Financial places, regional production system, and the gap to bridge: considerations for a research agenda

Dr Alain Thierstein, Associate Professor for Territorial and Spatial Development, Institute for Territorial and Landscape Development (IRL) at the Swiss Federal Institute of Technology in Zurich/Switzerland

Published in: Thierstein, A.; Schamp, E.W. (2003): Innovation, Finance and Space. Selbstverlag Institut für Wirtschafts- und Sozialgeografie der Johann Wolfgang Goethe Universität, Frankfurt a.M., 197-214. ISSN: 0340-8345.

1. Introduction

Financial markets are undergoing rapid change as a result of the world-wide deregulation of capital transfers, technological progress and financial innovation. As a consequence, the pressure of international competition in the intensive value-added financial sector has increased considerably. Thus, it can be assumed that small changes in overall conditions in the competition between top-rated financial centres could lead to a loss in competitive edge. That is why even London made an attempt to assess the UK's performance as an Euro financial centre since the launch of the Euro at the beginning of 1999. The Bank of England shows in its recent report that financial services make a significant contribution to the UK economy: about 5 percent of GDP in 2001. Over half of the total contribution to UK GDP can be attributed to the City of London, which generated net exports of financial services of over £13 billion in 2001. Before the recent stock market downturn, the Corporation of London estimated that around 343,000 people were employed in financial services in London (Bank of England 2002). The Bank of England continues: "The financial services industry in the UK depends on its international business. Historically, the City developed as a financial centre because of the international role of sterling. But for a long time now, the City's role has depended heavily on making markets and providing financial services in foreign currencies. Many market firms in the City are foreign owned and internationally oriented. While most international market firms have been based in the City for many years, they could move some or all of their activities abroad quickly if they concluded that the City was no longer internationally competitive. Market firms are located in the City because they find it competitive to do business there" (Bank of England 2002: 7).

Against this backdrop, it is possible that further global centres for various types of financial services will establish themselves. Looking at Switzerland, its advantages are its size and its know-how with regard to the expanding field of asset management. The combination of these advantages with political and economic stability, the traditional high quality of services provided, a good reputation, guaranteed protection of privacy and strict conditions ensuring the prevention of abuse result in a strong financial centre. Switzerland's success as a financial centre is often regarded by other countries as deriving merely from regulatory and tax conditions, in other words from banking secrecy. In practice, regulatory conditions are a decisive factor governing the location and success

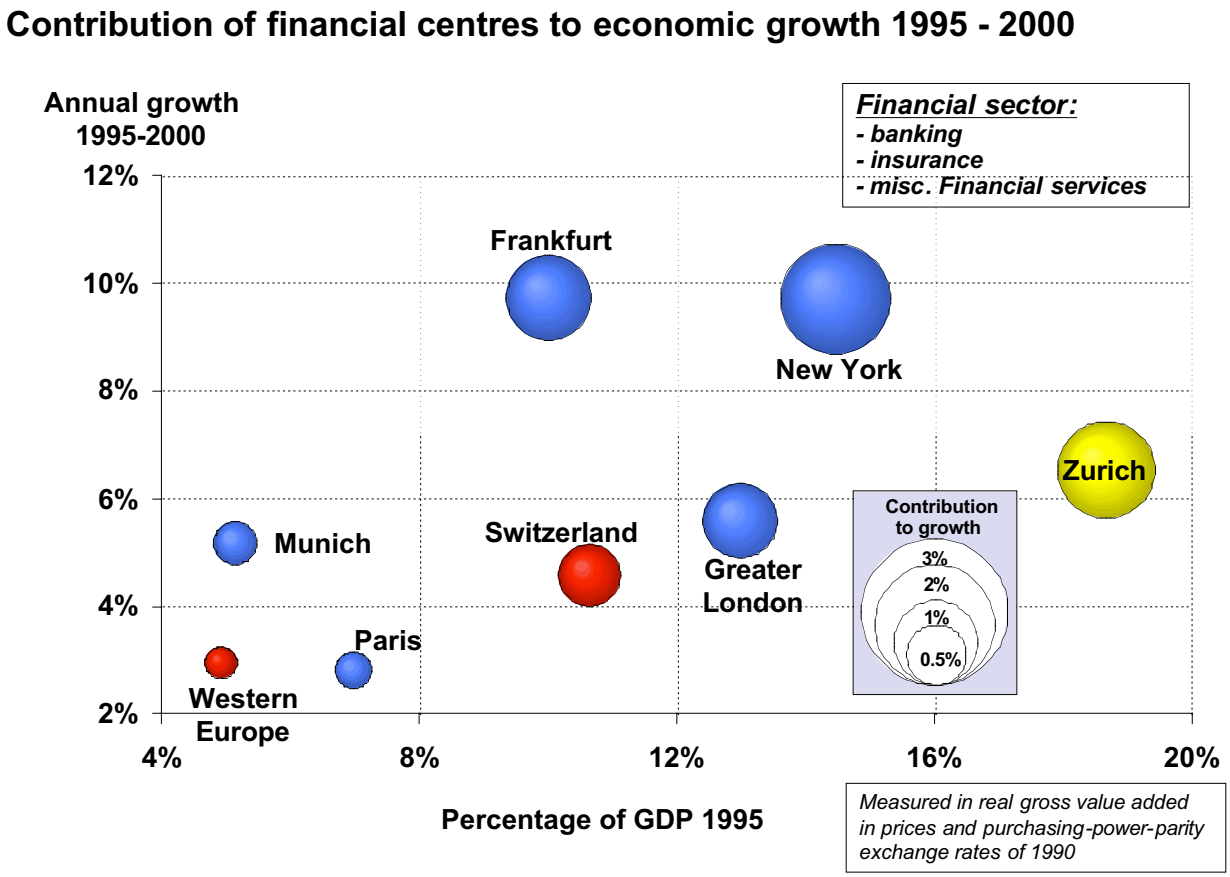
of any financial centre. They have a direct influence on the international competitiveness of financial services providers. It is noticeable that all financial centres of world importance enjoy certain local advantages with regard to regulations, such as special monitoring and tax regimes, legislation on trusts or a form of banking secrecy. Switzerland is therefore by no means alone with regard to its particular legal position.
"What makes a financial centre?" This crucial question is easy and difficult to answer at the same time. Easy because you take the definition given by Laulajainen (1998): "The ability to collect, exchange, rearrange and interpret information is the most persistent characteristic of an international finance centre" (Laulajainen 1998: 257). This definition is a static one, but looking at the change of time, the answer to what is a financial centre becomes tricky. External conditions, regulations, technology, human skills, they all change and so do the comparative positions of financial centres world-wide. Based on that rationale, the Bank of England looked at choice of location of firms involved in the financial centre of London. For most international market firms, what is important is where their key staff is located, because that is where most value is added. Where have large international market firms based their activities in Europe since the launch of the Euro? The Bank of England report starts with stating: "The UK's performance in financial services has not just been a function of the City's activities in the Euro markets, or competition between London and other financial centres in Europe. It has also been a function of London's global competitiveness (e.g. vis-à-vis New York), and of the impact of technology on financial centres in general. Then looking more specifically at choice of locations, the report identifies six main influences (Bank of England 2002: 28-31):

- Critical mass of expertise
- Financial infrastructure
- Regulatory framework
- Taxation
- Physical infrastructure
- Languages, learning, law and culture.

No doubt about it, but financial centres or financial places may constitute an important part of one's national economy, depending on the size and the comparative international position of a specific financial place. The following figure 1 illustrates the relative importance of major European financial centres in relation to the gross domestic product (GDP).

The paper is structured as follows. Section 2 sheds a brief light on the quantitative importance of the financial centre(s) of Switzerland. Section 3 tries to sketch the important issues that help to bridge the gap between the world of financial markets and the world of physical productive processes. The analytical concept of regional innovation and production systems (RIPS) is introduced. In section 4, a case study located in eastern Switzerland illustrates the potential benefits from applying the RIPS methodology to the process of financial inter-mediation, and a final remark closes the paper.

Figure 1: the relative importance of major European financial centres



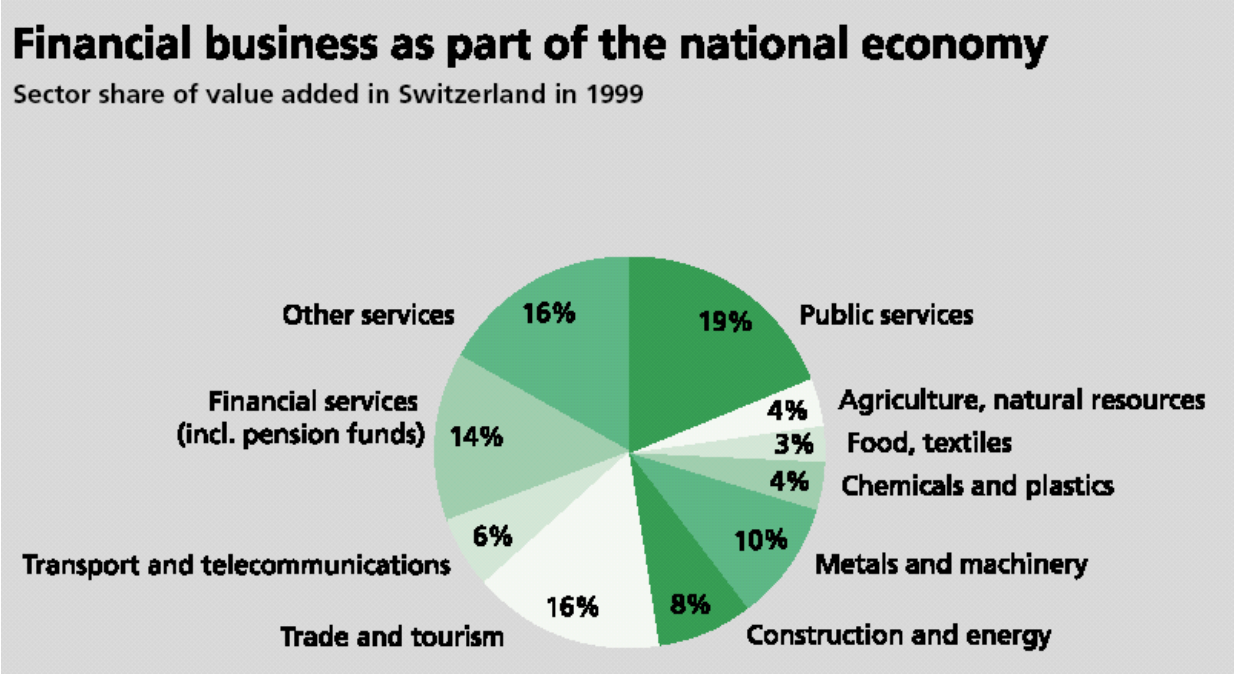
Source : BAK Basel Economics Ltd , International Benchmark Report, 2001

2. The financial centre of Switzerland

Now, look rapidly at numbers for Switzerland. The overall financial sector in Switzerland employs nearly 220,000 people, of which more than half work in banking. Around one quarter is employed by insurance companies that are relevant to the financial sector, trust and auditing companies and other types of financial services (figure 2). This means that approximately 6 percent of the Swiss workforce is employed in the financial sector (Swiss Federal Department of Finance 2002). These figures do not include turnover and incomes, which are indirectly generated by this sector. In addition, tax revenue linked directly or indirectly with the financial sector is a very important factor. Finally, a selection of high-quality services offers savers and investors better access to capital while facilitating industry's access to funding. The major structural changes in the financial sector witnessed during the 1990s are evidence of the pace of innovation in the Swiss financial industry. New logistical features such as cashless transfers and central management of liquid resources, plus complex, tailor-made tools for covering risks have become part of the standard pallet of services. In this way, financial intermediaries help to reduce costs and raise productivity within the economy. Over the last few years the Swiss banking sector's contribution towards overall added value in relation to gross do-

mestic product (GDP) has risen by one third. In the meantime, the proportion of all financial business, including insurance but excluding auxiliary activities, is estimated to be almost 14 percent of GDP (Lambelet, Mihailov 2001). The recent stock market downturn may lead to a decrease of these numbers.

Figure 2: Financial business as part of Swiss economy



Source: (Swiss Federal Department of Finance 2002):3

Against this background of rapid changes in the financial and capital markets, the spatial concentration of financial places and the obvious innovation processes within the financial industry, academic research has started to have a closer look at these phenomena.

3. Bridging two worlds: considerations for a research agenda

3.1. Preliminaries

The inter-linkages between money – the world of flows – and production – the world of stocks – has always been at the centre of thinking with economics as a scientific discipline. But since space and territory have been almost fully evacuated from mainstream economics, the bridging link between the two worlds has to be re-established with the help of other disciplines like the social sciences in general, and in particular regional sciences, economic geography or urban and regional planning. The phenomenon of financial place has evolved into a new field of research (Behrendt 2001; Corbridge et al. 1994; Gehring 1998; Porteous 1999; Roberts 1994). There is a large field of possibility for interdisciplinary collaborative research ahead of us. For instance there is a dire need for analysis of financial places as autonomous systems of real and symbolic localities for

exchange in the financial sector as well as their relationship to other systems – i.e.: the relationship of financial places to regional innovation systems of the production sector. Few studies have examined financial places as autonomous systems. Discussion in the social sciences pertaining to the financial place has until now first leaned heavily on a preconception of the new significance of available capital in the international economy, which most often find its way into general World or Global City discourse (Friedmann, Wolff 1982; Sassen 1991, 1999). Second, there is a strong focus on the meaning of the financial place as the regulation and control centres of international financial flows (Castells 1989; Sassen 1999; Thrift 1994).

For a long time the main focus was on research into the goods-side of the production process and into the development of theories about location structures that were done mostly by the branch of regional and urban sciences that is based on economics. The capital market-dependent business financing and its role in the innovation process has received scarce attention – as exemptions see e.g. (Corbridge et al. 1994; Crevoisier et al. 2001). Any link to the capital market has received little attention, the role of participants in the financial sector and their effect on the production system neglected. Thus, what seems to be lacking so far, is the attempt to look closely at the relationship between this – free-flowing – financial sector and the localised production sectors in relation to their innovation activities.

3.2. Regional innovation and production system

At this point of the paper it seems adequate to explain a little more in detail, why and how the inter-linkage between finance, innovation and territorial development is crucial for the understanding of urban and regional development. At the outset our focus of analysis lies on the firm with its innovation process, chain of valued added, behaviour and the degree and quality of localisation of its production factors. Competitiveness of firms does not only refer to a fixed list of static location factors; it has to be looked at from a more dynamic point of view (Maillat 1996). Regarding competitiveness as an ongoing process, the capacity for innovation and adaptation to a changing economic context is of crucial importance. Therefore the single firm has to be embedded in a broader regional framework. We argue that the competitiveness of a firm also relies on the degree to which the public and private stakeholders within a territory are able to proactively respond to challenges external to the region.

For the purpose of assessing firms behaviour within a regional (or urban) context, let us introduce the concept of ‘regional innovation and production systems’ (RIPS) (Crevoisier et al. 2001; Maillat 1996). The RIPS is a more general concept than that of «industrial districts» (Amin, Robbins 1990; Becattini 1992; Pyke, Sengenberger 1992); the «technopoles» (Benko 1991); the «global cities» (Sassen 1991) or the «innovative milieus» (Maillat, Perrin 1992; Maillat et al. 1993; Ratti et al. 1997). We will consider the latter as special cases of RIPS.

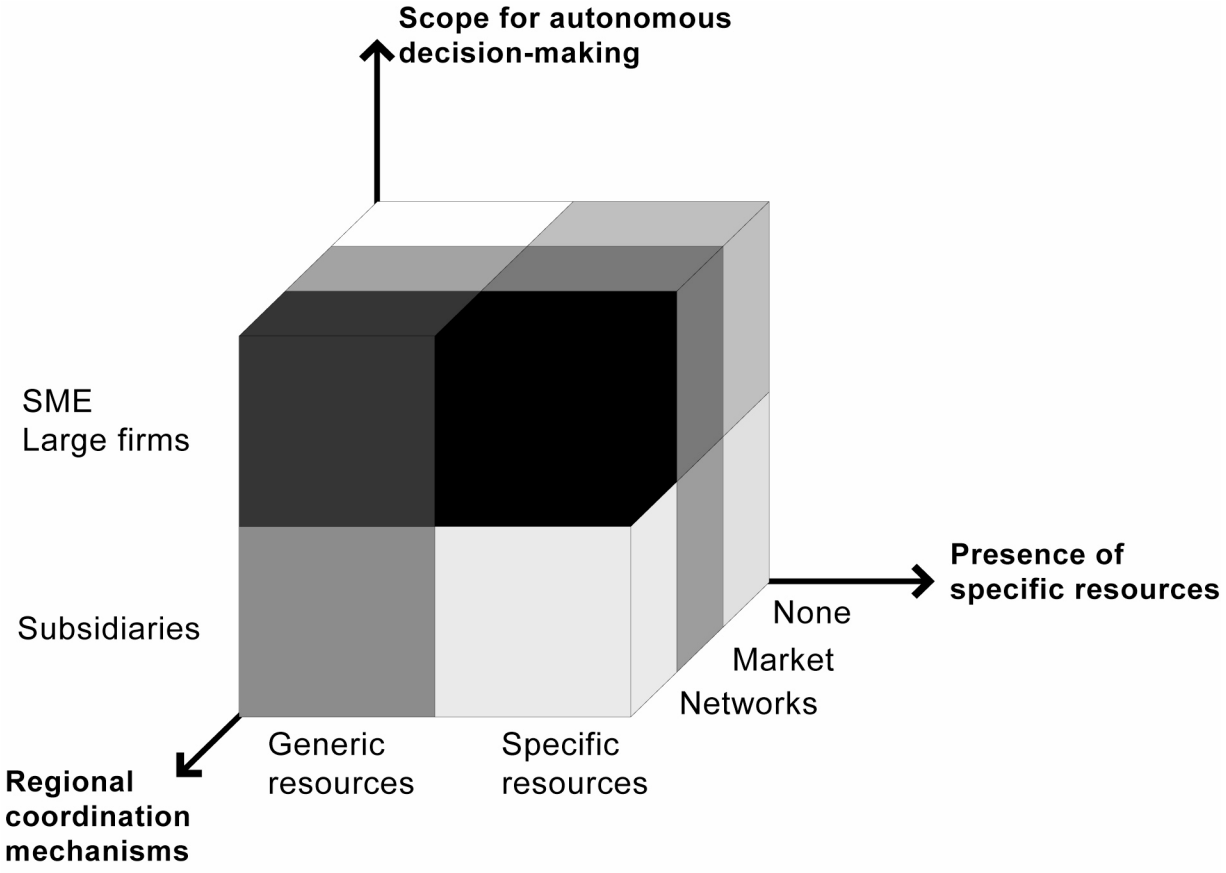
RIPS are anchored in different structures depending on the region in question. They are characterised by three dimensions (see figure 3):

- their scope for autonomous decision-making,
- their co-ordination mechanisms and,

- their specific resources.

The extent to which they are anchored in their particular region influences their capacity for innovation and adaptation to a changing economic context. A regional innovation and production system (RIPS) is defined as a geographical area of productive specialisation(s) including a certain number of regional actors (firms, - small or large -, institutions, public authorities). These actors interact with one another in accordance with certain relationships of (a) technical complementarities and linkages (with trade input/output relations; relations between training and education systems/research and firms); and (b) relationships of competition and/or co-operation. A RIPS harbours and generates *specific* resources (in particular know-how of all kinds), which form the basis of its competitiveness. It also has a more or less pronounced autonomy with respect to its own evolution.

Figure 3: The three dimensions of the RIPS



Source: Crevoisier et al., 2001, p.40

Of course, it is necessary to identify the spatial demarcations of RIPS in order to conduct any empirical work. The spatial boundaries of a RIPS comprise the following elements (Corpataux et al. 2002):

- specialisation of activities compared with the other national territories;

- specific relationships between regional players, which also define a particular area;
- the presence of specific resources, which give the region a specific edge over its neighbours.

And finally, in a more general way, it is the autonomous ability of adjustment and innovation, involving a certain number of actors in a dynamic interaction, which distinguishes this territory from the surrounding ones. The economy of some regions may be composed nearly exclusively of its RIPS. In other regions, on the contrary, the RIPS and its specialised branches are only a tiny part of the economy because the region is more diversified or it has a larger number of induced activities. The autonomy of a RIPS is also more or less pronounced, going from a dependent RIPS, consisting mainly of subsidiaries of large firms with few local ties to truly innovative milieus (Crevoisier et al. 2001). We do not want to elaborate on the problem of identifying the spatial demarcations of RIPS in detail. In short we suggest, like other authors (Asheim, Isaksen 1997; Cheshire, Hay 1989) to choose as basic unit spatial entities based on commuting movements (called MS-regions in Switzerland). This spatial delimitation makes both geographical and functional sense; for further methodological considerations see (Corpataux et al. 2002).

Now let us turn back to the overall perspective of the inter-linkages between finance, innovation and territorial development. It is no simple task to try to close this gap and to come up with a consistent research agenda. The challenge lies with the necessity to bring together the debate on financial places in spatial sciences and the debate on regional innovation system and regional development. In order to get a step further three focal issues are identified. The focal issues represent important aspects not only in financial place research but also in its analysis in relationship to regional development:

- The transformation of the international financial markets, the development of financial places and the relationship to regional development.
- The system of financial intermediaries and the participants in the financial place.
- Effects of the financial markets on the output in (regional) innovation processes

The following will illustrate these three issues.

3.3. Issue 1: The transformation of the international financial markets, the development of financial places and the relationship to regional development

The international financial markets change dynamically. Financial places are evolving into locations of highly concentrated and specialised service centres. The acting participants and businesses possess regulatory functions enabling them to powerfully influence market development not only in financial sectors but also production sectors. New technologies, political deregulation, the replacement of traditional banking systems through new financial institutions and changes in financial and investment conduct have brought about a fundamental change in the past few years. The international architecture of the financial sector has got a new, but double face. The new financial architecture is re-organised as a vertical and horizontal value chain that transforms the financial industry from within – for example the innovations in inter-bank business – as well as in geographic terms – for example the transnational co-operation of Euronext. This change

is noticeable in the presence of still young, but powerfully expanding financial institutions and the penetration of financial information into daily life. To count among these changes are also the increased media coverage, the luring of private households through massive advertisement pressure to change investment habits all the way to the spatially formative back office locations on city outskirts and the more expressive architecture in the downtown financial district. But after the hype of the late 1990s, the year 2001 brought a sharp downturn of the stock markets world-wide that has probably widespread repercussions on secondary demand in the national and regional economies.

As already mentioned earlier, discussion in the social sciences pertaining to the financial place has until now leaned heavily on a preconception of the new significance of available capital in the international economy, and the meaning of the financial place as the regulative control centre of international financial flows. The problem here lies in the perception that financial places are the central location of activity in the financial systems, being of great importance to other "systems". Any given (national) financial system is immediately localised, while other systems (production, innovation, and i.e.) may not necessarily be localised. This is, in our opinion, due to the following reason: national financial systems are currently undergoing major revamping. This is true even for those countries with decentralised metropolitan structure that has led to more than one financial place. In these countries, a spatial concentration of financial activities - as "manufacturing activities" of financial products - has evolved: i.e., in Germany, Frankfurt in contrast to Düsseldorf; in Switzerland, Zurich in contrast to Basle and Geneva; in Spain, Madrid in contrast to Barcelona.

From an inside perspective, there seem to be primary and secondary driving forces that change the financial system world-wide. Among the primary driving forces one can count (1) technology. (2) de-regulation/re-regulation, (3) demographic trends, (4) (shareholder)value orientation, (5) the launch of Euroland, and (6) progress in finance theory. These primary driving forces translate then into the following secondary driving forces (1) globalisation, (2) securitisation, and (3) the emergence of new corporate competitors. Taking this as basic knowledge, the question then arises how do these driving forces effect the structures of the individual financial places, as well as on the other hand, the international landscape of financial places? Because parallel to the trend of spatial concentration of financial places, new forms of co-opetition of financial places in an increasingly merging European landscape can be observed. The frequently discussed stock market alliances are evidence to this process, e.g. Euronext where the stock exchanges of Paris, Amsterdam, Brussels and Lisbon have joined shop to establish a larger and thus more liquid market. What is most interesting is the coexistence of collaborative value chains parallel to competition.

Although financial systems face a strong internationalisation and deregulation process, they still are highly internationally oriented but primarily *nationally regulated*. A recent Bank of England report claims accordingly, that “London has a reputation as a ‘clean’ market, which has high regulatory standards and appropriate safeguards for investors, without stifling innovation, competition and risk-taking” (Bank of England 2002: 30). But regulation is more than about quality. It is also about cost, about direct costs of regulation and indirect, overall costs of compliance by market firms. That means it is important to know the specific aspects of national regulation, its impact on national economy and

its specific relationship on the production sector. From a scientific perspective, the critical question would be where does one begin in order to define the steps to building a financial place theory? Does one look first at the users of funds – the innovating firms – or at the process of financial inter-mediation?

3.4. Issue 2: The system of financial intermediaries

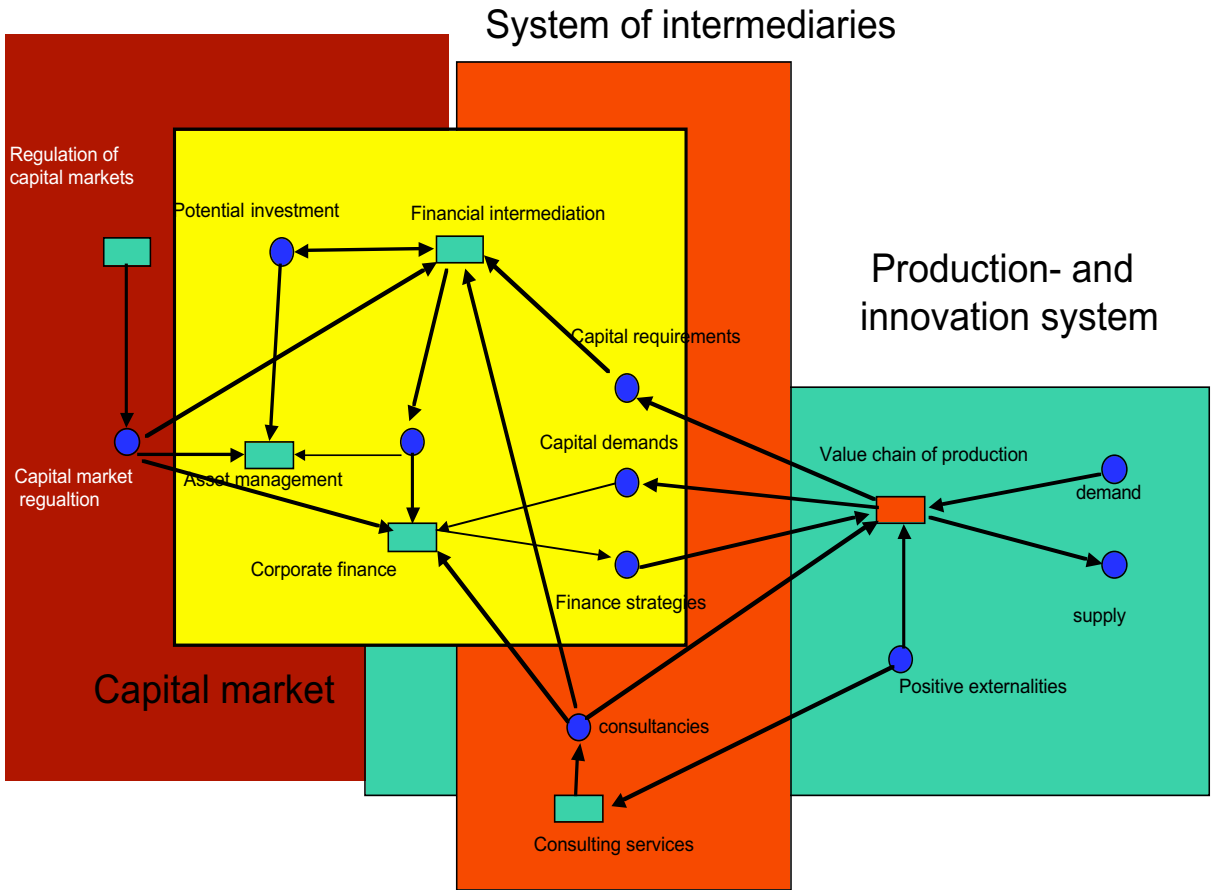
The transformation of the international financial landscape has also changed the role of its acting participants. The replacement of the traditional role of the banks and insurance companies with new financial institutions, and the tendency toward financial conglomerates, has turned the financial systems into a consulting-intensive and information-dependent field. A system of financial intermediaries has evolved within financial places. Their job is to act as middleman and centres around the concentration and transformation of interests between providers of capital and its recipients. Numerous analyses and information procedures have resulted from these activities. This has led to their role as indispensable participants in the economic process. Their methods of rating and researching might be the new instruments necessary – for example – to supply financing for a high-risk investment. The highest concentration of rating and research activities is located in focal financial places. This raises the question of the systemic structure and function of financial intermediaries and their outgoing effect on other systems and especially on regional innovation systems. Which qualities and characteristics constitute a high-achieving intermediary system in a financial place?

The financial market is tied to the production and innovation systems through the intermediary systems. How necessary is physical proximity between a financial place and the production sector in order to make financial products available? Will the accessibility, aside from technology, perhaps be assured through intermediary institutions and localities, allowing the geographical distance between the manufacturer of a financial product (i.e. high-tech funds) and the user of the financial product (i.e. software start-up company) to be great but the virtual distance nearly non-existent? Or do inventors of new financial products need close – physical or at least cultural – proximity to customers in order to be able to convert their needs precisely into the appropriate financial products? There are no easy answers yet. Empirical evidence for small island offshore financial centres (OFC) shows that the success of an OFC is driven by appropriate financial regulation and supervision addressing the critical precepts of reputation and trust (Cobb 1999). Grote et al. (2002) conclude, “In spite of these pervasive and increasing ubiquitous presence of information and communication technologies, proximities remain essential for the financial production process. In the globe-spanning network of financial flows, technologies will neither lead to a dissolution of national financial centres nor to a concentration in one single centre in Europe” (Grote et al. 2002: 421).

What role does special know-how play or networks of financial institutions in accommodating the needs of innovation systems? And: how should one explain the link to the localised production system and as well as to the regional innovation activity? To make answers more complicated one has to differentiate between geographical levels: the local, where investors and single firms or firm clusters are prevalent; the regional or national, where the financial place takes centre stage; the international, where the features of capital markets are to be considered. Figure 4 is a rough tentative to lay out the sys-

temic interrelationships between capital market, intermediary system and (regional) production-innovation system.

Figure 4: interrelationships between capital market, intermediary system and RIPS



Source: own illustration

3.5. Issue 3: Effects of the financial markets on the value chain in (regional) innovation processes

This issue ties the financial economy to the production economy through the context of a national territory. In the selected systemic approach the contribution of the financial systems cannot be defined in exclusion to the surrounding context. The interaction between the financial place "location" and the production system "region" is of special interest; in other words, understanding more precisely the geographical and functional relationship. This effects the way the geographical scale (local, regional, national, and global) is perceived as well as the selection from the production systems or divisions (branches, clusters, etc.). New forms of innovation financing, in particular the move from credit to equity financing, as, for example, in form of private equity or Initial Public Offerings (IPO), allow market places - that is the financial places - to become important to these financial transactions. On the other hand, venture capital firms obviously follow the geographical distribution of high-tech firm locations (in the US from Boston and New York to Silicon Valley, or more precisely, San Francisco; in Germany, to Munich), while simultaneously building (among themselves) global networks. Both, by the way, are dependent on the technology level of the considered production: high technology, intermediate technology, and low technology. The following questions pertain to the role of the financial sector in regional innovation systems:

- What role, as a factor in competition, does the financial markets or business financing, play in comparison to other strategic factors of the value chains?
- For which type of value chain, business, or technology level is this role strengthening or weakening?
- Which operational value-added activities document an effective link between the financial and production sector?
- What facts provide evidence of a noticeable influence of the financial markets on the value chain process of businesses?
- Do limited regional spill-over exist between the regional innovation system and the local financial place, that is, do businesses profit from the spatial and cultural proximity to the financial services or does this no longer have any meaning due to globalisation of financial markets.

These questions indicate that inter-linkages between the development of regional innovation systems and the financial system localised at the national financial place seem evident. But there is neither theoretical nor empirical proof yet. The following case study tries to shed some tentative light onto that question.

4. The Wegelin Bank – University of St.Gallen case

The Wegelin & Co. Bank is the oldest bank in Switzerland and still is privately owned by a five persons unlimited liability partnership. The bank was established in 1741 and specialises in asset and wealth management (URL: http://www.wegelin.ch/). The University of St.Gallen, located in the Eastern part of Switzerland close to the Lake Constance, is a leading business school in Europe and specialising in economics, business administra-

tion and law (URL: http://www.unisg.ch/). The two institutions form together – with other collaborative partners of course – a small but efficient regional – or localised – innovation and production system.

In the late 80s and early 90s of the 20th century, the Wegelin Bank like all the other banks was facing external technological challenges that transformed into re-focussing their business strategies, their organisation and their routines. New mathematical theories on financial management and risk-oriented asset management and allocation made their way into Europe and into Switzerland. The University of St.Gallen was the first Swiss University to endow a Chair for Finance and Financial Management. The first full professor appointed was trained in the United States and transferred innovative thinking and respective tools for financial engineering to St.Gallen. As a coincidence, the first two of the new business partners of the Wegelin Bank both were trained in the U.S. as well and hence were keen to profit from the fresh academic know-how in their proximity. Quickly, a standing working relationship between the bank and the professor – and the Swiss Institute for Banking and Finance – developed and spread out involving diploma and Ph.D. students as well as start-up and spin-off companies.

What makes the success of Wegelin's possible? The bank specialises as a *'total contractor'* in designing, engineering, marketing and distributing so called 'structured products', like POP – protection or participation, or YOS – yield or share. The bank's market share in Switzerland is 40 percent of an estimated two to three billions Swiss Francs market volume in structured products (year 2001). Their comparative advantage as a small bank with around 190 employees lies in the combination of strengths in financial market research, financial engineering and informatics, time-to-market, excellent personal network and in-depth knowledge of the Swiss tax regulation framework.

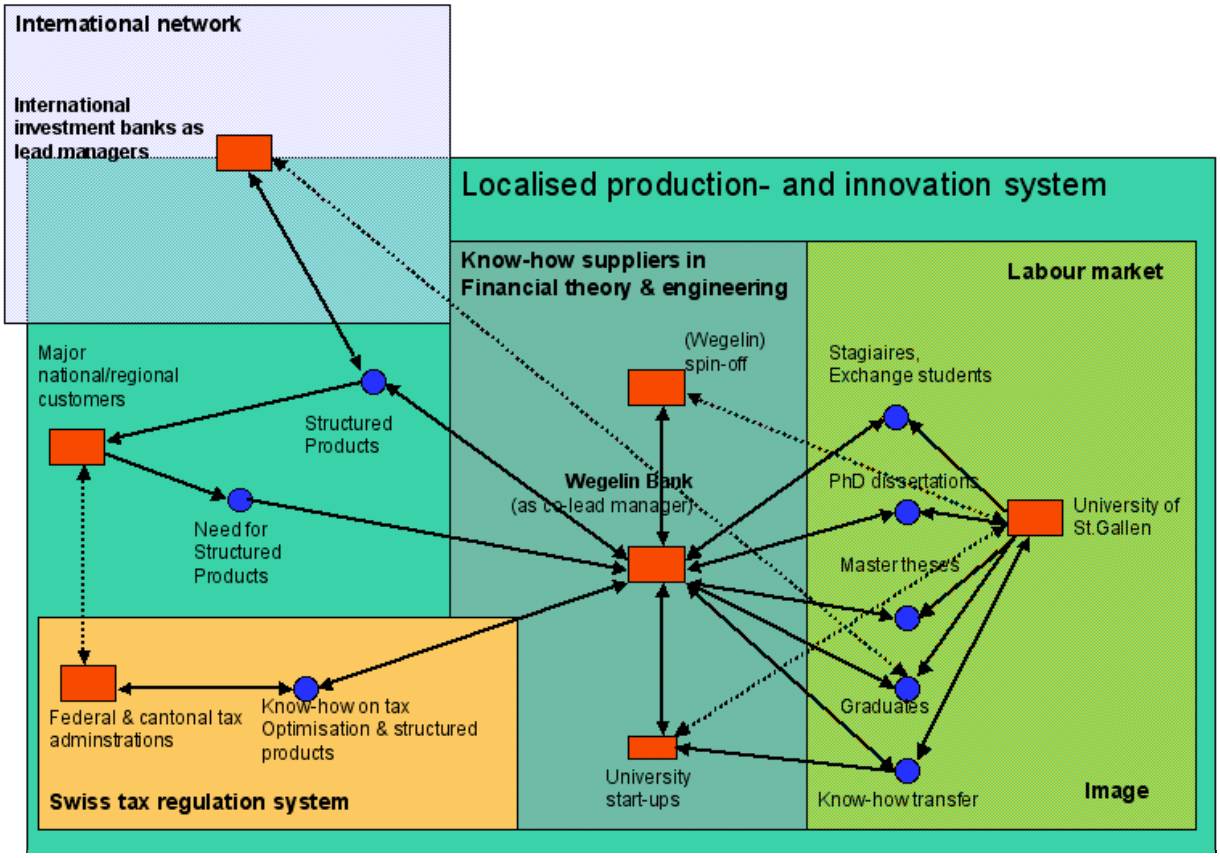
The bank at the same time – through a well-developed personal network – identifies and evaluates new customer needs for new structured products on the one hand. On the other hand the bank engineers these structured products and acts as the co-lead manager in behalf of one of the big investment banks like Goldman Sachs, Merrill Lynch, UBS Warburg or Morgan Stanley. Once they are in business with one of these big banks, the Wegelin Bank then offers these structured products to smaller national or regional banks, which in turn sell the products to their final customers. *Time-to-market* and a competent full service, at an attractive cost-performance ratio is the bank's key to success.

This competitive edge is largely based on a localised innovation and production system that is depicted in figure 5.

- The University of St.Gallen through their relationship with the Wegelin Bank provides a constant exchange of up-to-date know-how in financial theory and engineering. Diploma and Ph.D. students are regularly employed at the bank on a part-time basis thus securing the know-how transfer and in return gaining first hand banking experience. The physical as well as the cultural proximity to the university is an important asset in the labour market where well-trained specialists in finance are rare and sought after.

- Since the early 90s a diversified network of spin-off and start-up firms developed out of the Wegelin Bank and the University of St.Gallen. Most of these smaller asset management and financial engineering firms located in or around St.Gallen in order to profit from proximity to the pool of know-how, information, skilled labour, reputation and image.

Figure 5: The RIPS of Wegelin and University of St.Gallen



Source: own illustration

- In addition to the proximity to their know-how suppliers it is the closeness to Wegelin's major customers, which allows the bank on an almost daily basis to exchange information, opinions and perceptions. Thus the bank is able to quickly grasp a market opportunity and to translate these needs into marketable products.

- Last but not least, it is the intimate knowledge of the Swiss tax regulation system that adds to the competitive innovation and production system. The Wegelin Bank only operates in Switzerland, although their lead-managing partners are abroad. But Wegelin's customers are mainly high-net-wealth people, small and medium sized businesses and institutional pension funds. Investing money to them not only means

risk allocation and return on investment, but also optimising their tax bills. So it is the intimate knowledge of the Swiss tax regulations that allow the bank to take the most benefit possible out of the existing regulative system. Thus it is the national and cantonal tax regulations, the respective knowledge as well as frequent information exchange with officials of the Swiss Federal Tax Administration and their cantonal counterparts that makes 'tax regulations' a localised or specific resource of the production and innovation system.

It is obvious that it is not so much the physical proximity in itself – look at Wegelin's excellent personal contacts to alumni in large banks in London or New York. Rather it is a sort of 'cultural' or 'mental' proximity that holds these firms and these institutions together in such a small location. Nevertheless, St.Gallen has to be regarded as a part of the wider ranging European metropolitan area of Zurich that covers more than three million inhabitants of north-eastern Switzerland (Thierstein et al. 2003). Thus, the RIPS of St.Gallen is profiting from being part of a greater financial centre of Zurich. The main players of the RIPS St.Gallen all profit from and rely on the international reputation and image of the University of St.Gallen as a top ranking business school, which in turn attracts the brightest of foreign and domestic students. It is exactly that kind of 'innovative milieu' – combined with an efficient international network – that produces a competitive localised production and innovation system, that seems able to withstand the centripetal and internationalising forces in global financial places such as London, New York or Frankfurt.

5. Final remark

The research agenda for bridging the gap between the development of financial markets, financial places and the regional innovation and production system is intricate but rewarding. The case study of the Wegelin Bank and the University of St.Gallen indicates that there are valuable and promising traces to be followed, empirically as well as theoretically. To look carefully at the localisation aspects of national financial places seems promising but research shall not stop there. It is through the complex functioning of the financial inter-mediation system that the financial system is linked to regional or localised innovation-production systems. We argue that it is the thorough look at the chain of value added of single activities within these financial places, where one can hope to detect the transformation of the world of finance to the world of production and innovation. Examples for these new and dynamic inter-mediation activities anchored in financial places are the processes of initial public offerings (IPO), of mergers & acquisitions, of financing of start-up firms through venture capital and the like. But in order to not being overwhelmed by the complexity of relevant spatial scales and stakeholders involved, it is suggested to start research with a pragmatic approach. Look at the primary users of the financial capital offered to them, the firms engaged in the innovation process. Look at their chain of value added, their business models and the respective roles the financial inter-mediation plays, and the opportunity will come about to be able to identify the spatial impacts on territorial, urban development.

References

Amin, A.; Robbins, K. 1990: Industrial districts and regional development: limits and possibilities. In: Pyke, F.; Becattini, G.; Sengenberger, W. 1990: Industrial districts and interfirm cooperation in Italy. Geneva:International Institute for Labour Studies. 105-118.

Asheim, B.; Isaksen, A. 1997: Location, Agglomeration and Innovation: Towards Regional Innovation Norway? In: European Planning Studies. 5. 3. 299-310.

BAK Economics Basel Ltd (2001): International Benchmark Report 2001, Basel.

Bank of England 2002: Practical Issues Arising from the Euro. Bank of England. London.

Becattini, G. 1992: The Marshallian industrial district as a socio-economic notion. In: Pyke, F.; Sengenberger, W. 1992: Industrial districts and local economic regeneration. Geneva:International Institute for Labour Studies. 37-51.

Behrendt, H. 2001: Trends in the international financial market and their potential spatial implications. Discussion Paper - Chair of Spatial and Territorial Development 02-2001 (in German language). ORL Institute for National, Regional and Local Planning. Zurich.

Benko, G., B. 1991: Géographie des technopôles. Paris:Masson Géographie

Castells, M. 1989: The Informational City. Information Technology, Economic Restructuring, Urban-Regional Process. Oxford:Basil Blackwell

Cheshire, P.C.; Hay, D.G. 1989: Urban Problems in Western Europe. London:Hyman

Cobb, S.C. 1999: The role of corporate, professional, and personal networks in the of offshore financial services. In: Environment and Planning A. Vol 31. r.6. 1877-1892.

Corbridge, S.; Martin, R.; Thrift, N. 1994: Money, Power and Space. Oxford:Blackwell.

Corpataux, J.; Crevoisier, O.; Thierstein, A. 2002: Exchange Rate and Regional Divergence: The Swiss Case. In: Regional Studies. Vol 36. 6. 611-626.

Crevoisier, O.; Corpataux, J.; Thierstein, A. 2001: Integration monétaire er régions: des gagnants et des perdants. Economies. Paris:L'Harmattan

Friedmann, J.; Wolff, G. 1982: World City Formation. An Agenda for Reseach and Action. In: International Journal of Urban and regional research. 6. 3. 309-344.

Gehring, T. 1998: Cities and the geography of financial centers. Discussion paper series 1894. Centre for Economic Policy Research. London.

Grote, M.H.; Lo, V.; Harrschar-Ehrnborg, S. 2002: A Value Chain Approach to Financial Centres - The Case of Frankfurt. In: Tijdschrift voor Economische en sociale Geografie. Vol. 93. No. 4. 412-423.

Lambelet, J.-C.; Mihailov, A. 2001: Le poids des places financières suisse, genevoise et lémanique. Créa-Institut de macroéconomie appliquée. HEC-Université de Lausanne.

Laulajainen, R. 1998: Financial geography. A banker's view. Gothenburg:University of Gothenburg. Departments of Geography. Series B.

Maillat, D. 1996: From the industrial district to the innovative milieu: contribution to an analysis of territorialized productive organizations. Universität Neuchatel IRER. Neuchatel.

Maillat, D.; Perrin, J.-C. 1992: Entreprises innovatric et développement territorial. GREMI. Neuchâtel:EDES

Maillat, D.; Quévit, M.; Senn, L. 1993: Réseaux d'innovation et milieux innovateurs: un pari pour le développement régional. Neuchâtel:EDES. GREMI

Porteous, D. 1999: The development of financial centres: Location, information externalities and path dependence. In: Martin, R. 1999: Money and the space economy. Chichester u.a.:Wiley. 95-114.

Pyke, F.; Sengenberger, W. 1992: Industrial districts and local economic regeneration. Geneva:International Institute for Labour Studies.

Ratti, R.; Bramanti, A.; Gordon, R. 1997: The Dynamics of Innovative Regions. The GREMI Approach. Aldershot:Ashgate.

Roberts, R. 1994: International financial centres: concepts, development and dynamics. International financial centres. Aldershot:Elgar

Sassen, S. 1991: The global city: New York, London, Tokyo. Princeton, N.J.:Princeton University Press

Sassen, S. 1999: Global Financial Centres. In: Foreign Affairs. 78. 1. 75-87.

Swiss Federal Department of Finance 2002: Switzerland as a financial centre: top-quality performance and impressive dimensions. Newsletter Infoplus. Swiss Federal Department of Finance. Berne.

Thierstein, A.; Dümmler, P.; Kruse, C. 2003: Die europäische Metropolregion Zürich: zu gross um wahr zu sein? In: DISP. 152. 1/2003 (to be published).

Thrift, N. 1994: On the social and cultural determinants of international financial centres: the case of the City of London. In: Corbridge, S.; Martin, R.; Thrift, N. 1994: Money, Power and Space. Oxford:Blackwell. 327-355.