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# Opportunities in microfinance risk management

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**Abstrakt.** This paper examines the main risk management opportunities and threats, which microfinance institutions (MFIs) are exposed to. Awareness and understanding of these indicators can make the evolution of microfinance more accurate and simultaneously can help to locate the microfinance market in the broader picture of economic development. Growing competition improves the current situation for borrowers, because it leads to acceptable interest rates policy and expansion of existing microfinance services. At the same time, intense competition may represent threats, if the rules of regulation and supervision are not properly set. In this regard, we believe that the future of microfinance will significantly depend on the linkage between MFIs and financial markets, especially in the light of access to an alternative source of funding, the possibility of securitization and other complementary services.

**JEL :** G01, G21,

**Key words:** Microfinance; Microcredit; MFIs, Financial Crises

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## INTRODUCTION

In the last decades the governments of developed countries have made several attempts to increase the amount of financial aids for developing countries. Annually, the amount dedicated to the social and economic needs of the inhabitants reaches milliards of dollars. However, it is not an exception that these donations and investments originally intended to satisfy the needs of the poor are either used to gain power or end up in the hands of local bureaucrats. Due to the low transparency present in these cash flows, the phenomenon of “aid fatigue” appears. This means that international organizations and governmental authorities can sense an increasing difficulty when searching for aid from investors, interest groups or political parties. In the current economic situation, when the world faces a severe financial crisis, the countries are forced even more to re-consider the amount of financial aid they are willing to spend on helping the developing countries. Therefore, more transparent concepts are getting to the forefront, where the activity of the individual and his ability to take care of himself regardless of the economic situation are the most important attributes. One of the tools leading to this goal is microfinance. Generally, it is a financial assistance in the form of a loan, which allows the low-income inhabitants of the developing countries to implement their own business plan.

Until recently most of the conventional banks avoided such clients due to their low creditworthiness, lack of quality or total absence of their collateral, and also moral hazard. Over time, however, there is evidence that low-volume loans from MFIs to promote business development, education or improvement of living conditions in the family have a high percentage of redemption. Considerable success can be attributed to the loans provided to women. Their social perception of the institution of family and better accountability proved to be the key elements for the future development of microfinance<sup>3</sup>. Hence banks have reevaluated their business strategies and started to penetrate these markets either through direct financial service provision (for example Citibank, HSBC) or indirect investments to MFIs<sup>4</sup>.

Furthermore, it also took a considerable amount of time until the MFIs could earn the trust and confidence of private investors<sup>5</sup> and donors, who are also a considerable source of credit

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<sup>3</sup> Some African states are still not familiar with the concept of credit strategy aimed at the female gender. One study shows that other types of credit policies are financially and socially ineffective, and prevent from a faster development of microfinance (Kazi M. H., Leonard J.E., 2012)

<sup>4</sup> See Maksudova N. (2010)

<sup>5</sup> Economic study (Janda K., Svarovska B., 2009) found, that investments to microfinance fund recorded lower total risk than global stocks and bonds with moderate but stable returns. In this regard, it can be suitable as alternative investment for portfolio diversification.

support for the MFIs<sup>6</sup>. From this perspective, MFIs tend to finance their own credit policy in the form of deposits or borrowings. Financing loans in the form of deposits is typical for Latin American<sup>7</sup> or African region. On the other hand, getting borrowings from domestic financial institutions is more apparent in Asia, particularly in the Northern part of Asia, where borrowings accounted for about 95% of the funding sources in 2011. The only regions that are still dependent on subsidies from financial institutions are the Middle East and North Africa. In these regions the cross-border funding is the lowest from all regions and several MFIs do not even accept deposits. In the next chapter we will see that a high-quality funding source for different lending activities is very important for the development of microfinance.

## **The overall development of microfinance institutions**

Even though the efficiency of MFIs is constantly improving, the current level of development in various regions is still very different. Generally speaking, MFIs mostly occur in areas with higher levels of inflations and in such stable environments where the GDP growth is steady. Moreover, the industry also plays an important role, where its significant contribution to the overall GDP leads to a decline in the development of microfinance. The reason for this can be the fact that most of the loans are provided to the agriculture or other tertiary services. A stable source of funding loans either in the form of grants, loans, customer deposits or shares play only a secondary role. Plus, a sufficient legislative background or appropriate regulation can be also very useful<sup>8</sup>.

Graph 1 demonstrates the development of MFIs between 2003 and 2011 in various regions<sup>9</sup>. The biggest success in microfinance has long been recorded in Latin America and The Caribbean<sup>10</sup>. In the early nineties the local governments of these countries contributed substantial amounts of financial resources into the development of microfinance, which then was additionally supported by institutional investors. A high proportion of MFIs is formed by

**Graf 1:** Overall development of MFIs (source: mixmarket)

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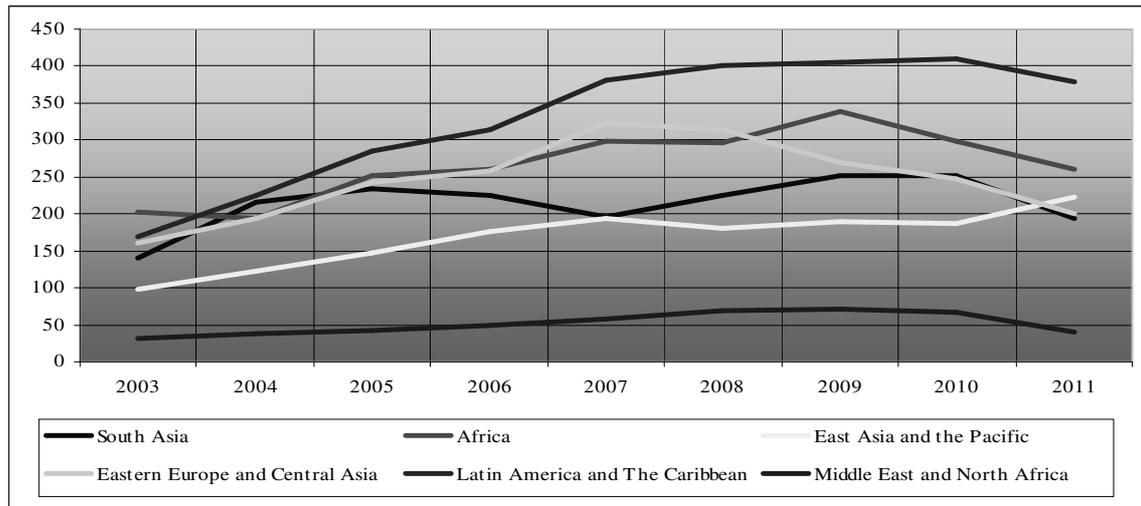
<sup>6</sup> Gähwiler, Nègre (2011) show that almost half of total cross-border funding is channeled through Microfinance Investment Vehicles (MIV) and other intermediaries.

<sup>7</sup> In 2009, deposits were the main source of funding, concentrating about 53 % of funding.

<sup>8</sup> Excessive regulation can cause problems in providing loans for the low-income residents. Its strict settings can even result in social ineffectiveness.

<sup>9</sup> In the following chapters, we will use the designation: SA – South Asia, SSA – Africa, EAP – East Asia and the Pacific, ECA – Eastern Europe and Central Asia, LAC – Latin America and The Caribbean, MENA – Middle East and North Africa

<sup>10</sup> Measured by the number of MFIs and the size of their assets.



non-governmental organizations (NGOs), which are both relatively transparent and also considered as credible. Financial independency and a balanced source of funding can be seen as the cause of the growing number of MFIs. An imperceptible decrease was seen in 2011, when the total number of institutions (378) decreased by 8% due to the financial crisis.

Another successfully developing region is Eastern Europe and Central Asia (ECA). Even though the number of institutions has decreased by 40% between 2007 and 2011, this region is still considered to be both financially and technologically developed. The financial crisis and the subsequent increase in the number of medium and large companies going bankrupt can be the reason for the long-term decrease of institutions. MFIs in the ECA region are strongly focused on corporate loans. In 2011 the total loan portfolio included 38% of corporate loans<sup>11</sup>, meaning that the insufficient divergence of loan portfolio could lead to significant losses of MFIs and reduction in their number.

We believe that in terms of future development it is going to be interesting to observe the African region (SSA). A high percentage of the population (88%)<sup>12</sup> here does not have access to formal financial services. However, informal financial institutions and credit unions have a considerable portion of the market here. Although in the recent years there has been a reduction in the number of MFIs, the quality of microfinance services is still relatively high. In addition, several local states (Kenya, Tanzania, Democratic Republic of Congo, etc.) implemented important measures in regulatory affairs and surveillance for an even more efficient development of microfinance. Finally, the information provision of these institutions has significantly improved, as well.

As a result of the high level of corruption, unstable economic environment, insufficient legislation and the concentration of power in the hands of particular individuals, microfinance in the Middle East and North Africa (MENA) is significantly lagging behind<sup>13</sup>. The number of financial institutions has decreased by 50% from 67 to 39 institutions due to the financial

<sup>11</sup> In the same year, Latin America showed only 18% of corporate loans in the total portfolio.

<sup>12</sup> In 2011

<sup>13</sup> See in Snapshot MENA 2011

crisis and the high dependency on the subsidy policy. Overall, in terms of range this region has the lowest coverage among all the other surrounding regions<sup>14</sup>. Economists agree that an improved situation can be anticipated, if strict legislative rules are introduced, the awareness about the microfinance industry is raised, the debts of the most affected institutions are restructurized and if a bigger information duty is expected from the MFIs in the local and regional context.

## **New opportunities and threats**

In the most developed areas the global trend of microfinance development is starting to resemble formal financial institutions, mainly through the quality of services they provide. At the same time, there are also a number of changes that may lead not only to new opportunities but threats, as well. The most remarkable change in all regions is the effort of transforming NGOs into profitable institutions<sup>15</sup>. The main goal is to make the private and institutional investors more interested in these institutions. Reaching this goal is extremely important as the subsidy policy of governmental authorities is not sustainable in the long haul and the further development requires private capital. It is generally true that the long-term subsidy policy supporting MFIs leads to „aid fatigue“and results in their inefficiency. The benefits of having creditors or investors as supporters of these institutions lies in them putting a great emphasis on financial efficiency in the form of cost reductions, and an additional emphasis on risk reduction and profit maximization. On the other hand, economists fear that a bigger emphasis on financial efficiency would prevent from helping the most needy, low-income people. Financial institutions may prefer creditworthy, less risky clients, who will most certainly repay their debt.

Another attribute is the substantial expansion of the product portfolio. The original scope of services provided by MFIs was limited to low-volume loans granted to certain business purposes, generally in agriculture. The subsidy policy of governments influenced the choice of this industry to a great extent, because they wanted to have their budget spending under control. In some regions, respectively states (particularly in Latin America and Southeast Asia) it was allowed to receive extra depository services.

Over time, thanks to the competitive environment and the increasing demands of clients a new type of loan was created. Nowadays mostly corporate loans, consumer credits, loans for households or start-ups are offered. In the meantime, instead of group lending rather personalized types of loans started to be promoted<sup>16</sup>, meeting the specific needs of lenders. Clients begin to appreciate an individual approach connected with a higher quality of financial services. Therefore, a lot of institutions offer, for example, life or non-life insurance, credit and debit cards or M-Banking<sup>17</sup> as complementary products. Although it is expected that these services will continuously play an important role, several countries mainly in North Africa,

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<sup>14</sup> In terms of total outreach and scale, the Arab region recorded the lowest compared to its global peers.

<sup>15</sup> See in Srnc K., Divišová M., Svobodová E. (2008)

<sup>16</sup> See in Nawaz A. (2010)

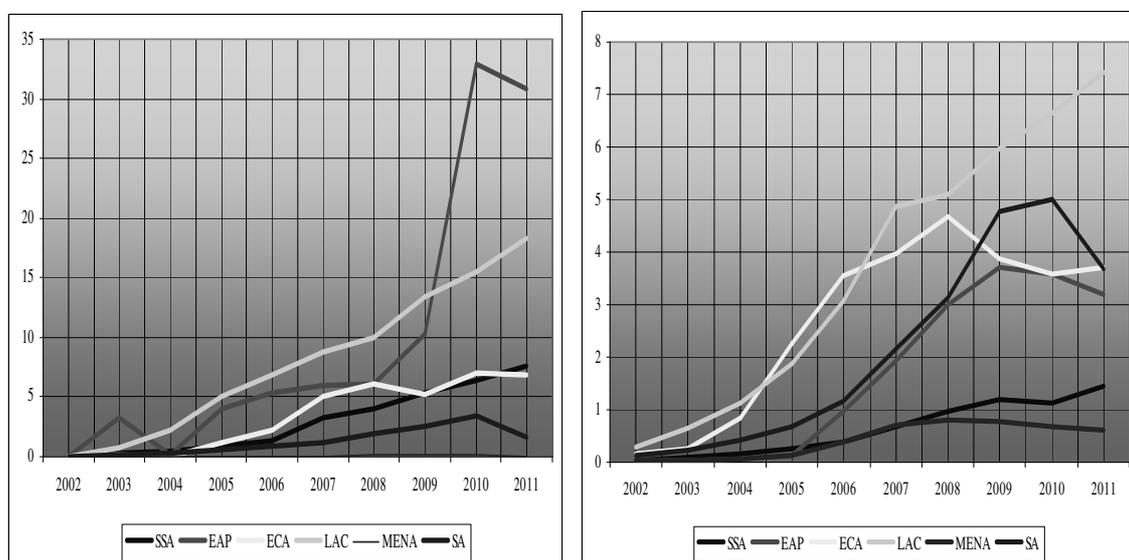
<sup>17</sup> See in Barton S. et al. (2007)

where the local MFIs are not trustworthy, prevent them to be offered. Additionally, costs are equally important.

As we have already mentioned before, such a cost-effective model is gaining prominence these days which aims to reduce the operating costs associated with credit processing and credit portfolio management. Haq M., Skully T. M. and Pathan S. (2009) found that MFIs have higher level of efficiency on the resource rather than production side. To reduce operating costs connected with the sales of financial services is rather demanding due to the high variable costs of labor<sup>18</sup>. Numerous processes still need manual activities to be able to operate. Often the needed know-how to manage cost reduction is missing. From this perspective, the introduction of technological innovations play a major role as they help in streamlining some of the processes, thus reducing the variable costs. Hassan, K. M. and Sanchez, B. (2009) analyzed the technological maturity in some regions and they found out that South Asia had the best results, outperforming Latin America and the countries in the MENA regions. Simultaneously, they discovered that from a technological perspective formal financial institutions are more developed than the informal ones, mainly due to their bigger sources of capital. The future development of microfinance will largely depend on the speed of implementation of innovative elements into the already existing processes.

The majority of the current activities of MFIs are financed by customers' deposits and loans from private and institutional investors. The attached Graphs 2 shows that there is a growing trend in funding through deposits and loans in the Latin American region. Moreover, this stable source of funding has not been significantly affected by the financial crisis in 2007.

**Graf 2:** Source of funding: Deposits and Borrowings (mld. USD), (Source: mixmarket.org)



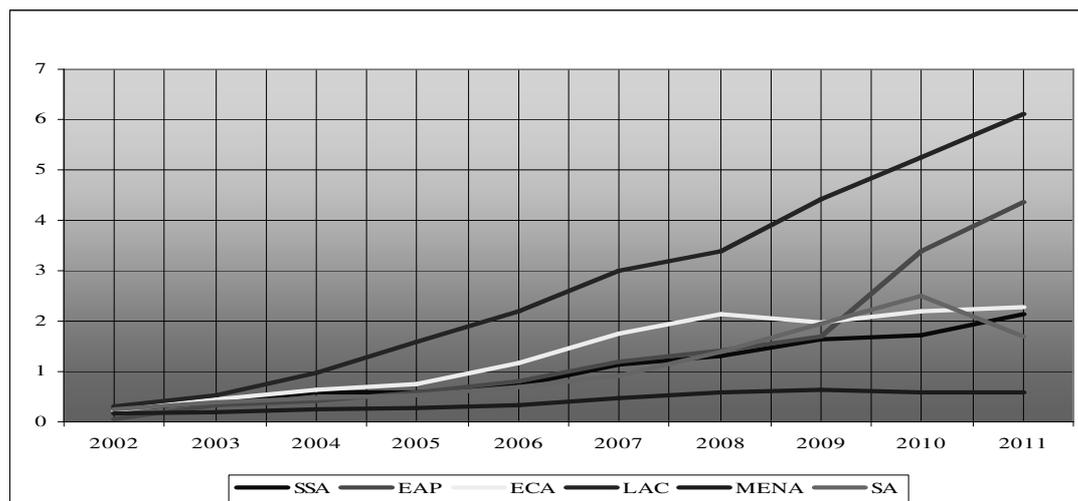
In the other regions the situation was slightly worse since many MFIs had to limit their lending and other commercial activities due to the deterioration of the debtors' insolvency and the decrease in funding. One example of a MFI is EAP, which shows a gradual decline in the

<sup>18</sup> Labor costs are the highest among all the other costs (Yunus M., Gonzalez A., 2010)

size of loans since 2009, while trying to compensate for it through an increase in deposits. It seems to be less expensive source of funding

In some regions technological maturity and a sufficient corporate infrastructure makes it possible to finance their own activities through share and bond issue. As we can see it from Graph 3, this method is mainly used in Latin America, where the value gained from the share and bond issue reached 310 million USD in 2002, moreover throughout only one decade this value jumped up to 6.1 mld. USD in 2012.

**Graf 3:** Source of funding: Equities (mld. USD), (Source: mixmarket.org)



Financial markets seem to be a good alternative for the other MFIs in the regions of EAP, ECA or SSA. Obviously the future development in the financial markets will largely affect the scope and sustainability of MFIs<sup>19</sup>. At the same time, it is worth considering the financial markets as an interesting opportunity how to move the development of microfinance forward. On the other hand, it is important to consider the possible advantages and disadvantages connected with the share and bond issue by the MFIs. Economic study<sup>20</sup> came to the conclusion that the method of securing capital through shares may represent the most expensive form of financing. Additionally, the comparative analysis carried out in 2003 in Latin America shows that the most economical form of financing small MFIs is through loans, while large MFIs should rather concentrate on bond issue. One of the advantages of the

<sup>19</sup> See in Hermes, N., Lensink, R. Meesters, A.(2009)

<sup>20</sup> See in Maisch F. P., Soria A. T., Westley G. D. (2006)

bond issue is an improved image of the MFI, reduce costs, brings a better estimate of the interest payments and there is no risk of control loss as in the case of issue of shares. On the contrary, the main disadvantage in the case of bond issue is the high risk of refinancing, then the current lack of investors' purchasing power to issue new on the local markets, the tendency of investors to follow the „herd behavior“ or the regulatory constraints to leverage. At the same time, the issue of shares may be advantageous because it can serve as a long-term source of financing, plus the new shareholder can provide the necessary skills and experience, respectively his reputation, and a conservative dividend policy may lead to additional capital accumulation. Apart from the high costs associated with the issue of share, the biggest drawback of such a form of financing is the possible loss of control over the company's management in the event of a new shareholder holding a greater proportion of the voting rights. If it was necessary to sell the shares to a strategic partner, the longer time needed for the negotiations would be another common setback. Cull, Demirgüç-Kunt and Morduch (2008) also confirmed that due to the increased pressure from investors to maximize profits, the issued public shares may affect the final amount of interest rates provided to lenders. Thus, in extreme cases the social effectiveness of microfinance can be influenced.

Microfinance is becoming an effective tool to improve the living standards of low-income people in developing countries. Loans for education or business development begin to be financially more effective, therefore the formal financial institutions and investors start to take a deeper interest in them. This results in a growing number of new MFIs and an increased competition<sup>21</sup>. The impact study of McIntosh and Wydick (2005) shows that the increasing competition on the microfinance market is favorable for the lender as it leads to lower interest rates and a bigger availability of credit. Other advantages may include improved financial services or the expansion of the existing product portfolio. On the other hand, lenders tend to indebt themselves and often they have loans at several MFIs at the same time. In response to this problem, there is a global effort from the side of MFIs to create credit bureaus, thus minimizing the potential asymmetrical information related to the insolvency of debtors<sup>22</sup>.

Furthermore, Assefa E., Hermes N., Meesters A. (2012) offer some interesting findings. They claim that intense competition has a negative effect on the overall performance of the MFIs. Besides, a rising number of new institutions on this market do not lead to a larger outreach of MFIs, but controversially to their decline. Due to the escalating competition, plummeting profits and increasing number of debtors going bankrupt, MFIs give priority to strengthening their positions on the already existing market rather than focusing on exploiting new opportunities.

Another research on the effects of MFIs on the competitive environment was carried out by Hermes N., Lensink R. and Meesters A. (2008). They have reached the conclusion that the social effectiveness of these institutions is highly affected through the growing competition. Consequently, the management prefers to adhere to the financial indicators rather than to fulfill the main goals of microfinance in order to maintain their position on the market. Hence, we can observe a change in the behavior of the debtors. They could reduce their screening

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<sup>21</sup> See in Assefa E., Hermes N., Meesters A. (2012)

<sup>22</sup> See in Credit Reporting at the Base of the Pyramid 2011

efforts and start to leave their lending rules when they are confronted with severe competition. Such a behavior can be justified assuming there is a stable economic growth and MFIs have sufficient amount of capital reserves. However, the vast majority of developing countries face long-term economic and social problems, which are even more severe due to the financial crisis and may indicate possible future hazards. Through their benevolent credit policy, MFIs may deteriorate the quality of their loan portfolio, which might lead to high losses and credit write offs in the future. It can be expected that the biggest threat for the MFIs is the increasing competition and the degradation in the quality of the loan portfolio resulting from this<sup>23</sup>.

The MBS empirical study<sup>24</sup> published with the purpose of monitoring potential risks that microfinance faces has identified credit risk as the most serious threat for second time in a row. The previous result was mainly explained by the difficulties borrowers had to face during the economic crisis. This time the study indicates that the credit risk due to the crisis has enlarged and it has to be re-evaluated in terms of clients' indebtedness, credit risk management and so on. The second most serious threat for the MFIs is the risk of losing their reputation due to the aggressive business strategy of the „hungry MFIs“, which seek to fulfill their social purpose for which they were established. The failure to comply with the basic principles and rules could lead to the loss of clients, investors and government solidarity in the future. However, it is necessary to recognize the importance of real expectations because a lot of respondents in the study already perceive microfinance as a panacea that removes the global problem of poverty once and for all. Then disappointment occurs if these expectations are not met. This problem is particularly regular at the grant policy, where the incorrectly identified objectives may eventually fail to meet the expectations and might eventually lead to the move of financial aid to other areas of the economy. This report places this problem of unrealizable expectations on the tenth place, which means that in comparison with the previous years it has moved up by 8 positions. A considerable success can be contributed to the liquidity risk, foreign currency risk and the macroeconomic trends of the economy. All these indicators are already considered to be less risky, thus shifting to the last places in the overall assessment.

High-quality human resources, mainly in the management area, can have a considerable importance for the microfinance industry in the future. In the developing countries they lack such human resources because microfinance is not perceived as an attractive job among the young talents, therefore they give priority to other fields or to a job abroad.<sup>25</sup> Although until recently the managerial positions were dominated by men, in some regions the female gender is also successfully incorporated into these positions. Their primary advantage lies in their personal approach and their greater understanding of the social problems of the poor. In this way, they are capable of reaching the business targets of MFIs. Furthermore, MBS puts the risk associated with the quality of management on the seventh place, an improvement of three places compared to 2009.

Finally, this study publishes the fastest growing risks associated with microfinance. Hereby, the outcomes of analyses from the previous chapters are confirmed: considerable

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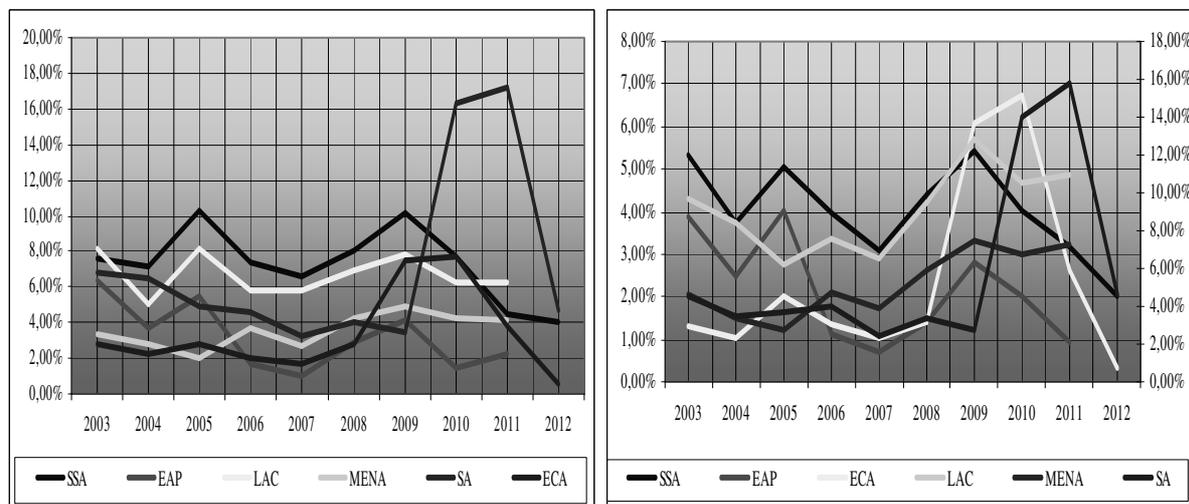
<sup>23</sup> See in Schicks and Rosenberg (2011)

<sup>24</sup> Microfinance Banana Skins 2011

<sup>25</sup> See in Upadhyaya S., Mitchell E., Reddy S., Seth A. (2007)

competition leads to a reduction in lending prudence and heavy indebtedness of borrowers, who usually have to repay more than one loan to various institutions. The quality of loan portfolio is, of course, also connected to this issue.

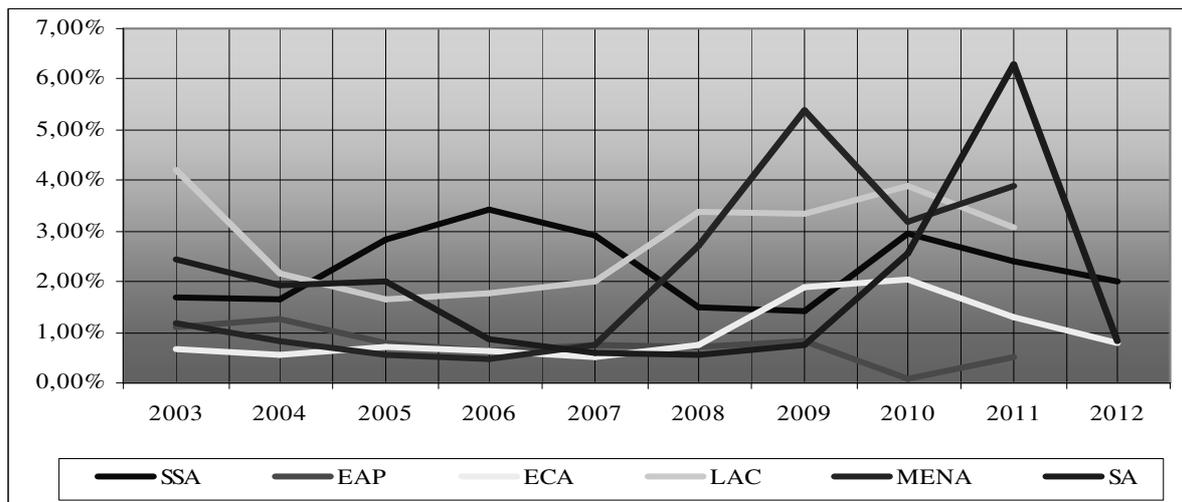
**Graf 4:** PAR > 30 days, PAR > 90 days. (Source: www.mixmarket.org)



Graph 4 shows on the left that the ratio of subprime loans, where the payments are more than 30 days overdue rose in all regions before the financial crisis hit in. Since 2009 a decrease in the amount of such loans can be observed because the MFIs are trying to structuralize these loans or to agree on new terms with the borrower. From this perspective, South Africa was the most affected as the share of risky/subprime loans rose from 3 to 17 % between 2009 and 2011. Fortunately, in the last year they managed to reduce this increase to 4.6%, thus getting closer to the averages of the other regions. On the contrary, the lowest portion of risky loans can long been observed in MFIs operating Asia. One of the reasons may be that the volume of loans provided is lower compared to the LAC region. Thus, the debtors are able to repay their loans or the MFI can agree with the client on an alternative payment schedule.

The development of subprime loans shown on the right depicts a slightly more dynamic scenario. The significant increase in the subprime loans with a more than 90 days overdue in SA had to be illustrated in a separate axis on the right. Until 2009 the loan diagram indicates a similar scenario as in the previous table. Most of the MFIs face a long-term rise in subprime loans, which have significantly decreased after 2009 due to the high percentage of nationalized loans that have been written off (Graph 5). The MENA and SA regions were the most affected by the economic crisis. A weak credit management is typical in most of the MFIs in these regions. The smallest losses can be traced in the EAP region, which gradually reduces the proportion of subprime loans in the total portfolio.

**Graf 5:** Write-off Loans



In all, the future financial sustainability<sup>26</sup> of microfinance will be influenced by appropriate credit risk management of MFIs. It is important to set the strict credit standards by government authorities and subsequently exercise an adequate supervision. Otherwise, the necessity to write-off loans will be repeated and the government will have to increase its subsidy policy.

## CONCLUSION

Over the last decade, the growing importance of microfinance has undergone substantial changes, which bring a lot of opportunities but also threats along. The overall development of the microfinance industry is making continuous effort to provide the low-income citizens with high-quality financial services that are comparable to formal institutions. The historical problem of the lack of stable sources for funding MFIs or the problem of liquidity risk has been replaced by the concern about strong competition between MFIs and conventional banks. Some studies already indicate a potential threat due to the lack of credit policy, which in case of non-compliance with strict rules creates the problem of indebtedness and the deterioration of loan portfolio quality. The fierce competition and the pressure from the side of private and institutional investors largely affect the social objectives, upon which microfinance was established (mission drift). In this regard, the next evolution of microfinance will be thus considerably affected by the regulation strategy of governmental authorities.

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<sup>26</sup> See in Dokulilová L., Janda K., Zetek P. (2009)

Although the microfinance industry has been severely shocked by the financial crisis, when many regions recorded high percentage of write off loans from credit portfolio, some signs of recovery are already present. From the available sources we have found that the more developed regions of LAC, EAP and ECA show gradual growth of indicators ROE and ROA from 2010. An improvement also emerges on the side of funding. The current growth in the share of deposits and borrowings is complemented by alternative ways of funding through the issue of bonds and shares. Even though this source is preferred especially in Latin America, we predict that it will affect the performance and outreach of MFIs in other regions, as well. This method of funding offers certain advantages/benefits in terms of costs, risk reduction or the entrance of a strategic investor, which are otherwise inaccessible.

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