



Statistics in focus

INDUSTRY, TRADE AND SERVICES

THEME 4 – 13/2003

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Employment in the market economy in the European Union - an analysis of the Structural Business Statistics

Pekka Alajääskö

Introduction

The Structural Business Statistics (SBS) are the most complete currently-available source of data on the enterprise, or market, economy in the European Union. They cover all sectors of the market economy except agriculture - sectors C-K of NACE Rev.1. In particular, they give detailed information on the sectors of activity in which those in work in different parts of the Union are employed. At the same time, they enable these data to be related to data on value-added, investment and wages and salaries in order to explore important policy issues, particularly those relating to productivity, the use of capital in the production process and personnel costs.

The latest data for 2000 indicate that some 42% of those employed in business activities in the EU worked in industry and 58% in market services (Figure 1). Most of those employed in industry worked in manufacturing, while within market services, over 40% were employed in the distributive trade and the rest worked in other services.

Figure 1: Employment and value-added in the market economy, 2000



Industry, and more especially manufacturing, generated a larger share of value-added than employment (48%). Conversely, the distributive trades consistently generated a significantly larger share of employment than value-added, while other market services accounted for a similar share of the two.

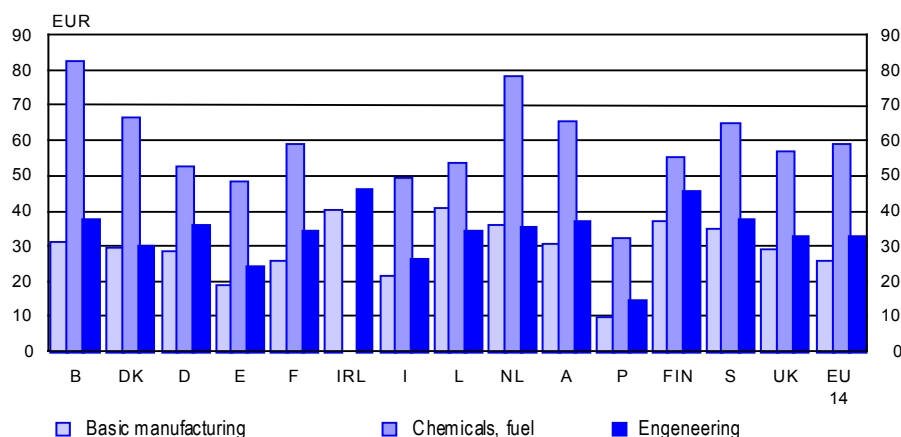
The distribution of employment between activities, the value-added generated by those employed in different activities and the relationship of this to capital investment will all be explored in a forthcoming report from Eurostat on the Structural Business Statistics (ISBN 92-894-4832-6, Cat No KS 51-03-318-EN-C). The main findings of that analysis are summarised briefly here. The report also examines personnel costs in manufacturing and market services and the regional location of employment in selected activities.



Labour productivity in manufacturing and market services

Labour productivity can be measured as value-added per unit of labour input. Often when making such calculations, labour input is measured by the number of persons employed. This, however, can give a misleading indication of labour input because it ignores possible variations in working time which, in practice, can be significant. To allow for these variations, and using data from the Labour Force Surveys (LFS) estimates can be made of average hours worked in different sectors of economic activity across the EU. The results show that labour productivity varied significantly between industries within manufacturing. It was almost twice as high in Chemicals and fuel as in the engineering industries, in where average value-added per hour worked was in turn some 25% above

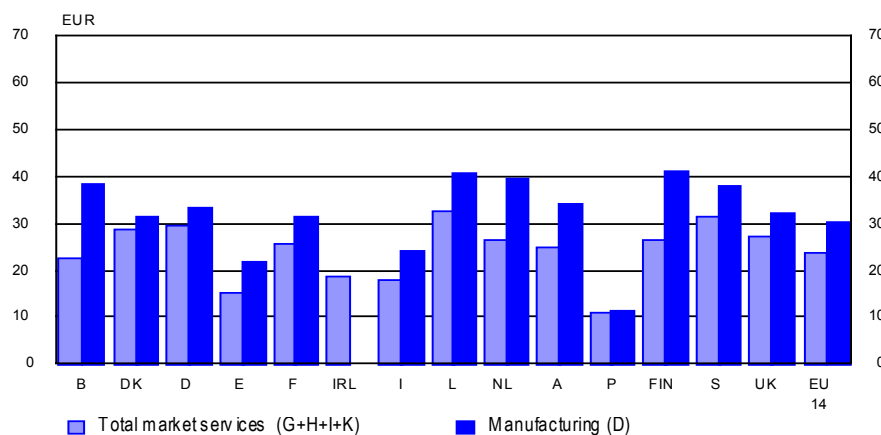
Figure 2: Value-added per hour worked in the three broad industry groupings, 2000



that in more basic industries (Figure in the EU in 2000, ranging from around EUR 40 in the Benelux countries and Finland to just over EUR 20 in Spain and only EUR 11 in Portugal (Figure 3). In addition, value-added per hour of labour input - or labour productivity - in manufacturing (NACE Rev.1, section D) averaged around EUR 30

Average working time in market services is less than in manufacturing in most parts of the Union, primarily because many more people work part-time. Allowing for this reduces the difference in labour productivity between the two, but value-added in the EU per hour worked was still 20% higher in manufacturing than in market services in 2000 (Figure 3).

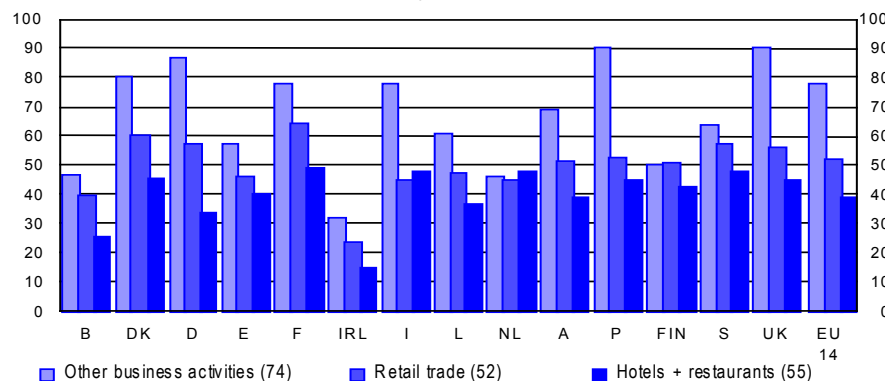
Figure 3: Value-added per hour worked in market services and manufacturing, 2000



Although labour productivity in some parts of the market services sector was higher than in manufacturing, these parts tend to be atypical activities. In particular, in real estate, leasing and parts of the transport sector, the value-added generated is influenced more by the capital or fixed assets employed than the labour. In most market services, labour productivity was significantly less than in manufacturing – only around half as high in retailing, on average, and 40% as high in hotels and restaurants (Figure 4). While productivity in other business activities is higher, it was still more than 20% below the level in manufacturing.

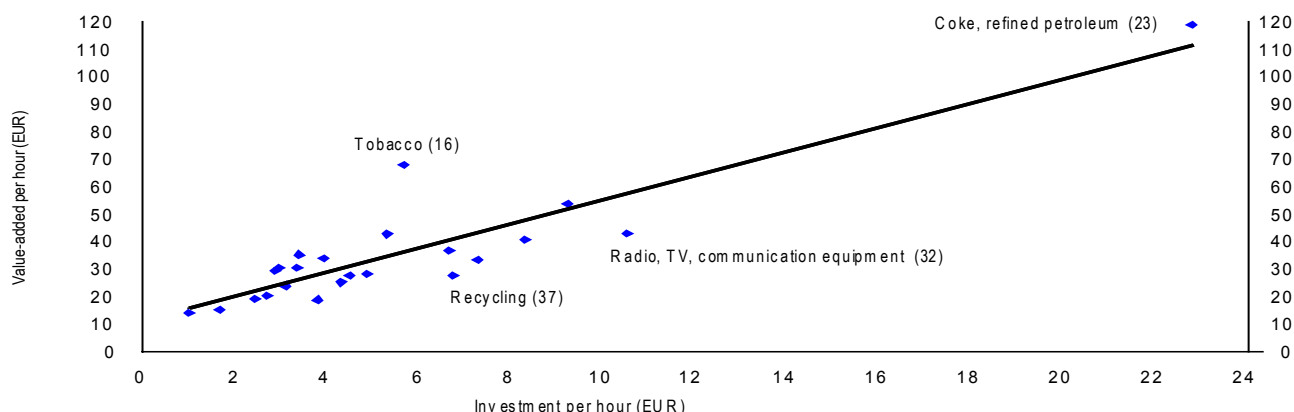
Figure 4: Value-added per hour worked in business services, retailing and hotels and restaurants relative to manufacturing, 2000

Index, value-added per hour in manufacturing = 100



Labour productivity and investment

Figure 5: Correlation between investment per hour and value-added per hour in manufacturing industries in the EU, 2000

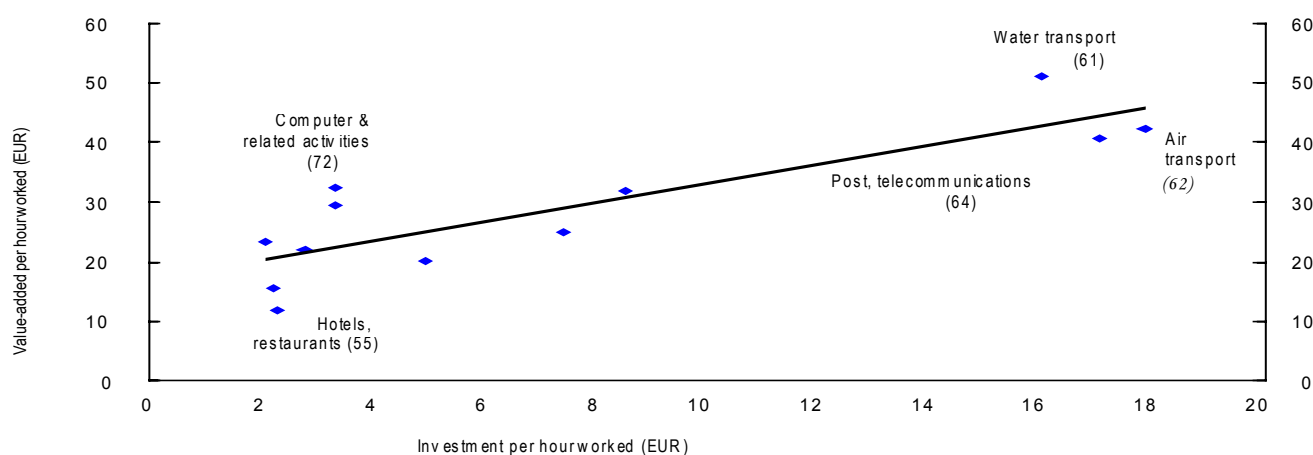


These differences in labour productivity between sectors of activity are to a significant extent related to the amount of capital used, as reflected in the data for investment. This is true for both manufacturing (Figure 5) and market services (Figure 6). (The SBS contain data for investment in fixed assets of various kinds but not on the capital stock, which, should nonetheless be related to fixed asset investment). The high value added per hour

worked in both the chemicals and fuel industries, therefore, is explicable to a large extent by the capital-intensity of the production process, which both raises the productivity of labour and requires that a larger share of value-added than in other industries. Similarly, in market services other than real estate and leasing, both value added per hour worked and capital inputs are relatively high in post and telecommunications and relatively

low in retailing. At the same time, the amount of capital employed is not the only determinant of labour productivity. The skills and qualifications of the work force also make a contribution. For example, they tend to be much higher in computer and related activities than in hotels and restaurants. However, there is no variable in the SBS from which to estimate the skill level of the work force.

Figure 6: Correlation between value-added per hour and investment per hour in market services in the EU, 2000



ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Division by sector of activity

For the purposes of analysis, manufacturing sectors are grouped into three broad sectors: 'Basic industries' which includes sub-sections DA, DB, DC, DD, DE, DH, DI and DN of the NACE Rev.1; 'Chemicals and fuel' which covers sub-sections DF and DG; and 'Engineering' defined as sub-sections DJ, DK, DL and DM.

Definition of variables

Labour or personnel costs

Wages and salaries paid to employees plus employers' social security costs, whether compulsory or voluntary. These are adjusted in the analysis to incorporate the earnings of the self-employed when relating labour costs to value-added.

Data for Greece is not available.

Unit labour costs

Labour costs per unit of value-added, adjusted for the earnings of the self-employed (i.e. including an imputed estimate of the latter). It is equivalent to the share of value-added going to labour. Definitions of the other variables can be found in the Annex to Commission Regulation (EC) No 2700/98.

Further information:

➤ Databases

NewCronos, SBS, LFS

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In collaboration with Manuel Hubert and Terry Word.

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