ÖROK SERIES NO 207 -QUANTITATIVE EFFECTS OF EU STRUCTURAL AND COHESION POLICY IN AUSTRIA -A CONTRIBUTION TO 25 YEARS OF AUSTRIA IN THE EU

The present study "Quantitative Effects of EU Structural and Cohesion Policy in Austria – A Contribution to 25 Years of Austria in the EU" offers for the first time a cross-fund and quantitative impact analysis of the use of funds from the European Structural and Investment Funds (ESIF) and their predecessors in Austria, which are: ERDF (European Regional Fund), ESF (European Social Fund), EAFRD (European Agricultural Fund for Rural Development) and EMFF (European Maritime and Fisheries Fund). The related data basis has been created for the first-time by merging and harmonising individual information on all funding projects or cases of the individual funds which are available in different decentralized systems.

By analysing this database using descriptive-statistical methods, (spatial) econometric regression analyses and simulations with a multi-regional, multi-sectoral model, it is possible for the first time to provide a comprehensive assessment of the quantitative effects of the ESI funds and their predecessors in Austria at a small-scale spatial level. In view of the congruence of the results achieved for different regional levels and using different methodological approaches, a predominantly positive summary of almost a quarter of a century of Structural Fund policy in Austria can be drawn.

No signs of spatial polarisation in Austria during the period of fund interventions

First of all, our analysis of the development of spatial disparities in Austria during the implementation period of the European subsidies shows encouraging results: Tests on $\sigma\text{-}$ as well as $\beta\text{-}$ convergence show a consistent tendency of decreasing regional differences in essential economic variables – a finding that differs significantly from the empirical evidence found for Europe, where regional imbalances within the majority of countries have increased.

Thus, cohesion policy objectives of EU policy have been achieved at least partially in Austria. However, this finding does not yet allow conclusions to be drawn about the effectiveness or efficiency of the funded initiatives, since the reduction of regional disparities may also have had other causes. A relevant contribution of the ESIF funding initiatives to the identified cohesion processes can be regarded as assured if – as a necessary condition (1) – primarily the "weaker" regions have actually benefited from the funds , and – as a sufficient condition (2) – these funds have actually had an effect, i.e. have made a significant contribution to the growth performance of supported regions.

Economic "accuracy" of ESIF expenditure despite fund-specific differences

The necessary condition (1) for a contribution of the ESIF initiatives to the reduction of regional disparities in Austria can be regarded as fulfilled according to our analyses of the spatial distribution of ESIF expenditure. On the one hand, the ESI funds were used for funding interventions in a differentiated manner at the district and municipal level, and the spatial distribution structures of the individual types of funds - in accordance with their different tasks - were not identical. However, on the other hand, the expenditures of different funds were largely complementary, and overall especially directed towards regions with structural or economic disadvantages. Our results thus show a considerable "accuracy" of the disbursements of the ESI funds - a result which, despite programmatic changes over time, proves to be robust over funding periods.

Positive and significant correlation between ESIF expenditure and the development of the regions supported

The extent to which the ESIF initiatives – as a sufficient condition (2) for their cohesion impact – have also contributed to growth and employment in the assisted regions is shown at the small-scale level by the results of econometric regression analyses. Even if no clear statement on the causality of the analysed relationship is possible due to data availability, the great concordance of the estimation results of our basic model with the results of various extensions with respect to data, methodology and regional granularity militates in favour of a robust and positive

(significant) correlation between ESIF funding per capita and growth at the regional level. According to our estimates for the Austrian labour market districts and the period 2000–2017, an increase in funding intensity by 1 % was associated with an expansion in the growth rate of the number of employees by 0.2 percentage points (PP), and with an increase of growth of municipal tax revenues by 0.14 PP. Extensions using the panel structure of the database as well as estimates at the municipal level confirm robustness of these results. In addition, they indicate that ESIF interventions in rural areas have been more effective than those in more urbanised regions.

Noticeable effects on Gross Value Added at the level of the federal states

Positive funding effects of the ESIF are ultimately confirmed by a series of model simulations with WIFO's ASCIANO multi-regional model for the Austrian federal states. According to these simulations, assuming "additionality" of EU funds as well as national co-financing, demand-side value-added effects (direct, indirect and induced) of more than € 33 billion were associated with the funding. Even if a (budget-neutral) "counter-financing" of the deployed national funds is assumed, relevant value-added effects from the subsidies remain, with the highest absolute impact in Lower Austria and the largest relative effects in Burgenland. The spatial distribution of ESIF expenditure and its effects differ, because the latter spill over to other regions in the course of triggered production and circulation processes.

Longer-term supply-side effects can be captured by our model simulations (only) in the case of investment subsidies. The largest impacts from associated capital stock effects are shown for Styria (with a cumulated value added of +2.5 billion \in), while in relative terms the supply-side effects are highest in Burgenland (with almost 1.4 % of the BRP in the year of the highest funding effect), followed by Styria and Carinthia (with +0.25 % of BRP respectively). After the simulated end of the funding period, the effects in all provinces fade away gradually, but remain positive in the decade after.

Positive summary; impact analysis of the entire funding system as a remaining task

All in all, based on our results a predominantly positive conclusion can be drawn regarding the effects of European ESI funds and their predecessors in Austria: Despite task-related differences by funds, the regional distribution of expenditure was largely "accurate". At the same time the initiatives were also "effective". A relevant contribution of the interventions co-funded by ESI funds to the reduction of regio-

nal disparities in Austria thus appears to be assured. This statement grounds on our confidence in the validity of the empirical results. In fact, our analysis builds on an information base that is clearly superior to the past state of knowledge. Above all, however, the largely concurring results of our "multi-level" analysis allow to draw such a conclusion: Based on different methodological approaches and for different spatial levels, very similar findings were obtained. Thus, our results provide evidence in favour of continuing the ESIF-initiatives in Austria also in the new funding period 2021–2027.

Nevertheless, our analysis faces limitations. In terms of content, this concerns the sole focus of our impact analyses on growth and employment in the regions. This is due to the overarching research question of our study, but it does not fully mirror the very different objectives of the individual funds. Our findings regarding the differences in impact across types of funds and measures therefore do not allow any conclusion to be drawn about their efficiency in fulfilling their different tasks. Hence, our study cannot replace a comprehensive monitoring as well as (ex-ante, accompanying and ex-post) evaluations at the level of the individual funds and their measures.

Methodologically, uncertainties remain with regard to the causality of the identified correlations between ESIF funding and regional growth, but also with regard to the influence of all other (non-ESIF) funding in Austria and its interaction with European funding. This is due to restrictions in data access at the firm level, but even more due to a lack of information on other promotional activities of the various local authorities in Austria. Progress is urgently needed here. Reliable data on this topic would allow an improved impact analysis of the entire public support system in Austria at the regional level and would make it possible to place the results in the context of this larger overall framework.