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**Capital market processes and regional innovation systems:
Hypotheses about the Zurich case**

Abstract

A process of transnationalization can be observed around the globe. More than any other sector, the financial sector is experiencing strong global dynamics. Capital markets and regional development are changing rapidly these days. Innovation and investment decisions of companies, as well as the value chain of the production sector are more and more influenced by new instruments of the financing system. This paper hypothesizes that a new logic of capital allocation and a new and dynamic set of institutions are thus influencing the regional socioeconomic structure of production and services. These dynamic processes of change in the worldwide financial economy (stock market booms, mergers & acquisitions, capital investment strategies and transfers, financial innovation, consulting business and so forth) affect the Zurich region. The financial market in Zurich bundles up among others decision-making for the development of the capital market which has an impact on the process of market capitalization of companies on the one hand and on the investment structure on the other.

Introduction

The liberalisation of both capital market and world trade, the technological revolution in information and communication technologies and the change in customer expectations have led to a fundamental change of business models of banks and other institutions in the financial market. The strategies have been changed and so did the ways of business financing, asset management and retail banking. Shareholder and Fund Manager are more and more determining the innovation and investment decisions of companies. In consequence, such changes are influencing the regional socio-economic structure of production and services.

In the last years, innovation systems, milieus, networks of production and service have widely been researched. Capital as an important factor in the creation and development of such systems was more or less been acknowledged as risk and venture capital. The creation of new financial instruments, the increased risk alertness and other changes may also have changed the finance side of milieus, networks and innovation systems.

Out of this context, we have designed the project “Capital Market Processes and Regional Innovation Systems” (CAPRI). In this project we want to analyse the influence of the new logic of capital allocation on the innovation and investment decisions of companies and thus on the regional socio-economic structure of production and services. The metropolitan region of Zurich serves as a case study to investigate the link between the new landscapes of capital markets, financial institutions and market intermediaries on the one side and corporate decisions on location of activities and the organisation of production on the other hand. With the results we should be able to answer the question how far the regional and local development policy can have an influence through the change of the business environment of the capital market.

The wind of change in finance and business processes

The last years have seen fundamental changes in the business world which are highly interconnected. With these changes the financial system has gained more influence on the modern economy and is sometimes the most crucial factor in doing business. Terms like Initial Public Offering (IPO), shareholder-value or new economy are finance-driven terms. What are the push-factors behind these changes? Which are the main issues concerning trends and structural changes? Which are the implications for the financial sector, the markets and on market-players? And what about potential impacts on the development of regions?

There are some external forces (more or less external respectively outside the capital market), which could be seen as important push-factors or external driving-forces. Due to many interconnections, it is not easy to distinguish push-factors, market forces and organisational reactions in reality. So we first introduce the most important factors on different impact levels and afterwards we try to put them together. The importance and deepness of the links between those levels is one of our research aspects, so the links have to be seen as preliminary.

Push-factors

The revolution in **information technology** serves as an enabler of new business models and processes, the Internet deepens and accelerates the changes. Technological developments have eroded statutory and physical barriers between sectors and countries. It enables all market participants to:

- make world-wide transactions in real-time possible
- reduces transaction costs due to automation and ‘prosuming’ (producing and consuming: parts of the processes are transferred to the customers)

- allow new instruments to access, manage, analyse and share information and to manage risks
- change existing and create new distribution channels
- create and use highly complex new financial products
- make new service products and a 24-hours-service possible
- build up data-based customer relationship and retention management
- collect market data and test new products world-wide very fast.

It is very important to implement new technologies quick, but it is even more important to succeed in replacing the old systems. Often, this process is far more difficult as well as time and money consuming.

Most of the changes in the business world take place due to the growing influence of shareholders and shareowners. Stock-market-listed companies bring their strategies and operations increasingly into line with the needs of shareholders. Investment companies not only expected higher profits, but they also want to have an influence on management decisions. Today, the **profit orientation** is the most decisive factor in running a business. New business models are mostly profit-defined models, driven by stock-options and quarterly performance.

A further motor in the change of capital markets is the **liberalisation** of capital controls, which allows to expand activities and to lower the costs. The easier access to capital allows world-wide solutions and quick transfers, which fuels global production and trade, force many companies to think and act (more) global, and make cross-border economies of scale possible. The liberalisation has a direct influence on the possibilities for financing business activities and it resulted in increased competition for the banking industry.

The **customers have changed their values** and hence their capital related behaviour. On the one hand, customers have realised the successful performance of financial markets in recent years and wanted to participate, on the other hand banks have searched for new

sources of capital and have persuaded their customers to invest in stocks or funds. In result, customers are better informed and readier to take risks. Large groups of customers have changed from security to profit orientation, from traditional saving accounts to stocks and bonds. Standardised funds, low thresholds, broad marketing activities and the going public of some former state-owned companies (e.g. telecom) have helped to spread this development to new groups of small clients.

After Second World War, the economies in Europe showed strong growth which result in high wealth. Now and in near future, this wealth passes from the post-war-generation to the next generation: the “**generation of heirs**”. For example estimates for Germany show, that about one billion Euro will be inherited between 1997 and 2002. Furthermore, money out of pensions is looking for new investment and, due to changing values, will be put into the capital market.

Market level

The described push-factors have some effects on the capital market:

The past ten years have seen many **new companies** popping up in the finance market. Some companies are completely new players such as internet firms, non-banks, discount-brokers, investment funds or virtual banks, others are traditional companies like banks which are going into the insurance business or insurance companies which build up privat banking branches. Furthermore, there are many new intermediaries serving the growing demand for advisory and special tasks, which are completely new or have been created through outsourcing.

New companies, less regulations, technological advances and the corresponding **explosion in the volume of transactions** (The Economist, October 23rd 1999) leads to **increasing competition**, an acceleration of all business processes and an enormous increase in cross-

border financial transactions and activities. With service around the clock from any location, there is no room for businesses to take a breather. The business processes must allow such a pace and there is a strong need to be innovative and fast.

As a result, linkages among OECD financial markets have been greatly strengthened and financial conditions in individual countries have become increasingly sensitive to developments in external markets. This has put higher demands on the stability and efficiency of clearing and settlement systems for payments (Blommestein 1995).

The **change in corporate financing** creates new markets for investments. In line with more global needs of even bigger companies, networks and crossborder investments or the hunt for better conditions, a **widening of range and pace of capital mobility** take place. The profit orientation drives banks out of risky markets like traditional lending for companies, which left many companies to get their investment capital through Initial Public Offerings (IPO) or issue of bonds or from risk- or venture capital firms. However, stock-market and bonds are relatively minor sources for capital, except the United States and Canada (Blommestein 1995). This is about to change and will have an influence on the finance market. Banks are still the dominant source of external finance for small companies. The limited access of SME to other forms of capital could become a great problem since more and more banks look to profits first. SME may have to pay high-risk premiums in future or have to say good bye to their traditional independent ownership as risk or venture capitalists partly take over the control or even the management.

Innovations in the capital market have created new risks and new possibilities to cover risks (stock call options, principal at risk etc.), and have lifted the border between banks and insurance companies, paving the way to a **linkage of finance and risk markets**. Conventional insurance products will be replaced with financial products. With alternative

risk transfer, the capital part of insurance will be replaced with stocks, the risk part with calls and puts, and the part of surplus earnings with options. So the risk and finance markets will partly be merged, leading to fiercer competition, mergers and more universal financing companies.

Moreover, some banks have enlarged their range into new lines of business, often they went into the more riskier segments of credit markets. This has made some banks more vulnerable to shocks (Blommestein 1995). A number of banks already have paid the price for such credit-adventures in the late nineties. This was one of the starting points for switching strategies to more profitability and risk management in all their business sectors.

The general objective is to build and use systems for the disciplined management of credit risk, market risk and liquidity risk, which consists of appropriate measurement of risk, a framework for governing risk taking and an adequate management information system (Blommestein 1995). Furthermore, the distinction between various types of financial assets has been eroded.

The most remarkable change in the financial market structure has been the **growth of equity markets** through the greater weight of equity components in institutional investor portfolios; the high demand for equity transactions triggered by mergers and acquisitions and the generation of additional equity operations by privatisation programmes. This produced a demand for trading risks, which fuel the huge derivative-market, which grows bigger from day to day. However, the opportunities and threats of derivatives for the stability of financial markets are still under discussion.

Trust, Risks and indeed the huge amount of money require exact and strongly controlled rules. Moreover, the financial crises in Eastern-Asia have shown the limits to deregulation. It is an open question, if the change of international market conditions or the change

respectively the conservation of **state regulations** are the most important factor for further success. In the case of Switzerland, the current discussion about the bank secrecy shows how important state regulations in the financial market are. A change in rules would change the whole business. It shows further, how important it is to have international regulations. Isolated national solutions will no longer be efficient since offshore banking places will come under pressure to sign international laws to prevent tax evasion and money-laundering.

Organisational level

The growing importance of private banking and investment banking, new technologies, globalisation etc. have forced most banks to work out **new visions and business strategies**. The new visions mostly contain ambitious objectives for profit-sales ratios or market-share. On the strategic level this means a decision to specialise or to diversify through mergers and acquisitions, broader co-operation, networking or outsourcing. This leads to a more and more interconnected landscape of financial firms, to more competition, new products and lower costs. Most strategies are based on fundamental changes in seeing the own business. Usually, customer-value, and customer retention are the central focus.

New visions and strategies need new business models, most of them have been realised through extensive reengineering projects in the last years. Some of the leading European banks are newly organised along business processes designed out of the needs of customers. For example, the Dutch ING-Group changed to four business units, named by their core-processes: Retail, Corporate Banking, Investment Banking and Asset Management; the Credit Swiss Group is new organised in the units Financial Services (Retail), Private Banking, Investment Banking and Asset Management (Nega-Ledermann 2000).

Another reason to think about reengineering are the changing success factors:

- Customer Focus. You have to know your customers if you want to retain them.
- Agility, which means acting swiftly and speeding up processes.
- Service Quality through high standards and pro-actively service and delivery.
- All Channels have to be integrated to give the customers choice and convenience.
- Alignment of risks with profitability targets.
- Create new markets and find new customers.

This means that banks must become more knowledgeable, innovative and professional. They have to leverage Intellectual Capital through human resources management, best practices through process development and bench marks, control the value chain through new controlling concepts like Balanced Score-Cards and increase efficiency through automation of transactions and concentration on advisory. Last but not least well-known and strong corporate brands are crucial for survival in the internet. Preconditions are new information technologies, new management systems and the exploitation of information (knowledge management). There is a need to process even the most complex banking transactions over the web.

Another challenge is the possible **separation of transaction services and distribution services**, which is usual in Anglo-American countries. In Switzerland, the universal banks followed this line in their change from an all-services-under-one-roof-policy to an all-services-under-one-umbrella-brand-name-approach, which, in effect result in three or four more or less independent business units. At the moment most banks in Switzerland are busy to form one big clearing and settlement organisation which will serve all its members in reducing costs.

Specialisation and diversification are two major strategies to maintain competitiveness. In the past years, this has led to a wave of **mergers and acquisitions** resulting in some very

big banks or rather finance groups with several hundred thousand workers. Moreover, wide-spread cross-shareholding between banks and other financial institutions is usual in some countries.

Joint ownership or operational control of banks, insurance companies and security houses is a significant trend in many OECD countries. The process of **financial conglomeration** may heighten the relevance of a number of risks: concentration of power, conflicts of interests, difficulties in assessing aggregate risk exposures, and a weakening of corporate control in the components of the conglomerate. (Blommestein 1995)

The **legal and political framework** has also an influence on the organisation of companies, since bankers often sit in the advisory boards or have an influence on the composition of shareholder structures. In this context, the special conditions in Zurich have to be examined in contrast to other contrast. Future adjustments to EU- or world-wide regulations can have a great influence on the location behaviour of banks and other corporations as well as on the location Zurich as a whole.

Regional level

- **Influences on location of banks and financial institutions**

The increase of mergers and acquisitions, co-operation, networking and outsourcing have a direct influence on the location of banks, insurance companies and finance intermediaries. New business processes will have an influence on the question where to locate which process. There will be leaner headquarters, less subsidiaries and a concentration in back offices of already existent banks and of new market players.

The new technologies also have an effect on decisions where to do transactions. Some new software causes concentration because they lead to a preference of certain locations (e.g. stock trading software). On the other side, remote access technologies give the possibility

to stay where you are. This might cause a decentralisation of some activities. It depends mostly on the necessity of frequent personal contacts. Such contacts are most necessary in investment banking, in preparations of initial public offers and in private banking and may enhance the demand for representative office-space in central business districts.

- **Influences on location of companies in the regional innovation system**

The described processes and changes may have some effects on the spatial division of production, services and innovation. As mentioned, investment companies and other shareholders want a direct influence on the performance of the companies in which they have invested their money. With their influence on business strategies and models (e.g. concerning the innovation policy) they also have an influence on location decisions (headquarters, subsidiaries, back-offices). They have a further impact on the spatial linkage and expansion of markets and activities.

- **Rating of town and regions as a location factor**

There is a growing pressure on towns and regions to be rated by their financial performance, credit worthiness or their conditions to do business. This will lead to AAA-Regions, which will attract further companies and A-Regions, which will not. The winners from today will obtain advantages in interregional competition.

Policy level

A growing influence of the capital market on politics can also be observed:

- First, as mentioned above, the rating of regions has an impact on local and regional policy.
- Second, more and more companies are involved in regional initiative committees to promote the region or to lobby for or against policies. The increasing privatisation of location marketing activities is one sign, the growing dominance in agenda setting is

another. Without having to worry about majorities, they try to put through their political interests, which raises questions about their democratic legitimacy.

- Third, the trade-off between competition and stability continues to present a dilemma for policy makers (...) and it cannot be automatically assumed that increased competition will always bring effective risk management (Blommestein 1995).

The liberalisation of markets has left politics in a dilemma between the need of the finance market for a framework and the demand for abolishing taxes and regulations. The pressure was diminished in 1999 when the Asian crises have shown the need for new global rules.

Where the wind of change is blowing...

Zürich as a European Metropolitan Region (EMRZ)

Zurich is competing with the most important international economic and financial centres. Location decisions are judged increasingly in an international context. Swiss enterprises deliberate about whether to invest domestic or abroad. Foreign companies are evaluating investments in Switzerland or to replace capital. Therefore information about the location of Zurich are essential. But at this point a main problem is starting. Which spatial dimension do we mean, if we want to measure Zurich's competitiveness (see figure 1)? Do we want to regard the city, or the conurbation or a construction called region? Don't we have to focus on the functional structures of spatial units?

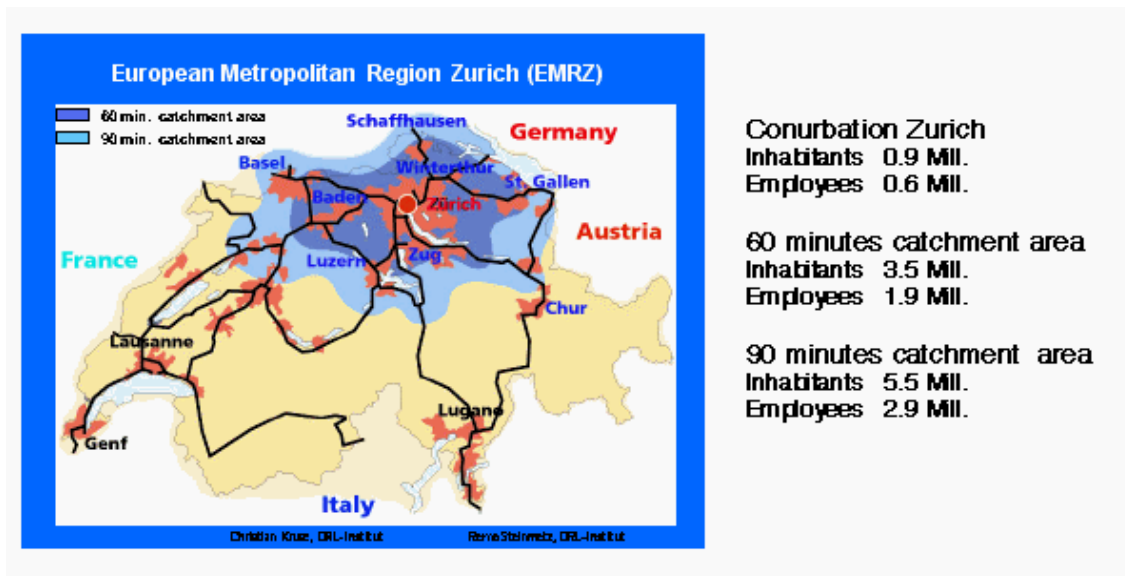


Figure 1: European Metropolitan Region Zurich

Source: Kruse, 2000

This is not only a problem of the discussion in Zurich. This vagueness can be obtained in the international discussion, although the subject of the competition of regions has been the major issue in regional sciences since the last years. Until now, it hasn't been possible, to find a satisfactory definition and characterisation. And exactly this is the problem where the comparing international ranking studies are suffering from. Mostly they are using data structures, which do not cover the true functional region. In the case of Zurich, we figure the major problem, that there is hardly no systematic research within the functional region. That leads to distortions in the description of the dimensions and the competitiveness of for example Zurich's financial sector. And the main reason for this vagueness is, that the political governed spatial units do not correspond with the true functional regions. They are not covered by a homogeneous political system, which at least provide the statistical data to evaluate the region.

The international research has reacted by focusing on the structures of Global and European Metropolitan Regions (Blotevogel 1998). Regions with a high degree of internationalisation

are characterised as global knots within the world economic system (Sassen 1999). They combine technological functions (innovation, r&d, high-tech-production), “gateway”-functions as well as international regulatory functions in the fields of finance and services and international politics (Bonneville 1994).

A high vertical and horizontal integration, of the enterprises within the region and the international markets, a high degree of specialisation, a high concentration of knowledge and information, the availability of capital as well as large skills of innovation are the main factors of competition - independently from political borders. It will be one of the most complicated issues of the CAPRI-project to find indicators for a “definite” functional metropolitan region.

Zurich as a hub in the worldwide financial system

Zurich is a hub in the worldwide financial system. The study conducted about the economic location of Zurich (Bretschger 1995) shows that the financial sector in Zurich creates by far the most value. By an international ranking of cities, Zurich takes a top position as a metropolitan area due to its strong financial sector (Reclus 1989, Brugger and Kärcher 1992, Krätke 1992, Rossi and Steiger 1995). Despite its small size Zurich is competing with other centers such as Frankfurt, Hamburg, Munich, Milan or Brussels. The international discussion about metropolitan functions, however, hardly considers the position of Zurich. Only the work by Hitz, Schmidt and Wolff (1995) has dealt with Zurich`s development towards a world metropolis. Hitz et al. (1995) describe in this connection the headquarter economy in Zurich`s region. A deeper analysis of the metropolis` structure and functions and of the financial center as a driving factor has not been conducted yet.

Special investigations have only been done for few financial metropolitan areas like New York (Sassen 1994), London or Frankfurt (Bördlein 1993) for instance. Dealing with the financial centre from a regional economic and geographic aspect seems promising. In financial centres many important decision-making-, knowledge creation- and information-processes are located. This is where strategic decisions are made and risk management is conducted. This is where the ratings for companies, industries as well as regions are compiled. Moreover, investment decisions are made, information is distributed and advertising campaigns are launched. A tight network with contacts to highly specialised intermediaries in the service sector is necessary. This process goes hand in hand with closeness and easy access (see Bördlein 1993, Grote 1998), which even might be one of the prerequisites for the process.

Transnational organization and regionalization of business units

Transnational organization in the financial industry offers global companies a worldwide network of branches and connections. Internationally operating financial companies also have to deal with economic and political development on various levels. Therefore, regional and local branches of banks have to be integrated into the transnational corporation in order to respond to the different regional needs which vary from global money transfers to the cash teller of a regional branch.

This establishes a link between the global and the regional business. This connection can be seen on the one hand through an internal network and strategic alliances, and through the interference with regional value creation on the other: financing different projects in the service and production industry, consulting on mergers, acquisitions and take-overs, supporting IPO's, financing investments and innovations, investing into real estate, leasing production commodities and durables as well as plant facilities (see Narr and Schubert

1994). This requires constant development of “new products”, i.e. investment opportunities for liquid funds and long-term capital. The development of these new products, their strategic deployment and their effects are determining the process of value creation. Above all, the innovation process, which is very important for competing internationally, depends fundamentally on the shareholders` evaluation. Laux (1996) has shown how financing can be used as incentives for customer loyalty. By this the production process can be controlled. In public this idea has been discussed under the heading of shareholder value. The strategic target of maximizing the return focuses mainly on a company`s market value (Beyfuss et al. 1997). Most likely this has an effect on the company`s location.

Importance of capital in the regional innovation system

In industrial- and economic-related research and in the discussion about regional innovation systems, capital is regarded as extremely valuable. The capital market plays the crucial role in financing innovation and supporting regional development (Welfens and Wolf 1997, Hess 1998). This factor, however, has not been sufficiently investigated. Most approaches in economic geography and regional economic research only include federal subsidies, tax reduction and risk capital provided by the government. In his “diamond”-model, Porter (1990) considers “free capital” as one element among different factors for competition among companies. No reference, however, is established to processes in international capital markets. While Lessard (1989) is the only one who integrates the companies` financial policy into Porter`s approach, he only focuses on fluctuations of exchange rates. Baldwin (1989) is among a few others who describe capital market processes as a

competitive factor and prove the enormous importance of this aspect. Still, these approaches remain limited to economic research.

In regional science this topic has been approached through analyzing the importance of international direct investments. Christian Steiger (1999) has investigated processes linked to this approach, using an empirical survey about foreign companies in Zurich and Geneva. Direct investments are the result of international capital flows and “value bundles” (Steiger 1999, 20), which remain, however, within the transferring company. Still, the main form of the transnationalization of capital is the international return-oriented transfer of private funds. By that an enormous amount of capital is constantly being transferred globally. Narr and Schubert (1994) consider this process much more important than the one of direct investments since this market is characterized by a much higher volume. The market allows investors to have a stake in different companies. The enormous accumulation of capital generates the investors` potential to influence decisions within companies.

The exploration of capital market processes with regards to their effects on regional innovation systems and on the region itself is an important starting point in analysing the competitiveness of companies and regions. It is surprising that no comprehensive scientific analysis of this aspect has been published yet.

The traces of change in Zurich

Working Hypotheses	Comment
The landscape of financial services and the system of intermediaries have changed.	Banks and insurance companies change their processes and organisation. Consultants of all kind, rating agencies, communication and advertising agencies and so forth pop up.
Business relations between companies and	The investors have more and more influence on

investors have changed.	the borrower's decisions where to locate as well as on the innovative potential of companies and regions.
Shareholders and other stakeholders are enhancing their influence on state policies.	This takes place on various levels, in particular in centralised fiscal policy and the regional location development policy.
Investments or loans to towns and regions will more and more be allocated according to their rating position.	Communities and regions are increasingly subject to solvency checks, which result in a ranking. As a result, strong regions are getting stronger and stronger while weak ones are worse off.
Internationally operating companies get increasingly involved in regional initiative committees.	This in order to commercialise the innovative potential of a functionally linked and highly specialised region in their own interest. These regional committees are hardly democratically legitimised and undermine the public authorities structural responsibility.
The importance of political regulations decreases, but still play a comparatively large role in the Swiss financial market.	There is high pressure on state policies to deregulate the finance market on the one hand, and strong interests to keep the bank secrecy as a pillar of Swiss competitiveness in private banking on the other. With private banking as the most important strategic factor offshore markets are the biggest competitors.

References

Baldwin, Carliss Y. (1989): der Faktor Kapital: Der Wettbewerb um das Kapital in einem globalen Umfeld. In: Porter, Michael E. (Hrsg.) (1989a): Globaler Wettbewerb. Strategien der neuen Internationalisierung. Wiesbaden. Seite 209-333.

Beyfuss, Jörg et al. (Hrsg.) (1997): Globalisierung im Spiegel von Theorie und Empirie. Beiträge zur Wirtschafts- und Sozialpolitik. Band 235. 80 Seiten.

Blommestein, H.J. 1995: Structural Changes in Financial Markets: Overview of Trends and Prospects. In: OECD (Ed.) 1995: The New Financial Landscape. Forces Shaping the Revolution in Banking, Risk Management and Capital Markets. OECD Documents. Paris: OECD. pp. 9-47.

Blotevogel, Hans H. (1998): Europäische Metropolregion Rhein-Rhur. Theoretische, empirische und politische Perspektiven eines neuen raumordnungspolitischen Konzepts. Dortmund, 98 Seiten.

Bonneville, M (1994): Internationalization on Non-capital Cities in Europe. Aspects, Processes and Prospects. European Planning Studies 2, p. 267 – 285.

Bördlein, Ruth (1993): Das Rhein-Main-Gebiet als Standort hochrangiger Dienstleistungen. Stand und Perspektiven des Internationalisierungsprozesses einer Region. Frankfurt. 292 Seiten.

Bretschger, Lucas et. al. (1995): Wirtschaftsstandort Zürich. Wettbewerbsfähigkeit heute und morgen. Zürich. 128 Seiten.

Brugger, Ernst A. und Thomas Kärcher (1992): Weltstädte – Schweizer Städte. Bericht 5 des NFP Stadt und Verkehr. Zürich, 85 Seiten.

Budd, Leslie (1995): Globalisation, Territory and Strategic Alliances in Different Financials Centres. In: Urban studies, Vol. 32, No. 2, page 345-360.

Code, William, R. (1991): Information flows and the process of attachment and projection: the case of financial intermediaries. In: Brunn, Stanley D. and Thomas R. Leinbach (Hrsg.) (1991): Collapsing Space and Time: Geographic aspects of communications and information. London. Page 111-131.

Grote, Michael H. (1998): Die Auslandsbanken am Finanzplatz Frankfurt. Projektbericht 1 im Rahmen des Projektes „Emerging Nodes in a Global System. Internationalisation and Urban Development in Tel Aviv Metropolitan Area and Rhine-Main (Frankfurt) Area. Frankfurt. 24 Seiten.

Hepworth, Mark (1991): Information technology and the global restructuring of capital markets. In: Brunn, Stanley D. and Thomas R. Leinbach (Hrsg.) (1991): Collapsing Space and Time: Geographic aspects of communications and information. London. Page 132-48.

Hess, Martin (1998): Glokalisierung, industrieller Wandel und Standortstruktur. Das Beispiel der EU-Schienefahrzeugindustrie. München, 203 Seiten.

Hitz, Hansruedi, Roger Keil, Ute Lehrer, Klaus Ronneberger, Christian Schmid und Richard Wolff (Hrsg.) (1995): Capitales Fatales: Urbanisierung und Politik in den Finanzmetropolen Frankfurt und Zürich. Zürich. 400 Seiten.

Krätke, Stefan (1992): Hierarchie und Vernetzung im europäischen Städtesystem. Hamburg, 46 Seiten.

Laux, Christian (1996): Kapitalstruktur und Verhaltenssteuerung: Finanzierungsverträge als Bindungs- und Anreizinstrumente. Wiesbaden. 229 Seiten.

Lessard, Donal R. (1989): Die Finanzpolitik des Unternehmens und der globale Wettbewerb: Grössenvorteile im Finanzbereich und Strategien gegen schwankende Wechselkurse. In: Porter, Michael E. (Hrsg.) (1989a): Globaler Wettbewerb. Strategien der neuen Internationalisierung. Wiesbaden. Seite 165-207.

Miarka, Tobias 2000: Financial Intermediation and Deregulation – A Critical Analysis of Japanese Bank-Firm Relations. Heidelberg: Physica-Verlag.

Narr, Wolf-Dieter und Alexander Schubert (1994): Weltökonomie. Die Misere der Politik. Frankfurt. 280 Seiten.

Nega-Ledermann, A.M. 2000: Credit Suisse reorganisiert den Retail-Bereich. In: Finanz und Wirtschaft. June, 10th 2000.

Porter, Michael E. (1990): Wettbewerbsstrategie. Methoden zur Analyse von Branchen und Konkurrenten. Frankfurt. 488 Seiten.

Reclus (1989): Les Villes Européenes. Un rapport pour la DATAR. La documentation française, Paris.

Rossi, Angelo (1995): Der wirtschaftliche Strukturwandel und die Regionen. Am Beispiel der Schweiz und der angrenzenden Länder. ORL-Bericht 93. Zürich. 291 Seiten.

Saskia Sassen (1996): Metropolen des Weltmarkts: die neue Rolle der Global Cities. Frankfurt, New York 188 Seiten. (Deutsche Fassung von Cities in a World Economy)

Sassen, Saskia (1994): Cities in a World Economy. Thousand Oaks, Pine Forge Press, 157 Seiten.

Steiger, Christian (1999): Internationale Direktinvestitionen und Standortkonkurrenz. Eine empirische Untersuchung über ausländische Unternehmungen in Zürich und Genf. ORL-Bericht 107. Zürich. 261 Seiten.

The Economist, 23. October 1999: Finance: trick or treat? pp. 117-118.

Welfens, Paul J.J. and Holger C. Wolf (Ed.) (1997): Banking, International Capital Flows and Growth in Europe. Financial Markets, Savings and Monetary Integration in a World with uncertain Convergence. Heidelberg. 458 Seiten.

Zoller, E. 2000: Bisher ist nur der Kanton Zürich eingestuft. In: Finanz und Wirtschaft.

May, 27th 2000.