



# THE EU KLEMS PRODUCTIVITY REPORT

An Overview of Results from the EU KLEMS Growth and Productivity Accounts for the European Union, EU Member States and Major Other Countries in the World

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with contributions of individual consortium members

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#### INTRODUCTION: THE FU KLEMS PRODUCTIVITY REPORT

### INTRODUCTION

This report presents the second description of results obtained from the first release of the EU KLEMS Growth and Productivity Accounts, which have been released in March 2008.

The EU KLEMS database includes measures of economic growth, productivity, employment creation and capital formation at the industry level for European Union member states, Japan and the United States from 1970 onwards. This work will provide an important input to academic research on sources of economic performance and on policy evaluation, for example for the assessment of the goals concerning competitiveness and economic growth potential as established by the Lisbon agenda. While the output measures are provided at industry level, the input measures will include various categories of capital (such as ICT versus non-ICT), labour (such as skill decomposition) and a breakdown of energy, material and service inputs. Productivity measures have been developed on the basis of growth accounting techniques.

This first productivity report provides summary results for individual countries as well as for the EU as a whole from 1970 to 2005 as far as the output and labour productivity estimates are concerned. Estimates for the new member states of the EU have been added for the period since 1995. The growth accounts relate to the period 1980-2005, and only cover a limited number of the countries from the EU-15, and include another five new member states since 1995.

The sections, which are prepared by individual consortium members, provide a short overview of major trends on output and productivity growth at the aggregate level, main developments on labour productivity at sector and industry level, a discussion of the contributions to output growth from of capital, labour and (multi factor) productivity growth, and a brief discussion of specific topics that deserve attention.

In addition to the country reports, the report begins with a brief overview of the main developments for the European Union as a whole and ends with a contribution piece from the European Commission services (DG ECFIN) on the relevance of this work for policy analysis and a technical overview of the content of the database.

The 2008 database has been publicly accessible as of 15 March 2008 on the EU KLEMS website: http://www.euklems.net, from which this report and additional documentation can also be obtained.

In the course of 2009 updates until 2006 will be released.

December 2008 Bart van Ark and Pieter Woltjer

# Table 1 Industry aggregation used for this report

### **TOT TOTAL INDUSTRIES**

### MARKT MARKET ECONOMY

FLECOM	<b>ELECTRICAL</b>	MACHINERY	POST	ΔND	COMMUNIC	CATION
LLLCOW	LLLCINICAL	WIACIIIIILIXI,	1 001		COMINION	27 I I O I V

- 30t33 Electrical and optical equipment
  - 64 Post and telecommunications

# MexElec MANUFACTURING, EXCLUDING ELECTRICAL

- 15t16 Food products, beverages and tobacco
- 17t19 Textiles, textile products, leather and footwear
- 36t37 Manufacturing nec; recycling
  - 20 Wood and products of wood and cork
- 21t22 Pulp, paper, paper products, printing and publishing
  - 23 Coke, refined petroleum products and nuclear fuel
  - 24 Chemicals and chemical products
  - 25 Rubber and plastics products
  - 26 Other non-metallic mineral products
- 27t28 Basic metals and fabricated metal products
  - 29 Machinery, nec
- 34t35 Transport equipment

### OtherG OTHER GOODS PRODUCING INDUSTRIES

- C Mining and quarrying
- E Electricity, gas and water supply
- F Construction
- AtB Agriculture, hunting, forestry and fishing

### DISTR DISTRIBUTION SERVICES

- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel
- 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles
- 52 Retail trade, except of motor vehicles and motorcycles; repair of household goods
- 60t63 Transport and storage

### FINBU FINANCE AND BUSINESS SERVICES

- J Financial intermediation
- 71t74 Renting of m&eq and other business activities

### PERS PERSONAL AND SOCIAL SERVICES

- H Hotels and restaurants
- O Other community, social and personal services
- P Private households with employed persons

### NONMAR NON-MARKET SERVICES

- L Public admin and defence; compulsory social security
- M Education
- N Health and social work
- 70 Real estate activities

### Reallo REALLOCATION OF LABOUR EFFECT

<sup>\*</sup> For a more detailed scheme see table 4 of the final section of the report

# EUROPEAN UNION: OVERALL SLOWDOWN IN PRODUCTIVITY HIDES CROSS COUNTRY VARIATION

- Slowdown in labour productivity in the "old" EU-15 countries since 1995, with relatively fast growth in Finland, Sweden and the United Kingdom, medium growth in France and Germany, and slow growth in Spain and Italy.
- Rapid acceleration of labour productivity growth in many new member states reflect "catching up" and "restructuring" growth as employment growth, in particular in manufacturing, has often been negative.
- The notable difference in industry contributions to productivity growth between the European Union and the United States originates from the much smaller contribution of market services, in particular retail and financial services.
- Output growth in "old" EU countries is driven by greater employment growth, but has gone together with a relatively slow shift from non-ICT to ICT capital, and a pronounced decline in the growth rate of multifactor productivity (MFP) growth.
- The future of productivity growth in the EU will depend on the capability to make more productive use of skilled labour, facilitate the shift of capital and other resources to the most productive sectors of the economy, and improve in the innovative capacity of firms.

During the second half of the 1990s the growth performance of the European Union has undergone a marked change. Even though average GDP growth of the EU-15 (i.e. the membership before the entry of new member states in 2004) accelerated slightly from 2.5 per cent on average from 1970-1995 to 2.7 per cent from 1995-2000, labour productivity growth slowed dramatically from 2.6 per cent from 1970-1995 to 1.6 per cent from 1995-2000. Since 2000 GDP and labour productivity slowed further to 1.6 per cent and 1.2 percent respectively. Even after including the significantly better productivity growth performance of the new member states of the Union, given their relatively small GDP, the labour productivity growth of the aggregate EU-25 was only slightly higher at 1.5 per cent from 1995-2005. Despite a largely cyclical growth acceleration in the EU GDP during 2006 and 2007, productivity growth has not shown any significant improvement.<sup>1</sup>

This structural slowdown in productivity for the European Union as a whole is in striking contrast with the United States, where productivity growth accelerated significantly accelerated from 1.3 per cent averaged over 1970-1995 to 2.4 per cent from 1995-2005. Even compared to Japan, which showed an even bigger slowdown in productivity growth than Europe since 1995, the productivity growth rate from 1995-2005 was still higher than in the EU at 2.4 percent.

There is a wide variation in productivity growth rates across EU member states as documented in the contributions for the individual countries in this report. In general, the productivity growth rates from 1995-2005 were by far the highest for the new member states, reflecting the restructuring of the economies in Central and Eastern Europe. However, labour input growth in the new member states has generally been negative, in particular in manufacturing. Among the "old" member states the fastest productivity growth rates were recorded in Finland and Sweden. Among the larger countries in the "old" EU, the UK has shown the fastest productivity growth since 1995, ahead of France and Germany. At the lower end of the productivity ranks are the two large countries in the southern part of the EU, i.e. Italy and Spain. The dismal productivity performance of the latter two countries impacts significantly on the average growth rate in the Union. However, whereas slow productivity growth in Spain was related to rapid improvement in labour input growth, the Italian economy experienced no compensating effect from an acceleration in employment growth.

The underlying analysis of the industry contributions to labour productivity since 1995 shows that the manufacturing sector continues to contribute significantly to European growth, which comes in equal shares (i.e., an 0.3 percentage point contribution) from the electrical machinery sector (which includes, for example, all the ICT production industries) and the rest of the manufacturing sector. A limited number of countries (Finland, Sweden and Ireland as well as Hungary and Latvia) showed a larger contribution from ICT production.

<sup>&</sup>lt;sup>1</sup> Recent estimates for the aggregate economy can be obtained from Eurostat and OECD as well as from the Total Economy Database of The Conference Board and the Groningen Growth and Development Centre (http://www.conference-board.org/economics/database.cfm).

<sup>&</sup>lt;sup>2</sup> Greece also showed rapid productivity growth which, as in the new member states, largely reflects "catching up" growth.

However, compared to the United States, the striking differences in labour productivity growth originates from the much smaller contribution of market services, notably the distribution sector as well as finance and business services.

The sources of growth analysis from the EU growth and productivity accounts concentrates on a subsample of ten "old" EU countries and four new member states.<sup>3</sup> Notably, the contribution of labour input to GDP growth in the market economy of the old EU countries improved strongly after 1995, increasing from a zero contribution to a 0.6 percentage point contribution, of which about two thirds (0.4 percentage point) came from faster growth in total hours worked and one third (0.2 percentage point) from improved labour composition, such as better skills of the labour force. Even though the rate of improvement of labour composition has declined marginally since 1995, the increase in employment of the unskilled is still more than compensated by the overall enhancement of education and training.

The contribution of capital input to value added growth has not changed much at the aggregate level, but the distribution has shifted somewhat from non-ICT capital to ICT capital. However, compared to the United States the shift towards intensive use of ICT capital has generally not been as pronounced. There are a few exceptions, such as the Netherlands and the United Kingdom, who appear to be following a similar path to the United States towards greater ICT use. Notably, when comparing the ratio of capital to labour contributions to growth in the EU, there are signs of declining capital intensity in the EU. This development is in sharp contrast to the U.S. trend in capital intensity since 1995.

The factor contributing most to the slowdown of labour productivity growth in the ten old EU countries is the decline in multifactor productivity growth (which measures the output growth over the combined contribution of the factor inputs – labour and capital) from 1 per cent from 1980-1995 to 0.4 per cent from 1995-2005. This slowdown in MFP growth is recorded almost everywhere across the Union, with the exception of Finland and the Netherlands where it improved since 1995. In France, Germany and the United Kingdom MFP growth slowed after 1995, and in Italy and Spain, MFP growth was negative. Overall analysis in this and other KLEMS-related studies suggest that the lack of technology and innovation spillovers and market rigidities, in particular in service industries, are important causes of the MFP slowdown in Europe (see also Inklaar et al., 2008; van Ark et al. 2008).

In conclusion, the potential for a recovery in productivity growth will to a large extent depend on the EU's capability to transform the economy towards one that makes more productive use of its resources. Much will depend on the capacity of markets to facilitate the reallocation of resources to industries that show rapid productivity growth. However, it is difficult to predict which industries will be the most productive in the future, as technology and innovation trends are inherently difficult to forecast. For now, a productive use of a larger input from skilled employment and the exploitation of ICT investments in service industries appear the most successful policy avenues for a European productivity revival.

### References:

Robert Inklaar, Marcel Timmer and Bart van Ark (2008), "Market Services Across Europe and the U.S.", *Economic Policy*, Vol. 23 (53), January, pp. 139–194.

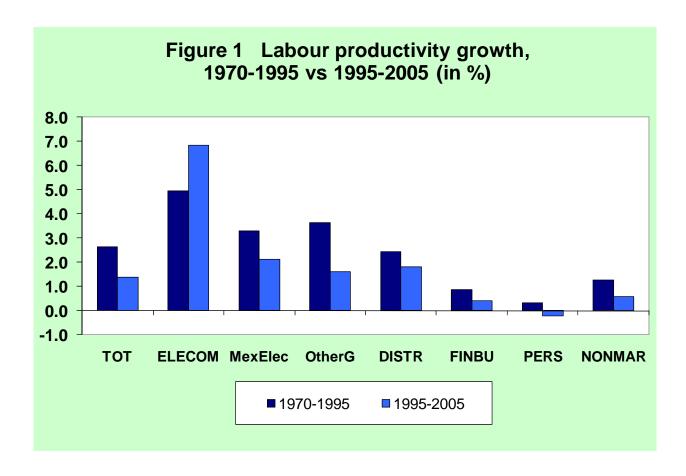
Bart van Ark, Mary O'Mahony and Marcel Timmer (2008), "The Productivity Gap between Europe and the U.S.: Trends and Causes", *Journal of Economic Perspectives*, Vol. 22 (1), Winter, pp. 25-44.

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<sup>&</sup>lt;sup>3</sup> The ten "old" EU countries in the growth accounts analysis refer to Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain and the United Kingdom. The four new member states refer to Czech Republic, Hungary, Poland and Slovenia.

# **European Union-15**

970-1995	Gross Value Added	Total	Total	C)/A nor	Average	Contribution
		persons engaged	hours worked	GVA per hour worked	share in total hours worked (%)	to LP growth in total industries
OTAL INDUCTRIES					(,,,	
OTAL INDUSTRIES	2.5	0.4	-0.2	2.6	100.0	2.
Electrical machinery, post and communication	4.1	-0.4	-0.8	4.9	4.1	0
Manufacturing, excluding electrical	1.6	-1.2	-1.7	3.3	21.8	0
Other goods producing industries	1.2	-2.0	-2.4	3.6	20.4	
Distribution services	2.7	0.8	0.3	2.4	19.7	0
Finance and business services	3.8	3.4	3.0	0.9	8.0	
Personal and social services	2.0	2.1	1.7	0.3	8.1	0
Non-market services	2.8	2.1	1.6	1.3	18.0	0
Reallocation of labour effect	,				. 0.0	-0
995-2005						
OTAL INDUSTRIES	2.1	1.2	0.8	1.4	100.0	1
Electrical machinery, post and communication	5.9	-0.5	-0.9	6.8	3.4	
Manufacturing, excluding electrical	1.0	-0.7	-1.1	2.1	16.2	
Other goods producing industries	1.2	-0.2	-0.4	1.6	14.2	
Distribution services	2.5	1.1	0.7	1.8	20.4	
Finance and business services	3.7	3.5	3.3	0.4	13.5	
Personal and social services	1.8	2.5	2.1	-0.2	11.1	0
Non-market services	1.7	1.3	1.1	0.6	21.2	
Reallocation of labour effect	1.1	1.0	•••	0.0	21.2	0
995-2000						
OTAL INDUSTRIES	2.7	1.5	1.1	1.6	100.0	1
Electrical machinery, post and communication	8.3	0.5	0.3	8.0	3.5	
Manufacturing, excluding electrical	1.8	0.0	-0.3	2.1	17.0	
Other goods producing industries	1.3	-0.3	-0.3	1.7	14.6	
Distribution services	3.3	1.5	1.0	2.3	20.4	
Finance and business services	4.7	4.9	4.5	0.3	12.7	0
Personal and social services	2.6	2.7	2.3	0.3	10.7	0
Non-market services	1.6	1.3	0.9	0.3	21.1	0
Reallocation of labour effect	1.0	1.3	0.9	0.7	21.1	0
000-2005	4.0	0.0	0.4	4.0	400.0	
OTAL INDUSTRIES	1.6	0.8	0.4	1.2	100.0	1
Electrical machinery, post and communication	3.6	-1.5	-2.1	5.7	3.3	
Manufacturing, excluding electrical	0.3	-1.4	-1.9	2.2	15.5	
Other goods producing industries	1.1	0.0	-0.4	1.5	13.8	
Distribution services	1.7	0.8	0.3	1.3	20.3	
Finance and business services	2.7	2.2	2.2	0.5	14.4	
Personal and social services	1.1	2.4	1.8	-0.7	11.4	
Non-market services Reallocation of labour effect	1.7	1.4	1.3	0.4	21.3	0



**EU-10 (New Member States)** 

	(annual av	erage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005		<u> </u>			· /	
TOTAL INDUSTRIES	3.1	-0.1	-0.3	3.5	100.0	3.
Electrical machinery, post and communication	11.7	0.6	0.4	11.3	3.6	0.4
Manufacturing, excluding electrical	4.7	-1.6	-1.6	6.3	20.2	1.4
Other goods producing industries	1.1	-1.5	-1.6	2.7	24.5	0.1
Distribution services	3.9	0.6	0.2	3.8	20.6	0.8
Finance and business services	6.1	3.9	3.6	2.5	6.9	0.
Personal and social services	1.4	1.4	1.0	0.4	5.9	0.0
Non-market services	2.1	0.2	0.2	1.9	18.2	0.3
Reallocation of labour effect						-0.2
I995-2000 FOTAL INDUSTRIES Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services	3.3 13.9 5.1 0.8 4.4 7.6 1.4	0.0 1.5 -1.7 -1.4 0.9 4.8 1.9	0.2 1.6 -1.4 -1.3 0.9 5.2 1.8 0.8	3.1 12.3 6.5 2.1 3.5 2.4 -0.5	100.0 3.5 21.0 25.3 20.4 6.2 5.7 17.9	3. 0. 1. 0. 0. 0. 0.
Reallocation of labour effect						-0.
TOTAL INDUSTRIES	3.0	-0.3	-0.9	3.9	100.0	3.9
Electrical machinery, post and communication	9.4	-0.3	-0.8	10.2	3.7	0.4
Manufacturing, excluding electrical	4.4	-1.5	-1.8	6.2	19.3	1.
Other goods producing industries	1.4	-1.6	-1.9	3.3	23.6	0.
Distribution services	3.4	0.2	-0.6	4.0	20.9	0.
Finance and business services	4.5	2.9	1.9	2.6	7.7	0.
Personal and social services	1.4	0.9	0.1	1.3	6.1	0.
Non-market services	2.3	0.2	-0.4	2.7	18.7	0.9
Reallocation of labour effect						-0.

EU-25 (excluding Bulgaria and Romania)

Table 1 Gross Value Added, Labour Inp						
	_ (annual av	erage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005		<u> </u>			( /	
TOTAL INDUSTRIES	2.2	1.0	0.6	1.6	100.0	1.6
.Electrical machinery, post and communication	6.2	-0.3	-0.7	6.9	3.4	0.2
.Manufacturing, excluding electrical	1.3	-0.9	-1.2	2.5	16.9	0.5
.Other goods producing industries	1.2	-0.5	-0.7	1.9	15.9	0.3
.Distribution services	2.6	1.1	0.6	2.0	20.4	0.4
.Finance and business services	3.8	3.5	3.3	0.5	12.4	0.1
.Personal and social services	1.8	2.4	2.0	-0.2	10.2	0.0
.Non-market services	1.7	1.2	1.0	0.7	20.7	0.2
.Reallocation of labour effect						0.0
1995-2000 TOTAL INDUSTRIES	2.7	1.3	1.0	1.8	100.0	4.0
				8.0		1.8
Electrical machinery, post and communication	8.5	0.6	0.5		3.5	0.3 0.5
.Manufacturing, excluding electrical	2.0 1.2	-0.3 -0.6	-0.5 -0.6	2.5 1.9	17.7 16.5	0.3
Other goods producing industries Distribution services	3.4	1.4	1.0	2.4	20.4	0.5
Finance and business services	4.9	4.9	4.5	0.4	11.6	0.0
Personal and social services	2.5	2.6	2.3	0.4	9.8	0.0
.Non-market services	1.7	1.1	0.9	0.2	20.5	0.0
Reallocation of labour effect	1.7	1.1	0.9	0.6	20.5	0.2
						0.0
2000-2005	1.7	0.7	0.2	1.5	100.0	1.5
TOTAL INDUSTRIES	3.9	-1.3	-1.8	5.8	3.3	0.2
Electrical machinery, post and communication	0.6	-1.3 -1.4	-1.0	2.5	3.3 16.1	0.2
.Manufacturing, excluding electrical	1.1			1.9	15.1	0.4
Other goods producing industries Distribution services	1.1	-0.4 0.7	-0.8 0.2	1.9	20.4	0.3
Finance and business services	2.8	2.2	2.1	0.7	13.3	0.3
Personal and social services	1.1	2.2	1.6	-0.5	10.6	-0.1
.Non-market services	1.8	1.3	1.0	0.7	20.9	0.1
Reallocation of labour effect	1.0	1.3	1.0	0.7	20.9	0.1

# EU15ex (excluding Greece, Ireland, Luxembourg, Portugal and Sweden)

	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.1	0.0	-0.3	0.3	1.1	0.4	0.7	1.0
Electrical machinery, post and communication	3.6	-0.6	-0.9	0.3	1.6	0.9	0.7	2.6
Manufacturing, excluding electrical	1.1	-1.2	-1.5	0.3	0.7	0.2	0.5	1.7
Other goods producing industries	1.1	-1.1	-1.4	0.2	0.7	0.1	0.6	1.6
Market services	2.8	1.3	1.0	0.3	1.3	0.5	0.8	0.1
Distribution services	2.6	0.3	0.1	0.2	0.8	0.3	0.5	1.5
Finance and business services	3.5	2.4	1.9	0.4	2.1	0.9	1.2	-1.0
Personal and social services	1.7	1.8	1.5	0.3	0.9	0.2	0.6	-1.1
1995-2005								
MARKET ECONOMY	2.2	0.6	0.4	0.2	1.2	0.6	0.6	0.4
Electrical machinery, post and communication	5.5	-0.4	-0.6	0.2	1.7	1.2	0.5	4.1
Manufacturing, excluding electrical	0.8	-0.4	-0.7	0.3	0.6	0.3	0.3	0.7
Other goods producing industries	1.1	0.0	-0.1	0.2	0.7	0.1	0.6	0.4
Market services	2.8	1.4	1.2	0.2	1.5	0.8	0.8	-0.:
Distribution services	2.3	0.6	0.5	0.1	1.1	0.4	0.7	0.6
Finance and business services	3.6	2.2	1.9	0.3	2.2	1.3	0.9	-0.8
Personal and social services	1.7	1.5	1.4	0.1	1.0	0.3	0.7	-0.8
1995-2000								
MARKET ECONOMY	3.0	0.9	0.8	0.2	1.5	0.8	0.7	0.5
Electrical machinery, post and communication	7.8	0.1	0.0	0.1	2.4	1.8	0.6	5.3
Manufacturing, excluding electrical	1.5	0.0	-0.1	0.2	0.8	0.4	0.5	0.6
Other goods producing industries	1.2	0.0	-0.3	0.2	0.7	0.2	0.5	0.6
Market services	3.7	1.8	1.6	0.2	2.0	1.0	1.0	-0.1
Distribution services	3.2	0.9	0.8	0.1	1.3	0.6	0.7	0.9
Finance and business services	4.6	2.8	2.5	0.3	2.9	1.7	1.3	-1.1
Personal and social services	2.5	1.6	1.6	0.1	1.2	0.4	0.8	-0.4
2000-2005								
MARKET ECONOMY	1.4	0.3	0.0	0.3	0.9	0.4	0.5	0.2
Electrical machinery, post and communication	3.1	-0.9	-1.2	0.3	1.0	0.4	0.3	3.0
.Manufacturing, excluding electrical	0.1	-0.9	-1.2	0.4	0.3	0.6	0.4	0.7
Other goods producing industries			0.0	0.4	0.3	0.2	0.2	0.7
Market services	1.1 1.8	0.1 1.0	0.0	0.1	1.1	0.1	0.7	-0.2
Distribution services	1.5	0.3	0.8	0.2	1.0	0.5	0.6	0.2
					1.0			
Finance and business services	2.5	1.6 1.3	1.3 1.2	0.3	1.4	0.8	0.5	-0.

VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition

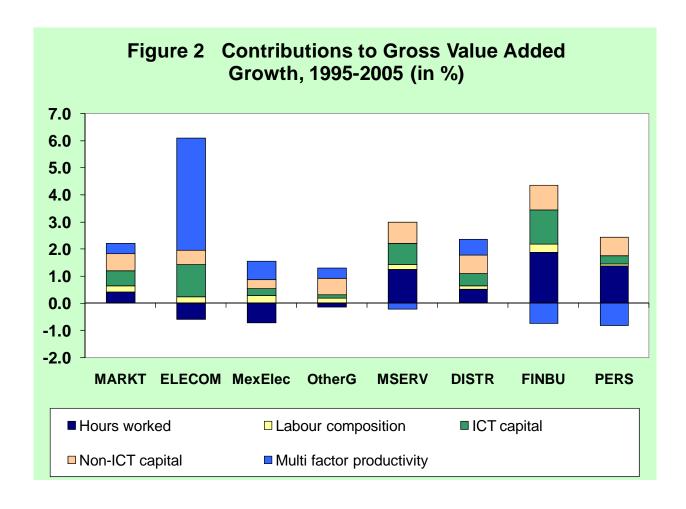
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

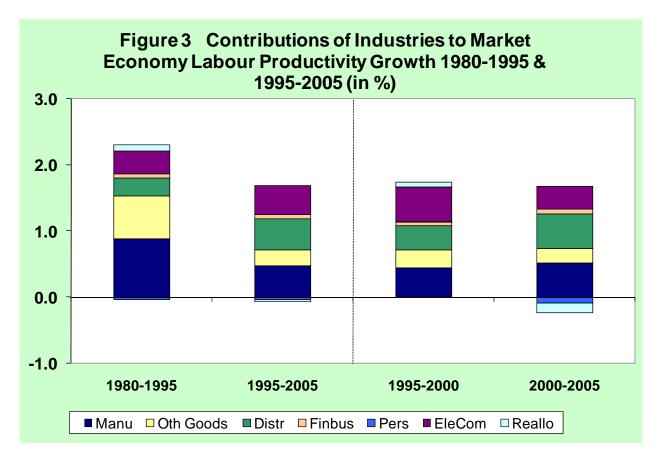
(annual average volume growth rates, i	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995		. , ,	.,,,,,	. ,	. ,	
MARKET ECONOMY	2.5	0.3	1.2	0.4	0.8	1.0
Electrical machinery, post and communication	4.9	0.3	2.0	1.0	1.0	2.7
Manufacturing, excluding electrical	3.2	0.3	1.3	0.2	1.0	1.6
Other goods producing industries	3.5	0.2	1.5	0.2	1.3	1.8
Market services	1.4	0.3	1.0	0.5	0.5	0.1
.Distribution services	2.5	0.2	0.8	0.3	0.5	1.5
.Finance and business services	0.3	0.4	1.1	0.7	0.4	-1.2
.Personal and social services	-0.5	0.3	0.4	0.2	0.2	-1.2
1995-2005						
MARKET ECONOMY	1.5	0.2	1.0	0.5	0.4	0.3
Electrical machinery, post and communication	6.5	0.2	2.1	1.3	0.8	4.2
Manufacturing, excluding electrical	2.0	0.3	0.9	0.3	0.6	0.8
Other goods producing industries	1.6	0.2	0.9	0.2	0.7	0.5
Market services	1.0	0.2	1.0	0.7	0.4	-0.2
.Distribution services	1.7	0.1	1.0	0.4	0.6	0.6
Finance and business services	0.3	0.3	1.1	1.0	0.1	-1.1
Personal and social services	-0.4	0.1	0.5	0.2	0.2	-0.9
1995-2000						
MARKET ECONOMY	1.8	0.2	1.2	0.7	0.5	0.5
Electrical machinery, post and communication	7.8	0.1	2.4	1.8	0.6	5.3
Manufacturing, excluding electrical	1.8	0.2	0.9	0.4	0.6	0.7
Other goods producing industries	1.7	0.2	0.8	0.2	0.6	0.7
Market services	1.3	0.2	1.3	0.9	0.4	-0.1
.Distribution services	2.2	0.1	1.1	0.5	0.5	1.0
Finance and business services	0.2	0.3	1.4	1.3	0.1	-1.5
.Personal and social services	0.2	0.1	0.6	0.3	0.3	-0.5
2000-2005						
MARKET ECONOMY	1.2	0.3	0.8	0.4	0.4	0.1
Electrical machinery, post and communication	5.1	0.4	1.7	0.9	0.9	3.0
Manufacturing, excluding electrical	2.1	0.4	0.9	0.2	0.7	0.8
Other goods producing industries	1.4	0.1	0.9	0.1	0.8	0.4
Market services	0.6	0.2	0.8	0.5	0.3	-0.4
.Distribution services	1.3	0.1	0.9	0.3	0.6	0.2
.Finance and business services	0.4	0.3	0.7	0.7	0.0	-0.6
Personal and social services	-0.9	0.1	0.3	0.2	0.2	-1.3

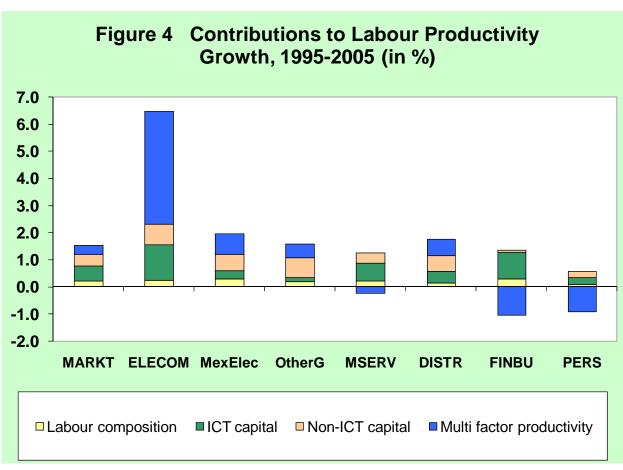
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP

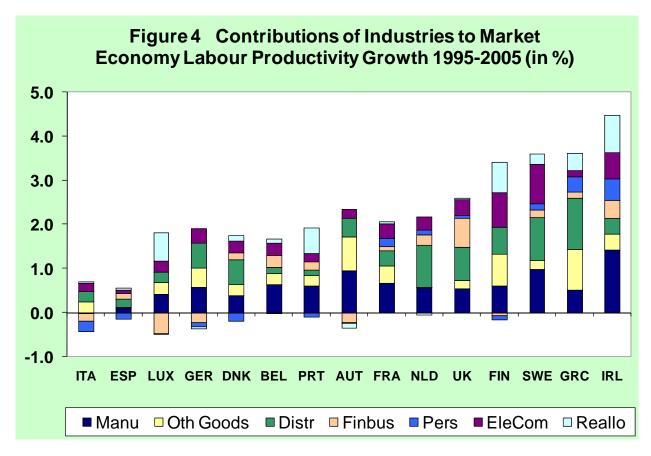
Notes: Inis table gives for each industry a decompose LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth

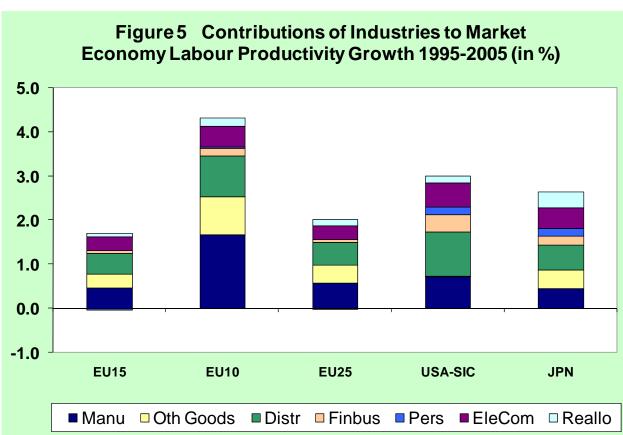
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects











AUSTRIA

Contact person: Michael Peneder, Austrian Institute of Economic Research (WIFO),

Michael.Peneder@wifo.ac.at

	(annual av	verage volum	e growth ra	ites, in %)	A	0
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.8	0.1	-0.2	3.0	100.0	3.0
.Electrical machinery, post and communication	5.2	0.5	0.0	5.2	4.1	0.2
.Manufacturing, excluding electrical	2.4	-1.0	-1.6	4.0	21.1	1.0
Other goods producing industries	1.7	-2.0	-1.9	3.6	21.1	1.0
.Distribution services	3.4	1.2	0.5	3.0	19.9	
Finance and business services	4.5	3.7	2.9	1.6	6.4	
Personal and social services	1.5	1.4	0.5	1.0	9.8	
Non-market services	2.6	2.2	1.5	1.1	17.6	
.Reallocation of labour effect						0.0
1995-2005	0.0	0.0	0.7	4.5	400.0	4.5
TOTAL INDUSTRIES	2.2	0.6	0.7	1.5	100.0	1.5
Electrical machinery, post and communication	2.8	-1.5	-1.5	4.3	3.5	
Manufacturing, excluding electrical	3.0	-0.9	-1.4	4.4	15.1	0.7
Other goods producing industries	1.9	-1.2	-1.6	3.5	15.5	
.Distribution services	2.1	0.7	0.6	1.5	21.3	
.Finance and business services	3.4	5.2	5.4	-2.0	11.9	
Personal and social services	1.2	1.3	1.4	-0.2	11.2	
.Non-market services .Reallocation of labour effect	1.4	1.3	1.5	-0.1	21.5	0.0 -0.2
.reallocation of labour effect						-0.2
1995-2000						
TOTAL INDUSTRIES	2.9	1.0	0.8	2.1	100.0	=
.Electrical machinery, post and communication	3.0	-0.3	-0.8	3.8	3.7	0.1
.Manufacturing, excluding electrical	4.3	-0.8	-1.9	6.2	16.0	
Other goods producing industries	2.3	-0.8	-2.2	4.4	16.5	
.Distribution services	3.5	0.9	0.8	2.7	21.3	
.Finance and business services	5.1	7.6	7.5	-2.4	10.5	
.Personal and social services	1.2	1.6	1.8	-0.6	11.0	
.Non-market services	1.2	1.3	1.7	-0.5	21.1	-0.1
.Reallocation of labour effect						-0.1
2000-2005						
TOTAL INDUSTRIES	1.5	0.3	0.6	0.9	100.0	0.9
.Electrical machinery, post and communication	2.6	-2.7	-2.2	4.8	3.4	
.Manufacturing, excluding electrical	1.8	-1.0	-0.9	2.7	14.3	
Other goods producing industries	1.6	-1.5	-1.0	2.7	14.4	
.Distribution services	0.8	0.4	0.4	0.4	21.3	
.Finance and business services	1.8	2.9	3.4	-1.6	13.4	
Personal and social services	1.3	1.0	1.1	0.2	11.4	
.Non-market services	1.5	1.2	1.2	0.3	21.9	
Reallocation of labour effect						0.0

# **AUSTRIA**

	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.3	0.1	-0.2	0.3	0.9	0.4	0.5	1.4
Electrical machinery, post and communication	4.9	-0.3	-0.5	0.2	1.8	1.3	0.5	3.4
Manufacturing, excluding electrical	1.7	-1.2	-1.5	0.3	0.6	0.2	0.4	2.3
Other goods producing industries	1.2	-0.5	-0.6	0.1	0.2	0.1	0.1	1.5
Market services	2.8	1.1	0.7	0.4	1.1	0.5	0.7	0.0
.Distribution services	2.7	0.5	0.3	0.3	1.0	0.4	0.6	1.2
Finance and business services	4.2	1.9	1.4	0.5	1.8	0.9	0.9	0.5
.Personal and social services	0.9	1.4	0.7	0.7	0.5	0.1	0.4	-0.9
1995-2005								
MARKET ECONOMY	2.5	0.6	0.4	0.2	0.8	0.6	0.2	1.1
Electrical machinery, post and communication	2.8	-0.6	-0.9	0.3	0.9	0.7	0.2	2.5
Manufacturing, excluding electrical	3.0	-0.5	-0.8	0.3	0.4	0.4	0.0	3.2
Other goods producing industries	1.9	-0.7	-0.9	0.2	-0.2	0.1	-0.3	2.
Market services	2.4	1.6	1.5	0.2	1.3	0.8	0.5	-0.
.Distribution services	2.1	0.5	0.4	0.1	0.8	0.6	0.2	0.8
Finance and business services	3.4	3.3	3.1	0.2	2.3	1.4	0.9	-2.
Personal and social services	1.2	1.4	1.2	0.2	0.6	0.3	0.3	-0.7
1995-2000								
MARKET ECONOMY	3.5	0.7	0.5	0.2	1.0	0.7	0.3	1.7
Electrical machinery, post and communication	3.0	-0.3	-0.6	0.3	1.6	1.3	0.3	1.7
Manufacturing, excluding electrical	4.3	-0.9	-1.2	0.3	0.5	0.5	0.0	4.7
Other goods producing industries	2.3	-1.2	-1.2	0.1	0.0	0.2	-0.1	3.4
Market services	3.5	2.2	1.9	0.2	1.5	0.9	0.6	-0.
.Distribution services	3.5	0.8	0.5	0.2	1.1	0.7	0.4	1.6
.Finance and business services	5.1	4.4	4.2	0.2	2.7	1.6	1.0	-1.
.Personal and social services	1.2	1.8	1.5	0.3	0.6	0.3	0.3	-1.
2000-2005								
MARKET ECONOMY	1.5	0.4	0.3	0.2	0.6	0.4	0.1	0.5
Electrical machinery, post and communication	2.6	-0.9	-1.2	0.2	0.0	0.4	0.0	3.4
Manufacturing, excluding electrical	1.8	-0.9	-0.4	0.3	0.1	0.2	-0.1	1.
Other goods producing industries	1.6	-0.2	-0.4	0.2	-0.4	0.3	-0.1	2.4
Market services	1.2	1.1	1.0	0.3	1.0	0.6	0.4	-0.
Distribution services	0.8	0.2	0.2	0.0	0.5	0.4	0.4	0.
Finance and business services	1.8	2.2	2.1	0.0	2.0	1.1	0.1	-2.
Personal and social services	1.3	1.0	0.8	0.2	0.5	0.3	0.9	-2. -0.

VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

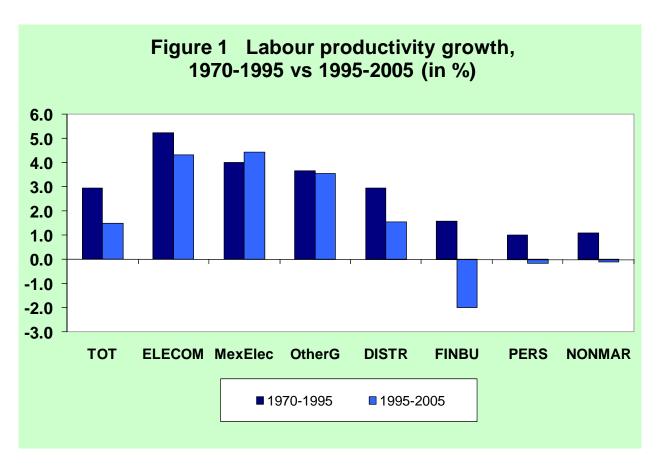
### **AUSTRIA**

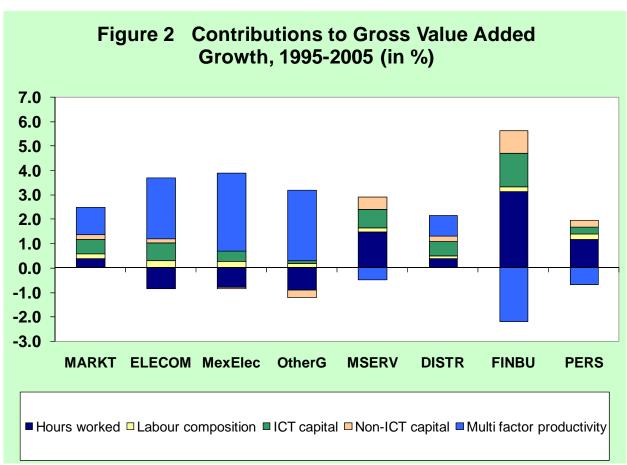
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	2.8	0.3	1.0	0.4	0.6	1.5
Electrical machinery, post and communication	5.7	0.2	2.0	1.4	0.6	3.4
Manufacturing, excluding electrical	3.8	0.3	1.1	0.2	0.9	2.4
Other goods producing industries	2.7	0.1	0.7	0.1	0.7	1.8
Market services	1.9	0.4	0.9	0.4	0.4	0.6
.Distribution services	2.3	0.3	0.9	0.4	0.5	1.2
Finance and business services	1.9	0.5	1.1	0.8	0.3	0.3
.Personal and social services	0.1	0.7	0.4	0.1	0.2	-0.9
1995-2005						
MARKET ECONOMY	2.0	0.2	0.6	0.6	0.1	1.2
Electrical machinery, post and communication	4.3	0.3	1.5	1.1	0.5	2.5
Manufacturing, excluding electrical	4.4	0.3	0.9	0.4	0.4	3.3
Other goods producing industries	3.5	0.2	0.4	0.1	0.3	2.9
Market services	0.3	0.2	0.6	0.7	-0.1	-0.4
.Distribution services	1.5	0.1	0.6	0.6	0.0	0.8
Finance and business services	-2.0	0.2	0.5	1.0	-0.5	-2.7
Personal and social services	-0.2	0.2	0.2	0.3	0.0	-0.6
1995-2000						
MARKET ECONOMY	2.9	0.2	0.8	0.7	0.1	1.8
Electrical machinery, post and communication	3.8	0.3	2.0	1.5	0.5	1.6
Manufacturing, excluding electrical	6.2	0.3	1.2	0.5	0.6	4.7
Other goods producing industries	4.4	0.1	0.8	0.2	0.7	3.5
Market services	0.9	0.2	0.7	0.8	-0.2	0.0
.Distribution services	2.7	0.2	0.8	0.7	0.1	1.6
.Finance and business services	-2.4	0.2	0.1	1.2	-1.1	-2.7
Personal and social services	-0.6	0.3	0.2	0.3	-0.1	-1.0
2000-2005						
MARKET ECONOMY	1.1	0.2	0.4	0.4	0.0	0.5
Electrical machinery, post and communication	4.8	0.3	1.1	0.6	0.5	3.4
Manufacturing, excluding electrical	2.7	0.2	0.6	0.3	0.3	1.8
Other goods producing industries	2.7	0.3	0.0	0.1	-0.1	2.4
Market services	-0.2	0.1	0.6	0.6	0.0	-0.9
.Distribution services	0.4	0.0	0.4	0.4	0.0	0.0
.Finance and business services	-1.6	0.2	0.9	0.9	0.1	-2.7
Personal and social services	0.2	0.2	0.3	0.2	0.0	-0.2

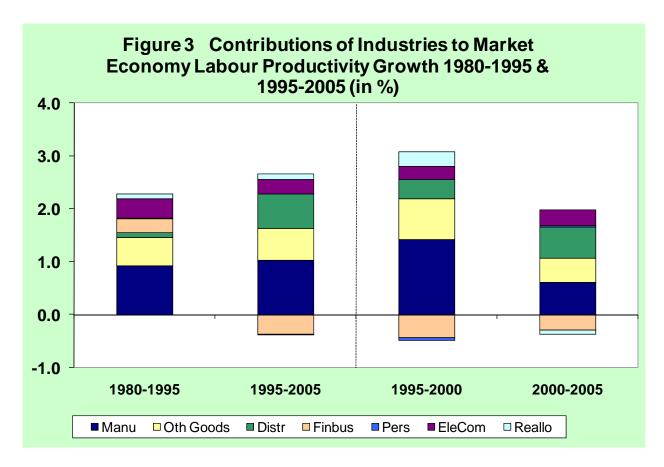
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP

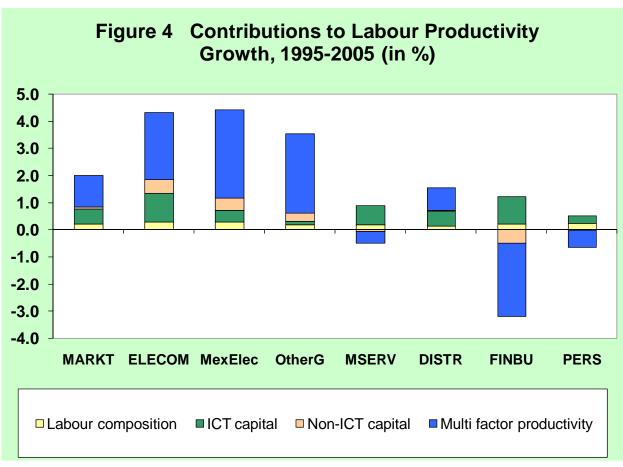
Notes: Inis table gives for each industry a decompose LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









BELGIUM

Contact person: Chantal Kegels, Federaal Planbureau, ck@plan.be

	(ariffual av	erage volum	ie growiii ia	1103, 111 /0)	Avorage	Contribution
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.5	0.2	-0.7	3.2	100.0	3.2
Electrical machinery, post and communication	3.0	-1.0	-1.5	4.5	4.9	0.2
Manufacturing, excluding electrical	3.2	-2.1	-2.7	5.9	23.0	1.7
Other goods producing industries	0.9	-1.7	-2.6	3.5	11.9	0.5
Distribution services	1.4	0.1	-0.6	2.0	20.3	0.4
Finance and business services	3.5	3.1	2.6	0.9	9.4	0.1
Personal and social services	2.8	1.0	-0.5	3.3	8.1	0.3
Non-market services	2.9	2.0	1.2	1.8	22.5	0.3
Reallocation of labour effect						-0.3
1995-2005						
TOTAL INDUSTRIES	2.0	0.9	0.9	1.1	100.0	1.1
Electrical machinery, post and communication	3.7	-1.0	-1.3	5.0	3.7	0.2
Manufacturing, excluding electrical	1.5	-1.1	-1.2	2.7	15.7	0.5
Other goods producing industries	1.6	-0.7	-0.4	2.0	8.8	0.2
Distribution services	1.1	0.7	0.5	0.5	19.6	0.1
Finance and business services	4.8	3.0	3.4	1.4	17.0	0.2
Personal and social services	0.8	0.8	0.9	-0.1	8.2	0.0
Non-market services	1.4	1.6	1.5	-0.1	26.9	0.0
Reallocation of labour effect						0.0
1995-2000						
TOTAL INDUSTRIES	2.5	1.1	1.3	1.2	100.0	1.2
Electrical machinery, post and communication	6.2	0.0	-0.2	6.4	3.9	0.3
Manufacturing, excluding electrical	2.4	-0.7	-0.5	2.9	16.6	0.5
Other goods producing industries	3.1	-0.6	0.4	2.7	9.1	0.3
Distribution services	0.3	0.5	0.7	-0.4	19.7	-0.1
Finance and business services	6.2	4.7	5.3	1.0	16.0	0.1
Personal and social services	1.2	0.8	0.8	0.3	8.2	0.0
Non-market services	1.4	1.3	1.3	0.1	26.4	0.0
Reallocation of labour effect	1.7	1.0	1.0	0.1	20.4	0.1
2000-2005 TOTAL INDUSTRIES	1.5	0.6	0.4	1.1	100.0	1.1
Electrical machinery, post and communication	1.3	-1.9	-2.4	3.7	3.6	0.1
.Manufacturing, excluding electrical	0.6	-1.5	-1.9	2.4	15.0	0.4
Other goods producing industries	0.0	-0.8	-1.9	1.3	8.6	0.2
Distribution services	1.8	0.8	0.3	1.4	19.4	0.3
Finance and business services	3.4	1.3	1.6	1.4	18.0	0.3
Personal and social services	0.4	0.7	0.9	-0.5	8.2	0.0
Non-market services	1.4	1.8	1.8	-0.5 -0.3	27.2	-0.1
Reallocation of labour effect	1.4	1.0	1.0	-0.3	21.2	-0.1

# **BELGIUM**

	VA	L	Н	LC	K	KIT	KNIT	MFI
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.0	-0.1	-0.4	0.3	1.5	8.0	0.7	0.0
Electrical machinery, post and communication	1.7	-1.0	-1.3	0.3	2.8	2.4	0.3	0.0
Manufacturing, excluding electrical	2.4	-1.1	-1.4	0.3	1.7	0.6	1.1	1.3
Other goods producing industries	0.3	-1.3	-1.5	0.2	0.7	0.3	0.5	0.
Market services	2.4	1.1	0.8	0.3	1.5	1.0	0.5	-0.
.Distribution services	0.8	0.0	-0.3	0.3	1.6	8.0	0.8	-0.
.Finance and business services	4.6	2.5	2.3	0.1	1.4	1.3	0.1	0.
.Personal and social services	2.3	1.1	0.7	0.4	1.1	0.6	0.5	0.
1995-2005								
MARKET ECONOMY	2.3	0.6	0.4	0.2	1.6	1.0	0.6	0.
Electrical machinery, post and communication	3.7	-0.5	-0.9	0.4	2.8	2.5	0.3	1.
Manufacturing, excluding electrical	1.5	-0.4	-0.7	0.4	1.3	0.5	0.7	0.
Other goods producing industries	1.6	-0.3	-0.3	0.0	0.7	0.3	0.3	1.
Market services	2.7	1.4	1.2	0.2	1.8	1.2	0.6	-0
.Distribution services	1.1	0.7	0.4	0.3	1.8	1.0	0.8	-1.
Finance and business services	4.8	2.3	2.2	0.1	2.0	1.6	0.4	0.
Personal and social services	0.8	0.9	0.7	0.2	1.2	0.6	0.6	-1.
1995-2000								
MARKET ECONOMY	3.1	1.2	1.0	0.2	2.0	1.3	0.7	-0.
Electrical machinery, post and communication	6.2	0.3	-0.2	0.5	4.5	4.1	0.5	1
Manufacturing, excluding electrical	2.4	0.1	-0.2	0.3	1.8	0.7	1.1	0.
Other goods producing industries	3.1	0.3	0.2	0.0	0.7	0.4	0.3	2.
Market services	3.0	2.1	1.8	0.2	2.1	1.4	0.6	-1.
.Distribution services	0.3	0.9	0.6	0.3	2.1	1.2	0.9	-2.
Finance and business services	6.2	3.7	3.5	0.2	2.2	1.8	0.4	0.
Personal and social services	1.2	0.9	0.7	0.3	1.3	0.7	0.6	-1.
2000-2005								
MARKET ECONOMY	1.6	0.1	-0.1	0.2	1.2	0.7	0.5	0.
Electrical machinery, post and communication	1.3	-1.3	-1.6	0.3	1.1	0.9	0.2	1.
Manufacturing, excluding electrical	0.6	-0.8	-1.2	0.4	0.7	0.4	0.3	0.
Other goods producing industries	0.1	-0.8	-0.8	0.0	0.7	0.3	0.4	0.
Market services	2.3	0.7	0.6	0.2	1.6	0.9	0.6	0.
Distribution services	1.8	0.5	0.2	0.3	1.5	0.7	0.8	-0
Finance and business services	3.4	0.9	0.9	0.0	1.8	1.3	0.5	0.
Personal and social services	0.4	0.9	0.7	0.0	1.0	0.5	0.5	-1

VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

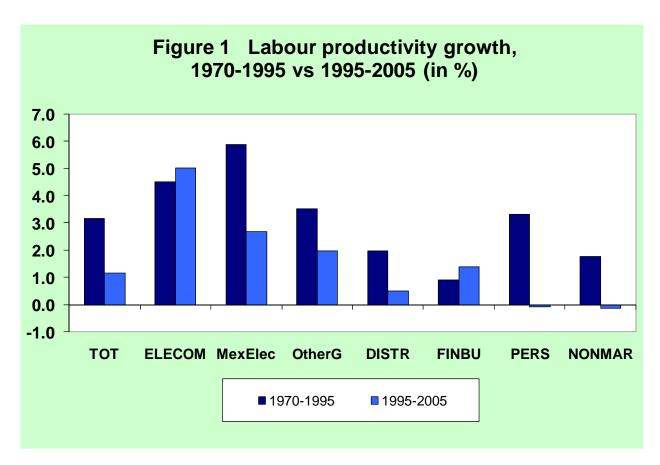
### **BELGIUM**

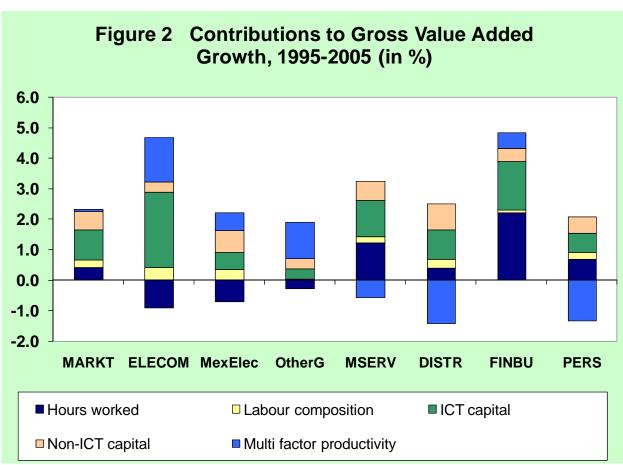
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995	(1) (2) (6) (6)	(-)	(5) (1) (6)	( · )	(0)	(0)
MARKET ECONOMY	2.6	0.3	1.7	0.8	0.8	0.7
Electrical machinery, post and communication	3.5	0.3	3.4	2.7	0.7	-0.1
Manufacturing, excluding electrical	4.6	0.3	2.4	0.7	1.7	1.9
Other goods producing industries	2.6	0.2	1.5	0.3	1.2	0.9
Market services	1.7	0.3	1.3	0.9	0.3	0.2
.Distribution services	1.3	0.3	1.8	0.8	0.9	-0.8
Finance and business services	1.1	0.1	0.5	1.0	-0.5	0.4
Personal and social services	2.4	0.4	1.1	0.6	0.5	0.9
1995-2005	4 =	0.0		4.0	0.4	0.4
MARKET ECONOMY	1.7	0.2	1.4	1.0	0.4	0.1
Electrical machinery, post and communication	5.0	0.4	3.3	2.7	0.6	1.4
Manufacturing, excluding electrical	2.7	0.4	1.7	0.6	1.1	0.7
Other goods producing industries	2.0	0.0	0.8	0.3	0.5	1.1
Market services	1.0	0.2	1.3	1.1	0.2	-0.5
.Distribution services	0.5	0.3	1.6	0.9	0.7	-1.4
.Finance and business services	1.4	0.1	1.1	1.3	-0.2	0.2
.Personal and social services	-0.1	0.2	1.0	0.6	0.4	-1.3
1995-2000						
MARKET ECONOMY	1.7	0.2	1.5	1.2	0.3	-0.1
Electrical machinery, post and communication	6.4	0.5	4.6	4.1	0.5	1.3
Manufacturing, excluding electrical	2.9	0.3	2.0	0.7	1.3	0.6
Other goods producing industries	2.7	0.0	0.5	0.4	0.2	2.1
Market services	0.6	0.2	1.3	1.3	0.0	-1.0
.Distribution services	-0.4	0.3	1.9	1.2	0.7	-2.6
.Finance and business services	1.0	0.2	0.8	1.4	-0.7	0.0
.Personal and social services	0.3	0.3	1.1	0.7	0.4	-1.0
2000-2005						
MARKET ECONOMY	1.6	0.2	1.2	0.7	0.5	0.2
Electrical machinery, post and communication	3.7	0.2	1.2	1.3	0.5	1.4
Manufacturing, excluding electrical	2.4	0.3	1.3	0.4	0.6	0.7
	1.3		1.3	0.4	0.9	0.7
Other goods producing industries  Market services	1.3	0.0 0.2	1.1	0.3	0.8	0.1
.Distribution services	1.4	0.3	1.4	0.7	0.7	-0.2
.Finance and business services	1.8	0.0	1.4	1.2	0.2	0.4

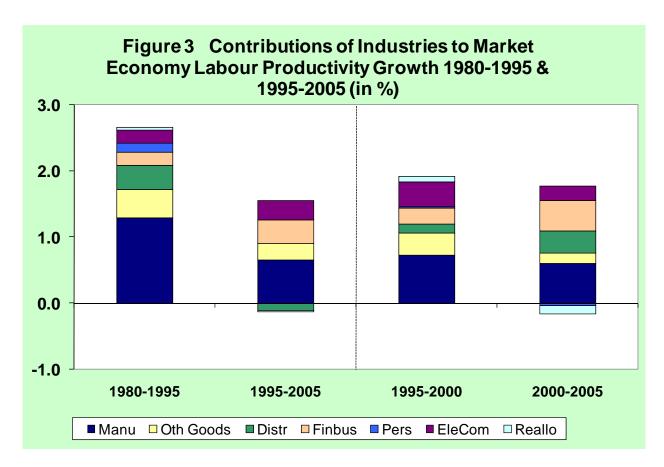
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP

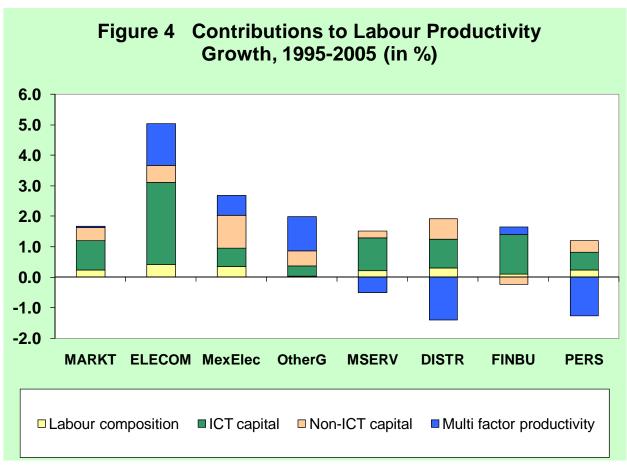
Notes: Inis table gives for each industry a decompose LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









# CZECH REPUBLIC

# CZECH REPUBLIC

**Contact person:** Robert Stehrer, The Vienna Institute for International Economic Studies (WIIW), <a href="mailto:stehrer@wiiw.ac.at">stehrer@wiiw.ac.at</a>

	(annual av	erage volum	ne growth ra	tes, in %)	•	0 . " . "
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005						
TOTAL INDUSTRIES	2.1	-0.3	-0.6	2.7	100.0	2.7
Electrical machinery, post and communication	9.8	1.9	1.7	8.1	4.6	0.3
.Manufacturing, excluding electrical	3.6	-0.7	-0.9	4.5	23.8	1.1
Other goods producing industries	-1.3	-3.3	-3.5	2.2	18.2	0.5
.Distribution services	4.4	-0.3	-0.4	4.8	21.1	1.0
Finance and business services	3.5	2.2	1.8	1.7	9.2	0.1
Personal and social services	-2.2	1.6	1.4	-3.6	6.9	-0.2
.Non-market services	-0.5	0.5	0.1	-0.6	16.2	-0.1
.Reallocation of labour effect						0.0
1995-2000 TOTAL INDUSTRIES	0.8	-0.8	-0.4	1.3	100.0	1.3
.Electrical machinery, post and communication	11.4	2.4	2.6	8.8	4.4	0.4
Manufacturing, excluding electrical	3.2	-1.2	-0.8	4.0	24.1	1.0
Other goods producing industries	-4.0	-4.6	-4.4	0.4	19.6	0.1
Distribution services	3.6	-0.4	0.2	3.4	20.9	0.7
Finance and business services	1.6	1.4	2.0	-0.4	8.5	0.0
Personal and social services	-4.7	1.7	2.1	-6.8	6.6	-0.4
Non-market services	-1.9	0.2	0.7	-2.6	15.9	-0.4
Reallocation of labour effect						0.0
2000-2005						
TOTAL INDUSTRIES	3.4	0.2	-0.7	4.1	100.0	4.1
Electrical machinery, post and communication	8.2	1.4	0.8	7.4	5.0	0.4
Manufacturing, excluding electrical	4.0	-0.3	-1.0	4.9	23.5	1.2
Other goods producing industries	1.4	-2.0	-2.6	3.9	16.6	0.7
Distribution services	5.1	-0.2	-1.0	6.1	21.3	1.3
Finance and business services	5.4	2.9	1.6	3.8	9.9	0.4
Personal and social services	0.3	1.6	0.8	-0.5	7.3	0.0
Non-market services	0.8	0.7	-0.6	1.4	16.5	0.2
Reallocation of labour effect						0.1

# CZECH REPUBLIC

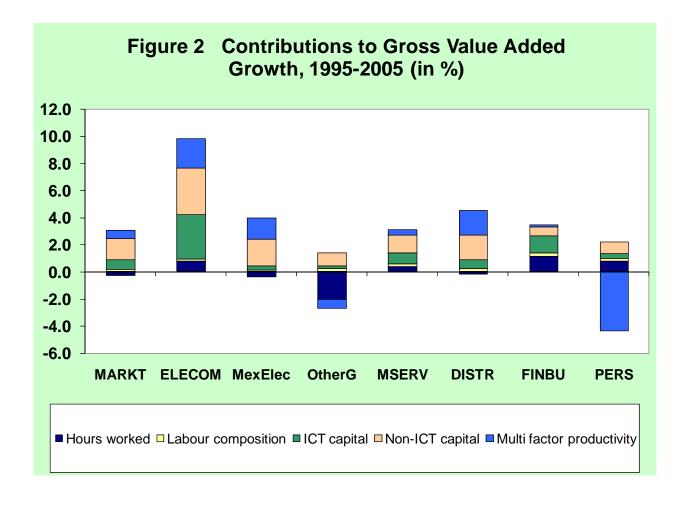
Table 2 Gross value added growth and (annual average volume growth rates,		95-2005						
	VA	L	Н	LC	K	KIT	KNIT	MFP
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	2.7	-0.1	-0.3	0.2	2.3	0.7	1.6	0.6
.Electrical machinery, post and communication	9.8	0.9	0.8	0.1	6.7	3.3	3.4	2.2
.Manufacturing, excluding electrical	3.6	-0.2	-0.4	0.1	2.2	0.3	1.9	1.6
.Other goods producing industries	-1.3	-1.8	-2.0	0.2	1.2	0.2	1.0	-0.7
.Market services	3.1	0.6	0.4	0.2	2.1	0.8	1.3	0.4
Distribution services	4.4	0.0	-0.2	0.2	2.5	0.7	1.8	1.8
Finance and business services	3.5	1.4	1.1	0.3	1.9	1.3	0.6	0.2
Personal and social services	-2.2	1.0	0.8	0.2	1.2	0.3	0.9	-4.4
1995-2000	4.5	0.0	0.0	0.4	0.7		4 7	4.4
MARKET ECONOMY	1.5	-0.2	-0.3	0.1	2.7	1.1	1.7	-1.1
.Electrical machinery, post and communication	11.4	1.4	1.3	0.1	11.1	5.9	5.2	-1.1
.Manufacturing, excluding electrical	3.2	-0.3	-0.4	0.1	2.0	0.4	1.5	1.6
Other goods producing industries	-4.0	-2.4	-2.5	0.1	1.7	0.3	1.3	-3.2
.Market services	1.7	0.8	0.6	0.1	2.5	1.1	1.4	-1.6
Distribution services	3.6	0.3	0.2	0.1	3.2	1.1	2.0	0.2
Finance and business services	1.6	1.5	1.3	0.2	2.3	1.5	0.9	-2.3
Personal and social services	-4.7	1.2	1.1	0.1	0.5	0.3	0.2	-6.5
2000-2005								
MARKET ECONOMY	4.0	-0.1	-0.3	0.3	1.8	0.3	1.5	2.3
.Electrical machinery, post and communication	8.2	0.5	0.3	0.1	2.3	0.7	1.6	5.4
.Manufacturing, excluding electrical	4.0	-0.2	-0.4	0.2	2.5	0.2	2.4	1.6
.Other goods producing industries	1.4	-1.2	-1.5	0.4	0.7	0.1	0.6	1.9
.Market services	4.5	0.4	0.1	0.3	1.7	0.5	1.2	2.4
Distribution services	5.1	-0.2	-0.5	0.3	1.8	0.2	1.6	3.5
Finance and business services	5.4	1.2	0.9	0.3	1.5	1.1	0.4	2.6
Personal and social services	0.3	0.8	0.5	0.3	1.8	0.3	1.5	-2.3

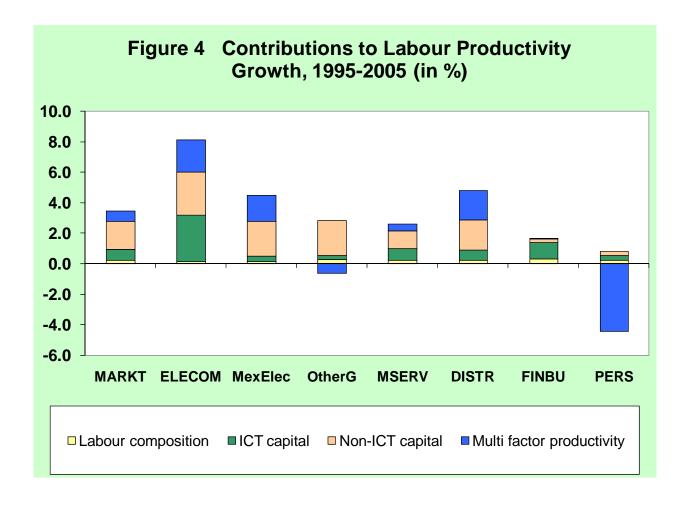
VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

### CZECH REPUBLIC

	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005						
MARKET ECONOMY	3.4	0.2	2.5	0.7	1.8	0.7
Electrical machinery, post and communication	8.1	0.1	5.9	3.0	2.8	2.1
Manufacturing, excluding electrical	4.5	0.1	2.6	0.3	2.3	1.7
Other goods producing industries	2.2	0.2	2.6	0.3	2.3	-0.6
Market services	2.6	0.2	1.9	0.7	1.2	0.5
.Distribution services	4.8	0.2	2.6	0.7	2.0	1.9
.Finance and business services	1.7	0.3	1.3	1.1	0.3	0.0
.Personal and social services	-3.6	0.2	0.6	0.3	0.3	-4.4
MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services .Personal and social services	2.1 8.8 4.0 0.4 0.7 3.4 -0.4	0.1 0.1 0.1 0.1 0.1 0.1 0.2	3.0 9.8 2.3 3.4 2.1 3.1 1.7 -0.4	1.1 5.5 0.5 0.5 1.0 1.1 1.2 0.3	1.9 4.3 1.9 3.0 1.1 2.0 0.4 -0.6	-1.0 -1.2 1.7 -3.1 -1.5 0.2 -2.3 -6.5
2000-2005						
MARKET ECONOMY	4.8	0.3	2.1	0.4	1.7	2.4
Electrical machinery, post and communication	7.4	0.1	1.9	0.5	1.4	5.4
Manufacturing, excluding electrical	4.9	0.2	2.9	0.2	2.7	1.8
Other goods producing industries	3.9	0.4	1.7	0.1	1.6	1.8
Market services	4.5	0.3	1.7	0.5	1.2	2.5
.Distribution services	6.1	0.3	2.2	0.2	2.0	3.6
.Finance and business services	3.8	0.3	1.0	1.0	0.1	2.4
Personal and social services	-0.5	0.3	1.6	0.3	1.2	-2.3

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects





DENMARK

Contact person: Martin Junge, Centre for Economic and Business Research (CEBR), mj.cebr@cbs.dk

Table 1 Gross Value Added, Labour Input and Labour Productivity, 1970-1995 and 1995-2005										
	(annual av	verage volun	ne growth ra	ites, in %)						
				0)/4	Average	Contribution				
	Gross	Total	Total	GVA per	share in	to LP growth				
	Value	persons	hours	hour	total hours	in total				
1970-1995	Added	engaged	worked	worked	worked (%)	industries				
TOTAL INDUSTRIES	2.0	0.3	-0.6	2.6	100.0	2.6				
.Electrical machinery, post and communication	5.0	0.3	-0.6	5.7	3.8	0.2				
.Manufacturing, excluding electrical	0.6	-1.2	-0.7	2.4	18.5	0.2				
Other goods producing industries	2.0	-1.2	-3.0	5.0	15.3	1.0				
.Distribution services	1.7		-3.0	2.8	21.2					
.Finance and business services	4.0	0.0 2.3	1.3	2.6	8.0	0.6 0.2				
.Personal and social services	1.6	0.7		1.6	6.5					
			-0.1			0.1				
Non-market services	2.0	2.6	1.6	0.5	26.6	0.1				
.Reallocation of labour effect						-0.2				
1995-2005										
TOTAL INDUSTRIES	1.8	0.5	0.8	1.0	100.0	1.0				
.Electrical machinery, post and communication	5.8	0.6	0.5	5.3	3.7	0.2				
.Manufacturing, excluding electrical	-0.7	-2.3	-2.2	1.6	14.9	0.3				
Other goods producing industries	1.9	-0.4	0.3	1.6	11.0	0.2				
.Distribution services	2.9	0.5	0.9	2.0	20.7	0.4				
.Finance and business services	4.9	3.4	3.8	1.0	11.5	0.1				
.Personal and social services	-0.1	1.6	1.6	-1.7	8.0	-0.1				
.Non-market services	0.9	0.8	1.0	-0.1	30.2	0.0				
.Reallocation of labour effect	0.0	0.0		<b></b>	00.2	0.1				
1995-2000										
TOTAL INDUSTRIES	2.7	1.0	1.7	1.0	100.0	1.0				
.Electrical machinery, post and communication	7.1	2.5	3.4	3.6	3.7	0.1				
.Manufacturing, excluding electrical	0.5	-1.6	-0.5	1.0	16.0	0.2				
.Other goods producing industries	3.8	0.0	1.1	2.6	11.1	0.3				
.Distribution services	4.6	1.1	2.5	2.1	20.7	0.4				
.Finance and business services	5.6	4.5	5.5	0.1	10.5	0.0				
.Personal and social services	-0.6	1.7	2.4	-3.0	7.9	-0.2				
.Non-market services	1.3	1.1	1.0	0.4	30.1	0.1				
.Reallocation of labour effect						0.1				
2000-2005	0.0	0.0	0.0	4.4	400.0	4.4				
TOTAL INDUSTRIES	0.9	0.0	-0.2	1.1	100.0	1.1				
.Electrical machinery, post and communication	4.5	-1.3	-2.5	7.0	3.7	0.3				
.Manufacturing, excluding electrical	-1.8	-3.0	-3.9	2.1	13.9	0.3				
Other goods producing industries	0.0	-0.8	-0.5	0.5	10.9	0.1				
Distribution services	1.2	-0.1	-0.7	1.8	20.7	0.4				
Finance and business services	4.1	2.4	2.2	2.0	12.5	0.2				
.Personal and social services	0.4	1.6	0.8	-0.4	8.1	0.0				
.Non-market services	0.5	0.5	1.1	-0.6	30.2	-0.2				
.Reallocation of labour effect						0.0				

### **DENMARK**

	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.4	-0.1	-0.4	0.3	1.4	1.0	0.4	1.1
.Electrical machinery, post and communication	4.7	-0.4	-0.6	0.3	1.4	0.7	0.7	3.7
.Manufacturing, excluding electrical	0.2	-0.4	-0.6	0.2	1.0	0.6	0.4	-0.4
Other goods producing industries	3.1	-1.0	-1.4	0.4	1.1	0.3	0.8	3.0
Market services	2.9	0.4	0.1	0.3	1.7	1.5	0.2	0.8
Distribution services	2.0	-0.2	-0.4	0.2	1.4	1.2	0.2	0.8
Finance and business services	5.0	1.0	0.6	0.4	2.0	2.0	0.0	2.0
Personal and social services	1.9	1.4	1.0	0.4	2.2	1.5	0.6	-1.5
1995-2005								
MARKET ECONOMY	2.2	0.7	0.5	0.2	1.5	1.1	0.4	0.0
Electrical machinery, post and communication	5.8	0.6	0.3	0.3	3.0	1.9	1.1	2.2
Manufacturing, excluding electrical	-0.7	-1.1	-1.5	0.4	1.0	0.6	0.4	-0.5
Other goods producing industries	1.9	0.5	0.4	0.0	1.2	0.3	0.9	0.2
Market services	3.1	1.5	1.3	0.2	1.6	1.4	0.2	-0.
Distribution services	2.9	0.8	0.7	0.2	1.3	0.8	0.5	0.7
Finance and business services	4.9	2.7	2.5	0.3	2.1	2.5	-0.4	0.1
Personal and social services	-0.1	1.0	0.9	0.1	1.7	1.0	0.6	-2.8
1995-2000								
MARKET ECONOMY	3.4	1.8	1.5	0.3	1.9	1.4	0.5	-0.3
Electrical machinery, post and communication	7.1	2.3	2.1	0.2	3.7	2.3	1.4	1.1
Manufacturing, excluding electrical	0.5	0.1	-0.3	0.4	1.4	0.9	0.5	-1.0
Other goods producing industries	3.8	1.2	1.1	0.2	1.0	0.4	0.6	1.5
Market services	4.1	2.6	2.3	0.3	2.2	1.8	0.4	-0.7
Distribution services	4.6	2.1	1.8	0.3	1.9	1.2	0.7	0.6
Finance and business services	5.6	3.7	3.4	0.3	2.8	3.0	-0.2	-0.9
Personal and social services	-0.6	1.8	1.6	0.2	2.1	1.4	0.7	-4.4
2000-2005								
MARKET ECONOMY	1.1	-0.3	-0.5	0.2	1.1	0.8	0.3	0.3
Electrical machinery, post and communication	4.5	-0.3	-0.5	0.2	2.3	1.5	0.8	3.3
Manufacturing, excluding electrical	-1.8	-2.3	-2.7	0.4	0.6	0.3	0.8	-0.
Other goods producing industries	0.0	-0.3	-0.2	-0.1	1.3	0.3	1.1	-0. -1.
Market services	2.1	0.5	0.2	0.1	1.1	1.0	0.0	0.6
Distribution services	1.2	-0.4	-0.5	0.1	0.7	0.4	0.0	0.0
Distribution servicesFinance and business services	4.1	-0.4 1.7	1.5	0.1	1.4	1.9	-0.6	1.0
Personal and social services	0.4	0.3	0.2	0.0	1.4	0.7	0.6	-1.3

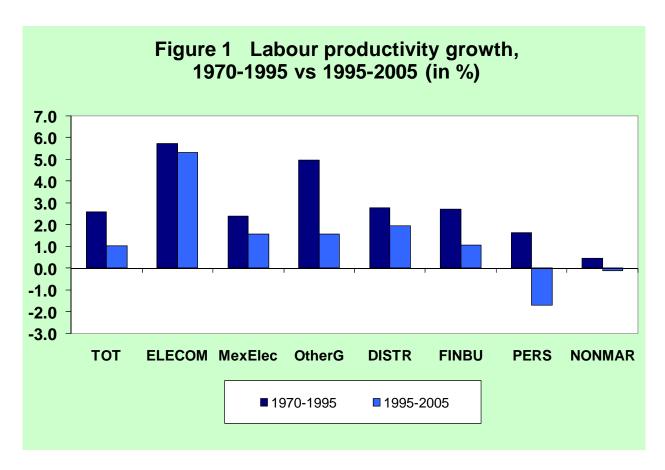
VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

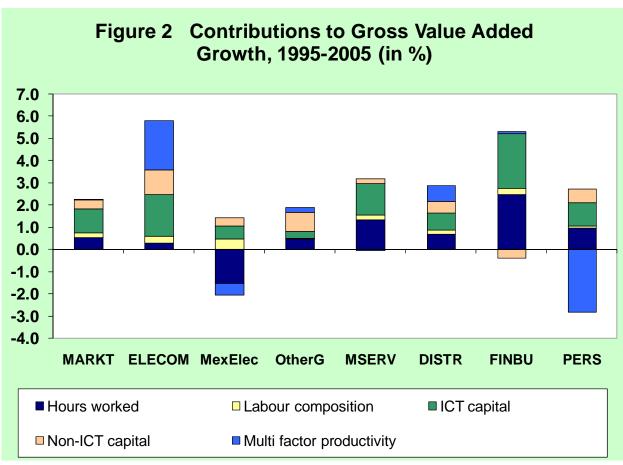
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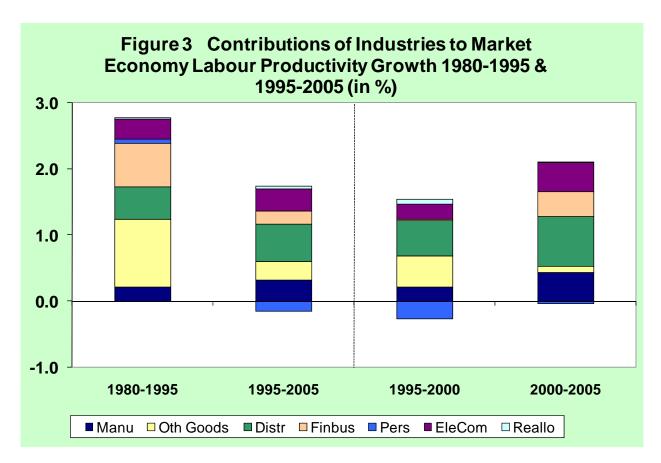
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	3.0	0.3	1.6	1.0	0.5	1.2
Electrical machinery, post and communication	5.7	0.3	1.7	0.7	0.9	3.7
Manufacturing, excluding electrical	0.9	0.2	1.1	0.6	0.5	-0.4
Other goods producing industries	5.6	0.4	2.0	0.3	1.7	3.2
Market services	2.8	0.3	1.7	1.5	0.2	0.8
.Distribution services	2.7	0.2	1.5	1.2	0.3	0.9
.Finance and business services	4.0	0.4	1.7	1.9	-0.2	1.9
Personal and social services	0.7	0.4	1.8	1.4	0.3	-1.5
1995-2005						
MARKET ECONOMY	1.6	0.2	1.3	1.0	0.2	0.1
Electrical machinery, post and communication	5.3	0.3	2.8	1.9	0.9	2.2
Manufacturing, excluding electrical	1.6	0.4	1.6	0.7	0.9	-0.5
Other goods producing industries	1.6	0.0	1.0	0.3	0.7	0.5
Market services	1.2	0.2	1.1	1.2	-0.2	-0.1
Distribution services	2.0	0.2	1.1	0.7	0.3	0.7
Finance and business services	1.0	0.3	0.9	2.0	-1.0	-0.2
Personal and social services	-1.7	0.1	1.2	0.9	0.3	-3.0
1995-2000	1.3	0.0	1.2	1.2	0.0	0.0
MARKET ECONOMY		0.3			0.0	-0.2
Electrical machinery, post and communication	3.6	0.2	2.3	2.0	0.3	1.2
Manufacturing, excluding electrical	1.0	0.4	1.5	0.9	0.6	-0.9
Other goods producing industries	2.6	0.2	0.5	0.3	0.2	2.0
Market services	0.8	0.3	1.3	1.5	-0.3	-0.8
.Distribution services	2.1	0.3	1.2	1.0	0.2	0.6
.Finance and business services	0.1	0.3	1.1	2.3	-1.2	-1.3
Personal and social services	-3.0	0.2	1.3	1.2	0.1	-4.5
2000-2005						
MARKET ECONOMY	1.8	0.2	1.3	0.8	0.5	0.3
Electrical machinery, post and communication	7.0	0.4	3.3	1.8	1.5	3.3
Manufacturing, excluding electrical	2.1	0.5	1.6	0.4	1.2	0.0
Other goods producing industries	0.5	-0.1	1.6	0.3	1.3	-1.0
Market services	1.6	0.1	0.9	1.0	0.0	0.6
.Distribution services	1.8	0.1	0.9	0.4	0.5	0.8
.Finance and business services	2.0	0.3	0.8	1.7	-0.9	0.9
.Personal and social services	-0.4	0.0	1.0	0.7	0.4	-1.5

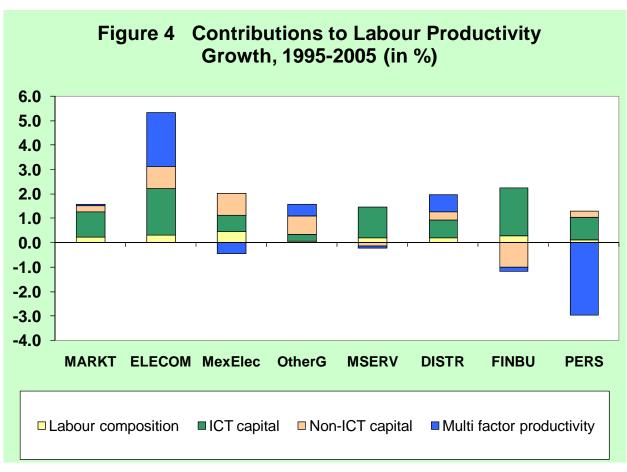
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









FINLAND

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	(annual av	erage volum	ne growth ra	ates, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.4	-0.4	-0.9	3.3	100.0	3.3
.Electrical machinery, post and communication	7.5	1.7	1.7	5.8	3.1	0.1
.Manufacturing, excluding electrical	2.8	-1.2	-1.8	4.6	19.5	
Other goods producing industries	0.3	-3.4	-3.5	3.9	27.6	
.Distribution services	2.2	-0.5	-0.7	2.9	18.6	0.5
.Finance and business services	5.2	3.5	3.5	1.7	5.4	0.0
.Personal and social services	2.4	1.0	0.7	1.7	5.7	0.1
.Non-market services	2.4	1.7	1.6	0.8	20.1	0.1
Reallocation of labour effect						0.0
1995-2005						
TOTAL INDUSTRIES	3.4	1.6	1.2	2.2	100.0	2.2
Electrical machinery, post and communication	15.1	1.2	1.4	13.7	4.4	
.Manufacturing, excluding electrical	2.7	0.1	0.0	2.7	15.5	
Other goods producing industries	2.3	0.1	-0.4	2.7	17.7	
Distribution services	3.9	1.9	1.5	2.4	18.8	
Finance and business services	3.0	3.9	3.6	-0.6	9.1	0.0
Personal and social services	1.6	2.7	2.8	-1.1	7.5	
.Non-market services	1.0	1.8	1.6	-0.4	26.9	
Reallocation of labour effect	1.2	1.0	1.0	0.4	20.3	0.4
4005 0000						
1995-2000	4.0	0.0	1.9	2.7	400.0	0.7
TOTAL INDUSTRIES	4.6	2.2			100.0 4.5	2.7
Electrical machinery, post and communication	21.6	3.8	4.0	17.6		
.Manufacturing, excluding electrical	3.4	1.5	1.4	2.0	16.0	
Other goods producing industries	3.5	0.6	0.4	3.2	18.6	
.Distribution services	4.3	2.8	2.3	2.0	18.8	
.Finance and business services	5.3	4.8	4.3	0.9	8.5	
.Personal and social services	2.8	3.6	4.1	-1.3	7.2	
.Non-market services	1.5	1.8	1.4	0.1	26.4	
.Reallocation of labour effect						0.6
2000-2005						
TOTAL INDUSTRIES	2.3	0.9	0.5	1.8	100.0	
.Electrical machinery, post and communication	8.6	-1.4	-1.3	9.9	4.5	
.Manufacturing, excluding electrical	2.0	-1.2	-1.4	3.5	15.1	0.5
Other goods producing industries	1.0	-0.5	-1.2	2.3	16.9	
.Distribution services	3.5	1.0	0.7	2.9	18.8	
.Finance and business services	8.0	3.0	2.8	-2.0	9.8	-0.2
.Personal and social services	0.5	1.8	1.4	-0.9	7.7	-0.1
.Non-market services	0.9	1.9	1.7	-0.9	27.2	-0.2
.Reallocation of labour effect						0.3

## **FINLAND**

	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	1.7	-0.5	-1.1	0.6	0.9	0.4	0.5	1.3
Electrical machinery, post and communication	8.2	1.0	0.5	0.5	2.8	1.4	1.4	4.4
Manufacturing, excluding electrical	2.3	-1.5	-2.0	0.5	1.1	0.3	0.8	2.7
Other goods producing industries	-0.6	-2.0	-2.6	0.6	0.3	0.1	0.2	1.1
Market services	1.7	0.7	0.0	0.7	1.0	0.6	0.4	0.1
.Distribution services	1.3	-0.4	-0.9	0.5	1.0	0.5	0.6	0.7
Finance and business services	3.1	2.9	2.0	0.9	0.9	0.9	0.0	-0.
Personal and social services	1.2	1.5	0.5	1.0	0.9	0.5	0.4	-1.2
1995-2005								
MARKET ECONOMY	4.3	1.0	0.9	0.1	0.9	0.7	0.2	2.5
Electrical machinery, post and communication	15.1	0.9	0.8	0.1	3.8	1.4	2.4	10.
Manufacturing, excluding electrical	2.7	0.2	0.0	0.3	0.6	0.3	0.2	1.9
Other goods producing industries	2.3	0.5	0.3	0.1	0.2	0.1	0.1	1.0
Market services	3.3	1.6	1.6	0.0	0.5	0.8	-0.3	1.1
Distribution services	3.9	0.9	0.9	0.0	0.6	0.6	0.0	2.4
Finance and business services	3.0	2.3	2.4	-0.1	0.5	1.4	-0.9	0.2
Personal and social services	1.6	2.4	2.2	0.2	0.6	0.6	0.0	-1.3
1995-2000								
MARKET ECONOMY	5.8	1.6	1.6	0.0	1.2	0.8	0.4	3.0
Electrical machinery, post and communication	21.6	1.9	2.1	-0.1	5.6	1.8	3.8	14.
Manufacturing, excluding electrical	3.4	1.0	0.9	0.1	1.1	0.4	0.6	1.3
Other goods producing industries	3.5	1.3	1.2	0.1	0.2	0.2	0.0	2.0
Market services	4.3	2.0	2.2	-0.2	0.6	1.0	-0.4	1.7
.Distribution services	4.3	1.5	1.5	-0.1	0.8	0.8	0.0	2.1
.Finance and business services	5.3	2.6	2.8	-0.3	0.1	1.5	-1.3	2.5
.Personal and social services	2.8	2.9	3.2	-0.3	0.7	0.7	0.0	-0.
2000 2005								
2000-2005 MARKET ECONOMY	2.8	0.3	0.1	0.2	0.6	0.5	0.0	1.9
				0.2				
Electrical machinery, post and communication	8.6	-0.1	-0.5		2.0	1.0	1.0	6.7
Manufacturing, excluding electrical	2.0	-0.5	-0.9	0.4	0.0		-0.2	2.5
Other goods producing industries	1.0	-0.3	-0.5	0.2	0.3	0.1	0.2	1.1
Market services	2.2	1.1	1.0	0.1	0.5	0.7	-0.2	0.
Distribution services	3.5	0.4	0.4	0.0	0.4	0.4	0.0	2.8
Finance and business services	0.8 0.5	2.1 1.8	2.0 1.2	0.0	0.8 0.5	1.3 0.4	-0.5 0.0	-2. -1.

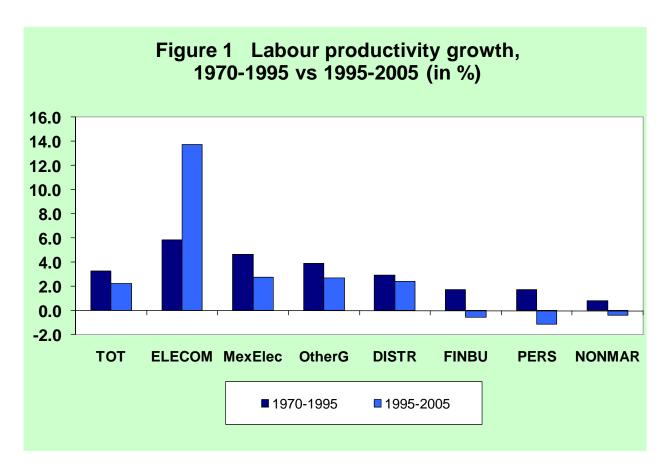
#### **FINLAND**

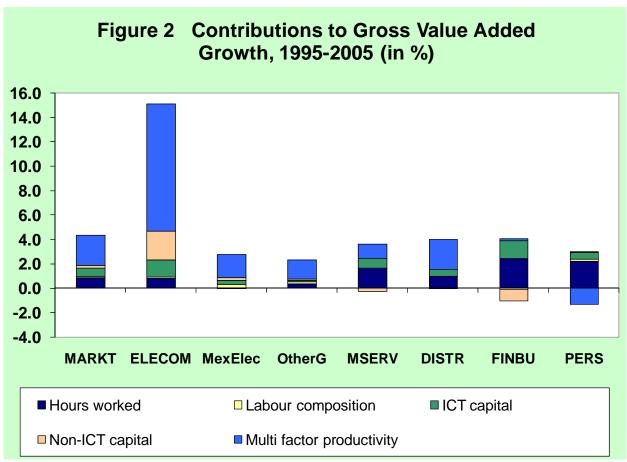
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	3.6	0.6	1.4	0.4	0.9	1.6
Electrical machinery, post and communication	7.3	0.5	2.4	1.3	1.1	4.5
Manufacturing, excluding electrical	5.3	0.5	2.0	0.4	1.6	2.9
Other goods producing industries	2.9	0.6	0.8	0.0	0.8	1.5
Market services	1.9	0.7	0.9	0.5	0.4	0.3
.Distribution services	2.6	0.5	1.4	0.5	0.9	0.8
Finance and business services	0.6	0.9	0.4	0.6	-0.2	-0.7
.Personal and social services	1.0	1.0	0.7	0.4	0.3	-0.8
1995-2005						
MARKET ECONOMY	3.2	0.1	0.5	0.6	-0.1	2.6
Electrical machinery, post and communication	13.7	0.1	3.1	1.3	1.8	10.5
Manufacturing, excluding electrical	2.7	0.3	0.6	0.3	0.3	1.9
Other goods producing industries	2.7	0.1	0.3	0.1	0.2	2.3
Market services	1.0	0.0	-0.2	0.6	-0.9	1.2
.Distribution services	2.4	0.0	0.0	0.5	-0.5	2.4
Finance and business services	-0.6	-0.1	-0.5	0.9	-1.4	0.0
.Personal and social services	-1.1	0.2	-0.1	0.3	-0.4	-1.2
1995-2000						
MARKET ECONOMY	3.7	0.0	0.4	0.6	-0.2	3.3
Electrical machinery, post and communication	17.6	-0.1	3.4	1.4	2.0	14.3
Manufacturing, excluding electrical	2.0	0.1	0.6	0.4	0.2	1.3
Other goods producing industries	3.2	0.1	0.0	0.1	0.0	3.0
Market services	1.1	-0.2	-0.5	0.7	-1.2	1.8
.Distribution services	2.0	-0.1	-0.1	0.7	-0.8	2.2
.Finance and business services	0.9	-0.3	-1.1	0.8	-1.9	2.3
Personal and social services	-1.3	-0.3	-0.3	0.3	-0.6	-0.8
2000-2005						
MARKET ECONOMY	2.8	0.2	0.5	0.5	0.0	2.0
Electrical machinery, post and communication	9.9	0.2	2.8	1.2	1.7	6.7
Manufacturing, excluding electrical	3.5	0.3	0.6	0.2	0.3	2.5
Other goods producing industries	2.3	0.4	0.5	0.2	0.3	1.6
Market services	0.8	0.2	0.0	0.1	-0.5	0.6
Distribution services	2.9	0.1	0.0	0.6	-0.3	2.7
Finance and business services	-2.0	0.0	0.1	0.4	-0.3 -0.8	-2.2
.Personal and social services	-2.0 -0.9	0.6	0.1	0.9	-0.8 -0.2	-2.2 -1.6

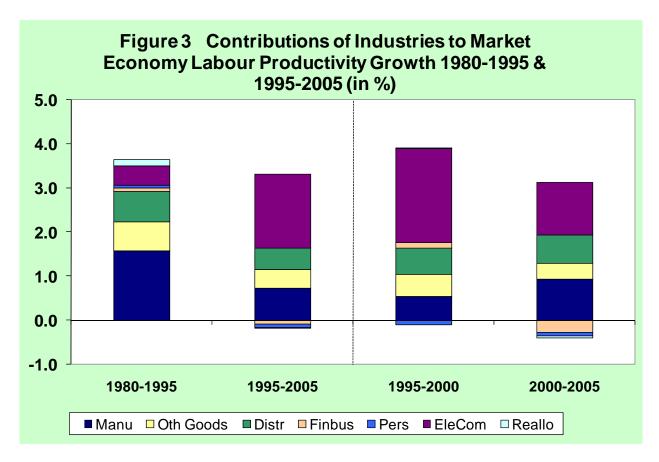
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

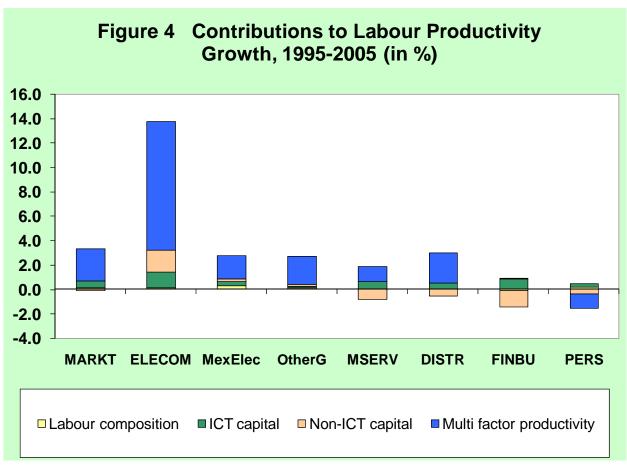
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









FRANCE

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	(annual a	verage volum	ne growth ra	ates, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.6	0.3	-0.5	3.1	100.0	3.1
.Electrical machinery, post and communication	5.0	0.3	-0.4	5.4	3.6	0.2
.Manufacturing, excluding electrical	1.7	-1.5	-2.0	3.7	18.7	0.8
Other goods producing industries	1.2	-2.6	-3.4	4.6	22.9	1.4
.Distribution services	3.4	0.5	-0.3	3.7	17.3	
.Finance and business services	3.1	2.9	2.3	0.9	10.2	
.Personal and social services	1.8	2.0	1.7	0.1	6.6	
.Non-market services	3.0	2.3	1.6	1.5	20.7	0.2
.Reallocation of labour effect						-0.2
1995-2005						
TOTAL INDUSTRIES	2.1	1.0	0.4	1.7	100.0	1.7
.Electrical machinery, post and communication	6.4	-0.2	-0.8	7.2	3.3	0.3
.Manufacturing, excluding electrical	1.7	-1.1	-1.7	3.3	13.6	0.5
Other goods producing industries	1.0	-0.2	-0.8	1.9	14.2	
.Distribution services	2.4	1.4	0.9	1.5	18.0	0.3
Finance and business services	2.8	2.8	2.4	0.5	15.6	0.1
Personal and social services	2.8	2.6	1.3	1.5	9.5	0.1
Non-market services	1.4	0.9	0.4	1.0	25.8	0.3
Reallocation of labour effect		0.0	0.1	1.0	20.0	0.0
1995-2000						
TOTAL INDUSTRIES	2.7	1.4	0.7	2.0	100.0	2.0
	7.4	0.7	-0.2	7.7	3.4	0.3
Electrical machinery, post and communication	2.8					
.Manufacturing, excluding electrical		-0.4	-1.2	4.0	14.2	
Other goods producing industries	0.8	-0.8 1.6	-1.4	2.2	14.6	0.3
.Distribution services	3.5	4.2	1.0	2.5	17.7	0.4
.Finance and business services	3.8		3.6	0.2	14.7	0.0
.Personal and social services	3.7	3.3	2.1	1.7	9.2	
.Non-market services .Reallocation of labour effect	1.5	1.1	0.5	1.0	26.1	0.2 -0.1
Accamodation of labour circut						0.1
2000-2005						
TOTAL INDUSTRIES	1.5	0.6	0.1	1.4	100.0	1.4
.Electrical machinery, post and communication	5.4	-1.1	-1.4	6.8	3.2	0.2
.Manufacturing, excluding electrical	0.6	-1.7	-2.1	2.7	12.9	0.4
Other goods producing industries	1.3	0.5	-0.3	1.6	13.8	0.2
.Distribution services	1.2	1.3	0.8	0.4	18.2	
.Finance and business services	1.9	1.4	1.1	0.8	16.6	0.1
.Personal and social services	1.9	1.8	0.5	1.4	9.8	0.1
.Non-market services	1.4	0.7	0.3	1.1	25.5	0.3
Reallocation of labour effect						0.0

## **FRANCE**

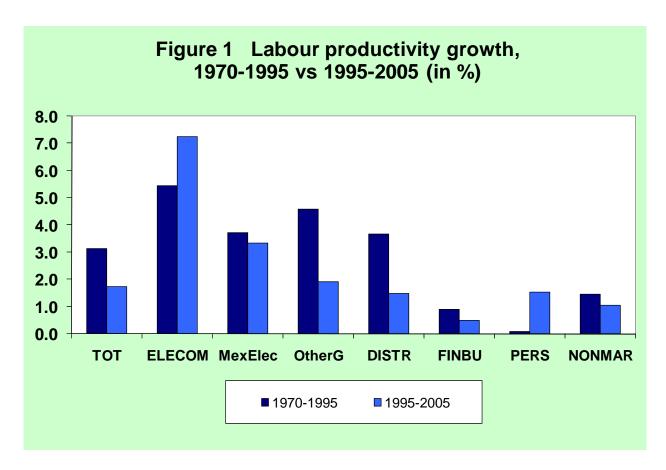
(1980-1995 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesFinance and business servicesPersonal and social services	1)=(2)+(5)+(8) 1.8 3.4 0.8 1.2	-0.1 -0.3	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(0)
MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business services	3.4 0.8					(-)	(-)	(8)
Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMYElectrical machinery, post and communicationManufacturing, excluding electrical Other goods producing industriesMarket servicesDistribution servicesFinance and business services	3.4 0.8							
Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries .Market servicesDistribution servicesFinance and business services	0.8	-0.3	-0.5	0.4	0.7	0.2	0.4	1.2
Other goods producing industries  Market services  Distribution services  Finance and business services  Personal and social services  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services  Finance and business services			-0.7	0.4	0.6	0.2	0.3	3.2
Market services .Distribution services .Finance and business services .Personal and social services  1995-2005 MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services	1 2	-1.3	-1.7	0.4	0.7	0.2	0.6	1.4
Distribution servicesFinance and business servicesPersonal and social services  1995-2005  MARKET ECONOMY .Electrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution servicesFinance and business services	1.2	-1.7	-2.2	0.4	0.4	0.1	0.3	2.5
.Finance and business services .Personal and social services  1995-2005  MARKET ECONOMY  Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services	2.3	1.1	0.7	0.4	0.8	0.3	0.4	0.5
Personal and social services  1995-2005  MARKET ECONOMYElectrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business services	3.0	0.0	-0.4	0.4	0.5	0.1	0.3	2.5
1995-2005  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services Distribution services Finance and business services	2.0	1.8	1.4	0.4	1.1	0.6	0.5	-0.9
MARKET ECONOMY  .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business services	1.2	2.1	1.6	0.5	0.6	0.1	0.5	-1.4
MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services  Finance and business services								
.Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business services	2.4	0.7	0.3	0.4	0.9	0.4	0.5	0.8
Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services	6.4	-0.2	-0.5	0.3	0.7	0.6	0.1	5.9
Other goods producing industries Market services .Distribution services .Finance and business services	1.7	-0.6	-1.1	0.5	0.5	0.2	0.3	1.8
Market services .Distribution services .Finance and business services	1.0	-0.1	-0.5	0.3	0.4	0.1	0.3	0.7
Finance and business services	2.7	1.5	1.1	0.4	1.2	0.5	0.7	-0.1
	2.4	1.1	0.7	0.4	0.8	0.3	0.6	0.4
	2.8	1.9	1.6	0.4	1.7	0.8	0.9	-0.8
F etsoliai attu sociai setvices	2.8	1.3	0.9	0.3	0.7	0.2	0.5	0.9
1995-2000								
MARKET ECONOMY	3.3	1.1	0.6	0.5	1.0	0.5	0.5	1.1
Electrical machinery, post and communication	7.4	0.3	-0.2	0.5	1.0	0.8	0.2	6.2
.Manufacturing, excluding electrical	2.8	-0.3	-0.8	0.5	0.6	0.3	0.3	2.5
Other goods producing industries	0.8	-0.5	-0.9	0.5	0.4	0.2	0.3	0.8
Market services	3.7	2.1	1.6	0.5	1.3	0.6	0.7	0.2
Distribution services	3.5	1.4	0.8	0.6	0.9	0.3	0.5	1.2
Finance and business services	3.8	2.8	2.4	0.4	2.0	1.0	1.0	-0.9
Personal and social services	3.7	2.0	1.5	0.5	0.8	0.3	0.5	1.0
2000-2005	4.0	0.0	0.4	0.0	0.0	0.0	0.5	0.5
MARKET ECONOMY	1.6	0.3	0.1	0.3	0.8	0.3	0.5	0.5
Electrical machinery, post and communication	5.4	-0.7	-0.9	0.2	0.4	0.4	0.0	5.7
Manufacturing, excluding electrical	0.6	-0.8	-1.4	0.5	0.3	0.2	0.2	1.1
Other goods producing industries	1.3	0.2	0.0	0.2	0.4	0.1	0.4	0.7
Market services	1.6	0.9	0.7	0.2	1.1	0.4	0.7	-0.3
.Distribution services	1.2	0.7	0.6	() 1	0.8	0.2		-0.3
.Finance and business services .Personal and social services	1.9	1.1	0.8	0.1	1.4	0.6	0.6 0.8	-0.6

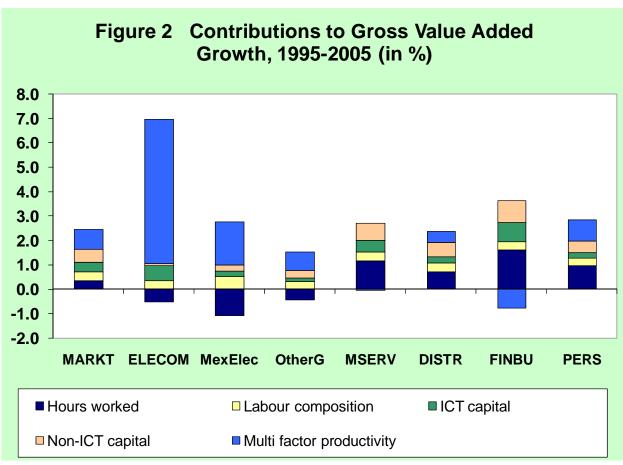
## **FRANCE**

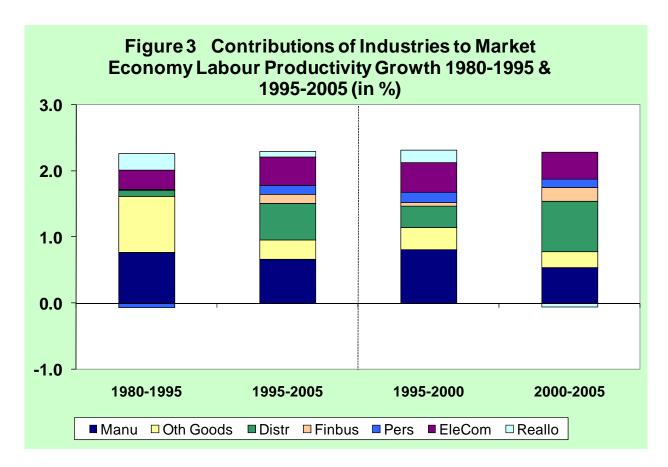
<u> </u>	n %)	1.0	I/	VIT	KNIT	MED
	LP (1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995	(1)=(2)+(3)+(0)	(2)	(3)=(4)+(3)	(4)	(5)	(0)
MARKET ECONOMY	2.9	0.4	0.9	0.3	0.6	1.6
Electrical machinery, post and communication	2.9 4.5	0.4	0.9	0.3	0.6	3.2
Manufacturing, excluding electrical	3.3	0.4	1.4	0.3	1.2	1.4
Other goods producing industries	3.3 4.6	0.4	1.4	0.2	1.2	3.0
Market services	1.5	0.4	0.5	0.1	0.2	0.6
Distribution services	3.5	0.4	0.5	0.3	0.4	2.6
Distribution servicesFinance and business services	0.1	0.4	0.5	0.1	0.4	-0.9
	-0.9	0.4	0.3	0.3	0.0	-0.9
.Personal and social services	-0.9	0.5	0.2	0.1	0.1	-1.5
1995-2005						
MARKET ECONOMY	2.1	0.4	0.8	0.4	0.4	0.9
Electrical machinery, post and communication	7.2	0.3	1.0	0.7	0.3	5.9
Manufacturing, excluding electrical	3.3	0.5	1.0	0.3	0.7	1.8
Other goods producing industries	1.9	0.3	0.7	0.1	0.6	0.9
Market services	1.1	0.4	0.8	0.4	0.4	0.0
.Distribution services	1.5	0.4	0.6	0.2	0.4	0.5
Finance and business services	0.5	0.4	1.0	0.6	0.4	-0.9
.Personal and social services	1.5	0.3	0.3	0.2	0.2	8.0
1995-2000						
MARKET ECONOMY	2.5	0.5	0.8	0.5	0.4	1.2
Electrical machinery, post and communication	7.7	0.5	1.1	0.8	0.2	6.2
Manufacturing, excluding electrical	4.0	0.5	1.0	0.3	0.7	2.5
Other goods producing industries	2.2	0.5	0.9	0.2	0.6	0.9
Market services	1.5	0.5	0.8	0.5	0.2	0.2
.Distribution services	2.5	0.6	0.6	0.3	0.3	1.3
Finance and business services	0.2	0.4	0.9	0.7	0.3	-1.1
.Personal and social services	1.7	0.5	0.2	0.2	0.0	0.9
2000-2005 MARKET ECONOMY	1.6	0.3	0.8	0.3	0.5	0.5
Electrical machinery, post and communication	6.8	0.3	1.0	0.6	0.3	5.6
Manufacturing, excluding electrical	2.7	0.2	1.0	0.0	0.4	1.1
Other goods producing industries	1.6	0.5	0.6	0.2	0.6	0.9
Market services	0.8	0.2	0.8	0.1	0.5	-0.2
Distribution services	0.6	0.2	0.6	0.3	0.5	-0.2
Finance and business services	0.4	0.1	1.1	0.2	0.6	-0.6
Personal and social services	1.4	0.3	0.4	0.5	0.8	-0.6 0.8

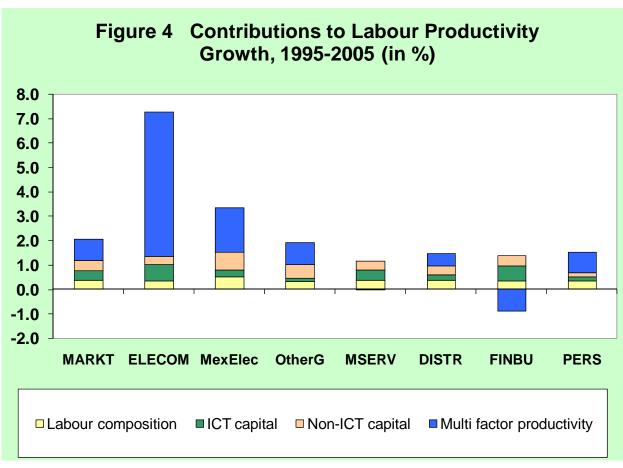
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









GERMANY

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Table 1 Gross Value Added, Labour Inp	(annual a	verage volum	e growth re	tes in %)	and 1995-2005	
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.4	0.5	-0.5	2.9	100.0	2.9
.Electrical machinery, post and communication	3.2	-0.5	-1.4	4.6	5.4	0.3
.Manufacturing, excluding electrical	0.9	-1.3	-2.2	3.0	24.6	0.9
.Other goods producing industries	0.6	-1.3	-2.0	2.7	17.1	0.6
.Distribution services	2.7	1.0	-0.1	2.8	19.2	
.Finance and business services	4.7	3.4	2.4	2.4	7.6	0.1
.Personal and social services	2.4	2.9	1.6	0.8	7.0	0.0
.Non-market services	3.6	2.4	1.2	2.4	19.0	0.3
.Reallocation of labour effect						0.1
1995-2005						
TOTAL INDUSTRIES	1.3	0.3	-0.3	1.7	100.0	1.7
.Electrical machinery, post and communication	3.5	-1.6	-2.3	5.8	3.9	0.3
.Manufacturing, excluding electrical	0.7	-1.2	-1.6	2.3	18.1	0.4
Other goods producing industries	-1.5	-3.6	-3.9	2.4	12.1	0.3
.Distribution services	1.7	0.2	-0.5	2.2	19.9	0.4
.Finance and business services	1.4	3.7	3.0	-1.6	13.3	-0.2
.Personal and social services	0.4	2.2	1.3	-0.8	9.8	-0.1
.Non-market services	2.2	0.9	0.5	1.7	22.8	0.4
.Reallocation of labour effect						0.0
1995-2000						
TOTAL INDUSTRIES	2.0	0.8	0.0	2.0	100.0	2.0
.Electrical machinery, post and communication	4.3	-1.9	-2.6	6.9	4.1	0.3
.Manufacturing, excluding electrical	1.0	-0.8	-1.4	2.4	18.6	0.5
Other goods producing industries	-1.1	-3.3	-1.4	2.4	13.2	
.Distribution services	2.6	1.0	0.1	2.5	20.0	
.Finance and business services	2.8	5.3	4.2	-1.4	12.2	-0.2
.Personal and social services	1.3	2.9	1.8	-0.5	9.5	0.0
.Non-market services	2.6	1.2	0.5	2.0	22.4	0.0
.Reallocation of labour effect	2.0	1.2	0.5	2.0	22.4	0.4
Treamount of labour effect						0.1
2000-2005						
TOTAL INDUSTRIES	0.7	-0.2	-0.7	1.4	100.0	1.4
.Electrical machinery, post and communication	2.7	-1.3	-2.0	4.7	3.8	0.2
.Manufacturing, excluding electrical	0.5	-1.6	-1.8	2.3	17.6	0.4
Other goods producing industries	-1.9	-3.9	-4.5	2.5	10.9	0.3
.Distribution services	0.7	-0.5	-1.1	1.8	19.8	0.4
.Finance and business services	-0.1	2.1	1.7	-1.8	14.5	-0.2
.Personal and social services	-0.5	1.5	0.7	-1.2	10.2	
.Non-market services	1.9	0.7	0.4	1.4	23.2	0.3
.Reallocation of labour effect						0.1

## **GERMANY**

1980-1995 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industriesMarket servicesFinance and business servicesFersonal and social servicesFersonal and social servicesFersonal and social servicesPersonal machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution servicesDistribution services	)+(5)+(8) 1.9 2.7 0.5 0.5 3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7 1.4 0.4	(2)=(3)+(4)  -0.2 -0.9 -1.3 -0.8 1.0 0.2 1.5 1.6  -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4 0.6	-0.4 -1.2 -1.5 -0.9 0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.2 0.3 0.1 0.2 0.2 0.2 0.3 0.1 0.1 0.1 0.2 0.1 0.0 0.0	(5)=(6)+(7)  1.2 1.5 0.6 0.6 1.8 0.7 3.5 0.9  1.0 0.3 0.3 0.0 1.7 0.7 3.2	(6)  0.3  0.6  0.1  0.5  0.9  0.1  0.5  0.2  0.2  0.1  0.8  0.3  1.6	0.9 0.9 0.5 0.5 1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9 0.3 1.6	0.8 2.1 1.2 0.8 0.4 1.6 -0.5 -0.3 0.4 4.7 1.3 1.4 -1.0
MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industriesMarket servicesFinance and business servicesFersonal and social servicesFersonal and social servicesFersonal end business servicesPersonal and social servicesPersonal and social servicesPersonal end business servicesPersonal and social servicesPersonal end social servicesPersonal end social servicesPersonal end social servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution services	2.7 0.5 0.5 0.5 3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	-0.9 -1.3 -0.8 1.0 0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-1.2 -1.5 -0.9 0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.3 0.1 0.2 0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0 0.0	1.5 0.6 0.6 1.8 0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.6 0.1 0.1 0.5 0.2 0.9 0.1	0.9 0.5 0.5 1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9 0.3	2.1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2
Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMYElectrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution servicesFinance and business servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesPersonal end business servicesPersonal and social servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution services	2.7 0.5 0.5 0.5 3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	-0.9 -1.3 -0.8 1.0 0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-1.2 -1.5 -0.9 0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.3 0.1 0.2 0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0 0.0	1.5 0.6 0.6 1.8 0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.6 0.1 0.1 0.5 0.2 0.9 0.1	0.9 0.5 0.5 1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9 0.3	2.1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2
Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesPersonal end business servicesPersonal end social servicesPersonal end social servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution services	0.5 0.5 3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	-1.3 -0.8 1.0 0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-1.5 -0.9 0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.3 0.1 0.2 0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0 0.0	0.6 0.6 1.8 0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7	0.1 0.5 0.2 0.9 0.1 0.5 0.2 0.1 0.8 0.3	0.5 0.5 1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9	1.2 0.8 0.4 1.6 -0.3 -0.3 0.4 4.7 1.3 1.4 -1.0
Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY Electrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesPersonal end business servicesPersonal end social servicesPersonal end social servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution services	0.5 3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3	-0.8 1.0 0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5	-0.9 0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.1 0.2 0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0	0.6 1.8 0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.1 0.5 0.2 0.9 0.1 0.5 0.2 0.2 0.2 0.1 0.8	0.5 1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9	0.8 0.4 1.6 -0.3 -0.3 0.4 4.7 1.3 1.4 -1.0
Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2005 MARKET ECONOMY .Electrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesDistribution servicesDistribution servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesPersonal and social servicesDistribution servicesDistribution servicesDistribution servicesDistribution servicesDistribution services	3.2 2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	1.0 0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	0.8 0.0 1.3 1.3 -0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0	1.8 0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.5 0.2 0.9 0.1 0.5 0.2 0.2 0.1 0.8 0.3	1.4 0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9	0.4 1.6 -0.9 -0.3 0.4 4.7 1.5 -1.0
Distribution servicesFinance and business servicesPersonal and social services  1995-2005  MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industriesMarket servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2000  MARKET ECONOMY .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution services	2.6 4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	0.2 1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0	0.7 3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.2 0.9 0.1 0.5 0.2 0.2 0.1 0.8 0.3	0.5 2.5 0.8 0.5 0.1 0.2 -0.1 0.9	1.6 -0.3 -0.3 0.4 4.7 1.3 1.4 -1.1
.Finance and business services .Personal and social services  1995-2005  MARKET ECONOMY  Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services .Personal and social services  1995-2000  MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services	4.4 2.2 1.0 3.5 0.7 1.5 1.3 1.7	1.5 1.6 -0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.2 0.3 0.1 0.1 0.2 0.1 -0.1 0.0	3.5 0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.9 0.1 0.5 0.2 0.2 0.1 0.8 0.3	2.5 0.8 0.5 0.1 0.2 -0.1 0.9 0.3	-0. -0. 0.4 4.7 1.4 -1.
Personal and social services  1995-2005  MARKET ECONOMYElectrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution servicesFinance and business servicesPersonal and social servicesPersonal and social services  1995-2000  MARKET ECONOMYElectrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution services	1.0 3.5 0.7 1.5 1.3 1.7	-0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.3 0.1 0.1 0.2 0.1 -0.1 0.0 0.0	0.9 1.0 0.3 0.3 0.0 1.7 0.7	0.1 0.5 0.2 0.2 0.1 0.8 0.3	0.8 0.5 0.1 0.2 -0.1 0.9 0.3	-0.: 0.4 4.7 1.3 1.4 -1.1
1995-2005  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services  Personal and social services  1995-2000  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services	1.0 3.5 0.7 1.5 1.3 1.7	-0.4 -1.5 -0.9 -2.9 0.6 -0.5 1.4	-0.5 -1.6 -1.1 -3.0 0.6 -0.5 1.4	0.1 0.1 0.2 0.1 -0.1 0.0	1.0 0.3 0.3 0.0 1.7	0.5 0.2 0.2 0.1 0.8 0.3	0.5 0.1 0.2 -0.1 0.9 0.3	0.4 4.7 1.3 1.4 -1.1
MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services  Personal and social services  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services	3.5 0.7 1.5 1.3 1.7	-1.5 -0.9 -2.9 0.6 -0.5 1.4	-1.6 -1.1 -3.0 0.6 -0.5 1.4	0.1 0.2 0.1 -0.1 0.0 0.0	0.3 0.3 0.0 1.7 0.7	0.2 0.2 0.1 0.8 0.3	0.1 0.2 -0.1 0.9 0.3	4.7 1.3 1.4 -1.0 1.5
MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services  Personal and social services  MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services	3.5 0.7 1.5 1.3 1.7	-1.5 -0.9 -2.9 0.6 -0.5 1.4	-1.6 -1.1 -3.0 0.6 -0.5 1.4	0.1 0.2 0.1 -0.1 0.0 0.0	0.3 0.3 0.0 1.7 0.7	0.2 0.2 0.1 0.8 0.3	0.1 0.2 -0.1 0.9 0.3	4.7 1.3 1.4 -1.0 1.5
Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2000 MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution services	0.7 1.5 1.3 1.7 1.4	-0.9 -2.9 0.6 -0.5 1.4	-1.1 -3.0 0.6 -0.5 1.4	0.2 0.1 -0.1 0.0 0.0	0.3 0.0 1.7 0.7	0.2 0.1 0.8 0.3	0.2 -0.1 0.9 0.3	1.3 1.4 -1.0 1.5
Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2000 MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market servicesDistribution services	0.7 1.5 1.3 1.7 1.4	-0.9 -2.9 0.6 -0.5 1.4	-1.1 -3.0 0.6 -0.5 1.4	0.2 0.1 -0.1 0.0 0.0	0.3 0.0 1.7 0.7	0.2 0.1 0.8 0.3	0.2 -0.1 0.9 0.3	1.3 1.4 -1.1 1.5
Other goods producing industries Market servicesDistribution servicesFinance and business servicesPersonal and social services  1995-2000 MARKET ECONOMY Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industriesMarket servicesDistribution services	1.3 1.7 1.4	0.6 -0.5 1.4	0.6 -0.5 1.4	-0.1 0.0 0.0	1.7 0.7	0.8	0.9 0.3	1.4 -1.6 1.5
Market services .Distribution services .Finance and business services .Personal and social services  1995-2000 MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services	1.3 1.7 1.4	0.6 -0.5 1.4	0.6 -0.5 1.4	-0.1 0.0 0.0	1.7 0.7	0.8	0.9 0.3	-1. 1.
.Finance and business services .Personal and social services  1995-2000  MARKET ECONOMY  Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services	1.4	1.4	1.4	0.0				
Finance and business servicesPersonal and social services  1995-2000  MARKET ECONOMY .Electrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution services	1.4	1.4	1.4	0.0				
Personal and social services  1995-2000  MARKET ECONOMYElectrical machinery, post and communicationManufacturing, excluding electricalOther goods producing industriesMarket servicesDistribution services								
MARKET ECONOMY  .Electrical machinery, post and communication  .Manufacturing, excluding electrical  .Other goods producing industries  .Market services Distribution services			0.9	-0.2	0.4	0.2	0.2	-0.7
MARKET ECONOMY  .Electrical machinery, post and communication  .Manufacturing, excluding electrical  .Other goods producing industries  .Market services Distribution services								
Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  Distribution services	1.7	-0.3	-0.2	-0.1	1.4	0.7	0.8	0.6
Manufacturing, excluding electrical Other goods producing industries Market services Distribution services	4.3	-1.9	-1.9	0.0	0.3	0.2	0.1	5.9
Other goods producing industries  Market services  Distribution services	1.0	-0.9	-1.0	0.1	0.5	0.2	0.3	1.4
Market services .Distribution services	1.1	-2.7	-2.6	0.0	0.2	0.1	0.1	1.3
Distribution services	2.5	0.9	1.1	-0.2	2.4	1.2	1.3	-0.
	2.6	-0.2	0.0	-0.2	0.9	0.5	0.4	1.9
	2.8	2.0	2.0	0.0	4.5	2.1	2.4	-3.
	1.3	0.7	1.2	-0.5	0.7	0.3	0.4	0.0
2000-2005	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0
	0.2	-0.6	-0.7		0.6	0.3	0.3	0.2
7,1	2.7	-1.1	-1.3	0.3	0.3	0.2	0.1	3.5
3, 1 1 1 3 1 1 1 1 3	0.5	-0.9	-1.2	0.4	0.2	0.1	0.0	1.2
0 1 0	1.9	-3.2	-3.3	0.1	-0.2	0.0	-0.3	1.
	0.1	0.2	0.1	0.1	1.0	0.5	0.5	-1.
	0.7	-0.8 0.9	-0.9 0.9	0.1	0.5 1.9	0.2	0.2	1.0
	0.1 0.5		O O	0.0		1.0	0.9	-2.

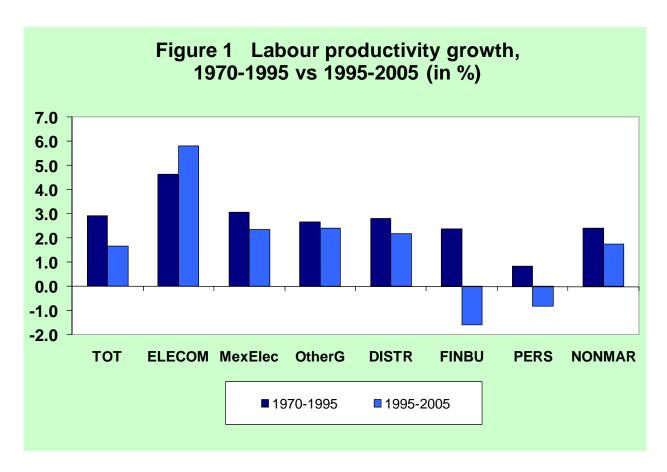
#### **GERMANY**

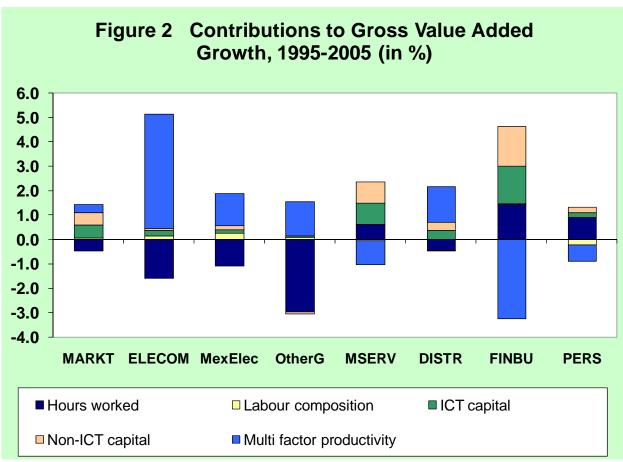
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	2.4	0.2	1.2	0.2	1.0	1.0
Electrical machinery, post and communication	4.4	0.2	2.0	0.7	1.3	2.1
Manufacturing, excluding electrical	2.6	0.3	1.0	0.2	0.9	1.3
Other goods producing industries	2.0	0.1	0.6	-0.1	0.8	1.3
Market services	2.1	0.2	1.3	0.3	1.0	0.6
.Distribution services	2.5	0.2	0.6	0.1	0.5	1.7
.Finance and business services	1.6	0.2	2.1	0.7	1.4	-0.6
.Personal and social services	0.3	0.3	0.1	-0.1	0.2	-0.1
1995-2005						
MARKET ECONOMY	1.5	0.1	1.1	0.5	0.6	0.4
Electrical machinery, post and communication	5.8	0.1	1.0	0.4	0.6	4.7
Manufacturing, excluding electrical	2.3	0.2	0.7	0.2	0.5	1.4
Other goods producing industries	2.4	0.1	0.9	0.1	0.8	1.5
Market services	0.4	-0.1	1.3	0.7	0.6	-0.9
.Distribution services	2.2	0.0	0.7	0.3	0.4	1.5
Finance and business services	-1.6	0.0	1.9	1.3	0.6	-3.5
Personal and social services	-0.8	-0.2	-0.1	0.0	-0.1	-0.5
1995-2000						
MARKET ECONOMY	1.9	-0.1	1.4	0.6	0.8	0.6
Electrical machinery, post and communication	6.9	0.0	1.0	0.4	0.6	5.9
Manufacturing, excluding electrical	2.4	0.0	0.8	0.4	0.5	1.5
Other goods producing industries	2.3	0.0	0.8	0.2	0.9	1.3
Market services	0.8	-0.2	1.7	0.1	0.8	-0.7
Distribution services	2.6	-0.2	0.7	0.3	0.4	2.1
Finance and business services	-1.4	0.0	2.6	1.7	0.9	-4.0
Personal and social services	-0.5	-0.5	-0.2	-0.1	-0.1	0.2
.Feisoriai and social services	-0.5	-0.5	-0.2	-0.1	-0.1	0.2
2000-2005						
MARKET ECONOMY	1.2	0.2	0.9	0.4	0.5	0.2
Electrical machinery, post and communication	4.7	0.3	1.0	0.4	0.5	3.5
Manufacturing, excluding electrical	2.3	0.4	0.6	0.2	0.5	1.3
Other goods producing industries	2.5	0.1	0.8	0.1	0.7	1.6
Market services	-0.1	0.1	0.9	0.5	0.4	-1.1
.Distribution services	1.8	0.1	0.6	0.2	0.4	1.0
.Finance and business services	-1.8	0.0	1.2	8.0	0.3	-3.0
Personal and social services	-1.2	0.0	0.0	0.1	-0.1	-1.2

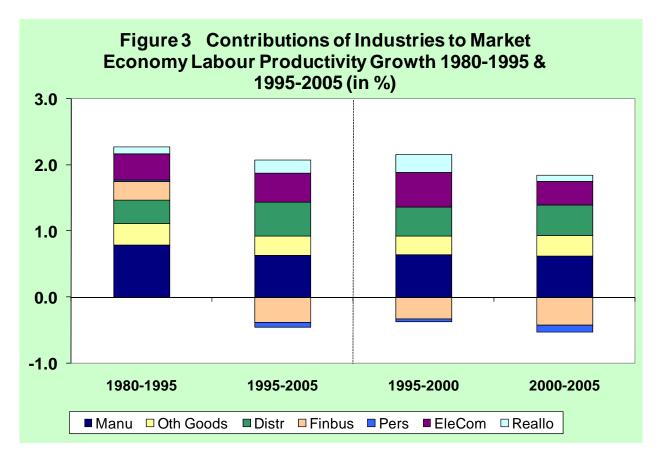
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

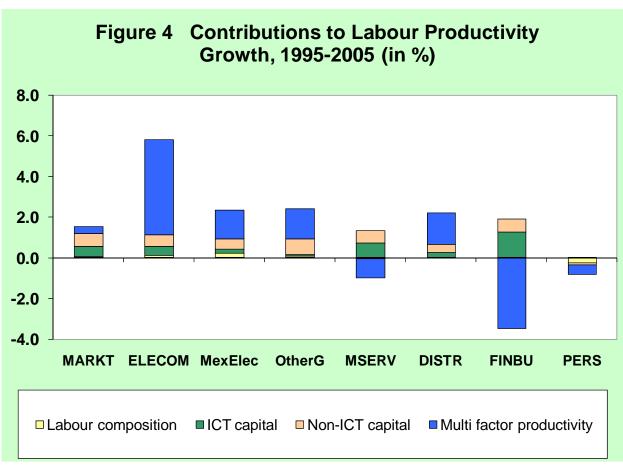
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









# HUNGARY

HUNGARY

Contact person: Robert Stehrer, The Vienna Institute for International Economic Studies (WIIW), <a href="mailto:stehrer@wiiw.ac.at">stehrer@wiiw.ac.at</a>

Table 1 Gross Value Added, Labour Inp						
	(annual av	erage volum	ne growth ra	ites, in %)	A	Canatalla (14) a ra
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005						
TOTAL INDUSTRIES	4.2	0.7	0.5	3.7	100.0	3.7
.Electrical machinery, post and communication	14.8	3.0	2.7	12.2	5.6	0.6
.Manufacturing, excluding electrical	2.7	-0.7	-1.0	3.6	20.2	3.0
Other goods producing industries	2.5	-1.0	-1.0	3.6	17.0	0.7
.Distribution services	4.2	1.4	0.9	3.3	20.8	0.7
.Finance and business services	5.1	5.5	5.0	0.1	7.1	0.0
.Personal and social services	0.9	0.9	0.4	0.6	8.1	0.0
.Non-market services	3.8	0.5	0.6	3.2	21.1	0.7
.Reallocation of labour effect						0.3
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	4.5 20.0 3.2 1.8 3.8 3.5 0.8 5.0	1.2 7.0 0.6 -1.0 2.1 6.6 0.1	1.4 7.0 0.7 -0.3 1.7 6.9 -0.1	3.1 13.0 2.5 2.1 2.1 -3.4 0.9 4.2	100.0 5.2 20.9 17.8 20.7 6.2 8.2 20.9	3.1 0.6 0.5 0.4 0.4 -0.2 0.1 0.9
2000-2005						
TOTAL INDUSTRIES	3.9	0.2	-0.5	4.4	100.0	4.4
.Electrical machinery, post and communication	9.7	-1.0	-1.6	11.3	6.0	0.7
.Manufacturing, excluding electrical	2.2	-2.1	-2.6	4.8	19.5	1.0
Other goods producing industries	3.3	-1.1	-1.8	5.1	16.2	0.0
.Distribution services	4.7	0.7	0.1	4.6	21.0	1.0
.Finance and business services	6.7	4.3	3.2	3.6	8.0	0.3
.Personal and social services	1.1	1.6	0.8	0.3	8.1	0.0
.Non-market services	2.6	0.8	0.3	2.3	21.3	0.5
.Reallocation of labour effect						0.2

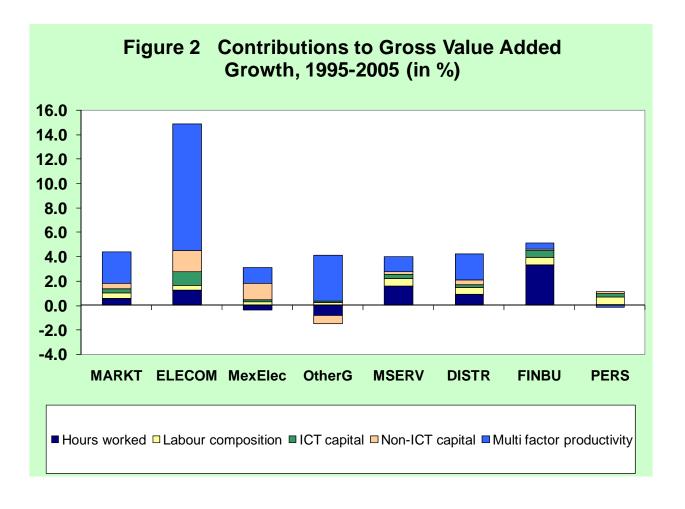
# HUNGARY

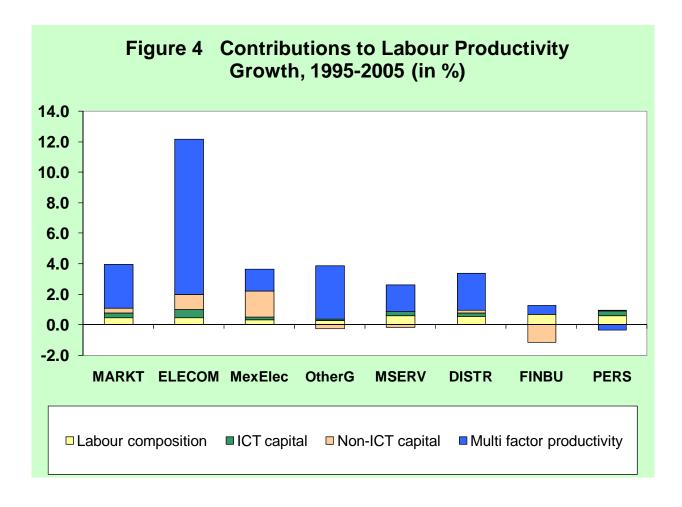
	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	4.4	1.0	0.6	0.4	0.8	0.3	0.5	2.6
Electrical machinery, post and communication	14.8	1.7	1.2	0.4	2.8	1.1	1.7	10.
Manufacturing, excluding electrical	2.7	-0.1	-0.4	0.3	1.5	0.2	1.3	1.3
Other goods producing industries	2.5	-0.6	-0.8	0.2	-0.6	0.1	-0.7	3.7
Market services	4.0	2.2	1.6	0.6	0.6	0.4	0.2	1.2
.Distribution services	4.2	1.4	0.9	0.5	0.6	0.3	0.3	2.2
Finance and business services	5.1	3.9	3.3	0.6	0.7	0.5	0.2	0.5
Personal and social services	0.9	0.7	0.1	0.6	0.4	0.3	0.1	-0.2
1995-2000								
MARKET ECONOMY	4.3	1.5	1.3	0.1	0.1	0.0	0.1	2.7
Electrical machinery, post and communication	20.0	3.7	3.4	0.4	2.9	0.6	2.3	13.
Manufacturing, excluding electrical	3.2	0.2	0.2	0.0	1.0	0.0	1.1	2.0
Other goods producing industries	1.8	-0.3	-0.3	0.0	-1.5	-0.1	-1.5	3.7
Market services	3.1	2.5	2.3	0.2	-0.2	-0.1	-0.1	0.8
.Distribution services	3.8	2.0	1.8	0.3	-0.3	0.0	-0.4	2.1
Finance and business services	3.5	4.7	4.5	0.2	-0.1	-0.2	0.0	-1.
.Personal and social services	0.8	-0.1	-0.4	0.2	0.2	-0.1	0.2	0.8
2000-2005								
MARKET ECONOMY	4.4	0.6	-0.2	0.7	1.5	0.7	0.8	2.4
Electrical machinery, post and communication	9.7	-0.4	-0.9	0.5	2.8	1.6	1.2	7.3
Manufacturing, excluding electrical	2.2	-0.5	-1.0	0.6	2.0	0.4	1.6	0.6
Other goods producing industries	3.3	-0.8	-1.3	0.5	0.3	0.3	0.0	3.8
Market services	4.8	1.8	0.9	0.9	1.4	0.8	0.6	1.0
.Distribution services	4.7	0.8	0.1	0.8	1.6	0.5	1.0	2.:
.Finance and business services	6.7	3.2	2.1	1.1	1.5	1.2	0.3	2.
Personal and social services	1.1	1.5	0.5	0.9	0.7	0.6	0.1	-1.

### **HUNGARY**

	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005						
MARKET ECONOMY	3.9	0.4	0.6	0.3	0.3	2.9
Electrical machinery, post and communication	12.2	0.4	1.5	0.6	1.0	10.2
Manufacturing, excluding electrical	3.6	0.3	1.9	0.2	1.7	1.5
Other goods producing industries	3.6	0.2	-0.2	0.1	-0.3	3.5
Market services	2.4	0.6	0.1	0.3	-0.2	1.7
.Distribution services	3.3	0.5	0.4	0.3	0.2	2.4
.Finance and business services	0.1	0.6	-1.2	0.0	-1.2	0.6
.Personal and social services	0.6	0.6	0.3	0.3	0.1	-0.4
MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services .Personal and social services	2.7 13.0 2.5 2.1 0.9 2.1 -3.4 0.9	0.1 0.4 0.0 0.0 0.2 0.3 0.2	-0.5 -0.6 0.7 -1.4 -0.9 -0.8 -2.8 0.2	-0.1 -0.7 -0.1 -0.1 -0.2 0.0 -1.0 0.0	-0.4 0.1 0.8 -1.3 -0.7 -0.8 -1.8 0.2	3.1 13.3 1.8 3.5 1.6 2.6 -0.8 0.5
2000-2005						
MARKET ECONOMY	5.1	0.7	1.8	0.7	1.0	2.6
Electrical machinery, post and communication	11.3	0.5	3.6	1.9	1.8	7.2
Manufacturing, excluding electrical	4.8	0.6	3.1	0.4	2.6	1.1
Other goods producing industries	5.1	0.5	1.1	0.3	0.8	3.5
Market services	3.9	0.9	1.1	0.8	0.4	1.8
.Distribution services	4.6	0.8	1.6	0.5	1.1	2.2
.Finance and business services	3.6	1.1	0.4	0.9	-0.5	2.0
Personal and social services	0.3	0.9	0.5	0.6	-0.1	-1.2

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects





ITALY

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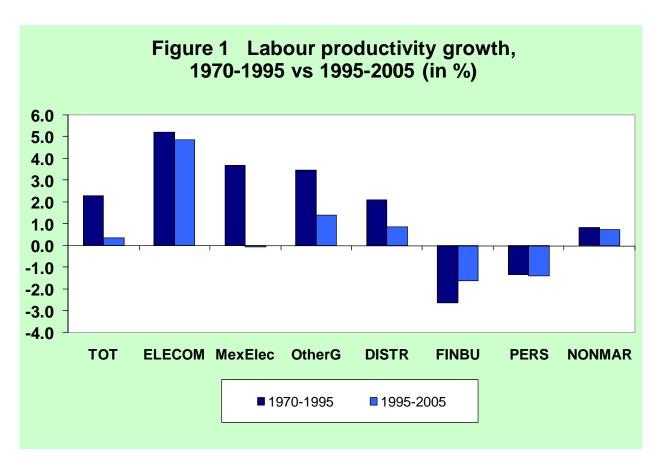
	(annual a	verage volum	ne growth ra	ates, in %)	Averes	Contribution
	Gross	Total	Total	GVA per	Average share in	to LP growth
	Value	persons	hours	hour	total hours	in total
	Added	engaged	worked	worked	worked (%)	industries
1970-1995					, ,	
TOTAL INDUSTRIES	2.7	0.4	0.4	2.3	100.0	2.3
Electrical machinery, post and communication	5.5	0.0	0.3	5.2	3.6	0.2
Manufacturing, excluding electrical	3.2	-0.3	-0.4	3.7	23.2	0.9
Other goods producing industries	0.7	-2.9	-2.7	3.5	22.2	1.1
Distribution services	3.5	1.1	1.4	2.1	21.6	0.4
Finance and business services	2.6	4.7	5.2	-2.6	5.8	-0.1
Personal and social services	1.6	2.5	2.9	-1.3	9.7	-0.
Non-market services	2.8	1.9	2.0	0.8	13.9	0.1
Reallocation of labour effect						-0.2
1995-2005						
TOTAL INDUSTRIES	1.2	1.1	0.8	0.3	100.0	0.3
Electrical machinery, post and communication	4.4	-0.3	-0.4	4.8	3.1	0.3
Manufacturing, excluding electrical	-0.7	-0.3	-0.7	-0.1	18.9	
Other goods producing industries	1.3	0.1	-0.1	1.4	14.0	
Distribution services	1.2	0.9	0.4	0.8	22.1	0.2
Finance and business services	2.9	4.5	4.6	-1.6	11.6	
Personal and social services	0.9	2.6	2.3	-1.4	14.7	
Non-market services	1.1	0.5	0.4	0.7	15.6	
Reallocation of labour effect		0.0	0	0		0.0
1005 0000						
1995-2000 TOTAL INDUSTRIES	1.8	1.0	1.0	0.8	100.0	0.8
Electrical machinery, post and communication	4.2	-0.1	0.2	4.0	3.2	
	0.6	-0.1	-0.3	0.8	19.6	
Manufacturing, excluding electrical	0.6	-0.3 -1.1	-0.3		14.3	
Other goods producing industries  Distribution services	1.9	1.1	0.9	1.8 1.3	14.3	
Finance and business services	4.5	5.5	5.7	-1.3	10.5	-0.1
Personal and social services	2.7	1.9	2.3	0.5	14.1	0.1
Non-market services	0.9	0.5	0.7	0.2	15.9	
Reallocation of labour effect						-0.1
2000-2005						
TOTAL INDUSTRIES	0.6	1.2	0.7	-0.1	100.0	-0.
Electrical machinery, post and communication	4.7	-0.4	-1.0	5.7	3.0	
Manufacturing, excluding electrical	-2.0	-0.3	-1.1	-1.0	18.2	
Other goods producing industries	1.7	1.2	0.7	1.0	13.7	
Distribution services	0.4	0.6	0.1	0.3	21.9	
Finance and business services	1.4	3.5	3.4	-2.0	12.6	
Personal and social services	-0.9	3.3	2.4	-3.3	15.2	
Non-market services	1.4	0.4	0.1	1.3	15.3	0.2
Reallocation of labour effect						0.

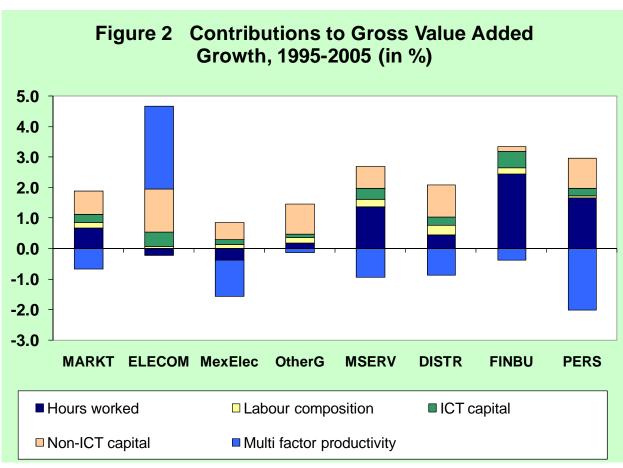
	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	1.9	0.3	0.2	0.1	0.8	0.3	0.6	0.8
.Electrical machinery, post and communication	3.2	-0.5	-0.5	0.0	1.4	0.6	0.8	2.3
.Manufacturing, excluding electrical	1.8	-1.0	-1.0	0.0	0.8	0.1	0.7	1.9
Other goods producing industries	0.9	-1.8	-1.7	-0.1	0.7	0.1	0.6	2.0
Market services	2.3	2.0	1.8	0.2	0.9	0.4	0.5	-0.6
Distribution services	2.6	0.8	0.6	0.2	0.8	0.3	0.5	1.0
Finance and business services	2.3	3.4	3.1	0.2	1.2	0.7	0.5	-2.3
Personal and social services	1.3	2.9	2.9	0.0	0.4	0.1	0.3	-2.0
1995-2005								
MARKET ECONOMY	1.2	0.8	0.7	0.2	1.0	0.3	0.8	-0.7
Electrical machinery, post and communication	4.4	-0.2	-0.2	0.1	1.9	0.5	1.4	2.7
Manufacturing, excluding electrical	-0.7	-0.3	-0.4	0.1	0.7	0.2	0.6	-1.2
Other goods producing industries	1.3	0.4	0.2	0.2	1.1	0.1	1.0	-0.
Market services	1.7	1.6	1.4	0.2	1.1	0.4	0.7	-0.9
Distribution services	1.2	0.8	0.4	0.3	1.3	0.3	1.1	-0.9
Finance and business services	2.9	2.6	2.4	0.2	0.7	0.6	0.2	-0.4
Personal and social services	0.9	1.7	1.6	0.1	1.2	0.3	1.0	-2.0
1995-2000								
MARKET ECONOMY	2.1	0.9	0.8	0.1	1.2	0.4	0.8	0.0
Electrical machinery, post and communication	4.2	0.1	0.0	0.0	1.8	0.4	0.9	2.3
.Manufacturing, excluding electrical	0.6	0.0	-0.1	0.1	1.0	0.3	0.7	-0.4
Other goods producing industries	0.9	-0.2	-0.3	0.1	1.0	0.1	0.9	0.1
Market services	2.9	1.8	1.6	0.1	1.3	0.5	0.7	-0.1
Distribution services	1.9	1.0	0.7	0.3	1.4	0.5	1.0	-0.5
Finance and business services	4.5	3.0	3.0	-0.1	0.9	0.8	0.1	0.6
Personal and social services	2.7	1.6	1.5	0.1	1.5	0.4	1.1	-0.4
2000-2005			0.5			0.4		
MARKET ECONOMY	0.3	0.8	0.5	0.3	0.9	0.1	0.8	-1.3
Electrical machinery, post and communication	4.7	-0.5	-0.6	0.1	2.0	0.1	1.9	3.1
Manufacturing, excluding electrical	-2.0	-0.6	-0.7	0.1	0.5	0.1	0.4	-2.0
Other goods producing industries	1.7	0.9	0.7	0.2	1.2	0.1	1.1	-0.4
Market services	0.5	1.4	1.1	0.3	0.9	0.2	0.7	-1.8
Distribution services	0.4	0.5	0.2	0.3	1.2	0.1	1.1	-1.3
Finance and business services	1.4	2.3	1.8	0.4	0.5	0.3	0.2	-1.4
Personal and social services	-0.9	1.8	1.7	0.1	0.9	0.1	0.8	-3.

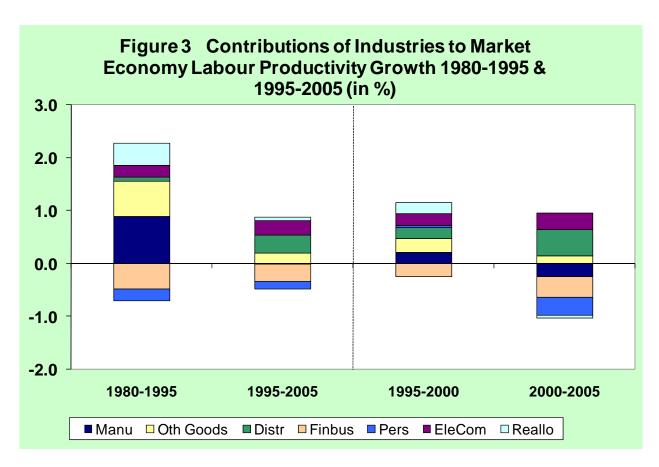
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	2.0	0.1	0.8	0.3	0.6	1.1
Electrical machinery, post and communication	4.0	0.0	1.6	0.7	0.9	2.3
Manufacturing, excluding electrical	3.2	0.0	1.2	0.2	1.0	2.0
Other goods producing industries	4.0	-0.1	1.3	0.1	1.2	2.7
Market services	0.0	0.2	0.4	0.3	0.1	-0.6
.Distribution services	1.9	0.2	0.7	0.3	0.5	1.0
.Finance and business services	-3.2	0.2	-0.5	0.5	-0.9	-3.0
Personal and social services	-2.4	0.0	0.1	0.0	0.0	-2.5
995-2005						
MARKET ECONOMY	0.3	0.2	0.7	0.3	0.5	-0.7
Electrical machinery, post and communication	4.8	0.1	2.1	0.5	1.6	2.7
Manufacturing, excluding electrical	-0.1	0.1	0.9	0.2	0.7	-1.1
Other goods producing industries	1.4	0.2	1.1	0.1	1.0	0.1
Market services	-0.2	0.2	0.5	0.3	0.2	-1.0
.Distribution services	0.8	0.3	1.2	0.2	1.0	-0.7
.Finance and business services	-1.6	0.2	-0.9	0.4	-1.3	-0.9
Personal and social services	-1.4	0.1	0.7	0.2	0.5	-2.2
995-2000						
MARKET ECONOMY	1.0	0.1	0.9	0.4	0.5	0.0
Electrical machinery, post and communication	4.0	0.0	1.7	0.8	0.9	2.3
Manufacturing, excluding electrical	0.8	0.1	1.1	0.3	0.8	-0.3
Other goods producing industries	1.8	0.1	1.3	0.2	1.2	0.3
Market services	0.7	0.1	0.6	0.5	0.2	-0.1
Distribution services	1.3	0.3	1.3	0.4	0.8	-0.2
Finance and business services	-1.3	-0.1	-1.1	0.5	-1.6	-0.2
Personal and social services	0.5	0.1	1.0	0.3	0.6	-0.6
2000-2005						
MARKET ECONOMY	-0.5	0.3	0.6	0.1	0.5	-1.4
Electrical machinery, post and communication	5.7	0.3	2.5	0.1	2.2	3.1
Manufacturing, excluding electrical	-1.0	0.1	0.8	0.3	0.7	-1.9
Other goods producing industries	1.0	0.1	0.8	0.1	0.7	-0.1
Market services	-1.1	0.2	0.9	0.1	0.3	-1.8
Distribution services	0.3	0.3	1.2	0.1	1.1	-1.0
Finance and business services	-2.0	0.3	-0.8	0.1	-1.0	-1.2
Personal and social services	-3.3	0.4	0.4	0.2	0.3	-1.7

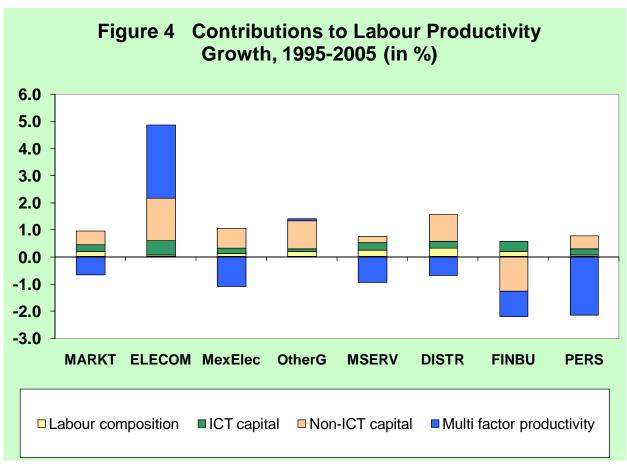
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









JAPAN

Contact person: Kyoji Fukao, Hitotsubashi University, <a href="mailto:k.fukao@srv.cc.hit-u.ac.jp">k.fukao@srv.cc.hit-u.ac.jp</a>

Table 1 Gross Value Added, Labour Inp		erage volum				
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1973-1995						
TOTAL INDUSTRIES	3.9	0.8	0.1	3.9	100.0	3.9
.Electrical machinery, post and communication	10.5	0.7	0.3	10.2	4.4	0.4
.Manufacturing, excluding electrical	3.2	-0.5	-1.0	4.2	19.9	0.9
.Other goods producing industries	1.0	-0.9	-1.4	2.5	21.7	0.6
.Distribution services	5.3	1.1	0.1	5.2	23.5	1.2
.Finance and business services	5.9	3.8	3.3	2.6	7.3	0.1
.Personal and social services	2.1	2.3	1.3	0.8	12.1	0.1
.Non-market services	3.6	2.2	1.5	2.1	11.1	0.2
.Reallocation of labour effect						0.3
1995-2005						
TOTAL INDUSTRIES	1.2	-0.4	-1.2	2.4	100.0	2.4
.Electrical machinery, post and communication	7.2	-1.9	-2.2	9.4	4.3	0.4
.Manufacturing, excluding electrical	-0.3	-2.3	-2.5	2.2	16.7	0.4
Other goods producing industries	-1.0	-2.7	-3.0	2.0	17.2	0.4
.Distribution services	0.0	-0.8	-2.1	2.1	22.6	0.5
.Finance and business services	3.2	2.2	1.4	1.8	11.0	0.2
.Personal and social services	0.6	0.6	-0.6	1.1	14.3	0.2
.Non-market services	1.8	2.0	1.2	0.6	14.0	0.1
Reallocation of labour effect	1.0	2.0		0.0	1 1.0	0.4
1995-2000						
TOTAL INDUSTRIES	1.2	-0.4	-1.3	2.5	100.0	2.5
Electrical machinery, post and communication	9.1	-0.4	-1.3	10.2	4.4	0.4
.Manufacturing, excluding electrical	-0.5	-0.9	-2.3	1.9	4.4 17.2	
Other goods producing industries	-0.5	-2.1	-2.3	2.4	18.0	0.5
.Distribution services	-0.8	-2.5	-1.8	1.5	23.1	0.3
.Finance and business services	3.0	2.0	1.4	1.7	10.3	
.Personal and social services	0.8	0.6	-0.7	1.7	14.0	0.2
.Non-market services	1.9	1.6	0.7	1.4	13.0	0.2
.Reallocation of labour effect	1.9	1.0	0.7	1.2	13.0	0.1
2000-2005	4.0	0.4	4.0	0.4	400.0	0.4
TOTAL INDUSTRIES	1.2	-0.4	-1.2	2.4	100.0	2.4
.Electrical machinery, post and communication	5.2	-2.9	-3.3	8.5	4.1	0.4
.Manufacturing, excluding electrical	0.0	-2.4	-2.6	2.6	16.2	0.4
Other goods producing industries	-1.3	-2.8	-2.8	1.5	16.3	
.Distribution services	0.4	-1.1	-2.4	2.8	22.1	0.6
Finance and business services	3.3	2.4	1.4	1.9	11.8	
.Personal and social services	0.3	0.5	-0.5	0.9	14.5	0.1
Non-market services	1.7	2.4	1.7	0.0	14.9	0.0
.Reallocation of labour effect						0.3

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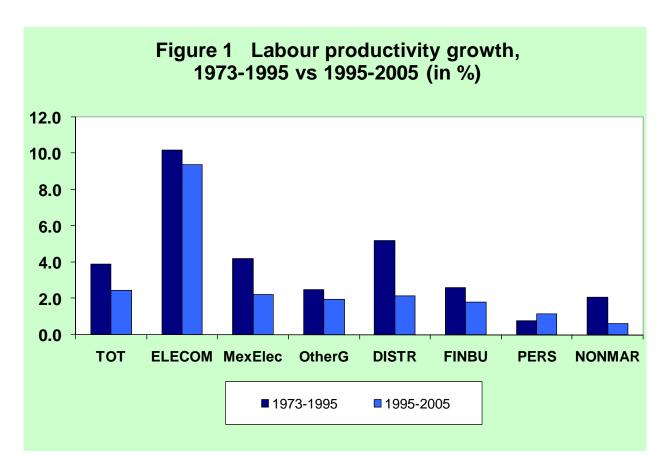
	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	3.9	0.4	0.1	0.3	2.0	0.5	1.5	1.5
Electrical machinery, post and communication	11.0	0.5	0.3	0.1	3.4	1.2	2.2	7.1
Manufacturing, excluding electrical	3.1	-0.2	-0.4	0.2	2.0	0.2	1.8	1.4
Other goods producing industries	1.0	0.0	-0.3	0.3	1.3	0.2	1.2	-0.3
Market services	4.2	0.9	0.6	0.4	2.0	0.6	1.4	1.3
Distribution services	4.3	0.1	-0.1	0.2	1.0	0.2	0.8	3.1
Finance and business services	6.1	1.9	1.5	0.4	3.6	1.6	1.9	0.7
Personal and social services	1.6	1.4	8.0	0.5	2.3	0.2	2.1	-2.′
1995-2005								
MARKET ECONOMY	1.0	-0.5	-0.9	0.4	1.1	0.5	0.6	0.5
Electrical machinery, post and communication	7.2	-0.8	-1.1	0.4	2.5	1.0	1.5	5.4
Manufacturing, excluding electrical	-0.3	-0.9	-1.2	0.3	1.2	0.2	1.1	-0.
Other goods producing industries	-1.0	-1.3	-1.7	0.4	0.3	0.1	0.2	0.0
Market services	1.2	-0.2	-0.6	0.4	1.0	0.6	0.4	0.4
Distribution services	0.0	-1.1	-1.5	0.4	0.3	0.1	0.1	0.9
Finance and business services	3.2	1.1	0.6	0.5	2.2	1.6	0.7	-0.
Personal and social services	0.6	0.1	-0.4	0.4	0.6	0.1	0.4	-0.1
1995-2000								
MARKET ECONOMY	1.0	-0.4	-0.9	0.4	1.1	0.5	0.6	0.4
Electrical machinery, post and communication	9.1	-0.2	-0.6	0.3	3.0	1.5	1.5	6.3
Manufacturing, excluding electrical	-0.5	-0.8	-1.1	0.3	0.8	0.2	0.6	-0.4
Other goods producing industries	-0.8	-1.1	-1.6	0.5	0.6	0.1	0.5	-0.:
Market services	1.0	-0.1	-0.6	0.5	1.0	0.6	0.4	0.0
.Distribution services	-0.3	-0.9	-1.3	0.4	0.5	0.2	0.3	0.1
Finance and business services	3.0	1.1	0.6	0.6	2.1	1.6	0.5	-0.:
Personal and social services	0.8	-0.1	-0.5	0.3	0.7	0.2	0.5	0.3
2000-2005								
MARKET ECONOMY	1.0	-0.7	-1.0	0.4	1.1	0.4	0.6	0.6
Electrical machinery, post and communication	5.2	-0.7	-1.7	0.4	2.1	0.4	1.6	4.5
Manufacturing, excluding electrical	0.0	-0.9	-1.7	0.4	1.7	0.5	1.5	-0.9
Other goods producing industries	-1.3	-0.9 -1.6	-1.2	0.3	-0.1	0.2	-0.2	0.4
Market services	1.4	-0.2	-0.6	0.3	-0.1	0.6	0.2	0.4
Distribution services	0.4	-1.4	-1.8	0.3	0.1	0.1	0.0	1.
Finance and business services	3.3 0.3	1.1 0.3	0.6 -0.3	0.5 0.5	2.3 0.5	1.5 0.1	0.8	0.0 -0.

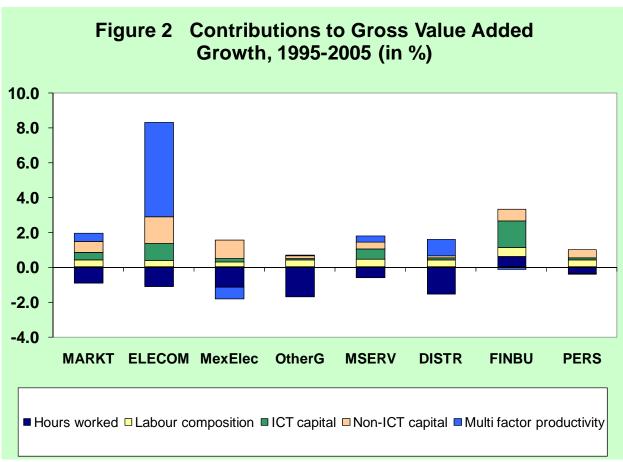
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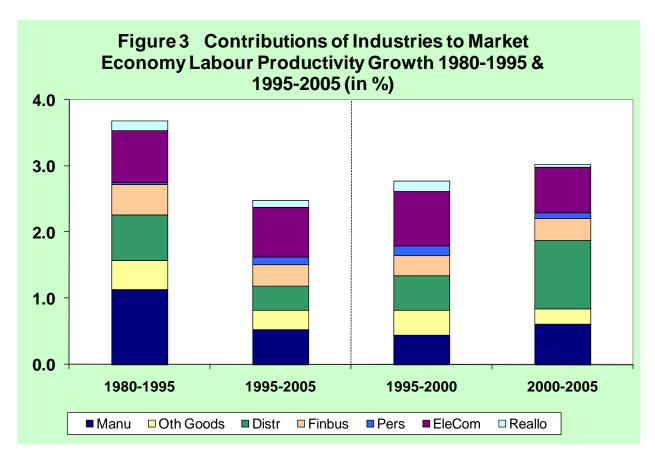
annual average volume growth rates, i						
	LP (1)=(2)+(3)+(6)	LC (2)	(3)=(4)+(5)	(4)	(5)	(6)
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	4.0	0.3	2.0	0.5	1.6	1.7
Electrical machinery, post and communication	10.4	0.1	3.2	1.2	2.0	7.1
Manufacturing, excluding electrical	4.0	0.2	2.4	0.2	2.1	1.5
Other goods producing industries	2.5	0.3	1.9	0.2	1.7	0.3
Market services	3.5	0.4	1.8	0.6	1.2	1.3
.Distribution services	4.5	0.2	1.1	0.2	0.8	3.2
.Finance and business services	3.3	0.4	2.6	1.4	1.1	0.3
.Personal and social services	0.4	0.5	1.9	0.2	1.7	-2.1
1995-2005						
MARKET ECONOMY	2.6	0.4	1.7	0.5	1.1	0.6
Electrical machinery, post and communication	9.4	0.4	3.6	1.3	2.3	5.4
Manufacturing, excluding electrical	2.2	0.3	2.3	0.2	2.1	-0.4
Other goods producing industries	2.0	0.4	1.3	0.1	1.2	0.3
Market services	2.0	0.4	1.3	0.7	0.6	0.3
.Distribution services	2.1	0.4	0.9	0.2	0.8	0.8
.Finance and business services	1.8	0.5	1.7	1.4	0.3	-0.4
Personal and social services	1.1	0.4	0.7	0.1	0.6	0.0
1995-2000						
MARKET ECONOMY	2.6	0.4	1.7	0.6	1.1	0.5
Electrical machinery, post and communication	10.2	0.3	3.6	1.7	1.9	6.3
Manufacturing, excluding electrical	1.9	0.3	1.8	0.2	1.6	-0.3
Other goods producing industries	2.4	0.5	1.7	0.2	1.6	0.2
Market services	1.7	0.5	1.3	0.7	0.6	0.0
Distribution services	1.5	0.4	1.0	0.2	0.8	0.0
Finance and business services	1.7	0.6	1.6	1.4	0.2	-0.5
Personal and social services	1.4	0.3	0.9	0.2	0.7	0.3
2000-2005						
MARKET ECONOMY	2.7	0.4	1.7	0.5	1.2	0.6
Electrical machinery, post and communication	2. <i>1</i> 8.5	0.4	3.7	1.0	2.7	4.4
Manufacturing, excluding electrical	0.5 2.6	0.4	2.9	0.3	2.7	-0.6
Other goods producing industries	1.5	0.3	0.8	0.3	0.7	0.8
Market services	2.3	0.3	1.3	0.1	0.7	0.3
Distribution services	2.3	0.4	0.9	0.6	0.6	1.6
.Finance and business services	1.9	0.5	1.7	1.3	0.4	-0.3

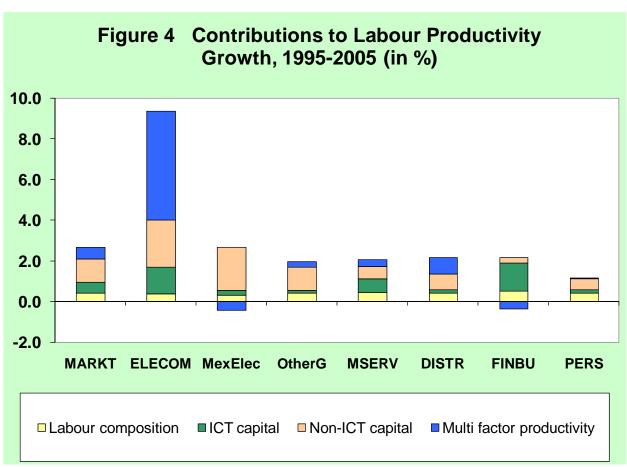
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









# LUXEMBOURG

LUXEMBOURG

Contact person: John Haas, Statistics Luxembourg (STATEC), john.haas@statec.etat.lu

	(annual a	verage volum	e growth ra	ates, in %)	A	O a set selle a at l
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995	1.0	4 =	4.0	0.0	100.0	0.0
TOTAL INDUSTRIES	4.9	1.7	1.6	3.3	100.0	3.3
.Electrical machinery, post and communication	6.6	2.0	1.7	4.9	2.3	
.Manufacturing, excluding electrical	1.7	-1.3	0.0	1.7	21.4	
Other goods producing industries	2.4	0.2	1.7	0.7	14.5	0.1
.Distribution services	5.4	2.7	1.6	3.9	21.5	
.Finance and business services	11.3	4.7	3.6	7.7	12.6	
.Personal and social services	3.1	2.9	1.6	1.5	12.6	0.2
.Non-market services	6.2	3.0	1.7	4.5	15.1	0.7
.Reallocation of labour effect						0.2
1995-2005						
TOTAL INDUSTRIES	4.5	3.6	3.7	0.8	100.0	0.8
.Electrical machinery, post and communication	12.4	2.8	3.3	9.1	2.2	0.2
.Manufacturing, excluding electrical	1.9	-0.3	-0.4	2.3	12.7	0.4
.Other goods producing industries	3.8	2.0	2.4	1.5	13.1	0.2
.Distribution services	4.1	2.8	3.1	1.0	20.9	0.2
.Finance and business services	5.5	7.1	7.7	-2.2	24.1	-0.4
.Personal and social services	0.6	2.3	0.7	-0.1	10.4	0.0
.Non-market services	3.7	4.5	5.0	-1.3	16.5	-0.2
Reallocation of labour effect						0.4
4005 0000						
1995-2000 TOTAL INDUSTRIES	5.4	4.0	4.3	1.1	100.0	1.1
Electrical machinery, post and communication	14.2	3.3	4.0	10.2	2.3	
.Manufacturing, excluding electrical	4.2	-0.2	-0.4	4.6	14.3	
Other goods producing industries	3.2	0.7	1.6	1.5	13.6	
.Distribution services	4.9	3.2	3.9	1.0	21.2	
Finance and business services	7.0	9.8	11.2	-4.2	21.2	
	0.4	3.2				-0.7
.Personal and social services .Non-market services	4.2		0.1	0.3	11.1	
Reallocation of labour effect	4.2	3.9	5.0	-0.7	15.9	-0.1 0.5
.Reallocation of labour effect						0.5
2000-2005						
TOTAL INDUSTRIES	3.5	3.1	3.0	0.5	100.0	0.5
.Electrical machinery, post and communication	10.5	2.3	2.6	7.9	2.2	0.2
.Manufacturing, excluding electrical	-0.3	-0.3	-0.3	0.0	11.4	
Other goods producing industries	4.5	3.3	3.1	1.4	12.7	0.2
.Distribution services	3.3	2.3	2.4	1.0	20.6	0.2
.Finance and business services	4.0	4.4	4.3	-0.3	26.4	-0.1
.Personal and social services	0.7	1.3	1.3	-0.6	9.8	-0.1
.Non-market services	3.3	5.0	5.1	-1.8	16.9	-0.3
.Reallocation of labour effect						0.4

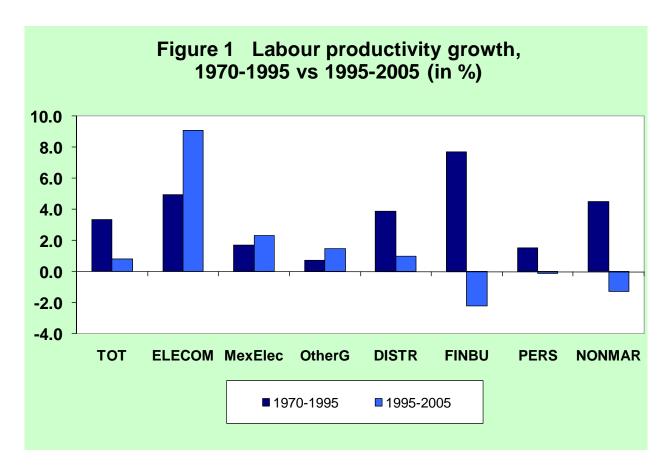
## **LUXEMBOURG**

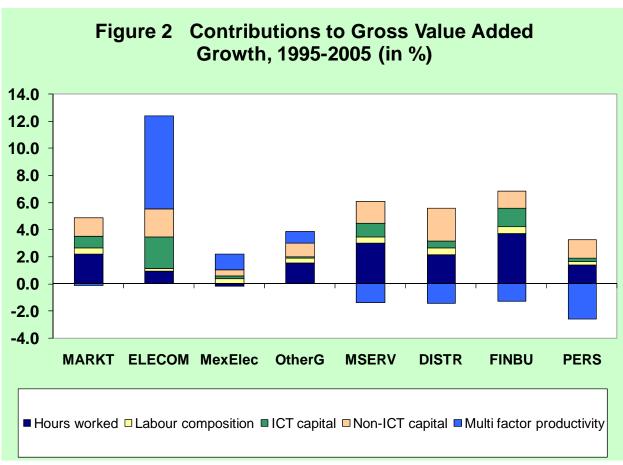
(annual average volume growth rates,	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	4.7	2.6	2.2	0.4	2.2	0.8	1.4	-0.2
.Electrical machinery, post and communication	12.4	1.1	0.9	0.2	4.4	2.3	2.1	6.9
.Manufacturing, excluding electrical	1.9	0.1	-0.2	0.3	0.7	0.2	0.5	1.1
Other goods producing industries	3.8	1.9	1.5	0.4	1.1	0.1	1.0	0.9
.Market services	4.6	3.5	3.0	0.5	2.6	1.0	1.6	-1.4
Distribution services	4.1	2.6	2.1	0.5	2.9	0.5	2.4	-1.4
Finance and business services	5.5	4.2	3.7	0.5	2.6	1.3	1.3	-1.3
Personal and social services	0.6	1.6	1.4	0.3	1.6	0.2	1.4	-2.6
1995-2000								
MARKET ECONOMY	5.8	3.4	2.8	0.6	2.8	0.9	1.9	-0.5
.Electrical machinery, post and communication	14.2	1.5	1.2	0.3	6.3	1.5	4.8	6.4
Manufacturing, excluding electrical	4.2	0.3	-0.2	0.5	-0.2	0.0	-0.2	4.0
Other goods producing industries	3.2	1.7	1.1	0.6	0.6	-0.1	0.7	0.9
.Market services	5.7	4.7	4.0	0.7	3.6	1.3	2.3	-2.5
Distribution services	4.9	3.5	2.7	0.8	2.8	0.2	2.6	-1.4
Finance and business services	7.0	5.8	5.2	0.6	4.3	2.0	2.3	-3.1
Personal and social services	0.4	2.0	1.4	0.6	1.5	0.1	1.4	-3.1
2000-2005								
MARKET ECONOMY	3.6	1.8	1.6	0.3	1.7	0.8	0.9	0.1
.Electrical machinery, post and communication	10.5	0.8	0.7	0.1	2.5	3.1	-0.6	7.3
Manufacturing, excluding electrical	-0.3	0.0	-0.2	0.2	1.5	0.4	1.1	-1.8
Other goods producing industries	4.5	2.1	1.9	0.1	1.6	0.3	1.3	0.8
Market services	3.5	2.2	1.9	0.3	1.6	0.7	0.9	-0.3
.Distribution services	3.3	1.7	1.5	0.2	3.0	0.9	2.2	-1.5
Finance and business services	4.0	2.6	2.2	0.4	0.9	0.7	0.3	0.5
Personal and social services	0.7	1.3	1.3	0.0	1.7	0.3	1.3	-2.2

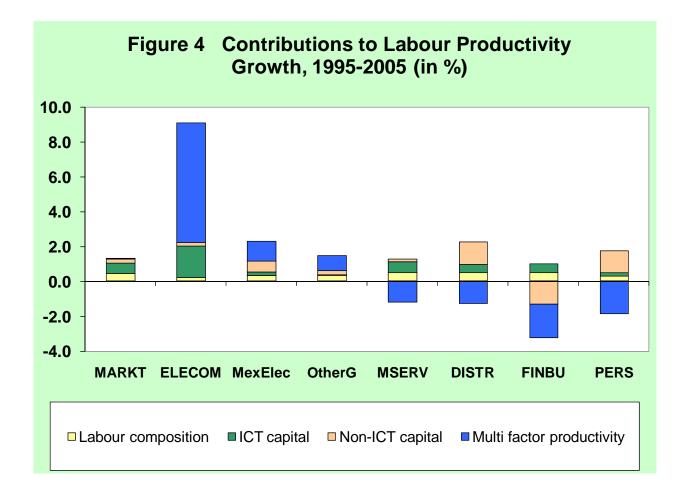
### **LUXEMBOURG**

(annual average volume growth rates,	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005	( ) ( ) (-) (-)	( )	(-) ( ) (-)	( )	(-)	(-)
MARKET ECONOMY	1.3	0.4	0.9	0.6	0.2	0.0
Electrical machinery, post and communication	9.1	0.2	2.0	1.8	0.2	6.9
Manufacturing, excluding electrical	2.3	0.3	0.8	0.2	0.6	1.1
Other goods producing industries	1.5	0.4	0.2	0.0	0.2	0.9
Market services	0.1	0.5	0.8	0.6	0.1	-1.2
.Distribution services	1.0	0.5	1.7	0.5	1.3	-1.3
Finance and business services	-2.2	0.5	-0.8	0.5	-1.3	-1.9
.Personal and social services	-0.1	0.3	1.5	0.2	1.3	-1.9
MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Market services .Distribution services .Finance and business services .Personal and social services	1.6 10.2 4.6 1.5 -0.2 1.0 -4.2 0.3	0.6 0.3 0.5 0.6 0.7 0.8 0.6	1.1 3.4 0.0 0.0 1.1 1.4 -0.8 1.5	0.7 0.9 0.0 -0.2 0.8 0.1 0.8	0.4 2.5 0.0 0.2 0.3 1.3 -1.6 1.4	-0.1 6.5 4.0 1.0 -2.0 -1.2 -4.0 -1.8
2000-2005						
MARKET ECONOMY	1.0	0.3	0.6	0.6	0.0	0.1
Electrical machinery, post and communication	7.9	0.1	0.6	2.7	-2.1	7.2
Manufacturing, excluding electrical	0.0	0.2	1.6	0.4	1.2	-1.7
Other goods producing industries	1.4	0.1	0.5	0.2	0.3	0.8
Market services	0.4	0.3	0.4	0.5	0.0	-0.3
.Distribution services	1.0	0.2	2.1	0.8	1.3	-1.3
.Finance and business services	-0.3	0.4	-0.8	0.2	-1.0	0.1
Personal and social services	-0.6	0.0	1.4	0.3	1.1	-2.0

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects







# THE NETHERLANDS

THE NETHERLANDS

**Contact person:** Henry van der Wiel, Netherlands Bureau for Economic Policy Analysis (CPB), <u>H.P.van.der.Wiel@cpb.nl</u>

Table 1 Gross Value Added, Labour Inp		verage volum				
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.7	1.1	0.2	2.6	100.0	2.6
.Electrical machinery, post and communication	3.1	-0.6	-1.2	4.3	3.8	0.2
.Manufacturing, excluding electrical	2.5	-0.8	-1.6	4.1	17.7	0.9
.Other goods producing industries	2.2	-0.8	-1.4	3.5	14.8	0.6
.Distribution services	2.7	1.1	0.3	2.4	21.9	0.5
.Finance and business services	4.3	3.4	2.9	1.4	11.3	0.1
.Personal and social services	0.0	2.4	0.9	-1.0	8.0	-0.1
.Non-market services	2.9	2.0	0.9	2.0	22.5	0.4
.Reallocation of labour effect						-0.1
1995-2005						
TOTAL INDUSTRIES	2.5	1.4	1.0	1.6	100.0	1.6
.Electrical machinery, post and communication	7.7	-0.2	-0.4	8.1	2.8	0.2
.Manufacturing, excluding electrical	1.9	-1.0	-1.2	3.2	12.7	0.4
Other goods producing industries	0.5	0.4	0.5	0.0	12.2	0.0
.Distribution services	3.7	1.3	0.5	3.3	22.0	0.7
.Finance and business services	3.7	3.0	2.7	1.1	19.0	
.Personal and social services	1.8	0.8	0.9	0.9	9.4	0.1
.Non-market services	1.6	2.3	1.7	-0.1	22.0	0.0
Reallocation of labour effect		2.0		<b>0.</b> .		-0.1
1995-2000						
TOTAL INDUSTRIES	3.8	2.5	2.2	1.6	100.0	1.6
Electrical machinery, post and communication	12.0	2.8	2.8	9.2	2.9	0.3
.Manufacturing, excluding electrical	2.8	0.2	0.0	2.8	13.3	
Other goods producing industries	1.1	1.5	2.5	-1.4	12.3	
.Distribution services	5.8	2.7	1.5	4.3	22.2	
Finance and business services	6.2	5.8	5.7	0.6	18.6	0.1
Personal and social services	4.0	1.5	2.3	1.7	9.4	
.Non-market services	1.6	2.0	1.2	0.5	21.2	0.2
.Reallocation of labour effect	1.0	2.0	1.2	0.5	21.2	-0.2
2000-2005	4.0	0.2	0.0	1.0	100.0	4.0
TOTAL INDUSTRIES	1.2	0.3	-0.3	1.6	100.0	1.6
Electrical machinery, post and communication	3.3	-3.2	-3.7	7.0	2.8	0.2
.Manufacturing, excluding electrical	1.0	-2.2	-2.5	3.5	12.0	0.4
Other goods producing industries	0.0	-0.7	-1.5	1.5	12.2	
.Distribution services	1.7	0.0	-0.6	2.3	21.8	0.5
.Finance and business services	1.2	0.2	-0.4	1.6	19.4	0.3
.Personal and social services	-0.3	0.0	-0.5	0.1	9.3	0.0
.Non-market services	1.6	2.6	2.3	-0.7	22.5	-0.1
.Reallocation of labour effect						0.0

## THE NETHERLANDS

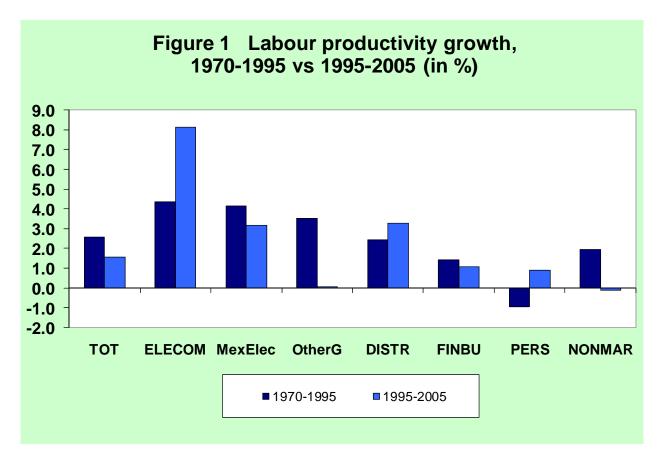
	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.3	0.9	0.7	0.2	1.1	0.5	0.6	0.3
Electrical machinery, post and communication	2.9	-0.5	-0.8	0.3	1.6	1.1	0.5	1.8
Manufacturing, excluding electrical	2.3	-0.3	-0.5	0.3	0.9	0.5	0.5	1.6
Other goods producing industries	0.9	-0.2	-0.3	0.1	0.9	0.1	0.7	0.3
Market services	2.8	2.0	1.9	0.2	1.2	0.6	0.6	-0.
.Distribution services	3.0	1.0	0.9	0.2	0.8	0.3	0.4	1.2
Finance and business services	4.1	3.3	3.1	0.1	1.9	1.0	0.9	-1.
Personal and social services	-1.4	2.3	1.9	0.3	0.5	0.2	0.3	-3.9
1995-2005								
MARKET ECONOMY	2.8	0.9	0.5	0.4	0.9	0.6	0.3	1.0
Electrical machinery, post and communication	7.7	0.2	-0.2	0.4	2.6	1.2	1.3	4.9
Manufacturing, excluding electrical	1.9	-0.3	-0.8	0.5	0.3	0.2	0.1	1.9
Other goods producing industries	0.5	0.9	0.3	0.6	0.5	0.2	0.2	-0.
Market services	3.5	1.4	1.0	0.4	1.1	0.8	0.4	0.9
Distribution services	3.7	0.5	0.3	0.1	0.8	0.5	0.3	2.4
Finance and business services	3.7	2.4	1.8	0.6	1.6	1.2	0.5	-0.:
Personal and social services	1.8	1.2	0.9	0.3	0.5	0.3	0.2	-0.
1995-2000								
MARKET ECONOMY	4.6	2.1	1.7	0.3	1.6	0.9	0.7	0.9
Electrical machinery, post and communication	12.0	1.9	1.6	0.3	4.7	2.1	2.6	5.4
Manufacturing, excluding electrical	2.8	0.3	0.0	0.3	0.8	0.4	0.4	1.7
Other goods producing industries	1.1	2.0	1.5	0.6	0.9	0.4	0.6	-1.5
Market services	5.7	2.7	2.5	0.3	1.9	1.1	0.8	1.1
.Distribution services	5.8	1.3	1.1	0.2	1.3	0.7	0.6	3.2
.Finance and business services	6.2	4.4	4.0	0.4	2.9	1.8	1.1	-1.0
Personal and social services	4.0	2.1	2.1	0.0	0.7	0.4	0.2	0.9
2000 2005								
2000-2005	4.4	0.0	0.0	٥٢	0.0	0.0	0.4	4.4
MARKET ECONOMY	1.1	-0.2	-0.8	0.5	0.2	0.3	-0.1	1.1
Electrical machinery, post and communication	3.3	-1.5	-2.0	0.5	0.4	0.4	0.0	4.4
Manufacturing, excluding electrical	1.0	-0.8	-1.5	0.7	-0.2	0.0	-0.2	2.
Other goods producing industries	0.0	-0.3	-0.9	0.6	0.0	0.1	-0.1	0.:
Market services	1.2	0.1	-0.4	0.5	0.4	0.5	-0.1	0.
.Distribution services	1.7	-0.4	-0.5	0.1	0.4	0.4	0.1	1.
.Finance and business services	1.2	0.4	-0.4	0.8	0.4	0.6	-0.2	0.4
Personal and social services	-0.3	0.2	-0.3	0.6	0.4	0.3	0.1	-1

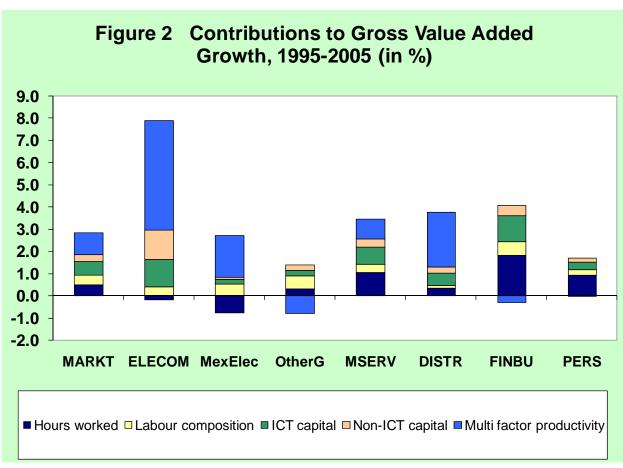
#### THE NETHERLANDS

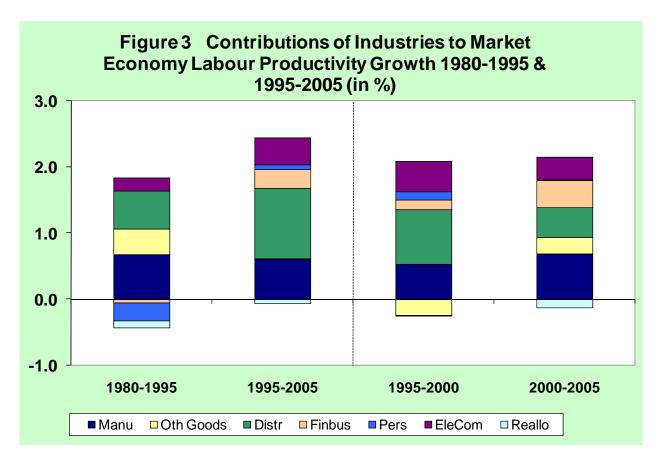
annual average volume growth rates, i						
	LP (2) (2)	LC	K (5) (4) (5)	KIT	KNIT	MFP (a)
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	1.3	0.2	0.7	0.4	0.3	0.3
Electrical machinery, post and communication	4.1	0.3	1.9	1.2	0.7	1.9
Manufacturing, excluding electrical	3.0	0.3	1.1	0.5	0.7	1.6
Other goods producing industries	1.7	0.1	1.3	0.1	1.1	0.3
Market services	0.4	0.2	0.6	0.5	0.1	-0.3
.Distribution services	1.8	0.2	0.4	0.3	0.1	1.2
.Finance and business services	-0.3	0.1	0.8	0.8	0.0	-1.2
.Personal and social services	-3.7	0.3	0.1	0.0	0.1	-4.1
1995-2005						
MARKET ECONOMY	2.1	0.4	0.7	0.6	0.1	1.0
Electrical machinery, post and communication	8.1	0.4	2.8	1.2	1.6	4.9
Manufacturing, excluding electrical	3.2	0.5	0.8	0.3	0.5	1.9
Other goods producing industries	0.0	0.6	0.3	0.2	0.1	-0.8
Market services	2.1	0.4	0.8	0.7	0.1	1.0
.Distribution services	3.3	0.1	0.7	0.5	0.2	2.4
.Finance and business services	1.1	0.6	0.9	1.0	-0.1	-0.4
Personal and social services	0.9	0.3	0.4	0.3	0.1	0.2
1995-2000						
MARKET ECONOMY	2.1	0.3	0.9	0.8	0.1	0.9
Electrical machinery, post and communication	9.2	0.3	3.6	1.6	2.0	5.4
Manufacturing, excluding electrical	2.8	0.3	0.8	0.5	0.3	1.7
Other goods producing industries	-1.4	0.6	0.0	0.3	-0.3	-2.0
Market services	2.5	0.3	1.1	1.0	0.1	1.2
.Distribution services	4.3	0.2	0.8	0.7	0.2	3.2
Finance and business services	0.6	0.4	1.3	1.4	0.0	-1.2
Personal and social services	1.7	0.0	0.4	0.4	0.0	1.3
2000-2005						
MARKET ECONOMY	2.2	0.5	0.6	0.4	0.2	1.1
Electrical machinery, post and communication	7.0	0.5	2.0	0.4	1.1	4.5
Manufacturing, excluding electrical	3.5	0.5	0.8	0.6	0.7	2.1
Other goods producing industries	3.5 1.5	0.7	0.6	0.1	0.7	0.3
Market services	1.7	0.6	0.5	0.1	0.4	0.3
Distribution services	2.3	0.5	0.5	0.5	0.0	1.6
Finance and business services	2.3 1.6	0.1	0.5	0.4	-0.2	0.3
Personal and social services.	0.1	0.8	0.5	0.6	-0.2 0.2	-0.9

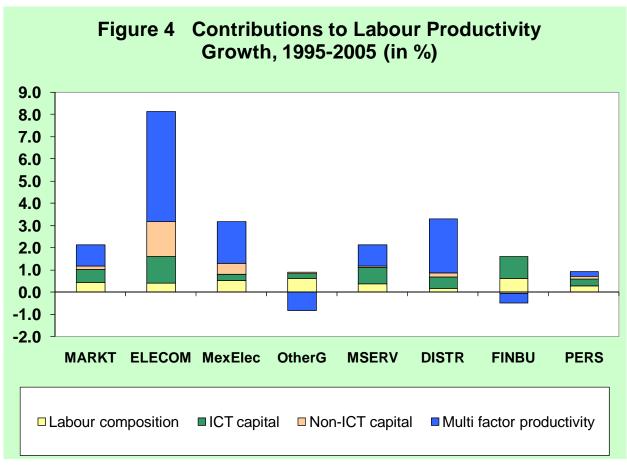
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









POLAND

**Contact person:** Robert Stehrer, The Vienna Institute for International Economic Studies (WIIW), <a href="mailto:stehrer@wiiw.ac.at">stehrer@wiiw.ac.at</a>

Table 1 Gross Value Added, Labour Inp	ut and Lab	our Produ	uctivity, 1	995-2005		
		erage volum				
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005		<u> </u>			· /	
TOTAL INDUSTRIES	3.6	-0.4	-0.6	4.1	100.0	4.1
.Electrical machinery, post and communication	10.3	-1.3	-1.6	11.9	2.6	0.3
.Manufacturing, excluding electrical	4.3	-2.1	-2.3	6.6	18.7	1.4
.Other goods producing industries	0.9	-1.1	-1.0	1.9	30.9	0.6
.Distribution services	4.2	0.2	-0.5	4.7	20.3	0.9
.Finance and business services	7.7	4.8	4.5	3.2	6.4	0.1
.Personal and social services	2.2	1.4	0.6	1.6	4.2	0.1
.Non-market services	1.8	-0.1	0.2	1.7	16.7	0.3
.Reallocation of labour effect						0.4
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	4.8 10.0 7.0 1.8 5.8 12.1 3.1	0.4 -0.7 -2.0 -0.1 1.2 7.4 3.1 0.2	0.5 -0.9 -1.8 0.0 0.7 7.9 2.5 1.2	4.3 10.9 8.8 1.8 5.0 4.2 0.6 -0.3	100.0 2.7 19.9 31.1 20.4 5.7 4.1 16.2	4.3 0.3 1.8 0.6 1.0 0.2 0.0 0.0
2000-2005						
TOTAL INDUSTRIES	2.3	-1.1	-1.7	4.0	100.0	4.0
.Electrical machinery, post and communication	10.7	-1.9	-2.3	12.9	2.5	0.3
.Manufacturing, excluding electrical	1.7	-2.3	-2.8	4.5	17.5	0.8
.Other goods producing industries	0.0	-2.0	-2.1	2.0	30.7	0.6
.Distribution services	2.6	-0.8	-1.8	4.3	20.3	0.9
.Finance and business services	3.3	2.2	1.1	2.2	7.3	0.1
.Personal and social services	1.4	-0.2	-1.3	2.7	4.3	0.1
.Non-market services	2.7	-0.3	-0.9	3.6	17.3	0.6
.Reallocation of labour effect						0.5

### SLOVAK REPUBLIC

SLOVAK REPUBLIC

**Contact person:** Robert Stehrer, The Vienna Institute for International Economic Studies (WIIW), <a href="mailto:stehrer@wiiw.ac.at">stehrer@wiiw.ac.at</a>

Table 1 Gross Value Added, Labour Inp						
	(annual av	erage volun	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005		-			• •	
TOTAL INDUSTRIES	3.1	-0.1	-0.7	3.8	100.0	3.8
.Electrical machinery, post and communication	8.2	1.6	1.4	6.8	4.4	0.3
.Manufacturing, excluding electrical	6.3	-1.8	-1.7	8.0	22.0	1.8
.Other goods producing industries	1.8	-3.1	-3.7	5.5	16.3	1.1
.Distribution services	3.3	3.1	2.2	1.1	21.2	0.2
.Finance and business services	-0.2	4.5	3.6	-3.8	7.9	-0.2
.Personal and social services	-1.0	-0.8	-0.8	-0.2	6.7	0.0
.Non-market services	2.1	-0.7	-2.0	4.1	21.6	0.9
.Reallocation of labour effect						-0.3
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	2.1 8.1 1.0 -0.5 3.1 -3.7 1.6 5.8	-0.8 0.5 -2.5 -5.2 2.7 3.6 0.9 -0.7	-1.4 0.1 -2.4 -6.7 1.8 3.0 1.0	3.5 8.1 3.4 6.1 1.3 -6.7 0.5 7.5	100.0 4.2 22.5 17.8 19.9 7.2 6.7 21.7	3.5 0.3 0.8 1.2 0.2 -0.4 0.0 1.7 -0.3
2000-2005						
TOTAL INDUSTRIES	4.2	0.6	0.1	4.1	100.0	4.1
.Electrical machinery, post and communication	8.3	2.6	2.7	5.6	4.7	0.2
.Manufacturing, excluding electrical	11.5	-1.2	-1.1	12.6	21.3	2.7
.Other goods producing industries	4.2	-0.9	-0.7	4.9	14.5	0.7
.Distribution services	3.6	3.4	2.7	0.9	22.6	0.2
.Finance and business services	3.3	5.3	4.1	-0.8	8.6	-0.1
.Personal and social services	-3.6	-2.4	-2.7	-0.9	6.8	-0.1
.Non-market services	-1.6	-0.8	-2.3	0.7	21.5	0.1
.Reallocation of labour effect						0.2

### SLOVENIA

SLOVENIA

Contact person: Robert Stehrer, The Vienna Institute for International Economic Studies (WIIW), <a href="mailto:stehrer@wiiw.ac.at">stehrer@wiiw.ac.at</a>

	(annual av	verage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005						
TOTAL INDUSTRIES	3.9	-0.1	-0.4	4.2	100.0	4.2
.Electrical machinery, post and communication	7.2	0.5	0.8	6.4	4.2	
.Manufacturing, excluding electrical	4.3	-1.9	-1.6	5.9	24.5	1.6
Other goods producing industries	2.4	-1.8	-2.7	5.1	24.2	1.4
.Distribution services	3.2	-0.2	-0.3	3.5	17.1	0.6
.Finance and business services	5.8	2.7	2.6	3.1	9.1	0.2
.Personal and social services	3.4	2.2	1.5	1.9	6.2	0.1
.Non-market services	3.1	2.5	2.6	0.5	14.6	0.1
.Reallocation of labour effect						0.0
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	4.0 7.8 4.8 2.6 2.6 6.0 4.8 3.2	-0.2 0.7 -2.3 -1.9 -0.4 2.8 4.1 2.6	-0.5 1.0 -2.1 -2.7 -0.5 2.7 3.6 2.7	4.5 6.8 6.9 5.4 3.0 3.4 1.2 0.5	100.0 4.1 25.1 25.7 17.1 8.4 6.0 13.6	4.5 0.3 1.8 1.4 0.5 0.3 0.1 0.1
2000-2005						
TOTAL INDUSTRIES	3.7	0.0	-0.2	4.0	100.0	4.0
Electrical machinery, post and communication	6.6	0.4	0.6	6.0	4.4	
.Manufacturing, excluding electrical	3.9	-1.4	-1.1	5.0	23.8	1.2
Other goods producing industries	2.2	-1.7	-2.6	4.8	22.6	1.2
.Distribution services	3.8	0.1	-0.1	3.9	17.1	0.7
.Finance and business services	5.5	2.7	2.6	2.9	9.9	0.3
Personal and social services	2.1	0.3	-0.5	2.6	6.6	0.2
.Non-market services	3.1	2.3	2.5	0.5	15.6	0.1
Reallocation of labour effect						0.2

#### SLOVENIA

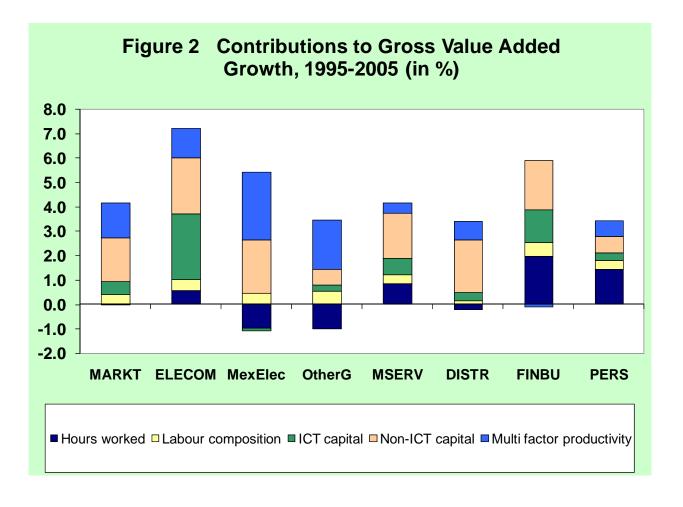
Table 2 Gross value added growth and (annual average volume growth rates,		95-2005						
	VA	L	Н	LC	K	KIT	KNIT	MFP
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	4.1	0.4	0.0	0.4	2.3	0.5	1.8	1.4
.Electrical machinery, post and communication	7.2	1.0	0.6	0.4	5.0	2.7	2.3	1.2
.Manufacturing, excluding electrical	4.3	-0.5	-1.0	0.4	2.1	-0.1	2.2	2.8
.Other goods producing industries	2.4	-0.5	-1.0	0.5	0.9	0.3	0.7	2.0
.Market services	4.1	1.2	0.9	0.3	2.5	0.7	1.8	0.4
Distribution services	3.2	-0.1	-0.2	0.2	2.5	0.3	2.1	0.8
Finance and business services	5.8	2.5	2.0	0.6	3.4	1.3	2.0	-0.1
Personal and social services	3.4	1.8	1.4	0.4	1.0	0.3	0.7	0.6
1995-2000								
MARKET ECONOMY	4.3	0.3	-0.1	0.3	2.6	0.5	2.1	1.4
.Electrical machinery, post and communication	7.8	0.9	0.7	0.3	7.2	3.7	3.4	-0.3
.Manufacturing, excluding electrical	4.8	-0.9	-1.5	0.6	2.0	-0.4	2.4	3.6
.Other goods producing industries	2.6	-0.7	-0.9	0.2	1.3	0.6	0.7	2.1
.Market services	4.1	1.3	1.1	0.2	2.9	0.6	2.3	-0.1
Distribution services	2.6	-0.3	-0.4	0.1	2.9	0.3	2.6	0.0
Finance and business services	6.0	2.5	2.0	0.5	4.0	1.2	2.8	-0.4
Personal and social services	4.8	3.4	3.3	0.0	0.6	0.1	0.6	0.8
2000-2005								
MARKET ECONOMY	4.0	0.5	0.0	0.5	2.0	0.5	1.4	1.5
.Electrical machinery, post and communication	6.6	1.1	0.5	0.6	2.8	1.7	1.2	2.7
.Manufacturing, excluding electrical	3.9	-0.2	-0.5	0.3	2.2	0.1	2.0	1.9
Other goods producing industries	2.2	-0.2	-1.1	0.9	0.5	-0.1	0.6	1.9
.Market services	4.1	1.1	0.6	0.5	2.2	0.8	1.4	0.9
Distribution services	3.8	0.2	-0.1	0.2	2.1	0.4	1.7	1.5
Finance and business services	5.5	2.6	1.9	0.6	2.8	1.5	1.3	0.2
Personal and social services	2.1	0.2	-0.4	0.7	1.3	0.6	0.8	0.5

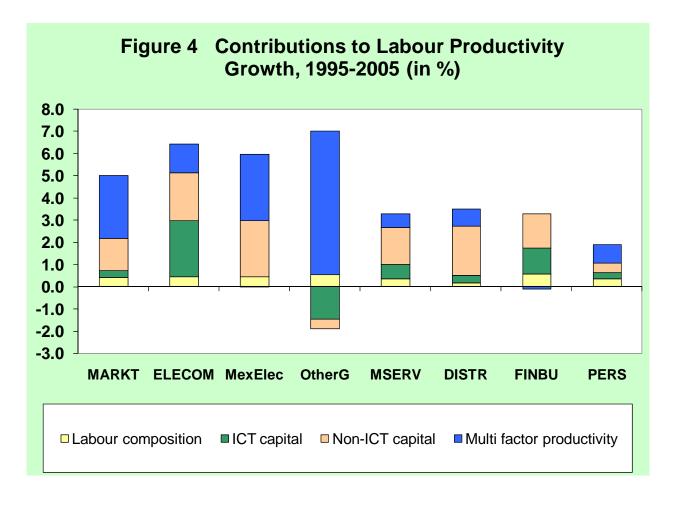
#### **SLOVENIA**

(annual average volume growth rates, i	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005						
MARKET ECONOMY	5.0	0.4	1.8	0.3	1.5	2.8
.Electrical machinery, post and communication	6.4	0.4	4.7	2.5	2.1	1.3
.Manufacturing, excluding electrical	5.9	0.4	2.5	0.0	2.5	3.0
Other goods producing industries	5.1	0.5	-1.9	-1.5	-0.4	6.5
.Market services	3.3	0.3	2.3	0.7	1.7	0.6
Distribution services	3.5	0.2	2.6	0.3	2.2	0.8
Finance and business services	3.1	0.6	2.7	1.2	1.5	-0.1
Personal and social services	1.9	0.4	0.7	0.3	0.4	0.9
1995-2000						
MARKET ECONOMY	5.3	0.3	1.8	0.2	1.6	3.1
.Electrical machinery, post and communication	6.8	0.3	6.7	3.5	3.2	-0.2
.Manufacturing, excluding electrical	6.9	0.6	2.5	-0.2	2.7	3.8
Other goods producing industries	5.4	0.2	-3.6	-2.9	-0.8	8.8
.Market services	3.0	0.2	2.6	0.5	2.1	0.2
Distribution services	3.0	0.1	3.0	0.3	2.7	0.0
Finance and business services	3.4	0.5	3.3	1.1	2.2	-0.4
Personal and social services	1.2	0.0	-0.1	-0.1	0.0	1.2
2000-2005						
MARKET ECONOMY	4.7	0.5	1.7	0.3	1.3	2.5
.Electrical machinery, post and communication	6.0	0.6	2.6	1.6	1.1	2.8
.Manufacturing, excluding electrical	5.0	0.3	2.5	0.2	2.3	2.2
Other goods producing industries	4.8	0.9	-0.2	-0.1	-0.1	4.1
.Market services	3.6	0.5	2.1	0.8	1.3	1.0
Distribution services	3.9	0.2	2.1	0.4	1.7	1.5
Finance and business services	2.9	0.6	2.1	1.3	0.8	0.2
Personal and social services	2.6	0.7	1.4	0.6	0.8	0.5

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects





SPAIN

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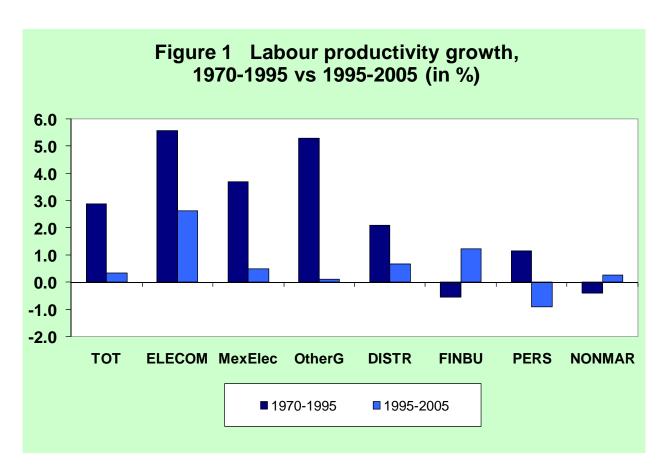
Table 1 Gross Value Added, Labour Inp	out and Lak	our Produ	uctivity, 1	970-1995 a	and 1995-2005	
	(annual av	verage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.9	0.3	0.0	2.9	100.0	2.9
.Electrical machinery, post and communication	6.2	1.0	0.6	5.6	2.4	
.Manufacturing, excluding electrical	2.9	-0.5	-0.8	3.7	19.7	0.8
.Other goods producing industries	2.4	-2.5	-2.8	5.3	27.3	2.0
.Distribution services	2.9	1.2	0.8	2.1	19.4	0.4
.Finance and business services	3.7	4.6	4.3	-0.6	5.4	
.Personal and social services	2.1	1.0	1.0	1.1	11.8	0.1
.Non-market services	2.7	3.7	3.1	-0.4	13.9	0.0
.Reallocation of labour effect						-0.4
1995-2005						
TOTAL INDUSTRIES	3.4	3.5	3.1	0.3	100.0	0.3
.Electrical machinery, post and communication	4.5	2.3	1.9	2.6	2.4	0.1
.Manufacturing, excluding electrical	2.2	2.5	1.8	0.5	16.5	0.1
Other goods producing industries	4.0	3.8	3.9	0.1	19.3	0.0
.Distribution services	3.6	3.4	2.9	0.7	20.8	0.1
.Finance and business services	5.3	4.5	4.1	1.2	9.4	-
.Personal and social services	3.1	4.2	3.9	-0.9	13.7	-0.1
.Non-market services	3.0	3.2	2.7	0.3	17.9	0.0
.Reallocation of labour effect	3.0	5.2	2.1	0.0	17.5	0.0
1005 0000						
1995-2000	0.0	0.0	0.0	0.4	400.0	0.4
TOTAL INDUSTRIES	3.9	3.8	3.8	0.1	100.0	0.1
.Electrical machinery, post and communication	6.4	3.1	3.4	3.0	2.6	0.1
.Manufacturing, excluding electrical	3.5	3.8	3.9	-0.4	17.2	
Other goods producing industries	4.3	4.0	4.3	0.0	18.8	0.0
.Distribution services	4.6	3.7	3.6	0.9	20.9	0.2
.Finance and business services	5.3	5.2	5.2	0.1	9.1	0.0
.Personal and social services	3.5	3.8	4.2	-0.7	13.3	-0.1
Non-market services	2.6	3.1	2.4	0.2	18.1	0.0
.Reallocation of labour effect						-0.1
2000-2005						
TOTAL INDUSTRIES	3.0	3.2	2.4	0.6	100.0	0.6
.Electrical machinery, post and communication	2.6	1.5	0.3	2.3	2.3	0.1
.Manufacturing, excluding electrical	1.0	1.1	-0.3	1.3	16.0	0.2
.Other goods producing industries	3.7	3.5	3.5	0.2	19.7	0.0
.Distribution services	2.6	3.0	2.2	0.4	20.7	0.1
.Finance and business services	5.3	3.7	2.9	2.3	9.7	0.2
.Personal and social services	2.6	4.5	3.7	-1.1	14.0	-0.2
.Non-market services	3.3	3.3	3.1	0.3	17.7	0.0
.Reallocation of labour effect						0.1

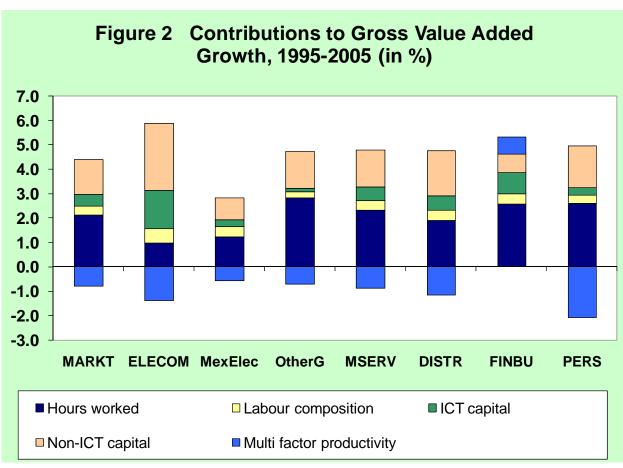
<u> </u>	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.4	0.3	0.0	0.3	1.4	0.5	1.0	0.6
.Electrical machinery, post and communication	5.8	1.0	0.3	0.7	2.6	1.2	1.4	2.2
.Manufacturing, excluding electrical	1.8	-0.6	-0.9	0.3	1.2	0.3	0.9	1.3
Other goods producing industries	2.4	-1.1	-1.3	0.2	0.6	0.1	0.5	2.9
Market services	2.5	1.7	1.3	0.3	1.9	0.7	1.2	-1.2
Distribution services	2.3	0.6	0.3	0.3	1.6	0.4	1.2	0.1
Finance and business services	3.4	3.1	2.8	0.3	2.7	1.5	1.2	-2.4
Personal and social services	1.9	2.0	1.7	0.4	1.7	0.6	1.1	-1.8
1995-2005								
MARKET ECONOMY	3.6	2.5	2.1	0.4	1.9	0.5	1.4	-0.8
Electrical machinery, post and communication	4.5	1.6	1.0	0.6	4.3	1.6	2.8	-1.4
Manufacturing, excluding electrical	2.2	1.6	1.2	0.4	1.2	0.3	0.9	-0.6
Other goods producing industries	4.0	3.1	2.8	0.3	1.6	0.1	1.5	-0.
Market services	3.9	2.7	2.3	0.4	2.1	0.6	1.5	-0.9
Distribution services	3.6	2.3	1.9	0.4	2.4	0.6	1.9	-1.2
Finance and business services	5.3	3.0	2.6	0.4	1.6	0.9	0.8	0.7
Personal and social services	3.1	2.9	2.6	0.3	2.0	0.3	1.7	-2.′
1995-2000								
MARKET ECONOMY	4.3	3.0	2.7	0.3	2.1	0.6	1.4	-0.8
Electrical machinery, post and communication	6.4	2.5	1.8	0.7	5.5	2.5	2.9	-1.0
Manufacturing, excluding electrical	3.5	2.7	2.5	0.2	1.7	0.4	1.3	-0.9
Other goods producing industries	4.3	3.1	3.0	0.2	1.1	0.1	0.9	0.1
Market services	4.5	3.2	2.8	0.4	2.3	0.8	1.5	-1.1
Distribution services	4.6	2.7	2.4	0.3	2.7	0.8	1.9	-0.9
Finance and business services	5.3	3.9	3.3	0.6	1.8	1.2	0.7	-0.4
Personal and social services	3.5	3.1	2.9	0.3	2.2	0.4	1.8	-2.
2000 2005								
2000-2005 MARKET ECONOMY	2.9	1.9	1.5	0.4	1.7	0.3	1.5	-0.8
Electrical machinery, post and communication	2.6	0.6	0.2	0.4	3.2	0.6	2.6	-1.2
.Manufacturing, excluding electrical	1.0	0.6	-0.1	0.4	0.7	0.6	0.6	-0.3
Other goods producing industries	3.7	3.0	2.6	0.6	2.2	0.2	2.1	-1.
Market services	3.4	2.2	1.8	0.4	1.8	0.1	1.5	-0.
Distribution services	2.6	1.9	1.4	0.4	2.1	0.4	1.8	-0. -1.
Distribution servicesFinance and business services	5.3	2.0	1.4	0.5	1.4	0.6	0.8	1.8
Personal and social services	2.6	2.7	2.3	0.2	1.4	0.0	1.6	-2.

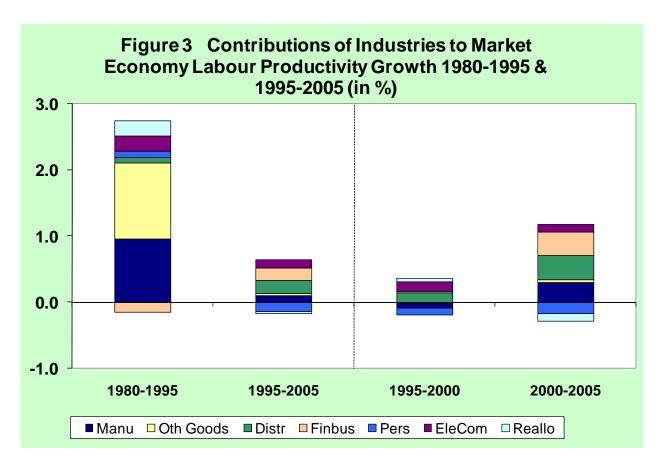
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	2.9	0.3	1.5	0.5	1.1	1.0
Electrical machinery, post and communication	5.1	0.7	2.3	1.1	1.2	2.1
Manufacturing, excluding electrical	3.4	0.3	1.8	0.3	1.5	1.3
Other goods producing industries	5.2	0.2	1.6	0.1	1.5	3.4
Market services	1.1	0.3	1.5	0.6	0.9	-0.7
.Distribution services	1.9	0.3	1.4	0.3	1.1	0.2
.Finance and business services	-1.2	0.3	1.4	1.1	0.3	-2.9
.Personal and social services	0.7	0.4	1.5	0.5	1.0	-1.2
1995-2005						
MARKET ECONOMY	0.4	0.4	0.8	0.3	0.5	-0.7
Electrical machinery, post and communication	2.6	0.6	3.4	1.3	2.1	-1.3
Manufacturing, excluding electrical	0.5	0.4	0.6	0.2	0.3	-0.5
Other goods producing industries	0.1	0.3	0.0	0.1	-0.1	-0.2
Market services	0.5	0.4	1.0	0.4	0.6	-0.9
.Distribution services	0.7	0.4	1.4	0.4	1.0	-1.1
.Finance and business services	1.2	0.4	0.5	0.5	0.0	0.3
.Personal and social services	-0.9	0.3	0.9	0.2	0.7	-2.1
1995-2000						
MARKET ECONOMY	0.2	0.3	0.6	0.5	0.2	-0.7
Electrical machinery, post and communication	3.0	0.3	3.8	2.0	1.8	-0.7
Manufacturing, excluding electrical	-0.4	0.7	0.3	0.3	0.0	-0.8
Other goods producing industries	0.0	0.2	-0.7	0.3	-0.8	0.6
Market services	0.3	0.2	1.1	0.1	0.5	-1.1
Distribution services	0.9	0.4	1.4	0.6	0.8	-0.8
Finance and business services	0.9	0.6	0.5	0.7	-0.2	-0.0
Personal and social services	-0.7	0.0	1.1	0.7	0.9	-0.8
.r elsorial and social services	-0.1	0.5	1.1	0.5	0.9	-2.
2000-2005						
MARKET ECONOMY	0.6	0.4	0.9	0.2	0.7	-0.7
Electrical machinery, post and communication	2.3	0.4	3.0	0.6	2.4	-1.1
Manufacturing, excluding electrical	1.3	0.6	0.8	0.2	0.7	-0.1
Other goods producing industries	0.2	0.4	0.8	0.1	0.7	-1.0
Market services	0.6	0.4	0.9	0.2	0.7	-0.7
.Distribution services	0.4	0.5	1.3	0.2	1.1	-1.4
.Finance and business services	2.3	0.2	0.5	0.3	0.2	1.6
Personal and social services	-1.1	0.4	0.7	0.1	0.6	-2.2

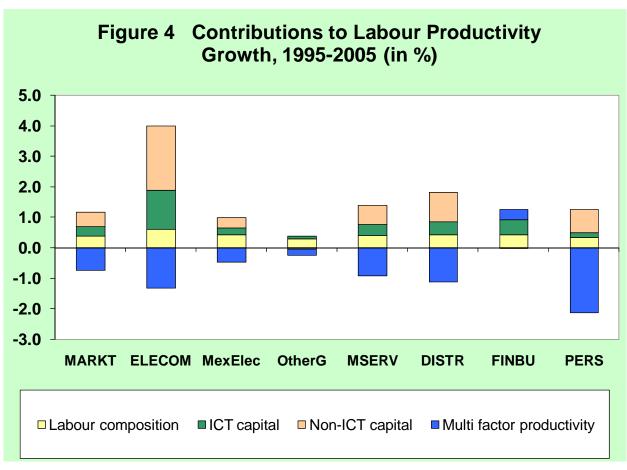
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









SWEDEN

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tomas.skytesvall@scb.se

.Non-market services

.Reallocation of labour effect

Table 1 Gross Value Added, Labour Input and Labour Productivity, 1970-1995 and 1995-2005 (annual average volume growth rates, in %) Contribution Average GVA per share in to LP growth Gross Total Total Value persons hours hour total hours in total Added engaged worked worked worked (%) industries 1970-1995 TOTAL INDUSTRIES 2.0 0.3 100.0 1.7 1.7 .Electrical machinery, post and communication 4.0 -0.5 0.1 3.9 4.1 0.2 20.4 .Manufacturing, excluding electrical 1.8 -1.5 -1.0 2.9 0.7 Other goods producing industries 1.0 -2.4 -2.2 3.2 15.2 0.7 .Distribution services 2.3 0.2 0.3 1.9 18.5 0.4 .Finance and business services 2.7 3.4 3.4 -0.7 6.5 0.0 .Personal and social services 1.3 1.2 1.2 0.1 7.1 0.0 .Non-market services 2.0 1.8 28.3 0.0 1.4 0.1 .Reallocation of labour effect -0.2 1995-2005 100.0 TOTAL INDUSTRIES 2.9 0.5 0.3 2.6 2.6 .Electrical machinery, post and communication 14.2 -1.3 -1.4 15.7 3.9 0.6 .Manufacturing, excluding electrical 3.2 -0.7 -0.6 3.8 17.1 0.7 8.0 -0.5 10.8 0.1 .Other goods producing industries -0.5 1.3 .Distribution services 3.6 0.5 0.1 3.6 18.2 0.7 .Finance and business services 4.2 3.8 2.9 1.3 11.2 0.1 .Personal and social services 2.2 0.1 1.0 1.0 8.1 1.1 .Non-market services 0.7 0.4 0.3 0.3 30.7 0.1 .Reallocation of labour effect 0.2 1995-2000 TOTAL INDUSTRIES 3.3 0.8 0.8 2.5 100.0 2.5 .Electrical machinery, post and communication 16.5 1.5 1.9 14.6 4.0 0.6 0.0 17.5 .Manufacturing, excluding electrical 4.0 0.2 3.8 0.7 .Other goods producing industries -0.2 -0.8 -0.6 0.4 11.0 0.0 .Distribution services 3.7 8.0 0.6 3.1 18.5 0.6 .Finance and business services 5.4 6.2 6.0 -0.5 10.4 -0.1 .Personal and social services 2.3 0.6 0.7 1.6 8.0 0.1 .Non-market services 30.6 8.0 -0.1 0.0 8.0 0.2 .Reallocation of labour effect 0.3 2000-2005 TOTAL INDUSTRIES 2.4 0.2 -0.2 2.7 100.0 2.7 .Electrical machinery, post and communication 16.7 0.7 12.0 -4.2 -4.8 3.7 -1.5 .Manufacturing, excluding electrical 2.4 -1.4 3.8 16.7 0.7 .Other goods producing industries 1.8 -0.2 -0.4 2.2 10.6 0.2 .Distribution services 3.6 0.2 -0.4 4.0 0.7 17.9 Finance and business services 3.1 1.3 -0.2 3.2 12.0 0.4 .Personal and social services 2.1 1.3 1.4 0.6 8.3 0.1

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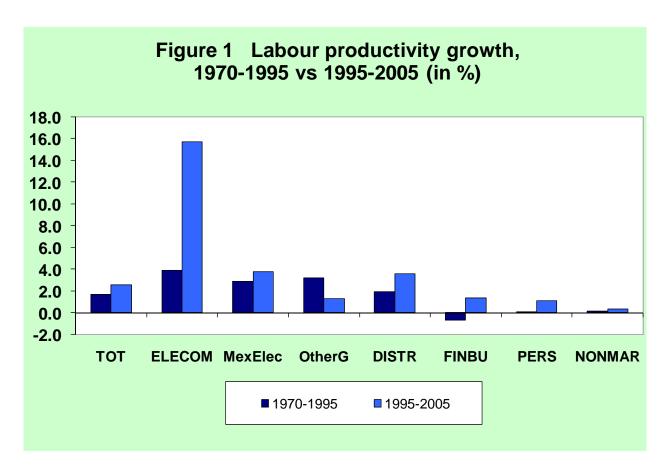
#### **SWEDEN**

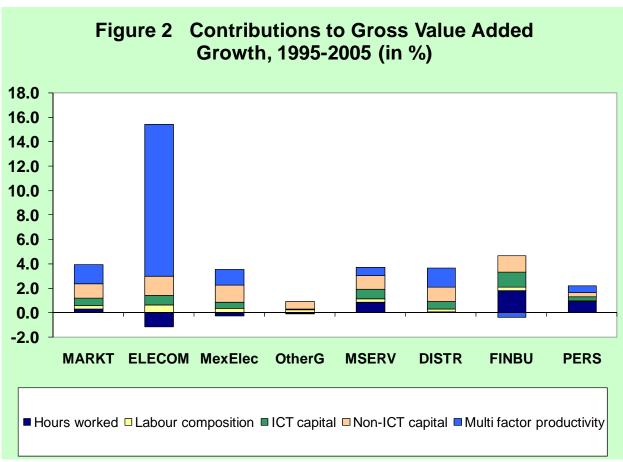
Table 2 Gross value added growth and (annual average volume growth rates,		95-2005						
	VA	L	Н	LC	K	KIT	KNIT	MFP
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	3.9	0.6	0.3	0.3	1.8	0.6	1.2	1.6
.Electrical machinery, post and communication	14.2	-0.6	-1.2	0.6	2.4	0.8	1.5	12.5
.Manufacturing, excluding electrical	3.2	0.0	-0.3	0.3	1.9	0.5	1.4	1.3
.Other goods producing industries	0.8	0.1	-0.1	0.2	0.7	0.1	0.6	0.0
.Market services	3.7	1.1	0.8	0.3	1.9	0.8	1.1	0.7
Distribution services	3.6	0.3	0.0	0.2	1.7	0.6	1.2	1.6
Finance and business services	4.2	2.1	1.8	0.3	2.6	1.2	1.4	-0.4
Personal and social services	2.2	0.9	0.9	0.0	0.7	0.3	0.3	0.6
1995-2000 MARKET ECONOMY	4.4	1.1	1.0	0.1	2.3	0.8	1.5	1.0
Electrical machinery, post and communication	16.5	1.1	1.0	0.1	3.8	1.3	2.5	1.0
.Manufacturing, excluding electrical	4.0	0.5	0.2	0.1	2.7	0.7	2.0	0.9
Other goods producing industries	-0.2	0.0	-0.2	0.3	0.7	0.7	0.6	-0.9
.Market services	4.2	1.7	1.7	-0.1	2.4	1.1	1.4	0.1
Distribution services	3.7	0.7	0.4	0.3	2.1	0.7	1.3	0.1
Finance and business services	5.4	3.8	3.7	0.0	3.5	1.7	1.8	-1.9
Personal and social services	2.3	-1.1	0.5	-1.7	0.5	0.3	0.2	2.9
2000-2005								
MARKET ECONOMY	3.3	0.1	-0.4	0.5	1.2	0.4	8.0	2.1
.Electrical machinery, post and communication	12.0	-2.4	-3.5	1.1	0.9	0.3	0.6	13.5
.Manufacturing, excluding electrical	2.4	-0.4	-0.8	0.4	1.1	0.2	8.0	1.8
.Other goods producing industries	1.8	0.2	0.0	0.2	0.7	0.0	0.7	0.9
.Market services	3.1	0.5	0.0	0.6	1.4	0.5	0.9	1.2
Distribution services	3.6	-0.1	-0.3	0.2	1.4	0.4	1.0	2.3
Finance and business services	3.1	0.3	-0.2	0.5	1.6	0.7	0.9	1.1
Personal and social services	2.1	3.0	1.3	1.7	0.8	0.4	0.5	-1.8

#### **SWEDEN**

	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005						
MARKET ECONOMY	3.6	0.3	1.6	0.6	1.1	1.7
Electrical machinery, post and communication	15.7	0.6	2.4	0.8	1.6	12.7
Manufacturing, excluding electrical	3.8	0.3	2.0	0.5	1.6	1.4
Other goods producing industries	1.3	0.2	0.8	0.1	0.8	0.2
Market services	2.6	0.3	1.6	0.7	0.9	0.7
.Distribution services	3.6	0.2	1.7	0.6	1.1	1.6
.Finance and business services	1.3	0.3	1.5	0.8	0.7	-0.5
.Personal and social services	1.1	0.0	0.4	0.2	0.2	0.7
MARKET ECONOMY  Electrical machinery, post and communication  Manufacturing, excluding electrical  Other goods producing industries  Market services  .Distribution services  .Finance and business services  .Personal and social services	3.2 14.6 3.8 0.4 2.1 3.1 -0.5 1.6	0.1 0.3 0.2 -0.1 0.3 0.1 -1.7	1.9 3.1 2.5 0.9 1.8 1.9 1.3	0.7 1.1 0.6 0.1 0.9 0.7 0.9	1.2 2.0 1.9 0.8 0.9 1.2 0.5	1.2 11.4 1.0 -0.7 0.3 0.9 -2.0 3.1
2000-2005						
MARKET ECONOMY	3.9	0.5	1.3	0.4	0.9	2.1
Electrical machinery, post and communication	16.7	1.1	1.7	0.5	1.2	14.0
Manufacturing, excluding electrical	3.8	0.4	1.6	0.3	1.2	1.8
Other goods producing industries	2.2	0.2	0.7	0.0	0.7	1.2
Market services	3.1	0.6	1.4	0.5	0.8	1.2
.Distribution services	4.0	0.2	1.5	0.5	1.0	2.3
.Finance and business services	3.2	0.5	1.6	0.7	0.9	1.1
Personal and social services	0.6	1.7	0.6	0.3	0.3	-1.7

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital KNIT= Contribution of Non-ICT capital MFP= Contribution of Multi factor productivity growth NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects





#### UNITED KINGDOM

### UNITED KINGDOM

**Contact person:** Mary O'Mahony, National Institute of Economic and Social Research (NIESR), <a href="months-m.omahony@niesr.ac.uk">m.omahony@niesr.ac.uk</a>

	(annual av	erage volum	e growth ra	ates, in %)	A	Contribution
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	1.8	0.1	-0.1	1.9	100.0	
.Electrical machinery, post and communication	3.7	-1.6	-1.7	5.4	5.1	
.Manufacturing, excluding electrical	0.3	-2.5	-2.6	2.8	22.3	-
Other goods producing industries	1.3	-1.4	-1.6	2.9	14.6	0.9
.Distribution services	1.9	0.4	0.2	1.7	20.7	0.3
Finance and business services	3.9	2.9	2.9	1.1	11.4	0.1
Personal and social services	2.6	2.0	2.0	0.6	7.5	0.0
.Non-market services	1.7	1.3	1.3	0.4	18.4	0.1
Reallocation of labour effect						-0.3
1995-2005						
TOTAL INDUSTRIES	2.7	1.2	0.8	1.9	100.0	1.9
Electrical machinery, post and communication	6.1	-0.7	-1.2	7.3	3.9	0.:
Manufacturing, excluding electrical	-0.1	-2.5	-2.8	2.7	14.2	0.4
Other goods producing industries	0.9	0.6	-0.4	1.2	11.0	0.
.Distribution services	3.3	1.0	0.6	2.8	21.0	0.0
.Finance and business services	6.4	2.9	3.1	3.3	18.1	0.5
Personal and social services	2.6	2.5	2.2	0.4	10.7	0.0
.Non-market services	1.4	1.7	1.6	-0.3	21.2	-0.
Reallocation of labour effect						-0.′
1995-2000						
TOTAL INDUSTRIES	3.2	1.5	1.0	2.2	100.0	2.2
Electrical machinery, post and communication	12.1	1.8	1.3	10.8	4.1	0.4
.Manufacturing, excluding electrical	-0.1	-0.9	-1.0	0.9	15.7	
Other goods producing industries	1.5	0.2	-0.5	1.9	11.3	
Distribution services	3.5	1.2	0.7	2.8	21.2	
Finance and business services	7.2	3.9	3.5	3.7	17.1	0.0
Personal and social services	2.9	2.8	2.0	0.9	10.1	0.
.Non-market services	1.3	1.1	0.8	0.5	20.6	
Reallocation of labour effect	1.0		0.0	0.0	20.0	0.0
2000-2005						
TOTAL INDUSTRIES	2.3	0.9	0.7	1.6	100.0	1.6
Electrical machinery, post and communication	0.1	-3.1	-3.7	3.8	3.7	
.Manufacturing, excluding electrical	0.0	-4.2	-4.5	4.5	12.9	
Other goods producing industries	0.0	1.0	-0.3	0.5	10.6	
Distribution services	3.2	0.8	0.3	2.8	20.9	
Finance and business services	5.7	2.0	2.8	2.6	19.1	0.0
Personal and social services	2.3	2.0	2.6	0.0	11.1	0.0
.Non-market services	1.5	2.3	2.4	-1.0	21.7	-0.2
Reallocation of labour effect	1.5	2.3	2.5	-1.0	21.7	-0. <sub>4</sub>

#### **UNITED KINGDOM**

	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	2.5	-0.3	-0.6	0.3	1.2	0.6	0.7	1.5
Electrical machinery, post and communication	4.6	-1.1	-1.5	0.3	1.8	1.3	0.5	3.9
Manufacturing, excluding electrical	1.0	-2.1	-2.3	0.2	0.4	0.3	0.0	2.7
Other goods producing industries	1.6	-1.1	-1.3	0.3	1.3	0.2	1.1	1.4
Market services	3.3	1.3	0.9	0.3	1.6	0.7	0.8	0.4
Distribution services	2.9	-0.1	-0.2	0.0	0.9	0.5	0.4	2.1
Finance and business services	4.0	2.7	2.1	0.6	2.4	1.1	1.3	-1.1
Personal and social services	3.1	2.0	1.4	0.6	1.5	0.4	1.1	-0.8
1995-2005								
MARKET ECONOMY	3.2	0.8	0.4	0.5	1.5	0.9	0.6	0.9
Electrical machinery, post and communication	6.1	-0.3	-0.7	0.5	2.6	2.5	0.2	3.7
Manufacturing, excluding electrical	-0.1	-1.3	-2.0	0.7	0.4	0.5	0.0	0.8
Other goods producing industries	0.9	0.1	-0.2	0.2	0.7	0.2	0.4	0.1
Market services	4.5	1.8	1.3	0.4	2.0	1.1	0.9	3.0
Distribution services	3.3	0.7	0.4	0.3	1.6	0.8	0.8	1.1
Finance and business services	6.4	2.6	2.0	0.5	2.7	1.7	1.0	1.1
Personal and social services	2.6	2.1	1.6	0.4	1.2	0.5	0.8	-0.7
1995-2000								
MARKET ECONOMY	3.8	1.2	0.7	0.5	2.0	1.2	0.8	0.5
Electrical machinery, post and communication	12.1	1.3	0.9	0.4	4.3	3.8	0.5	6.5
Manufacturing, excluding electrical	-0.1	0.1	-0.6	0.7	0.8	0.6	0.2	-1.0
Other goods producing industries	1.5	0.0	-0.3	0.3	0.5	0.2	0.3	0.9
Market services	4.9	1.9	1.4	0.5	2.7	1.4	1.2	0.4
Distribution services	3.5	0.9	0.5	0.4	1.8	0.9	0.9	0.8
Finance and business services	7.2	2.8	2.2	0.6	3.9	2.3	1.6	0.5
Personal and social services	2.9	2.1	1.5	0.6	1.8	0.6	1.2	-1.0
2000 2005								
2000-2005 MARKET ECONOMY	2.6	0.4	0.0	0.4	1.0	0.7	0.3	1.2
		-1.9	-2.4	0.4	1.0	1.1	-0.2	
Electrical machinery, post and communication  Manufacturing, excluding electrical	0.1 0.0	-1.9 -2.7	-2.4	0.5	0.1	0.3	-0.2 -0.3	1.0 2.7
	0.0	-2.7 0.1	0.0	0.6	0.1	0.3	-0.3 0.6	
Other goods producing industries  Market services	4.2	1.7					0.6	-0.0
			1.3	0.4	1.3	0.8		1.2
Distribution services	3.2	0.6	0.3	0.3	1.3	0.7	0.6	1.3
Finance and business services	5.7 2.3	2.4 2.0	1.9 1.8	0.5 0.3	1.5 0.7	1.1 0.4	0.4	1.8 -0.

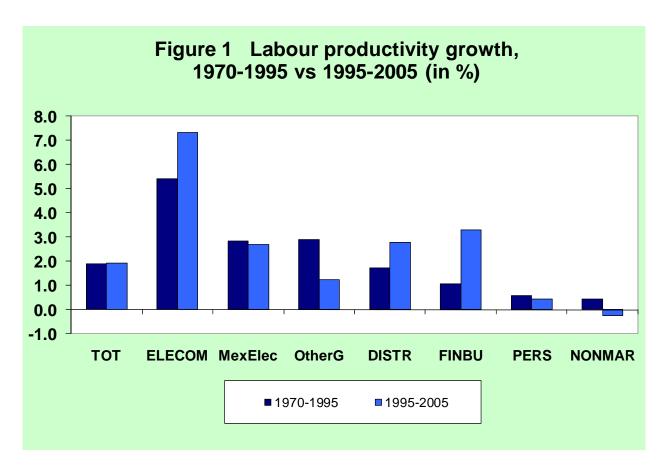
#### **UNITED KINGDOM**

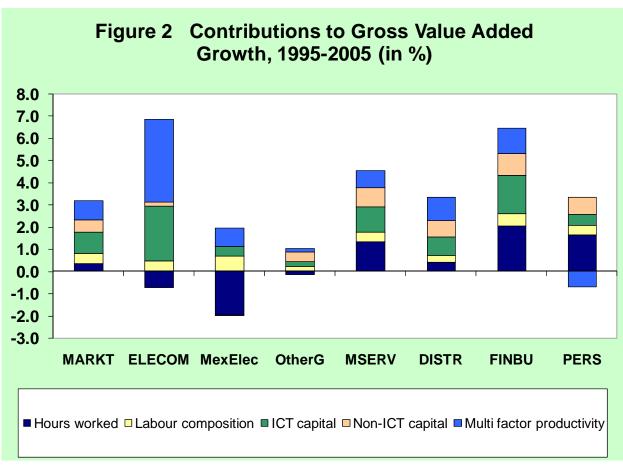
annual average volume growth rates, i	LP LC K KIT KNIT							
						MFP		
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)		
1980-1995								
MARKET ECONOMY	2.9	0.3	1.3	0.5	0.8	1.4		
Electrical machinery, post and communication	6.7	0.3	2.4	1.4	1.0	4.0		
Manufacturing, excluding electrical	3.9	0.2	0.9	0.3	0.6	2.8		
Other goods producing industries	3.3	0.3	1.9	0.2	1.7	1.1		
Market services	2.1	0.3	1.2	0.6	0.6	0.5		
.Distribution services	3.1	0.0	0.8	0.4	0.4	2.3		
.Finance and business services	1.1	0.6	1.7	1.0	0.7	-1.2		
Personal and social services	0.7	0.6	0.7	0.4	0.3	-0.6		
1995-2005								
MARKET ECONOMY	2.6	0.5	1.3	0.9	0.4	0.8		
Electrical machinery, post and communication	7.3	0.5	2.9	2.7	0.2	4.0		
Manufacturing, excluding electrical	2.7	0.7	1.0	0.6	0.5	1.0		
Other goods producing industries	1.2	0.2	0.8	0.2	0.6	0.2		
Market services	2.7	0.4	1.5	1.0	0.5	0.8		
.Distribution services	2.8	0.3	1.4	0.8	0.6	1.0		
.Finance and business services	3.3	0.5	1.8	1.4	0.4	0.9		
Personal and social services	0.4	0.4	0.7	0.4	0.3	-0.7		
1995-2000								
MARKET ECONOMY	2.8	0.5	1.7	1.2	0.6	0.5		
Electrical machinery, post and communication	10.8	0.4	3.9	3.6	0.3	6.5		
Manufacturing, excluding electrical	0.9	0.7	1.0	0.6	0.4	-0.9		
Other goods producing industries	1.9	0.3	0.7	0.2	0.5	0.9		
Market services	2.9	0.5	2.1	1.3	0.8	0.3		
Distribution services	2.8	0.4	1.6	0.9	0.8	0.8		
Finance and business services	3.7	0.6	2.9	2.0	0.9	0.2		
Personal and social services	0.9	0.6	1.2	0.5	0.7	-0.9		
2000-2005								
MARKET ECONOMY	2.4	0.4	0.9	0.7	0.3	1.1		
Electrical machinery, post and communication	3.8	0.4	2.0	1.8	0.3	1.4		
Manufacturing, excluding electrical	4.5	0.6	1.0	0.5	0.5	2.9		
Other goods producing industries	0.5	0.0	0.9	0.3	0.5	-0.5		
Market services	2.4	0.1	0.9	0.2	0.7	1.2		
Distribution services	2.4	0.4	1.2	0.7	0.2	1.2		
Finance and business services	2.0	0.5	0.8	0.7	-0.1	1.6		
Personal and social services.	0.0	0.5	0.8	0.8	0.0	-0.6		

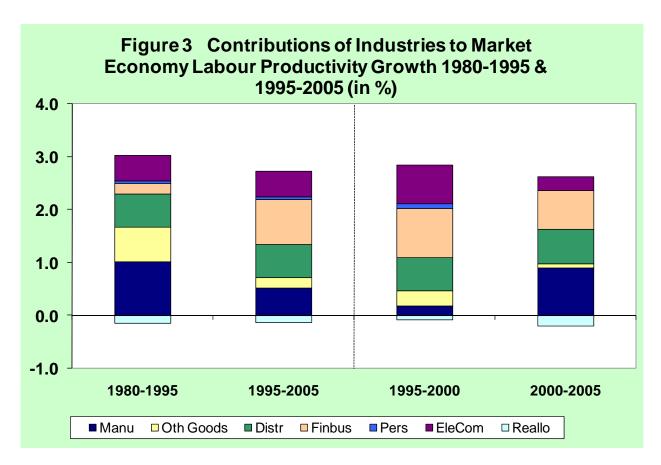
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

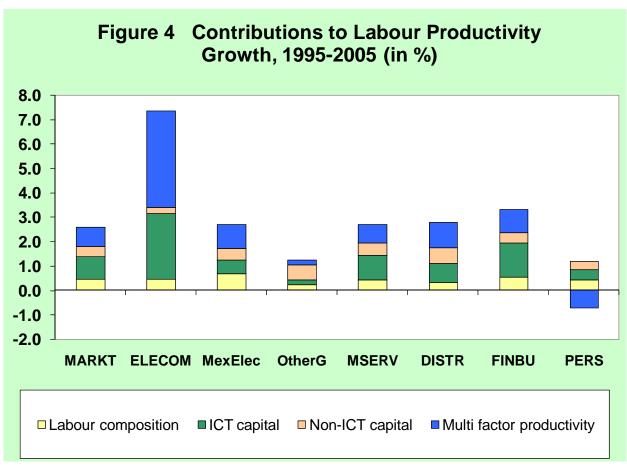
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









### **UNITED STATES**

### UNITED STATES

**Contact persons:** Dale Jorgenson, Mun Ho and Kevin Stiroh, Harvard University, <a href="mailto:djorgenson@harvard.edu">djorgenson@harvard.edu</a>

Table 1 Gross Value Added, Labour Inp	ut and Lab	our Produ	uctivity, 1	970-1995	and 1995-2005	
·		verage volum				
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.8	1.7	1.5	1.3	100.0	1.3
.Electrical machinery, post and communication	8.1	0.5	0.6	7.5	4.1	0.3
.Manufacturing, excluding electrical	1.7	-0.2	-0.1	1.8	16.6	0.4
.Other goods producing industries	0.7	0.9	0.6	0.1	11.7	0.0
.Distribution services	4.0	1.8	1.4	2.6	21.0	0.6
.Finance and business services	4.2	4.2	4.0	0.2	11.7	0.0
.Personal and social services	2.4	2.6	2.5	-0.1	11.2	0.0
.Non-market services	2.5	1.9	1.8	0.7	23.7	0.2
.Reallocation of labour effect						-0.1
1995-2005						
TOTAL INDUSTRIES	3.3	1.1	0.8	2.4	100.0	2.4
.Electrical machinery, post and communication	10.5	-1.2	-1.4	11.9	3.2	0.4
.Manufacturing, excluding electrical	1.8	-2.0	-2.2	4.0	11.9	0.6
Other goods producing industries	1.6	1.5	1.6	0.0	10.9	0.0
.Distribution services	4.1	0.8	0.4	3.6	20.5	0.8
.Finance and business services	4.3	2.4	2.2	2.0	16.1	0.3
.Personal and social services	2.6	1.6	1.6	1.0	13.2	0.1
.Non-market services	2.4	1.6	1.3	1.2	24.2	0.3
.Reallocation of labour effect						0.0
1995-2000						
TOTAL INDUSTRIES	4.1	2.0	2.0	2.0	100.0	2.0
.Electrical machinery, post and communication	14.2	2.3	2.1	12.0	3.4	0.4
.Manufacturing, excluding electrical	3.1	-0.2	-0.2	3.3	13.0	0.5
Other goods producing industries	3.3	2.5	2.7	0.6	10.7	0.1
.Distribution services	4.5	1.7	1.5	2.9	20.8	0.6
.Finance and business services	5.9	4.4	4.6	1.3	15.7	0.2
.Personal and social services	2.7	2.3	2.6	0.1	12.9	0.0
Non-market services	2.0	1.3	1.2	0.8	23.6	0.2
.Reallocation of labour effect	2.0	1.0	1.2	0.0	20.0	0.1
2000-2005						
TOTAL INDUSTRIES	2.5	0.2	-0.3	2.8	100.0	2.8
.Electrical machinery, post and communication	6.8	-4.6	-4.9	11.7	3.1	0.4
.Manufacturing, excluding electrical	0.5	-3.8	-4.3	4.7	10.9	0.6
Other goods producing industries	-0.1	0.4	0.5	-0.6	11.0	-0.1
.Distribution services	3.7	-0.1	-0.6	4.3	20.2	0.9
Finance and business services	2.6	0.3	-0.2	2.8	16.6	0.5
.Personal and social services	2.5	0.9	0.6	1.9	13.5	0.3
.Non-market services	2.9	1.8	1.3	1.6	24.6	0.4
.Reallocation of labour effect						-0.1

#### **UNITED STATES**

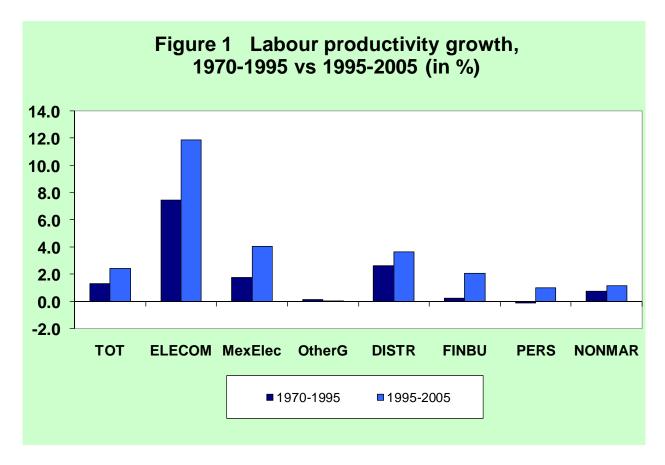
	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	3.0	1.2	1.0	0.2	1.1	0.5	0.6	0.7
Electrical machinery, post and communication	6.6	0.1	-0.3	0.4	1.9	1.0	0.9	4.6
Manufacturing, excluding electrical	1.7	0.1	-0.2	0.3	0.6	0.3	0.3	0.9
Other goods producing industries	0.7	0.7	0.4	0.3	0.7	0.2	0.5	-0.
Market services	3.9	2.1	1.9	0.2	1.4	0.7	0.7	0.4
Distribution services	3.9	1.3	1.2	0.2	1.2	0.6	0.6	1.3
Finance and business services	4.4	2.9	2.7	0.2	1.8	1.0	0.9	-0.3
Personal and social services	2.9	2.5	2.5	0.1	0.5	0.2	0.3	-0.2
1995-2005								
MARKET ECONOMY	3.7	0.7	0.4	0.3	1.3	0.8	0.6	1.7
Electrical machinery, post and communication	10.5	-0.4	-0.8	0.5	2.2	1.4	0.8	8.7
Manufacturing, excluding electrical	1.8	-1.0	-1.4	0.3	0.6	0.4	0.2	2.2
Other goods producing industries	1.6	1.1	1.0	0.1	0.8	0.2	0.6	-0.:
Market services	4.0	1.4	1.1	0.3	1.6	1.0	0.6	1.0
Distribution services	4.1	0.6	0.3	0.3	1.5	1.0	0.5	2.1
Finance and business services	4.3	1.9	1.5	0.4	1.9	1.2	0.7	0.4
Personal and social services	2.6	1.7	1.4	0.3	0.9	0.4	0.6	0.0
1995-2000								
MARKET ECONOMY	5.1	1.8	1.6	0.2	1.9	1.0	0.8	1.4
Electrical machinery, post and communication	14.2	1.4	1.1	0.3	3.7	2.1	1.6	9.0
Manufacturing, excluding electrical	3.1	0.3	0.0	0.3	1.2	0.6	0.7	1.6
Other goods producing industries	3.3	1.8	1.7	0.1	0.9	0.2	0.7	0.6
Market services	4.9	2.5	2.3	0.3	2.1	1.2	0.8	0.3
Distribution services	4.5	1.2	1.1	0.1	2.1	1.2	0.8	1.2
Finance and business services	5.9	3.6	3.2	0.3	2.3	1.4	0.9	0.0
Personal and social services	2.7	2.5	2.3	0.3	1.2	0.4	0.7	-1.0
2000-2005								
MARKET ECONOMY	2.3	-0.5	-0.8	0.4	0.8	0.5	0.3	2.0
Electrical machinery, post and communication	6.8	-0.5 -2.2	-0.6 -2.8	0.4	0.8	0.5	0.3	8.3
Manufacturing, excluding electrical	0.5	-2.2 -2.3	-2.0 -2.7	0.7	0.7	0.7	-0.2	2.8
Other goods producing industries	-0.1	0.4	0.3	0.3	0.0	0.2	0.6	-1.2
Market services	3.0	0.4	-0.2	0.1	1.2	0.2	0.6	1.6
	3.7		-0.2	0.4	0.9	0.7	0.4	3.0
.Distribution services .Finance and business services	2.6	-0.1 0.3	-0.6	0.4	1.5	0.7	0.2	0.8
Pinance and business servicesPersonal and social services	2.5	0.3	0.6	0.4	0.7	0.9	0.6	1.0

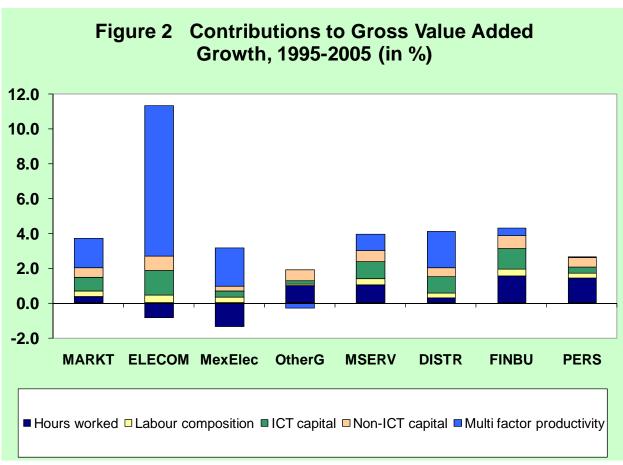
#### **UNITED STATES**

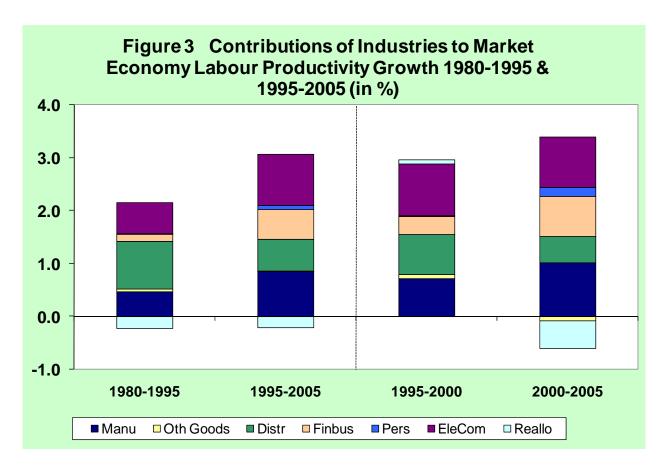
annual average volume growth rates, i						
	LP	LC	(a) (b) (5)	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
980-1995						
MARKET ECONOMY	1.5	0.2	0.7	0.5	0.2	0.6
Electrical machinery, post and communication	7.0	0.4	2.1	1.0	1.0	4.5
Manufacturing, excluding electrical	2.0	0.3	0.7	0.3	0.4	1.0
Other goods producing industries	0.3	0.3	0.6	0.2	0.4	-0.6
Market services	1.5	0.2	0.7	0.6	0.2	0.6
.Distribution services	2.4	0.2	0.9	0.6	0.3	1.3
.Finance and business services	0.7	0.2	0.8	0.7	0.0	-0.2
Personal and social services	0.1	0.1	0.1	0.2	-0.1	-0.1
1995-2005						
MARKET ECONOMY	3.0	0.3	1.1	0.7	0.4	1.6
Electrical machinery, post and communication	11.9	0.5	2.8	1.6	1.2	8.6
Manufacturing, excluding electrical	4.0	0.3	1.4	0.4	1.0	2.3
Other goods producing industries	0.0	0.1	0.2	0.2	0.0	-0.3
Market services	2.6	0.3	1.2	0.9	0.3	1.1
.Distribution services	3.6	0.3	1.4	1.0	0.5	1.9
.Finance and business services	2.0	0.4	1.2	1.0	0.2	0.5
Personal and social services	1.0	0.3	0.6	0.3	0.3	0.1
995-2000						
MARKET ECONOMY	2.8	0.2	1.1	0.9	0.2	1.5
Electrical machinery, post and communication	12.0	0.3	2.8	1.8	1.0	9.0
Manufacturing, excluding electrical	3.3	0.3	1.3	0.6	0.7	1.7
Other goods producing industries	0.6	0.1	-0.1	0.2	-0.3	0.6
Market services	2.1	0.3	1.3	1.0	0.2	0.6
Distribution services	2.9	0.1	1.7	1.2	0.5	1.1
Finance and business services	1.3	0.3	0.8	1.1	-0.3	0.1
Personal and social services	0.1	0.3	0.7	0.4	0.3	-0.8
2000-2005						
MARKET ECONOMY	3.2	0.4	1.1	0.6	0.5	1.7
Electrical machinery, post and communication	3.∠ 11.7	0.4	2.9	1.5	1.3	8.2
Manufacturing, excluding electrical	4.7	0.7	2.9	0.3	1.2	2.9
Other goods producing industries	-0.6	0.3	0.5	0.3	0.4	-1.2
Market services	-0.6 3.1	0.1	1.2	0.2	0.4	1.6
Distribution services	4.3	0.4	1.2	0.7	0.5	2.8
.Finance and business services	2.8	0.4	1.5	0.9	0.6	0.9

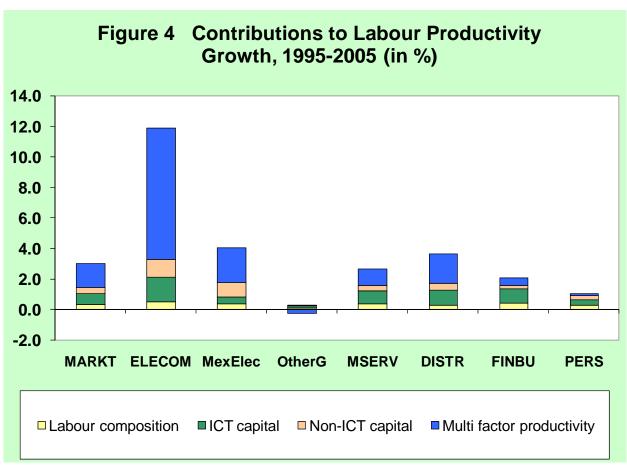
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









### OTHER COUNTRIES

### Australia

	(annual av	erage volum	ie growth ra	ites, in %)	A	Opentuilly said
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
970-1995						
TOTAL INDUSTRIES	3.1	1.5	1.4	1.7	100.0	1.
Electrical machinery, post and communication	6.2	-0.2	0.1	6.1	3.2	0.
Manufacturing, excluding electrical	1.2	-1.1	-1.0	2.2	18.3	0.
Other goods producing industries	3.0	0.3	0.2	2.7	18.7	0.
Distribution services	3.0	1.7	1.4	1.6	25.2	0.
Finance and business services	4.2	4.4	4.6	-0.4	8.9	0.
Personal and social services	2.8	3.0	2.8	0.0	8.1	0.
Non-market services	3.8	3.6	3.6	0.2	17.6	0.
Reallocation of labour effect						-0.
995-2005						
TOTAL INDUSTRIES	3.5	1.9	1.7	1.9	100.0	1.
Electrical machinery, post and communication	5.5	1.0	0.9	4.6	2.7	0.
Manufacturing, excluding electrical	1.5	-0.6	-0.6	2.2	12.6	0.
Other goods producing industries	3.5	2.0	1.8	1.6	16.0	0
Distribution services	3.9	1.2	1.1	2.8	23.5	0.
Finance and business services	4.6	3.3	3.0	1.6	14.2	0.
Personal and social services	3.8	2.6	2.6	1.2	10.2	0.
Non-market services	3.4	2.7	2.3	1.1	20.8	0.
Reallocation of labour effect						0.
995-2000						
TOTAL INDUSTRIES	3.9	1.7	1.6	2.4	100.0	2.
Electrical machinery, post and communication	6.2	2.5	2.5	3.7	2.7	0
Manufacturing, excluding electrical	2.1	-0.2	-0.2	2.2	13.3	0.
Other goods producing industries	3.4	1.1	1.4	2.0	16.1	0.
Distribution services	3.7	0.5	0.2	3.5	23.7	0.
Finance and business services	6.4	4.7	4.6	1.7	13.9	0.
Personal and social services	4.6	3.1	3.1	1.5	10.0	0.
Non-market services	3.5	1.8	1.5	2.0	20.2	
Reallocation of labour effect	0.0	1.0	1.5	2.0	20.2	0.
2000-2005 FOTAL INDUSTRIES	3.1	2.1	1.8	1.4	100.0	1
Electrical machinery, post and communication	4.8	-0.4	-0.7	5.5	2.7	0.
Manufacturing, excluding electrical	1.0	-0.4	-0.7 -1.1	2.1	11.9	0.
Other goods producing industries	3.5	2.9	2.3	1.2	15.9	0.
Distribution services	4.0	2.9	2.3	2.0	23.2	0.
Finance and business services	2.8	1.9	1.3	2.0 1.5	23.2 14.6	0
Personal and social services	3.0	2.2	2.1	0.9	14.6	0.
	3.0		3.2		21.2	
Non-market services	3.3	3.6	3.2	0.1	21.2	0.

(annual average volume growth rates,	VA		Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995	(, (, (, (,	( ) ( ) ( )	( )	. ,	( ) ( ) ( )	. ,	. ,	
MARKET ECONOMY	3.1	1.4	1.2	0.2	1.2	0.6	0.7	1.0
.Electrical machinery, post and communication	6.9	0.4	0.3	0.1	3.3	1.4	1.9	3.6
.Manufacturing, excluding electrical	1.1	0.0	-0.1	0.1	1.0	0.4	0.6	0.9
Other goods producing industries	3.4	0.4	0.3	0.1	1.1	0.2	0.9	2.6
.Market services	3.4	2.7	2.4	0.3	1.2	0.7	0.5	-0.1
Distribution services	2.8	1.1	1.1	0.1	0.9	0.6	0.3	1.4
Finance and business services	4.7	4.7	4.1	0.7	2.0	1.1	0.9	-1.8
Personal and social services	3.0	3.6	3.1	0.4	0.8	0.4	0.4	-1.2
1995-2005								
MARKET ECONOMY	3.6	1.2	1.0	0.2	1.8	1.0	0.8	0.6
Electrical machinery, post and communication	5.5	0.5	0.3	0.1	3.0	1.8	1.2	2.1
Manufacturing, excluding electrical	1.5	-0.3	-0.5	0.2	1.5	0.9	0.6	0.3
Other goods producing industries	3.5	1.2	1.1	0.1	2.2	0.6	1.6	0.1
.Market services	4.1	1.7	1.4	0.3	1.6	1.1	0.5	0.8
Distribution services	3.9	0.6	0.5	0.1	1.7	1.0	0.8	1.5
Finance and business services	4.6	2.6	2.2	0.5	1.7	1.5	0.1	0.3
Personal and social services	3.8	2.6	2.3	0.3	1.1	0.6	0.6	0.1
1995-2000								
MARKET ECONOMY	4.1	1.3	1.1	0.2	1.6	1.0	0.6	1.2
Electrical machinery, post and communication	6.2	1.2	1.1	0.1	3.8	2.3	1.5	1.2
Manufacturing, excluding electrical	2.1	0.2	-0.1	0.3	1.3	0.9	0.4	0.6
Other goods producing industries	3.4	0.7	0.5	0.2	1.8	0.6	1.2	1.0
.Market services	4.9	1.9	1.7	0.2	1.4	1.1	0.4	1.5
Distribution services	3.7	-0.1	-0.1	0.0	1.2	0.8	0.4	2.6
Finance and business services	6.4	4.1	3.4	0.7	1.7	1.5	0.2	0.6
Personal and social services	4.6	2.4	2.5	-0.1	1.3	0.7	0.7	0.9
2000-2005								
MARKET ECONOMY	3.1	1.1	0.9	0.3	2.0	1.0	1.0	0.0
Electrical machinery, post and communication	4.8	-0.2	-0.4	0.2	2.1	1.3	0.8	2.9
Manufacturing, excluding electrical	1.0	-0.8	-0.9	0.1	1.7	0.8	0.9	0.1
Other goods producing industries	3.5	1.7	1.6	0.1	2.6	0.7	1.9	-0.8
.Market services	3.4	1.5	1.2	0.4	1.8	1.2	0.6	0.1
Distribution services	4.0	1.4	1.1	0.3	2.2	1.1	1.1	0.4
Finance and business services	2.8	1.2	1.0	0.3	1.6	1.6	0.1	0.0
Personal and social services	3.0	2.7	2.0	0.7	1.0	0.5	0.5	-0.7

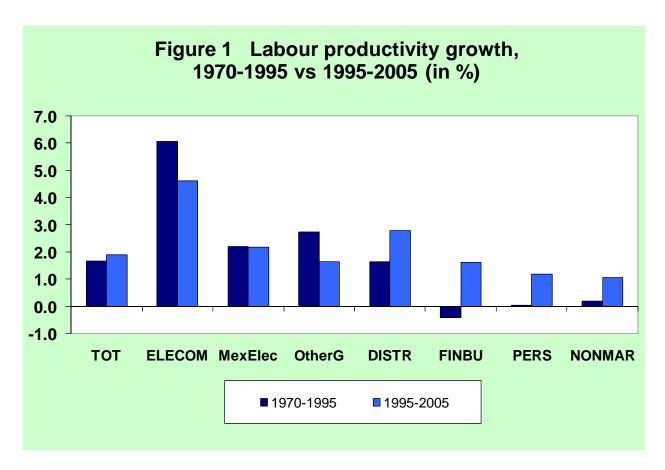
(annual average volume growth rates, i	LP	LC	K	KIT	KNIIT	MED
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995	(1)=(2)+(3)+(0)	(2)	(3)=(+)+(3)	(+)	(5)	(0)
MARKET ECONOMY	1.9	0.2	0.8	0.5	0.4	0.8
	6.2	0.2	2.6	1.1	1.5	3.5
Electrical machinery, post and communication  Manufacturing, excluding electrical	2.0	0.1	1.1	0.3	0.8	0.8
Other goods producing industries	3.2	0.1	1.1	0.3	1.0	1.9
Market services	0.9	0.1	0.6	0.2	0.0	0.0
	1.6	0.3	0.5	0.6	0.0	
.Distribution services .Finance and business services	-0.7	0.1	0.5	0.5	-0.3	1.0 -1.9
.Personal and social services	0.0	0.4	0.2	0.1	0.1	-0.6
1995-2005						
MARKET ECONOMY	2.1	0.2	1.2	0.9	0.3	0.7
Electrical machinery, post and communication	4.6	0.1	2.5	1.7	0.8	2.0
Manufacturing, excluding electrical	2.2	0.2	1.7	0.9	0.8	0.2
Other goods producing industries	1.6	0.1	1.2	0.6	0.6	0.3
Market services	2.2	0.3	1.0	1.0	0.1	0.8
.Distribution services	2.8	0.1	1.4	0.9	0.5	1.2
.Finance and business services	1.6	0.5	1.0	1.3	-0.4	0.2
.Personal and social services	1.2	0.3	0.3	0.2	0.2	0.5
1995-2000						
MARKET ECONOMY	2.5	0.2	1.0	0.9	0.1	1.3
Electrical machinery, post and communication	3.7	0.2	2.5	2.0	0.5	1.1
Manufacturing, excluding electrical	2.2	0.1	1.3	0.9	0.4	0.6
Other goods producing industries	2.0	0.3	1.1	0.9	0.4	0.8
Market services	2.8	0.2	0.8	0.9	0.0	1.7
Distribution services	3.5	0.2	1.2	0.9	0.0	2.4
Finance and business services	1.7	0.0	0.7	1.2	-0.5	0.4
	1.7	-0.1	0.7	0.1	0.2	1.3
.Personal and social services	1.5	-0.1	0.3	0.1	0.2	1.3
2000-2005						
MARKET ECONOMY	1.7	0.3	1.5	0.9	0.5	0.0
Electrical machinery, post and communication	5.5	0.2	2.5	1.4	1.1	2.9
Manufacturing, excluding electrical	2.1	0.1	2.1	0.9	1.2	-0.1
Other goods producing industries	1.2	0.1	1.3	0.6	0.7	-0.2
Market services	1.6	0.4	1.2	1.1	0.2	0.0
.Distribution services	2.0	0.3	1.6	1.0	0.7	0.1
.Finance and business services	1.5	0.3	1.2	1.4	-0.2	0.0
Personal and social services	0.9	0.7	0.4	0.2	0.2	-0.2

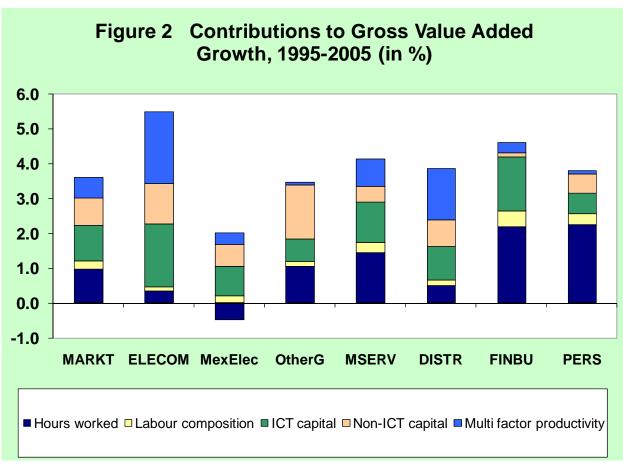
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

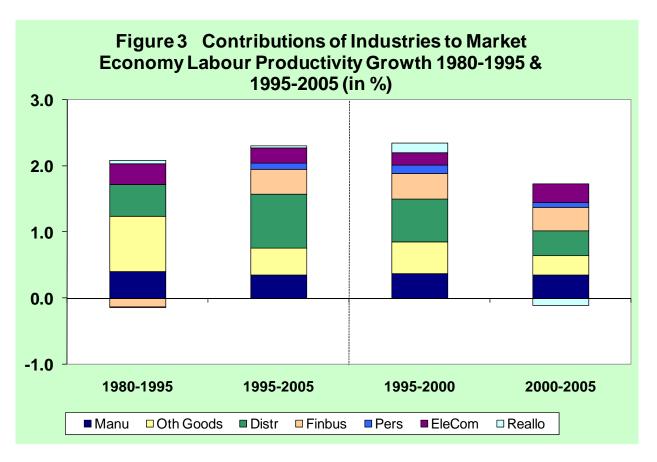
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital

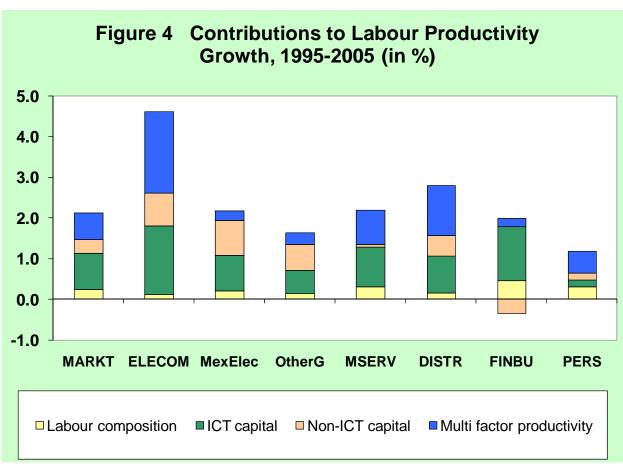
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









# Cyprus

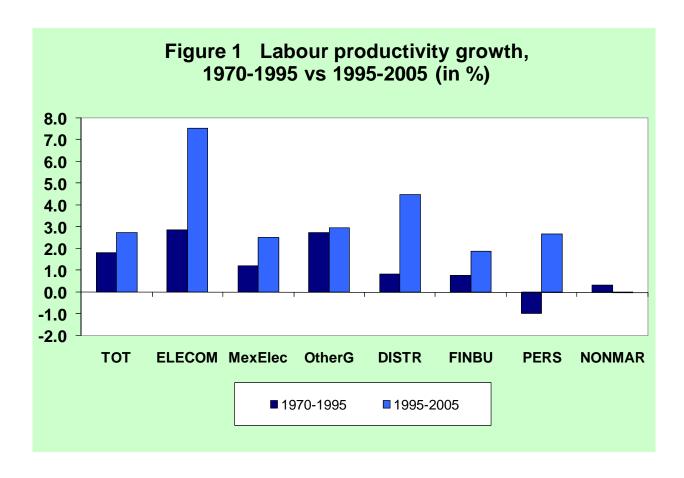
	(annual av	erage volum	ne growth ra	ates, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005					, ,	
TOTAL INDUSTRIES	3.6	1.4	1.3	2.3	100.0	2.3
.Electrical machinery, post and communication	10.1	2.2	1.2	8.9	1.6	0.
.Manufacturing, excluding electrical	0.6	-2.7	-2.7	3.2	12.3	0.
Other goods producing industries	2.7	-0.1	-0.4	3.2	21.3	0.
.Distribution services	3.3	1.7	1.9	1.4	24.1	0.
Finance and business services	5.5	2.7	2.3	3.2	5.9	0.
Personal and social services	2.8	3.2	4.1	-1.3	17.2	-0.
Non-market services	3.4	2.9	2.4	1.0	17.5	0.
Reallocation of labour effect						0.
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	3.4 14.6 0.1 0.5 3.7 5.1 5.2 3.4	1.2 3.5 -3.6 -2.2 2.2 5.0 3.5 3.3	1.0 3.5 -3.6 -2.5 2.3 5.0 3.6 3.3	2.5 11.0 3.7 3.0 1.4 0.2 1.6 0.1	100.0 1.7 13.8 22.3 23.7 5.7 15.6 17.2	2. 0. 0. 0. 0. 0. 0.
2000-2005						
TOTAL INDUSTRIES	3.7	1.5	1.6	2.1	100.0	2.
Electrical machinery, post and communication	5.7	0.9	-1.0	6.7	1.6	0.
Manufacturing, excluding electrical	1.1	-1.7	-1.7	2.8	10.8	0.
Other goods producing industries	4.9	1.9	1.6	3.3	20.2	0.
Distribution services	2.9	1.1	1.5	1.4	24.6	0.
Finance and business services	5.9	0.5	-0.3	6.3	6.1	0.
Personal and social services	0.4	2.9	4.6	-4.2	18.7	-0.
.Non-market services	3.4	2.4	1.4	1.9	18.0	0.
Reallocation of labour effect						0.

# Estonia

	(annual av	erage volum	ne growth ra	ates, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005					, ,	
TOTAL INDUSTRIES	7.1	-0.5	-0.4	7.5	100.0	7.
.Electrical machinery, post and communication	7.7	-2.4	-2.2	10.0	4.2	0.
.Manufacturing, excluding electrical	3.5	-1.2	-0.7	4.2	20.8	0.
Other goods producing industries	7.5	-2.4	-2.5	9.9	19.2	2.
Distribution services	7.0	-0.4	-0.5	7.5	21.9	1.
Finance and business services	2.3	-0.5	-0.4	2.7	3.2	0.
Personal and social services	10.0	1.3	1.5	8.5	7.5	0.
.Non-market services	11.0	1.2	1.5	9.5	23.3	2.
Reallocation of labour effect						-0.
1995-2000 FOTAL INDUSTRIES Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect	10.0 14.5 5.9 7.2 10.7 2.8 12.9 15.5	-2.1 -3.3 -4.1 -3.8 -0.7 -2.7 1.3 -0.7	-2.1 -3.3 -4.1 -4.2 -0.7 -2.7 1.4 -0.5	12.1 17.8 10.0 11.3 11.5 5.5 11.5	100.0 4.4 20.4 20.7 22.1 3.2 7.2 22.0	12. 0. 2. 2. 0. 0. 3.
2000-2005						
TOTAL INDUSTRIES	4.3	1.1	1.3	3.0	100.0	3.
.Electrical machinery, post and communication	0.9	-1.5	-1.2	2.1	4.0	0.
Manufacturing, excluding electrical	1.1	1.8	2.7	-1.6	21.2	-0.
Other goods producing industries	7.7	-0.9	-0.8	8.5	17.6	1.
Distribution services	3.2	-0.1	-0.3	3.6	21.7	0.
Finance and business services	1.7	1.7	1.9	-0.1	3.0	0
Personal and social services	7.2	1.3	1.6	5.6	7.9	0.
Non-market services	6.5	3.1	3.5	3.0	24.5	0
Reallocation of labour effect						-0

## Greece

	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.7	0.9	0.9	1.8	100.0	1.8
Electrical machinery, post and communication	3.6	0.7	0.7	2.9	1.7	0.0
Manufacturing, excluding electrical	1.4	0.2	0.2	1.2	21.0	0.2
Other goods producing industries	1.4	-1.4	-1.4	2.7	35.9	1.3
Distribution services	3.4	2.5	2.5	0.8	17.9	0.1
Finance and business services	4.3	3.6	3.6	0.8	4.4	0.0
Personal and social services	2.7	3.6	3.6	-1.0	7.4	-0.1
Non-market services	3.7	3.4	3.4	0.3	11.7	0.0
Reallocation of labour effect						0.1
1995-2005						
TOTAL INDUSTRIES	3.4	0.6	0.7	2.7	100.0	2.7
Electrical machinery, post and communication	9.2	1.5	1.7	7.5	1.7	0.1
Manufacturing, excluding electrical	1.4	-1.2	-1.2	2.5	15.7	0.4
Other goods producing industries	1.5	-1.6	-1.5	3.0	24.7	3.0
Distribution services	5.6	1.2	1.2	4.5	22.1	1.0
Finance and business services	6.0	4.0	4.1	1.9	8.4	0.1
Personal and social services	4.8	2.2	2.1	2.7	11.5	0.3
Non-market services	2.0	2.0	2.0	0.0	15.9	0.0
Reallocation of labour effect				0.0		0.0
1995-2000						
TOTAL INDUSTRIES	3.1	0.6	0.6	2.5	100.0	2.5
Electrical machinery, post and communication	9.7	2.9	3.1	6.6	1.7	0.1
Manufacturing, excluding electrical	2.1	-0.8	-0.9	3.0	16.5	0.5
Other goods producing industries	2.1	-0.8	-0.8	2.9	25.9	3.0
Distribution services	5.2	0.9	0.8	4.4	21.9	1.0
Finance and business services	6.5	3.5	3.7	2.7	7.6	0.2
Personal and social services	4.6	2.0	1.8	2.7	11.1	0.2
Non-market services	0.5	1.4	1.4	-0.9	15.4	-0.1
Reallocation of labour effect	0.5	1.4	1.4	-0.9	15.4	-0.1
						<u> </u>
2000-2005 TOTAL INDUSTRIES	3.8	0.7	0.8	3.0	100.0	3.0
Electrical machinery, post and communication	8.7	0.7	0.8	8.4	1.7	0.1
	0.7	-1.6	-1.4	2.0	15.0	0.1
Manufacturing, excluding electrical	-					
Other goods producing industries	0.9	-2.4	-2.1	3.0	23.6	0.7
Distribution services	6.1	1.5	1.5	4.6	22.3	1.0
Finance and business services	5.5	4.5	4.5	1.0	9.2	0.1
Personal and social services	5.0	2.5	2.5	2.5	11.9	0.3
Non-market services	3.4	2.5	2.5	0.9	16.4	0.1



# Ireland

	(annual at	erage volum	ie growin ra	1103, 111 70)	A.,	O = m4mlh ! =
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	3.7	0.9	0.5	3.3	100.0	3.3
Electrical machinery, post and communication	8.8	0.8	0.8	8.0	5.1	0.4
Manufacturing, excluding electrical	5.5	0.4	0.2	5.4	17.0	0.9
Other goods producing industries	2.3	-1.4	-1.6	3.9	27.5	1.4
Distribution services	3.1	0.6	0.2	2.9	17.7	0.5
Finance and business services	3.2	5.1	5.0	-1.7	6.5	-0.1
Personal and social services	3.1	3.0	2.8	0.3	9.6	0.0
Non-market services	3.1	2.0	1.5	1.6	16.5	0.2
Reallocation of labour effect						-0.2
1995-2005						
TOTAL INDUSTRIES	7.3	4.0	3.4	3.8	100.0	3.8
Electrical machinery, post and communication	12.1	3.6	3.1	9.0	6.0	0.5
Manufacturing, excluding electrical	7.7	0.4	0.3	7.4	14.0	1.2
Other goods producing industries	5.0	4.2	3.6	1.4	20.6	0.3
Distribution services	5.5	4.5	3.7	1.8	17.0	0.3
Finance and business services	9.1	6.1	5.7	3.4	11.6	0.3
Personal and social services	5.6	3.6	2.6	3.0	12.4	0.4
Non-market services	5.9	4.8	4.6	1.2	18.5	0.2
Reallocation of labour effect	0.0				. 0.0	0.6
1995-2000						
TOTAL INDUSTRIES	9.1	5.0	4.4	4.6	100.0	4.6
Electrical machinery, post and communication	18.7	8.6	8.4	10.3	6.2	0.6
Manufacturing, excluding electrical	11.0	1.3	1.5	9.5	15.0	1.5
Other goods producing industries	5.3	4.5	3.8	1.4	20.5	0.3
Distribution services	8.5	6.6	5.6	2.8	16.9	0.5
Finance and business services	8.3	8.4	8.0	0.3	10.9	0.0
Personal and social services	5.5	4.2	2.7	2.9	12.7	0.4
Non-market services	6.4	4.1	4.1	2.3	17.7	0.4
Reallocation of labour effect	0.4	4.1	7.1	2.5	17.7	1.0
2000-2005	<i>- - - - - - - - - -</i>	2.0	2.5	2.4	100.0	0.4
TOTAL INDUSTRIES	5.5	3.0		3.1		3.1
Electrical machinery, post and communication	5.5	-1.4	-2.1	7.7	5.8	0.5
Manufacturing, excluding electrical	4.4	-0.6	-0.8	5.2	13.0	0.7
Other goods producing industries	4.7	3.9	3.3	1.4	20.7	0.3
Distribution services	2.5	2.3	1.7	0.7	17.2	0.1
Finance and business services	9.8	3.8	3.4	6.4	12.2	8.0
Personal and social services	5.7	3.0	2.5	3.2	12.1	0.4
Non-market services	5.3	5.4	5.1	0.2	19.0	0.0

Table 2 Gross value added growth and (annual average volume growth rates,		80-1995 and '	1995-2	2005				
	VA	L	Н	LC	K	KIT	KNIT	MF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005								
MARKET ECONOMY	7.6	2.3	2.1	0.2	4.0	0.5	3.5	1.3
Electrical machinery, post and communication	12.1	1.9	1.5	0.3	5.2	0.5	4.7	5.
Manufacturing, excluding electrical	7.7	0.5	0.3	0.2	5.9	0.6	5.3	1.3
Other goods producing industries	5.0	4.4	4.2	0.2	0.9	0.1	0.8	-0.
Market services	7.2	3.0	2.8	0.3	3.4	0.6	2.8	0.7
.Distribution services	5.5	2.9	2.7	0.2	3.1	0.5	2.6	-0.
Finance and business services	9.1	3.3	3.0	0.3	3.4	0.5	2.9	2.3
Personal and social services	5.6	2.6	2.4	0.2	4.1	0.9	3.2	-1.
1995-2000								
MARKET ECONOMY	9.7	3.1	3.0	0.2	4.5	8.0	3.7	2.0
Electrical machinery, post and communication	18.7	3.9	3.7	0.2	6.8	1.1	5.7	8.
Manufacturing, excluding electrical	11.0	0.9	0.7	0.2	6.2	0.9	5.2	3.
Other goods producing industries	5.3	4.7	4.5	0.2	0.9	0.2	0.7	-0.
Market services	7.9	4.1	4.1	0.1	4.2	1.0	3.3	-0.
Distribution services	8.5	4.4	4.4	0.1	3.6	8.0	2.7	0.
Finance and business services	8.3	4.4	4.3	0.1	4.7	1.0	3.7	-0.
Personal and social services	5.5	2.8	2.8	0.0	4.9	1.4	3.5	-2.
2000-2005								
MARKET ECONOMY	5.6	1.5	1.2	0.3	3.4	0.1	3.2	0.0
Electrical machinery, post and communication	5.5	-0.2	-0.6	0.4	3.7	0.0	3.7	2.
Manufacturing, excluding electrical	4.4	0.1	-0.2	0.3	5.6	0.2	5.5	-1.
Other goods producing industries	4.7	4.0	3.8	0.2	1.0	0.1	0.9	-0.
Market services	6.4	1.9	1.5	0.4	2.6	0.2	2.4	1.
.Distribution services	2.5	1.4	1.1	0.3	2.7	0.2	2.5	-1.
.Finance and business services	9.8	2.2	1.7	0.5	2.2	0.1	2.2	5.
Personal and social services	5.7	2.4	2.0	0.4	3.3	0.4	2.9	-0.

VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1995-2005						
MARKET ECONOMY	4.5	0.2	2.5	0.4	2.1	1.7
Electrical machinery, post and communication	9.0	0.3	3.4	0.4	3.1	5.2
Manufacturing, excluding electrical	7.4	0.2	5.7	0.5	5.2	1.4
Other goods producing industries	1.4	0.2	0.4	0.1	0.3	0.8
Market services	3.3	0.3	2.0	0.4	1.5	1.1
.Distribution services	1.8	0.2	2.0	0.4	1.6	-0.5
Finance and business services	3.4	0.3	0.8	0.3	0.5	2.3
.Personal and social services	3.0	0.2	3.4	8.0	2.6	-0.6
1995-2000						
MARKET ECONOMY	5.2	0.2	2.6	0.7	1.9	2.5
Electrical machinery, post and communication	10.3	0.2	2.0	0.7	1.3	8.1
Manufacturing, excluding electrical	9.5	0.2	5.2	0.9	4.4	4.1
Other goods producing industries	1.4	0.2	0.3	0.1	0.2	0.9
Market services	2.6	0.1	2.4	0.8	1.6	0.1
.Distribution services	2.8	0.1	2.1	0.7	1.4	0.7
.Finance and business services	0.3	0.1	1.1	0.7	0.5	-0.9
.Personal and social services	2.9	0.0	4.1	1.3	2.8	-1.3
2000-2005						
MARKET ECONOMY	3.7	0.3	2.5	0.1	2.4	0.9
Electrical machinery, post and communication	7.7	0.4	4.9	0.0	4.9	2.4
Manufacturing, excluding electrical	5.2	0.3	6.2	0.2	6.0	-1.3
Other goods producing industries	1.4	0.2	0.5	0.1	0.4	0.7
Market services	4.0	0.4	1.5	0.1	1.4	2.1
.Distribution services	0.7	0.3	2.0	0.2	1.8	-1.6
Finance and business services	6.4	0.5	0.5	-0.1	0.5	5.5
Personal and social services	3.2	0.4	2.6	0.3	2.3	0.1

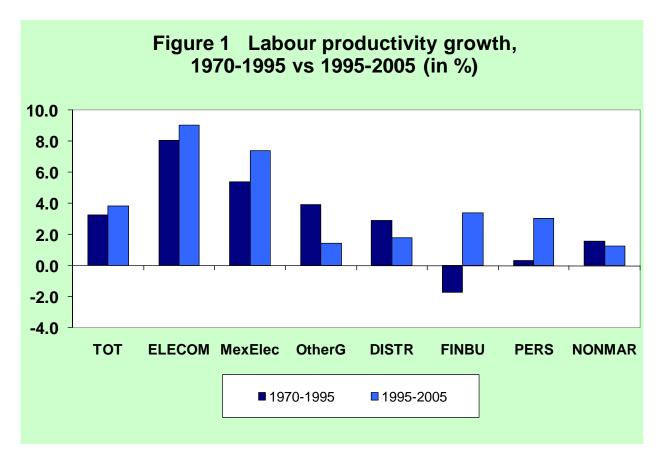
*Notes:* This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked

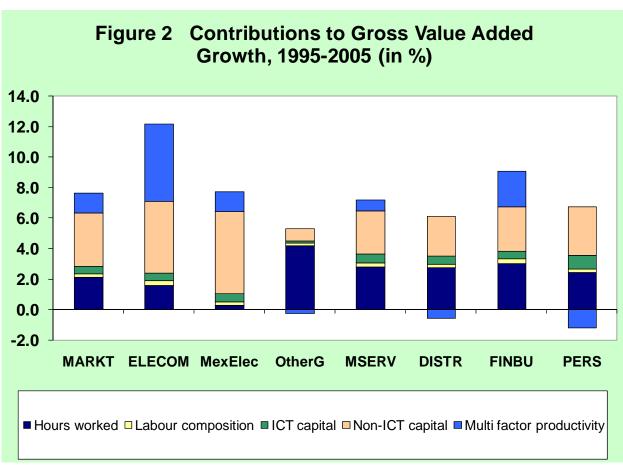
LC= Contribution of Labour composition

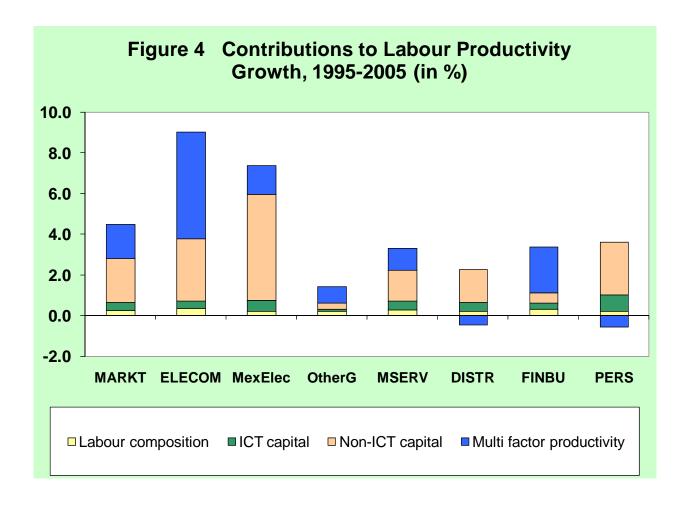
K= Contribution of Capital input growth KIT= Contribution of ICT capital

KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects







## Korea

	(annual av	erage volum	ie growin ra	ites, in %)	A	Combaile
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	8.6	3.0	3.0	5.6	100.0	5.6
Electrical machinery, post and communication	19.4	8.9	8.8	10.6	3.7	
Manufacturing, excluding electrical	12.5	4.5	4.4	8.1	22.3	1.2
Other goods producing industries	5.3	-0.5	-0.5	5.8	32.6	2.9
Distribution services	8.5	5.6	5.5	3.0	19.1	0.4
Finance and business services	14.5	9.8	9.6	4.9	3.3	0.1
Personal and social services	7.0	3.2	3.1	3.9	11.0	0.5
Non-market services	4.8	4.2	4.2	0.7	8.0	0.1
Reallocation of labour effect						0.5
1995-2005						
TOTAL INDUSTRIES	4.3	1.1	0.6	3.7	100.0	3.7
Electrical machinery, post and communication	16.3	2.5	1.7	14.6	4.7	0.7
Manufacturing, excluding electrical	4.2	-1.9	-2.4	6.6	17.4	1.4
Other goods producing industries	1.6	-1.7	-2.4	4.0	18.3	
Distribution services	3.4	0.3	-0.3	3.7	22.8	0.8
Finance and business services	4.1	5.0	4.3	-0.2	8.1	0.0
Personal and social services	3.7	3.9	3.6	0.1	15.8	0.0
Non-market services	2.7	4.4	4.2	-1.5	12.9	-0.2
Reallocation of labour effect						0.2
1995-2000						
TOTAL INDUSTRIES	4.5	0.7	0.2	4.3	100.0	4.3
Electrical machinery, post and communication	19.7	2.2	1.8	17.8	4.5	0.8
Manufacturing, excluding electrical	5.0	-3.0	-3.5	8.5	18.5	1.8
Other goods producing industries	0.2	-2.4	-2.5	2.7	19.8	0.6
Distribution services	4.4	0.6	-0.2	4.5	23.4	
Finance and business services	3.0	4.8	4.7	-1.7	7.4	
Personal and social services	4.0	4.7	3.5	0.5	14.5	
Non-market services	2.9	3.8	3.8	-3.1	11.8	-0.3
Reallocation of labour effect	2.5	5.0	3.0	-5.1	11.0	0.5
2000-2005 TOTAL INDUSTRIES	4.2	1.5	1.0	3.2	100.0	3.2
Electrical machinery, post and communication	12.9	2.8	1.6	11.3	4.9	0.6
Manufacturing, excluding electrical	3.4	-0.8	-1.3	4.7	16.3	3.0
Other goods producing industries	3.4	-0.6	-1.3	5.3	16.9	1.0
Distribution services	2.4		-2.3 -0.4	2.8	22.2	
		0.0				
Finance and business services	5.3	5.1	3.9	1.4	8.8	0.1
Personal and social services	3.3	3.1	3.7	-0.3	17.0	0.0
Non-market services	2.5	5.0	4.6	-2.2	13.9	-0.3

			Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	9.4	2.5	2.0	0.5	2.4	0.2	2.2	4.6
Electrical machinery, post and communication	16.6	3.3	2.7	0.6	4.1	0.9	3.1	9.2
Manufacturing, excluding electrical	10.5	2.5	1.8	0.7	3.2	0.1	3.1	4.8
Other goods producing industries	6.4	-0.2	-0.7	0.4	1.2	0.0	1.1	5.5
Market services	9.5	4.5	4.2	0.3	2.4	0.3	2.1	2.6
.Distribution services	8.0	3.3	3.0	0.3	1.8	0.0	1.7	2.9
.Finance and business services	13.0	7.1	6.9	0.2	4.4	0.9	3.5	1.6
Personal and social services	8.2	4.3	3.4	0.9	0.1	0.0	0.1	3.7
1995-2005								
MARKET ECONOMY	4.8	0.8	0.1	0.7	1.3	0.3	1.0	2.7
Electrical machinery, post and communication	16.3	1.8	1.3	0.5	4.4	0.9	3.5	10.
Manufacturing, excluding electrical	4.2	-0.7	-1.3	0.6	1.3	0.2	1.1	3.
Other goods producing industries	1.6	-0.8	-1.5	0.7	0.6	0.0	0.6	1.
Market services	3.8	2.4	1.6	0.8	0.8	0.3	0.5	0.
.Distribution services	3.4	1.0	-0.1	1.0	0.5	0.0	0.4	1.9
Finance and business services	4.1	2.6	1.9	0.7	1.6	0.8	0.8	0.0
.Personal and social services	3.7	4.9	4.3	0.6	0.0	0.0	0.0	-1.3
1995-2000								
MARKET ECONOMY	4.9	0.3	-0.3	0.6	1.3	0.3	1.0	3.3
Electrical machinery, post and communication	19.7	1.7	1.4	0.8	4.6	1.1	3.5	13.
Manufacturing, excluding electrical	5.0	-1.6	-2.2	0.6	1.1	0.2	0.9	5.5
Other goods producing industries	0.2	-2.1	-2.5	0.0	0.8	0.2	0.9	1.5
Market services	3.7	2.7	1.9	0.4	1.0	0.1	0.7	0.
Distribution services	4.4	1.0	0.1	0.8	0.7	0.3	0.6	2.
Finance and business services	3.0	3.4	2.6	0.9	1.7	0.1	0.7	-2.
Personal and social services	4.0	4.7	4.3	0.9	0.0	0.0	0.9	-2. -0.
. Gradial and addial activides	4.0	7.7	7.0	0.4	0.0	0.0	0.0	
2000-2005 MARKET ECONOMY	4.0	4.0	0.4	0.0	4.0	0.0	4.0	0.4
	4.6	1.2	0.4	8.0	1.3	0.3	1.0	2.:
Electrical machinery, post and communication	12.9	1.8	1.2	0.6	4.2	0.7	3.5	6.9
Manufacturing, excluding electrical	3.4	0.1	-0.5	0.6	1.4	0.2	1.2	1.9
Other goods producing industries	3.0	0.5	-0.4	1.0	0.5	0.0	0.5	2.0
Market services	3.8	2.1	1.3	0.8	0.7	0.3	0.4	1.
Distribution services	2.4	0.9	-0.2	1.1	0.3	0.0	0.2	1.
Finance and business services  Personal and social services	5.3 3.3	1.7 5.1	1.2 4.3	0.5 0.8	1.5 0.0	0.8	0.7	2. -1.

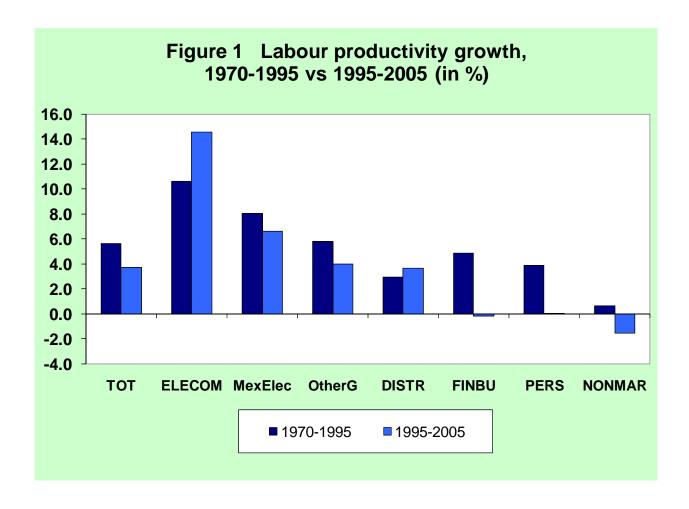
VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

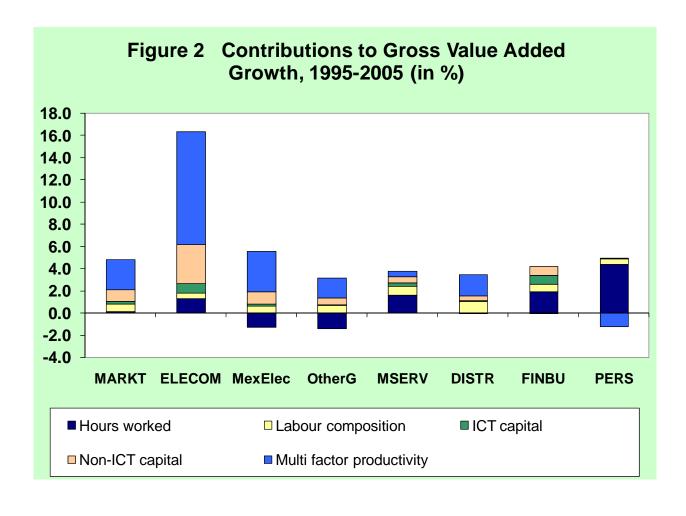
	LP	LC	K	KIT	KNIT	MFP
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)
1980-1995						
MARKET ECONOMY	7.6	0.5	1.6	0.1	1.5	5.5
Electrical machinery, post and communication	11.7	0.6	2.1	0.6	1.5	9.0
Manufacturing, excluding electrical	8.5	0.7	2.4	0.1	2.3	5.4
Other goods producing industries	8.4	0.4	1.3	-0.1	1.4	6.7
Market services	5.1	0.3	0.8	0.0	0.8	3.9
.Distribution services	3.9	0.3	0.8	0.0	0.8	2.9
.Finance and business services	3.0	0.2	1.0	0.4	0.6	1.8
.Personal and social services	4.9	0.9	-1.9	-1.0	-0.9	5.8
1995-2005						
MARKET ECONOMY	4.7	0.7	1.0	0.2	0.8	3.0
Electrical machinery, post and communication	14.6	0.5	3.4	0.7	2.7	10.7
Manufacturing, excluding electrical	6.6	0.6	2.2	0.2	1.9	3.9
Other goods producing industries	4.0	0.7	0.9	0.0	0.8	2.4
Market services	1.9	0.8	0.2	0.1	0.1	1.0
.Distribution services	3.7	1.0	0.5	0.0	0.4	2.2
Finance and business services	-0.2	0.7	-0.3	0.2	-0.5	-0.5
.Personal and social services	0.1	0.6	-1.6	-1.7	0.1	1.1
1995-2000						
MARKET ECONOMY	5.2	0.6	1.0	0.2	0.9	3.6
Electrical machinery, post and communication	17.8	0.3	3.4	0.9	2.5	14.1
Manufacturing, excluding electrical	8.5	0.6	2.4	0.3	2.1	5.6
Other goods producing industries	2.7	0.4	0.9	0.1	0.9	1.3
Market services	1.9	0.8	0.2	0.1	0.2	0.8
.Distribution services	4.5	0.9	0.6	0.0	0.6	3.0
.Finance and business services	-1.7	0.9	-0.2	0.2	-0.4	-2.4
.Personal and social services	0.5	0.4	-3.4	-2.8	-0.5	3.5
2000-2005						
MARKET ECONOMY	4.2	0.8	1.0	0.2	0.8	2.5
Electrical machinery, post and communication	11.3	0.6	3.4	0.5	2.9	7.2
Manufacturing, excluding electrical	4.7	0.6	2.0	0.2	1.7	2.2
Other goods producing industries	5.3	1.0	0.8	0.0	0.8	3.5
Market services	2.0	0.8	0.1	0.1	0.1	1.1
Distribution services	2.8	1.1	0.3	0.0	0.3	1.4
Finance and business services	1.4	0.5	-0.4	0.2	-0.6	1.4
Personal and social services	-0.3	0.8	0.2	-0.6	0.8	-1.3

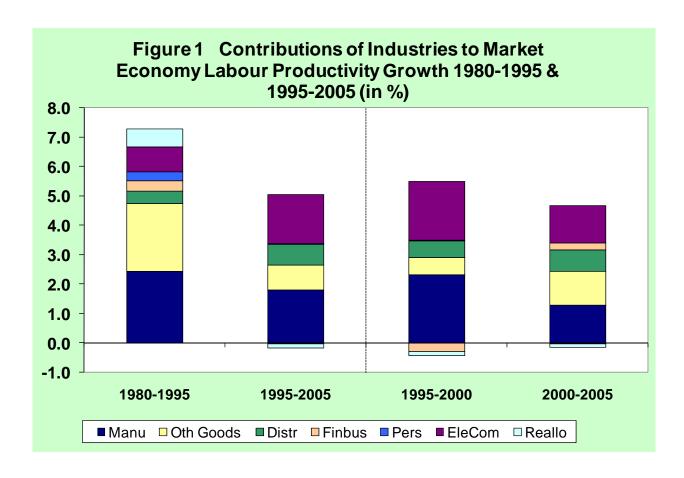
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

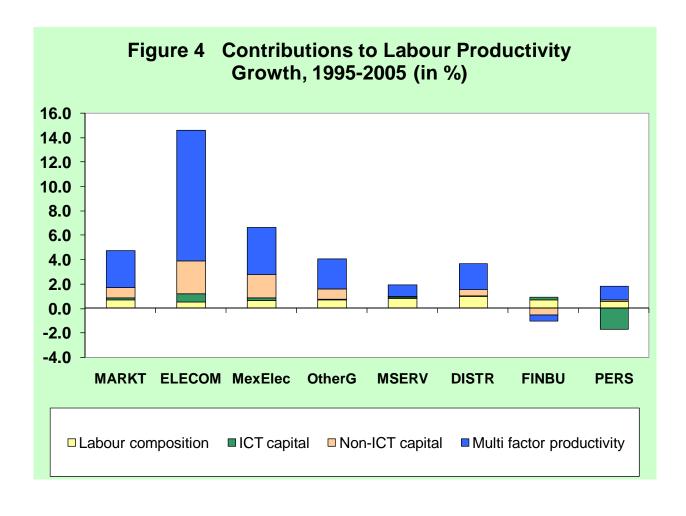
K= Contribution of Capital input growth

KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth
NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects









## Latvia

Lutvia						
Table 1 Gross Value Added, Labour Inp	ut and Lab	our Produ	uctivity, 1	970-1995	and 1995-2005	
	(annual av	erage volum	ne growth ra	ates, in %)		
	Gross	Total	Total	GVA per	Average share in	Contribution to LP growth
	Value	persons	hours	hour	total hours	in total
	Added	engaged	worked	worked	worked (%)	industries
1995-2005						
TOTAL INDUSTRIES	6.7	0.6	0.3	6.4	100.0	6.4
.Electrical machinery, post and communication	11.3	-3.3	-4.0	15.3	2.7	0.5
.Manufacturing, excluding electrical	6.1	-1.9	-1.4	7.5	17.7	1.5
.Other goods producing industries	5.1	-0.5	-2.2	7.4	16.7	1.4
.Distribution services	8.5	2.7	3.6	4.9	24.3	1.0
.Finance and business services	7.8	5.0	4.4	3.4	5.4	0.1
.Personal and social services	7.6	1.8	0.5	7.1	7.2	0.5
.Non-market services	3.7	0.6	-0.2	3.9	26.0	1.0
.Reallocation of labour effect						0.3
1995-2000						
TOTAL INDUSTRIES	5.5	-0.5	0.1	5.3	100.0	5.3
.Electrical machinery, post and communication	11.4	-7.1	-6.7	18.1	3.0	0.6
.Manufacturing, excluding electrical	5.0	-2.4	-1.7	6.8	17.8	1.3
.Other goods producing industries	2.7	-2.7	-5.0	7.7	18.6	1.5
.Distribution services	6.8	1.8	4.6	2.2	22.1	0.4
.Finance and business services	7.8	8.2	8.2	-0.4	4.8	0.0
.Personal and social services	7.6	-1.3	-1.2	8.8	6.9	0.7
.Non-market services	2.8	0.5	0.4	2.4	26.7	0.6
.Reallocation of labour effect						0.2
2000-2005						
TOTAL INDUSTRIES	7.9	1.7	0.5	7.4	100.0	7.4
Electrical machinery, post and communication	11.3	0.4	-1.2	12.5	2.4	0.3
.Manufacturing, excluding electrical	7.2	-1.5	-1.0	8.2	17.5	1.5
Other goods producing industries	7.5	1.7	0.5	7.0	14.4	1.0
.Distribution services	10.2	3.7	2.6	7.7	26.6	1.0
.Finance and business services	7.8	1.8	0.7	7.7	6.2	0.4
.Personal and social services	7.6	4.9	2.2	5.4	7.4	0.4
.Non-market services	4.6	0.7	-0.9	5.5	25.4	1.5
.Reallocation of labour effect	4.0	0.7	-0.9	ა.5	25.4	0.3
.Realiocation of labour effect						0.3

# Lithuania

Table 1 Gross Value Added, Labour Inp	ut and Lab	our Produ	uctivity, 1	995-2005		
	(annual a	erage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005						
TOTAL INDUSTRIES	6.0	-0.2	0.3	5.7	100.0	5.7
.Electrical machinery, post and communication	8.3	1.6	1.6	6.7	2.7	0.2
.Manufacturing, excluding electrical	8.1	-1.3	-0.9	8.9	17.8	1.7
.Other goods producing industries	3.6	-1.6	-1.2	4.8	27.2	1.4
.Distribution services	7.0	0.5	0.9	6.0	20.8	1.2
.Finance and business services	10.7	1.0	1.4	9.3	3.7	0.4
.Personal and social services	4.6	4.1	4.4	0.2	5.8	0.0
.Non-market services	4.1	0.4	0.9	3.2	21.9	0.7
.Reallocation of labour effect						0.2
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services	4.6 10.5 6.2 0.1 4.3 11.4 5.9	-1.2 1.9 -3.0 -2.3 -1.6 -5.0 4.2	-0.6 2.5 -2.9 -1.6 -0.5 -3.5 5.3	5.2 8.0 9.2 1.7 4.8 14.9	100.0 2.6 18.1 28.2 20.4 3.4 5.5	5.2 0.2 1.8 0.5 1.0 0.6
.Non-market services	4.9	0.9	1.2	3.7	21.7	0.8
.Reallocation of labour effect						0.4
2000-2005						
TOTAL INDUSTRIES	7.4	0.9	1.1	6.3	100.0	6.3
.Electrical machinery, post and communication	6.0	1.3	0.7	5.4	2.8	0.2
.Manufacturing, excluding electrical	9.9	0.3	1.2	8.7	17.5	1.5
.Other goods producing industries	7.2	-0.9	-0.8	7.9	26.1	2.1
.Distribution services	9.7	2.6	2.4	7.3	21.2	1.5
.Finance and business services	9.9	6.9	6.3	3.6	3.8	0.1
.Personal and social services	3.2	4.1	3.4	-0.2	6.1	0.0
.Non-market services	3.3	0.0	0.6	2.6	22.4	0.6
.Reallocation of labour effect						0.3

# Malta

Table 1 Gross Value Added, Labour Inp	ut and Lab	our Produ	uctivity, 1	970-199 <u>5</u> a	and 1995-2 <mark>00</mark> 5	
		erage volum				
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1995-2005					, ,	
TOTAL INDUSTRIES	2.6	1.4	0.5	2.1	99.9	2.1
.Electrical machinery, post and communication	3.6	1.5	1.1	2.6	5.6	0.1
.Manufacturing, excluding electrical	-0.1	-3.0	-3.5	3.4	17.0	0.7
.Other goods producing industries	1.9	0.2	-0.4	2.3	13.0	0.3
.Distribution services	1.0	2.0	1.3	-0.3	21.6	-0.1
.Finance and business services	4.5	4.9	4.7	-0.2	8.9	0.0
.Personal and social services	3.6	2.7	1.7	1.9	12.3	0.2
.Non-market services	4.2	2.4	0.5	3.7	21.5	0.8
.Reallocation of labour effect						0.1
1995-2000 TOTAL INDUSTRIES .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Distribution services .Finance and business services .Personal and social services .Non-market services .Reallocation of labour effect	4.2 14.0 0.7 1.9 2.1 7.7 3.4 4.1	1.6 3.9 -2.4 -0.6 2.3 4.4 3.6 2.6	1.5 3.9 -2.4 -0.6 2.3 4.4 3.6 2.6	2.7 10.1 3.2 2.6 -0.2 3.3 -0.2 1.5	99.9 5.5 18.5 13.2 21.2 8.0 11.8 21.8	2.7 0.5 0.6 0.4 0.0 0.2 0.0 0.3
2000-2005						
TOTAL INDUSTRIES	1.0	1.2	-0.6	1.6	99.8	1.6
.Electrical machinery, post and communication	-6.8	-0.9	-1.8	-4.9	5.8	-0.3
.Manufacturing, excluding electrical	-0.9	-3.5	-4.6	3.6	15.5	0.6
Other goods producing industries	2.0	1.1	-0.2	2.1	12.7	0.3
.Distribution services	-0.2	1.6	0.3	-0.5	22.0	-0.1
.Finance and business services	1.4	5.3	5.1	-3.7	9.8	-0.3
.Personal and social services	3.7	1.8	-0.2	3.9	12.8	0.5
.Non-market services	4.3	2.1	-1.6	5.9	21.3	1.3
.Reallocation of labour effect						-0.3

# Portugal

					A	Contributio		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	to LP growth in total industries		
1970-1995								
TOTAL INDUSTRIES	3.5	0.1	-0.3	3.8	100.0	3.8		
Electrical machinery, post and communication	6.0	0.0	-0.4	6.4	1.9	0.1		
Manufacturing, excluding electrical	2.6	0.0	-0.3	3.0	21.8	0.6		
Other goods producing industries	2.4	-1.4	-1.8	4.1	33.5			
Distribution services	2.6	0.2	-0.2	2.7	19.6			
Finance and business services	5.9	3.9	3.6	2.3	3.0	0.0		
Personal and social services	3.2	1.1	0.5	2.7	9.2	0.2		
Non-market services	4.2	1.8	1.4	2.7	11.0	0.3		
Reallocation of labour effect						0.4		
1995-2005								
TOTAL INDUSTRIES	2.2	1.1	0.7	1.5	100.0	1.5		
Electrical machinery, post and communication	7.3	-0.5	-1.3	8.5	1.8	0.2		
Manufacturing, excluding electrical	1.2	-0.9	-1.3	2.5	19.2	0.5		
Other goods producing industries	0.8	0.5	0.0	0.8	25.6	0.3		
Distribution services	2.0	1.9	1.5	0.6	20.6	0.		
Finance and business services	4.8	2.5	2.1	2.7	6.3			
Personal and social services	1.4	2.5	2.3	-0.8	11.5	-0.1		
Non-market services	1.8	2.0	1.6	0.2	15.1	0.0		
Reallocation of labour effect						0.4		
1995-2000								
TOTAL INDUSTRIES	3.6	1.8	1.1	2.5	100.0	2.5		
Electrical machinery, post and communication	10.2	2.5	1.3	8.8	2.0	0.2		
Manufacturing, excluding electrical	2.9	0.0	-0.7	3.6	20.3	0.8		
Other goods producing industries	2.9	2.1	1.4	1.5	25.9	0.4		
Distribution services	3.3	1.4	0.7	2.6	19.9	0.4		
Finance and business services	6.1	3.2	2.5	3.6	6.1	0.2		
Personal and social services	2.7	3.3	2.7	-0.1	11.2			
Non-market services	2.6	2.5	1.7	0.9	14.7			
Reallocation of labour effect	2.0	2.0	1.7	0.9	14.7	0.3		
2000-2005	0.0	0.2	0.2	0.5	100.0	0.4		
TOTAL INDUSTRIES	0.8	0.3	0.3	0.5		0.5		
Electrical machinery, post and communication	4.4	-3.6	-3.9	8.2	1.7	0.2		
Manufacturing, excluding electrical	-0.5	-1.8	-1.9	1.3	18.1	0.3		
Other goods producing industries	-1.3	-1.2	-1.3	0.0	25.4	0.0		
Distribution services	0.8	2.4	2.3	-1.4	21.0	-0.3		
Finance and business services	3.5	1.8	1.7	1.8	6.5	0.1		
Personal and social services	0.2	1.7	1.8	-1.6	11.8	-0.2		
Non-market services	0.9	1.4	1.4	-0.5	15.4	-0.1		

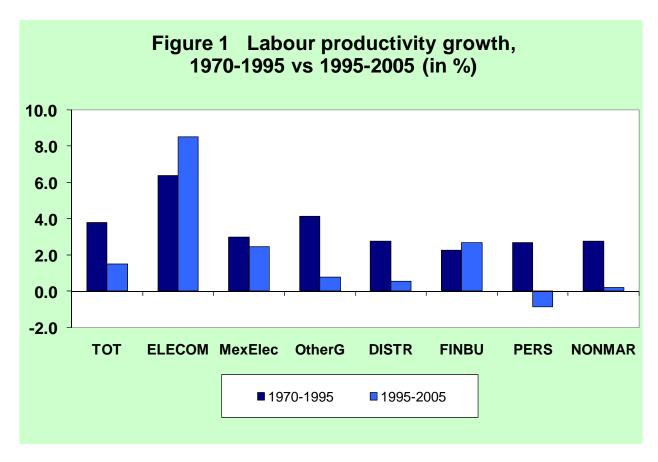
(annual average volume growth rates, i	VA		Н	LC	K	KIT	KNIT	MFI
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1995-2005	.,,,,,,,,	.,,,,,	. ,	. ,	.,,,,,	. ,	. ,	
MARKET ECONOMY	2.4	0.6	0.4	0.2	2.2	0.8	1.4	-0.4
Electrical machinery, post and communication	7.3	-0.3	-0.4	0.2	5.3	3.5	1.8	2.:
Manufacturing, excluding electrical	1.2	-0.4	-0.7	0.3	1.2	0.2	1.0	0.4
Other goods producing industries	0.8	0.4	0.2	0.2	1.1	0.0	1.1	-0.
Market services	2.9	1.1	1.0	0.1	2.7	1.0	1.7	-1.
.Distribution services	2.0	1.3	1.1	0.2	2.0	0.4	1.6	-1.
Finance and business services	4.8	0.7	0.6	0.1	4.2	1.9	2.3	-0.
.Personal and social services	1.4	1.6	1.5	0.0	1.9	0.8	1.1	-2.
MARKET ECONOMY Electrical machinery, post and communication Manufacturing, excluding electrical	3.9 10.2 2.9	0.3 0.5 -0.4	0.7 0.6 -0.3	-0.4 -0.2 0.0	2.8 6.3 1.4	0.9 3.4 0.1	1.9 2.9 1.2	0. 3. 1.
Other goods producing industries	2.9	-0. <del>4</del> 1.2	1.5	-0.3	1.4	0.1	1.4	0.
Market services	4.1	0.3	0.9	-0.6	3.6	1.3	2.2	0.
.Distribution services	3.3	0.0	0.6	-0.5	2.8	0.5	2.3	0.
Finance and business services	6.1	0.1	0.8	-0.7	5.2	2.6	2.6	0.
Personal and social services	2.7	1.4	1.9	-0.7	2.6	1.1	1.5	-1.
2000-2005								
MARKET ECONOMY	0.8	0.8	0.0	0.8	1.6	0.6	1.0	-1.
Electrical machinery, post and communication	4.4	-1.0	-1.5	0.5	4.3	3.6	0.7	1.
Manufacturing, excluding electrical	-0.5	-0.4	-1.1	0.7	0.9	0.2	0.7	-1.
Other goods producing industries	-1.3	-0.4	-1.1	8.0	0.8	0.1	0.7	-1.
Market services	1.6	1.9	1.1	0.8	1.9	0.7	1.2	-2.
.Distribution services	0.8	2.5	1.6	0.9	1.1	0.3	0.8	-2
.Finance and business services	3.5	1.3	0.4	0.9	3.2	1.2	2.0	-1
Personal and social services	0.2	1.7	1.2	0.6	1.2	0.5	0.7	-2

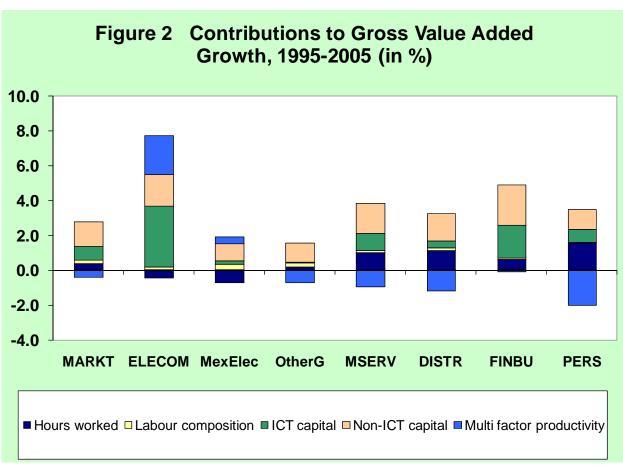
VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

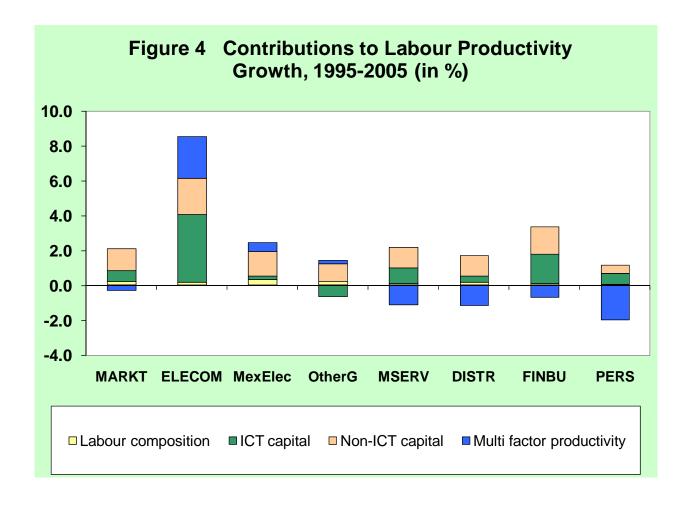
Table 3 Labour productivity growth and input contributions by industry, 1995-2005 (annual average volume growth rates, in %)							
(annual avoluge volume grown rates,	LP	LC	K	KIT	KNIT	MFP	
	(1)=(2)+(3)+(6)	(2)	(3)=(4)+(5)	(4)	(5)	(6)	
1995-2005							
MARKET ECONOMY	1.8	0.2	1.9	0.6	1.3	-0.3	
Electrical machinery, post and communication	8.5	0.2	6.0	3.9	2.1	2.4	
Manufacturing, excluding electrical	2.5	0.3	1.6	0.2	1.4	0.5	
Other goods producing industries	0.8	0.2	0.4	-0.7	1.0	0.2	
Market services	1.1	0.1	2.1	0.9	1.2	-1.1	
Distribution services	0.6	0.2	1.6	0.4	1.2	-1.2	
Finance and business services	2.7	0.1	3.3	1.7	1.6	-0.7	
.Personal and social services	-0.8	0.0	1.1	0.6	0.5	-2.0	
1995-2000  MARKET ECONOMY  .Electrical machinery, post and communication .Manufacturing, excluding electrical .Other goods producing industries .Market servicesDistribution servicesFinance and business servicesPersonal and social services	3.0 8.8 3.6 1.5 2.5 2.6 3.6	-0.4 -0.2 0.0 -0.3 -0.6 -0.5 -0.7	2.4 5.6 1.6 0.9 3.0 2.6 4.1	0.8 3.2 0.1 -0.1 1.2 0.5 2.4 0.9	1.6 2.4 1.5 1.0 1.8 2.1 1.8 0.8	0.9 3.3 2.0 0.9 0.1 0.5 0.2	
2000-2005	-						
MARKET ECONOMY	0.7	0.8	1.4	0.5	1.0	-1.5	
Electrical machinery, post and communication	8.2	0.5 0.7	6.3	4.5	1.8 1.3	1.4 -1.0	
Manufacturing, excluding electrical	1.3 0.0	0.7	1.6 -0.2	0.2 -1.3	1.3	-1.0 -0.5	
Other goods producing industries  Market services	-0.4	0.8	-0.2 1.2	0.6	0.6	-0.5 -2.4	
Distribution services	-0.4 -1.4	0.8	0.5	0.6	0.6	-2.4 -2.9	
Distribution servicesFinance and business services	-1.4 1.8	0.9	2.4	1.1	1.4	-2.9 -1.5	
Personal and social services	-1.6	0.9	0.5	0.4	0.2	-1.5 -2.7	

Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition K= Contribution of Capital input growth KIT= Contribution of ICT capital KNIT= Contribution of Non-ICT capital KNIT= Contribution of Mon-ICT capital MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects





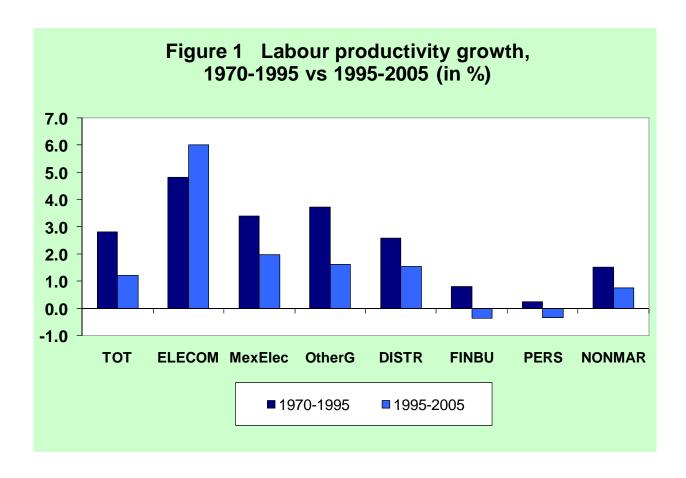


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## OTHER EU-AGGREGATES

## Eurozone

970-1995 TOTAL INDUSTRIES Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	Gross Value Added  2.6 4.2 1.9 1.2 3.0 3.9 1.9 3.2	Total persons engaged  0.4 -0.1 -1.0 -2.1 0.9 3.6 2.1 2.3	Total hours worked  -0.2 -0.6 -1.5 -2.5 0.4 3.0 1.7 1.6	GVA per hour worked  2.8 4.8 3.4 3.7 2.6 0.8 0.2 1.5	Average share in total hours worked (%)  100.0 3.9 21.8 22.0 19.4 7.3 8.3 17.4	0. 0. 1. 0. 0.
FOTAL INDUSTRIES Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	4.2 1.9 1.2 3.0 3.9 1.9 3.2	-0.1 -1.0 -2.1 0.9 3.6 2.1 2.3	-0.6 -1.5 -2.5 0.4 3.0 1.7	4.8 3.4 3.7 2.6 0.8 0.2	3.9 21.8 22.0 19.4 7.3 8.3	2 0 0 1. 0 0 0
Electrical machinery, post and communication Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	4.2 1.9 1.2 3.0 3.9 1.9 3.2	-0.1 -1.0 -2.1 0.9 3.6 2.1 2.3	-0.6 -1.5 -2.5 0.4 3.0 1.7	4.8 3.4 3.7 2.6 0.8 0.2	3.9 21.8 22.0 19.4 7.3 8.3	0.: 0.: 1. 0.: 0.: 0.:
Manufacturing, excluding electrical Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	1.9 1.2 3.0 3.9 1.9 3.2	-1.0 -2.1 0.9 3.6 2.1 2.3	-1.5 -2.5 0.4 3.0 1.7	3.4 3.7 2.6 0.8 0.2	21.8 22.0 19.4 7.3 8.3	0. 1. 0. 0. 0.
Other goods producing industries Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	1.2 3.0 3.9 1.9 3.2	-2.1 0.9 3.6 2.1 2.3	-2.5 0.4 3.0 1.7	3.7 2.6 0.8 0.2	22.0 19.4 7.3 8.3	1. 0. 0. 0.
Distribution services Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	3.0 3.9 1.9 3.2	0.9 3.6 2.1 2.3	0.4 3.0 1.7	2.6 0.8 0.2	19.4 7.3 8.3	0. 0. 0.
Finance and business services Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	3.9 1.9 3.2	3.6 2.1 2.3	3.0 1.7	0.8 0.2	7.3 8.3	0. 0. 0.
Personal and social services Non-market services Reallocation of labour effect  995-2005 TOTAL INDUSTRIES	1.9 3.2 2.0	2.1 2.3	1.7	0.2	8.3	0. 0.
Non-market services Reallocation of labour effect  995-2005 OTAL INDUSTRIES	3.2	2.3				0.
Reallocation of labour effect  995-2005  OTAL INDUSTRIES	2.0		1.6	1.5	17.4	
995-2005 OTAL INDUSTRIES		1.2				0.
TOTAL INDUSTRIES		1.2				
		1.2				
	5.2		0.8	1.2	100.0	1.
Electrical machinery, post and communication	5.2	-0.5	-0.8	6.0	3.3	0.
Manufacturing, excluding electrical	1.2	-0.4	-0.8	2.0	16.7	0.
Other goods producing industries	1.2	-0.3	-0.4	1.6	15.1	0
Distribution services	2.2	1.2	0.7	1.5	20.3	0.
Finance and business services	3.0	3.7	3.4	-0.4	12.6	0.
Personal and social services	1.7	2.6	2.1	-0.3	11.3	0.
Non-market services	1.8	1.3	1.0	0.8	20.7	0.
Reallocation of labour effect						0.
995-2000						
OTAL INDUSTRIES	2.5	1.5	1.1	1.4	100.0	1.
Electrical machinery, post and communication	6.4	0.1	-0.1	6.5	3.4	0
Manufacturing, excluding electrical	2.0	0.1	-0.2	2.2	17.4	0.
Other goods producing industries	1.3	-0.4	-0.4	1.6	15.5	0.
Distribution services	3.2	1.6	1.1	2.1	20.3	0.
Finance and business services	4.2	5.1	4.7	-0.5	11.8	-0
Personal and social services	2.6	2.8	2.4	0.2	10.9	0.
Non-market services	1.7	1.4	1.0	0.8	20.7	0.
Reallocation of labour effect	1.7	11	1.0	0.0	20.7	0.
2005						
2000-2005	4.4	0.0	0.4	4.0	400.0	4
OTAL INDUSTRIES	1.4	0.8		1.0	100.0	1.
Electrical machinery, post and communication	4.0	-1.0	-1.5	5.5	3.1	0.
Manufacturing, excluding electrical	0.3	-1.0	-1.4	1.7	16.0	0.
Other goods producing industries	1.2	-0.2	-0.4	1.6	14.7	0
Distribution services	1.3	0.8	0.4	0.9	20.3	0
Finance and business services	1.8	2.2	2.0	-0.2	13.5	0.
Personal and social services	0.8	2.4	1.7	-0.9	11.7	-0.
Non-market services Reallocation of labour effect	1.8	1.3	1.0	0.7	20.7	0. 0.



# **EUROex** (excluding Greece, Ireland, Luxembourg and Portugal)

Table 1 Gross Value Added, Labour Inp	out and Lak	our Produ	uctivity, 1	970-1995 a	and 1995-2005	
	(annual a	verage volum	ne growth ra	ites, in %)		
	Gross Value Added	Total persons engaged	Total hours worked	GVA per hour worked	Average share in total hours worked (%)	Contribution to LP growth in total industries
1970-1995						
TOTAL INDUSTRIES	2.6	0.4	-0.2	2.8	100.0	2.8
.Electrical machinery, post and communication	4.2	-0.1	-0.7	4.8	4.1	0.2
.Manufacturing, excluding electrical	1.9	-1.1	-1.6	3.5	21.8	0.9
.Other goods producing industries	1.2	-2.2	-2.6	3.8	20.7	1.1
.Distribution services	2.9	0.9	0.3	2.6	19.5	0.5
.Finance and business services	3.8	3.6	3.0	0.8	7.7	0.0
.Personal and social services	1.9	2.1	1.7	0.2	8.3	0.0
.Non-market services	3.1	2.3	1.6	1.5	17.9	0.2
.Reallocation of labour effect						-0.1
1995-2005						
TOTAL INDUSTRIES	1.9	1.2	0.7	1.1	100.0	1.1
.Electrical machinery, post and communication	4.9	-0.6	-1.0	5.9	3.3	0.2
.Manufacturing, excluding electrical	1.0	-0.4	-0.8	1.8	16.7	0.3
Other goods producing industries	1.1	-0.3	-0.5	1.6	14.1	0.2
.Distribution services	2.1	1.1	0.6	1.5	20.3	0.3
.Finance and business services	2.8	3.7	3.3	-0.5	13.1	-0.1
.Personal and social services	1.6	2.6	2.0	-0.5	11.3	-0.1
.Non-market services	1.7	1.2	0.9	0.8	21.2	0.1
.Reallocation of labour effect	1.7	1.2	0.0	0.0	21.2	0.0
1005 0000						
1995-2000	0.4	4.5	4.4	4.0	400.0	4.0
TOTAL INDUSTRIES	2.4	1.5	1.1	1.3	100.0	1.3
.Electrical machinery, post and communication	6.0	-0.1	-0.4	6.4	3.5	0.2
.Manufacturing, excluding electrical	1.8	0.2	-0.1	2.0	17.3	
Other goods producing industries	1.0	-0.6	-0.6	1.6	14.5	0.2
.Distribution services	3.1	1.6	1.0	2.1	20.3	
Finance and business services	4.0	5.1	4.7	-0.7	12.2	
.Personal and social services	2.5	2.7	2.4	0.1	10.9	
.Non-market services .Reallocation of labour effect	1.7	1.3	0.9	0.8	21.2	0.2
.Reallocation of labour effect						0.0
2000-2005	4.0	0.0	0.4	0.0	400.0	0.0
TOTAL INDUSTRIES	1.3	0.8	0.4	0.9	100.0	0.9
.Electrical machinery, post and communication	3.8	-1.0	-1.5	5.3	3.2	0.2
.Manufacturing, excluding electrical	0.2	-0.9	-1.4	1.6	16.1	0.3
Other goods producing industries	1.2	0.0	-0.4	1.5	13.7	0.2
.Distribution services	1.2	0.7	0.2	1.0	20.2	
.Finance and business services	1.5	2.2	1.9	-0.4	14.0	-0.1
.Personal and social services	0.6	2.4	1.7	-1.1	11.7	-0.1
.Non-market services	1.7	1.2	0.9	0.8	21.2	0.2
.Reallocation of labour effect						0.1

### OTHER EU-AGGREGATES: THE EU KLEMS PRODUCTIVITY REPORT

Table 2 Gross value added growth and (annual average volume growth rates, i	contributions, 19 in %)	180-1995 and	1995-2	2005				
(g.	VA	L	Н	LC	K	KIT	KNIT	MFF
	(1)=(2)+(5)+(8)	(2)=(3)+(4)	(3)	(4)	(5)=(6)+(7)	(6)	(7)	(8)
1980-1995								
MARKET ECONOMY	1.9	0.0	-0.2	0.3	1.0	0.3	0.7	0.9
.Electrical machinery, post and communication	3.3	-0.5	-0.7	0.2	1.5	0.7	0.8	2.3
Manufacturing, excluding electrical	1.2	-1.1	-1.4	0.3	0.8	0.2	0.6	1.5
Other goods producing industries	1.0	-1.2	-1.4	0.2	0.6	0.1	0.5	1.6
.Market services	2.6	1.3	1.0	0.3	1.3	0.5	0.8	0.0
Distribution services	2.5	0.4	0.1	0.3	0.8	0.3	0.5	1.3
Finance and business services	3.3	2.3	1.9	0.4	2.1	0.9	1.2	-1.1
Personal and social services	1.5	1.8	1.5	0.3	0.7	0.2	0.5	-1.2
1995-2005								
MARKET ECONOMY	1.9	0.6	0.4	0.1	1.1	0.5	0.6	0.2
Electrical machinery, post and communication	4.9	-0.6	-0.6	0.1	1.3	0.6	0.6	4.2
Manufacturing, excluding electrical	1.0	-0.3	-0.5	0.2	0.6	0.2	0.4	0.7
Other goods producing industries	1.1	0.0	-0.2	0.2	0.7	0.1	0.6	0.4
.Market services	2.3	1.3	1.2	0.1	1.4	0.7	0.8	-0.5
Distribution services	2.1	0.6	0.5	0.1	1.1	0.4	0.7	0.5
Finance and business services	2.8	2.1	1.8	0.2	2.0	1.1	0.9	-1.3
Personal and social services	1.6	1.3	1.3	0.0	0.9	0.2	0.7	-0.8
1995-2000								
MARKET ECONOMY	2.7	0.9	0.8	0.1	1.4	0.6	0.7	0.5
Electrical machinery, post and communication	6.0	-0.3	-0.3	-0.1	1.6	0.9	0.7	4.7
Manufacturing, excluding electrical	1.8	0.0	0.0	0.0	0.8	0.3	0.5	1.0
Other goods producing industries	1.0	-0.1	-0.3	0.2	0.7	0.2	0.5	0.5
.Market services	3.4	1.8	1.7	0.1	1.8	0.9	0.9	-0.2
Distribution services	3.1	0.9	0.8	0.1	1.2	0.5	0.7	0.9
Finance and business services	4.0	2.8	2.6	0.2	2.7	1.5	1.2	-1.5
Personal and social services	2.5	1.5	1.6	0.0	1.1	0.3	0.7	-0.2
2000-2005								
MARKET ECONOMY	1.1	0.3	0.1	0.2	0.8	0.3	0.5	0.0
Electrical machinery, post and communication	3.8	-0.8	-1.0	0.2	0.9	0.3	0.6	3.7
.Manufacturing, excluding electrical	0.2	-0.6	-0.9	0.2	0.3	0.1	0.2	0.4
Other goods producing industries	1.2	0.1	0.0	0.0	0.8	0.1	0.7	0.3
Market services	1.2	0.9	0.7	0.2	1.1	0.4	0.6	-0.7
.Distribution services	1.2	0.3	0.2	0.1	0.9	0.4	0.7	0.0
Finance and business services	1.5	1.3	1.1	0.1	1.3	0.2	0.6	-1.1
Personal and social services	0.6	1.1	1.0	0.1	0.8	0.2	0.6	-1.4

VA= Gross Value Added growth
L= Contribution of Labour input growth
H= Contribution of Total hours worked
LC= Contribution of Labour composition
K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

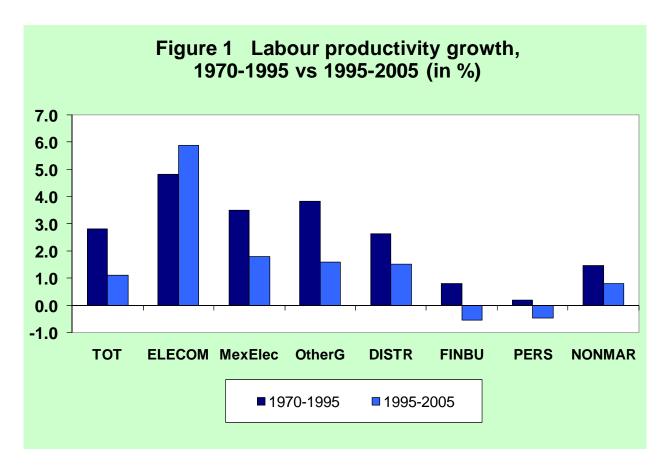
### OTHER EU-AGGREGATES: THE EU KLEMS PRODUCTIVITY REPORT

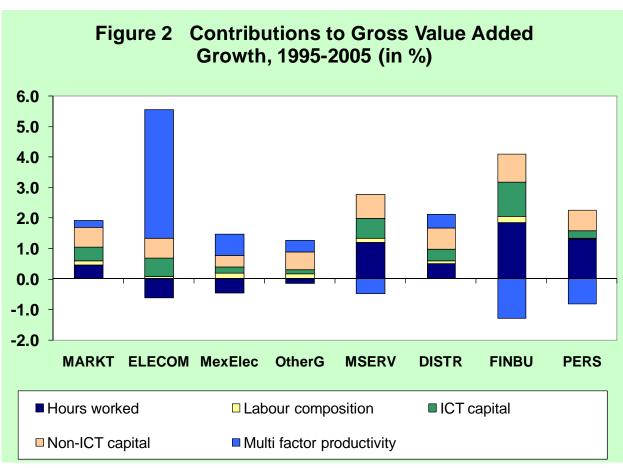
(annual average volume growth rates,		1.0	1/	KIT	KNUT	MED
	LP (1)=(2)+(3)+(6)	LC (2)	(3)=(4)+(5)	(4)	(5)	(6)
1000 4005	(1)=(2)+(3)+(0)	(2)	(3)=(4)+(3)	(4)	(3)	(0)
1980-1995 MARKET ECONOMY	2.4	0.3	1.1	0.3	0.8	1.0
		0.3	1.1			2.4
Electrical machinery, post and communication	4.4 3.1	0.2	1.8	0.8	1.0 1.1	1.5
Manufacturing, excluding electrical	3.1	0.3	1.3	0.2	1.1	2.0
Other goods producing industries						
Market services	1.3	0.3	0.9	0.4	0.5	0.0
.Distribution services	2.4	0.3	0.7	0.2	0.5	1.3
.Finance and business services	0.0	0.4	0.9	0.7	0.3	-1.3
Personal and social services	-0.7	0.3	0.3	0.1	0.2	-1.3
1995-2005						
MARKET ECONOMY	1.2	0.1	0.9	0.4	0.5	0.2
Electrical machinery, post and communication	5.9	0.1	1.6	0.7	0.9	4.2
Manufacturing, excluding electrical	1.8	0.2	0.8	0.2	0.6	0.8
Other goods producing industries	1.6	0.2	0.9	0.1	0.7	0.5
Market services	0.5	0.1	0.9	0.6	0.4	-0.5
.Distribution services	1.5	0.1	0.9	0.4	0.6	0.5
.Finance and business services	-0.5	0.2	0.9	0.8	0.0	-1.6
.Personal and social services	-0.5	0.0	0.4	0.2	0.2	-0.9
1995-2000						
MARKET ECONOMY	1.6	0.1	1.0	0.6	0.4	0.5
Electrical machinery, post and communication	6.4	-0.1	1.7	0.9	0.8	4.7
Manufacturing, excluding electrical	2.0	0.0	0.9	0.3	0.6	1.1
Other goods producing industries	1.6	0.0	0.8	0.2	0.7	0.6
Market services	1.0	0.1	1.1	0.2	0.3	-0.2
Distribution services	2.1	0.1	1.0	0.5	0.5	1.0
Finance and business services	-0.7	0.1	1.0	1.1	-0.1	-1.9
Personal and social services	0.1	0.2	0.5	0.3	0.2	-0.3
.Fersonal and social services	0.1	0.0	0.5	0.3	0.2	-0.3
2000-2005	0.0	0.0	0.0	0.0	0.5	0.4
MARKET ECONOMY	0.9	0.2	0.8	0.3	0.5	-0.1
Electrical machinery, post and communication	5.3	0.2	1.5	0.5	1.0	3.6
Manufacturing, excluding electrical	1.6	0.3	0.8	0.2	0.6	0.5
Other goods producing industries	1.5	0.1	0.9	0.1	0.8	0.5
Market services	0.1	0.2	0.7	0.4	0.4	-0.8
.Distribution services	1.0	0.1	0.9	0.2	0.6	0.0
.Finance and business services	-0.4	0.3	0.7	0.6	0.1	-1.3
Personal and social services	-1.1	0.1	0.3	0.1	0.2	-1.5

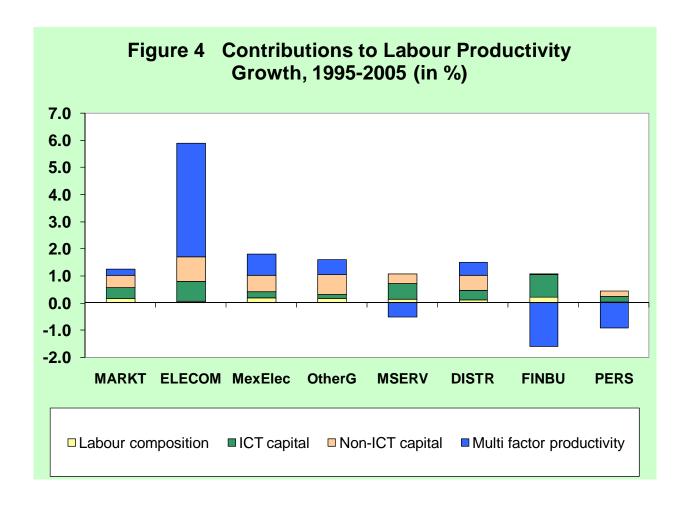
Notes: This table gives for each industry a decomposition of labourproductivity growth into the contributions of inputs and MFP LP=Labour productivity per hour worked LC= Contribution of Labour composition

K= Contribution of Capital input growth
KIT= Contribution of ICT capital
KNIT= Contribution of Non-ICT capital
MFP= Contribution of Multi factor productivity growth

NB MFP growth rates might differ from Table 2, due to negative asset rental price and due to reallocation effects







#### THE POLICY SIGNIFICANCE OF EU KLEMS

#### THE POLICY SIGNIFICANCE OF EU KLEMS

The EU is, and wants to remain, an important part of an increasingly integrated world economy. The dramatic intensification of the globalisation process over the last 15-20 years is transforming the economic structures of the developed and developing worlds, with India emerging as a global power in services, China consolidating its position in manufacturing and with the developed world as a whole searching for an appropriate response. The

combination of these global trends allied to important domestic EU developments, such as the internal market, single currency and enlargement processes, have the potential to generate the largest structural upheaval in EU economies since the industrial revolution. As in the past, these internal and external processes are being underpinned by both technological change (most notably the ICT revolution) and by a shift in policies in many countries around the world towards a more open, market based, system of economic governance. These policies reflect the realities of a new world order where knowledge creation and absorption and the flexibility of the regulatory and institutional frameworks will increasingly be the key determinants of the economic fortunes of economies.

With the pace of change accelerating and with the degree of complexity in decision making rising in tandem, it is clear that policy makers need more extensive sources of information in order to respond in an effective manner. This is particularly true in the case of industry level statistics. The unprecedented deepening in global trade and capital market integration since the early 1990's, allied to the cost-induced and ICT-enabled acceleration in the worldwide relocation of production processes over this period, has dramatically changed the economics of specific industries both in terms of scale economies, technological spillovers (i.e. diffusion of best technologies / practices); degree of import competition; and the productivity effects from the reallocation of resources amongst firms / industries. All of these globalisation related transmission mechanisms are having direct knock-on effects in terms of the specialisation patterns of individual countries, with the result that the post-1995 period has been marked by significant divergences in the productivity and GDP per capita trends of specific countries and regions around the world.

It is against this backdrop that the EU KLEMS project has emerged as an attempt by the Commission services to understand the global and EU specific phenomena driving EU growth and productivity trends in the post-1995 period. In our view, it is not possible to provide a meaningful interpretation of economic developments over this period without examining industry level trends. The key objective of the EU KLEMS project was therefore to build a system of analysis at the industry level for the EU's Member States (as well as for the US, Japan and a number of other countries) which encompasses internationally harmonised, national accounts based, industry level statistics and indicators, as well as an analytical framework for interpreting this information based on input-output analysis and growth accounting. This project is in effect an attempt to overcome certain deficiencies in official industry level statistics, especially with regard to the provision of data for service industries, and to thereby ensure a more informed EU structural policy debate over the coming years. While the work of Eurostat and the National Statistical Institutes (NSIs) offers hope for the future provision of such data, the present situation is particularly problematic, with long runs of official industry level data only available for a relatively small number of countries, industries and variables and with these short sample lengths precluding any serious degree of analysis.

Given the unsatisfactory nature of the present situation, it is widely recognised that if the EU KLEMS project can succeed in producing high quality industry level statistics and if its methodology is eventually absorbed into official statistics, it will lead to a dramatic improvement in the evaluation of existing structural policies to promote growth and competitiveness in the enlarged European Union. As it presently stands, EU KLEMS already constitutes a unique resource for policy makers and researchers to exploit. The databank is extremely rich in terms of its coverage of over 60 industries, with 25-30 countries, up to 35 years of data and between 60-70 variables / indicators included. In practical terms, these datasets will allow for a more refined growth accounting analysis at the industry level (between 30 and 72 industries in total, depending on the country, the variables included and the sub-period). These industries cover the whole economy, including a detailed breakdown of service industries. Labour input is disaggregated by age, gender as well as by distinct skill categories (i.e. high, medium and low skilled workers). A breakdown of capital distinguishing its ICT and non-ICT components is now feasible and the databank will also allow for an analysis of gross output as well as value added, with intermediate inputs (energy, materials and services) being considered as additional factors of production. Moreover, there will be complementary information on technology indicators, productivity levels

#### THE POLICY SIGNIFICANCE OF FU KLEMS

and a further breakdown for some of the factors of production into their domestic and foreign components in the December 2007 release.

In addition to the databank itself, the project is also addressing a wide range of methodological issues which top the agenda of statistical agencies and institutions involved in empirical economic research. Substantial methodological research has been carried out on the measurement of output, inputs, prices, knowledge indicators and productivity levels (most notably in terms of the production of industry specific purchasing power parities) and especially in terms of improving the international comparability of these indicators. Once the datasets are publicly released, the project will also deliver a large body of peer-reviewed analytical research over the remaining months of the contract. This policy oriented research work will focus on four broad thematic areas, each of which will have multiple individual research projects:

- Firstly, an analysis of productivity, prices, industry structures, technology and innovation;
- Secondly, research on labour markets and skills;
- · Thirdly, research on technological progress and innovation; and
- Finally, comparative analyses based on linking the industry level productivity results with firm level databases.

The overall objective of the analytical research work to be carried out by the consortium over the coming months will be to use the assembled EU KLEMS datasets to inform policy makers on the EU's structural performance at the aggregate EU level, within the EU and also compared with the US, Canada and Japan (and hopefully later on with China and India). In particular, it will help to unravel the extent to which total economy productivity growth differentials can be traced to industry specific developments and how much of these differentials are related to ICT investment; to the accompanying changes in the skill composition of employment / organisational changes; to R&D developments and finally, the extent to which measurement problems (most notably in terms of service industries) play a role.

Given the progress which has undoubtedly been made in terms of the databank itself, the provision of an analytical framework for interpreting the datasets as well as the groundbreaking methodological and policy oriented research work which has been initiated, we are confident that EU KLEMS has the potential to become a key tool in monitoring the overall success of the revised Lisbon strategy. In particular, whilst we accept that part of the databank is still in the "research" phase, sufficient progress has been made by the consortium to ensure that a sizeable proportion of the datasets could potentially be used for serious policy analysis. The exact number of series per Member State is still open to debate and this will ultimately depend on the success of the consortium over the final months of the contract in convincing the NSI's that their underlying data sources and methodologies are sufficiently robust to ensure public confidence as to their reliability. If this occurs, the statistical module of the databank could over time be developed into an officially accepted, comprehensive, national accounts based, industry level statistical system for the EU which could then be used as a natural complement to the existing Structural Indicators programme. This is an important objective since with a functioning EMU now in place and with the growing acceptance that existing Euro area growth rate differentials are linked to differences in the industry level structures of Euro area countries, we are convinced of the need to launch a debate on pushing the importance of industry level statistics higher up the EU's list of statistical priorities. This debate has already in fact started with the proposed extension of Eurostat's ESA95 transmission programme towards the provision of statistics which have a more medium to long term structural policy focus.

In conclusion, we regard EU KLEMS as a commendable achievement which should now be built upon to ensure that EU policy makers have access to industry level statistics with the scope and quality of those presently available to US policy makers. Productivity growth is the lifeblood of our economies and is the ultimate driver of sustained increases in living standards. EU KLEMS has the potential to increasingly demonstrate that industry level statistics, allied with an economically intuitive analytical framework, can provide important insights into many productivity related domains which have a direct bearing on medium to long run GDP per capita trends in the EU. Thanks to the work of the EU KLEMS consortium, EU policy makers are already more informed regarding the global and EU-specific phenomena which are at present radically reshaping our economic environment and which will undoubtedly continue to do so over the coming years and decades.

### THE POLICY SIGNIFICANCE OF EU KLEMS

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The views expressed represent exclusively the positions of the authors and do not necessarily correspond to those of the European Commission

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The EU KLEMS database is part of a research project, financed by the European Commission, to analyse productivity in the European Union at the industry level. This work is meant to support empirical and theoretical research in the area of economic growth, studying the relationship between skill formation, technological progress and innovation on the one hand, and productivity, on the other. In addition the database is meant to support the conduct of policies aimed at supporting a revival of productivity and competitiveness in the European Union, requiring comprehensive measurement tools to monitor and evaluate progress. The construction of the database should also support the systematic production of high quality statistics on growth and productivity using the methodologies of national accounts and input-output analysis.

The EU KLEMS growth accounts include measures of economic growth, productivity, employment creation, capital formation and technological change at the industry level for European Union member states from 1970 onwards. The input measures include various categories of capital (K), labour (L), energy (E), material (M) and service inputs (S). A major advantage of growth accounts is that it is embedded in a clear analytical framework rooted in production functions and the theory of economic growth. It provides a conceptual framework within which the interaction between variables can be analysed, which is of fundamental importance for policy evaluation. The measures will be developed for individual European Union member states, and are linked with "sister"-KLEMS databases in the U.S. and Japan. In a later stage, more countries will be added.

#### Distinguishing features of the EU KLEMS database

A key objective of the EU KLEMS database is to move beneath the aggregate economy level and examine the productivity performance of individual industries and their contribution to aggregate growth. Previous studies have shown that there is enormous heterogeneity in output and productivity growth across industries, so analysts should focus on the industry-level detail to understand the origins of the European growth process. The database has been constructed on the basis of data delivered by the consortium partners with cooperation of national statistical offices, and processed according to agreed procedures which have been discussed within the consortium over the past 40 months. These procedures were developed to ensure harmonisation of the basic data, and to generate growth accounts in a consistent and uniform way. Importantly, this database is deeply rooted in statistics from the National Accounts, following the ESA95 where appropriate.

Harmonisation of the basic data has focused on a number of areas:

- Industrial classifications: although harmonisation was relatively easy to realise for the recent period for
  which NACE1 has been in use (with the exception of the US and Japan), older statistics were often in
  NACE70 or country specific classifications. Additional data had to be found to provide links across
  diverse classification systems.
- Aggregation levels: the level of industry detail in the national accounts statistics varied widely across
  countries, variables and periods. The EU KLEMS consortium has generated a system which allows the
  comparisons of statistics at various levels of aggregation by using a common industry hierarchy for all
  countries.
- Reference year for volume measures: countries differ in the reporting of volume measures, e.g. previous year prices vis-à-vis different base years. All series have been put on a 1995 reference year.
- *Price concepts*: the price concept for gross output (basic prices) and intermediate inputs (purchasers' prices) have been harmonised across countries.
- *Solving breaks*: various series had to be linked in order to bridge different vintages of the national accounts. This has been done according to standardised methodologies.
- *Labour input:* various concepts of labour input (employees, self-employed, hours worked) and harmonised measures of persons engaged and hours worked have been developed.
- Labour services input: labour service input has been measured in a standardised way by distinguishing a variety of labour types in terms of gender, age and educational attainment. For these series additional material has been collected, as they are not part of the system of national accounts.

- Asset classification: although the SNA provides a classification of capital assets, it was not always
  detailed enough to back out information and communication equipment from the investment series.
  Additional information has been collected to obtain investment series for these assets. In addition, the
  level of asset detail has been put on a comparable basis.
- Capital services input: capital service input has been measured in a standard way, using harmonized depreciation rates and common rules to deal with a variety of practical problems, such as weighting and rental rates. Importantly, capital input is measured as capital services, rather than stocks.
- *Multifactor productivity measures:* MFP has been generated on both a gross output and value added basis according to a standard methodology developed by Jorgenson, Gollop and Fraumeni (1987).
- *Intermediate input measures*: Series on intermediate inputs are broken down into energy, materials and services using a standardised classification.

#### Coverage of countries and variables

Table 1 provides an overview of all the series included in the EU KLEMS database. The variables covered can be split into three main groups: Basic variables, growth accounting variables and additional variables. The basic series contain all the data needed to construct single productivity measures such as output per hour worked. They include nominal, volume and price series of output and intermediate inputs, and volumes and prices of employment. All these series are part of the present European System of National Accounts (ESA 1995) and can be found in the National Accounts of all individual countries, at least for the most recent period. The main assumptions used to construct these series were those required to fill up gaps in industry detail and to link series over time, in particular in those cases where revisions were not taken back to 1970 by the national statistical institutes (NSIs). The variables in the growth accounting series are of an analytical nature and cannot be derived from published National Accounts data without additional assumptions. These include series of capital services, of labour services, and of total factor productivity which are the heart and main aim of the EU KLEMS project. The construction of these series is based on a theoretical model of production, requiring a number of assumptions standard in the literature. Finally, additional series are given which have been used in generating the growth accounts and are informative by themselves. They include various measures of the relative importance of IT- and non-IT capital, and of the various labour types within the EU KLEMS classification.

Table 2 provides a list of countries covered in this preliminary database. It also indicates the period for which data are available. In general, data for 1970-2005 are available for the old EU-15 countries, and series from 1995 onwards are available for the new EU member states (EU-10). But due to data limitations this differs across countries, industries and variables.

At the lowest level of aggregation, data were collected for 71 industries, the so-called Euk industries. The industries are classified according to the European NACE revision 1 classification. Table 3 provides a listing of the industries, including higher aggregates. The level of detail in the EU KLEMS database varies across countries, industries and variables due to data limitations. In order to ensure a minimal level of industry detail for which comparisons can be made across all countries, so-called minimum lists of industries have been used. All national datasets have been constructed in such a way that these minimums are met. The minimum list is different for particular groups of variables and time-periods. Three groups of variables can be distinguished: variables needed to undertake labour productivity growth and unit labour cost analysis (for the period from 1995 onwards, and the period before 1995), and additional variables needed to undertake growth accounting (gross output, intermediate input, labour composition and capital). The industries included in each of these three groups are indicated in Table 3. They include respectively 62, 48 and 31 industries. The industry detail for each country conforms at least to the minimum list of industries, but often more detail is available.

For analytical convenience, the EU KLEMS database also provides files with an alternative aggregation scheme. It includes useful aggregates such as market economy, market services and goods production. This aggregation scheme is given in Table 4.

More information on the methodology used in EU KLEMS can be found in the document EU KLEMS Growth and Productivity Accounts, Version 1.0, PART I Methodology. Detailed source descriptions are given in PART II Sources

On the EU KLEMS website, the database has been presented in separate Excel files for each country. Two files are available for all countries. The basic files contain all data and variables according to the EU KLEMS

industry list, which corresponds with the NACE rev. 1 classification. The additional files contain the same series, but aggregated according to the alternative aggregation scheme. EU-aggregates are presented in exactly the same way. Next to the Excel files we have also constructed comma separated text files for those who want to read the database in to statistical programs.

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For more information and updates, see: www.euklems.net

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# Table 1 Variables in the EU KLEMS database

	va		

Values	
GO	Gross output at current basic prices (in millions of local currency)
II	Intermediate inputs at current purchasers' prices (in millions of local currency)
IIE	Intermediate energy inputs at current purchasers' prices (in millions of local currency)
IIM	Intermediate material inputs at current purchasers' prices (in millions of local currency)
IIS	Intermediate service inputs at current purchasers' prices (in millions of local currency)
VA	Gross value added at current basic prices (in millions of local currency)
COMP	Compensation of employees (in millions of local currency)
GOS	Gross operating surplus (in millions of local currency)
TXSP	Other taxes minus subsidies on production (in millions of local currency)
EMP	Number of persons engaged (thousands)
EMPE	Number of employees (thousands)
H EMP	Total hours worked by persons engaged (millions)
H_EMPE	Total hours worked by employees (millions)
Prices	
GO_P	Gross output, price indices, 1995 = 100
II_P	Intermediate inputs, price indices, 1995 = 100
VA_P	Gross value added, price indices, 1995 = 100
Volumes	
GO_QI	Gross output, volume indices, 1995 = 100
II QI	Intermediate inputs, volume indices, 1995 = 100
IIE_QI	Intermediate energy inputs, volume indices, 1995 = 100
IIM_QI	Intermediate material inputs, volume indices, 1995 = 100
IIS_QI	Intermediate service inputs, volume indices, 1995 = 100
VA QI	Gross value added, volume indices, 1995 = 100
LP_I	Gross value added per hour worked, volume indices, 1995=100
Growth accou	· · · · · · · · · · · · · · · · · · ·
LAB	Labour compensation (in millions of local currency)
CAP	Capital compensation (in millions of local currency)
LAB_QI	Labour services, volume indices, 1995 = 100
CAP_QI	Capital services, volume indices, 1995 = 100
VA_Q	Growth rate of value added volume (% per year)
VAConH	Contribution of hours worked to value added growth (percentage points)
VAConLC	Contribution of labour composition change to value added growth (percentage points)
VAConKIT	Contribution of ICT capital services to output growth (percentage points)
VAConKNIT	Contribution of non-ICT capital services to output growth (percentage points)
VAConTFP	Contribution of TFP to value added growth (percentage points)
TFPva_I	TFP (value added based) growth, 1995=100
να_ι	TTT (Talas aasaa sassa) giorrai, 1000–100
GO_Q	Growth rate of gross output volume (% per year)
COCopil	Contribution of intermediate inputs to output growth (percentage points)

GO_Q	Growth rate of gross output volume (% per year)
GOConII	Contribution of intermediate inputs to output growth (percentage points)
GOConIIE	Contribution of intermediate energy inputs to output growth (percentage points)
GOConIIM	Contribution of intermediate material inputs to output growth (percentage points)
GOConIIS	Contribution of intermediate services inputs to output growth (percentage points)
GOConH	Contribution of hours worked to output growth (percentage points)
GOConLC	Contribution of labour composition change to value added growth (percentage points)
GOConKIT	Contribution of ICT capital services to output growth (percentage points)
GOConKNIT	Contribution of non-ICT capital services to output growth (percentage points)
GOConTFP	Contribution of TFP to output growth (percentage points)

TFPgo\_I TFP (gross output based) growth, 1995=100

### Additional variables

CAPIT	ICT capital compensation (share in total capital compensation)*
CAPNIT	Non-ICT capital compensation (share in total capital compensation)*
CAPIT_QI	ICT capital services, volume indices, 1995 = 100
CAPNIT_QI	Non-ICT capital services, volume indices, 1995 = 100
CAPIT_QPH	ICT capital services per hour worked, 1995 reference
CAPNIT_QPH	Non-ICT capital services per hour worked, 1995 reference
LABHS	High-skilled labour compensation (share in total labour compensation)
LABMS	Medium-skilled labour compensation (share in total labour compensation)
LABLS	Low-skilled labour compensation (share in total labour compensation)
LAB_QPH	Labour services per hour worked, 1995 reference
H_HS	Hours worked by high-skilled persons engaged (share in total hours)
H_MS	Hours worked by medium-skilled persons engaged (share in total hours)
H_LS	Hours worked by low-skilled persons engaged (share in total hours)

Table 2 Co	ountries covered	
Code	Country	Period
	·	
AUS	Australia	1970-2005
AUT	Austria	1970-2005
BEL	Belgium	1970-2005
CYP	Cyprus	1995-2005
CZE	Czech Republic	1995-2005
DEW	West Germany	1970-1991
DNK	Denmark	1970-2005
ESP	Spain	1970-2005
EST	Estonia	1995-2005
FIN	Finland	1970-2005
FRA	France	1970-2005
GER	Germany	1970-2005
GRC	Greece	1970-2005
HUN	Hungary	1991-2005
IRL	Ireland	1970-2005
ITA	Italy	1970-2005
JPN	Japan	1970-2005
KOR	Korea	1970-2005
LVA	Latvia	1995-2005
LTU	Lithuania	1995-2005
LUX	Luxembourg	1970-2005
MLT	Malta	1995-2005
NLD	Netherlands	1970-2005
PRT	Portugal	1970-2005
POL	Poland	1995-2005
SVK	Slovak Republic	1995-2005
SVN	Slovenia	1995-2005
SWE	Sweden	1970-2005
UK	United Kindom	1970-2005
US2	United States (NAICS based)	1977-2005
USA	United States (SIC based)	1970-2005

	GA	LP70-95	LP 95-0
TOT TOTAL ECONOMY	Х	Х	Х
Atb Agriculture, Hunting, Forestry and Fishing	Х	Х	Х
AAGRICULTURE, HUNTING AND FORESTRY		Х	Х
1Agriculture		Χ	X
2Forestry		Х	X
BFISHING		Х	Х
C MINING AND QUARRYING	Х	Х	Х
0t12MINING AND QUARRYING OF ENERGY PRODUCING MATERIALS		Х	Х
10Mining of coal and lignite; extraction of peat			
11Extraction of crude petroleum and natural gas and services			
12Mining of uranium and thorium ores			
3t14MINING AND QUARRYING EXCEPT ENERGY PRODUCING MATERIALS		Х	Х
13Mining of metal ores			
14Other mining and quarrying			
D TOTAL MANUFACTURING	Х	Х	Х
5t16FOOD PRODUCTS, BEVERAGES AND TOBACCO	Х	Х	Х
15Food products and beverages			Х
16Tobacco products			Х
17t19TEXTILES, TEXTILE PRODUCTS, LEATHER AND FOOTWEAR	Х	X	X
17t18Textiles and textile products		Х	X
17Textiles			X
18Wearing Apparel, Dressing And Dying Of Fur		V	X
19Leather, leather products and footwear	v	X X	X <b>X</b>
20WOOD AND PRODUCTS OF WOOD AND CORK	X X		X
21 Pulp, PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING	Χ	X	X
21Pulp, paper and paper products		X	X
22Printing, publishing and reproduction 221Publishing		^	X
22xPrinting and reproduction			X
13t25CHEMICAL, RUBBER, PLASTICS AND FUEL PRODUCTS	Х	Х	X
23Coke, refined petroleum products and nuclear fuel	X	X	X
24Chemicals and chemical products	X	X	X
244Pharmaceuticals	,	Λ	X
24xChemicals excluding pharmaceuticals			X
25Rubber and plastics products	Х	Х	X
26OTHER NON-METALLIC MINERAL PRODUCTS	X	X	X
27t28BASIC METALS AND FABRICATED METAL PRODUCTS	X	X	X
27Basic metals		X	X
28Fabricated metal products		Х	Х
29MACHINERY, NEC	х	Х	Х
80t33ELECTRICAL AND OPTICAL EQUIPMENT	х	Х	Х
30Office, accounting and computing machinery		Χ	X
31t32Electrical engineering		Х	Х
31Electrical machinery and apparatus, nec		Χ	X
313Insulated wire			Х
31xOther electrical machinery and apparatus nec			X
32Radio, television and communication equipment		Х	Х
321Electronic valves and tubes			Х
322Telecommunication equipment			X
323Radio and television receivers			X
33Medical, precision and optical instruments		X	Χ
331t3Scientific instruments			X
334t5Other instruments			X
34t35TRANSPORT EQUIPMENT	Х	Х	Х
34Motor vehicles, trailers and semi-trailers		Χ	X
35Other transport equipment		Х	Х
351Building and repairing of ships and boats			
353Aircraft and spacecraft			
35xRailroad equipment and transport equipment nec			
6t37MANUFACTURING NEC; RECYCLING	Х	Х	Х
36Manufacturing nec			
37Recycling			

Table 3 Industries (continued)			
E ELECTRICITY, GAS AND WATER SUPPLY	Х	Х	Х
40ELECTRICITY AND GAS	^	^	^
40xElectricity supply			
402Gas supply			
41WATER SUPPLY			
F CONSTRUCTION	Х	Х	Х
G WHOLESALE AND RETAIL TRADE	X	X	X
50Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel	X	X	X
51Wholesale trade and commission trade, except of motor vehicles and motorcycles	X	X	X
52Retail trade, except of motor vehicles and motorcycles; repair of household goods	X	X	X
H HOTELS AND RESTAURANTS	X	X	X
I TRANSPORT AND STORAGE AND COMMUNICATION	X	X	X
60t63TRANSPORT AND STORAGE	X	X	X
	Α	X	X
60Inland transport		X	X
61Water transport			
62Air transport		X	X
63Supporting and auxiliary transport activities; activities of travel agencies	v	X	X
64 POST AND TELECOMMUNICATIONS	X	X	X
JtK FINANCE, INSURANCE, REAL ESTATE AND BUSINESS SERVICES	X	X	X
JFINANCIAL INTERMEDIATION	Х	Х	X
65Financial intermediation, except insurance and pension funding			X
66Insurance and pension funding, except compulsory social security			X
67Activities related to financial intermediation		.,	X
KREAL ESTATE, RENTING AND BUSINESS ACTIVITIES	X	X	X
70Real estate activities	X	X	X
71t74Renting of m&eq and other business activities	Х	X	Х
71Renting of machinery and equipment		X	Х
72Computer and related activities		X	Х
73Research and development		X	Х
74Other business activities		Х	Х
741t4Legal, technical and advertising			Х
745t8Other business activities, nec			Χ
LtQ COMMUNITY SOCIAL AND PERSONAL SERVICES	Х	Х	Х
LPUBLIC ADMIN AND DEFENCE; COMPULSORY SOCIAL SECURITY	Х	Х	Х
MEDUCATION	Х	Х	Х
NHEALTH AND SOCIAL WORK	Х	Х	Х
OOTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES	Х	Х	X
90Sewage and refuse disposal, sanitation and similar activities			X
91Activities of membership organizations nec			Х
92Recreational, cultural and sporting activities			Х
921t2Media activities			
923t7Other recreational activites			
93Other service activities			Х
PPRIVATE HOUSEHOLDS WITH EMPLOYED PERSONS	Х	Х	Х
QEXTRA-TERRITORIAL ORGANIZATIONS AND BODIES			

Notes: GA: Growth accounting (1970-2004)

LP70-95: Labour Productivity and Unit Labour Costs (1970-1995) LP95-04: Labour Productivity and Unit Labour Costs (1995-2004)

	tternative aggregation scheme
	TOTAL INDUSTRIES
MARKT	MARKET ECONOMY
ELECOM	ELECTRICAL MACHINERY, POST AND COMMUNICATION SERVICES
30t33	
64	Post and telecommunications
GOODS	GOODS PRODUCING, EXCLUDING ELECTRICAL MACHINERY
MexElec	TOTAL MANUFACTURING, EXCLUDING ELECTRICAL
Mcons	Consumer manufacturing
15t16	Food products, beverages and tobacco
17t19	Textiles, textile products, leather and footwear
36t37	Manufacturing nec; recycling
Minter	Intermediate manufacturing
20	Wood and products of wood and cork
21t22	Pulp, paper, paper products, printing and publishing
23	Coke, refined petroleum products and nuclear fuel
24	Chemicals and chemical products
25	Rubber and plastics products
26	Other non-metallic mineral products
27t28	Basic metals and fabricated metal products
Minves	Investment goods, excluding hightech
29	Machinery, nec
34t35	Transport equipment
OtherG	OTHER PRODUCTION
С	Mining and quarrying
E	Electricity, gas and water supply
F	Construction
AtB	Agriculture, hunting, forestry and fishing
MSERV	MARKET SERVICES, EXCLUDING POST AND TELECOMMUNICATIONS
DISTR	DISTRIBUTION
50t52	Trade
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade, except of motor vehicles and motorcycles; repair of household goods
60t63	Transport and storage
FINBU	FINANCE AND BUSINESS, EXCEPT REAL ESTATE
J	Financial intermediation
71t74	Renting of m&eq and other business activities
PERS	PERSONAL SERVICES
Н	Hotels and restaurants
0	Other community, social and personal services
Р	Private households with employed persons
NONMAR	NON-MARKET SERVICES
LtN	Public admin, education and health
L	Public admin and defence; compulsory social security
Μ	Education
N	Health and social work
70	Real estate activities