scores decrease with subsidy output. Whereas, for technological change and total factor productivity indices, average indices scores increase with subsidy input.

Table 1.13  
*Malmquist DEA indices for 2006 (with and without subsidy)*

	LR-ACE	
	with subsidy	without subsidy
technical efficiency (CRS)	1.071	1.108
technological change	0.943	0.895
pure tech. efficiency (VRS)	1.029	1.041
scale efficiency	1.041	1.064
total factor productivity	1.010	0.992

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.14  
*Malmquist DEA indices for 2006 (subsidy as an input)*

	LR-ACE		L-ACE	
	without subsidy input	with subsidy input	without subsidy input	with subsidy input
technical efficiency (CRS)	1.074	1.076	1.158	1.134
technological change	0.929	0.943	0.866	0.903
pure tech. efficiency (VRS)	1.019	1.024	1.052	1.050
scale efficiency	1.054	1.051	1.101	1.080
total factor productivity	0.998	1.015	1.003	1.024

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

Table 1.15  
*Malmquist DEA indices for 2006 (subsidy as an output)*

	LR-ACE		L-ACE		R-ACE	
	without subsidy output	with subsidy output	without subsidy output	with subsidy output	without subsidy input	with subsidy input
technical efficiency (CRS)	0.978	0.965	0.963	0.939	0.994	0.989
technological change	1.016	1.079	1.051	1.146	1.005	1.074
pure tech. efficiency (VRS)	0.986	0.979	1.001	0.976	1.013	1.010
scale efficiency	0.992	0.986	0.962	0.962	0.982	0.980
total factor productivity	0.993	1.041	1.013	1.076	0.999	1.062

Source: Author's own calculations. All values are average of the efficiencies of the total MFIs.

## 1.6 Tobit Regression Approach

### 1.6.1 Methodology

Tobit Regression analysis are carried out to test a series of hypotheses concerning the relationship between financial efficiency and other indicators related to MFIs productivity,

organizational, outreach, sustainability and social impact amid subsidies. The model is *censored* if one can at least observe the exogenous variables and *truncated* if the observations outside a specified range are totally lost” (Amemiya,1984:3). In this case, a Tobit censored regression model is appropriate<sup>23</sup> because it can accommodate the censored DEA efficiency score since the values of the dependent variable lie between 0 and 1 with some values achieving the highest value of 1. This study has taken the output oriented technical efficiency as dependent variable for Tobit regressions for year 2005 and 2006.

The Equation is as follows

$$\log \text{Efficiency}_i = \alpha + \beta_2 \log(\text{cost}/\text{staff})_i + \beta_3 (\text{OSS})_i + \beta_4 (\text{SDI}) + \beta_5 \log(\text{borrower}/\text{staff})_i + \beta_6 \log(\text{Loan size}/\text{GNI per capita})_i + \beta_7 \log(\text{age})_i + \beta_8 \log(\text{women})_i + \gamma_3 C_i + \varepsilon_i \quad (1)$$

Where  $C_i$  are the controls for Region, Status, Lending Methodology, Saving, Regulated and Other services.

The omitted variable categories are: for region, Africa; for status, Non Banking Financial Institution (NBFi); for lending methodology, Individual lending; and others are MFIs with no saving feature, not regulated and no other services.

The base regression describes the correlates of efficiency with particular emphasis on the role of productivity variables i.e. cost per staff and borrowers per staff. Another important aspect to understand is the impact of outreach on the efficiency. Further also of interest is to know how efficiency relates to the subsidy dependence and sustainability.

For each year 2005 and 2006, we have started from the overall regressions with PTE score of LR-ACE as dependent variable followed by the Tobit regressions where dependent variable consists of specifications with and without subsidies. Then follow the equations where subsidies have been treated as an input and as an output. The relationship between financial efficiency and other indicators related to MFIs productivity, outreach, sustainability and social impact have been tested which reveal important information about the tradeoff between outreach to the poor and efficiency of MFIs and also about the inefficiencies which leads to lower productivity etc. Finally, Tobit random effect model has been employed to analyze the panel data.

## 1.6.2 Regression Results (2005)

Table 1.16 gives results from the estimation of equation (1) above. Regression (1) and (2) are overall regression equation with base specification LR-ACE as dependent variable and include

<sup>23</sup> For literature see for example Chakraborty et al., 2001 ; McCarty and Yaisawarng, 1993; Gilen and lall, 1997 and Chilingirian, 1995 among others

all the 204 MFIs as sample. Regression 2 includes operational self sufficiency (OSS) and SDI as independent variables in addition to the other variables. The results showing the tradeoff between efficiency and cost per staff and positive relationship between efficiency and borrower per staff (productivity) are in line with the theory and also are significant. The regression equations confirm the negative association between subsidy dependence and efficiency of MFIs. While operational self sufficiency (OSS) contributes toward efficiency, though, the coefficient is significant only in Equation (2). The outreach indicator has significant positive impact on efficiency showing that as outreach increases i.e. lower loan size, the efficiency decreases. In other words, MFIs which cater to poor tend to be inefficient than those with relatively well off clients. However, lending to women borrowers significantly increases the efficiency. Impact of MFI age on efficiency is also positive though insignificant. Turning to covariates, MFIs with status of Rural Banks are inefficient ones while Non Banking financial intermediaries (NBFIs) which is omitted variable category are efficient though not significant. The rest of MFIs with status as Banks, NGOs and Cooperatives are negatively related to efficiency though the relationship is insignificant. MFIs which cater to both individuals and groups are clearly inefficient. While those with only group lending feature are also inefficient but by adding SDI and OSS into the regression framework makes the impact insignificant. MFIs operating in South Asia and M. East & N. Africa are inefficient than the MFIs operating in the rest of the regions. African MFIs have positive efficiency but insignificant. MFIs promoting savings are significantly inefficient while the ones which are regulated and provide other services are efficient though the relationship is insignificant.

The next two regression equations (3) & (4) show a comparison between with and without subsidies. Where in the dependent variable LR<sup>s</sup>-ACE in Equation (4), the subsidies have been deducted from the revenues. Comparing Equation (3) and (4), few differences are worth mentioning. Without subsidies, the positive impact of giving loans to women on financial efficiency has turned insignificant. Moreover the significance levels of Positive impact of staff productivity and negative impact of operational costs on financial efficiency. Notwithstanding the dummy variables, the inefficiency of South Asian MFIs becomes insignificant without subsidies.

Regression (5) and (6) depicts a comparison between general specification (LR-ACE) and treating positive subsidies as an input into the specification (LR-ACES<sup>i</sup>). So the sample consists of only subsidy dependant MFIs. The negative relationship between costs and efficiency becomes insignificant once subsidies entered as an input into the specification. Moreover the positive impact of outreach on efficiency also becomes insignificant. On the

covariate front, the significance level of the positive impact of MFIs providing other services on their efficiency is improved with subsidies.

Table 1.16  
Tobit Regression Analysis 2005

	Base Specification		with/without subsidies		+ve Subsidies (As Input)		-veSubsidies (As Output)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	LR-ACE	LR-ACE	LR-ACE	LR <sup>s</sup> -ACE	LR-ACE	LR-ACES <sup>i</sup>	LR-ACE	LRS <sup>o</sup> -ACE
Cost / Staff	-0.085 (-4.01)***	-0.069 (-3.17)***	-0.066 (-3.18)***	-0.089 (-3.75)***	-0.040 (-1.71)*	-0.020 (-0.78)	-0.128 (-3.87)***	-0.13 (-4.04)***
SDI		-0.075 (-2.37)**	-0.09 (-2.86)***	-0.045 (-3.07)***	-0.067 (-1.83)*	-0.091 (-2.51)**	0,265 (1.72)*	0,23 (1.56)
Operational Self Sufficiency		0.064 (1.68)*	0.045 (1.23)	0.118 (1.07)	0.190 (2.49)**	0.222 (2.99)***	0,06 (2.06)**	0,06 (2.02)*
Loan Size/GNIpc	0.114 (4.10)***	0.092 (3.29)***	0.077 (2.86)***	0.127 (4.14)***	0.055 (1.77)*	0.035 (1.07)	0,08 (1.95)*	0,08 (2.02)*
Borrower/Staff	0.106 (3.82)***	0.078 (2.74)***	0.079 (2.88)***	0.165 (5.27)***	0.029 (0.90)	0.007 (0.17)	-0.01 (-0.29)	-0.01 (-0.26)
GNIpc	0.144 (4.17)***	0.127 (3.67)***	0.091 (2.71)***	0.156 (4.02)***	0.079 (2.14)**	0.059 (1.52)	0,11 (1.63)	0,11 (1.76)*
Age	0.043 (1.51)	0.028 (0.99)	0.019 (0.69)	0.027 (0.88)	0.016 (0.54)	0.019 (0.70)	-0.07 (-1.39)	-0.07 (-1.41)
Women Borrower	0.088 (2.48)**	0.072 (2.05)**	0.071 (2.27)**	0.035 (0.99)	0.095 (2.81)***	0.092 (2.71)***	-0.07 (-1.04)	-0.08 (-1.12)
Bank	-0.031 (-0.66)	-0.009 (-0.19)	-0.026 (-0.58)	-0.034 (-0.66)	0.023 (0.46)	0.009 (0.21)	-0.02 (-0.27)	-0.02 (-0.31)
Cooperatives	-0.063 (-0.95)	-0.055 (-0.85)	-0.036 (-0.58)	-0.043 (-0.60)	0.029 (0.40)	0.042 (0.60)	-0.22 (-2.18)**	-0.22 (-2.23)**
NGOs	-0.020 (-0.53)	-0.016 (-0.44)	-0.020 (-0.57)	0.002 (-0.04)	-0.018 (-0.43)	-0.034 (-0.85)	0,06 (1.39)	0,06 (1.42)
Rural Bank	-0.149 (-1.83)*	-0.148 (-1.87)*	-0.134 (-1.77)*	-0.190 (-2.18)**	0.119 (1.14)	0.096 (0.90)	-0.23 (-2.31)**	-0.24 (-2.42)**
Individual & Group	0.080 (-2.48)**	-0.075 (-2.37)**	-0.075 (-2.46)**	-0.063 (-1.81)*	-0.083 (-2.34)**	-0.093 (-2.61)**	-0.06 (-1.77)*	-0.06 (-1.82)*
Group	0.087 (-1.73)*	-0.066 (-1.34)	-0.064 (-1.35)	-0.075 (-1.36)	-0.030 (-0.58)	-0.017 (-0.23)	-0.09 (-1.58)	-0.09 (-1.58)
Village Banking	0.051 (0.82)	0.058 (0.97)	0.039 (0.64)	-0.031 (-0.44)	0.031 (0.48)	0.007 (0.08)	0,17 (2.04)*	0,16 (1.96)*
C.Asia & E.Europe	-0.038 (-0.62)	-0.054 (-0.91)	0.022 (0.37)	-0.008 (-0.12)	-0.058 (-0.89)	-0.072 (-1.13)	0,14 (1.21)	0,13 (1.13)
E. Asia & Pacific	-0.033 (-0.53)	-0.046 (-0.77)	-0.021 (-0.36)	0.026 (0.39)	-0.027 (-0.41)	-0.032 (-0.47)	0,20 (2.48)**	0,20 (2.52)**
Latin America	-0.037 (-0.68)	-0.054 (-1.02)	0.011 (0.21)	0.010 (0.17)	-0.033 (-0.58)	-0.049 (-0.85)	0,19 (1.77)*	0,18 (1.71)*
M. East & N. Africa	-0.185 (-2.49)**	-0.210 (-2.89)***	-0.090 (-1.25)	-0.107 (-1.30)	-0.341 (-3.14)***	-0.288 (-2.65)***	0,12 (1.10)	0,11 (1.02)
S. Asia	-0.159 (-3.01)***	-0.155 (-3.01)***	-0.126 (-2.52)**	-0.085 (-1.48)	-0.157 (-2.81)***	-0.160 (-2.75)***	0,16 (2.33)**	0,15 (2.27)**
Savings	-0.068 (-1.89)*	-0.075 (-2.12)**	-0.056 (-1.63)	-0.065 (-1.65)	-0.079 (-2.01)**	-0.072 (-1.88)*	0,01 (0.29)	0,01 (0.24)
Other Services	0.045 (1.51)	0.046 (1.58)	0.035 (1.24)	0.035 (1.10)	0.061 (1.89)*	0.074 (2.32)**	0,01 (0.33)	0,01 (0.40)
Regulated	0.031 (1.00)	0.032 (1.04)	0.018 (0.62)	0.046 (1.37)	0.025 (0.77)	0.013 (0.33)	0,003 (0.10)	0,00 (0.11)
Constant	-1.17 (-4.05)***	-1.263 (-3.79)***	-0.984 (-3.12)***	-1.552 (-4.30)***	-1.661 (-3.76)***	-1.721 (-3.91)***	0,57 (1.26)	0,58 (1.31)
Log Likelihood	67.53	72.48	80.53	54.30	60.56	59.58	54.94	56.09
LR Chi-Square	82.26	92.16	88.35	105.49	77.31	78.33	66.82	67.62
Prob > Chi-Square	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No. of Obs.	198 <sup>24</sup>	198	193 <sup>25</sup>	193	149 <sup>26</sup>	149	49 <sup>27</sup>	49

T-values in parentheses

\*significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Source: Authors calculations based on data compiled from the audit reports of MFIs and from the Mix Market website.

<sup>24</sup> Six MFIs are dropped due to unavailability of women borrowers information

<sup>25</sup> 5 MFIs have been dropped for which subsidies exceed revenues in addition to the six MFIs

<sup>26</sup> 149 MFIs which are subsidy dependant i.e. they have positive subsidy value

<sup>27</sup> 49 MFIs are subsidy free i.e. they have negative subsidy value



Regression (7) and (8) present a comparison between general specification (LR-ACE) and incorporating negative subsidies as an output into the efficiency specification (LRS<sup>o</sup>-ACE). In other words only subsidy free MFIs are included in the sample. There is not much difference between the two regressions however when compared to previous Regressions (1) to (6), the impact of SDI on efficiency becomes positive which is due to the fact that the sample consists of only those MFIs which are subsidy free. Also the impact of women borrowers on efficiency turn negative though insignificant. Moreover MFIs with cooperative status become inefficient.

### **1.6.3 Regression Results (2006)**

Table 1.17 presents the efficiency regressions for the year 2006. Regression equations (9) and (10) present the regression results of taking the base specification efficiency LR-ACE as dependant variable. Compared to the results in year 2005, the positive impact of lending to women on efficiency is no longer significant. MFIs with cooperative status become significantly inefficient while rural banks remain still inefficient though the impact is insignificant. MFIs located in ME&NA region are still inefficient but insignificant. The other results are same as in year 2005. Costs have a significant negative impact on the efficiency while Staff Productivity contributes significantly towards the efficiency. Lending to relatively well off clients which can afford larger loan sizes, again turns out to be efficient in 2006. MFIs which lend to both individual and groups and exclusively to groups are inefficient. Whereas MFIs which lend to individuals remain efficient. MFIs with saving feature and those located in South Asia and ME&NA region are again turned out to be inefficient.

Regression equations (11) and (12) depict a comparison of with and without subsidy regression equations. Where the efficiency scores of the specifications LR-ACE (revenues including subsidies) and LRS<sup>s</sup>-ACE (revenues excluding subsidies) have been treated as a dependent variables. Comparing Equations (11) and (12), the negative impact of SDI on the efficiency becomes significant once subsidies are deducted from the revenues. Whereas the positive impact of OSS on efficiency turns insignificant without subsidies. This shows that the conventional financial ratios look good only in the presence of subsidies. Regarding dummy variables, MFIs with village banking methodology become significantly inefficient without subsidies. Geographically, the inefficiency of SA MFIs becomes insignificant once subsidies are taken out from revenues. This shows that subsidies do more harm than improving the financial efficiency for South Asian MFIs.

Table 1.17  
Tobit Regressions Analysis 2006

	Base Specifications		with/without subsidies		+ve Subsidies (As Input)		-veSubsidies (As Output)	
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	LR-ACE	LR-ACE	LR-ACE	LR <sup>s</sup> -ACE	LR-ACE	LR-ACES <sup>i</sup>	LR-ACE	LRS <sup>o</sup> -ACE
Cost / Staff	-0.09 (-4.91)***	-0.08 (-4.41)***	-0.068 (-4.12)***	-0.08 (-5.07)***	-0.09 (-4.62)***	-0.08 (-4.49)***	0.04 (1.03)	0.05 (1.10)
Operational Self Sufficiency		0.085 (1.31)	0.13 (2.18)**	0.08 (1.39)	-0.017 (-0.21)	0.009 (0.20)	0.70 (4.91)***	0.78 (4.97)***
SDI		-0.018 (-0.73)	-0.028 (-1.24)	-0.05 (-2.37)**	-0.00 (-0.16)	-0.02 (-0.80)	0.03 (0.10)	0.01 (0.14)
Loan Size/GNIpc	0.06 (2.72)***	0.061 (2.52)***	0.05 (2.20)**	0.09 (4.23)***	0.05 (1.82)*	0.03 (1.31)	-0.02 (-0.71)	-0.03 (-0.70)
Borrower/Staff	0.12 (4.82)***	0.105 (3.85)***	0.10 (3.69)***	0.16 (6.01)***	0.13 (4.33)***	0.11 (3.73)***	-0.05 (-0.97)	-0.05 (-0.97)
GNIpc	0.091 (3.18)***	0.090 (3.19)***	0.08 (3.34)***	0.12 (4.85)***	0.07 (2.24)**	0.05 (1.43)	0.08 (1.59)	0.06 (1.60)
Age	0.010 (0.41)	0.005 (0.23)	0.02 (0.48)	0.01 (0.88)	0.01 (0.44)	0.01 (0.48)	-0.07 (-1.64)	-0.09 (-1.62)
Women Borrower	0.05 (1.43)	0.053 (1.55)	0.03 (0.92)	0.03 (1.08)	0.09 (1.92)*	0.07 (1.66)*	-0.13 (-2.94)**	-0.16 (-2.98)**
Bank	-0.031 (-0.84)	-0.03 (-0.87)	-0.03 (-1.08)	-0.02 (-0.93)	0.01 (0.40)	0.01 (0.41)	0.05 (0.89)	0.07 (0.95)
Cooperatives	-0.17 (-3.10)***	-0.16 (-2.85)**	-0.13 (-2.57)**	-0.13 (-2.59)**	-0.12 (-1.94)*	-0.14 (-2.23)**	-0.14 (-1.54)	-0.14 (-1.58)
NGOs	-0.04 (-1.26)	-0.05 (-0.81)	-0.03 (-1.02)	-0.012 (-0.31)	-0.04 (-1.48)	-0.05 (-1.60)	-0.11 (-1.57)	-0.11 (-1.59)
Rural Bank	-0.04 (-0.53)	-0.07 (-0.69)	-0.07 (-1.10)	-0.11 (-1.50)	(dropped)	(dropped)	-0.04 (-0.55)	-0.04 (-0.57)
Individual & Group	-0.086 (-3.24)***	-0.07 (-2.74)***	-0.07 (-3.01)***	-0.07 (-2.68)***	-0.12 (-4.13)***	-0.10 (-3.33)***	-0.01 (-0.07)	-0.02 (-0.05)
Group	-0.13 (-2.99)***	-0.107 (-2.59)**	-0.08 (-2.13)**	-0.09 (-2.22)**	-0.23 (-4.62)***	-0.16 (-3.27)***	0.03 (-0.46)	-0.00 (-0.44)
Village Banking	-0.04 (-0.85)	-0.04 (-0.79)	-0.02 (-0.32)	-0.08 (-1.78)*	-0.07 (-1.42)	-0.03 (-0.81)	0.03 (0.40)	0.02 (0.43)
C. Asia & E. Europe	0.025 (0.43)	-0.00 (-0.08)	0.00 (0.01)	0.00 (0.02)	0.02 (0.28)	0.01 (0.11)	-0.20 (-2.21)**	-0.21 (-2.27)**
E. Asia & Pacific	0.032 (-0.67)	-0.05 (-1.04)	-0.06 (-1.53)	-0.05 (-1.23)	0.01 (0.09)	-0.02 (-0.60)	0.08 (0.88)	0.08 (0.90)
Latin America	0.038 (0.86)	0.025 (0.58)	0.00 (0.18)	0.00 (0.20)	0.00 (0.07)	0.014 (0.29)	-0.05 (-0.92)	-0.04 (-0.97)
M. East & N. Africa	-0.086 (-1.42)	-0.12 (-1.94)*	-0.11 (-2.12)**	-0.10 (-1.81)*	-0.06 (-0.91)	0.015 (-0.22)	-0.18 (-2.13)**	-0.14 (-2.15)**
S. Asia	-0.111 (-2.47)**	-0.12 (-2.65)***	-0.07 (-1.75)*	-0.02 (-0.49)	-0.22 (-4.54)***	-0.26 (-5.34)***	0.17 (1.81)*	0.18 (1.85)*
Savings	-0.062 (-2.05)**	-0.06 (-1.86)*	-0.03 (-1.36)	-0.01 (-0.49)	-0.08 (-2.81)**	-0.07 (-2.26)**	-0.03 (-0.63)	-0.03 (-0.65)
Other Services	0.038 (1.53)	0.047 (1.52)	0.03 (1.44)	0.02 (1.24)	0.04 (1.33)	0.04 (1.37)	0.17 (3.39)***	0.17 (3.43)***
Regulated	-0.003 (-0.09)	0.00 (0.33)	-0.00 (-0.23)	0.00 (0.27)	0.02 (0.53)	0.02 (0.42)	-0.10 (-2.25)**	-0.10 (-2.28)**
Constant	-0.64 (-2.51)***	-1.03 (-2.60)***	-0.08 (-0.49)	-0.44 (-1.19)	-0.54 (-1.27)	-0.42 (-0.94)	-3.32 (-5.01)***	-3.32 (-5.11)***
Log Likelihood	103.04	105.25	71.41	75.06	85.84	81.96	51.53	52.52
LR Chi-Square	95.35	98.80	104.91	122.34	92.65	87.17	59.17	60.06
Prob > Chi-Square	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No. of Obs.	173 <sup>28</sup>	172	170	170	115	115	54	54

T-values in parentheses

\*significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Source: Authors calculations based on data compiled from the audit reports of MFIs and from the Mix Market website.

Regression (13) and (14) depicts the case where dependent variables consist of general efficiency specification LR-ACE and LR-ACES<sup>i</sup> (treating positive subsidies as an input) respectively. Thus the sample consist of only those MFIs which have positive subsidies i.e.

<sup>28</sup> Out of total 179 MFIs, 9 have been dropped for 2006 analysis (5 MFIs with no women borrower info., 1 with no OSS info., and one MFIs as an outlier)

subsidy dependent MFIs. Comparing both regressions, the positive impact of average loan size per borrower on efficiency becomes insignificant when subsidies included as an input. This shows that subsidy input is ineffective if lending is directed to relatively well off individual clients or in other words, subsidy input works efficiently if the focus of lending is towards poor clients. In both regressions, the coefficient of women borrowers turns out to be positive and significant. This shows that lending to women contributes to efficiency.

Regression (15) and (16) compares the equation with dependent variables LR-ACE and LRS<sup>o</sup>-ACE (subsidies enter into the specification as an output). Only those MFIs which are subsidy-free are considered in these regressions. Therefore, caution warrants to interpret these results in the context of subsidy free MFIs. Both equations have no significant difference as all the dependent variables behave in the same fashion. However unlike previous regressions, MFIs which lend to women become significantly inefficient. This result is driven by the fact that sample consists of only subsidy free MFIs which primarily lend to individual clients with fewer women borrowers. The regressions also provide evidence of the inefficiency of the regulated MFIs. Moreover, MFIs which provide other services in addition to the financial services become highly efficient. While MFIs located in CA & EE region become inefficient.

#### **1.6.4 Panel data Results**

The same sequence of regression equations have been tested for the both years as a panel data set using tobit random effect regression technique in Table 1.18. The Hausman test for all the equations have been conducted to choose between random and fixed effect model. The regression results are by and large in line with the previous tobit regression analysis for respective years.

Equations (17) & (18) present the overall regression equation with base efficiency specification LR-ACE. The sample consists of 179 MFIs for which we have both two year SDI values. Out of which 5 MFIs have been dropped due to unavailability of women borrower information. While 38 more MFIs have been dropped for further analysis of treating subsidies as an input and output because their subsidy values change signs between two years i.e. from +ve to -ve and vice versa. Like previous year wise tobit regression results, cost per staff significantly reduces the efficiency while staff productivity and lending to women significantly contribute towards efficiency. The negative relationship between subsidy dependence and efficiency is also confirmed by the regression equations. Again evidence is there that reducing the loan size i.e. reaching out to the poor, decreases the efficiency or lending to relatively well-

off clients contributes towards efficiency. Moreover MFIs which are of cooperative status, lend to individuals and groups, those with saving features and those operating in South Asia and M. East and North Africa, are inefficient. Whereas, MFIs which lend exclusively to individual borrowers, those which provide other services and those with the status of non banking financial intermediaries (omitted variable category) are efficient.

Comparison between with and without subsidy regression equations (19) & (20) reveal important results. The positive impact of Lending to women on financial efficiency becomes insignificant once the subsidies have been removed from the revenue. Thus highlighting the fact that MFIs program's exclusively targeting women are highly subsidized which without subsidization become less financially efficient. Further the significantly inefficient MFIs with group lending methodology turn insignificant though still inefficient, once subsidies have been deducted from the revenues in equation (20). Moreover removing subsidies from the revenues further enhances impact of staff productivity on efficiency. Geographically the inefficiency of South Asian MFIs becomes insignificant without subsidies while M East & N African MFIs turn significantly inefficient without subsidies.

Regression equations (21) and (22) provide a comparison between general efficiency specification (LR-ACE) and treating positive subsidy as an input into the specification (LR-ACES<sup>i</sup>) respectively. In other words it takes into account only subsidy dependant MFIs. Therefore, the sample consists of only 107 MFIs which have positive subsidies in both years i.e. they are subsidy dependant. Evidence generated shows that OSS significantly contributes to efficiency once subsidies are added as an input. Also the inclusion of subsidies as an input makes the positive impact of per capita income on the efficiency insignificant. The rest of the variables behave in the same fashion.

Regression equations (23) and (24) present a comparison between the general base specification (LR-ACE) and the specification where negative subsidies have been treated as an output (LRS<sup>o</sup>-ACE) respectively. Thus the sample for the regressions consists of only 29 subsidy-free MFIs. Again the inclusion of subsidies as an output makes the positive impact of per capita income on the efficiency insignificant. Moreover, the positive coefficient for NGO becomes insignificant with the inclusion of subsidies as an output. Geographically, the inefficiency of LA MFIs turns insignificant with subsidies included as an output. Unlike previous regressions, the coefficient of group lending methodology turns positive though insignificant once only the subsidy-free MFIs are considered.

Table 1.18  
Tobit Regression Panel Analysis (Random Effect)

	Base Specification		with/without subsidies		+ve Subsidies (As Input)		-veSubsidies (As Output)	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	LR-ACE	LR-ACE	LR-ACE	LR <sup>s</sup> - ACE	LR-ACE	LR-ACES <sup>i</sup>	LR-ACE	LRS <sup>o</sup> -ACE
Cost / Staff	-0.08 (-4.60)***	-0.07 (-4.17)***	-0.08 (-4.85)***	-0.102 (-5.62)***	-0.07 (-3.57)***	-0.051 (-2.94)***	-0.01 (-2.02)**	-0.01 (-2.33)**
SDI		-0.03 (-1.92)*	-0.014 (-4.08)***	-0.099 (-4.68)**	-0.00 (-0.20)	-0.011 (-0.63)	0.145 (1.02)	0.09 (0.70)
Operational Self Sufficiency		0.03 (1.23)	0.03 (1.07)	0.03 (1.14)	0.0811 (1.25)	0.16 (1.92)*	0.31 (2.12)**	0.319 (2.31)**
Loan Size/GNIpc	0.08 (3.49)***	0.07 (3.13)***	0.06 (2.80)***	0.121 (4.94)***	0.029 (1.06)	0.00 (0.20)	0.09 (1.57)	0.08 (1.15)
Borrower/Staff	0.11 (4.68)***	0.09 (4.02)***	0.09 (4.33)***	0.167 (6.61)***	0.048 (1.56)	0.02 (0.65)	0.11 (0.54)	0.01 (0.13)
GNIpc	0.11 (3.91)***	0.10 (3.63)***	0.08 (3.20)***	0.159 (5.21)***	0.08 (2.46)***	0.05 (1.53)	0.201 (1.93)*	0.15 (1.55)
Age	0.02 (0.95)	0.02 (0.71)	0.01 (0.48)	0.02 (0.53)	0.01 (0.40)	0.01 (0.42)	0.098 (1.77)*	0.10 (1.85)*
Women Borrower	0.07 (2.60)**	0.08 (2.42)**	0.07 (2.30)**	0.06 (1.54)	0.097 (2.68)***	0.10 (2.33)**	-0.027 (-0.27)	-0.06 (-0.61)
Bank	-0.03 (-0.73)	-0.03 (-0.66)	-0.03 (-0.75)	-0.041 (-1.04)	0.01 (0.57)	0.01 (0.44)	-0.13 (-1.58)	-0.135 (-1.24)
Cooperatives	-0.13 (-2.29)**	-0.12 (-2.19)**	-0.114 (-2.25)**	-0.12 (-2.13)**	-0.021 (-0.34)	-0.01 (-0.23)	-0.29 (-2.31)**	-0.27 (-2.20)**
NGOs	-0.03 (-1.01)	-0.02 (-0.69)	-0.016 (-0.56)	0.013 (0.55)	-0.03 (-1.06)	-0.04 (-1.22)	0.09 (1.79)*	0.06 (1.37)
Rural Bank	-0.05 (-0.47)	-0.05 (-0.59)	-0.05 (-0.65)	-0.099 (-1.40)	Dropped	Dropped	-0.29 (-2.87)***	-0.28 (-2.86)***
Individual & Group	-0.09 (-3.25)***	-0.08 (-3.03)***	-0.091 (-3.08)***	-0.075 (-2.34)**	-0.106 (-3.45)***	-0.099 (-3.17)***	0.04 (0.85)	0.04 (0.55)
Group	-0.09 (-2.15)**	-0.08 (-1.89)*	-0.075 (-1.83)*	-0.072 (-1.70)*	-0.19 (-3.67)***	-0.168 (-3.11)***	0.16 (1.19)	0.09 (1.03)
Village Banking	-0.01 (-0.50)	-0.02 (-0.46)	-0.05 (-1.04)	-0.08 (-1.62)	-0.06 (-1.34)	-0.02 (-1.28)	0.17 (2.07)**	0.14 (1.74)*
C.Asia & E.Europe	0.02 (0.35)	0.009 (0.20)	0.040 (0.99)	-0.001 (-0.02)	-0.04 (-0.87)	-0.05 (-1.11)	-0.29 (-1.35)	-0.263 (-1.03)
E. Asia & Pacific	-0.04 (-0.76)	-0.04 (-0.91)	-0.04 (-0.87)	-0.02 (-0.26)	-0.01 (-0.26)	-0.016 (-0.68)	-0.13 (-1.18)	-0.170 (-1.04)
Latin America	0.01 (0.37)	0.01 (0.32)	0.04 (1.11)	0.008 (0.42)	-0.03 (-0.49)	-0.02 (-0.30)	-0.42 (-1.70)*	-0.33 (-1.40)
M. East & N. Africa	-0.12 (-2.21)**	-0.15 (-2.50)**	-0.05 (-1.29)	-0.077 (-1.65)*	-0.05 (-0.58)	-0.089 (-0.68)	-0.25 (-1.12)	-0.17 (-0.80)
S. Asia	-0.12 (-2.85)***	-0.12 (-2.87)***	-0.11 (-2.69)***	-0.061 (-1.28)	-0.24 (-4.52)***	-0.25 (-4.82)***	-0.07 (-0.61)	-0.07 (-0.55)
Savings	-0.05 (-1.76)*	-0.05 (-1.63)	-0.038 (-1.34)	-0.028 (-0.90)	-0.079 (-2.46)**	-0.069 (-2.11)**	-0.00 (-0.07)	0.00 (0.03)
Other Services	0.04 (1.63)*	0.04 (1.73)*	0.027 (1.15)	0.025 (0.94)	0.044 (1.51)	0.04 (1.60)	0.00 (0.05)	0.013 (0.31)
Regulated	0.02 (0.49)	0.01 (0.68)	0.00 (0.27)	0.028 (1.07)	0.024 (0.77)	0.02 (0.72)	-0.125 (-3.38)***	-0.129 (-3.62)***
Constant	-0.94 (-3.94)***	-1.02 (-3.78)***	-0.82 (-3.19)***	-1.44 (-4.91)***	-0.95 (-2.21)**	-0.909 (-2.06)**	-2.96 (-2.58)***	-2.45 (-2.22)**
No of Observations	346	345	335	335	212	212	57	57
No of Groups	174	174	169	169	107	107	29	29
Log likelihood	169.40	172.42	196.54	147.87	117.47	115.98	70.00	72.21
Wald chi2	127.25	138.88	170.54	206.45	119.67	113.16	136.90	145.70
Prob > chi-square	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
sigma_u	.11	.11	0.103	0.11	.09	.09	.06	.06
sigma_e	.11	.11	0.101	0.12	.11	.11	.07	.06
rho	0.50	0.49	0.51	0.45	.37	.39	.08	.01

t-values in parentheses

\*significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Source: Authors calculations based on data compiled from the audit reports of MFIs and from the Mix Market website.

## 1.7 Conclusion

At the outset of this paper, we endeavored to resolve few key issues. How to incorporate the subsidies into the non parametric DEA framework to investigate the efficiency

of microfinance institutions? What factors are important in determining the efficiency of microfinance and how much of these factors are driven by the subsidies in determining the efficiency of MFIs? In other words, How efficiency relates to the various organizational and structural variables amid the presence of subsidies? The way subsidy has been calculated in this paper i.e. social cost of subsidized MFIs, allows us to successfully enter the positive subsidies as an input and negative subsidies as an output in to the DEA efficiency specifications on the premise that the former distort public wealth while the later creates it. A comparison of efficiency scores with and without subsidies for various specifications reveals important information. Generally, in most of the specifications, the average efficiency scores are improved albeit only marginally when subsidies enter into the DEA framework. However specifically, there exist numbers of MFIs which become 100% efficient once subsidies have been incorporated into the specifications as an input and output. Conversely, there exist MFIs which were previously 100% efficient but become less efficient once subsidies have been removed.

The issue of how efficiency relates to various organizational, social and structural variables has been addressed by employing Tobit regression technique for each year (2005 & 2006) separately and also as panel data, taking efficiency as a left hand side variable. Notwithstanding the general regression equations, most of the relationships between efficiency and other variables are in line with the theory. The regression equations strongly confirm the trade-off between costs and efficiency. The evidence of negative association between subsidy dependence and efficiency is also established. Also evident is the fact that staff productivity significantly contributes to the financial efficiency of MFIs. Overall, operational self sustainability (OSS) does not significantly contribute to efficiency except for subsidy-free MFIs. From social perspective, lending to women borrowers contribute to efficiency as suggested by its significant positive coefficient in regression. The outreach variable (loan size/GNI per capita) has significant positive coefficient. This depicts that as the outreach increases i.e. loan size decreases, the financial efficiency also decreases. In other words, the more MFI's focus shifts away from the poor i.e. lending to well-off clients who can afford bigger loan sizes, the more it becomes efficient thus confirming the fact that lending to poor is relatively inefficient compared to well off clients.

However once we compare the regressions with and without subsidies, the results become quite revealing in some aspects. Important evidence obtained is that lending to women contributes to the financial efficiency in the presence of subsidies only, as the impact becomes insignificant without subsidies. Thus showing that MFIs exclusively targeting women

tend to be financially efficient only because of the subsidies they receive. Once we take out the subsidies from the equation, the positive impact of lending to women on the efficiency turns insignificant. The panel data results also confirm this relationship. Not surprisingly, treating subsidies as an input into the specification makes the negative relationship between costs and efficiency insignificant. Moreover, the positive impact of catering to wealthy clients on efficiency also becomes insignificant. The same sequence of regression equations has been tested for the both years as a panel data set using tobit Random effect model technique and the results are by and large in line with the previous tobit regression analysis for respective years.

Notwithstanding the categorical variables, geographically, MFIs located in South Asia and Middle East & North Africa are tended to be inefficient. MFIs with group lending methodology are found to be inefficient while those with individual lending methodology are efficient. MFIs with cooperative and Rural Bank status are less efficient while those with non-banking financial intermediary's status are found to be efficient. Also found is some evidence for MFIs with saving features to be less efficient while those providing other services in addition to financial services as being efficient.

This essay adds to the existing literature by taking on the issue of subsidies for the first time in evaluating the efficiency of microfinance by generating data for 204 MFIs worldwide. From policy perspective, valuable lessons can be drawn for the entire stakeholder in microfinance Industry on the basis of this research work. For microfinance practitioners, it serves as a performance evaluation guide to enhance the efficiency and in the course of that meeting the dual objectives of outreach and sustainability. A with and without subsidy analysis based on the efficiency scores of their respective MFIs can help them identify the efficiency-enhancing role of subsidies. In particular, the message is very clear for those socially driven MFIs with outreach to women borrowers, to devise new income enhancing and enterprise development schemes which can go a long way in enhancing efficiency without subsidies. From private investor's perspective, it identifies those MFIs which are successful in achieving maximum efficiency by a proper mix of inputs and outputs. Even the social investors can benefit by analyzing mission-driven MFIs in the sample which have successful in increasing their outreach. For academics and researchers, this research opens a new avenue of research by bringing the subsidy issue to the forefront. Future research in this context should be directed to specifically investigate the role of subsidies in the social efficiency of microfinance.

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## APPENDIX A

## MICROFINANCE INSTITUTIONS

### PAKISTAN

**KASHF**- Kashf Foundation

**FMTB**- First Microfinance Bank Ltd. Pakistan

**ASASAH**- Asasah

### NEPAL

**NSSC**- Neighbourhood Society Service Centre

**VYCCU**- VYCCU Saving & Credit Cooperative Society Ltd.

**NIRDHAN**- Nirdhan Utthan Bank Ltd.

**PGBB**- Western Region Grameen Bikas Bank

**CBB**- Chhimek Bikas Bank Ltd.

### INDIA

**BANDHAN**- Bandhan (Society and NBFC)

**BASIX**- Bhartiya Samruddhi Finance Limited

**SHARE**- SHARE Microfin Ltd.

**MAHASEMAN**- Mahasemam-SMILE

**CASHPOR**- Cashpor Microcredit

**IASC**- Indian Association for Savings and Credit

**KBSLAB**- Krishna Bhima Samruddhi Local Area Bank Limited

**ESAF**- Evangelical Social Action Forum

**SNF**- Sarvodaya Nano Finance Limited

**GK**- Grameen Koota

### BANGLADESH

**BURO**- BURO Bangladesh

**DESHA** - DESHA

**ASA**- ASA

**BRAC**- Bangladesh Rural Advancement Committee

**RDRS**- RDRS Bangladesh

**Shakti**- Shakti Foundation for Disadvantaged Women

**TMSS**- Thengamara Mohila Sabuj Sangha

**IDF**- Integrated Development Foundation

### AFGHANISTAN

**FMTB** - The First MicroFinanceBank – Afghanistan

**BRAC**- BRAC Afghanistan

**ARMP**- Afghanistan Rural Microcredit Programme

### AFRICA

#### KENYA

**K-REPK**-Rep Bank

**EBS**-Equity Bank

**KADET**-Kenya Agency to Development of Enterprise and Technology

**KWFT**-Kenya Women Finance Trust

**MDSL**-Microenterprise Development Services Ltd

**SMEP**-Small and Micro Enterprise Project

#### BURKINA FASO

**RCPB**-Réseau des caisses populaires du Burkina

#### SENEGAL

**PAMECAS**-Programme d'Appui aux Mutuelles d'Épargne et de Crédit au Sénégal

**ACEP**-Alliance de Credit et d'Epargne pour la Production

#### CMS

#### MALI

**SORO Y**-Soro Yiriwaso

**KANDO JAGIM**-Kondo Jigima

#### CAMEROON

**ACEP**-Agence de Crédit pour l'Entreprise Privée Cameroun

**CDS**-Crédit du Sahel

#### GHANA

**FONCRESOL**- foncresol

**PROCREDIT** -ProCredit SLC Ghana

**Fundación CAMPO**- Fundación CAMPO

**AMC de R.L.**- Sociedad Cooperativa de Ahorro y Crédito R.L.

**KSF** -Kraban Support Foundation

**OISL** -Opportunity International Savings and Loans Limited

**SAT** -Sinapi Aba Trust

### BENIN

**ALIDE**- Association de Lutte pour la promotion des Initiatives de Développement

**VF** -Vital Finance

**PADME** -Association pour la Promotion et l' Appui au Développement de MicroEntreprises

**FACECAM** -Fédération des caisses d'épargne et de crédit agricole mutuel

### ANGOLA

**NovoBanco** - NovoBanco Angola

### ETHIOPIA

**DECSI**- Dedebit Credit and Savings Institution

**ADCSI**- Addis Credit & Savings Institution

**ACSI**- Amhara Credit and Savings Institution

**WISDOM**- Wisdom

**OMO**- Omo Microfinance Institution

**BG**- Buusaa Gonofaa

### TANZANIA

**PRIDE** - PRIDE Tanzania

**FINCA** -FINCA Tanzania

### UGANDA

**CML**- Commercial Microfinance Limited

**FAULA** - Faulu Uganda

**MED-Net**- Micro Enterprise Development Network

**FINCA**- Finca Uganda

**UML**- Uganda Microfinance Limited

**CENTENARY**- Centenary Rural Development Bank Ltd.

### MALAWI

**FINCA**- FINCA Malawi

### MOZAMBIQUE

**SOCREMO**- Banco de Microfinanças de Moçambique

**FCC**- Fundo de Credito Comunitario

**Tchuma**- Tchuma Cooperativa de Crédito e Poupança

**NovoBanco** - NovoBanco Mozambique

### NIGERIA

**LAPO**- Lift Above Poverty Organisation

**SEAP**- Self-Reliance Economic Advancement Programme

### SOUTH AFRICA

**SEF-ZAF**- Small Enterprise Foundation South Africa

### ZAMBIA

**CETZAM**- CETZAM Opportunity

**FINCA** - FINCA Zambia

### LATIN AMERICA

#### BOLIVIA

**ProMujer** - Pro Mujer in Bolivia

**CRECER**- Crédito con Educación Rural

**PRODEM**- Fondo Financiero Privado PRODEM

**FIE**- Financiero Privado para Fomento de Iniciativas Economicas

**ProCredit** - Banco Los Andes ProCredit

**FADES**- Fundación para Alternativas de Desarrollo

**AgroCapital**- Fundación AgroCapital

Colombia – Bogotá

**FUNBODEM-** *Fundación Boliviana para el Desarrollo de la Mujer*

**BancoSol-** *BancoSol*

**Eco Futuro-** *Eco Futuro Fondo Financiero Privado*

**HONDOROUS**

**HdH OPDF-** *Fundación Microfinanciera Hermandad de Honduras OPDF*

**World Relief -** *World Relief Honduras*

**FINCA-FINCA Honduras**

**TIRINIDAD & TOBBAGO**

**MCHL-** *Microfin Caribbean Holdings Limited*

**VENEZEULA**

**BANGENTE** *Banco De La Gente Emprendedora*

**PERU**

**CMAC Tacna-** *Caja Municipal de Ahorro y Crédito de Tacna*

**MIBANCO-** *MiBanco*

**BANTRA-** *Banco del Trabajo*

**CMAC Maynas-** *Caja Municipal de Ahorro y Crédito de Maynas*

**EDPYME Confianza-** *EDPYME Confianza*

**IDESI La Libertad-** *Instituto de Desarrollo del Sector Informal para La Libertad*

**FONDESURCO-** *Fondo de Desarrollo Regional*

**EDPYME EDYFICAR-** *EDPYME Edyficar S.A.*

**Caritas-** *Caritas del Perú*

**CMAC Cusco-** *Caja Municipal de Ahorro Crédito de Cusco*

**ProMujer -** *Pro Mujer in Peru*

**CMAC Arequipa-** *Caja Municipal de Ahorro y Crédito de Arequipa*

**FINCA -** *FINCA Peru*

**CMAC Trujillo-** *Caja Municipal de Ahorro y Crédito de Trujillo*

**CRAC Caja Nor-** *Caja Nor Perú*

**CMAC Tacna-** *Caja Municipal de Ahorro y Crédito de Tacna*

**Movimiento M R-** *Movimiento Manuela Ramos*

**ECUADOR**

**BANCOSOL-**

**COAC Sac Aiet-** *Cooperativa de Ahorro y Crédito Sac Aiet*

**D-miro -** *D-miro*

**FODEMI -** *Fondo de Desarrollo Microempresarial*

**ProCredit -** *Banco ProCredit Ecuador*

**ECLOF -** *Ecumenical Church Loan Fund – Ecuador*

**COAC San José -** *Cooperativa de Ahorro y Crédito - San José*

**Fundación Espoir -** *Fundación Espoir*

**FINCA –** *FINCA ECU*

**COAC Jardín Azuayo-** *Cooperativa de Ahorro y Crédito Jardín Azuayo*

**COSTA RICA**

**CREDIMUJER –** *CREDIMUJER*

**FUNDECOSA-** *Fundación Unión y Desarrollo de Comunidades Campesinas*

**COLOMBIA**

**FMM Popayán-** *Fundación Mundo Mujer Popayán*

**Finamerica-** *Financiera América*

**WWB –** *Medellín- Women's World Banking – Medellín*

**WWB-CALI-**

**CMM Bogotá-** *Corporación Mundial de la Mujer*

**CREDIT MONGOL-** *Credit Mongol*

**EL SALVADOR**

*saeca*

**FIELCO-** *Financiera El Comercio*

**HAITI**

**ACME-** *Association Pour la Cooperation avec la Micro Enterprise*

**DOMINICAN REPUBLIC**

**Banco ADEMI-** *Banco ADEMI*

**NICRAGUA**

**FUNDENUSE-** *Fundación para el Desarrollo de Nueva Segovia*

**PRODESA-** *Fundacion Para La Promocion y el Desarrollo*

**FAMA-** *Financiera FAMA*

**ACODEP-** *Asociación de Consultores para el Desarrollo de la Pequeña, Mediana y Microempresa*

**FJN-** *Fundación José Nieborowski*

**FDL-** *Fondo de Desarrollo Local*

**ProCredit -** *Banco ProCredit Nicaragua*

**BANEX (Ex FINDESA)-** *Banco del Éxito. ex FINDESA*

**PARAGUAY**

**Interfisa-** *grupo internacional de finanzas interfisa financiera*

**IMON- LLC** *Microlending organization“IMON NTERNATIONAL”*

**GAUTEMALA**

**FAFIDESS-** *Fundación de Asesoría Financiera a Instituciones de Desarrollo y Servicio Social*

**FUNDEA-** *Fundación para el Desarrollo Empresarial y Agrícola*

**Génesis Empresarial-** *Fundación Génesis Empresarial*

**Fundación MICROS-** *Fundación para el Desarrollo de la Microempresa*

**EAST ASIA & PACIFIC**

**COMBODIA**

**PRASAC-** *PRASAC MFI Ltd.*

**AMRET-** *AMRET Co., Ltd.*

**SATHAPANA-** *SATHAPANA LIMITED*

**HKL-** *Hattha Kaksekar Ltd.*

**ACLED-** *AACLEDA Bank Plc.*

**SAMAO**

**SPBD-** *South Pacific Business Development*

**PHILIPINES**

**GREEN-** *Rural Green Bank of Caraga, Inc.*

**BCB-** *Bukidnon Cooperative Bank*

**ASHI-** *Ahon Sa Hirap, Inc.*

**TSPI-** *TSPI Development Corporation*

**NWFT-** *Negros Women for Tomorrow Foundation, Inc.*

**Ist VALLEY-** *1st Valley Bank*

**CBMO-** *Cooperative Bank of Misamis Oriental, Inc.*

**DIGOS-** *Rural Bank of Digos, Inc.*

**SOLANO-** *Rural Bank of Solano, Inc.*

**BANK KA-** *Bangko Kabayan (Ibaan Rural Bank, Inc.)*

**VIETNAM**

**TYM-** *TYM FUND*

**CEP-** *Capital Aid Fund for Employment of the Poor*

**INDONESIA**

**MBK VENTU-** *PT Mitra Bisnis Keluarga Ventura*

**CENTRAL ASIA & EASTERN EUROPE**

**ALBANIA**

**BESA-** *BESA Fund*

**PROCREDIT-** *ProCredit Bank Albania*

**PHSM-** *Opportunity Albania(formerly PSHM)*

**MONGOLIA**

**KHAN BANK-** *Khan Bank (Agricultural Bank of Mongolia LLP)*

**TAJKISTAN**

**FMFB-** *The First MicroFinanceBank - Tajikistan*

**BANK ESHKTA-** *Bank Eshkata*

**FMM Bucaramanga-** *Fundación Mundial de la Mujer Bucaramanga*

**MICROINVEST-** *Microloan Fund MicroInvest*

**AGROINVEST-** *OJSC Agroinvestbank*

**RUSSIA**

**FORUS-** *FORUS Bank*

**KYRGYSTAN**

**AIYL BANK-** *Aiyl Bank*

**FMCC-** *FINCA MicroCredit Company*

**BTFF-** *Bai Tushum*

**ARMENIA**

**INECO-** *INECO Bank*

**ACBA-** *ACBA-CREDIT AGRICOLE BANK CJSC*

**HORIZON-** *'Nor Horizon' UCO LLC*

**AZERBAIJAN**

**CRED AGRO-** *CredAgro Non-Banking Credit Institution*

**ACCESS-** *Access bank*

**NORMICO-** *Norwegian Microcredit LLC*

**VIATOR-** *Viator Microcredit Azerbaijan LLC*

**BOSNIA & HEZGOVENIA**

**MIKROFIN-** *MIKROFIN Banja Luka*

**PARTNER-** *Partner*

**SUNRISE-** *Microcredit Organization Sunrise*

**EKI-** *EKI*

**KAZAKHSTAN**

**KMF-** *"KazMicroFinance" LLC (formerly KLF)*

**GEORGIA**

**CREDO-** *VF Credo Foundation*

**LAZKA Capital-** *formerly SBDF*

**CRYSTAL FUND-** *JSC MFO Crystal formerly Crystal Fund*

**CONSTANTA-** *Constanta Bank*

**MIDDLE EAST & EAST AFRICA****EGYPT**

**DBACD-** *Dakahlya Businessmen's Association for Community Development*

**LEAD-** *Lead Foundation*

**AL TADAMUN-** *Al Tadamun*

**JORDAN**

**TAMWEELCOM-** *formerly JMCC*

**MFW-** *Microfund for Women*

**MORROCO**

**AL AMANA-** *Association Al Amana for the Promotion of Micro-Enterprises Morocco*

**FONDEP-** *FONDEP Micro-Crédit*

**ZAKOURA-** *Fondation Zakoura*

**INMMA-** *Institution Marocaine d'Appui a la Micro-entreprise*

**AL KARAMA-** *Association Al Karama de Micro Credit*

**TUNISIA**

**ENDA-** *enda inter-arabe*

**Appendix B**

**DEA Efficiencies for R<sup>s</sup> (R-S) for 2005**

MFIs	Coun	LR-ACE				LR <sup>s</sup> -ACE				R-ACE				R <sup>s</sup> -ACE			
		crste	vrste	scale	drs	crste	vrste	scale	drs	crste	vrste	scale	irs	crste	vrste	scale	drs
ARMP	AFG	0.676	0.766	0.882	drs	0.676	0.766	0.882	drs	0.401	0.402	0.998	irs	0.043	0.071	0.605	drs
FMFB AFG	AFG	0.341	0.350	0.976	drs	0.286	0.315	0.906	drs	0.324	0.326	0.997	irs	0.076	0.089	0.851	drs
BESA	ALB	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.771	0.800	0.964	irs	0.437	0.452	0.968	drs
ProCred ALB	ALB	0.655	0.745	0.878	drs	0.601	0.745	0.807	drs	0.645	0.680	0.949	drs	0.407	0.602	0.677	drs
PSHM	ALB	0.778	0.859	0.906	drs	0.774	0.858	0.902	drs	0.647	0.650	0.996	irs	0.228	0.248	0.919	drs
ACBA	ARM	0.654	0.715	0.914	drs	0.628	0.708	0.888	drs	0.633	0.665	0.952	drs	0.253	0.435	0.581	drs
HORIZON	ARM	0.891	0.956	0.932	irs	0.710	0.753	0.943	irs	0.862	0.940	0.917	irs	0.190	0.218	0.871	irs
INECO	ARM	0.847	0.909	0.932	drs	0.638	0.699	0.913	drs	0.847	0.909	0.932	drs	0.301	0.585	0.514	drs
CRED AGRO	AZE	0.868	0.874	0.993	drs	0.868	0.874	0.993	drs	0.658	0.668	0.985	irs	0.055	0.056	0.996	-
MFBA	AZE	0.691	0.807	0.856	drs	0.691	0.807	0.856	drs	0.549	0.549	1.000	-	0.078	0.176	0.445	drs
NORMICRO	AZE	0.912	0.969	0.941	irs	0.753	0.789	0.955	irs	0.868	0.941	0.922	irs	0.193	0.207	0.930	irs
Viator	AZE	0.897	0.921	0.974	irs	0.754	0.763	0.988	irs	0.862	0.892	0.966	irs	0.252	0.252	1.000	-
ASA	BAN	0.993	1.000	0.993	drs	0.916	1.000	0.916	drs	0.993	1.000	0.993	drs	0.391	1.000	0.391	drs
BRAC BAN	BAN	0.793	0.975	0.813	drs	0.700	0.975	0.718	drs	0.732	0.798	0.917	drs	0.000	0.001	0.224	drs
B TANGAIL	BAN	0.864	0.894	0.966	drs	0.805	0.907	0.888	drs	0.812	0.812	1.000	-	0.219	0.459	0.476	drs
DESHA	BAN	0.750	0.777	0.965	irs	0.720	0.727	0.990	irs	0.661	0.697	0.948	irs	0.141	0.157	0.902	irs
IDF	BAN	0.801	0.813	0.985	irs	0.787	0.787	0.999	-	0.701	0.722	0.972	irs	0.167	0.170	0.986	irs
RDRS	BAN	0.581	0.605	0.961	drs	0.581	0.605	0.961	drs	0.411	0.411	1.000	-	0.002	0.003	0.672	drs
SHAKTI	BAN	0.859	0.925	0.928	drs	0.859	0.926	0.927	drs	0.614	0.615	0.999	-	0.125	0.208	0.600	drs
TMSS	BAN	0.661	0.756	0.875	drs	0.659	0.756	0.872	drs	0.534	0.534	1.000	-	0.040	0.101	0.396	drs
FECECAM	BEN	0.508	0.559	0.908	drs	0.424	0.556	0.764	drs	0.481	0.485	0.992	drs	0.114	0.420	0.273	drs
ALIDE	BEN	0.697	1.000	0.697	irs	0.669	1.000	0.669	irs	0.359	1.000	0.359	irs	0.011	1.000	0.011	irs
PADME	BEN	0.741	0.815	0.909	drs	0.709	0.806	0.880	drs	0.697	0.703	0.992	drs	0.198	0.389	0.509	drs
VF	BEN	0.758	0.761	0.997	drs	0.722	0.745	0.968	drs	0.711	0.715	0.995	irs	0.229	0.229	1.000	-
RCPB	BF	0.681	0.800	0.851	drs	0.681	0.800	0.851	drs	0.460	0.466	0.987	drs	0.125	0.403	0.311	drs
Agrocapital	BOL	0.717	0.796	0.900	drs	0.714	0.796	0.898	drs	0.569	0.571	0.996	irs	0.129	0.148	0.867	drs
BANCOSOL	BOL	0.737	0.910	0.810	drs	0.730	0.910	0.802	drs	0.648	0.682	0.951	drs	0.293	0.574	0.510	drs
Bnaco L A	BOL	0.759	0.985	0.771	drs	0.759	0.985	0.771	drs	0.561	0.596	0.941	drs	0.197	0.406	0.485	drs
CRECER	BOL	0.857	0.930	0.921	drs	0.743	0.911	0.815	drs	0.804	0.840	0.958	drs	0.214	0.496	0.431	drs
Eco Futuro	BOL	0.705	0.795	0.887	drs	0.705	0.802	0.878	drs	0.607	0.607	1.000	-	0.206	0.319	0.647	drs
FADES	BOL	0.839	1.000	0.839	drs	0.820	0.993	0.826	drs	0.668	0.668	1.000	-	0.094	0.219	0.429	drs
FIE	BOL	0.786	0.943	0.833	drs	0.786	0.943	0.833	drs	0.632	0.641	0.985	drs	0.165	0.449	0.368	drs
Foncosol	BOL	0.893	0.937	0.953	irs	0.893	0.937	0.953	irs	0.719	0.780	0.921	irs	0.120	0.151	0.795	irs
FunBodem	BOL	0.845	0.861	0.981	irs	0.700	0.700	0.999	-	0.781	0.808	0.966	irs	0.196	0.214	0.920	irs
PRODEM	BOL	0.701	0.902	0.777	drs	0.676	0.902	0.749	drs	0.622	0.645	0.965	drs	0.190	0.544	0.348	drs
ProMujar	BOL	0.737	0.813	0.906	drs	0.674	0.791	0.852	drs	0.651	0.652	0.999	irs	0.093	0.183	0.509	drs
EKI	BOS	0.863	0.963	0.896	drs	0.863	0.963	0.896	drs	0.592	0.593	0.997	drs	0.267	0.356	0.752	drs
MIKROFIN	BOS	0.992	1.000	0.992	drs	1.000	1.000	1.000	-	0.730	0.731	0.999	irs	0.484	0.523	0.925	drs
PARTNER	BOS	0.906	0.952	0.952	drs	0.912	0.956	0.954	drs	0.725	0.729	0.995	drs	0.402	0.455	0.884	drs
SUNRISE	BOS	0.838	0.926	0.906	drs	0.817	0.934	0.876	drs	0.721	0.725	0.994	irs	0.334	0.400	0.834	drs
ACEP	CAM	0.923	0.932	0.990	irs	0.796	0.803	0.992	irs	0.839	0.864	0.971	irs	0.123	0.128	0.956	irs
CDS	CAM	0.548	0.549	1.000	-	0.472	0.522	0.904	drs	0.521	0.521	0.999	irs	0.139	0.187	0.746	drs
CMM Bog	COL	0.847	0.956	0.886	drs	0.765	0.955	0.801	drs	0.762	0.762	1.000	-	0.221	0.469	0.472	drs
Finamerica	COL	0.797	0.921	0.865	drs	0.721	0.922	0.782	drs	0.713	0.713	1.000	-	0.253	0.522	0.484	drs
FMM Buca	COL	0.898	0.910	0.986	drs	0.785	0.921	0.852	drs	0.883	0.884	1.000	-	0.390	0.737	0.530	drs
FMM Pop	COL	1.000	1.000	1.000	-	0.872	1.000	0.872	drs	1.000	1.000	1.000	-	0.361	0.835	0.433	drs
WMM Med	COL	0.897	0.937	0.957	drs	0.869	0.926	0.938	drs	0.848	0.848	1.000	-	0.192	0.328	0.587	drs
WWB Ca	COL	0.946	1.000	0.946	drs	0.907	1.000	0.907	drs	0.922	0.946	0.975	drs	0.484	0.829	0.583	drs
ACLEDA	COM	0.704	0.858	0.820	drs	0.651	0.858	0.759	drs	0.630	0.646	0.976	drs	0.126	0.556	0.227	drs
AMRET	COM	0.794	0.810	0.981	drs	0.619	0.748	0.828	drs	0.776	0.777	0.999	irs	0.159	0.346	0.461	drs
CEB	COM	0.798	0.798	1.000	-	0.728	0.760	0.958	drs	0.718	0.721	0.996	irs	0.127	0.167	0.763	drs
HKL	COM	0.755	0.759	0.995	irs	0.707	0.710	0.996	irs	0.661	0.671	0.985	irs	0.125	0.125	1.000	-
PRASAC	COM	0.755	0.848	0.890	drs	0.696	0.822	0.847	drs	0.650	0.655	0.992	drs	0.118	0.230	0.513	drs
CrediMujer	CR	0.854	1.000	0.854	irs	0.652	0.895	0.728	irs	0.825	1.000	0.825	irs	0.154	0.539	0.286	irs
Fundecoca	CR	0.764	1.000	0.764	irs	0.654	1.000	0.654	irs	0.750	1.000	0.750	irs	0.129	1.000	0.129	irs
ADEMI	DOM	1.000	1.000	1.000	-	0.875	0.982	0.891	drs	1.000	1.000	1.000	-	0.605	0.955	0.634	drs
Banco Sol	ECU	0.878	1.000	0.878	drs	0.839	1.000	0.839	drs	0.878	1.000	0.878	drs	0.678	1.000	0.678	drs
COAC Jardin	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.796	0.807	0.986	drs	0.344	0.407	0.845	drs

Coac S Jose	ECU	0.884	0.889	0.995	irs	0.884	0.890	0.994	irs	0.577	0.587	0.983	irs	0.289	0.306	0.944	irs
COAC SAC	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.831	0.862	0.964	irs	0.311	0.343	0.908	irs
MFls	Coun	LR-ACE				LR <sup>s</sup> -ACE				R-ACE			R <sup>s</sup> -ACE				
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
D-Miro	ECU	0.869	0.870	0.999	irs	0.747	0.803	0.929	drs	0.813	0.821	0.991	irs	0.259	0.287	0.900	drs
Finca	ECU	1.000	1.000	1.000	-	0.820	1.000	0.820	drs	0.988	0.994	0.994	drs	0.444	0.733	0.606	drs
FODEMI	ECU	0.737	0.746	0.988	irs	0.741	0.752	0.985	irs	0.606	0.637	0.952	irs	0.168	0.186	0.905	irs
Fundacion Es	ECU	0.898	0.899	1.000	-	0.785	0.812	0.967	drs	0.841	0.848	0.992	irs	0.272	0.292	0.931	drs
PROcredit	ECU	0.867	1.000	0.867	drs	0.876	1.000	0.876	drs	0.724	0.734	0.987	drs	0.413	0.633	0.653	drs
Al Tadamun	EGY	0.700	0.728	0.962	irs	0.417	0.426	0.981	irs	0.700	0.728	0.962	irs	0.156	0.164	0.949	irs
DBACD	EGY	0.662	0.668	0.991	drs	0.530	0.550	0.963	drs	0.662	0.668	0.991	drs	0.172	0.226	0.760	drs
AMC de RL	ELS	0.722	0.730	0.988	drs	0.625	0.698	0.895	drs	0.664	0.667	0.996	irs	0.152	0.204	0.744	drs
Fundacion	ELS	0.695	0.733	0.948	irs	0.695	0.733	0.948	irs	0.576	0.627	0.918	irs	0.159	0.211	0.753	irs
ACSI	ETH	0.831	0.898	0.925	drs	0.838	0.917	0.914	drs	0.702	0.749	0.937	drs	0.309	0.603	0.513	drs
ADCSI	ETH	0.994	1.000	0.994	drs	0.994	1.000	0.994	drs	0.592	0.594	0.998	irs	0.195	0.197	0.988	irs
BG	ETH	0.604	0.678	0.892	irs	0.604	0.678	0.892	irs	0.354	0.397	0.892	irs	0.027	0.037	0.727	irs
DECSI	ETH	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.436	0.732	0.596	drs
OMO	ETH	0.687	0.709	0.969	drs	0.687	0.709	0.969	drs	0.401	0.401	1.000	-	0.094	0.094	0.999	-
WISDOM	ETH	0.739	0.742	0.996	drs	0.739	0.742	0.996	drs	0.501	0.517	0.969	irs	0.084	0.085	0.989	irs
KSF	GHA	0.700	1.000	0.700	irs	0.677	1.000	0.677	irs	0.537	1.000	0.537	irs	0.122	1.000	0.122	irs
OI SASL	GHA	0.570	0.611	0.934	drs	0.492	0.548	0.897	drs	0.538	0.557	0.966	drs	0.146	0.212	0.690	drs
ProCredit	GHA	0.800	0.834	0.958	drs	0.621	0.726	0.855	drs	0.798	0.834	0.957	drs	0.274	0.466	0.588	drs
Sat	GHA	0.606	0.609	0.994	irs	0.506	0.506	1.000	-	0.582	0.589	0.988	irs	0.132	0.139	0.955	drs
C FUND	GOE	0.923	1.000	0.923	irs	0.742	0.798	0.930	irs	0.892	0.990	0.901	irs	0.208	0.236	0.878	irs
Constanta	GOE	0.844	0.893	0.945	drs	0.701	0.785	0.893	drs	0.685	0.782	0.876	drs	0.138	0.209	0.658	drs
CREDO	GOE	0.642	0.645	0.996	irs	0.625	0.637	0.982	irs	0.510	0.527	0.969	irs	0.037	0.037	1.000	-
SBDF	GOE	0.797	0.882	0.903	irs	0.774	0.869	0.890	irs	0.584	0.684	0.854	irs	0.034	0.045	0.759	irs
Fafidess	GUA	0.864	0.864	1.000	-	0.781	0.788	0.991	drs	0.793	0.803	0.987	irs	0.269	0.270	0.999	-
Fundacion M	GUA	0.537	0.582	0.923	irs	0.533	0.582	0.916	irs	0.427	0.469	0.911	irs	0.062	0.077	0.799	irs
Fundea	GUA	0.759	0.769	0.987	drs	0.640	0.709	0.903	drs	0.711	0.713	0.997	irs	0.147	0.212	0.695	drs
Genesis Em	GUA	0.824	0.957	0.861	drs	0.745	0.950	0.785	drs	0.742	0.750	0.988	drs	0.188	0.505	0.373	drs
ACME	HAI	1.000	1.000	1.000	-	0.754	0.766	0.985	drs	1.000	1.000	1.000	-	0.339	0.339	0.999	-
Finca	HON	0.870	0.871	0.999	irs	0.668	0.676	0.989	drs	0.861	0.863	0.998	irs	0.242	0.242	0.999	-
HDH	HON	0.702	0.717	0.979	drs	0.658	0.681	0.965	drs	0.604	0.605	0.998	irs	0.126	0.143	0.883	drs
World Rel	HON	0.751	0.792	0.948	drs	0.673	0.736	0.914	drs	0.676	0.676	1.000	-	0.184	0.249	0.740	drs
BANDHAN	IND	0.921	0.939	0.982	drs	0.921	0.939	0.981	drs	0.583	0.585	0.995	irs	0.157	0.157	1.000	-
BASIX	IND	0.733	0.834	0.879	drs	0.692	0.837	0.826	drs	0.649	0.650	1.000	-	0.130	0.373	0.349	drs
Cashpoor	IND	0.448	0.463	0.967	drs	0.352	0.416	0.847	drs	0.427	0.427	0.999	-	0.047	0.095	0.493	drs
ESAF	IND	0.661	0.674	0.980	drs	0.656	0.672	0.977	drs	0.503	0.505	0.997	irs	0.144	0.147	0.981	irs
GK	IND	0.663	0.669	0.991	drs	0.659	0.668	0.987	drs	0.540	0.545	0.991	irs	0.128	0.129	0.999	-
IASC	IND	0.833	0.842	0.989	drs	0.833	0.842	0.989	drs	0.734	0.737	0.996	irs	0.236	0.242	0.974	irs
KBSLAB	IND	0.617	0.619	0.997	irs	0.574	0.580	0.990	drs	0.573	0.579	0.991	irs	0.099	0.099	0.994	drs
Mahaseman	IND	0.753	0.760	0.990	drs	0.621	0.633	0.980	drs	0.730	0.730	1.000	-	0.284	0.285	0.999	-
SHARE MF	IND	0.799	0.913	0.875	drs	0.773	0.909	0.850	drs	0.739	0.741	0.998	drs	0.198	0.678	0.292	drs
SNFL	IND	0.949	0.977	0.972	drs	0.949	0.977	0.972	drs	0.545	0.546	0.998	irs	0.078	0.079	0.987	irs
MBK Ventu	IND	0.631	0.792	0.797	irs	0.513	0.670	0.766	irs	0.593	0.792	0.749	irs	0.090	0.243	0.370	irs
JMCC	JOR	0.671	0.687	0.977	drs	0.651	0.694	0.939	drs	0.582	0.586	0.992	irs	0.148	0.183	0.810	drs
MFW	JOR	0.755	0.756	0.999	irs	0.622	0.673	0.925	drs	0.729	0.734	0.992	irs	0.203	0.250	0.813	drs
KLF	KAZ	0.893	0.893	1.000	-	0.688	0.812	0.848	drs	0.892	0.893	0.999	irs	0.242	0.464	0.521	drs
EBS	KEN	0.572	0.602	0.950	drs	0.298	0.633	0.470	drs	0.572	0.602	0.950	drs	0.265	0.633	0.418	drs
Kadet	KEN	0.427	0.428	0.996	irs	0.372	0.373	0.998	irs	0.387	0.392	0.988	irs	0.028	0.028	1.000	-
K-REP	KEN	0.585	0.691	0.846	drs	0.554	0.689	0.804	drs	0.521	0.521	1.000	-	0.146	0.367	0.400	drs
KWFT	KEN	0.643	0.671	0.958	drs	0.505	0.645	0.783	drs	0.619	0.619	1.000	-	0.168	0.412	0.407	drs
MDSL	KEN	0.777	0.849	0.915	irs	0.653	0.702	0.931	irs	0.734	0.815	0.900	irs	0.192	0.268	0.715	irs
SMEP	KEN	0.622	0.637	0.976	drs	0.537	0.601	0.894	drs	0.573	0.576	0.995	irs	0.131	0.180	0.728	drs
AIYL Bank	KYR	0.972	1.000	0.972	drs	0.972	1.000	0.972	drs	0.660	0.704	0.938	drs	0.017	0.039	0.438	drs
BTFF	KYR	0.625	0.628	0.996	drs	0.621	0.627	0.991	drs	0.597	0.597	1.000	-	0.012	0.012	0.940	drs
FMCC	KYR	0.918	1.000	0.918	drs	0.826	0.983	0.840	drs	0.794	0.882	0.900	drs	0.219	0.433	0.505	drs
FINCA	MAL	1.000	1.000	1.000	-	0.677	0.681	0.994	irs	1.000	1.000	1.000	-	0.349	0.349	1.000	-
Kando Jagima	MAL	0.371	0.402	0.923	drs	0.376	0.409	0.919	drs	0.253	0.254	0.998	irs	0.071	0.105	0.680	drs
Soro Y	MAL	0.643	0.675	0.953	irs	0.643	0.675	0.953	irs	0.298	0.306	0.974	irs	0.024	0.024	1.000	-

CreditMongol	MON	0.803	0.826	0.973	irs	0.689	0.706	0.976	irs	0.736	0.765	0.961	irs	0.104	0.107	0.975	irs
Khan Bank	MON	0.838	0.873	0.960	drs	0.665	0.784	0.849	drs	0.838	0.873	0.960	drs	0.241	0.742	0.325	drs
AL AMANA	MOR	0.801	1.000	0.801	drs	0.807	1.000	0.807	drs	0.651	0.651	0.999	-	0.148	0.604	0.244	drs
Al Karama	MOR	0.850	0.932	0.912	irs	0.789	0.848	0.931	irs	0.777	0.859	0.904	irs	0.260	0.292	0.890	irs
MFI	Coun	LR-ACE				LR <sup>s</sup> -ACE				R-ACE				R <sup>s</sup> -ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
Fondep	MOR	0.773	0.834	0.928	drs	0.758	0.846	0.896	drs	0.677	0.678	0.999	irs	0.155	0.284	0.547	drs
Inmaa	MOR	0.673	0.706	0.953	irs	1.000	1.000	1.000	-	0.583	0.649	0.899	irs	1.000	1.000	1.000	-
Zakoura	MOR	0.787	0.974	0.808	drs	0.772	0.985	0.784	drs	0.659	0.701	0.941	drs	0.180	0.553	0.325	drs
NVO BANCO	MOZ	0.792	0.856	0.926	drs	0.624	0.728	0.857	drs	0.766	0.829	0.923	drs	0.187	0.333	0.562	drs
SOCREMO	MOZ	0.795	0.801	0.992	drs	0.562	0.624	0.901	drs	0.793	0.801	0.990	drs	0.161	0.230	0.699	drs
TCHUMA	MOZ	0.866	0.866	0.999	irs	0.703	0.706	0.996	irs	0.751	0.756	0.992	irs	0.222	0.222	0.999	-
CBB	NEP	0.635	0.640	0.993	irs	0.484	0.492	0.984	drs	0.635	0.640	0.993	irs	0.186	0.196	0.950	irs
NIRDHAN	NEP	0.622	0.632	0.985	drs	0.617	0.631	0.978	drs	0.500	0.501	0.997	irs	0.117	0.122	0.962	drs
NSSC	NEP	0.626	0.634	0.988	irs	0.398	0.409	0.972	drs	0.626	0.634	0.988	irs	0.210	0.230	0.915	irs
PGBB	NEP	0.608	0.615	0.988	drs	0.596	0.611	0.976	drs	0.534	0.534	0.999	-	0.118	0.118	0.996	irs
VYCCU	NEP	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.924	1.000	0.924	irs	0.404	1.000	0.404	irs
ACODEP	NIC	0.960	0.963	0.998	drs	0.723	0.887	0.815	drs	0.957	0.961	0.996	drs	0.391	0.664	0.589	drs
FAMA	NIC	0.891	0.897	0.994	drs	0.778	0.889	0.875	drs	0.872	0.872	1.000	-	0.271	0.551	0.492	drs
FDL	NIC	0.763	0.847	0.901	drs	0.720	0.852	0.845	drs	0.703	0.703	1.000	-	0.195	0.552	0.353	drs
FINDESA	NIC	0.878	0.890	0.987	drs	0.758	0.878	0.864	drs	0.878	0.889	0.989	drs	0.407	0.764	0.533	drs
FJN	NIC	0.874	0.889	0.983	drs	0.747	0.874	0.855	drs	0.840	0.840	0.999	irs	0.248	0.465	0.534	drs
FUNDENUSE	NIC	0.952	0.955	0.997	irs	0.809	0.858	0.942	drs	0.938	0.943	0.995	irs	0.331	0.380	0.870	drs
ProCredit	NIC	0.884	0.946	0.934	drs	0.775	0.948	0.818	drs	0.849	0.851	0.998	drs	0.392	0.773	0.507	drs
Prodesa	NIC	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.475	0.487	0.976	irs
LAPO	NIG	0.746	0.747	0.998	irs	0.560	0.578	0.969	drs	0.745	0.747	0.997	irs	0.212	0.224	0.946	drs
SEAP	NIG	0.974	1.000	0.974	irs	0.766	1.000	0.766	irs	0.974	1.000	0.974	irs	0.462	1.000	0.462	irs
ASASAH	PAK	0.910	0.924	0.985	irs	0.754	0.819	0.921	irs	0.725	0.731	0.993	irs	0.298	0.337	0.883	irs
FMBL	PAK	0.336	0.337	0.997	drs	0.243	0.256	0.949	drs	0.336	0.337	0.997	drs	0.019	0.036	0.527	drs
KASHF	PAK	0.681	0.681	1.000	-	0.621	0.664	0.935	drs	0.681	0.681	1.000	-	0.188	0.321	0.586	drs
FIELCO	PAR	0.872	0.872	1.000	-	0.640	0.783	0.818	drs	0.871	0.871	0.999	irs	0.197	0.468	0.421	drs
Interfisa	PAR	0.899	0.900	1.000	-	0.663	0.792	0.837	drs	0.899	0.900	1.000	-	0.203	0.532	0.380	drs
Bantra	PER	0.942	1.000	0.942	drs	0.732	1.000	0.732	drs	0.917	1.000	0.917	drs	0.312	1.000	0.312	drs
Caja Nor	PER	0.737	0.772	0.955	drs	0.662	0.767	0.863	drs	0.707	0.707	1.000	-	0.236	0.501	0.471	drs
Caritas	PER	0.758	0.796	0.952	drs	0.679	0.742	0.915	drs	0.618	0.623	0.992	drs	0.073	0.102	0.713	drs
CMAC Arq	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.864	1.000	0.864	drs
CMAC Cus	PER	1.000	1.000	1.000	-	0.941	1.000	0.941	drs	1.000	1.000	1.000	-	0.613	0.947	0.648	drs
CMAC May	PER	0.798	0.839	0.951	drs	0.674	0.827	0.816	drs	0.754	0.754	1.000	-	0.270	0.500	0.541	drs
CMAC Tac	PER	0.830	0.863	0.962	drs	0.807	0.858	0.941	drs	0.796	0.808	0.985	drs	0.417	0.565	0.738	drs
CMAC Tru	PER	0.903	0.997	0.905	drs	0.899	0.997	0.901	drs	0.819	0.836	0.979	drs	0.551	0.764	0.721	drs
Edpy. C Tac	PER	0.893	0.894	0.999	irs	0.766	0.828	0.925	drs	0.831	0.841	0.988	irs	0.289	0.290	0.998	irs
Edpy. Cofian	PER	0.810	0.829	0.978	drs	0.700	0.795	0.881	drs	0.781	0.781	1.000	-	0.237	0.366	0.646	drs
EDPY.Edyf	PER	0.815	0.895	0.910	drs	0.666	0.874	0.762	drs	0.769	0.769	1.000	-	0.185	0.540	0.344	drs
FINCA	PER	0.803	0.844	0.952	irs	0.584	0.602	0.971	irs	0.803	0.844	0.952	irs	0.250	0.250	1.000	-
Fondesurco	PER	0.782	0.827	0.946	irs	0.724	0.763	0.949	irs	0.692	0.756	0.915	irs	0.113	0.146	0.774	irs
MiBanco	PER	0.850	1.000	0.850	drs	0.766	1.000	0.766	drs	0.803	0.914	0.879	drs	0.395	0.991	0.398	drs
Movim. M R	PER	0.828	0.848	0.976	irs	0.722	0.737	0.979	irs	0.725	0.750	0.967	irs	0.228	0.228	1.000	-
Promujer	PER	0.883	0.888	0.994	irs	0.704	0.705	0.999	drs	0.856	0.864	0.991	irs	0.197	0.198	0.999	-
ASHI	PHI	0.629	0.630	0.998	irs	0.538	0.548	0.982	irs	0.556	0.568	0.978	irs	0.159	0.159	1.000	-
Bangko Ka	PHI	0.564	0.577	0.976	drs	0.446	0.482	0.925	drs	0.564	0.577	0.976	drs	0.192	0.328	0.584	drs
BCB	PHI	0.847	0.864	0.980	irs	0.623	0.626	0.996	irs	0.847	0.864	0.980	irs	0.223	0.223	0.997	irs
CBMO	PHI	0.731	0.733	0.997	irs	0.622	0.633	0.983	drs	0.721	0.725	0.994	irs	0.191	0.222	0.858	drs
DIGOS	PHI	0.655	0.660	0.992	irs	1.000	1.000	1.000	-	0.624	0.634	0.984	irs	1.000	1.000	1.000	-
GREEN	PHI	0.693	0.727	0.954	drs	0.545	0.694	0.785	drs	0.682	0.687	0.993	drs	0.169	0.489	0.345	drs
Ist Valley	PHI	0.838	0.850	0.985	drs	0.756	0.842	0.898	drs	0.799	0.799	1.000	-	0.193	0.383	0.503	drs
NWFT	PHI	0.694	0.719	0.965	drs	0.539	0.626	0.861	drs	0.687	0.701	0.980	drs	0.191	0.325	0.587	drs
SOLANO	PHI	0.780	0.807	0.967	irs	0.689	0.692	0.994	irs	0.780	0.807	0.967	irs	0.278	0.334	0.832	irs
TSPI	PHI	0.748	0.903	0.828	drs	0.614	0.759	0.809	drs	0.709	0.903	0.784	drs	0.284	0.621	0.458	drs
FORUS	RUS	0.688	0.734	0.937	drs	0.590	0.726	0.812	drs	0.648	0.648	1.000	-	0.216	0.451	0.479	drs
SEF-ZAF	SA	1.000	1.000	1.000	-	0.742	0.758	0.979	drs	1.000	1.000	1.000	-	0.316	0.317	0.999	-
SPBD	SAM	0.708	0.876	0.809	irs	0.551	0.803	0.686	irs	0.681	0.876	0.777	irs	0.125	0.527	0.236	irs



ACEP	SEN	1.000	1.000	1.000	-	0.991	1.000	0.991	drs	0.823	0.835	0.986	drs	0.306	0.357	0.855	drs
CMS	SEN	0.672	0.751	0.895	drs	0.656	0.751	0.873	drs	0.586	0.595	0.985	drs	0.260	0.393	0.662	drs
Pamecas	SEN	0.654	0.826	0.792	drs	0.654	0.828	0.790	drs	0.505	0.505	1.000	-	0.161	0.360	0.447	drs
MCHL	T&T	0.656	0.686	0.957	irs	0.635	0.667	0.951	irs	0.521	0.569	0.916	irs	0.142	0.172	0.829	irs
Agroinvest	TAJ	0.809	0.810	0.999	drs	0.599	0.709	0.845	drs	0.809	0.810	0.999	drs	0.169	0.563	0.300	drs
Bank Eskhata	TAJ	0.899	0.900	0.999	irs	0.402	0.430	0.935	drs	0.899	0.900	0.999	irs	0.226	0.351	0.643	drs
FMFB TAJ	TAJ	0.430	0.431	0.998	irs	0.358	0.364	0.981	drs	0.430	0.431	0.998	irs	0.029	0.032	0.901	drs
IMON	TAJ	0.835	0.839	0.995	irs	0.694	0.697	0.996	irs	0.778	0.787	0.989	irs	0.114	0.114	1.000	-
MicroInvest	TAJ	0.809	0.884	0.914	irs	0.684	0.740	0.923	irs	0.765	0.847	0.903	irs	0.183	0.211	0.866	irs
FINCA TAN	TAN	0.914	0.960	0.953	drs	0.733	0.820	0.894	drs	0.883	0.936	0.943	drs	0.321	0.449	0.715	drs
PRIDE	TAN	0.917	1.000	0.917	drs	0.806	0.967	0.834	drs	0.839	0.890	0.943	drs	0.283	0.569	0.498	drs
Enda	TUN	0.836	0.873	0.958	drs	0.778	0.835	0.932	drs	0.763	0.763	0.999	irs	0.223	0.280	0.799	drs
CERUDEB	UGA	0.611	0.643	0.951	drs	0.408	0.614	0.665	drs	0.611	0.643	0.951	drs	0.241	0.614	0.392	drs
CMFL	UGA	0.837	0.843	0.992	drs	0.510	0.580	0.880	drs	0.837	0.843	0.992	drs	0.250	0.366	0.683	drs
FAULU	UGA	0.763	0.763	0.999	-	0.527	0.555	0.950	drs	0.763	0.763	0.999	-	0.214	0.241	0.891	drs
FINCA UGA	UGA	0.989	1.000	0.989	drs	0.733	0.837	0.876	drs	0.989	1.000	0.989	drs	0.401	0.586	0.684	drs
MEDNET	UGA	0.660	0.662	0.997	irs	0.552	0.555	0.995	drs	0.626	0.631	0.992	irs	0.144	0.144	1.000	-
UML	UGA	0.839	0.959	0.875	drs	0.598	0.730	0.820	drs	0.839	0.959	0.875	drs	0.208	0.460	0.452	drs
BanGente	VEN	0.864	0.946	0.914	drs	0.720	0.911	0.790	drs	0.806	0.828	0.974	drs	0.206	0.493	0.418	drs
CEP	VIET	0.699	0.797	0.877	drs	0.710	0.815	0.872	drs	0.578	0.579	0.998	irs	0.143	0.244	0.586	drs
TYM	VIET	0.715	0.718	0.996	drs	0.723	0.724	0.999	-	0.549	0.564	0.973	irs	0.143	0.144	0.992	irs
CETZAM	ZAM	1.000	1.000	1.000	-	0.686	0.703	0.975	irs	1.000	1.000	1.000	-	0.078	0.078	1.000	-
FINCA ZAM	ZAM	0.883	0.886	0.996	irs	0.623	0.651	0.957	irs	0.824	0.833	0.989	irs	0.122	0.122	1.000	-
Mean		<b>0.786</b>	<b>0.833</b>	<b>0.945</b>		<b>0.700</b>	<b>0.781</b>	<b>0.900</b>		<b>0.707</b>	<b>0.735</b>	<b>0.966</b>		<b>0.222</b>	<b>0.369</b>	<b>0.691</b>	

### Appendix C DEA Efficiencies for treating positive Subsidy as an input for 2005

MFIs	cou	LR-ACE				LR-ACES <sup>i</sup>				L-ACE				L-ACES <sup>i</sup>				R-ACE				R-ACES <sup>i</sup>			
		crste	vrste	scale	drs	crste	vrste	scale	drs	crste	vrste	scale	drs	crste	vrste	scale	drs	crste	vrste	scale	drs	crste	vrste	scale	drs
ARMP	AFG	0.676	0.766	0.882	drs	0.676	0.766	0.882	drs	0.676	0.766	0.882	drs	0.676	0.766	0.882	drs	0.380	0.383	0.994	irs	0.397	0.404	0.981	drs
BRAC AFG	AFG	0.423	0.491	0.860	drs	0.423	0.491	0.860	drs	0.409	0.485	0.844	drs	0.409	0.485	0.844	drs	0.267	0.311	0.860	drs	0.287	0.315	0.911	drs
FMFB AFG	AFG	0.344	0.351	0.978	drs	0.344	0.351	0.978	drs	0.286	0.316	0.904	drs	0.286	0.316	0.904	drs	0.316	0.318	0.994	drs	0.325	0.327	0.993	drs
BESA	ALB	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.822	0.838	0.982	irs	0.822	0.838	0.982	irs
ProCred ALB	ALB	0.800	0.837	0.956	drs	0.811	0.837	0.969	drs	0.526	0.837	0.629	drs	0.732	0.837	0.875	drs	0.790	0.824	0.958	drs	0.804	0.824	0.975	drs
PSHM	ALB	0.782	0.859	0.910	drs	0.782	0.859	0.910	drs	0.774	0.858	0.902	drs	0.774	0.858	0.902	drs	0.635	0.637	0.997	irs	0.656	0.665	0.986	drs
NovoBanco	ANG	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.453	0.488	0.928	drs	0.453	0.488	0.928	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
ACBA	ARM	0.769	0.770	0.999	drs	0.769	0.770	0.999	drs	0.626	0.725	0.864	drs	0.626	0.725	0.864	drs	0.769	0.770	0.999	drs	0.769	0.770	0.999	drs
HORIZON	ARM	0.887	0.970	0.914	irs	0.912	1.000	0.912	irs	0.677	0.720	0.940	irs	0.677	0.721	0.938	irs	0.796	0.909	0.875	irs	0.884	1.000	0.884	irs
RED AGRO	AZE	0.880	0.896	0.983	irs	0.880	0.896	0.983	irs	0.878	0.891	0.985	irs	0.878	0.891	0.985	irs	0.685	0.718	0.955	irs	0.685	0.718	0.955	irs
MFBA	AZE	0.693	0.807	0.859	drs	0.693	0.807	0.859	drs	0.693	0.807	0.859	drs	0.693	0.807	0.859	drs	0.539	0.541	0.996	drs	0.552	0.556	0.994	drs
FORMICRO	AZE	0.908	0.958	0.947	irs	0.920	0.975	0.943	irs	0.722	0.756	0.955	irs	0.722	0.756	0.955	irs	0.784	0.883	0.888	irs	0.867	0.962	0.902	irs
BRAC BAN	BAN	0.814	1.000	0.814	drs	0.819	1.000	0.819	drs	0.702	1.000	0.702	drs	0.702	1.000	0.702	drs	0.720	0.928	0.776	drs	0.720	0.928	0.776	drs
DESHA	BAN	0.764	0.818	0.934	irs	0.884	1.000	0.884	irs	0.710	0.758	0.937	irs	0.884	1.000	0.884	irs	0.648	0.709	0.913	irs	0.733	0.822	0.892	irs
RDRS	BAN	0.598	0.605	0.989	drs	0.598	0.607	0.985	drs	0.591	0.605	0.976	drs	0.591	0.607	0.973	drs	0.467	0.470	0.995	irs	0.467	0.470	0.995	irs
SHAKTI	BAN	0.866	0.925	0.936	drs	0.866	0.950	0.912	drs	0.866	0.925	0.936	drs	0.866	0.950	0.912	drs	0.632	0.640	0.989	irs	0.643	0.655	0.982	irs
TMSS	BAN	0.675	0.769	0.878	drs	0.675	0.769	0.878	drs	0.665	0.769	0.864	drs	0.665	0.769	0.864	drs	0.548	0.548	1.000	-	0.548	0.548	1.000	-
FECECAM	BEN	0.512	0.564	0.907	drs	0.592	0.610	0.970	drs	0.405	0.558	0.725	drs	0.544	0.580	0.938	drs	0.456	0.483	0.943	drs	0.575	0.586	0.981	drs
ALIDE	BEN	0.697	1.000	0.697	irs	0.697	1.000	0.697	irs	0.669	1.000	0.669	irs	0.669	1.000	0.669	irs	0.359	1.000	0.359	irs	0.359	1.000	0.359	irs
PADME	BEN	0.795	0.823	0.966	drs	0.795	0.823	0.966	drs	0.717	0.816	0.878	drs	0.717	0.820	0.874	drs	0.742	0.743	0.999	irs	0.742	0.743	0.999	irs
VF	BEN	0.809	0.819	0.987	irs	0.809	0.819	0.987	irs	0.728	0.733	0.994	drs	0.728	0.743	0.980	drs	0.751	0.769	0.977	irs	0.754	0.776	0.973	irs
Agrocapital	BOL	0.717	0.796	0.900	drs	0.717	0.796	0.900	drs	0.714	0.796	0.898	drs	0.714	0.796	0.898	drs	0.551	0.555	0.993	drs	0.564	0.567	0.994	drs
BANCOSOL	BOL	0.765	0.947	0.808	drs	0.779	0.947	0.823	drs	0.720	0.947	0.760	drs	0.741	0.947	0.782	drs	0.698	0.810	0.863	drs	0.699	0.810	0.863	drs
Bnaco L A	BOL	0.759	1.000	0.759	drs	0.759	1.000	0.759	drs	0.759	1.000	0.759	drs	0.759	1.000	0.759	drs	0.589	0.691	0.853	drs	0.591	0.691	0.856	drs
CRECER	BOL	0.854	0.935	0.913	drs	0.986	0.992	0.994	irs	0.701	0.847	0.827	drs	0.845	0.909	0.929	drs	0.718	0.816	0.880	drs	0.960	0.963	0.997	drs
Co Futuro	BOL	0.728	0.796	0.914	drs	0.742	0.842	0.881	drs	0.709	0.796	0.891	drs	0.741	0.842	0.881	drs	0.612	0.612	0.999	irs	0.639	0.642	0.995	drs
FADES	BOL	0.839	1.000	0.839	drs	0.839	1.000	0.839	drs	0.820	0.993	0.826	drs	0.820	0.993	0.826	drs	0.610	0.649	0.939	drs	0.654	0.660	0.991	drs
FIE	BOL	0.802	0.965	0.832	drs	0.808	0.967	0.836	drs	0.793	0.965	0.823	drs	0.793	0.967	0.821	drs	0.664	0.670	0.990	drs	0.668	0.670	0.996	drs
Foncesol	BOL	0.894	0.988	0.905	irs	0.894	0.988	0.905	irs	0.894	0.985	0.908	irs	0.894	0.985	0.908	irs	0.695	0.782	0.889	irs	0.721	0.842	0.856	irs
FunBodem	BOL	0.848	0.861	0.985	irs	0.850	0.865	0.982	irs	0.697	0.700	0.995	irs	0.697	0.700	0.995	irs	0.746	0.771	0.968	irs	0.774	0.815	0.950	irs
PRODEM	BOL	0.722	0.911	0.792	drs	0.722	0.911	0.792	drs	0.679	0.911	0.745	drs	0.683	0.911	0.749	drs	0.622	0.682	0.911	drs	0.647	0.682	0.948	drs
ProMujar	BOL	0.735	0.813	0.904	drs	0.735	0.813	0.904	drs	0.674	0.791	0.852	drs	0.674	0.791	0.852	drs	0.610	0.611	0.997	drs	0.640	0.646	0.992	drs

Global Performance Report - Q3 2023																								
Entity	Region	North America				South America				Europe				Asia				Africa						
		Q1	Q2	Q3	YTD	Q1	Q2	Q3	YTD	Q1	Q2	Q3	YTD	Q1	Q2	Q3	YTD	Q1	Q2	Q3				
EKI	BOS	0.863	0.969	0.891	drs	0.880	0.988	0.891	drs	0.863	0.969	0.891	drs	0.880	0.988	0.891	drs	0.606	0.607	0.998	drs	0.618	0.622	0.994
PARTNER	BOS	0.906	0.953	0.951	drs	0.972	0.991	0.981	drs	0.902	0.953	0.947	drs	0.952	0.991	0.960	drs	0.797	0.804	0.991	irs	0.797	0.809	0.985
SUNRISE	BOS	0.835	0.926	0.903	drs	1.000	1.000	1.000	-	0.780	0.903	0.864	drs	1.000	1.000	1.000	-	0.680	0.687	0.990	drs	0.910	0.943	0.965
ACEP	CAM	0.930	0.947	0.982	irs	0.930	0.948	0.981	irs	0.796	0.805	0.989	irs	0.796	0.805	0.989	irs	0.801	0.832	0.962	irs	0.822	0.867	0.948
CDS	CAM	0.564	0.564	0.999	drs	0.581	0.584	0.994	irs	0.460	0.502	0.916	drs	0.517	0.529	0.977	drs	0.512	0.517	0.991	irs	0.558	0.566	0.987
CMM Bog	COL	0.841	0.956	0.880	drs	0.893	0.980	0.911	drs	0.744	0.922	0.807	drs	0.802	0.969	0.827	drs	0.706	0.742	0.951	drs	0.832	0.834	0.999
inamerica	COL	0.802	0.934	0.858	drs	0.825	0.951	0.867	drs	0.708	0.934	0.758	drs	0.768	0.945	0.812	drs	0.685	0.707	0.969	drs	0.768	0.768	1.000
VMM Med	COL	0.976	0.983	0.993	irs	0.976	0.983	0.993	irs	0.881	0.904	0.974	drs	0.881	0.928	0.949	drs	0.921	0.935	0.985	irs	0.921	0.935	0.985
WWB Ca	COL	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.855	1.000	0.855	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000
ACLEDA	COM	0.715	0.901	0.794	drs	0.735	0.903	0.814	drs	0.642	0.901	0.713	drs	0.705	0.903	0.781	drs	0.611	0.671	0.911	drs	0.668	0.685	0.976
AMRET	COM	0.801	0.813	0.986	drs	0.818	0.823	0.994	drs	0.592	0.707	0.838	drs	0.592	0.724	0.818	drs	0.733	0.738	0.992	drs	0.797	0.799	0.998
CEB	COM	0.812	0.813	0.999	irs	0.813	0.815	0.998	irs	0.725	0.753	0.963	drs	0.725	0.753	0.963	drs	0.700	0.714	0.980	irs	0.725	0.752	0.965
HKL	COM	0.755	0.758	0.995	irs	0.755	0.759	0.995	irs	0.705	0.709	0.996	irs	0.705	0.709	0.996	irs	0.612	0.631	0.971	irs	0.660	0.685	0.963
PRASAC	COM	0.755	0.848	0.890	drs	0.755	0.848	0.890	drs	0.696	0.816	0.853	drs	0.696	0.816	0.853	drs	0.579	0.629	0.921	drs	0.643	0.651	0.988
rediMujer	CR	0.852	1.000	0.852	irs	0.852	1.000	0.852	irs	0.631	0.856	0.737	irs	0.631	0.856	0.737	irs	0.771	1.000	0.771	irs	0.780	1.000	0.780
undecoca	CR	0.807	1.000	0.807	irs	0.807	1.000	0.807	irs	0.659	1.000	0.659	irs	0.659	1.000	0.659	irs	0.787	1.000	0.787	irs	0.787	1.000	0.787
ADEMI	DOM	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.755	0.926	0.815	drs	0.758	0.926	0.819	drs	1.000	1.000	1.000	-	1.000	1.000	1.000
Banco Sol	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.760	1.000	0.760	drs	1.000	1.000	1.000	-	0.970	1.000	0.970	drs	1.000	1.000	1.000
OAC Jardin	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000
Coac S Jose	ECU	0.886	0.893	0.993	irs	1.000	1.000	1.000	-	0.886	0.893	0.993	irs	1.000	1.000	1.000	-	0.699	0.723	0.966	irs	0.700	0.823	0.851
COAC SAC	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.792	0.815	0.972	irs	0.873	0.955	0.914
PROcredit	ECU	0.880	1.000	0.880	drs	1.000	1.000	1.000	-	0.850	1.000	0.850	drs	1.000	1.000	1.000	-	0.761	0.762	0.999	irs	0.834	0.838	0.996
l Tadamun	EGY	0.664	0.709	0.936	irs	0.789	0.877	0.899	irs	0.371	0.383	0.968	irs	0.458	0.504	0.908	irs	0.664	0.709	0.937	irs	0.789	0.877	0.899
DBACD	EGY	0.868	0.869	1.000	-	0.868	0.869	1.000	-	0.529	0.538	0.983	drs	0.529	0.546	0.970	drs	0.868	0.869	1.000	-	0.868	0.869	1.000
LEAD	EGY	0.358	0.360	0.994	irs	0.358	0.360	0.994	irs	0.316	0.326	0.971	drs	0.316	0.326	0.971	drs	0.322	0.328	0.980	irs	0.322	0.330	0.977
AMC de RL	ELS	0.725	0.732	0.991	drs	0.739	0.743	0.994	drs	0.610	0.677	0.902	drs	0.616	0.691	0.892	drs	0.629	0.635	0.991	irs	0.692	0.701	0.987
undacion	ELS	0.702	0.763	0.920	irs	0.703	0.819	0.859	irs	0.698	0.763	0.914	irs	0.698	0.815	0.856	irs	0.568	0.619	0.918	irs	0.587	0.720	0.815
ADCSI	ETH	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.869	0.878	0.990	irs	0.869	0.878	0.990
BG	ETH	0.604	0.682	0.886	irs	0.604	0.682	0.886	irs	0.604	0.682	0.886	irs	0.604	0.682	0.886	irs	0.330	0.413	0.799	irs	0.349	0.432	0.808
OMO	ETH	0.707	0.709	0.996	drs	0.707	0.711	0.994	drs	0.706	0.709	0.995	drs	0.706	0.711	0.992	drs	0.549	0.549	0.999	-	0.549	0.549	0.999
WISDOM	ETH	0.743	0.767	0.969	irs	0.743	0.767	0.969	irs	0.743	0.767	0.969	irs	0.743	0.767	0.969	irs	0.502	0.535	0.939	irs	0.515	0.559	0.920
KSF	GHA	0.700	1.000	0.700	irs	0.701	1.000	0.701	irs	0.674	1.000	0.674	irs	0.674	1.000	0.674	irs	0.477	1.000	0.477	irs	0.551	1.000	0.551
OI SASL	GHA	0.570	0.613	0.931	drs	0.613	0.618	0.992	drs	0.461	0.508	0.908	drs	0.461	0.509	0.907	drs	0.499	0.528	0.946	drs	0.589	0.590	0.998
C FUND	GOE	0.919	0.991	0.928	irs	0.929	1.000	0.929	irs	0.702	0.754	0.931	irs	0.702	0.754	0.931	irs	0.790	0.936	0.844	irs	0.889	1.000	0.889
Constanta	GOE	0.844	0.893	0.945	drs	0.844	0.893	0.945	drs	0.692	0.771	0.898	drs	0.692	0.771	0.898	drs	0.664	0.753	0.883	drs	0.664	0.768	0.865
CREDO	GOE	0.642	0.654	0.982	irs	0.642	0.654	0.982	irs	0.625	0.637	0.982	irs	0.625	0.637	0.982	irs	0.464	0.490	0.947	irs	0.495	0.523	0.948
SBDF	GOE	0.797	0.889	0.896	irs	0.797	0.889	0.896	irs	0.774	0.869	0.890	irs	0.774	0.869	0.890	irs	0.516	0.658	0.785	irs	0.561	0.677	0.828
undacion M	GUAT	0.537	0.582	0.923	irs	0.537	0.582	0.923	irs	0.533	0.582	0.916	irs	0.533	0.582	0.916	irs	0.396	0.473	0.838	irs	0.425	0.505	0.841
Fundea	GUAT	0.755	0.771	0.979	drs	0.767	0.771	0.994	drs	0.621	0.684	0.909	drs	0.621	0.684	0.909	drs	0.656	0.660	0.994	irs	0.718	0.728	0.986
genesis Em	GUAT	0.821	0.957	0.858	drs	0.836	0.965	0.866	drs	0.729	0.954	0.765	drs	0.729	0.959	0.761	drs	0.690	0.741	0.932	drs	0.774	0.784	0.987
ACME	HAI	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.652	0.656	0.994	irs	0.652	0.656	0.994	irs	1.000	1.000	1.000	-	1.000	1.000	1.000
Finca	HON	0.868	0.869	0.999	irs	0.873	0.876	0.997	irs	0.606	0.608	0.996	irs	0.606	0.608	0.996	irs	0.816	0.822	0.993	irs	0.860	0.867	0.992
HDH	HON	0.702	0.717	0.979	drs	0.702	0.717	0.979	drs	0.651	0.673	0.968	drs	0.651	0.673	0.968	drs	0.542	0.547	0.990	irs	0.604	0.614	0.982
World Rel	HON	0.751	0.795	0.944	drs	0.788	0.798	0.987	drs	0.639	0.692	0.923	drs	0.639	0.693	0.922	drs	0.618	0.632	0.977	drs	0.734	0.741	0.990
BANDHAN	IND	0.937	0.939	0.998	drs	0.986	0.989	0.997	irs	0.937	0.939	0.998	drs	0.986	0.989	0.997	irs	0.680	0.694	0.980	irs	0.680	0.694	0.979
BASIX	IND	0.746	0.834	0.894	drs	0.764	0.876	0.872	drs	0.685	0.834	0.821	drs	0.748	0.873	0.856	drs	0.633	0.643	0.985	drs	0.688	0.694	0.991
Cashpoor	IND	0.447	0.465	0.962	drs	0.452	0.465	0.971	drs	0.352	0.416	0.847	drs	0.352	0.416	0.847	drs	0.398	0.401	0.992	drs	0.422	0.424	0.993
ESAF	IND	0.704	0.751	0.937	irs	0.719	0.754	0.953	irs	0.672	0.689	0.975	irs	0.672	0.689	0.975	irs	0.683	0.684	0.999	irs	0.683	0.684	0.999
GK	IND	0.686	0.699	0.981	irs	0.713	0.725	0.984	irs	0.667	0.668	0.998	irs	0.713	0.719	0.992	irs	0.576	0.600	0.961	irs	0.579	0.609	0.951
IASC	IND	0.998	1.000	0.998	irs	0.998	1.000	0.998	irs	0.855	0.899	0.951	irs	0.875	0.924	0.947	irs	0.998	1.000	0.998	irs	0.998	1.000	0.998
KBSLAB	IND	0.650	0.666	0.976	irs	0.650	0.666	0.976	irs	0.580	0.580	0.999	irs	0.580	0.580	0.999	irs	0.594	0.617	0.964	irs	0.599	0.626	0.957
SNFL	IND	0.977	0.985	0.992	irs	0.977	0.985	0.992	irs	0.977	0.985	0.992	irs	0.977	0.985	0.992	irs	0.754	0.760	0.992	irs	0.754	0.760	0.992
IBK Ventu	INDO	0.630	0.938	0.671	irs	0.636	0.943	0.674	irs	0.512	0.719	0.712	irs	0.512	0.719	0.712	irs	0.553	0.938	0.590	irs	0.587	0.943	0.622
Kadet	KEN	0.425	0.427	0.996	irs	0.427	0.429	0.995	irs	0.372														

Global Performance Metrics - Q3 2023																								
Company	Country	Region A				Region B				Region C				Region D				Region E						
		M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4			
FINCA	MAL	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.563	0.579	0.974	irs	0.563	0.579	0.974	irs	1.000	1.000	1.000	-	1.000	1.000	1.000
Soro Y	MALI	0.643	0.675	0.953	irs	0.643	0.675	0.953	irs	0.643	0.675	0.953	irs	0.643	0.675	0.953	irs	0.298	0.320	0.930	irs	0.298	0.320	0.930
editMongol	MON	0.800	0.830	0.965	irs	0.802	0.835	0.961	irs	0.689	0.706	0.976	irs	0.689	0.706	0.976	irs	0.681	0.727	0.936	irs	0.719	0.778	0.925
Chan Bank	MON	0.988	1.000	0.988	drs	0.988	1.000	0.988	drs	0.650	0.920	0.706	drs	0.721	0.920	0.784	drs	0.988	1.000	0.988	drs	0.988	1.000	0.988
FCC	MOZ	0.802	0.897	0.894	irs	0.802	0.897	0.894	irs	0.379	0.409	0.925	irs	0.379	0.409	0.925	irs	0.802	0.897	0.894	irs	0.802	0.897	0.894
ovo Banco	MOZ	0.792	0.861	0.921	drs	0.795	0.861	0.923	drs	0.585	0.674	0.868	drs	0.585	0.674	0.868	drs	0.729	0.816	0.894	drs	0.757	0.818	0.925
SOCREMO	MOZ	0.772	0.803	0.961	drs	0.791	0.803	0.985	drs	0.531	0.583	0.910	drs	0.531	0.583	0.910	drs	0.696	0.730	0.953	drs	0.773	0.775	0.996
ATCHUMA	MOZ	0.866	0.871	0.993	irs	0.866	0.871	0.993	irs	0.653	0.662	0.987	irs	0.653	0.662	0.987	irs	0.748	0.756	0.989	irs	0.748	0.757	0.988
CBB	NEP	0.870	0.926	0.940	irs	0.870	0.926	0.940	irs	0.492	0.551	0.893	irs	0.492	0.551	0.893	irs	0.870	0.926	0.940	irs	0.870	0.926	0.940
NIRDHAN	NEP	0.651	0.664	0.981	irs	0.666	0.675	0.987	irs	0.627	0.630	0.996	drs	0.627	0.631	0.993	drs	0.579	0.590	0.981	irs	0.579	0.590	0.981
NSSC	NEP	0.861	1.000	0.861	irs	0.871	1.000	0.871	irs	0.390	0.656	0.595	irs	0.462	1.000	0.462	irs	0.861	1.000	0.861	irs	0.871	1.000	0.871
PGBB	NEP	0.724	0.724	0.999	irs	0.724	0.724	0.999	irs	0.610	0.612	0.998	irs	0.610	0.612	0.998	irs	0.724	0.724	0.999	irs	0.724	0.724	0.999
FINDESA	NIC	0.916	0.923	0.993	drs	1.000	1.000	1.000	-	0.695	0.853	0.815	drs	1.000	1.000	1.000	-	0.911	0.923	0.987	drs	1.000	1.000	1.000
ProCredit	NIC	0.899	0.949	0.947	drs	0.988	0.990	0.998	irs	0.715	0.933	0.766	drs	0.876	0.939	0.933	drs	0.836	0.863	0.968	drs	0.982	0.986	0.996
LAPO	NIG	0.737	0.738	0.999	irs	0.983	1.000	0.983	irs	0.504	0.510	0.988	drs	0.720	0.885	0.813	irs	0.660	0.668	0.989	irs	0.978	1.000	0.978
ASASAH	PAK	0.910	0.985	0.924	irs	0.935	1.000	0.935	irs	0.672	0.745	0.903	irs	0.672	0.768	0.876	irs	0.725	0.839	0.865	irs	0.778	1.000	0.778
FMBL	PAK	0.377	0.378	0.997	irs	0.377	0.378	0.997	irs	0.247	0.256	0.965	drs	0.247	0.257	0.960	drs	0.377	0.378	0.997	irs	0.377	0.378	0.997
KASHF	PAK	0.767	0.770	0.995	irs	0.767	0.771	0.994	irs	0.610	0.632	0.964	drs	0.716	0.717	0.998	irs	0.767	0.770	0.995	irs	0.767	0.771	0.994
FIELCO	PAR	0.874	0.878	0.995	drs	0.991	1.000	0.991	irs	0.593	0.716	0.827	drs	0.737	0.774	0.952	drs	0.825	0.835	0.988	drs	0.990	0.998	0.992
Interfisa	PAR	0.910	0.912	0.997	drs	0.933	0.935	0.998	irs	0.627	0.752	0.833	drs	0.627	0.773	0.811	drs	0.888	0.898	0.989	drs	0.933	0.935	0.998
Bantra	PER	0.907	1.000	0.907	drs	1.000	1.000	1.000	-	0.683	1.000	0.683	drs	0.786	1.000	0.786	drs	0.776	1.000	0.776	drs	1.000	1.000	1.000
Caja Nor	PER	0.774	0.797	0.971	drs	0.810	0.812	0.997	drs	0.652	0.765	0.852	drs	0.795	0.806	0.987	drs	0.727	0.731	0.994	drs	0.784	0.784	1.000
Caritas	PER	0.758	0.796	0.952	drs	0.758	0.796	0.952	drs	0.679	0.742	0.915	drs	0.679	0.742	0.915	drs	0.547	0.579	0.944	drs	0.582	0.600	0.971
CMAC May	PER	0.812	0.853	0.951	drs	0.838	0.860	0.975	drs	0.655	0.813	0.806	drs	0.723	0.841	0.860	drs	0.738	0.752	0.981	drs	0.813	0.815	0.998
CMAC Tac	PER	0.889	0.892	0.996	irs	0.889	0.892	0.996	irs	0.771	0.840	0.918	drs	0.841	0.866	0.971	drs	0.884	0.888	0.995	irs	0.884	0.888	0.995
CMAC Tru	PER	0.980	1.000	0.980	drs	1.000	1.000	1.000	-	0.847	1.000	0.847	drs	0.991	1.000	0.991	drs	0.942	1.000	0.942	drs	1.000	1.000	1.000
dp. C Tac	PER	0.902	0.904	0.999	drs	0.904	0.906	0.998	irs	0.744	0.808	0.920	drs	0.744	0.808	0.920	drs	0.807	0.816	0.989	irs	0.836	0.857	0.976
py. Cofian	PER	0.848	0.855	0.992	drs	0.848	0.855	0.992	drs	0.705	0.788	0.896	drs	0.705	0.790	0.893	drs	0.804	0.805	0.998	irs	0.811	0.815	0.995
DPY.Edyf	PER	0.823	0.905	0.910	drs	0.826	0.905	0.913	drs	0.654	0.899	0.728	drs	0.654	0.899	0.728	drs	0.737	0.767	0.962	drs	0.767	0.767	1.000
FINCA	PER	0.803	0.862	0.931	irs	0.803	0.873	0.920	irs	0.511	0.536	0.954	irs	0.511	0.536	0.954	irs	0.803	0.862	0.931	irs	0.803	0.873	0.920
ondesurco	PER	0.792	0.877	0.903	irs	0.792	0.879	0.901	irs	0.725	0.804	0.902	irs	0.725	0.804	0.902	irs	0.669	0.758	0.882	irs	0.693	0.815	0.850
IDESI LL	PER	0.930	1.000	0.930	irs	0.930	1.000	0.930	irs	0.602	0.798	0.754	irs	0.602	0.798	0.754	irs	0.853	1.000	0.853	irs	0.853	1.000	0.853
ovim. M R	PER	0.828	0.850	0.974	irs	0.837	0.889	0.942	irs	0.670	0.692	0.969	irs	0.670	0.695	0.964	irs	0.683	0.712	0.959	irs	0.775	0.866	0.895
Promujer	PER	0.880	0.885	0.994	irs	0.888	0.896	0.991	irs	0.666	0.670	0.995	irs	0.666	0.670	0.995	irs	0.763	0.780	0.978	irs	0.852	0.872	0.977
ASHI	PHI	0.629	0.644	0.977	irs	0.635	0.657	0.966	irs	0.506	0.519	0.973	irs	0.506	0.519	0.973	irs	0.532	0.554	0.960	irs	0.597	0.627	0.951
st Valley	PHI	0.879	0.881	0.997	drs	0.884	0.886	0.998	drs	0.744	0.813	0.916	drs	0.829	0.863	0.960	drs	0.818	0.822	0.994	irs	0.853	0.859	0.993
NWFT	PHI	0.690	0.722	0.956	drs	0.814	0.824	0.988	irs	0.491	0.561	0.876	drs	0.554	0.587	0.944	drs	0.616	0.669	0.921	drs	0.814	0.819	0.993
FORUS	RUS	0.702	0.748	0.939	drs	0.717	0.751	0.954	drs	0.576	0.727	0.793	drs	0.621	0.740	0.840	drs	0.637	0.651	0.978	drs	0.691	0.693	0.997
SEF-ZAF	SA	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.650	0.650	0.999	-	0.650	0.650	0.999	-	1.000	1.000	1.000	-	1.000	1.000	1.000
SPBD	SAM	0.705	0.874	0.806	irs	0.709	0.989	0.717	irs	0.536	0.768	0.698	irs	0.536	0.768	0.698	irs	0.615	0.874	0.704	irs	0.664	0.989	0.672
ACEP	SEN	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.991	1.000	0.991	drs	0.991	1.000	0.991	drs	0.967	0.976	0.990	irs	0.967	0.976	0.990
CMS	SEN	0.687	0.752	0.914	drs	0.695	0.752	0.924	drs	0.652	0.752	0.868	drs	0.652	0.752	0.868	drs	0.638	0.639	0.999	irs	0.638	0.639	0.999
Pamecas	SEN	0.654	0.850	0.769	drs	0.850	0.901	0.944	drs	0.654	0.850	0.769	drs	0.850	0.901	0.944	drs	0.482	0.496	0.971	drs	0.585	0.587	0.997
MCHL	T&T	0.656	0.686	0.957	irs	0.656	0.686	0.957	irs	0.635	0.667	0.951	irs	0.635	0.667	0.951	irs	0.418	0.462	0.904	irs	0.514	0.562	0.914
agroinvest	TAJ	0.830	0.843	0.985	drs	0.844	0.845	1.000	-	0.575	0.712	0.807	drs	0.575	0.719	0.799	drs	0.830	0.843	0.985	drs	0.844	0.845	1.000
nk Eshkata	TAJ	0.937	0.951	0.985	irs	1.000	1.000	1.000	-	0.337	0.354	0.952	drs	0.575	1.000	0.575	irs	0.937	0.951	0.985	irs	1.000	1.000	1.000
FMFB TAJ	TAJ	0.482	0.495	0.974	irs	0.482	0.495	0.974	irs	0.364	0.365	0.998	drs	0.364	0.365	0.998	drs	0.482	0.495	0.974	irs	0.482	0.495	0.974
IMON	TAJ	0.832	0.836	0.995	irs	0.832	0.837	0.994	irs	0.694	0.697	0.996	irs	0.694	0.697	0.996	irs	0.701	0.717	0.978	irs	0.757	0.778	0.973
icroInvest	TAJ	0.808	0.898	0.900	irs	0.809	0.901	0.898	irs	0.651	0.707	0.921	irs	0.651	0.711	0.917	irs	0.694	0.808	0.859	irs	0.763	0.878	0.869
INCA TAN	TAN	0.914	0.964	0.949	drs	0.971	0.973	0.999	irs	0.637	0.696	0.915	drs	0.637	0.704	0.905	drs	0.876	0.914	0.959	drs	0.968	0.968	1.000
PRIDE	TAN	0.917	1.000	0.917	drs	1.000	1.000	1.000	-	0.735	0.866	0.848	drs	0.951	0.951	1.000	-	0.779	0.882	0.883	drs	1.000	1.000	1.000
CERUDEB	UGA	0.584	0.643	0.909	drs	0.708	0.709	0.998	irs	0.346	0.497	0.696	drs	0.424	0.499	0.849	drs	0.571	0.643	0.887	drs	0.708	0.709	0.998
CMFL	UGA	0.748	0.775	0.965	drs	1.000	1.000	1.000	-	0.431	0.476	0.905	drs	0.561	0.570	0.984	irs	0.724	0.760	0.953	drs	1.000	1.000	1.000
FAULU	UGA	0.743	0.754	0.985	drs	0.767																		

## Appendix D Efficiencies DEA for treating negative Subsidy as an output for 2005

MFIs	Coun	LR-ACE			LRS <sup>o</sup> -ACE			L-ACE			LS <sup>o</sup> -ACE			R-ACE			RS <sup>o</sup> -ACE								
		crste	Vrste	scale	crste	vrste	scale	crste	vrste	scale	crste	vrste	scale	crste	vrste	scale	crste	vrste	scale						
INECO	ARM	0.847	0.909	0.932	drs	0.847	0.909	0.932	drs	0.614	0.663	0.925	drs	0.614	0.663	0.925	drs	0.847	0.909	0.932	drs	0.847	0.909	0.932	drs
Viator	AZE	0.959	0.999	0.960	irs	0.959	0.999	0.960	irs	0.912	0.931	0.980	irs	0.933	0.943	0.990	irs	0.959	0.999	0.960	irs	0.959	0.999	0.960	irs
ASA	BAN	0.993	1.000	0.993	drs	1.000	1.000	1.000	-	0.917	1.000	0.917	drs	1.000	1.000	1.000	-	0.993	1.000	0.993	drs	1.000	1.000	1.000	-
B TANGAIL	BAN	0.941	0.943	0.998	drs	0.945	0.950	0.994	drs	0.925	0.926	0.999	irs	0.945	0.950	0.994	drs	0.828	0.828	1.000	-	0.832	0.832	1.000	-
IDF	BAN	0.971	0.981	0.990	irs	0.974	0.983	0.991	irs	0.963	0.979	0.983	irs	0.974	0.983	0.991	irs	0.733	0.745	0.984	irs	0.733	0.745	0.984	irs
RCPB	BF	0.775	0.817	0.949	drs	0.775	0.817	0.949	drs	0.775	0.817	0.949	drs	0.775	0.817	0.949	drs	0.460	0.477	0.965	drs	0.460	0.477	0.965	drs
MIKROFIN	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.730	0.731	0.999	irs	0.730	0.731	0.999	irs
FMM Buca	COL	0.916	0.925	0.990	drs	0.916	0.941	0.974	drs	0.880	0.889	0.989	drs	0.885	0.941	0.940	drs	0.910	0.911	0.999	irs	0.913	0.921	0.991	drs
FMM Pop	COL	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.966	0.975	0.991	drs	0.971	1.000	0.971	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
D-Miro	ECU	0.948	0.951	0.997	irs	0.948	0.951	0.997	irs	0.924	0.934	0.990	irs	0.925	0.934	0.990	irs	0.873	0.888	0.982	irs	0.873	0.888	0.982	irs
Finca	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.977	0.977	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
FODEMI	ECU	0.967	0.991	0.976	irs	0.967	0.991	0.976	irs	0.965	0.989	0.976	irs	0.965	0.989	0.976	irs	0.657	0.701	0.937	irs	0.657	0.701	0.937	irs
Fundacion Es	ECU	0.986	0.988	0.997	irs	0.986	0.988	0.997	irs	0.944	0.953	0.990	irs	0.961	0.964	0.996	irs	0.979	0.988	0.990	irs	0.979	0.988	0.990	irs
ACSI	ETH	0.841	0.915	0.919	drs	0.873	0.926	0.943	drs	0.841	0.915	0.919	drs	0.873	0.926	0.943	drs	0.702	0.749	0.937	drs	0.788	0.788	1.000	-
DECSI	ETH	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
ProCredit	GHA	0.983	0.995	0.988	drs	0.983	0.995	0.988	drs	0.709	0.712	0.996	irs	0.724	0.725	0.998	irs	0.983	0.995	0.988	drs	0.983	0.995	0.988	drs
Sat	GHA	0.637	0.641	0.993	irs	0.637	0.641	0.993	irs	0.616	0.623	0.990	irs	0.618	0.623	0.993	irs	0.616	0.617	0.998	irs	0.616	0.617	0.998	irs
Fafidess	GUAT	0.983	0.985	0.998	irs	0.983	0.985	0.998	irs	0.940	0.951	0.988	irs	0.954	0.959	0.995	irs	0.966	0.972	0.993	irs	0.966	0.972	0.993	irs
Mahaseman	IND	0.887	0.981	0.904	drs	0.887	0.981	0.904	drs	0.702	0.709	0.989	irs	0.711	0.715	0.995	irs	0.887	0.981	0.904	drs	0.887	0.981	0.904	drs
SHARE MF	IND	0.888	0.914	0.972	drs	0.888	0.914	0.972	drs	0.880	0.906	0.971	drs	0.886	0.906	0.978	drs	0.744	0.802	0.928	drs	0.744	0.802	0.928	drs
JMCC	JOR	0.841	0.847	0.993	irs	0.841	0.847	0.993	irs	0.834	0.844	0.988	irs	0.840	0.846	0.993	irs	0.630	0.639	0.987	irs	0.630	0.639	0.987	irs
MFW	JOR	0.791	0.796	0.993	irs	0.791	0.796	0.993	irs	0.761	0.769	0.990	irs	0.780	0.782	0.997	irs	0.785	0.796	0.986	irs	0.785	0.796	0.986	irs
KLF	KAZ	0.947	0.947	1.000	-	0.947	0.947	1.000	-	0.822	0.825	0.996	irs	0.836	0.837	0.999	irs	0.947	0.947	1.000	-	0.947	0.947	1.000	-
EBS	KEN	0.597	0.662	0.902	drs	0.597	0.663	0.902	drs	0.259	0.287	0.902	drs	0.320	0.643	0.497	drs	0.597	0.662	0.902	drs	0.597	0.663	0.902	drs
K Jagima	MALI	0.479	0.482	0.994	irs	0.495	0.496	0.998	irs	0.479	0.482	0.994	irs	0.495	0.496	0.998	irs	0.268	0.269	0.999	-	0.287	0.287	1.000	-
AL AMANA	MOR	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.679	0.753	0.901	drs	0.679	0.753	0.901	drs
Al Karama	MOR	0.990	1.000	0.990	irs	0.990	1.000	0.990	irs	0.958	1.000	0.958	irs	0.981	1.000	0.981	irs	0.895	1.000	0.895	irs	0.895	1.000	0.895	irs
Fondep	MOR	0.937	0.939	0.999	irs	0.937	0.939	0.999	irs	0.929	0.934	0.996	irs	0.932	0.934	0.998	irs	0.707	0.708	0.999	-	0.707	0.708	0.999	-
Inmaa	MOR	0.804	0.868	0.926	irs	0.804	0.868	0.926	irs	0.783	0.816	0.960	irs	0.783	0.816	0.960	irs	0.676	0.868	0.779	irs	0.676	0.868	0.779	irs
Zakoura	MOR	0.996	0.996	1.000	-	0.996	0.996	1.000	-	0.985	0.985	0.999	irs	0.989	0.990	1.000	-	0.733	0.806	0.909	drs	0.733	0.806	0.909	drs
VYCCU	NEP	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.924	1.000	0.924	irs	0.981	1.000	0.981	irs
ACODEP	NIC	0.999	0.999	1.000	-	0.999	0.999	1.000	-	0.858	0.858	1.000	-	0.868	0.868	1.000	-	0.999	0.999	1.000	-	0.999	0.999	1.000	-
FAMA	NIC	0.915	0.919	0.996	drs	0.915	0.919	0.996	drs	0.894	0.896	0.998	drs	0.895	0.899	0.996	drs	0.888	0.889	1.000	-	0.888	0.889	1.000	-
FDL	NIC	0.857	0.862	0.993	drs	0.857	0.862	0.993	drs	0.850	0.853	0.996	drs	0.851	0.858	0.991	drs	0.721	0.724	0.995	drs	0.721	0.724	0.995	drs
FJN	NIC	0.919	0.922	0.997	drs	0.919	0.922	0.997	drs	0.901	0.902	0.999	irs	0.901	0.902	0.999	irs	0.879	0.879	1.000	-	0.879	0.879	1.000	-
FUNDENUSE	NIC	0.977	0.994	0.982	irs	1.000	1.000	1.000	-	0.931	0.937	0.994	irs	1.000	1.000	1.000	-	0.977	0.994	0.982	irs	1.000	1.000	1.000	-
Prodesa	NIC	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
SEAP	NIG	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.795	1.000	0.795	irs	0.909	1.000	0.909	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
CMAC Arq	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
CMAC Cus	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.945	1.000	0.945	drs	0.986	1.000	0.986	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
MiBanco	PER	0.898	1.000	0.898	drs	0.898	1.000	0.898	drs	0.885	1.000	0.885	drs	0.887	1.000	0.887	drs	0.864	1.000	0.864	drs	0.864	1.000	0.864	drs
Bangko Ka	PHI	0.564	0.577	0.977	drs	0.564	0.577	0.977	drs	0.444	0.452	0.982	drs	0.444	0.461	0.963	drs	0.564	0.577	0.977	drs	0.564	0.577	0.977	drs
BCB	PHI	0.901	0.924	0.975	irs	0.906	0.926	0.979	irs	0.727	0.737	0.987	irs	0.768	0.774	0.992	irs	0.901	0.924	0.975	irs	0.906	0.926	0.979	irs
CBMO	PHI	0.746	0.751	0.993	irs	0.751	0.756	0.993	irs	0.711	0.716	0.994	irs	0.737	0.739	0.997	irs	0.745	0.746	0.999	irs	0.749	0.753	0.996	irs
DIGOS	PHI	0.701	0.703	0.997	irs	0.701	0.703	0.997	irs	0.682	0.693	0.985	irs	0.682	0.693	0.985	irs	0.657	0.676	0.971	irs	0.657	0.676	0.971	irs
GREEN	PHI	0.744	0.763	0.975	drs	0.744	0.763	0.975	drs	0.668	0.669	0.999	irs	0.668	0.669	0.999	irs	0.744	0.763	0.975	drs	0.744	0.763	0.975	drs
SOLANO	PHI	0.781	0.827	0.944	irs	0.793	0.887	0.894	irs	0.700	0.708	0.988	irs	0.757	0.872	0.868	irs	0.781	0.827	0.944	irs	0.793	0.887	0.894	irs
TSPI	PHI	0.928	1.000	0.928	drs	0.928	1.000	0.928	drs	0.693	0.694	0.997	irs	0.701	0.701	0.999	irs	0.928	1.000	0.928	drs	0.928	1.000	0.928	drs
Enda	TUN	0.993	0.994	0.999	irs	0.993	0.994	0.999	irs	0.966	0.973	0.993	irs	0.969	0.973	0.996	irs	0.867	0.868	0.999	irs	0.867	0.868	0.999	irs
CEP	VIET	0.921	0.923	0.998	irs	0.927	0.929	0.998	irs	0.919	0.923	0.996	irs	0.927	0.929	0.998	irs	0.619	0.619	0.999	-	0.619	0.619	0.999	-
TYM	VIET	0.873	0.884	0.987	irs	0.886	0.892	0.993	irs	0.873	0.884	0.987	irs	0.886	0.892	0.993	irs	0.565	0.579	0.975	irs	0.566	0.581	0.973	irs
mean		<b>0.894</b>	<b>0.912</b>	<b>0.980</b>		<b>0.897</b>	<b>0.915</b>	<b>0.980</b>		<b>0.837</b>	<b>0.85</b>														

		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
ARMP	AFG	0.779	0.787	0.990	drs	0.779	0.787	0.990	drs	0.611	0.613	0.997	drs	0.327	0.383	0.854	drs
BRAC AFG	AFG	0.602	0.670	0.900	drs	0.566	0.638	0.888	drs	0.449	0.472	0.953	drs	0.081	0.165	0.492	drs
FMFB AFG	AFG	0.588	0.591	0.994	drs	0.530	0.547	0.969	drs	0.568	0.572	0.994	drs	0.331	0.466	0.711	drs
BESA	ALB	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.875	0.879	0.996	irs	0.624	0.756	0.825	drs
ProCred ALB	ALB	0.690	0.748	0.922	drs	0.636	0.730	0.872	drs	0.690	0.748	0.922	drs	0.629	0.694	0.906	drs
PSHM	ALB	0.884	0.885	0.999	drs	0.878	0.880	0.998	drs	0.774	0.777	0.995	irs	0.532	0.650	0.818	drs
NovoBanco	ANG	0.738	0.741	0.997	drs	0.517	0.544	0.951	drs	0.738	0.741	0.997	drs	0.289	0.462	0.625	drs
ACBA	ARM	0.724	0.823	0.880	drs	0.702	0.819	0.858	drs	0.652	0.784	0.832	drs	0.463	0.577	0.802	drs
HORIZON	ARM	0.936	0.953	0.982	drs	0.835	0.860	0.971	irs	0.917	0.930	0.986	drs	0.457	0.476	0.961	irs
INECO	ARM	0.698	0.889	0.786	drs	0.633	0.776	0.816	drs	0.698	0.889	0.786	drs	0.550	0.770	0.714	drs
CRED AGRO	AZE	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.719	0.720	1.000	-	0.290	0.297	0.976	drs
MFBA	AZE	0.825	0.869	0.949	drs	0.825	0.869	0.949	drs	0.593	0.604	0.982	drs	0.221	0.335	0.661	drs
NORMICRO	AZE	0.976	0.980	0.997	irs	0.931	0.967	0.962	irs	0.808	0.815	0.991	drs	0.331	0.337	0.982	irs
Viator	AZE	0.955	0.967	0.988	drs	0.855	0.864	0.989	irs	0.922	0.933	0.988	drs	0.466	0.484	0.962	drs
ASA	BAN	0.943	1.000	0.943	drs	0.834	1.000	0.834	drs	0.942	1.000	0.942	drs	0.424	0.743	0.571	drs
BRAC BAN	BAN	0.841	1.000	0.841	drs	0.611	1.000	0.611	drs	0.841	1.000	0.841	drs	0.197	0.409	0.481	drs
BURO TANGAIL	BAN	0.862	0.880	0.979	drs	0.803	0.869	0.924	drs	0.771	0.780	0.988	drs	0.477	0.621	0.767	drs
IDF	BAN	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.690	0.690	1.000	-	0.434	0.446	0.971	drs
SHAKTI	BAN	0.858	0.885	0.969	drs	0.836	0.885	0.944	drs	0.678	0.683	0.992	drs	0.417	0.508	0.821	drs
TMSS	BAN	0.689	0.730	0.944	drs	0.629	0.727	0.865	drs	0.574	0.585	0.980	drs	0.150	0.212	0.707	drs
FECECAM	BEN	0.489	0.512	0.956	drs	0.450	0.479	0.939	drs	0.436	0.451	0.965	drs	0.063	0.116	0.541	drs
ALIDE	BEN	0.737	0.834	0.884	irs	0.713	0.834	0.855	irs	0.479	0.480	0.998	irs	0.121	0.193	0.626	irs
PADME	BEN	0.692	0.697	0.993	drs	0.656	0.669	0.981	drs	0.644	0.648	0.994	drs	0.103	0.133	0.771	drs
VF	BEN	0.835	0.836	0.998	irs	0.783	0.788	0.994	irs	0.732	0.746	0.982	irs	0.351	0.450	0.781	drs
RCPB	BF	0.629	0.656	0.958	drs	0.632	0.656	0.963	drs	0.418	0.427	0.978	drs	0.301	0.439	0.686	drs
Agrocapital	BOL	0.784	0.784	1.000	-	0.765	0.766	0.999	irs	0.692	0.696	0.994	irs	0.369	0.457	0.809	drs
BANCOSOL	BOL	0.757	0.857	0.883	drs	0.756	0.857	0.882	drs	0.672	0.742	0.906	drs	0.529	0.697	0.759	drs
Bnaco L A	BOL	0.827	0.948	0.873	drs	0.827	0.948	0.873	drs	0.629	0.699	0.900	drs	0.407	0.594	0.685	drs
CRECER	BOL	0.874	0.887	0.985	drs	0.850	0.888	0.957	drs	0.762	0.778	0.980	drs	0.450	0.665	0.676	drs
Eco Futuro	BOL	0.783	0.788	0.995	drs	0.781	0.788	0.991	drs	0.658	0.661	0.996	drs	0.401	0.565	0.710	drs
FADES	BOL	0.760	0.768	0.990	drs	0.756	0.764	0.990	drs	0.596	0.604	0.986	drs	0.278	0.378	0.735	drs
FIE	BOL	0.790	0.823	0.960	drs	0.793	0.823	0.964	drs	0.627	0.651	0.963	drs	0.394	0.577	0.682	drs
FunBodem	BOL	0.906	0.919	0.987	irs	0.905	0.919	0.985	irs	0.716	0.721	0.994	drs	0.367	0.390	0.939	drs
PRODEM	BOL	0.742	0.807	0.920	drs	0.727	0.807	0.902	drs	0.645	0.672	0.960	drs	0.391	0.686	0.570	drs
ProMujar BOL	BOL	0.767	0.779	0.984	drs	0.709	0.729	0.972	drs	0.678	0.689	0.984	drs	0.301	0.403	0.747	drs
EKI	BOS	0.987	1.000	0.987	drs	0.996	1.000	0.996	drs	0.743	0.745	0.998	irs	0.704	0.793	0.888	drs
MIKROFIN	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.783	0.787	0.995	irs	0.951	0.951	1.000	-
PARTNER	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.786	0.788	0.997	irs	0.794	0.795	0.999	drs
SUNRISE	BOS	1.000	1.000	1.000	-	0.995	1.000	0.995	drs	0.938	0.944	0.993	irs	0.811	0.945	0.859	drs
CDS	CAM	0.599	0.599	1.000	-	0.583	0.583	0.999	irs	0.519	0.523	0.993	drs	0.304	0.390	0.779	drs
CMM Bog	COL	0.951	0.977	0.973	drs	0.934	0.970	0.963	drs	0.789	0.800	0.986	drs	0.415	0.679	0.612	drs
Finamerica	COL	0.850	0.897	0.948	drs	0.850	0.897	0.948	drs	0.637	0.644	0.989	drs	0.334	0.544	0.613	drs
FMM Buca	COL	0.936	0.944	0.992	drs	0.923	0.988	0.935	drs	0.859	0.867	0.990	drs	0.631	0.910	0.693	drs
FMM Pop	COL	0.983	0.994	0.988	drs	0.955	0.992	0.963	drs	0.882	0.900	0.981	drs	0.563	0.818	0.688	drs
WMM Med	COL	0.934	0.942	0.992	drs	0.925	0.942	0.981	drs	0.787	0.794	0.991	drs	0.481	0.653	0.736	drs
WWB Ca	COL	0.991	1.000	0.991	drs	0.972	1.000	0.972	drs	0.899	0.938	0.958	drs	0.631	0.860	0.734	drs
ACLEDA	COM	0.710	0.793	0.896	drs	0.691	0.793	0.872	drs	0.616	0.665	0.927	drs	0.377	0.634	0.596	drs
AMRET	COM	0.852	0.868	0.982	drs	0.757	0.803	0.943	drs	0.837	0.849	0.985	drs	0.460	0.618	0.744	drs
CEB	COM	0.949	0.950	0.998	drs	0.904	0.915	0.989	drs	0.850	0.850	1.000	-	0.384	0.417	0.920	drs
HKL	COM	0.878	0.881	0.997	drs	0.838	0.841	0.996	irs	0.754	0.759	0.993	drs	0.408	0.445	0.916	drs
PRASAC	COM	0.842	0.853	0.988	drs	0.785	0.814	0.965	drs	0.745	0.750	0.993	drs	0.334	0.414	0.806	drs
CrediMujer	CR	1.000	1.000	1.000	-	0.847	1.000	0.847	irs	1.000	1.000	1.000	-	0.396	1.000	0.396	irs
Banco Sol	ECU	0.963	1.000	0.963	drs	0.850	1.000	0.850	drs	0.963	1.000	0.963	drs	0.795	1.000	0.795	drs
COAC Jardin	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.756	0.798	0.948	drs	0.602	0.641	0.939	drs
Coac S Jose	ECU	0.916	0.927	0.988	irs	0.916	0.927	0.988	irs	0.565	0.586	0.964	irs	0.439	0.440	0.998	irs
COAC SAC	ECU	0.862	0.900	0.957	irs	0.862	0.900	0.957	irs	0.652	0.674	0.966	irs	0.417	0.426	0.978	drs
D-Miro	ECU	0.912	0.922	0.989	drs	0.858	0.887	0.968	drs	0.845	0.856	0.987	drs	0.476	0.713	0.668	drs
FINCA ECU	ECU	1.000	1.000	1.000	-	0.919	1.000	0.919	drs	0.952	0.958	0.993	drs	0.578	0.923	0.626	drs
FODEMI	ECU	0.939	0.956	0.983	irs	0.942	0.958	0.984	irs	0.687	0.691	0.994	drs	0.409	0.432	0.946	drs
Fundacion Es	ECU	0.968	0.983	0.984	drs	0.918	0.960	0.956	drs	0.879	0.896	0.981	drs	0.483	0.762	0.634	drs

ProCred ECU	ECU	0.903	0.943	0.957	drs	0.908	0.943	0.962	drs	0.639	0.660	0.969	drs	0.431	0.645	0.669	drs
Al Tadamun	EGY	0.861	0.870	0.989	drs	0.697	0.702	0.993	irs	0.861	0.867	0.992	drs	0.502	0.511	0.982	drs
DBACD	EGY	0.792	0.794	0.997	drs	0.626	0.641	0.978	drs	0.792	0.794	0.997	drs	0.598	0.641	0.934	drs
LEAD	EGY	0.469	0.469	0.998	drs	0.419	0.465	0.901	drs	0.469	0.469	0.998	drs	0.413	0.465	0.889	drs
AMC de RL	ELS	0.814	0.821	0.992	drs	0.780	0.780	0.999	-	0.730	0.736	0.992	drs	0.397	0.520	0.763	drs
Fundacion	ELS	0.790	0.854	0.925	irs	0.790	0.854	0.925	irs	0.598	0.603	0.992	irs	0.249	0.288	0.863	irs
ACSI	ETH	0.952	1.000	0.952	drs	0.981	1.000	0.981	drs	0.783	0.957	0.818	drs	0.927	1.000	0.927	drs
ADCSI	ETH	0.844	0.869	0.971	irs	0.844	0.869	0.971	irs	0.455	0.479	0.950	irs	0.196	0.206	0.953	irs
BG	ETH	0.658	0.661	0.995	irs	0.587	0.640	0.917	irs	0.595	0.595	0.999	-	0.336	0.420	0.800	irs
DECSI	ETH	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.970	1.000	0.970	drs
OMO	ETH	0.850	0.851	0.999	drs	0.851	0.852	1.000	-	0.465	0.465	1.000	-	0.382	0.389	0.981	drs
WISDOM	ETH	0.681	0.681	1.000	-	0.590	0.592	0.997	drs	0.681	0.681	1.000	-	0.590	0.592	0.997	drs
OI SASL	GHA	0.815	0.843	0.967	drs	0.741	0.842	0.879	drs	0.783	0.817	0.958	drs	0.425	0.782	0.544	drs
ProCred GHA	GHA	0.693	0.728	0.952	drs	0.687	0.727	0.945	drs	0.505	0.520	0.970	drs	0.256	0.492	0.521	drs
Sat	GHA	0.788	0.804	0.980	drs	0.725	0.769	0.943	drs	0.709	0.738	0.961	drs	0.344	0.575	0.598	drs
C FUND	GOE	1.000	1.000	1.000	-	0.712	0.728	0.977	irs	1.000	1.000	1.000	-	0.428	0.448	0.954	irs
Constanta	GOE	0.708	0.711	0.995	drs	0.617	0.628	0.983	drs	0.680	0.687	0.990	drs	0.296	0.395	0.750	drs
CREDO	GOE	0.853	0.858	0.993	irs	0.842	0.855	0.985	irs	0.624	0.633	0.985	drs	0.199	0.230	0.867	drs
SBDF	GOE	0.961	1.000	0.961	irs	0.940	1.000	0.940	irs	0.722	0.723	1.000	-	0.265	0.315	0.841	irs
Genesis Em	GUAT	0.924	0.969	0.954	drs	0.905	0.947	0.955	drs	0.742	0.758	0.978	drs	0.349	0.618	0.564	drs
ACME	HAI	0.960	0.960	0.999	irs	0.749	0.808	0.926	drs	0.960	0.960	0.999	irs	0.385	0.625	0.617	drs
Finca HON	HON	0.909	0.919	0.989	drs	0.845	0.849	0.996	drs	0.789	0.790	0.999	irs	0.352	0.540	0.651	drs
HDH	HON	0.881	0.891	0.989	irs	0.881	0.891	0.989	irs	0.320	0.320	0.999	-	0.002	0.003	0.654	drs
World Rel	HON	0.910	0.927	0.981	drs	0.841	0.856	0.983	drs	0.844	0.867	0.974	drs	0.413	0.590	0.699	drs
BANDHAN	IND	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.777	0.813	0.955	drs	0.708	0.801	0.883	drs
BASIX	IND	0.806	0.857	0.940	drs	0.790	0.853	0.926	drs	0.637	0.652	0.977	drs	0.344	0.522	0.659	drs
Cashpoor	IND	0.757	0.801	0.945	drs	0.752	0.801	0.939	drs	0.562	0.563	0.998	drs	0.275	0.322	0.856	drs
ESAF	IND	0.932	0.953	0.978	drs	0.937	0.953	0.984	drs	0.624	0.624	1.000	-	0.449	0.490	0.916	drs
GK	IND	0.855	0.857	0.998	drs	0.817	0.830	0.984	drs	0.793	0.793	1.000	-	0.557	0.608	0.916	drs
KBSLAB	IND	0.619	0.619	0.999	drs	0.582	0.584	0.995	drs	0.566	0.566	1.000	-	0.265	0.285	0.929	drs
SHARE MF	IND	0.863	0.935	0.923	drs	0.863	0.935	0.923	drs	0.531	0.547	0.972	drs	0.308	0.467	0.659	drs
SNFL	IND	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.658	0.729	0.902	irs	0.273	0.303	0.900	irs
MBK Ventu	INDO	0.818	0.829	0.988	drs	0.682	0.729	0.936	irs	0.774	0.789	0.982	drs	0.314	0.363	0.865	irs
JMCC	JOR	0.847	0.851	0.996	irs	0.850	0.853	0.996	irs	0.657	0.663	0.992	drs	0.409	0.474	0.862	drs
MFW	JOR	0.920	0.920	1.000	-	0.912	0.913	0.999	irs	0.724	0.738	0.981	drs	0.384	0.565	0.681	drs
KLF	KAZ	0.794	0.801	0.992	drs	0.712	0.774	0.920	drs	0.794	0.801	0.992	drs	0.579	0.767	0.754	drs
EBS	KEN	0.639	0.691	0.924	drs	0.506	0.795	0.636	drs	0.639	0.691	0.924	drs	0.506	0.795	0.636	drs
Kadet	KEN	0.579	0.588	0.985	drs	0.533	0.537	0.991	irs	0.463	0.469	0.986	drs	0.090	0.148	0.610	drs
K-REP	KEN	0.721	0.755	0.955	drs	0.707	0.759	0.932	drs	0.627	0.636	0.986	drs	0.368	0.595	0.619	drs
KWFT	KEN	0.684	0.691	0.991	drs	0.619	0.654	0.946	drs	0.644	0.651	0.989	drs	0.334	0.497	0.671	drs
MDSL	KEN	0.993	1.000	0.993	irs	1.000	1.000	1.000	-	0.993	1.000	0.993	irs	1.000	1.000	1.000	-
SMEP	KEN	0.913	1.000	0.913	irs	1.000	1.000	1.000	-	0.612	0.621	0.985	irs	1.000	1.000	1.000	-
AIYL Bank	KYR	0.978	1.000	0.978	drs	0.978	1.000	0.978	drs	0.576	0.658	0.875	drs	0.057	0.075	0.756	drs
BTFF	KYR	0.839	0.839	1.000	-	0.687	0.692	0.993	drs	0.839	0.839	1.000	-	0.342	0.357	0.958	drs
FMCC	KYR	0.793	0.810	0.979	drs	0.743	0.793	0.937	drs	0.731	0.747	0.978	drs	0.418	0.609	0.686	drs
Kando Jagima	MALI	0.521	0.522	0.998	irs	0.521	0.522	0.998	irs	0.410	0.413	0.994	drs	0.234	0.274	0.854	drs
Soro Y	MALI	0.621	0.640	0.971	irs	0.621	0.640	0.971	irs	0.319	0.326	0.979	drs	0.057	0.068	0.845	drs
CreditMongol	MON	0.877	0.883	0.994	drs	0.803	0.822	0.977	irs	0.732	0.748	0.979	drs	0.237	0.266	0.891	drs
Khan Bank	MON	0.802	1.000	0.802	drs	0.754	1.000	0.754	drs	0.802	1.000	0.802	drs	0.669	1.000	0.669	drs
AL AMANA	MOR	0.897	1.000	0.897	drs	0.904	1.000	0.904	drs	0.564	0.665	0.849	drs	0.417	0.619	0.674	drs
Al Karama	MOR	0.822	0.824	0.998	drs	0.788	0.809	0.974	irs	0.674	0.689	0.978	drs	0.344	0.345	0.997	drs
Fondep	MOR	1.000	1.000	1.000	-	0.980	1.000	0.980	drs	1.000	1.000	1.000	-	0.863	1.000	0.863	drs
Inmaa	MOR	0.915	0.927	0.987	irs	0.902	0.933	0.967	irs	0.725	0.734	0.988	drs	0.382	0.390	0.981	drs
Zakoura	MOR	0.882	0.957	0.921	drs	0.882	0.957	0.921	drs	0.582	0.601	0.970	drs	0.292	0.475	0.614	drs
FCC	MOZ	0.821	0.825	0.995	irs	0.419	0.432	0.970	irs	0.821	0.825	0.995	irs	0.374	0.400	0.935	irs
NOVO BANCO	MOZ	1.000	1.000	1.000	-	0.846	1.000	0.846	drs	1.000	1.000	1.000	-	0.541	1.000	0.541	drs
SOCREMO	MOZ	0.811	0.846	0.959	drs	0.737	0.775	0.952	drs	0.750	0.750	1.000	-	0.281	0.545	0.516	drs
TCHUMA	MOZ	0.926	0.944	0.981	drs	0.791	0.795	0.996	irs	0.894	0.896	0.998	irs	0.359	0.478	0.750	drs
CBB	NEP	0.637	0.851	0.749	irs	0.586	0.813	0.721	irs	0.637	0.849	0.751	irs	0.551	0.802	0.686	irs
NIRDHAN	NEP	0.705	0.706	0.999	irs	0.704	0.704	0.999	irs	0.545	0.545	1.000	-	0.313	0.321	0.975	drs
ACODEP	NIC	1.000	1.000	1.000	-	0.868	1.000	0.868	drs	1.000	1.000	1.000	-	0.711	1.000	0.711	drs

<b>FDL</b>	<b>NIC</b>	0.826	0.837	0.988	drs	0.803	0.838	0.957	drs	0.746	0.759	0.984	drs	0.491	0.688	0.715	drs
<b>FINDESA</b>	<b>NIC</b>	1.000	1.000	1.000	-	0.864	1.000	0.864	drs	1.000	1.000	1.000	-	0.792	1.000	0.792	drs
<b>ProCred NIC</b>	<b>NIC</b>	0.815	0.851	0.958	drs	0.781	0.842	0.927	drs	0.736	0.743	0.990	drs	0.435	0.668	0.651	drs
<b>Prodesa</b>	<b>NIC</b>	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
<b>LAPO</b>	<b>NIG</b>	0.849	0.874	0.972	drs	0.767	0.864	0.888	drs	0.762	0.792	0.962	drs	0.408	0.675	0.604	drs
<b>SEAP</b>	<b>NIG</b>	0.980	1.000	0.980	irs	0.754	1.000	0.754	irs	0.980	1.000	0.980	irs	0.483	1.000	0.483	irs
<b>ASASAH</b>	<b>PAK</b>	0.438	0.442	0.991	drs	0.400	0.403	0.993	irs	0.354	0.358	0.989	drs	0.022	0.023	0.954	drs
<b>FMBL</b>	<b>PAK</b>	0.493	0.493	1.000	-	0.392	0.398	0.984	drs	0.493	0.493	1.000	-	0.232	0.266	0.872	drs
<b>KASHF</b>	<b>PAK</b>	0.779	0.787	0.991	drs	0.748	0.768	0.973	drs	0.698	0.702	0.993	drs	0.451	0.524	0.861	drs
<b>FIELCO</b>	<b>PAR</b>	0.961	0.980	0.981	drs	0.708	0.804	0.880	drs	0.961	0.980	0.981	drs	0.516	0.798	0.646	drs
<b>Interfisa</b>	<b>PAR</b>	0.990	1.000	0.990	drs	0.778	0.868	0.896	drs	0.990	1.000	0.990	drs	0.587	0.867	0.677	drs
<b>Bantra</b>	<b>PER</b>	1.000	1.000	1.000	-	0.843	1.000	0.843	drs	1.000	1.000	1.000	-	0.479	1.000	0.479	drs
<b>Caja Nor</b>	<b>PER</b>	0.775	0.788	0.983	drs	0.730	0.780	0.936	drs	0.702	0.715	0.982	drs	0.387	0.594	0.652	drs
<b>Caritas</b>	<b>PER</b>	0.926	0.944	0.981	drs	0.853	0.856	0.997	irs	0.777	0.796	0.977	drs	0.231	0.387	0.597	drs
<b>CMAC Arq</b>	<b>PER</b>	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
<b>CMAC May</b>	<b>PER</b>	0.892	0.898	0.993	drs	0.806	0.842	0.957	drs	0.860	0.865	0.994	drs	0.499	0.716	0.697	drs
<b>CMAC Tac</b>	<b>PER</b>	0.868	0.886	0.980	drs	0.842	0.853	0.987	drs	0.780	0.806	0.968	drs	0.572	0.643	0.890	drs
<b>CMAC Tru</b>	<b>PER</b>	0.932	1.000	0.932	drs	0.895	1.000	0.895	drs	0.871	0.914	0.952	drs	0.740	0.844	0.876	drs
<b>Edpy. C Tac</b>	<b>PER</b>	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
<b>Edpy. Cofian</b>	<b>PER</b>	0.756	0.762	0.992	drs	0.705	0.724	0.974	drs	0.701	0.706	0.993	drs	0.184	0.254	0.722	drs
<b>EDPY.Edyf</b>	<b>PER</b>	0.905	0.915	0.989	drs	0.811	0.868	0.934	drs	0.845	0.858	0.986	drs	0.288	0.491	0.588	drs
<b>FINCA PER</b>	<b>PER</b>	0.927	0.930	0.997	irs	0.678	0.690	0.983	irs	0.927	0.930	0.997	irs	0.332	0.363	0.914	drs
<b>Fondesurco</b>	<b>PER</b>	0.970	0.971	0.999	drs	0.918	0.964	0.952	irs	0.854	0.858	0.995	drs	0.271	0.304	0.892	irs
<b>MiBanco</b>	<b>PER</b>	0.947	1.000	0.947	drs	0.839	1.000	0.839	drs	0.915	1.000	0.915	drs	0.605	1.000	0.605	drs
<b>Movim. M R</b>	<b>PER</b>	0.915	0.921	0.994	drs	0.825	0.843	0.979	irs	0.829	0.831	0.998	irs	0.342	0.397	0.863	drs
<b>ProMujar PER</b>	<b>PER</b>	0.982	1.000	0.982	drs	0.888	0.891	0.997	drs	0.918	0.944	0.973	drs	0.416	0.570	0.729	drs
<b>ASHI</b>	<b>PHI</b>	0.736	0.750	0.982	drs	0.639	0.641	0.996	irs	0.697	0.704	0.990	drs	0.316	0.396	0.800	drs
<b>Bangko Ka</b>	<b>PHI</b>	0.565	0.579	0.976	drs	0.490	0.563	0.871	drs	0.565	0.579	0.976	drs	0.490	0.563	0.871	drs
<b>BCB</b>	<b>PHI</b>	0.862	0.864	0.998	drs	0.709	0.711	0.998	drs	0.862	0.864	0.998	drs	0.592	0.619	0.957	drs
<b>CBMO</b>	<b>PHI</b>	0.752	0.752	1.000	-	0.727	0.730	0.996	drs	0.717	0.717	1.000	-	0.522	0.569	0.917	drs
<b>DIGOS</b>	<b>PHI</b>	0.690	0.693	0.996	drs	0.637	0.640	0.996	irs	0.659	0.663	0.994	drs	0.417	0.453	0.921	drs
<b>Ist Valley</b>	<b>PHI</b>	0.812	0.815	0.996	drs	0.801	0.826	0.970	drs	0.766	0.773	0.992	drs	0.606	0.766	0.791	drs
<b>NWFT</b>	<b>PHI</b>	0.759	0.780	0.972	drs	0.661	0.757	0.873	drs	0.721	0.748	0.963	drs	0.366	0.632	0.578	drs
<b>SOLANO</b>	<b>PHI</b>	0.750	0.751	1.000	-	0.636	0.703	0.905	irs	0.750	0.751	1.000	-	0.636	0.703	0.905	irs
<b>TSPI</b>	<b>PHI</b>	0.860	0.925	0.930	drs	0.754	0.915	0.823	drs	0.852	0.916	0.930	drs	0.485	0.895	0.541	drs
<b>FORUS</b>	<b>RUS</b>	0.621	0.652	0.952	drs	0.613	0.644	0.952	drs	0.509	0.513	0.992	drs	0.231	0.363	0.638	drs
<b>SEF-ZAF</b>	<b>SA</b>	0.899	0.970	0.926	drs	0.822	0.872	0.942	drs	0.830	0.889	0.934	drs	0.399	0.643	0.621	drs
<b>SPBD</b>	<b>SAM</b>	0.708	0.713	0.993	irs	0.610	0.683	0.892	irs	0.650	0.653	0.995	irs	0.112	0.142	0.789	irs
<b>CMS</b>	<b>SEN</b>	0.647	0.658	0.983	drs	0.590	0.631	0.935	drs	0.613	0.616	0.994	drs	0.387	0.477	0.811	drs
<b>Pamecas</b>	<b>SEN</b>	0.622	0.632	0.985	drs	0.618	0.648	0.954	drs	0.548	0.551	0.993	drs	0.370	0.539	0.686	drs
<b>Agroinvest</b>	<b>TAJ</b>	0.594	0.632	0.940	drs	0.594	0.632	0.941	drs	0.350	0.374	0.934	drs	0.205	0.284	0.722	drs
<b>Bank Eskhata</b>	<b>TAJ</b>	0.922	0.924	0.997	drs	0.684	0.776	0.882	drs	0.922	0.924	0.997	drs	0.684	0.776	0.882	drs
<b>FMFB TAJ</b>	<b>TAJ</b>	0.593	0.593	1.000	-	0.492	0.496	0.990	drs	0.593	0.593	1.000	-	0.188	0.207	0.909	drs
<b>IMON</b>	<b>TAJ</b>	1.000	1.000	1.000	-	0.874	0.876	0.998	irs	0.981	0.983	0.997	drs	0.440	0.485	0.909	drs
<b>Microinvest</b>	<b>TAJ</b>	0.927	0.928	0.999	irs	0.780	0.818	0.953	irs	0.921	0.922	0.999	irs	0.424	0.473	0.895	irs
<b>PRIDE</b>	<b>TAN</b>	0.904	0.977	0.925	drs	0.870	0.939	0.926	drs	0.760	0.784	0.970	drs	0.351	0.687	0.511	drs
<b>Enda</b>	<b>TUN</b>	0.905	0.918	0.986	drs	0.839	0.900	0.932	drs	0.869	0.888	0.979	drs	0.548	0.764	0.718	drs
<b>CERUDEB</b>	<b>UGA</b>	0.527	0.571	0.923	drs	0.528	0.572	0.922	drs	0.364	0.369	0.986	drs	0.241	0.424	0.569	drs
<b>CMFL</b>	<b>UGA</b>	0.835	0.843	0.990	drs	0.758	0.791	0.958	drs	0.770	0.770	1.000	-	0.326	0.617	0.528	drs
<b>FAULU</b>	<b>UGA</b>	0.638	0.652	0.978	drs	0.516	0.520	0.992	drs	0.634	0.643	0.986	drs	0.190	0.315	0.603	drs
<b>FINCA UGA</b>	<b>UGA</b>	0.845	0.924	0.914	drs	0.690	0.799	0.863	drs	0.845	0.924	0.914	drs	0.409	0.736	0.556	drs
<b>BanGente</b>	<b>VEN</b>	0.975	0.975	1.000	-	0.840	0.923	0.910	drs	0.953	0.954	0.999	drs	0.508	0.811	0.627	drs
<b>CEP</b>	<b>VIET</b>	0.801	0.803	0.997	drs	0.792	0.803	0.987	drs	0.683	0.688	0.993	drs	0.461	0.544	0.847	drs
<b>TYM</b>	<b>VIET</b>	0.701	0.704	0.996	irs	0.686	0.699	0.982	irs	0.578	0.578	1.000	-	0.362	0.365	0.994	drs
<b>CETZAM</b>	<b>ZAM</b>	1.000	1.000	1.000	-	0.795	0.822	0.966	irs	1.000	1.000	1.000	-	0.266	0.277	0.962	drs
<b>FINCA ZAM</b>	<b>ZAM</b>	0.916	0.917	0.999	irs	0.558	0.623	0.896	drs	0.916	0.917	0.999	irs	0.531	0.623	0.852	drs
<b>MEAN</b>		<b>0.835</b>	<b>0.859</b>	<b>0.973</b>		<b>0.776</b>	<b>0.823</b>	<b>0.944</b>		<b>0.732</b>	<b>0.751</b>	<b>0.976</b>		<b>0.428</b>	<b>0.561</b>	<b>0.773</b>	

## Appendix F

## Efficiencies DEA for treating Subsidy as an input for 2006

MFIs	Cou	LR-ACE				LR-ACES <sup>1</sup>				L-ACE				L-ACES <sup>1</sup>				R-ACE				R-ACES <sup>1</sup>			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
		ARMP	AFG	0.793	0.794	0.998	irs	0.793	0.794	0.998	irs	0.793	0.794	0.998	irs	0.793	0.794	0.998	irs	0.639	0.639	0.999	-	0.640	0.642
BRAC AFG	AFG	0.644	0.671	0.960	drs	0.644	0.671	0.960	drs	0.627	0.638	0.984	drs	0.627	0.638	0.984	drs	0.449	0.494	0.909	drs	0.449	0.494	0.909	
MFB AFG	AFG	0.604	0.605	0.998	drs	0.606	0.607	0.999	-	0.510	0.517	0.986	drs	0.510	0.517	0.986	drs	0.596	0.597	0.999	irs	0.596	0.597	0.999	
BESA	ALB	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.970	0.980	0.990	irs	1.000	1.000	1.000	
CoCred ALB	ALB	0.841	0.842	0.998	irs	1.000	1.000	1.000	-	0.472	0.743	0.635	drs	1.000	1.000	1.000	-	0.841	0.842	0.998	irs	1.000	1.000	1.000	
PSHM	ALB	0.887	0.888	0.999	irs	0.887	0.888	0.999	irs	0.877	0.879	0.998	drs	0.877	0.879	0.998	drs	0.859	0.866	0.992	irs	0.859	0.866	0.992	
ovoBanco	ANG	0.743	0.743	1.000	-	0.743	0.743	1.000	-	0.492	0.493	0.998	irs	0.492	0.493	0.998	irs	0.743	0.743	1.000	-	0.743	0.743	1.000	
ACBA	ARM	0.867	0.890	0.974	drs	0.867	0.890	0.974	drs	0.700	0.822	0.852	drs	0.700	0.822	0.852	drs	0.867	0.877	0.989	drs	0.867	0.877	0.989	
HORIZON	ARM	0.936	0.956	0.979	drs	1.000	1.000	1.000	-	0.797	0.819	0.973	irs	0.797	0.878	0.908	irs	0.917	0.935	0.981	drs	1.000	1.000	1.000	
INECO	ARM	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.625	0.634	0.985	drs	0.652	0.663	0.984	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	
RED AGRO	AZE	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.831	0.835	0.995	irs	0.831	0.839	0.991	
MFBA	AZE	0.831	0.869	0.957	drs	0.831	0.869	0.957	drs	0.831	0.869	0.957	drs	0.831	0.869	0.957	drs	0.609	0.621	0.982	drs	0.609	0.621	0.982	
FORMICRO	AZE	0.980	0.986	0.994	irs	0.980	0.986	0.994	irs	0.946	0.966	0.979	irs	0.946	0.966	0.979	irs	0.812	0.817	0.994	drs	0.812	0.817	0.994	
Viator	AZE	0.958	0.965	0.993	drs	1.000	1.000	1.000	-	0.844	0.857	0.985	irs	0.844	0.864	0.977	irs	0.922	0.938	0.984	drs	0.948	0.959	0.988	
ASA	BAN	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.850	1.000	0.850	drs	0.850	1.000	0.850	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	
RAC BAN	BAN	0.914	1.000	0.914	drs	0.914	1.000	0.914	drs	0.618	1.000	0.618	drs	0.618	1.000	0.618	drs	0.914	1.000	0.914	drs	0.914	1.000	0.914	
RDRS	BAN	0.578	0.578	0.999	irs	0.578	0.578	0.999	irs	0.543	0.552	0.984	drs	0.543	0.552	0.984	drs	0.514	0.522	0.984	irs	0.514	0.522	0.984	
TMSS	BAN	0.705	0.730	0.967	drs	0.705	0.730	0.967	drs	0.703	0.727	0.966	drs	0.703	0.727	0.966	drs	0.583	0.589	0.990	drs	0.583	0.589	0.990	
TECECAM	BEN	0.491	0.512	0.959	drs	0.491	0.512	0.959	drs	0.457	0.479	0.954	drs	0.457	0.479	0.954	drs	0.438	0.452	0.968	drs	0.438	0.452	0.968	
ALIDE	BEN	0.760	0.854	0.890	irs	0.760	0.854	0.890	irs	0.744	0.854	0.872	irs	0.744	0.854	0.872	irs	0.474	0.478	0.992	drs	0.482	0.485	0.993	
PADME	BEN	0.718	0.719	0.999	irs	0.718	0.719	0.999	irs	0.656	0.669	0.980	drs	0.656	0.669	0.980	drs	0.718	0.719	0.999	irs	0.718	0.719	0.999	
VF	BEN	0.835	0.836	0.998	irs	0.835	0.836	0.998	irs	0.782	0.785	0.996	irs	0.782	0.785	0.996	irs	0.744	0.767	0.970	irs	0.744	0.767	0.970	
Agrocapiatal	BOL	0.785	0.785	1.000	-	0.785	0.785	1.000	-	0.766	0.766	0.999	-	0.766	0.766	0.999	-	0.760	0.769	0.989	irs	0.760	0.769	0.989	
ANCOSOL	BOL	0.799	0.857	0.933	drs	1.000	1.000	1.000	-	0.752	0.857	0.878	drs	1.000	1.000	1.000	-	0.791	0.814	0.972	drs	1.000	1.000	1.000	
Snaco LA	BOL	0.829	0.948	0.875	drs	0.834	0.948	0.880	drs	0.827	0.948	0.872	drs	0.831	0.948	0.877	drs	0.718	0.757	0.948	drs	0.725	0.757	0.958	
Co Futuro	BOL	0.784	0.788	0.996	drs	0.802	0.802	1.000	-	0.782	0.786	0.996	drs	0.801	0.802	1.000	-	0.696	0.697	0.998	irs	0.705	0.709	0.995	
FADES	BOL	0.767	0.768	0.999	drs	0.767	0.768	0.999	drs	0.766	0.766	1.000	-	0.766	0.766	1.000	-	0.605	0.606	0.999	drs	0.605	0.606	0.999	
FIE	BOL	0.794	0.823	0.965	drs	0.807	0.823	0.980	drs	0.786	0.823	0.955	drs	0.801	0.823	0.972	drs	0.701	0.718	0.975	drs	0.718	0.721	0.996	
UnBodem	BOL	0.913	0.922	0.990	irs	0.913	0.922	0.990	irs	0.913	0.922	0.990	irs	0.913	0.922	0.990	irs	0.734	0.743	0.988	irs	0.734	0.743	0.988	
PRODEM	BOL	0.743	0.807	0.921	drs	0.783	0.979	0.799	drs	0.725	0.807	0.898	drs	0.779	0.863	0.903	drs	0.677	0.701	0.965	drs	0.685	0.966	0.709	
Mujar BOL	BOL	0.774	0.782	0.990	drs	0.774	0.782	0.990	drs	0.740	0.741	0.999	irs	0.740	0.741	0.999	irs	0.684	0.694	0.986	drs	0.685	0.694	0.988	
CDS	CAM	0.600	0.600	0.999	-	0.604	0.605	1.000	-	0.584	0.585	0.998	irs	0.584	0.585	0.998	irs	0.541	0.543	0.996	irs	0.543	0.547	0.993	
CMM Bog	COL	0.952	0.978	0.974	drs	0.965	0.978	0.986	drs	0.931	0.946	0.984	drs	0.931	0.946	0.984	drs	0.800	0.802	0.997	drs	0.808	0.808	1.000	
América	COL	0.854	0.897	0.952	drs	0.854	0.897	0.952	drs	0.854	0.897	0.952	drs	0.854	0.897	0.952	drs	0.667	0.668	1.000	-	0.667	0.668	1.000	
CMM Pop	COL	0.990	0.995	0.995	drs	1.000	1.000	1.000	-	0.943	0.981	0.960	drs	0.954	1.000	0.954	drs	0.960	0.974	0.985	drs	0.982	0.987	0.995	
CMM Med	COL	0.935	0.942	0.993	drs	0.939	0.947	0.991	drs	0.928	0.938	0.990	drs	0.928	0.939	0.988	drs	0.819	0.821	0.998	drs	0.828	0.830	0.997	
WWB Ca	COL	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.968	1.000	0.968	drs	0.970	1.000	0.970	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	
ACLEDA	COM	0.715	0.793	0.902	drs	0.717	0.798	0.899	drs	0.695	0.793	0.876	drs	0.699	0.798	0.875	drs	0.656	0.687	0.955	drs	0.669	0.707	0.947	
AMRET	COM	0.860	0.879	0.979	drs	0.895	0.898	0.997	drs	0.748	0.749	1.000	-	0.748	0.749	1.000	-	0.847	0.854	0.991	drs	0.849	0.854	0.994	
CEB	COM	0.972	0.985	0.987	irs	0.972	0.985	0.987	irs	0.921	0.921	1.000	-	0.921	0.921	1.000	-	0.925	0.926	0.998	irs	0.925	0.928	0.997	
HKL	COM	0.887	0.888	1.000	-	0.888	0.888	1.000	-	0.864	0.870	0.993	irs	0.864	0.870	0.993	irs	0.763	0.765	0.998	drs	0.766	0.768	0.998	
PRASAC	COM	0.845	0.855	0.989	drs	0.845	0.855	0.989	drs	0.815	0.815	1.000	-	0.815	0.815	1.000	-	0.764	0.766	0.998	drs	0.764	0.766	0.998	
RediMujer	CR	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.810	1.000	0.810	irs	0.810	1.000	0.810	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	
Banco Sol	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.781	1.000	0.781	drs	0.781	1.000	0.781	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	
OAC Jardin	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	
Oac S Jose	ECU	0.916	0.927	0.988	irs	0.920	0.934	0.985	irs	0.916	0.927	0.988	irs	0.920	0.934	0.985	irs	0.780	0.814	0.959	irs	0.780	0.816	0.956	
OAC SAC	ECU	0.862	0.900	0.957	irs	0.862	0.900	0.957	irs	0.862	0.900	0.957	irs	0.862	0.900	0.957	irs	0.705	0.729	0.967	irs	0.705	0.729	0.967	
DBACD	EGY	0.946	0.951	0.994	drs	1.000	1.000	1.000	-	0.586	0.595	0.985	drs	0.644	0.702	0.918	irs	0.946	0.951	0.994	drs	1.000	1.000	1.000	
MC de RL	ELS	0.814	0.822	0.990	drs	0.826	0.828	0.998	drs	0.774	0.776	0.997	irs	0.774	0.776	0.997	irs	0.737	0.738	0.999	drs	0.737	0.738	0.999	
Fundacion	ELS	0.791	0.854	0.925	irs	0.791	0.854	0.925	irs	0.791	0.854	0.925	irs	0.791	0.854	0.925	irs	0.648	0.691	0.937	irs	0.648	0.691	0.937	
ADCSI	ETH	0.895	0.969	0.924	irs	0.895	0.969	0.924	irs	0.895	0.969	0.924	irs	0.895	0.969	0.924	irs	0.675	0.696	0.970	irs	0.687	0.710	0.968	
BG	ETH	0.665	0.670	0.992	irs	0.706	1.000	0.706	irs	0.629	0.667	0.944	irs	0.648	1.000	0.648	irs	0.599	0.606	0.988	irs	0.617	1.000	0.617	
Sat	GHA	0.791	0.816	0.970	drs	0.882	0.899	0.980	drs	0.696	0														



Global Market Performance Report - Q3 2023																								
North America					Europe					Asia Pacific					Latin America									
Region	Country	Market Cap	Revenue	Profit	Market Cap	Revenue	Profit	Market Cap	Revenue	Profit	Market Cap	Revenue	Profit	Market Cap	Revenue	Profit	Market Cap	Revenue	Profit					
Inca HON	HON	0.911	0.925	0.985	drs	0.983	0.983	0.999	drs	0.817	0.824	0.991	irs	0.817	0.824	0.991	irs	0.795	0.830	0.958	drs	0.921	0.922	0.999
HDH	HON	0.917	0.925	0.991	irs	0.917	0.925	0.991	irs	0.917	0.925	0.991	irs	0.917	0.925	0.991	irs	0.309	0.331	0.933	drs	0.324	0.334	0.968
World Rel	HON	0.912	0.930	0.980	drs	0.938	0.949	0.989	drs	0.822	0.825	0.996	irs	0.822	0.825	0.996	irs	0.847	0.875	0.969	drs	0.876	0.888	0.986
BASIX	IND	0.836	0.857	0.975	drs	0.836	0.857	0.975	drs	0.833	0.853	0.976	drs	0.833	0.853	0.976	drs	0.642	0.654	0.983	drs	0.647	0.654	0.990
Cashpoor	IND	0.802	0.803	0.999	drs	0.802	0.803	0.999	drs	0.802	0.803	0.999	drs	0.802	0.803	0.999	drs	0.580	0.582	0.997	drs	0.584	0.587	0.996
KBSLAB	IND	0.632	0.642	0.985	irs	0.632	0.642	0.985	irs	0.592	0.594	0.997	irs	0.592	0.595	0.995	irs	0.612	0.614	0.997	irs	0.617	0.624	0.988
HARE MF	IND	0.889	0.935	0.950	drs	0.894	0.935	0.956	drs	0.889	0.935	0.950	drs	0.894	0.935	0.956	drs	0.562	0.570	0.986	drs	0.577	0.587	0.982
SNFL	IND	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.964	1.000	0.964	irs	0.967	1.000	0.967
BK Ventu	INDO	0.827	0.828	0.998	drs	0.840	0.841	0.999	-	0.718	0.756	0.949	irs	0.718	0.768	0.935	irs	0.774	0.791	0.979	drs	0.796	0.812	0.979
MFW	JOR	0.924	0.925	1.000	-	1.000	1.000	1.000	-	0.903	0.907	0.996	irs	0.907	0.942	0.963	irs	0.731	0.743	0.983	drs	0.833	0.859	0.971
Kadet	KEN	0.581	0.589	0.987	drs	0.581	0.589	0.987	drs	0.547	0.551	0.993	irs	0.547	0.551	0.993	irs	0.463	0.485	0.955	drs	0.466	0.496	0.940
K-REP	KEN	0.721	0.755	0.955	drs	0.730	0.811	0.900	drs	0.704	0.745	0.945	drs	0.704	0.775	0.909	drs	0.654	0.661	0.989	drs	0.656	0.668	0.982
KWFT	KEN	0.693	0.696	0.996	drs	0.693	0.696	0.996	drs	0.617	0.642	0.960	drs	0.617	0.642	0.960	drs	0.669	0.671	0.997	drs	0.669	0.671	0.997
SMEP	KEN	0.913	1.000	0.913	irs	0.913	1.000	0.913	irs	0.913	1.000	0.913	irs	0.913	1.000	0.913	irs	0.604	0.621	0.972	irs	0.604	0.621	0.972
IYL Bank	KYR	0.978	1.000	0.978	drs	0.978	1.000	0.978	drs	0.978	1.000	0.978	drs	0.978	1.000	0.978	drs	0.701	0.760	0.923	drs	0.701	0.760	0.923
BTFF	KYR	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.684	0.688	0.995	drs	0.684	0.688	0.995	drs	1.000	1.000	1.000	-	1.000	1.000	1.000
ndo Jagima	MALI	0.529	0.530	0.998	irs	0.529	0.530	0.998	irs	0.529	0.530	0.998	irs	0.529	0.530	0.998	irs	0.423	0.424	0.998	irs	0.424	0.427	0.992
Soro Y	MALI	0.652	0.665	0.980	irs	0.652	0.665	0.980	irs	0.652	0.665	0.980	irs	0.652	0.665	0.980	irs	0.317	0.329	0.963	drs	0.321	0.338	0.949
editMongol	MON	0.892	0.892	1.000	-	0.892	0.892	1.000	-	0.843	0.856	0.984	irs	0.843	0.856	0.984	irs	0.732	0.755	0.970	drs	0.732	0.763	0.960
L AMANA	MOR	0.897	1.000	0.897	drs	1.000	1.000	1.000	-	0.897	1.000	0.897	drs	1.000	1.000	1.000	-	0.659	0.751	0.877	drs	0.783	0.843	0.929
l Karama	MOR	0.833	0.839	0.994	irs	0.960	1.000	0.960	irs	0.787	0.807	0.975	irs	0.797	1.000	0.797	irs	0.674	0.691	0.975	drs	0.831	1.000	0.831
Zakoura	MOR	0.899	0.957	0.939	drs	0.899	0.957	0.939	drs	0.899	0.957	0.939	drs	0.899	0.957	0.939	drs	0.602	0.623	0.966	drs	0.602	0.623	0.966
FCC	MOZ	0.752	0.757	0.993	drs	0.862	0.864	0.997	drs	0.333	0.350	0.952	irs	0.333	0.354	0.942	irs	0.752	0.757	0.993	drs	0.862	0.864	0.997
OCREMO	MOZ	0.811	0.860	0.944	drs	0.850	0.863	0.985	drs	0.715	0.717	0.998	irs	0.715	0.717	0.998	irs	0.754	0.800	0.942	drs	0.812	0.819	0.992
TCHUMA	MOZ	0.927	0.939	0.988	drs	0.963	0.983	0.980	drs	0.770	0.782	0.985	irs	0.770	0.782	0.985	irs	0.864	0.895	0.965	drs	0.924	0.937	0.986
IRDHAN	NEP	0.730	0.734	0.994	irs	0.733	0.747	0.982	irs	0.705	0.706	0.998	drs	0.723	0.733	0.986	irs	0.616	0.631	0.977	irs	0.646	0.658	0.982
roCred NIC	NIC	0.816	0.851	0.959	drs	0.816	0.851	0.959	drs	0.778	0.833	0.934	drs	0.778	0.833	0.934	drs	0.791	0.792	0.998	irs	0.791	0.792	0.998
SEAP	NIG	0.925	1.000	0.925	irs	1.000	1.000	1.000	-	0.704	1.000	0.704	irs	0.704	1.000	0.704	irs	0.925	1.000	0.925	irs	1.000	1.000	1.000
ASASAH	PAK	0.461	0.464	0.993	irs	0.461	0.464	0.993	irs	0.455	0.460	0.987	irs	0.455	0.460	0.987	irs	0.354	0.360	0.985	drs	0.354	0.360	0.985
FMBL	PAK	0.528	0.528	1.000	-	0.531	0.532	0.998	irs	0.393	0.397	0.990	drs	0.393	0.397	0.990	drs	0.527	0.528	1.000	-	0.531	0.532	0.998
KASHF	PAK	0.791	0.792	0.998	irs	0.824	0.833	0.989	irs	0.755	0.767	0.984	drs	0.769	0.770	0.999	drs	0.747	0.747	1.000	-	0.782	0.786	0.995
FIELCO	PAR	0.969	0.984	0.984	drs	0.972	0.985	0.987	drs	0.658	0.661	0.995	drs	0.658	0.661	0.995	drs	0.969	0.984	0.984	drs	0.972	0.985	0.987
Interfisa	PAR	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.711	0.727	0.979	drs	0.957	0.971	0.986	irs	1.000	1.000	1.000	-	1.000	1.000	1.000
Bantra	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.801	1.000	0.801	drs	0.801	1.000	0.801	drs	1.000	1.000	1.000	-	1.000	1.000	1.000
Caja Nor	PER	0.777	0.789	0.985	drs	0.787	0.790	0.995	drs	0.726	0.756	0.960	drs	0.726	0.756	0.960	drs	0.714	0.729	0.980	drs	0.714	0.729	0.980
Caritas	PER	0.927	0.951	0.975	drs	0.928	0.951	0.976	drs	0.868	0.870	0.997	irs	0.868	0.870	0.997	irs	0.778	0.807	0.965	drs	0.778	0.811	0.960
MAC May	PER	0.916	0.916	0.999	-	0.916	0.916	0.999	-	0.775	0.800	0.969	drs	0.775	0.800	0.969	drs	0.912	0.913	0.999	irs	0.912	0.913	0.999
MAC Tac	PER	0.941	0.943	0.998	irs	0.941	0.943	0.998	irs	0.840	0.857	0.980	drs	0.840	0.857	0.980	drs	0.934	0.936	0.998	irs	0.934	0.936	0.998
MAC Tru	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.872	1.000	0.872	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000
py. C Tac	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000
py. Cofian	PER	0.769	0.769	0.999	drs	0.769	0.769	0.999	drs	0.705	0.724	0.974	drs	0.705	0.724	0.974	drs	0.762	0.762	1.000	-	0.762	0.762	1.000
DPY.Edyf	PER	0.910	0.915	0.994	drs	0.910	0.915	0.994	drs	0.815	0.868	0.938	drs	0.815	0.868	0.938	drs	0.887	0.888	0.999	drs	0.887	0.888	0.999
INCA PER	PER	0.870	0.882	0.986	drs	0.942	0.953	0.989	drs	0.661	0.678	0.975	irs	0.661	0.678	0.975	irs	0.864	0.880	0.981	drs	0.942	0.953	0.989
ondesurco	PER	0.973	0.973	1.000	-	0.973	0.973	1.000	-	0.928	0.965	0.962	irs	0.928	0.965	0.962	irs	0.862	0.875	0.985	irs	0.862	0.875	0.985
MiBanco	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.806	1.000	0.806	drs	0.806	1.000	0.806	drs	1.000	1.000	1.000	-	1.000	1.000	1.000
ovim. M R	PER	0.918	0.918	1.000	-	0.970	0.970	1.000	-	0.802	0.821	0.978	irs	0.802	0.821	0.978	irs	0.825	0.842	0.980	drs	0.912	0.924	0.987
oMujar PER	PER	0.991	1.000	0.991	drs	1.000	1.000	1.000	-	0.878	0.885	0.993	irs	0.878	0.885	0.993	irs	0.918	0.956	0.960	drs	0.937	0.966	0.970
ASHI	PHI	0.741	0.744	0.996	drs	0.824	0.841	0.980	drs	0.630	0.642	0.982	irs	0.630	0.659	0.956	irs	0.687	0.713	0.964	drs	0.784	0.792	0.989
FORUS	RUS	0.621	0.652	0.952	drs	0.621	0.652	0.952	drs	0.615	0.644	0.955	drs	0.615	0.644	0.955	drs	0.541	0.543	0.996	irs	0.541	0.543	0.996
SEF-ZAF	SA	0.902	0.998	0.904	drs	1.000	1.000	1.000	-	0.783	0.788	0.993	irs	0.783	0.788	0.993	irs	0.819	0.948	0.864	drs	0.982	0.994	0.988
SPBD	SAM	0.708	0.713	0.992	irs	0.708	0.713	0.992	irs	0.624	0.683	0.913	irs	0.624	0.683	0.913	irs	0.654	0.655	0.998	drs	0.654	0.655	0.998
CMS	SEN	0.697	0.697	1.000	-	0.697	0.697	1.000	-	0.591	0.636	0.929	drs	0.591	0.636	0.929	drs	0.694	0.695	0.999	irs	0.694	0.695	0.999
groinvest	TAJ	0.600	0.632	0.950	drs	0.617	0.632	0.976	drs	0.600	0.632	0.950	drs	0.617	0.632	0.976	drs	0.394	0.410	0.959	drs	0.412	0.422	0.976
MFBJ TAJ	TAJ	0.651	0.652	0.999	drs	0.651	0.652	0.999	drs	0.497	0.498	0.998	drs</											

SanGente	VEN	0.988	0.991	0.997	irs	0.988	0.991	0.997	irs	0.812	0.841	0.965	drs	0.812	0.841	0.965	drs	0.972	0.977	0.995	irs	0.975	0.979	0.995	irs
CETZAM	ZAM	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.810	0.834	0.971	irs	0.810	0.834	0.971	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
INCA ZAM	ZAM	0.801	0.900	0.889	drs	1.000	1.000	1.000	-	0.426	0.436	0.979	irs	0.426	0.451	0.946	irs	0.801	0.900	0.889	drs	1.000	1.000	1.000	-
Mean		0.844	0.864	0.977		0.864	0.881	0.981		0.758	0.793	0.961		0.768	0.806	0.957		0.758	0.776	0.978		0.783	0.799	0.980	

## Appendix G. Efficiencies DEA for treating Subsidy as an output for 2006

MFIs	Cou	LR-ACE				LRS <sup>o</sup> -ACE				L-ACE				LS <sup>o</sup> -ACE				R-ACE				RS <sup>o</sup> -ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
JURO TANGAIL	BAN	0.894	0.954	0.937	drs	0.894	0.954	0.937	drs	0.751	0.912	0.824	drs	0.751	0.912	0.824	drs	0.788	0.789	0.999	irs	0.788	0.789	0.999	irs
IDF	BAN	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.706	0.745	0.947	irs	0.706	0.745	0.947	irs
SHAKTI	BAN	0.862	0.957	0.901	drs	0.862	0.957	0.901	drs	0.837	0.939	0.891	drs	0.837	0.939	0.891	drs	0.689	0.693	0.994	irs	0.689	0.693	0.994	irs
RCPB	BF	0.656	0.691	0.949	drs	0.656	0.697	0.940	drs	0.656	0.691	0.949	drs	0.656	0.697	0.940	drs	0.420	0.428	0.983	drs	0.420	0.446	0.942	drs
CRECER	BOL	0.918	0.931	0.986	drs	0.918	0.931	0.986	drs	0.881	0.883	0.997	drs	0.881	0.883	0.997	drs	0.778	0.778	1.000	-	0.778	0.778	1.000	-
EKI	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.743	0.747	0.995	irs	0.757	0.810	0.935	drs
MIKROFIN	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.783	0.795	0.985	irs	0.955	1.000	0.955	drs
PARTNER	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.786	0.791	0.994	irs	0.795	0.798	0.995	drs
SUNRISE	BOS	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.955	0.957	0.999	irs	0.961	0.961	1.000	-	0.938	0.946	0.991	irs	0.946	0.946	1.000	-
FMM Buca	COL	0.975	1.000	0.975	drs	0.975	1.000	0.975	drs	0.928	0.959	0.968	drs	0.929	0.989	0.939	drs	0.861	0.869	0.990	drs	0.861	0.937	0.919	drs
D-Miro	ECU	0.935	0.940	0.995	irs	0.935	0.940	0.995	irs	0.856	0.857	0.999	drs	0.859	0.860	0.998	irs	0.858	0.870	0.987	irs	0.858	0.870	0.987	irs
FINCA ECU	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.929	0.930	0.999	drs	0.930	0.930	1.000	-	0.958	0.959	1.000	-	0.958	0.959	1.000	-
FODEMI	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.698	0.728	0.959	irs	0.698	0.728	0.959	irs
Fundacion Es	ECU	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.897	0.898	0.999	drs	0.905	0.907	0.998	irs	0.898	0.910	0.987	irs	0.898	0.910	0.987	irs
ProCred ECU	ECU	0.940	1.000	0.940	drs	0.940	1.000	0.940	drs	0.940	1.000	0.940	drs	0.940	1.000	0.940	drs	0.642	0.676	0.949	drs	0.642	0.676	0.949	drs
Al Tadamun	EGY	0.884	0.942	0.938	irs	0.884	0.942	0.938	irs	0.670	0.712	0.942	irs	0.671	0.712	0.943	irs	0.884	0.942	0.938	irs	0.884	0.942	0.938	irs
LEAD	EGY	0.472	0.478	0.988	irs	0.476	0.478	0.995	irs	0.344	0.350	0.983	drs	0.387	0.432	0.896	drs	0.472	0.478	0.988	irs	0.476	0.478	0.995	irs
ACSI	ETH	0.994	1.000	0.994	drs	1.000	1.000	1.000	-	0.994	1.000	0.994	drs	1.000	1.000	1.000	-	0.788	0.974	0.809	drs	1.000	1.000	1.000	-
DECSI	ETH	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
OMO	ETH	0.859	0.874	0.983	irs	0.859	0.874	0.983	irs	0.859	0.874	0.983	irs	0.859	0.874	0.983	irs	0.467	0.468	0.998	irs	0.467	0.468	0.998	irs
WISDOM	ETH	0.684	0.685	0.999	irs	0.684	0.685	0.999	irs	0.367	0.371	0.987	irs	0.367	0.371	0.987	irs	0.684	0.685	0.999	irs	0.684	0.685	0.999	irs
IOI SASL	GHA	0.842	0.852	0.988	drs	0.842	0.852	0.988	drs	0.704	0.713	0.987	drs	0.709	0.723	0.981	drs	0.817	0.818	0.998	drs	0.817	0.818	0.998	drs
ProCred GHA	GHA	0.739	0.749	0.987	drs	0.739	0.749	0.987	drs	0.697	0.700	0.995	drs	0.697	0.700	0.995	drs	0.520	0.521	0.997	drs	0.520	0.521	0.997	drs
BANDHAN	IND	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.785	0.834	0.941	drs	0.785	0.854	0.919	drs
ESAF	IND	0.950	0.959	0.990	drs	0.950	0.959	0.990	drs	0.950	0.959	0.990	drs	0.950	0.959	0.990	drs	0.626	0.636	0.986	irs	0.626	0.636	0.986	irs
GK	IND	0.864	0.866	0.998	drs	0.864	0.866	0.998	drs	0.798	0.804	0.992	drs	0.798	0.804	0.992	drs	0.796	0.808	0.985	irs	0.796	0.808	0.985	irs
JMCC	JOR	0.910	0.914	0.996	drs	0.910	0.914	0.996	drs	0.902	0.903	0.999	drs	0.902	0.903	0.999	drs	0.666	0.677	0.984	irs	0.666	0.677	0.984	irs
KLF	KAZ	0.798	0.801	0.996	drs	0.798	0.801	0.996	drs	0.680	0.680	1.000	-	0.681	0.683	0.998	drs	0.798	0.801	0.996	drs	0.798	0.801	0.996	drs
EBS	KEN	0.639	1.000	0.639	drs	0.645	1.000	0.645	drs	0.389	0.559	0.695	drs	0.395	1.000	0.395	drs	0.639	1.000	0.639	drs	0.645	1.000	0.645	drs
MDSL	KEN	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.766	1.000	0.766	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
FMCC	KYR	0.809	0.828	0.977	drs	0.809	0.828	0.977	drs	0.754	0.773	0.976	drs	0.754	0.773	0.976	drs	0.748	0.748	1.000	-	0.748	0.748	1.000	-
Khan Bank	MON	0.802	1.000	0.802	drs	0.802	1.000	0.802	drs	0.748	1.000	0.748	drs	0.748	1.000	0.748	drs	0.802	1.000	0.802	drs	0.802	1.000	0.802	drs
Fondep	MOR	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.901	0.908	0.992	drs	0.948	1.000	0.948	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
Inmaa	MOR	0.972	1.000	0.972	irs	0.972	1.000	0.972	irs	0.894	1.000	0.894	irs	0.899	1.000	0.899	irs	0.744	0.806	0.923	irs	0.744	0.806	0.923	irs
NOVO BANCO	MOZ	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.765	0.766	0.998	drs	0.777	0.796	0.975	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
CBB	NEP	0.640	1.000	0.640	irs	0.640	1.000	0.640	irs	0.589	1.000	0.589	irs	0.589	1.000	0.589	irs	0.640	1.000	0.640	irs	0.640	1.000	0.640	irs
ACODEP	NIC	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.849	0.850	0.999	drs	0.856	0.864	0.990	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
FDL	NIC	0.863	0.883	0.977	drs	0.863	0.883	0.977	drs	0.823	0.837	0.983	drs	0.823	0.837	0.983	drs	0.752	0.762	0.987	drs	0.752	0.762	0.987	drs
FINDESA	NIC	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.803	0.869	0.924	drs	0.803	0.869	0.924	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
Prodesa	NIC	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-	1.000	1.000	1.000	-
LAPO	NIG	0.872	0.886	0.984	drs	0.872	0.886	0.984	drs	0.722	0.766	0.942	drs	0.724	0.767	0.944	drs	0.797	0.804	0.992	irs	0.797	0.804	0.992	irs
CMAC Arq	PER	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.898	1.000	0.898	drs	0.898	1.000	0.898	drs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
Bangko Ka	PHI	0.565	0.581	0.972	drs	0.565	0.585	0.966	drs	0.453	0.457	0.992	drs	0.455	0.458	0.994	drs	0.565	0.581	0.972	drs	0.565	0.585	0.966	drs
BCB	PHI	0.875	0.917	0.955	irs	0.875	0.917	0.955	irs	0.655	0.660	0.992	irs	0.668	0.675	0.989	irs	0.875	0.917	0.955	irs	0.875	0.917	0.955	irs
CBMO	PHI	0.765	0.775	0.987	irs	0.765	0.775	0.987	irs	0.708	0.708	1.000	-	0.716	0.717	0.999	irs	0.721	0.739	0.976	irs	0.721	0.739	0.976	irs
DIGOS	PHI	0.699	0.716	0.976	irs	0.699	0.716	0.976	irs	0.646	0.646	1.000	-	0.646	0.647	0.999	irs	0.668	0.686	0.974	irs	0.668	0.686	0.974	irs
Ist Valley	PHI	0.831	0.838	0.991	drs	0.833	0.838	0.993	drs	0.781	0.781	1.000	-	0.787	0.792	0.994	drs	0.771	0.773	0.998	drs	0.771	0.774	0.996	drs
NWFT	PHI	0.787	0.788	0.999	drs	0.																			

<b>Enda</b>	<b>TUN</b>	0.927	0.929	0.997	irs	0.927	0.929	0.997	irs	0.833	0.834	0.998	drs	0.841	0.841	1.000	-	0.890	0.895	0.994	irs	0.890	0.895	0.994
<b>CERUDEB</b>	<b>UGA</b>	0.568	0.628	0.904	drs	0.568	0.645	0.880	drs	0.565	0.627	0.901	drs	0.565	0.645	0.876	drs	0.366	0.497	0.736	drs	0.366	0.517	0.708
<b>CEP</b>	<b>VIET</b>	0.845	0.846	0.999	irs	0.846	0.847	0.999	irs	0.819	0.820	0.999	drs	0.822	0.822	0.999	irs	0.691	0.698	0.990	irs	0.691	0.698	0.990
<b>TYM</b>	<b>VIET</b>	0.721	0.766	0.941	irs	0.721	0.766	0.941	irs	0.701	0.766	0.915	irs	0.701	0.766	0.915	irs	0.583	0.621	0.940	irs	0.583	0.621	0.940
<b>Mean</b>		<b>.868</b>	<b>.901</b>	<b>.964</b>		<b>.868</b>	<b>.901</b>	<b>.964</b>		<b>0.778</b>	<b>0.825</b>	<b>0.946</b>		<b>0.786</b>	<b>0.839</b>	<b>0.941</b>		<b>0.765</b>	<b>0.801</b>	<b>0.958</b>		<b>0.773</b>	<b>0.809</b>	<b>0.958</b>

## Appendix H Malmquist DEA indices for 2006 relative to 2005

MFI	Cou	LR ACE					L ACE					R ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
ARMP	AFG	1.154	0.878	1.030	1.120	1.012	1.154	0.876	1.030	1.120	1.011	1.673	0.886	1.675	0.999	1.483
BRAC AFG	AFG	1.423	0.943	1.398	1.018	1.341	1.385	0.951	1.352	1.024	1.317	1.688	0.846	1.523	1.108	1.429
FMFB AFG	AFG	1.689	0.926	1.635	1.033	1.564	1.777	0.896	1.643	1.082	1.593	1.879	0.849	1.776	1.058	1.595
BESA	ALB	1.000	0.939	1.000	1.000	0.939	1.000	0.938	1.000	1.000	0.938	1.117	0.851	1.076	1.038	0.951
ProCred ALB	ALB	1.046	0.962	1.003	1.043	1.007	0.896	1.116	0.979	0.915	0.999	1.061	0.949	1.097	0.967	1.007
PSHM	ALB	1.136	0.918	1.030	1.103	1.043	1.133	0.906	1.024	1.107	1.027	1.293	0.879	1.269	1.019	1.137
NovoBanco	ANG	0.738	0.773	0.741	0.997	0.571	1.078	0.824	1.003	1.075	0.889	0.738	0.746	0.741	0.997	0.551
ACBA	ARM	1.107	0.995	1.142	0.970	1.102	1.123	0.982	1.157	0.971	1.102	1.035	0.995	1.144	0.905	1.030
HORIZON	ARM	1.058	0.939	0.994	1.064	0.993	1.150	0.841	1.053	1.092	0.966	1.179	0.841	0.972	1.214	0.992
INECO	ARM	0.825	1.066	0.926	0.891	0.879	1.037	0.992	1.034	1.002	1.029	0.825	1.066	0.926	0.891	0.879
CRED AGRO	AZE	1.144	0.950	1.120	1.021	1.086	1.144	0.950	1.120	1.021	1.086	1.154	0.945	1.111	1.039	1.090
MFBA	AZE	1.189	0.867	1.078	1.103	1.031	1.189	0.867	1.078	1.103	1.031	1.168	0.886	1.141	1.023	1.035
NORMICRO	AZE	1.076	0.899	1.017	1.058	0.967	1.289	0.836	1.270	1.015	1.078	1.045	0.842	0.885	1.180	0.880
Viator	AZE	1.071	0.938	1.048	1.022	1.005	1.172	0.852	1.173	1.000	0.999	1.198	0.842	1.113	1.076	1.009
ASA	BAN	0.982	0.977	1.000	0.982	0.960	0.955	1.009	1.000	0.955	0.964	0.974	0.967	1.000	0.974	0.942
BRAC BAN	BAN	1.070	0.954	1.025	1.044	1.021	0.869	0.983	1.025	0.848	0.855	1.251	0.926	1.253	0.999	1.158
BURO TANGAIL	BAN	1.019	0.946	1.018	1.001	0.964	0.969	0.995	1.021	0.949	0.964	1.024	0.898	1.024	1.000	0.920
IDF	BAN	1.250	0.958	1.215	1.028	1.197	1.299	0.988	1.244	1.044	1.283	1.074	0.885	1.003	1.070	0.951
RDRS	BAN	0.945	0.993	0.942	1.003	0.938	0.897	1.016	0.903	0.994	0.912	1.226	0.958	1.215	1.009	1.174
SHAKTI	BAN	0.991	0.960	0.980	1.011	0.951	0.951	0.980	0.980	0.971	0.932	1.177	0.904	1.179	0.999	1.064
TMSS	BAN	1.049	0.944	0.999	1.049	0.990	0.949	1.001	0.999	0.950	0.950	1.152	0.902	1.128	1.021	1.039
FECECAM	BEN	0.969	0.916	0.918	1.055	0.887	1.111	0.829	0.913	1.217	0.921	0.993	0.855	0.872	1.139	0.849
ALIDE	BEN	1.055	0.914	0.834	1.266	0.964	1.066	0.901	0.834	1.278	0.961	1.278	0.961	0.479	2.670	1.228
PADME	BEN	0.935	0.941	0.851	1.099	0.880	0.923	0.932	0.823	1.122	0.860	0.966	0.924	0.922	1.048	0.893
VF	BEN	1.102	0.911	1.098	1.004	1.004	1.077	0.872	1.066	1.010	0.939	1.081	0.806	1.102	0.982	0.872
RCPB	BF	0.919	0.933	0.821	1.119	0.857	0.919	0.933	0.821	1.119	0.857	0.953	0.930	0.908	1.049	0.886
Agrocapital	BOL	1.093	0.918	0.985	1.110	1.004	1.071	0.904	0.963	1.112	0.969	1.316	0.851	1.263	1.041	1.119
BANCOSOL	BOL	1.026	0.966	0.941	1.090	0.991	1.045	0.946	0.941	1.110	0.989	1.067	0.943	1.085	0.983	1.005
Bnaco L A	BOL	1.090	0.934	0.962	1.133	1.018	1.089	0.934	0.962	1.132	1.017	1.172	0.924	1.167	1.004	1.082
CRECER	BOL	1.023	0.906	0.956	1.070	0.926	1.179	0.832	0.990	1.191	0.981	1.067	0.846	0.950	1.123	0.903
Eco Futuro	BOL	1.110	0.899	0.991	1.120	0.998	1.105	0.889	0.990	1.116	0.982	1.160	0.888	1.123	1.033	1.030
FADES	BOL	0.905	0.857	0.770	1.175	0.775	0.922	0.838	0.772	1.195	0.773	0.994	0.861	0.904	1.100	0.856
FIE	BOL	1.002	0.932	0.871	1.151	0.934	0.997	0.934	0.871	1.144	0.931	1.044	0.931	0.995	1.049	0.972
FunBodem	BOL	1.084	0.896	1.089	0.996	0.972	1.299	0.841	1.307	0.994	1.091	1.003	0.871	0.962	1.042	0.873
PRODEM	BOL	1.060	0.910	0.894	1.186	0.965	1.066	0.881	0.894	1.192	0.940	1.113	0.886	1.001	1.112	0.986
ProMujar BOL	BOL	1.043	0.910	0.965	1.081	0.949	1.051	0.863	0.931	1.129	0.907	1.150	0.866	1.142	1.007	0.996
EKI	BOS	1.143	0.956	1.036	1.103	1.093	1.143	0.956	1.036	1.103	1.092	1.320	0.909	1.267	1.042	1.200
MIKROFIN	BOS	1.004	1.049	1.000	1.004	1.053	1.003	1.039	1.000	1.003	1.042	1.070	0.942	1.065	1.004	1.008
PARTNER	BOS	1.097	0.997	1.041	1.054	1.094	1.109	0.991	1.041	1.065	1.099	1.107	0.911	1.093	1.013	1.009
SUNRISE	BOS	1.188	0.914	1.080	1.100	1.086	1.171	0.887	1.013	1.156	1.040	1.430	0.819	1.365	1.047	1.171
CDS	CAM	1.097	0.925	1.093	1.004	1.015	1.263	0.876	1.159	1.090	1.106	1.077	0.889	1.076	1.001	0.957
CMM Bog	COL	1.131	0.879	1.024	1.104	0.994	1.242	0.823	1.033	1.202	1.022	1.147	0.844	1.030	1.114	0.968
Finamerica	COL	1.075	0.866	0.976	1.102	0.931	1.201	0.829	0.982	1.223	0.995	0.974	0.859	0.864	1.128	0.837
FMM Buca	COL	1.054	0.938	1.027	1.026	0.989	1.190	0.912	1.053	1.130	1.086	1.032	0.905	0.975	1.059	0.934
FMM Pop	COL	0.988	0.946	0.995	0.993	0.935	1.127	0.923	1.015	1.110	1.039	0.930	0.921	0.900	1.034	0.857
WMM Med	COL	1.042	0.925	0.999	1.043	0.964	1.055	0.919	1.039	1.015	0.970	0.964	0.920	0.948	1.016	0.886
WWB Ca	COL	1.044	0.958	1.000	1.044	1.000	1.132	0.946	1.000	1.132	1.071	0.994	0.933	0.987	1.007	0.927
ACLEDA	COM	1.010	0.919	0.924	1.094	0.929	1.067	0.896	0.924	1.155	0.955	1.062	0.899	0.972	1.093	0.955
AMRET	COM	1.080	0.956	1.075	1.005	1.032	1.232	0.846	1.059	1.163	1.042	1.184	0.871	1.154	1.026	1.031
CEB	COM	1.192	0.935	1.197	0.996	1.114	1.240	0.932	1.215	1.021	1.155	1.287	0.911	1.271	1.012	1.173
HKL	COM	1.163	0.903	1.160	1.003	1.050	1.175	0.872	1.177	0.998	1.025	1.266	0.866	1.225	1.033	1.096

PRASAC	COM	1.114	0.913	1.012	1.100	1.017	1.128	0.897	1.008	1.120	1.012	1.295	0.864	1.190	1.088	1.118
CrediMujer	CR	1.173	0.939	1.000	1.173	1.102	1.255	0.846	1.000	1.255	1.061	1.297	0.875	1.000	1.297	1.135
Banco Sol	ECU	1.090	0.902	1.000	1.090	0.983	1.024	0.997	1.000	1.024	1.021	1.090	0.891	1.000	1.090	0.971
COAC Jardin	ECU	1.000	1.109	1.000	1.000	1.109	1.000	1.126	1.000	1.000	1.126	0.944	1.037	0.937	1.008	0.979
Coac S Jose	ECU	1.036	0.978	1.028	1.008	1.013	1.036	0.978	1.028	1.008	1.013	0.983	1.007	0.924	1.064	0.990
COAC SAC	ECU	0.862	0.873	0.900	0.957	0.752	0.862	0.873	0.900	0.957	0.752	0.858	0.825	0.853	1.006	0.708
D-Miro	ECU	1.064	0.918	1.062	1.002	0.977	1.149	0.826	1.089	1.055	0.949	1.279	0.808	1.296	0.987	1.034
FINCA ECU	ECU	1.028	0.912	1.000	1.028	0.938	1.185	0.820	0.982	1.206	0.972	1.223	0.800	1.030	1.187	0.978
FODEMI	ECU	1.274	0.833	1.272	1.001	1.060	1.284	0.825	1.285	0.999	1.060	1.250	0.857	1.152	1.085	1.071
Fundacion Es	ECU	1.085	0.921	1.093	0.993	1.000	1.176	0.835	1.165	1.009	0.982	1.215	0.841	1.237	0.983	1.022
ProCred ECU	ECU	1.041	0.947	0.944	1.103	0.986	1.062	0.946	0.944	1.125	1.004	0.911	0.906	0.871	1.046	0.826
Al Tadamun	EGY	1.341	0.900	1.233	1.088	1.207	1.719	0.845	1.659	1.037	1.453	1.350	0.859	1.227	1.100	1.160
DBACD	EGY	1.205	0.992	1.192	1.011	1.196	1.107	0.988	1.097	1.009	1.094	1.205	0.992	1.192	1.011	1.196
LEAD	EGY	1.370	0.934	1.370	1.000	1.279	1.051	0.938	1.039	1.011	0.986	1.581	0.905	1.576	1.003	1.430
AMC de RL	ELS	1.133	0.915	1.124	1.008	1.036	1.257	0.825	1.138	1.105	1.037	1.207	0.864	1.214	0.994	1.043
Fundacion	ELS	1.134	0.891	0.914	1.240	1.011	1.134	0.891	0.914	1.240	1.011	1.122	0.894	0.865	1.296	1.003
ACSI	ETH	1.114	1.011	1.113	1.001	1.127	1.105	1.009	1.122	0.985	1.115	1.122	1.108	1.278	0.878	1.243
ADCSI	ETH	0.844	0.980	0.870	0.970	0.827	0.844	0.980	0.870	0.970	0.827	0.775	1.069	0.732	1.058	0.828
BG	ETH	1.104	0.938	0.868	1.272	1.035	0.923	0.951	0.796	1.160	0.878	1.871	0.863	1.424	1.314	1.615
DECSI	ETH	1.000	0.962	1.000	1.000	0.962	1.000	0.930	1.000	1.000	0.930	1.000	1.013	1.000	1.000	1.013
OMO	ETH	1.204	1.003	1.200	1.004	1.208	1.204	1.003	1.200	1.004	1.208	1.164	1.080	1.147	1.016	1.258
WISDOM	ETH	0.920	1.046	0.874	1.053	0.962	0.484	0.993	0.460	1.053	0.481	1.463	0.998	1.358	1.077	1.461
OI SASL	GHA	1.429	0.905	1.382	1.033	1.292	1.445	0.847	1.340	1.078	1.224	1.570	0.857	1.550	1.013	1.345
ProCred GHA	GHA	0.885	0.918	0.877	1.009	0.813	1.222	0.842	1.087	1.124	1.029	0.707	0.867	0.647	1.093	0.613
Sat	GHA	1.308	0.927	1.324	0.988	1.212	1.409	0.859	1.412	0.998	1.211	1.326	0.869	1.337	0.991	1.151
C FUND	GOE	1.088	0.916	1.000	1.088	0.997	0.958	0.844	0.920	1.041	0.809	1.267	0.840	1.002	1.264	1.064
Constanta	GOE	0.836	0.935	0.796	1.050	0.782	0.892	0.870	0.816	1.092	0.776	1.023	0.887	0.912	1.121	0.908
CREDO	GOE	1.327	0.849	1.330	0.997	1.127	1.347	0.837	1.342	1.004	1.127	1.366	0.846	1.285	1.063	1.155
SBDF	GOE	1.205	0.864	1.016	1.186	1.040	1.214	0.849	1.031	1.177	1.031	1.401	0.835	0.990	1.415	1.169
Genesis Em	GUAT	1.125	0.874	1.014	1.110	0.984	1.235	0.825	1.019	1.212	1.019	1.106	0.844	0.973	1.137	0.933
ACME	HAI	0.924	0.896	0.949	0.974	0.828	1.038	0.867	1.037	1.001	0.900	0.924	0.878	0.945	0.978	0.811
FINCA HON	HON	1.047	0.921	1.058	0.990	0.964	1.308	0.852	1.320	0.992	1.114	0.964	0.884	0.961	1.003	0.852
HDH	HON	1.255	0.863	1.242	1.011	1.083	1.353	0.849	1.323	1.022	1.149	0.573	0.871	0.572	1.002	0.499
World Rel	HON	1.212	0.900	1.170	1.035	1.091	1.265	0.837	1.173	1.078	1.058	1.367	0.842	1.370	0.997	1.151
BANDHAN	IND	1.067	1.025	1.065	1.002	1.094	1.064	1.026	1.065	0.999	1.091	1.380	0.981	1.412	0.977	1.353
BASIX	IND	1.101	0.898	1.041	1.058	0.989	1.150	0.881	1.053	1.092	1.013	1.065	0.878	1.013	1.052	0.935
Cashpoor	IND	1.700	0.961	1.771	0.960	1.633	2.133	0.959	1.970	1.083	2.045	1.465	0.884	1.409	1.039	1.295
ESAF	IND	1.380	1.002	1.350	1.022	1.382	1.387	1.001	1.362	1.018	1.388	1.244	0.985	1.090	1.142	1.226
GK	IND	1.282	0.970	1.285	0.997	1.243	1.170	0.983	1.194	0.980	1.150	1.541	0.935	1.507	1.023	1.441
KBSLAB	IND	1.005	0.944	1.004	1.001	0.949	0.996	0.945	1.005	0.991	0.942	1.047	0.928	1.023	1.024	0.971
SHARE MF	IND	1.082	0.945	1.035	1.046	1.023	1.143	0.950	1.047	1.091	1.086	0.761	0.921	0.714	1.066	0.701
SNFL	IND	1.023	1.064	1.010	1.013	1.089	1.023	1.061	1.010	1.013	1.086	1.246	1.086	1.277	0.976	1.353
MBK Ventu	INDO	1.336	0.927	0.844	1.582	1.238	1.246	0.968	0.716	1.740	1.207	1.458	0.854	0.796	1.832	1.245
JMCC	JOR	1.264	0.865	1.238	1.021	1.094	1.334	0.839	1.268	1.052	1.120	1.245	0.870	1.239	1.005	1.084
MFW	JOR	1.227	0.899	1.226	1.000	1.103	1.548	0.828	1.453	1.065	1.281	1.092	0.845	1.101	0.991	0.923
KLF	KAZ	0.900	0.942	0.903	0.997	0.848	1.026	0.882	0.900	1.140	0.905	0.970	0.897	0.960	1.010	0.870
EBS	KEN	1.193	0.887	1.121	1.064	1.058	1.694	0.909	1.521	1.113	1.539	1.193	0.887	1.121	1.064	1.058
Kadet	KEN	1.361	0.902	1.376	0.989	1.228	1.430	0.842	1.441	0.993	1.204	1.317	0.865	1.297	1.015	1.139
K-REP	KEN	1.234	0.909	1.093	1.130	1.122	1.266	0.868	1.083	1.169	1.099	1.296	0.881	1.177	1.101	1.141
KWFT	KEN	1.079	0.933	1.029	1.048	1.007	1.268	0.850	1.051	1.206	1.078	1.145	0.870	1.014	1.130	0.997
MDSL	KEN	1.290	0.934	1.211	1.066	1.205	1.171	0.831	1.108	1.057	0.973	1.580	0.846	1.433	1.103	1.338
SMEP	KEN	1.162	0.901	1.134	1.025	1.048	1.291	0.828	1.169	1.105	1.068	1.212	0.851	1.233	0.983	1.031
AIYL Bank	KYR	1.000	0.982	1.000	1.000	0.982	1.000	0.982	1.000	1.000	0.982	0.878	0.993	0.896	0.979	0.871
BTFF	KYR	1.339	0.975	1.337	1.002	1.306	1.095	0.981	1.098	0.997	1.074	1.420	0.988	1.419	1.001	1.403
FMCC	KYR	0.863	0.911	0.814	1.060	0.786	0.905	0.849	0.794	1.141	0.769	0.995	0.857	0.874	1.139	0.853
Kando Jagima	MALI	1.404	0.872	1.299	1.080	1.225	1.403	0.870	1.299	1.080	1.221	1.764	0.885	1.767	0.998	1.561
Soro Y	MALI	0.966	0.883	0.948	1.019	0.853	0.966	0.887	0.948	1.019	0.857	1.057	0.892	1.060	0.997	0.943
CreditMongol	MON	1.096	0.901	1.061	1.033	0.988	1.165	0.858	1.158	1.006	1.000	1.105	0.844	1.024	1.079	0.932
Khan Bank	MON	0.979	0.983	1.136	0.862	0.963	1.132	0.981	1.179	0.960	1.110	0.979	0.983	1.136	0.862	0.963
AL AMANA	MOR	1.115	0.926	1.000	1.115	1.033	1.115	0.926	1.000	1.115	1.033	0.936	0.932	0.960	0.975	0.872
Al Karama	MOR	0.967	0.893	0.882	1.096	0.864	1.033	0.864	0.998	1.036	0.893	0.962	0.842	0.803	1.198	0.810

Fondep	MOR	1.294	0.936	1.199	1.079	1.211	1.150	0.903	1.058	1.087	1.039	1.595	0.903	1.588	1.005	1.440
Inmaa	MOR	1.359	0.889	1.313	1.035	1.208	1.423	0.842	1.426	0.998	1.198	1.365	0.852	1.217	1.121	1.162
Zakoura	MOR	1.120	0.878	0.988	1.134	0.983	1.178	0.867	1.012	1.164	1.021	0.988	0.868	0.851	1.161	0.858
FCC	MOZ	0.823	1.022	0.782	1.052	0.841	0.807	0.923	0.797	1.013	0.745	0.823	1.022	0.782	1.052	0.841
NOVO BANCO	MOZ	1.262	0.947	1.169	1.080	1.195	1.238	0.849	1.085	1.140	1.051	1.371	0.916	1.226	1.118	1.257
SOCREMO	MOZ	1.051	0.952	1.074	0.978	1.001	1.320	0.838	1.204	1.097	1.106	1.078	0.865	1.028	1.049	0.932
TCHUMA	MOZ	1.063	0.929	1.076	0.988	0.987	1.122	0.871	1.130	0.992	0.977	1.156	0.876	1.170	0.988	1.012
CBB	NEP	1.006	1.114	0.882	1.141	1.121	1.180	0.998	0.871	1.355	1.177	1.006	1.114	0.880	1.144	1.121
NIRDHAN	NEP	1.119	0.987	1.117	1.001	1.104	1.121	0.986	1.116	1.004	1.105	1.123	0.970	1.114	1.008	1.089
ACODEP	NIC	1.102	0.917	1.045	1.055	1.010	1.229	0.835	1.028	1.195	1.025	1.268	0.820	1.096	1.157	1.040
FDL	NIC	1.085	0.931	0.989	1.097	1.010	1.106	0.902	0.984	1.124	0.998	1.135	0.906	1.069	1.062	1.029
FINDESA	NIC	1.162	0.933	1.096	1.060	1.084	1.124	0.934	0.951	1.183	1.050	1.204	0.916	1.096	1.099	1.103
ProCred NIC	NIC	0.933	0.929	0.896	1.042	0.867	1.087	0.887	0.901	1.207	0.965	0.936	0.843	0.817	1.146	0.789
Prodesa	NIC	1.000	1.050	1.000	1.000	1.050	0.987	0.992	0.998	0.989	0.979	1.000	1.071	1.000	1.000	1.071
LAPO	NIG	1.151	0.919	1.196	0.963	1.058	1.402	0.920	1.460	0.960	1.290	1.158	0.841	1.188	0.975	0.974
SEAP	NIG	0.954	0.980	1.000	0.954	0.935	1.069	0.968	1.203	0.889	1.035	0.934	0.975	1.000	0.934	0.911
ASASAH	PAK	0.483	0.968	0.480	1.006	0.468	0.601	0.968	0.547	1.099	0.582	0.448	0.960	0.452	0.991	0.430
FMBL	PAK	1.516	0.949	1.466	1.034	1.439	1.566	0.957	1.540	1.017	1.498	1.516	0.941	1.466	1.034	1.426
KASHF	PAK	1.150	0.960	1.167	0.985	1.104	1.201	0.970	1.210	0.992	1.165	1.060	0.945	1.046	1.013	1.001
FIELCO	PAR	1.124	0.914	1.120	1.003	1.027	1.097	0.827	0.926	1.185	0.908	1.212	0.861	1.164	1.041	1.043
Interfisa	PAR	1.137	0.918	1.123	1.012	1.043	1.127	0.859	0.986	1.143	0.967	1.187	0.882	1.123	1.057	1.047
Bantra	PER	1.103	0.921	1.000	1.103	1.015	1.165	0.822	1.000	1.165	0.957	1.299	0.796	1.000	1.299	1.034
Caja Nor	PER	1.056	0.932	1.022	1.032	0.984	1.111	0.879	1.007	1.102	0.976	1.054	0.893	1.014	1.039	0.941
Caritas	PER	1.219	0.892	1.185	1.029	1.088	1.257	0.837	1.154	1.090	1.052	1.421	0.845	1.373	1.035	1.200
CMAC Arq	PER	1.000	0.943	1.000	1.000	0.943	0.965	1.034	1.000	0.965	0.997	1.000	0.912	1.000	1.000	0.912
CMAC May	PER	1.132	0.931	1.071	1.057	1.053	1.183	0.873	1.008	1.173	1.033	1.235	0.880	1.132	1.091	1.086
CMAC Tac	PER	1.045	0.973	1.015	1.030	1.017	1.089	0.972	1.004	1.085	1.059	0.996	0.944	0.998	0.998	0.940
CMAC Tru	PER	1.033	0.968	1.003	1.030	0.999	1.029	0.979	1.003	1.026	1.007	1.080	0.909	1.083	0.997	0.982
Edpy. C Tac	PER	1.118	0.920	1.098	1.019	1.028	1.219	0.870	1.129	1.080	1.061	1.181	0.874	1.180	1.001	1.032
Edpy. Cofian	PER	0.942	0.937	0.918	1.027	0.883	1.006	0.913	0.926	1.087	0.918	0.952	0.905	0.919	1.035	0.862
EDPY.Edyf	PER	1.120	0.922	1.022	1.096	1.033	1.240	0.831	0.999	1.241	1.030	1.201	0.863	1.042	1.152	1.037
FINCA PER	PER	1.074	0.933	1.034	1.039	1.002	1.214	0.887	1.203	1.010	1.077	1.066	0.924	1.027	1.038	0.985
Fondesurco	PER	1.242	0.904	1.040	1.195	1.122	1.266	0.840	1.052	1.204	1.063	1.343	0.871	1.071	1.254	1.170
MiBanco	PER	1.132	0.924	1.000	1.132	1.047	1.159	0.881	1.000	1.159	1.021	1.236	0.864	1.094	1.130	1.067
Movim. M R	PER	1.104	0.933	1.081	1.021	1.030	1.156	0.853	1.163	0.994	0.986	1.199	0.922	1.151	1.041	1.105
ProMujer PER	PER	1.117	0.926	1.129	0.989	1.034	1.274	0.851	1.278	0.997	1.085	1.204	0.830	1.211	0.994	0.999
ASHI	PHI	1.165	0.925	1.175	0.991	1.077	1.155	0.909	1.150	1.005	1.050	1.295	0.866	1.297	0.998	1.121
Bangko Ka	PHI	1.015	0.986	0.997	1.018	1.001	1.025	0.981	1.024	1.001	1.005	1.015	0.986	0.997	1.018	1.001
BCB	PHI	1.049	0.922	1.031	1.018	0.968	1.103	0.846	1.099	1.004	0.934	1.110	0.876	1.060	1.047	0.973
CBMO	PHI	1.033	0.961	1.030	1.003	0.993	1.148	0.906	1.150	0.998	1.040	1.069	0.900	1.051	1.017	0.962
DIGOS	PHI	1.058	0.939	1.053	1.005	0.994	1.130	0.851	1.135	0.996	0.961	1.147	0.881	1.114	1.030	1.010
Ist Valley	PHI	0.972	0.945	0.958	1.014	0.919	1.011	0.922	0.938	1.078	0.932	1.020	0.921	1.001	1.019	0.939
NWFT	PHI	1.103	0.925	1.091	1.012	1.020	1.224	0.908	1.135	1.078	1.112	1.171	0.847	1.122	1.043	0.992
SOLANO	PHI	0.982	0.969	0.785	1.250	0.951	0.759	0.968	0.698	1.088	0.735	0.982	0.969	0.785	1.250	0.951
TSPI	PHI	1.128	0.945	1.054	1.070	1.067	1.203	0.928	1.117	1.077	1.117	1.127	0.902	1.024	1.100	1.017
FORUS	RUS	0.912	0.910	0.889	1.025	0.830	1.067	0.856	0.907	1.176	0.913	0.850	0.849	0.772	1.101	0.721
SEF-ZAF	SA	0.899	1.002	0.970	0.926	0.901	1.156	0.869	1.162	0.994	1.005	0.815	1.023	0.889	0.917	0.834
SPBD	SAM	1.004	0.946	0.713	1.409	0.950	1.137	0.841	0.683	1.664	0.956	1.057	0.891	0.653	1.618	0.941
CMS	SEN	0.962	0.959	0.875	1.099	0.922	0.905	0.961	0.839	1.078	0.869	1.069	0.898	1.028	1.040	0.960
Pamecas	SEN	0.952	0.870	0.766	1.243	0.828	0.917	0.858	0.759	1.209	0.787	1.186	0.876	1.060	1.119	1.039
Agroinvest	TAJ	0.769	0.950	0.763	1.008	0.731	1.033	0.953	0.936	1.104	0.985	0.460	0.936	0.450	1.021	0.430
Bank Eskhata	TAJ	1.083	0.932	1.080	1.003	1.010	1.296	0.958	1.270	1.020	1.241	1.083	0.932	1.080	1.003	1.010
FMFB TAJ	TAJ	1.416	0.958	1.414	1.002	1.357	1.355	0.958	1.362	0.995	1.298	1.423	0.946	1.416	1.006	1.346
IMON	TAJ	1.201	0.947	1.194	1.006	1.138	1.252	0.891	1.251	1.001	1.115	1.416	0.864	1.373	1.031	1.223
MicroInvest	TAJ	1.153	0.939	1.049	1.099	1.083	1.177	0.906	1.136	1.036	1.067	1.332	0.864	1.097	1.213	1.151
PRIDE	TAN	0.985	0.931	0.979	1.006	0.917	1.117	0.846	0.963	1.160	0.944	0.976	0.917	0.889	1.098	0.895
Enda	TUN	1.082	0.909	1.051	1.029	0.984	1.069	0.845	1.007	1.061	0.903	1.285	0.841	1.310	0.981	1.080
CERUDEB	UGA	0.920	0.852	0.838	1.098	0.783	1.522	0.827	1.159	1.314	1.260	0.657	0.829	0.541	1.214	0.544
CMFL	UGA	1.117	0.906	1.089	1.026	1.012	1.680	0.831	1.524	1.102	1.396	1.064	0.828	1.014	1.049	0.881
FAULU	UGA	0.851	0.917	0.863	0.986	0.780	1.058	0.849	1.034	1.023	0.898	0.868	0.866	0.874	0.992	0.752
FINCA UGA	UGA	0.825	1.020	0.924	0.893	0.842	1.008	0.873	0.924	1.090	0.879	0.823	1.016	0.924	0.891	0.836

<b>MEDNET</b>	<b>UGA</b>	1.520	1.003	1.515	1.003	1.524	1.216	0.879	1.290	0.942	1.068	1.799	0.952	1.752	1.026	1.713
<b>BanGente</b>	<b>VEN</b>	1.146	0.903	1.031	1.111	1.035	1.161	0.825	0.963	1.206	0.958	1.471	0.741	1.164	1.264	1.090
<b>CEP</b>	<b>VIET</b>	1.146	0.872	1.008	1.137	1.000	1.105	0.852	0.971	1.138	0.942	1.293	0.879	1.300	0.995	1.136
<b>TYM</b>	<b>VIET</b>	0.974	0.931	0.939	1.037	0.907	0.939	0.940	0.920	1.021	0.883	1.132	0.900	1.062	1.066	1.018
<b>CETZAM</b>	<b>ZAM</b>	1.000	1.055	1.000	1.000	1.055	1.122	0.863	1.146	0.980	0.969	1.000	1.063	1.000	1.000	1.063
<b>FINCA ZAM</b>	<b>ZAM</b>	0.906	1.012	0.992	0.913	0.917	0.635	0.925	0.624	1.019	0.588	0.969	0.990	1.059	0.915	0.959
<b>Mean</b>		<b>1.081</b>	<b>0.935</b>	<b>1.034</b>	<b>1.046</b>	<b>1.011</b>	<b>1.127</b>	<b>0.903</b>	<b>1.049</b>	<b>1.074</b>	<b>1.017</b>	<b>1.123</b>	<b>0.899</b>	<b>1.059</b>	<b>1.061</b>	<b>1.011</b>

## Appendix I Malmquist DEA indices for R<sup>s</sup> (R-S) (Panel)

MFI	Country	LR ACE					LR <sup>s</sup> -ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
ARMP	AFG	1.154	0.878	1.030	1.120	1.012	0.052	0.920	0.094	0.552	0.048
FMFB AFG	AFG	1.608	0.963	1.609	0.999	1.549	1.855	0.893	1.740	1.066	1.656
BESA	ALB	1.000	0.939	1.000	1.000	0.939	1.000	0.953	1.000	1.000	0.953
ProCred ALB	ALB	1.046	0.962	1.003	1.043	1.007	1.058	0.985	0.979	1.081	1.043
PSHM	ALB	1.136	0.918	1.030	1.103	1.043	1.134	0.918	1.025	1.107	1.041
ACBA	ARM	1.107	0.995	1.142	0.970	1.102	1.118	0.986	1.157	0.966	1.103
HORIZON	ARM	1.051	0.948	0.994	1.057	0.996	1.175	0.849	1.048	1.121	0.998
INECO	ARM	0.825	1.066	0.926	0.891	0.879	0.993	0.970	1.085	0.915	0.963
CRED AGRO	AZE	1.144	0.950	1.120	1.021	1.086	1.144	0.950	1.120	1.021	1.086
MFBA	AZE	1.189	0.867	1.078	1.103	1.031	1.189	0.867	1.078	1.103	1.031
NORMICRO	AZE	1.071	0.902	1.010	1.060	0.966	1.235	0.844	1.210	1.021	1.042
Viator	AZE	1.065	0.943	1.046	1.018	1.005	1.134	0.860	1.133	1.001	0.975
ASA	BAN	0.965	0.987	1.000	0.965	0.953	0.911	0.970	1.000	0.911	0.883
BRAC BAN	BAN	1.067	0.969	1.025	1.041	1.035	0.869	0.983	1.025	0.848	0.855
BURO TANGAIL	BAN	1.017	0.948	1.018	0.999	0.964	1.012	0.937	1.000	1.012	0.948
IDF	BAN	1.249	0.958	1.215	1.028	1.196	1.271	0.970	1.216	1.045	1.234
SHAKTI	BAN	0.991	0.960	0.980	1.011	0.951	0.965	0.976	0.977	0.988	0.942
TMSS	BAN	1.049	0.945	0.999	1.049	0.991	0.949	1.001	0.999	0.950	0.950
FECECAM	BEN	0.964	0.920	0.918	1.050	0.887	1.061	0.835	0.866	1.224	0.886
ALIDE	BEN	1.055	0.914	0.834	1.266	0.964	1.066	0.901	0.834	1.278	0.961
PADME	BEN	0.934	0.948	0.851	1.098	0.885	0.923	0.930	0.822	1.122	0.858
VF	BEN	1.100	0.931	1.098	1.002	1.024	1.085	0.878	1.057	1.026	0.953
RCPB	BF	0.919	0.933	0.821	1.119	0.857	0.923	0.929	0.821	1.124	0.857
Agrocapital	BOL	1.092	0.922	0.985	1.109	1.007	1.071	0.906	0.963	1.112	0.970
BANCOSOL	BOL	1.026	0.966	0.941	1.090	0.991	1.035	0.964	0.942	1.099	0.998
Bnaco L A	BOL	1.090	0.934	0.962	1.133	1.018	1.090	0.934	0.962	1.133	1.018
CRECER	BOL	1.020	0.909	0.956	1.067	0.927	1.144	0.841	0.979	1.169	0.962
Eco Futuro	BOL	1.110	0.899	0.991	1.120	0.999	1.107	0.892	0.983	1.126	0.987
FADES	BOL	0.905	0.857	0.770	1.175	0.775	0.922	0.838	0.772	1.195	0.773
FIE	BOL	1.002	0.932	0.871	1.151	0.934	1.006	0.930	0.871	1.155	0.935
FunBodem	BOL	1.058	0.907	1.042	1.015	0.960	1.293	0.843	1.302	0.993	1.089
PRODEM	BOL	1.060	0.913	0.894	1.185	0.967	1.075	0.885	0.894	1.202	0.951
ProMujar BOL	BOL	1.041	0.913	0.965	1.078	0.950	1.052	0.866	0.931	1.130	0.911
EKI	BOS	1.143	0.956	1.036	1.103	1.093	1.154	0.965	1.036	1.113	1.113
MIKROFIN	BOS	1.004	1.049	1.000	1.004	1.053	1.000	1.070	1.000	1.000	1.070
PARTNER	BOS	1.097	0.997	1.041	1.054	1.094	1.096	1.011	1.041	1.053	1.109
SUNRISE	BOS	1.158	0.937	1.080	1.072	1.085	1.218	0.914	1.071	1.137	1.113
CDS	CAM	1.093	0.927	1.093	1.000	1.013	1.235	0.884	1.118	1.105	1.092
CMM Bog	COL	1.113	0.893	1.024	1.087	0.994	1.222	0.832	1.019	1.199	1.017
Finamerica	COL	1.057	0.874	0.976	1.084	0.924	1.180	0.834	0.975	1.210	0.984
FMM Buca	COL	1.023	0.960	1.027	0.996	0.982	1.176	0.902	1.076	1.093	1.061
FMM Pop	COL	0.983	0.949	0.995	0.988	0.933	1.095	0.904	0.993	1.102	0.990
WMM Med	COL	1.042	0.925	0.999	1.043	0.964	1.058	0.916	1.018	1.040	0.969
WWB Ca	COL	1.032	0.963	1.000	1.032	0.994	1.071	0.973	1.000	1.071	1.042
ACLEDA	COM	1.008	0.921	0.924	1.092	0.928	1.061	0.899	0.924	1.148	0.953
AMRET	COM	1.073	0.962	1.075	0.998	1.032	1.222	0.856	1.081	1.131	1.047
CEB	COM	1.189	0.936	1.195	0.995	1.113	1.243	0.931	1.204	1.032	1.157
HKL	COM	1.162	0.905	1.159	1.002	1.051	1.185	0.877	1.184	1.000	1.039

PRASAC	COM	1.114	0.914	1.012	1.100	1.018	1.128	0.897	1.001	1.127	1.012
CrediMujer	CR	1.170	0.957	1.000	1.170	1.121	1.300	0.853	1.000	1.300	1.110
Banco Sol	ECU	1.048	0.929	1.000	1.048	0.974	1.014	0.969	1.000	1.014	0.982
COAC Jardin	ECU	1.000	1.109	1.000	1.000	1.109	1.000	1.116	1.000	1.000	1.116
Coac S Jose	ECU	1.036	0.978	1.028	1.008	1.013	1.036	0.977	1.021	1.015	1.012
COAC SAC	ECU	0.862	0.873	0.900	0.957	0.752	0.862	0.873	0.900	0.957	0.752
D-Miro	ECU	1.049	0.938	1.059	0.990	0.984	1.149	0.836	1.104	1.040	0.961
FINCA ECU	ECU	1.000	0.953	1.000	1.000	0.953	1.121	0.841	1.000	1.121	0.943
FODEMI	ECU	1.274	0.833	1.272	1.001	1.060	1.273	0.834	1.266	1.005	1.062
Fundacion Es	ECU	1.077	0.930	1.094	0.984	1.002	1.169	0.844	1.184	0.987	0.987
ProCred ECU	ECU	1.041	0.947	0.944	1.103	0.986	1.036	0.955	0.944	1.098	0.990
Al Tadamun	EGY	1.230	0.950	1.180	1.042	1.169	1.664	0.845	1.578	1.054	1.405
DBACD	EGY	1.200	1.000	1.192	1.006	1.200	1.168	0.973	1.150	1.016	1.137
AMC de RL	ELS	1.128	0.922	1.124	1.004	1.040	1.249	0.835	1.118	1.117	1.043
Fundacion	ELS	1.134	0.891	0.914	1.240	1.011	1.134	0.891	0.909	1.247	1.011
ACSI	ETH	1.114	1.011	1.113	1.001	1.127	1.148	1.008	1.090	1.054	1.157
ADCSI	ETH	0.844	0.980	0.870	0.970	0.827	0.844	0.980	0.870	0.970	0.827
BG	ETH	1.104	0.940	0.868	1.272	1.037	0.975	0.941	0.842	1.158	0.917
DECSI	ETH	1.000	0.962	1.000	1.000	0.962	1.000	0.935	1.000	1.000	0.935
OMO	ETH	1.204	1.003	1.200	1.004	1.208	1.207	1.003	1.201	1.005	1.210
WISDOM	ETH	0.920	1.046	0.874	1.053	0.962	0.801	0.827	0.761	1.051	0.662
OI SASL	GHA	1.429	0.912	1.382	1.033	1.303	1.506	0.856	1.542	0.977	1.289
ProCred GHA	GHA	0.865	0.926	0.870	0.993	0.800	1.106	0.851	1.004	1.101	0.941
Sat	GHA	1.302	0.930	1.319	0.987	1.211	1.432	0.863	1.521	0.941	1.236
C FUND	GOE	1.083	0.943	1.000	1.083	1.022	0.959	0.852	0.897	1.069	0.818
Constanta	GOE	0.836	0.937	0.796	1.050	0.784	0.881	0.876	0.802	1.099	0.771
CREDO	GOE	1.327	0.849	1.330	0.997	1.127	1.347	0.837	1.342	1.004	1.127
SBDF	GOE	1.205	0.864	1.016	1.186	1.040	1.214	0.849	1.031	1.177	1.031
Genesis Em	GUAT	1.121	0.877	1.014	1.105	0.983	1.214	0.834	1.000	1.214	1.012
ACME	HAI	0.960	0.858	0.961	0.999	0.824	0.992	0.874	1.060	0.936	0.868
FINCA HON	HON	1.045	0.917	1.055	0.990	0.958	1.265	0.859	1.257	1.007	1.087
HDH	HON	1.255	0.863	1.242	1.011	1.083	1.340	0.853	1.307	1.025	1.143
World Rel	HON	1.212	0.906	1.170	1.035	1.098	1.250	0.845	1.165	1.073	1.057
BANDHAN	IND	1.067	1.025	1.065	1.002	1.094	1.067	1.027	1.065	1.002	1.096
BASIX	IND	1.100	0.900	1.041	1.056	0.989	1.142	0.887	1.034	1.104	1.013
Cashpoor	IND	1.690	0.963	1.771	0.955	1.629	2.133	0.959	1.970	1.083	2.045
ESAF	IND	1.380	1.002	1.350	1.022	1.382	1.391	0.999	1.356	1.026	1.391
GK	IND	1.282	0.971	1.285	0.997	1.244	1.221	0.971	1.238	0.986	1.186
KBSLAB	IND	1.003	0.945	1.003	1.001	0.949	1.003	0.943	1.005	0.997	0.945
SHARE MF	IND	1.081	0.946	1.035	1.045	1.022	1.117	0.941	1.039	1.075	1.051
SNFL	IND	1.023	1.064	1.010	1.013	1.089	1.023	1.061	1.010	1.013	1.086
MBK Ventu	INDO	1.333	0.928	0.850	1.569	1.237	1.351	0.950	0.743	1.818	1.283
JMCC	JOR	1.263	0.866	1.238	1.020	1.093	1.303	0.848	1.230	1.060	1.106
MFW	JOR	1.219	0.902	1.210	1.007	1.100	1.463	0.839	1.356	1.079	1.228
KLF	KAZ	0.886	0.969	0.892	0.994	0.859	1.034	0.862	0.959	1.079	0.892
EBS	KEN	1.070	0.998	1.121	0.955	1.068	1.697	0.770	1.255	1.352	1.306
Kadet	KEN	1.356	0.904	1.371	0.989	1.226	1.430	0.842	1.441	0.993	1.204
K-REP	KEN	1.233	0.913	1.093	1.128	1.125	1.276	0.873	1.103	1.157	1.114
KWFT	KEN	1.047	0.956	1.029	1.017	1.001	1.224	0.858	1.016	1.205	1.051
MDSL	KEN	1.279	0.980	1.171	1.091	1.254	1.531	0.855	1.368	1.119	1.309
SMEP	KEN	1.149	0.908	1.135	1.012	1.044	1.261	0.836	1.132	1.114	1.055
AIYL Bank	KYR	1.000	0.982	1.000	1.000	0.982	1.000	0.982	1.000	1.000	0.982
BTFF	KYR	1.339	0.981	1.337	1.002	1.314	1.099	0.979	1.104	0.995	1.076
FMCC	KYR	0.863	0.913	0.814	1.060	0.788	0.899	0.856	0.812	1.108	0.770
Kando Jagima	MALI	1.404	0.872	1.299	1.080	1.225	1.387	0.874	1.277	1.086	1.213
Soro Y	MALI	0.966	0.883	0.948	1.019	0.853	0.966	0.887	0.948	1.019	0.857
CreditMongol	MON	1.092	0.903	1.064	1.026	0.986	1.165	0.859	1.159	1.005	1.001
Khan Bank	MON	0.957	0.997	1.136	0.843	0.954	1.132	0.959	1.276	0.888	1.086
AL AMANA	MOR	1.115	0.926	1.000	1.115	1.033	1.119	0.925	1.000	1.119	1.035
Al Karama	MOR	0.967	0.893	0.884	1.094	0.864	0.994	0.870	0.949	1.047	0.865
Fondep	MOR	1.293	0.939	1.199	1.078	1.214	1.284	0.886	1.182	1.086	1.137

<b>Inmaa</b>	<b>MOR</b>	1.359	0.889	1.313	1.035	1.208	0.900	0.679	0.931	0.967	0.611
<b>Zakoura</b>	<b>MOR</b>	1.120	0.878	0.988	1.134	0.983	1.142	0.871	0.977	1.170	0.995
<b>NOVO BANCO</b>	<b>MOZ</b>	1.262	0.973	1.169	1.080	1.228	1.355	0.858	1.373	0.987	1.162
<b>SOCREMO</b>	<b>MOZ</b>	1.017	0.974	1.053	0.966	0.991	1.311	0.846	1.243	1.055	1.110
<b>TCHUMA</b>	<b>MOZ</b>	1.071	0.922	1.089	0.984	0.988	1.125	0.877	1.126	1.000	0.987
<b>CBB</b>	<b>NEP</b>	1.006	1.114	0.882	1.141	1.121	1.189	1.007	1.001	1.188	1.198
<b>NIRDHAN</b>	<b>NEP</b>	1.119	0.987	1.117	1.001	1.104	1.121	0.985	1.117	1.003	1.104
<b>ACODEP</b>	<b>NIC</b>	1.006	1.010	1.006	1.000	1.016	1.200	0.879	1.127	1.064	1.054
<b>FDL</b>	<b>NIC</b>	1.083	0.933	0.989	1.095	1.010	1.115	0.895	0.988	1.129	0.997
<b>FINDESA</b>	<b>NIC</b>	1.095	0.992	1.090	1.005	1.086	1.140	0.947	1.139	1.000	1.079
<b>ProCred NIC</b>	<b>NIC</b>	0.887	0.967	0.896	0.990	0.858	1.007	0.921	0.889	1.133	0.928
<b>Prodesa</b>	<b>NIC</b>	1.000	1.050	1.000	1.000	1.050	1.000	1.006	1.000	1.000	1.006
<b>LAPO</b>	<b>NIG</b>	1.147	0.921	1.181	0.971	1.056	1.368	0.918	1.517	0.902	1.256
<b>SEAP</b>	<b>NIG</b>	0.989	0.919	1.000	0.989	0.909	1.036	0.889	1.000	1.036	0.921
<b>ASASAH</b>	<b>PAK</b>	0.484	0.967	0.482	1.003	0.468	0.535	0.941	0.498	1.076	0.504
<b>FMBL</b>	<b>PAK</b>	1.469	0.982	1.465	1.003	1.443	1.597	0.952	1.556	1.026	1.521
<b>KASHF</b>	<b>PAK</b>	1.144	0.963	1.167	0.981	1.102	1.205	0.956	1.161	1.038	1.152
<b>FIELCO</b>	<b>PAR</b>	1.101	0.969	1.101	1.000	1.067	1.105	0.839	1.033	1.069	0.927
<b>Interfisa</b>	<b>PAR</b>	1.099	0.975	1.092	1.006	1.071	1.174	0.850	1.108	1.060	0.998
<b>Bantra</b>	<b>PER</b>	1.041	0.988	1.000	1.041	1.028	1.151	0.833	1.000	1.151	0.959
<b>Caja Nor</b>	<b>PER</b>	1.052	0.936	1.022	1.029	0.984	1.103	0.879	1.020	1.082	0.970
<b>Caritas</b>	<b>PER</b>	1.219	0.895	1.185	1.029	1.091	1.257	0.838	1.154	1.090	1.053
<b>CMAC Arq</b>	<b>PER</b>	1.000	0.943	1.000	1.000	0.943	1.000	0.942	1.000	1.000	0.942
<b>CMAC May</b>	<b>PER</b>	1.098	0.961	1.071	1.026	1.055	1.194	0.876	1.020	1.171	1.046
<b>CMAC Tac</b>	<b>PER</b>	1.044	0.973	1.015	1.029	1.017	1.043	0.994	0.995	1.049	1.037
<b>CMAC Tru</b>	<b>PER</b>	1.033	0.968	1.003	1.030	0.999	0.996	1.004	1.003	0.993	1.000
<b>Edpy. C Tac</b>	<b>PER</b>	1.074	0.953	1.068	1.005	1.023	1.184	0.881	1.102	1.074	1.044
<b>Edpy. Cofian</b>	<b>PER</b>	0.921	0.957	0.918	1.003	0.881	1.006	0.911	0.910	1.105	0.916
<b>EDPY.Edyf</b>	<b>PER</b>	1.102	0.950	1.022	1.078	1.047	1.218	0.836	0.994	1.225	1.019
<b>FINCA PER</b>	<b>PER</b>	1.145	0.873	1.093	1.047	1.000	1.161	0.892	1.146	1.012	1.035
<b>Fondesurco</b>	<b>PER</b>	1.240	0.906	1.040	1.192	1.124	1.266	0.840	1.052	1.204	1.063
<b>MiBanco</b>	<b>PER</b>	1.076	0.971	1.000	1.076	1.045	1.095	0.922	1.000	1.095	1.009
<b>Movim. M R</b>	<b>PER</b>	1.104	0.933	1.086	1.017	1.030	1.144	0.860	1.144	1.000	0.984
<b>ProMujer PER</b>	<b>PER</b>	1.112	0.929	1.125	0.989	1.033	1.262	0.859	1.264	0.998	1.084
<b>ASHI</b>	<b>PHI</b>	1.178	0.913	1.195	0.986	1.075	1.187	0.912	1.170	1.014	1.082
<b>Bangko Ka</b>	<b>PHI</b>	1.002	0.998	0.997	1.005	1.000	1.100	0.929	1.177	0.935	1.022
<b>BCB</b>	<b>PHI</b>	1.016	0.958	0.993	1.023	0.973	1.138	0.828	1.121	1.015	0.942
<b>CBMO</b>	<b>PHI</b>	1.028	0.965	1.025	1.003	0.992	1.169	0.879	1.156	1.011	1.027
<b>DIGOS</b>	<b>PHI</b>	1.054	0.944	1.049	1.004	0.994	0.637	0.544	0.640	0.996	0.347
<b>Ist Valley</b>	<b>PHI</b>	0.969	0.948	0.958	1.011	0.919	1.060	0.904	0.986	1.075	0.958
<b>NWFT</b>	<b>PHI</b>	1.103	0.925	1.090	1.012	1.021	1.225	0.912	1.226	1.000	1.117
<b>SOLANO</b>	<b>PHI</b>	0.962	0.992	0.785	1.225	0.954	0.924	0.878	0.759	1.218	0.811
<b>TSPI</b>	<b>PHI</b>	1.163	0.915	1.040	1.119	1.065	1.237	0.900	1.233	1.003	1.114
<b>FORUS</b>	<b>RUS</b>	0.893	0.930	0.889	1.004	0.830	1.040	0.860	0.888	1.171	0.895
<b>SEF-ZAF</b>	<b>SA</b>	0.899	0.998	0.970	0.926	0.897	1.107	0.876	1.155	0.958	0.970
<b>SPBD</b>	<b>SAM</b>	0.999	0.954	0.713	1.401	0.952	1.106	0.845	0.683	1.619	0.935
<b>CMS</b>	<b>SEN</b>	0.962	0.962	0.875	1.099	0.925	0.900	0.976	0.839	1.073	0.879
<b>Pamecas</b>	<b>SEN</b>	0.952	0.874	0.766	1.243	0.832	0.945	0.858	0.784	1.205	0.810
<b>Agroinvest</b>	<b>TAJ</b>	0.733	0.973	0.763	0.961	0.713	0.993	0.941	0.896	1.108	0.934
<b>Bank Eskhata</b>	<b>TAJ</b>	1.026	0.979	1.028	0.999	1.005	1.705	0.681	1.847	0.924	1.161
<b>FMFB TAJ</b>	<b>TAJ</b>	1.379	0.984	1.376	1.002	1.356	1.355	0.958	1.362	0.995	1.298
<b>IMON</b>	<b>TAJ</b>	1.198	0.951	1.191	1.006	1.139	1.259	0.894	1.256	1.002	1.125
<b>MicroInvest</b>	<b>TAJ</b>	1.152	0.942	1.049	1.098	1.085	1.142	0.910	1.097	1.041	1.039
<b>PRIDE</b>	<b>TAN</b>	0.985	0.931	0.979	1.006	0.917	1.080	0.854	0.975	1.107	0.922
<b>Enda</b>	<b>TUN</b>	1.082	0.912	1.051	1.029	0.987	1.074	0.853	1.072	1.001	0.916
<b>CERUDEB</b>	<b>UGA</b>	0.788	0.920	0.831	0.948	0.725	1.292	0.869	0.932	1.386	1.123
<b>CMFL</b>	<b>UGA</b>	0.992	0.972	0.997	0.995	0.963	1.486	0.841	1.365	1.089	1.250
<b>FAULU</b>	<b>UGA</b>	0.820	0.933	0.838	0.979	0.765	0.979	0.857	0.939	1.043	0.839
<b>FINCA UGA</b>	<b>UGA</b>	0.845	0.999	0.924	0.914	0.844	0.941	0.875	0.957	0.983	0.823
<b>BanGente</b>	<b>VEN</b>	1.129	0.947	1.031	1.094	1.069	1.167	0.855	1.014	1.151	0.998
<b>CEP</b>	<b>VIET</b>	1.146	0.873	1.008	1.137	1.001	1.116	0.861	0.989	1.128	0.960



<b>TYM</b>	<b>VIET</b>	0.974	0.931	0.939	1.037	0.907	0.949	0.936	0.925	1.025	0.888
<b>CETZAM</b>	<b>ZAM</b>	1.000	1.055	1.000	1.000	1.055	1.159	0.866	1.169	0.991	1.004
<b>FINCA ZAM</b>	<b>ZAM</b>	1.037	0.928	1.034	1.002	0.961	0.912	0.894	0.957	0.953	0.816
<b>Mean</b>		<b>1.071</b>	<b>0.943</b>	<b>1.029</b>	<b>1.041</b>	<b>1.010</b>	<b>1.108</b>	<b>0.895</b>	<b>1.041</b>	<b>1.064</b>	<b>0.992</b>

### Appendix J Malmquist DEA indices for treating subsidies as an input (Panel)

MFI	Cou	LR-ACE					LR-ACES <sup>i</sup>					L-ACE					L-ACES <sup>i</sup>				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
ARMP	AFG	1.182	0.862	1.045	1.132	1.019	1.182	0.862	1.045	1.132	1.019	1.182	0.849	1.045	1.132	1.004	1.182	0.849	1.045	1.132	1.004
BRAC AFG	AFG	1.569	0.842	1.399	1.121	1.321	1.569	0.842	1.399	1.121	1.321	1.591	0.813	1.352	1.176	1.293	1.591	0.813	1.352	1.176	1.293
FMFB AFG	AFG	1.708	0.915	1.649	1.036	1.563	1.591	0.970	1.590	1.001	1.543	1.788	0.895	1.639	1.090	1.600	1.788	0.990	1.639	1.090	1.769
BESA	ALB	1.000	0.925	1.000	1.000	0.925	1.000	1.060	1.000	1.000	1.060	1.000	0.937	1.000	1.000	0.937	1.000	1.093	1.000	1.000	1.093
ProCred ALB	ALB	1.034	0.973	1.006	1.028	1.007	1.230	1.106	1.195	1.030	1.361	0.896	1.115	0.887	1.010	0.999	1.366	1.193	1.195	1.143	1.629
PSHM	ALB	1.128	0.932	1.034	1.090	1.051	1.128	0.962	1.034	1.091	1.084	1.133	0.905	1.024	1.107	1.025	1.133	0.959	1.024	1.107	1.087
NovoBanco	ANG	0.743	0.763	0.743	1.000	0.567	0.743	0.821	0.743	1.000	0.610	1.089	0.818	1.012	1.076	0.891	1.089	0.818	1.012	1.076	0.891
ACBA	ARM	1.130	0.922	1.160	0.974	1.042	1.130	0.922	1.160	0.974	1.042	1.119	0.983	1.161	0.964	1.100	1.119	0.983	1.161	0.964	1.100
HORIZON	ARM	1.056	0.940	0.956	1.105	0.992	1.090	0.970	1.000	1.090	1.057	1.187	0.813	1.049	1.132	0.965	1.187	0.865	1.000	1.187	1.027
CRED AGRO	AZE	1.134	0.962	1.105	1.026	1.091	1.134	0.963	1.105	1.026	1.092	1.139	0.952	1.105	1.031	1.085	1.139	0.952	1.105	1.031	1.085
MFBA	AZE	1.202	0.856	1.078	1.115	1.029	1.202	0.856	1.078	1.115	1.029	1.202	0.856	1.078	1.115	1.029	1.202	0.856	1.078	1.115	1.029
NORMICRO	AZE	1.082	0.894	1.018	1.062	0.967	1.060	0.903	1.004	1.056	0.957	1.316	0.813	1.270	1.036	1.070	1.316	0.813	1.270	1.036	1.070
BRAC BAN	BAN	1.193	0.970	1.000	1.193	1.157	1.193	0.970	1.000	1.193	1.157	0.904	0.908	1.000	0.904	0.821	0.904	0.908	1.000	0.904	0.821
RDRS	BAN	0.994	0.987	0.996	0.998	0.981	0.994	0.987	0.990	1.004	0.981	0.955	0.957	0.942	1.014	0.914	0.955	0.957	0.936	1.021	0.914
TMSS	BAN	1.082	0.907	0.982	1.102	0.981	1.082	0.907	0.982	1.102	0.981	1.110	0.877	0.982	1.130	0.973	1.110	0.877	0.982	1.130	0.973
FECECAM	BEN	0.960	0.919	0.909	1.056	0.882	0.829	0.962	0.841	0.986	0.798	1.135	0.813	0.862	1.317	0.923	0.792	0.973	0.826	0.959	0.771
ALIDE	BEN	1.101	0.842	0.860	1.280	0.928	1.101	0.842	0.860	1.280	0.928	1.130	0.813	0.860	1.313	0.918	1.130	0.813	0.860	1.313	0.918
PADME	BEN	0.895	0.978	0.872	1.027	0.876	0.895	0.978	0.872	1.027	0.876	0.915	0.938	0.818	1.119	0.858	0.915	0.938	0.814	1.123	0.858
VF	BEN	1.026	0.937	1.003	1.023	0.961	1.026	0.976	1.003	1.023	1.001	1.075	0.873	1.066	1.008	0.938	1.075	0.871	1.054	1.020	0.936
Agrocapital	BOL	1.095	0.926	0.986	1.110	1.013	1.095	0.927	0.986	1.110	1.015	1.072	0.903	0.963	1.113	0.968	1.072	0.903	0.963	1.113	0.968
BANCOSOL	BOL	1.022	0.987	0.923	1.108	1.009	1.279	1.682	1.056	1.211	2.150	1.045	0.946	0.923	1.133	0.989	1.350	1.658	1.056	1.278	2.238
Bnaco LA	BOL	1.093	0.950	0.979	1.116	1.038	1.099	0.947	0.979	1.122	1.041	1.089	0.937	0.979	1.112	1.020	1.095	0.948	0.979	1.118	1.038
Eco Futuro	BOL	1.068	0.929	0.990	1.078	0.992	1.081	1.089	0.947	1.142	1.177	1.105	0.888	0.989	1.118	0.982	1.081	1.089	0.946	1.143	1.177
FADES	BOL	0.917	0.847	0.770	1.190	0.777	0.917	0.847	0.770	1.190	0.777	0.938	0.821	0.775	1.210	0.770	0.938	0.821	0.775	1.210	0.770
FIE	BOL	0.976	0.969	0.854	1.143	0.945	0.989	0.970	0.852	1.161	0.959	0.990	0.940	0.854	1.160	0.931	1.009	0.958	0.852	1.184	0.967
FunBodem	BOL	1.079	0.905	1.063	1.015	0.976	1.071	0.908	1.058	1.012	0.973	1.313	0.832	1.311	1.002	1.093	1.313	0.832	1.311	1.002	1.093
PRODEM	BOL	1.029	0.937	0.886	1.161	0.963	1.084	1.072	1.085	0.999	1.161	1.069	0.879	0.886	1.206	0.939	1.141	1.048	1.047	1.090	1.195
ProMujar BOL	BOL	1.064	0.892	0.968	1.099	0.949	1.064	0.897	0.968	1.099	0.954	1.116	0.813	0.952	1.172	0.907	1.116	0.813	0.952	1.172	0.907
CDS	CAM	1.064	0.951	1.054	1.009	1.011	1.041	1.014	1.034	1.007	1.055	1.272	0.869	1.167	1.090	1.106	1.116	1.036	1.101	1.014	1.156
CMM Bog	COL	1.133	0.878	1.021	1.109	0.994	1.080	0.938	0.998	1.083	1.013	1.255	0.813	1.028	1.220	1.020	1.145	0.930	0.972	1.178	1.065
Finamerica	COL	1.067	0.871	0.962	1.110	0.930	1.036	0.899	0.941	1.101	0.932	1.208	0.824	0.962	1.256	0.995	1.099	0.884	0.943	1.165	0.971
WMM Med	COL	0.945	0.956	0.944	1.001	0.903	0.948	1.072	0.950	0.998	1.016	1.056	0.918	1.039	1.016	0.970	1.056	1.060	1.008	1.047	1.119
WWB Ca	COL	1.000	0.945	1.000	1.000	0.945	1.000	0.932	1.000	1.000	0.932	1.132	0.946	1.000	1.132	1.071	0.970	1.012	1.000	0.970	0.982
ACLEDA	COM	1.005	0.939	0.922	1.090	0.944	0.979	0.982	0.929	1.054	0.962	1.088	0.869	0.922	1.180	0.946	0.981	0.990	0.929	1.056	0.972
AMRET	COM	1.074	0.966	1.051	1.022	1.037	1.088	0.967	1.070	1.016	1.051	1.275	0.816	1.069	1.193	1.040	1.275	0.873	1.040	1.226	1.114
CEB	COM	1.210	0.959	1.230	0.984	1.160	1.206	0.960	1.225	0.984	1.158	1.284	0.887	1.236	1.039	1.139	1.284	0.887	1.236	1.039	1.139
HKL	COM	1.187	0.882	1.180	1.006	1.047	1.187	0.897	1.181	1.005	1.064	1.242	0.817	1.242	1.000	1.015	1.242	0.861	1.242	1.000	1.069
PRASAC	COM	1.126	0.905	1.006	1.119	1.019	1.126	0.905	1.006	1.119	1.019	1.185	0.841	1.011	1.173	0.997	1.185	0.841	1.011	1.173	0.997
CrediMujer	CR	1.173	0.938	1.000	1.173	1.100	1.173	0.955	1.000	1.173	1.120	1.294	0.813	1.000	1.294	1.052	1.294	0.813	1.000	1.294	1.052
Banco Sol	ECU	1.000	0.966	1.000	1.000	0.966	1.000	0.747	1.000	1.000	0.747	1.027	0.994	1.000	1.027	1.021	0.781	0.883	1.000	0.781	0.690
COAC Jardin	ECU	1.000	1.068	1.000	1.000	1.068	1.000	1.062	1.000	1.000	1.062	1.000	1.119	1.000	1.000	1.119	1.000	1.119	1.000	1.000	1.119
Coac S Jose	ECU	1.034	0.980	1.028	1.006	1.013	0.920	0.988	0.934	0.985	0.909	1.034	0.980	1.028	1.006	1.013	0.920	0.988	0.934	0.985	0.909
COAC SAC	ECU	0.862	0.870	0.900	0.957	0.750	0.862	0.903	0.900	0.957	0.778	0.862	0.870	0.900	0.957	0.750	0.862	0.899	0.900	0.957	0.775
DBACD	EGY	1.096	1.050	1.080	1.014	1.151	1.152	1.011	1.110	1.038	1.164	1.108	0.988	1.109	1.000	1.094	1.392	0.999	1.471	0.946	1.390
AMC de RL	ELS	1.123	0.923	1.103	1.019	1.037	1.118	0.955	1.108	1.009	1.067	1.271	0.814	1.148	1.107	1.034	1.257	0.896	1.122	1.120	1.126
Fundacion	ELS	1.119	0.904	0.914	1.223	1.011	1.118	0.904	0.855	1.308	1.011	1.134	0.891	0.914	1.240	1.010	1.134	0.891	0.855	1.326	1.010
ADCSI	ETH	0.896	0.874	0.970	0.924	0.783	0.896	0.810	0.970	0.924	0.726	0.896	0.874	0.970	0.924	0.783	0.896	0.810	0.970	0.924	0.726
BG	ETH	1.136	0.861	0.904	1.257	0.978	1.187	0.932	1.292	0.918	1.105	1.087	0.813	0.898	1.211	0.884	1.087	0.973	1.292	0.841	1.058
C FUND	GOE	1.088	0.918	1.000	1.088	0.999	1.070	0.953	1.000	1.070	1.020	0.983	0.813	0.924	1.064	0.799	0.983	0.813	0.924	1.064	0.799
Constanta	GOE	0.857	0.934	0.804	1.066	0.801	0.857	0.938	0.804	1.066	0.804	0.902	0.841	0.816	1.105	0.759	0.902	0.841	0.816	1.105	0.759
CREDO	GOE	1.348	0.831	1.329	1.014	1.120	1.348	0.831	1.329	1.014	1.120	1.376	0.813	1.360	1.012	1.119	1.376	0.813	1.360	1.012	1.119
SBDF	GOE	1.237	0.835	1.000	1.237	1.033	1.237	0.835	1.000	1.237	1.033	1.259	0.813	1.017	1.237	1.023	1.259	0.813	1.017	1.237	1.023

Genesis Em	GUAT	1.132	0.871	1.014	1.116	0.985	1.116	0.880	1.005	1.110	0.982	1.252	0.813	0.988	1.267	1.018	1.252	0.813	0.981	1.277	1.018
ACME	HAI	0.924	0.896	1.000	0.924	0.828	0.992	0.828	1.000	0.992	0.821	1.103	0.813	1.102	1.001	0.897	1.103	0.813	1.102	1.001	0.897
FINCA HON	HON	1.050	0.919	1.067	0.984	0.965	1.122	0.883	1.121	1.002	0.991	1.361	0.813	1.365	0.997	1.106	1.361	0.813	1.365	0.997	1.106
HDH	HON	1.324	0.834	1.297	1.021	1.105	1.324	0.834	1.297	1.021	1.105	1.427	0.813	1.390	1.027	1.160	1.427	0.813	1.390	1.027	1.160
World Rel	HON	1.216	0.897	1.161	1.047	1.090	1.190	0.913	1.185	1.005	1.087	1.295	0.813	1.199	1.080	1.053	1.295	0.813	1.197	1.082	1.053
BASIX	IND	1.141	0.874	1.041	1.096	0.998	1.113	0.955	0.987	1.128	1.063	1.240	0.829	1.038	1.194	1.027	1.123	0.956	0.984	1.141	1.074
Cashpoor	IND	1.848	0.917	1.743	1.060	1.694	1.813	0.926	1.743	1.040	1.678	2.347	0.852	1.988	1.180	2.000	2.347	0.852	1.988	1.180	2.000
KBSLAB	IND	0.987	0.981	0.971	1.017	0.968	0.987	0.981	0.971	1.017	0.968	1.033	0.919	1.034	0.999	0.949	1.033	0.919	1.035	0.998	0.949
SNFL	IND	1.023	1.089	1.010	1.013	1.114	1.023	1.089	1.010	1.013	1.114	1.023	1.052	1.010	1.013	1.077	1.023	1.052	1.010	1.013	1.077
MBK Ventu	INDO	1.364	0.909	0.859	1.587	1.240	1.351	0.914	0.869	1.555	1.236	1.484	0.813	0.795	1.866	1.207	1.484	0.813	0.807	1.839	1.207
Kadet	KEN	1.371	0.893	1.383	0.992	1.225	1.363	0.896	1.375	0.991	1.220	1.482	0.813	1.488	0.997	1.205	1.482	0.813	1.488	0.997	1.205
K-REP	KEN	1.202	0.931	1.068	1.125	1.119	1.215	1.023	1.157	1.050	1.243	1.272	0.864	1.055	1.205	1.098	1.244	1.017	1.127	1.103	1.265
KWFT	KEN	1.079	0.945	1.006	1.073	1.019	1.025	0.967	1.005	1.020	0.992	1.277	0.842	1.023	1.248	1.076	1.189	0.873	0.994	1.196	1.038
SMEP	KEN	1.167	0.899	1.119	1.043	1.048	1.139	0.916	1.118	1.019	1.044	1.315	0.813	1.187	1.108	1.069	1.315	0.813	1.176	1.118	1.069
AIYL Bank	KYR	0.978	0.996	1.000	0.978	0.973	0.978	0.996	1.000	0.978	0.973	0.987	0.996	1.000	0.987	0.982	0.987	0.996	1.000	0.987	0.982
BTFF	KYR	1.320	1.012	1.239	1.065	1.336	1.320	1.012	1.239	1.065	1.336	1.081	0.994	1.078	1.003	1.074	1.081	0.994	1.078	1.003	1.074
Soro Y	MALI	1.031	0.813	0.998	1.034	0.839	1.031	0.813	0.998	1.034	0.839	1.031	0.813	0.998	1.034	0.839	1.031	0.813	0.998	1.034	0.839
CreditMongol	MON	1.124	0.883	1.078	1.043	0.992	1.121	0.884	1.078	1.040	0.990	1.242	0.813	1.222	1.017	1.010	1.242	0.813	1.222	1.017	1.010
FCC	MOZ	0.823	1.023	0.758	1.086	0.842	0.949	0.953	0.870	1.091	0.904	0.908	0.813	0.874	1.038	0.738	0.908	0.813	0.884	1.026	0.738
SOCREMO	MOZ	1.051	0.952	1.073	0.980	1.001	1.065	0.968	1.075	0.991	1.031	1.358	0.813	1.238	1.096	1.104	1.358	0.813	1.238	1.096	1.104
TCHUMA	MOZ	1.071	0.920	1.075	0.997	0.986	1.118	0.886	1.127	0.992	0.990	1.199	0.813	1.197	1.002	0.975	1.199	0.813	1.197	1.002	0.975
NIRDHAN	NEP	1.096	1.007	1.082	1.013	1.103	1.095	1.006	1.088	1.006	1.101	1.137	0.970	1.133	1.003	1.102	1.153	0.956	1.160	0.994	1.102
ProCred NIC	NIC	0.908	0.924	0.883	1.028	0.839	0.826	0.988	0.857	0.964	0.816	1.090	0.885	0.891	1.223	0.964	0.855	1.016	0.878	0.974	0.869
ASASAH	PAK	0.527	0.906	0.489	1.079	0.478	0.518	0.841	0.488	1.062	0.436	0.716	0.813	0.653	1.097	0.582	0.716	0.813	0.486	1.473	0.582
FMBL	PAK	1.408	0.959	1.403	1.003	1.351	1.432	0.955	1.404	1.020	1.368	1.606	0.940	1.562	1.028	1.510	1.606	0.940	1.531	1.049	1.509
KASHF	PAK	1.043	0.975	1.019	1.024	1.017	1.084	0.956	1.048	1.034	1.037	1.256	0.940	1.229	1.022	1.181	1.086	1.056	1.088	0.997	1.147
FIELCO	PAR	1.108	0.919	1.085	1.022	1.019	0.972	1.038	0.985	0.987	1.009	1.114	0.813	0.926	1.203	0.906	0.850	1.002	0.851	0.998	0.851
Interfisa	PAR	1.099	0.933	1.077	1.020	1.025	1.052	1.147	1.036	1.015	1.207	1.138	0.848	0.968	1.175	0.965	1.527	0.968	1.268	1.204	1.477
Bantra	PER	1.103	0.921	1.000	1.103	1.015	1.000	0.991	1.000	1.000	0.991	1.176	0.813	1.000	1.176	0.956	0.990	0.886	1.000	0.990	0.877
Caja Nor	PER	1.004	0.956	0.988	1.016	0.960	0.971	0.973	0.975	0.996	0.944	1.117	0.874	0.991	1.128	0.977	0.898	1.037	0.935	0.961	0.931
Caritas	PER	1.221	0.885	1.193	1.023	1.080	1.222	0.884	1.193	1.025	1.081	1.286	0.813	1.179	1.091	1.045	1.286	0.813	1.179	1.091	1.045
CMAC May	PER	1.128	0.949	1.065	1.060	1.071	1.087	0.977	1.065	1.021	1.062	1.185	0.871	0.985	1.203	1.033	1.059	0.963	0.945	1.122	1.020
CMAC Tac	PER	1.055	0.936	1.046	1.008	0.987	1.055	0.930	1.038	1.016	0.981	1.089	0.972	1.000	1.089	1.059	0.997	1.016	0.989	1.008	1.013
CMAC Tru	PER	1.000	0.981	1.000	1.000	0.981	1.000	1.033	1.000	1.000	1.033	1.030	0.978	1.000	1.030	1.007	1.009	1.115	1.000	1.009	1.125
Edpy. C Tac	PER	1.099	0.944	1.088	1.009	1.037	1.072	0.955	1.067	1.005	1.024	1.223	0.868	1.131	1.081	1.061	1.223	0.868	1.131	1.081	1.061
Edpy. Cofian	PER	0.906	0.966	0.893	1.015	0.876	0.906	0.966	0.893	1.015	0.876	1.000	0.918	0.919	1.088	0.918	1.000	0.918	0.917	1.091	0.918
EDPY.Edyf	PER	1.105	0.936	1.011	1.093	1.035	1.090	0.944	1.011	1.078	1.028	1.247	0.825	0.967	1.290	1.028	1.247	0.825	0.967	1.290	1.028
FINCA PER	PER	1.076	0.932	1.006	1.069	1.003	1.169	0.848	1.084	1.078	0.991	1.322	0.813	1.286	1.028	1.075	1.322	0.813	1.286	1.028	1.075
Fondesurco	PER	1.229	0.906	0.974	1.261	1.113	1.229	0.906	0.974	1.261	1.113	1.284	0.823	1.026	1.252	1.057	1.284	0.823	1.026	1.252	1.057
Movim. M R	PER	1.107	0.927	1.078	1.027	1.027	1.158	0.873	1.038	1.116	1.011	1.211	0.813	1.194	1.015	0.984	1.211	0.813	1.134	1.067	0.984
ProMujer PER	PER	1.131	0.917	1.129	1.002	1.037	1.120	0.927	1.111	1.008	1.039	1.334	0.813	1.334	1.000	1.085	1.334	0.813	1.334	1.000	1.085
ASHI	PHI	1.190	0.900	1.164	1.022	1.071	1.333	0.906	1.246	1.070	1.207	1.280	0.813	1.263	1.013	1.040	1.280	0.882	1.335	0.959	1.128
FORUS	RUS	0.885	0.921	0.869	1.018	0.815	0.863	0.944	0.869	0.993	0.815	1.069	0.852	0.887	1.205	0.911	0.985	0.888	0.865	1.139	0.874
SEF-ZAF	SA	0.903	0.998	0.999	0.904	0.901	1.000	0.876	1.000	1.000	0.876	1.222	0.813	1.228	0.996	0.994	1.222	0.813	1.228	0.996	0.994
SPBD	SAM	1.005	0.945	0.713	1.408	0.950	0.998	0.943	0.713	1.400	0.941	1.172	0.813	0.683	1.715	0.953	1.172	0.813	0.683	1.715	0.953
CMS	SEN	0.987	0.953	0.924	1.068	0.941	0.987	0.958	0.924	1.068	0.946	0.906	0.960	0.844	1.073	0.870	0.906	0.971	0.844	1.073	0.880
Agroinvest	TAJ	0.727	0.949	0.727	1.001	0.690	0.720	0.957	0.728	0.989	0.689	1.050	0.930	0.892	1.176	0.976	1.073	0.931	0.884	1.214	0.999
FMFB TAJ	TAJ	1.352	0.956	1.275	1.061	1.293	1.352	0.956	1.275	1.061	1.293	1.371	0.947	1.370	1.001	1.298	1.371	0.947	1.370	1.001	1.298
IMON	TAJ	1.201	0.950	1.194	1.006	1.142	1.201	0.953	1.194	1.006	1.144	1.315	0.835	1.314	1.001	1.097	1.315	0.835	1.314	1.001	1.097
MicroInvest	TAJ	1.163	0.939	1.073	1.084	1.092	1.161	0.944	1.032	1.125	1.096	1.252	0.829	1.198	1.045	1.037	1.252	0.829	1.148	1.091	1.037
PRIDE	TAN	0.989	0.926	0.996	0.993	0.916	1.000	0.852	1.000	1.000	0.852	1.156	0.813	0.981	1.178	0.940	0.849	0.977	0.850	0.999	0.830
CMFL	UGA	1.117	0.903	1.094	1.021	1.009	0.872	0.946	0.872	1.000	0.825	1.705	0.813	1.546	1.103	1.386	1.234	0.956	1.077	1.146	1.179
FAULU	UGA	0.851	0.916	0.881	0.966	0.780	0.821	0.915	0.863	0.951	0.751	1.101	0.813	1.074	1.026	0.895	1.101	0.813	1.074	1.026	0.895
FINCA UGA	UGA	0.828	1.018	1.000	0.828	0.843	0.996	0.814	1.000	0.996	0.811	1.065	0.813	0.966	1.102	0.866	1.007	0.836	0.938	1.073	0.842
MEDNET	UGA	1.520	0.997	1.515	1.003	1.515	1.490	1.001	1.474	1.011	1.491	1.353	0.813	1.398	0.968	1.100	1.353	0.813	1.398	0.968	1.100
BanGente	VEN	1.161	0.897	1.046	1.110	1.041	1.108	0.990	1.046	1.059	1.097	1.168	0.817	0.944	1.237	0.954	1.168	0.817	0.944	1.237	0.954
CETZAM	ZAM	1.000	1.055	1.000	1.000	1.055	1.000														

### **Appendix K Malmquist DEA indices for treating subsidies as an output (Panel)**

MFI	Cou	LR-ACE				LRS <sup>o</sup> -ACE				L-ACE				LS <sup>o</sup> -ACE				R-ACE				RS <sup>o</sup> -ACE			
		effch	techch	pech	tfpch	effch	techch	pech	tfpch	effch	techch	pech	tfpch	effch	techch	pech	tfpch	effch	techch	pech	tfpch	effch	techch	pech	tfpch
BURO TANGAIL	BAN	0.946	1.060	1.018	1.002	0.946	1.060	1.007	1.002	0.797	1.243	1.014	0.990	0.795	1.213	1.002	0.965	0.917	1.027	0.919	0.942	0.916	1.027	0.907	0.941
IDF	BAN	1.010	1.217	1.000	1.230	1.010	1.217	1.000	1.230	1.010	1.280	1.000	1.293	1.010	1.278	1.000	1.291	0.939	1.022	0.925	0.960	0.939	1.022	0.925	0.960
RCPB	BF	0.869	0.993	0.841	0.862	0.869	0.993	0.841	0.862	0.869	0.993	0.841	0.862	0.869	0.993	0.841	0.862	0.873	1.019	0.946	0.890	0.873	1.019	0.946	0.890
MIKROFIN	BOS	1.000	1.094	1.000	1.094	1.000	1.606	1.000	1.606	1.000	1.095	1.000	1.095	1.000	1.608	1.000	1.608	1.070	0.942	1.082	1.008	1.366	1.605	1.353	2.192
FMM Buca	COL	1.055	0.979	1.032	1.033	1.054	0.980	1.026	1.033	1.095	0.986	1.087	1.079	1.092	0.985	1.029	1.076	0.919	1.013	0.982	0.931	0.919	1.013	0.996	0.931
D-Miro	ECU	0.982	0.970	0.985	0.953	0.982	0.970	0.985	0.953	0.906	1.047	0.938	0.949	0.928	1.036	0.940	0.961	1.051	0.941	1.025	0.989	1.051	0.941	1.025	0.989
FINCA ECU	ECU	1.000	0.934	1.000	0.934	1.000	0.906	1.000	0.906	0.958	1.017	0.992	0.974	0.957	0.988	0.992	0.946	0.983	0.940	0.997	0.924	0.983	0.913	0.997	0.897
FODEMI	ECU	1.014	1.046	1.000	1.060	1.014	1.046	1.000	1.060	1.014	1.046	1.000	1.061	1.014	1.046	1.000	1.061	1.060	1.006	1.015	1.066	1.060	1.006	1.015	1.066
Fundacion Es	ECU	1.002	0.983	1.000	0.985	1.002	0.983	1.000	0.985	0.924	1.063	0.949	0.982	0.958	1.034	0.955	0.990	1.010	0.983	1.000	0.993	1.010	0.983	1.000	0.993
ACSI	ETH	1.147	0.979	1.080	1.123	1.000	1.518	1.000	1.518	1.147	0.979	1.080	1.123	1.000	1.518	1.000	1.518	1.122	1.108	1.254	1.243	1.000	1.716	1.000	1.716
DECSI	ETH	1.000	0.962	1.000	0.962	1.000	1.008	1.000	1.008	1.000	0.930	1.000	0.930	1.000	1.002	1.000	1.002	1.000	1.013	1.000	1.013	1.000	1.061	1.000	1.061
ProCred GHA	GHA	0.739	1.005	0.751	0.743	0.739	1.005	0.751	0.743	0.956	1.077	1.014	1.030	0.956	1.060	1.010	1.014	0.608	0.991	0.651	0.602	0.608	0.991	0.651	0.602
JMCC	JOR	1.066	1.036	1.092	1.104	1.066	1.036	1.092	1.103	1.067	1.044	1.093	1.114	1.067	1.041	1.093	1.110	1.043	1.013	1.058	1.057	1.043	1.013	1.058	1.057
KLF	KAZ	0.820	1.017	0.849	0.834	0.820	1.017	0.849	0.834	0.843	1.011	0.863	0.852	0.844	1.002	0.863	0.846	0.820	1.017	0.849	0.834	0.820	1.017	0.849	0.834
EBS	KEN	1.056	1.008	1.422	1.065	1.083	1.019	1.305	1.103	1.565	0.981	1.940	1.536	1.071	1.508	1.305	1.615	1.056	1.008	1.422	1.065	1.083	1.019	1.305	1.103
Fondep	MOR	1.046	1.043	1.045	1.091	1.046	1.589	1.045	1.663	0.973	1.040	1.005	1.012	1.047	1.597	1.045	1.672	1.368	1.028	1.359	1.406	1.368	1.567	1.359	2.142
Inmaa	MOR	1.199	1.005	1.000	1.205	1.199	1.005	1.000	1.205	1.111	1.077	1.000	1.197	1.140	1.064	1.000	1.213	1.269	0.976	1.000	1.238	1.269	0.976	1.000	1.238
ACODEP	NIC	1.000	0.971	1.000	0.971	1.000	0.971	1.000	0.971	1.012	1.007	1.034	1.019	1.029	0.991	1.037	1.020	1.000	0.971	1.000	0.971	1.000	0.971	1.000	0.971
FDL	NIC	1.001	0.993	0.971	0.993	1.001	0.993	0.971	0.993	0.982	1.010	0.995	0.992	0.982	1.010	0.987	0.992	1.001	1.024	1.050	1.025	1.001	1.024	1.050	1.025
Prodesa	NIC	1.000	1.042	1.000	1.042	1.000	1.263	1.000	1.263	1.000	1.033	1.000	1.033	1.000	1.263	1.000	1.263	1.000	1.070	1.000	1.070	1.000	1.297	1.000	1.297
CMAC Arq	PER	1.000	0.949	1.000	0.949	1.000	0.947	1.000	0.947	0.917	1.088	1.000	0.998	0.917	1.088	1.000	0.998	1.000	0.912	1.000	0.912	1.000	0.910	1.000	0.910
Bangko Ka	PHI	0.990	1.009	1.015	0.999	0.990	1.026	1.015	1.016	1.032	0.970	1.025	1.001	1.035	1.107	0.982	1.145	0.990	1.009	1.015	0.999	0.990	1.026	1.015	1.016
BCB	PHI	0.955	1.019	1.000	0.974	0.899	1.078	1.000	0.969	0.882	1.060	0.875	0.935	0.733	1.297	0.788	0.950	0.955	1.019	1.000	0.974	0.899	1.078	1.000	0.969
CBMO	PHI	0.989	1.002	0.969	0.991	0.959	1.056	0.960	1.012	0.994	1.049	1.005	1.042	0.964	1.088	0.917	1.049	0.936	1.027	0.962	0.961	0.907	1.093	0.959	0.992
DIGOS	PHI	0.994	0.986	0.978	0.980	0.994	0.986	0.978	0.980	0.933	1.036	0.940	0.967	0.937	1.034	0.940	0.969	0.993	1.021	1.006	1.014	0.993	1.021	1.006	1.014
SOLANO	PHI	0.948	1.011	1.000	0.958	0.768	1.271	1.000	0.975	0.765	0.969	1.000	0.741	0.559	1.544	1.000	0.863	0.948	1.011	1.000	0.958	0.768	1.271	1.000	0.975
TSPI	PHI	1.000	1.047	1.000	1.047	1.000	1.053	1.000	1.053	0.903	1.236	1.071	1.117	0.951	1.198	1.079	1.140	1.000	1.043	1.000	1.043	1.000	1.053	1.000	1.053
Enda	TUN	0.933	1.002	0.940	0.935	0.936	1.001	0.940	0.936	0.839	1.082	0.881	0.907	0.872	1.063	0.886	0.927	1.060	0.969	1.008	1.027	1.061	0.969	1.009	1.029
CEP	VIET	0.898	1.044	0.911	0.938	0.900	1.042	0.913	0.937	0.880	1.054	0.910	0.928	0.890	1.047	0.911	0.932	1.097	1.020	1.118	1.119	1.097	1.021	1.118	1.120
TYM	VIET	0.808	1.112	0.845	0.899	0.808	1.110	0.807	0.896	0.797	1.120	0.845	0.893	0.797	1.118	0.807	0.891	0.997	1.027	1.004	1.024	0.996	1.028	1.003	1.023
mean		<b>0.978</b>	<b>1.016</b>	<b>0.986</b>	<b>0.993</b>	<b>0.965</b>	<b>1.079</b>	<b>0.979</b>	<b>1.041</b>	<b>0.963</b>	<b>1.051</b>	<b>1.001</b>	<b>1.013</b>	<b>0.939</b>	<b>1.146</b>	<b>0.976</b>	<b>1.076</b>	<b>0.994</b>	<b>1.005</b>	<b>1.013</b>	<b>0.999</b>	<b>0.989</b>	<b>1.074</b>	<b>1.010</b>	<b>1.062</b>