An Empirical Evaluation of EU and National Structural Policies in Remote Rural Areas: The Case of Evrytania

Demetrios Psaltopoulos and Sofia Efstratoglou*

Abstract

This paper presents an empirical investigation into the effects of European Union structural policy funding in the poor, remote, rural area of Evrytania in Greece. First, the socio-economic profile of the area is presented, followed by a detailed description of structural policy intervention in the study area during 1989-93 period (first Community Support Framework). Subsequently, a regional Social Accounting Matrix (SAM) is used to portray the structural characteristics of the local economy, followed by the estimation of the economic impacts of policy expenditures during the first period of structural funding after the 1988 reforms. Results indicate that the local economy is characterised by a low level of development, lack of integration and generally traditional structures. Moreover, the economic impacts of structural policy expenditure were found to be very significant, especially in terms of employment and firm income generation, representing thus, a valuable effort for the promotion of the area's development.

Keywords: *Social Accounting Matrices, Impact Analysis, Structural Policy, Rural Development, Remote Rural Areas*

Introduction

Rural areas in the European Union (EU) are currently undergoing significant economic and social changes, mostly induced by agricultural policy reform, international trade liberalisation, and the strengthening of the role of rural development policies. The potential effects of the above developments are not expected to be equally distributed amongst EU rural areas, as there is variation in terms of population change and densities, natural resource endowments, and economic and social structures. Rural areas of the 'centre' have higher population densities, greater proximity to main markets, a low dependence on farming, and a more developed and diversified economic base. On the other hand, 'peripheral' rural areas are characterised by severe remoteness, depopulation, infrastructural inadequacies and high dependence on agriculture. Most of the peripheral rural areas have been designated as Objective 1, 5b or 6, but within this group, there is an enormous variation, as some areas are characterised by a significant dependence on agriculture, and others by a more mixed economic structure. Within this framework, two different types of poor, remote rural areas can be distinguished, on the basis of the extent of the diversity of their economies:

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* D. Psaltopoulos is Special Advisor to the Minister of Agriculture, Hellenic Republic and S. Efstratoglou is Professor in the Department of Agricultural Economics, Agricultural University of Greece. The authors would like to thank the Editor and two anonymous referees for helpful and penetrating comments. Senior authorship is not assigned.
Contact address: Dr Demetrios Psaltopoulos, 28 Anapiron Polemou, 16233 Kareas Athens, Greece

- 'Type I' involves rural areas characterised by severe remoteness, depopulation, infrastructural inadequacies, adverse climatic and soil conditions, and the existence of outstanding natural resources. For a long time, these areas have not shown significant agricultural economic activity and it seems that agricultural policy reform will not induce a dramatic agricultural adjustment process, as their economies mainly concentrate on secondary and especially, tertiary sectors.
- On the other hand, 'Type II' involves poor, remote rural areas characterised by similar (to Type I areas) structural weaknesses, while a significant share of economic activity in these areas derives from agriculture. The presence of non-agricultural activities in this type of areas is comparatively low, and whenever in existence, relates heavily on agriculture. Agricultural policy reforms are expected to have significant direct and indirect effects in these rural regions.

Since the reform of the Structural Funds (1988), Structural Policies are implemented in different areas. The impact of those policies has been evaluated by different tools, but there has not been so far any evaluation on how these policies have affected remote areas with unfavourable structures, especially in terms of 'direction' of these funds towards sectors with a comparatively high economic activity-generating capacity.

Within this scope, the objective of this paper is to analyse and evaluate the economic impacts of Structural Policies implemented in the Prefecture of Evrytania (Type I rural area), through the use of a Social Accounting Matrix (SAM).

The choice of the study area of this effort was justified in terms of it's economic backwardness, the diversified structure of it's economy, as well by the fact that significant Structural Policy investment was fulfilled in Evrytania, especially since the reform of the EU Structural Funds.

In terms of policy-evaluation, Structural Policies at regional level encompass a wide range of policies, programmes and measures, targeted at different sectors and domains in rural areas. The growth-generating capacity of every single programme/measure on the local economy (output, income, employment) can only be **comprehensively** assessed through a general equilibrium model approach. Therefore, the SAM approach (Stone *et al.*, 1962; Pyatt and Roe, 1977; Pyatt and Round, 1977; ibid, 1985) was selected as the basic tool for the evaluation of the Structural Policy effects in this work.

In addition, other main reasons for selecting this method have been: (a) the ability of the SAM technique to capture the distributional effects of exogenous injections (investment funding and transfers) in a regional economy. In particular, the increased presence of the CAP subsidy payments to farmers further substantiates the use of the SAM method since analysis which focuses solely on production linkages (the traditional Leontief Input-Output approach) may ignore the implications (particularly the distributional effects) arising from other types of links between rural sectors (especially agriculture) and the macro economy; and (b) the multisectoral dimension of SAM accommodates the analysis of the effects induced by current rural development policies, which have shifted attention from the traditional product-oriented support to a more broadly based (multisectoral) one. Finally, lack of regional data prohibited the application of the even more comprehensive CGE methodological framework or a hybrid (I-O – econometric) model in this study.

The next section of the paper presents the main socio-economic characteristics of the study area and describes Structural Policy interventions in Evrytania during period 1989-93 (First Community Support Framework). Section 3 briefly presents the applied methodology, while results are presented in Section 4. The paper ends with the relevant conclusions.

Background to the Study

Socio-economic Profile of Evrytania

The prefecture of Evrytania is located in Central Greece, it is a Nuts III area and is characterised as Objective 1 (as the entire country). Evrytania is located at an average distance of 280-320 Km northwest of Athens. Its land area of 1,870 sq. Km (1.4 per cent of Greece) is all classified as mountainous, while its population amounts to 24,307 people (0.23 per cent of total), compared to around 40,000 in 1961.

Evrytania is a depopulated, remote area, with harsh soil and climatic conditions. Historically it has been one of the poorest departments in Greece, associated with low levels of economic development. In more detail, its level of development, expressed by a composite development indicator (Athanasiou et. al., 1995) is 49 per cent (national average = 100) and the prefecture is ranked as last amongst the 51 prefectures of the country. Furthermore, from 1961 onwards (especially until 1981), Evrytania has experienced a severe out-migration trend, characterised by the highest apparent migration rates amongst the 51 Greek prefectures (Kanellopoulos, 1995), which have slowed down significantly during the last decade.

In 1991, GDP per capita in Evrytania represented about 77 per cent of the relevant national average, compared to 47 per cent in 1971. However, this improvement is mostly due to depopulation (Table 1) rather than real increases of GDP.

Table 1: Evolution of Population and GDP, Evrytania, Greece, 1971-91

Year	Population Evrytania	Population Greece	Density Evrytania (persons/ Km^2)	Density Greece (persons/ Km^2)	% change of population Evrytania	% change of population Greece	GDP Evrytania*	GDP Greece*
1971	29,533	8,768,641	16	66	-29.2	4.4	406	258,000
1981	26,182	9,740,417	14	74	-12.0	10.6	802	418,271
1991	24,307	10,259,900	13	78	-7.2	5.3	917	504,250

* Million Drs, 1970 prices

Source: National Statistical Service of Greece, Population Census Data

This poor economic performance has resulted in the development of a certain socio-economic structure, which can be regarded as considerably different to that of most continental Greek rural prefectures (Efstratoglou and Psaltopoulos, 1998). The demographic structure of Evrytania is characterised by the relative over-representation of the 'elder' age-groups, while the sectoral structure of the area's labour market (Table 2) is quite different to the average structure of all other rural departments in Greece, as the share of the primary sector (an important component of which is forestry) is lower in Evrytania, while that of the tertiary sector is higher. Despite the fact that economic activity still depends substantially on the primary sector, its employment share has declined from 72 per cent in 1971 to 28 per cent in 1991. During the same period, the share of employment in the service sector increased from 19 to 49 per cent, and that of industry from 9 to 23 per cent. Finally, in terms of the sectoral structure of GDP (Table 2), Evrytania differs considerably from other Greek rural areas, as its distribution pattern is quite similar to that of the country average.

Table 2: Percentage Distribution of Employment and GDP, Evrytania, Greece, 1991

	Primary	Secondary	Tertiary	TOTAL
EMPLOYMENT				
Evrytania	28	23	49	100
"Rural Greece"	34	22	44	100
Greece	20	25	55	100
GDP				
Evrytania	10	30	60	100
Greece	12	29	59	100

Source: National Statistical Service of Greece

Structural Policies in Evrytania

During the 1980-93 period, structural and agricultural policies in Evrytania have gone through considerable change. Initially, development priorities concentrated on the improvement of infrastructure, the increase of agricultural production, the exploitation of the area's forest and the gradual expansion of tourism. These targets were mainly promoted through the Common Agricultural Policy (CAP), the National Public Investment Programme and the existence of investment incentives in Development Law 1262/82.

In the mid-1980s, the introduction of an EC-funded Integrated Mediterranean Programme (IMP) in the prefecture provided a higher amount of funds and also an 'integrated' approach to rural development policy (promoting investment in agrotourism, forest industries, ski-centre, etc.).

Finally, by the end of the decade the move of the emphasis of development strategy towards the sustainable exploitation of natural resources and the further improvement of infrastructure (including tourism) have clearly pointed out towards an effort for the development of the tertiary sector (especially winter tourism, agrotourism, forest recreation tourism). At the same period, the Reform of the EU Structural Funds constituted the beginning of a new era for the prefecture, as the provision of around 75 per cent of investment funds has led to the uptake of considerable investment action in the framework of Regional and National Operational Programmes and Community Initiatives. This investment contributed towards the long-term effort to improve the area's infrastructure and accessibility and at the same time benefited the diversification of the local economy.

As an example of fund allocation in accordance to development priorities, the first CSF (1989-93) is reviewed for Evrytania (the second CSF is still under completion). From 1989 to 1993 (Table 3), over 22 billion Drs were provided via Structural Policy investment (more than twofold increase of annual average financial provision, compared to the 1982-88 period). Moreover, if we include CAP Guarantee spending during the same period (2,062 million Drs), then the increase of annual average spending for structural and agricultural policies is even higher. Structural policy intervention represented 25 per cent of the area's annual average GDP at that period (compared to nearly 5 per cent for Greece). Almost 40 per cent of total spending was allocated to Road improvement and Construction, followed by Agriculture (21.5 per cent), Tourism infrastructure (14 per cent), and Forestry (5.7 per cent).

Table 3: Analysis of Structural Policy Interventions in Evrytania, 1989-93 (million Drs)

	Total Spending	Public Spending	ERDF	ESF	EAGGF	National Budget	Private Capital
Regional Operational Programme	12,106.0	12,100.4	8,588.4	51.4	435.4	3,025.2	5.6
National Oper. Progr. 'Agriculture'	4,221.3	3,985.7			2,050.8	1,965.5	205.1
IMP	3,982.7	3,609.0	2,281.4		283.5	1,044.0	373.7
Community Initiatives	420.6	415.4	302.5	9.1		103.8	5.2
Total	20,730.6	20,110.5	11,172.3	60.5	2,769.7	6,138.5	589.6
Annual Average	4,146.10	4,022.1	2,234.5	12.1	553.9	1,227.7	117.9
Ann. Aver/Aver GDP (89-93) %	23.2	22.5	12.5	0.1	3.1	6.9	0.7
Public Investment Programme	1,295,2	1,295.2	363.7			931.5	
Total	22,025.8	21,405.7	11,536.0	60.5	2,769.7	7,070.0	589.6
Annual Average	4,405.2	4,281.1	2,307.2	12.1	553.9	1,414.0	117.9
Ann. Aver/Aver GDP (89-93) %	24.6	24.0	12.9	0.1	3.1	7.9	0.7

Source: Prefectural Administration of Evrytania, Authors' Calculations

Methodology

Evaluating the impacts of structural policies in a regional context has been a popular issue in agricultural and rural economics. Reviewing research in this field is far beyond the scope of this paper; however, some of the most indicative recent studies include Marcouiller *et al.* (1995), who analyse the differential impact of natural resource management programmes and policies on timber development on three groups of households by income level. Also, Roberts (1995) investigates links between UK agriculture and the wider economy, showing significant magnitude of benefits that leak from the farm sector, while Leatherman and Marcouiller (1996) use a SAM to analyse a small rural region in Wisconsin, and conclude that local policy could influence distributional patterns, through targeting specific economic sectors for growth. Finally, in another indicative study, Roberts (1998) constructs a rural-urban interregional SAM model in Scotland, in order to investigate financial flows and relations with the rest of the world.

In this study a regional SAM was generated for the study area through a two-stage process. First, the hybrid Generation of Regional I-O Tables (GRIT) technique (Jensen *et al.*, 1979) was used to construct a regional I-O table, via the use of mechanical adjustment procedures (employment location-quotients) and primary data (through a business survey plus other primary and/or secondary information). GRIT was chosen as the regionalisation method for this study, as the cost of using a survey-method to generate the regional table was prohibitive, while regional I-O tables constructed via non-survey techniques are 'not free from significant error' (Mattas *et al.*, 1984). Then, by using various data sources, a regional SAM was constructed for Evrytania.

Regarding the impact analysis it was primarily considered important to clarify the types of assistance that are considered as 'structural'. In practice, it would be expected that non-structural ('support') policies such as the CAP have structural effects in the

longer term. Sometimes these policies may be designed to counter normal economic adjustment (as with the CAP Less-Favoured Areas payments) in attempting to maintain economic activity and local communities against the pressures of national and global markets. Hence the 'effects' of these policies must be judged in an opposite direction from normal Structural Policy which attempts to promote or re-direct structural change. The latter may either attempt to accelerate the activities of relevant socio-economic institutions or to reduce the adjustment costs of those involved in structural change. Along these lines, the study-area-specific Structural Policies whose effects on the local economy are analysed here consist of all Structural Funds, including the Guarantee Section of the European Agricultural Guarantee and Guidance Fund (EAGGF), and national policies (when integrated with SP action).

As a first step, Structural Policies pursued and implemented in period 1989-93 in the study area were identified and a systematic database was built of Structural Policy spending by programmes/measures/projects implemented. The next step involved the estimation (via the SAM-linkages) for the period 1989-1993 (First CSF) of the regional economy-wide effects, associated with agricultural support and structural funding (including agricultural subsidies). Structural Policy and CAP spending were treated as exogenous 'injections' in the local economy and, through multiplier analysis, their growth-generating impacts were assessed, in terms of output, income (on firms, households, labour and capital), and employment effects.

Application

Construction of SAM for Evrytania

The base of our analysis was the 1988 I-O table for Greece (National Statistical Service of Greece, 1992), which contained 123 sectors. The choice of this base-year was justified in terms of the fact that the structural information provided by a more recent I-O table would have 'embodied' a considerable part of the impacts of Structural Policy implementation.

Next, and in order to achieve compatibility between the sectors of the national table and the available sectoral employment data for Evrytania, the national table was aggregated to 32 sectors. Then, the mechanical GRIT procedure was applied (Jensen et al., 1979) and subsequently, the table was further aggregated to 18 sectors, in order to represent the most important economic sectors in the prefecture. As a next step, the mechanically derived input purchasing and output sales patterns of economic sectors were modified by the insertion of relevant superior data, derived from a business survey on input-purchasing and sales-direction patterns of 11 sectors for year 1988 (namely Agriculture, Forestry, Fishing, Food Processing, Textiles, Timber Processing, Furniture, Other Manufacturing, Construction, Trade, Hotels and Catering). The criteria of the selection of those sectors for survey were first their importance to the local economy (in terms of output and employment), and second, their influence by Structural Policies.

The next step involved the estimation of the non-I-O parts of the Evrytania SAM. This procedure has been reported in detail elsewhere (Efstratoglou and Psaltopoulos, 1998), however main data sources included:

- the 1988 Household Income and Expenditure Survey
- the GRIT business survey
- National Statistical Service data on Taxes and Government Transfers
- regional information on Property Incomes, and Government Transfers from and to the rest of the world.

The Structure of the Local Economy

The 1988 SAM for Evrytania (Table 4) provides useful quantitative information on economic interdependence among production activities, and income distribution among production factors, institutions (firms and government) and households in the prefecture. In more detail, factor incomes to the rest of the world represent only 1.8 of value added in Evrytania. This is a clear indication of the *remoteness and lack of integration of the local economy.*

Factor payments to households represent 62 per cent of total factor payments, compared to 41 per cent nationally (Zografakis, 1997). Therefore, labour is considered to be the most important factor of production in the area, as production activities are generally labour-intensive and the technology level is still comparatively low. A significant 59 per cent of household income is provided by labour, with the rest by firms (24 per cent), government (16.5 per cent) and the rest of the world (0.2 per cent). The relevant national shares are labour (49 per cent), firms (28 per cent), government (19 per cent) and rest of the world (4 per cent). The comparatively high regional share of firms income in the prefecture is attributed to the existence of a significant number of small units (especially in farming) run by self-employed people, while the (perhaps surprising) low share of government is due to the fact that the main form of government assistance to households in Evrytania comes in the form of low agricultural pensions. Finally, the low level of integration of the local economy is again obvious (low share of incomes from the rest of the world).

The average propensity to consume is 71 per cent in the case of households (64 per cent nationally), while their average propensity to save is 14 per cent (20 per cent nationally). This is again an indication of low incomes in Evrytania, considering that the lower the incomes, the higher the propensity to consume.

Firms in Evrytania transfer 69 per cent of their incomes to households (national average is 84 per cent), and save 30 per cent of their incomes (national average 12 per cent). On the other hand, firm taxes in the prefecture represent 1.2 per cent of their incomes (3.3 per cent nationally). This is again an indication of the existence of small, low-income, traditional enterprises in the area, which (in contrast to the more 'modern' enterprises at the national level) do not distribute profits.

The government deficit in Evrytania represents 26 per cent of the area's GDP (8 per cent nationally), while the share of government in total consumption is 20 per cent (9 per cent nationally). This is an indication of the importance of public support to economic activity in the prefecture. The trade deficit of the area represents 19 per cent of local GDP, compared to 3 per cent at the national level, an indication of the small local economy.

Table 4: Aggregate Social Accounting Matrix for Evrytania (1988, million drs.)

				EXPENDITURES										
				Current Account						Capital Account				
						Institutions				Institutions				
				Production Activities	Factors Labour, Capital	HHS	Firms	Govern.	Rest of the World	HHS	Firms	Govern.	Change in Stocks	Total
				A	B	C	D	E	F	G	H	I	J	K
				18	1+1	1	1	1	1	1	1	1	1	
RECEIPTS	CURRENT ACCOUNTS	Production Activities	1	18	A1 Intermediate Consumption 6.655,3	B1	C1 Consumption 8.361,0	D1 Consumption 0	E1 Consumption 3.770,7	F1 Exports 4.457,2	G1 Investments 403,2	H1 Investments 434,3	I1 Investments 1.112,0	J1 Stocks 173,5	*K1 Demand* 25.367,2
		Production Factors	2	1 + 1	A2 Distribution of Value Added 10.761,5	B2	C2	D2	E2 Subsidies 482,0	F2 Factor Incomes from the ROW 0,0	G2	H2	I2	J2	*K2 Income of Factors* 11243,5
		Households	3	1	A3	B3 Factor Payments to Households 6.976,9	C3 Current Transfers from HHS 0,0	D3 Current Transfers from Firms 2.797,4	E3 Current Transfers from Govern. 1.960,2	F3 Current Transfers from Rest of the World 21,0	G3	H3	I3	J3	*K3 Income of HHS* 11.755,6
		Firms	4	1	A4	B4 Factor Payments to Firms 4.065,5	C4	D4	E4	F4	G4	H4	I4	J4	*K4 Income of Firms* 4.065,5
		Government	5	1	A5 Taxes (Vat, Duties) 1.366,9	B5 Factor payments to Govern. 0,0	C5 HHS paym. to Govern. 1.702,6	D5 Direct Taxes 50,2		F5 Current Transf. to Govern. 0,0	G5	H5	I5	J5	*K5 Income of Govern* 3.119,6
		Rest of the World	6	1	A6 Imports 6.583,6	B6 Factor Payments to ROW 201,0	C6 Current Transfers to ROW 0,0	D6 Current Transfers to ROW 0,0	E6 Current Transf. to ROW 0,0	F6	G6	H6	I6	J6	*K6 Income of Rest of the World* 6.784,5
		Savings	7	1	A7	B7	C7 Gross Savings Institutions 1.692,0	1.217,9	-3.093	2.306	G7				*K7 Savings* 2.123
		TOTAL	8		*A8 Gross Value of Production* 25367,2	*B8 Total Factors Payments* 11243,5	*C8 Expendit. of Institutions* 11.755,6	4065,6	3.119,6	*F8 Expendit. of ROW* 6.784,5	G8 *Aggregate Invest.* 403,2	434,3	1112,0	173,5	

Finally, due to the backwardness of the area, there is a significant investment effort, amounting to 17 per cent of GDP, compared to 22 per cent nationally. On the other hand, 52.3 per cent of this investment is carried out by the government, compared to 13.5 per cent nationally.

Impact Analysis

In order to carry out the impact analysis of Structural Policy expenditure in Evrytania during the period 1989-93, first the sectors for the product of which every project represented increase in final demand and the relevant flows were specified (in 1988 prices). Then, the estimation of the impacts on local output, income and employment took place via the traditional Leontief procedures.

Table 5 presents the results of the impact analysis. Annual average real (i.e. in 1988 prices) investment and transfers expenditure for the 1989-93 period amounted to 3,269 million Drs, or 12.9 per cent of the 1988 gross output in the study area. At the Programme level, the CSF Specific Development Programme represented 48.6 per cent of total spending, the CAP Guidance Fund 15.8 per cent, the IMP 13.8 per cent, the CAP Guarantee Fund 8.7 per cent, the National Public Investment Programme 5.4 per cent, while the contribution of the remaining CSF programmes, the Valoren and Now initatiatives and Leader I (which started in 1993) was generally small.

Table 5: Economic Impacts of Structural Policy in Evrytania, 1989-93, Annual Average Effect

Programmes/ /Measures	Annual Average Expenditure (ml Drs, 1988 prices)	Annual Average Output Effects (%)	Annual Average Firm Income Effects (%)	Annual Average Household Income Effects (%)	Annual Average Employment Effects (%)
1. Public Inv. Progr.	**176.60**	**1.46**	**2.36**	**1.35**	**3.09**
Forestry	53.76	0.44	0.71	0.41	0.93
Transport	87.11	0.72	1.17	0.66	1.52
2. IMP	**452.21**	**3.72**	**5.87**	**3.37**	**7.81**
Transport	214.78	1.78	2.88	1.64	3.76
Agrotourism	93.80	0.78	1.26	0.72	1.64
3. ROP Agriculture	**60.01**	**0.50**	**0.75**	**0.45**	**1.07**
Forestry	58.40	0.48	0.74	0.44	1.02
4. CSF - ESF	**8.46**	**0.07**	**0.05**	**0.08**	**0.16**
Local Development	7.11	0.06	0.04	0.06	0.13
5. CSF Local Devel.	**77.44**	**0.64**	**1.04**	**0.59**	**1.35**
Tourism	39.96	0.33	0.54	0.30	0.70
6. CSF - Specific Development Progr.	**1,587.41**	**13.14**	**21.39**	**12.14**	**27.78**
Transport	1,117.28	9.24	14.99	8.52	19.55
Water Supply-Drainage	103.72	0.86	1.39	0.79	1.81
Health	74.47	0.62	1.00	0.57	1.31
Tourism	164.56	1.36	2.21	1.26	2.88
7. CSF Agriculture	**61.83**	**0.51**	**0.83**	**0.47**	**1.08**
Forestry	61.83	0.51	0.83	0.47	1.08
8. CAP Guidance	**516.27**	**2.91**	**12.42**	**4.38**	**6.41**
2328/91, 797/85	262.59	1.71	5.36	2.15	3.70
1096/88	234.26	1.03	6.79	2.08	2.33
9. CAP Guarantee	**283.79**	**1.25**	**8.22**	**2.52**	**2.82**
Sheep & Goat Premium	232.61	1.03	6.74	2.06	2.31
10. VALOREN	**42.79**	**0.35**	**0.57**	**0.33**	**0.74**
11. NOW	**1.70**	**0.01**	**0.01**	**0.02**	**0.04**
12. LEADER I	**0.90**	**0.01**	**0.01**	**0.01**	**0.02**
TOTAL	**3,269.41**	**24.59**	**53.52**	**25.69**	**52.37**

Annual average *Total Output Effects* of Structural Policy spending in Evrytania amounted to 6,237 million Drs, or 24.59 per cent of total 1988 regional gross output. The main contributors to this increase in total regional output were the CSF Specific Development Programme (which increased annual average total output in Evrytania by 13.14 per cent), the IMP (3.72 per cent), the CAP Guidance Fund (2.91 per cent), the National Public Investment Programme (1.46 per cent), and the CAP Guarantee Fund (1.25 per cent). Regarding specific Structural Policy Measures, significant contributions in regional output increases are associated with the CSF Specific Development Programme Road Construction (9.24 per cent increase in total regional output), Tourism Infrastructure (1.36 per cent) and Water Supply-Drainage (0.86 per cent) measures, the IMP Transport (1.78 per cent) and Agrotourism (0.78 per cent) measures, the CAP Guidance Regulations 2328/91, 797/85 (1.71 per cent) and 1096/88 (1.03 per cent), the CAP Guarantee Sheep and Goat Premium (1.03 per cent), and finally, the National Public Investment Programme Transport measure (0.72 per cent).

Annual average *Firm Income Effects* of Structural Policy spending in Evrytania during 1989-93 amounted to 2,176 million Drs, or a significant 53.52 per cent of total 1988 firm income. The main contributors to this increase were the CSF Specific Development Programme (which increased annual average total firm income by 21.39 per cent), the CAP Guidance Fund (12.42 per cent), the CAP Guarantee Fund (8.22 per cent), the IMP (5.87 per cent) and the National Public Investment Programme (2.36 per cent). Regarding specific Structural Policy Measures, significant contributions in total regional firm income increases are associated with the CSF Specific Development Programme Road Construction (14.99 per cent increase in total regional firm income), Tourism Infrastructure (2.21 per cent), Water Supply-Drainage (1.39 per cent) and Health Infrastructure (1 per cent) measures, the CAP Guidance Regulations 1096/88 (6.79 per cent) and 2328/91, 797/85 (Compensatory Allowances 3.43 per cent and Improvement Plans 1.93 per cent), the CAP Guarantee Sheep and Goat Premium (6.74 per cent), the IMP Transport (2.88 per cent) and Agrotourism (1.26 per cent) measures, and finally, the National Public Investment Programme Transport measure (1.17 per cent).

Annual average *Household Income Effects* of Structural Policy spending during the 1989-93 period amounted to 3,020 million Drs, or 25.69 per cent of total 1988 household income. The main contributors to this increase were the CSF Specific Development Programme (which increased annual average total household income in Evrytania by 12.14 per cent), the CAP Guidance Fund (4.38 per cent), the IMP (3.37 per cent), the CAP Guarantee Fund (2.52 per cent) and the National Public Investment Programme (1.35 per cent). Regarding specific Structural Policy Measures, significant contributions are associated with the CSF Specific Development Programme Road Construction (8.52 per cent increase in total regional household income), Tourism Infrastructure (1.26 per cent) and Water Supply-Drainage (0.79 per cent) measures, the CAP Guidance Regulations 2328/91, 797/85 (Compensatory Allowances 1.05 per cent and Improvement Plans 1.10 per cent) and 1096/88 (2.08 per cent), the IMP Transport (1.64 per cent) and Agrotourism (0.72 per cent) measures, the CAP Guarantee Sheep and Goat Premium (2.06 per cent), and the National Public Investment Programme Transport measure (0.66 per cent).

Finally, annual average *Total Employment Effects* of Structural Policy spending in Evrytania during period 1989-93 amounted to 4370 jobs, or a significant 52.37 per cent of total employment in the area in 1988. The main contributors to this increase were the CSF Specific Development Programme (which increased annual average employment in Evrytania by 27.78 per cent), the IMP (7.81 per cent), the CAP Guidance Fund (6.41 per cent), the National Public Investment Programme (3.09 per cent), the CAP Guarantee Fund (2.82 per cent) and the CSF Local Development Programme (1.35 per cent). Regarding specific Structural Policy Measures, significant contributions in total re-

gional job creation are associated with the CSF Specific Development Programme Road Construction (19.55 per cent increase in total regional employment), Tourism Infrastructure (2.88 per cent), Water Supply-Drainage (1.81 per cent) and Health Infrastructure (1.31 per cent) measures, the IMP Transport (3.76 per cent), Agrotourism (1.64 per cent) and Irrigation (0.98 per cent) measures, the CAP Guidance Regulations 2328/91, 797/85 (Compensatory Allowances 1.17 per cent and Improvement Plans 2.53 per cent) and 1096/88 (2.33 per cent), the National Public Investment Programme Transport (1.52 per cent) measure, the CAP Guarantee Sheep and Goat Premium (2.31 per cent) and finally, the CSF Agricultural Guidance and CSF Agriculture (National scale) Forestry measures (in total 2.10 per cent).

Conclusions

Results of the above analysis have shown that the economy of the prefecture of Evrytania is characterised by a low level of development, remoteness and lack of integration. Labour is the most important production factor, technological innovations are rare while government transfers to households are generally low and mostly come in the form of agricultural pensions. As a result, low incomes are mostly directed to consumption, and consequently, the low level of savings requires significant government funding for investment activity and the provision of necessary services to the local population.

Impact analysis shows that the economic effects of Structural Policy investment and transfers in Evrytania during the 1989-93 period were very significant, especially in the case of firm income and employment generation, while important increases are also observed in local household income, output and labour income.

The CSF Specific Development Programme generated very significant economic activity in Evrytania, while, the IMP Programme generated significant output, labour income and employment effects. The effects of the CAP are also substantial, as the Guidance Fund significantly raised firm and household incomes, as well as employment, while the Guarantee Fund contributed to increases in firm income. On the other hand, the economic impact of the other Structural Policy Programmes implemented in Evrytania (CSF ESF, CSF Local Development, CSF Agriculture, Community Initiatives) was much lower, as related expenditure was not so high.

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