EFFICIENCY AND PRODUCTIVITY OF MICROFINANCE: INCORPORATING THE ROLE OF SUBSIDIES[1]

Ahmad Nawaz* **3rd Draft**

Abstract

Unlike conventional finance institutions, Microfinance institutions (MFIs) strive for financial efficiency and sustainability but also empowerment of the poor. This social nature of MFIs is mainly financed by subsidies from the Donors. So the role of subsidies can not be under estimated in MFIs efficiency and productivity analysis. This paper is a first attempt to measure the financial efficiency and productivity of MFIs worldwide taking into account the subsidies received by MFIs by using the non-parametric Data Envelopment Analysis (DEA). This latest panel data set for the subsidy calculations has been generated directly from the audit reports of the 204 MFIs with 23 million borrowers in 54 Countries worldwide which constitute a significant part of the microfinance outreach worldwide. Towards this aim, a four-stage analysis is carried out. Firstly subsidies have been calculated for the years 2005 and 2006 in a unique way using Yaron's Subsidy Dependence Index (SDI) which measures the social cost of subsidized MFIs in a short time frame. Secondly technical and pure efficiency scores are calculated by spliting subsidies into input and output and entered into the DEA framework specifications depending on whether they are creating (negative subsidies) or distorting public wealth (positive subsidies). Thirdly DEA-based Malmquist indices are calculated to analyse the intertemporal productivity change. Fourthly 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 upheld the trade off between outreach to the poor and financial efficiency. Thus MFIs which cater to poor tend to be 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.

Keywords: Microfinance, Subsidies, Efficiency, Data Envelopment Analysis, Malmquist Index, Tobit regression analysis
J.E.L. Classification: C14, C24,G14, G21, H21

1 Introduction

Microfinance promises poverty reduction without subsidization[2]. After four decades into the business this promise is yet to be fulfilled as the role of subsidies still persists despite recent drives to Commercialization of Microfinance[3]. Consequently measuring their Efficiency and Productivity demands incorporation of the role of subsidies. However incorporation of subsidies has been generally a neglected area in efficiency and productivity analysis of Microfinance Institutions (MFIs). Traditionally the performance of Finance Institution has been measured by conventional

*Email: Ahmad.Nawaz@wiwi.uni-goettingen.de - Tel: +49-551-397301 - Fax: +49-551-397302
University of Goettingen, Department of Economics, Chair in Development Economics, Platz der Goettinger Sieben 3, Oec I-157, 37073 Goettingen, Germany

[1] I am grateful for the comments and suggestions from Prof. Stephan Klasen, PhD and Prof. Dr. Bernhard Bruemmer of Goettingen University, Germany and participants of the Asia-Pacific Productivity Conference, Taiwan and EUDN PhD seminar 2008, Goettingen, Germany

[2] A lot of literature has been published on this issue by the advocates of Microfinance. For Proponents see for example Hulme and Mosley (1996); Zeller and Meyer (2002);

[3] Armendáriz de Aghion and Jonathan Morduch(2004); Morduch (1999a); Morduch (1999b); Goodman (2005): Cull et.al (2007)

financial ratios. To date only a few studies have been emerged which have taken into account the subsidies into the assessment of financial performance of MFIs through parametric techniques[4]. The accuracy of that subsidy estimates are questionable as MFIs tend to under estimate the subsidy figure to make their accounts look more acceptable. Also most of the subsidy does not make it into the balance sheets of respective MFIs. Notwithstanding these shortcomings, as a starting point, this paper calculates subsidies using Yaron's Subsidy Dependence Index[5] (SDI) which measures the social cost of subsidized MFIs.

In addition to the conventional financial ratios, the assessment can also be done using the efficiency analysis of MFIs. There exists significant literature that assess the efficiency of Traditional Financial institutions by employing non parametric techniques i.e. Data Envelopment Analysis (DEA) (Charnes *et al*, 1978)[6] which has been widely employed in recent times. Though normally associated with the efficiency analysis of the Traditional Banking Sector, some researchers have successfully replicated it for the efficiency Analysis of MFIs[7]. However the efficiency analysis of MFIs based on conventional production and intermediation model approach in traditional financial literature is hard to justify when it comes to subsidized MFIs. The overall equation linking capital and labor inputs into profits and social change still proves difficult to master (Cull et al. 2007)

In this backdrop this paper is a first attempt to addresses 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[8] 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.

With a subsidy data at our disposal, this study aims to resolve some key issues. Can we incorporate these subsidies into the DEA framework in order to gauge their impact on the financial efficency? In particular we want to investigate the impact of different organizational, structural, financial and social variable on the efficiency of microfinance both with and without subsidies. In the course of that the study attempts to find out some specific relationships in the presence of subsidy. Does staff productivity enhances the MFI's financial efficiency and Financial costs reduces it? Another important relationship to investigate is the impact of outreach on MFI's efficiency. Loan size is an indicator of outreach of MFI i.e. the lower the loan size, the more MFI reaches to the poor (outreach). Another important relationship to be estimated is between financial sustainability and SDI with financial efficiency. Does Lending to women enhances the financial efficiency amid subsidies? 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 feratures i.e status, regulations and savings.

For the proponents of the Win-Win proposition[9], 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 analysis and Malmquist Productivity index show only marginal positive impact of subsidies on the financial efficiency of

[4] Hudon & Tarca, (2006); Cull et al.(2007) : Hudon (2006)

[5] To examine SDI calculations in past studies see for example Congo (2002); Sharma (2004); Hulme and Mosley(1996); Schreiner (19977); Schreiner and Yaron (1999 and 2001); Jehangir (2005)

[6] Examples of the use of DEA in banking are Sherman and Gold (1985), Athanassopoulos (1997), Seiford and Zhu (1999), and Camanho and Dyson (2005);

[7] See for example Gutierrez-Nieto et. al (2007)

[8] The audit reports have been taken from the Mix Market Website (hhp://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

[9] That mocrifinace reduces poverty and in the course of that becomes subsidy free or sustainable

MFIs. Tobit regression equation too found little evidence in support of positive role of subsidies on the Efficiency and Productivity of Microfinance.

The paper is organized as follows. In the next section, to start off, some descriptive statistic about the data in general and subsidy dependence index (SDI) in particular are given. The third section gives an overview of Microfinance sector with reference to with and without subsidies. The fourth section is dedicated to illustrate the non-parametric efficiency analysis. The fifth section shows the empirical evidence using Tobit regression analysis. A conclusion is given at the end.

2 Microfinance Horizon

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[10] figures in particular. All the MFIs adhere to the International Accounting Standards (IAS). SDI has been calculated for the years 2005 and 2006 in a unique way using Yaron's Subsidy Dependence Index[11] (SDI) which measures the social cost of subsidized MFIs in a short time frame (Yaron, 1992a). Table 1 depicts the calculated SDI values for years 2005 & 2006.

Table 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[12]	0.109	**INECO**	-0.028	0.068	**FONCRESOL**	0.359	-	**FINCA-PER**	0.269	0.380
ACSI	-0.250[13]	-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	-	**Tamweelcom**	-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	12.26[14]
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	0.200
KADET	0.582	0.849	**FORUS**	0.095	0.332	**FODEMI**	-0.055	-0.091	**ENDA**	-0.044	-0.320

[10] Extracting subsidy information from the balance sheet needs delibration. 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)

[11] 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

[12] SDI value of 0.161 means that the MFI has to raise the interest rates on loans by 16.1% to be subsidy free

[13] SDI value of -0.250 means that the MFI is subsidy free even if it reduces interest rate on loand by 25%

[14] Clearly an outlier so it has been dropped for the descriptive naylysis later on.

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	-0.185	**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	0.382
KANDO-JAGIMA	-0.380	0.159	**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	0.074	**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

SDI values for 25 MFIs for the year 2006 are missing due to the 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. We proceed further without going into the details of SDI calculation as it is beyond this paper's main theme.

2.2 Description of the Data

Table 2 gives the overview of variables used in the study along with summary statistics. It is summed up into different categories i.e. variables used in calculating subsidies and other economic, organizational, financial and categorical variables.

Table 2

Variable Description and Summary Statistics

Organisational variables	***Obs***	***Definition***	***Mean***	***Median***	***Min***	***Max***
Savers*	407	Number of savers	75083.79	0	0	6455979
GNI per capita	404	GNI per capita (formerly GNP per capita) is the gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population.	1.401	0.1	0.160	10.300
Borrowers*	404	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	100259.5	23768	949	5163279
Age*	408	Age of MFI in years	14.20	12	3	51
Women borrowers*	391	Percentage of borrowers who are women	64.76	61.6	8.6	100
Average Loan Balance per Borrower*	404	Gross Loan Portfolio / Number of Active Borrowers	789.59	476	34	11198
Staff*	404	The number of individuals who are actively employed by the MFI.	559.13	201	7	24457
Credit Officers	330	Total number of Credit officers	315.08	89	5	14670
Operational cost	395	Expenses related to operations, such as all personnel expenses, rent and utilities, transportation, office supplies, and depreciation	4381	1850	0	77300
Operating Cost per Staff	395	Operating Cost per Staff	12.170	12.029	0	47.714
Borrower per Staff*	404	Borrower per Staff	144.5864	136.871	2.826149	454.8

Outreach	401	Average Loan Size/ GNI per capita	0.8939	0.4432	.02606	33.93
Variable used in subsidy calculations	***Obs***	***Definition***	***Mean***	***Median***	***Min***	***Max***
Average annual Assets (A)	388	Average of current year (t) and previous year (t-1) assets. Includes all asset accounts net of all contra-asset accounts, such as the loan-loss allowance and accumulated depreciation.	37000	11400	227	521000
Average annual Equity (E)	387	Average of current (t) and previous year (t-1) equity. Total assets less total liabilities.	8189	3890	-1400	180000
Subsidised Equity	386	Average equity*Opportunity cost of capital	1247	527	-1400	27600
Average Public Debt (A)	383	Average annual outstanding concessionary-borrowed funds	10600	3310	0	100000
Total Interest on Debt	383	interest rate paid on concessionary borrowed funds/ interest rate paid on Public debt	778	266	0	8629
Interest rate(c)	377	interest rate paid on concessionary borrowed funds/ interest rate paid on Public debt	0.074	0.072	0	0.321
Discount on Debt	383	A(m^{15}-c)	709	155	-1044	13900
Revenue Grants	385	Cash gifts except for the accounting choice to record them as revenues rather than as direct injection to equity.	525	0.921	0	79800
K	384	Sum of Revenue grants and Discount on expenses	526	1.144	0	79800
Accounting profit	385	Total revenue less total expenses, operating and non-operating, Including all donations and taxes, if any.	1793	510	-5643	41300
Tax	385	Includes all taxes paid on net income or other measure of profits as defined by local tax authorities. This item may also include any revenue tax.	282	0.403	-158	7078
Profit Tax (P)	385	Accounting Profit – Taxes	1510	461	-5899	41300
Subsidy (S)	383	(E * m + A (m - c) + K – P)	967	220	-18100	76900
Average Loan Portfolio	384	Average annual outstanding loan portfolio	89100	8411	48	24100000
Revenues from Loan Portfolio	385	Revenue from interest earned, fees, and commissions (including late fees and penalties) on the gross loan portfolio only.	27700	2401	0	8040000
Intrest rate/Yield	385	Average on lending interest rate/yield on lending	0.302	0.267	0	1.281
Subsidy Dependence Index	383	Subsidy(S)/ Revenue from lending(R)	0.247	0.122	-1.914	12.26
Financial Ratios calculated						
change in Yield	383	SDI * actual yield from lending	0.069	0.028	-0.766	1.715
Nominal Subsidy Free Yield	381	Change in yield + actual yield on lending	0.372	0.308	-0.396	2.533
Inflation[16]	408	Indices shown for Consumer Prices are the most frequently used indicators of inflation and reflect changes in the cost of acquiring a fixed basket of goods and services by the average consumer	0.067	0.062	0.0064	0.2403
Real Subsidy Free Yield	383	(Nominal Subsidy free yield-inflation)/(1+inflation)	0.309	0.251	-0.337	2.296
True Profit	385	Accounting Profit- profit Grants	280	112	-50300	38500
Return on assets (ROA)	386	(Net Operating Income, less Taxes)/ Period Average Assets	0.052	0.044	-0.685	0.616
Subsidy adjusted (ROA)	385	True profit/ Period Average Assets	.0063	0.0120	-.951	.521
Return on Equity (ROE)	386	(Net Operating Income, less Taxes)/ Period Average Equity	0.1444	0.1694	-17.23	8.535
Subsidy adjusted (ROE)	385	True profit/ Period Average Equity	-.0333	0.0584	-17.639	14.683
Operational Self Sufficiency(OSS)	399	Financial Revenue (Total)/ (Operational Expense + Loan Loss Provision Expense + Operating Expense)	123.615	120.82	3.57	254.88
Categorical Variable	***Obs***	***Definition***	***Mean***	***Median***	***Min***	***Max***
Region*	408	Geographic region in which the MFI operates classified into 6 regions: Africa; East Asia and the Pacific; Eastern Europe and Central Asia; Middle East and North Africa; Latin America and the Caribbean; South Asia	3.259804	4	1	6
Lending Methodology	408	Lending classified into 4 categories: Individual; Individual & group; group; Village banking	1.936275	2	1	4
Status*	408	classified into 5 categories: NGO;Bank;NBFI;Rural Bank; Cooperatives	3.20098	4	1	5
Otherserve*	408	MFI involves other services i.e. health, education etc apart from providing financial services	.4019608	0	0	1
Saving*	408	Whether savings (voluntary or Compulsory) is a feature of MFI	.5539216	1	0	1
Regulated*	408	Whether MFI is regulated by some authority like central bank etc.	.5735294	1	0	1

Source: Author´s own calculation based on the Audit Reports of MFIs and Microfinance Information eXange Inc. All the values are in 000s US$ except the ratios and observations. Some definations are taken from CGAP (2003).
* refers to data taken from Mix market Website

The correlation matrix in Table 3 reveals important relationships among the Financial, Organizational and Social variables. Most of the relationships are in line with the theory. Next section describes an overview of Microfinance Sector followed by the comparisons of few Financial Ratios with and without subsidies.

[15] Opportunity cost of capital i.e Market lending interest rate taken from the Internation Financial Statistics , IMF for years 2005 and 2006
[16] taken from the Worldbank's World Development Indicators (WDI)

Table 3
Correlations

	SDI	Subsidy	OSS	ROA	SAROA	ROE	SAROE	Age	Women	Outreach	borr/staff	cost/staff	True Profit	Equity	Financial Revenues
SDI	1.00 (381)														
Subsidy	0.2288* (381)	1.00 (381)													
OSS	-0.4022* (378)	-0.0290 (378)	1.00 (397)												
ROA	-0.4241* (381)	-0.0866 (381)	0.3345* (380)	1.00 (384)											
SAROA	-0.6697* (381)	-0.1855* (386)	0.4932* (380)	0.6949* (381)	1.00 (383)										
ROE	0.0845 (381)	-0.0315 (381)	0.0702 (380)	-0.2178* (383)	-0.2324* (381)	1.00 (384)									
SAROE	0.0312 (381)	-0.0375 (381)	0.0823 (380)	-0.1978* (381)	-0.1370* (383)	0.8925* (381)	1.00 (383)								
Age	-0.1392* (381)	0.1541* (381)	0.0896 (397)	-0.0758 (384)	0.0774 (383)	-0.0523 (384)	-0.0247 (383)	1.00 (406)							
Women	-0.0330 (369)	0.0466 (369)	-0.1367* (384)	0.0827 (371)	-0.0437 (371)	0.1075* (372)	0.0442 (371)	0.0443 (389)	1.00 (389)						
Outreach[17]	0.0472 (378)	0.0046 (378)	0.0694 (394)	-0.0448 (380)	0.0046 (380)	-0.0242 (381)	-0.0147 (380)	-0.1254* (399)	-0.2704* (386)	1.00 (399)					
Borr/Staff	-0.2041* (381)	0.0124 (381)	0.1979* (397)	0.1452* (383)	0.1815* (383)	0.0742 (384)	0.0645 (383)	0.1060* (402)	0.3430* (389)	-0.3159* (399)	1.00 (402)				
Cost/Staff	-0.0467 (381)	-0.0534 (381)	-0.0425 (390)	-0.0987 (383)	0.0016 (383)	-0.0966 (383)	-0.0547 (383)	0.0267 (393)	-0.3808* (381)	0.0019 (390)	-0.1002* (393)	1.00 (393)			
True Profit	-0.2734* (381)	-0.8854* (381)	0.2190* (380)	0.1108* (381)	0.2479* (383)	0.0509 (381)	0.0655 (383)	-0.0673 (383)	-0.0852 (371)	0.0207 (380)	0.0470 (383)	0.11103* (383)	1.00 (383)		
Equity	0.0175 (381)	0.6647* (381)	0.3196* (381)	0.0017 (382)	0.0246 (381)	0.0133 (383)	0.0292 (381)	0.2199* (385)	-0.0270 (373)	0.0148 (382)	0.1481* (385)	0.0415 (384)	-0.2591* (381)	1.00 (385)	
Financial Revenues	-0.0753 (381)	0.4638* (381)	0.1485* (386)	-0.2561 (382)	0.0216 (382)	0.0129 (382)	0.0208 (383)	0.1731* (389)	-0.1111* (377)	0.0210 (386)	-0.0551 (389)	0.3022* (389)	-0.1138* (383)	0.7205* (384)	1.00 (389)

Numbers of Observations are in parentheses
*Correlation Coefficient significant at 5% level or better

3 Efficiency Analysis

3.1 Methodology

For efficiency analysis, two-stage analysis have been carried out. Firstly, Data Envelopment Analysis (DEA) approach is used to estimate technical and pure efficiency scores of the MFIs for year 2005 and 2006 Saperately. Secondly, DEA-based Malmquist indices are calculated to analyse inter.temporal productivity change. In the next subsections only a brief description of DEA approach and Malmquist productivity index will be given.

3.1.1 Data Envelopment Analysis

DEA was first introduced by Charnes, Cooper and Rhodes (1978), known as the CCR model, as a generalization of efficiency proposed by Farrell (1957). We assume that there are n DMUs, and each DMU has m inputs to produce s output. 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 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

[17] Outreach is defined as Average loan balance divided by thegross national income per capita. The lower the ratio, the higher the Outreach i.e MFI caters to poor relatively to wealthy clients

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

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

where h_o is the efficiency ratio of the DMU_o; 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_o, y_{ro} is the value of the output r for DMU_o.

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

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

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

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

To reflect the transformation, the variables from (u, v) has been replaced by (μ, v). ε 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:

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

subject to

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

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

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

where θ_o is the proportion of DMU_o's inputs needed to produce a quantity of outputs equivalent to its benchmarked DMUs identified and weighted by the λ_j. s_i^- and s_r^+ are the slack variables of input and output respectively. λ_j is a ($n \times 1$) column vector of constants and can indicate benchmarked DMUs of DMU_o. 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

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

(VRS). The CRS LP problem can be easily modified to account for VRS by adding the convexity constraint 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

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

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

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

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

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_o by using CCR and BCC model as follow:

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

If the ratio is equal to 1 then a DMU_o is scale efficient, otherwise if the ratio is less than one then a DMU_o is scale inefficient.

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:

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

and

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

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 τ. 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:

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

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 periods *t* and *t + 1;* this could be called technological progress. So:

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

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

3.2 DEA Model and Input Output Variable

Table 4 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. 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 production model approach, Financial institutions are treated as firms that use physical input, employes and expend money in order to obtain deposits, grant loans and collect revenues. We assume output oriented Production model with variable returns to scale is better suited to Microfinance institutions. Beacause 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. And they always have restricted amount of money and human resource (Inputs) to spend on unlike commercial banks which can generate money from shareholders. The selection of specifications with correct inputs and outputs in the context of MFIs is very important. This study uses LR-ACE[18] 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 MFI. The other specifications used are basically the different combination of treating subsidies as an input and output with the above general specifications.

Table 4

Inputs and Outputs in Efficiency Specifications

Variable	Variable name	Notation	Definition	Unit
Input	Total Assets[19]	A	Total of all net asset accounts	($)
Input	Operating Cost[20]	C	Expenses related to operations, such as all personnel expenses, rent and utilities, transportation, office supplies, and depreciation	($)
Input	Number of Staff[21]	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^i	(E * m + A (m - c) + K – P) in case a positive value	($)
Output	Total Subsidies	S^o	(E * m + A (m - c) + K – P) in case a negative value	
Output	Gross loan portfolio[22]	L	Outstanding principal balance of all of the MFI's outstanding loans including current, delinquent and restructured loans, but not	($)

[18] The left part in all the specifications show outputs and the right part depict inputs.

[19] Berger and Humphrey (1997), Seiford and Zhu (1999) and Luo (2003).

[20] Athanassopoulos (1997), Berger and Humphrey (1997) and Pastor (1999).

[21] Athanassopoulos (1997), Berger and Humphrey (1997), Sherman and Gold (1985), Seiford and Zhu (1999) and Luo (2003) among others

			loans that have been written off. It does not include interest receivable	
Output	Financial revenue[23]	R	Revenue generated from the gross loan portfolio and from investments plus other operating revenue	($)
Output	Revenue- Subsidy	R^s	Financial revenues with out subsidies (R-S)	($)

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 a positive subsidies distort public wealth while negatives subsidies create it. Where positive subsidies have been treated as an input and negative subsidies as an output in all the efficiency specifications. This is due to the fact that our calculated subsidies are infact 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.

3.4 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 has been bifurcated into constant returns to scale efficiency (CRSTE), variable return to scale efficiency (VRSTE) and scale efficiency (SE). In this paper, the focus of the analysis is on the variable returns to scale efficiency scores for the reasons as described in section 3.2. Nevertheless the efficiency scores of Constant Returns to Scale (crs) and Scale Efficiency have also been presented in the following figures.

Fig 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 intermediaries status are more efficient than others while MFIs with individual and village lending methodology are more efficient than others.

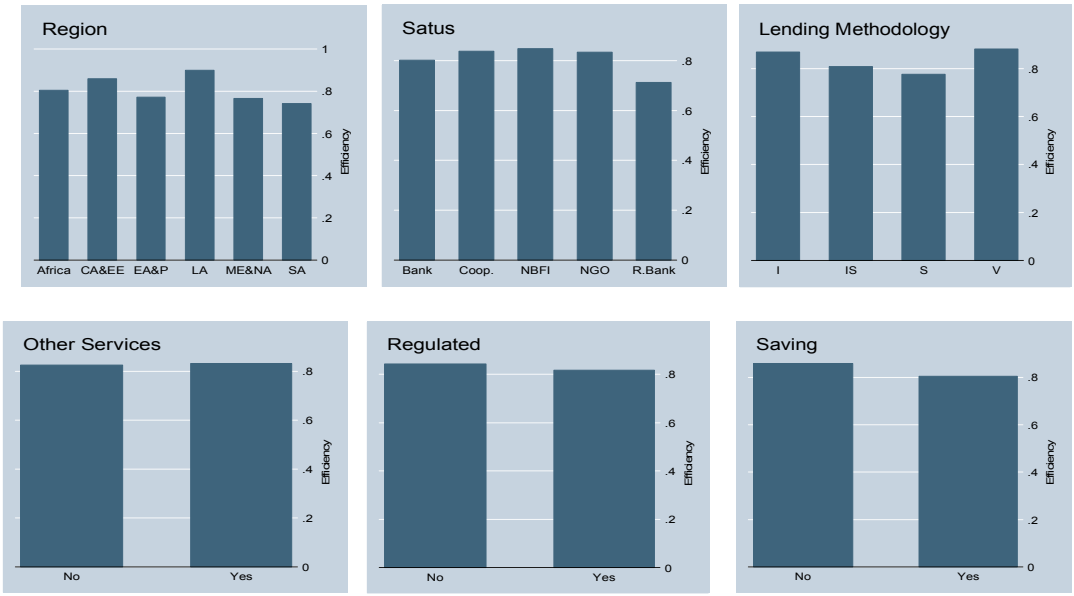

Fig. 1 Composition of Efficiency Scores for Specification LR-ACE (vrs)

Source: Based on authors own calculations.

[22] (Sherman and Gold, 1985; Athanassopoulos, 1997; Berger and Humphrey, 1997; Wheelock and Wilson, (1999).

[23] Pastor (1999) and Seiford and Zhu (1999)

Fig 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 the efficient one while South Asian are 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 designes and are not regulated are more efficents than their counterparts.

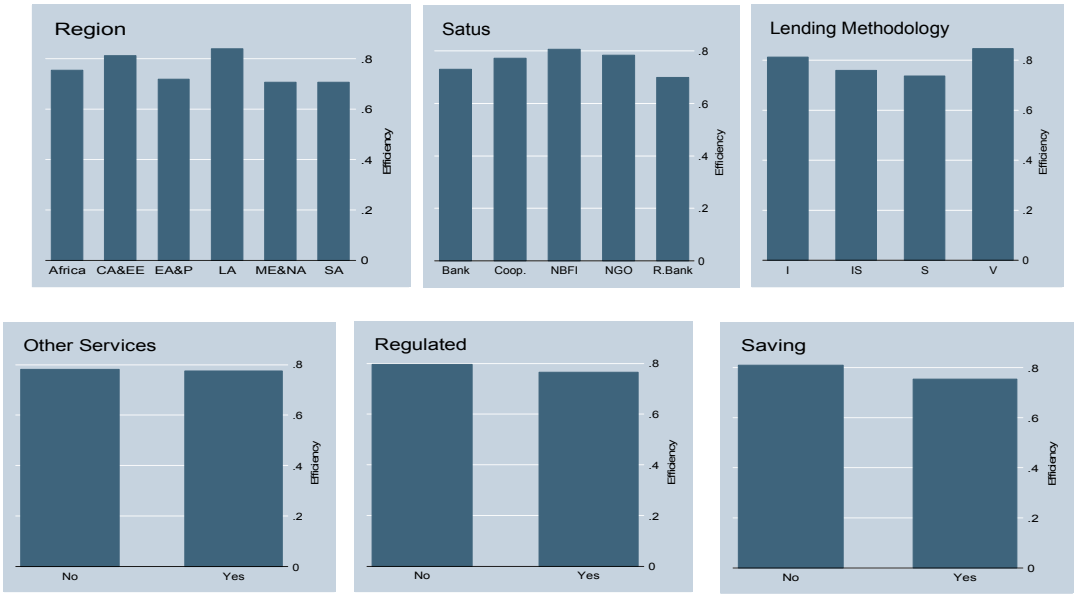

Fig. 2 Composition of Efficiency Scores for Specification LR-ACE(crs)
Source: Based on authors own calculations.

The average scale efficiency scores have been presented in Fig. 3. The average scores show that NBFIs alongwith Rural Banks are scale efficient. MFIs located in South Asia are on average more scale efficient than others.

Fig. 3 Composition of Efficiency Scores for Specification LR-ACE(scale)
Source: Based on authors own calculations.

With and Without Subsidy Analysis

3.4.1 Efficiency Analysis 2005

Table 5.1 presents the average values of the technical efficiency results of with and without subsidy specifications. The specifications entertained are LR-ACE vs LR^s-ACE (without subsidies) and R-ACE vs R^s-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 **A**. Comparing the general specification LR-ACE vs. LR^s-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. Considering specification R-ACE (where MFIs objective is to increase revenues), the decrease in efficiency is more resounding when subsidies have been substracted from the revenues in specification R^s-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 5.2 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 those MFIs with positive subsidies. The detailed efficiency results of all the MFIs are presented in Appendix **B**. There is only a slight increase in the average efficiencies for specification LR-ACES^i 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 cause 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 5.3 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 **C**. 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 5.1

Efficiency Analysis 2005 (With and Without Subsidies)

	LR-ACE		**R-ACE**	
technical efficiency	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 5.2

Efficiency Analysis 2005 (Subsidies as an Input)

	LR-ACE		**L-ACE**		**R-ACE**	
technical efficiency	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 5.3

Efficiency Analysis 2005 (Subsidies as an Output)

	LR-ACE		**L-ACE**		**R-ACE**	
technical efficiency	without subsidy	with subsidy output	without subsidy	with subsidy output	without subsidy	with subsidy output
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.

3.4.2 Efficiency Analysis 2006

Like year 2005, the efficiency analysis have been carried out on the same lines for the year 2006. Table 6.1 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 **D.** 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, Iinterfisa and CETZAM become less efficient. MFIs which remain fully efficient irrespective of subdies 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 6.2. The detailed efficiency analysis for all the MFIs in the sample for year 2006 is being presented in Appendix **E.** 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 6.1

Efficiency Analysis 2006 (With and Without Subsidies)

	LR-ACE		**R-ACE**	
technical efficiency	with subsidies	without subsidies	with subsidies	without subsidies
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 6.2

Efficiency Analysis 2006 (Subsidies as an Input)

	LR-ACE		L-ACE		R-ACE	
technical efficiency	without subsidy	with subsidy Input	without subsidy	with subsidy Input	without subsidy	with subsidy Input
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 6.3

Efficiency Analysis 2006 (Subsidies as an Output)

	LR-ACE		L-ACE		R-ACE	
technical efficiency	without subsidy	with subsidy output	without subsidy	with subsidy output	without subsidy	with subsidy output
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 6.3. The detailed efficiency analysis for all the MFIs in the sample for year 2006 is being presented in Appendix **F**. Overall the average efficiency scores remain same for 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.

3.4.3 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 7.1 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 **G**. 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 7.2 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 **H**. 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 infact increases the average efficiency score marginally. Moreover without subsidy, total factor productivity indices become less than one.

Table 7.3 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 **I**. 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 decreases with subsidy input except for technological change and total factor productivity indices.

Table 7.4 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 **J**. For all the three specifications, the magnitude of change in efficiency indices before and after subsidy output is same. For technical, pure technical and scale efficiencies, the average indices scores decrease with subsidy output. Whereas for technological change and total factor productivity indices, the average indices scores increases with subsidy input.

Table 7.1

Malmquist DEA indices for 2006

	LR-ACE	**L-ACE**	**R-ACE**
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 producivity	1.011	1.017	1.011

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

Table 7.2

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 7.3

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 7.4

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 output	with subsidy output
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.

4 Tobit Regression Approach

4.1 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. One shortcoming of DEA method is that the relative efficiency scores obtained from DEA may be vulnerable and confused with effects from the uncontrollable factors. A Tobit model is appropriate[24] because it can account for truncated data 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 oreinted technical efficiency as dependent variable for Tobit regressions for year 2005 and 2006.

The Equation is as follows

$$logEfficiency_i = \alpha + \beta_2\, log(cost/staff)_i + \beta_3\,(OSS)_I + \beta_4(SDI) + \beta_5 log(borrower/staff)_i + \beta_6 log(Loan\ size/GNI\ per\ capita))_I + \beta_6 log(age)_i + \beta_7 log(women)_i + \gamma_3\, C_i + \varepsilon_i \qquad (1)$$

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 trade off 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 tested to analyse the panel data.

4.2 Empirical Evidence

4.2.1 Regression Results (2005)

Table 8 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 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 trade off between efficiency and cost per staff and positive relationship between efficiency and borrower per staff

[24] For literature see for example Chakraborty et al. 2001 & McCarty and Yaisawarng 1993

Table 8

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^{s}-ACE**	**LR-ACE**	**LR-ACES^{i}**	**LR-ACE**	**LRS^{o}-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)
OSS		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[25]	198	193[26]	193	149[27]	149	49[28]	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.

(productivity) are in line with the theory and also are significant. SDI has negative impact while OSS has positive impact on the efficiency. The outreach indicator has significant positive impact on

[25] Six MFIs are dropped due to unavailability of women borrowers information

[26] 5 MFIs have been dropped for which subsidies exceed revenues in addition to the six MFIs

[27] 149 MFIs which are subsidy dependant i.e they have positive subsidy value

[28] 49 MFIs are subsidy free i.e they have negative subsidy value

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 clients relatively well off. Impact of MFI age on efficiency is also positive though insignificant. Lending to women significantly increases the efficiency. Turning to covariates, MFIs with status of Rural Banks are inefficient ones while Non Banking financial intermediaries (NBFI) 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^{s}-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-$ACES^{i}$). 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. 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.

Regression (7) and (8) present a comparison between general specification (LR-ACE) and incorporating negative subsidies as an output into the efficiency specification (LRS^{o}-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.

4.2.2 Regression Results (2006)

Table 9 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 ca nafford 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.

Table 9

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^{s}-ACE**	**LR-ACE**	**LR-ACES^{i}**	**LR-ACE**	**LRS^{o}-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)
OSS		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[29]	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 equations (11) and (12) depicts a comparison of with and without subsidy regression equations. Where the efficiency scores of the specifications LR-ACE (revenues including subsidies) and LR^{s}-ACE (revenues excluding subsidies) have been treated as a dependent variables. Comparing Equations (11) and (12), the negative impact of SDI on the efficiency become significant once subsidies are deducted from the revenues. Whereas the positive impact of OSS on

[29] 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)

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 become insignificant once subsidies are taken out from revenues. Which shows that subsidies do more harm than improving the financial efficiency for South Asian MFIs.

Regression (13) and (14) depicts the case where dependent variables consist of general efficiency specification LR-ACE and LR-ACES^{i} (treating positive subsidies as an input) respectively. Thus the sample consist of only those MFIs which have positive subsidies i.e. 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. Thus shows that subsidy input in 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 turn out to be positive and significant. Which shows that lending to women contributes to efficiency.

Regression (15) and (16) compares the equation with dependent variables LR-ACE and LRS^{o}-ACE (subsidies enter into the specification as an output). Thus only those MFIs which are subsidy-free are considered in these regressions. 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 and those which are regulated have become significantly inefficient.

Moreover, MFIs which provide other services in addition to the financial services become highly efficient. While MFIs located in CA &EE become inefficient. Caution warrants to interprete these results in the context of subsidy free MFIs.

4.2.3 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 10. 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. 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 intermedieries (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

Table 10

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^{s}- ACE**	**LR-ACE**	**LR-ACES^{i}**	**LR-ACE**	**LRS^{o}-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)
OSS		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	173[30]	173	168	168	107[31]	107	29[32]	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

Z-Values in 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.

[30] The sample consists of 179 MFIs for which we have both two year SDI values. Out of which 6 MFIs have been dropped due to unavailability of women borrower information. While 37 MFIs have been dropped for further analysis of treating subsidies as an input and output because their SDI value changes sign between two years i.e from +ve to –ve and vise versa.

[31] 107 MFIs have positive subsidies in both years i.e they are subsidy dependant.

[32] 29 MFIs have negative subsidies for both two years i.e they are subsidy free

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 become 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^{i}) repectively. In otherwords it takes into account only subsidy dependant MFIs. 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 percapita 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^{o}-ACE) respectively. Thus the sample for the regressions consist 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.

5 Conclusion

At the outset of this paper, we endeavored to resolve few key issues. How to incorporate the Subsidies into the DEA framework and their impact on the efficiency of Microfinance Institutions. How efficiency relates to the various organizational and structural variables amid the presence of subsidies. To start with, an analysis of how subsidies distort the financial ratio has been presented to make a case for its incorporation into the efficiency and productivity analysis of the MFIs. 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. Similarly 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 and structural variables has been addressed by running Tobit regression equations for each year (2005 & 2006) 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 negative association between subsidy dependence and efficiency is also established. Also evident is the fact that staff productivity contributes towards the efficiency. There is also enough evidence that the operational self sustainability, and lending to women borrowers contribute towards efficiency. 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.

However once we compare the regressions with and without subsidies, the results become quite revealing in some aspects. An 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. Which shows that MFI's exclusively targeting women tend to be financially efficient only because of the subsidies they recieve. Once we take out the subsidies from the equation, the positive impact turns insignificant. Panel data results also confirm this relationship. 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.

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 intermedieries 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 being efficient.

References

Beatriz Armendáriz de Aghion and Jonathan Morduch(2004). *Microfinance: Where do we Stand? in Charles Goodhart Edition. Financial Development and Economic Growth: Explaining the links* (London: Palgrave)

Athanassopoulos AD (1997). *Service quality and operating efficiency synergies for management control in the provision of financial services: Evidence from Greek bank branches*. Europeon Journal of Operational Research **98**: 300–313.

Berger AN and Humphrey DB (1997). *Efficiency of financial institutions: International survey and directions for future research*. Europeon Journal of Operational Research. **98**: 175–212.

Camanho AS and Dyson RG (2005). *Cost efficiency. production and value-added models in the analysis of bank branch performance*. Journal of Operational Research Society **56**: 483–494.

Chakraborty, K., B. Biswas, and W.C. Lewis. (2001). "*Measurement of technical efficiency in public education: A stochastic and nonstochastic production function approach"*. South. Econ, J. **67(4)**:889-905.

Charnes A. Cooper WW and Rhodes E (1978). *Measuring the efficiency of decision making units*. Europeon Journal of Operational Research **2**: 429–444.

CGAP (2003). *Microfinance Consensus Guidelines*. *Definitions of Selected Financial Terms, Ratios and Adjustments for Microfinance*. 3rd edn. Consultative Group to Assist the Poorest: Washington. DC. USA.

Cull. R & Asli Demirguç-Kunt & Morduch. J (2007). *Financial performance and outreach: a global analysis of leading microbanks*. Economic Journal. Royal Economic Society. vol. 117(517). pages F107-F133. 02

Farrel, M. (1957). *The measurement of productive efficiency*. Journal of royal statistical society 120(3), 253-2811

Gutierrez-Nieto. B; Serrano Cinca. C.; and Mar Molinero. C. (2007). *Social Efficiency in Microfinance Institutions*.Journal of the Operational Research Society (2007). 1--16

Hudon. M. ans Traca. D. (2006). *Subsidies and Susutainability in Microfinance*. Working Paper WP-CEB 06-020. Solvay Business School. Belgium

Hudon. M. (2006) *Financial performances, management and ratings of the microfinance institutions: Do subsidies matter?*. Working paper, Universite Libre de Bruxelles

Hulme. David; and Paul Mosley. (1996) *Finance Against Poverty. Volume I and II*. London: Routledge, ISBN 0-415-09544-1 and 0-415-12430-1.

International Monetory Fund. *International Financial Statistics*., 2005 & 2006, Washington, D.C.

Inter-American Development Bank. (1994) *Technical Guide for the Analysis of Microenterprise Finance Institutions*. Microenterprise Division. Washington. D.C.

Mixmarket (2007). The Microfinance Information eXchange MIX) http://www.mixmarket.org/en/what.is.mix.asp.

McCarty, T.A. and S. Yaisawarng. (1993). "*Technical Efficiency in New Jersey School Districts*," in H. Fried, C.A.K. Lovell and S.S. Schmidt, eds., The Measurement of Productive Efficiency: Techniques and Applications (Oxford: Oxford University Press), 1, pp. 271-287.

Morduch J (1999a). *The microfinance promise*. Journal of Economic Literature **37**: 1569–1614.

Morduch. J. (1999b). *The role of subsidies in microfinance: evidence from the Grameen Bank*. Journal of Development Economics. 60: 22-248.

Pastor, J. m. (1999). *Efficiency and risk management in spanish banking: a method to decompose risk*. Applied financial economics, 9, 371-384

Schreiner. M. (1997). *A Framework For the Analysis of the Performance and Sustainability of Subsidized Microfinance Organizations With Application to BancoSol of Bolivia and to the Grameen Bank of Bangladesh*. PhD dissertation. The Ohio State University

Schreiner. M.. and J. Yaron. (1999). *The subsidy Dependence Index and recent attempts to adjust it*. Savings and Development. 1999. Vol. 23. No. 4. pp.375-405.

Schreiner. M.. and J. Yaron. (2001). *Development Finance Institutions: Measuring Their Subsidy*. Washington. D.C.: World Bank.

Schreiner. M. (2003). *A Cost-Effectiveness Analysis of the Grameen Bank of Bangladesh*. Development Policy Review. 2003. Vol. 21. No. 3. pp. 357–382.

Seiford LM and Zhu J (1999). *Profitability and marketability of the top 55 U.S. commercial banks*. Mngt Sci 45: 1270–1288.

Sharma. M. (2004). *Subsidy Dependence and Financial sustainability in development banks- A case study of Small Pecific Island Country* The university of South Pacific. Fiji Islands

Sherman HD and Gold F (1985). *Bank branch operating efficiency: Evaluation with data envelopment analysis*. *J Banking Finance* **9**: 297–315.

Yaron. Jacob. (1994). *What Makes Rural Finance Institutions Successful?'*. World Bank Research Observer. Vol. 9. No. 9. pp. 49-70.

_____. (1992a). *Successful Rural Finance Institutions*. Discussion Paper No. 150. Washington. D.C.: World Bank. ISBN 0-8213-2018-1.
_____. (1992b). *Assessing Development Finance Institutions: A Public Interest Analysis*. Discussion Paper No. 174. Washington. D.C.: World Bank. ISBN 0-8213-2203-6.

Yaron. J.. M. Benjamin. and G. Piprek. (1997). *Rural Finance: Issues. Design. and Best Practices*. Washington. D.C.: World Bank

Zeller. M.. Meyer. R . (2002). *The Triangle of Microfinance: Financial Sustainability, Outreach and Impact*. John Hopkins University Press. Baltimore

Appendix A. DEA Efficiencies for R^s (R-S) for 2005

MFIs	Coun	LR-ACE				LR^s-ACE				R-ACE				R^s-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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
Foncresol	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

MFIs	Coun	LR-ACE				LR^s-ACE				R-ACE				R^s-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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
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

MFIs	Coun	LR-ACE				LR^s-ACE				R-ACE				R^s-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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
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

MFIs	Coun	LR-ACE				LR^s-ACE				R-ACE				R^s-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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		**0.786**	**0.833**	**0.945**		**0.700**	**0.781**	**0.900**		**0.707**	**0.735**	**0.966**		**0.222**	**0.369**	**0.691**	

Appendix B. DEA Efficiencies for treating positive Subsidy as an input for 2005

MFIs	cou	LR-ACE				LR-ACES^i				L-ACE				L-ACES^i				R- ACE				R-ACES^i			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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	irs
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	irs
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	irs
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
CRED 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	irs
NORMICRO	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	irs
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

		LR-ACE				LR-ACES[i]				L-ACE				L-ACES[i]				R- ACE				R-ACES[i]			
	cou	crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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	irs
Eco 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	irs
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
Foncresol	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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
Finamerica	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	-
WMM 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	irs
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	drs
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	irs
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	irs
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	irs
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	drs
CrediMujer	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	irs
Fundecoca	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	irs
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	-
COAC 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	irs
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	irs
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	irs
Al 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	irs
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	irs
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	irs
Fundacion	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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	drs
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	irs
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	irs
Fundacion 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	irs
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	irs
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	drs
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	irs
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	irs
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	irs
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	irs
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	drs
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	irs
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	irs

		LR-ACE				LR-ACES[i]				L-ACE				L-ACES[i]				R- ACE				R-ACES[i]			
	cou	crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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	irs
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	irs
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	irs
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	irs
MBK 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	irs
Kadet	KEN	0.425	0.427	0.996	irs	0.427	0.429	0.995	irs	0.372	0.373	0.998	irs	0.372	0.373	0.998	irs	0.361	0.371	0.974	irs	0.380	0.395	0.963	irs
K-REP	KEN	0.600	0.707	0.848	drs	0.600	0.713	0.842	drs	0.555	0.707	0.784	drs	0.567	0.713	0.796	drs	0.516	0.529	0.976	drs	0.545	0.548	0.994	drs
KWFT	KEN	0.643	0.680	0.944	drs	0.673	0.683	0.985	drs	0.484	0.629	0.769	drs	0.513	0.643	0.798	drs	0.583	0.603	0.967	drs	0.662	0.667	0.993	drs
MDSL	KEN	0.769	0.814	0.945	irs	0.816	1.000	0.816	irs	0.614	0.664	0.925	irs	0.614	0.664	0.925	irs	0.628	0.698	0.900	irs	0.774	1.000	0.774	irs
SMEP	KEN	0.618	0.639	0.966	drs	0.630	0.639	0.985	drs	0.524	0.582	0.900	drs	0.524	0.587	0.893	drs	0.528	0.530	0.996	irs	0.594	0.602	0.985	irs
AIYL Bank	KYR	0.998	1.000	0.998	drs	0.998	1.000	0.998	drs	0.991	1.000	0.991	drs	0.991	1.000	0.991	drs	0.856	0.856	1.000	-	0.856	0.856	1.000	-
BTFF	KYR	0.758	0.758	0.999	-	0.758	0.758	0.999	-	0.633	0.636	0.996	irs	0.633	0.636	0.996	irs	0.758	0.758	0.999	-	0.758	0.758	0.999	-
FMCC	KYR	0.918	1.000	0.918	drs	0.920	1.000	0.920	drs	0.788	0.927	0.850	drs	0.788	0.927	0.850	drs	0.734	0.856	0.858	drs	0.820	0.882	0.929	drs
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	irs
CreditMongol	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	irs
Khan 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	drs
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	irs
Novo 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	drs
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	drs
TCHUMA	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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	irs
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	drs
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	irs
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	irs
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	-
Edpy. 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	irs
Edpy. 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	irs
EDPY.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	irs
Fondesurco	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	irs
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	irs
Movim. 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	irs
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	irs
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	irs
Ist 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	irs
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	irs
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	drs
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	irs
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	irs
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	irs
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	irs
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	irs

		LR-ACE				LR-ACES^{i}				L-ACE				L-ACES^{i}				R- ACE				R-ACES^{i}			
	cou	crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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	-
Bank Eskhata	**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	irs
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	irs
MicroInvest	**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	irs
FINCA 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	irs
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	0.768	0.999	irs	0.466	0.480	0.970	drs	0.466	0.480	0.970	drs	0.721	0.736	0.980	drs	0.767	0.768	0.999	irs
FINCA UGA	**UGA**	0.989	1.000	0.989	drs	1.000	1.000	1.000	-	0.599	0.661	0.906	drs	0.628	0.678	0.925	drs	0.989	1.000	0.989	drs	1.000	1.000	1.000	-
MEDNET	**UGA**	0.658	0.660	0.997	irs	0.671	0.677	0.991	irs	0.528	0.529	0.998	irs	0.528	0.529	0.998	irs	0.560	0.570	0.982	irs	0.643	0.656	0.980	irs
UML	**UGA**	0.816	0.941	0.868	drs	0.834	0.950	0.878	drs	0.547	0.656	0.834	drs	0.547	0.656	0.834	drs	0.770	0.941	0.819	drs	0.827	0.950	0.870	drs
BanGente	**VEN**	0.851	0.946	0.900	drs	0.881	0.946	0.931	drs	0.696	0.892	0.780	drs	0.696	0.892	0.780	drs	0.648	0.820	0.790	drs	0.808	0.820	0.986	drs
CETZAM	**ZAM**	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.686	0.703	0.975	irs	0.686	0.703	0.975	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
FINCA ZAM	**ZAM**	0.883	0.917	0.962	irs	0.883	0.917	0.962	irs	0.615	0.644	0.956	irs	0.615	0.644	0.956	irs	0.824	0.881	0.934	irs	0.824	0.881	0.934	irs
mean		**0.790**	**0.843**	**0.939**		**0.812**	**0.860**	**0.946**		**0.656**	**0.745**	**0.889**		**0.688**	**0.767**	**0.903**		**0.691**	**0.739**	**0.940**		**0.737**	**0.780**	**0.948**	

Appendix C. Efficiencies DEA for treating negative Subsidy as an output for 2005

MFIs	Coun	LR-ACE				LRS^{o}-ACE				L-ACE				LS^{o}-ACE				R-ACE				RS^{o}-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	-

MFIs	Coun	LR-ACE				LRS^o-ACE				L-ACE				LS^o-ACE				R-ACE				RS^o-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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		**0.894**	**0.912**	**0.980**		**0.897**	**0.915**	**0.980**		**0.837**	**0.857**	**0.977**		**0.853**	**0.875**	**0.973**		**0.812**	**0.839**	**0.968**		**0.816**	**0.842**	**0.969**	

Appendix D. Efficiencies DEA for R^s (R-S) for 2006

MFIs	Coun	LR- ACE				LR^s- ACE				R- ACE				R^s- ACE			
		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

MFIs	Coun	LR- ACE				LR^s- ACE				R- ACE				R^s- ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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

MFIs	Coun	LR- ACE				LR^s- ACE				R- ACE				R^s- ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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
FDL	NIC	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
FINDESA	NIC	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
ProCred NIC	NIC	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
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	-
LAPO	NIG	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
SEAP	NIG	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
ASASAH	PAK	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
FMBL	PAK	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
KASHF	PAK	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
FIELCO	PAR	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
Interfisa	PAR	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
Bantra	PER	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
Caja Nor	PER	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
Caritas	PER	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
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	-
CMAC May	PER	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
CMAC Tac	PER	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
CMAC Tru	PER	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
Edpy. 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	-
Edpy. Cofian	PER	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
EDPY.Edyf	PER	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
FINCA PER	PER	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
Fondesurco	PER	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
MiBanco	PER	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
Movim. M R	PER	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
ProMujar PER	PER	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
ASHI	PHI	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
Bangko Ka	PHI	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
BCB	PHI	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

MFIs	Coun	LR- ACE				LR^s- ACE				R- ACE				R^s- ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
CBMO	PHI	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
DIGOS	PHI	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
Ist Valley	PHI	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
NWFT	PHI	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
SOLANO	PHI	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
TSPI	PHI	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
FORUS	RUS	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
SEF-ZAF	SA	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
SPBD	SAM	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
CMS	SEN	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
Pamecas	SEN	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
Agroinvest	TAJ	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
Bank Eskhata	TAJ	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
FMFB TAJ	TAJ	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
IMON	TAJ	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
MicroInvest	TAJ	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
PRIDE	TAN	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
Enda	TUN	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
CERUDEB	UGA	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
CMFL	UGA	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
FAULU	UGA	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
FINCA UGA	UGA	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
BanGente	VEN	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
CEP	VIET	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
TYM	VIET	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
CETZAM	ZAM	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
FINCA ZAM	ZAM	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
MEAN		**0.835**	**0.859**	**0.973**		**0.776**	**0.823**	**0.944**		**0.732**	**0.751**	**0.976**		**0.428**	**0.561**	**0.773**	

Appendix E. Efficiencies DEA for treating Subsidy as an input for 2006

MFIs	Cou	LR-ACE				LR-ACES^i				L-ACE				L-ACES^i				R-ACE				R-ACES^i			
		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	0.997	irs
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	drs
FMFB 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	irs
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	-
ProCred 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	irs
NovoBanco	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	drs
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	-
CRED 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	irs
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	drs
NORMICRO	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	drs
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	drs
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	-
BRAC 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	drs
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	irs
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	drs
FECECAM	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	drs
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	drs
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	irs
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	irs
Agrocapital	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	irs
BANCOSOL	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	-

MFIs	Cou	LR-ACE	LR-ACES^{i}	L-ACE	L-ACES^{i}	R-ACE	R-ACES^{i}
		crste vrste scale	crste vrste scale	crste vrste scale	crste vrste scale	crste vrste scale	crste vrste scale
Bnaco L A	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 drs
Eco 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 irs
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 drs
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 drs
FunBodem	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 irs
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 drs
ProMujar 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 drs
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 irs
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 -
Finamerica	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 -
FMM 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 drs
WMM 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 irs
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 drs
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 drs
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 irs
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 irs
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 drs
CrediMujer	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 -
COAC 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	0.916 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 irs
COAC 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 irs
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 -
AMC 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 drs
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 irs
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 irs
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 irs
Sat	GHA	0.791 0.816 0.970 drs	0.882 0.899 0.980 drs	0.696 0.698 0.996 irs	0.696 0.698 0.996 irs	0.709 0.755 0.940 drs	0.833 0.841 0.990 drs
C FUND	GOE	1.000 1.000 1.000 -	1.000 1.000 1.000 -	0.686 0.701 0.978 irs	0.686 0.701 0.978 irs	1.000 1.000 1.000 -	1.000 1.000 1.000 -
Constanta	GOE	0.725 0.727 0.998 drs	0.725 0.727 0.998 drs	0.623 0.628 0.991 drs	0.623 0.628 0.991 drs	0.706 0.707 0.999 -	0.706 0.707 0.999 -
CREDO	GOE	0.862 0.867 0.995 irs	0.862 0.867 0.995 irs	0.856 0.864 0.991 irs	0.856 0.864 0.991 irs	0.626 0.636 0.985 drs	0.626 0.636 0.985 drs
SBDF	GOE	0.979 1.000 0.979 irs	0.979 1.000 0.979 irs	0.966 1.000 0.966 irs	0.966 1.000 0.966 irs	0.722 0.723 1.000 -	0.722 0.723 0.999 -
Genesis Em	GUAT	0.928 0.969 0.958 drs	0.931 0.969 0.962 drs	0.910 0.940 0.968 drs	0.910 0.940 0.968 drs	0.749 0.761 0.985 drs	0.749 0.761 0.985 drs
ACME	HAI	0.924 1.000 0.924 drs	0.990 1.000 0.990 drs	0.708 0.713 0.994 irs	0.708 0.713 0.994 irs	0.924 1.000 0.924 drs	0.990 1.000 0.990 drs
Finca 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 drs
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 drs
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 drs
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 drs
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 irs
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 irs
SHARE 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 drs
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 irs
MBK 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 drs
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 irs
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 drs
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 drs
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 drs
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 irs
AIYL 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 drs
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 -
Kando 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 irs
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 drs
CreditMongol	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 drs
AL 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 drs
Al 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 irs
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 drs

MFIs	Cou	LR-ACE				LR-ACES^{i}				L-ACE				L-ACES^{i}				R-ACE				R-ACES^{i}			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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	drs
SOCREMO	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	drs
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	drs
NIRDHAN	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	irs
ProCred 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	irs
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	drs
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	irs
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	drs
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	drs
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	drs
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	drs
CMAC 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	irs
CMAC 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	irs
CMAC 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	-
Edpy. 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	-
Edpy. 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	-
EDPY.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	drs
FINCA 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	drs
Fondesurco	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	irs
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	-
Movim. 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	drs
ProMujar 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	drs
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	drs
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	irs
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	drs
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	drs
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	irs
Agroinvest	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	drs
FMFB TAJ	TAJ	0.651	0.652	0.999	drs	0.651	0.652	0.999	drs	0.497	0.498	0.998	drs	0.497	0.498	0.998	drs	0.650	0.651	0.999	irs	0.650	0.651	0.999	irs
IMON	TAJ	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.902	0.906	0.995	irs	0.902	0.906	0.995	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
MicroInvest	TAJ	0.936	0.950	0.985	irs	0.937	0.956	0.981	irs	0.803	0.838	0.958	irs	0.803	0.840	0.956	irs	0.936	0.950	0.985	irs	0.937	0.952	0.984	irs
PRIDE	TAN	0.906	0.992	0.913	drs	1.000	1.000	1.000	-	0.842	0.843	0.999	irs	0.842	0.843	0.999	irs	0.764	0.868	0.880	drs	0.941	0.970	0.970	drs
CMFL	UGA	0.835	0.847	0.986	drs	0.872	0.872	1.000	-	0.732	0.733	0.998	irs	0.732	0.733	0.998	irs	0.770	0.771	0.999	irs	0.840	0.841	0.998	irs
FAULU	UGA	0.632	0.666	0.949	drs	0.641	0.677	0.948	drs	0.508	0.511	0.994	irs	0.508	0.511	0.994	irs	0.626	0.665	0.941	drs	0.641	0.676	0.948	drs
FINCA UGA	UGA	0.829	1.000	0.829	drs	0.996	1.000	0.996	drs	0.629	0.630	0.998	irs	0.629	0.630	0.998	irs	0.829	1.000	0.829	drs	0.996	1.000	0.996	drs
MEDNET	UGA	1.000	1.000	1.000	-	1.000	1.000	1.000	-	0.695	0.726	0.958	irs	0.695	0.726	0.958	irs	1.000	1.000	1.000	-	1.000	1.000	1.000	-
BanGente	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	-
FINCA 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 F. Efficiencies DEA for treating Subsidy as an output for 2006

MFIs	Cou	LR-ACE				LRS^{o}-ACE				L-ACE				LS^{o}-ACE				R-ACE				RS^{o}-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
BURO 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	-

MFIs	Cou	LR-ACE				LRS^o-ACE				L-ACE				LS^o-ACE				R-ACE				RS^o-ACE			
		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale		crste	vrste	scale	
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
OI 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	0.787	0.788	0.999	drs	0.617	0.657	0.939	drs	0.617	0.657	0.939	drs	0.752	0.756	0.995	irs	0.752	0.756	0.995	irs
SOLANO	**PHI**	0.753	1.000	0.753	irs	0.753	1.000	0.753	irs	0.521	1.000	0.521	irs	0.535	1.000	0.535	irs	0.753	1.000	0.753	irs	0.753	1.000	0.753	irs
TSPI	**PHI**	0.938	0.944	0.994	drs	0.938	0.944	0.994	drs	0.643	0.729	0.882	drs	0.650	0.741	0.877	drs	0.916	0.916	1.000	-	0.916	0.916	1.000	-
Pamecas	**SEN**	0.663	0.675	0.983	drs	0.663	0.675	0.983	drs	0.643	0.647	0.993	drs	0.643	0.647	0.993	drs	0.549	0.552	0.995	drs	0.549	0.552	0.995	drs
Bank Eskhata	**TAJ**	0.923	0.925	0.998	drs	0.923	0.925	0.998	drs	0.450	0.455	0.988	drs	0.457	0.464	0.985	drs	0.923	0.925	0.998	drs	0.923	0.925	0.998	drs
Enda	**TUN**	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	irs
CERUDEB	**UGA**	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	drs
CEP	**VIET**	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	irs
TYM	**VIET**	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	irs
Mean		**.868**	**.901**	**.964**		**.868**	**.901**	**.964**		**0.778**	**0.825**	**0.946**		**0.786**	**0.839**	**0.941**		**0.765**	**0.801**	**0.958**		**0.773**	**0.809**	**0.958**	

Appendix G. 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

MFI	Cou	LR ACE					L ACE					R ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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	1206	1.078	1.145	0.870	1.014	1.130	0.997
MDSL	KEN	1.290	0.934	1.211	1.066	1.205	1171	0.831	1108	1057	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

MFI	Cou	LR ACE					L ACE					R ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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	1057	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	1026	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	1219	0.870	1129	1080	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

MFI	Cou	LR ACE					L ACE					R ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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
MEDNET	UGA	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
BanGente	VEN	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
CEP	VIET	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
TYM	VIET	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
CETZAM	ZAM	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
FINCA ZAM	ZAM	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
Mean		**1.081**	**0.935**	**1.034**	**1.046**	**1.011**	**1.127**	**0.903**	**1.049**	**1.074**	**1.017**	**1.123**	**0.899**	**1.059**	**1.061**	**1.011**

Appendix H. Malmquist DEA indices for R^s (R-S) (Panel)

MFI	Country	LR ACE					LR^s-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

MFI	Country	LR ACE					LR^3-ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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

MFI	Country	LR ACE					LR^3-ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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
Inmaa	MOR	1.359	0.889	1.313	1.035	1.208	0.900	0.679	0.931	0.967	0.611
Zakoura	MOR	1.120	0.878	0.988	1.134	0.983	1.142	0.871	0.977	1.170	0.995
NOVO BANCO	MOZ	1.262	0.973	1.169	1.080	1.228	1.355	0.858	1.373	0.987	1.162
SOCREMO	MOZ	1.017	0.974	1.053	0.966	0.991	1.311	0.846	1.243	1.055	1.110
TCHUMA	MOZ	1.071	0.922	1.089	0.984	0.988	1.125	0.877	1.126	1.000	0.987
CBB	NEP	1.006	1.114	0.882	1.141	1.121	1.189	1.007	1.001	1.188	1.198
NIRDHAN	NEP	1.119	0.987	1.117	1.001	1.104	1.121	0.985	1.117	1.003	1.104
ACODEP	NIC	1.006	1.010	1.006	1.000	1.016	1.200	0.879	1.127	1.064	1.054
FDL	NIC	1.083	0.933	0.989	1.095	1.010	1.115	0.895	0.988	1.129	0.997
FINDESA	NIC	1.095	0.992	1.090	1.005	1.086	1.140	0.947	1.139	1.000	1.079
ProCred NIC	NIC	0.887	0.967	0.896	0.990	0.858	1.007	0.921	0.889	1.133	0.928
Prodesa	NIC	1.000	1.050	1.000	1.000	1.050	1.000	1.006	1.000	1.000	1.006
LAPO	NIG	1.147	0.921	1.181	0.971	1.056	1.368	0.918	1.517	0.902	1.256
SEAP	NIG	0.989	0.919	1.000	0.989	0.909	1.036	0.889	1.000	1.036	0.921
ASASAH	PAK	0.484	0.967	0.482	1.003	0.468	0.535	0.941	0.498	1.076	0.504
FMBL	PAK	1.469	0.982	1.465	1.003	1.443	1.597	0.952	1.556	1.026	1.521
KASHF	PAK	1.144	0.963	1.167	0.981	1.102	1.205	0.956	1.161	1.038	1.152
FIELCO	PAR	1.101	0.969	1.101	1.000	1.067	1.105	0.839	1.033	1.069	0.927
Interfisa	PAR	1.099	0.975	1.092	1.006	1.071	1.174	0.850	1.108	1.060	0.998
Bantra	PER	1.041	0.988	1.000	1.041	1.028	1.151	0.833	1.000	1.151	0.959
Caja Nor	PER	1.052	0.936	1.022	1.029	0.984	1.103	0.879	1.020	1.082	0.970
Caritas	PER	1.219	0.895	1.185	1.029	1.091	1.257	0.838	1.154	1.090	1.053
CMAC Arq	PER	1.000	0.943	1.000	1.000	0.943	1.000	0.942	1.000	1.000	0.942
CMAC May	PER	1.098	0.961	1.071	1.026	1.055	1.194	0.876	1.020	1.171	1.046
CMAC Tac	PER	1.044	0.973	1.015	1.029	1.017	1.043	0.994	0.995	1.049	1.037
CMAC Tru	PER	1.033	0.968	1.003	1.030	0.999	0.996	1.004	1.003	0.993	1.000
Edpy. C Tac	PER	1.074	0.953	1.068	1.005	1.023	1.184	0.881	1.102	1.074	1.044
Edpy. Cofian	PER	0.921	0.957	0.918	1.003	0.881	1.006	0.911	0.910	1.105	0.916
EDPY.Edyf	PER	1.102	0.950	1.022	1.078	1.047	1.218	0.836	0.994	1.225	1.019
FINCA PER	PER	1.145	0.873	1.093	1.047	1.000	1.161	0.892	1.146	1.012	1.035
Fondesurco	PER	1.240	0.906	1.040	1.192	1.124	1.266	0.840	1.052	1.204	1.063
MiBanco	PER	1.076	0.971	1.000	1.076	1.045	1.095	0.922	1.000	1.095	1.009
Movim. M R	PER	1.104	0.933	1.086	1.017	1.030	1.144	0.860	1.144	1.000	0.984
ProMujer PER	PER	1.112	0.929	1.125	0.989	1.033	1.262	0.859	1.264	0.998	1.084
ASHI	PHI	1.178	0.913	1.195	0.986	1.075	1.187	0.912	1.170	1.014	1.082
Bangko Ka	PHI	1.002	0.998	0.997	1.005	1.000	1.100	0.929	1.177	0.935	1.022
BCB	PHI	1.016	0.958	0.993	1.023	0.973	1.138	0.828	1.121	1.015	0.942
CBMO	PHI	1.028	0.965	1.025	1.003	0.992	1.169	0.879	1.156	1.011	1.027
DIGOS	PHI	1.054	0.944	1.049	1.004	0.994	0.637	0.544	0.640	0.996	0.347
Ist Valley	PHI	0.969	0.948	0.958	1.011	0.919	1.060	0.904	0.986	1.075	0.958
NWFT	PHI	1.103	0.925	1.090	1.012	1.021	1.225	0.912	1.226	1.000	1.117
SOLANO	PHI	0.962	0.992	0.785	1.225	0.954	0.924	0.878	0.759	1.218	0.811
TSPI	PHI	1.163	0.915	1.040	1.119	1.065	1.237	0.900	1.233	1.003	1.114
FORUS	RUS	0.893	0.930	0.889	1.004	0.830	1.040	0.860	0.888	1.171	0.895
SEF-ZAF	SA	0.899	0.998	0.970	0.926	0.897	1.107	0.876	1.155	0.958	0.970
SPBD	SAM	0.999	0.954	0.713	1.401	0.952	1.106	0.845	0.683	1.619	0.935
CMS	SEN	0.962	0.962	0.875	1.099	0.925	0.900	0.976	0.839	1.073	0.879

MFI	Country	LR ACE					LR^s-ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
Pamecas	**SEN**	0.952	0.874	0.766	1.243	0.832	0.945	0.858	0.784	1.205	0.810
Agroinvest	**TAJ**	0.733	0.973	0.763	0.961	0.713	0.993	0.941	0.896	1.108	0.934
Bank Eskhata	**TAJ**	1.026	0.979	1.028	0.999	1.005	1.705	0.681	1.847	0.924	1.161
FMFB TAJ	**TAJ**	1.379	0.984	1.376	1.002	1.356	1.355	0.958	1.362	0.995	1.298
IMON	**TAJ**	1.198	0.951	1.191	1.006	1.139	1.259	0.894	1.256	1.002	1.125
MicroInvest	**TAJ**	1.152	0.942	1.049	1.098	1.085	1.142	0.910	1.097	1.041	1.039
PRIDE	**TAN**	0.985	0.931	0.979	1.006	0.917	1.080	0.854	0.975	1.107	0.922
Enda	**TUN**	1.082	0.912	1.051	1.029	0.987	1.074	0.853	1.072	1.001	0.916
CERUDEB	**UGA**	0.788	0.920	0.831	0.948	0.725	1.292	0.869	0.932	1.386	1.123
CMFL	**UGA**	0.992	0.972	0.997	0.995	0.963	1.486	0.841	1.365	1.089	1.250
FAULU	**UGA**	0.820	0.933	0.838	0.979	0.765	0.979	0.857	0.939	1.043	0.839
FINCA UGA	**UGA**	0.845	0.999	0.924	0.914	0.844	0.941	0.875	0.957	0.983	0.823
BanGente	**VEN**	1.129	0.947	1.031	1.094	1.069	1.167	0.855	1.014	1.151	0.998
CEP	**VIET**	1.146	0.873	1.008	1.137	1.001	1.116	0.861	0.989	1.128	0.960
TYM	**VIET**	0.974	0.931	0.939	1.037	0.907	0.949	0.936	0.925	1.025	0.888
CETZAM	**ZAM**	1.000	1.055	1.000	1.000	1.055	1.159	0.866	1.169	0.991	1.004
FINCA ZAM	**ZAM**	1.037	0.928	1.034	1.002	0.961	0.912	0.894	0.957	0.953	0.816
Mean		**1.071**	**0.943**	**1.029**	**1.041**	**1.010**	**1.108**	**0.895**	**1.041**	**1.064**	**0.992**

Appendix I. Malmquist DEA indices for treating subsidies as an input (Panel)

MFI	Cou	LR-ACE					LR-ACES^i					L-ACE					L-ACES^i				
		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 L A	**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

MFI	Cou	LR-ACE					LR-ACES[i]					L-ACE					L-ACES[i]				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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

MFI	Cou	LR-ACE					LR-ACES^{i}					L-ACE					L-ACES^{i}				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
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	1.055	1.000	1.000	1.055	1.203	0.813	1.198	1.004	0.978	1.203	0.813	1.198	1.004	0.978
FINCA ZAM	**ZAM**	0.906	1.009	0.980	0.924	0.913	1.131	0.955	1.089	1.039	1.081	0.714	0.813	0.694	1.029	0.580	0.714	0.880	0.757	0.942	0.628
Mean		**1.074**	**0.929**	**1.019**	**1.054**	**0.998**	**1.076**	**0.943**	**1.024**	**1.051**	**1.015**	**1.158**	**0.866**	**1.052**	**1.101**	**1.003**	**1.134**	**0.903**	**1.050**	**1.080**	**1.024**

Appendix J. Malmquist DEA indices for treating subsidies as an output (Panel)

MFIs	Coun	LR-ACE					LRS^{o}-ACE					L-ACE					LS^{o}-ACE					R-ACE					RS^{o}-ACE				
		effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch	effch	techch	pech	sech	tfpch
BURO TANGAIL	**BAN**	0.946	1.060	1.018	0.929	1.002	0.946	1.060	1.007	0.939	1.002	0.797	1.243	1.014	0.786	0.990	0.795	1.213	1.002	0.794	0.965	0.917	1.027	0.919	0.998	0.942	0.916	1.027	0.907	1.010	0.941
IDF	**BAN**	1.010	1.217	1.000	1.010	1.230	1.010	1.217	1.000	1.010	1.230	1.010	1.280	1.000	1.010	1.293	1.010	1.278	1.000	1.010	1.291	0.939	1.022	0.925	1.015	0.960	0.939	1.022	0.925	1.015	0.960
RCPB	**BF**	0.869	0.993	0.841	1.032	0.862	0.869	0.993	0.841	1.032	0.862	0.869	0.993	0.841	1.032	0.862	0.869	0.993	0.841	1.032	0.862	0.873	1.019	0.946	0.923	0.890	0.873	1.019	0.946	0.923	0.890
MIKROFIN	**BOS**	1.000	1.094	1.000	1.000	1.094	1.000	1.606	1.000	1.000	1.606	1.000	1.095	1.000	1.000	1.095	1.000	1.608	1.000	1.000	1.608	1.070	0.942	1.082	0.989	1.008	1.366	1.605	1.353	1.009	2.192
FMM Buca	**COL**	1.055	0.979	1.032	1.023	1.033	1.054	0.980	1.026	1.027	1.033	1.095	0.986	1.087	1.007	1.079	1.092	0.985	1.029	1.062	1.076	0.919	1.013	0.982	0.936	0.931	0.919	1.013	0.996	0.922	0.931
D-Miro	**ECU**	0.982	0.970	0.985	0.997	0.953	0.982	0.970	0.985	0.997	0.953	0.906	1.047	0.938	0.966	0.949	0.928	1.036	0.940	0.988	0.961	1.051	0.941	1.025	1.025	0.989	1.051	0.941	1.025	1.025	0.989
FINCA ECU	**ECU**	1.000	0.934	1.000	1.000	0.934	1.000	0.906	1.000	1.000	0.906	0.958	1.017	0.992	0.965	0.974	0.957	0.988	0.992	0.964	0.946	0.983	0.940	0.997	0.986	0.924	0.983	0.913	0.997	0.986	0.897
FODEMI	**ECU**	1.014	1.046	1.000	1.014	1.060	1.014	1.046	1.000	1.014	1.060	1.014	1.046	1.000	1.014	1.061	1.014	1.046	1.000	1.014	1.061	1.060	1.006	1.015	1.044	1.066	1.060	1.006	1.015	1.044	1.066
Fundacion Es	**ECU**	1.002	0.983	1.000	1.002	0.985	1.002	0.983	1.000	1.002	0.985	0.924	1.063	0.949	0.974	0.982	0.958	1.034	0.955	1.003	0.990	1.010	0.983	1.000	1.010	0.993	1.010	0.983	1.000	1.010	0.993
ACSI	**ETH**	1.147	0.979	1.080	1.062	1.123	1.000	1.518	1.000	1.000	1.518	1.147	0.979	1.080	1.062	1.123	1.000	1.518	1.000	1.000	1.518	1.122	1.108	1.254	0.894	1.243	1.000	1.716	1.000	1.000	1.716
DECSI	**ETH**	1.000	0.962	1.000	1.000	0.962	1.000	1.008	1.000	1.000	1.008	1.000	0.930	1.000	1.000	0.930	1.000	1.002	1.000	1.000	1.002	1.000	1.013	1.000	1.000	1.013	1.000	1.061	1.000	1.000	1.061
ProCred GHA	**GHA**	0.739	1.005	0.751	0.984	0.743	0.739	1.005	0.751	0.984	0.743	0.956	1.077	1.014	0.944	1.030	0.956	1.060	1.010	0.947	1.014	0.608	0.991	0.651	0.933	0.602	0.608	0.991	0.651	0.933	0.602
JMCC	**JOR**	1.066	1.036	1.092	0.976	1.104	1.066	1.036	1.092	0.976	1.103	1.067	1.044	1.093	0.976	1.114	1.067	1.041	1.093	0.976	1.110	1.043	1.013	1.058	0.985	1.057	1.043	1.013	1.058	0.985	1.057
KLF	**KAZ**	0.820	1.017	0.849	0.967	0.834	0.820	1.017	0.849	0.967	0.834	0.843	1.011	0.863	0.977	0.852	0.844	1.002	0.863	0.977	0.846	0.820	1.017	0.849	0.967	0.834	0.820	1.017	0.849	0.967	0.834
EBS	**KEN**	1.056	1.008	1.422	0.743	1.065	1.083	1.019	1.305	0.829	1.103	1.565	0.981	1.940	0.807	1.536	1.071	1.508	1.305	0.820	1.615	1.056	1.008	1.422	0.743	1.065	1.083	1.019	1.305	0.829	1.103
Fondep	**MOR**	1.046	1.043	1.045	1.001	1.091	1.046	1.589	1.045	1.001	1.663	0.973	1.040	1.005	0.968	1.012	1.047	1.597	1.045	1.001	1.672	1.368	1.028	1.359	1.006	1.406	1.368	1.567	1.359	1.006	2.142
Inmaa	**MOR**	1.199	1.005	1.000	1.199	1.205	1.199	1.005	1.000	1.199	1.205	1.111	1.077	1.000	1.111	1.197	1.140	1.064	1.000	1.140	1.213	1.269	0.976	1.000	1.269	1.238	1.269	0.976	1.000	1.269	1.238
ACODEP	**NIC**	1.000	0.971	1.000	1.000	0.971	1.000	0.971	1.000	1.000	0.971	1.012	1.007	1.034	0.979	1.019	1.029	0.991	1.037	0.993	1.020	1.000	0.971	1.000	1.000	0.971	1.000	0.971	1.000	1.000	0.971
FDL	**NIC**	1.001	0.993	0.971	1.031	0.993	1.001	0.993	0.971	1.031	0.993	0.982	1.010	0.995	0.987	0.992	0.982	1.010	0.987	0.995	0.992	1.001	1.024	1.050	0.954	1.025	1.001	1.024	1.050	0.954	1.025
Prodesa	**NIC**	1.000	1.042	1.000	1.000	1.042	1.000	1.263	1.000	1.000	1.263	1.000	1.033	1.000	1.000	1.033	1.000	1.263	1.000	1.000	1.263	1.000	1.070	1.000	1.000	1.070	1.000	1.297	1.000	1.000	1.297
CMAC Arq	**PER**	1.000	0.949	1.000	1.000	0.949	1.000	0.947	1.000	1.000	0.947	0.917	1.088	1.000	0.917	0.998	0.917	1.088	1.000	0.917	0.998	1.000	0.912	1.000	1.000	0.912	1.000	0.910	1.000	1.000	0.910
Bangko Ka	**PHI**	0.990	1.009	1.015	0.976	0.999	0.990	1.026	1.015	0.976	1.016	1.032	0.970	1.025	1.007	1.001	1.035	1.107	0.982	1.054	1.145	0.990	1.009	1.015	0.976	0.999	0.990	1.026	1.015	0.976	1.016
BCB	**PHI**	0.955	1.019	1.000	0.955	0.974	0.899	1.078	1.000	0.899	0.969	0.882	1.060	0.875	1.009	0.935	0.733	1.297	0.788	0.930	0.950	0.955	1.019	1.000	0.955	0.974	0.899	1.078	1.000	0.899	0.969
CBMO	**PHI**	0.989	1.002	0.969	1.020	0.991	0.959	1.056	0.960	0.999	1.012	0.994	1.049	1.005	0.989	1.042	0.964	1.088	0.917	1.052	1.049	0.936	1.027	0.962	0.972	0.961	0.907	1.093	0.959	0.946	0.992
DIGOS	**PHI**	0.994	0.986	0.978	1.017	0.980	0.994	0.986	0.978	1.017	0.980	0.933	1.036	0.940	0.993	0.967	0.937	1.034	0.940	0.997	0.969	0.993	1.021	1.006	0.987	1.014	0.993	1.021	1.006	0.987	1.014
SOLANO	**PHI**	0.948	1.011	1.000	0.948	0.958	0.768	1.271	1.000	0.768	0.975	0.765	0.969	1.000	0.765	0.741	0.559	1.544	1.000	0.559	0.863	0.948	1.011	1.000	0.948	0.958	0.768	1.271	1.000	0.768	0.975
TSPI	**PHI**	1.000	1.047	1.000	1.000	1.047	1.000	1.053	1.000	1.000	1.053	0.903	1.236	1.071	0.844	1.117	0.951	1.198	1.079	0.881	1.140	1.000	1.043	1.000	1.000	1.043	1.000	1.053	1.000	1.000	1.053
Enda	**TUN**	0.933	1.002	0.940	0.993	0.935	0.936	1.001	0.940	0.995	0.936	0.839	1.082	0.881	0.952	0.907	0.872	1.063	0.886	0.984	0.927	1.060	0.969	1.008	1.051	1.027	1.061	0.969	1.009	1.052	1.029
CEP	**VIET**	0.898	1.044	0.911	0.986	0.938	0.900	1.042	0.913	0.985	0.937	0.880	1.054	0.910	0.967	0.928	0.890	1.047	0.911	0.978	0.932	1.097	1.020	1.118	0.981	1.119	1.097	1.021	1.118	0.981	1.120
TYM	**VIET**	0.808	1.112	0.845	0.956	0.899	0.808	1.110	0.807	1.002	0.896	0.797	1.120	0.845	0.943	0.893	0.797	1.118	0.807	0.988	0.891	0.997	1.027	1.004	0.993	1.024	0.996	1.028	1.003	0.993	1.023
mean		**0.978**	**1.016**	**0.986**	**0.992**	**0.993**	**0.965**	**1.079**	**0.979**	**0.986**	**1.041**	**0.963**	**1.051**	**1.001**	**0.962**	**1.013**	**0.939**	**1.146**	**0.976**	**0.962**	**1.076**	**0.994**	**1.005**	**1.013**	**0.982**	**0.999**	**0.989**	**1.074**	**1.010**	**0.980**	**1.062**