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**THE ROLE OF FINANCIAL CENTRES IN  
REGIONAL DEVELOPMENT**

**The Impact of Globalisation on Regional Money Markets**

**PHD. DISSERTATION THESES**

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## I. Introduction

Historic experience has shown that the level of development of financial relations has a major impact on the economic and social development of various geographic areas. This level of development can be put down - among many other factors - to geographic features. The rise of international financial centres has enhanced the development of the world market, but at the same time, it has weakened the role of small and medium-sized towns because global and local economic, political and economy policy processes are closely related. Enterprises that once were established in small towns have become the subsidiaries of large multinational companies. As a result, their corporate centres were also relocated into large financial centres. Communication and information technologies further strengthen the role of only a few cities and undermine the traditional autonomy of several smaller cities. The functions of international financial centres have significantly been extended, they essentially pursue universal activities, whereas regional centres are functionally specialised. These days, we could hardly find a spot on the world map which in the context of financial relations could remain untouched by the impacts of the network of financial centres.

Financial centres are extremely different institutions, communities both in functional and regional terms. In many cases, they are extremely difficult to define. There is no agreement either among experts or in literature on the definition of "financial centre". However, the role of centres in modern economic and regional development is undoubtedly significant. Financial centre is a complex economic category, which can only be defined in formal rather than in content-related terms, their economic and spatial impacts are extremely complex and their analysis would go beyond the limits of a dissertation.

A common element of various definitions is that a centre is always in a given geographic spot, named after a city, or even after a quarter of a city or a street, such as the City of London, the Wall Street in New York. For the purpose of the dissertation, the term financial centre shall mean the following: a given geographic location where the most important financial institutions (banks, stock exchanges, financial intermediaries, investment funds, insurance companies, credit-rating agencies, etc.) are present and carry out their transactions freely and fully in the area of finances, applying hi-tech instruments.

Over the past one-and-a-half decades, the restructuring of the world economy has essentially covered all economic and social processes. Two of its decisive elements are the free movement of production factors, which has

been implemented in all areas except for the free movement of labour, and technological development. These processes also affect the creation, evolution and role of financial centres. Due to the progress in globalisation, their economic roles have also been altered and the dynamic development or decline of individual centres has a considerable regional impact.

## II. The objective and background of the research

The character of financial centres, the changes in the mainstream are historically cyclical and linked to individual periods in economic history. It is obvious that the degree of liberalisation of economic processes determines on national and international level the development, character, activities and regional impacts of financial centres. Although regulatory liberalisation and protectionist discrimination both promote the development of financial centres, these changes lead to the evolution of financial centres which are completely different in function and mostly in terms of regional scope. Since nowadays the development of financial centres is essentially and simultaneously influenced by globalisation, integration and localisation tendencies, just like in the case of the other actors of world economy, their role in the development of a region in the international economy goes under transformation, and declines in certain regions. However, as another prevailing tendency, the situation of the largest financial centres has strengthened in the global context compared to previous decades. A major restructuring is unfolding on a regional level with emerging new centres, primarily in the Far East, which in the future might have a serious impact on the development of individual countries and areas, furthermore the role of former regional centres declines (for example, Vienna, Cyprus, etc.)

With regard to the "concentration" of financial centres, the industry of financial services follows the development pattern of "sectoral concentration" because such "spots" or "sites" develop where the number of financial institutions and the volume of labour force with sufficient expertise reaches the sufficient, critical level (critical mass). The reasons for the regional concentration of industrial sectors can be grasped by studying location theories, which aim to identify the factors that influence the development of individual geographic units. They identify the factors which explain why certain zones gain importance in economic terms and become the location of certain industries. In addition to simple comparative factors, for example, natural conditions, there are certain other features that boost the development of one area with given characteristics, whereas others bearing the same characteristics do not gain any major importance. Location theories are valid under the conditions of a perfect competition, which due to the varying conditions created by economies of scale and due to the logic of market competition does hardly exist. The explanation is to be found in competitive advantages that have been gaining ground. The development of favourable conditions and the significant level of international flow of capital have modified the explanatory value of traditional approaches.

The theoretical dimensions of the development of financial centres and their hierarchy, the analysis of their impacts on economic development - especially in Hungarian literature on economics - are unjustifiably underexploited, maybe because of the sophisticated system they are embedded in or due to the indirect economic policy backgrounds, or due to the former relatively closed nature of the Hungarian economy. Very few economists have dealt with the relations between the international financial hierarchy and the global financial net (for example, GÁL P., SIMAI M.) Over the past few years, it has been the science of geography, especially regional research that has placed increasing emphasis on geographical and economic links, dimensions of the subject matter (for example, LENGYEL I.), and financial geography has also gained importance (for example, GÁL T.). One aspect, a quasi-interdisciplinary element of this is the relation between economic growth and financial centres and the evaluation of their impacts on regional development (including regions in world economy and regions in individual countries).

In international literature, the subject matter of centralisation of industrial sectors has been touched upon already as early as in the 19th and early 20th centuries. The theoretical questions relating to financial centres have become a central issue only as of the 1970s, 1980s, when the impact mechanism of liberalisation had its effects felt in the area of development. As a renaissance of the 19th century, the thoughts of KINDLERBERGER C., KRUGMAN P. and PORTER M. following the theories of MARSHALL A. accelerated the analysis of theoretical aspects relating to financial centres. As of the 90s, an increasing number of studies have examined the impacts of the euro-area on financial centres within and outside the EU, in relation to a spatial restructuring in the euro-area and, on the other hand, in relation to London, which falls outside the euro-area.

Based on theoretical antecedents, the following background can be drawn up of factors that influence the development of financial centres.

1. The concept of site, location has first come to the fore in economics with regard to the geographic location and concentration of certain industrial sectors and in relation to external impacts on production. Alfred MARSHALL described the geographical distribution of industrial sectors and traced back the development of English industrial regions and boom in the 19th century to external economic effects, which he called neighbourhood effect, i.e. he interpreted them in a local context. This is a sort of multiplier effect, when enterprises with a similar scope of activities mutually promote each other's development and show a special concentration. The economic logic behind this process is on the one hand the

internal, and on the other, the external economies of scale. In the case of internal economies of scale, costs depend on the size of the given enterprise. In the case of external economies of scale, factors outside the enterprise, for example, the sectoral size in the given area, influence costs. The larger the given industrial sector in a given geographic location, the smaller might unit costs be. Accordingly, a given enterprise will be established on a site where several other enterprises active in a similar sector are located, because this makes it easier for enterprises to exploit the competitive advantages deriving from positive external impacts.

2. The regional concentration of financial centres was proved by Charles KINDLEBERGER. According to his theory, financial centres emerge due to the centralisation of payments. As soon as one centre starts to grow, growth per se stabilises and strengthens its position. The squeezing effect, market segmentation, the strategy of other financial centres in a geographical region might also justify the existence of several financial centres but the number of these centres will remain rather limited. After the integration of various areas of finance, minor centres or those unable to grow start to decline, only very few of them will survive and generally speaking, one of them will become dominant. This is essentially the revival of Marshall's logic, and projects the analyses of Krugman and Porter in this direction.

3. Paul KRUGMAN in the theoretical framework of the "new regional geography" partially reformulated the ideas of Marshall. The reason for a spatial concentration is that in parallel with deepening globalisation, countries cease to be the basic units of the economy and they are replaced by regions, cross-border areas and cities. According to Krugman, with regard to concentration it is Marshall's positive local extern impacts that unfold (centripetal forces), on the other hand, centrifugal forces working against concentration also appear (for example because labour force is not mobile), and there might be other negative extern impacts as well (for example overpopulation or a price hike in the real estate sector). The theory is rooted in geographical determinism and the rethinking of "Marshall's extern impacts".

4. A major conclusion Michael PORTER draws from his analyses is that the sources of competitive advantages of competing enterprises in the world economy are basically geographically concentrated. Consequently, global competition unfolding on an industrial level in several cases is based on a few localisation advantages, occasionally on the activities in one region or a town/city. In addition, he emphasizes the important role of geographical concentration. According to his findings, the decisive units of competition are not individual, isolated enterprises but enterprise clusters, which are



regionally concentrated, global enterprises and the cooperation between global enterprises and smaller enterprises as well as institutions. From this another conclusion of his follows, which says that there are no low-technology industrial branches, only low technology enterprises, because technological development is given in every branch of industry. The only question is whether or not individual enterprises acquire or have access at all to the latest technical achievements. Spatial concentration constitutes a major advantage in technological changes and the process of innovation, which amplifies the practicability of follow-up impacts. As a result, technical and economic unpredictability declines, interaction between enterprises and researchers and other actors becomes more intensive, therefore, problems are promptly identified.

Porter's logic constitutes the foundation of the location strategy of global companies. Accordingly, enterprises with a world-wide activity locate individual blocs where that particular bloc can function the most efficiently in the value chain (for example, R&D in the USA, mass production in Southeast Asia, etc.). By the turn of the millennium, this sort of strategy could be spotted in the case of financial enterprises going global, which locate their specialised activities to places following the above logic (for example, driven by the most favourable funding opportunities, or close to the most important stock exchanges). Thus, the broadening scope for liberalisation and corporate activities together can exert substantial influence on the framework conditions of financial centres' activities.

These theoretical frames were considered as the point of departure of the dissertation and based on the findings of economic geography, monetary history and financial science, as well as my own banking experience, the dissertation aims to determine the place of a geographical unit (country, region, etc.) in the international financial relations and aims to determine its interrelation with the economic development of the given area. Furthermore, it makes an attempt to draw regional conclusions from economic and financial interrelations. The objective of the dissertation is to explore the role of financial centres, basically those with a transborder scope in the uneven development of individual regions and countries, furthermore, in globalisation, a new era in world economy. A further objective is to explore within this theoretical framework the relating opportunities and limits of geographical regions (countries, regions and cities) in this context. I also wish to explore the role of globalisation and regulatory liberalisation in general, or protectionism in the development of financial centres. The research aims to provide a detailed analysis of the functioning mechanism of international financial centres, their role and impacts on changes in international finances. The dissertation also aims to contribute to

conclusions relating to economic policy, more precisely monetary and regional policy and to draw attention to the importance of the efficient linkages with international money and capital markets, furthermore to prove that financial activity might play an extremely important role in economic growth. The creation of a developed financial intermediary system, the development of a country, region, and city into a financial centre also provides favourable conditions and frames for the development potentials of the economy. The dissertation applies a dual approach, which is suitable to show how economic conditions modify the impacts of financial services on regional development. By means of this, the dissertation with its own limited tools, wishes to contribute to the analysis of relations between different periods of financial and economic development, to explore the links and interrelations between financial, regional and global development and to shed light upon the workings of the new era of financial development.

### **III. Research methodology**

The point of departure of the research or its backbone is the overview of theories relating to location, the development of individual cities, regions, which constitutes borderline between economics and regional science. These theories identify the factors, which play a decisive in the emergence and development of financial centres, including national and international centres. With a view to drawing well-founded conclusions, it is reasonable to integrate the relevant theories of economics and geography into a economic history perspective. Therefore, the dissertation amalgamates in a specific manner, the methodology of various disciplines and makes an attempt to synthesise research findings which were arrived at in an interdisciplinary manner.

The analysis wills overview and process literature on the subjects and includes historical and functional analytical methods. The first chapter containing the theoretical overview and evaluation will be followed by an interpretative approach, which is based on secondary sources (studies, analyses, reference books), and introduces various scientific positions regarding factors that impact on the development of financial centres. Primary sources of data are lacking in individual sub-areas, for example, the interpretation of data relating to offshore centres is possible only for the largest international organisation, national ministries of finance, or global auditing firms. However, in spite of this fact, the comparison of publicly available evaluations, analyses from different sources and the comparison of statements therein enhance a specific and unique combination of the research findings in this area.

In addition, a substantial amount of corporate information has been collected and evaluated with respect to certain sub-items (for example, transnational banks). In this regard, the dissertation synthesised statistical data deriving from primary sources.

The research follows the direction of regional analyses, and by doing so, it tries to explore the specific features of the development and functioning of various financial centres and explores causal effects relating to regions. Other dissertation on this basis tries to formulate general conclusions and based on these conclusions, we make an attempt to outline the direction of development in the medium-term. In addition to relying on literature and statistics, I will also make use of my professional experience in the banking sector. The analysis based on international comparisons wishes to synthesise all the factors which have an impact on the financial relations in the regions

and it blends a synthesis in specialist literature with quantitative, primarily statistical time series and statistical comparative analysis. From the processes evaluated with this method, it makes an attempt to draw conclusions that can have an added value from economic policy and theoretical perspective alike.

The dissertation consists of descriptive and explanatory, evaluative parts as required by the subject matter. The dissertation attaches different weight to various factors according to their importance and the strength of their links with financial centres. Therefore, certain ideas need to be explored in more detail whereas others are to be briefly summarised. The proportions, the degree of detail of the dissertation and the subject matters discussed have been modified based on the outcome of the in-house debate following the advice in the evaluation.

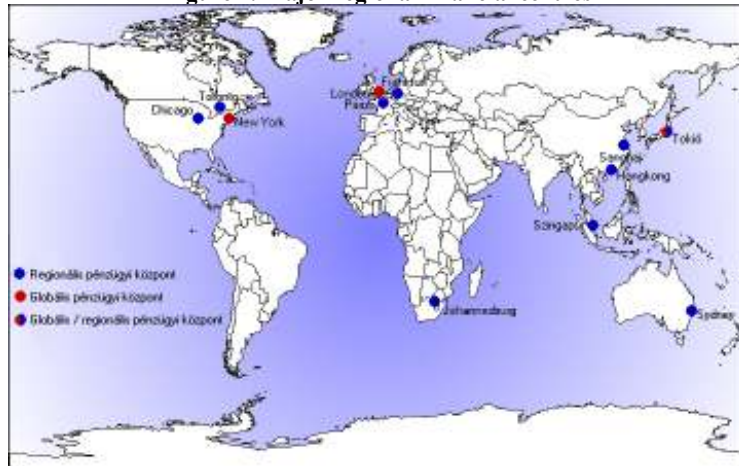
#### **IV. Findings**

1. There is a close link between international development and the emergence of financial centres, but this link is rather specific in nature and cannot always be defined unambiguously. However, financial centres very well reflect the specific features of the period in economic history when they evolved. Liberalisation in general promoted financial development and, in general promotes the strengthening of universal centres, whereas more protectionist world economic conditions restrict the development of universal centres but give preference to those with a regional scope. The development of financial centres has undergone major changes, with the deepening of globalisation it entered into a new era but in spite of the growing competition, the weight of decisive international financial centres has not dwindled.

In economic and financial relations, centres with varying significance developed in certain geographical locations and they developed a hierarchy. Through centuries, these centres financially reflected real processes and power relations. Economic and geographical analyses point out the reasons why certain industrial branches/sectors gain more importance in a given geographical location than in other places. The same applies to financial centres.

2. In the course of history, the importance of international financial centres has permanently changed, which is a direct consequence of uneven economic developments and can also be witnessed nowadays. Concentration and specialisation are two obvious elements in the development process of financial centres. Though financial centres have changed profoundly both in temporal and spatial terms over the past centuries, certain framework conditions show a rather great degree of stability. Such is for example the role of London as a global International Financial Centre on a permanent basis. At the same time, several factors might induce changes in the current global financial structure, the development potentials of financial centres and their relations with one another. Globalisation has brought about essential historic changes and restructuring not only in the economy as a whole, but also in financial processes, the system of financial centres and international financial centres, their impacts and structures.

**Figure 1. Major regional financial centres**



Source: Own compilation

Note: Regionális pénzügyi központ = Regional financial centre

Globális pénzügyi központ = Global financial centre

Globális / regionális pénzügyi központ = Global/regional financial centre

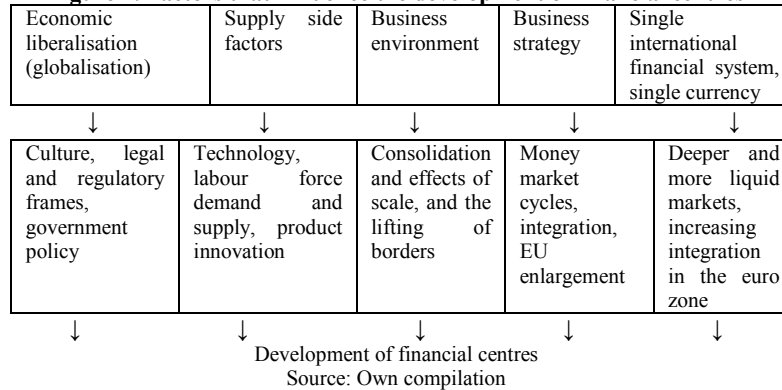
a) In previous centuries, individual financial centres exerted an extremely strong local impact and were of decisive importance in the economic upswing or decline of individual regions. Currently, due to the liberalisation on a global scale, such local growth effects are not that strong, several other factors have become more important (for example, the balance of foreign trade, investments of transnational companies, technology transfer, potential for high-tech production). The unfolding of financial globalisation cannot be separated from the revolutionary development of information technologies (internet). Based on new technical instruments, the toolkit of finances has been extended, which is an ongoing process. This also contributed to disintermediation, the creation of money independently from the economy, the revolutionary development in financial innovation and the expansion of the global network of financial institutions. The complex financial restructuring together with electronic banking can be very well considered as the beginning of a new era of development, which already shows the signs of a financial/money revolution. Former knowledge is insufficient to understand and deal with these new phenomena, financial innovations, because a large number of linkages and questions are not explained or responded to by the mainstream economic theories.

b) As a result of globalisation and integration, the national independence of financial systems weakens, what is more, it has ceased to exist in the euro area. The competition between various currency zones and international financial centres on international markets becomes fierce, which changes the role of certain geographical regions in the global economy, but specific features do not cease to exist even in the era of globalisation. In competition, certain economic and integration attempts are made, which include various countries and the lines of economic power are redrawn. Together with the deepening globalisation, regions, cross-border areas and cities become the basic units of the economy and they replace countries in this respect. We witness a major restructuring not only in current global economic processes but in the analysis of the linkages between competitiveness, economic growth, economic development and financial activities.

c) In international financial relations, a very sophisticated hierarchy, power relations, interrelations and dependencies have evolved between transnational companies and banks, which have an increasing influence on the activities of international economic and financial institutions, and on the hierarchy of international financial centres.

Economic history analyses in, economic theory and geographical research also point out that over the past centuries the institutional environment of international finances, corporate strategies and economic policy objectives of certain regions and the instruments to implement these had a profound impact on the development conditions of financial centres. Today, given the current framework conditions, the major forces that determine the development of financial centres in the future are related to five factors. These are: globalisation, the changing business environment, supply-side factors (such as the impact of technology on the location), corporate strategies, currency changes.

**Figure 2. Factors that influence the development of financial centres**



3. Judging by the current processes, we can forecast that in addition to the decisive financial centres (London, New York, possibly Tokyo) retaining their roles, a major restructuring will take place with respect to regional centres, which in the coming decades might lead to the development of (a) new centre(s) with a decisive weight in the world economy.

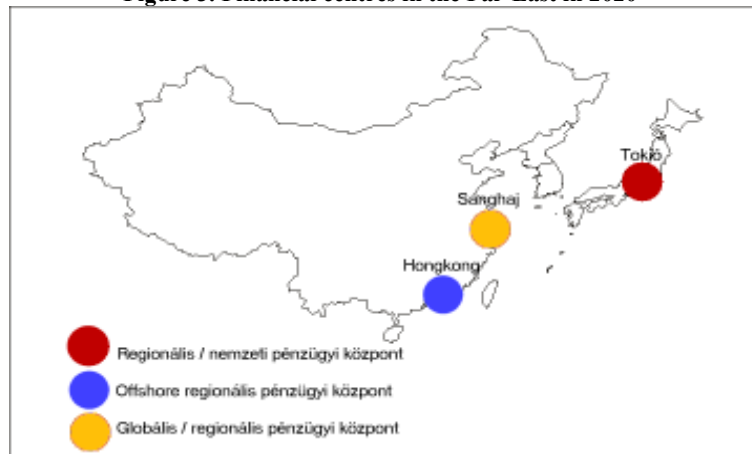
Previously in economics it was obvious that the position of a geographical area, country in international finances is in line with the level of its economic and social development. This is hardly valid any longer because this does not explain the role of oil states or other countries that are short of production factors but function as offshore centres in international finances. It would not give us any plausible answer to the question why China possesses the most significant currency reserve in the world, how the Yuan could be considered at all as international currency. It is not by chance that at the end of the last century location theories were born on the borderline of economics and geographical sciences. These location theories, which are rooted in the 19th century, aimed to reinterpret space, location, economic competitiveness and on the basis of these factors analysed the decisive elements of the development of financial centres.

Global economic restructuring in the coming years might have an impact on the increasing significance of certain regions in the area of finance. The main reason for this process is the advancing European integration and a very rapid economic alignment of certain regions, which has the following consequences:



- In Europe, financial centres are concentrated and a certain division of labour evolves among the most important centres, interestingly enough this efficient specialisation can be observed in the relation between London and continental Europe.
- Countries in the Far East, China, India, South-Korea and the small tigers are increasingly important actors in the global economy and the system of international finances. China and the role of individual financial centres in China might not induce only regional but also global restructuring. At the end of the process, the Yuan might become a commercial and reserve currency as a competitor of the USD and the euro.

**Figure 3. Financial centres in the Far-East in 2020**



Source: Own compilation based on the publication London as a global Financial Centre (Corporation of London, 2005)

Note: Regionális/nemzeti pénzügyi központ = Regional/national financial centre  
 Offshore regionális pénzügyi központ = Offshore regional financial centre  
 Globális/regionális pénzügyi központ = Global/regional financial centre

- At a regional level, the dynamic development of the Russian economy based on hydrocarbons might also exert a major influence. Recently, Russia has recorded major achievements in stabilising its economy, the international expansion of Russian banks is on the increase, the convertible rouble is stable, and Russia has a high level of currency reserves. We cannot rule out

the possibility of a regional international rouble zone emerging within a few years' time. The intention of the Russian financial policy is to make the rouble an international key currency and turn Moscow into an international financial centre.

4. In Europe, the competition among financial centres in the 1970s and 1980s led to a strong concentration of these centres in Paris, Frankfurt and London. The introduction of the euro accelerated this tendency and the three major European financial centres have become a network of three cities that carry out supplementary activities and functions, which boosts the competitiveness of the money market in the EU. At the same time, financial centres with a smaller significance in Europe either gradually decline or carry on with their activities by means of specialisation, or they retain their important role through networking, which focuses on individual activities.

A driving force behind the development of European financial centres was the introduction of the single currency. In certain areas, the euro has already created deeper and more liquid capital markets; the demand for instruments/facilities denominated in euro has strongly increased over the past few years. Euro is a new currency that has acquired a relatively important role in international financial processes. Though as a reserve currency it has not managed to break the hegemony of the dollar, but it has significantly re-tailored conditions in the European Union. With regard to major European financial centres, the introduction of the new currency triggered two marked processes.

- On the one hand, there is a definite specialisation within the euro-area in Paris and Frankfurt. Over the past decade, Paris, London and Frankfurt have shown an accelerated growth and in several branches they have managed to acquire a high market share. This growth was fed by several sources, for example, the deregulation of markets in Member States, which drove up the demand for wholesale activities, the introduction of the euro and the shifting of retail and corporate clients towards capital market financing.
- On the other hand, the establishment of the euro-area did not at all mean that role of London as a financial centre was undermined. It has been able to fully participate in the euro money market processes and has retained its market share. The introduction of the euro considerably contributed to the evolution of the single

financial market in the euro-area and by doing so, it enhanced the deepening of integration.

However, the single currency constituted only one element in the development of European markets. Similarly important is globalisation and its progress in the area of financial services, the business strategies of money market actors, which point to the direction of an even higher level of concentration, technological development and the launching of the European action plan in the area of financial services, which might have a remarkable impact on the development of the European money markets, financial services, and thus financial centres as of 2007.

It is important to note that analyses of the impacts triggered by the introduction of the euro are for the time being rather scarce. Comparative analyses on the impact of the single currency in the euro zone on growth processes and the evolution of the single market are relatively rare. So are analyses regarding growth and other differences between the members of the euro-area and outside. In the EU, reports on fiscal and monetary policy contain references and indications to, for example, the impact of budgetary regulations on growth. However, these are not comprehensive, cyclical processes and the consequences of the introduction of the euro are not indicated separately. The same applies to financial services and financial centres. Such analyses are extremely difficult to work out because only a relatively short time has elapsed since the euro was introduced. This also indicates that one potential follow-up of the dissertation might be a research into the future development of financial centres in Europe.

**Figure 4. Restructuring of financial centres in Europe**



Source: Own compilation

Note: Fejlődő pénzügyi központ = Emerging financial centre  
 Hanyatló vagy specializálódó pénzügyi központ = Declining or specializing financial centre  
 Erősödő regionális pénzügyi központ = Strengthening regional financial centre  
 Globális pénzügyi központ = Global financial centre  
 Eurózáóna = Euro-zone  
 Többi EU-tag = Other EU members  
 EU-n kívüli országok = Non-EU members

5. The institutional framework that determines the international financial system and the relating economic philosophy substantially affects the development of financial centres. The system that emerged after World War II, strengthened the role of financial centres played by countries possessing a key currency through the accelerated international financial liberalisation. On the other hand, the system provided a room for the dynamic upswing of offshore transactions.

The development potentials of financial centres are shaped by the character, regulation of the international financial system and the economic interests of countries in a key position. Prior to the Second World War, the evolution of different currency zones had a major impact which - coupled with a considerable degree of protectionism - artificially diverted financial processes and tailored the development opportunities of financial centres to the world economic interest of individual countries within different economic blocs. The dominant philosophy of the international financial system that has evolved over the past sixty years is the liberalisation of

international financial flows, which provides a room for increased concentration and localisation simultaneously.

The high degree of liberalisation and globalisation of international finances, mutual interdependencies, the system of subordination and domination has developed among financial centres. International financial centres influence the room for manoeuvring of local centres not only through market impulses but also based on the technique they follow and common law. However, this is a two-way street, i.e. the IFCs weigh up and make use of the opportunities of local centres and their need of information.

6. A major feature of international financial centres is the strong presence of transnational banks in the capital and cash flow. These banks, most of which operate in holdings, establish their organisational and management systems in international financial centres where they carry out most of their foreign transactions. There is a close interdependence between transnational banks and international financial centres, internationalisation in the corporate and banking sectors stimulated and restructured financial centres.

Nowadays, the strategies of large international corporations play an increasing role in global economic processes. A decisive element of global corporate strategies is the choice of location of the premises along the value chain. Accordingly, enterprises locate a given activity where it can be managed with the highest possible efficiency. This way they can directly influence the economic development of a given geographical area.

We can also observe the appearance of large-sized players among financial institutions. Concentration in the area of finances is accompanied by processes that are similar to those in productive sectors and various activities are located in various geographical areas influencing the financial activities in the given country or city. The increasing financial significance of one area is typically reflected by the number of international banks, the labour force specialised in finances and its intensity. The presence of a transnational bank is a national economic interest for the country that hosts the bank in an international financial centre because the operational revenues of such a centre are not insignificant. According to certain estimates, the revenue generated this way might amount to 6-8% of the GDP of a country.

Expanding financing opportunities have a favourable impact on world economic growth. The high degree of liquidity makes it possible to finance developments, projects that were not affordable previously. New forms of financial speculation have come into being, which cannot only trigger the crisis of a national monetary system but can also put the international

monetary system at risk. Financial experts (speculators) possess a high degree of creativity and they permanently innovate and come up with new instruments, which regulators cannot keep up with. Due to the high degree of liquidity, the role of economic foundations has eroded, which beyond a certain level of instability might entail risks. (At the same time, international banks have already developed a multiple rating system in their lending activities: the role of non-quantifiable information in decision-making is increasing. This also indicates that traditional analytical methods and theoretical conclusions are modified in light of current world economic processes.)

For the TNBs, it is extremely important that international financial centres should be liberalised, reliable and possess a strong financial infrastructure. They should have free access to information and benefit from strong agglomeration impacts. Therefore, TNBs are interested to exploit the opportunities offered by the international financial centre as broadly as possible and with high efficiency. Currently, the existence of an international centre is in practice determined by the presence of the TNB. At the same time, TNBs up to a certain degree might substitute and supplement the functions of financial centres, which modify the development potentials of certain regional financial centres and thus, the impacts on economic development.

7. There is a multi-faceted and multi-level relation between the dynamics of financial centres and regional development. Financial centres in certain periods of history were of decisive importance from the perspective of accelerating the economic growth in certain regions. Generally speaking, today these impacts are more indirect, though in the case of small developing countries they might still be substantial.

From a theoretical perspective an important question is what sort of causal relation exists and can be identified between the deepening of financial intermediation, the increasing intensity of financial services and economic growth. In literature, there are two markedly different views on this.

- According to one of these views, the broadening of financial services exerts a substantial and direct impact on economic growth.
- According to the other approach, economic growth and basically the expansion of corporate activities are of primary importance and financial services will develop as a consequence of increased economic growth and corporate activities.

Taking into account the processes of globalisation I am of the view that the link between the two processes is much more indirect than before and the strength of this link has also declined. The impacts might unfold through the following major channels.

- The IFC through the financial transactions of institutions located there brings a major tax revenue for the host country, the development of its infrastructure and its management attracts local investments and creates jobs in the host city. The money supply will be broader for the country, which can take out loans under favourable conditions.
- The host country benefits from the advantages of financial innovation and the inflow of high-tech information systems. Local finances can have a broad and fast access to the most authentic and most up-to-date information due to the IFC, which is an important competitive advantage for them.
- The negative impulses evolving in the global financial system appear promptly in domestic finances, the number of speculative transactions grows, which also increases risk (however, these impacts are immediately perceivable anywhere in the world). If the role of the national financial centres diminishes or the centres cease to exist, local enterprises and households might have growing difficulties in financing. (Two examples of the fast collapse of financial centres are Panama and Beirut where tremendous centrifugal forces forced businesses to exit, which led to the rapid cessation of the financial centre function. In the EU, a much more gradual decline can be observed in the case of smaller regional financial centres, mostly stock exchanges. This process, for example, in Spain led to the rise of Madrid, whereas other financial centres in the country gradually lost their positions and significance. The scenario was similar in France, where Paris gradually assumed the role of smaller provincial financial centres.)
- The process of integration, however, might create new opportunities because each financial centre has access to the markets of other financial centres, and can serve as a market for those. Integration is expected to increase efficiency, to broaden the spectrum of financial activities. These places, however, have to somehow compensate for their disadvantages relating to size, which influences certain allowances, incentives to be offered to potential investors. According to the approach based on the networking externalities, financial centres need to concentrate their efforts on various areas. Not only do they have to guarantee efficiency but they need to achieve the critical mass and be able to

maintain it: in addition they need to make an attempt to establish a network with other financial centres, and to exploit local differences maintained by the segmented financial market. This complex approach offers chances even for smaller, more peripheral financial centres, which might also influence economic growth potentials.

8. Offshore financial centres were placed a major emphasis on in certain periods of economic history. Nowadays, in the current global economic development, they have a contradictory role. Their existence is a logical consequence of private capital wishing to exploit market- and profit opportunities, which derive from various economic conditions, however, these centres might contribute in a growing number of ways to global economic imbalances.

Offshore locations, which can be considered as a specific type of financial centres, do have an influence on world economic development. Frequently, they come into being as a result of political, strategic and economic development policy considerations.

- In certain cases, they assume an important intermediary role among certain actors of the world economy.
- Frequently they might specifically deform the economy of a developing country, making it unilaterally and largely vulnerable to changes in international capital flows and regulations.
- Indirectly, they might have an extremely adverse effect on the economy of some developed countries, if with their favourable tax regulations they divert major tax revenues from developed countries. (There are no precise statistics available, but according to estimates we are talking about rather substantial amounts.)

Over the past 15 years, offshore financial centres have undergone a spectacular development. According to reliable estimates between 1995-2004, the assets managed by these centres have increased by a factor of five, and exceeded 2400 billion dollars (!). These transactions currently are carried out by 60 thousand specialised enterprises and involve 2,5 million enterprises. Nowadays 55-60 percent of international financial transactions are related to offshore transactions.

The dynamic development of offshore financial centres is a logical consequence of globalisation. These centres with their extremely favourable tax environment attract international enterprises and private persons as well,



who by exploiting accounting, banking and legal opportunities might minimise their tax liability in their countries of establishment.

The favourable conditions offered by OFCs cannot be separated from the interests of the largest international corporations, which on the one hand can exert influence in order to protect such centres and they register their profits in OFCs, where this provides an instrument to optimise their tax-paying obligations. (Optimising or minimising tax to be paid has become a global endeavour over the past 25-30 years. The statement, according to which the rise of OFC has been caused by the high tax rates applied by nation states is not valid. The reason is the changes in international regulations, the increased mobility of capital and the increase and maintenance of the marginal utility of capital, i.e. deepening globalisation.)

OFCs and the mobility of capital might also oppose serious challenges for democracy. If, for example, the parties winning the elections would like to increase public spending in certain areas to keep their promises, they might need to increase tax revenues, which might prove to be difficult to implement. Enterprises that exploit services and markets in the given country might hide in offshore centres in a fictitious manner trying to avoid taxation. TNCs due to their global network are in the position to do this more easily than their local competitors, which in the end distorts competition. Certain local enterprises might be more efficient than TNCs but they do not operate on a level playing field. At the same time, the increasing fight against money laundering, the links with international terrorism, the importance of safeguarding international financial stability increased the demand for regulations in the area of OFCS. However, this need or demand has not achieved a level where it could significantly influence the process, which has already become a tremendously profitable business.

Various proposals have been put forward in order to eliminate offshore centres, or at least regulate them (for example, OECD statements, EU Directive on the taxation of interest revenues, various proposals concerning the taxation of international capital flows). However, according to certain views, offshore centres are the most free markets in the world, which complies with the fundamental principles of WTO. In my view, offshore activities will remain an important element of international capital flow: TNCs and TNBs are strongly interested to maintain this system and in certain cases, developed countries also advocate their survival. However, the emphasis might shift, on the one hand, due to the combating of international crime, and on the other hand, due to the increasing demand for a global financial stability.

9. The situation of Eastern Europe was rather specific from the perspective of the development of financial centres. Comecon in line with economic logic made an attempt to standardise finances, as well. This type of artificial and arbitrary uniformity might possibly be successful if it is based on the shared economic interests of those involved and takes into account the conditions that were brought about by globalisation. Political and economic changes temporarily provided an opportunity to establish a regional and functional financial centre. Budapest could have become such a player, however, with the accelerated international integration of the region and broadening of world economic liberalisation, this opportunity has considerably diminished.

The breaking up of the Eastern bloc created a vacuum in the region of Central Europe.

- On the one hand, the most developed countries of the region started to rapidly move towards the European Union, whereas their economic and political relations plummeted to an extremely low level.
- At the same time, the territory of the former Soviet Union sank into a deep economic crisis, which was accompanied by the loss of its role in international economic and political relations in the region.
- In addition, the transformation of the South-East European region to a market economy was extremely sluggish, and the territory of the former Yugoslavia was devastated by an armed conflict.

Similar historical and sometimes occasional incidental factors contributed to the exploitation of special opportunities in the case of a large number of countries and regions. Such a window of opportunity opened up for Cyprus, for example, when Lebanon lost its role as a financial centre. In previous centuries, Switzerland had such opportunities due to its specific geo-strategic location and, for example, Vienna became an important centre during the era of the Cold War due to its proximity to the Eastern bloc.

Among the less liberalised international financial conditions in the 90s, the plan to make Budapest a financial centre was a viable and logic idea. This plan in order to make use of the temporarily existing favourable factors in the region wanted to assign the role of a financial bridge to Budapest. By the 2000s, however, this opportunity for the city to become a financial intermediary has become irrelevant due to the accession to the European Union, the inclusion of South-East Europe in the integration process and the further deepening of international financial liberalisation. This, however,

does not mean that economic policy should not endeavour to establish financial relations with, for example, countries in the Far-East, which could make Budapest function as a financial bridge for these countries towards the EU. Hungary due to its favourable geographic location possesses major comparative advantages in economic logistics, which might entail similar opportunities. Hungary is a transit country in the flow of products and services within Europe as well from and to other continents. This provides incentives for logistics with various financial dimensions and generates considerable turnover in FX. In national development plans the exploitation of logistics is also included. These might strengthen the regional financial position of Budapest and influence the functioning of the national banking system, as well.

**Figure 5. The enlargement of the European Union in Central Europe**



Source: Own compilation

Note: EU-tagok 1995-ben = EU Member States in 1995  
EU-tagok 2007-ben = EU Member States in 2007

## **V. The practical implementation of findings, directions of future research**

The dissertation primarily aimed to establish a theoretical framework which helps to circumscribe the impact mechanisms of the most important factors that determine the development of financial centres. Furthermore, it tried to describe the international financial system, financial centres and economic development and their relations. To my judgement, this framework provides a logical perspective from which international finances and the importance of an organic integration into the financial system can be examined under the liberalised conditions of the world economy. Simultaneously, it might provide a method to predict long-term geographical and world economic restructuring. For the Hungarian economic policy, this is an essential matter since Hungary is largely dependent on international financial relations, primarily due to the vital importance of foreign funding in its economy.

Development of financial centres and the monitoring of their repositioning in the world economy is important with a view to make use of their regional growth impulses, as well. The development of financial centres might have very important influence on Hungary in two ways: due its geographical position and institutional integration. Hungary is influenced on the one hand by the restructuring within Europe and the liberalisation of financial services, which the domestic economic policy also has to prepare for. On the other hand, the development of Russia might lead to the emergence of a new financial power with Moscow as its centre. The important economic policy relations of Hungary with Russia might imply that this process of financial centralisation would be worth monitoring.

From the perspective of Hungary's long-term economic interest, it is critical whether the country can have access to additional sources of growth by means of novelty instruments of economic development. One such instrument might be the intense, concentrated development of logistics, which requires a high level of financial services. By promoting this process, Hungary might become a unique centre of logistics and finance. To elaborate the theoretical foundations of this development, it is necessary to rely on the analysis of the strategies applied by successful financial centres. Another valuable option for the country's economy would be to become a financial, economic point of entry into the European Union for economies in the Far-East. This would largely increase the prestige of the country.

Concerning future research, the following considerations have crystallised.

a) The area that research into financial centres has focused on the least is linked to offshore centres – partly as a result of limited access to information. The impacts of these centres on economic development and international financial equilibrium are contradictory. The subject matter at the same time is related to the broader context of redefining/reinterpreting the role of the state in general. Offshore-type of activities, certain forms of which are carried out even in the most advanced financial centres, erode the tax revenues of states, which pose difficulties in financing public tasks. Measuring the volume of this impact - in spite of difficulties in quantifying it – and elaborating various alternatives to solve the problem would contribute to the improved performance of public tasks and the international equilibrium.

b) An area of future research of decisive importance might be the analysis of the impacts deriving from the evolution of financial centres, determined by the development in the regions of the Far-East and Eastern-Europe. It is especially the development of financial centres in the Far-East that might exert influence on the proportions of even the largest international financial centres. At regional level, developments in Russia might induce major consequences.

c) Changes on the map of European financial centres stemming from the introduction of the euro is yet another essential area of research. In Europe, competition among financial centres concentrated in Paris, London and Frankfurt already in the 1990s. The introduction of the euro has accelerated this process. The forthcoming period might witness the process of concentration in centres develop further, whereas the financial sectors of financially less developed countries continue to shrink. All in all, however, the European financial market will benefit from integration.

d) Finally, an important area of analysis is to explore how financial centres contribute to the redistribution of investments and funding in the world economy and its effects on regional development.

## VI. List of publications

1. The dissertation is based on the following publications

### Articles in scientific journals:

1. **ERŐS, J.** (1986): Marketing a pénzügyintézeteknél. Bankszemle, 1986/6. pp. 20-27.
2. **ERŐS, J.** (2001): Introduction of the Balance sheet. Accounting Controlling Tax Auditon BMGE Budapest 2001/4. pp. 62-75.
3. **ERŐS, J.** (2004): Investments and Economic Growth in the European Union and Hungary. Development and Finance, 2004/2. pp. 21-31.
4. **ERŐS, J.** (2007): Pénzügyi központok a globalizáció korában – stabilitás és átrendeződés. Fejlesztés és Finanszírozás, 2007/2. (to be published)

### Scientific papers:

1. **ERŐS, J.** (1996): Concentration of the banking system and the international experience in the field of bank mergers. Paper written for the Kissinger Associates, Inc. New York, USA, 1996. 20 p.
2. **ERŐS, J. – GÁL P. – PALÁNKAI T. – SIMAI M.** (1996): Az Európai Unió egységes piacának helyzete a pénzügyi szolgáltatások terén. Tanulmány a Miniszterelnöki Hivatal részére. Budapest, 1996. 14 p.
3. **ERŐS, J.** (1997): The Hungarian Capital Markets. Paper written for the European Bank for Reconstruction and Development, London, UK, 1997. 9 p.
4. **ERŐS, J. – Gál Péter – Palánkai Tibor** (1998): A bankrendszer átrendeződése és az euro /alkalmazkodási lehetőségek és hatások/ BKE Jubileumi ülészak, Budapest, 1998. December
5. **ERŐS, J.** (1998): The economic, financial position of Central Europe. Paper for the IIF/EBRD Board of Directors and Advisors. London, UK, 1998.

**Papers commissioned by government bodies:**

1. **ERŐS, J.** – GÁL P. – PALÁNKAI T. (1997): Vélemény a bankrendszer és a gazdaságpolitika kapcsolatáról. A Miniszterelnök Gazdasági Kabinetirodája részére. 10 p.

2. **ERŐS, J.** (1997): Feltételek és kidolgozandó kérdések a „Budapesti Kereskedelmi és Pénzügyi Központ” kialakításához. Összefoglaló értékelés a Miniszterelnöki Hivatal részére. 6 p.

2. Lectures, papers delivered orally

**ERŐS, J.** (1996): Report on the position of the Hungarian economy and the Hungarian banking system. Paper for the Central European Bank leaders meeting, Prague, 27 October, 1996.

**ERŐS, J.** (1997): A bankrendszer szerepe a magyar gazdaság pénzügyi folyamatában. AIESEC Konferencia, Budapest, 17 May 1997

**ERŐS, J.** (1999): Az EURO-hoz való csatlakozás és a magyar bankok érdekei, problémái. Az euro-pénzrendszer hatásai a nemzetközi pénzügyekre és Magyarországra. Az EURÓ Magyarországon Konferencia előadása, Budapest, 22 January 1999

**ERŐS, J.** (2005): Development Policy Dilemmas Related to the Introduction of the Euro in Hungary. Executive Club Luxembourg, Continental Finance Group S.A. Luxembourg, 2005.

**ERŐS, J.** (2006): A magyarországi tőkebefektetési lehetőségek bemutatása. Nomura Corporate Advisor (Central-Europe) Pr. Ltd. felkérésére prezentáció tartása, a Magyarországra látogató japán intézményi befektetők részére. Budapest, 26 October 2006.

**ERŐS, J.** (2006): Fejlesztés és Finanszírozás – elmélet és gyakorlat. Az MFB Rt és a BMGE által szervezett „Gazdasági alkalmazkodás és felzárkózási dilemmák” című konferencia, Budapest, 5 December 2006.

### 3. Other publications

**ERŐS, J.** (1993): The most important part of the Hungarian banking systems development. Paper written for the Economic Development Conference - Harvard Business School, Budapest University of Economic Sciences. Budapest, 1993. 15 p.

**ERŐS, J.** (1993): Private Banking Services Report. A study for the Central European Development Corporation. New York, USA, 1993. 14 p.

**ERŐS, J.** (1993): Investment Management Services - Practice and Administration Notes. A study for the Central European Development Corporation. New York, USA, 1993. 11 p.

**ERŐS, J.** (1997): A vállalászási kockázati tőke funkciói és jellemzői a '90-es évek végén. Tanulmány a Pénzügyminiszter számára. Budapest, 1997. 14 p.

**ERŐS, J.** (2001): Introduction of the Balance sheet. Bases on Interpretation and Application of GAAP Interpretation and Application of GAAP 2001. October, Budapest, 14 p.

**ERŐS, J.** (2002): Az immateriális javak szabályozása a HGB-ben. Budapest, tanulmány a BMGE Pénzügyi és Számvitel tanszéke részére 2002. February 13 p.