

Economic approach to the analysis of the labour market

1. Individuation of relevant trends in labour market performance
2. Definition of theoretical models focussing on the relevant variables and their causal relations
3. Testing of theoretical models using econometric methods
4. If models are validated, use their predictive capacity to simulate likely effects of economic policies and future trends and to evaluate effectiveness of policies

ELM- Part 1 Labour market trends in the EU

References

European Commission (2005) Employment in Europe 2005, Brussels: executive summary and chapter 1
http://europa.eu.int/comm/employment_social/employment_analysis/employ_2005_en.htm

INDICATORS OF LABOUR MARKET PERFORMANCE: STOCKS AND LEVELS

- PARTICIPATION OR ACTIVITY RATE (AR) = labour force/working age population. Share of working age population participating of the labour market either because employed or searching for a job
- EMPLOYMENT RATE (ER) = employed/working age population
- UNEMPLOYMENT RATE (UR) = unemployed/labour force

**INDICATORS OF LABOUR MARKET
PERFORMANCE: FLOWS**

- Flows in and out of unemployment consent to measure average unemployment duration: $D_u = U/I$
- Flows in and out of employment consent to measure labour mobility and job and worker turnover
- Flows in and out of the labour force consent to understand labour participation and its relation to the economic cycle

**INDICATORS OF LABOUR MARKET
PERFORMANCE: WAGES and
PRODUCTIVITY**

- **Wages** measure the price of labour services.
- **Labour costs** are the costs incurred by firms when employing labour: they include hourly wages, fringe benefits, social security contributions and training, recruiting, firing costs.
- **Labour productivity** measures the contribution of labour to output, given the other production factors
- In economics the relevant variables are the **real wage** (W/P), **unit labour costs** (LC/Q), **labour marginal productivity** (dQ/dL) and **average productivity** (Q/L)

2004	EU25	EU15	US
Population (millions)	457	383	293
GDP (in 1000 million PPS current prices)	10213	9316	10164
Employment rate	63.3	64.7	71.2
Participation rate	69.7	70.6	75.4
Unemployment rate	9.0	8.1	5.5

Economic trends EU and US (annual average percentage changes)

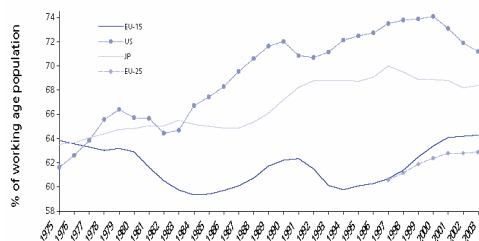
	1991-1996		1997-2002	
	EU15	US	EU15	US
GDP	1.5	3.2	2.4	3.0
Employment	-0.3	1.7	1.4	1.0
Hourly productivity	2.2	1.4	1.5	2.2

Source: Tabellini-Wyplosz from Kok report of the Employment task force, nov.2003

Employment trends in the EU (1)

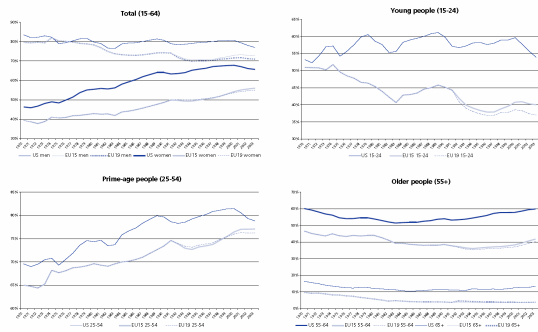
- **Employment Rate (ER) at 63,3% lower than in other non EC countries, but increasing:** + 15 million jobs (+8,2%) between 1995 and 2004, increases especially among older workers and women.
- **However persisting segmentation of labour markets:** ER are 70,9% for men, but only 55,7% for women, 36,8% for young people (15-24) and 41,0% for older people (55-64)
- **Large territorial differences across and within countries:** ER from 75,7% in Denmark to 57,6% in Italy and 51,7% in Poland
- **Increasing share of temporary and part time employment** (14% and 18% of total employment respectively) especially among women, young and older workers

Chart 2 - Employment rates in the EU, US and Japan, 1975-2003



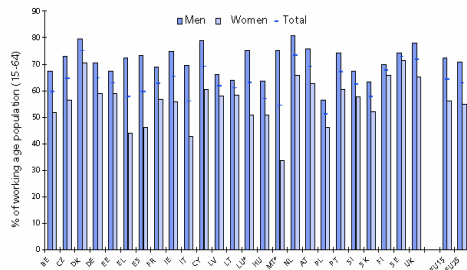
Source: DG EMPL calculation based on long-term trends in employment and population, Commission Services

Chart 56 - Evolution of employment rates in the EU and the US by gender and age group, 1970-2003



Source: OECD, Labour market statistics database, Table 2
Notes: Data might deviate slightly from those in charts 52 and 53 due to differences in the underlying definitions and data sources. See also footnote 12.

Chart 17 - Employment rate by gender, 2003

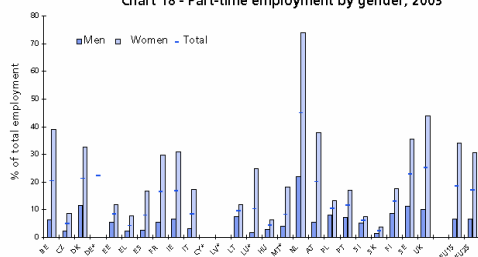


Source: Eurostat, QLFD. Note: * Data for LU and MT refer to 2002

Employment trends in the EU (2)

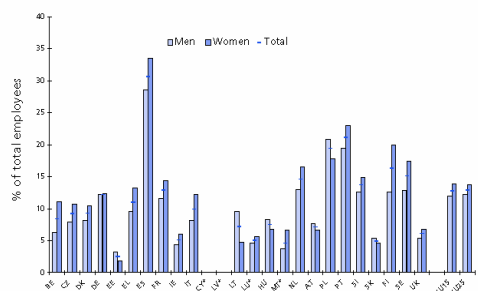
- Increase in employment was in part due to increase in non-standard employment especially in the 1997-2000 (slow down in the 2000-2004).
- In 2004 part time reached in EU25 17,7% of total (19,4% EU15), temporary work 13,7% (13,6%) and self-employment 15,9% (14,9%).
- Part-time and temporary jobs are mainly taken up by women, young and older people:
 - One third of women are employed part-time and 14,3% with temporary jobs
 - 23% of young and 21% of older people work part-time; 38% of young people with temporary contracts
 - Transition rates from temporary to permanent contracts are higher for prime-age men and the more skilled or educated.

Chart 18 - Part-time employment by gender, 2003



Source: Eurostat, QLFD. Note: * No recent data for CY and LV. No gender breakdown for GE. Data for LU and MT refers to 2002.

Chart 21 - Fixed-term employment by gender, 2003



Source: Eurostat, QLFD. Note: * No recent data for CY and LV. Data for LU and MT refers to 2002

Table 8 - Relative employment changes 1997-2000 and 2000-2003 by age group, gender and type of employment

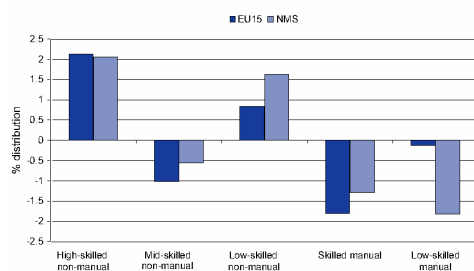
	Relative change in employment between 1997 and 2000 (as % of 1997 employment level)	Relative change in employment between 2000 and 2003 (as % of 2000 employment level)
By age group		
15-24	5.7	-0.2
25-54	6.0	2.0
55-64	4.9	13.9
65+	3.0	12.1
By gender		
Women	7.4	4.9
Men	4.7	1.7
By permanent or fixed-term employment		
Permanent	5.5	4.4
Fixed-term	18.8	-2.7
By employment status		
Employee	7.2	3.2
Self Employed	0.1	3.6
Total		
	5.8	3.1

Source: Eurostat, LFS; Note: estimates based on LFS, spring results.

Employment trends in the EU (3)

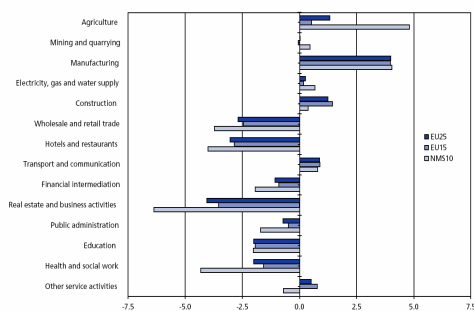
- Increase in the share of *non manual occupations* high and low skilled, in the last 6 years.
- *High skilled occupations*, accounted for over 60% of jobs created between 1995 and 2000, and their share on working age population increased from 15% to 18,5% in 2003 (EU25).
- *The employment rate of those who completed tertiary education* was 82,5% relative to 68,4% for those with upper secondary and only 46,6% for those with less than upper secondary (EU25). The quality of jobs is better for the higher educated.
- 60% of jobs created between 1995 and 2000 were in *health care, education and social services* (4 million jobs), *business services* (2,5 million jobs) and *the computer and related sector* (1 million jobs).
- However still differences in the employment structure relative to the US. In the EU less role of services and of high skilled employment.

Chart 99 - Comparative change in the structure of skills (1997-2003)

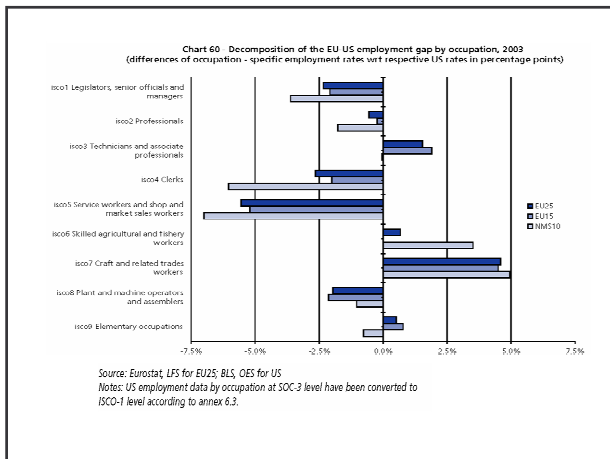


Source: Vienna Institute for International Studies (WIIW).
Note: NMS excluding CY and MT.

Chart 59 - Decomposition of the EU-US employment gap by sector (NACE-1, 2003)
(differences of sector-specific employment rates wrt respective US rates in percentage points)

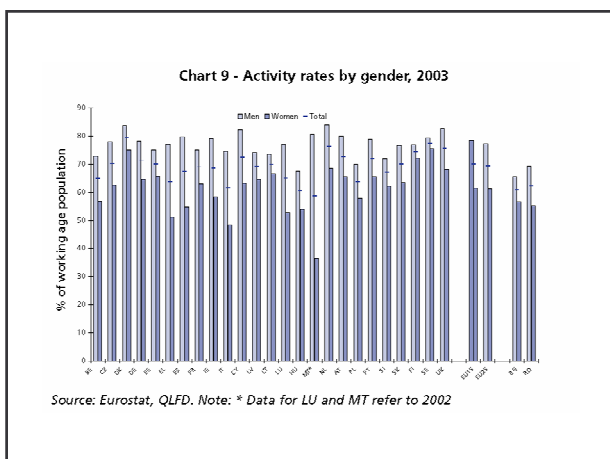


Source: Eurostat, LFS for EU25; BLS, OES for US
Notes: US employment data by sector at SIC-3 or NAICS-3 level have been converted to NACE-1 level according to annex 6.2.



Labour market participation

- Positive employment trends have activated *participation*, among women and older people.
- Overall AR rose from 67.7% in 1997 to 69.7% in 2004 (70.6% in EU15). But still much lower than in the US and still some 92 million people in working age were inactive in 2004
- In the EU25, women participation rates increased from 58.1% in 1997 to 62% in 2004 (62.5% EU15). Participation rate of older people from 39,1% in 1995 to 44,6% in 2003 (EU15, 43,1% EU25).
- Participation rates for young people stable at 47%
- Inactivity especially large among the low skilled and women; over half of the inactive are low skilled. One third are young people in education/training, 1/5 is on retirement, 16% is inactive for family or personal responsibilities, 13% for illness/disability and 4,5% due to discouragement effects.
- Strong correlation between inactivity and unemployment (female participation rate related positively to male unemployment rate and negatively with female unemployment rate)



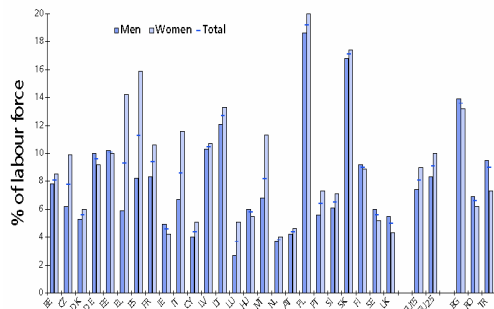
Unemployment

- Unemployment is slowly falling, but still more than 19,4 million individuals were unemployed in 2004, with the *unemployment rate at 9.0%* in the EU25 .
 - “OLD” PROBLEMS:
- UR for adult men is relatively low (8,1%) and stable over time, while higher and cyclical in the case of **women (10.2%)**, **young people (18.7%)** and **the low educated (12.2%** relative to 4.9% for the high educated) and in **some territorial areas**.
- high unemployment is usually associated with **long-term unemployment**, suggesting that unemployment and labour market/social exclusion might be positively correlated.
- Long-term unemployment is a primary concern for women, older workers and the low-educated.

and “NEW” PROBLEMS:

- Ageing of EU population** → reforms of pensions and welfare systems
Impact on older workers: incentives to retire and low activity rates, but need to retain and retrain → there might be **increasing U rates for the elderly** (and present low levels of participation might hide it)
- (Skill-biased) technological progress → **changing skill demand and skill gaps** → **higher risk of unemployment for the low-educated**
- Increasing net migration flows**: do migrants substitute or complement native workers? No clear pattern between national unemployment rates and incidence of foreign population.

Chart 5 - Unemployment rates by gender, 2003



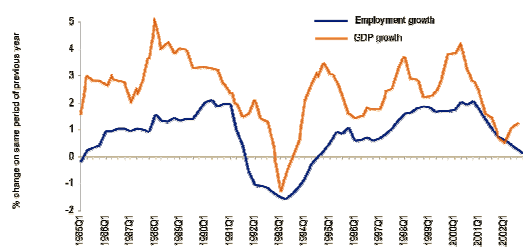
- Since 1995 employment growth higher than GDP growth. Hence slow down of productivity growth in all economic sectors.
- Real wage moderation has characterised the EU since 1995, wage differentials and earning inequalities have been increasing in some countries (UK, Poland, Denmark especially) and within some countries.
- However non wage labour costs (taxation and social contributions to finance welfare provisions) still high share of labour costs (from 30% in Swe, Ita, Fra, Hung, Rom, to 15% in Dk and Ire)
- There is evidence of a greater increase in nominal and real wages in accession countries, which shows a tendency to convergence, even if accession countries start from wage levels much lower than EU countries.

Table 3 - Average annual growth rates in employment related indicators (in % terms)

	1991-1993	1996-2000	2000-2002
Employment	-1.42	1.59	0.84
Net Annual Hours Worked	-0.57	-0.37	-0.52
GDP	0.44	2.96	1.36
GDP/employed person	2.05	1.4	0.58
GDP/hour worked	2.49	1.75	1.02

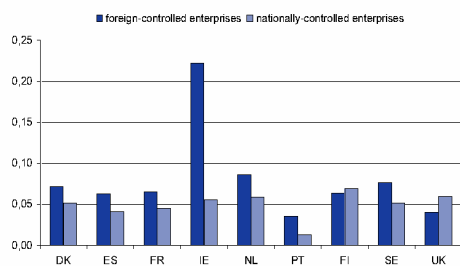
Source: DG EMPL, calculations based on data from AMECO database, Commission Services and Eurostat.

Chart 7- EU15 GDP and Employment Growth, 1985-2002



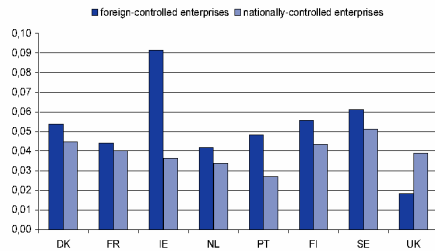
Source: Eurostat and OECD

Chart 92 - Labour productivity in manufacturing



Source: Eurostat, NACE C-F. Data for other countries are not available.

Labour productivity in services



Source: Eurostat, NACE G-I, K. (data refer to 2000; the unit is in million €, the apparent labour productivity reported here is the average value-added per enterprise in units divided by the number of employed persons per enterprise in million €; data for ES is not available)

Main challenges and future trends in labour markets

- Labour market institutions will have to adapt to:
 - Stronger competitive pressures (globalisation and enlargement)
 - Higher regional differences due to enlargement: in NMS GDP per person is lower, but growth rate higher than in OMS (on average 4% relative to 2,5% of EU15), higher unemployment and share of employment in agriculture, lower wages (4 euros per hour relative to 22); large territorial differentials (urban vs rural)
 - Less shock absorbers at national and local level (EMU) and increase in labour mobility and age moderation.
 - Ageing population, which asks for higher participation rates and labour mobility.
 - Increasing use of atypical contracts and occupational mobility: more people will have to adapt to job changes during their working life. Need to be able to acquire skills during working life.

Table 14 - The impact on the indicators of enlargement from 2004 to 2006, based on 2000 data

	2004	2005	2006	As % of EU15	2004	2005	2006
Total Population (millions, as at 1.1.2005)	318.5	319.3	320	100	119.7	120.7	121.7
GDP (1000 million euros)	9 161	9 406	9 560	100	4.7	104.7	106.7
GDP (1000 million PPP)	9 460	9 605	9 699	100	6.1	104.1	106.1
GDP per capita (1000 euros)	28	29.5	29.9	100	39.9	97.6	99.6
GDP per capita (1000 PPP)	34	35.1	35.5	100	46.4	99.2	101.2
GDP per person in employment (1000 euros)	30.1	31.4	31.8	100	39.6	95	97
GDP per person in employment (1000 PPP)	36.1	37.4	37.8	100	51.5	90.7	92.7
Employment (1000 persons)	101 698	102 628	103 048	100	117.6	117.6	117.6
Unemployment rate (10.64 %)	200 000	200 000	200 000	100	201.1	201.1	201.1
Unemployment rate (10.64 %)	64.5	64.5	64.5	100	97	97.6	97.6
Unemployment rate (%)	7.7	7.8	7.8	100	102.2	102.2	102.2

Source: Eurostat, demographic statistics, LFR and harmonised census on unemployment, Commission Services, AMECO database for GDP indicators based on current prices

Table 19: Comparison of employment rate projections for the EU14 and the EU20 in the "medium-term" scenario (as percentage)

	EU14 2002	EU20 2003	EU14 2005	EU20 2005	EU14 2010	EU20 2010
Overall employment rate	64.3	62.9	66.2	64.9	67.8	66.5
Employment rate for women	55.9	54.9	58.4	57.5	61.5	60.5
Employment rate for older workers (aged 55 to 64)	41.6	40.1	43.5	41.9	45.8	43.8

Table 20 - Potential for reaching the overall employment rate target across countries (of 70.0% in 2010) in the "medium-term" scenario and pace of progress

Pace/Likelihood	Likely ^{a)}	Possibly ^{b)}	Unlikely ^{c)}
Rapid ^{d)} countries count	NL, FI, CY 3	IE 1	EL, ES 2
Close to average ^{e)} countries count	SE 1	0	BE, HU, SK 3
Slow ^{f)} countries count	DK, DE, PT, UK, AT 5	0	FR, IT, CZ, PO, SL 5

a) Target achieved by date.

b) Projection lower by less than 1 percentage point than the target.

c) Projection lower by more than 1 percentage point than the target.

d) Rapid progress towards the target (i.e. in the 1990-2010 period, the average annual growth rate of the employment rate is expected to increase faster than the average for the EU14);

e) "Close to average" (i.e. in the 1990-2010 period, the average annual growth rate for the employment rate is expected to increase between the average for the EU14 and 2/3 of it;

f) Slow progress towards the target, (i.e. in the 1990-2010 period, the average annual growth rate for the employment rate is expected to increase below 2/3 of the employment rate average for the EU14).

Current institutional framework in the EU/1

- Higher public intervention to regulate labour and product markets than in non EC contries
- Higher relevance of collective bargaining in wage determination
- Higher employment protection legislation
- Large role of welfare state with high expenditures in social and labour policies funded largely through social security contributions and taxation which increase non wage labour costs

Current institutional framework /2

Three main regulatory and welfare regimes:

- the **liberal regime (UK)**: high labour and wage flexibility, universal public support only against "bad risks". Decentralized and uncoordinated industrial relations at the firm/plant level. Increasing attention to ALMP and "work to welfare" model.
- the **conservative regime of the continental and southern** European countries: high employment protection for "core workers" (adult males in the industrial sector), low and differentiated support during unemployment (especially in Southern Europe), little attention to active policies relative to income support.
- the **social-democratic** regime of the Scandinavian countries: low employment protection and high labour flexibility, but generous support during job search and labour market transitions (through activation policies and unemployment benefits). Wage-setting and regulation of working conditions left to centralized bargaining between unions and employers' associations

The "right set" of institutions

- Income policies
- Mobility friendly institutions and policies (such as Students and workers mobility, removal of barriers to the recognition of qualifications, information and transparency on EU job opportunities)
- Activation measures (to increase participation and employment rates, especially for women and older people)
- Immigration policies
- Investment in human capital (training and education):
- Dealing with the informal sector
