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Rural transition experiences after joining the EU: Results of the case studies in selected EU15 regions

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Abstract

The performance of five regions (Altmark, Borders, Midlands and West (BMW), Navarra, Skåne and Tyrol) in established EU Member states (Germany, Ireland, Spain, Sweden and Austria) are examined in the light of competing theories of rural development. Case study evidence reveals that the performance of regions has been closely tied to that of their respective nation states. No region has been insulated from national / global trends or grown entirely due to internal, endogenous factors and there is minimal evidence of purely *endogenous development*. While the CAP, particularly direct payments, make a significant contribution to farm income in all regions, the growth in farm incomes has not kept pace with non-agricultural occupations. The degree to which farm based development can be the mainstay of a prosperous rural economy is severely questioned. Farm centric models of rural development are unlikely to benefit some of poorest groups. Only in Tyrol is there clear evidence of 'multifunctional agriculture' delivering wider economic benefits, leveraging significant agri-tourism.

SCARLED Consortium

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LIST OF ABBREVIATIONS

ACF	Agreed Common Framework
AKI	Research Institute for Agricultural Economics
AWUs	Annual Work Units
BMW	Border, Midlands and West
CAP	Common Agricultural Policy
CEE	Central and Eastern Europe
CEC	Commission of the European Communities
EU	European Union
ESU	Economic Size Unit
GAO	Gross Agricultural Output
GDP	Gross Domestic Product
GVA	Gross Value Added
LEADER	Links between Actions for the Development of the Rural Economy
LFAs	Less Favoured Areas
MTR	Mid-Term Review
OECD	Organisation for Economic Co-operation and Development
OGA	Other gainful activities
SCARLED	Structural change in agriculture and rural livelihoods
S&E	South and East
SMEs	Small and Medium Sized Enterprises
UAA	Utilised Agricultural Area
WP	Workpackage

"If we hadn't got into the European Union and got access to its markets, very little of what's happened would have happened. But the reason we were successful was that having got in we had the right policies to enable us to do well, so it's conjunction of the two that gives you the success. Outside the EU we were a small country of four million people with no chance of going anywhere. So the Union has given us an opportunity, but we've cashed in on it by taking the right decisions at certain key moments. We made lots of mistakes too, but we made enough good decisions to compensate for mistakes."

Garret Fitzgerald, Former Irish Prime Minister, 2004

1 Introduction

This working paper examines the dynamics of rural changes in five selected EU15 regions, focusing particularly on the role of agriculture, following accession to the European Union (EU). In doing so, the paper seeks to contribute to debates concerning the extent to which rural policy should be 'farm centric' or embrace a wider set of actors. This is central to deliberations about the future of the CAP and the balance between the first and second pillars (Lowe *et al.* 2002). The analysis draws on country and regional case studies presented in Deliverables D8.1 to D8.5 of Workpackage 8 (WP8). These case studies identify the key features and determinants of rural transition in four selected EU15 member states following their accession to the EU, i.e. Ireland (1973), Spain (1986), Sweden and Austria (1995), as well as the new German Bundesländer, which joined the EU in 1990 in the light of the reunification of Germany. The regions covered are the: Border, Midlands and Western (BMW) (Ireland); the Autonomous Community of Navarra (Spain); the county of Skåne (Sweden), the Tyrol Region (Austria) and the Altmark Region (the new German Bundesländer). These case study reports were prepared by various authors (Hubbard and Kaufmann, 2008; Hubbard and Ward, 2007; Iraizoz, 2007; Copus and Knobblock, 2007; Wolz and Reinsberg, 2007)[2]. Overall, the general objective of WP8 is to analyse patterns behind "success stories" in rural transition experiences following EU accession in these countries, looking in detail at one case study region within each member state.

The analysis will provide a basis for subsequent work, considering the extent to which the lessons and experiences from the EU15 can be emulated in the New Member States (NMS) from Central and Eastern Europe (CEE). This reflects how identifying key national and regional features of rural change and the major driving forces behind such change can assist in drawing conclusions about the success or otherwise of measures to manage agricultural and rural transformations. It can also support the design of future rural development policies.

The working paper is organised into five sections. The next Sections reviews models of rural development against which the case study experiences are evaluated. Section 3 presents the rationale for the selection of case study regions and profiles each in turn. The role of agriculture in case study regions is assessed in Section 4 and conclusions in the light of competing models of rural development are drawn in Section 5.

[2]The specific deliverables are: D8.1 "Development of socio-economic and agricultural structures in selected rural regions in Austria after EU accession" Carmen Hubbard and Peter Kaufmann @CRE; D8.2 "Development of socio-economic and agricultural structures in selected rural regions in Ireland after EU accession" Carmen Hubbard and Neil Ward @CRE; D8.3 "Development of socio-economic and agricultural structures in selected rural regions in Spain after EU accession" Belen Iraizoz @Public University of Navarra; D8.4 "Development of socio-economic and agricultural structures in selected rural regions in Sweden after EU accession" Andrew Copus and Erika Knobblock @NORDREGIO and D8.5 "Development of socio-economic and agricultural structures in selected rural regions in the new German Bundesländer after the German unification" Axel Wolz and Klaus Reinsberg @IAMO.

2 Models of Rural Development

Currently, there is a debate amongst academic researchers in rural studies regarding the 'theories' or 'models' of economic development in rural regions and the role of rural development policy in stimulating economic growth in rural regions (Lowe *et al.*, 1993; Cloke, 1997; Ray, 2000; Terluin, 2003). This section reviews four models of rural development that provide both a theoretical framework and specific policy recommendations for encouraging economic growth in rural areas. A distinction is made between agrarian and wider rural development approaches, with the latter separated into exogenous, endogenous and neo-endogenous approaches. The main characteristics of each are summarised in Table 1.

Table 1 Approaches to Rural Development

	Agrarian	**Wider rural development**		
		Exogenous development	*Endogenous development*	*Neo-endogenous development*
Premise	Viable rural areas dependent on farming activity, both economically and culturally	A competitive farming sector is not a prerequisite for viable rural areas		
Key determinants	Agricultural productivity and policy	Economies of scale and concentration	Employing local resources (natural, human and cultural capital)	Interaction between local and global forces
Dynamic force	Agricultural R&D	Urban growth poles (external driver)	Local initiative and enterprise	Globalisation, knowledge economy
Function of rural areas	Food production or multi-functionality	Aid urban economies (e.g. food, land and labour)	Diverse 'enclosed' economies	Participation of local actors in local and external networks and development processes
Major rural development issues	Agricultural policy	Peripherality and relative costs of capital, land and labour	Limited capacity of areas/groups to participate in economic activity	Resource allocation and competitiveness in a global environment
Focus on rural development	Agricultural policy and increasing productivity; multifunctionality	Agricultural productivity, encourage labour and capital mobility	Local capacity building (skills, institutions etc.)	Enhances local capacity and actors participation to direct local and external forces to their benefit
Criticism	Agriculture minor and declining component of rural economies	Dependent and dictated development	Not practical in contemporary Europe	Operates at a level of insufficient empirical evidence

Source: adapted from Ward *et al*. (2005)

a) Agrarian

The agrarian model is premised on the belief that the essence of rural is agriculture. This has taken two forms. The first is a *productionist* stance whereby the primary function of the rural economy is the production of food and fibre. Success under this model is measured in terms of the marketable surplus of farms and improvements in productivity. The prosperity of farms, under this approach, stems from improvements in agricultural productivity and sheltering farmers from the short-term 'vagaries' of the market. The task of policy, it therefore follows, is to support research and development that improves agricultural productivity and put in place support domestic market and trade measures that ensure the continuation of farming. Such a 'farm centric approach' to rural development continues to pervade many European Ministries of Agriculture. Surveys of European farmers indicate that most see that their primary role is the production of food and fibre (Gorton *et al.,* 2008). However, others recognise that when examining agriculture's importance to the local economy, employment structure and social environment, a solitary focus on the farming sector excludes much of what inherently is understood and classified as rural. As agriculture's socio-economic importance declines, the notion that farming can be the main driver and recipient of rural policy is increasingly anachronistic and unattractive (Ward *et al.,* 2005).

The second agrarian model stresses the *multifunctionality* of agriculture: that farming produces a wide range of non-commodity goods and services, shapes the environment and affects social and cultural systems in ways in which contribute the vitality of rural areas beyond the mere production of food and fibre (Van Huylenbroeck *et al.,* 2007). Agriculture is thus multifunctional when it has one or several other functions in addition to its primary role in food production. The multifunctional approach has become an increasingly influential policy framework and is closely related to a so-called 'European model of agriculture':

> *"The fundamental difference between the European model and that of our main competitors lies in the multifunctional nature of agriculture in Europe and in the role it plays in the economy and the environment, in society, and in the conservation of the countryside; hence the need for maintaining agriculture all over Europe and protecting farmers' incomes" (Commission of the European Communities, 1998, p.5).*

This remains a farm centric model of rural policy but farmers are perceived as rural entrepreneurs who combine a number of food production and other activities (Potter and Burney, 2002).

b) Exogenous

The exogenous development model rests on the assumption that growth is driven from outside of rural areas. Rural development emerges out of the relocation of capital and labour from urban centres, which are the main growth poles for the economic development of regions and countries (Lowe, 2008). Policy should thus be geared to attracting capital, principally branch plants, to relocate in the countryside. This approach was widely adopted in several European countries in the 1970s, including the UK and Ireland, where tax relief and subsidies were used to entice multinational and national companies to relocate part of their operations (Dobson, 1987; Grimes, 1993). In addition to policy support, rural areas were seen to offer 'natural benefits' such as lower land and labour costs. Without such cost advantages, rural areas were perceived as offering scant grounds for development due to them being technically, economically and culturally distant from (and inferior to) the main (urban) centres of activity (Lowe, 2008). Under this approach variations in rural development are explained by differences in the extent to which they can attract external capital. However, as the post-war economic boom collapsed in the 1970s, policies solely based on the attraction of branch plants were discredited as they seemed to offer the host region little in the way of skill formation, technology transfer, the fostering of entrepreneurial spin-offs or reinvestment of profits (Amin and Thrift, 1994).

c) Endogenous

In contrast to the exogenous approach, endogenous development is based on local resources (Picchi, 1994) and the assumption that the 'specific resources of an area – natural, human and cultural – hold the key to its sustainable development' (Lowe *et al.,* 1995, p.91). Bryden and Dawe (1998) argue that an endogenous approach is preferable because, by utilising local resources, multiplier effects will be greater. Moreover, they advocate that rural development strategies should be focused on immobile resources that 'hold down the global'. Bryden and Dawe, (1998) define immobile resources as those which are not open for competition – social capital, cultural capital, environmental capital and local knowledge capital. By being immobile, they conceptualise these resources as immune from a 'race to the bottom': the lowest cost point of production. As such, they offer opportunities for sustainable, value added development. However, the endogenous approach has been criticised on two counts (Lowe *et al.,* 1995). First, the focus on local resources ignores questions of control, for instance, the activities of international mining companies would be classified as a form of endogenous development on Picchi's (1994) definition. Second, the emphasis on local self-sufficiency is unrealistic in contemporary markets. For example, indigenous Small and Medium Sized Enterprises (SMEs) are widely perceived as an important building block for endogenous development. However, the success of rural SMEs in sparsely populated, low valued added local markets, often hinges on successfully accessing larger, urban markets (Gorton, 1999). The question thus becomes how 'local circuits of production, consumption and meaning articulate with extra-local circuits' (Lowe *et al*., 1995, p.93).

d) Neo-endogenous

Neo-endogenous development rejects the polarisation of exogenous and endogenous development models (Terluin, 2003), recognising that development will emerge out of the interplay between local and external forces (Lowe *et al.,* 1995). The local level has to interact with extra-local circuits of production and consumption so that:

> *"While the resourcefulness and resilience of local businesses, households and community groups are crucial, other organisations with national and global connections also have a vital role to play in linking into broader circuits of capital, power and knowledge" (Lowe, 2008, p.9).*

The critical issue is to develop local institutional capacity to be able to 'both mobilise internal resources and to cope with the external forces acting on a region' (Ward *et al.*, 2005, p.5). Ray (2000) argues that critical to local institutional capacity is human and social capital. Given the importance of human and social capital, 'soft connections' and informal networks are important mechanisms for local development activity. He argues that community initiatives such as LEADER are particularly suited to fostering neo-endogenous development. This is because, Ray (2000) argues, development should be defined by local needs, problems and capacities based on an integrating 'network' approach recognising the inter-relationships between economic, socio-cultural and physical resources. However to date, neo-endogenous development theory has suffered from a lack of supporting, rigorous empirical evidence (Ward *et al.,* 2005).

3 Regional Case Studies: Choice and Profile

Choice of case study regions

Case study regions were selected in terms of their ability to offer 'successful' experiences of rural transition following accession to the EU. The choice of the five regions (BMW [Ireland]; the Autonomous Community of Navarra [Spain]; the county of Skåne [Sweden], the Tyrol Region [Austria] and the Altmark Region [of the new German Bundesländer]) was based on multiple factors. It is first important to note that 'success' is a relative term. The success or otherwise of a local rural area may be measured against the norms for urban areas in its region, or against the regional average. The success of a region might also be measured against the national average or against the average for the EU as a whole. Usually a series of socio-economic and demographic indicators, such as the contribution of the region to the economy as a whole, regional GDP/person, employment and unemployment rates, rate of birth and life expectancy, are used to quantify the 'success' or otherwise. The list is, however, non-exhaustive. Furthermore, with one exception (Skåne) all the regions are classified as predominately or intermediate rural. Although agriculture has declined over the years, both in terms of contribution to the regional GVA and labour force, the sector remains significant. It is also crucial that success in local rural development be understood in the particular context of the performance of the Member State.

The development of the BMW region in Ireland is remarkable in this respect. Although, the economic growth in the BMW region has been lower than that for Ireland's other NUTS 2 (Southern and Eastern) region and lower than the Irish national average, economic growth in BMW remains significantly higher than the norm for the EU as a whole. GDP per capita (euro/inhabitant) increased from 60% of the EU15 average to 106% between 1995 and 2005, which is a remarkable record for a geographically peripheral and sparsely populated region of Europe. Moreover, during the 1980s the region suffered substantial out-migrations and high unemployment rates. Currently, the employment rates are comparable with the national levels and unemployment rate is amongst the lowest within the regions of the EU member states. Until 2006, the BMW region was eligible for EU Objective 1 funds. As regards agriculture, although most of the BMW area is classified as severely and less severe handicapped almost half of the total Irish farmed area and more than half of the total farms are locate in this region. The region also provides 40% of the total Irish agricultural output.

The region of Navarra, by contrast, was a prosperous economic region prior to the entry of Spain to the EU. The country's accession brought even more favourable conditions for further economic development. The region has continued to thrive, with most of the above mentioned indicators well above the national levels. With a regional GDP/capita above 75% of the European average, Navarra was never considered an EU Objective 1 region. More important is the convergence process with EU averages, which has accelerated particularly after the mid-1990, leading to the reduction of the gap between regional and EU levels for most indicators.

The Tyrol region is perceived as a wealthy Austrian federal province, and as well as the Spanish region of Navarra, its economy performed well even prior to the country's accession to the EU. Regional GDP/person is above the national and EU levels. The region has also the third-highest birth rate in Austria and the highest life expectancy amongst the nine federal provinces. Tyrol's agriculture contributes very little to the regional economy directly, but it contributes much more indirectly by preserving the natural and cultural landscape and being integral to agri-tourism. For large parts of rural Tyrol, farming remains at the core of the rural community.

Skåne was selected as the case study region on the grounds that it is considered as the most competitive agricultural industry in Sweden. It has both physical advantages (in terms of climate, topography, soils) and locational advantages (close to a major urban market, export gateways, and a very dynamic labour market, offering many opportunities for off-farm employment). Farm structures are also more commercially orientated in comparison with other Swedish regions. It should therefore be viewed as a region likely to benefit from the wider market access provided by EU membership, rather than from (national and EU) policy aspects of addressing structural or regional handicaps.

The Altmark region has its own particularities as is the only region within the five selected case studies that belongs to a former ex-communism regime. Although the economy of the region has struggled following the reunification of Germany there are some lessons to be learnt from its experience during difficult times. Indeed, rural areas within the region and East Germany as a whole did not benefit immediately from the re-unification as harsh economic conditions led to a sharp decline of (particularly young) population, which left rural areas in search for better employment opportunities.

The remainder of this section provides a more detailed overview of the five selected regions.

Geography of the regions

Administratively, using the Nomenclature of Territorial Units of Statistics (NUTS levels), the individual case studies cover an interesting range of regions. Three regions, i.e. the Austrian Tyrol, the Irish BMW and the Spanish Autonomous Community of Navarra belong to the NUTS 2 level. Skåne is one of the 21 counties which form Sweden, at NUTS 3 level. In Sweden, the counties represent the first administrative and political subdivisions. Altmark Region combines two out of the 11 districts of the Federal State of Saxony-Anhalt (NUTS 2). The German districts (equivalent with counties in other countries) are administrative units which act between the Länder (federal state) and the local/municipal levels.

Tyrol is one of the nine federal provinces of Austria. It is situated in its western part, in the Alps, bordering Italy in the south, Germany in the north, and other Austrian provinces in the west (Vorarlberg) and east (Salzburg and Carinthia). The region is split into nine political districts and has five NUTS 3 subregions. BMW is one of the two NUTS 2 level regions in the Republic of Ireland which covers 13 counties and comprises three Regional Authority NUTS 3 areas: Border, Midlands and West. The region was formed in the late

1990s as part of the Irish Government's strategy for securing future Structural Funds. Ireland was divided into two NUTS 2 regions in the hope that the poorer regions would remain eligible for EU Objective 1 funds. Indeed, BMW retained the status of Objective 1 for the entire period 2000-2006. Navarra, one of the 17 Autonomous Communities of Spain, is located in the north of the country, bordering with France to the north, with Aragon to the east, the Basque Country to the west, and La Rioja to the south. This region is divided into seven agricultural counties (*comarcas*) that are grouped into three major areas: the mountainous area, the intermediate area and the south. The region benefits from a particular administrative and tax system, so-called "regimen foral", which allows for a high degree of legislative and fiscal autonomy.

Skåne is the most southerly of the Swedish counties, and faces the Copenhagen region of Denmark to the west, across the (recently bridged) Öresund channel. The region is one of the most accessible parts of the Swedish territory, both via the new fixed link to Denmark, and the ports of Helsingborg and Malmö (routes to the West and North via the Kattegatt), and Trelleborg (facing Germany and the Baltic). The German Altmark Region comprises the districts of Salzwedel and Stendal. The District of Salzwedel includes five cities and 115 communes, whereas the District of Stendal has 10 cities and 126 communes. The communes are merged into administrative units. Stendal City has the biggest population within the region and is acting as the administrative, social, cultural and economic centre. The City of Salzwedel is the major centre of the district and the second largest within the Altmark Region.

The topography is also diverse across these studied regions ranging from the coastline of the Irish BMW region and low-lying and maritime topography of Skåne to the highest peaks of the Austrian Alps in Tyrol. Navarra, however due to its geographical location, presents a greater heterogeneity of the landscape, from mountainous areas (the Pyrenees) in the north to the semi-arid areas of the Mediterranean climate in the south.

The BMW region occupies almost half of Ireland's total land, but most of it is classified as "severely handicapped" or "less severe handicapped". The Alpine character of Tyrol means that only 12% of its total area is accounted for by permanent settlement, with more than half (64%) of the land area covered by forests and mountain pastures. Merely 9.3% of Tyrol's land area is suitable for agriculture. In Skåne, agricultural land and forestry (taken together) account for 90% of its total area, with large parts of the north characterised by forest as opposed to the flat agricultural lands in the south. Nevertheless, with more than half of its area under arable land and pasture, the region is by far the most agricultural part of Sweden. Permanent grassland and forests characterise the Altmark Region.

Demographic Characteristics of the Regions[3]

Table 2 summarises the importance of the region within each country in terms of area and population.

Table 2 Area and Population in selected EU15 Regions

	Year	Area		Population		Population density (persons/km^2)
		(km^2)	as % of country		as % of country	
Tyrol (AU)	2006	12,648	15	700,427	8.5	55.4
BMW (IE)	2006	33,032	47	1,132,090	26.8	34.3
Navarra (ES)	2005	10,391	2.2	593,472	1.3	57.1
Skåne (SE)	2006	11,027	2.7	1,169,464	15.0	106
Altmark (GE)	2005	4,715	1.3	227,307	9.2*	48.2

Source: based on D1.8 – D8.5; * as % of total Federal State of Saxony-Anhalt (as % of total Germany's population represents less than 0.3).

With one exception, Skåne, all other four regions are classified (using the OECD [1996] and national definitions for rural areas) as predominantly or intermediate rural. Amongst these, the Irish BMW region is the least populated area, with 68% of its inhabitants living in settlements with less than 1,500 people. In contrast, the population of Skåne is very much concentrated in urban areas (over 90%) and less than 1% of population live in areas classified as "sparsely populated"[4]. Skåne is the second most densely populated county in Sweden.

Within the regions, however, population density is widely dispersed and uneven. Moreover, for all regions, the population in rural areas that are close to urban developments (which attract a significant number of in-migrants) has increased, while remote and peripheral rural areas continue to be characterised by net out-migration. For example, in Skåne there is a clear discrepancy between rural areas near to urban centres (i.e. Malmö) and the coast where population levels have increased and northern Skåne characterised by continued negative population trends.

[3] Large parts of this section draw heavily on the individual reports (D8.1 to D8.5).

[4] These are areas which are within more than 45 minutes drive from a settlement according to the Glesbygdvrket (national) definition of rural areas.

Over the years there have been some important changes in the population trends within each region. Most remarkable are, however, the increase of population in the BMW region, and decline of population in the German Altmark Region (Table 3). Although, population in Altmark decreased steadily even before the country's reunification, the trend accelerated after the 1990. This is mainly explained by a low birth rate and net out-migration. The harsh economic conditions that affected the region after reunification led to the migration of a large share of (particularly young) people to West Germany.

Overall, all regions are, like most of the EU, characterised by an ageing population. Changes in population, across the regions, are due to a combination of demographic (e.g. net natural changes, net migration), economic (e.g. employment opportunities and the provision of infrastructure), social (provision of public services) and political factors.

Table 3 Population Change before and following EU Accession

Region	Population	% change
Tyrol - 1992 - 2006	 640,375 700,427	9.4
BMW - 1971 -2006	 852,118 1,132,090	21.8
Navarra - 1981 - 2005	 507,300 593,500	16.9
Skåne -1990 -2006	 1,068,587 1,199,357	12.2
Altmark - 1990 - 2005	 261,175 227,307	-12.9

Source: Deliverable 8.1 to 8.5 and http://www.scb.se/ for Skåne region

Socio-Economic Characteristics of the Regions

The contribution of each region to the country's economy as a whole differs across the case studies. Table 4 presents data regarding GDP and GDP per capita, expressed in current prices and purchasing power parity for two years 1995 and 2005.

Table 4 GDP and GDP per person, case study regions, 1995 and 2005

	Tyrol		BMW		Navarra		Skåne		Saxony-Anhalt*	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
GDP(€millions)	15490.7	21382.6	10242.7	31346.4	7772	15354.2	22509.1	33630.1	38103.3	40299.8
- as % of country	8.5	8.7	20.3	19.4	1.7	1.7	11.6	11.4	2.1	2.2
- as % of EU15	0.23	0.21	0.15	0.23	0.12	0.15	0.33	0.32	0.60	0.47
- as % of EU27	0.22	0.19	0.15	0.28	0.11	0.14	0.32	0.31	0.58	0.44
GDP(PPSmillions)	13341	20704.3	11014.5	25926.4	9010	16920.8	18826.2	28568.5	32238.6	45769.1
- as % of country	8.5	8.7	20.3	19.4	1.7	1.7	11.6	11.4	2.1	2.2
- as % of EU15	0.21	0.21	0.17	0.26	0.14	0.17	0.30	0.29	0.51	0.47
- as % of EU27	0.19	0.19	0.16	0.24	0.13	0.15	0.27	0.26	0.46	0.42
€/inhabitant	23771.9	30794.4	10857	28252.6	14596.7	26270.7	20270.9	28860.9	14662.3	19457.6
- as % of country	103.1	103.3	76.2	72.6	125.9	125.5	92.3	88.4	62.1	71.5
- as % of EU15	131.7	115.5	60.1	106.0	80.8	98.6	112.3	108.3	81.2	73.0
- as % of EU27	162.5	137.5	74.2	126.1	99.8	117.3	138.6	128.8	100.2	86.9
PPP per person	20473	28817.7	11471.2	23367.5	16921.8	28951.1	16954.3	24517.1	11729.4	18441.0
- as % of country	103.1	103.3	76.2	72.6	125.9	125.5	92.3	88.4	62.1	71.5
- as % of EU15	120.7	118.1	67.6	92.6	99.8	114.7	100.0	97.1	69.2	73.0
- as % of EU27	140.0	133.1	78.4	104.3	115.7	129.2	115.9	109.5	80.2	82.3

Source: Eurostat database at http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=fab10000; * data are presented for Saxony-Anhalt region as no data are available for the Altmark Region. PPS = Purchasing Power Standard; PPP = Purchasing Power Parities

The contribution of each region to total GDP varies from around 2 percent for Navarra to 20 percent in BMW. Interestingly, these shares have changed little over ten years. This suggests that overall the regional economies are growing at about the same rate as the national average. Although, all regions have experienced an increase in their GDP, the biggest growth is recorded by the Irish BMW region.

The BMW region has experienced major economic and social transformation since Ireland's accession to the EU in January 1973, despite its predominantly rural character. Understanding this pattern of growth cannot be divorced from national economic trends. The region suffered, particularly during the economic and social hardship of the 1980s, but it started to recover as the domestic economy boomed from the mid-1990s onwards. There

is a continuing move away from agriculture and traditional manufacturing. The regional GDP (expressed in PPS) grew by 135% between 1995 and 2005. This is below Ireland's national average (which rose by 146%) and the rate achieved by the South and Eastern[5] region (149%), but is considerably higher than the average for the EU15 (55%) or the EU25 (57%). Agriculture's contribution to the region's economy declined from 13% in 1995 to 5% in 2004. Over the same period, services expanded from 50% to 63%. These are marked changes in the structure of the economy over a relatively short time period.

Nevertheless, agriculture still plays an important role in the region, but particularly within the country's agricultural sector as a whole. It accounts for 37% of Ireland's total agricultural output. Moreover, despite that the number of people engaged in agricultural activities has fallen, the share of people employed in farming is 12% (much higher than the national average of 7%). Out of 4.4 million hectares of total area farmed in Ireland in 2006, 44% is within the BMW region. Additionally, more than half (53%) of the total number of Irish farms are located in this region.

The BMW region accounts for slightly more than a quarter of Ireland's workforce. BMW experienced high levels of outward migration and high rates of unemployment during the 1980s, but it recovered significantly from the mid-1990s onwards. Levels of employment in the region are comparable currently with the national average for Ireland. Between 2003 and 2005, employment grew faster (from 63.5% to 66.1%) in the BMW region than in the Southern and Eastern (S&E) region.

Per capita GDP in the region, although much smaller than the national average (73%), represents 106% of the EU15 average and 126% of the EU27. With a GDP per capita of approximately €28,300, the BMW region was ranked 33rd within the (81) regions of the EU15[6] in 2005. Within Ireland, the regional (between BMW and S&E) discrepancy diminishes, however, when per capita disposable income is considered, the gap between the two regions narrowing from 13 percentage points in 2000 to 9 percentage points in 2004.

Navarra is a relatively small sized regional economy, contributing less than 2% to Spanish GDP. As in the case of the BMW region in Ireland, the economy of the region has followed closely national trends, with both periods of economic growth and crisis. The regional economy flourished particularly during the first three years after Spain's EU accession, when it experienced much higher rates of economic growth than the national economy and the EU15 average. This was followed by recession and it was not until mid-1990s that a period of economic stability began. However, between 1980 and 2005, Navarra's real GDP rose by an average of 2.7% per annum compared to 3% for the national economy and 2.3% for the EU15. Regional GDP (in PPS) increased by 87% between 1995 and 2005 (Table 4), slightly lower than the national level (which rose by 89%), but higher than the EU15 and EU27 levels.

[5] This also includes the Dublin Region, one of the most dynamic and densely populated areas, and an engine of the expansion of the Irish economy (http://www.dra.ie/profile-dublin.html)

[6] http://www.bmwassembly.ie/region/region-1.html (accessed 17/07/2008)

The agricultural sector plays a relatively small role within the region, and its contribution to Gross Value Added (GVA) and, particularly, employment decreased significantly following accession to the EU. Whereas, in 1984, the sector accounted for 14% of the region's labour force and 8% of GVA, in 2004 it represented only 5% of employment and 5% of GVA (Table A4.7 – D8.3). Services are by far the most important sector within the region, although since EU accession its participation in the regions' real GVA has remained almost constant at around 55%. This is in contrast to the national picture where the relative importance of services continues to rise: for Spain as a whole the number of people employed in the service sector increased from 45% in 1980 to 55% in 2004. There is a small increase (of about 4 percentage points) of the share of industry and construction, which accounts for 40% of the region's GVA and labour force. Until early 1990s, the region experienced a high level of specialisation[7] within agriculture, but since then, the level of industry specialisation has become one of the driving forces of the regional economy.

Navarra also benefits from a higher rate of labour market participation than the national average, and implicitly it has experienced, since accession to the EU, much lower rates of unemployment than the economy as a whole. For example, in 1985 the unemployment rate in the region was 19%, compared with a national average of 22%, whereas by 2005, these figures dropped to 5.6% and 9.2% respectively (Table 5). The level of female unemployment, although significantly below the national average, is still almost double the rate for men.

Table 5 Employment and Unemployment Rates, 2005

	Employment rate* (%)	Unemployment rate (%)
Tyrol	71	3.5
Austria		5.2
BMW	66.1	4.4
Ireland		4.3
Navarra	69.1	5.6
Spain		9.2
Skane	69.7**	8.4
Sweden		7.5
Altmark	60.7**	16.5***
Germany		11.1
EU15	…	8.2
EU27	…	9.0

Source: Eurostat database http://epp.eurostat.ec.europa.eu/extraction/evalight/EVAlight.jsp?A=1&language=en&root=/theme1/reg/reg_lfu3rt; * employment rate of the age group 15-64 as % of the population of the same age group; ** It refers to Saxony-Anhalt and Svdsverige Regions (NUTS 2 level); *** at the end of December 2007 (www.marko-muehlstein.de/english/altmark-stat.htm?

[7] Specialisation index sector "i" is computed as % of real GVA in Navarra of sector I divided by % of real GVA in Spain of sector I (Iraizoz, 2007).

Between 1980 and 2005, real GDP per capita in Navarra grew at higher rates than the national and EU15 averages. Following accession, with the exception of the first year of accession (1986) when Navarra's real GDP/person represented 74% of the EU15 average, the regional figures are well above 75% of the EU average. In consequence, Navarra was never classified as an Objective 1 territory. Even before EU accession, the economic welfare of the region (GDP/capita in real terms) was superior to that of Spain as a whole, and it remains so since. More important for the region, following EU membership, is the convergence towards the EU average. In 2005, Navarra's GDP/person was much higher than the EU27 level and almost equalled the EU15 average.

Skåne, one of the two counties of Southern Sweden (Sydsverige), accounts for 11% of Swedish GDP, and this share has remained almost constant since the country joined the EU in 1995. The county is one of the most accessible parts of the Swedish territory, with Malmö, Sweden's third largest city, located in the southwest part of the region. The decision to build the Öresund Bridge, which links the region to Denmark was extremely beneficial for the region. Malmö has become part of a trans-national city and network of business. The completion of the Öresund Bridge has affected not only employment in the urban areas of the region, but rural areas close to Malmö. Railway stations are also being transformed. Commuting has become more frequent and real estate prices are increasing in what were previously seen as peripheral areas of Skåne. The transformation has also affected residential choices, with 3,500 Danish people moving to the region in 2005. As in the previous case studies, the tertiary sector is the most important within the region accounting for 81% of regional GDP and 82% of its labour force. Between 1999 and 2005, the contribution of this sector increased by more than a third. For the same period, the share of agriculture within regional GDP dropped by 17%, accounting for by 2005 for only 1.3% of regional GDP and 2% of the economically active labour force. However, Skåne remains important when Sweden's agriculture is considered as a whole and the region's farming is believed to be the most competitive in the country. Some 18% of total employment within the region is linked, directly or indirectly, with the agro-food industry, which also provides 10% of total regional GDP.

Employment rates (total and by gender) are lower, and self-employment rates higher, in Skåne than in Sweden as a whole. The incidence of higher education qualifications in the workforce is above the national average. This is in part due to the presence of one of Sweden's largest universities (Lund). Unemployment rates (male and female, youth and long-term) are all higher in Skåne than the national average levels.

At €28,860 per capita, regional GDP is lower than the national average (€32,633/person), and its share has decreased from 92% to 88% between 1995 and 2005 (Table 4). When expressed in PPP, Skåne's GDP/person is slightly lower than the EU15 average but higher than that of the EU27. The lag between the region and the Swedish average still persists even when the (average) Net Disposable Income is considered, although this has risen considerably in both Skåne and Sweden as a whole, since the difficult times of the late 1990's.

Tyrol, Austria's most mountainous federal province, is perceived to be a relatively wealthy region which accounts for 9% of the country's GDP. Its gross income is mainly generated from tourism and the associated retail market, and industry with its services. Winter and summer tourism is extremely important, making Tyrol one of the top 20 tourist regions within the EU27. Thus, services account for most (70%) of the GVA of the region, followed by the secondary sector (28.7%), both of which have increased since EU accession. The primary sector accounts for only 1.2% of regional GVA (basic prices). However, although agriculture contributes a very small share of regional GDP, as in most mountainous areas of Europe, it is considered to play a central role in maintaining the natural landscape and preserving cultural heritage. Following Austria's accession to the EU, Tyrol's economy has performed well, its GDP (in PPS) increased by 55% between 1995 and 2005. This is slightly higher than the national average of 50% and equal to the EU15 level. The unemployment rate in Tyrol has traditionally been below that of the Austrian average (3.5% versus 5.2% in 2005), but female unemployment remains above the national level. Employment opportunities in tourism and also industry, plus the attractive scenery has attracted an increasing number of in-migrants, which has led to steadily rising population figures. There are, however, some significant discrepancies between its (NUTS 3) sub-regions. For example, in Osttirol and Tiroler Oberland, the unemployment rate is almost double that of the regional average. Tyrol is also characterised by a very high rate of self-employment, with the majority of farmers part-time.

Total Tyrolean GDP per capita compares favourably with the Austrian average. Although the region experienced a slight fall in the first three years after EU accession, it finally caught up again after the turn of the millennium and has remained three percentage points above the Austrian average from 2003 onwards. Moreover, this is higher (by 18 percentage points and 33 percentage points, respectively) than the EU15 and EU27 average (Table 4). Interestingly, GDP/person as percentage of EU15 and EU27 levels has fallen slightly compared to the level at the time of accession. This may be explained by the increase in the number of people within the region, but also it may suggest a catching up process in the new EU member states. Within the region, Außerfern has witnessed remarkable economic growth. Immediately after EU accession, the GVA per person was below the Austrian average. By 2005, it was nearly 15% above the Austrian average, with Außerfern coming out top of all Tyrolean NUTS 3 regions.

The Altmark Region is located in the Federal State of Sachsen-Anhalt, part of the ex-Democratic Republic of Germany. The region covers 25% of the federal area and accounts for 10% of its population. Data for the Altmark region are rather scarce, thus a more detailed analysis is difficult. However, where data are missing at the level of the region, information is provided for the Federal State. Sachsen-Anhalt is a small economy: it provides only 2% of the total GDP for Germany as a whole. Like the entire East Germany, Altmark suffered from the repercussions of the former communist regime. During the socialist era, heavy and light industries dominated the regional economy, with agriculture being less important. After the re-unification of the country and the change of the political regime in 1990, most of the industries of the region collapsed and agriculture recovered to some extent. Currently, Altmark is a predominantly rural area, characterised by a strong primary sector (agriculture and forestry), a small number of large-scale but modern industrial enterprises (cellulose and paper industry) and small and medium enterprises in the manufacturing sector. Tourism is most important within the tertiary sector, but Information and Communication Technology (ICT) services are growing rapidly.

Nevertheless, since the re-unification process, the regional economic structure is highly unbalanced and poorly diversified. The region also suffers from a weak infrastructure, with substantial problems in ensuring the provision of basic services, like medical care, public transport, retail shops or schools and professional education. All of these problems contributed to significant net out migration (between 1990 and 2005). However, the decline of the regional population is lower than that of the entire federal state of Sachesen-Anhalt. Altmark is also characterised by a low birth rate. Out-migration of the young generation to more economically attractive areas in Germany continues, contributing to a rapidly rising share of elderly people.

While overall unemployment rates have declined during the last two years, they are still very high within the region. They are much higher than the unemployment rates of the Federal State of Sachsen-Anhalt (16%) and the entire Germany (11%) (Table 5). As expected the average GDP/person within the region is much lower than the national and EU averages. However, although, overall, Altmark has not performed economically very well since the country's re-unification it is believed that the region has considerable potential for future development.

4 Agriculture's Role in Rural Development

To evaluate to what extent the selected regional case studies follow the existing theoretical approaches to rural development it is critical to understand what is the function of the agricultural sector within each regional rural economy. To what extent do the regions fit with agrarian based or alternative models of rural development?

Table 6 indicates that agriculture's role within the regional economy has declined in all regions in terms of both contribution to the GVA of the region and labour force. However, in terms of employment, agriculture remains particularly important for the BMW, Navarra and Altmark regions. Despite the fact that the number of people employed directly in the BMW agriculture decreased by 27%, between 1994 and 2003[8], the sector still employs a significant share (12%) of the region's labour force. Interestingly for the same period the number of people employed in manufacturing industries increased by 21% and by 142% in construction. Navarra also presents some interesting figures. Whereas the contribution of agriculture to the regional economy declined by a third between 1984 and 2004, the share of labour force dropped by almost two-thirds. Agriculture labour productivity in this region has increased in real terms by 55% between 1984 and 2004, being much higher than the national level (Ezcurra and Iraizoz, 2007). Agriculture and the food industry accounts for 9% of the total regional exports.

Table 6 Agriculture's Contribution to GVA and Labour Force by Regions

	GVA (as % of total region)	Labour force (as % of total region)
BMW		…
- 1995	13.4	
- 2004	4.7	12.4
Navarra		
- 1984	7.5	14.0
- 2004	4.9	5.3
Tyrol		
- 1995	1.8	…
- 2005	1.2	1.2
Skåne		
- 1999	1.6	2.4
- 2005	1.3	2.0
Altmark	…	5.2*
- 2005		

Source: D8.1 to D8.4; * it refers to agriculture and forestry at 30.06.2006 (www.marko-muehlstein.de/english/altmark-stat.htm?

[8] www.bmwassembly.ie/Research%20&%20Policy/Research%20&%20Policy%20docs/employment.doc

For Tyrol and Skåne, agriculture contributes a very small share to the economic output of the regions. Statistics for the Altmark region are not readily available. The region is however recognised as having traditional strengths in agricultural and forestry sectors, as the light sandy soils are suitable for this type of activities. Agriculture and forestry together employ some 5.2% of total regional labour force (Table 6).

Agricultural Output, Land Use and Farm Structure

Livestock, mainly beef and sheep, predominates in the BMW the region. The decline of the dairy sector, which affected the whole country after the introduction of milk quotas, was particularly significant in the Borders and West. The consequence was a shift from dairy to specialist beef farms. Currently, the BMW region has the largest number of specialised beef, sheep and mixed grazing livestock farms in Ireland. In Tyrol, as most of the land area is mountain pastures and forest, less than 10% of land is used for agriculture, and livestock production dominates. Crop production, which are more prevalent in the flat areas, account for no more than 20% of regional agricultural output. Agricultural output in the region of Navarra is more balanced. Crop production, particularly cereals and horticultural products, still remains most important, but in recent years there is a noticeable growing contribution of the livestock sector (e.g. pigs, cattle and milk). More than half of the arable land in Skåne is used for crop production, particularly cereals. The county provides between 25% and 30% of the total cereal production of Sweden and more than one third of the country's winter wheat. Pig, poultry and beef are particularly important, with the region providing 30% and 20% of Sweden's pig and poultry output respectively.

Table 7 Agricultural Land, Number of Farms & Average Farm Size by Countries and Regions

Country/Region	UAA (1000 ha)	No of farms	Average size (ha/farm)
Ireland (2005)	4,307	133,000	31.8
BMW			
- 2005	1,936	70,000	27.6
- 1991	…	88,816	20.6
Spain (2005)	24,855.1	1,069,700	23.2
Navarra			
- 2005	588.6	17,790	33.0
- 1990	657.4	30,810	20.0
Austria* (2005)	7,569.3	189,591	39.9
Tyrol*			
- 2005	1,222.6	16,846	72.6
- 1995	1,189.9	20721	57.4
Sweden (2005)	3,216.8	75,808	42.4
Skåne (2005)	517.7	9,783	53
Germany (2005)	17,035	390,000	46.0
Altmark (2006)	275	1,600	211
EU15 (2005)	130,331	6,284,000	20.7

Source: D8.1 to D8.5; 1 ESU = €1,200; * it includes agricultural and forestry area and holdings

Although the BMW region covers 45% of the total Irish farmed area most of the land is classified as severe or less severe handicapped. Hence, the geography of the region influenced farm types, methods and structure. Most of the region's agricultural land is under pasture (47.3%) and rough grazing (17.2%); cereal crops (mainly wheat) accounts only for 3%. More than half of Ireland's farms are located in the region. With an average size of around 28 ha, farms in BMW are much smaller than the national average. Navarra accounts for only a small share of Spanish agricultural land and total number of farms. About two-thirds of the agricultural area is classified as Less Favoured Area (LFA), and the share of holdings in this area has increased from 55% in 1990 to 62% in 2005. The average farm size at 33 ha/farm is higher than the national average of 22 ha/farm. More than half (58%) of its Utilised Agricultural Area (UAA) is used for crops (particularly cereals, fruits and vegetables) the rest being pastures.

Given its Alpine climate, Tyrol differs significantly from the BMW and Navarra regions as regards land use. Most of its land (37%) is forest, 34% is farmland and the rest is classified as unproductive. Within the farmland category mountain pastures, pastures and grassland accounts for almost 96%. Hence, only a very small proportion is used for arable crops. The Tyrolean average farm size appears rather high (at 73 ha/farm), but the available data on farm size includes both agriculture and forestry holdings. The national average farm size is around 20 ha[9]. Forest land is also important in Skåne (as 31% of its land area is covered by forest). However, with 53% representing arable land and pasture, Skåne is by far the most agricultural part of the country. More than half of the arable land is used for cereals and about a fifth for other cash crops. With cereal yields well above the Swedish average, the region provides between 25% and 30% of the total cereal production of Sweden. In Altmark more than 25% of its UAA represents permanent grassland, the region accounting for the largest share within the federal state of Saxony-Anhalt. Besides some fertile soil, most of the arable land is of a poor quality due to water logging and low natural fertility.

From Table 7 it is clear that farm structure across the regions have undergone significant change. With one exception (Altmark), a severe decline in the number of farms and an increase in the average farm size have taken place in all regions. Nevertheless, the decline has affected mostly small-scale farms, which either exited the industry or were amalgamated within larger and more viable units. For example, in BMW, between 1991 and 2005, the number of farms declined by 21% whereas the average farm size increased by almost a third. Interestingly, in Ireland, the reduction in the number of farms and the process of farm extension were rather slow until the beginning of the 1990s. This was caused by a long Irish family tradition, with land transferred from one generation to another, and a limited land market (Lafferty *et al.*, 1999). As regards categories of farms, those with 100 hectares and over represent less than 2% of total farms in the region as opposed to 4.5% in the S&E region. While the mean farm size has increased, countertrends are apparent at the extreme: between 2003 and 2005, the number of very small farms (less than 5 ha) increased (by 4%) whereas the number of very large farms (>=100 ha) declined (by 8%). This phenomenon has recently been observed and in Sweden. Copus and Knobblock (2007) argue that this does not necessarily mean an increase in farming activity, but rather the effects of the implementation of the Single Farm Payment Scheme (SFPS).

[9] This refers only to agricultural holdings (forest excluded) (http://www.rlg.nl/cap/austria.html)

Like in Ireland, the cultural ties with family land are strong; hence tenancy agreements were more common than purchase. People who previously let out their land and received no CAP payments (but benefited from the rent) are now determined to stop this practice in order to receive the benefits of the SFPS. Skåne follows similar trends as Sweden, except that after 2000 the decline of medium size holdings (51-100 ha) was more rapid.

In Navarra the process of farm expansion although gradual was more intensive. The region lost almost half of its farms, between 1990 and 2005, whereas the average farm size increased by 65%. Moreover, following accession, the region also experienced an increase in the volume of rented land, reflecting a more flexible system of land tenancy.

In the case of the Altmark region, after re-unification, farm structure underwent a reverse process of that experienced in western European countries. The dissolution of the large farm-collective entities led to an increase in the number of small-size individual farms and a decrease in the average farm size. Nonetheless, the average size of farms in the region remains very high (e.g. 211 ha) as compared with western European standards. Average farm sizes vary between 90 hectares for individual farms and 960 hectares for legal entities (e.g. Limited Liability Companies and Joint Stock Companies). In the federal state of Saxony-Anhalt, more than 40% of all farms cultivate in excess of 100 hectares and about 6% more than 1,000 ha. Farms larger than 100 ha account for approximately 94% of the UAA of the federal state.

Farming is almost entirely a family business in all regions, except in Altmark, despite the fact that in recent years there has been a clear reduction in the labour input provided by family members, expressed in Annual Work Units (AWUs) (Table 8). For example, in 2005, 95% and more than 84% of total AWUs in Ireland and Austria were provided by family members. In Spain the comparable figure was 65%. More interestingly, in Ireland, the decline of family labour force is particularly significant for holders of small size farms, with cattle and sheep, and spouses and other family members in farms of an intermediate size. This might explain the increase in off-farm employment which has become more widespread in recent years. Overall in Ireland, the proportion of farm households with off-farm jobs by holder/ and or spouse in 2005 was 58% and this figure almost double to that in 1993 (National Farm Survey, 2006, Teagasc). In BMW regular non-family workers account only for 4.4% of the total agricultural labour force in the region, and in one out of three farms the holder has agriculture as a subsidiary occupation or is not engaged at all in farm work. For just over half (53%) of total family farms in the region, the holder has agriculture as sole occupation.

Table 8 Agricultural Labour Input ('000 AWUs)

	Ireland		Spain/ Navarra		Austria		Sweden	
	1991	2005	1990	2005	1995	2005	1995	2005
Total labour	253.7	148.6	1,143/18.05	997.8/15.02	198.1	165	87.67	72.16
Family labour as % of total	234.2	141.7	852.7/14.69	652.4/10.03	178.1	141.3	65.05	54.3
Regular non-family workers	11.0	7.0	290./3.36	345.4/4.99	20.1	23.7	22.62	17.86

Source: D8.1, D8.2 and D8.3

Another important characteristic for all regions, including Altmark, is the increasing share of part-time farming compared to full-time employment. This phenomenon is particularly significant in Austria and Germany. For example, only 38% of total agricultural holdings in Tyrol in 2005 were managed full-time. In Germany, only 45% of individual farmers worked full-time. Within Germany the share of individual farms working part-time is higher in East Germany (65.2%) compared to the West (54.4%). While the proportion of legal entities in Eastern Germany is significant, Wolz and Reinsberg (2007) note that even when these are included the majority of farms are run part-time. Interestingly, the share of cultivated area by part-time farms accounts for only one quarter of total; hence part-time farms are, on average, relatively small. In Spain and Ireland, the proportion of part-time farmers is lower than in Germany and Austria (42% in Ireland and 45% in Spain). Nonetheless, in both countries, there is a clear ascending trend toward part-time farming. The high share of part-time farming shows that the most of the farms have other gainful activities outside of agricultural production (OGA) and off-farm employment contributes significantly to the welfare of farm households.

Other Gainful Activities

In the BMW region, the number of farms reporting OGA has steadily increased and accounted for 2,600 holdings in 2005. Rural tourism is the most popular, with 20% of the farms with OGA being engaged in this activity. Contractual work is also common. However, the share of farms with OGA in BMW (3.7% of the total number of farms) and Ireland as a whole (4.5% of total farms) remains modest. The number of farms which were engaged in OGA is also modest in Spain, where only 3.3% of total farms[10] were recorded as having OGA in 2005 (Benoist and Marquer, 2007).

The share of farms with other OGA is much higher in Sweden, where almost 30% of total farm holdings have other gainful activities directly or not linked to agriculture. In Skåne, in 2005, 21% of holdings were recorded as having an OGA directly linked to agriculture and some 16% with OGA not directly linked to farming. In Austria, agriculture diversification and other related activities such as food processing, direct sales or farm cooperation (contractual work) are also very important. Almost a quarter of farmers have some other gainful activity outside of agricultural production (or 'secondary agricultural activities'). Processing of agricultural and forestry products (e.g. cheese) is the most important secondary activity, with 48% of holdings with OGA engaged in it. Rural tourism also represents one of the major off-farm sources of income. At least one in three holdings (34%) with secondary activities was engaged in tourism in 2005. A 'farm holidays' initiative has proved to be very successful, attracting a substantial number of tourists. Some 10% of Austria's total accommodation capacity is directly on farms and other non-farm activity holdings in rural areas. Contractual work is undertaken by around 30% of farms with OGA, and most of the farms which practice this activity have in excess of 50 hectares. Interestingly, there has been a gradual increase in the number of holdings involved in the generation of renewable energy (2% of farms with secondary activities in 2005). In recent years, biomass (e.g. wood and arable crops) has become a source for energy production.

[10] Total farms refer to agricultural holdings with an economic size of at least 1ESU.

Farm Income

Whilst agricultural input labour continues to decrease, farming is becoming more of a part-time activity and the number of farms on which the holder and/or spouse takes up off-farm work is on the rise. Indeed, farming is not any more the main source of income for farm households. For example, the contribution of farming for an Irish farm household has almost halved from 58% of total gross income in 1980 to 33% in 2004, whereas the share of other direct income increased from 26% of total gross income to 52%, for the same period. Table 9 presents the change in the average annual household disposable income in Ireland, emphasising the distinction between farm households, non-farm rural households and urban households.

Table 9 Average Annual Household Income in Ireland, 1994 and 2004 (€)

	Farm Households		Non-farm Rural Households		Urban Households		Average	
	1994	**2004**	**1994**	**2004**	**1994**	**2004**	**1994**	**2004**
Farming income	12,653	14,382	397	0	43	0	1,319	1,138
Off-farm employment	7,315	21,692	13,209	29,747	17,878	44,084	15,595	37,819
Other direct income	928	806	1,384	745	2,418	1,407	1,993	1,152
State transfers	2,762	6,825	4,177	9,151	3,803	9,551	3,809	9,210
Gross income	23,658	43,704	19,168	39,644	24,128	55,042	22,716	49,319
Disposable income	21,191	35,898	16,168	32,047	19,380	42,383	18,664	38,630
Person per household	3.6	3.1	3.3	2.74	3.2	2.97	3.28	2.91
Gross income /person	6,514	14,076	5,794	14,486	7,504	18,556	6,398	16,976
Disposable income/person	5,834	11,562	4,887	11,710	6,027	14,288	5,692	13,297
Gross income as % of average	104.1	89	84	80	106	112	100	100
Disposable income as % of average	113.5	93	87	83	104	110	100	100

Source: D8.2 – Table 29

The distribution of income is very much related to farm size and type of business, but also varies also across the regions within each country. For example, family farm incomes in the BMW region are much lower than in the S&E region. Family farm income in the BMW region amounted to on average €17,184 in 2004, compared to €28,395 in the S&E region. The distribution of income varies considerably between farms according to the enterprise mix, e.g. from €35,898 for a dairying farm to just €10,780 for a cattle rearing farm. There is also a large variation within the BMW region itself, with farms in the West area having a family income of just €13,994 as opposed to €27,395 for a farm in the Midlands or €16,527 for a Border farm.

In Austria, in 2005, agriculture and forestry (output including subsidies minus variable and fixed costs) contributed 53% of average farm household income compared to 30% being derived from non-farm earnings, and 17% from transfer payments (e.g. child benefits and pensions). The figures for Tyrol are roughly comparable: 62% of farm income on average is derived from agriculture and forestry, 22% is non-farm earnings and 16% are transfer payments. Mean farm household income in the Tyrol region is well below the Austrian average (by 14% in 2005 and by 18% in 2004). In Germany, official estimates indicate that about 80% of all farm households have at least one other income source outside of agriculture.

Common Agricultural Policy support payments have become an increasingly important component of farm household incomes for farms in all selected regions. Direct payments are, however, crucial for farms in Ireland, particularly in the BMW region, as they account for the largest share of family farm income, e.g. 98% of total Irish farm income in 2006. Within the BMW region the share of direct payments in total family farm income varies between 100% in the Midlands and 113% in the Border sub-region. There is however a wide variation of the distribution of direct payments across farm sizes and enterprise mix. The larger the farm, the higher the share of direct payments received. For a specialist dairy farm the proportion of direct payments represents almost a third of family farm income whereas for cattle rearing and sheep farms the share is well above 100% (in 2005). The majority of the farms in the BMW region are beef and sheep producers.

In Sweden, the distribution of direct payments (calculated as % of total farm income) varied between 17% for a mixed farm and 46% for a beef producer, in 2005. Dairy farms were dependent upon direct payments for 20% of their receipts, whilst cereal farms received between 20% (small farm) and 29% (large farm) of income from direct payments. In Tyrol, direct payments accounted for 27.3% of family farm income in 2005.

5 Conclusions

This report examined broadly, in the light of competing theories of rural development, the socio-economic and agricultural performance of five regions in established EU member states: BMW (Ireland), Navarra (Spain), Tyrol (Austria), Skåne (Sweden) and Altmark (Germany). The regions were selected because of their ability to offer 'successful' experiences of rural transition following their countries accession to the EU. More closely the report focused on the role of the agriculture in these five regions trying to evaluate to what extent they fit with the agrarian-based or alternative models of rural development.

The case study evidence reveals that the economic performance of regions has been closely tied to that of their respective nation state. No region's trajectory has been due solely to endogenous factors. Similarly no region has been insulated from national/global trends or grown entirely due to internal, endogenous factors. There is therefore little evidence of purely *endogenous development*. Rather it is the combination of internal (endogenous) and external (exogenous) factors and their interplay which drives the development of these regions. This combination of endogenous and exogenous forces is consistent with neo-endogenous development theories. Nonetheless, much of the economic growth within these rural regions is not necessarily in line with the *spirit* of neo-endogenous theory, which rests upon the strategy of enhancing local capacity and actors' participation so to steer development to best meet local needs.

In explaining the trajectory of agriculture, the CAP plays a central role. Direct payments make a significant contribution to farm income in all regions, especially in Ireland. However, despite substantially policy support, the growth in farm incomes has not kept pace with non-agricultural occupations. The degree to which farm based development can be the mainstay of a prosperous rural economy is severely questioned. In all regions, agriculture's share of employment and GVA has declined. Farm centric models of rural development are unlikely to benefit some of poorest groups, as evidenced in Altmark. In fact one consequence of successful growth in agricultural productivity is a sharp decline in farm employment.

Only in Tyrol is there clear evidence of 'multifunctional agriculture' delivering wider economic benefits, leveraging significant agri-tourism. A key question for the New Member States will be whether such other gainful activities can be developed in conjunction with agriculture in their own mountainous regions.

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