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**Towards Inclusive Financial
Development for Achieving the
MDGs in Asia and the Pacific**

Kunal Sen



Towards Inclusive Financial Development for Achieving the MDGs in Asia and the Pacific

Kunal Sen



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Macroeconomic Policy and Development Division (MPDD)

Economic and Social Commission for Asia and the Pacific

United Nations Building, Rajadamnern Nok Avenue

Bangkok 10200, Thailand

Email: escap-mpdd@un.org

Director
Dr. Nagesh Kumar

Series Editor
Dr. Aynul Hasan

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**Towards Inclusive Financial Development for Achieving the
MDGs in Asia and the Pacific**

Prepared by Kunal Sen*

October 2010

Abstract

The views expressed in this Working Paper are those of the author(s) and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate. This publication has been issued without formal editing.

Financial development enhances domestic resource mobilisation and also allows these resources to be put to the most productive uses. While there is little doubt that financial development leads to higher economic growth which may then lead to poverty reduction, financial development in itself will allow developing countries to achieve the Millennium Development Goals (MDGs). We will argue in the paper that a more relevant dimension of financial development that is important for the achievement of the MDGs is inclusiveness of the financial system. We will develop concepts and measures of inclusive financial development and show that measures of inclusive financial development are positively correlated with progress towards the attainment of MDGs. We will also present evidence of how inclusive financial development can contribute to reaching the MDGs. Finally, we will discuss some analytical principles and issues relating to inclusiveness in financial development.

* Kunal Sen is Professor of Development Economics and Policy at IDPM, School of Environment and Development, University of Manchester, United Kingdom. This paper was prepared as an input to the ESCAP theme study entitled *Financing an Inclusive and Green Future : A Supportive Financial System and Green Growth for Achieving the Millennium Development Goals in Asia and the Pacific*.

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1. INTRODUCTION

Financial development, broadly defined to include not just financial sector deepening but also improvements in the efficiency of the financial sector, is vital for pro-poor growth (Mavrotas 2009). Financial development enhances domestic resource mobilisation and also allows these resources to be used for the most productive uses. The cross-country literature on the relationship between financial development and economic growth is vast – and most studies show that financial development unambiguously and positively impacts on economic growth (Aghion and Bolton 1997, Levine 1997). However, while there is little doubt that financial development leads to higher economic growth which may then lead to poverty reduction, it is less clear that financial development in itself will allow developing countries to achieve the eight Millennium Development Goals (MDGs). We will argue in this paper that the relationship between financial development and the achievement of the MDGs is not as straightforward as the relationship between financial development and the achievement of economic growth. We will further argue that the more relevant dimension of financial development that is important for the achievement of the MDGs is inclusiveness of the financial system. We will develop concepts and measures of *inclusive financial development* and show that measures of inclusive financial development are positively correlated with progress towards the attainment of MDGs. We will then present evidence of how inclusive financial development can contribute to reaching the MDGs. Finally, we will discuss some analytical principles and issues relating to inclusiveness in financial development and how inclusiveness may be achieved in different segments of the financial system, and end with some policy recommendations.

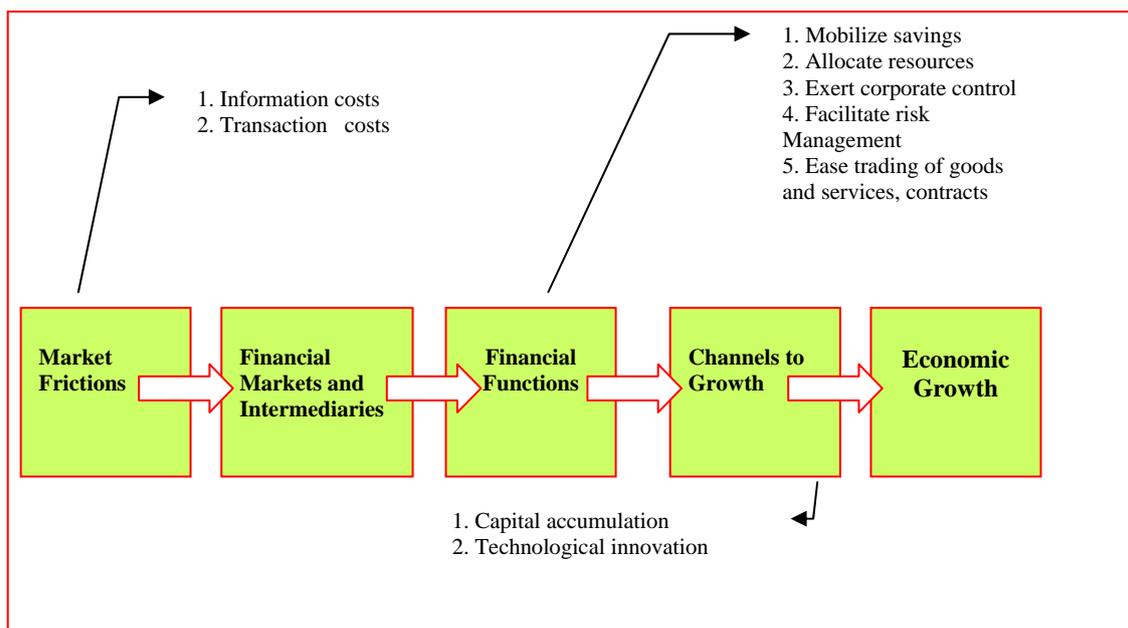
In the next section, we review the arguments on the finance-growth nexus and show that such a nexus does not necessarily lead to a finance-poverty nexus. In Section 3, we propose a broader definition of financial development that includes financial inclusion as a key dimension. We present some measures of inclusive financial development and the relationships between these measures and the MDGs in the Asia-Pacific region. In Section 4, we assess what we know about the role of inclusive financial development in contributing to the achievement of the MDGs. In Section 5, we address some analytical issues on how to obtain greater financial inclusion in the Asia Pacific region. Section 6 will provide some policy recommendations.

2. FINANCE, GROWTH AND POVERTY: THE INTER-RELATIONSHIPS

Since the work of the economic historian Raymond Goldsmith (1969), who found that “rough parallelism can be observed between economic and financial development if periods of several decades are considered” (p.48), it has been widely recognised that a well-functioning financial system is crucial to economic growth (McKinnon 1973, Shaw 1973). Financial development can lead to economic growth in the following five ways: i) by facilitating the trading, hedging, diversifying, and pooling of risk, ii) by allocating resources to the most productive uses; iii) by monitoring managers and exerting corporate; iv) by mobilising savings, and v) by facilitating the exchange of goods and services (Levine 1997). The theoretical mechanisms by which financial development leads to economic growth is best captured by Figure 1. The figure shows schematically how financial markets and intermediaries can be linked to growth by means of their five main functions. In fulfilling those five functions to overcome market frictions such as information costs and transaction costs, financial markets and intermediaries actually affect saving and allocation decisions in

ways that influence growth. Levine (1997) identifies two channels through which each financial function may affect growth: Capital accumulation and technological innovation (Barro and Sala-i-Martin 1995, Barro 1997). The financial system affects resource allocation either by altering the savings rate or by reallocating savings among different capital producing technologies. With respect to technological innovation, the functions performed by the financial system affect economic growth by altering the rate of technological innovation.

Figure 1: Understanding the finance-growth nexus



Source: Ozer (2008)

Therefore, the degree of financial development can have a positive effect on economic growth both by increasing the volume of investment and its efficiency (Khan and Senhadji 2000). Financial development can increase the volume of investment by the greater mobilisation of investible resources in the economy (Bandiera, Honohan and Schianarelli 2000). With respect to the efficiency of investment, the financial sector can improve the allocation of investible funds in four ways. Firstly, the financial sector improves the screening of fund-seekers and the monitoring of the recipients of funds, which improves the allocation of resources. Secondly, in the presence of information and transactions costs, the financial system eases the trading, hedging and pooling of risk. Thirdly, financial markets and intermediaries mitigate the information acquisition and enforcement costs of monitoring managers of firms and exerting corporate control. Finally, financial systems spur technological innovation by encouraging specialisation in the economy via the lowering of transactions costs. There is persuasive empirical evidence both across countries and for individual countries that suggest that countries with better developed financial systems tend to grow faster, controlling for all other determinants of economic growth.¹

¹ See Abu-Bader and Abu-Qarn. 2006, Acaravci, Ozturk and Acaravci. 2007, Arestis and Demetriadis 2007, Beck, Levine and Loayza 2000a, b, Beck and Levine 2001, Choe and Moosa. 1999, Christophoulosa and Tsionas. 2004, Khalifa 1999, Demetriades, P.O. and K.A. Hussein.1996.

However, while financial development can lead to higher economic growth, it is not obvious that it will lead to higher poverty reduction (Holden and Propenko 2001). This is because of two reasons. Firstly, the effect of financial development on poverty reduction is itself dependent on the level of income or asset inequality in the country. For countries with high levels of inequality, the effect of growth on poverty and therefore, of finance on poverty will be less than for countries with low levels of inequality (Ahluwalia 1976). Secondly and more importantly, financial development may itself exacerbate inequality in the country. Thus, as banks and other financial intermediaries grow in size and number, they may choose to lend only to those who have collateral and who can borrow against such collateral. This may be high net worth households and medium and large firms in the country. Poorer households or small and micro enterprises who do not have access to collateral may be rationed out of financial markets. The emergence of stock markets – another crucial indicator of financial development – may only listed companies who are usually medium or large in size, or the richer households who would be less risk averse in investing in shares with uncertain income streams than poorer households who would be more risk averse (Demirguc-Kunt and Levine, 1996, Demirguc-Kunt 2006).

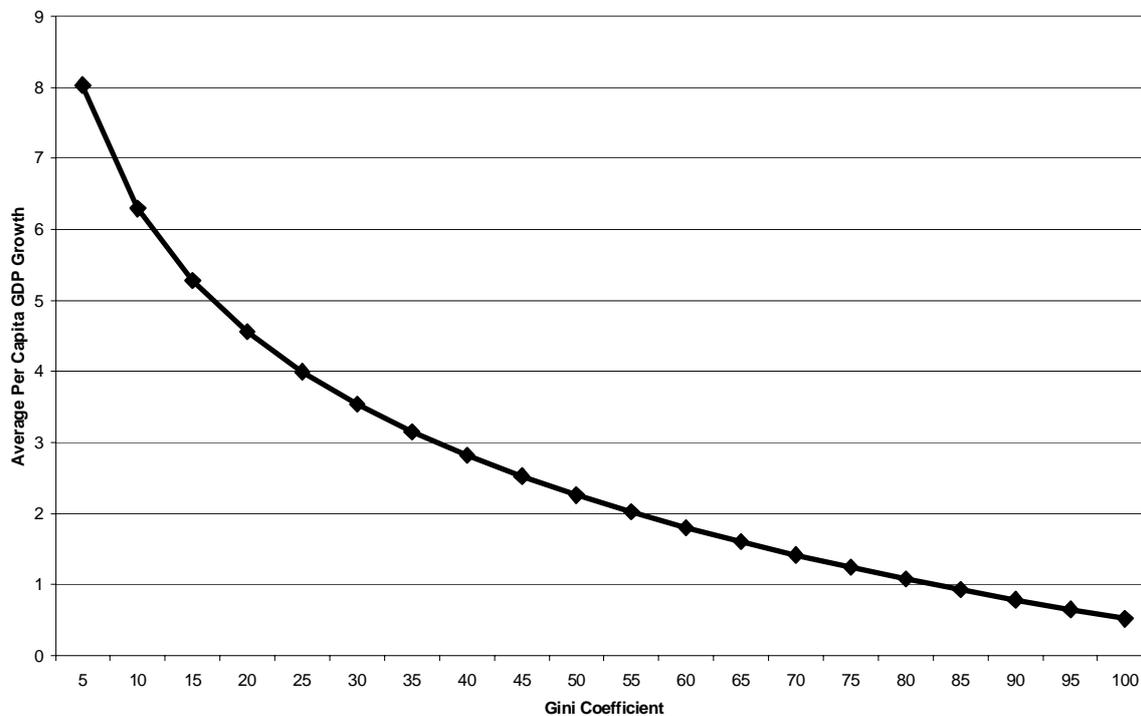
A high level of inequality may not only reduce the poverty reducing impact of economic growth, it may itself contribute to reducing the impact of financial development on economic growth (Clarke 1995, Partridge 1997, Aghion, Caroli and Garcia-Penalosa, 1999, Banerjee and Duflo 2001). The reason why income distribution is likely to exert an influence on economic efficiency is that productive opportunities might vary along the wealth distribution (Banerjee and Newman 1993, Blanchflower and Oswald 1998, Parker 2000). Where information is costly and imperfect, equilibrium credit rationing will arise - that is, agents will be able to obtain credit only if they own assets that can be used as collateral. A more unequal distribution of assets would then imply that, for any given level of per capita income, a greater number of people are credit constrained (Deininger and Olinto 2000). In an economy where individuals make indivisible investments - in schooling, for example- that have to be financed through borrowing, this would imply lower physical and human capital formation and hence, aggregate growth (King and Levine 1993a, b; Deininger and Squire, 1998).

The fact that the effect of finance on growth is conditional on the level of inequality is clear from Figure 2, which shows that the effect of financial development on economic growth at different levels of income inequality. The figure shows that the greater the level of inequality (as measured by the Gini coefficient), the lower the magnitude of the positive effect of finance on growth. The impact of finance on growth is more than six times larger when a country has a Gini coefficient of 10 per cent as compared to when a country has a Gini coefficient of 90 per cent.

The inter-relationships between financial development, economic growth and income inequality are depicted in Figure 2. Financial development can reduce poverty by increasing economic growth. However, financial development can exacerbate income inequality, and thus, can lead to higher poverty, for the same of economic growth. Higher income inequality can negatively impact on economic growth, and thus, bring about a decrease in the rate of economic growth. Economic growth also may widen disparities between individuals and groups in the economy, and by increasing inequality, reduce the impact of financial development on poverty reduction. This suggests that the relationship between financial development and poverty reduction is complex and depends on whether financial development increases inequality and whether this increased inequality is large enough to

dwarf the positive effect of financial development on poverty reduction via higher economic growth. It also depends on whether economic growth and income inequality mutually reinforce each other such that higher inequality leads to lower growth and higher growth leads to higher inequality.

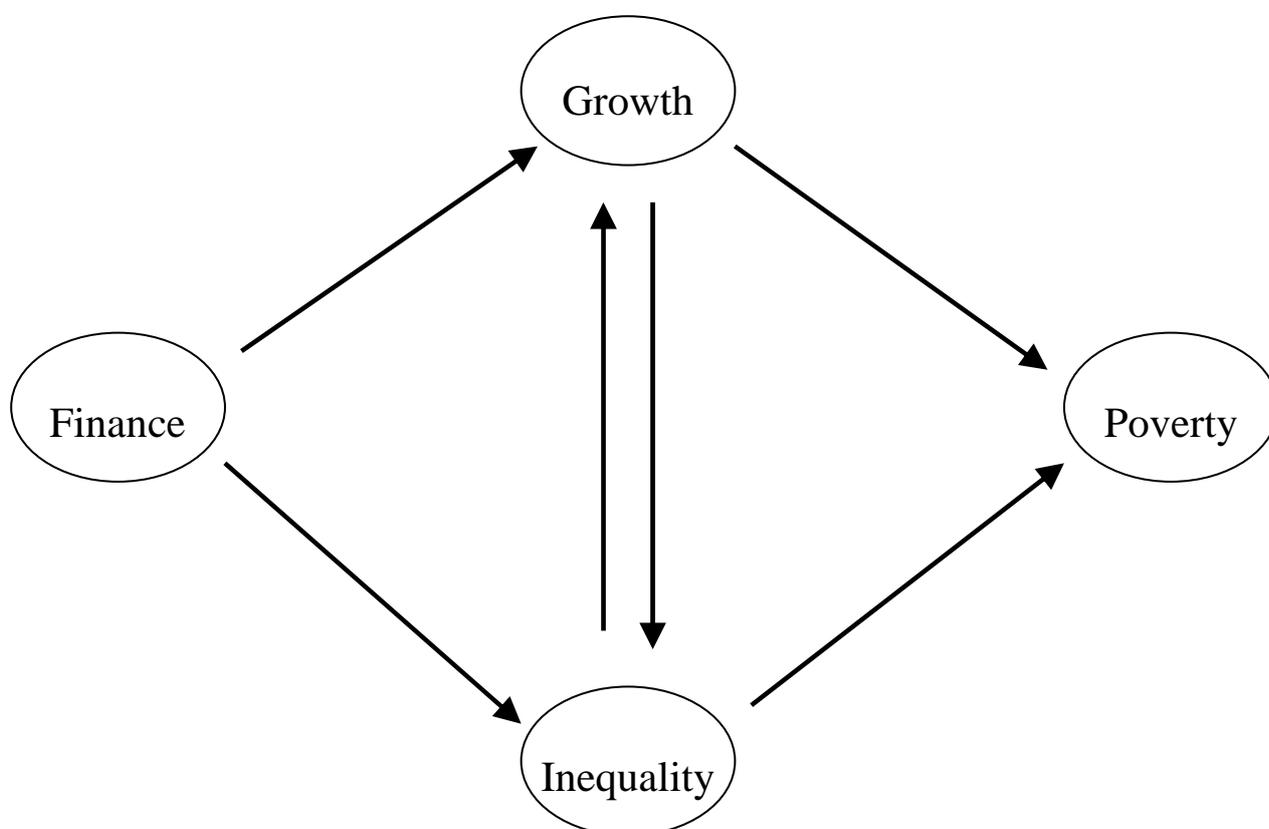
Figure 2. The net effect of finance on growth at different levels of inequality



Source: Ozer and Sen (2009)

For financial development to have an unambiguous positive effect on poverty reduction, it must lead to both an increase in economic growth and a decrease in income inequality. Such an outcome is most likely if financial development is inclusive. Financial development that is not inclusive and that does not reduce asset and income inequalities in the economy has less of a likelihood in reducing MDG 1 – halving income poverty by 2015, and may also for the same reason may contribute to progress in attaining MDGs relating to health, nutrition and health. But how do we define inclusive financial development? We do this in the next section.

Figure 3. The inter-relationships between financial development, economic growth, income inequality and poverty



Source: Author

3. INCLUSIVE FINANCIAL DEVELOPMENT: CONCEPT, MEASURES AND PATTERNS

Financial development is the increase in the size of the financial sector relative to economic activity. Higher levels of financial development are brought about by the increase in number of financial intermediaries such as commercial banks and co-operative credit unions along with an increase in the size of these intermediaries. Higher levels of financial development are also brought about by increase in the depth of capital markets such as stock and bond markets, along with an increase in the range of financial instruments available in the these markets. Two standard measures of financial development are the share of domestic credit to the private sector as a ratio of GDP, and market capitalisation (stock market trading volume) of listed companies as a ratio of GDP. The first could be called the credit based measure of financial development and the second the equity based measure of financial development. It is clear from Figures 4 and 5 that both the credit and equity based measures of financial development are positively related to higher economic development, as measured by per capita GDP. However, the relationship between financial development and poverty reduction is less clear, as is seen in Figures 6 and 7.

This indicates that financial development by itself is unlikely to contribute to MDGs, if it is not sufficiently inclusive. Commercial banks and other financial intermediaries may only lend to medium and large sized firms and to rich households who can provide the necessary collateral to these intermediaries for lending purposes. Capital markets may channelize funds only to the large listed companies, who have the ability to pay for the high fixed costs necessary to issue shares in the stock market or who have been in existence for a long enough period to obtain credit ratings that are necessary for issuing bonds, debentures and fixed deposits. Both credit and capital markets may ration credit to small and micro enterprises or to poor households who may not have the history of past borrowing to obtain credit ratings necessary to borrow from capital markets, cannot meet the costs of underwriters necessary to issue shares and are seen as risky customers by commercial banks and other financial intermediaries. This implies that only a financial sector that is inclusive in its ability to bring in previously underbanked households or to lend to small and micro enterprises can be a potent positive force for achieving MDGs (UNCTAD 2001).

3.1 Inclusive financial development: What do we mean by it?

Inclusive financial development is *the development of the financial system that is biased towards the poor*. . A stronger definition of inclusive financial development is that it is financial development that is actually driven by access of the poor to financial services and products.

It is important to note that inclusive financial development is not the same thing as financial inclusion. The latter simply captures the increasing access of poor households to financial services (for example, the possibility of depositing funds in a financial institution by a poor household in a remote rural village), regardless of its effect on the growth of the financial sector in the economy.² Inclusive financial development implies **both** financial inclusion and growth in the width and depth of the financial sector. Thus, inclusive financial development will occur when the inclusiveness of the financial sector does not retard its growth possibilities. Clearly, it is possible for policy-makers to require financial institutions by government regulation to open branches in remote regions of the country, so that the poor can access these branches. However, if such government intervention leads to the creation of unviable branch expansion that itself impedes the development of the banking system in the country or the efficiency of financial intermediation, such an attempt to bring about financial inclusion may not necessarily lead to inclusive financial development, and have negative effects on economic growth, and hence, on poverty reduction. Put in another way, inclusive financial development should be a pattern of financial development that should **simultaneously** lead to higher economic growth and reductions in social exclusion and income inequality.

² Information on financial inclusion is available in web-sites such as www.afi-global.net. The data on financial inclusion in the Asia-Pacific region is patchy, with few systematic studies on the extent of financial exclusion in the region. An exception is the report of the Committee on Financial Inclusion constituted by the National Bank for Agriculture and Rural Development in India (NABARD, 2008). The committee reports that 51.4 per cent of farmer households are financially excluded from both formal / informal sources, and of the total farmer households, only 27 per cent access formal sources of credit, with one third of this group also borrow from non-formal sources. Overall, 73 per cent of farmer households in India have no access to formal sources of credit.

3.2 Inclusive financial development: How do we measure it?

Measuring inclusive financial development is important as it allows us to assess to what extent a country's financial system is inclusive, relative to other countries in the region. It also allows us to examine the relationship between inclusive financial development and the relevant MDGs that financial sector may be expected to have an impact on.

To measure inclusive financial development in the Asia and the Pacific, we need indicators that can be calculated using data which is readily available for as many countries as possible in the Asia-Pacific region. We propose two sets of measures of inclusive financial development. The first is the share of firms in total firms in the country that have access to credit. Allied with this is the share of firms in the country which are owned by females. We call these measures **the Firm Based Measures of Inclusive Financial Development**. The data for this measure is available from the World Bank's World Development Indicators. The second set of measures is the proportion of the country's population who are depositors in microfinance institutions, along with the proportion of borrowers who are women, and the average loan balance and deposit balance per borrower/depositor as a ratio of Gross National Income (GNI) per capita. The data are available from www.mixmarket.org, which is a global, web-based, microfinance information platform. It provides information to sector actors and the public at large on microfinance institutions (MFIs) worldwide, public and private funds that invest in microfinance, MFI networks, raters/external evaluators, advisory firms, and governmental and regulatory agencies. MIX Market currently provides data on over 1400 MFIs, several of whom are based in Asia and the Pacific.³ We call this set of measures **the Household Based Measures of Inclusive Financial Development**.

We start with the Household Based Measures of Inclusive Financial Development, and provide estimates of it for countries in Asia and the Pacific for which we have data. We do this in Table 1. Considering the average loan balance per borrower (as a ratio of Gross National Income per capita), we can see countries in Central Asia have very high loans balances per borrower, indicating significant **depth** in the microfinance sector. For example, Kyrgistan has an average loan balance per borrower as a ratio of GNI per capita of 347 per cent. In contrast, loan balances per borrower is very low in countries like Thailand and Turkey at 5.1 per cent and 4.8 per cent respectively. Not surprisingly, a similar picture emerges when one considers average deposit balance per depositor (as a ratio of GNI per capita) – countries in Central Asia have high deposit balances per depositor.

Using a different indicator of financial inclusion at the household level – the percentage of women borrowers in total borrowers, we find that 91.6 per cent of borrowers in Bangladesh are women. In contrast, only 13.2 per cent of borrowers in Uzbekistan are women. Bangladesh has also one of the highest percentages of depositors in the total population at 18.1 per cent. This may be an indication of the success of MFIs in Bangladesh and their ability to target women in lending activities.

³ The mix market data-base is regarded as the most reliable data-base on microfinance and is widely used by researchers working on micro-finance. The data-base reports data on individual microfinance institutions. We compute simple averages of the requisite variables for individual micro finance institutions for each country in the Asia Pacific region for which the data is available.

Moving on to firm based measures of inclusive financial development in Figure 8, we find that about 75 per cent of firms in Thailand have access to credit while only 8 per cent of firms in Uzbekistan have access to credit. With respect to female ownership, 41 per cent of firms in Georgia and Turkey are owned by women, while only 16 per cent of firms in Bangladesh are owned by women. The low rate of female ownership of firms in Bangladesh contrasts with the high rate of women are borrowers from MFIs in the same country. This shows that the firm and household based measures of inclusive financial development are capturing different dimensions of inclusive financial development, and that one set of measures by itself may not be sufficiently informative of the degree of inclusive financial development in the country.

3.3 Measures of inclusive financial development and their relationship with the MDGs

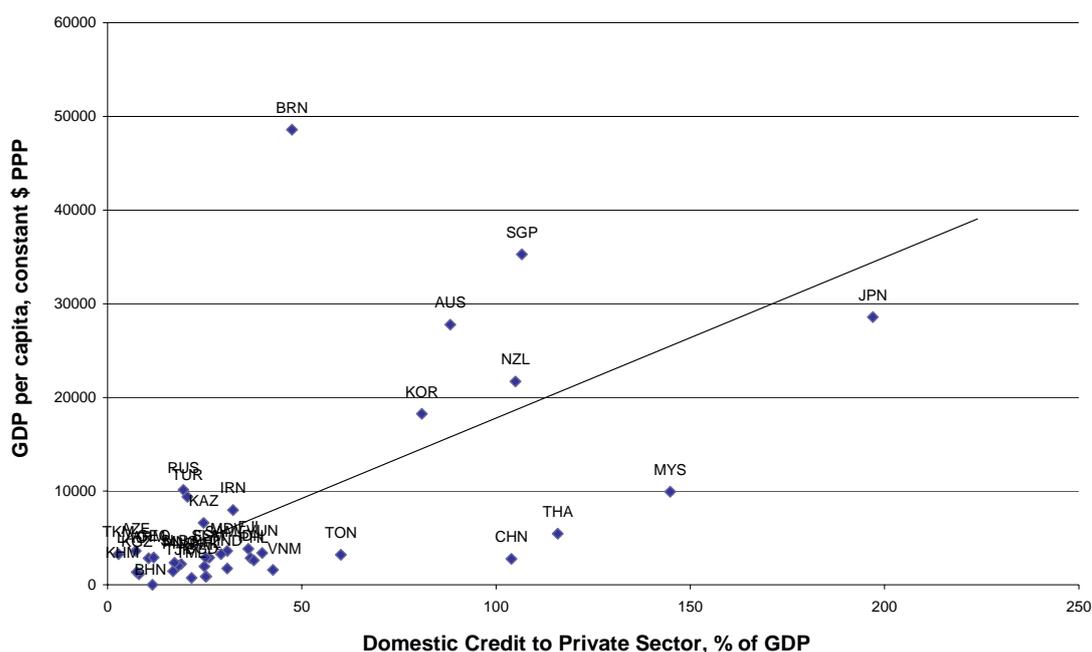
Is there a prima facie case of inclusive financial development being a contributor to the achievement of the MDGs? To address this question, we can examine the relationship between our measures of inclusive financial development and the different indicators of MDG progress. Before we do this, we first need to establish which specific MDG we expect to be impacted on by inclusive financial development. As shown in Figure 9, among the eight MDGs, we expect inclusive financial development to specifically impact on the six MDGs that deal with poverty and hunger, education, gender equality and health. The more inclusive the financial sector in reaching out to the poorest, and the more likely the inclusivity of the financial development will bring about a change in economic and social well-being of poor households. Inclusive financial development will lead to higher income growth of economically and socially disadvantaged households, leading to lower poverty reduction and less hunger among members of the household. As depicted in Figure 10, higher income growth will also lead to the likelihood that the poorer households send their children to school and that their nutritional intake is such they are less likely to be prone to chronic and debilitating illness. Higher income growth of poor households also allow them to access costly health services that may not have been within reach when they had less income. Therefore, higher income growth of poor households brought about by inclusive financial development is expected to lead to better health and educational outcomes of these households, and by doing so, contribute to the attainment of the MDGs on universal primary education, and on reducing the infant mortality and maternal mortality rates and the HIV prevalence rate. Inclusive financial development is also expected to lead to lower poverty rates (as measured by the \$1.25 dollar a day poverty line, for example) and lower degree of malnutrition among children. The decrease in poverty itself will lead to better educational and health outcomes of poor households.

With respect to the MDG on gender equality, financial development that is particularly inclusive of women may be expected to womens' empowerment and progress in gender related indicators of economic and social development.

We examine the relationship between inclusive financial development and the different indicators of MDG progress in Asia and the Pacific in Figures 11, 12, 13, 14, 15 and 16. We

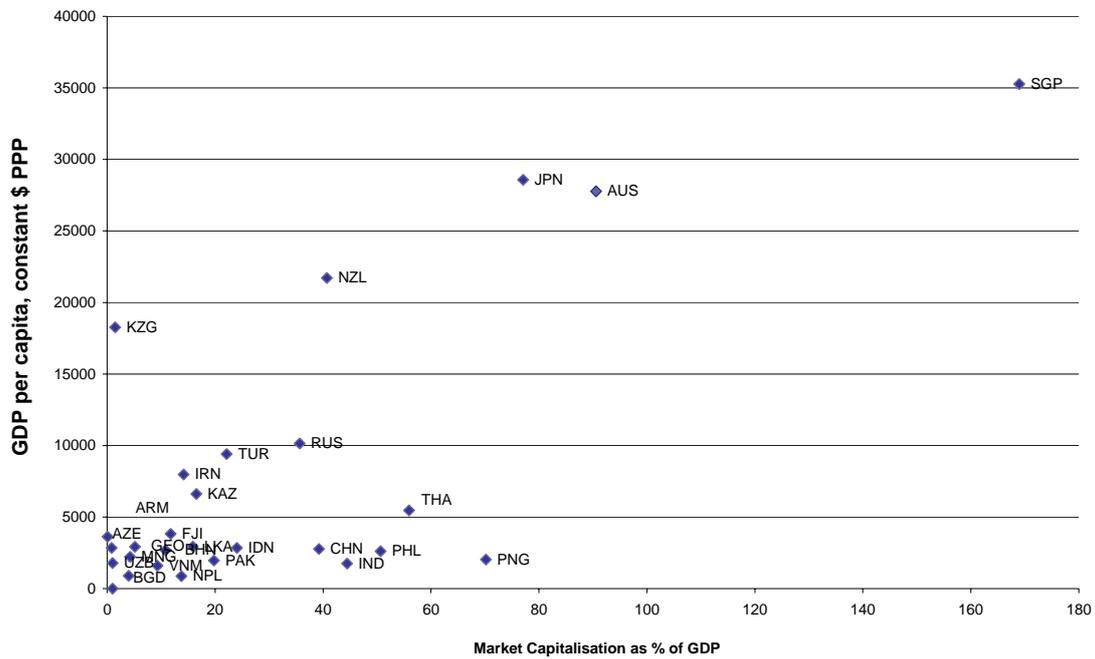
use depositors in MFIs as a percentage of total population as our preferred measure of inclusive financial development. In Figure 11, we plot the relationship between depositors as percentage of population and the poverty headcount ratio (using \$1.25 per day as the poverty line). In Figure 12, we plot the relationship between depositors as percentage of population and the primary enrolment rate. In Figure 13, we plot the relationship between depositors as percentage of population and malnutrition prevalence (using height for age for children). In Figure 14, we plot the relationship between depositors as percentage of population and the under 5 mortality rate. In Figure 15, we plot the relationship between depositors as percentage of population and the HIV prevalence rate. Finally, in Figure 16, we plot the relationship between female ownership of firms and the labour force participation rate of women. In all these graphs, we see a clear relationship between inclusive financial development and the MDG indicator, where higher inclusiveness of the financial sector is associated with improvements in the indicator and progress towards the MDG in question. The most striking relationship is between inclusive financial development and poverty reduction, where a greater degree of inclusive financial development is related with declining poverty rates.

Figure 4. The relationship between credit market based measure of financial development and per capita income in Asia and the Pacific



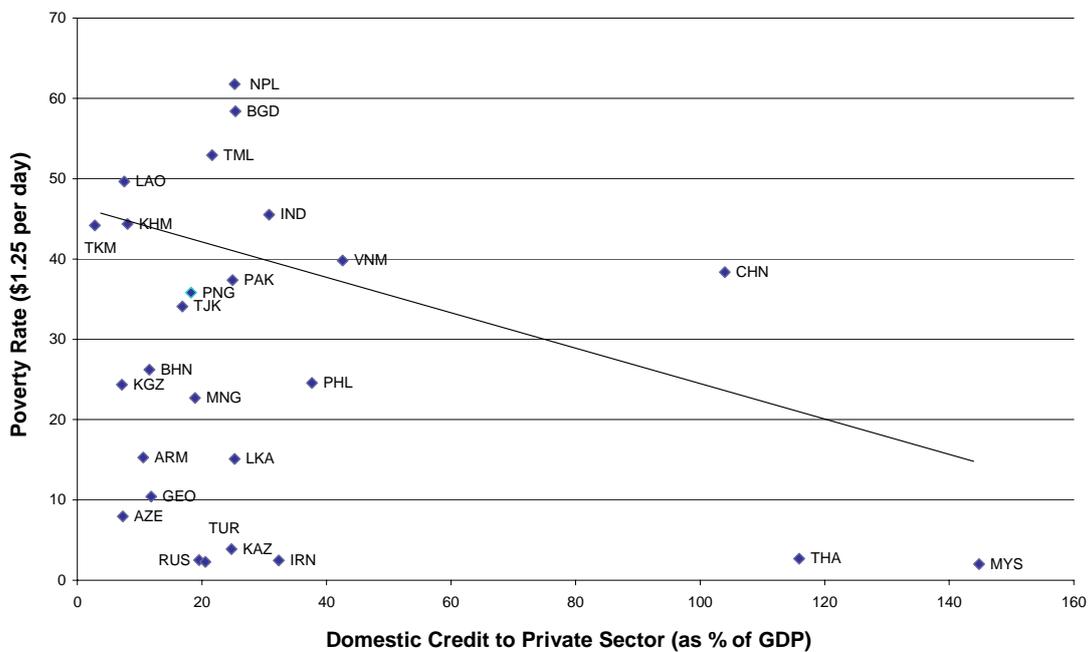
Source: Author's calculations from World Bank's World Development Indicators.

Figure 5. The relationship between equity market based measure of financial development and per capita income in Asia and the Pacific



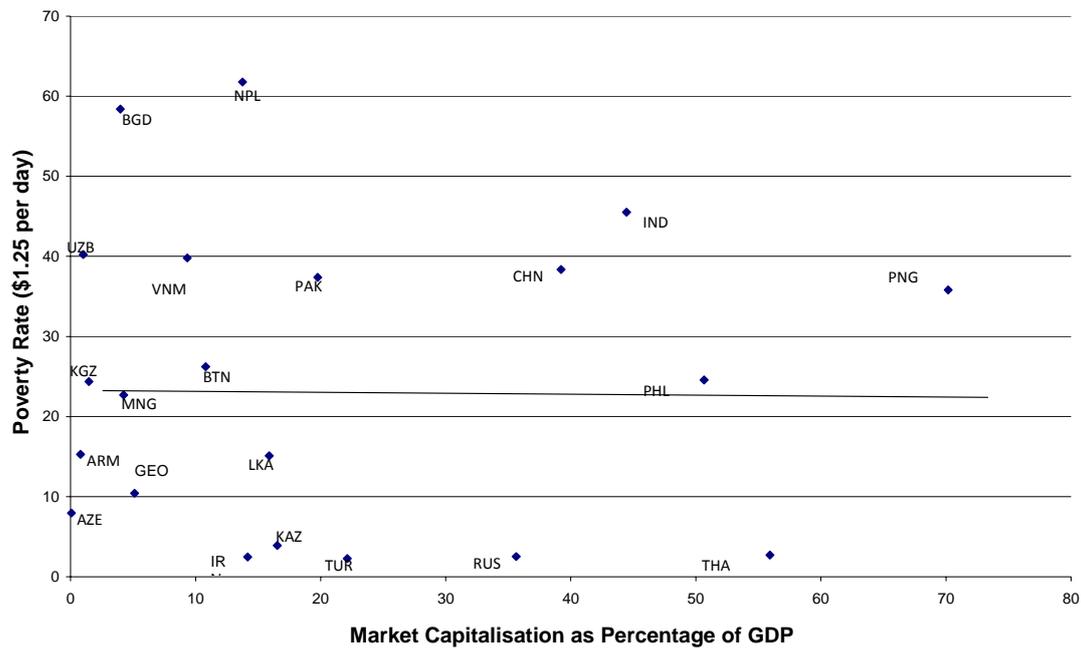
Source: Author's calculations from World Bank's World Development Indicators.

Figure 6. The relationship between credit market based measure of financial development and poverty rates in Asia and the Pacific



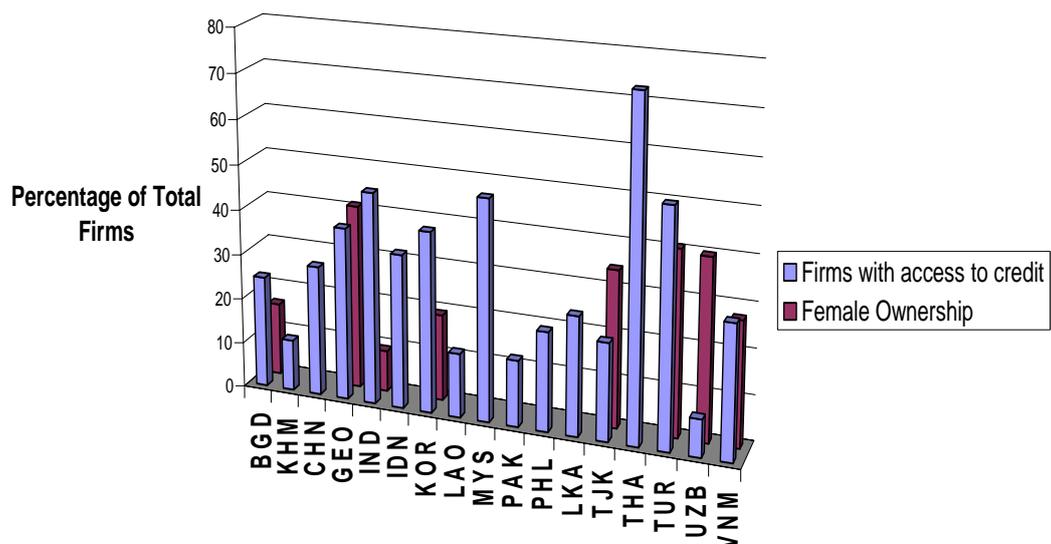
Source: Author's calculations from World Bank's World Development Indicators.

Figure 7. The relationship between equity market based measure of financial development and poverty rates in Asia and the Pacific



Source: Author's calculations from World Bank's World Development Indicators.

Figure 8. Firm based measures of inclusive financial development in Asia and the Pacific



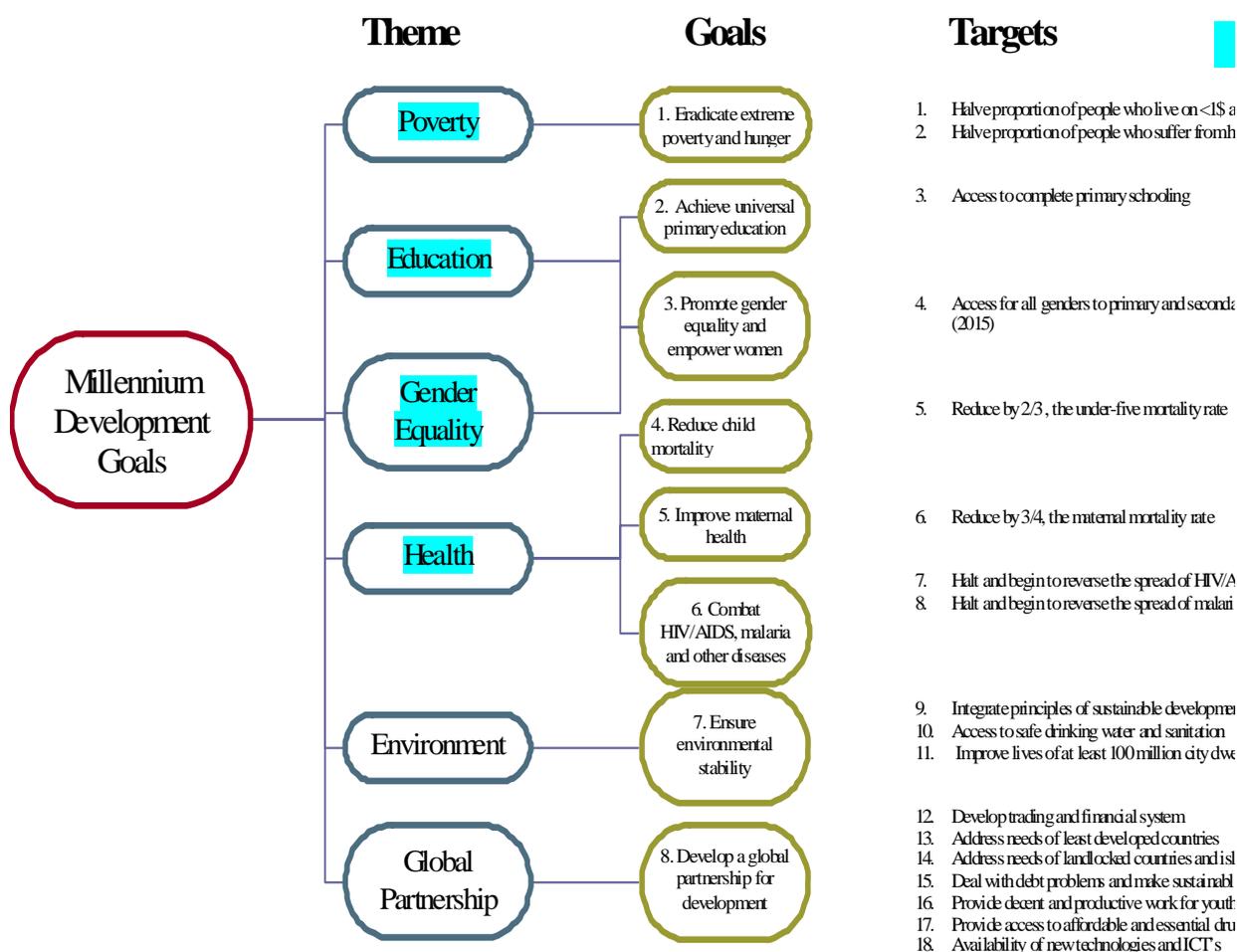
Source: Author's compilation from www.mixmarket.org and World Bank's World Development Indicators

**Table 1. Household based measures of inclusive financial development
in Asia and the Pacific**

Countries	Average loan balance per borrower / Gross National Income (GNI) per capita (per cent)	Average deposit balance per depositor / GNI per capita	Women borrowers as per cent of Total borrowers	Depositors as percentage of Population
Afghanistan	86.9	24.8%	69.81	
Armenia	44.6	391.0%	31.11	4.13
Azerbaijan	93.8	305.5%	34.34	0.19
Bangladesh	17.7	6.1%	91.60	18.12
Cambodia	91.8	103.6%	60.71	2.71
China	34.5	1.0%	63.39	
Timor-Leste	26.0	5.0%	82.53	
Georgia	84.0	20.0%	22.29	8.44
India	18.2	5.3%	92.77	0.29
Indonesia	53.8	15.9%	48.13	10.58
Kazakhstan	296.2		45.10	
Kyrgyzstan	347.2	453.5%	62.21	0.49
Lao PDR	33.6	6.0%		0.01
Mongolia	83.5	36.0%	10.27	66.69
Nepal	95.9	17.4%	97.00	2.40
Pakistan	22.8	12.0%	48.70	0.30
Papua New Guinea	56.7	16.5%		2.90
Philippines	22.7	14.0%	70.38	2.99
Russia	79.8	77.6%	40.74	0.03
Samoa	8.4	1.0%	99.81	2.63
Sri Lanka	19.0	7.6%	58.14	5.55
Tajikistan	275.4	773.0%	42.24	0.43
Thailand	5.1		94.49	
Turkey	4.8	0.0%	100.00	
Ukraine	160.8	86.0%		
Uzbekistan	176.8	112.0%	13.24	0.17
Viet Nam	15.2	5.6%	61.74	0.20

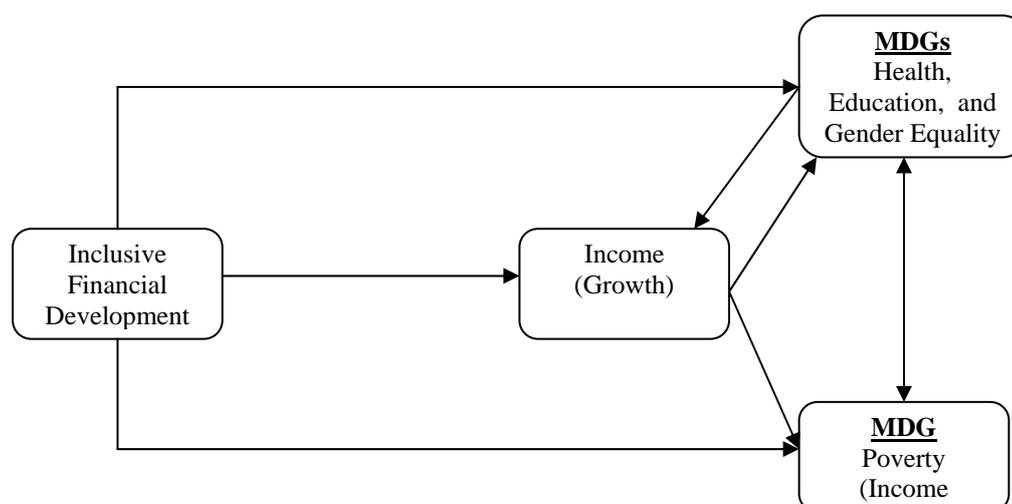
Source: Author's calculations, from www.mixmarket.org and World Bank's World Development Indicators

Figure 9. The expected contribution of inclusive financial development to the MDGs



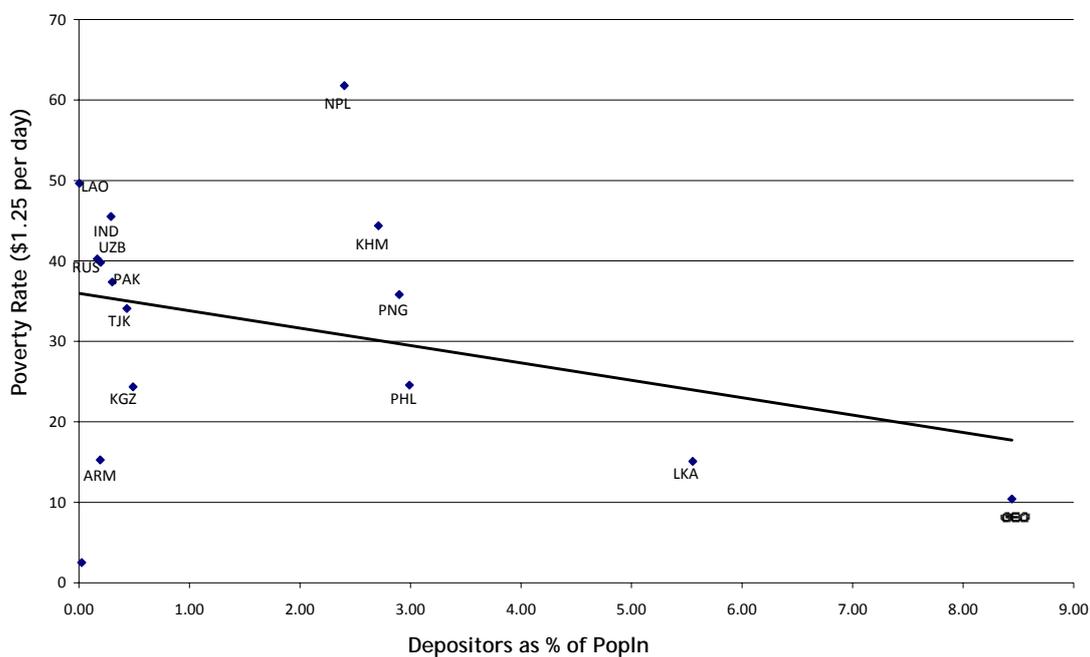
Source: Adapted from Claessens and Feijen (2006)

Figure 10. The relationship between inclusive financial development and the MDGs



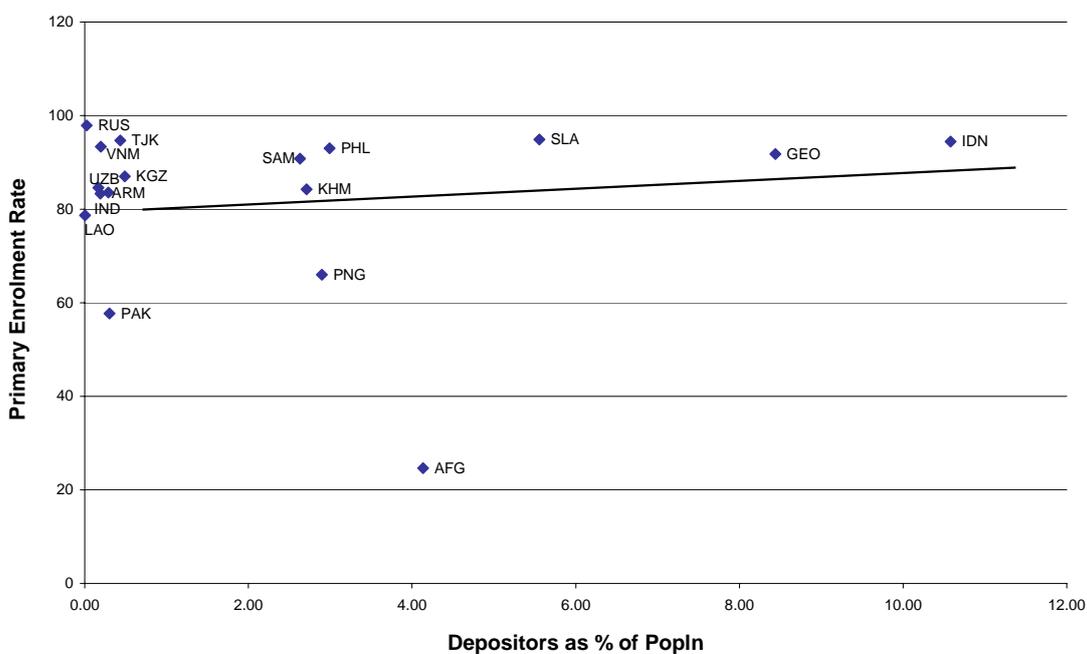
Source: Adapted from Claessens and Feijen (2006)

Figure 11. The relationship between inclusive financial development and poverty reduction in Asia and the Pacific



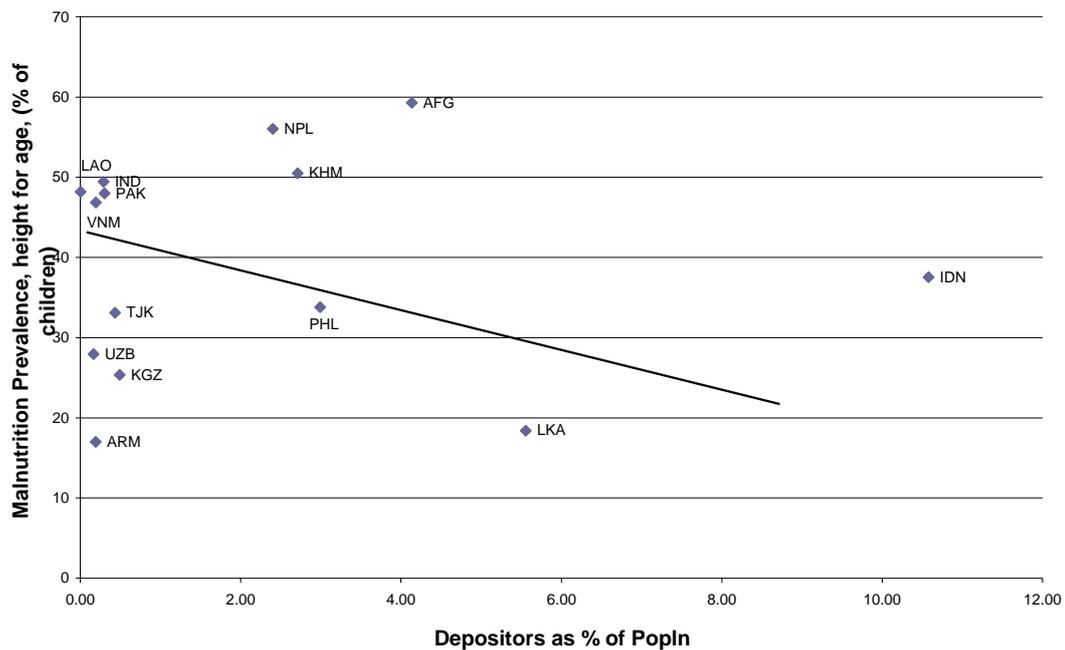
Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

Figure 12. The relationship between inclusive financial development and primary enrolment rate in Asia and the Pacific



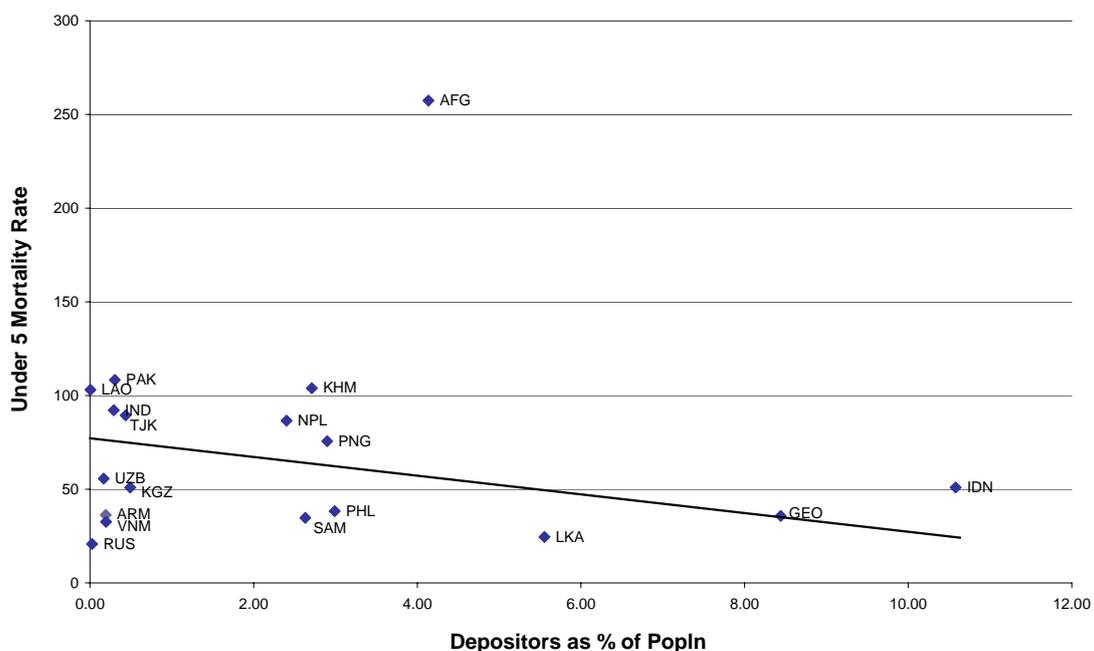
Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

Figure 13. The relationship between inclusive financial development and malnutrition prevalence (height for weight of children) in Asia and the Pacific



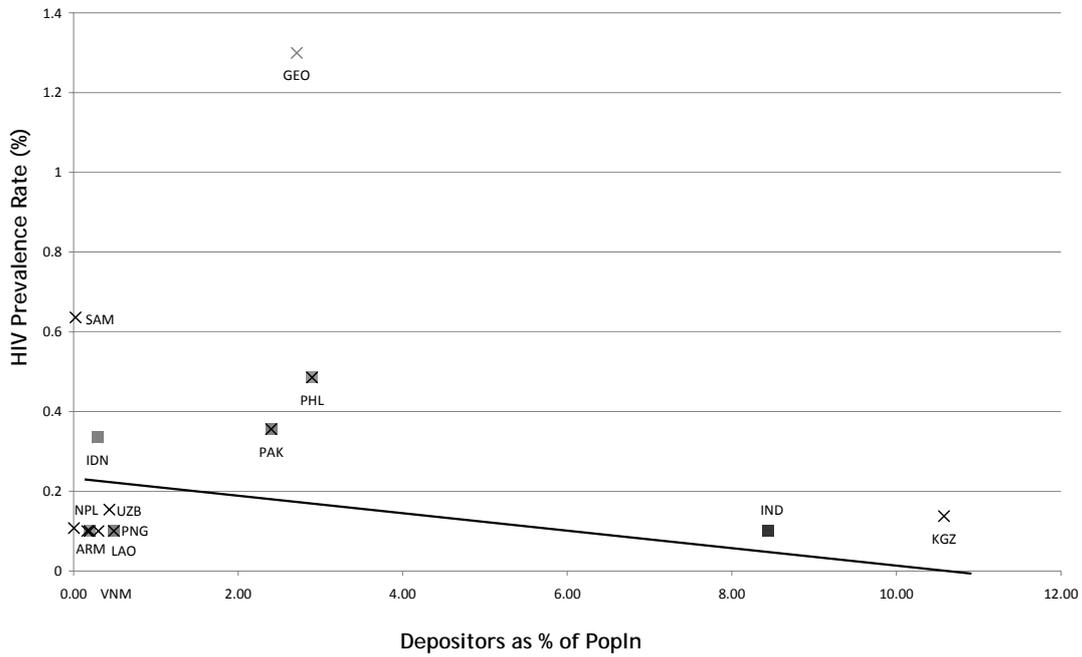
Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

Figure 14. The relationship between inclusive financial development and the under-5 mortality rate in Asia and the Pacific



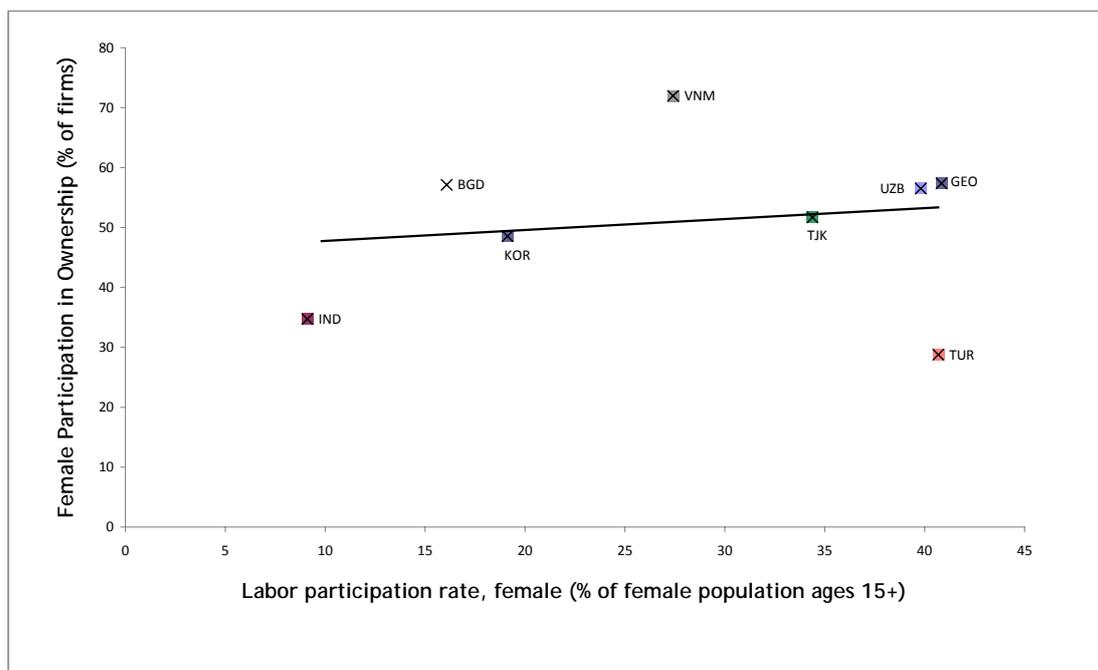
Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

Figure 15. The relationship between inclusive financial development and the HIV prevalence rate in Asia and the Pacific



Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

Figure 16. The relationship between gender-inclusive financial development and the female labour force participation rate in Asia and the Pacific



Source: Author's calculations from www.mixmarket.org and World Bank's World Development Indicators.

4. HOW DOES INCLUSIVE FINANCIAL DEVELOPMENT CONTRIBUTE TO PROGRESS TOWARDS THE MDGS?

In this section, we assess what we know about the manner inclusive financial development may assist in the achievement of the MDGs. We draw from the secondary literature, and rely on existing studies that have rigorously addressed the relationship between inclusive financial development and the MDGs. We first examine the evidence on poverty reduction, then look at educational and health outcomes in turn, and end with the evidence on womens' empowerment.

The evidence will be primarily drawn from the impact of microfinance on the MDGs. By microfinance, we mean any financial institution which is small-scale in size and whose primary clientele are low income households and micro-enterprises. Microfinance institutions, by their very nature, reach out to such households and enterprises, who may have significant problems accessing finance from other sources. Microfinance, therefore, has been the key element of inclusive financial development wherever it has occurred in the Asia Pacific region (ESCAP 2006). However, it is not the only element in inclusive financial development and we will argue in the next section that other segments of the financial system such as commercial banks and innovative ways of providing financial services such as post offices must be leveraged on for accelerated inclusive financial development.

4.1 Inclusive financial development and poverty reduction

Access to finance allows poor people to protect, diversify, and increase their sources of income. We know these are the essential routes out of poverty, and inclusive financial development can help poor households in buffering sudden shocks to incomes and assets. Inclusive financial development also allows poor households and micro enterprises to borrow and invest in productive human capital (such as sending children to school) and productive physical capital (such as agricultural machinery).

Microfinance also helps protect poor households against the extreme vulnerability that characterizes their everyday existence. Loans, savings, and insurance help smooth out income fluctuations and maintain consumption levels even during lean periods. The availability of financial services acts as a buffer for sudden emergencies, business risks, climactic shocks or events, such as a flood or a death in the family, that can push a poor family into destitution (CGAP 2003).

**Box 1: Microfinance Success in a Difficult Institutional Environment:
The Case of Fiji**

The Republic of Fiji includes about 332 islands, of which approximately one-third is populated. About 25 per cent of the population are below the poverty line, according to the Government's 1996 Poverty Report. Given the low density of population in Fiji, it would have been difficult for microfinance institutions to be successful. However, the Government of Fiji established the National Microfinance Unit in 1999 to provide very poor families to engage in productive activities and to grow. The scheme has been successful, with the loans disbursed doubling from 164 thousand Fijian dollars in 2000 to 379 thousand Fijian dollars in 2003. The repayment rate has been 90%. Mostly women have been recipients of the loans.

Source: Kinivuwai, L. (2005). "Developing Micro Finance in Fiji: Challenges and Successes", mimeo.

There is robust evidence that poor households who have access to financial services do better over time in terms of economic well-being than poor households who do not have access to such services. For example, borrowers in a MFI called Bank Rakyat Indonesia increased their incomes by 12.9 per cent compared to increases of 3 per cent in households who did not belong to the MFI. Three-fourths of clients of a MFI called SHARE in India saw significant improvements in well-being and half moved out of poverty. Members in Bangladesh of a MFI called BRAC in Bangladesh who stayed in program for more than 4 years increased household expenses by 28 per cent and assets by 112 per cent. Grameen Bank is one of the most well respected MFI in the world, and members of Grameen Bank in Bangladesh had incomes which were 43 per cent higher than incomes of non-members in villages not served by the Grameen Bank and 28 per cent higher in villages served by the Grameen Bank.

Box 2: Does Microfinance Lead to Poverty Reduction? Evidence from Pakistan

Using data from a survey of clients of the leading microfinance bank in Pakistan, Khushhali Bank (KB), in 2005, Setboonsarng and Parpiev (2008) find that the lending program contributed significantly to income generation activities such as agricultural production and, in particular, animal raising, leading to lower poverty among the client households. The study confirms that KB has been effective, overall, in reaching out to the poor and has rapidly expanded its outreach to remote rural areas of Pakistan, consistent with the government's poverty alleviation program.

Source: Setboonsarng, S. and Z. Parpiev (2008). Microfinance and the Millennium Development Goals in Pakistan: Impact Assessment Using Propensity Score Matching, ADBI Institute Working Paper No. 104.

4.2 Inclusive financial development and achieving universal primary education

Investing in education of their children is the most likely way that poor households can break out of the intergeneration poverty trap. This is perhaps why one of the first things poor people do with new income from microenterprise is invest in their children's education. Studies show that children of microfinance clients are more likely to go to school and stay in school longer. Student drop-out rates are much lower in microfinance-client households (CGAP 2003). To support this priority, many microfinance programs are developing new credit and savings products specifically tailored to school expenses.

The evidence on the effect of inclusive financial development in promoting universal primary education is strong. A longitudinal study in a BRAC area in Bangladesh found that basic competency in reading, writing, and arithmetic among children 11–14 years old in member households had increased from 12 per cent of children at the start of the program in 1992 to 24 per cent in 1995. In non-member households, only 14 per cent of children could pass the education competency tests in 1995. An ethnographic study of a Grameen village shows a much higher levels of schooling of Grameen children compared to children of non-members. Almost all of the girls in Grameen households had some schooling compared to 60 per cent of girls in the comparison group; 81 per cent of Grameen boys went to school compared to 54 per cent in non-Grameen households (CGAP 2003). This is also substantiated in the World Bank study in 1998, which found higher levels of schooling for children of all credit program participants and statistically significant higher rates of schooling for girls in Grameen households.

Evidence is also available from other countries. An impact study of a microfinance program in Uganda, conducted for the USAID-AIMS project, showed that client households invest more in education than non-client households. Microenterprise revenues were important in financing the education of their children for over half of the client households. Clients also were significantly more likely than non-clients to pay school charges for a non-household member. This has implications for keeping orphans and the children of households affected by HIV/AIDS in school.

A similar study of Zambuko Trust clients in Zimbabwe found positive impacts on enrolment ratios for boys 6–16 years old from 1997–99. Over the same period, school-enrollment ratios for girls 6–16 declined, who possibly dropped out of school in response to a need to care for the sick. The data for repeat borrowers suggested that cumulative loans increase the likelihood that clients' children aged 6–21 would stay in school. School enrollment among working-class children in Ahmedabad was 55 per cent for girls and 65 per cent for boys 11–17 years of age in 1997. Over the period 1997–99, borrowing from SEWA Bank had a positive impact on boys' secondary-school enrollment rates, which rose to 70 per cent. However, the relationship of SEWA participation to the enrollment of girls at the secondary-school level or of girls and boys at the primary-school level was weak (CGAP 2003).

4.3 Inclusive financial development and improving health outcomes

Illness is generally the most important crisis for poor families. Deaths in the family, taking time off from work when sick, and health-care related expenses can lead to loss in incomes and a reduction in savings. Illness can lead to a spiralling downwards of incomes and assets, as households increasing sell assets and get into indebtedness. Illness is often the main reason why poor households fail to repay loans.

Households of microfinance clients appear to have better nutrition, health practices, and health outcomes than comparable non-client households. Higher and more stable incomes lead to better nutrition, living conditions, and preventive health care. Increased earnings and financial management options that are available with microfinance schemes allow clients to treat health problems immediately rather than waiting for conditions to get worse. One additional benefit of an inclusive financial sector in the form of microfinance institutions is that these institutions also provide health education, usually in the form of short, simple preventive care messages on immunization, safe drinking water, and pre-natal and post-natal care. Some programs provide credit products for water, sanitation, and housing. Several microfinance institutions have developed partnerships with insurance providers to offer health insurance to clients.

Several studies have found positive links between inclusive financial development and improved health outcomes. For example, a study in Ghana found that clients in the microfinance programme, Freedom from Hunger, had better breast-feeding practices, and one-year-old children were healthier than non-client children in terms of weight-for-age and height-for-age. Clients also showed significant positive changes in a number of health practices— breast-feeding immediately after birth (so newborns get colostrum), introducing liquids and first foods to infants, and giving rehydration therapy to children with diarrhea. Another study, commissioned by USAID-AIMS, found that clients in the FOCCAS microfinance program in Uganda, who received health care instructions on breastfeeding,

preventive health, and family planning, had much better health-care practices than non-clients. Ninety-five per cent of clients engaged in some improved health and nutrition practices for their children compared to 72 per cent of non-clients. Thirty-two per cent of clients had tried at least one AIDS-prevention practice compared to 18 per cent for non-clients (CGAP 2003).

A comprehensive longitudinal study of BRAC clients in Bangladesh found that fewer members suffered from severe malnutrition (relative to the control group), and that the extent of severe malnutrition declined as the length of membership increased. A World Bank study for the same country found that a 10-per cent increase in credit to women was associated with a 6.3-per cent increase in mid-arm circumference of daughters. Mid-arm circumference of sons also increased, though by a smaller amount. There was also a statistically significant positive effect on height-for-age for both boys and girls. Another survey of microfinance clients in Bangladesh indicated that rates of contraceptive use were significantly higher for Grameen Bank clients (59 per cent) than for non-clients (43 per cent). Similar findings of increased contraceptive use were reported in a later study. This could be due to greater awareness of contraceptive programs gained by attending group meetings and from increased mobility that allows women to seek out such services (CGAP 2003).

Box 3: Microfinance and Child Health Outcomes in Indonesia

How do households cope with unexpected economic shocks such as drought and financial crisis? And do microfinance programmes help in the manner households cope with these shocks? Using the Indonesian Family Life Survey (1993-2000), DeLoach and Lamanna (2009) find that children living in communities that gained access to small-scale microfinance institutions experienced significantly higher rates of weight gain. Given that the time-period encompasses the large economic shocks brought about by the 1997 financial crisis, the findings are particularly noteworthy, especially in the context of the current global financial crisis. The availability of credit in the wake of income shocks allows households to smooth consumption, any negative effects on child health are lessened. This suggests that inclusive financial development can be a crucial policy tool during the current economic crisis in developing countries.

Source: DeLoach, S. and E. Lamanna (2009). "Measuring the Impact of Microfinance on Child Health Outcomes in Indonesia", Elon University, Working Paper 2009-03.

4.4 Inclusive financial development and womens' empowerment

Microfinance programs have generally targeted women as clients. The evidence suggest that women often are more financially responsible with better repayment performance than men. Also, women are more likely than men to invest increased income in the household and family well-being. Access to financial services can empower women to become more confident, more assertive, more likely to participate in family and community decisions, and better able to confront systemic gender inequities (CGAP 2003). However, it is not obvious that inclusive financial development in itself can deliver better gender equality. Gender-related issues are complex and depend on social and cultural factors. There is needs to be sufficient attention to appropriate program design, such that inclusive financial development can have a strong, positive effect on women's empowerment, resulting in women owning more assets, having a more active role in family decisions, and increasing investment in family welfare.

There is clear evidence that microfinance programs lead to increased decision-making roles of women clients. The Women's Empowerment Program in Nepal found that 68 per cent of its members were making decisions on buying and selling property, sending their daughters to school, negotiating their children's marriages, and planning their family, when traditionally these decisions were made by husbands. World Education, which combines education with financial services, found that women were in a stronger position to ensure female children had equal access to food, schooling, and medical care. TSPI in the Philippines showed that program participation increased the percentage of women who were principal household-fund managers from 33 per cent to 51 per cent. In the control group, only 31 per cent of women were principal fund managers. Results of the Freedom from Hunger studies in Bolivia and Ghana also suggest that program participation led to increased self-confidence in women and improved status within the community. Participants in Ghana played a more active role in community life and community ceremonies, while participants in Bolivia were actively involved in local governments. A survey of 1300 clients and non-clients in Bangladesh showed that credit-program participants were significantly more empowered than non-clients on the basis of their physical mobility, ownership and control of productive assets (including homestead land), involvement in decision making, and political and legal awareness. This empowerment increased with duration of membership, suggesting strong program influence. The study also found, in some cases, that program participation led to an increase in domestic violence. However, over time men and families became more accepting of women's participation, which eventually led to a decrease in violence.

Naila Kabeer (1998) found that in microfinance programs, changes occurred at a personal level in the form of increased self-worth. She also found that women's increased contribution of resources led, in a significant majority of cases, to declining levels of tension and violence. She noted that women often reported feeling an increase in affection and consideration within the household with longer program membership.

5. INCLUSIVE FINANCIAL DEVELOPMENT – SOME ANALYTICAL ISSUES

How is it possible to bring about a more inclusive financial sector that leads to broad-based financial development? In this section, we examine the key segments of the financial sector which could be the cornerstones of an inclusive financial development strategy. These are commercial banks, development finance institutions, microfinance institutions, microinsurance, the stock market and the bond market and . In addition, we look at two specific aspects of inclusive financial development – the use of public networks for financial inclusion and financial innovation that leads to financial inclusion.

5.1 Commercial banks

Commercial banks are usually the first port of call for firms who are considering external finance for their investments. Accessing credit from banks is usually easier for most firms who intend to expand the scale of their economic activities by not being only reliant on internal savings than accessing bond and equity markets. However, due to the presence of informal asymmetries and moral hazard in credit markets, it is usually the case that commercial banks do not want to lend to new customers unless they have some form of collateral (Stiglitz and Weiss 1981). This implies that small and micro enterprises which may

not possess such collateral are less likely to receive loans from commercial banks. In the past, governments have tried to intervene in credit markets to make commercial banks lend to small and micro enterprises or require them to open branches in rural and semi-urban areas, with the expectation that by doing so, banks would be more likely to lend to households and enterprises who may not have received credit otherwise. As Box 4 shows, such state intervention has had mixed success. It is arguable that state directives that force banks to lend to poor households and micro enterprises or make them open branches in remote rural regions can play an important role in inclusive financial development for such policy interventions can bring about financial inclusion only at the cost of financial development or may not be implementable in most institutional contexts.

While commercial banks do not tend to lend to small and micro enterprises and poor households in most circumstances, increasing competition may cause banks to venture into microfinance and specialised lending to targeted groups of poor households (such as self-help groups). One advantage of lending to previously unbanked households is that as these households become richer, they become loyal customers of these banks. Therefore, commercial banks may choose to lend to customers usually reached by MFIs with the objective of increasing their market share. The case of the ICICI Bank in India (discussed in Box 5) is an example of a large commercial bank who saw profit opportunities in the microfinance sector and expanded operations in this area. Clearly, an important strategy for inclusive financial development should be the encouragement of such initiatives by policy-makers by the provision of tax breaks and the development of a different model of prudential regulation for commercial banks involved in microfinance type lending.

5.2 *Development financial institutions*

While development financial institutions are a generic term used to refer to a range of alternative financial institutions including microfinance institutions, community development finance institutions and revolving loan funds, we mean by development finance institutions state-owned term-lending institutions which provide credit at often subsidized rates to industrial units and to the agricultural sector. Development finance institutions also provide loans for sectors such as infrastructure where the high capital costs of initial investment and the high degree of uncertainty with the returns to the investment, at least in the initial years, may discourage most commercially oriented lenders. A specific feature of many development finance institutions are that they subscribe to the equity of firms as well as providing loans to them. The close ties between development finance institutions and firms lead to a reduction in the cost of capital for these firms. Since development finance institutions own a large equity share of the firms they deal with as well as lend considerable capital, they have an incentive to get around the information and monitoring problems associated with arm's length capital market transactions. For many developing countries, development finance institutions are a crucial part of an inclusive financial development strategy as they lend to start-up firms who may not be able to borrow from the market and lend to pro-poor sectors such as agriculture and small industry, as Box 6 shows. Furthermore, the presence of development financial institutions in the financial system can lead to increased financial stability as these institutions provide long-term funds which are less volatile than the short-term loans provided by commercial banks and financing from equity and bond markets. The strong involvement of the government in the ownership and management of these institutions also imply that these institutions are less subject to systemic failure, in contrast to commercial banks which are prone to moral hazard and adverse selection problems in credit markets.

Box 4: The Pros and Cons of State Intervention in Credit Markets

The Indian banking sector has seen the most extensive state interventions in the world. In 1969, as a part of an effort to bring commercial banks under social control so that poverty reduction goals could be pursued, the Government of India nationalised 14 of the largest commercial banks. A nation-wide bank branch licensing rule which sought to increase and equalize bank branch presence across Indian states and to make banks open branches in rural and semi-urban areas, was put into place, where to qualify for a license to open a branch in a census location which already had one or more bank branches an Indian bank had to open four branches in locations with no bank branches. Further, there were priority sector lending requirements where commercial banks had to lend to a large proportion of their funds to agricultural households and small and medium enterprises. Burgess and Pande (2005) find that the policy-induced rural branch expansion in India significantly reduced rural poverty. Furthermore, Loayza et al. (2000) and Athukorala and Sen (2002) find that bank nationalization led to an increase in bank density in the rural and semi-urban areas, and consequently, led to an increase in private saving. This was a benefit of state intervention in the Indian banking sector.

However, Banerjee and Duflo (2001) find that in spite of the stated intentions of the priority sector lending requirement policies, most loans went to the largest of the enterprises which qualified for such loans, and that bank lending was not to the small and micro enterprises who were the most deserving of the state intervention. Furthermore, Cole (2009) find that bank nationalization led to lower quality financial intermediation and slowed employment gains in trade and industry. Thus, state intervention led to development lending goals being met but did not have any discernible effect on the real economy.

Sources: Athukorala, P. and K. Sen (2002). *Saving, Investment and Growth in India*, Delhi: Oxford University Press, pages xiii + 181; Banerjee, A. V. and Esther Duflo (2000). *Inequality and Growth: What can the Data Say*, NBER Working Paper, No: 7793; Burgess, R. and R. Pande (2005). "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment", *American Economic Review*, 95, pp. 780-795; Cole, S. (2009). "Financial Development, Bank Ownership and Growth: Or, Does Quantity imply Quality?", *The Review of Economics and Statistics*, 91(1), pp. 33-51; Loayza, N. et al. (2000). "Saving in Developing Countries", *World Bank Economic Review*, 14(3), pp. 392-605.

Box 5: The Large and Small of Banking: The Case of the ICICI Bank and Microfinance

ICICI Bank, one of the largest private sector banks in India, ventured into microfinance in 2001, but within a short span of time achieved remarkable progress.² The microfinance portfolio of the bank grew from \$16 million to \$63 million (the average loan is \$223) from 2001 to 2003.³ Adopting a partnership model, it has extended credit facilities directly to rural masses. Though it faced major challenges such as information irregularity, inability of poor people to offer collaterals and lack of details of credit history, it could provide credit to the needy rural population and is beginning to develop various financial products like weather insurance, health insurance, remittance services and commodity derivatives. The successful example of ICICI Bank in providing financial services and products to a previously unbanked segment of the population suggest that innovative approaches by commercial banks that use their large size and professional expertise to diversify the risks of lending to poor households, may allow the merger of the large and small in the banking sector – large commercial banks who provide microfinance products and services and are able to reach out to small customers.

Source: ICFAI (2009). Microfinance in India: The Case of the ICICI Bank, ICFAI Business School Case-study.

Box 6. The Role of Development Finance Institutions in an Inclusive Financial Development Strategy: the cases of SIDBI and NABARD in India

The Small Industries Bank of India (SIDBI) was set up as a wholly owned subsidiary of the Industrial Development Bank of India in 1989. Its main role is to promote small scale industries in India and to provide financial support to them. The National Bank for Agricultural and Rural Development (NABARD) was set up by the Reserve Bank of India in 1982 to provide refinancing and make loans and advances to the co-operative banks, regional rural banks and commercial banks for financing production, marketing and investment activities relating to agriculture and allied sectors. These two development banks have been crucial in India's pro-poor strategy and have been protected to a large degree by the Indian government from the financial liberalisation process initiated since 1991.

Source: Sen, K. and R.R. Vaidya (1997). *The Process of Financial Liberalization in India*, Delhi: Oxford University Press.

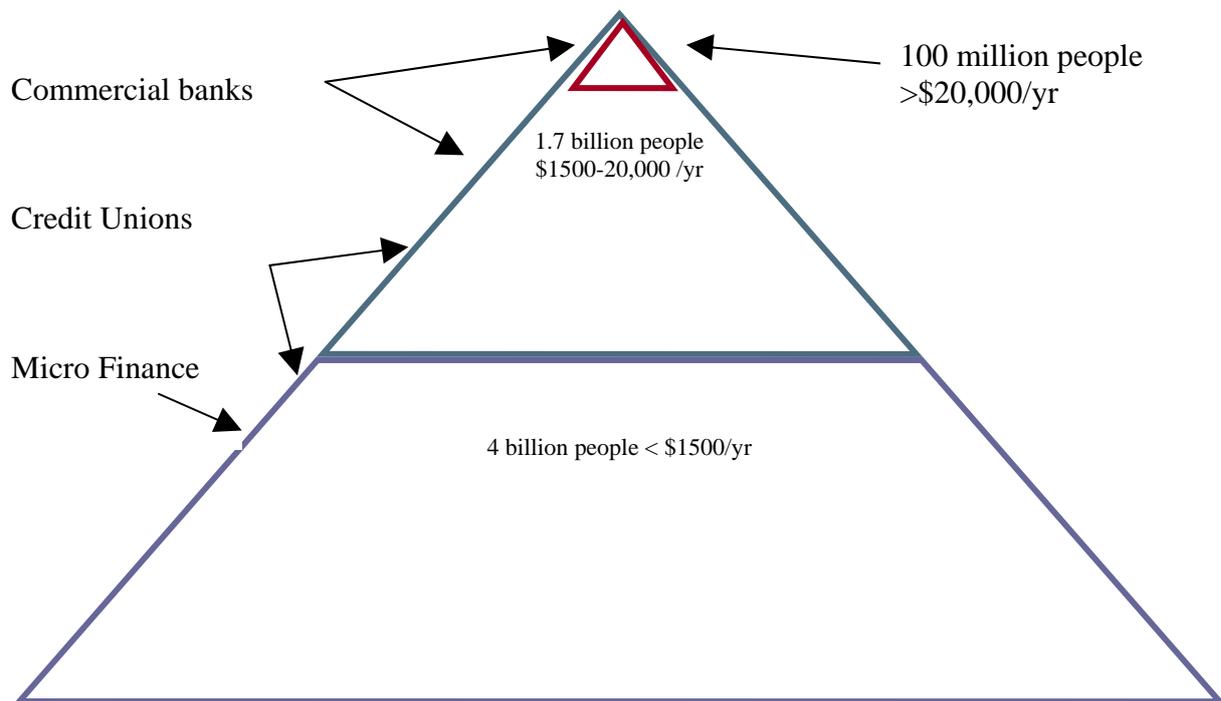
5.3 Microfinance

Microfinance institutions may be of three types: i) informal institutions, such as self-help groups and credit associations, who provide microfinance services on a voluntary basis and are not subject to any kind of control or regulation; ii) semiformal institutions, who are registered entities subject to all relevant general laws, and who provide various financial services but are generally not deposit-taking institutions, or if they are, they cannot grant credit; and iii) formal institutions, who are microfinance banks, microfinance oriented banks and microfinance sensitive banks (Armendariz de Aghion and Morduch 2005, La Torre and Vento 2006). They can all offer credit and are all deposit-taking institutions. For these reasons, they are all under banking regulations. Modern microfinance provide a range of services and products, such as credit products, saving products, payment services and insurance products.

It is well recognised that microfinance is the best way that the financial sector can reach those 'at the bottom of the pyramid' (Prahalad 2005). As Figure 17 makes clear, microfinance's core competency is in reaching the poorest, which ordinarily would be outside the ambit of commercial banks and credit unions.⁴ Commercial banks have traditionally, and mostly still do, reach only the top of the pyramid. Credit unions "have done better in reaching further down the pyramid through their cooperative principles and lower cost structures, but even they do not generally reach below the international poverty line" (Dunford 2006, p. 2). The innovative approaches used by MFIs have made it commercially feasible to reach further down still. It is generally agreed that financially sustainable microfinance operations reach the "near poor" and the "upper poor."

⁴ The numbers of people and their annual per capita expenditures are taken from VISA International and The World Bank. The solid horizontal line approximates an international poverty line.

Figure 17. Microfinance and the bottom of the pyramid



Source: Dunford (2006)

The development of a large microfinance sector in a country can have additional benefits with respect to inclusive financial development. As Box 6 shows microfinance can be used to leverage the development potential of remittances by channelising remittances to the poorest of households, and by ensuring that these households use remittance incomes productively in investment activities.

Two key issues in the development of a microfinance sector in a low income country are the sustainability of microfinance institutions and the nature of regulation for the microfinance sector. With respect to the first, while subsidisation may be an appropriate policy initiative when a MFI is being set up, it is clearly not desirable if the MFI cannot survive in the medium to long term without government subsidies. It is important, then, to devise **smart subsidies** to encourage MFIs to find their feet in the initial stages but to be financial viable in the long-run. With respect to the regulatory framework for the MFI sector, it is important to have a limited set of regulations for informal and semi-formal MFIs. This may be public registration and periodic reporting for all such MFIs and for the MFIs that collect public funds, a set of tailor made rules concerning market structure and prudential norms (La Torre and Vento 2006). It is only the formal MFIs, and especially microfinance banks, where there is a danger that a MFI failure may exacerbate systemic risk and lead to a financial system collapse that the full force of prudential regulation may be brought to bear.

5.4 *Microinsurance*

Micro-insurance is an important element in the financial services package for people at the bottom of the pyramid. The poor face more risks than the well-off, but more importantly they are more vulnerable to the same risk. Microinsurance can provide greater economic and psychological security to the poor as it reduces exposure to multiple risks and cushions the impact of a disaster (NABARD 2008). As is well known, there is a strong demand for social protection among the poor. Microinsurance in conjunction with micro savings and micro credit can make a substantial contribution in keeping the poor and the vulnerable away from the poverty trap and would truly be an integral component of financial inclusion.

A particular challenge in providing microinsurance to the poor is that established insurance companies are reluctant to provide such insurance to the poor as a stand-alone product. A study commissioned by the United Nations Development Programme (UNDP) titled “Building Security for the Poor - Potential and Prospects for Microinsurance in India” states that 90 per cent of the Indian population - some 950 million people - are not covered by insurance and signify an untapped market of nearly US\$2 billion. This is a clear market failure, where the demand for microinsurance is not met by the supply of customized life and non-life insurance products. There is a clear role for the government here in linking microinsurance to social protection schemes or exempting microinsurance from the taxation applied to standard insurance products to encourage the provision of microinsurance by commercial providers.

5.5 *Stock markets*

Stock markets have been seen to play a limited role in an inclusive financial development strategy. The negative effects of stock markets such as short-termism and speculation and the tendency of large firms to expand via take-overs rather than new investment tend to outweigh the possible positive benefits such as encouragement of financial savings, efficient allocation of investment resources and improvements in the market for corporate control (Sen and Vaidya 1997).

However, an important mechanism by which stock markets can contribute to inclusive financial development is via the provision of private equity to venture capitalists and startup firms in developing countries. Private equity is the provision of equity or equity linked capital to privately held firms by professional investors. In recent years, there is increasing interest by professional investors, mostly based in the United States, to invest in privately held firms in developing countries (Lerner 2009). The sources of these funds are pension funds, corporations, insurance companies and high net worth individuals, mostly but not exclusively based in advanced market economies. There is also strong interest in private equity financing by donors such as USAID and the International Finance Corporation. These agencies often give guarantees to private investors that they will receive all or most of their money back, and by doing so, encourage these investors in high return but relatively high risk firms in developing countries, such as for example software firms in India. Private equity financing can be a significant catalyst for entrepreneurial growth in the small and medium enterprise sector and therefore, is an important plank of an inclusive financial development strategy.

5.6 Bond markets

There is a growing consensus among policy makers and academics about the importance of local currency bond markets for financial stability. The development of local currency bond markets in the Asia and Pacific region would contribute to financial stability in several ways. Firstly, by reducing reliance on foreign currency debt – and its concomitant currency mismatches – Asia-Pacific economies would be less likely to repeat the experiences of the Asian financial crisis. Secondly, local bond markets can play an important role in the broader goal of inclusive financial development. Thirdly, the development of local currency bond markets has the potential to mitigate the global shortage of sound and liquid financial assets (Burger et al. 2009).

The lack of a local currency bond market makes it difficult to finance long-term public infrastructure investments and major private modernization projects. It also forces firms to use short-term debt to finance long-term investment, leading to maturity mismatches in their balance sheets or to borrow abroad, leading to currency mismatches. The mix of such maturity and currency mismatches can enhance the fragility of the financial system during periods of exchange rate depreciations and rising interest rates. The lack of development of a local currency bond market and the associated risk of financial instability can lead to reduced policy space for monetary intervention when dealing with external shocks or upward pressure on the domestic interest rate when the government finances its deficits by domestic borrowing. In such a circumstance, if the government is to rely on domestic borrowing to finance social sector expenditures on MDG targets, there is a danger that domestically financed MDG investments can crowd out private investment and lower economic growth, and also exacerbate the possibility of a financial crisis (Vos et al 2007).

Both investor friendly policies and investor friendly laws are important for the development of local currency bond markets. With respect to investor friendly policies, the most important is the pursuit of macroeconomic policies that lead to low and stable inflation. The investor-friendly laws that matter are strong protection for the rights creditors in the event of a default by the supplier of the bond and efficient bankruptcy procedures that lead to the liquidation of assets of distressed firms.

5.7 Financial infrastructure

Perhaps the biggest challenge in inclusive financial development is to find a way to bring into the financial system households and firms who have previously had no dealings with banks and other financial intermediaries (Beck and La Torre 2006). One important way that this can happen is by the use of existing public networks or infrastructure that are available in the remotest of regions and to the poorest of households. The best example of such a financial infrastructure is the post office network, which are usually government run in developing countries. The ubiquitous presence of the post office in the remotest of rural regions in most developing countries combined with the large amount of trust and close ties that village post masters may have with the residents of villages make the post office the most effective mechanism through which the rural poor can be reached. Box 7 provides examples of how the post office has been an important channel for financial inclusion in the Asia-Pacific region.

An example of a successful financial intermediary that has combined the provision of financial services with post office services is the China Postal Savings Bank, which plays a critical role in providing financial services in rural areas. The network of CPSB spreads over 3,000 small cities, and more than two-third of its branches serve the rural areas. At the end of 2006, 130 million Chinese, almost 10 per cent of the Chinese population had deposit accounts with the postal service and the total amount of card deposits reached about USD 30 billion (231 billion Yuan). A remarkable feature of CPSB is the low cost of financial services. A charge of about USD 1.5 (10 Yuan) is required by all the commercial banks when people apply for a debit card. CPSB encourages the clients to use the green card (CPSB's debit card brand), from which the annual USD1.5 fee is exempted. In the countryside of China, USD 1.5 represents the poor's living expense for one month. The exemption of the charge for applying a debit card with CPSB enables the poor to have a bank account and access basic financial services such as savings and remittances. The extensive branch network of CPSB extends across both the countryside and urban areas and enable clients to save regularly and benefit from the convenience of proximity and convenient financial services (WSBI 2009).

Box 7: Leveraging Remittances with Microfinance in Asia and the Pacific

Many countries in Asia and the Pacific send significant numbers of their nationals into labour markets abroad and receive sizeable international remittances. In a study of six countries in the region – Fiji, Samoa, Indonesia, The Philippines, Sri Lanka and Timor Leste – it was found that remittances contribute to microenterprise development and savings, asset building and housing improvements. Microfinance was particularly well suited to address some of the key financial needs related to remittances, given the relatively poor backgrounds of remittance-receiving households and the small size of most of their financial transactions. Microfinance can contribute to leveraging the development impact of remittances by providing money transfer services, saving and cash management products, remittance linked lending and non-financial services such as financial literacy education and financial planning assistance. An enabling business environment can make it more likely that remittances will be invested in micro-enterprise development rather than consumption.

Source: Monash Asia Institute (2007). 'Leveraging Remittances with Microfinance', University of Tasmania, December.

Box 8: Microfinance in Post-Conflict Environments: the Case of Bougainville

Microfinance can play a dual role in post-conflict environments, by supporting survival, reconstruction and social reconciliation objectives in the immediate conflict aftermath, as well as longer-term economic building through microenterprise development. Bougainville, a province of Papua New Guinea, has suffered a ten year period of conflict from 1988 to 1997. The social, political, economic and environmental consequences of the conflict was severe, and the region was characterised by widespread destruction of physical infrastructure, displacement of families, ongoing pockets of armed conflict and a severely traumatised population. In this context, the Bougainville Microfinance Scheme (BMFS) was started with the help of donors in 1998 and significantly increased its outreach to become Bougainville's leading microfinance entity. Therefore, microfinance institutions played an important part in the post-conflict recovery and reconstruction.

Source: Shaw, J. and M. Clarke (2008). "Risky Business in Bougainville: Implementing Microfinance in Post Conflict Environments", RMIT University, mimeo.

5.8 Financial innovation

The growing use of branchless banking – via the use of the internet and mobile phones is inevitable in most developing countries. Branchless banking can be a strong positive force for inclusive financial development if the technology that makes branchless banking possible is available to the poor. Perhaps one of the most important examples of how branchless banking can lead to inclusive financial development is from Kenya. Safaricom, Kenya’s largest MNO offered M-PESA, the mobile payment service for the first time in March 2007. Since then, more than 7 million people—approximately one in four adult Kenyans—have signed up. Largely (though not only) due to M-PESA, the proportion of Kenyans considered to be formally financially included has almost doubled to 41 per cent in just three years. Another example of branchless banking and inclusive financial development going hand in hand is the point-of-sale (POS) devices deployed at agents in Brazil. Following a ramp-up of agents by state and private banks, by 2005 every municipality in the country had a financial service point, changing the geography of financial inclusion (CGAP-DFID 2009). As a consequence of these examples, there is significant interest among donors in branchless banking as a mechanism for poverty reduction and for achieving the MDGs.

6. POLICY RECOMMENDATIONS

Deepening and widening the financial sector such that it both increases in size and scope and providing increasing access to poor households and small and micro-enterprises is a key priority for countries in Asia and the Pacific. For this to occur, policy-makers must encourage both the development of the financial system *and* its inclusivity. Policies that bring about synergies between the two objectives should be emphasised over and above policies that may contribute to the attainment of one objective at the cost of another. Both financial development and its inclusivity are essential for achievement of the MDGs in Asia and the Pacific.

Box 9. The Post Office can be an Important Channel for Financial Inclusion

Postal Services have long been one of the friendliest services provided by the governments – a service that has reached the doorsteps of the poorest of poor even in the most remote area. In fact postal networks tend to be the densest existing access infrastructures - especially in rural areas. In the rural areas of some of the CIS countries, 10 to 25 post offices exist compared to just one bank branch. In India there are 155,034 post offices (139,173 of those are in rural areas), serving an average of 7174 persons per post office. Most post offices have a long tradition in serving the under-banked population.

For a large number of people living in rural areas, a postal savings bank is the only financial service available. Even in the urban areas the access barriers to other financial institutions effectively leaves the postal financial services as the only viable option for a large number of citizens. The importance of postal savings bank can be seen from the total deposits in various postal savings bank – Japan (1.8 Trillion USD), China (342 Billion USD), India (over 100 Billion USD). The deposits in the postal banks in South Korea, Vietnam, Bangladesh, and Pakistan among others are also very large.

The postal savings bank, in most of the countries, has largely remained an agency function, where the post offices have collected money on behalf of the ministry of Finance or the government. There is definitely a case for the post office to manage the deposits itself and enter into important services like micro credit. For example, the postal savings bank of China has had a substantial success in Microfinance and Retail Banking.

Post Office has also traditionally provided important services like remittances (Money Orders) - both domestic and international - and life insurance. The Domestic Money Order business in China, India, Thailand, Pakistan, Bangladesh, Sri Lanka, Nepal, Indonesia, Vietnam and other developing countries remain very important especially for poor migrant workers to the cities. In recent years, many post offices have joined hands with Money Transfer Organizations (MTOs) to promote international remittances. For example, the business for India Post during 2008-2009 was more than 1.5 Billion USD. Many other post offices in the region also had a similar big business.

For a long time, post offices in the developing countries have provided financial services mostly to those on the fringe of society. However, as has been the case with other state-run services, there has been under-investment in post offices in many countries. Given the large social returns to investment in building up a modern and extensive post office network in countries where financial inclusion still remains a problem, there is a strong argument for high levels of public investment in this neglected but important service in the future.

Source: Asia—Pacific Postal Union Bureau (2009) , “The Post Office as a Channel for Financial Inclusion”, mimeo.

Box 10. Mobile Phone Banking in Remote Regions: the case of Telmar

Even small, post-conflict countries should not be overlooked in their potential for branchless banking. In Telmar, alignment of the government, international donors, and the private sector led to banking the poor using branchless channels. In this case, two large traditional service providers (a bank and an MNO) offered incentives to form joint ventures on a regional basis to reach places where they would not go alone. They successfully bid to offer government payments to citizens on a widespread basis. As a consequence, there was a significant increase in financial inclusion in Telmar, with the Fastpay service offered by the MNO observed in almost every street corner.

Source: CGAP-DFID (2009). “Scenarios for Branchless Banking in 2010”, Focus Note.

6.1 Encouraging financial development

The general thrust of policies should be to promote competition among financial intermediaries so that the efficiency of financial intermediation is enhanced, and that loanable funds can be channelized from savers to investors at the lowest cost. However, competition that puts the stability of the financial sector at risk should be avoided, and there should be strong capital adequacy requirements on banks so that they do not fail. There should not be free bank entry as excessive competition can lead to banks with low net worth which then itself lead to bank collapses that create chaos in the financial system. Policy-makers must balance the competition effects of new entry into the banking sector with the possible instability that it entails and allow new entry when there are significant inefficiencies in the financial system (Sen and Vaidya 1997).

Macroeconomic stability is essential for financial sector development (Claessens and Feijen 2006). High and volatile rates of inflation rates or deflation can be wreak havoc with bank balance sheets and cause financial institutions to engage in short-term speculative investments over long-term productive investments. Macroeconomic policies that are credible and sustainable are preferred over overly expansionary or contractionary policies,

and it is the responsible use of monetary and fiscal policies to meet macroeconomic objectives such as low and stable inflation and low unemployment that crucial for financial sector development.

Policy-makers must encourage the growth in the size of financial intermediaries and in the range of financial instruments offered in capital and credit markets by limiting regulation on branch expansions and bank mergers that do not inhibit competition. A greater range of financial instruments allow for greater diversification of risk, and allow firms to tap funds for investments in ways that are cost-effective. Similarly, with the development of the economy, households prefer more sophisticated financial savings instruments that allow them to minimise the riskiness of their savings and allow them to combine their savings with other products and services such as life insurance. However, a balance must be struck between encouraging excessive innovation in financial instruments which regulators do not understand the mechanisms of their functioning adequately and do not know how to regulate properly, and fostering productivity enhancing innovation. Similarly, while larger sized financial institutions have significant economies of scale and scope and are, therefore, more efficient, it is important to avoid the 'too big to fail' syndrome, which was one important factor behind the recent financial crisis in the advanced market economies.

6.2 Encouraging the inclusiveness of the financial sector

Policy-makers need to encourage microfinance institutions which are particularly able to reach out to the poorest of households and smallest of enterprises. There needs to a balance between onerous regulations and strict accountancy standards that microfinance institutions may find difficult to meet and the absence of regulations and an enabling environment for such institutions which may not allow such institutions to develop financial practices up to professional standards and minimum lending criteria. The absence of such standards and criteria would make MFIs prone to failure and subject to fraudulent practices.

The use of public networks such as postal services should be encouraged for the delivery of social transfers and social protection schemes to provide poor rural households experience in handling financial transactions through these networks and gradually bring them into the formal financial sector. This would break the dependence on informal credit and money-lenders that is characteristic of poor households in rural areas. Regional rural banks and co-operatives should be provided targeted government assistance if they are able to reach out to poor rural and urban households in a sustained manner.

Credit infrastructure should be improved so that banks and other financial intermediaries have access to information on past borrowing of poor households and a credit history can be built up for these households. The larger the pool of information available to financial intermediaries on poor households who may not have sufficient net worth to offer as collateral, the more likely that financial intermediaries will lend to these households.

Legal institutions should be reformed and property rights in land and property be well-defined so that households with some land or property are able to access credit using these assets as collateral (La Porta, Lopez-de-Silanes and Shleifer 2002). Courts should be well-functioning in the event of default of households and the repossession of collateral so that banks are less inclined to lend to households and firms, even when they have some collateral to offer.

Finally, policy-makers should encourage financial innovation that favour the poor. New technology, such as the internet, smart cards and mobile phones can greatly increase financial inclusion. For example, the Bank of Bangladesh has ‘focused on leveraging the potential synergies in creative, cost-saving partnerships between banks, MFIs and telecom/mobile phone service providers to bridging the remaining gaps in financial inclusion’ (Rahman 2009). The government can take the lead in introducing new financial products such as the Mzansi bank account targeted to the black majority in South Africa without prior access to bank accounts, that was initiated by the government owned PostBank along with the country’s top four retail banks.

The key policy issue in inclusive financial development is the trade-off that policy-makers face in striking a balance between policy interventions that encourage the access of the poor to financial services which can have a discernible positive impact on poverty reduction but may be deleterious for financial development and the overwhelming policy priority to enhance financial development such that investible resources are available for capital accumulation and economy-wide productivity growth. The more joined up policy interventions are in promoting **both** financial inclusion and financial development, the more likely it will be that financial development will be broad-based and inclusive and that such financial development will have a significant positive effect on the achievement of the MDGs.

REFERENCES

- Armendariz de Aghion, B. and J. Morduch (2005). *The Economics of Microfinance*, Cambridge: The MIT Press.
- Abu-Bader and Aamer S. Abu-Qarn (2006). *Financial Development and Economic Growth Nexus: Time Series Evidence from Middle Eastern and North African Countries* Israel, Discussion Paper No.06-09, Monaster Center for Economic Research.
- Acaravci, Ali, Ilhan Ozturk and Songul Kakilli Acaravci (2007). “Finance-Growth nexus: Evidence from Turkey”, *International Research Journal of Finance and Economics*, Issue 11 (2007)
- Aghion, Philippe, Eve Caroli and Cecilia Garcia-Penalosa (1999). “Inequality and Economic Growth: The Perspective of the New Growth Theories”, *Journal of Economic Literature*, 37, pp.1615-1660.
- Ahluwalia, M. (1976). “Inequality, Poverty and Development”, *Journal of Development Economics*, 3, pp.307-342.
- Amable, Bruno and Jean-Bernard Chatelain (2001). “Can financial infrastructures foster economic development?” *Journal of Development Economics* , 64: pp.481-498.
- Arestis, Philip, and Panicos Demetriades (1997). “Financial development and economic growth: Assessing the Evidence”, *Economic Journal* 107, pp.783–99.
- Asia—Pacific Postal Union Bureau (2009) , “The Post Office as a Channel for Financial Inclusion”, mimeo.
- Athukorala, P. and K. Sen (2002). *Saving, Investment and Growth in India*, Delhi: Oxford University Press, pages xiii + 181.
- Bandiera, Oriana Patric Honohan and Fabio Schiantarelli (2000). “Does financial reform raise or reduce savings.” *Review of Economics of Statistics*, 82: pp.239-263.
- Banerjee, Abhijit V., and Andrew F. Newman (1993). “Occupational Choice and the Process of Development.” *Journal of Political Economy*, 101, pp.274–298.
- Banerjee, A. V. and Esther Duflo (2000). *Inequality and Growth: What can the Data Say*, NBER Working Paper, No: 7793.
- Banerjee, Abhijit and Esther Duflo (2001). “The Nature of Credit Constraints. Evidence from an Indian Bank”, Mimeo, MIT.
- Barro, R. J. (1997). *Determinants of Economic Growth: A Cross Country Empirical Study*, London/Massachusetts: The MIT Press.
- Barro, R. J. and Xavier Sala-i-Martin (1995). *Economic Growth*, New York: McGraw-Hill.

- Beck, Thorsten and Augusto de la Torre (2006). "The Basic Analytics of Access to Financial Services" World Bank Policy Research Working Paper 4026.
- Beck, T., Ross Levine and Norman Loayza (2000a). "Finance and the sources of growth", *Journal of Financial Economics* 58: pp.261-300.
- Beck, T., Ross Levine and Norman Loayza (2000b). "Financial Intermediation and Growth: Causality and Causes." *Journal of Monetary Economics*, 46: pp.31-77.
- Blanchflower, D. G. and A. J. Oswald (1998). "What Makes an Entrepreneur? Evidence on Inheritance and Capital Constraints." *Journal of Labor Economics* 16(1): pp.26-60.
- Burger, J.D., F.E. Warnock and V.C. Warnock (2009). "Global Financial Stability and Local Currency Bond Markets", mimeo.
- Burgess, R. and R. Pande (2005). "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment", *American Economic Review*, 95, pp. 780-795.
- Cetorelli, Nicole (2002). "The role of financial services in economic growth", *Chicago Fed Letter, The Federal Reserve Bank of Chicago*, Number 173.
- CGAP (2003). "Is Microfinance an effective strategy to reach the Millenium Development Goals?", Focus Note.
- CGAP-DFID (2009). "Scenarios for Branchless Banking in 2010", Focus Note.
- Chongwoo Choe and Imad A. Moosa (1999). "Financial System and Economic Growth: The Korean Experience", *World Development*, 27 (6): pp.1069-1082.
- Christopoulou, Dimitris K. and , Efthymios G. Tsionas (2004). "Financial development and economic growth: evidence from panel unit root and cointegration tests" *Journal of Development Economics* 73, pp. 55– 74
- Claessens, S. And E. Feijen (2006). *Financial Sector Development and the Millenium Development Goals*, The World Bank, Washington D.C.
- Clarke, G. R. G. (1995). "More Evidence on Income Distribution and Growth", *Journal of Development Economics*, 47: pp. 403-427.
- Cole, S. (2009). "Financial Development, Bank Ownership and Growth: Or, Does Quantity imply Quality?", *The Review of Economics and Statistics*, 91(1), pp. 33-51.
- Deininger, Klaus and Pedro Olinto (2000). *Asset Distribution, inequality and growth*. World Bank, Development Research Group, Working Paper, 2375.
- Deininger, Klaus and Lyn Squire (1998). "New Ways of Looking at Old Issues: Inequality and Growth", *Journal of Development Economics*, 57: pp. 259-287.
- DeLoach, S. and E. Lamanna (2009). "Measuring the Impact of Microfinance on Child Health Outcomes in Indonesia", Elon University, Working Paper 2009-03.

- Demirguc-Kunt, Asli (2006). "Finance and economic development : policy choices for developing countries". *Policy Research Working Paper Series 3955*, The World Bank
- Demirguc-Kunt, Asli, and Ross Levine (1996). "Stock market development and financial intermediaries: Stylized facts", *World Bank Economic Review* 10, no. 2: pp. 291–322.
- Demetriades, P.O. and K.A. Hussein.1996."Does Financial Development Cause Economic Growth? Time Series Evidence from 16 Countries", *Journal of Development Economics*, 51:387-411.
- Dunford, C. (2006). "Evidence of Microfinance's Contribution to Achieving the Millenium Development Goals" prepared for Global Microcredit Summit, mimeo.
- ESCAP (2006). "Microfinance for Poverty Reduction: Building Inclusive Financial Sectors in Asia and the Pacific", Development Papers No. 27.
- Goldsmith, R. W. (1969). *Financial Structure and Development*, New Haven/London: Yale University Press.
- Holden, P. and V. Prokopenko (2001). "Financial Development and Poverty Alleviation: Issues and Policy Implications for Developing and Transition Countries", *IMF Working Paper*, WP/01/160.
- ICFAI (2009). Microfinance in India: The Case of the ICICI Bank, ICFAI Business School Case-study.
- Kabeer, N. (1998). " Money Can't Buy Me Love? Re-evaluating Gender, Credit and Empowerment in Rural Bangladesh", *IDS Discussion Paper 363*, Brighton: Institute of Development Studies.
- Khalifa H. G. (1999). "Financial development and Economic Growth: The Tunisian Experience", *Review of Development Economics* 3(3), pp. 310-322
- Khan, M. S., A. S. Senhadji (2000). "Financial Development and (Economic Growth: An Overview", *IMF Working Paper* WP/00/209.
- King, R. G. and R. Levine (1993a). "Finance and Growth: Schumpeter Might Be Right." *The Quarterly Journal of Economics* 108(3).
- King, R. G. and R. Levine (1993b). "Finance, Entrepreneurship and Growth: Theory and Evidence." *Journal of Monetary Economics* 32: pp. 513-542.
- Kinivuwai, L. (2005), Developing Microfinance in Fiji: Challenges and Successes, mimeo.
- La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer (2002). Government ownership of banks. *Journal of Finance* 57 (February): pp.265-301
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny (1998). Law and finance.*Journal of Political Economy* 106 (December): pp.1133–55

- La Torre, M. And G.A.Vento (2006). *Microfinance*, London: Palgrave-Macmillan.
- Lerner, J. (2009). "Private Equity in Developing Countries", mimeo.
- Levine, Ross & Demirguc-Kunt, Asli (2008). "Finance, financial sector policies, and long-run growth", *Policy Research Working Paper Series 4469*, The World Bank
- Levine, Ross, Norman Loayza, and Thorsten Beck (2000). "Financial intermediation and growth: Causality and causes." *Journal of Monetary Economics* 46: pp. 31–77
- Levine, Ross and S. Zervos (1998). "Stock Markets, Banks, and Economic Growth." *The American Economic Review*, 88(3): pp. 537-558.
- Levine, Ross (1997). "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature*, 35(2), pp 688-726.
- Loayza, N. et al. (2000). "Saving in Developing Countries", *World Bank Economic Review*, 14(3), pp. 392-605.
- Mavrotas, G. (2009). "Domestic Resource Mobilization and Financial Development: Looking at the MDGs from a Different Angle?", UNU-WIDER Angle Newsletter.
- McKinnon, R. I. (1973). *Money and Capital in Economic Development*, The Brookings Institution: Washington D.C.
- Monash Asia Institute (2007). 'Leveraging Remittances with Microfinance', University of Tasmania, December.
- NABARD (2008). Report of the Committee on Financial Inclusion in India, Mumbai.
- Ozer, U, (2008). *The Underpinnings of Finance, Inequality and Growth Nexus: Is there a Link between Credit Constraints, Entrepreneurship and Growth in Turkey?*, Phd Thesis, submitted to the University of East Anglia.
- Ozer, U. and K. Sen (2009). "Does Inequality matter in the Finance-Growth Nexus?", *Trade and Development Review*, Vol. 1.
- Parker, S. C. (2000). "Saving to overcome borrowing constraints: implications for small business entry and exit", *Small Business Economics* 15, pp. 223–232.
- Partridge, M. D. (1997). "Is Inequality Harmful for Growth", *American Economic Review*, 87: pp.1019-1037.
- Prahalad, C.K. (2005). *The Bottom of the Pyramid*, Philadelphia: Wharton School Publishing.
- Rahman, A (2009). "Financial Inclusion as a Tool for Combating Poverty", Joesph Mubiru Lecture, Mimeo.

- Rioja, Felix and Neven Valev (2004). "Does one size fit all?: A re-examination of the finance and growth relationship." *Journal of Development Economics* 74 (2004), pp. 429-447.
- Sen, K. and R.R. Vaidya (1997). *The Process of Financial Liberalization in India*, Delhi: Oxford University Press.
- Setboonsarng, S. and Z. Parpiev (2008). "Microfinance and the Millennium Development Goals in Pakistan: Impact Assessment Using Propensity Score Matching", *ADB Institute Working Paper* No. 104
- Shaw, E. S. (1973). *Financial Deepening in Economic Development*, New York: Oxford University Press.
- Shaw, J. and M. Clarke (2008). "Risky Business in Bougainville: Implementing Microfinance in Post Conflict Environments", RMIT University, mimeo.
- Stiglitz, J. and A. Weiss (1981). "Credit Rationing in Markets with imperfection information." *American Economic Review* 71: pp. 393-410.
- WSBPI (2009). *Overview of Microfinance in Asia/Pacific and Selected Experiences from WSBPI members*, report.
- UNCTAD (2001). *Finance and E-Finance for SMEs as a Means to Enhance Their Operations and Competitiveness*, Geneva.
- Vos, R., K. Inoue and M.V. Sanchez (2007). "Constraints to achieving the MDGs through domestic resource mobilization", mimeo.

Appendix: Abbreviations of countries

Abbreviation	Country Name
AFG	Afghanistan
ARM	Armenia
AUS	Australia
AZE	Azerbaijan
BGD	Bangladesh
BHN	Bhutan
KHM	Cambodia
BRN	Brunei Darussalam
CHN	China
FJI	Fiji
GEO	Georgia
IND	India
IRN	Iran, Islamic Republic of.
JPN	Japan
KAZ	Kazakhstan
KGZ	Kyrgyzstan
KOR	Republic of Korea
LAO	Lao People's Democratic Republic
LKA	Sri Lanka
MYS	Malaysia
MNG	Mongolia
NPL	Nepal
NZL	New Zealand
PAK	Pakistan
PNG	Papua New Guinea
PHL	Philippines
RUS	Russian Federation
SAM	Samoa
SGP	Singapore
THA	Thailand
TJK	Tajikistan
TML	Timor-Leste
TON	Tonga
TUR	Turkey
TKM	Turkmenistan
UZB	Uzbekistan
VNM	Viet Nam