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Klaus Müller

International Activities of the German Craft Sector

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1. Introduction

The crafts comprise a wide-ranging field of economic activities in Germany. The enterprises of the craft sector provide goods and services for both private households and enterprises in all sectors. They have qualifications which enable them to respond to individual demand with a multifarious supply. In Germany the crafts are considered to be an independent economic sector separate from industry and commerce. The 560,000 enterprises have about 6.1 million employees (15 % of the German working population) and 630,000 apprentices. They generate an annual turnover of 800 billion DM.

The crafts form an important social and economic group within the group of small and medium-sized enterprises (SMEs), which account for 99 % of German companies. The SMEs in Western Germany employ 76 % of the total workforce, train 80 % of all apprentices and contribute 52 % to gross value added.

The Craft Sector has traditionally been geared towards the needs of the national economy as a result of its demand structure. The majority of the firms in this sector cater for a narrow regional market. The effect of foreign economic factors on this sector have long been ignored, i.e. have not been seen as relevant. This position, however, has been put to the test in the light of discussion about appropriate ways for German firms to prepare for the European single market. A discussion about the possibility of commercial activity abroad began, with certain firms being given extensive help in order to foster the development of international trade in this sector.

For a long time, however, there has been no exact data available on the extent and type of craft exports. This absence of hard data has been largely overcome by the 1995 Craft Census (Handwerkszählung). Since then, exact data on the activity of the skilled craft sector abroad has been available, whereby a comparison of data according to the size of firm, region and sector is possible in many cases.[1]

The availability of this new data is the reason for this current publication. The data from the census on the activity of the craft sector abroad is analysed in every possible way, allowing many new conclusions about the activity of the craft sector abroad to be drawn.

The current state of knowledge on the reasons for craft sector activity abroad, entry into foreign markets, the appropriate methods for working in foreign markets, countries promising new export markets and the export potential of the craft sector [2] are presented with a concise summary in the second part of this publication.

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1 Unfortunately these figures are only for direct craft exports as the indirect export, though thought by experts to be of almost equal importance, were not included in the census. For this reason we were unable to examine this in detail in this current piece of research.

2 In its narrowest definition, „export“ is understood solely to mean the export of goods. In a wider definition it can, however, often be equated with the term „foreign commercial activity“. Unless stated to the contrary, this wider definition will be used throughout this publication.

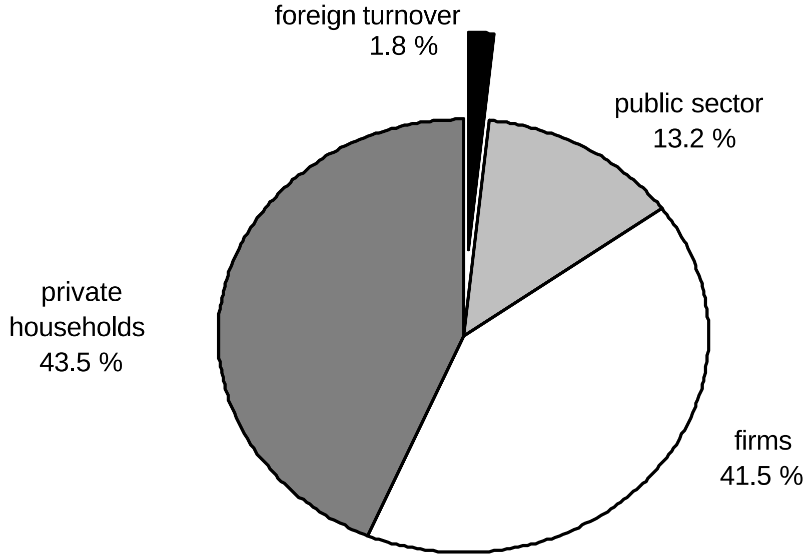
2. Figures for foreign activities of the craft sector

2.1 Basic statistics

The information about foreign turnover in the German craft sector was gathered from a question in the 1995 Craft Census, where firms were asked to separate their turnover into various categories. Out of the four categories, **foreign trade, accounting for 1.8 % of total turnover**, was by far the lowest earner (see figure 1). Turnover from private households (43.5 %) and from other firms (41.5 %) were dominant. Turnover from the public sector accounted for a total of 13.2 % in 1994.

Figure 1: **Turnover by various categories**

(%)



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Source: Statistisches Bundesamt: Handwerkszählung 1995

The 1.8 % share of turnover from foreign trade had a total value of **14,250 million DM**.

In 1994 Exports from the entire German economy had a total value of ca. 690,573 million DM. One can thus calculate that the craft sector accounted for **2.1 %** of **German foreign turnover**.

According to the last Census, out of a total 563,204 craft firms in Germany, exactly **17,605** (3.1 % of all firms) traded either goods or services across German borders.

One can calculate from this data that those firms trading abroad had an average foreign turnover of 809,000 DM.

It must be noted that all the figures for foreign turnover in the craft sector only relate to a certain time period, namely 1994. For this reason, no conclusions can be drawn as to whether or not foreign turnover in the craft sector has risen in the last ten years, i.e. whether 1994 represents a positive or negative deviation from the long term trend of foreign turnover in the craft sector. The thesis that craft exports could be increased as a result of the completion of the E.U. internal market can also not be proved on the basis of these figures.

2.2 Size of firms

Foreign turnover in the craft sector can be divided according to various classes of business size (categorised as to the number of employees). One sees that the percentage of foreign turnover increases in proportion to the size of firm (see figure 2). The proportion in craft firms with fewer than ten employees is merely 0.4-0.5 % of total turnover. Thereafter the percentage rises steadily so that „large“ craft firms with over 100 employees generate 4.5 % of their turnover abroad.

Figure 2: **Foreign turnover of craft firms by size (number of employees) in 1994**

Class of firm (according to number of employees)	Turnover 1994 *(in 1 000 DM)*	Turnover 1994 *(in %)*	Foreign turnover *(in %)*	Foreign turnover *(in Mill. DM, about)*	Proportion according to class *(in %)*
1	5 341 977	0.7	0.4	21	0.2
2 - 4	51 360 739	6.4	0.4	205	1.4
5 - 9	117 775 281	14.7	0.5	589	4.2
10 - 19	163 027 504	20.4	0.8	1 304	9.2
20 - 49	194 534 718	24.3	1.3	2 529	17.8
50 - 99	106 555 410	13.3	2.1	2 238	15.8
100 and more	162 010 847	20.2	4.5	7 216	51.4
Total	***800 606 477***	***100.0***	***1.8***	***14 250***	***100.0***

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Source: Statistisches Bundesamt Wiesbaden, special analysis of “Handwerkszählung” 1995, own calculations

If the foreign turnover of each class of firm is calculated, one can see that over half of craft exports are made by large craft firms (exactly 51.4 %), although these firms generate only one fifth of total craft sector turnover. If all firms with over 20 employees are examined, one sees that they account for a total of about 85 % of foreign turnover in the craft sector. In comparison, craft firms with fewer than 10 employees account for less than 6%. Thus foreign turnover in the craft sector is generated almost entirely by large craft firms.

This picture is put somewhat into context when one takes into account the number of craft firms engaged in foreign trade rather than merely the proportion of turnover (see figure 3). Of 17,605 „exporting firms“, almost 50 % have fewer than 10 employees. This shows that on principle even small craft firms make use of their opportunities abroad. Alone 665 one-man businesses mentioned to have foreign turnover in 1994.

Figure 3: **Craft firms with foreign turnover by size in 1994**

Class of firm (according to no. of employees)	Craft firms *(number)*	Craft firms with foreign turnover *(number)*	*(in %)*	Foreign turnover per firm[1)] *(in TDM)*
1	77 104	665	0.9	32
2 – 4	185 443	3 201	1.7	64
5 – 9	154 375	4 467	2.9	132
10 – 19	89 537	4 067	4.5	321
20 – 49	42 018	3 238	7.7	781
50 – 99	9 477	1 189	12.5	1 882
100 and more	5 250	778	14.8	9 370
Total	***563 204***	***17 605***	***3.1***	***809***

1) only firms with foreign turnover *SfH Göttingen*

Source: Statistisches Bundesamt Wiesbaden, special analysis of “Handwerkszählung” 1995, unpublished; own calculations

Even when viewed in this way, it remains clear that it is the large firms rather than the small that are active abroad. The percentage of craft firms active internationally increases in proportion to the size of firm. Whereas it is only 0.9 % of one-man businesses, this rises to 14.8 % of large firms. The same applies to the turnover of those firms active internationally. Small firms make an annual turnover of less than 100,000 DM abroad, whereas firms in the 50-99 employee category turnover 2 million on average, and large firms even 10 million DM. Thus foreign turnover is generally an area for large firms. This also allows a conclusion to be drawn by combining figures 2 and 3: namely that a total of 778 craft firms (each with over 100 employees) account for over 50 % of foreign turnover in the craft sector.

2.3 German federal states (Bundesländer)

Before a detailed examination of the individual federal states (Bundesländer) a differentiation between **new** and **old** Bundesländer has to be made. Of the 17,605 internationally active craft firms, 16,000 (i.e. 90 %) are from former West Germany and proximately 1,600 (10 %) from former East Germany (see figure 4), i.e. 3.5 % of craft firms from the old Bundesländer are internationally active but only 1.5 % of firms from the new. Thus it is clear that East German firms are far less frequently active abroad. This result is hardly surprising in the light of the huge restructuring problems resulting from the collapse of the socialist system.

Figure 4: **Foreign turnover in the craft sector in old and new Bundesländer in 1994**

		old Bundesländer	new Bundesländer	Germany
firms	(no.)	454 299	108 905	563 204
those with foreign turnover	(no.)	15 874	1 631	17 605
	(in %)	3.5 %	1.5 %	3.1 %
% of total Germany		*90.7 %*	*9.3 %*	*100 %*
turnover	(in Mill. DM)	656 605	144 001	800 606
of that foreign turnover (in Mill. DM)		13 584	666	14 250
	(in %)	2.1 %	0.5 %	1.8 %
% of total Germany		*95.3 %*	*4.7 %*	*100 %*
ø turnover per firm[1)]	(in DM)	850 000	408 000	809 000

1) only firms with foreign turnover *SfH Göttingen*

Source: Statistisches Bundesamt Wiesbaden, special analysis Handwerkszählung 1995, unpublished; own calculations

The differences between West and East become even more apparent, if a comparison of foreign turnover is made. Over 95 % of foreign turnover in the craft sector is made by firms from the old Bundesländer where the „export quota“ is 2.1 %, while only 0.5 % for the new Bundesländer.

The amount of foreign turnover per firm in the West is (on average) 850,000 DM per exporting firm; twice as high as the one of the East.

Unfortunately, only data for the amount of foreign turnover is available for the individual Bundesländer, not for the number of firms active abroad (see figure 5). Only minimal differences appear between the new Bundesländer. Foreign turnover accounts for either 0.3 or 0.4 % of total craft turnover. The slightly higher percentage of foreign turnover of 0.5 % for the New Bundesländer is a result of the fact that the foreign turnover of East Berlin is slightly higher.

In West Germany, the foreign turnover of the individual Bundesländer is substantially higher, although great differences between the individual Bundesländer can be observed. Baden-Württemberg is in first place with 3.5 % of craft turnover generated abroad, followed by the city-states of Hamburg and Bremen, and by North-Rhine-Westphalia. These are followed by the Saarland and Bavaria, though where Bavaria is concerned, it must be noted that these figures for foreign turnover refer to 1994 when the export stimulating effects resulting from

Austria joining the E.U. had not yet come into effect. Had the Craft Census taken place two years later, higher export values would certainly have been recorded, particularly in the case of Bavaria.

Bundesland	**Turnover**	**Turnover abroad** [1]		
	in Mio DM	*in Mio DM*	*in %*	*Share of D*
Schleswig-Holstein	23 812	*214*	0.9	1.5
Hamburg	16 542	*546*	3.3	3,8
Bremen	4 913	*142*	2.9	1.0
Lower-Saxony	69 028	*759*	1.1	5.3
North Rhine-Westphalia	169 953	*3 739*	2.2	26.2
Hessen	58 670	*645*	1.1	4.5
Rhineland-Palatinate	36 885	550	1.5	3.9
Saarland	9 876	*207*	2.1	1.5
Baden-Württemberg	117 179	4 124	3.5	28.9
Bavaria	131 751	*2 503*	1.9	17.6
Berlin (incl. Berlin-East)	27 338	*328*	1.2	2.3
Old Bundesländer	**656 605**	**13 584**	**2.1**	**95.3**
Mecklenburg-Vorpommern	17 486	*70*	0.4	0.5
Brandenburg	24 944	*75*	0.3	0.5
Saxony-Anhalt	24 027	*96*	0.4	0.7
Thuringia	22 610	*68*	0.3	0.5
Saxony	45 593	*182*	0.4	1.3
New Bundesländer	**144 001**	**666**	**0.5**	**4.7**
Germany	**800 606**	**14 250**	**1.8**	**100.0**

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[1] The results from the Bundesländer do not add up to the total due to approximations

[2] incl. Berlin-East

figures in italics: calculations according to proportional values. Descrepancies resulting from approximations possible

Source: Statistisches Bundesamt; Statistische Landesämter: Handwerkszählung 1995, partly unpublished results, own calculations

Schleswig-Holstein is the lowest in the Western Germany ranking list, though the proportion of foreign turnover of this Bundesland is nevertheless twice as high as that of the new Bundesländer. Furthermore, Hessen, Lower-Saxony and Berlin barely show a higher rate of foreign turnover. Altogether nearly 73 % of total foreign turnover in the craft sector is generated in the following three Bundesländer: Baden-Württemberg, North Rhine-Westphalia and Bavaria.

2.4 Border Regions

Since craft firms predominantly cater for a regional market, the presumption arises that foreign turnover is higher in border districts where the regional market extends partially into the neighbouring country.

Unfortunately it is impossible to make a precise comparison of the percentage rate of foreign turnover achieved in border districts with that of central districts using the data made available through the current Census. Nevertheless, an attempt was made to calculate the foreign turnover in border districts through figures of the districts provided by statistical offices of the Bundesländer.[3]

All districts were chosen which are situated either directly on the international border, or where the majority of the area of the district lay less than 30 km from the neighbouring country. The foreign turnover attained by the craft sector in these districts was added. The result showed that the proportion of foreign turnover was 2.9 % in border districts as opposed to 1.6 % in central districts (see figure 6). In total, approximately 22 % of foreign turnover was produced in border districts and 77.8 % in central districts. In view of the fact that only 13.6 % of total craft turnover is produced in border districts, the considerable result shows that proximity to borders is an substantial factor for foreign craft trade.

Indeed, these results help to correct a common opinion that international trade in the craft sector is only of interest to border districts and that for this reason encouragement of foreign trade by crafts in central districts is pointless.

The border proportion of 22 % must, however, be put into context as much of the foreign turnover in these districts is not simply a result of the proximity of a border. The district Tuttlingen in Baden-Württemberg, is a case in point, as there is a concentration of medium-sized craft firms specialising in the production of technical medical equipment (surgical mechanics) to supply the world market.

[3] However this was not possible for all Bundesländer. The rural districts close to the border in Schleswig-Holstein and the new Bundesländer couldn't be taken into the analysis. As the foreign activities are very low regulations for secrecy were applied and only a few results from the rural districts could be published.

Figure 6: **Foreign turnover in the craft sector in relation to border and central regions**

	total turnover in Mill. DM	share of Germany	foreign turnover in Mill. DM	in %	*share of Germany*
Border regions [1)]	108 742	13.6	3 165	2.9	*22.2*
Central regions	691 864	86.4	11 085	1.6	*77.8*
Total	***800 606***	***100***	***14 250***	***1,8***	***100***

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1) except for border areas in Schleswig-Holstein and the new Bundesländer

Quelle: Statistisches Bundesamt Wiesbaden, special analysis Handwerkszählung 1995, unpublished; own calculations

If one looks at the results of each individual border district the following conclusions can be reached:

- The proportion of foreign turnover is not generally above-average in border districts. In a total of 24 out of 60 districts studied, the proportion of foreign turnover was under the German average of 1.8 %.
- The level of foreign turnover seems above all to depend on the neighbouring regions. Therefore a high level was found in the districts bordering on Luxembourg (districts: Bittburg-Prüm, Trier city, Trier rural district and Merzig-Wabern), in the border area between south-west German, Switzerland and Alsace (districts: Lörrach, Freiburg, Ortenaukreis, Emmendingen) and in some districts bordering on the Netherlands (Viersen, Mönchengladbach city). These are regions in which relatively few differences can be found in language and cultural attitudes to the neighbouring country.
- Overall, only a low level of foreign turnover actually stems from the Czech Republic, even though the districts of Cham and Hof show above average levels.

2.5 Craft groups

In order to look at foreign trade in the craft sector in terms of craft branches, there a distinction into nine groups has been made. Of these nine groups, the number of firms active abroad is shown in figure 7 with their resultant turnover. Before, however, these are analysed in detail, a rough overview shall be given.

The two craft groups, where the foreign trade has the most importance are those producing for commercial and for specialist private needs. Of these groups, 8.4 % and 7.5 % of all firms are involved in export and 6.4 % and 5.3 % of their turnover is produced abroad. This is considerably higher than the average values for the whole sector (3.1 % share of exporting firms and 1.8 % turnover share form abroad). The firms in these two groups are further marked for producing transportable goods and therefore not being restricted by a narrow geographical market.

Firms producing foreign turnover appear relatively often in two further groups; automotive crafts and service crafts supplying the commercial sector. Foreign turnover played only a minor role in the remaining craft groups. At the bottom of the scale were the crafts servicing private clients (above all hairdressers). Of these firms, only 0.1 % were active abroad and their foreign turnover as a proportion of total turnover was also only 0.1 %.

If the difference in size of the various nine groups is then taken into account, it can be seen that firms producing for commercial needs are responsible for 60 % of foreign turnover alone. Since the craft group supplying specialist private needs is very small, it only produces 5.4 % of the total foreign turnover in the craft sector and is thus surpassed by the service crafts supplying the commercial sector i.e. automotive crafts and the installations-crafts.

The nine groups are examined individually below, the basic data is shown in figure 7. This analysis also relies on the craft census of 1995, which published the results of NACE Rev.1[4] in sub-sections, divisions (2 sections), groups (3 sections), partial classes (4 sections), and even sub-classes (5 sections).[5]

Crafts producing for the commercial sector

As already mentioned, the group of crafts producing for the commercial sector are responsible for the largest amount of foreign trade within the group of nine. This group contains above all craft suppliers and producers of capital goods, but also other craft branches (e.g. dental technicians) whose contracts stem predominantly from industry, from trade and independent professions, but also from the craft sector itself.

One in twelve firms in this group was involved in foreign trade in 1994, and the percentage of foreign turnover as a proportion of total turnover reached 6.4 % (see figure 8). All in all, over 60 % of total foreign turnover in the craft sector was produced by firms in this group, with the turnover of each firm being more than 1.1 million DM.

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4 Statistical classification of economic activities in the European Community

5 See: Statistisches Bundesamt: Handwerkszählung 1995

Figure 7: **Foreign turnover by craft groups 1994**

	Firms	Firms with foreign turnover		share per group	Turnover	Foreign turnover		Share per group	Foreign turnover per firm
	(number)	*(number)*	*(in %)*	*(in %)*	*(in thousand DM)*	*(in thousand DM)*	*(in %)*	*(in %)*	*(in TDM)*
Crafts producing for commercial demand	90 577	7 609	8.4	43.2	135 226 344	8 602 450	6.4	60.9	1131
Crafts producing for special consumption	18 433	1 378	7.5	7.8	14 322 550	761 642	5.4	5.4	553
Food crafts	45 755	354	0.8	2.0	59 879 333	479 035	0.8	3.4	1353
Automotive crafts	48 595	2 743	5.6	15.6	150 571 784	1 054 002	0.7	7.5	384
Trade and repair crafts	48 021	1 174	2.4	6.7	38 711 773	348 406	0.9	2.5	297
Service crafts for private consumption	56 029	72	0.1	0.4	11 182 653	11 183	0.1	0.1	155
Service crafts for the commercial sector	22 189	910	4.1	5.2	46 506 746	1 164 278	2.5	8.2	1279
Construction and building installation[2)]	232 664	3 349	1.4	19.0	168 105 624	669 969	0.4	4.7	200
Building installation					173 630 289	1 039 067	0.6	7,4	
Total [1)]	**563 204**	**17 605**	**3.1**	**100.0**	**800 606 477**	**14 410 917**	**1.8**	**100.0**	819

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Source: Statistisches Bundesamt: Handwerkszählung 1995, special evaluation; own calculations

1) The sum of the 9 groups is a little smaller than the total as some craft firms could not be categorised in one of the groups

2) Firms incl. building installation

If this group is further divided according to NACE Rev. 1; four sub-groups can be identified, in which the craft firms are ranked with particular regard to the level of foreign turnover (see figure 8). The following groups emerge according to the degree of foreign turnover:

- Engineering (sub-section DK) with a foreign turnover of almost 4 billion DM (13.1 % of total).
- Production of office equipment, data-processing equipment and fitting, electrical, precision and optical engineering, (sub-section DL) with 1.8 billion DM and an export share of 7.2 %.
- Vehicle construction (sub-section DM) with almost 1.2 billion DM foreign turnover and an export share of 15.1 %.
- Metal working and production, production of metal goods (sub-section DJ) with a foreign turnover of 1.1 billion and an export share of 2.9 %.

If a deeper division into individual industries is made, the „production of machine tools“ takes first place with an export share of almost 25 %. One also notices that high levels of foreign turnover are often to be found where the group name means that we are dealing with a residual term e.g. industrial groups 29.5 (manufacture of other special purpose machinery) or sub-section 35 (manufacture of other transport equipment). It can thus be concluded that craft exports that fall into these categories are primarily niche products that cannot be found under any of the other industrial groupings.

If the four sub-groups mentioned above are examined individually, the production of machine tools within engineering, as already mentioned, lies in first place in terms of turnover share, though in terms of total foreign turnover, groups 29.2 and 29.5 in which are categorised other machines, play a larger role. It is likely that there are especially specialist machines concerned.

Where the sub-section DL (manufacture of electrical and optical equipment) is concerned, the largest amount of craft exports, in terms of percentage, is generated in the areas of the production of measuring, control, navigational and similar instruments and appliances. Overall, the production of equipment for electrical exchange and supply, medical equipment and orthopaedic appliances is of greater importance. A turnover share of over 10 % is reached even in group 31.1 (production of electric motors and generators, transformers).

Within the vehicle construction industry, special vehicles are exported by craft firms, such as security vehicles or money transporters. Another important area is the production of motor caravans.

We briefly need to examine the last of the four sub-sections mentioned i.e. metal working and production and the production of metal goods. Seen from outside the industry, it seems as if the production of cutting tools, other tools, locks and hardware play the largest role, producing a foreign turnover of approx. 250 million DM. However, metal production and working, has greater weight with a 10.5 % share.

Figure 8: **Crafts producing for commercial demand**

Selected groups with high foreign turnover [1)]

No. of classi-cation[2)]	Commercial line	Turnover (in thousand DM)	Foreign turnover (in thousand DM)	(in %)
DD	Manufacture of wood and wood products	16 348 351	212 529	1.3
DE	Manufacture of pulp, paper and paper products; publishing and printing	4 309 554	43 096	1.0
DH	Manuf. of rubber and plastic products	6 040 772	144 979	2.4
DI	Manufacture of other non-metallic mineral products	7 105 452	142 109	2.0
DJ	Manufacture of basic metals and fabricated metal products	39 029 017	1 131 841	2.9
27	*Manufacture of basic metals*	*767 739*	*80 613*	*10.5*
28.6	*Manufacture of cutlery, tools and general hardware*	*3 871 047*	*255 489*	*6.6*
DK	Manufacture of machinery and equipment N.E.C.	29 498 169	3 864 260	13.1
29.1	*Man. of machinery f.t.production a. use of mech. power, exc.aircraft, vehicle and cycle engines*	*2 402 959*	*338 817*	*14.1*
29.2	*Manufacture of other non general purpose machinery*	*9 896 256*	*950 041*	*9.6*
29.4	*Manufacture of machine-tools*	*2 967 826*	*694 471*	*23.4*
29.5	*M. of other special purpose machinery*	*9 815 213*	*1 658 771*	*16.9*
DL	Manufacture of other electrical and optical equipment	24 850 709	1 789 251	7.2
31.1	*Manufacture of electric motors, generators and transformers*	*1 828 385*	*199 294*	*10.9*
31.2	*Manufacture of electricity distribution and control apparatus*	*4 786 264*	*516 917*	*10.8*
33.1	*Manufacture of medical and surgical equipment and orthopaedic*	*11 461 275*	*550 141*	*4.8*
33.2	*M. of instr.a. appl. for measuring, checking, testing, navigating and other purposes*	*1 897 983*	*254 330*	*13.4*
DM	Manufacture of transport equipment	7 721 872	1 166 003	15.1
34	*Manufacture of motor vehicles, trailers and semi-trailers*	*6 714 012*	*986 960*	*14.7*
35	*M. of other transport equipment*	*1 007 859*	*175 367*	*17.4*
	Total	***135 226 344***	***8 602 450***	***6.4***

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Source: Statistisches Bundesamt: Handwerkszählung 1995, H. 3

1) Sub-sections and groups with more than 5 % turnover abroad

2) NACE Rev.1 (statistical classification of economic activities in the European Union)

Crafts producing for special consumption

It is above all textile and clothing firms (group DB) and group DN (producers of furniture, jewellery, musical instruments, sports equipment, toys and other products and recycling) that are the most prominent in the craft group producing for special consumption. This is the smallest of the nine groups. These firms usually produce high quality goods in small batches, often also one-offs, and cater for a wide variety of consumer needs. Sales are made partly through trade, and partly directly to the final consumer.

The firms in this group are generally internationally orientated. They are second to the producers for the commercial sector in terms of the number of craft firms active abroad both as a proportion of total craft firms, and in terms of the share of foreign turnover as a proportion of the whole. Approximately 5 % of foreign turnover in the craft sector is produced by firms within this sector, in spite of the approximate export turnover of 550,000 DM being a little below average. If one takes into account the generally small size of these firms, the rate of foreign turnover is very impressive.

The most important section in terms of quantity within the group of firms producing for special consumer needs is by far that of furniture production (see figure 9). Over half of the foreign turnover of this group is produced by this section. This usually means the specialised making of high value pieces of furniture, although the production of office, shop and kitchen furniture is also of great importance.

If one looks at the importance of foreign turnover by percentage share, then the group of „producers of other products“ is the most significant. This group includes, among others, producers of fantasy and Christmas decorations.

Producers of musical instruments earn approximately one mark in every seven abroad. Makers of organs, harmoniums, violins, bows, wood-wind and plucked instruments have in particular long been active internationally generating a considerable turnover.

In the textile industry (sub-section DB), the „export quota“ is somewhat lower, at 3-5 %, although the production of textiles generates a slightly larger amount of foreign turnover than the production of clothing.

Figure 9: **Crafts producing for special private consumption**
Selected groups with high foreign turnover

Number of Classification[1)]	Commercial line	Turnover *(in thousand DM)*	Foreign turnover *(in thousand DM)*	*(in %)*
DB	Manufacture of textiles and textile products	1 471 905	67 708	4.6
17.4	Manufacture of made-up textile articles, except apparel	380 344	17 876	4.7
18.2	Manufature of other wearing apparel and accessoires	520 599	20 824	4.0
DN	Manufacture N.E.C.	12 850 645	693 935	5.4
36.1	Manufacture of furniture	10 350 750	465 784	4.5
36.2	Manufacture of jewellery and related articles	906 701	33 548	3.7
36.3	Manufacture of musical instruments	402 514	59 170	14.7
36.6	Miscellaneous manufacturing n.e.c.	638 651	110 487	17.3
	Total	***14 322 550***	***761 642***	***5.3***

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Source: Statistisches Bundesamt: Handwerkszählung 1995, H. 3
1) NACE Rev.1 (statistical classification of economic activities in the European Union)

Food crafts

Out of approximately 45,000 firms producing comestibles in 1994, only 354 (0.8 %) were active internationally. Of the nine groups, this sector has the second lowest share. The reason for this low figure is that these firms predominantly produce perishable goods unsuitable for transport. Firms producing comestibles generate a combined foreign turnover of almost 500 million DM, though it is surprising that the average amount of foreign turnover per firm is over 1.3 million DM, higher than in any other group.

It is probable that this is the result of a few firms producing comestibles which are highly specialised in international mail-order supply of goods where the problem of perishableness could be solved. According to the figures these are mostly butchers (152 firms) and bakers (94 firms). In terms of turnover share, however, both of these larger craft trades were exceeded by confectioners (2.6 % of foreign turnover). These exporters are restricted to a small segment of the market including, for example, frozen products or storable types of sausage, often regional specialities.

Automotive crafts

According to the latest craft census, out of around 48,500 craft firms in the automotive sector, 5.6 % (2,743 firms) generated foreign turnover in 1994. This means that one sixth of all craft firms active abroad are in the automobile sector.

The proportion of turnover per firm (on average 384,000 DM) is, however, relatively low, though it must be taken into account that for these internationally active firms, exports are of minor importance. This is doubly true, as turnover per firm in the automotive crafts is higher than in other sectors, particularly as a result of the high share of trade. The average foreign turnover is therefore only 0.7 % in terms of total turnover, though 7.5 % of the overall foreign turnover generated in the craft sector comes from automotive firms.

Within the automotive crafts, the highest level of foreign turnover (2.4 %) is generated by the trade in automobile parts and accessories. Far lower percentages are generated through the maintenance and repair of automobiles (0.9 % of foreign turnover), wheels (trade in wheels, parts and accessories, maintenance and repair = 0.7 %) and trade in vehicles (0.6 %). As a result of the overwhelming weight of this sector, the automotive trade generated the greatest amount of foreign turnover in terms of total foreign turnover in 1994.

Trade and repair crafts

All those craft firms which are predominantly concerned with trade and repair have been put into this category. 1,174 firms from a total of 48,000 in this sector, were involved in international trade in 1994, generating 350 million DM. Thus a foreign turnover of almost 300,000 DM per firm can be calculated.

The level of foreign trade in this sector is generally very low. This is hardly surprising, as trade and repair activities usually cater for a narrow regional market. Where foreign turnover is generated, this is usually in border regions where firms are contracted by foreign clients for having products in stock which are unavailable abroad, or are known for their careful repair work. Price advantages only play an exceptional role.

In general those firms more involved in retail are more often active abroad than those whose primary function is to repair. Relatively high levels of foreign turnover result from the retail trade in household, tele-visual and audio electronic products (2.3 % of foreign turnover) and from the retail clothes trade (2.1 %).

Personal services crafts for private consumption

Craft services for the private sector show the lowest levels of international activity both in terms of the numbers of firms involved and in terms of the level of foreign turnover generated as a proportion of the whole. Only 72 firms in this sector were active abroad. Annual foreign turnover was approximately 11 million DM, thus merely 0.1 % of total foreign turnover in the craft sector. Also the average foreign turnover of 155,000 DM per firm is very low.

Although hairdressers make up around 95 % of firms in this group, about 60 % of the foreign turnover is generated by textile cleaners. This turnover is primarily generated by firms in border regions or those specialising in certain cleaning techniques that are of interest internationally. Only very few hairdressing firms were active abroad. These were primarily firms with branches abroad.

Service crafts for the commercial sector-demand

Service crafts for the commercial sector can on the whole be divided into three groups: building cleaners, photographers, and craft firms involved mainly in wholesale. Although this group is dominated by building cleaners, at least in terms of employee numbers, a very different picture emerges concerning foreign turnover. Out of 910 firms generating foreign turnover, 329 are either building cleaners or photographers, and 581 wholesalers. When the levels of foreign turnover are examined, the wholesalers gain further weight. From a total of 1.1 billion DM, 8.2 % of total foreign turnover generated by the craft sector, 86 % is generated by wholesalers. The amount of foreign turnover per firm was almost 1.3 million DM, putting this group in second place in the group of nine, behind producers of comestibles.

These three groups are analysed more thoroughly below. Craft firms primarily concerned with wholesale, generate approximately 5-6 % of their turnover abroad. Four particular fields of importance can be found here:

- Wholesale of agricultural machinery and tools,
- Wholesale of office equipment and fittings,
- Wholesale of grain, seed and feed,
- Dispatch of products from butcheries

Photographers generate a total of 2.9 % of their turnover abroad. Firms specialising in photography for industry and advertising are particularly active internationally.

Building cleaners generate only 0.4 % of foreign turnover. This is generated by firms based in border regions or those offering highly specific sanitation services.

Construction and building installation

Building firms are the most important group overall within the craft sector. More than 40 % of firms are directly involved in either construction or installation trades. In relation to foreign turnover, however, builders play a very low key role. Only 19 % of all firms active abroad belong to the building trade, generating 12 % of total foreign turnover. These statistics in themselves indicate that the level of foreign turnover per firm is relatively low. Builders are at the bottom of the scale of all craft groups examined, with the exception of craft services for the private sector, with each internationally active firm generating on average 200,000 DM .

On closer inspection of the individual sectors of the building trade, it can be seen that only one sector achieves over the 1 % mark of foreign turnover. This is in the sector building chimneys, generators and industrial ovens, where the craft firms involved generate 3.2 % of their turnover abroad. The remaining foreign turnover in this sector is overwhelmingly generated by firms in border districts. Building installations firms, in particular, are often awarded contracts to carry out work in the neighbouring country if they offer a high level of quality which is not available from local craft firms.

3 Characteristics of foreign turnover in the craft sector

3.1 Reasons for foreign trade

- In almost every country a wide network of small and medium sized craft firms already exists which cover a basic provision of craft goods and services.
- Goods and services from German firms are almost always more expensive than their competitors abroad as a particular result of the relatively high wage costs that exist in Germany. These higher costs are compensated in the industry by a higher level of productivity. The advantages of higher productivity can rarely be realised in the labour-intensive craft sector[6]. This is a source of price disadvantage for German firms when compared to foreign craft firms.

One might assume from this that foreign trade would play no role at all for German craft firms. Since this is not true, as shown in chapter 2, the question of why German craft firms are successfully active in foreign markets must be posed. Three reasons were found for this[7]:

- German craft firms active abroad contrast markedly with their foreign competitors particularly in terms of quality, flexibility, rapidity, innovation, reliability, meeting a schedule and adaptability to the wishes of clients. In this way the higher costs of German craft products are made acceptable.
- German craft firms provide goods and services which are unavailable abroad.
- German craft firms use either the so called „piggy-back“ method of riding on other German firms abroad, or are contracted by private German citizens moving abroad.

The most important reason for international activity by German firms seems to be the contrast between the range of activities on offer between German firms and their competitors. This is particularly true in the case of craft firms producing for the commercial sector, which in turn generate by far the highest levels of foreign turnover (see section 2.5). Most of these firms have specialised in high quality

6 See Müller, K. (1993), p. 10

7 An exact division between these three reasons is not possible.

special makes or particular niche products, and through this gained know-how which can be used to distance themselves from their foreign competitors. This is specially true for the craft manufacture of machinery, as firms in this sector often serve industrial clients whose demands on providers (be it for systems or parts) have risen as a result of increased global competition and the resulting upheaval caused by this process.

Where private demand is concerned, the majority of demand for craft goods and services is catered for by local firms. However, classes of consumers demanding specialist products and services which differ from the „normal“ craft supply in terms of form, image, quality and range of application are growing in every country. This reflects the trend towards individualisation that has become characteristic world-wide within the rich industrialised countries. An example for foreign trade in this area is the supply of luxury bathrooms and high quality fitted kitchens.

German craft firms offer goods and services in many areas that do not exist in the same form abroad. One can refer to this as **unobtainable goods and services**. These are to some extent regional specialities, for example clocks from the Black Forest, or musical instruments from the Erzgebirge (Saxony), sought after by foreigners as a result of contact with these products through holiday trips, or because they value German craftsmanship. Of at least equal importance appears to be the fact that German craftsmen have a competitive advantage in some areas because trends often develop earlier and become stronger in Germany than in neighbouring countries, for example, energy saving, environmentalism and ecological construction.[8] German craftsmen have to adapt quickly to these trends, and thus gain a competitive advantage internationally that has a particular effect in border regions.

The „piggy-back“ method comes into effect when German firms - industrial and trading firms but also banks or insurance brokers - open branches abroad and engage German craft firms, for example to install the fittings. If the wage difference to the local craftsmen is not too extreme, German craftsmen are contracted for all of the work, as the cost of looking for local workers would in end effect be more expensive than the generally higher wage charged by the German craft worker for his work. In those countries where the wage difference is sharply different, for example in central and east European states, German craftsmen are employed only for particularly fine work, for example in electronic work.

Further opportunities for working together with German industrial firms abroad occurs in the field of the assembly and installation of machines and larger plants. In some cases German craft firms have set up branches abroad when involved in the relocation of production facilities in order to effect a smooth continuity of supply to the industrial client.

Private individuals also employ craft firms when moving either their primary or secondary residence abroad, or when building a weekend house in the neighbouring country. They often take German craftsmen with them, to whom they have built up

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[8] See Müller, K. (1993), p. 11

a trusting relationship, as they often associate the search for local craftsmen with relatively high risk and cost factors.

The three reasons discussed above are not independent of one another, but are often linked with each other. They are based on the fact that there is a relatively high number of craft firms in Germany which are able to differentiate themselves from their competitors for various reasons, and thus are internationally competitive. The basis for this is the national competitive intensity, which forces craftsmen to be efficient and innovative and which results in firms constantly having to further develop their competitive advantage. In addition, German craft firms also benefit generally from the good image German products enjoy abroad and specifically from the high reputation of German craft work.

On the other hand, the knowledge and ability of craft workers must be taken into account. These stem from the high quality of their professional training, particularly in technical areas, and ensure the continued ability of the German craft sector to be active internationally. The individual workers in this sector do not generally possess qualifications that particularly facilitate international orientation (foreign language skills, work experience abroad) but are nevertheless capable of being sent abroad, which is often necessary in connection with services such as installing equipment, repairs etc.

3.2 Entry into the international market

The theory about the internationalisation of firms takes for granted that firms plan their foreign activities strategically. This is, however, only the case for a minority of firms in the craft sector.[9]It was discovered through observation and through surveys that firms in this sector usually only come into contact with the concept of export by chance, and then make the most of a good opportunity to enter the international market.

This good opportunity arises for example when a foreign client who has heard of the capabilities of German craft workers through an acquaintance or colleague etc., approaches a firm. This is particularly the case in border regions. It is more often the case in border regions that German clients take up residence abroad in these areas, and continue to contract their customary craft workers. In the delivery sector, activity abroad is often developed as a result of German clients who have moved their centre of production abroad but continue to employ former German craft sub-contractors for delicate delivery products.

Craft organisations often play an important role in dealing with and encouraging enquiries from abroad. Some craft chambers organise trips to areas of special interest abroad, or offer trans-national conferences (contact days) in order to facilitate the development of contacts with foreign firms for those German firms capable of exporting.[10]

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9 For comparison see Sauer, J. (1991), p. 128.

10 See Müller, K. (1993), p. 23.

Another successful method of entering foreign markets can be found in participation in an international trade fair abroad. Participation in international trade fairs at home can also lead to export contracts as many trade fairs in Germany are visited by a wide cross-section of international business people since Germany is a leader in the area of trade fairs. Participation in such trade fairs is made far easier if it is possible for groups to present themselves through one communal stand. These stands are usually publicly funded (in particular by state governments) and organised by craft chambers- as long as the stand is exclusively open to craft firms.

When craft firms have made their first experiences in export and it becomes clear that there is a definite demand for their wares abroad, they often incorporate the planning of foreign trade into their marketing planning; whereby this becomes a regular part of their planning strategy. Some firms, however, treat it as an exceptional event or simply wait to see if the opportunity to be active abroad arises again.

A decisive factor for further development is above all the interest of the entrepreneur whose personality is important as he/she is usually solely responsible for the marketing strategy of the firm. Their decision-making capacity develops through the experience of being active abroad so that their increasing internationalisation also allows for alternative commercial activity abroad, such as cross-border co-operation, to be taken into account in strategic planning.[11]

One must make a basic differentiation between offensive and defensive when analysing the motives of those firms **actively pursuing** foreign trade. The most important of the **offensive motives** is the increase of turnover. This is achieved above all through the creation of new markets or product diversity. An important reason for foreign trade within industry is often the pursuit of economies of scale, the decrease of cost per item through an increase of production. This concept is of only limited importance in the craft sector as firms are not usually involved in mass production but rather in specialised finishing or production of individual pieces and thus have a limited output. At the most they might gain experience through an increase in production.

The primary **defensive motive** is that of securing the business base. This includes the reduction of sales risks, to balance an increased pressure from competition at home, or to utilise free production capacity.

3.3 Target countries for export

Data on the direction of German exports comes predominantly from export statistics. These statistics, however, do not differentiate between craft and industrial products, thus they cannot supply any specific data on the direction of craft exports. This information can nevertheless be collected through various surveys of craft

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[11] See Ostendorf, Th. (1997), p. 196 f.

firms[12], through interviews with firms at trade fairs[13] or through **professional dialogue** with export consultants from craft organisations.

On the whole, exporting craft firms are active world-wide;[14]activities are not restricted to the neighbouring country, although the level of activity is certainly higher in this region. This is above all a consequence of the fact that cross-border activity is of no minor importance in the craft sector (see section 2.4).

If the various target countries are put into four groups in accordance with the sources mentioned above, the following rough figures result:

- E.U. member-states: 55 %
- Central and Eastern European states: 10 %
- Other European States 15 %
- Overseas states: 20 %

A brief analysis of each of these four groups is given in the following. The dominance of **E.U. member-states** in the area of craft sector export is hardly surprising. An even higher market share might even have been expected given that cross-border trade with other E.U. member-states alone makes up approximately 22 % of the total foreign turnover in the craft sector (see section 2.4). The size of border region trade dictates that foreign trade in the craft sector would mostly take place within the European Union. Thus the largest proportion of foreign trade in the craft sector should be with France, the Netherlands, Austria[15] and Luxembourg. Apart from the common border with these countries and the relatively short distances this means for transportation, the linguistic and cultural similarities with these countries as a whole or at least with certain regions must have at least some positive effect on the level of foreign trade.

Luxembourg lies without a doubt in first place among all the countries importing craft products and services from Germany in terms of total imports per country. This can be explained by the fact that at that time a high demand for craft products existed in Luxembourg, particularly in the building sector, which could not be met by local craft firms. One must also take into account that the proportion of specialist workers in the craft sector in Luxembourg is lower than in Germany and thus German craft workers are often contracted for difficult pieces of work.

There has been a large structural shift in the level of foreign turnover coming from **Central and east European states** in the last few years as a result of the opening and liberalisation of these markets. Important markets for former East Germany

[12] For comparison on this point see Sauer, J. (1991), p. 96; Ostendorf, Th. (1997). p. 180 and Müller, K. (1989), pp. 13-22.

[13] See Müller K. (1993), p. 43.

[14] Approximately two thirds of exporting craft firms are active in several countries; one third (predominantly firms in border areas) are active in only one foreign market, see Ostendorf, Th (1997), p. 177.

[15] According to experts, a large increase in craft trade with Austria has been observed since joining the E.U. in 1995.

collapsed after reunification and had to be carefully built up again. During this period a substantial level of foreign trade existed with neighbouring Poland and the Czech Republic, whereby the passive job processing that resulted from the large wage gap had a measurable effect. Many German craft firms initially attempted to build up production in these countries by founding joint-ventures. As a result of ensuing conflicts with the local partners, however, there is at present a greater tendency to found a separate branch in these countries (see section 3.4). Pure export of goods, or the undertaking of contracts in these neighbouring countries is exceptional, and occurs only with high value goods, or highly specialised services that cannot be supplied by local firms in these countries.

In more distant Central and east European states, craft chamber partnerships between German and local craft chambers play an important role. These are usually sponsored by public funds. An important goal in these partnerships is the formation of business contacts in order to initiate cross-border collaboration. Some examples of this are the partnerships between the Frankfurt/Oder craft chamber with the chamber in Riga (Latvia), the chamber in Potsdam with that in Kostroma in Russia and the Düsseldorf chamber with the craft chamber in Moscow. We must wait and see whether this contact brings about a notable rise in foreign trade.

The main market for German craft products and services in the group of „**other European states“** is unquestionably Switzerland. The reasons for this are the common border and the similarities in language and culture. According to the German-Swiss chamber of commerce, the Swiss are generally very open to German products.[16]The activity of German craftsmen in Switzerland is however, hampered by the restrictive Swiss rules for the employment of foreign workers. Norway and south-east European countries are also of certain significance for the foreign trade of German craft firms.

The share of exports going **overseas** seems surprisingly high at first glance. Approximately every fifth DM earned abroad in the craft sector comes from outside Europe. This high level can, however, be understood once one takes into account that many exporting craft firms have specialised themselves in niche markets where they often have few competitors world-wide. Examples of craft branches of world-wide importance, are besides the delivery branch above all organ-builders, makers of musical instruments, makers of surgical equipment (producing technical-medical supplies), car and body mechanics (producing for example security vehicles) and boat-builders (above all sports boats).

The biggest market overseas is probably the U.S.A., although the rich Arab states are also a productive area for exports, as shown by the participation of Bavarian craft firms in a trade fair in Abu Dhabi. Other important overseas markets are Canada, Mexico, Australia, Israel and newly also states in the far East.

Business contact with the **developing world** is in contrast on the whole relatively low. This is true in spite of the fact that many craft chambers have partnerships with groups in the developing world and that special development possibilities exist for these regions. The reason for this lack of business contacts is mostly a result of the

[16] See: Handelskammer Deutschland-Schweiz (1997).

fact mentioned above, that exporting craft firms usually produce high price niche products for which a demand in the third world barely exists.

3.4 Methods of marketing abroad

The method by which foreign markets are worked by firms is primarily dependent on the level of management and capital that a craft firm is willing to invest in activity abroad. The simplest form is the pure export of goods. The demands on the business are lowest in this area. Other forms of activity abroad, for example cross-border co-operation or direct foreign investment require a far greater input from the craft firm. This must be an important reason for the fact that these types of foreign activity are scarcely found in the craft sector.

Foreign activity can be divided into the following categories, although the size of the classes is dependent on the estimates of the author:

- Pure export of goods (ca. 85-90 % of craft activity abroad),
- Work conducted abroad (10-15 % of craft activity abroad),
- Other forms of foreign activity (2-5 % of craft activity abroad).

There is a difference between direct and indirect trade in the category of **pure export of goods**. As mentioned in the introduction the figures for the indirect export of goods (which must be of almost equal significance as that of direct export in the craft sector) are unfortunately unavailable. As the pure export of goods is with great distance the most important among the methods of marketing abroad, this form of foreign activity has been examined in the preceding sections in depth and so will not be mentioned at this stage again.

The second largest category of the various forms of foreign craft activity is that of **work conducted abroad**. This is usually governed by a so-called work contract under which craft workers are bound to perform a precisely defined activity within a fixed time period for a previously agreed price. The carrying out of work abroad is almost exclusively confined to border areas and then particularly in the construction and building industries. Activity on the other side of the border is definitely more problematic than the pure export of goods as a variety of regulations governing entry into the market must often be taken into account.[17] Particularly limiting are the business permits commonly necessary, the registration of staff employed in the target country.

Cross-border co-operation and direct investment are the most prominent among the other forms of internationalisation. What is understood by the term **cross-border co-operation** is a longer-term collaboration between two or more firms from different countries which is in effect is more than purely a business arrangement to supply certain markets. Trans-national co-operation is to date, however, relatively uncommon in the German craft sector. Examples of this are found in the Saar-

17 This is still the case for work performed within the E.U.

Lorraine-Luxemburg region as well as in South-West Germany, where the partner firm usually (though not exclusively) comes from the bordering country.[18]

There are two basic reasons that can be identified which prevent German craft firms from setting up cross-border partnerships. On the one hand only a very small sector of craft firms would be suited to such an arrangement, as specialist supplies necessarily require a high level of technical expertise. On the other hand, the mentality of craft workers must be taken into account as the usual reason for becoming self-employed was in order to be in charge of the decision making process and thus to avoid situations where co-operation is necessary as this would restrict the freedom to make decisions.

Examples for the cross-border co-operation of German craft firms were the subject of a detailed investigation by the Institute of Small Business several years ago[19]. The conclusion reached by this research was that these cases concerned above all co-operation in production and distribution. The primary aim of co-operation in production was to increase the product range by specialisation in complimentary products on both sides. In distribution, it was above all the knowledge of the market but also business contacts and channels of distribution of the partner that were used in order to effect an easier entry into the foreign market.

Cross-border co-operation among the crafts differ in comparison with middle-sized industry in the following ways:

- „Cross-border co-operation in the craft sector operates on the basis of informal agreements in contrast to industry. Contracts governing the nature of co-operation are rarely signed.
- A good personal relationship between potential partners must be developed first before any form of co-operation can take place. Thus co-operation hardly ever fails as a result of a lack of mutual trust as so often happens in industry.
- Craft organisations play a vital role in enabling co-operation to take place. Previous business contacts are rarely used as path to co-operation.
- Cross-border co-operation in the craft sector frequently occurs in the area of production in contrast to industry where co-operation in distribution is far more important.“[20]

The **transfer of technology** is a special form of cross-border co-operation. This is understood to mean the compensatory transfer of scientifically beneficial knowledge of a technical or organisational type.[21] Every form of knowledge is suitable for technological transfer, knowledge of a product as well as of the production process, and management know-how. The importance of technology transfer for the foreign activity of the craft sector is usually dependent on the degree of the extent of the export as it is not usually used as a form as internationalisation

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[18] See: König, W. et al. (1994), p. 29.

[19] See König, W. et al. (1994).

[20] See König, W. et al. (1994), p. 102

[21] See Ostendorf, Th. (1997), p. 49.

in itself, but rather serves to strengthen and protect previously existing export activities.[22]

A further form of cross-border co-operation is the passive job processing. This is understood to be the result of the transfer of (particularly high wage cost) work to foreign sub-contractors in order to benefit from their lower wage and production costs. Examples of the passive job processing with participation of the craft sector can be found above all with firms in areas bordering on central and east European countries, and also very occasionally in firms in the far East or Latin America. It must , however, be noted that German firms sometimes experienced that the cost advantages were reduced and in some cases over compensated for by lower productivity, greater unreliability, poorer quality and inability to hold to deadlines. Some craft firms have withdrawn from co-operation with partners in Central and Eastern Europe for this reason.

Where cross-border co-operation involves a capital participation by the German partner, it is known as a **joint-venture**, whereby this is an intermediate stage in comparison to a direct investment abroad. A few isolated cases of joint-ventures can be found in the German craft sector, once again with partners in central or eastern European states. The intensity of co-operation and the strength of the ties to the partner firm increase with the investment of capital. The investment of capital, however, leads to increased risk in these cases.

The advantages of joint ventures for the partner lie in the reduction of the financial burden through the participation of the local partner in capital costs, in the reduction of risk through easier access to the market and as the local partner takes care of the legal and tax requirements, a better relationship with local officials (easier access to state aid) and increased sensitivity to the cultural and social customs of the host country.

Problems arise above all from the differing attitudes to business and possible differences in particular over pricing, quality control and deadlines. The quality of the staff is also of decisive importance. Above all, a suitable manager is often very difficult to find.

There are also other forms of **direct foreign investment** aside from the joint venture. These are:

- The founding of a foreign **branch or chain**. This is understood to mean a business dependent on a parent firm with cross-border activities.
- The founding of a foreign subsidiary. In this situation the foreign business, in contrast to the branch, is a separate legal entity.

A branch or subsidiary is often formed when a joint venture proves to be unsuccessful as a result of problems with the foreign partner. Thus some joint ventures with partners in central or eastern Europe have developed into the opening of branches.

[22] See König, W. (1987), p. 6

Only very few examples of direct foreign investment are identifiable in western Europe. These are mostly cases of bakers who open an extra retail outlet or production centre in a neighbouring country in order to satisfy the local demand for German bread and pastry goods.

The reason for the low levels of direct foreign investment abroad is primarily that the degree of co-ordination needed is very high for (small) craft firms.[23]The advantages on the other hand are proximity to the client base and low transportation costs which allow a more intensive form of marketing. In addition, necessary fitting, maintenance and repair services can be offered more easily.

4. Potential for foreign business in the German craft sector

4.1 Attempt at quantifying

The question as to whether a potential for foreign business exists in the German craft sector, and of how large this might be is very difficult to answer. It is clear that not every craft firm is suited to activity abroad. The majority of craft firms set up to serve a narrow regional market and have few opportunities to offer their goods and services beyond national boundaries. Nevertheless, a group of craft firms for whom potential foreign activity is a relevant issue can be identified between the 3 % of craft firms currently active abroad and the purely regional units.

There are two basic possible methods of evaluating the size of this potential:

- evaluation of the level of preparation for export through interviews with the firm owners
- evaluation of the export ability through an analysis of the sales according to distance.

Both methods are explained below:

At the end of the 1980s as the issue of a European single market was widely discussed, various surveys among craft firms were conducted as to the possibility of future export in order to assess their **level of preparation for export**. The results were fairly uniform. An example are the results of a wide-spectrum survey conducted by the Institute of Small Business of over 3,000 craft firms in Lower-Saxony. Of the firms not yet operating abroad, 8.3 % (every twelfth firm) expressed an interest in export and a further 6 % answered „maybe“.[24] These results point to a substantial export potential.

It must, however, be borne in mind that the ability to export does not always directly follow from a level of preparation for export. For this reason we will attempt a more concrete analysis of the potential for export within the German craft sector through the use of objective criteria such as the of the distance to the product destination (evaluation of the export ability).

[23] See HWK Trier, (1995), Course III, pp. 2-7.

[24] See Sauer, J. (1991), p. 235.

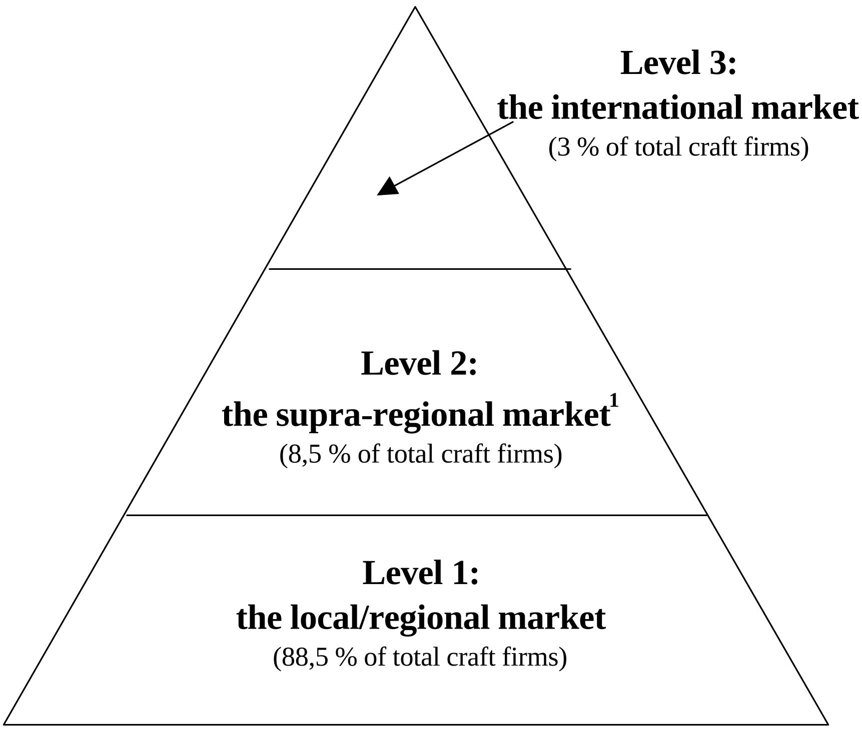
A three level pyramid was developed for this purpose (see figure 10). The lowest level contains those craft firms that only cater for a local market. Firms active in supra-regional markets or involved in supra-regional exchange, are accounted for in level two. Level three is concerned with those firms already active abroad.

The evaluation of the potential for foreign activity in the craft sector can thus be made on the basis of the following questions:

1. How many craft firms are found in the individual levels, or rather how many are supra-regional and how many active internationally ?
2. What are the pre-conditions needed for a firm to change level, i.e. distributing its products over a greater distance or even abroad ?
3. How many of these firms meet these basic pre-conditions ?

A potential for foreign trade can only be spoken of when a greater number of firms fulfil the pre-conditions for foreign activity than are already active abroad.

Figure10: **Three-level pyramid for internationalisation in the craft sector**

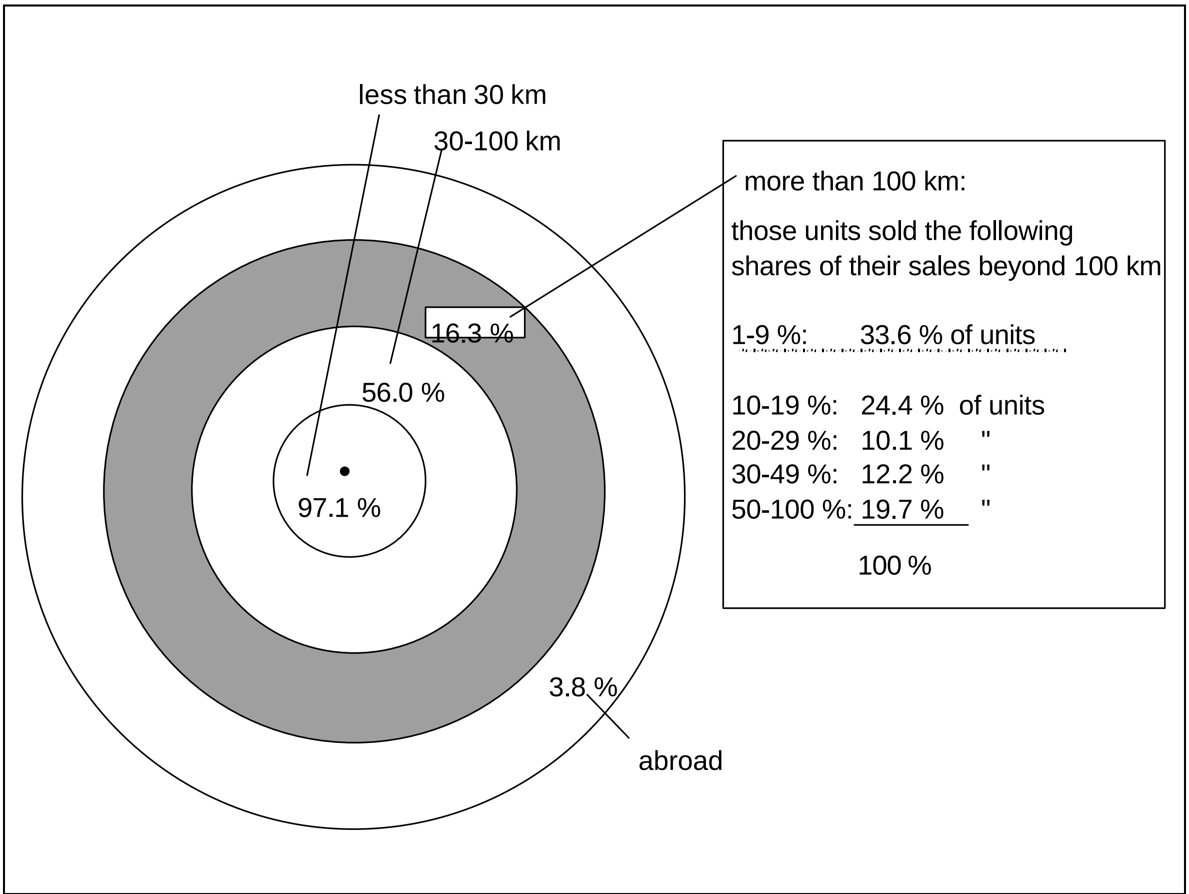


[1)] Destination of goods > 100 km

In order to quantify the **individual levels**, the distance of craft firms to product destination must be investigated. Since such a question was unfortunately not included in the in the 1995 Craft Census, the results of the above mentioned wide-spectrum survey of craft firms in Lower-Saxony will be used as a source for this information.

This survey investigated the percentage of craft firms having business connections in the separated distance areas. A distinction was made between local areas (up to distances of 30 km) and regional areas (between 30-100 km). As most craft firms distribute their products and services over various distances, the total percentage figure has a value greater than one hundred. As can be seen in figure 11, almost every firm made a turnover in their local area (97.1 %). A good half of firms had business contacts in the regional area (30-100 km), either additionally, or instead of this. Approximately one in every six craft workers delivered over greater distances. In this survey, 3.8 % of all craft firms were found to be active internationally.[25]

Figure11: **Share of craft firms in various sales regions**



Source: Empirical research of the *SFH Göttingen*

25 The figure for this area lay slightly over the value of 3.1 % given by the Craft Census.

The supra-regional area will be studied in greater depth below. Business contacts over distances over 100 km indicate that the geographical restriction on sales can be ruled out. Of 16.3 % of firms active supra-regionally, only one third generate a small amount of turnover beyond the 100 km boundary. These firms distribute the rest of their goods and services in either the local and regional areas or abroad. Approximately one in four supra-regional firms generate 10-19 % of their turnover in this supra-regional area. The supra-regional turnover is the main source of income for approximately one fifth of firms.

In a further step the assumption can be made that firms are labelled supra-regional if a ‘substantial` proportion of their turnover is generated in this area. If only a small percentage of turnover is generated outside the local market, this generally appears as a sporadic or random statistic, thus not justifying inclusion in level two of the pyramid (supra-regional market). The definition of a ‘substantial’ proportion of turnover through a threshold figure is not easy to make, yet, a figure of 10 % would be realistic.

In this case one third must be subtracted from the 16.3 % of firms.[26] If the resulting figure of 11 % is applied to the national total of 580,000 craft firms, one obtains a figure of 64, 000 firms. This figure must further be reduced by the number of firms already exporting. Thus we reach a final figure in the order of 50, 000 for the amount of craft firms active supra-regionally (8,5 % of the craft firms).[27]

Since the number of internationally active firms can be ascertained directly from the craft census statistics (see section 2.1), the following figures result for the three levels (see figure 3.1):

- Level 1 local crafts ca. 88.5 %
- Level 2 supra-regional crafts ca. 8.5 %
- Level 3 internationally active crafts ca. 3 %

What, therefore, is required for a craft firm to move into a higher category i.e. expand its sales radius ?

The following points must be considered in order to answer this question. On the whole, an extensive supply network of craft goods and services exist which generally suffice to meet market demand. A vital condition in allowing firms to supply their goods over greater distances, and even abroad, is that they offer distinctly different products and services from their competitors. In other words, they must offer goods and services that are not commonly available in the same quality or form. In many cases this means specialisation or the production of niche products.[28] [29]

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[26] As mentioned above, these are firms which generate less than 10 % of their turnover supra-regionally.

[27] In this case only 14,000 and not the entire 18,000 firms currently exporting were subtracted as there are firms, particularly in border areas, which are active abroad but not supra-regionally (nationally). About 4,000 firms would fall into this category.

[28] See Handwerkskammer Trier (1993), p. 16.

Examples for this are:

- A producer of machine parts producing high value sub-contracting goods.
- A butcher producing a regional speciality, given of course that the product can be preserved.
- A carpenter specialising in an uncommon restoration process

A second factor is the type of business. This is also a question of production capacity. When local demand for a product is high enough, craft firms avoid expanding their capacity to satisfy demand from more distant customers for various reasons. Whether or not an expansion of capacity takes place is dependent above all on the mentality or personality of the entrepreneur.

Both of these factors are important, but not exclusively so. One must also consider whether the products and services are at all suitable to be marketed supra-regionally. Craft services in particular are often not suitable, or only in exceptional cases. There are for example, only very few customers who would travel large distances in order to have their hair cut. Supra-regional exchange is also often restricted by factors such as transportability and shelf life (for comestibles).

The same basic requirements exist for the move from the supra-regional market to the international market i.e. from level 2 to level 3 as the move from the local market to the supra-regional. The question thus arises as to why a craft firm based in Hannover which supplies its goods or services to Frankfurt or Munich, can not supply them to Brussels or Amsterdam. The additional requirement that a similar demand structure exists in the foreign market must of course be fulfilled. This is very probable when one considers that a recognisable trend towards individualisation exists in every E.U. country, whereby the interests, wishes and life-styles of E.U. citizens increase in similarity. An example of this is the increase of interest of small parts of the population in ecological construction in both in Germany and the neighbouring countries.[30]

A third stage must concern itself with how many craft firms could **potentially fulfil these requirements**. There seems to be no possibility in quantifying the move from a local to a supra-regional market. On the basis of the above analysis, however, one can assume that on principle every firm that is to some extent active supra-regionally can also be successful internationally. In addition it is certainly the case that firms exist which currently supply only their local market which would also be suitable for international markets due to the quality of their products (a move from level 1 to level 3). The number of these firms can not be determined, though the figure is probably of no great importance. Thus when investigating potential for trading abroad it is possible to work from a figure in the order of 8.5 % of all craft firms, a concrete figure of 50,000 firms.

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[29] It is theoretically also possible that distribution to wider markets results from prices being lower than those of the competitors, though this is rarely the case in the craft sector.

[30] Since a demand for this first developed in Germany and a few German craft firms adapted themselves to this, these firms now have a comparative advantage over their colleagues, even abroad.

Craft firms in border regions have not yet been fully taken into account. As shown in section 2.4, these are areas whose local market is divided by a border. Firms can certainly be identified even here for whom foreign trade could be an issue.

The exact number of these firms can not be ascertained. The number of firms capable of export, however, could certainly be increased somewhat above 50,000. If one compares this value with that of the number of firms ready for export given at the beginning of this section, one finds a surprising correlation. A similar result is thus achieved with both methods of evaluating export potential in the craft sector.

If one works from the basis of 50,000 firms capable of export, and assumes that each of these firms makes a turnover of 800,000 DM[31] abroad annually, a potential annual export volume of 40 billion DM is reached. Even if the annual foreign turnover were half this level, one would still reach a figure of 20 billion DM. The size of this figure is not insignificant, even in terms of the national economy.

4.2 Factors obstructing activity abroad

As shown in the preceding section a notable potential for export in the German craft sector exists, thus the question arises as to why this potential has not yet been realised. One is also asking what obstacles to export exist.

Two particular obstacles become apparent through empirical survey at potential exporters (see figure 12): the making of contacts with foreign clients and the lack of information about foreign markets. These problems signify that craft firms neither know whether or not there is any demand for their products and services abroad nor who their potential clients are. These questions would generally be answered through market research, though this kind of survey is usually out of the question for craft firms because of cost.[32] Financial problems (minimising risk and the financing of exports) play an important role in conjunction with both of these obstacles.

It is interesting that „language problems“, „distance from the recipient client“ and „trade restrictions“ (e.g. the need for a business permit for cross-border work) are seen as relatively minor obstacles. These problems were, however, seen as more important in surveys of companies which had been involved in export for a longer time. The reason for this is probably that these problems only arise during the practical preparation or implementation of export plans, whereas e.g. the problem of finding clients becomes apparent with the initial consideration of possible activity abroad.[33]

Problems with exchange rates was only put at tenth place and seems therefore to be of relatively low importance for the craft sector. This is of interest as a sizeable

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31 This is the average amount of annual foreign turnover generated by firms currently exporting. See section 2.1.

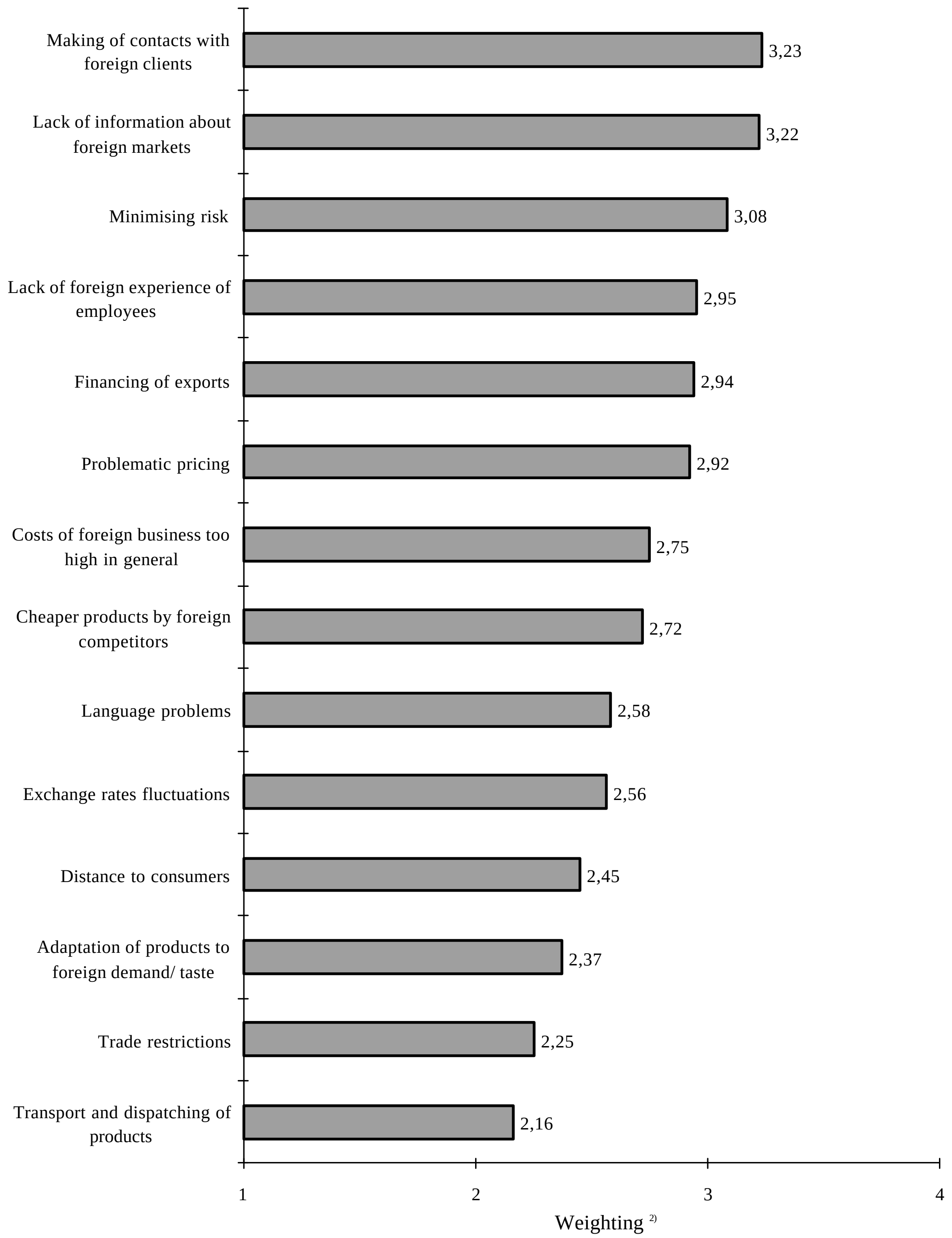
32 At the beginning of the 1990s various studies were made of foreign markets relevant to the craft sector in order prevent, at least in part, the need for the sector to do its own research. One can find an analysis of the various surveys in König, W. and Kucera, G. (1993).

33 See Sauer, J. (1991), p. 228.

number of experts expect a rise in craft exports as a result of the completion of the European currency union and the implicit ending of exchange rate fluctuations within the EURO area. The reason for the low importance of exchange rate fluctuations is probably above all due to the fact that the majority of craft firms involved in exports are able arrange payment in DM.[34] This is usually possible as they are mostly dealing with niche products (see section 2.5) and therefore have a relatively strong position in negotiations.

34 See Müller, K. (1997), p. 12.

Figure12: Obstacles for potential exporters[1]



1) Statements of 67 craft firms (with no export activities till now) producing for commercial demand

2) Weighting of pre-categorised answers: 1 = no importance, 2 = little importance, 3 = middle importance, 4 = high importance

Source: Sauer, J. (1991), p. 227 *SfH Göttingen*

5. Summary

Introduction

Although the craft sector is primarily geared towards an internal market, international business connections are of ever growing importance to this area of the economy. Exact information about the extent of foreign activity was not available until recently. A precise picture of the number of craft firms active abroad and how these can be categorised by size of firm, region and branch-type has been made possible for the first time by a proper analysis of the results of the 1995 craft census. Indirect export, which is of considerable importance particularly in the craft sector, could not be taken into account as the necessary basic data is unavailable.

Statistics for foreign turnover in the craft sector

Approximately 1.8 % of turnover in the German craft sector was generated abroad in 1994 (over 14 billion DM). The craft sector thus accounts for 2.1 % of the total exports of the German economy. A total of 17,605 craft firms were active abroad (3.1 % of the total number of craft firms). These firms generated an average of over 800,000 DM a year abroad.

Considering the size of firms, foreign turnover was generated overwhelmingly by large craft firms. Thus 85 % of foreign turnover was generated by firms with over 20 employees, although almost 50 % of exporting firms have fewer than 10 employees. The amount of foreign turnover generated by these firms per firm is decidedly smaller.

Over 95 % of foreign turnover in the craft sector is generated by firms from the former West Germany. Their 2.1 % proportion of foreign turnover is notably higher than that of firms from the former East Germany (0.5 %). On the level of the individual Bundesländer, the level of foreign activity in the craft sector is greatest in Baden-Württemberg as well as in the two city-states of Hamburg and Bremen.

Approximately 22 % of foreign turnover in the craft sector is generated by firms from border regions. The 2.9 % share of total export generated in this area is noticeably higher than the 1.6 % in interior regions. However, the rate of turnover was not shown to be higher in every border region than in the interior. The highest levels were found to be in the Saar-Lor-Lux region, the border area in south-west Germany and some areas bordering on the Netherlands. These are areas in which in the language, culture and mentality differ relatively low from the neighbouring country.

If the figures for craft exports are analysed by sector, one sees that over 60 % of foreign trade is concentrated in the producing craft for commercial demand. Exports in this area consist mainly of machine construction (specialist and tool making machines) and the manufacturing and installation of electro-technical and technical-medical equipment.

The manufacturing craft sector for specialist consumption is a further important export field. Carpenters (furniture-makers) are particularly prominent, as well as a large proportion of makers of musical instruments are also active internationally.

Some craft firms specialising in wholesale make a considerable amount of turnover abroad. This concerns above all the wholesale of agricultural machines and equipment, the supply and fitting of office equipment, crop seeds, feed and meat exports.

Characterisation of international trade in the craft sector

German craft firms have the possibility to trade internationally as long as their products differ visibly from those of their competitors in terms of quality, meeting deadlines and reliability, so that the higher price for German craft products is accepted. In some cases, German craft firms export goods and services which are unavailable abroad. Furthermore the piggy-back phenomenon exists, whereby German craft firms become active abroad in conjunction with industrial firms.

The basis for international competitive advantage is above all strong competition between firms on a national level, which ensures continual improvement of both the services and of the knowledge and skills of the workforce, who in turn guarantee the capability of the firm through their technical training.

The entry of craft firms into foreign markets is not commonly a result of strategic planning, as it is usual in industry. Firms often enter by making use of chance opportunities. Craft organisations also play an important role as they offer help to encourage their members to trade abroad.

Where firms actively pursue activity abroad, one must make a basic differentiation between offensive (e.g. the creation of new markets or product specialisation) and defensive motives (to secure the business base). Both are equally important. The goal of lowering per item costs is of minor importance in the craft sector.

Over half of German craft exports are to other E.U. states. A large part of this foreign trade is particularly done with the neighbouring states. Middle and Eastern European states account for approximately 10 % of foreign craft turnover. Switzerland stands out from among the other European states. Approximately every fifth Mark generated through foreign trade stems from businesses in states outside the E.U.. Clients in the U.S.A. and the Arabian states are of great importance in this area. Some craft firms are world leaders in narrow markets.

The pure export of goods is the dominant form of the various methods of international trade (80-90 %). Cross-border work has considerable weight in border areas. Other forms of foreign activity (such as cross-border co-operation and direct investment abroad) are exceptional events.

Potential for foreign trade in the German craft sector

The number of craft firms capable of export can be calculated by two methods: on the one hand by evaluating the level of preparation for export through a survey of firms, and on the other through an analysis of the geographical range of supply of firms (export capability). Both methods give the result that approximately 8.5 %, that is to say 50,000 craft firms, fulfil the criteria needed to take part in foreign trade. This would entail a potential export volume of up to 40 billion DM.

These craft firms are on the whole not yet active abroad as they neither know whether an interest for their products and services abroad exists, nor who their potential customers are. Finance is a further important obstacle. The final introduction of European Monetary Union will probably give only little impulse to an increase in foreign trade in the craft sector.

References

Handelskammer Deutschland-Schweiz (ed.) (1997): Länderleitfaden Schweiz im Auftrag des Deutschen Handwerksinstituts, unpublished

Handwerkskammer Trier (ed.) (1993): Handwerk und Export. Eine Strukturuntersuchung exportierender Unternehmen im Kammerbezirk Trier sowie eine Abschätzung des Exportpotentials, Trier

Handwerkskammer Düsseldorf (1986): Export im Handwerk, Schriftenreihe: Kurzinformation 1/86, Düsseldorf

König, W. (1987): Handwerk und Außenwirtschaft - Stärkung der Wettbewerbsfähigkeit des deutschen Handwerks in der offenen Wirtschaft -, Göttinger Handwerkswirtschaftliche Arbeitshefte, vol. 18, edited by Prof. Dr. W. König and Prof, Dr. G. Kucera, Göttingen

König, W.; Müller, K. (1990): Der Europäische Binnenmarkt als Herausforderung für das deutsche Handwerk, Göttinger Handwerkswirtschaftliche Studien, vol. 43, edited by Prof. Dr. W. König and Prof. Dr. G. Kucera, Göttingen

König, W.; Kucera, G. (eds.) (1993): Auslandsmärkte für deutsche Handwerksunternehmen, Kontaktstudium Wirtschaftswissenschaft 1993, Göttingen

König, W.; Müller, K., Lüttgens, A. (1994): Grenzüberschreitende Handwerkskooperationen – Fallstudien im Kontext des Europäischen Binnenmarktes, Göttinger Handwerkswirtschaftliche Studien, vol. 48, Göttingen

Müller, K. (1989): Der erweiterte Markt als Chance des Handwerks, in: Kontaktstudium Wirtschaftswissenschaft 1989, edited by Prof. Dr. W. König und Prof. Dr. G. Kucera, Göttingen

Müller, K. (1993): Handwerkspolitik für den EG-Binnenmarkt - Aktivitäten der Handwerksorganisationen zur Vorbereitung ihrer Betriebe auf den EG-Binnenmarkt -, Göttinger Handwerkswirtschaftliche Arbeitshefte, vol. 28, edited by Prof. Dr. W. König and Prof, Dr. G. Kucera, Göttingen

Müller, K. (1997): Die Betroffenheit des Handwerks durch den EURO, unpublished

Ostendorf, Th. (1997): Das Internationalisierungsverhalten von Handwerksbetrieben - Entscheidungsprozesse und Strategien -, Göttinger Handwerkswirtschaftliche Studien, vol. 54, edited by Prof. Dr. W. König and Prof, Dr. G. Kucera, Göttingen

Sauer, J. D. (1991): Exportverhalten handwerklicher Unternehmen, Göttinger Handwerkswirtschaftliche Arbeitshefte, vol. 24, edited by Prof. Dr. W. König and Prof, Dr. G. Kucera, Göttingen

Statistisches Bundesamt (ed.) (1996): Produzierendes Gewerbe, Fachserie 4, Handwerkszählung vom 31. März 1995, H.1-H.3, Wiesbaden

Statistisches Bundesamt (ed.) (1997): Statistisches Jahrbuch 1997 für die Bundesrepublik Deutschland, Wiesbaden

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