



Report on the Seminar on  
Microfinance Interest Rates and Transparency

Held 11 – 12 August 2009  
Dhaka, Bangladesh

*Presented to the Institute of Microfinance,  
the Microfinance Regulatory Authority and  
Palli Karma-Sahayak Foundation*

By MicroFinance Transparency

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## Summary of Results

**Deliverable 1:** Provide training on the costs and pricing of credit products to MFIs

**Summary:** MFT led a two-day seminar on pricing transparency held in Dhaka on 11-12 August, hosted by the InM and MRA. Approximately 300 people attended the opening session, and attendance averaged approximately 250 people for the remaining 1.5 days. The participants paid careful attention to the materials presented and engaged actively in the discussion sessions. The agenda for the two days provided a blend of training on the topics of pricing and costing interspersed with periods for dialogue and discussion on the materials as well as on the implications of how to apply them within their MFIs. The closing session on Wednesday afternoon generated a broad-based agreement and support for advancing pricing transparency in the industry. The seminar appears to have succeeded in its task to lay the groundwork for the MRA to move forward with pricing transparency policies.

**Deliverable 2:** Provide a tool for reporting the prices of microfinance loan products in a common format that includes all costs to the borrower, including interest rates, fees and other charges.

**Summary:** MFT revised its data collection tool to reflect the practices in Bangladesh and the requests of InM and MRA and made it available for use prior to and during the seminar. An updated version of this tool, "Understanding Interest Rates Tool v1.6 Bangladesh.xls", can be found at <http://www.mftransparency.org/blog/bangladesh/> and Annex 1 contains a description of the enhancements added to the tool for use in Bangladesh.

**Deliverable 3:** Begin the collection of pricing data from MFIs in Bangladesh.

**Summary:** The InM developed a paper-based tool for collecting pricing data from the MFIs attending the seminar, based on the Excel tool that we had provided. We used these forms to calculate approximate EIRs for the MFIs attending the seminar. The next section of this report contains a full review of the strengths and weaknesses of this approach.

**Deliverable 4:** Support the Microfinance Regulatory Authority in developing a method for collecting pricing data on all MFIs in Bangladesh and reporting it in a common format.

**Summary:** Based on the lessons learned in Bangladesh, MFT has further developed the data collection tool and is providing it to the MRA for its use. A copy of the Excel file containing the tool "MFT Data Collection Tool, v2 Bangladesh.xls" is now available at <http://www.mftransparency.org/blog/bangladesh/>.

**Deliverable 5:** Advise on regulatory strategies for protecting clients while also encouraging the expansion of credit products for the poorest clients

**Summary:** The report "Recommendations for Interest Rate Transparency" accompanies this report.

## Lessons Learned in the Data Collection Process

### Calculating EIRs with Irregular Grace Periods

In all APR/EIR reporting requirements around the world, the calculation is based on the details of the repayment schedule for the client. This insures that the rate calculation takes into account any variations in the timing of repayments and all of the fees, compensating balances and additional charges paid by the client. Common repayment practices in Bangladesh provide a good example for why this approach is best for calculating the EIR. The vast majority of microloans in Bangladesh are not adjusted to account for irregular payment frequencies or early or late payment by the client. Rather, at disbursement the MFI calculates the amount of interest to be paid if the client were to make consistent weekly installments and then makes no adjustments if the client pays late or misses a payment because of a holiday occurring on the day of the weekly meeting.

For example, a loan of 1,000 taka may be calculated as 44 installments of 25 taka each, for a total of 1,100. If these payments were all made in 44 consecutive weeks, the EIR (excluding any fees) would be 25.07%. This is shown in the first EIR column below (to save space we are only showing the first 15 payment periods, even though the loan has 44 total):

Repayment Schedule for Standardized Bangladesh Weekly Loan												
Loan Amount	1,000	T* (period int rate)		0.43%	0.52%	0.52%						
Num Pmts	44	"n" (periods per yr)		52	52	52						
Payment Amt	25	APR (i * n =)		22.42%	27.28%	27.28%						
Total Repaid	1,100	EIR (1 + i) <sup>n</sup> - 1 =		25.07%	31.27%	31.27%						
Initial Fees	0.02			with interest	with fees	with savings						
Disb Date	1-Jul-09	<input type="checkbox"/> Apply government holidays as grace periods			44	Number of weeks until last payment						
				Loan Cost and Cashflow				Compulsory Savings				
Period #	Date	Holiday?	Grace?	Principal Disbursed	Principal Paid	Cashflow incl. interest	Fees Paid	Cashflow incl. Fees	Savings Deposit	Savings Withdr.	Savings Balance	Cashflow incl. savings
0	1-Jul-09			1,000	1,100	(100)	20	(120)	0	0		(120)
1	8-Jul-09			1,000	25	1,000	20	980			0	980
2	15-Jul-09				25	(25)		(25)			0	(25)
3	22-Jul-09				25	(25)		(25)			0	(25)
4	29-Jul-09				25	(25)		(25)			0	(25)
5	5-Aug-09				25	(25)		(25)			0	(25)
6	12-Aug-09				25	(25)		(25)			0	(25)
7	19-Aug-09				25	(25)		(25)			0	(25)
8	26-Aug-09				25	(25)		(25)			0	(25)
9	2-Sep-09				25	(25)		(25)			0	(25)
10	9-Sep-09				25	(25)		(25)			0	(25)
11	16-Sep-09				25	(25)		(25)			0	(25)
12	23-Sep-09				25	(25)		(25)			0	(25)
13	30-Sep-09				25	(25)		(25)			0	(25)
14	7-Oct-09				25	(25)		(25)			0	(25)
15	14-Oct-09				25	(25)		(25)			0	(25)

The EIR is based on the cash flow, which is the flow of money over time. In Bangladesh, clients generally get grace periods. Grace periods allow clients to use more money for more time, thus delaying the timing of the cash the client pays back to the MFI. The client still pays back 1,100, but over a period longer than 44 weeks. For example, if there are four holiday grace periods distributed evenly throughout the loan term, the client gets the use of more loan funds for more time, with the cost being the same. One way of describing this is that the client gets the use of some of the loan,

interest free, for four weeks. Thus, the resulting EIR is lower. In this case it would drop from 25.07% to 22.30%, as shown in the following schedule, where periodic grace periods have been incorporated into the repayment schedule:

Repayment Schedule for Standardized Bangladesh Weekly Loan												
Loan Amount	1,000		"i" (period int rate)	0.39%	0.47%	0.47%						
Num Pmts	44		"n" (periods per yr)	52	52	52						
Payment Amt	25		APR (i * n =)	20.17%	24.53%	24.53%						
Total Repaid	1,100		EIR (1 + i) <sup>n</sup> - 1 =	22.30%	27.73%	27.73%						
Initial Fees	0.02			with interest	with fees	with savings						
Disb Date	1-Jul-09		<input checked="" type="checkbox"/> Apply government holidays as grace periods	48		Number of weeks until last payment						
				Loan Cost and Cashflow				Compulsory Savings				
Period #	Date	Holiday?	Grace?	Principal Disbursed	Principal Paid	Cashflow incl. Interest	Fees Paid	Cashflow incl. Fees	Savings Deposit	Savings Withdr.	Savings Balance	Cashflow incl. savings
				1,000	1,100	(100)	20	(120)	0	0		(120)
0	1-Jul-09			1,000		1,000	20	980			0	980
1	8-Jul-09				25	(25)		(25)			0	(25)
2	15-Jul-09				25	(25)		(25)			0	(25)
3	22-Jul-09				25	(25)		(25)			0	(25)
4	29-Jul-09	x			0	0		0			0	0
5	5-Aug-09				25	(25)		(25)			0	(25)
6	12-Aug-09				25	(25)		(25)			0	(25)
7	19-Aug-09				25	(25)		(25)			0	(25)
8	26-Aug-09				25	(25)		(25)			0	(25)
9	2-Sep-09				25	(25)		(25)			0	(25)
10	9-Sep-09				25	(25)		(25)			0	(25)
11	16-Sep-09				25	(25)		(25)			0	(25)
12	23-Sep-09				25	(25)		(25)			0	(25)
13	30-Sep-09				25	(25)		(25)			0	(25)
14	7-Oct-09	x			0	0		0			0	0
15	14-Oct-09				25	(25)		(25)			0	(25)

Clients are often given a first week of grace as well. Again this gives them the use of more money for more time for the same cost, and the loan that was 22.30% now has an EIR of 21.24%, as shown below:

Repayment Schedule for Standardized Bangladesh Weekly Loan												
Loan Amount	1,000		"i" (period int rate)	0.37%	0.45%	0.45%						
Num Pmts	44		"n" (periods per yr)	52	52	52						
Payment Amt	25		APR (i * n =)	19.30%	23.47%	23.47%						
Total Repaid	1,100		EIR (1 + i) <sup>n</sup> - 1 =	21.24%	26.38%	26.38%						
Initial Fees	0.02			with interest	with fees	with savings						
Disb Date	1-Jul-09		<input checked="" type="checkbox"/> Apply government holidays as grace periods	49		Number of weeks until last payment						
				Loan Cost and Cashflow				Compulsory Savings				
Period #	Date	Holiday?	Grace?	Principal Disbursed	Principal Paid	Cashflow incl. Interest	Fees Paid	Cashflow incl. Fees	Savings Deposit	Savings Withdr.	Savings Balance	Cashflow incl. savings
				1,000	1,100	(100)	20	(120)	0	0		(120)
0	1-Jul-09			1,000		1,000	20	980			0	980
1	8-Jul-09		x		0	0		0			0	0
2	15-Jul-09				25	(25)		(25)			0	(25)
3	22-Jul-09				25	(25)		(25)			0	(25)
4	29-Jul-09	x			0	0		0			0	0
5	5-Aug-09				25	(25)		(25)			0	(25)
6	12-Aug-09				25	(25)		(25)			0	(25)
7	19-Aug-09				25	(25)		(25)			0	(25)
8	26-Aug-09				25	(25)		(25)			0	(25)
9	2-Sep-09				25	(25)		(25)			0	(25)
10	9-Sep-09				25	(25)		(25)			0	(25)
11	16-Sep-09				25	(25)		(25)			0	(25)
12	23-Sep-09				25	(25)		(25)			0	(25)
13	30-Sep-09				25	(25)		(25)			0	(25)
14	7-Oct-09	x			0	0		0			0	0
15	14-Oct-09				25	(25)		(25)			0	(25)

With more grace periods, the cost of the loan drops. Also important is the actual timing of those grace periods. If the holidays fall early in the loan term, they result in a lower-priced loan, because the client gets the free use of a large amount of the loan. Holidays near the end of the loan term have less impact because the client gets free use of only a small portion of the loan. The following table displays five different scenarios, with their resultant EIRs:

<b>44 week loan</b>		
Grace periods?	Paid in (wks)	EIR
no grace period	44	25.07%
4 wks holiday, evenly distributed	48	22.30%
4 wks holiday, 1st week grace	49	21.24%
5 wks holiday, evenly distributed	49	22.19%
5 wks holiday, 1st week grace	50	21.13%

Generating a repayment schedule with the actual or estimated grace periods is essential to deriving an accurate calculation of the EIR of the typical Bangladeshi microloan. A loan with 44 installments should not have the EIR calculated with 44 consistent payments or the EIR will be overstated from what the client is legally obligated to pay.

MFTransparency has developed a new APR/EIR worksheet that models the typical Bangladeshi weekly-installment loan and allows the input of upcoming Bangladeshi holidays. Once the disbursement date of the loan is typed in, the repayment schedule searches for upcoming payment dates that fall on official holidays and grants the client a week of grace. The worksheet also allows the manual input of grace periods. This allows the creation of an accurate cash flow. Both amounts and dates of all payments must be accurate to get an accurate EIR for the loan.

### **Implications for the calculation of EIRs during the Seminar**

Due to this unique method of calculating interest, it was difficult for MicroFinance Transparency to calculate the APR/EIR rates for any of the microfinance institutions that practice this non-standard method of calculating interest. Without full repayment schedules to use as evidence of the actual repayment dates for clients, MicroFinance Transparency could only calculate an approximate APR/EIR.

Further, the paper-based questionnaire given to the microfinance institutions created additional limitations to the data collection process due to its format. For example, data on the calculation of additional fees, microinsurance and compulsory savings was not captured accurately as the initial questionnaire simply asked if the institution charged additional fees but did not ask how much. For these reasons, MicroFinance Transparency is not confident in the validity of the data obtained through the questionnaire.

Our conclusion is that a more thorough and accurate data collection process should be undertaken in Bangladesh to produce more valid results. While microfinance institutions may not be proficient in the use of an Excel-based data collection tool, MicroFinance Transparency believes that with the support of Research Assistants from the MRA,

institutions could successfully and rather easily complete MicroFinance Transparency's Data Collection Tool, yielding reliable and accurate results.

MicroFinance Transparency has spent months developing, adapting and revising the Data Collection Tool to capture many nuances in the price structures of loan products around the world. The Tool asks a range of questions in order to more accurately and thoroughly represent the possible variations in pricing within one loan product – such as the inclusion of compulsory savings for certain clients, whether different nominal interest rates are charged to clients in different regions of a country, and variations in fees charged to different clients in their loan application. The MicroFinance Transparency Tool has been proven to capture much of the gradation within a loan portfolio. Used in three countries, the average amount of time required by the MFI to completely fill in the tool is two hours of a senior official in the credit department.

### **Recommendations:**

We make the following recommendations to the MRA for collecting pricing data on all MFIs in Bangladesh and reporting it in a common format:

1. Utilize the Data Collection Tool designed by MicroFinance Transparency for Bangladesh in order to capture more of the nuances of various loan products.
2. Develop a brief tutorial on the Data Collection Tool to instruct MFIs on how to complete the tool (MFT can assist with this).
3. For microfinance institutions not proficient in Excel, employ Research Assistants from the MRA to complete the Data Collection Tool alongside the microfinance institution. This process should not take more than two hours for an institution with approximately 6 – 7 loan products.
4. Require the submission of actual repayment schedules to fully capture the cash flow from the point of view of the client, including payment dates, as explained in this paper.
5. Require the submission of multiple repayment schedules for each product, related to the loan size range offered by the client. This is to ensure that pricing data is collected for small loans and large loans, in order to determine if there is a difference in pricing related to loan size.
6. Test this approach using the Data Collection Tool with the ten largest MFIs in Bangladesh. MFTransparency is willing to assist with this process, guiding the MRA staff in collecting the data.
7. Discuss the possibility of using the MFTransparency.org website tools to publicly post all data collected and to provide a means for MFIs to update their pricing data regularly.

# Annex 1

## Bangladesh EIR Calculation Tool

The Excel file “Understanding Interest Rates Tool v1.6 Bangladesh.xls” has been adapted to the specific circumstances of microcredit in Bangladesh. An earlier version of this tool (v1.5) was used during the seminar. The new version includes a new worksheet, “Bangladesh Wk Loan”, which allows calculation of EIRs for the standard weekly microcredit product with fixed weekly payments and various grace periods.

On the top portion of this new worksheet, the user enters the loan amount, number of payments, the payment amount, any initial fees, and the disbursement date. The user also checks or unchecks the box to apply government holidays as grace periods.

In Column P, to the right, the user can list all upcoming government holidays. Column C shows projected repayment dates for the loan being analyzed, and for any date that falls on a government holiday, the client receives a week in which he or she does not make a loan payment.

**Repayment Schedule for Standardized Bangladesh Weekly Loan**

Loan Amount	1,000	* (period int. rate)	0.37%	0.45%	0.45%
Num Pmts	44	*n (periods per yr)	52	52	52
Payment Amt	25	APR (i * n =)	19.20%	23.35%	23.35%
Total Repaid	1,100	EIR (1 + i) <sup>n</sup> - 1	21.13%	26.24%	26.24%
Initial Fees	0.02		with interest	with fees	with savings
Disb Date	1-Jul-09	<input checked="" type="checkbox"/> Apply government holidays as grace periods			
				50	Number of weeks until last payment

  

Period #	Date	Holiday?	Grace?	Loan Cost and Cashflow				Compulsory Savings				Bangladesh Holiday Schedule	
				Principal Disbursed	Principal Paid	Cashflow incl. Interest	Fees Paid	Cashflow incl. Fees	Savings Deposit	Savings Withdr.	Savings Balance		Cashflow incl. savings
0	1-Jul-09			1,000	1,100	(100)	20	(120)	0	0		(120)	
1	8-Jul-09		x		0	1,000	0	980			0	0	9-Jul-09
2	15-Jul-09			25	0	(25)		(25)			0	(25)	19-Jul-09
3	22-Jul-09			25	(25)	(25)		(25)			0	(25)	29-Jul-09
4	29-Jul-09	x		0	0	0		0			0	0	8-Aug-09
5	5-Aug-09			25	(25)	(25)		(25)			0	(25)	18-Aug-09
6	12-Aug-09			25	(25)	(25)		(25)			0	(25)	28-Aug-09
7	19-Aug-09			25	(25)	(25)		(25)			0	(25)	7-Sep-09
8	26-Aug-09			25	(25)	(25)		(25)			0	(25)	17-Sep-09
9	2-Sep-09			25	(25)	(25)		(25)			0	(25)	27-Sep-09
10	9-Sep-09			25	(25)	(25)		(25)			0	(25)	7-Oct-09
11	16-Sep-09			25	(25)	(25)		(25)			0	(25)	17-Oct-09
12	23-Sep-09			25	(25)	(25)		(25)			0	(25)	27-Oct-09
13	30-Sep-09			25	(25)	(25)		(25)			0	(25)	6-Nov-09
14	7-Oct-09	x		0	0	0		0			0	0	16-Nov-09
15	14-Oct-09			25	(25)	(25)		(25)			0	(25)	26-Nov-09
											0	(25)	6-Dec-09

In addition, the user can manually indicate weeks where there are additional grace periods using Column E. For example, it is common to give the first week after disbursement as a grace period. This can be done by entering an “x” into Column E for Period 1 (row 15).

We have incorporated the ability to translate Version 1.6 into Bengali. This can be done by a translator by filling in the Bengali column on the TRANSLATIONS sheet. A sample section is shown below. Once this translation is done, MFTransparency will incorporate this into the official version of the Interest Rate Tool.

Text	Row	English	Spanish	Bosnian	Bengali
Calculation	1	Calculation of APR based on Loan Conditions and Pricing	Cálculo de APR basado en Condiciones de Préstamo y Precios	Obračun God. Kam. Slope na bazi kreditnih uslova i cijene	
Basic Loan	2	Basic Loan Conditions	Condiciones de Préstamo Básicas	Osnovni kreditni uslovi	
Loan Amount	3	Loan Amount	Monto Prestado	Iznos kredita	
Amortization	4	Amortization	Amortización	Amortizacija	
Equal principal	5	Equal principal payments	Pagos principales iguales	Jednake oplate	
Equal instal	6	Equal installments (amortized)	Pagos iguales (amortizados)	plavnice Jednaki anuiteti (amortizovani)	
Single end	7	Single end-term principal payment	Pago principal único al fin del plazo	Oplatna plavnica na kraju oplate kredita	
Interest	8	Interest	Interés	Kamata	
Multiple in	9	Multiple installments	Cuotas múltiples	Oplatna u više rata	
Single end	10	Single end-term payment	Pago principal único al fin del plazo	Oplatna plavnica na kraju oplate kredita	
Term & Re	11	Term & Repay Freq.	Frecuencia de pagos y plazos	Rok & Frekvencija oplate	
Days	12	Days	días	Dani	