The Role of Small Firms in East Germany

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ABSTRACT. This paper examines the role which small firms in East Germany have played under the system of combines and the important contribution they can make in the current reform process. The evolution of a striking trend towards the centralization of economic power in the GDR during the last three decades is documented. Not only has the share of economic activity accounted for by the combines greatly increased, but the number of establishments, and particularly small establishments, has drastically decreased. It is concluded that the establishment of a a vital entrepreneurial sector is essential if East Germany is to succeed in its process of economic reform and the transition to the market economy.

I. Introduction

As East Germany confronts economic reform, perhaps *the* decisive question is: "How can a restructuring of the economic system be made compatible with the installation of democratic values?" A pressing issue in the GDR is the need to replace inefficient with efficient productive structures across a wide array of sectors in the economy. Just as a realization of an integrated market within the EC in 1992 is expected to promote the international competitiveness of Western European countries, a restructuring of the economic system that promotes economic efficiency is essential in order to compete in global markets.

A consensus is emerging among both academic economists as well as industrial managers that the only solution to the restructuring problem confronting East Germany is a fundamental shift in the economic structure. The centralized system of a "command" economy, which adheres to a principle of top-down management, is incapable of responding to the dynamics of market conditions. At the heart of the reform process, then, is the development of a vital base of entrepreneurial activity.[1] As both Román (1989) and Puchev (1990) have pointed out in this *Journal*, the existence of such entrepreneurial activity has been markedly absent throughout the Eastern European countries since the Second World War. According to Román (1989, p. 396), "Small business as an entrepreneurial sector is still small, lacks dynamism, and is far from being innovative enough to have a significant impact on structural adjustment.

The purpose of this paper is to examine the role of small firms in the GDR and specify the contribution they can make to the process of economic reform. In the second section, the system of combines under centralized planning is described. The impact of centralized planning on firm size, economic concentration, and productive efficiency is analyzed in the third section. Finally, in the last section a conclusion and policy recommendations are provided. In particular, it is recommended that three specific reforms need to be emphasized: the creation of a favorable environment for entrepreneurship; the elimination of political and administrative barriers for new start-ups; and the creation of a network of institutions to promote, finance, and facilitate new businesses.

II. The system of combines

Under the system of centralized planninig, the framework for the development of economic units[2] was that of the combine. A combine consists of a collection of plants or establishments, generally within a single industry, which are managed by one general director. In principle, the combine was considered to facilitate the efficient

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management of the individual establishments throught the realization of economies in administration and information processing.

Table I indicates the evolution of the extent of industrial combines since 1970 in East Germany. While most industrial combines are controlled by an industrial ministry, the relative importance of industrial combines controlled by a local district economic council is shown in the parentheses. There are two important trends apparent in Table I. First, the number of industrial combines in the GDR has substantially increased over the last two decades. Second, the share of economic activity — measured alternatively by industrial output, employment, output of consumer goods, and exports — accounted for by these combines rose drastically between 1970 and 1987. While industrial combines accounted for about one-third of industrial output in 1970 and only six percent of the output of consumer goods, by 1987 virtually all industrial output emanated from the combines.

One of the major goals of a combine is to be able to function autonomously to react to evolving economic conditions. To facilitate this goal, combines typically undertake research and development (R&D) activities spanning the entire industry. These R&D activities usually involve a close association with the universities. In addition, combines often include the capacity for plants producing crucial inputs as well as for plants producing final goods. A combine may also have the capacity to engage in marketing and sales at a national level and, in certain cases, in international markets.

Within the mandate of central government planning, the general director has the authority to shape the development of products, production organization and techniques, as well as the working and living conditions of employees. He also has the authority to determine the extent of specialization, concentration, and cooperation within the combine, and approves mergers between plants as well as any foreign trade. Thus, the general director had the task of implementing the plan dictated by the central government in terms of R&D, investment, inputs and intermediate materials, sales and marketing, and labor relations.

One of the historical artefacts of the combines is that, over time, some plants were included in combines for administrative reasons and not because they provided an economic contribution. The inclusion of such inefficient plants has placed a burden on overall economic growth.

III. Firm size and centralized planning

Not surprisingly, with the increase in the share of economic activity accounted for by the industrial combines has come a sharp concentration of economic power. This economic concentration was largely the product of a policy designed to exploit administrative economies and therefore

TABLE I
Industrial combines in the German Democratic Republic[a]

Year	Number of combines	Industrial production	Employment	Consumer goods	Exports
1970	35	33	33	6	38
1980[b]	130	98	99	100	99
	(93)	(92)	(94)	(97)	(85)
1985	129	98	100	100	100
	(95)	(95)	(95)	(97)	(96)
1986	127	98	100	100	100
1987	126	98	100	100	100
	(93)	(95)	(95)	(97)	(97)

Source: Statistisches Jahrbuch der DDR, 1988, p. 138.

[a] The combines controlled by District Economic Councils are listed in parentheses. Otherwise, all combines are controlled by an industrial ministry.

[b] The values in parentheses for the combines controlled by District Economic Councils are for 1981.

continuously reduce the number of independent industrial plants. Table II shows that there were only 13 percent as many industrial enterprises in existence in the GDR in 1987 as there were in 1950. This is a strong contrast to the expansion in employment of over 50 percent over the same period.

This dramatic reduction in the number of enterprises over the last four decades is a striking contrast to the explosion in new firms in most western countries (Brock and Evans, 1989). That is, just as the number of enterprises throughout the western economies has been rapidly expanding, there has been an overwhelming increase in economic concentration in East Germany.[3] Similarly, while the average plant size has been reduced substantially during the last twenty years in the U.S. (Acs and Audretsch, 1990), it has increased considerably in the GDR.

Table III shows that the decrease in the number of establishments in East German manufacturing between 1971 and 1987 has been most pronounced for the small- and medium-sized establishments. Not only did the total number of establishments decrease from 11,253 to 349 over this period, but the number of establishments with fewer than 26 employees decreased from 3,864 in 1971 to 131 in 1987. By contrast, the number of establishments with more than 500 employees clearly increased over this period.

The connection between Tables II and III should be emphasized — the reduction in the total number of plants, and especially smaller-sized plants, which were integrated into the existing larger establishments, resulted in an increasing degree of concentration of economic assets. As a

TABLE II
Index of number of enterprises and employment in East German manufacturing, 1950—1970 (1950 = 100)

Year	Number of enterprises	Employment
1950	100	100
1960	68	135
1970	49	138
1980	19	150
1987	13	153

Source: Statistisches Jahrbuch der DDR, 1988, p. 139.

TABLE III
Number of establishments in East German manufacturing by size class, 1971—1987

Number of workers and employees	1971	1978	1987
Less than 25	3864	716	131
26—50	2559	1084	186
51—100	1812	1130	343
101—200	1147	946	519
201—500	845	1074	861
501—1000	405	517	558
1001—2500	406	480	540
2501—5000	133	178	215
5001—10,000	62	69	75
10,001—20,000	15	16	21
20,000+	5	3	–
Total	11253	6213	3449

Source: Statistisches Jahrbuch der DDR, 1988, p. 178.

result of government policy, only limited resources of the "accumulation fund" were available to new establishments, so that smaller plants were often not able to survive.

IV. Economic assessment of the combine system

The economic plan of the GDR was successful in that it managed to centralize the bulk of economic assets, as Tables I—III make clear. However, the extent to which the creation of giant enterprises oriented towards exploiting economies of scale was successful is less clear. That is, as Diwan (1989) and Carlsson (1989a) point out, one of the liabilities of larger enterprises is inflexibility and a sluggishness in reacting to change. In fact, both Carlsson (1989a) and Diwan (1989) attribute the recent emergence of small firms in western economies to the inherent flexibility associated with smaller firm size.

It is difficult to judge the performance of the small- and medium-sized enterprises in the GDR since most of them are in the crafts industries, such as construction or manufacturing of wood products. Small firms have played virtually no role in high technology, unlike the experience in a number of western economies.

In fact, as Table IV reflects, the industrial policy pursued by the Central Committee generally channelled investment towards the so-called high-

TABLE IV
Growth rates (%) and relative growth rates (%) of industrial sectors in East Germany, 1950—1987[a]

	Time period		
	1950—1970	1970—1980	1980—1987
Energy	247	182	126
	(0.33)	(0.65)	(0.84)
Chemicals	613	238	127
	(1.18)	(1.10)	(0.87)
Metal products	587	216	128
	(1.12)	(0.92)	(0.90)
Machinery & vehicles	734	234	135
	(1.146)	(1.06)	(1.13)
Electrical equipment	1144	433	184
	(2.40)	(2.64)	(2.70)
Textiles	344	156	120
	(0.56)	(0.444)	(0.64)
Food & beverages	439	150	115
	(0.78)	(0.40)	(0.48)
Total manufacturing	535	226	131

Source: Steinitz (1989).
[a] The growth rate of each sector relative to the overall manufacturing growth rate is listed in the parentheses.

technology sector. That this policy had at least some effectiveness is supported by high growth rates during the last four decades in the electrical equipment sector, which experienced a growth in output of 1,144 percent between 1950 and 1970. This represented a growth rate of nearly two and a half times greater than that for the overall manufacturing industries of 439 percent. Similarly, the growth rate tended to be higher than average in the machinery and vehicles sector.

The emphasis on promoting high-technology production is also reflected by the relatively high diffusion of CAD/CAM technology in the late 1980s. For example, there were 42,493 CAD/CAM workstations and systems in the GDR in 1987 as well as 79,130 industrial robots. This application of flexible technology leads the Eastern European countries. However, when compared to western economies (Carlsson, 1989b), the adaption of flexible technologies lags substantially behind the west.

V. Conclusion and policy recommendations

As flexibility in production becomes increasingly decisive in determining international competitiveness (Audretsch and Claudon, 1990), it will become crucial to increase the ability of the combines to adapt to changing economic conditions. This will require plant managers with greater autonomy in decision-making. However, a more fundamental reorganization of the combine system is likely to be necessary. Such a restructuring, for example, may require the divestiture of plants from their combines. Similarly, joint venture with firms from western countries will certainly play an important role in any such reorganization.

Beyond restructuring the existing combines, a crucial policy will be of allowing and encouraging the establishment of new private plants. Not only can such plants contribute to innovative activity, as they have throughout the west, but they can also have spillover effects by increasing the flexibility of larger plants belonging to the combines.

To facilitate a vital entrepreneurial sector, three essential reforms are required:

(1) the creation of an economic environment that is conducive to entrepreneurial activity;
(2) the alleviation of political and administrative barriers which impede the creation of new firms;

(3) the creation of an institutional network that will provide the infrastructure for promoting, financing, and facilitating new businesses.

Notes

[1] It should be recognized that entrepreneurial activity in Eastern Europe must encompass a sphere of social responsibilities that is distinctive from its counterpart in the West.

[2] These economic units are termed "Wirtschaftseinheiten".

[3] By contrast, Shepherd (1982) documents a marked increase in competition in the U.S. economy between 1950 and 1977.

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