FACTOR MARKETS

Comparative Analysis of Factor Markets for Agriculture across the Member States

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WORKING PAPER

No. 24, February 2012

Trevor Donnellan, Kevin Hanrahan and Thia Hennessy

Defining an Institutional Framework for the Labour Market

ABSTRACT

This paper describes a conceptual framework for the empirical analysis of farmers' labour allocation decisions. The paper presents a brief overview of previous farm household labour allocation studies. Following this, the agricultural household model, developed by Singh, Squire and Strauss (1986), which has been frequently applied to the study of labour allocation, is described in more depth. The agricultural household model, the theoretical model to be used in this analysis, is based on the premise that farmers behave to maximise utility, which is a function of consumption and leisure. It follows that consumption is bound by a budget constraint and leisure by a time constraint. The theoretical model can then be used to explain how farmers decide to allocate their time between leisure, farm work and off-farm work within the constraints of a finite time endowment and a budget constraint. Work, both farm and off-farm, provides a return to labour which in turn relaxes the budget constraint allowing the farm household to consume more. The theoretical model can also be used to explore the impact on government policies on labour allocation. It follows that subsidies that decrease commodity prices, such as reductions in intervention prices, mean that farmers have to work more (either on or off the farm) to maintain income and consumption levels. On the other hand, income support subsidies that are not linked to output or labour, such as decoupled subsidies, are a source of non-labour income and as such allow farmers to work less while maintaining consumption levels, known as the wealth effect.

FACTOR MARKETS Working Papers present work being conducted within the FACTOR MARKETS research project, which analyses and compares the functioning of factor markets for agriculture in the member states, candidate countries and the EU as a whole, with a view to stimulating reactions from other experts in the field. See the back cover for more information on the project. Unless otherwise indicated, the views expressed are attributable only to the authors in a personal capacity and not to any institution with which they are associated.

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FACTOR MARKETS Coordination: Centre for European Policy Studies (CEPS), 1 Place du Congrès, 1000 Brussels, Belgium Tel: +32 (0)2 229 3911 • Fax: +32 (0)2 229 4151 • E-mail: info@factormarkets.eu • web: www.factormarkets.eu

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Trevor Donnellan, Kevin Hanrahan and Thia Hennessy*

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1. Introduction

Well-functioning factor markets are a crucial condition for the competitiveness and growth of agriculture and for rural development. At the same time, the functioning of the factor markets themselves are influenced by changes in agriculture and the rural economy and in EU policies. Member state regulations and institutions affecting land, labour and capital markets may cause important heterogeneity in the factor markets, which may have important effects on the functioning of the factor markets and on the interactions between factor markets and EU policies. The general objective of the Factor Markets project is to analyse the functioning of factor markets for agriculture in the EU-27, including the candidate countries. Furthermore, the objective is to compare the different markets, their institutional framework and their impact on agricultural development and structural change, as well as their impact on rural economies, for the member states, candidate countries and the EU as a whole.

The objective of this deliverable, which relates specifically to the labour market, is to define the important elements of the institutional framework to be addressed and analysed in subsequent deliverables. This paper will be used to inform the research team of the main elements and variables that are important in describing an institutional framework, for example, the structure of employment and unemployment, the quality of human capital, the mobility of labour and the structure of agricultural employment.

This paper begins by defining what is meant by an institutional framework. Following on from this a brief literature review of previous studies of labour market institutional frameworks is presented. The paper concludes by defining the most important elements of the labour market institutional framework to be addressed in subsequent deliverables.

2. Defining an Institutional Framework for the Labour Market

An institutional framework is generally understood to mean the systems of formal laws, regulations, and procedures, and informal conventions, customs and norms that broaden, mould and restrain socio-economic activity and behaviour. The institutional framework of the labour market regulates the employment relationship, including the legal framework for standards at work, minimum wages and trade union recognition and powers. The institutional framework is likely to be the result of government policy but workers' organisations may have their own rules on hiring and firing. The three pillars of an institutional framework for labour are the regulations governing individual and collective employment relations, unemployment protection and active labour-market policies (see Topel, 1999). It is important to consider how these three pillars affect labour mobility, employment flexibility, wage flexibility, human capital flexibility and labour productivity.

Blanchard (2002) states that labour markets will not function well without proper institutions because they are not, by their nature, perfectly competitive. Market imperfections include information problems such as the difficulty for employers to fully monitor the workers' efforts or skills, and for workers to properly evaluate their contribution to the firm's

* Agricultural Economics and Farms Surveys Department, Teagasc, Athenry, Co Galway, Ireland (www.teagasc.ie).

productivity (and thereby know what their wage should be). Information problems also complicate the matching between workers and vacancies, especially when the skill level of the worker is important. Market power also leads to market failure:, if employers dominate labour relations, then wages can be pushed too low. Alternatively, if workers' organisations dominate, wages can be too high beyond what is reflected in productivity terms. Furthermore, market mechanisms cannot provide sufficient insurance against unemployment risks given the aggregate nature of such a risk. Blanchard concludes that some mix of regulations, taxes and subsidies are required to ensure the successful functioning of a labour market.

3. Literature on Institutional Frameworks of Labour Markets

Most of the literature on labour market institutional frameworks relates to defining the 'rigidity' of the institutional framework and the consequent effect for the successful operation of the labour market. As summarised by Auer (2007), there are two conflicting schools of thought in this regard. One view, the free market view, is that the institutional framework should be based solely on market mechanisms as the use of other instruments distorts the workings of the labour market and diminishes its efficiency and hence its performance in terms of equity. The opposing view is that mechanisms are required to protect workers against the structural inequalities that exist between stakeholders if the labour market is to operate fairly and in a sustainable manner.

In relation to institutional rigidities, a wide range of analysts and international organisations – including the European Commission, the Organization for Economic Cooperation and Development (OECD) and the International Monetary Fund (IMF) – have argued that the causes of high unemployment can be found in labour market institutions. Accordingly, countries with high unemployment have been repeatedly urged to undertake comprehensive structural reforms to reduce 'labour market rigidities', such as generous unemployment insurance schemes, high employment protection such as high firing costs, high minimum wages, non-competitive wage-setting mechanisms and severe tax distortions (see IMF, 2003).

In terms of distinguishing between flexible and rigid institutional frameworks, Amadeo & Camargo (1993) measure flexibility in terms of the flexibility of employment (low barriers to hiring and firing employees and, for workers, low barriers to moving from one job to another); wage flexibility (a high correlation between changes in the marginal productivity of labour and real wages); labour mobility (low barriers to workers moving from one job to another in different segments or regions); human capital flexibility (the capacity to adapt to new demands arising from changes in a given job or from job transfers) and firms' orientation towards increasing productivity, which increases their chances of responding to a shock with fewer costs in terms of employment and wages.

An IMF study (2003) was conducted to empirically estimate the effect of institutional framework rigidities on unemployment rates. The following institutional elements were considered to be important when analysing the institutional framework of labour markets: the replacement ratio (the ratio of unemployment benefits in the first year of unemployment to past earnings); an index of employment protection; the tax rate on labour (including social security contributions, income taxes, and indirect taxes); the density of union membership; and the nature of wage bargaining process (centralised or decentralised). The study revealed that, not surprisingly, the extent to which unemployment insurance compensates for job losses contributes to higher unemployment. Unionisation and high rates of employment protection are positively associated with unemployment. Interestingly, the effect of central coordination in wage bargaining has two conflicting effects. On the one hand, greater coordination discourages competitive wage-setting, resulting in upward pressure on real wages and a looser relationship between wages and productivity across industries and regions. On the other hand, greater coordination may lead workers to take into account the broader economic consequences of wage demands in excess of productivity gains, such as higher inflation or loss of competitiveness. Hence, coordination is conducive to economy-wide wage moderation.

The IMF study also concludes that across a range of structural indicators, the EU labour market continues to compare unfavourably to more competitive labour markets. For example, EU unemployment benefits and marginal effective tax rates on additional income are excessive in comparison to US levels. Austria, Belgium, France, Italy and the Nordic countries, in particular, have effective tax rates well above OECD averages; only Ireland, Portugal and the United Kingdom have an average effective rate broadly equal to that in the United States. Within the EU, wage moderation has transpired through increased use of national social pacts or 'wage norms' as well as opening clauses in sectoral agreements.

3.1 Literature with a specific focus on agriculture

The role of agricultural labour markets within the wider macro labour market is interesting. A study by Timmer (1987) suggests that the agricultural labour is commonly seen as a buffer in economic development. When other sectors of the macroeconomy prosper, the agricultural sector tends to release the work force without reducing output. However, in times of recession, the sector tends to absorb more labour, thus avoiding more dramatic unemployment problems. The literature on the institutional frameworks of agricultural labour markets is thin. Most studies examining the institutional setting of agricultural labour markets tend to refer to developing countries. Such studies typically examine the failing of the institutions and the consequent effect for the productivity and efficiency of the agricultural sector.

Studies within a European context tend to examine the factors affecting structural change in farming, for example the drivers and barriers to farm exits, the effect of policy reform on labour demand and so forth. For a review of such papers, see Hennessy (2005). One such publication is the 1977 study by De Haen & Von Braun, which examined the mobility of agricultural labour in West Germany. While the study did not address the role of the institutional framework as such, it examined the effect of labour policies on structural change in the agricultural workforce. It concluded that there are interregional differences in the impact of regional labour markets, income differentials and age structures on the level and structure of the total rate of change in the agricultural labour force. The study highlights problem regions where labour market policies should be adjusted in order to facilitate mobility.

4. Key elements to be considered when analysing the institutional framework for agricultural labour markets

Based on the literature review outlined above, the following key elements, outlined in the table below, have been identified as being relevant to an analysis of the institutional framework of labour markets.

Table 1. Elements of the institutional framework for agricultural markets

Broad institutional framework	**Specifics**
Structure of the employment market	• Size of the labour force • Numbers at work and out of work • Human capital measures • Proportion of workers involved in agriculture • Human capital and demographic measures of the agricultural work force
Labour legislation	• Legislation on hiring and firing • Workers' rights and employment protection • Working hours legislation

	• Legislation on contracts and tenure • Legislation governing foreign workers
Wage setting	• Policies on minimum wage • Policies on collective bargaining for agricultural workers
Unionisation of workers	• Unionisation of agricultural workers • Protection of workers' rights
Policies on taxes	• Employee taxes • Employers' taxes • Social insurance schemes, etc. • Unemployment benefits

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The Factor Markets in a nutshell

Title	Comparative Analysis of Factor Markets for Agriculture across the Member States
Funding scheme	Collaborative Project (CP) / Small or medium scale focused research project
Coordinator	CEPS, Prof. Johan F.M. Swinnen
Duration	01/09/2010 – 31/08/2013 (36 months)
Short description	Well functioning factor markets are a crucial condition for the competitiveness and growth of agriculture and for rural development. At the same time, the functioning of the factor markets themselves are influenced by changes in agriculture and the rural economy, and in EU policies. Member state regulations and institutions affecting land, labour, and capital markets may cause important heterogeneity in the factor markets, which may have important effects on the functioning of the factor markets and on the interactions between factor markets and EU policies. The general objective of the FACTOR MARKETS project is to analyse the functioning of factor markets for agriculture in the EU-27, including the Candidate Countries. The FACTOR MARKETS project will compare the different markets, their institutional framework and their impact on agricultural development and structural change, as well as their impact on rural economies, for the Member States, Candidate Countries and the EU as a whole. The FACTOR MARKETS project will focus on capital, labour and land markets. The results of this study will contribute to a better understanding of the fundamental economic factors affecting EU agriculture, thus allowing better targeting of policies to improve the competitiveness of the sector.
Contact e-mail	info@factormarkets.eu
Website	www.factormarkets.eu
Partners	17 (13 countries)
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