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Impact of Regulations on Financing in the Developing and Developed Countries

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Biography of the author
Professor Einarsson is the former dean of the Faculty of Economics and Business Administration at the University of Iceland. He obtained his PhD in Germany. He is the author of 6 books on microeconomics, business administration and cultural economics and over 50 journal articles and conference papers and over 400 shorter articles on economics, fisheries and politics in magazines, newspapers, and on websites. Professor Einarsson is a former Member of the Icelandic Parliament and Chairman of the Board of the Central Bank of Iceland and served as a delegate for Iceland at the General Assembly of the United Nations in New York.

Abstract
The paper describes the importance and impact of regulation on financing in the developing and developed countries using three examples. The paper utilises the concepts of the New Institutional Economics (NIE).

The first example concerns microfinance in the developing countries. Microfinance organizations, which specialize in lending to poor entrepreneurs in the developing countries, tend to be small and the lending activities in which they engage tend to be risky owing to the lack of security.

The second example describes the importance of good regulation on property rights. The absence of formal property rights is one of the principal problems of developing countries, leading to extensive conduct of economic activities outside the official system (i.e. extralegal activities) and a proliferation of unregistered assets which cannot be used to secure loans.

The third example explains how functional law can contribute to rapid growth in organized equity trading in a developed country. Stock markets are very important in enterprise financing. At the outset of regulated stock trading in Iceland, just over ten years ago, there were few rules and the economy was extremely unstable. In the last decade the economy has been in an upswing at the same time as there has been extensive reform in legislation on stock trading.

Regulations on financing are very important for the developing and developed countries and this importance can be described within the concepts of the New Institutional Economics.

Keywords: New Institutional Economcis, microfinance, property rights, stock excahange

1. Introduction

The paper describes the importance and impact of proper regulation on financing in the developing and developed countries using three examples. The paper utilises the concepts of the New Institutional Economics (NIE), which addresses phenomena such as organizations and behaviour, as well as cultural differences among countries and ethnic groups.

Institutions represent the formal and informal rules that impose constraints on individual behavior (North, 1990). Organizations, which include enterprises, are sets of actors who co-operate in production. Transaction costs are the opportunity costs of gaining control of resources. Property rights are defined as the rights of individuals to use resources (Eggertsson, 1990). Property rights can consist in the informal rights to the disposal of tangible objects or intellectual work, or they can ensue from agreements or legislation. Institutions in any economy influence transaction costs and the framework underpinning the rights of individuals to the disposal of property affects outcomes in the economy. Research in the new institutional economics emphasizes transaction costs, agency, and property rights, all of which are relevant for developing countries.

Transaction cost economics explains what transactions are conduced across markets and what transactions are conducted within organizations. Transaction cost economics can be regarded as a part of the framework of NIE. Transaction cost economics is based on two principles of human behaviour: bounded rationality and opportunism.[1] Transaction costs arise because of incomplete information. One person may know more than another in any given transaction, e.g. the seller of a product may know more about a product than the buyer (asymmetric information).

Another reason for imbalance in information is that formal, written rules of law and contracts are often modified or elaborated by unwritten, informal rules of usage. Communities with weak institutions, as in the developing countries, have fewer possibilities and less confidence in the market, which reduces specialization and prevents economies of scale. In a developed environment, enterprises have a system for resolving disputes without intervention by the courts, which is usually an expensive recourse. Such a solution can only exist in a secure environment where the parties involved can

[1] Bounded rationality implies that people are limited in their ability to make complex decisions that require analyzing extensive data. The rational choice model, however, does not recognize such limits on decision making. Opportunism arises because human beings will try to exploit a situation to their own advantage (Williamson, 1985).

trust each other, but trust is obviously an important factor in economic transactions (Clague, 1997).

Agency theory distinguishes between a positive theory of agency and the theory of principal and agent. The positive theory of agency looks at organizations as a nexus of contracts. It explains why organizational forms are the way they are. Agency theory can also be regarded as a part of NIE. The theory of principal and agent is the main element of the contemporary agency theory. This theory takes risk into account. In its simplest form, a relationship exists between a single principal and a single agent. The agent carries out a task for the principal and incurs some cost. The outcome is dependent on the effort he makes (Douma & Schreuder, 2002).

The prerequisite for economic progress is technology, which can be divided into production technologies and social technologies. One of the principal problems impeding economic progress in poor countries is their inability to apply social technologies necessary for progress, such as well designed and secure property rights. Appropriate structure of social institutions is a prerequisite for prosperity and an inadequate institutional environment combined with the inability of government to reform the environment is the major obstacle to economic progress (Eggertsson, 2002). The problems of the developing countries are largely caused by inappropriate institutional environments.

The first example in Section 2 in the paper concerns microfinance in the developing countries. The second example in Section 3 describes the importance of good regulation on property rights. The third example in Section 4 explains how functional law can contribute to rapid growth in organized equity trading in a developed country.

2. Microfinance Institutions in the Developing Countries

Lending to poor entrepreneurs in the developing countries is characterised by high cost and risk where security is lacking. (Morduch, 1997). 80% of the world's population have no access to banking services (Robinson, 1998). The distribution of income among the nations of the world is very unequal; of the six billion people in the world, 1.2 billion subsist on less than one dollar a day, and 10 million children died in 1999 from preventable diseases (World Bank, 2001). In 2000, the gross national income (GNI) at purchasing power parity (PPP) per capita in the world was $7,410. In low-income countries (40% of the world's population) the GNI in PPP per capita was $1,980, but for high-income countries (15% of the world's population) it was $ 27,770 (World Bank, 2002).

Economic growth in the developing countries is uneven but often very slow. Out of 95 developing countries, 28 actually experienced a decline in gross domestic product (GDP) per capita between 1964 and 1999 (United Nations, 2000). There were 1.3 billion inhabitants on Earth in 1900, and this number is projected to increase from today's six billion to eight billion in 2030. Future difficulties in providing access to food, water and shelter will therefore be tremendous (Einarsson, 2001). Increased capital, particularly human capital, in the form of education and knowledge, and social capital, in the form of relationships among people contributing to economic development, is a prerequisite for success. Progress in biogenetic sciences will also greatly assist in the supply of food. The activities of entrepreneurs are very important in this context.

A prerequisite for effective lending to entrepreneurs in the developing countries is saving. The poor people in the developing countries are quite capable of saving (Getubig, Gibbons & Remenyi, 2000) but one of the main problems of lending is the lack of a solid infrastructure capable of ensuring secure savings. Other factors, such as education, health care, a good justice system, efficient communications and transparent government are also of great importance. The most common form of enterprise in developing countries is the family business, where a family or families pool their efforts to start a business and take out a loan to do so. This is a traditional form of activities of entrepreneurs. Microfinance[2] is a system of lending to entrepreneurs. Most of the enterprises using microfinance are small and medium sized enterprises (SMEs) and family businesses. Fig. 1 shows the relation between the conceptual framework of NIE and some elements of microfinance.

[2] One of the earliest forms of microfinance is described by the Danish writer, Karen Blixen. In her book, *Shades in the Grass*, Blixen describes how villagers outside the city of Nairobi in Kenya each put 1.000 rupees into a pot, from which loans could be taken for a specified time for as long as the pot lasted. Sometimes there was a wait for the money to trickle back, and occasionally the register of borrowers preserved in the pot would be consulted and borrowers asked to speed up their repayment so that new loans could be granted.

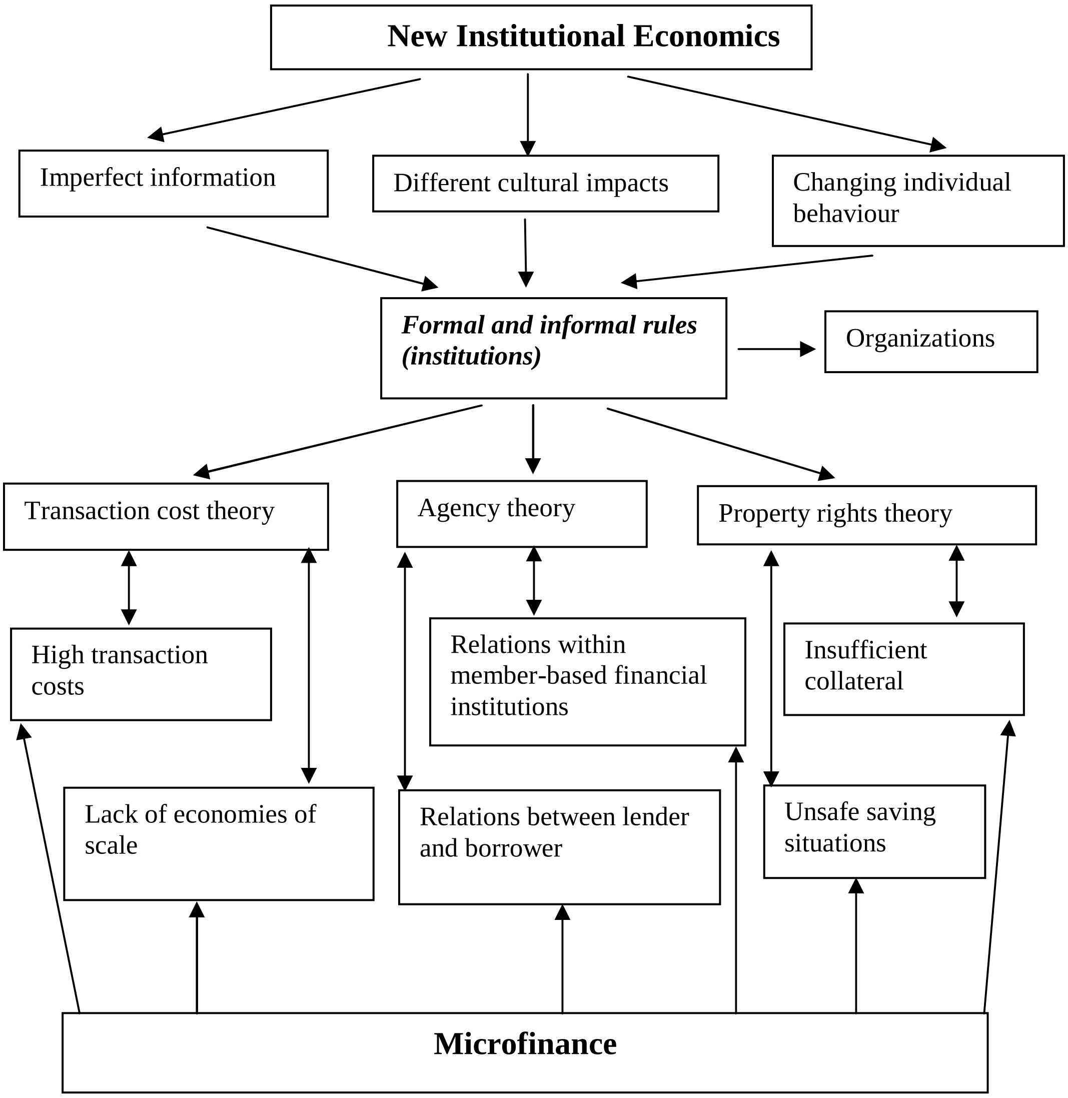

Fig. 1: The new institutional economics and microfinance

For numerous reasons, including corruption, the policy of aid to the poor in the form of subsidized loans has not given the intended results for numerous reasons. Such loans do not guarantee access to credit, and their impact on interest rates discourages saving (Adams, 1998). Institutions are arrangements of human behavior which include both formal and informal rules. If changes are made to the formal side it is important for the changes to be consistent with the informal rules. It is a general principle that if no account is taken of informal rules in the course of reform, it is likely that the reforms will fail.

The Grameen Bank in Bangladesh is a good example that microfinance can give good results because it is adapted to the current environment. The bank is operated as a member-based financial organization. Groups of five members are formed, where each owns less than half an acre of land and saves a specific amount every week. Loans granted by the bank are repaid in 50 weeks and 5% of each loan is paid into a special fund. All the members of the group are liable for the loan, and attendance is mandatory at weekly meetings of the group and at a special development center consisting of 5-8 groups (Johnson & Rogly, 1997).

The Grameen Bank has over two million members; 94% of the borrowers are women, who have proven a three times better credit risk than men (Khandker, 1998). The high proportion of microfinance loans to women as entrepreneurs underscores the importance of this form of lending for women's rights in the developing countries. Increased participation of women in the economy, together with their increased education, is one of the most effective means of bringing about progress in the developing world. Microfinance has another advantage. Poor people rely on an informal system of communal assistance, and regular group meetings in member-based financial organizations contribute to social capital (Rosenweig, 1998; Anderson, Locker & Nugent, 2002). The methodology of microfinance has also been used with good results in the developed countries (Ashe, 2000; Copisarow, 2000; Burrus, 2002).[3]

Microfinance is frequently implemented in the form of group lending, where relations within the group are based on certain rules. In a sense, the groups have agreed on common ownership of financial resources where the rights of disposal are restricted. Relations within the groups and the relations of lender and borrower is the subject of the agency theory. Loans granted to the developing countries by international organizations, such as the World Bank, and earmarked for specific projects fit well within the framework of NIE, that is to say within the context of contractual relations in the agency theory. Under NIE, lending of this kind might be considered unfeasible because it is impossible to exclude opportunistic behavior on the part of the governments taking the loans. For instance, a government might not use the proceeds of the loan for their intended purpose, and the World Bank would have no opportunity for active surveillance or intervention. In a worst-case scenario of this kind, governments might deliberately take loans from international organizations with the premeditated intent of using the funds for purposes other than those provided for in the loan agreement (Toye, 1995). A comparable situation in the context of microfinance would arise if a lender and a borrower were to contract over the use of a loan, e.g. for the establishment of a small enterprise, but owing to the high costs of monitoring, supervision by the lender would be difficult.

[3] An example of regulation which are not in conform with the existing procedures is a study of the coffee trade in Tanzania that finds that the liberalization of the coffee trade in Tanzania resulted in reduced costs (as expected), but surprisingly the transaction cost of financing activities, which had formerly been based on linked informal transactions, increased. This demonstrates that the impact of changed business procedures must be examined closely in order to secure effective implementation (Winter-Nelson & Temu, 2002).

3. The Problems of Property Rights

In many parts of the world, extensive economic activity takes place outside the domestic legal order, and NIE is particularly suitable for analyzing many aspects of such extralegal activities, especially the structure of property rights. Independent economic activity which is not documented anywhere by public authorities forms a part of the system of informal rules that exist in any community. Activities outside the scope of formal rules involve high transaction costs and prevent the formation of capital because assets cannot be used as collateral since their ownership is not formally registered.

In this context the views of Hernando de Soto regarding to secure titles to property are very interesting. He claims that the primary problem of the developing countries is that assets are not registered and therefore not creditworthy and that this is the same problem that the industrial states faced 150-200 years ago (de Soto, 2000). The problem of the developing countries is primarily that they have no possibility of obtaining credit based on assets which are substantial but unregistered. This problem is compounded by the lack of rules and the great migrations from rural areas to urban areas, where a large part of economic activities is extralegal.

The implementation of finance in the developing countries is fraught with difficulties because it is complicated to pledge assets to secure loans when ownership cannot be proven officially and definitively; at the same time, however, the importance of real estate as security for loans is growing (Gelos & Werner, 2002). The difficulty of lending to the poor is due precisely to the lack of security, which in many cases is not that there are no assets to pledge, but that these assets are to a greater or lesser degree unregistered and the title to them is not even clear. This applies not only to real estate but also to movable properties which are important for poor people in the developing countries.

Proper administrative procedures for establishing property rights are extremely important, and slow, inefficient administrative procedures, e.g. registration of companies, assets and operating licenses, are a great impediment to progress. This results in higher transaction costs. Of equal importance is the legislative framework and the will of the authorities to protect and encourage saving, as reflected in measures taken to preserve the integrity of financial systems and the strength of currencies. The lack of a strong framework for saving in the developing countries is related to inefficient property rights which include problematic external regulation and supervision. In the developed countries, the sale of real estate is regarded as a relatively simple act, although it involves a complex process which is hundreds of years old; this process and infrastructure is lacking in many developing countries.

A western entrepreneur will normally obtain capital for his enterprise through loans which are provided through the banking sector. This encapsulates the difference between the entrepreneur in the developed countries and his counterpart in the developing countries. A western entrepreneur with a project can frequently obtain a loan, for which he will usually post security, e.g. in the form of his own home or property belonging to his close family. This avenue is closed to the entrepreneur in the developing countries, even if he owns a piece of real estate, because the property is not registered to his (or anyone else's) name in any definitive manner. Banks in the developing countries do not have the same access to debtors' assets, as do banks in the developed countries.

The adaptation of new ideas that recognize existing informal rules can change matters quickly; for instance, the registration of real estate or movable properties in order to make them suitable as security would transform the possibilities for obtaining credit in the developing countries. The importance of getting a grip on extralegal property rights is clearly revealed by de Soto, who points out that "the recognition and integration of extralegal property rights was a key element in the United States becoming the most important market economy and producer of capital in the world" (de Soto, 2000, p. 148).

4. Legislation on Stock Exchange Trading in Iceland

Legislation on stock exchange trading in Iceland is a good example of regulations which were implemented by following foreign models. In the process of legislation it was taken good care of the existing situation and the economic environment. Over the past 20 years, legislation and procedures in Europe concerning equity trading have converged to become more and more similar in individual countries, although numerous differences remain in the governance of listed companies (Barca & Becht, 2001; Berglöf, 1997). As regards legislation for the protection of shareholders and creditors, however, legislation based on British tradition provides the strongest protection. Legislation based on French tradition provides the weakest protection, and German and Nordic legislation is generally regarded as falling somewhere between these two major traditions (La Porta, de Silanes, Shleifer & Vishny, 1998.

Before 1990, stock trading was relatively rare in Iceland and stocks were not generally regarded as an attractive investment option. There were no rules regarding such transactions. It was quite rare, in fact, for individuals and companies to sell stocks. Many Icelandic enterprises were family companies, which were deliberately kept closed. Also, relations among the various companies and their directors were extremely close, e.g. in political lobbyism and protection of common interests. The period from 1970 to 1990 was also characterised by extreme instability and inflation, but this situation was reversed after 1990. From 1980 to 1990, the average annual inflation was 34%, but from 1991-2003, the corresponding average was 3%.

In 1984, the Central Bank of Iceland took the initiative in introducing regulated securities trading in Iceland. The Central Bank Act included certain provisions relating to such activities. Rules were set by the Central Bank concerning trading activities in the securities market. At first, trading primarily involved Icelandic Treasury Bonds and later housing bonds, which are state guaranteed bonds. Stocks were first listed on the Iceland Stock Exchange in October 1990.

The Agreement on the European Economic Area, which was finalised in 1992 and entered into force in 1994, provided for the free flow of capital, although the Agreement did not require the establishment of a securities exchange in all the member states. However, Community Directive 79/279, which forms a part of the Agreement, stipulated that the member states should appoint authorities qualified to authorise the public listing of securities. Also, numerous EU directives relating to securities trading, e.g. concerning listings, the obligation to notify of holdings in excess of specific limits, disclosure obligations and obligations concerning prospectuses, were incorporated into the first Icelandic legislation on the Iceland Stock Exchange.

The first ICEX legislation of 1993 took account of the Central Bank rules on securities trading and of legislation in neighbouring states, as well as all provisions which were binding for Iceland as a result of the membership of the European Economic Area. The Althing did not make extensive changes to the legislative bill on the Iceland Stock Exchange in the course of its deliberations (*Report of the Economic and Trade Committee*, 1992)

With the enactment of a legislative bill for an Act on Securities Transactions, which was submitted to the Althing at the same time as the legislative bill on the Iceland Stock Exchange, i.e. in 1992, a comprehensive legal framework had been established for securities trading in Iceland. The legislative framework was based on the legislation current at the time and on the legislation in neighbouring countries, which had already been adapted to the rules of the European Union. Also, direct account had been taken of the legislation and regulations of the European Union. It was a common characteristic of the process of enacting these three legislative bills that there was no dispute between the government and opposition and the bills did not undergo any major changes in the course of parliamentary deliberation.

The bills resulted in threefold legislation, i.e. an Act on Securities Transactions, an Act on Undertakings for Collective Investment, and an Act on the Iceland Stock Exchange. In addition to these three statutes, the framework for financial activities in Iceland is completed by an Act on the Supervision of Financial Operations, which, until 1999, was in the hands of the Central Bank, and an Act on Electronic Recording of Securities and several other acts on financial undertakings. Icelandic legislation on financial markets still rests on these six pillars which are showed in Figure 2.

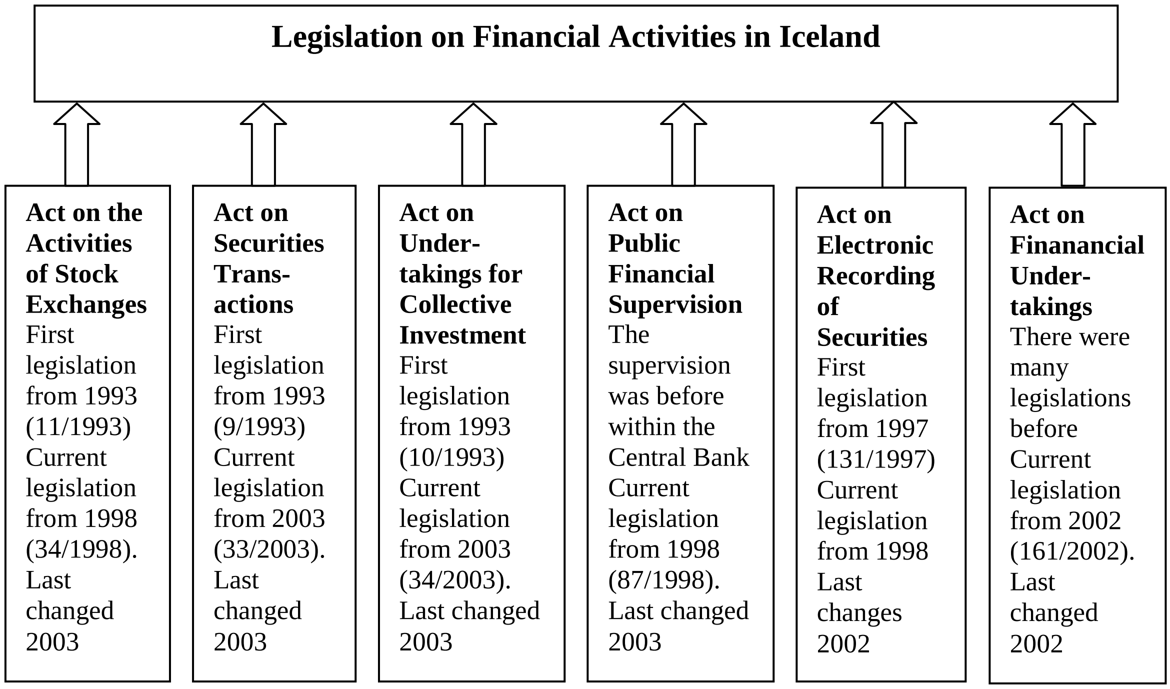

Fig. 2: Principal legislation on financial activities in Iceland

In 1998 a cabinet bill on public financial supervision was passed into law by the Althing (*Cabinet bill on public financial supervision*, 1998). Under the new law, supervision of the capital market was transferred from the Central Bank to a new and independent institution, the Financial Supervisory Authority (FSA). The new Financial Supervisory Authority took over all the supervisory tasks of the Central Bank and the Insurance Inspectorate. This was in line with arrangements in other Nordic Countries, where regulatory bodies in the financial markets have been combined.

Provisions which are unique for Iceland are not prominent in this legislation; on the contrary, Icelandic legislation has been adapted to trends abroad, partly by reference to legislation in the other Nordic Countries and partly by fulfilling the provisions of the Agreement on the European Economic Area. The EEA Agreement has had a profound and positive impact on the Icelandic economy, and has been a decisive factor in making the Icelandic stock market as strong as it in fact is.

The ratio of market value and volume to gross domestic production provide a good illustration of the activities of a stock exchange and their development over a longer period of time. In 1991, the market value of listed stocks corresponded to 0.4% of GDP, but by 2003 this ratio had reached 80%. The trading volume as a ratio of GDP rose from nothing in 1991 to 70% in 2003 (*ICEX Indices*, 2003).[4]

[4] It is interesting to compare the development of the Icelandic stock market with other relatively recent markets. Hungary was the first of the Eastern European countries to set up a traditional stock market along Western lines following the changes after the fall of the Berlin Wall in 1989 (Mitura-Zalewska & Hall, 2000). A comparison of the first

The Iceland Stock Exchange joined NOREX, an alliance of the stock exchanges in Copenhagen, Oslo, Stockholm, Iceland and Helsinki, in 2001. The participation involves the use of the same trading system, and the rules of membership and trading are the same for all the stock exchanges. The alliance engages in joint marketing efforts outside the Nordic countries and works on education and technological and market development. The membership of the Iceland Stock Exchange of NOREX was an important step in the direction of enhancing the credibility of stock trading and the co-ordination of work procedures has also led to a reduction of transaction costs. The flow of information through NOREX is strong, as it is extremely important for traders to have good access to information. Limited information has a particularly inhibiting effect on the function of stock markets in their development phase. Trading in the stock market is often a matter of finding the investment opportunities which yield sufficient returns to survive the transaction costs (Flôres & Szafarz, 1997)

5. Conclusion

The success of member-based financial institutions, such as the Grameen Bank in Bangladesh, has demonstrated the importance of good regulation of microfinance for entrepreneurs, particularly for women, small and medium sized enterprises and family businesses. One advantage of microfinance is through its positive effect on human capital and social capital.

The New Institutional Economics offer numerous possibilities for analyzing the problems of microfinance, such as the complicated agency relationships between lenders and borrowers. The absence of formal property rights is one of the principle problems of developing countries. One of the most important contributions of NIE to microfinance is the analysis of uncertain property rights. This includes activities that are outside the official system (extralegal) and the problem of unregistered assets which cannot be used to secure loans. Property rights are poorly specified in most less developed countries, and the situation is comparable to the situation one or two centuries ago in many industrial countries. A clear definition of property rights is very important for ensuring better collaterals for loans to entrepreneurs. One of the principal reasons for the limited success of the industrial states in promoting development in low-income countries is the "limited understanding of the relation between formal and informal institutions" (Eggertsson, 1996, p. 22).

A regulated stock market has only been in operation in Iceland for slightly more than 13 years. The Central Bank of Iceland took the initiative in trading of this kind and the first stocks were listed in 1990. The legislation of the ensuing years was modelled on trends in the other Nordic countries and Community legislation. Iceland's membership of the European Economic Area

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seven years of operation of the markets in Iceland and Hungary shows that the market value of listed companies as a proportion of GDP was about twice as high in Iceland. The tempo of the privatization could be an explanation for this.

resulted in profound changes in Icelandic financial activities. Legislation and practices in the European stock exchanges are similar from country to country.

Icelandic legislation on financial activities rests on six pillars, i.e. the Act on the Activities of Stock Exchanges and Regulated OTC markets, the Act on Securities Transactions, the Act on Undertakings for Collective Investment in Transferable Securities and Investment Funds, the Act on Official Supervision of Financial Operations and Investment Funds, the Act on Electronic Recording of Securities, and the Act on Financial Undertakings.

The scope of activities of the Iceland Stock Exchange has grown extremely rapidly over the past thirteen years. The growth in stock trading has grown significantly as a ratio of GDP. Trends in the Icelandic stock market show that the concepts of the New Institutional Economics are extremely relevant, as transaction costs have fallen, information has increased and become more generally available, and formal rules have replaced informal rules.

At the outset of regulated stock trading in Iceland just over ten years ago there were few rules and the economy was extremely unstable. In the last decade of the last century, and the first years of the current century, the economy has been in an upswing at the same time as there has been extensive reform in legislation on stock trading. This upswing, together with the reformed legislation based on foreign models, is the principal reason for the success in the development of regulated equity trading in Iceland.

These examples prove to a certain extent how regulations on financing are very important for the developing and developed countries and this importance can be described well within the concepts of the New Institutional Economics.

In future research it would be interesting to analyze further the importance of property rights on financing and how the methods of agency theory can improve the management of financial institutions, especially in the developing countries, based on the framework and the relation between NIE and microfinance illustrated in this paper.

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