Rural Jobs and the CAP: Spitting into the Wind?

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Abstract

The European Parliament's Committee on Agriculture and Rural Development (COMAGRI) has recently drafted an own-initiative report "How Can the CAP Improve Job Creation in Rural Areas?" However, the creation or maintenance of jobs is not one of the CAP's original (and still operational) objectives. Moreover, assessing the "success" or "failure" of the CAP in terms of job creation is a complex matter, particularly considering gross *versus* net job creation (including off-farm diversification by farm family members), or side-effects in the sense of job losses or gains in different sectors. How should agricultural economists address this topic, which is clearly of political importance but seems to require the reversal of long-term trends in EU agriculture? This paper suggests a number of questions, with a particular emphasis on the trade-off between employment and productivity, and the respective role of the two CAP Pillars. Some evidence from Ireland is presented to support the argument.

Keywords: employment, EU, CAP

1. Background

The creation or maintenance of jobs is not one of the CAP's original (and still operational) objectives, and the employment aspects of the CAP (or the lack of them) have hardly been a focus of research by agricultural economists in Europe. Insofar as employment with respect to the CAP has been implicitly or explicitly debated, it has been in the context of the CAP slowing down structural change in agriculture and keeping in operation more (and relatively inefficient) farms, and consequently farmers, in comparison to what would have happened under different conditions. Empirical analyses have indeed shown that higher subsidy

payments and output prices have lowered farm exit rates in some European countries (Breustedt and Glauben, 2007; Tocco *et al.*, 2013a). However, there has been a change in rhetoric since Agenda 2000 and the creation of Pillar 2, with the latter's formulation of the objective to improve the quality of life in rural areas and to encourage diversification of economic activity, both of which may have employment effects.

The employment impact of the CAP has moved higher on the political agenda with the Europe 2020 strategy "*to create the conditions for smart, sustainable and inclusive growth*", with targets to "*raise the employment rate of the population aged 20–64 from the current 69% to at least 75%*" (EC, 2010). For the period 2014-2020, one of the three long-term strategic objectives of Pillar 2 is "*to achieve a balanced territorial development of rural economies and communities including the creation and maintenance of employment*" (Official Journal L347).

In response to these strategic documents, the European Parliament's Committee on Agriculture and Rural Development (COMAGRI), based on the own-initiative procedure, has recently produced a draft report on "How Can the CAP Improve Job Creation in Rural Areas?" (EP, 2016a) which was presented at a plenary session of the Parliament on 27th October 2016. The report "*calls on the Member States and their regions to shift the focus of their rural policy to job creation and calls on the Commission to assist them in achieving this objectiv*e". Particular emphasis is put on support to small and medium-sized farms, since due to their often diversified nature they may be able to create "territory-based jobs".

Employment within territorial development is set as a CAP objective for 2014-2020 alongside sustainable land management and viable food production. Sustainable land management must avoid over-exploitation of natural resources, which may prevent or make costlier the creation of job-providing enterprises, at least in the short term. Viable food production requires attention to greater competitiveness, which may involve labour-saving technologies rather than job creation. However, a more competitive agri-food sector may actually lead to a bigger farm sector, with consequently more off-farm jobs in ancillary industries which could more than compensate for any loss of on-farm employment. These indirectly generated jobs in the product chains for food, drink and biofuels are often important in rural areas.

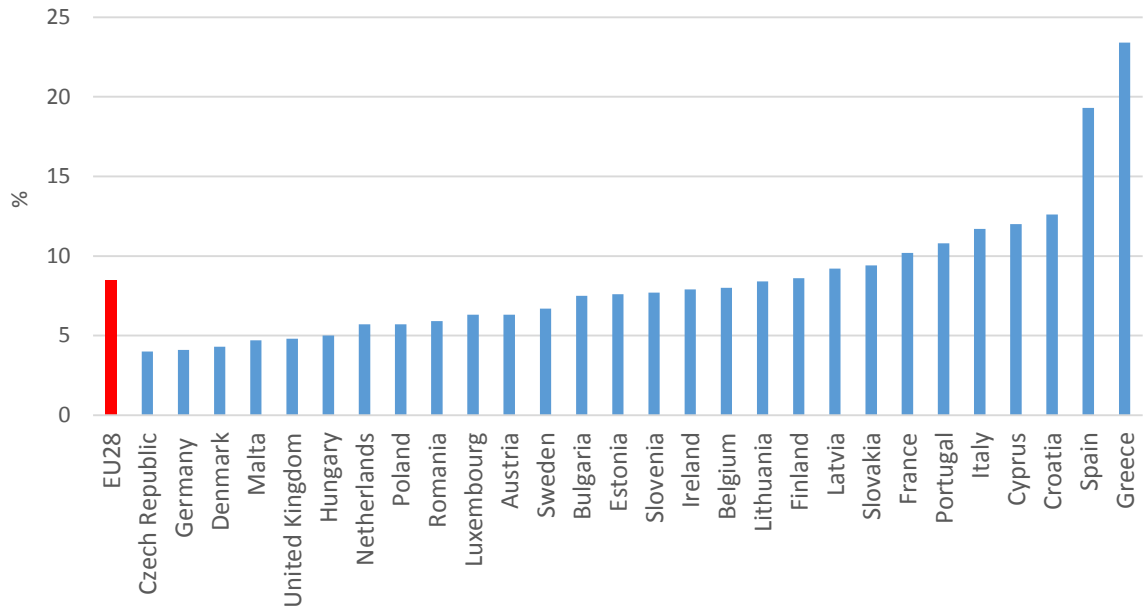
It also needs to be recognised that for many years the CAP has already sought to maintain the level of agricultural employment, or at least to slow its decrease in the face of technical and

structural change, and urban attractions. Its successes in this respect may limit its ability to move further in the direction of job creation or job maintenance in primary agriculture. Moreover, alongside "pure" technical change such as higher-yielding varieties of crops and livestock, the greatest source of raised productivity in the agricultural (and food) sector over the last century has been the substitution of capital for labour. For example, Kawagoe, Hayami and Ruttan (1985) found increasing returns to scale in developed countries, which they explained by increasing substitution of large machines for labour. This process seems likely to continue, and, with few prospects of increased demand, implies fewer jobs in the EU agri-food sector. Therefore, we must consider the conflicting agendas of more jobs and increased productivity, both within farming, and in sectors associated with it.

Therefore, assessing the "success" or "failure" of the CAP in terms of job creation is not a simple matter, since the effects of the CAP on rural jobs are complex, and may work in opposite directions. It also raises methodological issues, particularly considering gross versus net job creation (including off-farm diversification by farm family members), and side effects in a sense of job losses or gains in different sectors.

Unemployment rates vary considerably across the Member States of the EU, and so does the prominence of unemployment in the policy agenda. The latest Eurostat data (September 2016) show substantial differences in seasonally adjusted unemployment rates (Figure 1).

Figure 1: Unemployment Rates, Seasonally Adjusted, September 2016



At a national level, unemployment is obviously a much more serious concern for governments in Greece and Spain than in other Member States. However, national statistics may mask the unemployment problems that exist in many rural areas of Member States that boast quite healthy overall employment statistics. Rural development statistics (EC, 2016) show that rural unemployment rates are highest in Spain, at 16.2 %, but are also in the double-digit range in Bulgaria, Estonia, Ireland, Greece, Latvia, Lithuania, Hungary and Slovakia. Only Ireland and some central and eastern EU Member States recorded higher unemployment rates in predominantly rural regions than in other types of regions. By contrast, predominantly urban regions observed the highest unemployment rates in some western and southern Member States.

In view of the above, it is timely to start a discussion among agricultural economists about the "employment" objective of the CAP. First, we present a brief literature review (Section 2), and then some data at EU level (Section 3). In Section 4, a number of questions for agricultural economists are set out, with some initial discussion. Section 5 presents some data from Ireland, which has experienced notable fluctuations in both agricultural and general economic conditions over recent years. The paper concludes with some suggestions for further discussion.

2. What can we learn from previous studies?

A study conducted for COMAGRI reviewed 53 pieces of research (EP, 2016b), and investigated the impact of CAP on rural employment, addressing both its direct and indirect effects. The indirect effects were studied through the CAP's impact on incentives to produce and thus on agricultural exports, on substitution of capital for labour and intensification of agriculture, on potential reduction of support prices accelerating farm exit. The bulk of research focused on qualitative regional case studies, or estimated the association of CAP expenditure with employment within some regions or Member States (Mattas *et al*., 2011; Petrick and Zier, 2011; Fieldsend, 2011; Nordin and Blomquist, 2014). Very few academic studies cover all or most of the regions in the EU Member States. One of the recent studies with a large geographical coverage focused on the migration from agriculture across 149 EU regions over 1990–2008 (Olper *et al*., 2012). In addition, two studies on employment in rural areas, financed by the European Commission, have been published: the *Study on Employment in Rural Areas* (SERA) (Copus *et al*., 2006), and the *Study on Employment, Growth and*

Innovation in Rural Areas (SEGIRA) (Ecorys, 2010). Information about the effect of particular Pillar 2 measures on gross employment is contained in the Mid-Term Evaluations (+s) of Rural Development Programmes (RDPs).

The results of quantitative studies are inconsistent. For example, the most comprehensive (according to coverage) study by Olper *et al*. (2012) concluded that "*Overall, CAP payments contributed significantly to job creation in agriculture, although the magnitude of the economic effect was rather moderate. We also find that Pillar I subsidies exerted an effect approximately two times greater than that of Pillar II payments*". On the other hand, a geographically smaller study of three East German states – Brandenburg, Saxony, and Saxony-Anhalt – reports that direct payments have led to labour shedding, whilst the only measures which contributed to an increase in employment were the agro-environmental ones (Petrick and Zier, 2011). This was in particular due to the support for conversion to organic farming. A paper looking beyond agriculture found positive spill-over effects of the CAP payments on non-agricultural small and medium-sized enterprises (SMEs) – rural and urban – in the UK, with a much stronger effect of Pillar 1 single farm payment (Rizov *et al*., 2016)

A more macroeconomic approach was taken by Nordin and Blomquist (2014) using data at municipality level in Sweden. They estimated the effect of CAP support on employment and unemployment outside agriculture, the so-called second-order effect (fiscal multiplier effect) using an open-economy relative multiplier. The findings indicate a positive effect of direct payments on agricultural and private employment (stemming mainly from agricultural purchases and production), but a negative one on public employment, suggesting displacement between public and private employment.

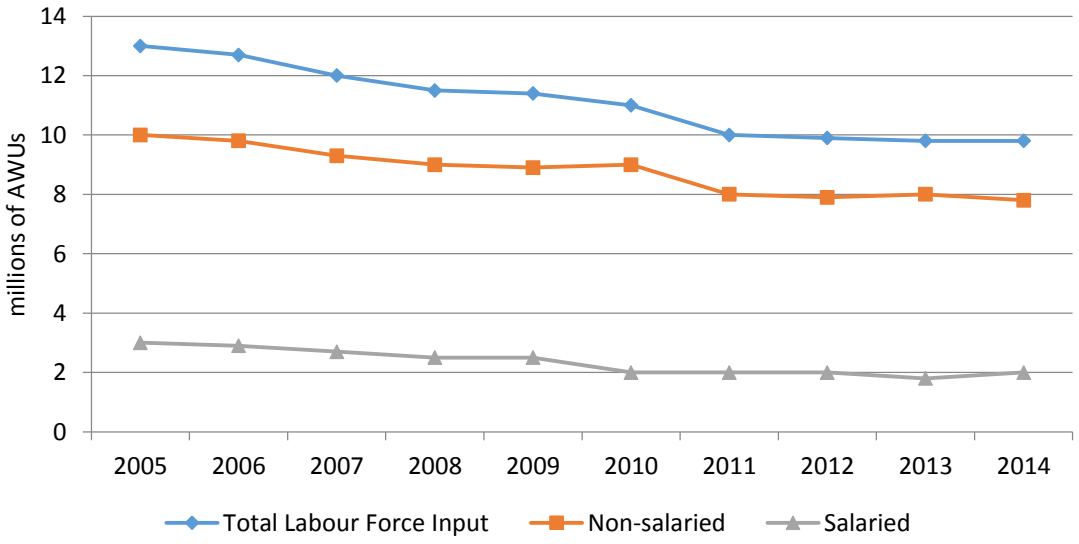
A number of MTEs indicate the way in which the RDPs influence rural depopulation. They argue that RDPs were not able to reverse rural depopulation, but the possibilities to create employment and additional income, and to increase the attractiveness of rural areas, have a positive influence in the long run (OAR *et al*., 2012). In general, MTEs report "*a modest positive impact upon employment*". MTEs have also underlined the conflict between measures (in particular RD measures 112 ,121 and 123) which aim at creating rural employment and those which try to improve labour productivity or modernise agriculture, which lead to job reductions. Despite this, the level of conflicts reported in MTEs is generally low.

3. Labour Input and Rewards in EU Agriculture

According to the EU's labour force survey (LFS), people employed in agriculture, forestry and fishing activities represented 5.2% of all employment in 2013. The farm structure survey (FSS) estimated that 22.2 million people worked regularly in agriculture, of which 20.2 million people were either holders or members of the holder's family. After taking into account the amount of time actually worked and converting this into full-time work equivalents (measured as Annual Work Units or AWUs), the FSS estimated that the equivalent of 9.5 million people worked full-time on farms in 2013 (Eurostat, 2016).

Between 2005 and 2014, there was a reduction of almost one quarter (– 23.6%) in agricultural labour input in the EU-28 with the steepest annual declines in the 2007 to 2010 period, see Figure 2. The overall contraction of 3.0 million AWUs was almost exclusively due to a reduction in non-salaried labour input (2.8 million AWUs or 92.6% of the total change). Against this background of a general decrease of farm labour, there were large variations between the Member States. For example, over the period 2010-14, seven Member States recorded an increase in farm employment: Slovenia (+ 6.2%), Lithuania (+ 4.5%), Hungary (+ 4.2%), Greece (+ 2.9%), Malta (+ 2.0%), the United Kingdom and Poland (both + 1.2%), while twelve registered declines less marked than for the EU-28 as a whole (– 5.6%). The remaining nine Member States showed steeper decreases, in particular Bulgaria (– 26.8%) and Spain (– 14.5%) (Eurostat, 2016).

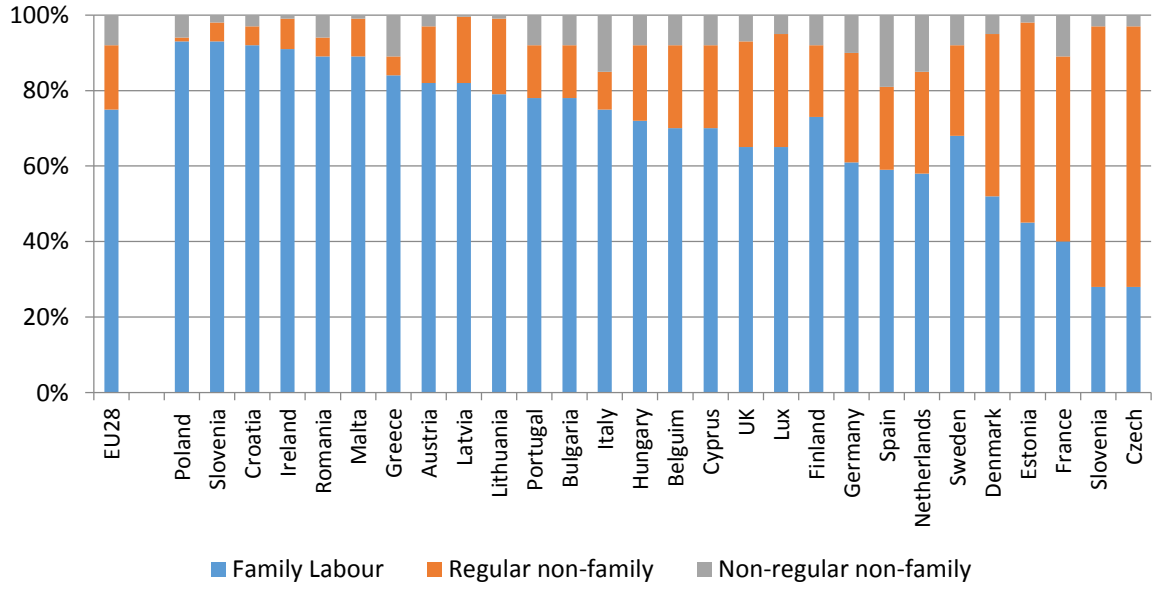
Figure 2: Agricultural Labour Force EU-28 2005 to 2014



Source: Eurostat 2016

The proportion of salaried and non-salaried labour varies substantially by Member State, see Figure 3. In Ireland, Croatia, Slovenia and Poland, family labour accounted for over 90% of the volume of work carried out in agriculture in 2013. In contrast, non-family labour accounted for a majority of the labour force in 2013 in a small number of countries, including Estonia (59.1%), Slovakia (72.4%) and the Czech Republic (74.2%). Even in some countries where family labour provided the majority of labour, there were relatively large volumes of non-family labour; in particular, non-regular (seasonal) labour (often for picking perishable crops) represented between 10% and 20% of the total labour input within agriculture in Germany, Greece, France, the Netherlands, Italy and Spain (Eurostat, 2016).

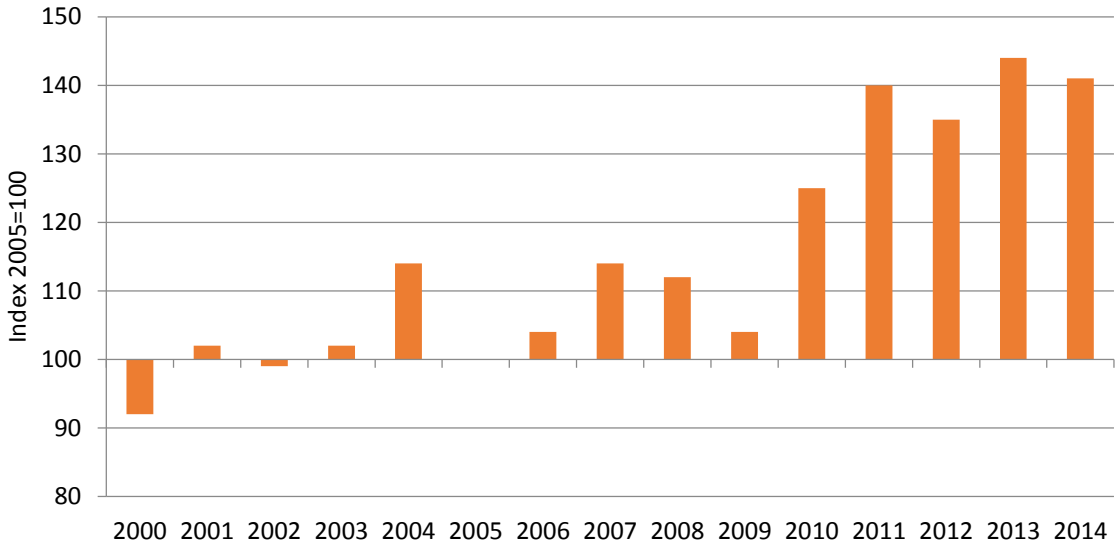
Figure 3: Labour Force by type of labour: 2013



Source: Eurostat 2016

Within agricultural accounts, income has traditionally been measured as an index, computed on the basis of real factor income per AWU. This index has fluctuated considerably but in conjunction with reductions in the total agricultural labour force, income per AWU has been on the increase since 2009, see Figure 4.

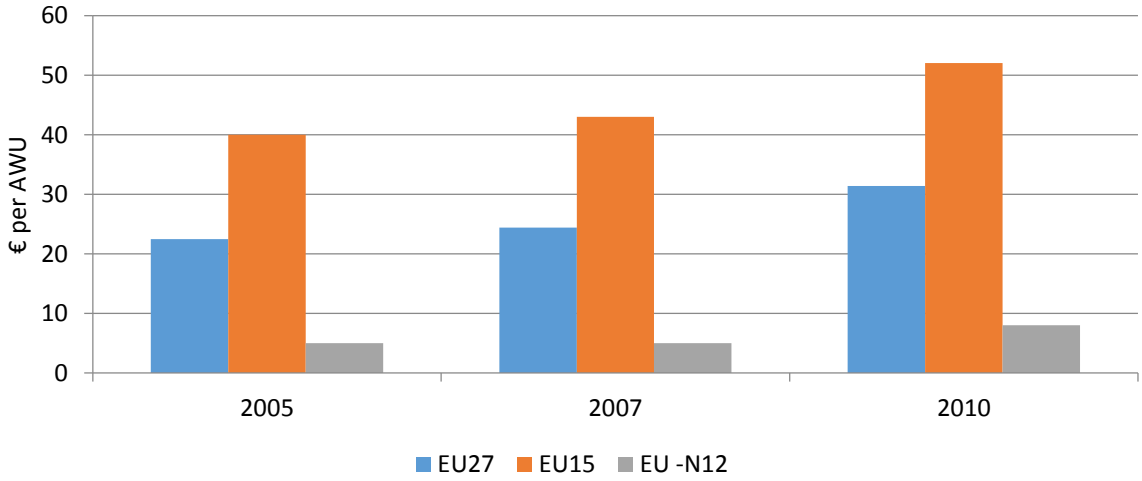
Figure 4: Agricultural income per AWU, EU-28, 2000 to 2014 (index 2005=100)



Source: Eurostat 2016

In general, the output per AWU, when measured in standard outputs, has been increasing in the EU from 2005 to 2010. As can be seen in Figure 5, output per AWU is considerably higher in the EU-15, and is also growing at a faster pace.

Figure 5: Standard output per Annual Work Unit



It is difficult from these data to deduce much about the influence of the CAP on farm employment; the policy was reformed substantially in 2005, just after most of the New Member States acceded (but before Romania and Bulgaria with their very large farm workforces). It may be that the post-2010 rise in AWU income was due to delayed reaction to the new policy framework. However, altered macroeconomic conditions were probably as

influential, including more flexible labour markets which enabled or forced "excess" farm workers to leave their home sector, whether by East-West or rural-urban migration, or by retirement. A study of five EU Member States - France, Hungary, Italy, Poland and Slovakia - concluded that the main outflow of labour from agriculture is associated with retirement (Tocco *et al*., 2013b).

4. Discussion Questions

Given the above, a number of questions suggest themselves for discussion as regards the effect (or non-effect) of policy on farm and rural employment. Each topic is followed here by a short discussion, but much more could and should be added, perhaps by fresh analyses of quantitative data for some or all EU countries or regions.

The political significance of rural job creation

From a political point of view, citizen engagement with employment in agricultural and other rural occupations is likely to be strongly linked to personal or family involvement in such work, and perhaps less strongly to concerns over food security, countryside conservation and vitality. Thus, the starting figure for assessment is the 22.2 million people working regularly in agriculture, to which may be added several more million family members – perhaps of different generations and in the households of siblings or relations by marriage – who take a personal interest in the sector.

Moreover, it may be noted that, compared to the general population, the farm workforce is older, more male-dominated, and much more self-employed: all factors which lead to higher rates of voting and, it may be supposed, more engagement with non-electoral political activity such as union or cooperative membership. Also, landownership and tenancy, as well as immediate exposure to commodity markets, are likely to lead to higher rates of interest in policy matters.

At institutional level, it is a commonplace of political science that rural areas in developed countries have a relatively high weight in terms of political representatives, and most Member States have a strong Ministry of Agriculture or equivalent. The special place that the CAP has always held in EU circles, and its still-large (40%) share of EU expenditure, also heighten the importance of this sector and its geographical area. In the European Parliament, smaller Member States have larger weight in EU decision-making (Tangermann and von

Cramon-Taubadel, 2013), and this is likely to give agriculture a more prominent role, especially as several such states face high national unemployment rates.

Despite recent changes in European decision-making, the powerful position of agricultural lobbies in influencing EU policy-making "*seems unshakeable*" (Bednarikova and Jilkova, 2012). Of course, there is a two-way effect here: the long history of policy support for agriculture has encouraged the build-up of a clientele which owns considerable "policy rent" in the CAP (and in national fiscal arrangements) and which is therefore eager and capable of defending such rents. Economists have their part to play in clarifying and quantifying the issues concerned, but ultimately considerable political skills are needed to enact reform.

The trade-off between technical progress and employment

The argument over whether technical progress helps or hinders employment is at least two centuries old. It is obvious that labour-saving innovation tends to displace workers in the relevant sector(s), especially when faced with static and inelastic demand such as exists for food in the EU. Historically, such displacement has been offset by new jobs in industry and services, but currently most sectors in the economies of most Member States are static or in decline, while the traditional avenues of emigration have been sharply reduced or indeed gone into reverse.

However, some factors suggest that farm and associated employment might be maintained or even increased despite the obvious advances in yields, machinery and communications characteristic of current EU agriculture. Higher quality, and food traceability and safety demands require greater levels of product (and input) inspection, drying, cleaning and packaging, all of which involve labour time, sometimes of a specialised nature, such as for training, or electronics repair. Greater attention to landscape and wildlife also involves labour, whether to maintain and protect trees or other countryside features.

Non-agricultural rural jobs face similar trade-offs: scale economies and modernisation of manufacture and processing have led to many plant closures, especially of the smaller plants once common in rural settlements. However, better communications, whether by road or electronic, make work feasible from a wide geographical area.

However, some types of rural employment seem both likely to grow in importance, and to suit those forced to seek work alternative or additional to farming their own land. Contract farming (operations carried out for local farmers who lack labour or machinery) is of growing importance, and offers work and income attractive to those already familiar with the locations

and techniques involved. Similarly, nature conservation work such as the management of water, trees and hedges, whether in the open countryside or in the gardens etc. of those resident in rural areas but working or living elsewhere or insufficiently active, can be attractive to farm family members with the necessary skills.

Tourism in the countryside has long been seen as a major opportunity for on- and off-farm diversification, and addresses the growing interest in rural vacations, boosted by ever-improving communications, electronic as well as physical, as well as rural development grants for the provision of visitor facilities, again on- and off-farm. While largely demand-driven, it can often be tailored to suit the seasons and day patterns of farm work.

UK evidence "*indicates that urban/rural differences in vacancies and skill gaps are a function of differences in the profile of establishments and employment rather than locational factors per se. In other words, urban and rural differences can be explained by the types and sizes of businesses that are likely to be found in those areas, rather than purely as a result of being urban and or rural*" (Owen *et al*., 2013). However, hard-to-fill vacancies in rural areas may lead to withdrawal from markets and delayed investment, and training and grant applications seem to be more informal and random than in urban areas. However, on the EU scale, such urban/rural differences may be much more obvious (Bock *et al.*, 2015).

The job-related roles of the two CAP Pillars and their measures

The recent CAP reforms have maintained the two "pillars" of the CAP but somewhat obscured the differences between them. Pillar 1 is no longer focussed on "markets and incomes" but contains seven direct-payment components (four of them optional for Member States) ranging from a basic per-hectare payment to be harmonised according to national or regional criteria through special payments to young or small farmers to a "greening" payment for environmental public goods. The "rural development" Pillar 2 has lost its four Axes in favour of six "priorities" including knowledge transfer and technological innovation, economic viability, risk management, ecosystem restoration and preservation, and "*economic development … facilitating job creation, promoting local development …*" in pursuit of the Europe 2020 Strategy (EP, 2015). The balance between these many and disparate objectives – which is largely up to Member States and their regions - will be hard to discern, as will their employment effects.

On the one hand, traditional forms of capital-intensive and often labour-saving investment undertaken for reasons of "modernisation" and "viability" will usually tend to displace

conventional jobs, indirectly (in other enterprises) if not directly. On the other hand, work to restore ecosystems and develop local economies will often have direct and positive work implications. A renewed emphasis on producer cooperation and marketing may lead to more labour-dependent value added in food production.

Data sources

As illustrated by the EU section above, a number of official data sources exist for the analysis of farm – and, to a less satisfactory extent, rural – employment, which can be measured in terms of the number of persons or jobs, in full-time equivalents or in hours worked. Most Eurostat estimates for agricultural and other sectors use the number of persons, with employment rates typically published for the working age population, which is generally considered to be those aged between 15 and 64 years. This may affect agriculture/non-agriculture comparisons, if farming – especially small-scale farming with its high labour-land ratios – tends to retain labour to older ages than other sectors.

The distinction between full-time and part-time work is generally based on a spontaneous response by the respondent. Indicators for employed persons with a second job refer only to people with more than one job at the same time; people having changed job during the reference week are not counted as having two jobs.

In general, several sources of data can be used in the analytical work (at sectoral, regional or farm level), including rural development in the EU: Statistical and Economic Information, Farm Accountancy Data Network (FADN), AMADEUS.[1] The problem is that the scale of these datasets varies (e.g. NUTS2 or NUTS3 level, or different grid size systems), and a scale harmonisation of the various datasets is necessary. And often the scale is too large to draw any meaningful policy conclusions.

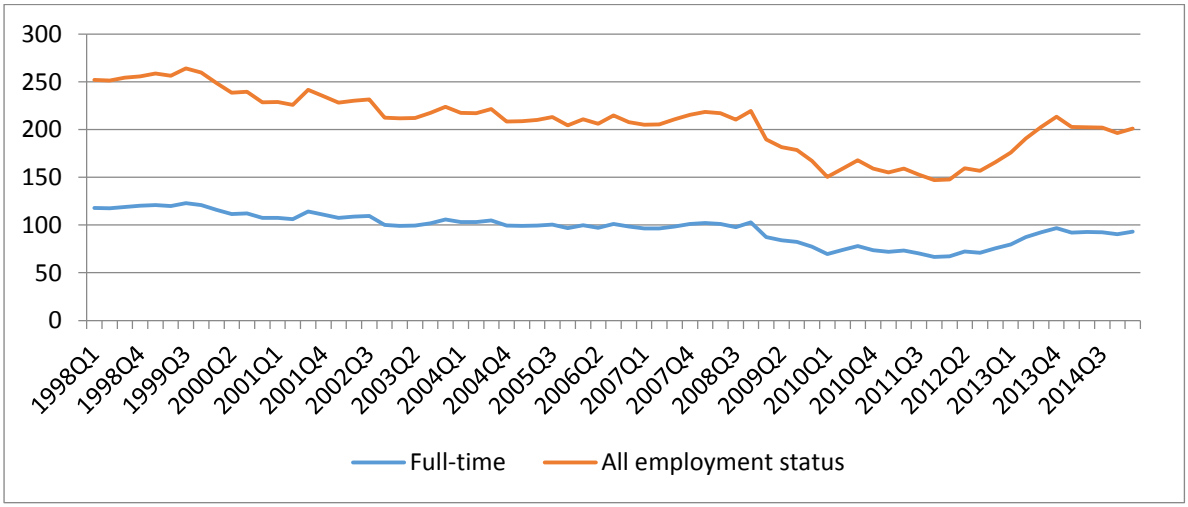
5. Evidence from Ireland

In terms of addressing both the impact of the CAP on employment and the trade-off between employment creation and labour productivity, data from Ireland can provide some interesting insights. Figure 6 shows the total numbers employed in Agriculture, Forestry and Fishing in Ireland from 1998 to 2015. The data represents people who identified this sector as their primary source of income. The collapse in employment in 2008 and subsequent recovery in

[1] AMADEUS is a comprehensive, pan-European database containing financial, employment, and location information on over 13 million public and private companies in 40 European countries, including all EU-28. It combines data from over 30 specialist regional information providers.

2013 is somewhat perplexing, and an issue of considerable interest in Ireland. It is believed that the economic downturn in 2008/09 and the associated job losses caused quite a number of part-time farmers, who previously identified other sectors as their main source of employment, to revert to agriculture as their main sector of employment. The extent to which the fluctuations represented real employment shifts, or only data-recording effects, is uncertain, and as such raises some interesting questions about the validity of agricultural employment statistics in general. Furthermore, it is also interesting to note the "return to farming" that occurred in Ireland when the wider macro economy entered recession and when alternative employment opportunities dissipated.

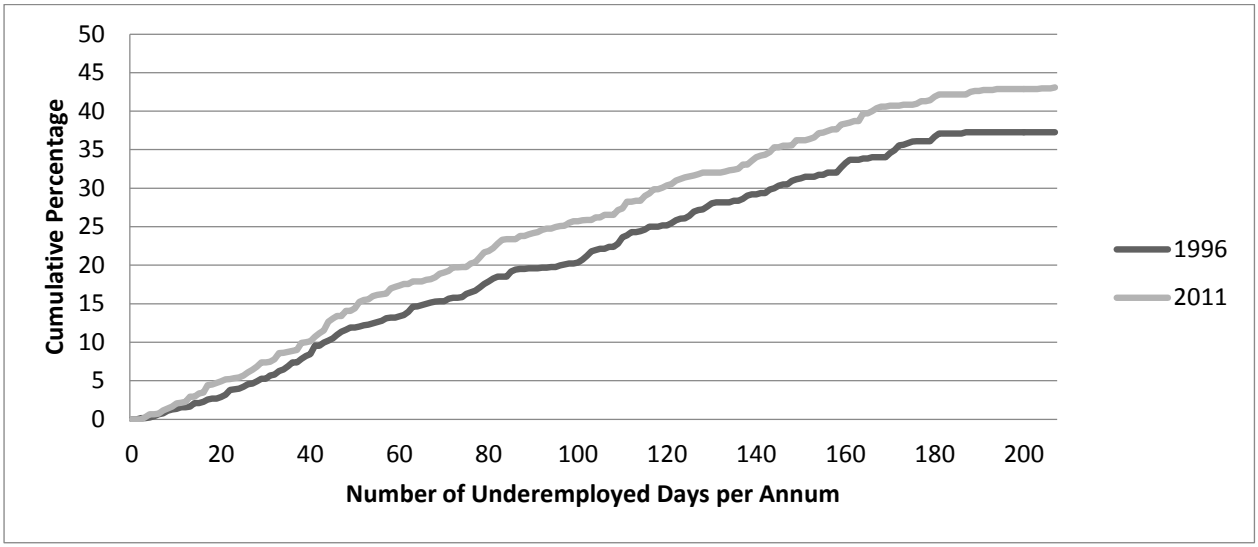
Figure 6: Numbers employed in Agriculture, Forestry and Fishing in Ireland: 1998 to 2015



Source: Central Statistics Office in Ireland (www.cso.ie)

Despite the considerable recent growth in employment in Agriculture, Forestry and Fishing, as suggested by these statistics, there was no comparable growth in the output of these sectors, thus implying losses in labour productivity. Indeed, analysis by Loughrey and Hennessy (2014) suggests a serious problem of underemployment in Irish farming. These researchers examined the scale of what they termed as hidden underemployment in farming in Ireland by measuring the difference between a farmer's self-reported amount of labour and the standard labour requirement estimated in the Irish FADN dataset. Their analysis showed that the number of farms with hidden forms of underemployment increased from 1996 to 2011 despite increases in off-farm employment (Figure 7). Loughrey and Hennessy note that from a productivity perspective, it is worrying to find that over ten per cent of working age farm holders have more than 120 days of hidden underemployment per annum.

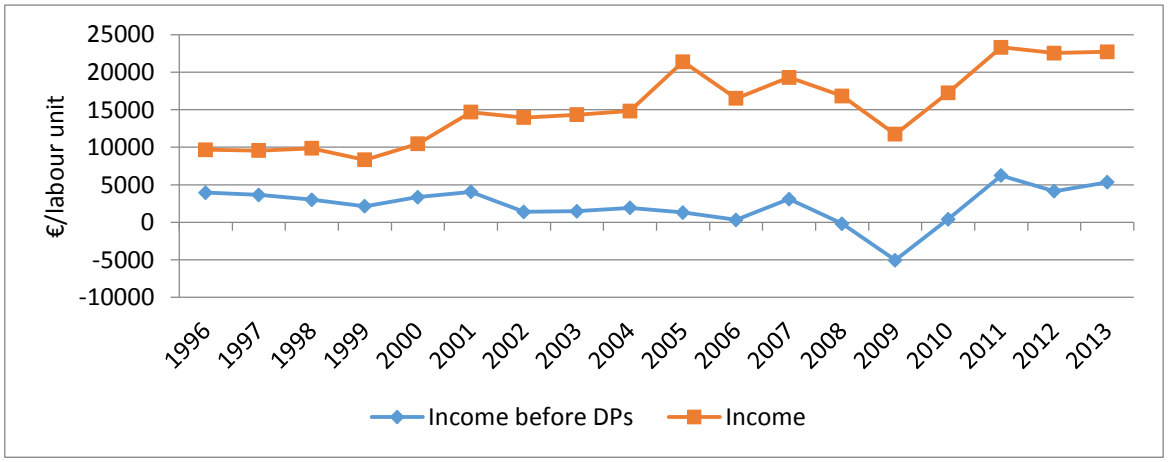
Figure 7: Cumulative percentage of farms by severity of underemployment, Ireland, 1996 and 2011



Source: Loughrey and Hennessy (2014)

It is also interesting to consider the earnings per labour unit employed in farming. Figure 8 shows the average income per unpaid family labour unit, across all systems, in farming in Ireland from 1996 to 2014 using Irish FADN data. It is important to note that there was a change to the Irish FADN sample in 2012, when the standard output of farms falling into the survey sample increased from €4,000 to €8,000. Nonetheless, the data still tell an interesting story.

Figure 8: Average income per unpaid family labour unit and income before direct payments (DPs) for Irish farms, 1996 to 2013



Source: Teagasc National Farm Survey

First, the relatively low, albeit increasing, income per labour unit throughout the period is evident, especially in years of depressed agricultural markets such as 2009. Second, the considerably lower income per labour unit when direct payments are excluded is striking. This is of particular interest from 2004 onwards, when direct payments were decoupled from production. The amount of labour required to qualify for the decoupled Single Farm Payment from 2004 onwards is relatively small, with farmers only needing to keep agricultural land in good agricultural and environmental condition to qualify for payments. In effect, from 2004 onwards, the majority of income could be earned with a fraction of the labour input, thus raising further questions regarding the productivity of labour in farming and the value of promoting additional employment in farming without some additional increase in market-based output.

The evidence from Ireland provides some interesting insights into agricultural employment. First, a large or increasing agricultural labour force may include large numbers of underemployed farmers or individuals "re-labelling" themselves as farmers when they have lost their other sources of employment. Second, in general, relatively low levels of income per labour unit can be observed in Ireland, and indeed across the wider EU. However, the effective return to labour, i.e. income before decoupled payments, is much lower, and close to zero or negative for a large number of farmers in Ireland. Again, the data from Ireland questions the value of expanding the labour force in primary agriculture without commensurate growth in output.

CAP Pillar 2 policies provide more scope to support employment creation and retention directly, and especially in sectors beyond the farmgate. However, the funding of the RDP in Ireland in the period 2007 to 2010 was very much skewed towards Axis 2, with over 80% of total RDP funding, mainly for farm-based Less Favoured Areas and agri-environmental schemes. The funding made available for Axes 3 and 4, which includes rural broadband schemes and LEADER –that are most likely to stimulate non-farm rural employment – was relatively small, amounting to less than 10% of the total budget, and moreover was slow to be made available.

The evaluation of Ireland's rural development programme for the 2007 to 2010 period concluded that *"Activity levels under Axes 3 and 4 of the programme have substantially lagged behind those seen to date under Axes 1 and 2, and this reflects the delay in commencement of measures under these axes until mid-2009. The key challenge for this side of the RDP will be in attracting significant project proposals during the current recessionary*

climate and ensuring that the Leader Local Action Groups (LAGs) have the infrastructure and capacity required to accelerate the allocation of funding to projects and actions so as to meet the programme targets."

It is clear that in the case of Ireland, CAP Pillar II funds were mostly directed to farmers and paid in form of area based payments. Indeed, almost 40% of income on cattle farms in Ireland was derived from Pillar 2 schemes in 2012 (Hennessy *et al*., 2013). While such funds were crucial in sustaining the economic viability of many farms and especially those in marginal areas, and while undoubtedly such direct payments have a multiplier effect in rural economies, the direct impact on the creation of sustainable rural jobs was minimal.

6. Conclusions

No firm conclusions or "results" are put forward in this paper, but rather suggestions for further discussion, enquiries about existing literature and data which have not been referenced above, and some recommendations for further analysis.

The questions raised above have focussed on political significance, technical progress, the new CAP, and data sources. As regards the first, it may be worth assessing the stances taken by various EU Ministries of Agriculture (or their equivalent; many Member States Ministries now have titles including – and sometimes prioritising – "Environment", "Rural", "Food" or "Economy") towards farm and rural employment in their respective countries or regions. Different attitudes – perhaps in their RDPs and the wider Partnership Agreements – may be taken towards different objectives such as farm "viability" and "competitiveness", and rural development and nature conservation. In doing so, the political emphasis towards farm and rural employment as such may be discernible.

As regards technical progress, it would be well worth analysing FADN labour data for different farm types, some (e.g. dairy, beef, sheep) heavily supported via the CAP while others (pigs and poultry, fruits and vegetables) receiving only light support. Moreover, features such as new product development need to be accounted for.

Within the CAP, attention should be paid as to how the new or changed measures, whether for greening, or for new entrant, active or small farmers, affect employment as these measures are applied, in different ways, throughout the MSs. Within Pillar 2, the emphasis placed (or not) in RDPs on non-farm rural development will be important in whether and how rural jobs are created and maintained, whether directly via enterprise projects or indirectly by improving rural living standards.

As regards data, more might be done to interrogate and compare the various sources. An obvious area of weakness is data for non-farm rural jobs (whether carried out on or for farms, or not), since the problems of definition for geographical area and job type are obvious. Perhaps detailed rural case studies, in different parts of the EU, and with a time dimension, might throw light on how employment is boosted or lost as a result of better communications, increased emphasis on services, etc.

Finally, several aspects of farm and rural employment have not been touched on in this paper, partly for lack of space and time, and partly because agricultural policy, at least in its traditional sense, does not seem to apply strongly. Thus age and gender issues, except for new "young" farmers, are often ignored, as likewise health and safety concerns. Levels of skills, and indeed of entrepreneurial spirit, might be worth exploring, in order to assess the resilience of rural sectors to both short- and long-term pressures on employment.

We do not mean to suggest in this paper that employment, *per se*, is a particularly useful as a primary objective of policy, except perhaps in terms of fairness (e.g. wage levels, non-discrimination) and conditions (e.g. safety). In a highly competitive world economy, and with agriculture being a sector facing several forms of relatively severe fluctuation, it seems more sensible to focus on longer-term issues of structure, finance and innovation. Nevertheless, with unemployment rates still at high levels in many parts of the EU, and the need to address questions of disaffection both with economic policy in general, and with agricultural policy in particular, we believe that more attention by agricultural economists to this area would be worthwhile.

References

Bednarikova, Z. and Jilkova, J. (2012) Why is the Agricultural Lobby in the European Union Member States So Effective? *Economie. 15(2).* Available at http://www.ekonomie-management.cz/download/1379933318_f25f/2012_02+Why+is+the+Agricultural+Lobby+In+the+European+Union+Member+States+So+Effective.pdf.

Bock, B., Kovacs, K. and Shucksmith, M. (2015) Changing Social Characteristics, Patterns of Inequality and Exclusion, Chapter 10 in *Territorial Cohesion in Rural Europe: The Relational Turn in Rural Development* (Copus, A. K. and de Lima, P., eds.). Abingdon: Routledge.

Breustedt, G and Glauben, T. (2007). Driving Forces behind Exiting from Farming in Western Europe. *Journal of Agricultural Economics*, Vol. 58(1): 115–127.

Copus, A., Hall, C., Barnes, A., Dalton, G., Cook, P., Weingarten, P., Baum, S., Stange, H. Lindner, C., Hill, A., Eiden, G., McQuaid, R. Grieg M. and Johansson M. (2006) Study on Employment in Rural Areas (SERA) Final Deliverable to the European Commission. Available at http://ec.europa.eu/agriculture/publi/reports/ruralemployment/sera_report.pdf.

Ecorys (2010) Study on Employment, Growth and Innovation in Rural Areas (SEGIRA) Final Report to the European Commission. Available at http://ec.europa.eu/agriculture/analysis/external/employment/full-text_en.pdf.

Farm Structure Survey (FSS) Available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Farm_structure_statistics.

European Commission (EC) (2010) *A strategy for smart, sustainable and inclusive growth.* Communication from the Commission Europe 2020, Brussels, 3.3.2010, COM(2010) 2020.

European Commission (EC) (2016) Agriculture – rural development statistics. http://ec.europa.eu/eurostat/statistics-explained/index.php/Agriculture_-_rural_development_statistics#Data_sources_and_availability.

European Parliament (EP) (2015) *Fact Sheets on the European Union*. Available at http://www.europarl.europa.eu/atyourservice.

European Parliament (EP) Committee on Agriculture and Rural Development (2016a) *How can the CAP improve job creation in rural areas?*, 2015/2226(INI), 6th April 2016. Report of Plenary Sitting, A8-0285/2016, 10 October 2016, available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2016-0285+0+DOC+PDF+V0//EN.

European Parliament (2016b) *The Role of the EU'S Common Agricultural Policy in Creating Rural Jobs, Agriculture and rural development*, Research for AGRI Committee Available at: http://www.europarl.europa.eu/RegData/etudes/STUD/2016/573418/IPOL_STU(2016)573418_EN.pdf.

Eurostat (2016). Statistics Explained, Farm Structure Survey. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Farm_structure_statistics#The_farm_labour_force

Fieldsend (2011) Rural Europe 2+2+: A conceptual framework for a rural employment policy, *Studies in Agricultural Economics*, 113: 145-151.

Kawagoe, T., Hayami, Y. & Ruttan, V.W. (1985). The intercountry agricultural production function and productivity differences among countries. *Journal of Development Economics*, 19(Sept-Oct):113-132.

Labour Force Survey (LFS) Available at http://ec.europa.eu/eurostat/web/agriculture/farm-structure.

Loughrey, J. and Hennessy, T. (2014). Hidden underemployment among Irish Farm holders 2002 to 2011. *Applied Economics*, 46 (26): 3180-3192.

Mattas, K, Arfini, F., Midmore, P., Schmitz, M and Surry Y. (2011). The impact of the CAP on regional employment: a multi-modelling cross-country approach, in Catherine Moreddu (ed.), Disaggregated Impacts of CAP Reforms: Proceedings of an OECD Workshop, OECD Publishing.

Nordin, M. and Blomquist, J. (2014). *Do the CAP Subsidies Increase Employment in Sweden? Estimating the Open Economy Relative Multiplier Using an Exogenous Change in the CAP*, AgriFood Economics Centre, Working Paper, No 3, Lund University, Sweden.

Official Journal L347 (20.12.2013). Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on Support for Rural Development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005.

OAR, University of Gloucestershire, Ecorys (2012). Synthesis of Mid-Term Evaluations of Rural Development Programmes 2007-2013. Final Report, October 2012.

Olper, A., Raimondi, V., Cavicchioli, D. and Vigani, M. (2014) Do CAP Payments Reduce Farm Labour Migration? Panel data analysis across EU regions. *European Review of Agricultural Economics*, 41(5): 843-873.

Owen, D., Li, Y., Green A. and Manson, K. (2013) *Secondary Analysis of Employer Surveys: Urban and Rural Differences in Jobs, Training, and Skills.* Executive Summary 75, UK Commission for Employment and Skills. Available at www.ukces.org.uk.

Petrick, M. and Zier, P. (2011). Regional employment impacts of Common Agricultural Policy measures in Eastern Germany: a difference-in-differences approach. *Agricultural Economics* 42(2): 183–193.

Rizov, M., Davidova, S. and Bailey, A. (2016). Employment effects of CAP payments in the UK non-farm economy. Paper prepared for the 160th EAAE Seminar, Warsaw 1-2 December 2016.

Tangermann, S. and von Cramon-Taubadel, S. (2013) *Agricultural Policy in the European Union: an Overview*. Diskussionsbeitrag 1302. Universität Göttingen, Department für Agrarökonomie und Rurale Entwicklung.

Tocco, B., Davidova, S. and Bailey, A. (2013a) *The Impact of CAP Payments on the Exodus of Labour from Agriculture in Selected EU Member States*. Factor Markets Working Paper No 66. Available at https://www.ceps.eu/publications/impact-cap-payments-exodus-labour-agriculture-selected-eu-member-states

Tocco, B., Bailey, A. and Davidova S. (2013b) *Determinants to Leave Agriculture and Change Occupational Sector: Evidence from an Enlarged EU*. Factor Markets Working Paper No 46. Available at

http://ageconsearch.umn.edu/bitstream/155704/2/FM%20WP46%20Determinants%20to%20Leave%20Agriculture.pdf.