

BULLETIN HIGHLIGHTS

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Sources of Revenue and Assets Allocation at MFIs

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To be sustainable businesses, microfinance institutions (MFIs) must cover all expenses with their own revenues. If revenues are more than expenses, the MFI is sustainable and can keep operating without the need for subsidies; if revenues are less than expenses, the MFI needs subsidies in order to cover all its costs. The main sources of revenues for MFIs are interest, fees and commissions on loan portfolios, and they represent on average 90 percent of all financial revenue. One problem with this high dependency on revenue associated with loans is that an increase in expenses can be covered in only one of two ways: 1) by increasing the interest rates, fees or commissions, all paid by the borrowers, or 2) from other subsidies. Therefore, understanding the sources of revenue used by MFIs may be useful for those institutions that are looking at generating additional revenues or diversifying their current sources.

This note analyzes the various sources of revenues of MFIs, focusing on financial revenues, defined as revenues related to the provision of financial services. Financial revenues are classified into three categories:

- i) revenues from loan portfolio, composed of interest, fees and commissions on loan portfolio,

- ii) revenues from other assets, composed mainly of interest on investments, and
- iii) revenues from other services, composed of revenues related to the provision of other financial services beyond lending, such as remittances.

Non-operating revenues – those from activities unrelated to the MFI's core activity of providing financial services – are not considered in this analysis.

In 2007 on average for the 892 MFIs in the sample, 90 percent of all revenues came from loan portfolio, 4 percent from other assets, and 6 percent from the provision of other financial services. Figures for the last five years are presented in **Table 1**. Clearly, revenues from loan portfolio are the most important source of revenue for MFIs, since the other two sources of revenues, referred to as **other revenues** hereafter, represent less than 10 percent of all revenues generated by the average MFI.

In the 2005–2007 period, the relative importance of each source of revenue experienced insignificant changes for the 488 MFIs with data in both years (bottom of **Table 1**). In particular, the relative

Table 1 Sources of Revenue as Percentage of Financial Revenue

Year	Sources of Financial Revenue as %			No. of MFIs
	Loan Portfolio	Other Assets	Other Financial Services	
2003	90	5	5	235
2004	92	3	5	369
2005	90	5	6	561
2006	90	4	6	794
2007	90	4	6	892
Average	90	4	6	
Only for MFIs with data in both years				
2005	90	4	6	488
2007	90	4	6	488
Average	90	4	6	488

Table 2 Simulation: MFIs not sustainable without other revenues

Year	All MFIs	Only FSS* MFIs	Simulated without Other Revenues		
			Still FSS	Non-FSS	% FSS
2003	234	138	103	35	25%
2004	364	246	189	57	23%
2005	556	350	239	111	32%
2006	792	462	319	143	31%
2007	892	549	368	181	33%
All MFIs with data in Both Years					
2005	488	314	220	94	30%
2007	488	340	233	107	31%
All FSS MFIs in Both Years					
2005	269	269	186	83	31%
2007	269	269	190	79	29%

* FSS = Financial Self Sufficiency

importance for each source of revenue in 2005 is almost identical to the 2007 figures.

Despite the fact that other revenues represent only 10 percent of all revenues generated by MFIs, we should not ignore them to concentrate only on revenue from loan portfolio. Other revenues represent at least half of all net operating income (after removing expenses) for 49 percent of the MFIs in the sample of 549 sustainable MFIs in 2007.

Another way to look at the importance of revenues from other sources is to measure their contribution to the average profitability for all 837 MFIs that collected some revenue from other sources beyond lending. In particular, the average return on assets (ROA) for MFIs that collected some revenue from other sources beyond lending in 2007 is -1.8 (negative) percent, from which 2.6 (positive) percentage points came from other sources of revenue.

Other revenues matter even more for a full third of all sustainable MFIs in 2007 that were able to cover all their operating costs **only** with the revenues from both other assets and other services. Meaning, the sustainability of more than 181 MFIs depended on the revenue generated from other activities beyond lending. In order to put these figures in perspective, the simulated yield that these MFIs would have been required to charge to their borrowers, assuming that all income was generated from lending and no income was generated through other sources (this implies that all non-portfolio assets are idle and not invested), is 8.2 percentage points higher than the actual yield they charged (31.5 percent). However, as shown in **Table 2**, over time there is a reduction

in the number of MFIs that depended on the extra revenue from other sources to break even, from 31 percent to 29 percent of the 269 sustainable MFIs with data in both 2005 and 2007 (bottom of **Table 2**).

Readers may suspect that significant differences regarding the relative importance of the different sources of revenue may exist based on a number of factors, for instance between sustainable and non-sustainable MFIs, charter type, or region, just to mention a few. Before reviewing these results, let's discuss first the main determinants of the different sources of revenue.

Ceteris paribus, the larger the share of assets that an MFI disburses as loans, the larger the share of revenue from loan portfolio with respect to the other sources of revenue. In the extreme, an MFI with 100 percent of its assets disbursed as loans will have 100 percent of its revenues from loan portfolio. A similar argument can be made for revenues from other assets and the share of assets allocated for other investments.

In particular, as presented in **Table 3**, for MFIs with less than 33 percent of assets disbursed as loan portfolio, revenues from loan portfolio are on average 67 percent of all revenues. The same ratio is 86 percent for MFIs with loan portfolio as percentage of assets between 33-66 percent, and 95 percent for MFIs that allocate between 87-100 percent of their net assets as loan portfolio.

Therefore, once differences in portfolio allocation are considered, there is no difference between sustainable and unsustainable MFIs in term of the

Table 3 Revenue from Loan Portfolio as Percentage of Total Revenue, 2007

	Loan Portfolio as Percentage of Assets					Average
	0-33%	33.1-66%	66.1-78%	78.1-87%	87.1-100%	
FSS	60	85	90	92	95	91
Non-FSS	72	86	88	92	95	88
Average	67	86	89	92	95	90

relative importance of revenue from loan portfolio with respect to the other sources of revenues. In this regard, the main difference between sustainable and non-sustainable MFIs comes from the percentage of assets that is disbursed as loans. On average, sustainable MFIs disburse 77 percent of their assets as loan portfolio, while non-sustainable MFIs disburse only 68 percent of their assets as loan portfolio. In order to better understand the full income structure of MFIs, we need to look at the other two types of assets and their returns: other financial assets and net fixed assets. Non-sustainable MFIs allocate on average 29 percent of their assets as other financial assets while sustainable MFIs allocate only 21 percent of their assets. The rest of the assets are allocated as in fixed assets, with non-sustainable MFIs allocating on average 2 percentage points more to fixed assets than sustainable MFIs.

Besides assets allocation in different productive assets, the other variable that determines the total composition of financial revenues is the returns generated by each type of asset. The returns presented in **Table 4** are calculated over the average level of assets. In previous issues of the Microbanking Bulletin it has been reported that the average yield of sustainable and non-sustainable MFIs is very similar, but on average 2 percentage points higher for sustainable MFIs. Surprisingly, there is a similar pattern related with the returns on other financial assets between sustainable and non-sustainable MFIs: the average return that both types of MFIs received

on their other assets is on average 3 percent in the 2003–2007 period.

In addition to portfolio allocation, the higher the yield (interest rates, fees and commissions) that an MFI charges, the larger the share of revenue from loan portfolio, with respect to other sources of revenue. Based on the MFIs reporting to this MBB, revenue from loan portfolio as percentage of total revenue and yields are shown in **Figure 1** according to the level of portfolio allocation in 2007. Clearly, there is a positive relationship between these two variables, as highlighted by the trend line. However, the effect of nominal yield on percentage of revenue from financial revenues weakens as the percentage of assets disbursed as loan portfolio increase (compare the slope of the trend in the upper left corner versus the one in the bottom right corner).

Another driving factor determining the revenue structure of MFIs is the average return that they received on other assets. As the following graph demonstrates (only for MFIs with yields in the 30–70 percent rate, for comparability of results), there is a negative relationship between the percentage of financial revenue coming from loan portfolio and the average domestic deposit rate. Higher deposit rates are associated with higher returns on other assets and lower revenue from loan portfolio, given a specific portfolio allocation. Similar to the relationship with yield, the relationship weakens as portfolio allocation increases.

Table 4 Average Return by Asset Type

Year	Average Returns by Asset Type					
	Yield as % of Gross Loan Portfolio			Returns on Other Financial Assets		
	FSS	Non-FSS	Average	FSS	Non-FSS	Average
2003	40	35	38	3	2	3
2004	37	36	37	3	2	2
2005	35	34	35	2	2	2
2006	36	33	35	3	3	3
2007	34	33	34	3	3	3
Average	36	34	35	3	3	3

Figure 1: Revenue from Loan Portfolio as Percentage of Financial Revenue versus Yield by Level of Portfolio Allocation

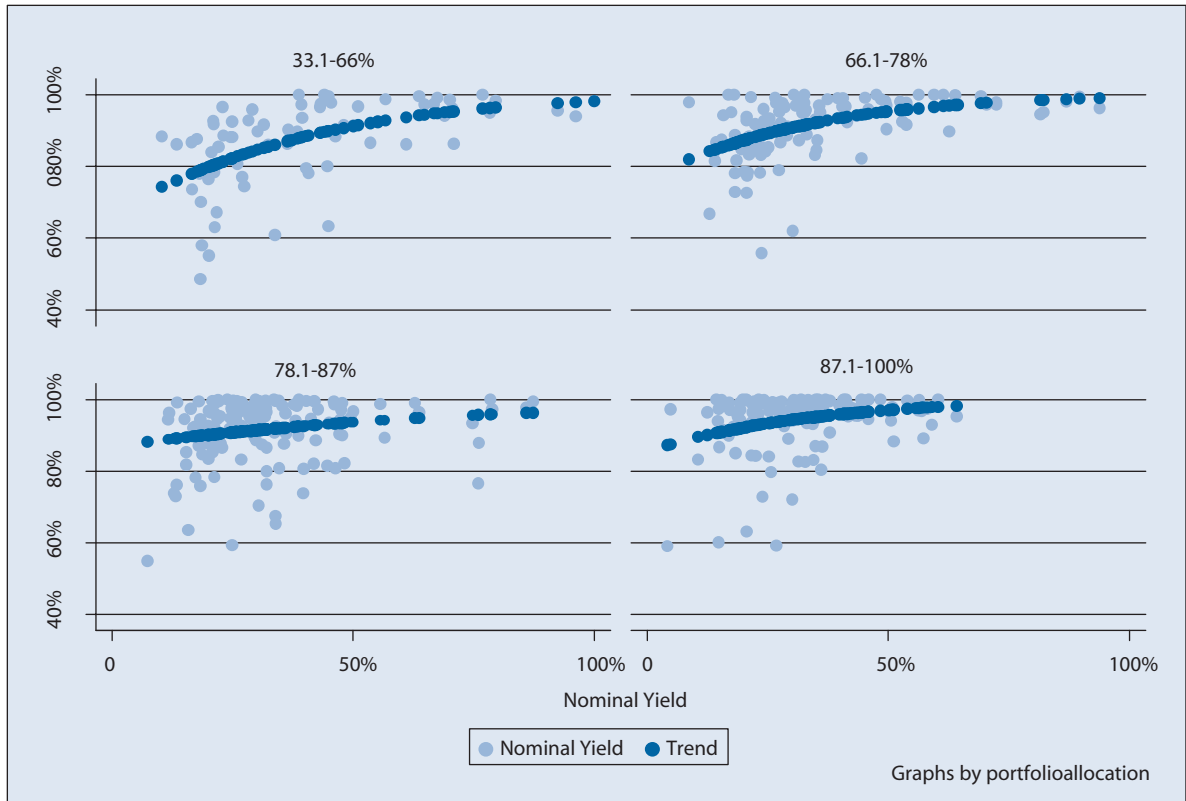


Figure 2: Revenue from Loan Portfolio as Percentage of Financial Revenue versus Domestic Deposit Rate by Level of Portfolio Allocation

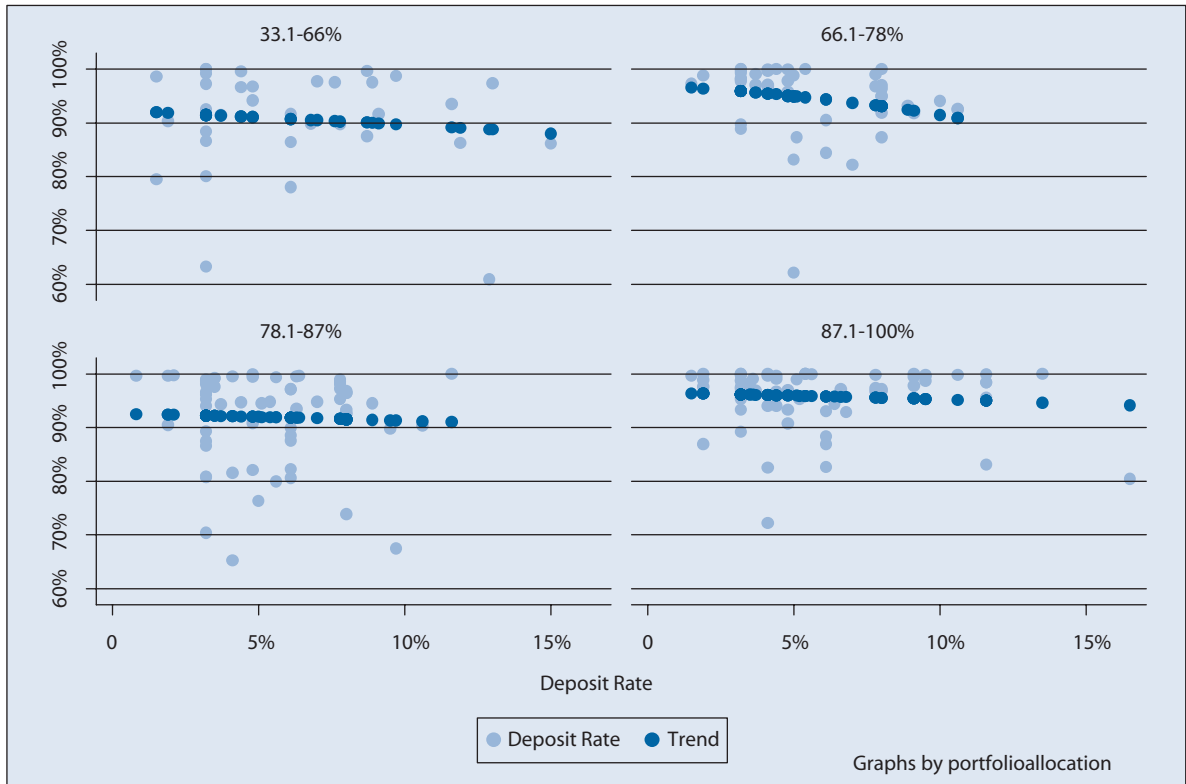


Table 5 Regional Breakdown

Region	Sources of Revenue as Percentage of Financial Revenue			Asset Structure as Percentage of Total Assets			Average Returns by Asset Type	
	Loan Portfolio	Other Assets	Other Services	Gross Loan Portfolio	Other Assets	Net Fixed Assets	Gross Loan Portfolio	Other Assets
Africa	83	8	9	61	34	8	39	4
EAP	92	3	5	72	26	4	35	3
ECA	93	2	5	82	16	5	32	2
LAC	91	2	7	79	20	5	37	3
MENA	94	4	2	72	29	4	30	2
S Asia	87	7	6	72	27	3	24	3
Average	90	4	6	74	24	5	34	3

On the regional level, Africa followed by South Asia were the regions with the lowest percentage of financial revenue coming from loan portfolio in 2007 (**Table 5**). For these two regions, the other revenues are equally distributed between other assets and other services. The explanations for these similar results are quite different. Africa is the region where loan portfolio represents the lowest share of assets, but also has the highest yield on loan portfolio. South Asia MFIs have a portfolio allocation similar to that of EAP (East Asia & the Pacific) or MENA (Middle East & North Africa) MFIs, but they charge the lowest yield compared to other regions. ECA (Eastern Europe & Central Asia) MFIs have the highest portfolio allocation followed by LAC (Latin America & the Caribbean), but in terms of revenue generation, ECA and MENA get the highest percentage of revenues from loan portfolio. In terms of other financial assets, Africa is the region with the highest share, followed by MENA; however, in terms of returns for this type of assets, most regions show a similar return, with a global average around 3 percent.

Banks received the lowest share of their financial revenue from loan portfolio in 2007 followed by rural

banks, while NGOs and NBFIs received the highest shares of their financial revenue from loan portfolio (**Table 6**). However, banks have the second highest share of financial revenue from other assets as well as the highest share of financial revenue from other services. The revenue composition of banks is consistent with their assets allocation, with the second highest allocation of assets in other investments. In terms of their regulatory environment, NBFIs are very close to banks, but surprisingly, the revenue structure and portfolio allocation of NBFIs are closer to those of NGOs, and banks share more common patterns with rural banks and with CU/COOPs.

Conclusions

Revenues from other sources beyond lending are a key component of the revenue stream of most MFIs. The average MFI allocates only three-quarters of its assets as loan portfolio, and this creates the need to maximize the return of almost one-quarter of its assets in alternative activities beyond lending. In the case of regulated institutions, the share of other assets that can generate some positive return is constrained by the reserve requirements. In addition to investing idle

Table 6 Charter Breakdown

Charter	Sources of Revenue as Percentage of Financial Revenue			Asset Structure as Percentage of Total Assets			Average Returns by Asset Type	
	Loan Portfolio	Other Assets	Other Services	Gross Loan Portfolio	Other Assets	Net Fixed Assets	Gross Loan Portfolio	Other Assets
Bank	82	8	11	66	32	5	32	4
CU/COOP	87	5	8	76	21	6	26	3
NBFI	91	3	6	76	22	4	36	2
NGO	92	3	5	76	22	5	36	3
Rural Bank	85	9	6	59	38	4	33	4
Average	90	4	6	74	24	5	34	3

assets that cannot be allocated as loan portfolio, many MFIs complement their revenue stream with revenues from the provision of other services. Therefore, MFIs should not underestimate the importance of maximizing the revenues from other sources as this could reduce some of the pressure borne by borrowers. This could be particularly important in countries where competition makes increasing interest rates difficult or in countries where there is a high risk of interference by local authorities by imposing a ceiling on high interest rates.

With the subprime crisis affecting international financial markets, and many forecasts of high inflation and food crisis, it may be wise for MFIs to diversify their sources of revenue in order to compensate for the negative effects of a global crisis. However, if revenues from other sources beyond lending are more correlated with the overall performance of the economy in comparison with the lower correlation of portfolio quality, increasing the share of revenues from other sources may increase the general correlation of the microfinance industry with the rest of the financial system.

Interest Charges versus Fees and Commissions

A Glimpse at Transparency on Interest Rates

Financial revenue from loan portfolio is the most important source of revenue for MFIs, and it has two components: i) interest charges and ii) fees and commissions. From the point of view of transparency to the client, especially in developing countries where the equivalent of an average percentage cost (like the APR in USA) is not available or just recently introduced, the higher the percentage of revenue that an MFI receives from interest on loan portfolio, the closer the average yield will be to average interest rate paid by the borrowers. And if an MFI does not charge commission or fees, and all revenue from loan portfolio is from interest, then the average yield will be – or should be – very close to the average interest rate the borrower pays. However, the share of fees and commissions as percentage of financial revenue from loan portfolio can be higher when some of the penalties associated with late repayment are charged as fees and not as higher interest rates.

Before looking at the results, there is a reporting issue that should be considered. Many MFIs reported that 100 percent of their revenue from loan portfolio came from interest charges and zero percent from fees and commissions. This could be a reporting problem: many auditors may have chosen to report both types of revenue from loan portfolio as a single line item, in which case it was classified as interest charges.

Since we cannot separate the reporting issue from those MFIs that actually receive 100 percent of their financial revenue only from interest charges, the figures in the following tables are reported for two different groups of MFIs: i) all MFIs in the sample of 892, and ii) only those MFIs that report some revenue from fees and commissions (revenue from interest charges was not 100 percent of all revenue from loan portfolio). The interval for the percentage of revenue from loan portfolio coming from interest charges defined by these two groups has a dispersion of less than 5 percentage points.

As reported in 2007, 89 percent of all revenue from loan portfolio came from interest rate charges. After correcting for reporting issues as previously explained, this share drops 4 percentage points, for the true value ranging in the 85-89 percent interval. Estimates for 2007 based only on MFIs that reported data in both years are very similar to the global estimates previously reported. And, based on this subset of MFIs there is an increase of 2-3 percentage points in the global contribution of interest charges to the revenue from loan portfolio in the 2005–2007 period.

The first two rows of **Table 8** present the interest charges as percentage of financial revenue for all MFIs in the sample by year. The second two rows present the same information after removing those MFIs that did not reported zero. The second half of the table follows a

Table 7 Revenue from Interest Charges as Percentage of Revenue from Loan Portfolio

	All MFIs		Trends	
	%	No. MFIs	%	No. MFIs
2005	88	561	87	488
2007	89	892	89	488
After Removing those with 100% from Interest				
2005	82	394	82	304
2007	85	651	85	304

Interest Charges versus Fees and Commissions

similar structure with the only difference that it is only for MFIs with information available in 2005 and 2007, so it is useful for changes over time.

For all regions with the exceptions of LAC, the difference between the first two rows and the second two rows is between 1-3 percentage points, but for LAC it is between 8-11 percentage points. A similar pattern emerges for the lower half of the table.

Table 8 Revenue from Interest Charges as Percentage of Revenue from Loan Portfolio by Region

All MFIs							
Year	Africa	EAP	ECA	LAC	MENA	Asia	Total
2005	87	88	91	86	90	85	88
2007	87	90	87	90	89	93	89
After Removing those with 100% from Interest							
2005	84	86	88	74	87	80	82
2007	84	88	84	82	88	91	85
Trends							
Year	Africa	EAP	ECA	LAC	MENA	Asia	Total
2005	87	88	91	86	90	82	87
2007	84	90	91	89	89	92	89
After Removing those with 100% from Interest							
2005	85	86	87	74	87	80	82
2007	86	87	86	80	87	89	85

The countries with the lowest share of income from loan portfolio stemming from interest charges in 2007 are identified alphabetically in the **Table 9**. Country results are separated into two categories: MFIs reporting 100 percent of their income from loan portfolio from interest chargers (indicated in the column titled **100%**) versus the **rest** of MFIs (column titled Rest), and against the national average.

At the regional level, the distribution of charter types by high share (those with highest share of revenue coming from interest on loan portfolio) and low share MFIs (those organizations with the lowest share of revenue from loan portfolio coming from interest charges) is clearly differentiated for most regions. For Africa, most credit unions tend to concentrate in the high share group and rural banks in the low share one. In ECA, most licensed MFIs are concentrated on the high share group while most CU/COOP is concentrated on the low share one. The low share group in LAC is dominated by countries where the main charter type is NGOs. In South Asia, there is almost not difference in the distribution of charter types.

Table 9 Countries with the Lowest Share of Revenue from Loan Portfolio coming from Interest Charges

Region	Share of Revenue in %		
	100%	Rest	Average
Cameroon	100	76	81
Croatia	n.a.	64	64
Ecuador	100	62	67
Ghana	100	79	80
Guatemala	100	74	83
India	100	82	84
Nicaragua	100	60	73
Nigeria	n.a.	82	82
Romania	100	84	86
Russia	100	74	76
South Africa	100	56	74
Uzbekistan	100	82	87
Average	100	74	78

Interest Charges versus Fees and Commissions

Financial transparency has improved dramatically in the last years. For instance, the number of MFIs with public profiles in the MIX Market (www.mixmarket.org) has increased more than four times in the last four years, with more than 1,300 MFIs disclosing their information today, and over 75 percent of those MFIs provide audited financial statements or ratings to back up their information. However, given that still more than 15 percent of all revenue from loan portfolio comes from fees and commissions, the industry needs pay more attention to the level of transparency between the MFI and the borrower.

Table 10 Charter Type by Region and Level of Revenue from Loan Portfolio coming from Interest Charges

Region	Bank	High Share					Low Share					
		CU/ COOP	NBFI	NGO	Rural Bank	No. MFIs	Bank	CU/ COOP	NBFI	NGO	Rural Bank	No. MFIs
Africa	8	29	37	27	0	112	9	7	23	30	32	44
EAP	3	2	14	39	41	123	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ECA	19	6	62	13	0	111	8	67	21	4	0	48
LAC	8	7	36	48	0	203	4	29	5	63	0	80
MENA	2	0	17	81	0	48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
S Asia	3	5	39	45	8	64	0	10	42	46	2	59
Total	8	9	35	39	8	661	5	28	21	40	6	231

Definitions

Revenues

- Financial Revenue = Revenue from Loan Portfolio + Revenue from Other Financial Assets + Revenue from Other Financial Services
- Revenue from Loan Portfolio = Interest on Loan Portfolio + Fees and Commissions on Loan Portfolio

Assets

- Assets = Net Loan Portfolio + Other Financial Assets + Net Fixed Assets
- Net Loan Portfolio = Gross Loan Portfolio – Impairment Loss Allowance
- Other Financial Assets = Cash and Due from Banks + Reserves from Central Bank + Trade Investments + Interest Receivable + Accounts Receivable and Other Assets + Other Investments

Returns

- Yield on Gross Portfolio = Revenue from Loan Portfolio / Average Gross Loan Portfolio
- Return on Other Financial Assets = Revenue from Other Financial Assets / Average Other Financial Assets

(Full definitions available in the **Index of Terms and Definitions** Section of this Bulletin)