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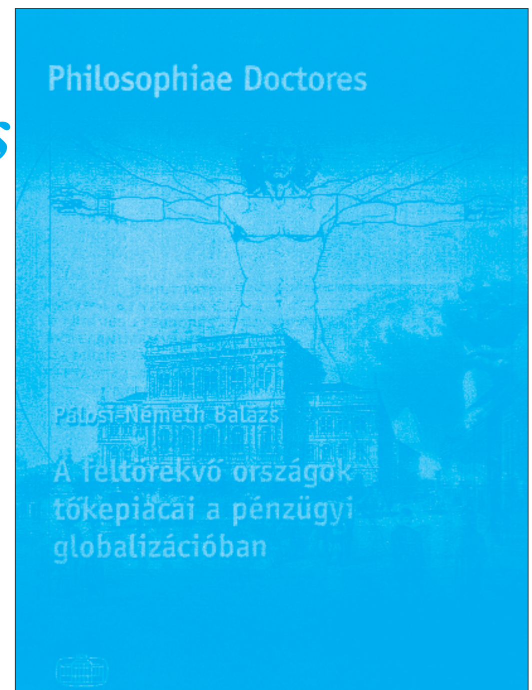
Equity markets of emerging economies amid financial globalisation



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The study under scrutiny below has earned *Balázs Pálosi-Németh* his PhD degree. The thesis addresses a very intriguing and relevant subject, the development of the financial systems of emerging countries of the European Union amid the financial globalisation, focusing on the stock market among the components of their system of financial institutions, comparing it against the banking sector, the other main player in financial intermediation.

The author believes that the models devised by representatives of the mainstream (such as Cass, Stiglitz, Boyle, Smith, and Bose), underlining a positive correlation between economic development and the expansion of stock markets, cannot be applied in emerging countries, because the strength of this connection varies in different phases of economic progress. "The main statement of the study is that the system of financial institutions in emerging countries has not only fallen behind that of developed countries but is different as well". (p. 12)

The author built his study on the Schumpeterian research methodology, which says "Scientific economists are distinguished from others who think, talk, or write about economic problems by their possession of certain methodologies. These are related to three scopes: theories, statistics, and history. These three components form what is widely called economic analysis" (p. 14)

The chapters of the book are built on six theorems defined by the author. In brief, they are: Chapter One is a summary of literature and a compilation of results to date in a new approach, followed by an historic overview where lessons in economic history are drawn. This is followed by a comparative analysis in the third chapter where an overview of the development of standardised equity markets is given along with a potential outlook. In

Chapter Five, his own alternative model is set up and tested, followed by measurements in Chapter Six along with proving and discarding some of the hypotheses. Finally, in Chapter Seven, results are compiled, conclusions drawn and recommendations put down.

In a noteworthy effort, the author describes the logical structure of the book in an amazing and reader-friendly chart for the sake of easy navigation. (p. 17)

The entire book is characterised by the author's efforts to summarise the textual content with visual components, such as charts, tables and graphs, making the book much more comprehensible even for layman readers.

■ In *Chapter One,* the author first scrutinises the impacts financial intermediation has on economic efficiency. He deems it important because, as he says, literature typically assesses inappropriately or superficially the operational mechanism of the role of financial instruments and institutions to reduce market imperfections and dead-weight welfare loss, because it usually focuses on the allocation function of financial institutions even though it has other functions as well. As a result, what can be drawn are not clear conclusions. With money appearing as a vessel of exchange, its functions have been expanding throughout economic history. A major breakthrough was achieved by *Keynes*[1] in 1930. Mobilisation of savings and long-term thinking led to the development of additional functions in the scope of investments: 'appropriate allocation of resources and risks, as well as the monitoring of corporations' (p. 19). To manage this latter efficiently, the institution of companies limited by shares evolved.

Schumpeter says (1980) 'the financial system makes economic progress more efficient through its selection mechanism'. *Miller* (1998) regards the positive correlation between the sophistication of financial intermediation and economic growth as a “cliché”. *Lucas* (1988) regards all this as being overreacted, assessing the quality of the correlation as limited. In an empiric scrutiny *King* and *Levine* (1993) found financial sophistication in any given time to give a good indication of subsequent economic growth. *Jayaratne* and *Strahan* (1996) say competition in the financial sector is increasing and the depth of financial intermediation may become deeper due to deregulation. According to *Rajan* and *Zingales* (1998), countries with a deeper level of financial intermediation have shown a faster growth rate in industries with external funding need than wherever the demand for external funding is lower, *ceteris paribus.* Based on a comprehensive empirical analysis by *Levine* and *Zervos* (1998), a rule of thumb can be defined that the sophistication of a country's financial system gives a good forecast of its economic growth.

Summarising literature, the author underlines financial intermediation as 'a catalyst in the outbreak of the second economic revolution in the second half of the 19th century, then it was developing simultaneously with real economy since neither of them was independent of the economic environment. On the one hand, real economy demands various financial solutions, and the towing effect of arising demands urges the financial sector to develop new features….” (p. 24)

In the following section the author defines the core functions of financial intermediation, emphasising that the way these functions are fulfilled greatly determines the development of the system of institutions. Five functions are defined, which support economic growth by increasing allocation efficiency and adaptive efficacy. The former is practically means efficient allocation of resources, the latter, promoting capital accumulation and liquidity. The author underlines a sixth function, a behavioural design – a new concept in international literature – which ensures neutral approach in case market players' expectations are not homogenous.

Management of risk components – *such as liquidity risk, diversification among sectors, and timely risk spreading* – plays a prominent role in the operating mechanism of financial institutions. By using the tools offered by equity and financial markets, risks can be accumulated and distributed, adapting to the preferences of individual investors. The financial system has a key role in making it possible for individuals to maintain diversified portfolios, which at the same time defines the distribution of savings. At times of financial crises, however, this type of (cross-section) diversification proves unfeasible. At these times the most prudent thing to do is spread the risks among generations by employing dedicated, long-term institutions.

Liquidity risk – increased by information asymmetry and transaction costs – means the risk that exchangeability to the common instrument becomes unavailable. Due to transaction frequency at financial markets and product standardisation, however, this kind of risk can be reduced considerably. Financial intermediation increases liquidity for long-term investments, in lack of which many large-scale projects could not be implemented, because capital owners are reluctant to give up control over their savings for long term. run. In the event of external shocks, chances of 'escaping into liquidity' increases substantially, which has become manageable with the appearance of financial institutions, thus the operation of corporations implementing long-term investments decouples from the liquidity attitude of individual investors, which in turn greatly helps the development of a rational and predictable system. It is to be noted of the effects of financial intermediation on adaptive efficacy that innovation and product development are under severe pressure because of a cut-throat race among market players.

Another function is represented by the *gathering*, processing and dissemination *of information,* as well as the *allocation of resources.* The market-maker role of information is emphasised even in the works of *Menger*, chief representative of the Austrian school. "The role of market price mechanism is information mediation, information concentration and, consequently, reduction of transactions costs, because market prices reflect the price of capital currently invested in production". (p. 33)

Controlling mechanisms *(monitoring)* and simplification of exchange processes are also part of the operations of the financial intermediary system, with the latter representing the most ancient function of money as a means of exchange, as defined by *Adam Smith.*

Attitude neutrality, the sixth function, reflects individual psychological factors in financial market prices and corporate decisions. Contrary to the assumptions made by neoclassical models, the expectations of market players are not homogenous, but could be optimistic, neutral, and pessimistic based on individual attitudes, which are definitive in an individual's approach to risks. And the latter defines the ratio of risk-free assets and those with various levels of risks in individual portfolios.

Consequently, the necessity of banks in the financial intermediation system seems explained, because they fulfil the function more efficiently than stock markets do. In a structural approach an answer is sought to the question whether the continental banking system or the Anglo-Saxon capital market provides better financing options for a country. The answer lies somewhere in between. On the one hand, the banking system seems to be more efficient to exercise control over corporations and to transmit attitude neutrality in a credible way, and on the other hand, the capital market is more advanced in promoting innovation than banks. However, the author underlines that the efficiency of these institutions may be different at various stages of development in different countries, which again tips the theoretical scales to the financial system.

The optimum financial structure always changes in time and in terms of economic development. At the end of Chapter One, the author sets his first theory, saying 'The relation between the sophistication of financial intermediation and the impacts of financial intermediation on economic growth can be plotted as a non-linear curve that takes a positive incline. (p. 45).

Where an initial low level of financial culture is coupled with a low economic growth, then the effect becomes strongly positive, and finally its effect on economic growth declines again when the financial system has reached a high level of sophistication.

The next three chapters analysise the special features of capital markets of emerging countries from the perspective of economic history.

■ *Chapter Two* begins with a comparative analysis where developments in globalisation in the past 150 years are in the focus, seeking an answer to the question why capital markets in emerging countries were playing entirely different roles in terms of financial globalisation a hundred years ago than now.

The pre-WWI development of capital markets goes back to Renaissance, the time when banks appeared in Italy and joined trade with the Levant. Then, financial innovations mushrooming in the transactions of the Low Countries and Hanseatic cities also meant a huge step forward in the development of financial markets, whose centre was Amsterdam since the 17th and 18th centuries, to be replaced by London subsequently. However, the concept that knowledge was concentrated in this narrow geographic area before 1914 is wrong. Granted, 'a global economy formed between 1870 and 1914 with its core being the economies of the Atlantic region, and the progress, starting from Western Europe, triggered an explosion-like economic boom in the United States of America. However, the British Colonies and Eastern Europe also joined the progress of this centre, particularly with an intensifying supply pressure in commodities." (p. 48). The catalytic effect of financial markets thus contributed greatly to the development of globalisation processes in financing trade and infrastructure. 'After 1870, at the time of liberalism and "laissez faire", the monetary system of the gold standard – lacking any exchange rate risks – as well as technological breakthroughs in transportation and communication created the first global marketplace, which promoted the flow of capital further. (…) As a result of the process, an increasing part of the local and global economy monetised and became sensitive to the signals sent by capital markets….' (p. 49)

The period between the two world wars, however, brought total destruction for the global economic regime, and, besides the Keynesian approach, a non-competition, protectionist economic policy came to rule that even controlled the flow of capital. the ensuing interim economic setup as well as Bretton Woods, regarded as an attempt at restoring global processes, can be assess as successful despite their internal contradictions. Real processes were started, triggering unprecedented economic growth in the more developed countries, but financial processes took much longer to react. After 1971, side by side with a high level of innovation in financial instruments, a surging improvement occurred in capital mobility with no decline in the integration of real processes.

In literature, many have explained the ups and downs of the economic policy history of capital markets by the role of the exchange rate regime. However, it has been clear since *Mundell* (1963) and *Fleming* (1962)[2] that it's not the quality of the currency rate that's responsible for the historic development of capital flow, but whichever two conditions of the '*Impossible Trinity*' are prevalent at the time. Apart from that, technological innovation,

political factors, and the impact of economic theories should also be emphasised, of which technological changes had an impact on an upswing of capital markets directly and indirectly – through the integration of mercantile markets – in the 19th century. This, however, presents a tough challenge for the analyst, because the degree of financial integration should be measured some way in order to establish any correlation between these two factors. Of the numerous methods available, the author opted for the analysis of the correlation and volatility of stock and bond yields among various capital markets, two factors that give the highest indication of the capital markets of emerging economies. Hence, the impacts of diversification can be split into two factors, a structural one between sectors, and another, this one geographical. This latter is again divided into two by the author: diversification among new (emerging) capital markets and diversification in central (developed) markets (Chart 10, page 63). In the course of history, the ratio of the components of diversification has changed. While a hundred years ago geographic diversification was dominant, it has changed by now. Before World War 1, investors could ditch considerable individual risks by geographic diversification, proven by the fact that the development of stock returns were not as connected as they are now. This means that the role of the then emerging market were more substantial than previously thought, and, on the other hand, this role could increase due to endogenous progress. As a contrast, the capital markets of today's emerging countries have been developing exogenously, on the back of external effects. Among others, this is the reason these capital markets have been unable to perform such a global role than in the period before WWI. This represents the author's *second thesis.*

■ *Chapter Three* involves an analysis into the strength of the relation between the sophistication of the capital markets and the economic performance of emerging countries, seeking answer to the question whether any country could be launched to a path of steady growth by developing its financial institutions. The answer is negative, for a liberalised financial intermediation system is just one of the factors of economic growth. Nevertheless, establishing such a system is unavoidable. Experience gained by transition economies indicates, however, that the transformation hasn't been automatic or free of bumps along the way due to a distorting effect of asymmetric information and moral risks. In order for the necessary but positive effects of competition to come into play, an appropriate degree of institutional development has to be achieved. When the two-tier banking sector had developed in Central and Eastern Europe, it was not in all these countries that new banks could enter the competition. In the early '90s, many of the newly established banks remained in state ownership. And demonetisation processes were evident in most former Soviet Block countries. Obviously, the transformation of the financial intermediary system in itself is insufficient, enforcing macroeconomic stability and fiscal and monetary discipline in countries successfully taking a growth path is inevitable in order to curb the impacts of the aforementioned negative factors. Consequently, there was no strong correlation between financial intermediation and economic growth in new, emerging economies in the '90s. Besides, these countries started to establish their systems of institutions from very different initial positions, they've travelled special paths, applied various methods and reaped different levels of success in terms of the most important measures, including the policies of bad loans restructuring, bank privatisation, permitting foreign ownership, and developing equity markets. In the scope of bank consolidation, Estonia and Hungary proved the most successful, while the Czech

Republic, Slovakia, Lithuania, and Romania initially gave their stock markets priority, including them in the process of privatisation as primary intermediaries. But with time the trading volume dropped considerably. In the meantime, a peculiar process of intertwining between political and economic interests in Russia, as a consequence of which 'banks created artificially by decoupling them from the financial divisions of former state-owned banks and (…) kept in dependency of public administration became the biggest capital owners'. (p. 85) Apparently, development courses have been largely different in the past 15 years. Nevertheless, the structure of financial systems have been converging on the basis of two key factors.

❶ The role of banks dominates financial intermediation, its depth is much larger than that of intermediation by equity markets. However, due to the initial low degree of retail lending and the dominance of lending to government and other financial institutions, the banking systems had limited functions in the early '90s.

❷ The development of capital markets is hampered by a negative scope; namely 'the ownership structure of corporations is concentrated, thus shares have a low trading volume. On the one hand, the capital market is unable to lower liquidity risks, and on the other it fails to fulfil its control function efficiently, forcing the owners to do so'. (p. 87) In most countries of the survey, market capitalisation represents a mere 35 per cent of GDP, as opposed to 127 per cent of EU15 in 2006.

According tot the authors, however, the banking system is necessary to dominate the capital market in the early stages of economic development. Results found by researchers addressing this issue and published in literature are compiled in Table 4 (p. 92), listing the impact factors of the banking sector and capital market. Apparently, the banking system correlates with factors at a higher degree that are typical of emerging markets (traditional sectors with high demand for intellectual capital). However, measurements were broken down into various data types, periods, and countries, urging the author to make additional research. In his analysis the author addresses the advantages and disadvantages of relation-oriented or bank-controlled systems and those driven by a market-oriented capital market in terms of financing various industries (Table 5, page 98) and finds that while the concentration of information has become a real limitation in the relation-oriented system, capital markets have gained comparative advantages in more complex industries. Though it may seem that markets are more efficient than banking sectors in a number of cases, the simultaneous presence of both systems are best. A background system of contacts is needed for the market to operate efficiently or for the coordination of contact to be viable. A capital market that operates well could be a significant and efficient component in the reduction of higher financial risks of emerging countries, but this would require market-driven intermediation to play a definitive role. In these countries, foreign banks fulfil this 'task' by diversifying risks not in a single country, but by linking emerging countries with developed capital markets, lowering the possibility of local crises, thus intensifying competition among local banks. Summarising the lessons learnt from the chapter, the *third and fourth theses* are put down.

'In the early stages of financial intermediation, a structural homogenisation is necessary. Its main impacts do not originate from the special features of the transition in former centrally planned economies (even though they enhance the process), because they occur in other emerging countries as well, the difference is the speed of the phenomenon'. (p. 106)

'…The state of development of the institutions (…) becomes a relevant task to be sup-

ported by economic policy as well: the countries of the region are currently in that stage of development when the impact of financial intermediation on economic growth can be accelerated by increasing its depth. Mixed-type financial intermediation is inevitable in this goal, therefore the development of capital markets is especially important. Hampering capital markets creates long-term growth sacrifices.' (p. 107)

■ *Chapter Four* shows that the development of stock markets of the countries in the survey cannot be simultaneous with the deepening of general system of institutions because of the impacts of financial globalisation. The author analyses this from the aspect of the three major economic sectors – government, corporations, households – seeking answer to the question whether how much each sector requires the activities and services of the local stock exchange. He finds that even though the government has affected the progress of standardised market directly (for instance, by dedicated capital market reforms, financial liberalisation) and indirectly (general improvement of macroeconomic fundamentals), corporations and households have been less responsive to it. The development of regional stock markets have been characterised by a '*wave movement*' in the past 15 years (Chart 23, page 119), and these rallies and plunges occurred completely independently of business cycles of real economy. In the scope of households, the financial culture of the population is characterised by a marginal disposition to take risks and by extensive use of the banking sector as financial intermediary. A weak demand by households and corporations for services offered by capital market does not mean capital markets would not be viable in the CEE region, but it does mean the change, development, and convergence of these roots of financial culture to the Western European attitude could be a very slow process that might span centuries.

All this lead to the question of what strategy the securities markets of emerging countries should purse, namely whether they could survive and/or they could actually foster economic growth by increasing their functional efficacy.

Four models can be discerned in terms of their intensity of building international relations

❶ *Seeking an individual path.* This strategy is pursued by the stock exchanges of Prague, Bratislava, and Ljubljana, but it is optimal for a narrow scope of investors and should not be subsidised by the government.

❷ *Establishing a loose regional federation* among the stock exchanges of neighbouring countries in the region, which, however, requires a high level of capital market institutions and infrastructure.

❸ *Establishing a strategic alliance with a leading stock exchange* is a task not without some problems, because it requires a similar level of macroeconomic sophistication and political-social view of the capital market.

❹ *Full integration* means that the merging stock market is totally and unconditionally consumed by another system. Aside from initial problems, this strategy yields maximum cost efficiency in the long run.

For emerging countries, giving up their independence at least partially seems inevitable, and an optimum solution could be delivered by the establishment of a regional stock exchange, which could achieve the best impacts by joining a Western stock market.

Fifth thesis: 'The capital market of a country cannot be considered mature by any means unless it is working with the functional efficiency expected of financial institutions, irrespective of how close it comes to the indicators of developed countries in terms of liquidity and market capitalisation. In this sense, the standardised equity markets o EU member states are to be regarded definitely underdeveloped.' (p. 134)

■ *Chapter Five* is dedicated to showing that a capital market is a significant economic player without which a corporate ownership structure and corporate governance would develop that would hamper economic growth. Additionally, the government is more apt to interfere with market processes in these cases. Here the author introduces the concept of *twin income extraction*, which is 'a market activity that reduces efficiency and originates from an opportunistic collective behaviour connecting in macro and micro level'. (p. 36) As the essence of this behaviour, individual distribution coalitions influence corporate cash flow in line with their selfish interests. This phenomenon is relevant both on the corporate and government level, and the two are in interaction with one another. On the micro level, insiders of a corporation can learn ways of manipulate part of the cash flow, and on the macro level the government can distort cash flow by taxes, contributions, and legislation. The problem inherent in twin income extraction is that in this case the fragmented ownership structure is unable to work efficiently, in other words the individual risk of a corporation cannot be spread among typically international investors, hence insiders have to take it. This, in turn, hampers the development of the financial sector, reduces the amount of foreign capital invested, causes fluctuations in consumption and decelerates economic growth. When this phenomenon is relevant, the institutional structure and the impact of legislation in country have a substantial impact on the trading of financial instrument and the ownership structure in the corporate scope. In other words, this is a country-specific phenomenon. This could provide an explanation as to why the impacts of financial globalisation – as opposed to neoclassical models – have had limited effects in emerging countries. Mainstream theories give a good description of the general trends of globalisation but tend to project faster-than-actual processes. Special components of the behaviour of individuals influence the diversity of processes that take place locally alongside global trends. On these bases, using the models designed by *Stulz* (2005), as well as *Shleifer* and *Wolfenzon* (2002), and fine-tuning them at lots of spots, the author tests the phenomenon in a single-period model. Based on the findings of the model, light is shed on the exchange between government and ownership lobbies, and on the fact that if investors' legal protection is ensured, the distribution costs of insiders increase but their distribution profit does not decrease, provided both sides manage to increase their income at the cost of minor investors. Which means that coalitions on opposite sides of the twin income extraction problem manage to reach an agreement. In this case, financial intermediation is of key importance, since this is the only design – and at its most market-oriented form, that is – that is able to offset the distorting effects caused by distribution coalitions, provided it meets the requirements of functional efficacy. Consequently, the problem of twin income extraction hampers the development of financial globalisation. However, the connection between cause and effect can be switched over; this way it is financial globalisation that reduces the extent of distribution by various lobbies and its negative effects on the level of national economy. This important recognition leads to the *sixth theory*, which says 'The only way to reduce the problem of twin income extraction, originating from the close entwining of this macro- and microeconomic phenomenon. and to improve the competitiveness of corporations of emerging countries is to put the positive impacts of financial globalisation to good use. And to achieve this goal, intensifying transparency and publicity are inevitable.' (p. 157). The capital market is its most powerful tool. This provides the basis for analysing how relevant is the phenomenon of twin

income extraction in emerging countries. The author defines three categories: Quality of government, the extent of ownership concentration, and the extent of investors protection. All three aspects imply that the phenomenon and consequent distortions are substantial in 'emerging Europe'.

■ *Chapter Six* is designed to underpin empirically the theses and novel thoughts described in the preceding five chapters or to deny them, splitting the scrutiny into three parts. First, the issue of efficiency is addressed and the *fifth thesis* is tested. To measure functional efficacy, the author conducts an analysis of cross-section independence of share prices. The results show a very poor functional efficacy for the stock exchanges in all eight transition economies in his survey (the Visegrád Four, Estonia, Lithuania, Bulgaria, and Romania), nor do the figures indicate a definitely improving trend. The results of the first part of the test projects the insignificance of the next measurement, yet it can define in which stage the progress of financial intermediation is currently in emerging countries. The postulation in the *first thesis* is tested by regression analysis, which finds that intermediation via the capital market cannot be connected to economic growth either in linear or quadratic form even though the connection is strong in terms of statistics. This statement underlines the assumption that the impacts of financial intermediation on economic growth is special in transition countries. Finally, the author tests his *second thesis* by a confirmation quantity analysis, and shows that the role the markets of the countries in the survey is gradually diminishing from the aspect of international portfolio investments.

Overall, the detailed nature of this dissertation has to do with the deep message of the book, the new approach to the correlations, and the sophisticated and high-quality work of the author. The results of his research shed some light on a special development path of financial systems in emerging countries, the acceptance and understanding of which may give fuel not only to additional research work in this filed but may influence rational investment decisions in practice, promoting more efficient asset allocation.

Ágnes Halász

Notes

[1] Keynes defined the four functions of money used in financial textbooks: settlement, sales, payment, wealth.

[2] According to the second hypothesis of the Impossible Trinity, fixed exchange rate, free capital flow, and sovereignty of national monetary policy cannot be maintained at the same time.