LIMITATIONS OF REGIONAL NETWORK-ORIENTATED STRATEGIES FOR MANUFACTURING INDUSTRIES

The case of the Neckar-Alb region in Baden-Württemberg/Germany

With 3 figures and 2 tables

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Zusammenfassung: Grenzen regionaler netzwerkorientierter Strategien für die Industrie. Das Beispiel der Region Neckar-Alb in Baden-Württemberg/Deutschland

In den letzten Jahren spielten die Bestimmungsgrößen der lokalen und regionalen Wirtschaftsentwicklung sowohl in der wirtschaftswissenschaftlichen als auch in der wirtschaftsgeographischen Forschung eine große Rolle. Trotz dieses erheblichen Forschungsinteresses blieben die Ansätze und Ergebnisse bislang jedoch vage und basieren noch immer überwiegend auf den Erfahrungen, die aus einigen Referenzregionen gewonnen wurden. Ungeachtet dieser Defizite haben sich Begriffe wie *Netzwerk* oder *Kooperation* jedoch zu Schlüsselworten der regionalen Wirtschaftspolitik entwickelt. Dieser Aufsatz befaßt sich vorwiegend mit der Übernahme dieser Konzepte durch regionale Entscheidungsträger. Die Möglichkeiten und Grenzen kooperations- oder netzwerkorientierter Regionalpolitik werden insbesondere am Beispiel der Region Neckar-Alb in Baden-Württemberg diskutiert. Dieser Raum wurde in den letzten Jahren von einem tiefgreifenden wirtschaftlichen Abschwung erfaßt, der sich in erheblichen Beschäftigungsverlusten der regionalen Kernbranchen niederschlug. Die Strategien, die als Reaktion auf die Krise entwickelt wurden, legen zumindest verbal ein großes Gewicht auf innerregionale Kooperation und die Stärkung regionaler Netzwerke. Empirische Befunde lassen jedoch Zweifel an der Umsetzbarkeit und den Erfolgsaussichten dieser regionalpolitischen Strategien aufkommen. Effektive regionale Netzwerke sind seltene Ausnahmefälle in der Weltwirtschaft. Sie beruhen auf spezifischen und einzigartigen regionalen Bedingungen, die nicht beliebig und innerhalb kurzer Zeit reproduzierbar sind. In einer sich rasch globalisierenden Wirtschaft befinden sich regionale Akteure ohnehin in einer zunehmend schwächeren Position, wenn es darum geht, entscheidende Faktoren der regionalen Wirtschaftsentwicklung zu beeinflussen oder zu steuern.

Summary: Over the past decade the determinants of local and regional economic development ranked high on the research agenda in economics and economic geography alike. Despite this extensive research interest, the approaches used and the results obtained are still vague and strongly biased towards very few positive regional examples around the world. Nevertheless, the concepts derived from this work were quickly transformed into regional policy strategies. *Networks* and *co-operations* almost became key words for successful regional economic development. This paper is primarily concerned with the adoption of these concepts by regional decision-makers. The possibilities and limitations of co-operation- or network-orientated regional strategies are discussed with special reference to the Neckar-Alb region in Baden-Württemberg. This area is confronted with a severe economic downturn and massive job losses in some of its leading manufacturing sectors. Regional decision-makers try to overcome these problems with strategies which very much reflect the fashionable concepts of intensified regional co-operation and networking. In the light of our empirical findings, however, it is doubtful whether these strategies can be successful. Effective regional networks are rare highlights in the world economy. They rely on specific conditions which cannot be reproduced easily within a couple of years. Furthermore, regional actors are in an ever more weakening position to promote or control relevant factors of regional economic development in a rapidly globalising economy.

Introduction

The federal state (Bundesland) of Baden-Württemberg in south-west Germany has been seen as a model economy for the past three decades (COOKE a. MORGAN 1990a; GABRIEL 1990; HASSINK 1992; MAIER 1989; SABEL 1989; SCHMITZ 1992; SEMLINGER 1993). With low levels of unemployment, high rates of industrial investment and export, a reputation for high quality, and well-engineered products, it seemed to have overcome major problems of many regional or national economies; namely how to establish and maintain competitive advantage. The Neckar-Alb region in the centre of Baden-Württemberg was no exception to this positive reputation. Many factors which were seen as essentials of success in Baden-Württemberg – for example a high share of specialised and export-oriented capital goods producers, a dominance of flexible small and medium-sized enterprises (SMEs), and a high capacity for technological innovation within these firms – were even more frequent in this region than in other parts of the federal state. But now economic problems strike the *former Baden-Württemberg success model* and they have turned out to be particularly painful in the Neckar-Alb region since 1992.

Fig. 1: Neckar-Alb region
Region Neckar-Alb

This paper is not so much concerned with the discussion of theoretical academic concepts but with a critical review of the adoption of these concepts by regional decision-makers. It is divided into five sections. The first section briefly analyses the current economic crisis in the Neckar-Alb region. In the second and third sections we shall discuss the reactions of regional decision-makers – especially the key concept of regional co-operation – in the light of recent empirical findings. The paper closes with an example of a promising initiative for inter-firm co-operation (section 4) and some final remarks on the limitations of co-operation-orientated regional policies (section 5).

1 The emerging economic crisis in the Neckar-Alb region

The Neckar-Alb region is situated south of Stuttgart. The cities of Reutlingen (108,000 inh.) and

Table 1: Unemployment rates in the Neckar-Alb region 1991–1996
Arbeitslosenquoten in der Region Neckar-Alb 1991–1996

area	1991	1992	1993	1994	1995	Jan.–June 1996
Neckar-Alb	3.8	4.6	6.7	8.1	8.1	8.5
north-east[1)]	3.9	4.3	6.5	7.8	7.9	8.2
south-west[2)]	3.5	4.7	7.1	8.6	8.7	9.1
Baden-Württemberg	3.7	4.4	6.3	7.5	7.4	7.9
Germany (West)	6.3	6.6	8.2	9.2	9.3	10.2

[1)] labour office sub-districts Reutlingen, Tübingen, Bad Urach, Münsingen
[2)] labour office sub-districts Balingen, Albstadt, Hechingen
Source: Unemployment data of the Chamber of Industry and Commerce Reutlingen

Tübingen (83,000 inh.) are the major urban centres. They are situated in the northern part of this region, relatively close to the adjoining Stuttgart metropolitan area (Fig. 1). Due to its relative remoteness from major transport routes and its lack of natural resources, the industrialisation process in the Neckar-Alb region started relatively late during the 1870s. It was mainly based on an existing craft tradition. From the very beginning, the economic strength of the area has been based on the close connection between textile and clothing manufacturing and related mechanical engineering industries. Remnants of this textile/machinery-complex still exist, despite the chronic crisis of the German textile and clothing industry since the 1960s. This is especially true for the south-western part of the Neckar-Alb region. In the Albstadt/Balingen area (Zollernalbkreis) textile and clothing industries still account for almost one fifth of total employment. Another 13 % are employed in mechanical engineering firms. Many of them produce specialised machinery for the textile and clothing industry.

In other parts of the region, the textile-machinery inter-relationship has crumbled over time. The structure of the economy is less specialised in the highly urbanised Reutlingen/Tübingen area. Influences from the economic region of Stuttgart have increased and intra-regional linkages have lost ground to inter-regional ones. In this north-eastern part of the region, the textile/machinery-complex only accounts for 11 % of total employment today (against 32 % in the south-west). Furthermore, the service sector plays a more important role in the north-eastern (50 %) than in the south-western part (34 %).

Present economic difficulties are reflected in rising unemployment rates in recent years (Tab. 1). The unemployment rate has risen from 3.8 % to 8.5 % between 1991 and the first half of 1996. This development causes concern, not only because of the high level of unemployment, but also because of the speed of its increase. As can be seen from the unemployment figures the economic downturn was more severe in the specialised and – as some might say – more *industrial district-like* south-west than in the north-east with its more diversified production and economic structure. It seems that the specialised and formerly successful production complex of the Albstadt/Balingen area now suffers from the disadvantages of industrial monostructure. Moreover, the share of innovative firms is considerably lower now than in the Reutlingen/Tübingen area (Herdzina, Nolte a. Hegner 1995, 16).

A closer look at the industries with the most severe employment losses reveals that the regionally dominant sectors, the mechanical engineering and textile/clothing industries, have suffered most (Tab. 2). Especially the formerly praised mechanical engineering industry has run into trouble and lost more than one fifth of its jobs within three years. These massive employment losses are scattered over the whole Neckar-Alb region. In the north-east, however, the service sector has been at least partly able to compensate for losses in the core industries. This has not been possible with the more specialised *production complex* of the Balingen/Albstadt area.

The decline of the textile and clothing industries within the region has been occurring for decades. This negative trend, however, was offset by above-average growth rates of other industry sectors, especially in electronics and electrical engineering. As a result, regional employment growth was only slightly below the Baden-Württemberg average during the 1980s (Brachat-Schwarz 1994). Difficulties for manufacturers of machines and machine tools are a relatively

new phenomenon. Ironically the factors for the decline in the mechanical engineering industry were very much the same ones which had built the basis of its success in the 1980s. In general, the firms in this industry can be characterised as being very much dependent on their traditional products and their respective market niches. In the early 90s, the firms still tried to overcome sales problems by their general ethos of constantly upgrading existing products and of competing on ever increasing standards. This finally caused an effect which is called *over-engineering*. The high technology content of their products caused high prices which pushed them out of many markets. Very often such highly sophisticated machinery is not needed by customers, instead they accept cheaper offers for less sophisticated machines from other sources. Only a few mechanical engineering firms in the Neckar-Alb region managed a more radical technological change or – even more important – new marketing approaches. Within very recent years, however, firms seem to be better prepared to change their strategies more fundamentally (Braczyk a. Schienstock 1996).

2 *Reactions of regional decision-makers*

The so-called *Zukunftskommission* (Commission for the Future) in Baden-Württemberg has identified three general reasons for the economic crisis (Cooke 1994; Staatsministerium Baden-Württemberg 1993):

1. *Increasing international competition:* The dominating regional production clusters based on automotive, mechanical and electrical engineering are facing growing competition from Japan, Asian NICs, other EU member states (especially Italy) and even from Eastern Europe. This reason applies to almost every regional economy and so it is a commonplace.

2. *Innovation deficits:* In general, the firms of Baden-Württemberg are highly innovative in mature technologies but are relatively weak in the adaptation of new information and communication technologies and particularly biotechnology.

3. *Production costs:* Especially labour costs are high in comparison to international competitors. In a situation where price competition becomes more important in markets for high-quality products as well, this is a major disadvantage.

The Commission's policy recommendations consist of the improvement of firm organisation, time-to-market, tax structure, infrastructure, vocational training, business services, firm culture and the climate of innovation as well as the reduction of production and labour costs. This is well-meant, but it is also well-known. Several questions remain: How can this be translated into concrete initiatives? How can these initiatives be effective in times of severe budget restrictions of the public sector? What role should the government play in the restructuring process?

Regional decision-makers of the Neckar-Alb region also developed concepts to respond to the economic crisis. A working group on regional economic structure[1] published a report with some strategy recommendations in early 1995 (Regionalverband Neckar-Alb 1995). This paper suggests:

1. *Innovation and qualification measures:* This point recommends a further improvement of institutionalised regional technology transfer. In addition new vocational training centres should be installed.

2. *More active and co-operative support for the regional economy:* Different institutions and private firms should create a co-operative regional climate. A major aim is the foundation of a regional agency for the promotion of regional economic development *(Regionale Wirtschaftsförderungsgesellschaft).*

3. *Co-ordinated policies for infrastructure and regional development:* A co-operation between regional institutions should achieve better results in fiscal negotiations with the federal and state governments as well as with the adjoining Stuttgart region. Public transport, upgrading of the road network, tourism and the promotion of cultural events have been identified as additional key sectors of regional infrastructure policies.

If we look at these recommendations it is striking that – apart from the general and unspecified wording – the concept is by no means a new one. Such proposals were basically developed in the 1980s and were probably applicable all over the world. *Regional co-operation* seems to be regarded as a means for performing miracles when confronted with almost any kind of problem. But what has happened in reality? The *Regionalverband* (a regional planning authority) initiated the establishment of a single agency for the support of the regional economy (Regionale Wirtschaftsförderungsgesellschaft). This initiative failed due to the rivalry between different government bodies and the regional Chamber of Industry and Commerce.

[1] It includes members of the Landkreise (districts) of Reutlingen, Tübingen and the Zollernalbkreis, the regional Chamber of Industry and Commerce (which later dissociated itself from the final report), the regional Labour Office, the University of Tübingen, the Fachhochschule in Reutlingen and representatives of political parties.

Table 2: Changes of manufacturing employment and manufacturing turnover in the Neckar-Alb region by industry 1987–1995 (enterprises with 20 employees or more)

Beschäftigungs- und Umsatzentwicklung in der Industrie der Region Neckar-Alb nach Branchen 1987–1995 (Unternehmen ab 20 Beschäftigte)

	employment			
industry	1987–1991 in %	1991–1995 in %	1995 number	in %
machines and machine tools	12.8	-27.7	17 369	22.4
textiles and clothing	-16.5	-31.5	16 232	21.0
other manufacturing	17.8	-6.7	43 776	56.6
total	5.7	-18.3	77 377	100,0
	turnover			
industry	1987–1991 in %	1991–1995 in %	1995 DM millions	in %
machines and machine tools	37.3	-7.5	3 833	23.1
textiles and clothing	12.3	-19.7	4 093	24.7
other manufacturing	41.9	10.1	8 639	52.2
total	30.6	-3.1	16 565	100,0

Source: Statistisches Landesamt Baden-Württemberg, Chamber of Industry and Commerce Reutlingen

But it also failed due to the lack of co-operation from the private sector. Only in the south-western part of the region, which is most affected by the economic recession, could the *Wirtschaftsförderungsgesellschaft Zollernalb GmbH* be established in 1995. One aim of this organisation of public-private-partnership is to set up an information system on free or inefficiently used regional production capacities. Other initiatives are underway, but it is too early for a final judgement of the results.

3 Is regional co-operation a universal concept for successful restructuring?

Soon after academic debates about regional economies started to concentrate on inter-firm linkages and contacts between different organisational structures, the positive effects of *silicon landscapes, industrial districts, regional networks, innovative milieux,* and the like became universal wisdom in modern regional economics and economic geography. According to Courlet and Soulage (1995, 287) the new approaches and concepts revolve around three main lines of study:

- approaches linked to the Marshallian model of industrial districts and localised production systems;
- research linked to the development of the evolutionist theory and the notion of the innovative milieu; and
- research on the organisation of industrial production.

Based on this work a new *magic formula* for regional economic planning was created and quickly adopted by regional planners and politicians. The new paradigm has different names and consists of a variety of interrelated concepts: more flexibility, more innovativeness, more economic success through regional co-operation, regional networks, and regionalised (or even localised) technology transfer. SMEs became the main target group of regional economic strategies (Gibb 1993).

During the debates about *regional endogenous potentials* and *regional innovation policies* in the 1980s (Meyer-Krahmer 1985; Fritsch 1990; Genosko 1986) a regionalised system of technology transfer agencies was set up in Germany as well as in many other Western European countries. The aim of these initiatives is to support the regional endogenous potential by encouraging the diffusion of new technologies from public research establishments as well as from tertiary education institutes to private firms (Brackmann 1993). In the early 1990s, however, the focus of innovation-orientated regional policies eventually shifted to the encouragement of inter-firm co-operations and small firm networks (Cooke a. Morgan 1993; Cuny a. Stauder 1993; Maillat 1995; Plougmann 1994).

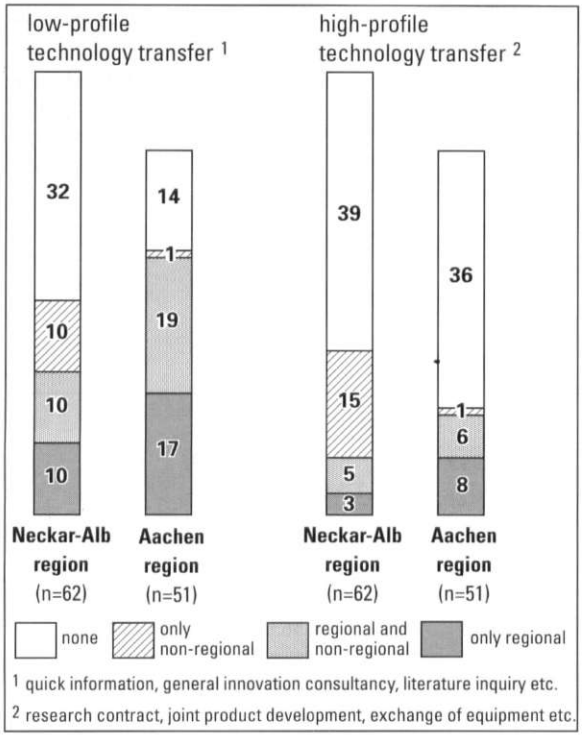

Fig. 2: Technology transfer to SMEs in mechanical engineering in the Neckar-Alb and Aachen regions (number of firms)
Source: Survey 1993/94

Technologietransfer in kleine und mittlere Maschinenbauunternehmen in den Regionen Neckar-Alb und Aachen (Anzahl der Unternehmen)

These network-orientated policies were mainly based on experiences and anecdotal narratives from a number of successful regional economies. Despite the popularity of *networks* and co-operations in regional policies, there is still a lack of systematic empirical research on enterprise networks under different regional conditions and specific institutional arrangements.

Surprisingly little work has been done to evaluate the impact of different regional policy instruments on regional economies so far. In the light of more recent empirical results, however, it is doubtful whether policies aiming at a closer regional co-operation between universities, polytechnics (Fachhochschulen), research institutes, and SMEs can meet the high expectations for more innovativeness and competitiveness expressed by regional decision-makers. Evidence from few empirical studies on the demand of SMEs for new technologies demonstrate that technology transfer agencies and public research establishments are not an important source of external information for the majority of SMEs (Beyer 1994; Hahn et al. 1994; Hassink 1996).

In order to obtain more data on the extent and efficiency of regionally based technology transfer agencies and possibly existing co-operation networks between firms, we conducted a survey in the Neckar-Alb and Aachen regions. The survey was mainly based on in-depth interviews with enterprise representatives of SMEs in the mechanical engineering industry. Out of the 62 mechanical engineering firms we interviewed in the Neckar-Alb region, only 23 (37 %) had any co-operations with public research establishments in the fields of product or process development etc. (high-profile technology transfer). Moreover, out of these 23 firms only 8 (13 %) co-operated with regional know-how suppliers (Fig. 2). The results of this survey revealed that the firms in the Neckar-Alb region are no exception to the trend mentioned above. Despite considerable efforts to create an elaborate technology transfer system within the region – e.g. by the institutions of the Steinbeis-Stiftung (Steinbeis Foundation for Economic Promotion) – its effects are relatively limited (Grotz a. Braun 1993, 157). Even within the Aachen region in the federal state of North Rhine-Westphalia, where the supply of technological know-how is quite exceptional, its utilisation by regional SMEs is limited. In both regions regionalised technology transfer consists mainly of low-profile interactions. It is at least questionable whether networking between public research institutions and private enterprises will ever play the outstanding role anticipated by regional politicians and economists.

The same might be true for the second question raised in our survey: co-operations between manufacturing firms. There is growing support for the supposition that SMEs are predominantly reluctant to co-operate with other firms (Belzer a. Hilbert 1994; Prognos u. Fraunhofer-Institut für Systemtechnik und Innovationsforschung 1991). Our study of the Neckar-Alb region confirms that despite a high density of SMEs regional, inter-firm relationships are less important in manufacturing than generally assumed. They seem to have some relevance for low-level production steps, but they become increasingly irrelevant for more sophisticated operations and in core activities of a firm. Only about one fifth of the mechanical engineering firms interviewed in the Neckar-Alb region have experiences with formalised inter-firm co-operations (Fig. 3). The percentage of firms which have non-formalised co-operations within their home region is slightly higher (31 %). However, most of these non-formalised co-operations consist of very

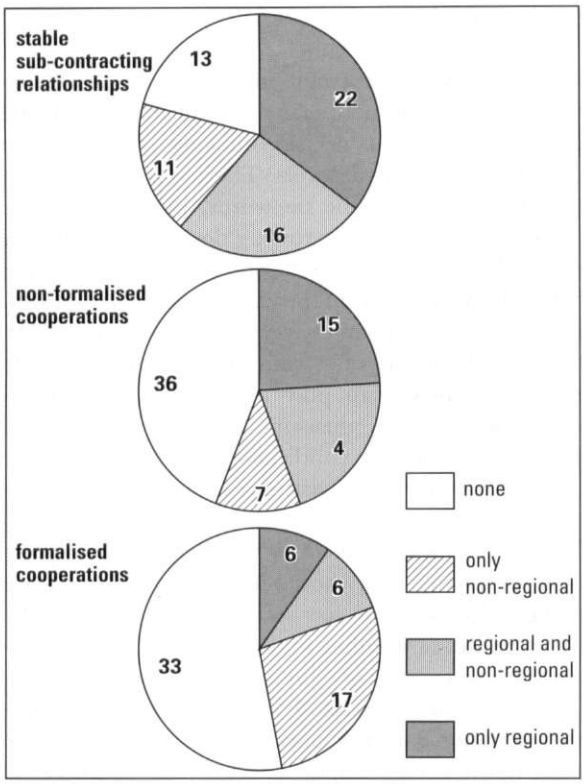

Fig. 3: Co-operating and non-co-operating SMEs in mechanical engineering in the Neckar-Alb region (number of firms = 62)
Source: Survey 1993/94

Kooperierende und nicht kooperierende kleine und mittlere Unternehmen des Maschinenbaus in der Region Neckar-Alb (Anzahl der Unternehmen = 62)

loose arrangements concerning low-level production steps and are not directly connected to technological innovations. The same is true for more frequent, stable sub-contracting relationships. In most cases access to inter-regional contact networks is considered more important than regional co-operations. In particular, technology intensive and economically successful firms do not want to rely only on the potentials of their regional economy. Up to now technological change and competitiveness are pursued rather through individual product-orientated firm strategies than through intensive regional networking. There is hardly any reason to believe that this might change in the foreseeable future. Therefore it is very difficult to encourage the development of internally integrated local innovation milieux through policy measures. This casts some doubt on the possibilities and the effectiveness of network- or milieu-orientated regional policy initiatives. As the regional network approach and initiatives for its implementation are very popular, there is a real danger of enhancing *provincial thinking*. In order to avoid this danger network policies should also foster trans-territorial relationships.

Industrial networks are characterised by a very sensible balance between inside and outside relations. Networks cannot be simply developed, enforced or controlled from outside or by a central institution. Streamlining the regional technology transfer system, for example, may not be a desirable goal where redundancies are essential for the adaptability of the regional economy (Grabher 1994).

Regional actors are in a relatively weak position to promote or control relevant factors. In the process of economic globalisation this is not a new, but a rapidly growing dilemma. If proximity becomes less and less important for decisive firm operations, network-orientated regional policies might be an academic chimera. This is not to say that integrated regional networks do not exist under specific circumstances. But they are relatively rare cases and – even more important in this respect – they cannot be initiated by regional policies. In addition, the relevance of regional variations and regional policies on economic development may have long been overestimated by geographers, economists and regional decision-makers. Further empirical results from the German mechanical engineering industry suggest that successful firm strategies do not vary significantly between regions (Grotz a. Braun 1997). By and large, existing differences depend rather on product specifications or markets in which firms operate than on locational factors.

A few examples will illustrate this: Even in the crisis-ridden clothing industry of the Neckar-Alb region, there are some firms which stand out. In the case of Trigema, a sportswear manufacturer in the provincial town of Burladingen, the management was successful, due to constant product innovations, new marketing concepts (including direct marketing), a stable workforce, and a strong regional concentration of its production. Another example is the now internationally operating men's clothing manufacturer Hugo Boss in Metzingen. Mayer & Cie., a producer of knitting machines in Albstadt, increased its competitiveness by strictly applying modular construction systems and expanding into new market segments with lower technology standards (reduction of over-engineering).

For the individual firm, a broad spectrum of possible strategies and development paths exists. Regional networking is only one concept of many, and – despite its popularity with academics and regional

decision-makers – it is by no means a very popular or outstandingly successful one. Interviews with enterprise representatives revealed that regional inter-firm co-operations have not been a prominent reaction to the economic crisis. Furthermore, co-operative SMEs have not been more successful in coping with the crisis than their competitors. For the individual firm, the general (macro-)economic framework is by far more important than regional policy initiatives. That is the reason why the fate of regional economies in Germany will certainly be influenced more effectively by policies on the federal level.

4 Promising initiatives for inter-firm co-operations – an example

Despite this sceptical view there also are some promising initiatives with regard to inter-firm co-operations. The Baden-Württemberg section of the VDMA (Verein Deutscher Maschinen- und Anlagenbauer, Association of German Machinery and Plant Manufacturers) initiated a co-operation between five medium-sized precision tool manufacturers in 1995. They come from all over Baden-Württemberg. Major aims of this co-operation are harmonising product programms and the operation of a joint sales office in Singapore.

This example demonstrates some typical characteristics and essential preconditions for successful inter-firm co-operations of SMEs in the capital goods sector. Three of them are worth mentioning:

1. Inter-firm co-operations are easier to implement in the fields of sales and marketing than with respect to joint product or process development.

2. Successful co-operations should have a limited number of participants. Still, spatial proximity on a local or regional level is not at all a decisive criterion.

3. A strong participation of a mediating organisation (like the VDMA or Chambers of Industry and Commerce) is a major advantage, especially in the early stages of a co-operation.

The last point is inevitable if the deep-rooted reluctance concerning formalised inter-firm co-operations is to be overcome. Experience from the VDMA initiative shows how difficult it is to convince SME managers to co-operate: out of 680 member firms which were contacted only 40 (6 %) signalled serious interest and finally five established the first *model co-operation*. The co-operation, however, will probably be successful because the participants pursue common goals on foreign markets, even though they do not belong to the same regional network.

5 Final remarks

Ever increasing unemployment figures cause enormous pressure on politicians, administrations, trade unions, and other decision-makers, both on the national and regional levels. There is a lively debate about macro-economic measures, but as problems increase there is also a growing demand for regional or even local actions. On the one hand, this approach can be understood from the viewpoint of unemployed people and persons in charge of regional affairs. On the other hand, it is far from being clear which role regional policies can play in reality. Thinking in categories of policy measures is normally based on stable or predictable conditions. However, the most striking features of successful regional economies are constant change, flexibility, and the ability to adapt to impulses from the outside world. Even in small sections of the market, where SMEs formerly had their niches, competition has become fierce. Now the question arises whether regional strategies are sufficient for overcoming economic problems of SMEs. There is certainly a risk of overestimating the potentials of regional economic policies because firms have more options than simply to accept regional and local offers. Participation in or integration within some external production networks may well become the dividing line between success and failure in a global economy (D'Arcey a. Guissani 1996, 173).

Even SMEs have already reacted by relocating labour-intensive production steps to low-cost countries in order to avoid high labour costs in Germany or they sub-contract components from abroad for the same reason. Other firms set up more or less independent subsidiaries in their major export markets. If transaction costs are low, non-regional solutions will probably be preferred to solve problems originating in global competition.

Because of this experience economic and political decision-makers are well advised to be critical of widespread fashionable concepts for the promotion of regional economies. Very often they do not meet the real problems and requirements of firms. Structures which work in Silicon Valley, the Third Italy or Cambridge will not necessarily work in other regional economies. Measures adjusted to the specific needs of small groups of enterprises are probably a better, but certainly a more demanding way. This is not to deny the existence and returns of effective regional networks which might stimulate a collective learning process and even marketable innovations. Still, these cases are rare *highlights* in the economic world, created under specific conditions which cannot be reproduced

easily. Networks are not panaceas, nor are local cultures readily transferable. At least it is very difficult and time-consuming to create or encourage such structures through regional policy measures. Unfortunately, most of the regional economic problems – especially unemployment – cannot be solved on a regional level.

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