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SUCCESSFUL STRUCTURAL CHANGE IN STYRIA

Within a single decade, Styria has achieved a remarkable turnabout: the region which had experienced the gravest problems in the Austrian labor market became the province in which the largest number of new jobs were created in a year. Reviewing the chronology of the rehabilitation process helps us obtain a realistic idea of the time requirements of structural intervention.

Although politicians have recently tended to concentrate on employment in their view of economic policy, it is not entirely advisable to measure regional development primarily by its job growth rates. However, the dearth of data currently available makes it impossible to evaluate the general output situation. To the extent that indirect conclusions are permitted, productivity appears to have grown at a less than average rate, compared to the previous period.

Over the past years (since about 1995), Styria has been faced with an unusual situation in the labor market: while the rate of change in employment lagged some 0.4 percentage point p.a. behind the Austrian average in the years between 1980 and 1994 (which translates as a shortage of 22,000 jobs or 5.5 percent vis-à-vis a hypothetical rate in proportion to the Austrian average), jobs grew by 0.7 percentage point p.a. in excess of the average over the past three years, so that one in three lost jobs have already returned. This factor is of sufficient interest to study the process in detail, even though the conclusions cannot yet be verified by performance data (economic growth).

The conclusions to be drawn from the process should help us gain a realistic perspective of the rehabilitation of a region, and especially of the time required to achieve it, and should illuminate the tension between the political planning and development horizon and evolutionary structural change.

In the value added pattern of 1994, Styria was identified as one of four "industrial provinces"; at 24.9 percent, the contribution of its manufacturing sector was slightly lower than in Lower Austria (27.1 percent), Vorarlberg (28.4 percent) and Upper Austria (30.7 percent). Taken together, these four Länder (provinces) are clearly distinct from the service-centered economy of Vienna and the mixed forms prevailing in the other provinces (Table 1).

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Table 1: Economic structure of the Länder

	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol	Vorarlberg	Austria
	Percentage shares in nominal gross value added, 1994									
Agriculture and forestry	0.2	4.8	5.6	3.8	2.8	3.4	1.4	1.7	1.0	2.4
Mining	0.0	1.1	0.3	0.7	0.3	0.5	0.1	0.3	0.3	0.4
Manufacturing	14.4	27.1	18.4	24.9	18.2	30.7	15.6	20.4	28.4	21.7
Energy and water	2.6	2.5	2.3	3.0	4.5	2.7	3.6	3.0	3.7	2.9
Construction	6.0	9.6	11.6	7.8	9.0	7.3	8.1	8.4	7.9	7.7
Trade, automotive repair businesses	16.3	11.8	10.2	11.3	12.1	11.9	15.5	10.4	12.0	13.2
Hotels and catering businesses	1.9	2.3	3.1	2.9	5.9	2.1	7.4	10.8	5.5	3.6
Transport, communications	5.6	6.6	7.1	7.9	7.3	6.8	8.4	9.0	6.2	6.8
Banking, insurance and real estate businesses (economic services)	29.5	14.4	15.2	15.8	16.3	16.9	20.2	17.1	17.7	20.3
Other private and public services	23.6	19.8	26.2	21.9	23.7	17.7	19.7	18.9	17.4	21.0
Total gross value added	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: WIFO.

Concentration ratios (indices which illustrate inequalities in the distribution of industries) are highest for Styria, if we ignore the highly specialized urban economy of Vienna, the very small and peripheral Burgenland, and Vorarlberg, which is similarly specialized to an extreme degree. The slanted structure is also expressed in the regional typification: highly specialized areas and old industrial areas employ over 50 percent of the workforce (Austrian average: 30 percent). Marginal areas are similarly distinctive so that there are few functionally mixed areas (Table 2).

Economic development in 1988 to 1994 was similar in seven provinces (the exceptions were Burgenland and Upper Austria). In the "industrial" provinces, the contribution of the manufacturing sector was higher, as expected, and that of the services sector correspondingly lower. Styria keeps pace with the average in both sectors (Table 3).

Employment, on the other hand, failed to keep pace with economic growth (dropping behind by 0.5 percentage point p.a. vis-à-vis the Austrian average); and productivity correspondingly rose more rapidly. Up to 1994, the labor market was strongly influenced by efforts to eliminate redundancies which had little effect on the output (which grew proportionally).

As will be demonstrated later, it was during this period that the groundwork was laid for later recovery, even though it had, for the time being, no effect on the aggregate total.

Two decades earlier (in 1974), agriculture, mining, energy generation and primary production (smelting, steel, saw and paper mills) ranked foremost in the Styrian economy. These sectors, which might be summarized as "extractive industries", made up 24 percent of the value added (Austrian average: 14.5 percent; Table 4). By 1994, the difference had decreased to 3 to 3.5 percentage points (the figure is an estimate only as the system of national accounts has since been changed, so that direct comparison is not possible).

When looking at employment figures over the past 17 years (before, there had been little variation in job growth rates, cyclical deviations had been compensated by productivity growth), we observe that the severe slump

Table 2: Industrial concentration by Länder

	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol	Vorarlberg	Austria
Industries 1993										
Herfindahl Index[1]	0.1507	0.0612	0.1353	0.0774	0.0750	0.0776	0.0558	0.0695	0.1385	0.0664
Theil Coefficient[2]	0.3766	0.1278	0.3321	0.1926	0.1919	0.1715	0.1336	0.1569	0.3304	0.1374
	Percentage shares in total employment									
Industrial regions 1994										
Agglomeration	100.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7
Highly centralized areas										
Based on returns to scale	0.0	24.8	0.0	10.6	0.0	51.2	21.1	75.7	17.2	25.0
Specialized	0.0	21.8	16.7	23.1	30.9	26.1	55.0	13.2	82.8	24.3
Old industrial areas	0.0	9.5	0.0	28.5	0.0	0.0	0.0	0.0	0.0	6.3
Semi-centralized areas										
Based on resources	0.0	11.7	6.8	3.9	23.4	7.5	0.0	0.0	0.0	6.0
Labor-intensive	0.0	13.2	17.0	16.2	31.4	10.2	21.5	1.2	0.0	10.7
Marginal areas	0.0	11.5	59.5	17.7	14.3	4.9	2.4	9.9	0.0	8.9

Source: Austrian Central Statistical Office, WIFO. Datenbasis Betriebssystematik 68: subgroups 31 to 59. Definition of regions as per Palme, G., „Entwicklungsstand der Industrieregionen Österreichs", WIFO-Monatsberichte, 1989, 62(5). – [1] Sum of the squared proportion of industrial employment to total employment. – [2] Sum of deviations of the industrial employment proportion against uniform distribution.

Table 3: Sectoral determinants of regional economic growth in 1988-1994

	Nominal gross value added	Manu-facturing	Trade	Services	Construc-tion	Other industries
	Year-to-year percentage changes	Sectoral percentage contribution to growth				
Vienna	+6.2	+0.6	+0.7	+4.3	+0.5	+0.1
Lower Austria	+6.5	+1.3	+0.7	+3.5	+0.9	+0.1
Burgenland	+7.2	+1.6	+0.6	+4.0	+1.3	–0.3
Styria	+6.2	+1.2	+0.6	+3.4	+0.7	+0.3
Carinthia	+6.1	+0.7	+0.8	+3.7	+0.8	+0.1
Upper Austria	+5.6	+1.0	+0.7	+3.1	+0.6	+0.2
Salzburg	+6.1	+0.7	+0.7	+3.9	+0.7	+0.1
Tyrol	+6.2	+1.1	+0.5	+3.8	+0.7	+0.1
Vorarlberg	+6.3	+1.2	+0.7	+3.5	+0.7	+0.2

Source: WIFO.

Table 4: Economic structure in 1974

	Styria	Austria
	As a percentage of GDP (SNA)	
Agriculture	8.1	5.7
Mining, energy	5.2	3.5
Manufacturing	33.7	32.9
Basic metals	7.8	3.1
Other industries	25.9	29.8
Construction	9.0	9.4
Market-oriented services	30.2	36.3
Public services	13.8	12.2
Extractive industry[1]	24.0	14.5
Processing	32.0	37.0
Services	44.0	48.5

[1] Estimate. Primary sector including mining and energy.

of 1980-1982 had a more than proportionate impact on Styria. The subsequent recovery remained weak. A short recession was then followed by a strong upswing, which Styria could not quite emulate. Since 1993, Austrian employment rates have been stagnating in the medium term, but in 1995, Styria detached itself from the Austrian-wide trend, and it has since gained a lead of well over 2 percentage points (Figure 1).

When we rank the Austrian Länder by their employment growth rates, we get a significant difference for Styria: in 1981, the rate tumbled much faster than in the rest of Austria, and Styria fell back to last place. In subsequent years, it steadily recovered terrain and once again gained the middle ground, albeit at the price of hoarding labor, which necessarily entailed large sums spent on subsidies. By the mid 1980s, a change in the political attitude vis-à-vis the problems prevailing in Upper Styria prepared the ground for a rehabilitation concept, which claimed a large number of victims on the labor market, not least because of the time lost before action was finally taken.

Between 1986 and 1992, Styria ranked last and second-last three times, respectively, in its employment growth rates. The exception was in 1990, when the international stock cycle gave the primary industry a temporary relief. The economy gradually began to revive in 1993 and 1994, noticeably accelerating in 1995 and finally catapulting Styria to top labor market position in 1997 (Table 5). The fact that this recent development coincided with Austria's accession to the European Union may have had a positive, but still marginal influence, since the rehabilitation process had by that time already been set in motion, as will be shown in the last chapter.

Provided that Styria maintains its current edge, it could overcome the crisis in another four or five years, returning to a mid-term growth rate comparable to the rest of Austria, i.e., it could finally retrieve the former loss of 22,000 jobs.

In the last two years (structural comparisons are not possible for 1995 due to the change-over to NACE), Styria achieved a "headstart" of 6,600 jobs: the employment rate showed a "surplus" of 6,600 jobs over what it would have been based on the Austrian average. Of these jobs, 1,200 were created by the construction industry, which received an additional stimulus from special provincial government aid; 2,900 additional jobs were created by the manufacturing sector (lead: 2.8 percentage points); and market-oriented services contributed another 3,300 additional jobs (+2.2 percentage points)[1].

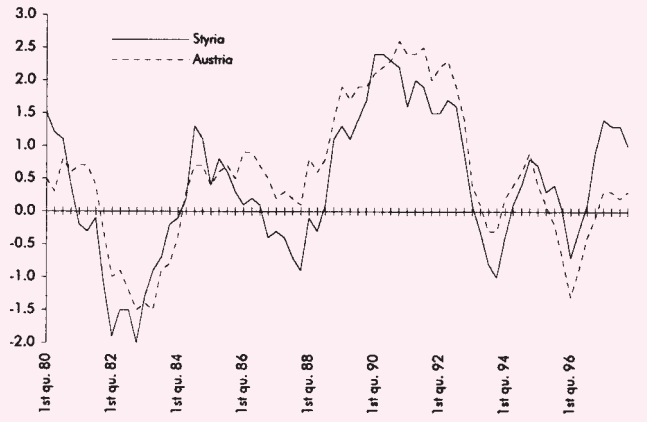
It thus appears that the manufacturing sector has been chiefly responsible for the development. With no current output data available (the EU business cycle statistics is still under construction), our analysis has been initially based on production reports obtained from the WIFO Business Survey (Table 6). These include clear indications of an upswing (except for the setback in the October survey), but no lead for Styria – except perhaps in the technology sector (average of the last four reports: the balance of companies with growing and those with shrinking production was +19 percentage points, as compared with +13 percentage points for the Austrian average).

A clearer picture is obtained from the development of employment in the manufacturing sector. Generally, the growth rate is on the road to stabilization in Styria, which is particularly noticeable in the technological sector (industries with a large share of skilled workers and salaried employees), even though it began to abate towards the end of 1997. Compared with Austria in general, an interesting point is the recovery of the primary sector (mining and special materials sector). Its importance for revitalizing the economic structure in Styria is outmatched only by the lead

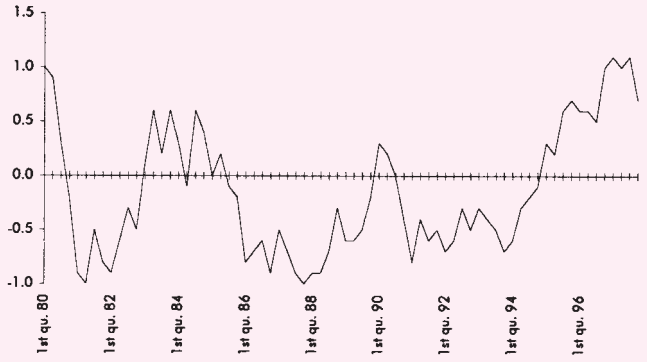
[1] The fact that the sum total exceeds 6,600 is due to a negative structural effect (high proportion of manufacturing). The primary sector and public service showed a more or less proportional development.

Fig. 1: Employee rates since 1980

Percentage changes from previous year



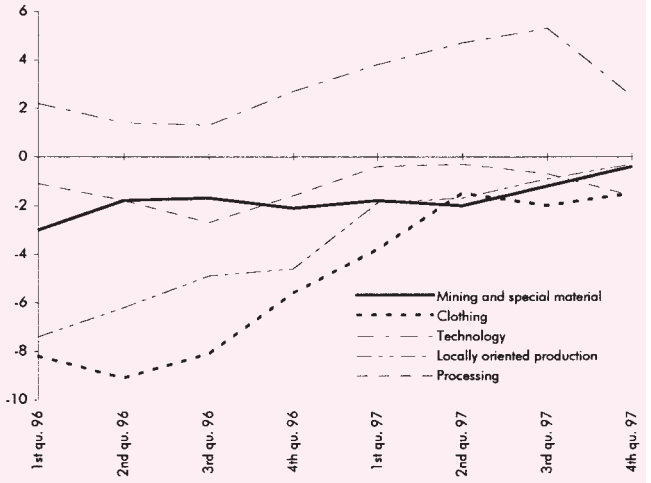
Percentage difference Styria-Austria



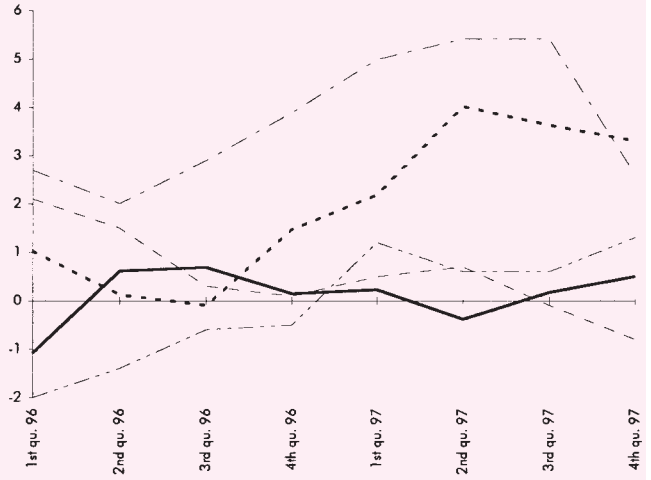
Source: Hauptverband der österreichischen Sozialversicherungsträger.

Fig. 2: Employment in the Styrian manufacturing sector

Percentage changes from previous year



Percentage difference Styria-Austria



Source: Hauptverband der österreichischen Sozialversicherungsträger. Business classes assigned as per ÖNACE for the sectors Mining and special material . . . 10 to 14, 21, 23, 25, 27; Clothing . . . 17 to 19; Technology . . . 24, 29 to 35, 37; Locally oriented production . . . 15, 16, 26; Processing . . . 20, 22, 28, 36.

achieved by the technological sector (5 percentage points; Figure 2).

Available information on the output lead us to expect a below-average growth of per-capita value added or, in other words, a development that is labor and human capital intensive. On the other hand, efforts to streamline technologically mature capital-intensive production (which is not likely to be among the *fortes* of Austria in the emerging European and global division of labor) had disproportionately increased productivity in the previous phase.

Many of the new manufacturing jobs were created by the automotive suppliers industry, which has developed a network of more than 100 small suppliers centering around three major corporations.

But this should not give rise to the impression that the current strength of this "automotive cluster" will solve all the structural problems under which the Styrian economy is laboring. Given the accelerating speed at which business in general is subject to change, such a strength needs to be seen as a signal of the need to develop new technological focus points to prepare for the next change in good time.

A NEW FOCUS FOR ECONOMIC POLICY

In this connection it is interesting to study the chronology of the rehabilitation process in Styria: the boom of the primary industry in 1973, a last flaring of the post-war boom enjoyed by European natural-resource companies, was the result of speculative stockpiling attendant to the first oil

Table 5: Styria's ranking in the labor market

	Ranking by employment growth	Average percentage growth differential to Austria
1981	9	
1982	7	
1983	6.5	
1984	6	
1985	5.5	
Ø 1981/1985		–0.2
1986	9	
1987	9	
1988	9	
1989	8	
1990	6	
1991	8	
1992	8	
Ø 1986/1992		–0.6
1993	7.5	–0.5
1994	7	–0.3
1995	4	+0.4
1996	2	+0.7
1997	2	+0.9
As of April 1997	1	

Table 6: Cyclical development of the Styrian industry in 1996-97

	Styria	Austria	Styria
	Percentage balance of positive and negative assessment of production in the last three or four months		Percentage difference to Austrian average
1996, 1st quarter	–29.1	–26.5	– 2.6
2nd quarter	– 4.4	– 5.9	+ 1.5
3rd quarter	– 3.8	– 1.1	– 2.7
4th quarter	– 3.2	– 0.9	– 2.3
1997, 1st quarter	+ 8.3	+ 6.0	+ 2.3
2nd quarter	+27.6	+21.1	+ 6.5
3rd quarter	+ 6.1	+16.8	–10.7

Source: WIFO Business Cycle Test, in cooperation with the EU (GD II-4).

price shock, and it terminated in a precipitous slump in 1975, which severely affected Styria.

Over the next six years, analysts agreed that the crisis was caused by underlying structural problems. By the middle of 1982, an exhaustive analysis and an initial strategic concept had been developed (Tichy, G., ÖIR, WIFO, Regionalstudie Obersteiermark, study commissioned by the Austrian Federal Government, Vienna, 1982), which met with considerable scepticism. The slow recovery up to 1985 (Table 5) fostered hope that it would be possible to "muddle through" until the next recovery with a minimum of sacrifices. The recession of 1986 destroyed this hope, and work was finally taken in hand to reshape the economic structure. Thanks to the losses accumulated by then, passive measures were clearly in the majority. The double-track strategy of the original concept (short-term measures to cushion adaptation losses in the primary sector, combined with long-term structural change) could be implemented only after the recovery of 1988-1992 had set in.

It took until the early 1990s to develop a technology policy concept, reorganize the scheme of business subsidies and – a key point that tends to be overlooked in economic analyses – to convince those responsible and affected that it was necessary to implement "new" strategies.

An evaluation of subsidies granted in 1993-94 by the "Companies in take-off" division of the newly founded Economic Promotion Company[2] indicates the basics of the new strategy: strengthen the strengths and stress innovation in the technological and organizational sectors. Subsidized companies are markedly above the industrial average, except for their self-financing capacity and

[2] Geldner, N., Evaluierung der steirischen Wirtschaftsförderung, WIFO study commissioned by Steirische Wirtschaftsförderungsgesellschaft mbH, Vienna, 1995.

Successful Structural Change in Styria – Summary

What has happened to the economy in Styria over the past two decades could be described as a case history of regional rehabilitation. If we limit ourselves to employment, we find the following overall situation:

A massive crisis in the primary industry (1st oil price shock of 1975) and the expiry of built-in stabilizers in approximately 1980 resulted in a sharp tumble in employment figures (2nd oil price shock). In 1981-1986, attempts were made to achieve stabilization by traditional tools, especially by loss compensation. In 1986-87, the traditional approach at last began to be reconsidered and the first structural reorganization schemes were introduced after it had finally dawned that expectations of economic recovery would not materialize.

During 1991-1993, the main future-oriented concepts and organizational structures were developed, after which recovery set in.

In 1995, Styria was finally on the fast track to recovery. If the current speed is sustained, it could be able to regain lost terrain (job creation rate in line with the Austrian average) in about five years.

The time it took to reach this position must be seen as the typical time requirement for the rehabilitation of a region. The true problem of any regional policy is the discrepancy between political legitimization and evolutionary structural change.

growth of turnover; and projects act primarily by improving the company's market position. As an unweighed average, they are rated at 55 percent of a theoretical maximum (roughly comparable with later measurements).

For 1995-1997, the company has computed that their rating vis-à-vis the possible maximum initially rose from 59.4 to 61.8 percent (far above the industrial average in all parameters), but declined to 51.7 percent in 1997 (still slightly above the industrial average). The greatest decline was in structural policy relevance, possibly reflecting a shift towards job creation relevance.

The rating for technological content of new companies, on the other hand, increased markedly – to 88 percent of the achievable maximum. Altogether it can be assumed that the job-creating potential of subsidies was given more relevance (in line with a European-wide objective), but that technology maintained its relevancy ranking, especially with regard to consulting.

In the past three years, this emphasis in economic policy has impacted on overall economic development. By 2003, Styria could be back on the road to growth from which it had drifted in 1975-1980. In this connection it must be stressed that we are not talking of any negligence or omission, but of an average rehabilitation process – a process which technically could have been completed in half the time, but whose prerequisites need to be implanted in the minds of those responsible at the authorities level as much as those that benefit – which may occasionally be an uphill battle.

We should not forget that there will always be losers even when modernization is successful. This makes the modernization process a political process until the very last – even when the first fruits of success can be reaped. The discrepancy between time requirements – the inherent short-term time frame of politics versus a scope of 25 years for rehabilitation – is the true problem faced by political action at the regional as much as any other level.