

UNDEREMPLOYMENT

Concepts and definitions
Survey questions and flow charts
Implementation issues
Derived variables and indicators

Department of Statistics
International Labour Office

WHY DO WE NEED STATISTICS ON UNDEREMPLOYMENT ?

- ◉ Unemployment statistics are insufficient to explain the labour market
 - Lack of unemployment relief programmes
 - Persons in self-employment jobs
 - Traditional work arrangements
 - Structural adjustments
 - Reduction in demand for labour
- ◉ Need for sub-classification of employed persons
 - Persons in partial lack of work
 - Persons in inadequate forms of work

Department of Statistics
International Labour Office

THE POLICY BASIS

- ◉ Employment policy Convention (n. 122) and recommendations (n.122, 169): promotion of “full, productive and freely chosen employment”

Work for all who are available for and seeking work

Work which is as productive as possible

Work freely chosen by workers in accordance with skills and endowments for a job which is well suited

Need for statistics on employment, unemployment and underemployment

Department of Statistics
International Labour Office

3

WHAT IS UNDEREMPLOYMENT ?

- ◉ Reflects the underutilisation of the productive capacity of persons in employment
- ◉ Is part of and consistent with the labour force framework

Uses “labour supply” approach: based on actual capacities and desires of workers, as expressed by workers

Not based on theoretical models about the potential capacities and desires of workers

- ◉ Can take several forms

Time-related

Skill-related

Income-related

Department of Statistics
International Labour Office

4

UNDEREMPLOYMENT IN THE INTERNATIONAL CONFERENCE OF LABOUR STATISTICIANS

- ◉ Together with employment and unemployment
 - 6th ICLS (1947)
 - 8th ICLS (1954)
 - 13th ICLS (1982)
 - 19th ICLS (2013) *
- ◉ As a subject of its own
 - 9th ICLS (1957)
 - 11th ICLS (1966)
 - 16th ICLS (1998)
 - 18th ICLS (2008) – labour underutilization

CURRENT INTERNATIONAL STANDARDS (16TH ICLS)

- ◉ General definitions
 - Underemployment
 - Time-related underemployment
 - Inadequate employment (skills, income, etc.)
- ◉ Operational definition of time-related underemployment
- ◉ Analytical groups
- ◉ Indicators
- ◉ Cross-classifications

GENERAL DEFINITION OF UNDEREMPLOYMENT

◉ Underemployment reflects ...

Underutilisation of the productive capacity of the employed population

In relation to an **alternative employment situation**

In which persons are **willing** and **able** to engage

GENERAL DEFINITION OF TIME RELATED UNDEREMPLOYMENT

◉ Time-related underemployment exists

When the hours of work of an employed person are insufficient

in relation to an **alternative employment situation**

in which the person is **willing** and **available** to engage

GENERAL DEFINITION OF INADEQUATE EMPLOYMENT SITUATIONS

◉ Inadequate employment exists

When capacities and well being of workers are affected

In relation to an **alternative employment situation**

In areas such as: mismatch of occupational skills, income, excessive hours, precarious job, etc.

UNDEREMPLOYMENT IN THE LABOUR FORCE FRAMEWORK

	willing and Able	not willing or not able
Working	UNDEREMPLOYED	Other employed
not working	Unemployed	Inactive

OPERATIONAL DEFINITION OF TIME-RELATED UNDEREMPLOYMENT

Persons in time-related underemployment comprise all persons in employment who, during the reference period used to define employment,

1. were willing to work additional hours,
2. available to work additional hours,
3. and whose hours actually worked in all jobs during the reference period were below a threshold to be chosen according to national circumstances.

WILLINGNESS TO WORK ADDITIONAL HOURS

◉ When a persons wants ...

Another job (or jobs) in addition to the current job(s) to increase the total hours of work

To replace any of the current jobs with another job (or jobs) with increased hours of work

To increase the hours of work in any of the current jobs

Or a combination of these

◉ Persons who actively sought to work additional hours should be separately identified

AVAILABILITY TO WORK ADDITIONAL HOURS

- ◉ When a person ...
 - Is ready to work additional hours
 - Within a specified subsequent period
 - Similar to the period used to measure unemployment
 - Given opportunities to work additional hours

HOURS ACTUALLY WORKED BELOW THRESHOLD

- ◉ Hours actually worked (18th ICLS)
 - In all jobs
 - Consistent with labour force framework
- ◉ Threshold
 - Boundary between full-time and part-time work
 - Median values or averages of hours actually worked
 - Norms for hours of work as specified in relevant legislation, collective agreements on working time arrangements or labour practices in countries
- ◉ For international reporting, this criterion can be dropped

RELATED TOPICS AND ANALYTICAL GROUPS

- ◉ Usual and recent time-related underemployment

Persons who usually work part-time

Persons who worked few hours only during the reference period

- ◉ Volume of time-related underemployment

Additional time that persons in time-related underemployment are willing and available to work during the reference period, up to the chosen threshold

Expressed in units of working days, half-days or hours

- ◉ Duration of time-related underemployment

Number of days/weeks/months/years that persons have been continuously in time-related underemployment.

Number of days/weeks of time-related underemployment over the year

- ◉ Reasons for multiple job holding

To indicate whether time-related underemployment is the cause of multiple job holding

INADEQUATE EMPLOYMENT SITUATIONS

- ◉ **Willing to**
 - Change their current work situation
 - Make changes to their work activities and/or environment
- ◉ **For specific reasons:**
 - Inadequate use and mismatch of occupational skills
 - Inadequate income in current job(s)
 - Excessive hours of work
 - Precarious job(s)
 - Inadequate social services
 - Travel to work difficulties
 - Variable, arbitrary or inconvenient work schedules
- ◉ **Available to change their current work situation**

PARTICULAR TYPES OF INADEQUATE EMPLOYMENT

- ◉ **Skill-related inadequate employment**
 - Wanting or seeking to change their current work situation
 - To use current occupational skills more fully
 - Available to do so
- ◉ **Income-related inadequate employment**
 - Wanting or seeking to change their current work situation
 - To increase income (by increasing the levels of organisation of work or productivity, improving tools and equipment and training or infrastructure)
 - Available to do so
 - Threshold is optional
- ◉ **Inadequate employment related to excessive hours**
 - Wanting or seeking to work less hours than currently (in the same job or in another job)
 - With corresponding reduction of income
 - Threshold is optional

LIMITATIONS OF CURRENT STANDARDS

◉ Ambiguous guidelines

Can be measured on the basis of **wanting** an alternative job situation or of **seeking** an alternative job situation

Hours benchmark for time-related underemployment is not specific enough

◉ Subjective measurement

Measures will depend on the opinion of persons regarding wanting a different job, not on “actions”, such as **seeking** another job

◉ May not be relevant

Only persons who work less than the benchmark on a regular basis are able to voice their preference for additional hours

LFS SURVEY QUESTIONS TIME-RELATED UNDEREMPLOYMENT

Q50. Thinking of each day last week, how many hours did you actually work...

	a. Main job/act.	b. Other job(s)/act.(s)	c. Total all jobs/activities
Monday?			
Tuesday?			
Wednesday?			
Thursday?			
Friday?			
Saturday?			
Sunday?			
Total			

To measure total hours actually worked in all jobs in reference week

Q51. Last week, would you have liked to work more hours than you actually worked provided the extra hours had been paid?

- Yes 1 ☐
- No 2 ☐

To measure desire to work more hours than actually worked in reference week

Q52. How many additional hours could you have worked last week?

- Number of additional hours

To measure volume of time-related underemployment

Q53. How would you have liked to increase your working hours?

- Increase number of hours in current job(s)/activity(ies) 1 ☐
- Take an additional job/activity 2 ☐
- Replace current job(s)/activity(ies) with another job/activity with more hours 3 ☐

For analytical purposes

LFS SURVEY QUESTIONS

INADEQUATE EMPLOYMENT

Q54. Would you like to change your current employment situation?

- Yes
- No

To measure desire to change their employment situation

Q55. What is the main reason why you want to change your current employment situation?

- To work more hours paid at your current rate
- To have a higher pay per hour **Income-related**
- Fear or certainty of losing the present job
- Present job is temporary or occasional
- To use qualifications/skills more adequately **Skills-related**
- To have more convenient working time, shorter commuting time
- To improve working conditions
- To work less hours with a corresponding reduction in pay **Excessive hours**
- Other reason (specify):

To identify the main form of inadequate employment

- Response categories in Q55 above can include other important reasons as per country circumstances

ADDITIONAL SURVEY QUESTIONS

FOR ANALYTICAL PURPOSES

Q56. During the last four weeks, did you look for another job/activity to replace your current one(s)?

- Yes
- No

To distinguish between those seeking/not seeking another job (inadequate employment)

Q57. During the last four weeks, did you look for extra work in addition to your current job(s)/activity(ies)?

- Yes
- No

To distinguish between those seeking/not seeking additional hours of work (time-related underempl.)

Additional questions on method of job search could also be added if considered relevant

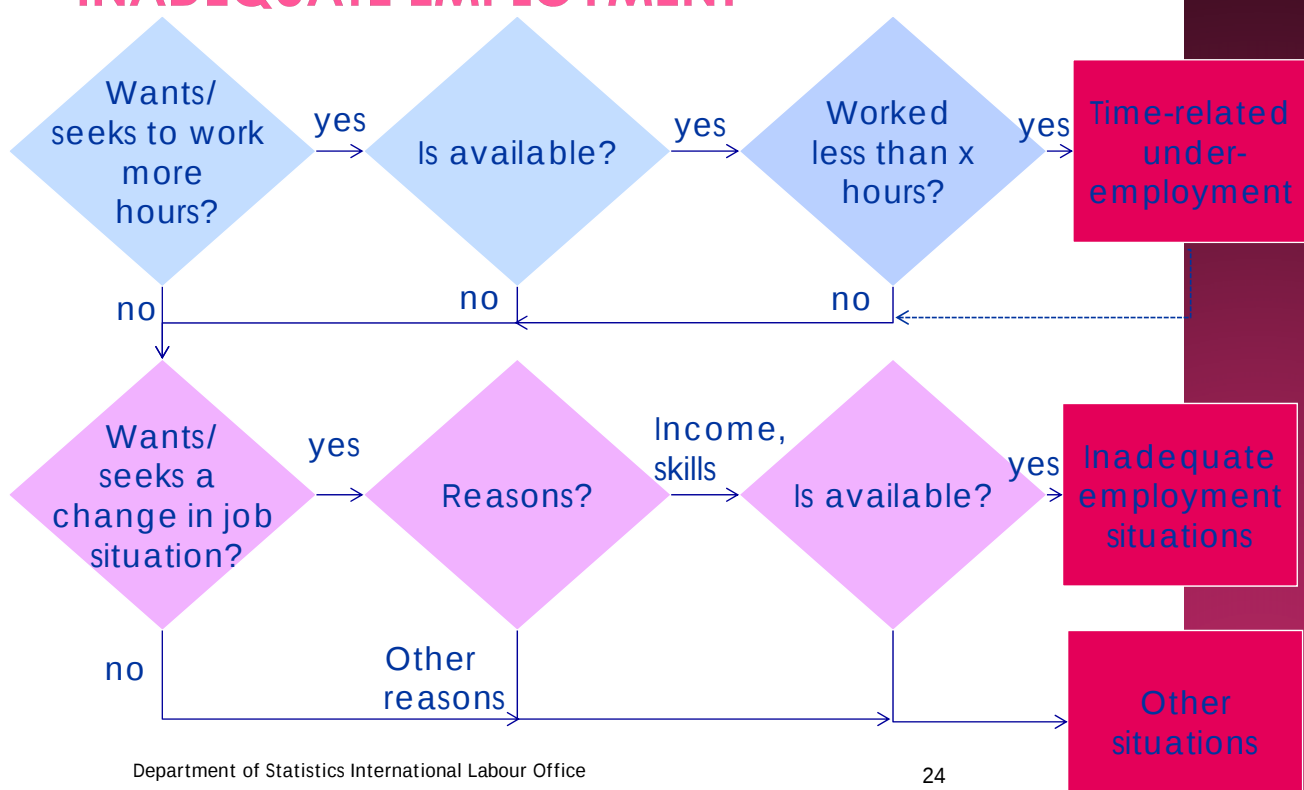
IMPLEMENTATION ISSUES

TIPS FOR GOOD QUESTIONNAIRE DESIGN

- ◉ The questions should be asked of all persons employed in the reference week
- ◉ The questions are best placed after the sequence of questions on the characteristics of main and secondary jobs, within the sequence of questions on usual hours per week and actual hours worked in the reference week at all jobs (as time-related underemployment refers to all jobs)
- ◉ An additional question on search for work can be included for analytical purposes. Such question should refer to the same reference period as used for unemployment

DERIVED VARIABLES

TIME-RELATED UNDEREMPLOYMENT AND INADEQUATE EMPLOYMENT



INDICATORS: TIME-RELATED UNDEREMPLOYMENT

Rate of time-related underemployment

Ratio between persons in time-related underemployment and persons in employment, expressed as a percentage

$$\text{Rate of time-related underemployment} = \frac{\text{Persons in time-related underemployment}}{\text{Persons in employment}} \times 100$$

INDICATORS: TIME-RELATED UNDEREMPLOYMENT

Rate of volume of time-related underemployment

Ratio between the volume of time-related underemployment and the potential time for work of persons in employment, expressed as a percentage

$$\text{Rate of volume of time-related underemployment} = \frac{\text{Volume of time-related underemployment}}{\text{Potential time for work of persons employed}} \times 100$$

Potential time for work =
(hours actually worked of
all employed persons +
volume of time-related
underemployment)

INDICATORS: OTHER FORMS OF INADEQUATE EMPLOYMENT

Persons in “type of inadequate employment” situation, expressed as a percentage of the employed

$$\text{Share of the employed in "..." inadequate employment} = \frac{\text{Persons in "..." inadequate employment}}{\text{Persons in employment}} \times 100$$

“...” = skills-related, income-related, excessive hours, etc

Department of Statistics
International Labour Office 27

Table 37. Persons in time-related underemployment by age group, the way they wanted to work more hours, sex and area, year 2008

Sex, area, way of working more hours	Total	Age group					
		15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Total	86,7	6,9	16,9	26,3	25,9	9,6	0,0
Increasing the number of hours worked in current job(s)	28,0	1,5	5,6	8,7	7,5	4,1	0,0
Having an additional job	32,3	2,6	6,0	9,8	10,1	3,4	0,0
Replacing the current job(s) by another with more hours	26,5	2,9	5,3	7,8	8,3	2,1	0,0
Men	45,2	4,1	8,6	12,7	13,1	6,0	0,0
Increasing the number of hours worked in current job(s)	12,8	0,0	2,3	3,6	3,2	2,6	0,0
Having an additional job	17,3	1,5	3,3	4,7	5,6	1,9	0,0
Replacing the current job(s) by another with more hours	15,0	1,9	3,0	4,5	4,3	0,0	-
Women	41,5	2,8	8,3	13,6	12,8	3,6	0,0
Increasing the number of hours worked in current job(s)	15,2	0,0	3,3	5,1	4,3	1,5	0,0
Having an additional job	15,0	0,0	2,8	5,1	4,5	1,5	0,0
Replacing the current job(s) by another with more hours	11,4	0,0	2,2	3,4	4,0	0,0	0,0

Table 39. Volume of time-related underemployment by age group, economic activity, sex and area, year 2008

thousand hours

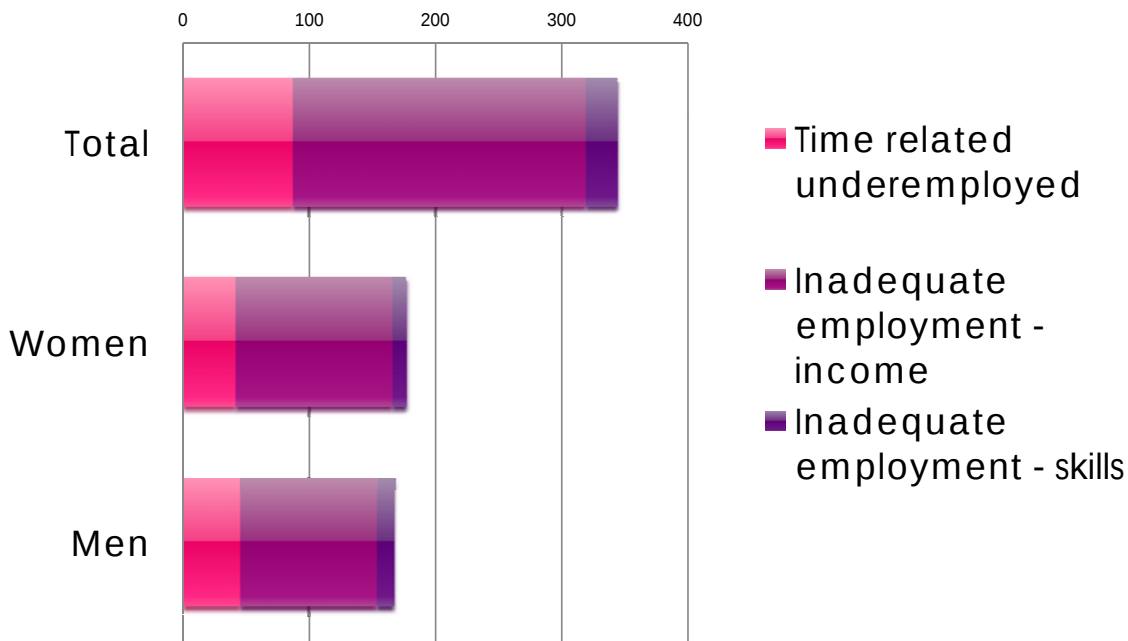
Sex, area, economic activity	Total	Age group					
		15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Total	1243,5	100,8	242,5	380,1	382,8	126,0	11,3
Agriculture, forestry, fishery	780,3	71,4	148,2	230,9	243,1	76,9	9,8
Industry	76,8	4,0	21,2	27,8	18,6	4,8	0,0
Construction	74,3	6,2	12,7	21,3	24,8	9,3	-
Trade, hotels and restaurants	78,1	3,9	15,5	23,8	23,3	11,7	-
Transport, communications	42,2	0,0	8,8	10,4	17,6	4,5	-
Public administration, education, health and social work	132,6	7,1	18,4	47,8	44,2	14,1	0,0
Other	59,2	7,2	17,9	18,2	11,2	4,7	-
Men	648,7	60,8	127,1	185,0	190,1	79,1	6,5
Agriculture, forestry, fishery	430,1	46,6	86,7	119,3	124,0	47,9	5,5
Industry	36,0	3,0	6,9	13,3	10,3	2,1	0,0
Construction	65,8	5,8	12,5	18,2	20,6	8,7	-
Trade, hotels and restaurants	38,3	0,0	10,4	9,5	10,2	7,9	-
Transport, communications	30,5	0,0	6,7	8,7	10,4	3,8	-
Public administration, education, health and social work	26,7	2,4	0,0	8,1	9,7	5,4	0,0
Other	21,3	1,8	3,5	7,9	5,0	3,2	-
Women	594,9	40,0	115,4	195,1	192,6	46,9	4,8
Agriculture, forestry, fishery	350,3	24,9	61,5	111,6	119,1	29,0	4,3
Industry	40,8	0,0	14,3	14,5	8,2	2,7	-
Construction	8,5	0,0	0,0	3,1	4,2	0,0	-
Trade, hotels and restaurants	39,8	3,6	5,1	14,3	13,1	3,7	-
Transport, communications	11,7	-	2,1	1,7	7,2	0,0	-
Public administration, education, health and social work	105,8	4,7	17,7	39,7	34,5	8,7	0,0
Other	37,9	5,5	14,4	10,3	6,3	1,5	-

Table 41. Employed persons wishing to change their situation in the main job by reason, age group, sex and area, year 2008

thousand persons

Sex, area, reason of wanting to change something in the main job	Total	Age group					
		15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Total	299,6	32,2	59,1	82,3	88,3	34,2	3,5
To work more hours, with a proportional increase in salary	44,9	4,4	9,2	14,0	12,7	3,9	0,0
To have a higher salary	186,8	18,7	36,1	50,5	55,3	23,9	2,2
The current job is a temporary one (occasional)	33,9	5,7	6,8	9,1	9,3	2,9	0,0
A more adequate use of qualification/abilities	25,3	2,4	5,1	6,8	8,2	2,6	0,0
Other reason ³⁹	8,6	0,0	1,9	1,9	2,9	0,0	0,0
Men	147,8	18,1	30,0	38,0	41,8	18,2	1,9
To work more hours, with a proportional increase in salary	23,1	3,1	4,0	7,0	6,6	2,0	0,0
To have a higher salary	85,0	9,9	16,7	20,8	24,3	12,2	0,0
The current job is a temporary one (occasional)	21,5	3,4	5,0	5,8	5,4	1,8	0,0
A more adequate use of qualification/abilities	14,2	0,0	3,3	3,5	4,2	1,7	0,0
Other reason	3,9	0,0	0,0	0,0	0,0	0,0	0,0
Women	151,8	14,1	29,2	44,4	46,6	16,0	1,6
To work more hours, with a proportional increase in salary	21,8	0,0	5,1	7,1	6,0	1,9	0,0
To have a higher salary	101,8	8,9	19,4	29,7	31,0	11,8	0,0
The current job is a temporary one (occasional)	12,4	2,3	1,8	3,4	3,8	0,0	-
A more adequate use of qualification/abilities	11,1	0,0	1,7	3,3	4,0	0,0	-
Other reason	4,7	0,0	0,0	0,0	1,8	0,0	0,0

EMPLOYED PERSONS IN TIME-RELATED UNDEREMPLOYMENT AND INADEQUATE EMPLOYMENT, MOLDOVA 2008



Department of Statistics
International Labour Office

31

CLASSIFICATIONS

All statistics and indicators by sex and by ...

Age

Education level

Kind of economic activity

Occupational group

Institutional sector (including the informal sector)

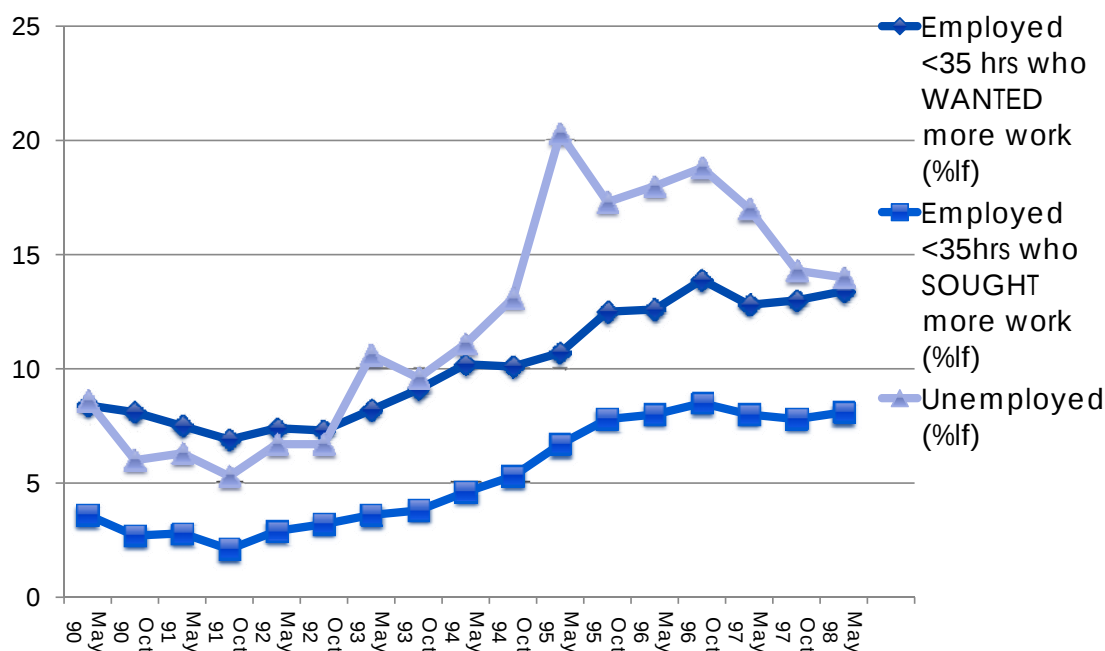
Status in employment category

Presence of young children and of adults requiring care

Department of Statistics
International Labour Office

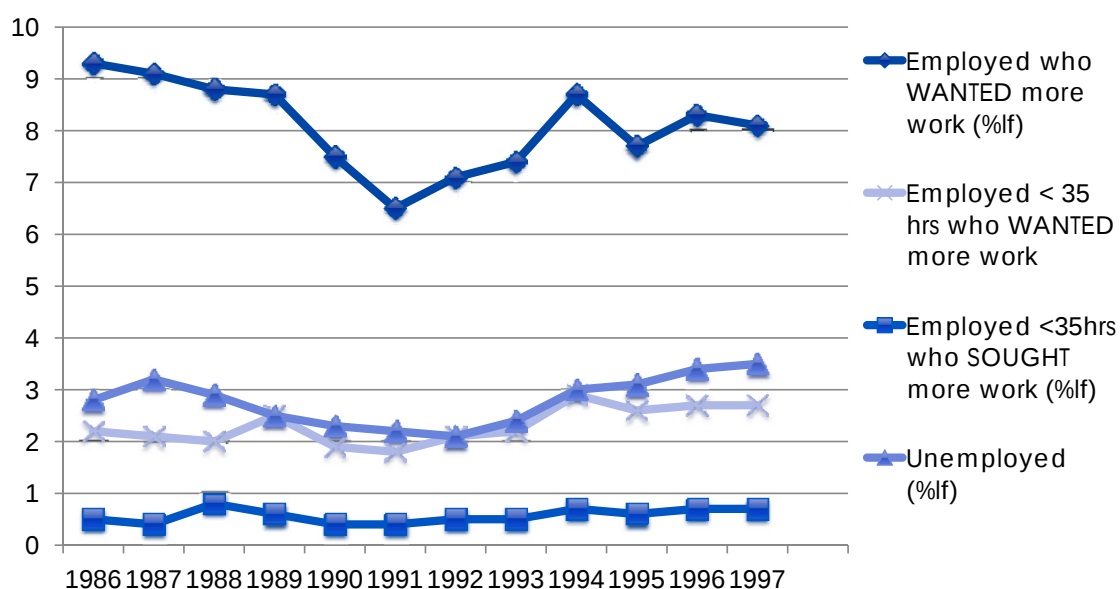
32

TIME-RELATED UNDEREMPLOYMENT AND UNEMPLOYMENT GRAN BUENOS AIRES, ARGENTINA, 1990-1998

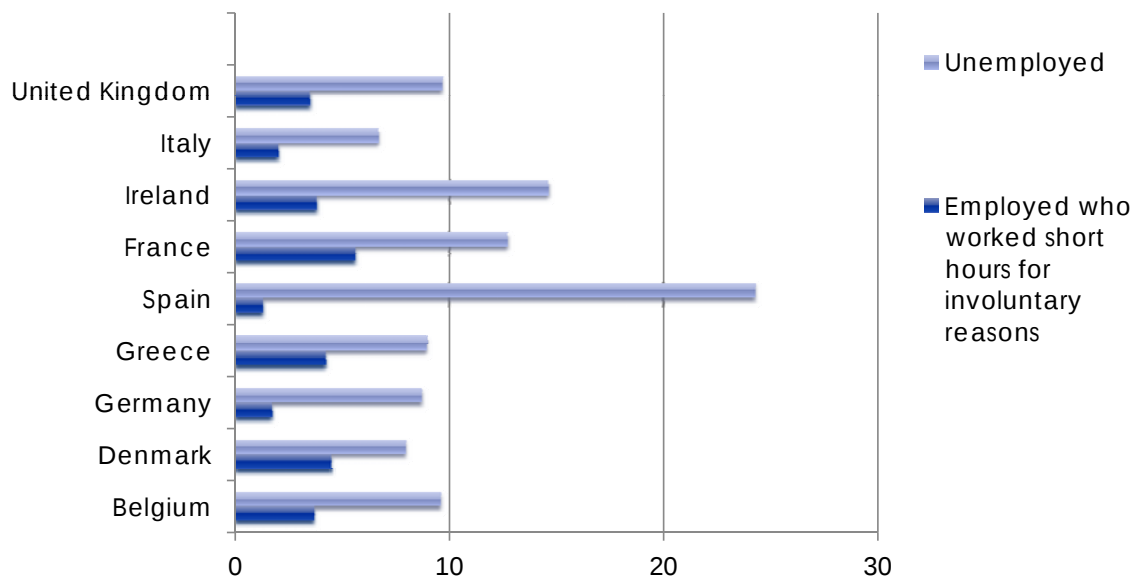


Department of Statistics International Labour Office

TIME-RELATED UNDEREMPLOYMENT AND UNEMPLOYMENT JAPAN, FEBRUARY 1986-1997



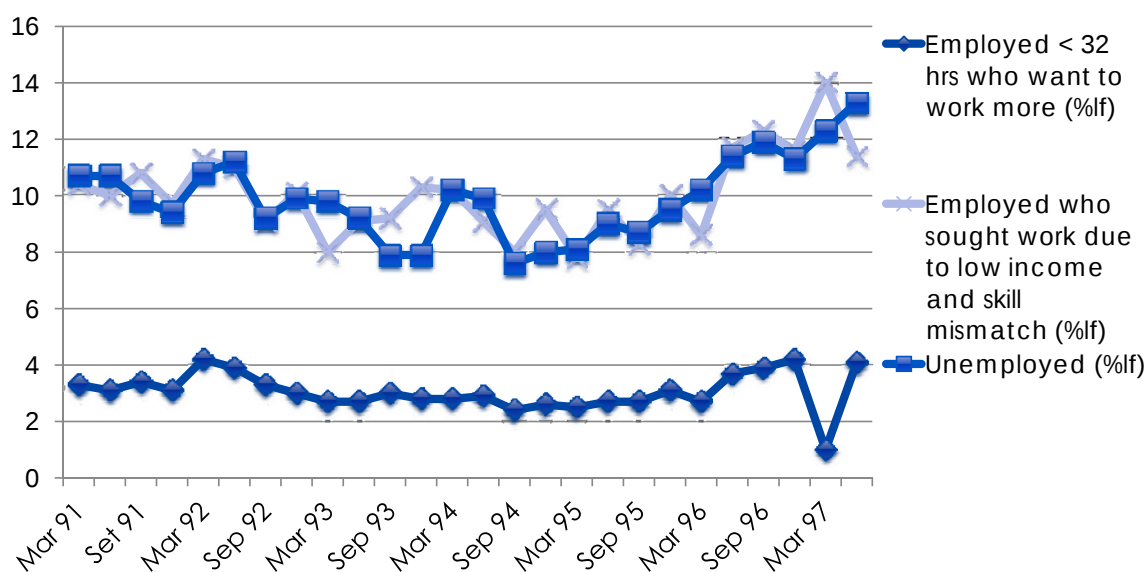
TIME-RELATED UNDEREMPLOYMENT AND UNEMPLOYMENT EU COUNTRIES, 1994



Department of Statistics International
Labour Office

35

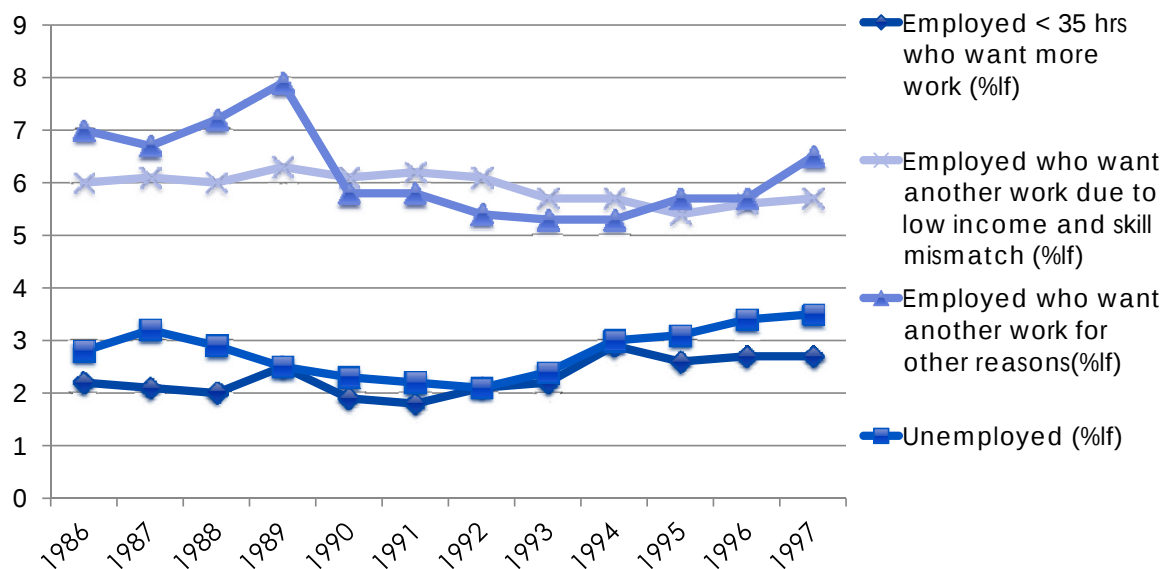
TIME-RELATED UNDEREMPLOYMENT, INADEQUATE EMPLOYMENT SITUATIONS AND UNEMPLOYMENT COLOMBIA, 1991-1997



Department of Statistics International
Labour Office

36

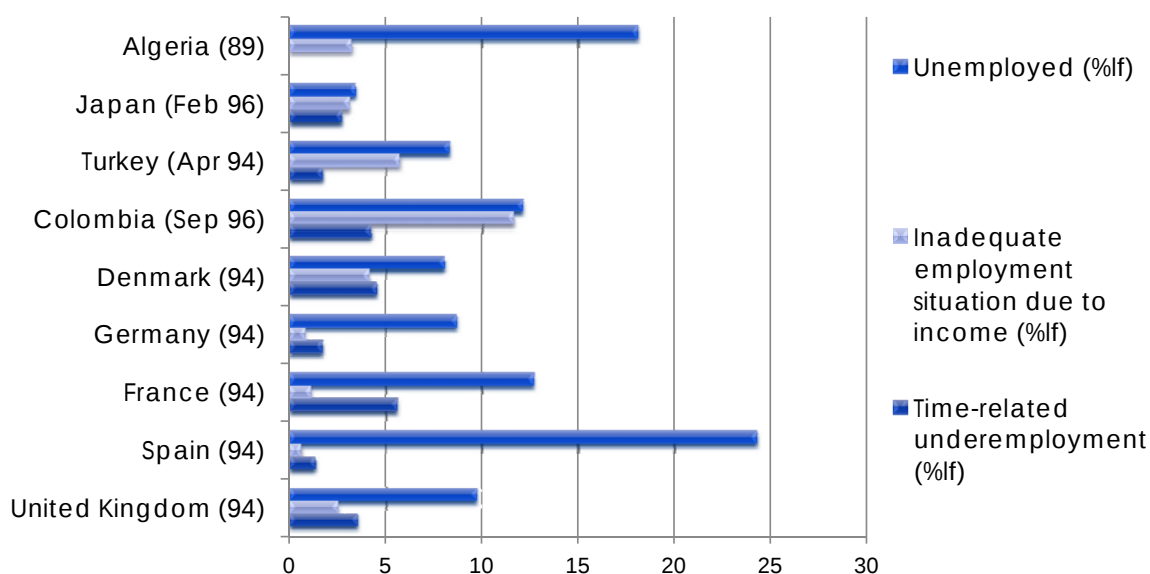
TIME-RELATED UNDEREMPLOYMENT, INADEQUATE EMPLOYMENT SITUATIONS AND UNEMPLOYMENT JAPAN, FEBRUARY 1986. 1997



Department of Statistics International
Labour Office

37

TIME-RELATED UNDEREMPLOYMENT, INADEQUATE EMPLOYMENT SITUATIONS AND UNEMPLOYMENT SELECTED COUNTRIES, LATEST YEAR



Department of Statistics International
Labour Office

38

WWW.ILO.ORG/STAT