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# Employment in the Services Sector Has Increased by a Half Million Persons over Twenty Years

A drop in employment in agriculture and manufacturing (industry at large) was compensated by an increase of the number of working persons in activities of services. Compared to numerous developed countries of the EU, however, the shares of employment in certain services, especially in human health and social care activities, have still been falling behind in the Czech Republic.

#### A. Males working in the secondary sector outnumber females by almost three times

In the period of 1993 through 2013 the total number of persons having one (main) job was changing in certain cycles. Till 1996 total employment was slightly growing and reached its first peak (4 972 thousand persons) in that year. Then, as a result of economic hardship, the number of working persons was declining to reach its minimum (4 707 thousand persons) in 2004. Then a period of a rapid increase in employment by almost 300 thousand persons followed and this way employment surpassed the limit of five million persons in 2008. In the next years then there is a noticeable decrease in employment yet in 2013 economic recovery brought also an increase in employment to 4 937 thousand persons. Such a trend can be observed in the course of this year as well.

It was the structure of economic activities, in which working persons were employed, what underwent more important changes over the recent twenty years. The number of working persons in the primary sector of agriculture, forestry and fishing has dropped by 209 thousand since 1993 and the value of the employment index 2013/1993 in this activity was mere 41.7. The number of working persons in the secondary sector of manufacturing and construction decreased by 236 thousand and the employment index 2013/1993 was 88.7 of the initial number. Conversely, the number of working persons in the tertiary sector of services grew by over a half of million persons (by over one fifth).

## The number of persons having one (main) job in national economy sectors in the age group 15+ years

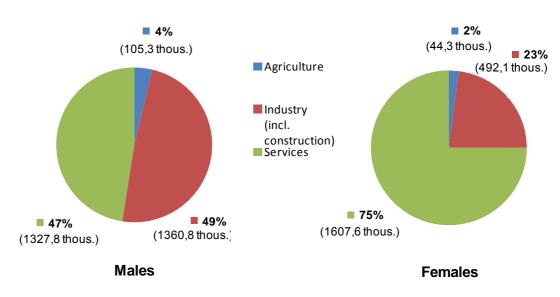
mousand perso								
The employed		1993	2013	Difference 2013/1993	Index (%) 2013/1993			
Total	CZ-NACE sections	4 873.5	4 937.1	63.5	101.3			
Agriculture	А	358.5	149.6	-208.9	41.7			
Manufacturing (incl. construction)	B to F	2 087.8	1 851.9	-235.9	88.7			
Services	G to U	2 427.3	2 935.4	508.1	120.9			

Source: CZSO, Labour Force Sample Survey

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If at the beginning of the 1990s the employment structures of males and of females were significantly different from each other, then the differences have become even greater over the next twenty years. This holds especially for the proportion of the secondary sector and tertiary one. While the total number of males working in manufacturing and/or construction decreased just little (by 35 thousand persons), the number of females working in the aforementioned sector dropped by 200 thousand persons (by almost 30%). This development is in contrast to a high increment of the number of working females in the tertiary sector by almost 290 thousand, and this increment was significantly higher the increment of males working in the services sector (increase by less than 220 thousand persons).



Shares of males and females in the age group 15+ years as percentage by economy sector in 2013

Source: CZSO, Labour Force Sample Survey

#### B. High increment in employment in numerous activities of the tertiary sector

Changes in the structure of employment are documented by developments in respective CZ-NACE sections of economic activities. Besides the primary sector, employment dropped in all sections of industry and in construction, except for water supply; sewerage, waste management and remediation activities, over the recent twenty years.

Conditions in services are completely different. In all other sections of the tertiary sector, in which a certain drop in employment was recorded solely for transportation and storage, the number of working persons increased, and in significant manner in many cases. In the section financial and insurance activities the number of working persons has been doubled. Employment in other sections as in real estate activities and professional, scientific and technical activities grew in a similar manner. The latter includes mostly legal and accounting



activities, architectural and engineering activities; technical testing and analysis, but also advertising and market research. The number of working persons in education and in public administration and defence, compulsory social security grew relatively the least.

		Thousand perso				
The employed		1993	2013	Difference 2013/1993	Index (%) 2013/1993	
Total		4 873.5	4 937.1	63.5	101.3	
CZ-NACE	sections					
activities						
Agriculture, forestry and fishing	А	358.5	149.6	-208.9	41.7	
Mining and quarrying	В	124.6	41.1	-83.5	33.0	
Manufacturing	С	1 405.1	1 285.3	-119.9	91.5	
Electricity, gas, steam and air conditioning supply Water supply; sewerage, waste management and	D	79.3	54.0	-25.4	68.0	
remediation activities	E	37.5	51.3	13.8	136.8	
Construction Wholesale and retail trade, repair of motor vehicles	F	441.2	420.3	-20.9	95.3	
and motorcycles	G	497.5	605.3	107.8	121.7	
Transportation and storage	Н	338.9	301.9	-37.1	89.1	
Accommodation and food service activities	I	148.9	178.5	29.6	119.9	
IT and other information services	J	93.6	139.8	46.2	149.4	
Financial and insurance activities	К	68.7	137.3	68.7	200.0	
Real estate activities	L	25.3	48.8	23.5	193.0	
Professional, scientific and technical activities	М	122.7	220.8	98.2	180.0	
Administrative and support service activities Public administration and defence, compulsory	Ν	84.9	129.4	44.5	152.4	
social security.	0	299.2	315.9	16.7	105.6	
Education	Р	316.5	322.6	6.1	101.9	
Human health and social work activities	Q	276.5	339.3	62.8	122.7	
Arts, entertainment and recreation	R	63.3	80.3	17.0	126.9	

#### Numbers of working persons of the age group 15+ years in CZ-NACE activities

Source: CZSO, Labour Force Sample Survey

#### C. Male and of female employments show different trends in numerous activities

There are great differences in male and female employments at the level of CZ-NACE sections. Some sections are at present dominated by males (secondary sector), conversely, females dominates in several sections of services. The numbers of males and females in these sections have undergone counter-current development. It can be documented in examples as follows.

In the largest section concerning the number of working persons C – manufacturing the number of females has dropped by over one quarter (by 160 thousand) in twenty years; the number of males has grown by 39 thousand on the contrary. If in 1993 the number of males exceeded the number of females 1.4 times, in the last year there were twice as much males as females working in the section. Here, the principal effect brought a drop in female employment in consumer industry.



The number of females decreased in all sections of industry, including construction, yet the number of males has increased not solely in manufacturing but also in water and waste management. A decline in male employment was recorded in the section mining and quarrying, which relates, first of all, to coal mining.

In the tertiary sector the absolutely highest growth in the number of males was recorded in IT and other information services (by 64 thousand, i.e. 2.5 times compared to that in 1993), yet the number of females working in this section, on the contrary, declined and in 2013 did not reach even one quarter of total employment in this CZ-NACE section.

Conversely, the number of males was reduced in tertiary sector activities as public administration and defence, compulsory social security, where the number of females significantly increased due to developments in armed forces. The decline in the number of males working in the large section of education is troublesome, while the number of females in the section has been further increased. The result is that males do not represent even a quarter of working persons in the section.

						Thous	and persons		
			Males			Females			
The employed		2013	Difference 2013/1993	Index 2013/1993	2013	Difference 2013/1993	Index 2013/1993		
Total		2 794.0	58.6	102.1	2143.0	4.9	100.2		
CZ-NACE	sections								
Agriculture, forestry and fishing	А	105.3	-125.4	45.6	44.3	-83.5	34.7		
Mining and quarrying	В	36.4	-67.6	35.0	4.7	-16.0	22.9		
Manufacturing	С	854.4	38.5	104.7	430.9	-158.3	73.1		
Electricity, gas, steam and air conditioning supply	D	43.1	-15.3	73.8	10.9	-10.1	51.8		
Water supply; sewerage, waste management and remediation activities	E	40.5	15.2	160.1	10.8	-1.4	88.5		
Construction	F	386.5	-6.0	98.5	33.8	-14.9	69.4		
Wholesale and retail trade, repair of motor vehicles and motorcycles	G	273.8	62.0	129.3	331.6	45.8	116.0		
Transportation and storage	Н	223.4	-8.7	96.2	78.5	-28.4	73.4		
Accommodation and food service activities	I	73.0	10.5	116.8	105.6	19.1	122.1		
IT and other information services	J	106.9	64.3	250.5	32.8	-18.1	64.5		
Financial and insurance activities	К	60.7	38.6	274.3	76.7	30.1	164.7		
Real estate activities	L	25.7	14.4	226.0	23.0	9.1	165.8		
Professional, scientific and technical activities	М	110.0	45.6	170.8	110.9	52.6	190.3		
Administrative and support service activities	Ν	71.9	20.1	138.8	57.5	24.4	173.7		

## Changes in the numbers of males and females working in respective economic activity sections in the age group 15+ years

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Public administration and defence, compulsory social security	0	168.0	-31.2	84.3	147.9	47.9	147.9
Education	Р	74.8	-10.7	87.5	247.8	16.8	107.3
Human health and social work activities	Q	67.3	9.1	115.7	271.9	53.6	124.6
Arts, entertainment and recreation	R	39.7	7.0	121.6	40.6	10.0	132.6

Source: CZSO, Labour Force Sample Survey

## D. The employment share in industry in the Czech Republic is the highest one of all countries of the EU28

The services sector has been growing in the whole European Union. Numerous countries, however, show prominent specific features in the employment structure by activity and the Czech Republic is no is not an exemption.

The decline in employment in the primary and secondary sectors over the recent twenty years was in the Czech Republic fully compensated by a high increment in the number of working persons in services. Nevertheless, the employment structure by activity in the Czech Republic differs from those of other Member States of the European Union. The share of the working persons in the secondary sector of industry and construction remains in the Czech Republic the highest of all of the European Union. The high share of secondary sector is also visible in the group of younger working persons up to 40 years of age. On the contrary, the share of tertiary sector of services in the Czech Republic is the third lowest followed by those of Romania and Poland. Yet Romania features an extremely high share of employment in agriculture (one quarter of all working persons), and Poland shows one of the highest shares of working persons in this sector as well.

In the EU28 there were 150 million persons aged 15-60 years working in the tertiary sector, i.e. over 70%. In the Czech Republic this share did not reach even 60%. In eleven countries employment in services was over 75%. Working persons in services can be most frequently found in the Nordic countries, including the Netherlands, but also in populated states as Spain, France, and United Kingdom.

		Secto	ors (thousand per	sons)	Share in total employment (%) <sup>1)</sup>			
Country	Total	Agriculture	Industry, incl. construction	Services	Agriculture	Industry, incl. construction	Services	
EU28	212 655.9	9 558.1	52 035.0	149 496.9	4.5	24.7	70.8	
Belgium	4 484.5	58.1	978.4	3 448.0	1.3	21.8	76.9	
Bulgaria	2 889.4	188.1	878.0	1 822.5	6.5	30.4	63.1	
Czech Republic	4 845.9	144.7	1 832.5	2 868.4	3.0	37.8	59.2	
Denmark	2 622.1	60.8	512.7	2 041.1	2.3	19.6	78.0	
Germany	39 537.8	526.0	11 092.3	27 919.7	1.3	28.1	70.6	
Estonia	596.6	25.5	183.9	386.4	4.3	30.8	64.8	
Ireland	1 828.0	86.9	337.5	1 402.2	4.8	18.5	76.7	

#### Working persons aged 15-64 years by economic activity sector in the EU28 in 2013

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Greece	3 459.0	458.5	543.1	2 457.4	12.9	15.3	69.0
Spain	17 001.6	722.1	3 369.0	12 910.7	4.2	19.8	75.9
France	25 509.9	764.9	5 336.6	18 850.8	3.1	21.4	75.5
Croatia	1 493.6	142.6	419.6	929.5	9.6	28.1	62.3
Italy	21 985.2	758.0	6 026.6	15 200.7	3.4	27.4	69.1
Cyprus	356.7	8.9	63.1	284.5	2.5	17.7	79.8
Latvia	866.5	67.5	209.4	588.1	7.8	24.2	67.9
Lithuania	1 264.3	105.8	323.4	829.2	8.4	25.6	65.6
Luxembourg	236.1	3.4	27.7	198.4	1.5	12.1	86.4
Hungary	3 906.3	190.1	1 172.1	2 543.9	4.9	30.0	65.1
Malta	172.6	2.1	37.4	132.2	1.2	21.7	76.6
Netherlands	8 184.4	153.0	1 244.1	6 116.9	2.0	16.6	81.4
Austria	4 098.8	171.7	1 074.3	2 852.8	4.2	26.2	69.6
Poland	15 313.3	1 784.1	4 720.5	8 799.1	11.7	30.8	57.5
Portugal	4 158.0	275.0	1 034.0	2 846.8	6.5	24.3	67.0
Romania	8 883.6	2 281.4	2 646.3	3 955.8	25.7	29.8	44.5
Slovenia	888.1	63.6	278.7	541.4	7.2	31.5	61.3
Slovakia	2 317.7	76.7	831.8	1 408.2	3.3	35.9	60.8
Finland	2 403.2	92.1	551.0	1 749.7	3.8	23.0	73.1
Sweden	4 554.3	81.3	879.1	3 567.6	1.8	19.4	78.8
United Kingdom	28 798.2	265.4	5 428.1	22 831.0	0.9	19.0	80.0

Source: Eurostat, Labour Force Survey; calculation of the CZSO

<sup>1)</sup> Shares of respective sectors are calculated on the basis of measured cases only.

Compared to the Czech Republic neighbouring countries conditions in Slovakia are much similar to the Czech Republic, in Poland agriculture has essentially more important share, Germany and Austria, however, show employment shares in services by 10-11 percentage points higher than in the Czech Republic. It is needless to mention that both Germany and Austria feature a clearly higher share of industry sector than the average of the European Union.

In the Czech Republic all sections of the secondary sector demonstrate higher shares than averages of the European Union. It is noticeable namely in the case of manufacturing, in which the share of all working persons aged 15-64 years attained 26.3% for the Czech Republic, the highest one of all countries of the EU28. The Union average was mere 15.6% of total employment in the Member States. The Czech Republic also showed significantly higher employment in construction (8.6% compared to 7.0% in the EU28).

Conditions in sections of the tertiary sector are different. Although the number of working persons in services in the Czech Republic has grown over twenty years by a half of million, shares of all sections, except transportation and storage, in the Czech Republic still remain lower than in the EU28. Characteristics of numerous professions in this section, however, are close to many jobs in industry or construction.

People in the Czech Republic work less often in wholesale and retail trade, repair of motor vehicles and motorcycles (CR 12.3% compared to 14.2% in the EU28). In a similar way people in the Czech Republic work less frequently in the sections of professional, scientific and

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technical activities and administrative and support service activities. The Czech Republic demonstrates also lower employment in education, which may to a certain extent relate to the fact, the share of the young of the age for preparations for occupation is lower due to population development.

The section of human health and social work activities shows the highest difference. The Czech Republic has been falling significantly behind the average of the EU28 (6.8% compared to 10.7%). The share of employment in health and social work activities in the Czech Republic falls namely behind countries as France, United Kingdom, Germany, and all the Nordic countries, including the Netherlands. It is just employment in this section, which makes respective countries different in an important manner by level of population health care and especially by level of care for dependent persons both of the youngest age and of the eldest population.

	Shares in total employment (%)						
The employed			EU28		CR		
		Total	Males	Female s	Total	Males	Females
Total		100.0	100.0	100.0	100.0	100.0	100.0
CZ-NACE	sections						
Agriculture, forestry and fishing	А	4.5	5.3	3.5	3.0	3.7	2.0
Mining and quarrying	В	0.4	0.6	0.1	0.8	1.3	0.2
Manufacturing Electricity, gas, steam and air	С	15.6	20.3	10.0	26.3	30.8	20.3
conditioning supply Water supply; sewerage, waste	D	0.8	1.1	0.4	1.1	1.5	0.5
management and remediation activities	E	0.8	1.2	0.3	1.0	1.5	0.5
Construction Wholesale and retail trade, repair of	F	7.0	11.6	1.5	8.6	13.9	1.6
motor vehicles and motorcycles	G	14.2	13.4	15.1	12.3	9.8	15.5
Transportation and storage Accommodation and food service	Н	5.2	7.5	2.5	6.2	8.1	3.7
activities	I	4.5	3.8	5.3	3.6	2.6	4.9
IT and other information services	J	2.9	3.7	2.0	2.9	3.9	1.5
Financial and insurance activities	K	3.0	2.7	3.4	2.8	2.2	3.6
Real estate activities Professional, scientific and technical	L	0.8	0.7	0.9	1.0	0.9	1.1
activities Administrative and support service	М	5.2	5.1	5.3	4.3	3.7	5.1
activities Public administration and defence,	Ν	4.0	3.8	4.3	2.6	2.5	2.6
compulsory social security.	0	7.0	7.0	7.1	6.4	6.0	7.0
Education	Р	7.5	3.9	11.7	6.5	2.6	11.6
Human health and social work activities	Q	10.7	4.2	18.3	6.8	2.4	12.6
Arts, entertainment and recreation	R	1.6	1.5	1.7	1.6	1.4	1.8

## Employment structures of working persons aged 15-64 years in the Czech Republic and in the EU28 by section in 2013

Source: Eurostat, Labour Force Survey; calculation of the CZSO

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In the Czech Republic it is especially sections of the secondary sector, in which mostly males work, that have important shares in the national economy. This holds, first of all, to manufacturing and construction (it is also interesting that not only the share of males but also the share of females working in manufacturing are the highest in all the EU28). Because of job characteristics males work more often in transportation and storage in the Czech Republic. On the contrary, males work less often in trade and the share of females working in trade is higher than the average for the European Union.

Employment structure of females in the Czech Republic in services does not differ much from that for the EU28, except for a substantially lower share of females in human health and social work activities. Conversely, males in the Czech Republic work less often than the Union average in numerous sections of services, besides trade these are also professional, scientific and technical activities, education, and human health and social work activities.

## E. Highest differences in between the Czech Republic and the EU28 are in industry and in human health and social work activities

It follows from statistical data that male employment in the Czech Republic is mostly dependent on development in manufacturing. Females also work in manufacturing more often than in other Member States. The fact is in contrast to a significantly under average numbers of both females and males in human health and especially social work activities in the Czech Republic.

Differences in shares of these two large sections are extremely great. While in the Czech Republic there are four times more persons working in manufacturing than in human health and social work activities, in the Netherlands, all Nordic states, United Kingdom, but also in France employment in human health and social work activities is even higher than that in manufacturing.

When taking a view at conditions in respective divisions (two-digit classes of the CZ-NACE) the division C29 - manufacture of motor vehicles, trailers and semi-trailers occupies an important rank in the Czech Republic. While in the EU28 employment in this division is 1.4% of all working persons, in the Czech Republic it is 4% of all working persons. The Czech Republic also features the highest share in employment in the division C25 - manufacture of fabricated metal products, except machinery and equipment, and there is an important employment in manufacture of machinery and equipment as well. On the contrary, in all three divisions of human health and social work activities employment is lower than in the EU28. This holds for both human health activities and residential care activities, yet namely for social work activities without accommodation. Just to keep readers informed one percent of total employment in the Czech Republic represents roughly 50 thousand working persons.

# Shares of selected divisions of manufacturing and human health and social work activities in total employment of the aged 15-64 years in respective countries of the EU28

	Percentage
Countring	NACE Rev. 2
Countries	sections-divisions

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	C-10	C-25	C-28	C-29	Q-86	Q-87	Q-88 <sup>1)</sup>
EU28	2.0	1.7	1.5	1.4	6.2	2.2	2.3
Belgium	2.2	1.2	1.0	1.0	6.5	3.6	3.9
Bulgaria	2.9	1.6	1.2	0.3	3.7	0.5	1.0
Czech Republic	2.1	3.6	2.3	4.0	4.8	1.4	0.7
Denmark	2.1	1.3	2.4	0.2	6.9	4.6	7.2
Germany	2.1	2.3	3.1	2.8	7.1	3.0	2.2
Estonia	2.1	2.3	0.4	0.7	4.3	1.0	0.3
Ireland	2.5	0.7	1.7	0.2	8.3	1.4	3.6
Greece	3.0	0.8	0.2	0.0	5.3	0.2	0.5
Spain	2.3	1.2	0.7	1.1	5.4	1.4	1.2
France	2.2	1.2	0.8	0.9	7.0	2.4	4.7
Croatia	3.4	1.7	0.7	0.3	5.3	0.9	0.6
Italy	1.8	2.4	2.1	1.0	5.7	1.2	1.0
Cyprus	2.3	1.3			3.8	0.4	0.4
Latvia	2.9	1.5	0.3		3.8	0.9	0.6
Lithuania	3.2	1.0	0.6		5.3	0.9	
Luxembourg	0.6	0.3	0.6		4.7	2.0	4.3
Hungary	2.9	1.9	1.3	2.7	4.3	1.2	1.3
Malta	1.3	0.6	0.2		6.0	2.1	1.0
Netherlands	1.5	1.0	0.9	0.3	7.0	5.1	4.2
Austria	1.6	2.0	2.0	1.0	6.6	1.9	1.3
Poland	3.1	1.9	0.8	1.5	4.5	0.7	0.8
Portugal	2.2	1.8	0.4	1.2	5.3	2.0	1.4
Romania	2.1	1.4	0.7	1.8	3.5	0.4	0.4
Slovenia	1.7	3.5	1.5	2.1	4.2	1.2	0.7
Slovakia	2.1	2.7	2.3	3.9	4.4	1.2	1.4
Finland	1.4	1.8	2.0	0.3	7.5	3.6	5.2
Sweden	0.9	1.6	1.3	1.2	6.5	4.8	4.0
United Kingdom	1.1	0.8	0.8	0.7	7.3	3.0	3.2

Source: Eurostat, Labour Force Survey; CZSO calculation

<sup>1)</sup> Explanatory notes:

C-10 Manufacture of food products

C-25 Manufacture of fabricated metal products, except machinery and equipment

C-28 Manufacture of machinery and equipment n.e.c.

C-29 Manufacture of motor vehicles, trailers and semi-trailers

Q-86 Human health activities

Q-87 Residential care activities

Q-88 Social work activities without accommodation

The share of working persons in human health and social work activities is affected by demographic developments in respective countries, including life expectancy, family relations, and, of course, by economic and social conditions in respective countries. Anyway, it is an important factor affecting intergeneration relations in the society in an essential manner.



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