



Bachelorgradsoppgave

The promise of microfinance

Mikrofinans' sitt løfte

A closer look at the effects of microfinance

Et nærblikk på effektene av mikrofinans

Camilla Lundseng

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Preface

This paper forms the final project of my three-year bachelor program in business administration at Nord-Trøndelag University College.

My interest for this particular subject was a result of my interest in development and my supervisor's knowledge and engagement about the subject. Sustainable development in the world and in the developing world especially has long been a subject for personal interest, and to be able to learn more about this through my final project felt like a privilege.

The work with this paper have been both challenging and rewarding, and the learning curve has been steep. During my work I got the opportunity to travel to Phnom Penh in Cambodia, to conduct interviews and to see the poverty and development with my own eyes. This journey has increased my interest for this subject, and my desire for further study.

My biggest appreciation and thanks to vice principal Hanne Solheim Hansen, who believed in the project and made the case study in Cambodia possible. Thanks to my supervisor Lars Hovdan Molden who has been guiding me through the whole process and given me priceless support. Finally, thanks to my fellow students Faiza Butt and Daniel Håpnes for support and valuable discussions.

Steinkjer, Mai 2015

Camilla Lundseng

Summary

In this paper I have taken a closer look at microfinance and the focused on the questions regarding microfinance and development. The research questions in this paper are:

- 1) What effect does microfinance have on development?*
- 2) How is microfinance executed in Cambodia today?*

Starting off by explaining the current situation regarding microfinance and poverty, then to elaborate on how development is measured according to international standards and which two theories can be used to understand this. To get a better understanding of the countries being studied a brief overview of their history, economy and microfinance situation is given. The analysis is conducted by a triangulation between qualitative interviews and quantitative regression analysis.

Sammendrag

I denne oppgaven har jeg tatt et nærmere blikk på mikrofinans og fokusert på spørsmålene knyttet til mikrofinans og utvikling. Problemstillingsspørsmålene til denne oppgaven er:

- 1) Hvilken effekt har mikrofinans på utvikling i dag?*
- 2) Hvordan blir mikrofinans gjennomført i Kambodsja i dag?*

Starter med å redegjøre for nåværende situasjon innen mikrofinans og fattigdom, deretter utdype hvordan utvikling måles i følge internasjonale standarder og hvilke teorier som kan bli brukt for å forstå denne utviklingen. For å skaffe en bedre forståelse av de landene som er i fokus blir det redegjort kort om deres historie, økonomi og mikrofinans. Analysen gjennomføres ved hjelp av en triangulering mellom kvalitative intervjuer og kvantitativ regresjons analyse.

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1. INTRODUCTION

Throughout the history there have been many examples of the richer part of the world, interfering in the poor part in an attempt to improve their lives. Over the last decades more and more aid has been poured into projects in developing countries, but still there are millions living in extreme poverty.

Engaging locals in a bottom-up philosophy regarding development is a growing focus, where locals can help themselves create wealth and better their lives. Nevertheless no exact cure for extreme poverty is found, development is still a developing project of its own.

1.1. Why Microfinance?

When choosing a subject for your bachelor thesis, it is essential finding something of personal interest. I have personally always been very interested in international questions and social difficulties. Sustainable development has also been something I have wanted to work with and learn more about, so I saw this bachelor as an opportunity to do just that.

One of the largest challenges within international sustainable development is poverty, which is an ongoing subject in this area. I therefor want to take a closer look at microfinance, as it claims to be one of the tools to reduce the poverty issues in the world.

There has been a lot of research over the last decade trying to document the effect of microfinance. This is though not an easy task; therefor I want to see what I can find in terms of this matter.

1.2. Problem discussion

Over the last decades microfinance has become a wide known subject within sustainable development. But microfinance became a subject for a larger audience after Muhammad Yunus won the Nobel Peace Prize in 2006 for his work with microfinance trough Grameen Bank in Bangladesh. The Nobel committee awarded Yunus this prize «for their efforts to create economic and social development from below” (Nobelprize.org)

The rationale behind microfinance is to provide the opportunity for small households, enterprises, and farmers, to build and increase the value of their income and reduce risk, and by doing this improve the quality of their lives and the lives of those around them (Robinson 2001). Marguerite Robinson explain how the different organizations and banks that offer

small loans for people who would otherwise never been granted an ordinary loan, can build a life of value for them self and their family.

It might be easy to find the positive aspects of microfinance, and examples of individuals overcoming extreme poverty inform us that there are a lot of possibilities for growth and reduction of poverty when using microfinance. It is suggested that microfinance may contribute to reduce the vulnerability due to illness, drought and crop failures, it may also contribute to better education and to an improvement of the social and economic situation of women. (Hermes and Lensink 2011)

Still there are some critics towards the use of microfinance to reduce poverty. Over the last decade there has been a lot of research regarding microfinance and its effect and outreach. Bateman and Chang call microfinance a “poverty trap”, and conclude with that yes, microfinance can have short-term, individual benefits, but that there are other better alternative to reduce poverty in a more sustainable way as financial cooperatives, credit unions, national developing bank etc. (Bateman & Chang, 2012)

Another critique regarding microfinance involves the changes within the structure of the institutions. In the beginning the Microfinance institutions were NGO’s, non-profitable organizations. Now these are changing to commercialized banks, with complex business structures that need to raise interest rates to ensure profit to their shareholders. Some see this as a wrong turn for microfinance. (Hoque & Chishty, 2011)

1.3. The issue at question

The aim for this thesis is to analyze to what extend there exist any connection between the economic development (poverty reduction) and the development of microfinance. The focus will be on finding the answer to the two following questions:

- Issue:*
- 1) *“What effect does microfinance have on development?”*
 - 2) *“How is microfinance executed in Cambodia today?”*

This is a very large subject to comprehend and write about, so refinements needs to be done. Thus I have chosen a combined macro and micro perspective and chosen six countries, where I will take a closer look at their development, and if there can be any connections with the

development of microfinance and the reduction in poverty. I have chosen one of these six countries to take a closer look at, for trying to get a better understanding of the composition of the microfinance business.

The six countries I want to focus on are Colombia and Bolivia in South America, Rwanda and Ethiopia in Sub-Sahara Africa and Cambodia and Vietnam in South-East Asia. I choose Cambodia as case because it is one of the countries where the development of microfinance has grown rapidly the last couple of years.

The reason for choosing these countries is because although some of them still are to be considered as poor countries, they have had large poverty reduction over the last decades. They are also all countries with historically or ongoing social and political turbulence.

1.4. Limitations

Due to the refinements done there are some limitations to the study. Choosing six countries to represent the development in microfinance and the reduction in poverty might limit the use of the information in a wider perspective. In this research it will be focus on a few economic development indicators, knowing that there are many other aspects that can affect the development and poverty reduction as well. I will also limit the theoretical scope to two major stands of theory on the micro- and macro level.

2. THE AID DEBATE

The debate regarding in what extend aid is actually helping in the long run is an ongoing discussion. Still the amount of money being used on aid worldwide is tremendous. The OECD countries donated in 2014 USD 135,2 billion to aid worldwide. United Stated being the largest donor providing USD 32,7 billion, another country in the top donor list is Norway providing in 2014 USD 31,7 billion (Norad, 2015). Although the aid flow is stable, the amount of aid provided to the poorest regions seems to be decreasing according to OECD Development Assistant Committee (DAC) (Organisation for economic Co-operation and development).

Jeffrey Sachs believes in the power of aid, and believes that used in the right manner, we could eliminate the extreme poverty in the world, by increasing foreign aid in a way that would increase the returns to private investment (Sachs, 2005).

Easterly is a known critic to the large aid donations to the developing part of the world. He points out the fact that during the last decades an enormous amount of aid has been poured in to the African continent, still the per capita growth of the median African is close to zero (Easterly, 2007). He also points out that the West over the last four decades have used over USD 2 trillion on aid, but still not been able to provide 12-cent medicine to children to prevent malaria deaths. He claims the western world is not stingy; it is ineffective (Easterly, The white man's burden, 2006).

Easterly and Sachs are at opposite sides on the aid debate, whereas Collier is somewhere in between. Collier believes that there are four “poverty-traps” that prevent the poorest of the poor to escape poverty. These four traps are; conflict trap, natural resource trap, landlocked with bad neighbors traps and poor governance trap. Collier focuses on that the problem with poverty is complex, and should therefore have complex solutions. He points out four necessary measures to defeat poverty; aid, military intervention, laws and charters. All these measures are not always the best solution, but analyzing the state of the society he believes we can defeat poverty by thoughtful use of one or a combination of these different measures (Collier, 2007).

3. MICROFINANCE AND DEVELOPMENT

“If the global rich still deserve access to mortgage, the global poor deserve access to small loans” (Roodman, 2012)

In this section the reader get a short introduction to the microfinance history and situation today. An introduction and overview over poverty in the world today will also be given. When it comes to measuring development there are several indicators to consider, we shall take a look at some of these indicators and any challenges connected to using them.

3.1. Microfinance

According to the World Bank research more than half of the world’s adult population do not have access to the type of financial services many of us rely on today. In numbers that signifies about 2.5 billion people (CGAP).

Microfinance is a common designation for several financial services provided to poor and low income clients, particularly women. These financial services include small loans, savings, insurance and remittances, and the aim for these services is to create economic growth and better social situations for the people.

Since the start of Grameen Bank in Bangladesh in 1983 microfinance has grown to a worldwide phenomenon providing people with small loans and other financial services. Only in Bangladesh today Grameen has 8,29 million borrowers in 81 367 villages (Grameen Bank-Bank For Small Business). Today there are microfinance institutions in more than 100 countries worldwide, and over 93 million clients (Microfinance Information Exchange Inc.).

Region	Number of MFI	Active borrowers	Gross Loan Portfolio (USD)
Africa	200	4,6 million	7 billion
East Asia and the Pacific	93	12,7 million	9,6 billion
Eastern Europe and Central Asia	126	2,7 million	12,1 billion
Latin America and The Caribbean	315	18,9 million	1,9 trillion
Middle East and North Africa	29	1,6 million	1,1 billion
South Asia	124	52,6 million	9,3 billion
World total	887	93,1 million	1,93 trillion

Table 1, microfinance in the world

Source: (Microfinance Information Exchange Inc.)

3.2. Poverty

The United Nations defines poverty by how much money a person have to live on a day, where the poverty line is US 1.25\$ (United Nations org.), the world population that have less to live on a day is defined as extreme poor. According to the World Bank Inc. there are 14,5% under the poverty line in the world (2011), this is about 1,011 million people (The World Bank Group)

According to the millennium development goals set by the UN, they work towards goals within eight different areas to better the life and conditions for humans worldwide. One of these areas is poverty, and their primary goal was to half the population of the people living under the poverty line between 1990 and 2015. They reached this goal already in 2010. They

have also managed to better the work conditions for women and young people. Their last goal within poverty is to halve the amount of people suffering from hunger, from 1990 to 2015, and indications say this goal will almost be met by the end of 2015. (United Nations org.)

Region (Group, Data)	1981	2011
East Asia & Pacific	78%	7,9%
South Asia	61%	24,5%
Sub-Saharan Africa	53%	46,8%
Latin America & Caribbean	-	4,6%
World	52%	14,5%

Tabell 2, world population under the poverty line.

According to the World Bank Group, there has been an overall poverty reduction over the last decades. In East Asia the number of people living under the poverty line has been reduces from 78 percent (1981) to 8 percent (2011). China is the main reason for this decreasing in poverty, where they from 1981 to 2011 were able to get 753 million people out of extreme poverty. The total reduction in

poverty during that time was 942 million people. The region that is most affected of poverty is Sub-Saharan Africa, where still in 2011 46,8% of the population was living under the poverty line (Group, Pverty Overview).

4. MEASURING DEVELOPMENT

Adam Smith described already in 1776 the best way to measure prosperity in a Nation was by the GDP or income per person. Here he refers to income as not only consumption, but also the amount not consumed, which goes to saving, investment and by this future consumption (Sørensen & Whitta-Jacobsen, 2005).

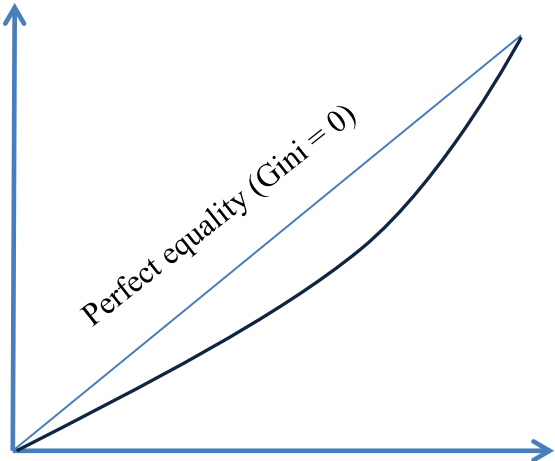


Figure 1 Example of Lorenz curve

Measuring a nation as a whole gives us information about the prosperity in total, but what should also be considered is the distribution of wealth within a nation. This is measured by the Lorenz curve and the Gini coefficient. The Gini coefficient is a number between 0 and 1, where 0 represents perfect equality and 1 represents that the one part of the portion has all the income. This is usually

visualized in a curve called Lorenz curve (Sørensen & Whitta-Jacobsen, 2005).

The larger distance between the perfect equality curve (45°) and the curve, the larger is the inequality within the population.

When The World bank talks about world development indicators in a country they focus on six different areas additional to the growth in GDP, the six indicators are: School enrolment, poverty, CO2 emission, gross national income (GNI) and the statistical capacity indicator (SCI). Looking at these indicators we see that the world bank do not only look at the financial aspect of development, but the overall picture including environment and social situations. In this paper the focus will be on human development index (HDI). Using the HDI as an indicator includes many of the indicators used by The World Bank to measure development, as school enrolment and GNI.

4.1. GDP

Although the Gross domestic product (GDP) will not be specifically used in this paper, it is the one of the most common indicator for measuring economic development. GDP is a measurement for productivity activity within a particularly geographic area, usually a country, within a defined time interval, mostly a year. GDP is most commonly expressed as Y and explained by five different categories (Burda & Wyplosz, 2009):

C	-	Final sales of consumption goods and services
I	-	Final sales of investment goods and additions to inventory stocks
G	-	Final sales to the government
X	-	Sales to the rest of the world
Z	-	Imported goods

We write: $Y = C + I + G + X - Z$

There are critics towards using GDP as an indicator for economic development. The GDP gives us an all-over picture of the production, but do not tell us anything about the sustainability of the growth. Will the increased GDP help someone the expense of someone else? (Cambridge University Press, 2014)

4.2. Human Development Index (HDI)

The HDI is developed by the UN and its purpose is to try to measure development as a whole based on people and their capabilities. Since the development of a country do not only refer to the economics, but also to other social factors. There are three factors to this indicator; the health dimension, the standard of living dimension and the education component. (United Nations Development Programme)

Health dimension is measured after the life expectancy at birth, ranging from the age of 20 to 85. The UN measures the standard of living dimension through gross national income per capita (GNI), where they have set a standard GNI per capita to a range from a minimum of \$100 to a maximum of \$75 000. They measure the education component by the mean number of years of schooling for adults (age 25), and the maximum years of schooling set to 18 years (United Nations Development Programme)

There have been some critics towards using the HDI as a development indicator as well that should be mentioned regarding the indicators validity. Sagar and Njam's article from 1998 points to three main issues regarding the HDI (Sagar & Njam, 1998);

(1) "The dimensional indices that comprise the HDI must be multiplied instead of being arithmetically averaged. Such a treatment would, in fact, be closer to treating each dimension as an 'essential' and non-substitutable component by controlling trade-offs between them".

(2) "In calculating the standard-of-living dimension of the index, a logarithmic treatment of GDP across the whole range of global incomes will present a less unrealistic depiction of the availability of options across countries without camouflaging inter-country disparities that are all too real".

(3) "Inequity considerations must be integrated into the evaluation of performance on each component dimension. Substantial effort should be invested in exploring ways in which inequities along each of the three component dimensions can be evaluated and incorporated into the index".

Despite these limitations I find HDI to be an adequate measure and using HDI as an indicator on the development in a country, gives a wider perspective, not only focusing on the economic development but also other social factors.

5. UNDERSTANDING DEVELOPMENT

5.1. Macro perspective:

The Solow-Swan growth model

The Solow-Swan model was developed by Robert Solow and Trevor Swan, and Solow received the Nobel Prize in economics for this work in 1987. The Solow model is a neoclassical theory of growth that shows output in gross domestic product (Y) from a production function based on capital, labour and technology. (Barro & Sala-i-Martin, 2003)

$$Y = AK^\alpha L^{1-\alpha}, 0 < \alpha < 1$$

The simple Cobb-Douglas production function, where $A > 0$ stands for level of technology, is the base for the Solow-Swan model. To get a more dynamic view on the economic growth, the Solow-Swan model refer to output by GDP per capita, $y = Y/L$. The same regarding capital, we write capital per capita as $k = K/L$. The function that then expresses output per capita is: $y = f(k)$. By dividing both sides of the first equation on L (total supply of labour) we are left with a production function where input is k , capital per capita and output is y , GDP per capita. (Sørensen & Whitta-Jacobsen, 2005).

$$y = AK^\alpha$$

When A is assumed to be constant, the growth in production per worker can only come from a growth in capital. An increase in the capital-labour ratio, K/L , will result in an increase in the production per worker, Y/L , but at a diminishing rate.

The depreciation $\delta (K/L) = \delta k$, is assumed constant and visualiazed by a 45° angle in *figure 2*. K^* marks the steady state of the growth function, and the growth model predicts that in the long run the captital intensity and production output (GDP per worker) will converge to this steady state, k^*, y^* .

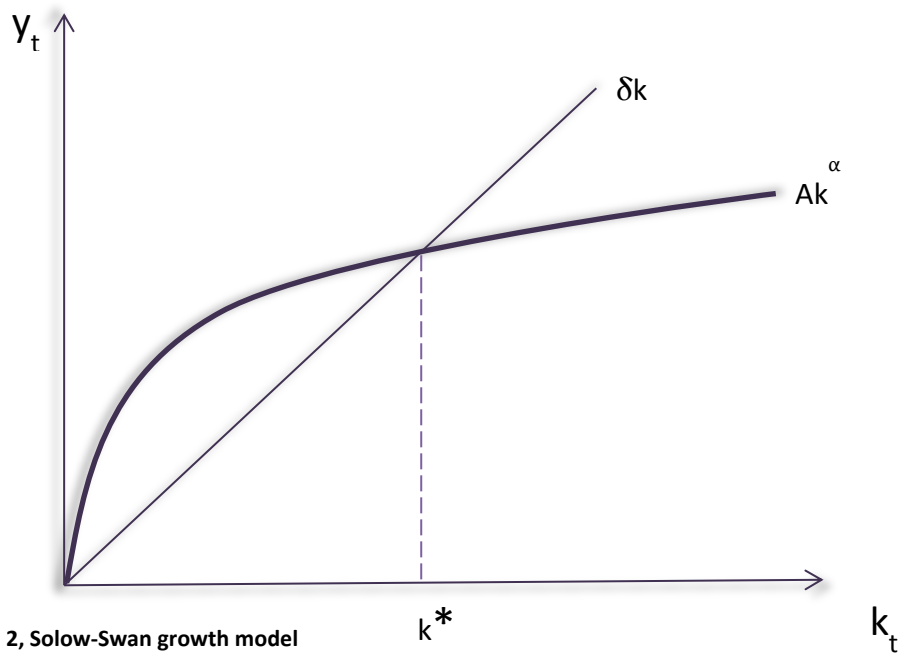


Figure 2, Solow-Swan growth model

The Solow model shows how growth in GDP increases with the amount of accumulated capital, therefore institutions and activities providing capital will then according to this model be contributing to the economic growth. Microfinance provides capital to people and businesses, many of which would not have this option otherwise. All else equal, the effect of an inclusive financial sector such as microfinance would increase capital and investments, and hence spur economic growth. Of course this assumes that microfinance loans are actually used for investments and not consumption alone. I aim to work around this simplification by simultaneously studying effects of consumption in a micro model.

5.2. Micro perspective: Consumption

With the Solow-Swan growth model and other time series data, we assume that the ratio of consumption can be explained by a linear function of the disposable level of income, this is called *the simple Keynesian consumption function* (Sørensen & Whitta-Jacobsen, 2005):

$$C_t = a + bY_t^d$$

$$a > 0, 0 < b < 1,$$

Consumption in period $t = C_t$, disposable income period $t = Y_t^d$

According to this function, income is the only variable that affects consumption. There are critics towards this, since there can be many other factors as well that effect the consumption. The consumption function indicates that the aggregated consumption over time increases constant at the same ratio as aggregated income. This indication from a macroeconomic view contradicts the microeconomic theories on consumption where cross-section data indicate the difference between households and consumption. Thus there have been developed theories to try to involve both views. One of these theories is the *life cycle theory* by Franco Modigliani and Richard Brumberg, which claims that consumers have different propensity of consume current income in different stages of life, due to their desire to smoothen consumption over time. Milton Friedman developed a hypothesis called *permanent income*, which says temporary changes in income will lead to temporary changes in savings, but current consumptions depends on the permanent income. (Sørensen & Whitta-Jacobsen, 2005) These theories lead up to the generalized consumption function, which implies that aggregated consumption depends on more than just income. According to this function the aggregated consumption depends on current disposable income Y^d_1 , expected rate of income growth (g), real rate of interest and market value of initial private wealth. We get the generalized consumption function (Sørensen & Whitta-Jacobsen, 2005):

$$C_1 = C (Y^d_1, g, r, V_1)$$

The rate of income growth has direct positive effect on current consumption; this also applies if the customer is optimistic and believes the income growth will increase in the future. This will again stimulate to higher consumption through a positive impact on private wealth (Sørensen & Whitta-Jacobsen, 2005).

Sources of financial guidance and services (like microfinance) might contribute to an optimistic view on future income growth, and in that way contribute to increased current consumption.

6. EMPIRICAL DESIGN

6.1. The six countries – an introduction

In this section the six countries in focus will be presented, including their main economic history and situation today, and also the different challenges regarding development in each country. Cambodia will be presented with more detailed information, since the study will analyze the function and methods of microfinance in Cambodia.

The development in these countries has been positive the last decades, still there are some differences. The HDI-index from each country gives an idea of these differences.

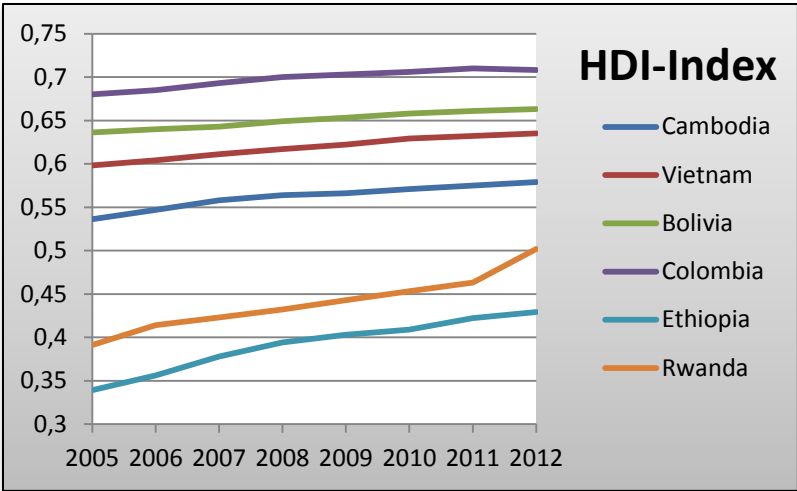


Figure 3, HDI-Index for the six countries

In 2005 UN defined high human development on HDI-index to be 0,682, and low human development to be 0,444 (United Nations Development Programme). If we look at Rwanda compared to Colombia, we can see that Rwanda in 2005 is beneath the defined low development scale, and Colombia on the other hand is on the high human development scale. Although these countries have some similarities due to resent or ongoing armed conflicts and civil wars, there are significant differences in the human wealth of the people.

6.2. Cambodia

6.2.1. History and development

Cambodia’s newer history is characterized by occupations and the communist Khmer Rouge regime under Pol Pot. During the Khmer Rouge regime (1975-1979) large part of the

population were evacuated to the country side, and about 1,7 million people were killed or died from starvation and illness. (Store Norske Leksikon)

In 1979 Vietnamese forces drove Pol Pot's people in to the country side, and then started a civil war that would last until 1993. The last decade there has been a positive development in Cambodia's economy, where export of goods (\$6.781 billion US per 2013, garments being the largest part with about 70%), agriculture and tourism has been some of the aspects contributing to growth. (Central Intelligence Agency, 2014)

Although the development in Cambodia is positive, they are still considered to be one of the poorest countries in Asia. In Cambodia today there are 18.6 percentage of the population living on less than 1.25\$ (Wold Bank Group).

6.2.2. Microfinance in Cambodia

According to Cambodia Microfinance Association there are today 37 licensed microfinance institutions and 5 NGO (rural credit operators) in Cambodia. There has been a large increase in number of MFI over the last couple of years. Before 1990 the only option for financial services and loans were given by the banks, followed by high interest (from 10-20% per month). From 1990 to 1995 the few existing non-profit microcredit projects developed to institutions. In Cambodia at this time there was still no working banking system, so the organizations and microcredit projects initially had to physically handle the money transfers within their projects. After the end of the civil war in 1993 international aid became an important source for rebuilding the country, but the outreach of microfinance was still limited. Between 1995 and 2000 the microfinance received recognition from the royal government of Cambodia, and bank establishments was created to strengthen and manage funding for microfinance projects (Cambodia Microfinance Association).

6.2.3. Cambodia Microfinance Association

The Cambodia microfinance association (CMA) is a subdivision of Association of Banks in Cambodia (ABC) and work towards prosperity and sustainability within the microfinance and microfinance institutions in Cambodia. CMA was established by seven MFI's, and has grown from serving those seven to today serving 42 members in total. In Cambodia the Banking and Finance law only permit one association working with financial services (Cambodia Microfinance Association). CMA has since 2004 worked for improving the situation and

development of microfinance institutions in Cambodia. Their goals include improving the communication between the MFI's and in the microfinance sector, improve awareness of microfinance and to protect the interest of microfinance (Cambodia Microfinance Association).

6.3. Vietnam

Located in south-east Asia with boarder to Cambodia, Vietnam is a socialistic republic. Vietnam is mainly an agriculture country, with over half of the workforce being farmers and their biggest export products being rice, coffee and cashew nuts. Vietnam was a French colony from 1887 until the liberation war in 1946-1954, which resulted in dividing the country into North-, and South Vietnam. The United States got involved in the internal conflict between the divided parts in 1964, and is known as "the Vietnam war". The relationship to surrounding countries has been characterized by conflicts, especially to neighbour Cambodia. Today the situation is better, but conflicts still occur. (Store Norske Leksikon, 2012)

Vietnam has had a remarkable development over de last decades. They have gone from being one of the poorest countries in the world with income per capita below \$100 US, to \$1,960 US, and reducing the amount of poverty from 60% in 1990s, to fewer than 10% in 2015. (World Bank Group)

Today there are 40 registered MFI's in Vietnam that together serves 7,8 million borrowers. The total amount of loans provided to microfinance clients is USD 6,3 billion (Microfinance Information Exchange, Inc.). There are three different types of microfinance providers in Vietnam; informal, semi-formal and formal microfinance service providers (Nghiem, Coelli, & Rao, 2006), thus there might be more than 40 institutions providing microloans.

6.4. Colombia

Located in northwest of South America with about 48,3 million inhabitants, Colombia is republic with rich natural resources, but due to violent traditions and illegal businesses, the development has gone slowly (Store norske leksikon). Colombia had a growth in GDP of 4,7% in 2013 (World Bank Group), which is a increase from the mean growth in GDP between 1994-2002 on 1,6% (Store norske leksikon)

Through the years Colombia has been affected by four relatively large guerrilla groups, where *Fuerzas Armadas Revolucionarias de Colombia* (FARC) is the oldest and largest of them. The FARC guerrilla is connected to the communist party and they and other guerrilla groups has been the source for many armed conflicts, corruption and bribery. This is something Colombia still struggle with today (Store norske leksikon).

Microfinance came to Colombia in the 1980s and has since then had a remarkable increase (Bateman, *Confronting Microfinance: Undermining sustainable development*, 2011).

According to MIX market there are 42 MFI's in Colombia, that in total serve 2,8 million borrowers with USD 38,7 billion (Microfinance Information Exchange, Inc.).

6.5. Bolivia

Bolivia is located in the centre for South-America. Before the colonies Bolivia was inhabited by inka- and aymara- people. For a long time the political system were unstable and dominated by a small amount of families, but in 1952 this started to change to more democratic politics. Today Bolivia is a republic run by president Evo Morales (since 2005), still the politic system is unstable and driven by a handful, strong personalities. (Store norske leksikon)

There are many similarities between Bolivia and Colombia, Bolivia is also rich in natural resources, but they are still considered to be one of the poorest countries in South-America. They have also over many years had large illegal production and export of cocaine, which have been source for the black numbers in their economy. Today there is about 10,6 million people in Bolivia, and the GDP is registered at \$30,6 US, with a growth of 6,8% (2013) (World Bank Group).

There are 27 microfinance institutions in Bolivia today according to MIX market, and it is registered 982 866 borrowers and USD 5,5 billion in microloans (Microfinance Information Exchange, Inc.). Bolivia is one of the countries that have had positive effects of the increasing competition between MFIs. Since 1998 until 2005 their interest rate has gone down from 30% to 21%, they have become more efficient and widen the range of financial services they offer their clients (Hermes, Lensink, & Meesters, 2011).

6.6. Rwanda

Rwanda has a long history as a centralized monarchy, ruled by kings. In 1899 they changed from monarchy to become a German colony (Rwanda), and they became independent in 1962 (Leksikon). The population in Rwanda is composed of three ethnic groups: Hutu, Tutsi and Twa.

In 1994 a conflict between the different ethnic groups resulted in genocide that killed about one million people, most of them Tutsis (Leksikon). In 2000 Paul Kagame became president, and a modernization of the country gave them in 2001 a new flag and national anthem. Rwanda is defined as a financial low income country; the population is 11.78 million people (2013), and the GDP is \$7.452. (World Bank Group). Most of the inhabitants (90%) in Rwanda are farmers, and the main products of export are coffee and tea (Leksikon).

Today there are 35 microfinance institutions in Rwanda which provides loans and saving options for the rural population, farmers and small enterprises (Microfinance Information Exchange). One of the largest MFI in Rwanda measured by the number of borrowers, is UOB (Urwego Opportunity Bank of Rwanda, SA) with over 42 000 borrowers, over 165 000 depositors and a gross loan portfolio on 16,9 million USD (2012). UOB was created in 2007 and is a licensed commercial bank, and has a mission on providing a ladder of opportunity to the underprivileged of Rwanda (Microfinance Information Exchange).

6.7. Ethiopia

In north-East Africa you find the republic of Ethiopia. Ethiopia is characterized as one of the poorest countries in the world and is driven by mainly agriculture. Until 1974 the country was not unlike a feudal society and its history driven by a three decade long civil war that ended in 1991.

Over the last years economic development has grown and changed many aspects of the earlier Ethiopia. In average the GDP growth has been 10,8% over the last decade (2003-2013), this is higher than other sub-Saharan and developing countries. (World Bank Group) About 85% of the working force is farmers, and they export a large amount of vegetables, fruit, grains and coffee. This helps the economic development, but there is still a lot of poverty in this country. In 2011 the amount of people living under the poverty line (\$1,25 US) were 29,6 %, out of a

population of 94,1 million people that means about 27,8 million people are defined as extreme poor. (World Bank Group)

Today there are 24 microfinance institutions in Ethiopia, serving micro loans to 2,8 million borrowers, and the amount of loan is registered according to MIX-market to be USD 655,5 million (Microfinance Information Exchange, Inc.).

7. METHOD

The methods used to gather the information and analysis will be presented in this section. Including the information about the data used and its reliability, and last looking at the challenges and sources for measurement errors regarding the methods used.

7.1. Choosing an approach

When performing a research, we separate between qualitative and quantitative method. Qualitative method have a profound perspective on the issue, and tries to analyse through collecting data, often using interviews with a handful of candidate to collect the information needed. When using qualitative method you rather want to interview a few people regarding their larger perspective.

When using quantitative method it takes a wider look at an issue, using available data, or collecting data. Quantitative method uses many units and few variables, and usually tries to explain the issue closer by using numbers and statistics rather than analytical text which is the case in qualitative method. Triangulation is when using more than one method to research an issue, combining quantitative and qualitative methods. One can use both methods equally or one can use the other method to strengthen the research. A very common way to go is to start with the quantitative data, and afterwards strengthen the data research with qualitative interviews or observations (Ringdal, 2013).

According to Michael Patton triangulation is the ideal approach, due to that no single method alone is adequate to solve the problem. He also points out that all methods have their weaknesses and possible measurement errors, therefor combining methods through triangulation might reduce the vulnerability of errors linked to individual methods. Patton describes four types of triangulation (Patton, 2002):

- Data triangulation
- Investigator triangulation
- Theory triangulation
- Methodological triangulation

Data triangulation uses a range of different data sources, investigator triangulation use more than one researcher. Theory triangulation uses several theories and perspectives to research on single set of data and methodological triangulation uses two or several methods to research an issue.

In this research it will be used a methodological triangulation, with the first focus using a quantitative method, due to the large scale and data that need to be collected to be able to say anything about the question asked. The first research question is also concerning macro level development in our sample so that quantitative analysis seems most appropriate. There have been a lot of research done on the subject, and the data is available. Although quantitative method can be able to answer the first question regarding this issue, a second focus will be qualitative interviews in an exploratory research to answer the second question and strengthen the hypothesis and also give the quantitative research more depth. Qualitative interviews will be done through a *case study* in Cambodia, January 2015. When performing a case study such as this, it is not recommended only to rely on one individual source of evidence. To base the findings on several sources of information will give a broader range of the issue, and strengthen any conclusion one might reach (Yin, 2014), thus triangulation the best solution. In this case the interviews conducted in Cambodia will give a much closer and personal approach to the subject, and it is necessary to use an exploratory method to answer research question number two in a realistic matter.

7.2. Collecting the data

7.2.1. Primary data

The primary data used in this research will be gathered in Phnom Penh, Cambodia, conducting interviews with four selected microfinance institutions and Cambodia Microfinance Association. The intention is to also interview clients of microfinance. The aim for this case study is to gather information about how the institutions works, any differences

between the institutions and to get inside perspective from the people working with microfinance every day and the clients who receive microfinance services.

Although the aim was to also interview clients of microfinance, this became a complicated task. Due to language barrier and difficulties contacting the clients, these interviews were not conducted. Instead secondary data was used, from The National University of Management in Phnom Penh.

Preparations

The preparation for the case study in Cambodia includes gathering information about the microfinance situation in the country and about the MFI's chosen. Creating an interview-guide to use during the interviews is also an important step (see appendix), to strengthen the reliability of the data collected.

Selection

When choosing the MFI's for the interviews, this was decided to do specific selection. This way the case study will be based on four MFI's with different organization structure and size. This is done in the attempt to get a wider perspective on how the microfinance works, not only in the larger institutions, but a more all-over perspective.

Implementation

The interviews are conducted in a two week time period in Phnom Penh, Cambodia. There are four MFI selected by their different scale and focus, in attempt to cover a wider view of the microfinance sector. The general secretary in the Cambodia Microfinance Association is also interview.

Before every interview permissions to use the data collected from the interviews are given, and the identity of the MFI and employees interviewed are kept anonymous. Permission to use name and references by the general secretary of CMA is also granted.

7.2.2. Secondary data

To analyse the issue it will be used secondary data, already gathered by larger institutions in the applicable countries. Using already collected data there is a few negative aspects, one of them being that you will not be able to adjust the data according to your specific issue. On the other hand if you want historical data you have to use secondary data.

The data will be collected from the World Bank Group and their collaborators; here it is possible to find a wide range of quantitative data. There exists a wide range of different statistics and information about the six countries in focus on their web sites, and on microfinance and development in total. For more data on microfinance institution and development, this will mostly be collected from Microfinance Information Exchange Inc. (MIX-market).

Additionally to compliment the qualitative analysis, secondary data is gathered from the National University of Management, Phnom Penh. This due to difficulties regarding conducting interviews with microfinance clients.

7.3. Reliability

Reliability says something about how reliable the data is. If several measurements with the same tools, gives the same information, the data is reliable – high reliability. In any research you should always try to estimate and strengthen the reliability of your data. Minimizing measurement errors is critical for creating a reliable research, and if there is any form of source for measurement error it is important to state knowledge about this. In general optimizing reliability can regard educating interviewers, adding more questions and controlling the registration of the data. (Ringdal, 2013).

When using data from already existing researches online, it is important to always keep a critical eye on the information to make sure the reliability is sufficient. Using data from World Bank Group which is a wide known organization consisting of five international institutions, it will help increase the reliability.

Numbers and information regarding microfinance is mostly gathered from Microfinance Information Exchange Inc. (Mix market). Mix market calls themselves a public data hub, and they work towards transparency in the microfinance market. Mix market has created a system of diamond ranking, so you can see the reliability of the data and the source. Using this source for gathering information about the microfinance market and institutions is valued as a reliable source. Finding information about microfinance in different countries can be challenging and resourceful, using this web page helps the progress in the research. (Microfinance Information Exchange Inc.)

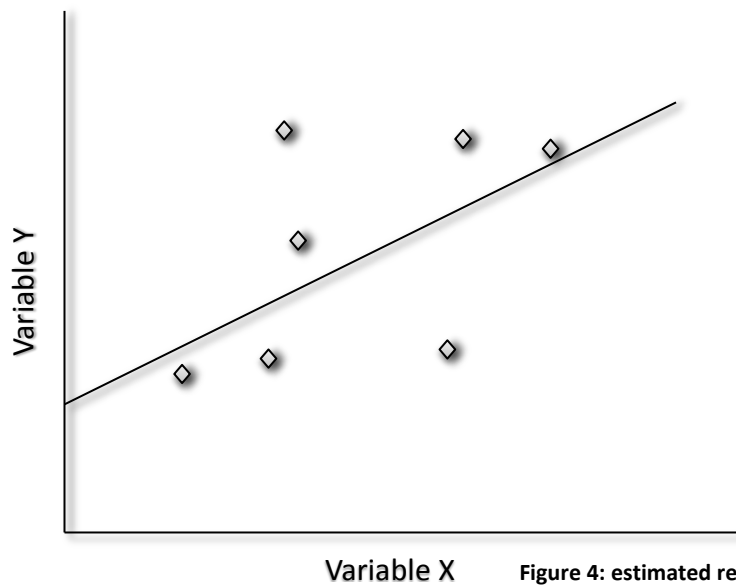
Regarding the data from MIX-market, there has been registered some inconsistency. CMA claims there are 37 MFI's in Cambodia, according to MIX-market there are 24 MFI's in Cambodia today. Despite the uncertainty regarding this data, the quantitative study will mainly use the data from MIX-market due to the comparison value towards the other countries. Regarding the closer study of Cambodia, the numbers from CMA will be used.

7.4. Regression analysis

Regression analysis is in research used to try to explain possible connection between different variables. The main aspect we are looking at and want to explain, we call Y, the dependent variable. We want to explain this variable Y with different possible causes; we call them X, independent variables. The regression analysis is based on the assumption of a linear relation between the variables X and Y and the general equation of regression analysis is (Ringdal, 2013):

$$Y_i = \alpha_0 + b_1X + e_i$$

The α_0 is the regression constant and explains the intersection between the estimated line and the Y-axis. The b_1 is the regression coefficient and describes the relation between X and Y, and the slope of the regression line. The residual (e_i) graphically explains the distance between the estimated line and the data points (see figure 4). Theoretically the residual explain the change in Y that cannot be explained by variable X. This indicates that if the residual = 0, changes in Y can be fully explained by changes in X, and the data point lines up along the estimated regression slope. This is the optimal situation, but normally in real life indicators and variation are much more complicated.



7.4.1. Ordinary least squares

The estimation of the coefficient in the analysis is based on ordinary least squares (OLS). According to this method the best solution is the estimated line that gives the least sum of squares from the line and the data registered.

We find this estimated line by finding the parameters α , and b_1 . From the regression equation we then get two new equations used to find these parameters (Ringdal, 2013):

$$\alpha = \bar{Y} - b_1 \bar{X} \qquad b_1 = \frac{\sum(X_i - \bar{X})(Y_i - \bar{Y})}{\sum(X_i - \bar{X})^2}$$

The regression coefficient (b_1) can in theory be both positive and negative, and indicated the slope of the line. If the regression coefficient is 0, there is no linear relation between the variables, and then the estimated line is horizontal.

When using the OLS method to estimate the parameters we have the following assumptions (Chumney & Simpson, 2006):

- (1) $(e_i) = 0$, The expected value of error is 0. The error might be positive or negative for some of the observations, but the assumption implies that these offset each other so the mean error is 0.
- (2) $Cov(e_i, e_k) = 0$, There is no autocorrelation between the errors. If there is autocorrelation it implies that the values of e_i are correlated. That would go against the statistical properties of OLS.

- (3) $\text{Var}(e_i) = \sigma^2 < \infty$, Homoscedasticity. Equal variance of e_i for each X.
- (4) $\text{Cov}(e_i, X_i) = 0$, The covariance between e_i and X_i is 0. Implies no correlation between e_i and X. If there is correlation between these it is not possible to assess their individual effects on Y.
- (5) The regression model is specified correctly, meaning it only includes relevant variables. All other variables are excluded. If the wrong variables are included (or excluded), or a wrong assumption regarding the variable is made, the validity of the estimate is questionable.

7.4.2. Testing the model

In assessing the value of a regression model we consider the significance of individual variables using a t-test, whereas the overall model fit is tested by means of an F-test or simply by looking at the adjusted R^2 measure. R^2 explains how much of the changes in Y that can be explained by variable X. $R^2 = 0$, signifies that none of the changes in Y can be explained by X, whereas $R^2 = 1$, all the changes in Y can be explained by variable X.

7.4.3. Multiple regression analysis

When we have two or more x-variables we are using multiple regression analysis. The reason for adding more variables is to decrease the residuals (e_i) according to OLS. The regression coefficient then shows changes in Y when X changes with one unit of measure, controlling the other variables in the model. The multiple regression analysis with three variables looks like this (Ringdal, 2013):

$$Y_i = \alpha + b_1X_{1i} + b_2X_{2i} + b_3X_{3i} + e_i$$

7.4.4. Time series study and panel data

In this quantitative analysis the regression will be conducted in two ways; using time series and panel data. Time series study is when one unit (people, organization, countries) is measured many times over a time period. Panel data is when a selected group of unities are surveyed over time, with at least two data gatherings (Ringdal, 2013). The panel data approach gives us a wider perspective and allows us to study the dynamics (Frees, 2004) by fixing individual country-specific effects using a Least Square Dummy Variable approach. In this approach we add a dummy for each country in the sample. By cleaning out individual

effects we can see trends in the overall effect of microfinance on development in our overall sample and not only in individual countries over time.

When using the regression analysis in this research it's an attempt to be able to answer the question whether microfinance can take credit for the poverty reduction. Focusing on the human development index, regression analysis will be used to see any significant changes in the HDI that can be explained by microfinance. By including other elements that is said to have an effect on the index, we are able to control for these.

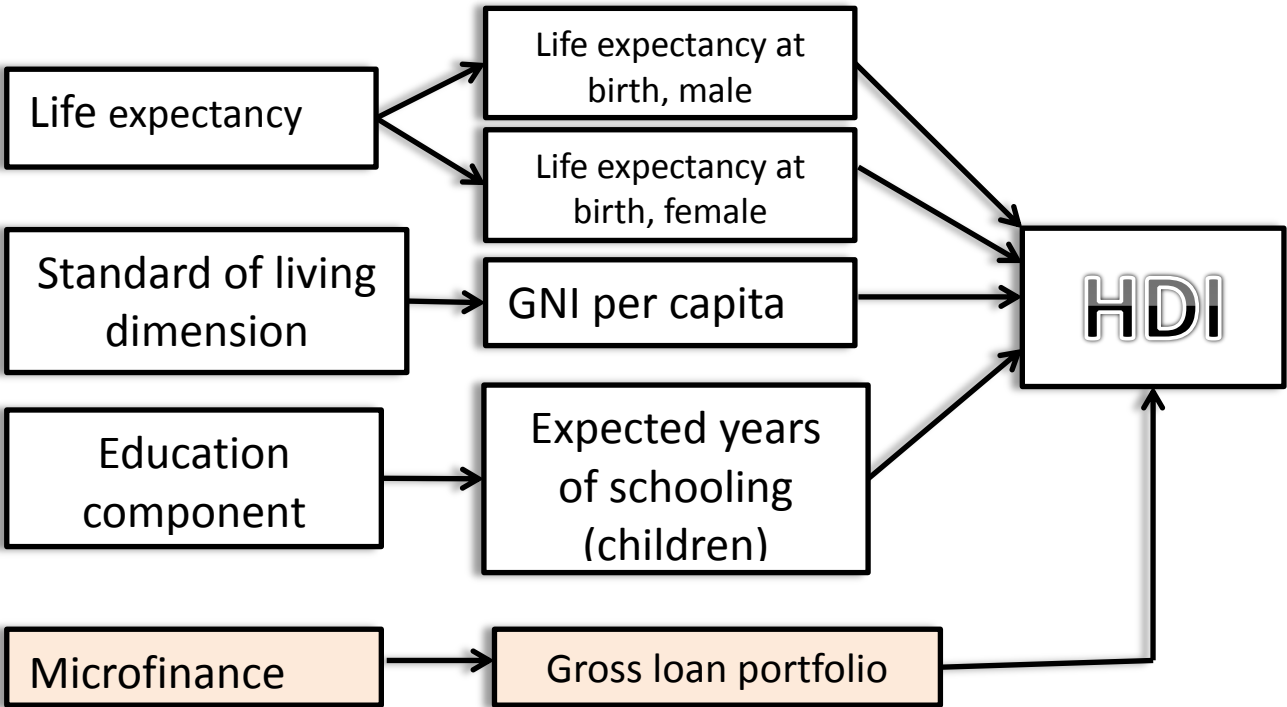


Figure 5: Method for regression analysis

7.5. Interview analysis

The stated first issue in this study indicates that we will proceed with a deductive method regarding the interview analysis. This means that we have an understanding of what we want to research, and have a main focus during the interviews.

- (1) Primary aim for the interviews: Do microfinance have an alleviating effect on poverty?
- (2) Second aim (more inductive): How does microfinance work towards poverty alleviation in Cambodia?

The second aim is more exploratory regarding what we will find (inductive). Some information is gathered before the interviews, but no specific thoughts about what the results of the interviews will be.

7.5.1. Interview validity

Using an interview guide helped keeping focus on the question in the research. Questions were followed, but in some situations there had to be some adjustments regarding language, time availability and subject preferences. Some of the people interviewed spoke quite limited English, something that makes the data collected weaker in the sense that they had difficulties explaining exactly what they meant, and the communication at times were difficult. One of the subjects informed me right before the interview that he had limited time (less than estimated), therefore selections had to be done regarding questions. Another subject refused to let me record the interview; therefore the data collected is less accurate than what it could have been had I been able to use the voice recorder.

Regarding content validity it should be mentioned some critics regarding the subjects interviewed. These could have been selected more carefully. Due to limited time and knowledge about the institutions, the institutions themselves found the subjects that had time and availability to conduct the interviews. To provide an inside look to the institution the subject interview probably worked fine, but regarding to the main question in the study, the subjects could maybe have been selected more carefully and precise.

7.5.2. Interview reliability

In every interview-situation it is more or less impossible not to affect the interview in one way or another, we are all rational humans, and to be completely objective and neutral is not realistic in these situations. The effect and in what extend this causes different outcomes of the interview is discussable.

In my case this was my first time interviewing anyone, and therefore it might be possible that some nerves and lack of experience affected the interview in some matter. The interview guide was an important tool to keep focus and time schedule.

Another factor regarding reliability, is the whether it was used leading questions during the interview. Some leading questions is normal, but most should be open and with no “yes or “no” answer. Again the interview guide was a helpful tool, since all of the questions were thought of beforehand, they were written as open questions. Still in every interview situation you have to improvise, adding some follow-up questions as you go. Some of these questions could have been formulated in another way to try to gather more reliable data.

8. ANALYSIS

In this section the questions in this research is attempted answered by the use of the applied theories and models. Starting with the quantitative analysis, using regression to provide information regarding the factors estimated to have an effect on development. Following is the qualitative analysis, where data collected from Cambodia is elaborated in an attempt to give a close-up insight in the how the microfinance institutions can work.

8.1. Regression analysis

The variables used in the regression analysis are from the year 2005 to 2012.

The first time series regression analysis look at the four variables set by the UN to measure the HDI-index. The equation for this multiple regression analysis then looks like this:

$$HDI_{it} = \alpha_i + \beta_{1i}LE^M_{it} + \beta_{2i}LE^F_{it} + \beta_{3i}GNI_i + \beta_{4i}EDU_i + \varepsilon_i$$

	Cambodia	Vietnam	Bolivia	Colombia	Rwanda	Ethiopia
β GNI per capita	0,09691	0,01218***	0,01666	0,00586*	0,04445***	-0,04051
β Life expectancy female	0,00216**	-	0,00275	0,00003	0,00234***	0,00994*
β Life expectancy male	0,00216	-0,00068	0,00012	0,00098	0,00208**	0,00199
β Expected years of schooling	0,00082	0,02378***	0,00620	0,01217**	0,00993***	0,01881**
Adjusted R²	0,99223	0,99893	0,96269	0,97547	0,99862	0,99833

Figure 1, Time series regression analysis - HDI index, excluded microfinance

*** Significant 1%, $p < 0,01$,

** Significant 5%, $p < 0,05$,

* Significant 10%, $p < 0,1$

According to the first regression analysis the most significant variable to the HDI index is *expected years of schooling*, and the least significant variable is *life expectancy for males*. The country out of these six that can explain changes in HDI due to changes in these factors the most is Vietnam with adjusted $R^2 = 0,9989$, although Rwanda and Ethiopia is almost at the same level. The country which has the lowest R^2 is Colombia, but also in Colombia the changes in expected years of school has significant impact on the HDI. As mention before the initial HDI in these countries are very different, and it should be considered if the variation of impact on HDI might be a result of the countries being in different stages of development.

In the second time series regression we add the microfinance variable; gross loan portfolio (GLP). This is an attempt to rule out the other variables and see if microfinance can have an effect on the HDI-index.

$$HDI_{it} = \alpha_i + \beta_{1i}LE^M_{it} + \beta_{2i}LE^F_{it} + \beta_{3i}GNI_i + \beta_{4i}EDU_i + \gamma_i \log(GLP)_i + \mu_i$$

	Cambodia	Vietnam	Bolivia	Colombia	Rwanda	Ethiopia
β GNI per capita	0,01435	0,01212**	0,03266*	0,00589	0,04596**	-0,07761
β Life expectancy female	0,00230	-	-0,00329	0,00050	0,00220*	0,01464**
β Life expectancy male	0,00061	-0,00067	-0,00909	0,00167	0,00216*	0,00195
β Expected years of schooling	0,01877	0,02437*	0,02676	0,01003	0,00991***	0,00925
β Gross loan portfolio	0,00585	-0,00086	0,03605	-0,00265	0,00101	0,02925
Adjusted R²	0,98847	0,99656	0,98085	0,96723	0,99980	0,99931

Figure 2, Time series regression analysis, HDI index, included microfinance.

In comparison to the first regression analysis there are some minor changes when adding the fifth variable. The most significant variable to the HDI-index, changes from expected years of schooling to GNI per capita. Another change worth mentioning is the adjusted R^2 , which decreases in all countries except Rwanda and Ethiopia. It is normal when adding another variable that the R^2 increases even if the variable added do not affect Y, but the adjusted R^2 ,

calculate for this. This could indicate that microfinance contributes to minor positive changes in HDI, but the numbers are not significant, therefore we cannot draw this conclusion.

	Panel data, excluded Microfinance	Panel data, including microfinance
β GNI per capita	0,00652***	0,00576***
β Life expectancy male	0,00393***	0,00440***
β Life expectancy female	0,00365**	0,00246
β Schooling	0,01138***	0,01240***
β Gross Loan Portfolio		0,00343**
Adjusted R²	0,75762	0,74122

Figure 3, Panel data results

The results from the panel data regression shows that there is a difference between analysing one single country and analysing a group of countries. Excluded microfinance 75,76% (R^2) of the changes in HDI (Y), can be explained by the indicators chosen. Including microfinance the R^2 decreases by 0,01498. This can be because of the indicator for *life expectancy female* no longer is significant for HDI. On the other hand *gross loan portfolio* is significant below 0,05 margin. We can conclude that overall in our sample we see a positive significant effect of microfinance on development. This is in line with our expectations from the Solow model.

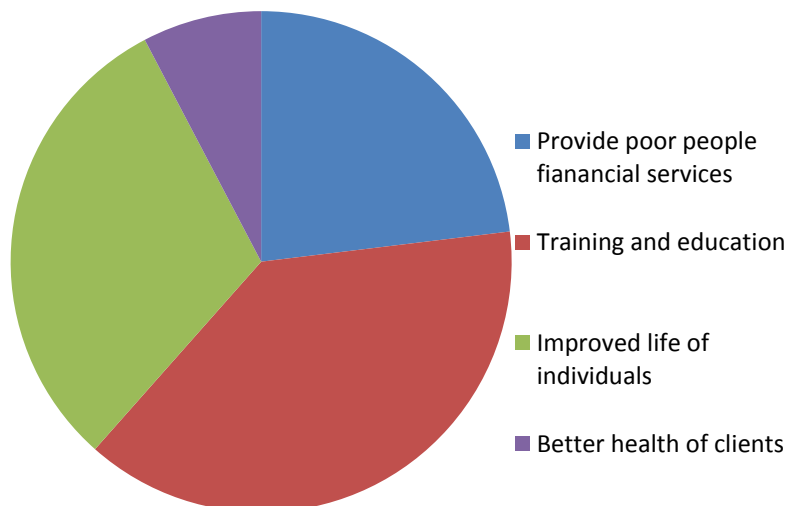
8.2. Interview analysis - Cambodia – a closer look

8.2.1. Education

Microfinance is a source for education, and according to Sophea Hoy, general secretary in Cambodia Microfinance organization, this is one of their main focuses in Cambodia today. Because of what happened in Cambodia in the 1970's with the Khmer Rouge regime, a lot of the population do not possess proper education or understanding of business or economics in general. Microfinance can contribute to educate people in basic understanding regarding personal economics, savings and general economics. Additionally many microfinance institutions provide education to business entrepreneurs, teaching them basic start-up and how to maintain a good business. Hoy explains that they cannot make the clients do anything they do not want to do, but they can motivate and educate them to make well thought out decisions for themselves.

The education of people in Cambodia also involves informing them about the difference between Microfinance institutions with licence from The National Bank of Cambodia, and the informal moneylenders. Since they from outsiders (clients) point of view seems to be providing the same services, it might be hard for clients to differentiate one from the other. This creates a bad reputation and lack of trust in the work of MFI's.

Positive aspects of microfinance



8.2.2. Reaching the core-poor

Some of the critics towards microfinance have been that it does not reach the core-poor of the population, but mainly the low-medium income part of the population. As microfinance claims to reduce poverty, do they manage this if they do not reach the poorest parts of the population? To be able to reach the most unfortunate of the population, there are two important factors that needs to be discusses.

First to be able to reach the core-pore the MFI has to be located close to them and be easy to locate. In Cambodia about 80% of the population are farmers, and live in remote areas. This means to reach this part of the population, most likely you would have to organize institutions in these areas. If you are able to reach these potential clients, it is also important that they know the difference between an MFI and an informal moneylender. Since the informal moneylenders charge up to 10-20% interest rate per month, this will most likely make them poorer than before, instead of helping them.

The second thing MFI need to consider regarding reaching the core-pore of the population is the security or collateral demanded of clients. In Cambodia many of the poor people living in rural areas do not poses any formal education, and many cannot read or write. In order for these potential clients to receive financial services it the criteria for becoming a client have to be affordable.

What is a common basic criteria for becoming a client and that is always needed are some sort of identification (since a lot of pore people have limited official identification, many can use other paper of ID as birth certificate) and permanent address in the area they are applying financial services. There are still many MFI that demand more from the client before they provide financial services, as steady income, a shop or a business. These are criteria's that for some can be hard to fulfil since we are talking about the core-pore. On the other hand, some MFI are more flexible, and as long as they have a well-structured plan on what they want to do with their money, they can be granted a small loan as a start. The conditions also vary after the size of the micro-loan.

One option that might suit the ones with no steady income or any business is the group loan option. Some MFI's provide group-loan as their main loan services. The normal structure of a

group loan is that the group work as a security for each other, and is built on a bond of trust and respect.

8.2.3. To-sided trust relationship between institution and client.

It seems like some of the MFI in Cambodia rely parts of their services on a trust relationship between the institution (and/or loan officer) and client. As one of the MFI have as a main policy to try to be a good judge of character, and focuses on teaching their employees that this is an important aspect. Whether or not it is right to use such a wage point of view to choose who gets to receive financial services and not is questionable. It is arguable that this is a skill one might be able to develop and learn, but there is no actual proof for this. On the other hand it might be the only way to actually be able to provide loans to those who do not have a steady income or a business already.

Due to the trust relationship there are clients who take advantage of this. All the MFI in this research have had experience with clients who create false business ideas and plans in order to receive money. They still claim that there are very few of these type of clients, one of the MFI claims its only about 1-2% of their clients that turns out to be these types. Their philosophy is to provide the option, and as long as the majority of the clients are good clients, they choose to focus on this. Although it is clear that a limited funded MFI could not survive a larger group of these clients.

When it happens that a client do not pay back the loan they have been given, the MFI's explain that as long as the client is cooperative, they go far to find a solution for the issue. A solution can be to reschedule the payment, changing the amount of the payment, longer payback time or just simply wait until the customer is able to pay. One of the MFI informed that sometimes they could wait as long as 3-5 years for a customer to be able to pay back. They preferred to wait and motivate the customer to pay instead of approaching the court.

8.2.4. Commercialisation – a natural step?

Most MFI's started as non-profit NGO's, and developed later to microfinance institutions, which is also the case in Cambodia. Their main source of capital funding has been through donor grants, government subsidies and often debt capital. The international organizations and donors motivate and want the MFI to become independent from these sources of funding as they grow. Doing this many of the MFI also takes a step towards commercialization of their

institutions. Hoque and Chishty argue that this commercialization have negative effect on their outreach and social aspects, in other words it transforms by the cost of the poor (Hoque & Chishty, 2011).

On the other hand Sophea Hoy addresses the commercialization of microfinance as a natural step for the institutions if they want to keep their clients as they develop their needs. As the economic situations of the clients improve, they might look for bigger loans and other type of services. Hoy explains that if these needs are not met, the MFI will simply lose their client to a larger (commercialized) bank. So in regard to the MFI maintaining the same client base, they need to develop their services along with the development of their clients.

The employees and managers of the MFI's in Cambodia seem to have, like Hoy, a practical view on the development of microfinance. As they see the changes around them, and want to develop in the same pace. The critics on the other hand see the challenges in this, when the MFI change from being reliable on funds and donors, to become independent. They need to find other sources of financing their capital, and many times this means funding trough debt, loans provided by regular banks. Many banks provide generous loans to the MFI, but still they are loans, and this can result in increased interest rates to the clients (Hoque & Chishty, 2011).

In contrast, some of the MFI's believe that the commercialization will result in larger competition, and therefor will result in the interest rate decreasing. Some MFI look at the commercialization as a good thing, a sign of the economic and country is growing. Many institutions start up as very small, and the goal to develop the business is an underlying factor from the very beginning, and is also a motivation for the employees working there.

There are still questions to ask regarding this, whether the development of the microfinance institutions is the best for the institutions, the clients or both. If the critics are right and the development results in a higher interest rate, this will exclude the poor part of the population from these services. The MFI and CMA seem to have different view on the development than the critics, as they see this as a step in the right direction if they want to keep microfinance sustainable.

Commercialization

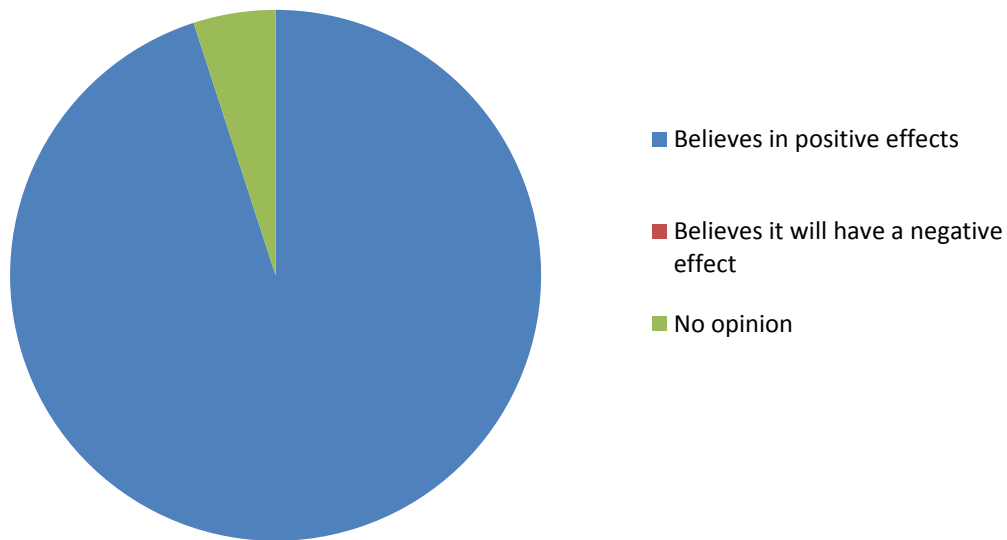


Figure 4, opinions from microfinance institutions regarding commercialization

8.2.5. The individual victory

For the people working with microfinance everyday they seem to find joy in their work by the small success stories of individuals. Cambodia being a country with a conflict background, leaving a large part of the population with no or very limited education, and then to help the development of people gives them hope for the future. The MFI's in Cambodia referred to small positive changes in the day to day lives of the clients, and the overall growth in their surroundings as the main point for addressing microfinance as a positive contribution to development. Examples of positive individual changes could be to see the house of the client develop from wood cottages to brick houses, being able to send their children to school and better logistics and house facilities. These are small scale improvements, but none the less, they do improve the lives of the ones living there and their surroundings. According to the HDI indicator used by the UN one of the factors measures is education. If microfinance can contribute to more children going to school, it will be a positive contribution to the HDI regarding development.

On the other hand, a few success stories from individuals cannot be implemented to the larger picture. That might be one of the reasons why Mr. Neth Sovann conducted a research on the impact microfinance has on the living standard of the rural areas in Cambodia. The study

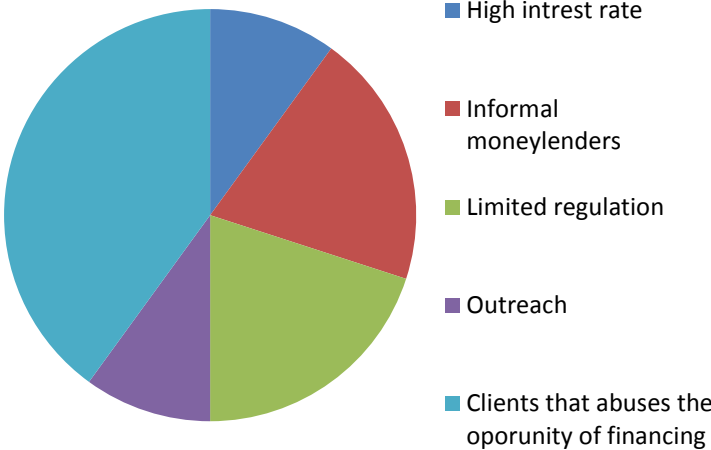
focused on five factors to indicate the changes in living standard, the five factors were: food consumption, housing condition, health facilities, children education and household income (Sovann, 2015). During his research he was able to interview 400 clients of three of the largest MFI's in Cambodia. What he found was that microfinance had positive impact on their living standard after receiving financial services from a microfinance institution. This study strengthens the stories from the employees as the MFI's, and their vision that changing the lives of individual is a change in the right direction, even if it's one by one.

8.2.6. The prospects of Microfinance

One of the biggest challenges in Cambodia regarding reaching out micro financial services to poor people, are according to the MFI's the informal moneylenders in the rural areas. Since about 80% of the population lives in the rural areas, for many the informal services are the only available source for financing. The informal money lenders take a very high interest rate, and their main goal is said to be to make profit, mostly by providing loans to the poor.

Some of the MFI points out that stronger regulation from government could help regarding the informal moneylenders. Others also believe that educating people and clients about the difference between MFI and the informal services can help reduce this problem. They see microfinance as an important part in the poverty alleviation in Cambodia, and believe as long as there are poor people and development prospects there will be microfinance. This being said, they also see a negative development that can take place if the government don't act upon the informal services conducted in the rural areas.

Negative aspects of microfinance



9. THE EFFECTS OF MICROFINANCE

9.1. Macro level

According to the quantitative analysis in chapter 7.1, focusing on one single country did not indicate any significant effect from microfinance on the HDI-index. On the other hand there are reasons to believe from the survey on larger group of countries (panel data results) that microfinance can contribute to increase the HDI-index. Increasing the HDI-index signifies better living conditions and living standards, and is used as an index for development of a country including more than just the economic aspects. In this research the HDI has been used as an indicator for poverty, since an increased living standard also indirectly indicates less poverty, provided a stable Gini coefficient (chapter 3). Due to the findings in the quantitative panel data analysis there is significant information to support the hypothesis that microfinance can contribute to alleviate poverty. Still there is not enough evidence to conclude on this, but rather an indication. There are still many factors not being considered in this analysis, therefore to confirm the theory in this case would not be applicable.

9.2. Micro level

The quantitative analysis focuses on individuals and small scale effects of microeconomics in Cambodia. Records of microfinance clients who are able to improve their living standard by upgrading utilities and accommodation, indicates the increased consumption after receiving financial services. According to the generalized consumption theory, this can be because of expected income growth due to optimism, or it can be because of a change in permanent income. Both of which has an effect on wealth (chapter 4.1.1.).

The study conducted on 400 microfinance clients in Cambodia (Sovann, 2015) also show the positive changes that come as a result of getting microloans. The question is if these clients from three of the biggest MFIs in Cambodia, is representative for all microfinance clients. There are negative aspects as well, as exploiting customers and informal money lenders, but in the big-micro picture they fade away compared to the positive aspects.

The common factor of the micro level analysis is individual focus, and that one clients' success should not be compromised due to other clients' misbehavior. There is no exact recipe

on how to get poor people out of poverty, but microfinance can contribute and help individuals create a better life by providing financing and education.

10. REFERANSER

- Barro, R. J., & Sala-i-Martin, X. (2003). *Economic Growth second edition*. Massachusetts: Massachusetts Institute of Technology.
- Bateman, M. (2011). *Confronting Microfinance: Undermining sustainable development*. Virginia: Kumarian Press.
- Bateman, M., & Chang, H.-J. (2012, 01 26). *Microfinance and the illusion of development: From Hubris to nemesis in thirty years*. Bristol: World Economics Association.
- Berry, W. D., & Feldman, S. (1985). *Multiple regression in practice*. California: Sage Publications, Inc.
- Burda, M., & Wyplosz, C. (2009). *Macroeconomics A European text*. New York: Oxford University Press Inc.
- Cambodia Microfinance Association. (u.d.). *About us*. Hentet 04 22, 2015 fra <http://cma-network.org/drupal/WhoWeAre>
- Cambodia Microfinance Association. (u.d.). *Microfinance Environment*. Hentet mars 15, 2015 fra <http://cma-network.org/drupal/MicrofinanceEnvironment>
- Cambridge University Press. (2014). *Inclusive Wealth Report 2014, Measuring progress toward sustainability*. New York: Cambridge University Press.
- Central Intelligence Agency. (2014, Juni). *The World Factbook*. Hentet mars 15, 2015 fra <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- CGAP. (u.d.). *Financial inclusion*. Hentet 11 10, 2014 fra <http://www.cgap.org/topics/financial-inclusion>
- Chumney, E. C., & Simpson, K. N. (2006). *Methods and designs for outcomes research*. Wisconsin: American Society of Health-system Pharmacists, Inc.
- Collier, P. (2007). *The bottom billion*. New York: Oxford University Press.
- Easterly, W. (2006). *The white man's burden*. New York: The Penguin Press.
- Easterly, W. (2007, 05 2). Was development assistance a mistake? *The American Economic Review*, ss. 328-332.
- Frees, E. W. (2004). *Longitudinal and Panel data analysis and applications in the social sciences*. Cambridge: Cambridge University Press.
- Grameen Bank- Bank For Small Business. (u.d.). *Founder*. Hentet 04 18, 2015 fra <http://www.grameen-info.org/grameen-founder-muhammad-yunus/>
- Group, W. B. (u.d.). *Data*. Hentet mars 15, 2015 fra http://data.worldbank.org/topic/poverty#tp_wdi

- Group, W. B. (u.d.). *Pverty Overview*. Hentet mars 15, 2015 fra <http://www.worldbank.org/en/topic/poverty/overview#3>
- Hermes, N., Lensink, R., & Meesters, A. (2011, 06 6). Outreach and Efficiency of Microfinance Institutions. *Elsevier*, ss. 938-948.
- Hoque, M., & Chishty, M. (2011). *Commercialization and changes in capital structure in microfinance institutions. An innovation or wrong turn?* Chicago: University of Illinois.
- Leksikon, S. N. (u.d.). *Rwanda*. Hentet september 16, 2014 fra <https://snl.no/Rwanda>
- Microfinance Information Exchange Inc. (u.d.). Hentet 04 16, 2015 fra <http://www.mixmarket.org/about/faqs#datasets2>
- Microfinance Information Exchange Inc. (u.d.). *Microfinance institutions*. Hentet 04 19, 2015 fra <http://www.mixmarket.org/mfi>
- Microfinance Information Exchange. (u.d.). *Rwanda market profile*. Hentet september 17, 2014 fra <http://www.mixmarket.org/mfi/country/Rwanda>
- Microfinance Information Exchange, Inc. (u.d.). *Bolivia market profile*. Hentet 05 20, 2015 fra <http://mixmarket.org/mfi/country/Bolivia>
- Microfinance Information Exchange, Inc. (u.d.). *Colombia market profile*. Hentet 05 20, 2015 fra <http://mixmarket.org/mfi/country/Colombia>
- Microfinance Information Exchange, Inc. (u.d.). *Ethiopia market profile*. Hentet 05 20, 2015 fra <http://www.mixmarket.org/mfi/country/Ethiopia>
- Microfinance Information Exchange, Inc. (u.d.). *Vietnam market profile*. Hentet 05 20, 2015 fra <http://www.mixmarket.org/mfi/country/Vietnam>
- Nghiem, H. S., Coelli, T., & Rao, P. (2006, 5 2). The efficiency of microfinance in Vietnam: Evidence from NGO schemes in the north and the central regions. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, ss. 71-78.
- Nobelprize.org. (u.d.). *Mohammad Yunus - Facts*. Hentet 04 17, 2015 fra http://www.nobelprize.org/nobel_prizes/peace/laureates/2006/yunus-facts.html
- Norad. (2015, 04 14). *Internasjonal bistand stabil*. Hentet 05 24, 2015 fra <http://www.norad.no/om-bistand/tallenes-tale/internasjonal-bistand-stabil-i-2014/>
- Organisation for economic Co-operation and development. (u.d.). *Development aid stable in 2014 but flows to poorest countries still falling*. Hentet 05 24, 2015 fra <http://www.oecd.org/dac/stats/development-aid-stable-in-2014-but-flows-to-poorest-countries-still-falling.htm>

- Patton, M. Q. (2002). *Qualitative Research & Evaluation methods*. London: Sage Publications, Inc.
- Ringdal, K. (2013). *Enhet og mangfold*. Bergen: Fagbokforlaget .
- Roodman, D. (2012). *Due Diligence: An Impertinent Inquiry Into Microfinance*. Washington : Center of global development.
- Rwnada, G. o. (u.d.). *Brief history of Rwanda*. Hentet september 16, 2014 fra <http://www.gov.rw/History>
- Sachs, J. (2005). *The end of poverty*. New york: The Penguin press.
- Sagar, A., & Najam, A. (1998, june). The human development index: a critical review. *Elsevier*, ss. 249-264.
- Sovann, N. (2015). *Assessing the impact of microfinance on the living standard*. Phnom Penh: National Univeristy of Management.
- Store Norske Leksikon. (2012, 12 28). *Vietnam*. Hentet 4 10, 2015 fra <https://snl.no/Vietnam>
- Store norske leksikon. (u.d.). *Bolivia*. Hentet 04 12, 2015 fra <https://snl.no/Bolivia>
- Store norske leksikon. (u.d.). *Colombia*. Hentet 04 10, 2015 fra <https://snl.no/Colombia>
- Store Norske Leksikon. (u.d.). *Kambodsja*. Hentet september 18, 2014 fra <https://snl.no/Kambodsja>
- Store Norske Leksikon. (u.d.). *Økonomisk ulikhet*. Hentet 4 8, 2015 fra https://snl.no/%C3%B8konomisk_ulikhet
- Sørensen, P. B., & Whitta-Jacobsen, H. J. (2005). *Introducing advanced Macroeconomics*. Berkshire: McGraw-Hill Education.
- The World Bank Group. (u.d.). *Poverty & Equity Data*. Hentet 05 20, 2015 fra <http://povertydata.worldbank.org/poverty/home/>
- United Nations Development Programme. (u.d.). *Human Development Reports*. Hentet 4 8, 2015 fra <http://hdr.undp.org/en/content/human-development-index-hdi>
- United Nations org. (u.d.). *Millenium Development Goals and beyond 2015*. Hentet 04 14, 2015 fra Goal 1: Eradicate extreme poverty and hunger: <http://www.un.org/millenniumgoals/poverty.shtml>
- United Nations org. (u.d.). *Poverty: the official numbers*. Hentet 10 3, 2014 fra <http://www.un.org/esa/socdev/rwss/docs/2010/chapter2.pdf>
- Wold Bank Group. (u.d.). *Poverty & Equity, East Asia & Pacific*. Hentet 10 3, 2014 fra <http://povertydata.worldbank.org/poverty/region/EAP>
- World Bank Group . (u.d.). *Vietnam Overview*. Hentet 4 10, 2015 fra <http://www.worldbank.org/en/country/vietnam/overview>

- World Bank Group. (u.d.). *Bolivia*. Hentet 04 12, 2015 fra
<http://www.worldbank.org/en/country/bolivia>
- World Bank Group. (u.d.). *Data Rwanda*. Hentet september 17, 2014 fra
<http://data.worldbank.org/country/rwanda>
- World Bank Group. (u.d.). *Ethiopia*. Hentet 04 12, 2015 fra
<http://www.worldbank.org/en/country/ethiopia>
- World Bank Group. (u.d.). *Global Economic Prospects*. Hentet 04 10, 2015 fra
<http://www.worldbank.org/en/publication/global-economic-prospects/data?variable=NYGDPMKTPKDZ®ion=LAC>
- Yin, R. K. (2014). *Case study research* . London: Sage Publications, Inc.

11. APPENDIX

11.1. Interview guide 1

Microfinance institutions

Information

Place for interview: _____

Date/time: _____

Person being interviewed: _____

Interviewer: _____

other information: _____

Introduction

Background for the project

General information and rights

Recording interview

I. Background

- How long have you had this job?
- What is your formal education?
- What motivated/made you work with microfinance?
- How does a normal workday look like for you?

II. How is the MFI organized?

- How many employers do this organization /company have?
- What financial services do you offer?
 - o Why have you chosen to focus on this service (one/several)?
- What non-financial services do you offer?
- What is the background/reason for focusing on microfinance?
- What is your view on positive aspects of microfinance services?
- What is your view on negative aspects of microfinance services?
- Which (if any) challenges have you experienced?

III. Connection and communication with clients

- Who will you consider your most important clients?
- Why do you choose to concentrate on certain type of clients? (if applicable)
- Do you have non-microfinance clients that have particular impact on your institution?
- How does your company get in contact with new potential clients?

- How important are microfinancial clients?
- Who are the most important microfinancial clients and why?
- What are the criteria's for becoming a client of microfinancial services?
- How do you follow up existing microfinancial clients?
- What happens if a client cannot pay back a microloan?
- Positive experiences with microfinancial clients
- Negative experiences with microfinancial clients?

IV. Cooperation with organizations

- Do you collaborate with any organizations?
- Who do you consider as your most important partner (cooperation) within the organizations?
- In what way do you cooperate?
- Positive aspects of this cooperation? (benefits)
- Negative aspects of this cooperation? (challenges)
- Are there other potential partners your organizations could benefit from collaborating with?

V. The future of microfinance

- Have microfinance in Cambodia changed in any ways the last couple of years?
- What is your perspective on the commercialization of microfinance in Cambodia?
 - o Positive and negative aspects of this transformation?
- The background for microfinance is to alleviate poverty, to what extent do you feel your company/organization work towards this ground principle?
- How do you plan to continue and improve the work your are doing today regarding microfinance?
- Potential changes you believe microfinance in Cambodia could benefit from?
- How do you believe that microfinance will be a part of poverty alleviation in the future?

Are there any important aspects you feel we have not talked about? Do you have any questions or additional information?

11.2. Interview guide 2

Organization

Information

Place for interview: _____

Date/time: _____

Person being interviewed: _____

Interviewer: _____

other information: _____

Introduction

- *Background for the project*

- *General information and rights*

I. Background

- What is your job in the organization?
- How long have you had this job?
- What is your formal education?
- What motivated/made you work with microfinance?
- How does a normal workday look like for you?

II. Organization, structure

- How many employers does this organization have?
- What services do you offer?
- What is the background for establishment and focusing on microfinance?
- Positive aspects of microfinance services?
- Negative aspects of microfinance services?

III. Cooperation with MFI's

- Who do you consider as your most important partner within the microfinance institutions?
- Positive aspects of this cooperation?
- Negative aspects of this cooperation?
- Are there other potential partners your organizations could benefit from?
- Do you have any strategies for measuring the impacts of MFI's regarding poverty alleviation?

IV. The future of microfinance

- Have there been any changes in the microfinance system the last couple of years?
- What is your perspective on the commercialization of microfinance in Cambodia?
 - Positive and negative aspects of this transformation?

- The background for microfinance is to alleviate poverty, to what extent do you feel your organization work towards this ground principle?
- How does the organization plan to continue and improve the work you are doing today regarding microfinance?
- How do you believe microfinance will be a part of poverty alleviation in the future?
- Potential changes you believe microfinance in Cambodia could benefit from?

Are there any important aspects you feel we have not talked about? Do you have any questions or additional information?