Financial Deregulation and Economic Growth in the 
Czech Republic, Hungary and Poland

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Literature Review

Extraction from PhD in Economics

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Abstract

Advocates of financial regulation, Arestis and Demetriades, argue that financial liberalisation does not impact on financial market efficiency and the allocation of investment. Results in this study find that Czech, Hungarian and Polish firms are subject to scrutiny when applying for credit. The firm’s ability to provide collateral, the potential of the proposed investment project and individual financial backgrounds are all factors that are used before loans are offered, and it likely that allocational efficiency is strengthened in these circumstances, and not weakened. Stiglitz has the view that financial repression improves the quality of the pool of loans. Results here indicate that companies in these countries previously had very limited access to credit while government owned companies and government projects received the bulk of credit. After deregulation it became apparent that the quality of the pool of loans was very poor. This study supports Shaw’s assertion that financial deregulation improves financial deepening.

JEL codes: G, G2, G21

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Review of the Literature

1.0 Introduction

The following is an extract from my PhD on Financial Deregulation and Economic Growth in the Czech Republic, Hungary and Poland.

The debate on financial market deregulation has a long pedigree and is marked with conflicting conclusions. The difference in conclusions is due not only to differences in theoretical perspectives, but also to the way in which the link between deregulation and existing institutional set up, is taken into account. Substantial literature, on the role of financial regulation/deregulation has emerged over the decades. There are two extreme views of regulation/deregulation, namely:

i) regulation is necessary in order to reduce market failure, avoid banking crises and increase financial stability

ii) deregulation leads to a more efficient allocation of resources. This leads to reduced costs and increased economic growth

The focus here is on three countries (formerly Central and Eastern Europe), namely the Czech Republic, Hungary and Poland. The positions of other countries are also examined prior to deregulation, during and after deregulation. In this chapter, theories surrounding regulation and deregulation are investigated. Sources have been drawn from books and journal articles from the British Library and libraries of Irish Universities, databases – Emerald and Business Source Elite, and also from the William Davidson Institute, U.S. The literature used dates from 1971 to 2004 and includes all well-known experts on “regulation/deregulation”. It encompasses views of
theorists world-wide, and includes those interested specifically in developing countries/transition countries and developed countries.

The focus is on financial sector deregulation only, as this is the essence of the study. No attempt is made to include deregulation of any other industries. The differing views that dominate current thinking in this area are described in detail, along with current global events in terms of deregulation of financial markets and subsequent impact on economic growth. The experiences of the Czech Republic, Hungary and Poland to date, with deregulation are covered extensively.

The aim of the literature review is to identify and discuss existing theories, to see what areas are currently being debated and to identify where the three countries fit into this debate. Although these three countries differ in terms of structure and size, there are all in a similar position in that they are currently three of the ten Accession countries to the EU. To date there is no study that analyses the impact of financial deregulation on economic growth, on these three countries specifically, from years 1990-2003. This study fills the gap. The aim of the study is to identify, compare and analyse the three countries and in doing so provide new information relating to the deregulation process in transition countries and subsequent effect on economic growth. The results may be applied to the other seven\(^1\) accession countries and other transition countries.

Results of this study will answer the proposal: does financial deregulation lead to and cause higher levels of economic growth?

The chapter is organised as follows:
Section 1 introduces the topic
Section 2 describes the main points of view relating to regulation and deregulation of financial markets
Section 3 analyses the theoretical relationship between deregulation and industrial development
Section 4 analysis the theoretical relationship between industrial development and economic growth

\(^1\) Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia
Section 5 analyses the theoretical relationship between financial sector deregulation and development, and economic growth
Section 6 shows experiences of countries with financial market deregulation and resulting impact on economic growth
Section 7 describes the events and experiences that have marked the process of deregulation for the Czech Republic, Hungary and Poland
Section 8 provides an analysis of sections
Section 9 investigates regulation versus deregulation of financial markets and what lies ahead
Section 10 concludes the chapter and includes strengths and weaknesses of current literature/gaps in literature

2.0 Regulation versus Deregulation of Financial Markets

Regulation is described as “any policy which alters market outcomes by the exercise of some coercive government power”. Deregulation, on the other hand, is defined as the “removal of rules and restrictions”.

Those that argue for regulation in the financial sector believe that competition in the financial markets is essentially imperfect, and therefore deregulation will only encourage further non-competitive behaviour. Here the emphasis is not on deregulation per se, but on the underlying non-competitive structure of the financial markets, which may be consolidated as a result of deregulation. Under these conditions, government intervention and strict regulation may be necessary to deal with the consequences of market failure.

Those in favour of deregulation argue that financial institutions, as intermediaries, affect the level of savings and the distribution of investment funds positively, and therefore encourage economic growth. The premise upon which this conclusion is based is competition. Increased competition between financial institutions leads to an increase in interest rates on investment, reduces the spread between rates on investment and lending, and ensures optimal credit

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allocation by channelling funds to the most feasible investment projects. The overall impact on economic development and welfare is positive.

Arestis and Demetriades\(^3\) believe that some form of repression is necessary and relate their theories to Cyprus. In terms of economic development “financial liberalisation is neither a necessary nor a sufficient condition for economic development”. They say that financial repression with low or negative real interest rates does not prevent economic growth or financial deepening. They cite Cyprus as an example as it has both a low real rate of interest and a level of financial depth which is higher than other developing countries. They do not believe that the real rate of interest has an influence on total saving while recognising that that “financial saving is a more productive form of saving that other forms of saving”. They argue that financial saving is determined by many factors, notably, the volatility of inflation, and economic and political uncertainty. High real interest rates put upward pressure on the exchange rate which affects exports negatively and reduces inward investment. They conclude that “financial liberalisation seems to be neither the only nor the best path on the way to economic development”.

However McKinnon\(^4\) argues that certain groups are not well served in developing countries. Rural areas and small borrowers are omitted from lending resources as governments ‘crowd-out’ resources to service their deficits on current accounts. These groups become financially repressed as a result of financial repression in the financial system and rely on moneylenders, pawnbrokers and co-operatives. Bank credit is much reduced as a result of regulations: depositors receive low or negative rates of interest (if inflation is high), which reduces their incentive to save. Banks also underprice loans to borrowers (which suits governments) leading to reduced bank profit levels. Savers then choose not to save, leading to even more reduced levels of credit. Moneylenders charge very high rates of interest on borrowing, which small groups and rural customers such as farmers, have to pay. Moneylenders\(^5\) have access to useful information and they could legalise their operations and openly use this information in the guise of loan officers in the formal sector.

\(^5\) Ibid. A Preferred Strategy for overcoming repression, pp78
Shaw\textsuperscript{6} also argues strongly for liberalisation, as it “tends to raise ratios of private domestic savings to income. There are higher rates of interest for savers”. He believes that increased liquidity will be apparent as a result of liberalisation, leading to financial deepening, which will reverse capital flight. Liberalising\textsuperscript{7} leads to “superior allocations of savings by widening and diversifying the financial markets in which investment opportunities compete for the savings flow”. The real size of the monetary sector increases and there is an increase in the stability of growth in output and employment.

On the other hand, Sachinides\textsuperscript{8} stresses that regulations allow the government to borrow at a lower cost, although he recognises that research has suggested that regulation leads to inefficiency. Here Arestis and Demetriades\textsuperscript{9} argue that liberalisation means “upward financial repression” with a higher spread between borrower and saving rates of interest. High interest rates on loans will negatively affect small firms while high interest rates on deposits will encourage banks to take on riskier investment projects, knowing they will be rescued by the government if the project fails. They conclude that developing countries need low interest rates and government intervention in the form of regulations. They also state further in Frowen\textsuperscript{10} that the elimination of government ceilings on the lending rate leads to allocative inefficiency as banks have information on categories of borrowers, not individual borrowers. Alternatively financial liberalisation may lead to too high real interest rates and a situation where banks accept all loanable funds leading to excess supply of funds and ‘bad’ loans.

A report by the Council of Economic Advisers\textsuperscript{11} observes (contrary to most pro-deregulation views) that regulation does not constrain competition but forces it into new channels. This leads

\textsuperscript{7} Ibid. pp10-14
\textsuperscript{8} Sachinides, P. “Financial Liberalisation in Cyprus, a public consideration”, \textit{The Cyprus Journal of Economics}, Volume 7, No 2, December 1994, p19-35
\textsuperscript{9} Ibid. Arestis, P and Demetriades, P. “To liberalise or not to liberalise, this is not the question”, Chapter 10: The Ethics of Interest Rate Liberalisation in Developing Countries, pp178-181
to resource misallocation and consumers, shareholders and taxpayers face higher unnecessary costs. Ceilings on interest rates lead to disintermediation as funds flow to other vehicles. These unproductive directions cause industries to operate less efficiently.

An advocate of regulation, Stiglitz\textsuperscript{12} in Fry points that government intervention makes financial markets function better and improves the performance of the economy. He also argues that intervention is necessary in prudential regulation and supervision. Financial repression improves the quality of the pool of loan applicants and increases the firm’s equity.

Caprio et al’s\textsuperscript{13} opposing view, that “the economic performance of many countries deteriorated progressively under financial repression”, is supported by evidence of much lower growth and allocative efficiency for countries with negative real interest rates.

3.0 Analysis of the Theoretical Relationship between Deregulation and Industrial Development

Various views abound regarding the advantages and disadvantages of deregulation/regulation on efficiency of industries. Driscoll\textsuperscript{14} suggests investigating the source of the regulation – if political reasons instigate the regulation, it is likely that allocative efficiency is jeopardised, while if the reason for the regulation is to correct market failure, the result may assume a higher level of allocative efficiency. In the case of the CEE economies they were, prior to 1989, totally controlled by the government for political and economic gain. It is likely that large inefficiencies abounded up to 1989 (prior to liberalisation). These economies did not have opportunities for market failure to appear, as the centralised approach did not allow market forces to be applied.

Stiglitz and Weiss (1981) argue that credit rationing will exist regardless of the state of the financial market, be it liberalised or repressed. Banks must discriminate in some way between borrowers, and as they cannot charge highly excessive interest rates because of the possibility of default, they will ration levels of credit. While this may be the case generally, in these three countries (Czech Republic, Hungary and Poland) prior to 1989, it was almost impossible for private companies to receive any form of bank lending. All resources were used to source government spending i.e. there was ‘crowding out’. While some form of credit rationing may always be evident, the opening up of funding for companies other than government run industries, will always be a positive move for private industry in these countries.

Guasch advocates regulation if it reduces monopoly power, though he believes the government is not the best regulator due to necessary information. Also politicians may use regulation to gain politically, which will not progress industries. As these countries move towards full monetary union with the E.U., they come under the influence of the ECB (European Central Bank). Firstly their economies will become more open, with increased competition from abroad along with increased opportunities. It is likely that national governments will welcome any positive move with FDI (foreign direct investment) while acting to protect local industry. These countries have an industrial sector made up of a large number of SME’s (Small and Medium size companies) and a small number of large companies. The problem of monopolies being a problem is not likely to affect these countries for some years.

Fitzgerald proposes that lifting of regulations may encourage better risk management and narrower margins, but may lead to excessive risk taking by financial intermediaries. Honohan and Stiglitz in Caprio argue that strong regulatory capacity is necessary, however developing countries tend to have environments with weak regulatory capacity. These three countries have moved from developing status to developed status, and as part of their EU accession, they must

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conform fully to EU standards unless they make prior agreements. This includes developing a strong regulatory and legal environment. All three countries have made advancements in these areas, thus ensuring that the business environment is robust and can accommodate all EU criteria.

Others say that deregulation of financial markets will lead to deepening of financial markets and increased competition for curb markets, who should be encouraged to enter formal markets, thus incurring less risk and lowering their costs. Hanson and Rocka\textsuperscript{19} in Fry suggest that taxation by the authorities of financial intermediation increases the financial sector’s instability by moving it into the informal and less regulated and untaxed part of the market (curb market). Caprio et al\textsuperscript{20} states that financial repression causes evasion of regulation and the more costly it is to comply with a regulation, the more likely it is to be evaded. As part of their EU accession process, these three countries have all reduced the size of the ‘black market’ especially Hungary, who had a serious problem with it. It is unlikely that there will be a return to increased activity in the curb market.

Shaw\textsuperscript{21} recognises that certain groups may not want ‘market forces’ and that ‘interventionist’ policies may be more appropriate if market forces are mistrusted. These countries are willing supporters of the EU, and believe that EU status will bring large gains for them. They are strong supporters of free market forces and have already seen the benefits that a free market system has brought.

The Czech Republic, Hungary and Poland have had years of financial repression, under communism. From 1989 onwards, with the dismantling of barriers, these countries moved closer to Western style standards. This included removing financial barriers such as the following:

1. Removal of restriction on capital account
2. Removal of interest rate controls
3. Despecialisation of financial institutions

\textsuperscript{21} Op. Cit. Shaw, 1973
4. Advancement of securities markets
5. Increase in the transparency of financial institutions
6. Harmonisation and simplification of prudential supervision across markets

Prior to 1989 there were very few private companies in operation, especially in the Czech Republic and Hungary. Poland had some private companies but like the other two countries, the government tended to control most companies and there was limited scope to set up privately. From 1989 this began to change, as large centralised companies were reorganised and dismantled, and small private firms emerged. Increased opportunity for firms arose with the deregulation of financial markets, and there was increased access to funds and services. The following section discusses the relationship between industrial development and economic growth.

4.0 Analysis of the Theoretical Relationship between Industrial Development and Economic Growth

1989 saw the beginning of transformation. The three countries moved from a repressed state, to one embracing a market economy. From the beginning of reform, there was the belief that small, privately owned firms would act as one of the main instigators of reform. Jurajda and Terell\textsuperscript{22} argue that small start-up firms were the “stimulus for job creation in early transition”. Jackson et al\textsuperscript{23} state that the creation of new firms is vital for successful transformation, rather than merely restructuring existing firms. Berkowitz and Cooper\textsuperscript{24} agree that start-ups determine to some extent, the success of transition economies. There are however, different views as to how important start-ups actually are – some view them as being more important than state enterprise reform. Others believe that privatisation of state owned enterprises should be delayed in order that investment is available for new firms. Brixiova et al\textsuperscript{25} suggest that transition economies rely

\textsuperscript{22} Jurajda, S. and Terell, K. “Job Growth in Early Transition, comparing two paths”, William Davidson Institute, University of Michigan Business School, August 2002, Paper No. 503, Abstract, pp1
\textsuperscript{24} Berkowitz, D.W. and Cooper, D.J. “Start-Ups and Transition”, William Davidson Institute, University of Michigan Business School, Paper No 84, September 1997, pp1
on the development of a dynamic private sector in order to have increased growth and job creation. Small and medium private firms are the driving force behind the recovery in both output and employment in transition economies. Backhaus\textsuperscript{26} however, advises caution and states that mass privatisation will not automatically lead to a market economy. He states that there must be techniques to test for efficiency of these organisations, otherwise they are likely to continue operating inefficiently indefinitely. Dickinson\textsuperscript{27} proposes that the contribution of small private firms to the economies of Eastern Europe has been difficult to measure.

While many authors agree that developing small firms is a key to increased prosperity, there is still rising unemployment in many of these countries. Kirby and Watson’s\textsuperscript{28} view is that SME’s in Transition Economies contribute to job creation and domestic output. Ghatak et al\textsuperscript{29} agree that SME’s contribute enormously to output and employment, while Weeks\textsuperscript{30} studies contradicted this view. He found that output per worker fell as size declined and that this reduction was larger than the reduction in wages in smaller enterprises.

Kocenda\textsuperscript{31} states that previous studies show that privatisation alone will not increase GDP growth. However when accompanied by institutional reform, the result is positive. They also found that majority foreign ownership leads to increased profitability while concentrated ownership improves performance.

Angresano\textsuperscript{32} argues that Western style economics does not work for CEEC’s. Social impact was not taken into account, and the belief that the destruction of SOE’s would mean the mass

\textsuperscript{27} Dickinson, P.G. “Transforming the Economies of Eastern Europe: an evaluation of the role and contribution of the small scale private sector (with specific reference to Poland)2, European Business Review, MCB University Press, Volume 12, No 2, 2000, pp84-92
\textsuperscript{28} Kirby, D.A. and Watson, A. Small Firms and Economic Development in Developed and Transition Economies: A Reader, Aldershot, Ashgate Publishing Ltd, 2003
\textsuperscript{29} Ghatak, S. et al, “European Integration and the Survival of Polish Small Enterprises”, edited by Homi Katrak and Roger Strange, Chapter 8 in Small Scale Enterprises in Developing and Transitional Countries, Basingstoke, Palgrave, 2002, pp137
\textsuperscript{30} Ibib, Chapter 2, The Efficiency of Small Enterprises in Developing Countries: an Empirical Analysis by John Weeks, pp15-16
creation of private firms has not been forthcoming. The overall result has been loss of industry. He argues that an ‘organised’ market approach (like in China) might have worked better here or the negotiated Scandinavian approach which includes all parties – public, private and all other organisations. The opening up of markets, and the deregulation of financial markets all helped to create a business environment that was conducive to the setting up of new, private firms. Overall the prevailing view here is that new firms contribute positively to economic growth.

5.0 Analysis of the Theoretical Relationship between Financial Sector Deregulation and Development, and Economic Growth

Financial deregulation permits increased financial intermediation. Today there is accepted belief that financial intermediation channels resources towards activities with high rates of return. Obviously the level of intermediation would have to be efficient in order for good investment opportunities to be identified. Efficient intermediation will lower the cost of investment, and savings that are transformed into investment can be used to fund an increased number of projects. Becsi and Wang33 argue that intermediaries allow individual savers access to large investment projects, which they would not be able to access or afford without the pooling of funds of small savers. Savers also get access to riskier and potentially high return projects, without having to bear the full risk individually. They can also invest in long-term projects, without tying up funds for unnecessarily long time periods, and they have access to already screened projects. Everett and Kelly34 argue that the ready availability of credit is an important factor in the growth process, within the widely accepted position that financial liberalisation supports growth in developing economies. The absence of finance hinders the exploitation of opportunities, while efficient and deepening financial markets act to foster investment opportunities. These findings are in line with previous studies: Shaw35, McKinnon36 found that as financial markets developed, the level of per capita income rose at a comparable rate.

35 Op. Cit. 1973
McLean and Shrestha\textsuperscript{37} comment that financial liberalisation increases economic growth by increasing capital flows, which in turn raises the domestic investment rate.

King and Levine\textsuperscript{38} found that banking sector development contributed to economic growth in the long run, while Boyd and Prescott\textsuperscript{39}, Stiglitz\textsuperscript{40} and Arestis et al\textsuperscript{41} all agree that bank development contributes more to economic growth than stock market development. Levine\textsuperscript{42} argues that a well-developed financial system leads to faster growth. The two factors that influence economic growth positively are: having a selection of privately owned banks offering finance to private enterprises and liquid stock exchanges. Others argue that the relationship between financial sector development and economic growth is a demand-following relationship, indicating a causal relationship from economic growth to financial development. This thinking has been more or less outdated by current researchers who point to the supply leading relationship. The belief here is that financial development leads to and causes economic growth.

6.0 Experiences of countries with financial market deregulation and resulting impact on economic growth

As more and more countries move from ‘developing’ country to developed country status, there is an increasing move towards liberalisation of financial sectors. It is likely that this trend will continue and although some theorists now believe the liberalisation can cause more problems than it solves, we are unlikely to see any wholesale reversal towards ‘repression’. The results are varied, and here specific country experiences are reviewed.

\textsuperscript{40} Op. Cit. 1981
Rockoff\textsuperscript{43} states that as far back as the nineteenth century in the U.S. the free banking era in the U.S. produced few fluctuations in the macroeconomy, and he believes that it helped macroeconomic stability. There is recognised belief that macroeconomic stability is an important requisite as a basis for economic growth.

Zank\textsuperscript{44} comments on studies by the World Bank on Africa, Asia, Latin America and the Caribbean which show that privately owned banks operate more efficiently than state owned banks. He believes that financial policy reform and privatisation are the instigators of improved efficiency and stability of the financial system, which in turn leads to a much improved economic performance. Further, when banks are privatised, there is increased confidence in the banking system. This leads to increased activity and increased intermediation, which leads to an increase in savings and investment. These are positive indicators for increased economic growth.

Galbis\textsuperscript{45} examined eight countries (Argentina, Bulgaria, Ecuador, Egypt, India, Kenya, Tanzania and Uganda) experiences with reforms and found that reforms were successful in “maintaining appropriate real interest rate and achieving financial sector deepening” and that efficiency of intermediation increased through reduced operating costs. When interest rates are set at an appropriate rate, this increases the level of credit, thus benefiting industry. This leads to increased levels of economic activity which in turn increases the level of economic growth.

Grabel\textsuperscript{46} studied five countries (Argentina, Columbia, Venezuela, Korea and the Philippines) and discovered that stock market volatility increased during the financial liberalisation period. Caprio\textsuperscript{47} surveyed 86 incidents of bank insolvency and argues that premature financial

\textsuperscript{43} Rockoff, H. Chapter 3, “Lessons from the American Experience with Free Banking”, in Unregulated Banking, Chaos or Order, Forrest Capie, Geoffrey E. Wood, MacMilan Academic and Professional Ltd, Basingstoke, 1971, pp77-104
\textsuperscript{45} Galbis, V. “Financial Sector Reforms in Eight Countries: Issues and Results”, IMF Working Paper WP/95/141, Policy Development and Review Department, Summary, pp3
liberalisation occurred in almost all crises in Latin America in the 1980’s and East Asia in the 1990’s.

Bisat\(^{48}\) investigated countries Argentina, Chile and the Philippines and found that they all experience financial crises following financial sector reforms. Demeriguc-Kunt and Detragiache\(^{49}\) analysed 53 countries\(^{50}\) between 1980 and 1995 and found that improved financial development followed financial liberalisation. However they also found that the fragility of banking systems increased with liberalisation though it did not necessarily mean that a financial crisis would ensue. Low levels of corruption served to protect the banking sector and reduced the severity of a banking crisis if it occurred. They distinguish between repressed financial sectors (those with an average negative interest rate during the three years preceding financial liberalisation) and restrained financial sectors (liberalised from a position of positive interest rates). Their studies showed that repressed sectors gained overall from liberalisation even if a crisis took place, while restrained financial sectors were left without any gain if a crisis followed liberalisation as all gains were nullified by the banking crisis.

Caprio\(^{51}\) agrees with Demeriguc-Kunt and Detragiache (above) that strong law enforcement and a resulting strong institutional environment led to a financial crisis being avoided after liberalisation. Coricelli\(^{52}\) in Caprio focused on the Commonwealth of Independent States and found that “financial liberalisation increased their vulnerability to financial crisis”. While sophisticated financial markets were formed, the majority of the economy dealt in a barter type of exchange. Schull and Hanweck\(^{53}\) studied deregulation in the U.S. and found that mergers, resulting from deregulation, led to banks achieving much increased profitability with no


\(^{50}\) Ibid., Austria, Australia, Belgium, Canada, Switzerland, Chile, Columbia, Denmark, Ecuador, Egypt, Finland, France, Germany, Greece, Guatemala, Guyana, Honduras, Indonesia, India, Ireland, Israel, Italy, Jamaica, Jordan, Japan, Kenya, Korea, Sri Lanka, Mexico, Malaysia, Mali, Nigeria, Netherlands, Norway, New Zealand, Papua New Guinea, Peru, Philippines, Portugal, Paraguay, El Salvador, Tanzania, Syria, Sweden, Togo, Thailand, Turkey, Uganda, Uruguay, U.S., Venezuela, Zaire, Zambia


\(^{52}\) Ibid. Coricelli, F. “Chapter 8: The Financial Sector in Transition: Tales of Success and Failure, pp208

corresponding reduction in costs. Deregulation has led to customers having increased substitutes but the relaxed merger policy meant the development of a small group of large banks. Increased profitability in banks leads to increased investment funds becoming available for viable businesses and worthwhile projects. Once these projects are underway and begin to show returns on investment, this will impact positively on economic activity and growth.

Daianu and Vranceanu\textsuperscript{54} comment that the reality of the ‘invisible hand’ is that markets are imperfect and distortions may increase as a result of further liberalisation. While economists used to believe that opening up of the capital account was a natural part of financial liberalisation, there is now growing belief that some capital controls should be in place in certain situations\textsuperscript{55}.

Gibson and Tsakalotos\textsuperscript{56} concentrated on five European countries\textsuperscript{57} and comment on the effects of financial liberalisation on capital flight. Their results showed that the rates of return were significant for Spain and Portugal, and a decrease in interest rates in either the current period in Spain or the previous period in Portugal increased capital flight in the current period\textsuperscript{58}. Khoury\textsuperscript{59} states that deregulation of the UK financial markets led to “increased competition in both equity and gilt markets, lowered transaction costs and increased market liquidity”. His statistical tests\textsuperscript{60} showed that in the US, deregulation led to increases on the return to equity for banks. Sandor in Bonin and Szekely\textsuperscript{61} argue caution when proceeding with financial liberalisation, as deregulation in Scandinavia, the U.K. and the U.S. led to high rates of economic growth and later, recession.

\textsuperscript{55} Ibid, 4, Capital Controls during Transition to a Mature Market Economy, pp13-14
\textsuperscript{57} Ibid, France, Greece, Italy, Portugal and Spain
\textsuperscript{58} Ibid, 5 Conclusions pp32-34
\textsuperscript{60} Ibid, Chapter 7: The Impact of U.S. Deregulation, pp204
Warman and Thirlwall\textsuperscript{62} argue that in the financial liberalisation literature, there is “no clear distinction made between financial saving and total saving”. They examined Mexico over this period and found “very little evidence that movements in real interest rates have any significant effect on economic performance. Financial saving grew with a positive real rate of interest but also with negative real interest rates, indicating that savings were highly correlated with levels of income”. Dalla\textsuperscript{63} studied the effect of financial liberalisation on Korea and concludes that its mix of government intervention and financial liberalisation was a success. Its results include: positive interest rates, increased competition between banks, improved credit programmes and increased efficiency of the banking system. Improvements in efficiency of the banking system, as a result of financial deregulation, will have wider effects for the macroeconomy. There will be improved access to credit for all firms, which will increase investment opportunities, and lead to economic development and growth.

Fry\textsuperscript{64} found that Uruguay’s financial liberalisation in 1977 did not affect interest rates in that they did not rise to any great levels while Fernandes\textsuperscript{65} in Fry, notes that in Argentina “each financial institution closed by the Central Bank was offering the highest interest rate in the market” at the time of its closure. The overall conclusion here is that the decision of some developing Asian countries to take their own gradual path towards liberalisation, rather than participating in the euphoria of Western economists, was the correct one. Vos\textsuperscript{66}, in Griffith-Jones and Drabek, reviewed the effects of interest rate liberalisation on Argentina, Brazil, Chile, Philippines, Turkey and Uruguay, and concludes that higher real interest rates stimulate higher financial savings i.e. interest bearing financial assets, and lowers household savings while depressing corporate profits and savings. Firms switch to using internally generated funds rather than borrowing at expensive rates.

\textsuperscript{64} Op. Cit. 1995 Chapter 16, pp384
\textsuperscript{65} Ibid. 1995, Chapter 16, pp387
\textsuperscript{66} Griffith-Jones, S. and Drabek, Z. Financial Reform in Central and Eastern Europe, New York, St Martin’s Press, 1995, pp179-220
Clarke\textsuperscript{67} concludes that Chile and Argentina’s problems that led to financial collapse, were exacerbated by high interest rates and argues that positive but low real interest rates are needed to ensure macroeconomic stability, along with broad regulation of the financial system. Williams\textsuperscript{68} investigated Barbados, Jamaica, Trinidad and Tobago, and concludes that “regulation affected market share negatively in all countries researched”.

Hickson and Turner\textsuperscript{69} argue that South Asia’s banking crises would have been limited, if nor for the deregulation which had taken place earlier. Johnston\textsuperscript{70} comments that financial liberalisation (1977-1980) preceded a financial crisis in the 1980’s in Argentina, while Chile and Korea had a gradual process towards financial liberalisation and fared better than those with rapid reform.

In Caprio\textsuperscript{71} Negret and Landa argue that Mexico’s problems did not stem from liberalisation alone, as they already suffered from poor pre-conditions for privatisation and liberalisation, and did not take corrective action at appropriate times. Maskooki\textsuperscript{72} supports the above, arguing that as financial deregulation took place before adequate measures were in place in Mexico, this led to an inefficient banking system leading to destabilisation of the financial sector. Sachs\textsuperscript{73} and Woo point out the “financial panic among international investors brought Pacific Asia to its knees in 1998”. They believe that national weaknesses existed that were exacerbated by a recommendations such as closing financial institutions.

Levine\textsuperscript{74} comments on the consistency of results of previous studies (by various authors on difference countries) on financial systems and economic growth. The conclusions reached are

\textsuperscript{68} Op. Cit. 1996, Chapter 7: Conclusion and Implications for the Future, pp229
\textsuperscript{70} Op. Cit. 1999, Chapter 3: Sequencing Financial Reform and Liberalisation in Five Developing Countries, pp102-103
\textsuperscript{73} Sachs, J. and Woo, W. T. “The Asian Financial Crisis: What Happened, and What is to be Done”, \textit{Harvard Institute for International Development and University of California at Davis}, January 23\textsuperscript{rd}, 1999, pp1-3
\textsuperscript{74} Op. Cit. 2003, pp31-46
that countries grow faster if they had a well-developed financial system. This includes having a selection of privately owned banks offering finance to private enterprises and liquid stock exchanges. Both of these factors influence economic growth positively.

In line with this view, Barth et al\textsuperscript{75} argue that state ownership of banks means poorly developed banks, non-banks and stock markets. A poorly developed financial system means reduced opportunities to deepen financial markets and developed innovative financial instruments. Credit levels will be lower which means that industries will not have sufficient access to loans. There will be fewer opportunities for firms to grow which will impact negatively on economic growth.

A report\textsuperscript{76} on the Australian financial deregulation states that monetary policy is more effective in an atmosphere of financial deregulation. It “probably contributes to macroeconomic performance and economic growth”. Gupta and Yuan\textsuperscript{77} studied 19 countries\textsuperscript{78} that liberalised their stock markets. Results show that liberalisation facilitates economic growth, by reducing both the “overall cost of capital in the economy”, and “market imperfections that drive a wedge between the internal and external cost of capital”.

Oks\textsuperscript{79} analysed the relationship between financial sector development and economic growth in 11 CEE’s\textsuperscript{80} and found a positive relationship. However he did not find a causal relationship between the two factors for all countries. He states that tests in the Czech Republic and Poland “indicate the causal relationship to run from financial sector development to economic growth”. Eddy and Hviding\textsuperscript{81} state that over the last two decades, there has been enormous growth in

\textsuperscript{75} Barth, J. R., Caprio, G. and Levin, R. “Banking Systems Around the Globe: Do Regulation and Ownership Affect Performance and Stability?”, Finance Department, Auburn University and Capital Studies Division, Milken Institute, 2001, pp1-63
\textsuperscript{78} Argentina, Brazil, Chile, Columbia, Greece, India, Indonesia, Jordan, Korea, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Portugal, Thailand, Turkey, Venezuela and Zimbabwe
\textsuperscript{79} Oks, A. “Efficiency of the Financial Intermediaries and Economic Growth in CEEC”, University of Tartu, Faculty of Economic and Business Administration, Tartu 2001, Tartu University Press, Order No 562
\textsuperscript{80} Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia, Estonia, Latvia and Lithuania
financial activity in OECD countries. In some instance this has been due to financial deregulation while in others, different factors have contributed to this growth. There has been evidence of increased efficiency of financial markets while effects on economic efficiency cannot be directly attributed to financial deregulation.

7.0 Events and Experiences that have Marked the Process of Deregulation for the Czech Republic, Hungary and Poland

For transition economies eager to join the EU, they must ensure their policies operate in harmony with those countries in the EU. As part of the Single Market Policy, the European Union (EU) has introduced new competition and deregulation measures aimed at making the Western European financial sector more competitive internationally. These measures are based on two principles: (a) minimal government intervention mainly in the form of risk-reducing regulation; and (b) “national treatment” which allows financial institutions to operate in any part of the EU, provided that they comply with the regulatory framework of one of the member states. This framework has significant implications for the CEE (Central and Eastern Europe) countries as they are now part of the EU body of legislation (acquis communautaires) which is binding not only on existing members, but also on countries likely to join the EU in the future. As a result of the positive vote in the Nice treaty, which ratified the position of ten new members’ accession to the EU, CEE’s are now faced with intensive pressure to harmonise their financial system towards EU standards.
Table 1.1

<table>
<thead>
<tr>
<th>Overview of change in regulatory constraints in CEE’s as a result of liberalisation</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Despecialisation of financial institutions:</td>
<td>1991*</td>
<td>1979*</td>
<td>1990*</td>
</tr>
<tr>
<td>Advancement of securities markets:</td>
<td>1993**</td>
<td>1990**</td>
<td>1991**</td>
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<tr>
<td>Increase in the transparency of financial institutions:</td>
<td>1994***</td>
<td>1992***</td>
<td>1993***</td>
</tr>
<tr>
<td>Harmonisation and simplification of prudential supervision across markets:</td>
<td>2001****</td>
<td>1998****</td>
<td>2000****</td>
</tr>
</tbody>
</table>

Notes:

*Czech Republic: Private banks grew steadily from 1991, when state financial institutions held around 15% of total commercial banks. This fell to under 2% by 1995\(^82\).

Hungary: In 1979 the Central European International Bank Ltd was set up as an offshore bank. This was a joint venture of the National Bank of Hungary and six Western banks. In 1983 small financial institutions were established to finance research and development and venture capital\(^83\).

Poland: The number of commercial banks increased from 6 to 75 in 1990\(^84\).

**Czech Republic: The Prague Stock Exchange opened in April 1993, as a joint venture of twelve banks and five brokerage companies\(^85\).

Hungary opened the Budapest Stock Exchange on 19\(^{th}\) June 1990, with forty one banks, financial institutions and securities trading companies involved\(^86\).

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\(^83\) Ibid. Chapter 4: Hungary, pp75

\(^84\) Ibid. Chapter 5: Poland, pp134

\(^85\) Ibid. pp210-211

\(^86\) Ibid. pp126
Poland: The Warsaw Stock Exchange, in accordance with the March 1991 Act on Public Trading in Securities and Trust Funds, began on April 1991\textsuperscript{87}.

***Czech Republic: CNB has compiled a consolidated balance sheet for the commercial banking sector since 30\textsuperscript{th} June 1994\textsuperscript{88}.

Hungary: The National Bank of Hungary developed a bank supervision division, to perform on site audits and to exercise central bank control on data collected jointly with the State Banking Supervision Agency. The SBSA can audit banks and obtain all information judged as useful to impose sanctions\textsuperscript{89}.

Poland: The February 1993 Law on Financial Restructuring was introduced to solve the problem of bad debts and encourage banks to disclose complete information\textsuperscript{90}.

****Czech Republic: At the beginning of 2002 a medium-term banking supervision concept was approved for 2002-2004. The focus is to complete full harmonisation with EU law and raise the quality of supervisory work to internationally recognised standards\textsuperscript{91}.

Hungary has a unified financial sector supervisory framework since April 2002\textsuperscript{92} which operates under the direction of the Government and is supervised by the Minister of Finance. The goal of HFSA management is to upgrade financial sector supervision.

Poland: The Commission for Banking Supervision was set up in September 1998 to supervise domestic banks, their branches and representative offices of foreign banks. The Commission ensures banks comply with Acts, statues and other legal provisions and financial standards that have put in place\textsuperscript{93}.

\textsuperscript{87} Ibid, pp167
\textsuperscript{88} Ibid. pp181
\textsuperscript{89} Ibid, pp96
\textsuperscript{90} Ibid. pp162
\textsuperscript{92} International Monetary Fund, “Report on the Observance of Standards and Codes”, Hungary, Monetary and Exchange Affairs, Washington, April 2001, pp7, Contact: e-mail: MAEREVIEW@imf.org
\textsuperscript{93} National Bank of Poland, About the NBP, Banking Supervision, URL:http://www.nbp.pl/en/onbp/informacje/nadzor.html
8.0 Analysis of Sections

There is clear debate between the regulatory and deregulatory views described. Here we describe the main regulatory and deregulatory views as they apply to the countries of, the Czech Republic, Hungary and Poland and provide a critical analysis of same:

a) In section 2.0, Views of the pro-regulation group, we find the argument for regulation is strongly defended by Arestis and Demetraides, who base assumptions on their home country, Cyprus. While Cyprus represents one of the ten accession countries to the EU and in this sense is similar to these three countries, there are vast difference in their financial sectors, economic stances and outlook. Arestis and Demetraides argue that financial liberalisation will not increase the efficiency of financial markets and the allocation of investment. Here they discuss Cyprus specifically, which has a very small number of banks (14) compared to that of the Czech Republic (37), Hungary (31), and Poland (79). The reality is that, after financial deregulation, the banks in these CEE’s have tended to offer loans to companies, based on their ability to offer collateral. Firms are subject to scrutiny about financial background and potential of the investment project. It is likely that allocational efficiency is strengthened in these circumstances and not weakened, as suggested by these authors. Also, contrary to the suggestion that governments will bail banks out in times of trouble, these banks know they will not be rescued automatically, if they are in trouble. They have been allowed to fail in the past.

These authors are also concerned about the impact on small firms, whose vulnerability will increase as they face higher interest rates. Without access to internal funds, these firms have no choice but to borrow at high rates of interest, unlike larger firms who will have increased access to internal profits. This may lead to smaller firms being squeezed out of the market. Again the Cypriot industrial sector is made up of fundamentally smaller firms, as opposed to the larger types of organisation, which abound in CEE’s. Cyprus has had a budget deficit for many years yet it is not a serious problem, as the government has serviced its debt at low interest rates. This will not be the case with EU accession as the EU interest rate will prevail, and as this means a higher cost of borrowing, the Cypriot government will be under pressure to reduce its deficit. This is likely to lead to capital spending being curtailed, which will reduce competitiveness.
This argument can be seen to have some justification when applied to Cyprus but while regulation may currently favour a country such as Cyprus (and this will change rapidly with EU membership), it does not appear to offer the same advantages for transition economies of Eastern Europe. The disadvantages of financial deregulation were felt by all three countries in that there was little scope for industrial activity and development. Access to credit was very limited for smaller firms and households and there were few financial instruments to invest in. The government crowded out the private sector and dominated the credits allocated by the financial sector. Deregulation has altered this completely. Unlike the democratic Cypriot government, the centralised government of CEE’s did not favour private businesses and they had an unduly harsh time under the Communist regime.

Liberalisation led to the privatisation of firms and banks, and individuals and households began to have access to liberalised markets and new financial instruments. While inflation was an initial problem for all three countries, all have made successful efforts to reduce inflation to acceptable levels, needed for EU entry.

As households increase savings (initially there is massive spending of the monetary ‘overhang’ though this stabilises over time), there is an increase in the supply of loanable funds. Businesses and investors have access to previously restricted credit. With new business opportunities available to CEE’s, the increase in economic activity is likely to increase economic growth substantially.

Stiglitz states that financial repression improves the quality of the pool of loan applicants, and increases the firm’s equity. However it can be argued that in economies with financial repression, there is limited credit allocation. In the CEE’s the government was the main benefiter of credit and as mentioned above, the private sector was crowded out. There was not scope for private businesses to compete for the limited credit available. Credit was allocated to companies who had previously been allocated credit, regardless of their performance profit wise. If companies were in difficulties and could not repay debts as planned and agreed, these debts were rolled over and extended if needed. The quality of the pool of loan applicants was very poor, though it took time for the problem to be highlighted. This only took place when
liberalisation occurred and accounting and supervisory controls were introduced and applied. In the prevailing environment of financial repression, potentially successful projects were excluded from credit, and banks’ equity did not appreciate. The liberalised market opened up credit facilities which benefited these projects.

Shaw believes that liberalisation leads to financial deepening. CEE’s have seen loan interest rates fall from over 13% in the Czech Republic to 5.75%, from over 27% in Hungary to 6.5%, and from almost 55% in Poland to 8.75%. In this time period, the spread (difference between loan and deposit rate) has also fallen from a high of 9 in the Czech Republic to 2.25, from 11 in Hungary to 3, and from 13 to 3 in Poland. However this has not prevented increased activity and development of financial markets. They have all experienced financial deepening (financial development). An increase in financial activity leads to development of financial markets and instruments. This increases the level of economic activity and acts as a stimulant for economic growth.

b) Section 3.0 looks at countries experiences with deregulation and effects on economic growth, and finds that overall results are positive. Some countries found success with liberalisation, while for others there was a positive and negative aspect. However, it was found that countries with poor macroeconomic conditions and/or inadequate financial systems were more vulnerable after deregulation. The initial conditions were crucial to the end result.

Galbis’ studies found that the efficiency of financial intermediation increased with financial liberalisation. The three CEE countries all suffer from low financial intermediation levels, by comparison with countries of the Euro area. This is likely to change as further liberalisation leads to markets deepening and developing, as increased numbers of financial instruments act to attract new customers. It is likely that intermediation levels will rise in the CEE’s. If increased efficiency results through reduced operating costs, the gap between their intermediation level and the rest of the Eurozone should continue to fall in the future. This will lead to increased business opportunities thus stimulating economic growth. Various studies have blamed financial liberalisation for financial crises in different countries, while others have pointed to the years of

\[94\] International Financial Statistics, International Monetary Fund
financial repression prior to reform. The CEE’s are now in a position where they have gotten over the first hurdle of financial reform and although some financial institutions have experienced difficulties, and have been closed down\textsuperscript{95}, most negative aspects of reform have now been endured.

Studies agree that strong law enforcement and low levels of corruption in other countries helped to negate aspects of financial crises if they occurred. The CEE’s have experienced levels of corruption in the past. However these have reduced dramatically as EU officials ensure that these countries are keeping within acceptable boundaries of behaviour when conducting their financial affairs.

Sandor advises caution when proceeding with financial liberalisation, as it may be that initially positive economic growth levels are recorded, followed closely by recession. Currently CEE’s are being closely monitored by the EU and full accession to the EU will lead to economic benefit for all three (Czech Republic, Hungary and Poland). Recession in these countries is now less likely for them now than at any point in the past, as EU officials ensure that these countries are keeping within acceptable boundaries of behaviour when conducting their financial affairs.

Dalla’s studies of Korea concludes that is mix of government intervention and financial liberalisation contributes to its successful outcome. The CEE’s are in a position where they are all pursuing financial liberalisation, while being closely monitored by the EU. It is likely that this combination of liberalisation and an adherence to EU rules, will ensure a positive outcome for all three countries.

The CEE’s have all undergone financial liberalisation and endured many hurdles, including the closing of insolvent banks. The countries that faced the most difficult circumstances after financial liberalisation, were those who had major difficulties before reform. The CEE’s are not

\textsuperscript{95}Hungary – CW Bank went into liquidation in October 1999, Poland – Polish banks have been restructured and merged with other banks, Czech Republic – 22 banks were closed from 1995 to date: AB Banka, Agrobanka, Banka Bohemia, Baska, Coop Banka, Ceska Banka, Akciova spolecnost Praha, Ekoagrobanka, Kreditni a prumysloca banka, Kreditni banka Plzen, Moravia Banka, Pragobanka, Prvni sleska banka a.s., Realitbanka, Universal Banka, Velkomoravska banka, Bank Austria, Banka Austria Creditanstalt, Hypo-bank CZ a.s., Postovni banka a.s., Westdeutsche Landesbank, (CZ), Evrobanka a.s.
in this position. While they have all had macroeconomic instability in the past, this has now been reduced to acceptable levels. Financial market liberalisation should continue to aid bank performance, which should in turn lead to increased financial development, leading to increased economic growth.

9.0 Regulation versus Deregulation of Financial markets – What Lies Ahead?

Repression was used in financial markets in the past, but most countries have accepted that regulation is now the norm and not the exception. Various strong arguments have been forwarded in favour of regulation and while this may have been a more appropriate strategy in the past, the changing economic structure has meant that its use today, is more limited. Globalisation as meant increased interdependencies amongst countries and while this can lead to increased exposure to external shocks, these shocks are weakened as they are absorbed by a larger body than previously. Globalisation has also led to increased openness and removal of barriers, and regulation of financial markets is restricted in this environment.

Supporters of deregulation point to the advantages of increased competition which results after liberalisation i.e. increased efficiency, increased choice, etc. The reality is that liberalisation of financial markets, while opening up entry, has led to mergers in almost all countries, leading to increased concentration. We now have a reduced number of larger banks than previously, as smaller banks find it increasingly harder to compete in this market. Currently there is increased recognition of the informal market or curb market and a desire to include this market, as in instances it is more efficient than the formal market. Presently no advantage is taken of the expertise of its personnel in assessing loan applicants and the knowledge that these people hold in relation to their immediate environment. It is assumed that the two markets (formal and informal) will continue to operate in parallel without any attempt to include this sector and utilise the expertise within. Efforts should be made to make the transition to the formal economy more attractive for the curb market, with training and development, and tax incentives. This should lead to a more equitable allocation of credit resources, with loan applicants paying lower rates of interest whilst still having access to reasonable amounts of credit. This will benefit those who are currently not catered for in the formal economy, like farmers and country dwellers.
There is increased understanding that some form of supervision is necessary, while the regulatory era is more or less over. Supervision is a more expensive form of monitoring than regulation, as it involves constant overseeing rather than irregular checks with appropriate sanction, if necessary. Nonetheless, supervision as a tool of monitoring appears to be the most suitable for financial markets if we are to avoid instances like Barings Bank and Allfirst, where both banks lost millions due to lax controls. The EU countries are all introducing supervisory bodies for financial institutions as the role of the individual Central Banks changes, with the presence of the European Central Bank.

There is concern over the role of central banks as ‘lender of last resort’ and criticism that central banks tend to act as lender of ‘first resort’ in many instances. This is changing in CEE’s as banks have to comply with EU regulations, which includes having transparent operations and accounting systems. While central banks, in the past, have had problems deciding if a bank was illiquid or insolvent this should not now be a problem, and appropriate corrective action should take place once any discrepancies are noticed. It is now believed more extensively that ‘contagion’ problems are not a grave matter of controversy as previously thought, as the general public are now more financially aware and trust the banking system. It is seen to be a robust system and problems in one bank are not viewed as being contagious for the whole banking system.

It is universally agreed that macroeconomic stability is a natural pre-requisite for financial reform. However there is also agreement that financial reform cannot be held back indefinitely if the macroeconomic environment is not suitable for immediate reform. Efforts should be made to ensure that both areas proceed simultaneously, perhaps on a more gradual path to reform. The CEE’s because of their ‘accession status’ are not locked into agreements to proceed, in order to meet the criteria for convergence. Strenuous efforts have been made by all three countries to meet this convergence criteria, though presently some gaps appear.
10.0 Conclusion – Strengths and Weaknesses of Current Literature/Gaps in Literature

This study investigates the impact of deregulation of financial markets on industrial development, the development of financial institutions and the resulting effect on economic development and growth of the Czech Republic, Hungary and Poland. Presently very little empirical work has been undertaken on this subject for these three countries simultaneously, and the purpose of this study is to address this gap. The development of efficient financial markets within a strong economic environment, is one of the aims of all countries and is especially important for those experiencing transition to the developed world. These three countries have all begun the process of liberalising financial markets and industries, and have effected change in order to meet EU criteria. To date no significant measure of financial deregulation on the efficiency of financial institutions and economic development has been carried out.

The most important development on financial deregulation and economic growth in the literature, are the works of Levine, King and Shaw. The intention here was to build on the work of these authors, who have studied financial deregulation and the impact on economic growth in different countries. The importance of economic growth has always been a factor for governments of developed/developing countries. However the importance of financial markets as an engine for growth has only recently been recognised. Authors Levine (and others) notes that firms who have previously been constrained due to limited external financial being available, can now (due to deregulation and increased development of the banking system) avail of these funds. This increase in industrial growth improves economic growth overall. Noticeable gaps in literature concern the causal relationship between industrial growth (resulting from financial deregulation) and economic growth. To date there is no study that addresses this relationship in the three countries. Regarding financial deregulation and development of the financial system, and economic growth, Oks addresses this to some extent by examining financial sector development and economic growth in eleven CEE’s, but does not find conclusive
evidence. Andreisz et al (2003)\textsuperscript{96} examine this topic in Poland and find support for the causation between financial sector development and economic development. The point of this study was to address the gap in literature on the relationship between financial deregulation and industrial growth, and economic growth. Also attempts were made to build on the work quoted above by examining these three countries specifically vis-à-vis financial deregulation/development and economic growth. The study carried out primary research to investigate the impact of financial deregulation on industrial development. We included a longer time span over which to estimate results. Industrial Production was used as a proxy for GDP, and we extend the different measures for financial sector efficiency, used as exogenous variables and add M0, M2, 3 month Treasury Bill rate, credit to non-financial sector, credit to government, and exports and imports. Open economy effects were examined, and an increased number of statistical techniques used. Ratio analysis was used to establish relationships between financial variables and economic growth. Financial statements from banks in the three countries were analysed to assess bank profitability and efficiency after financial deregulation.

Finally by answering the question, “does financial deregulation supports higher levels of economic growth” the following sub-questions are also answered:

\begin{enumerate}
\item has financial deregulation impacted on industrial development and in what way?
\item is causality established between industrial development and economic growth and in what direction/s?
\item is causality established between financial development and economic growth and in what direction/s?
\item what impact has financial deregulation on economic policy and monetary policy, and is there a subsequent impact on economic development?
\end{enumerate}

The aim of the research is to provide useful information that will be used by academics, bankers, Central Banks, ECB and policymakers. The results of the study may be applied directly to developing/transition economies.

\textsuperscript{96} Andreisz, Ewa et al, “The Linkage between Financial Liberalisation and Economic Development: Empirical Evidence from Poland”, 2003, City University London, Department of Economics, Discussion Paper Series, No. 03/03
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