

The Two Unemployment Figures

Introduction

EXAMPLE

A person who loses his job becomes unemployed. But when does Statistics Denmark receive information that a person has become unemployed? Let us look at two situations involving two different persons.

Person A is a member of an unemployment insurance fund. If he becomes unemployed, he is entitled to claim unemployment benefits or social assistance. He is thereby incorporated in Statistics Denmark's statistics on registered unemployment, providing figures on the number of persons who are registered as unemployed.

Person B is not a member of an unemployed insurance fund. If he loses his job, he is not entitled to claim unemployment benefits. If Person B is not entitled either to claim social assistance, he is not registered as unemployed, but he is incorporated in Statistics Denmark's statistics on LFS unemployment, providing figures on the number of persons who are, in real terms, available for work.

LFS unemployed persons

- are out of work,
- are available for work and
- have actively looked for work in the past four weeks

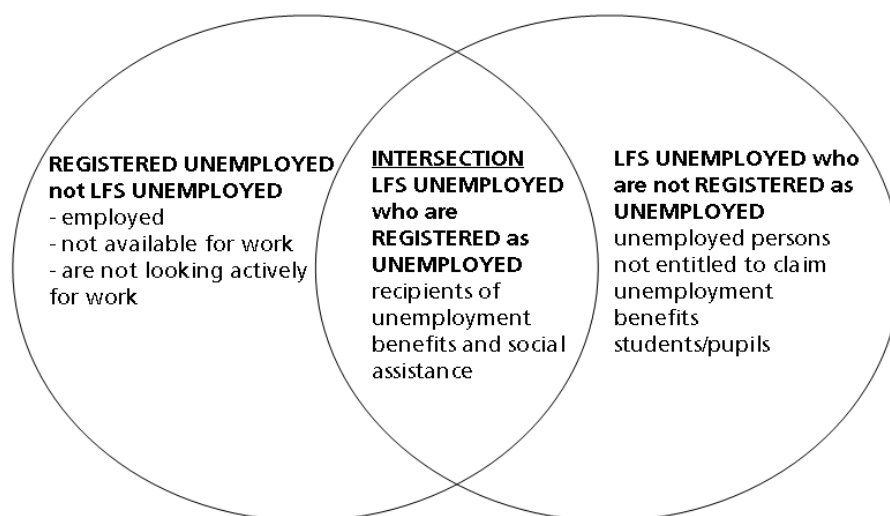
Registered unemployed persons

- claim unemployment benefits from an unemployment insurance fund or
- are recipients of social assistance who are ready for work

Unemployment figures are important indicators of the situation on the labour market and trends in the national economics. Statistics Denmark currently publishes two unemployment figures: LFS unemployment and registered unemployment.

LFS unemployment is estimated based on the Labour Force Survey (LFS), where Statistics Denmark **asks** a sample of the population, while the statistics on registered unemployment are compiled from a variety of **registers**. The two unemployment figures supplement each other and share a major subset of the population.

Figure 1 Intersection of the two unemployment figures



In 2009, the number of registered full-time unemployed persons was 123,000 and the number of LFS unemployed persons was 177,000. 82,000 persons were included in both unemployment figures: two-thirds of the registered unemployed were also LFS unemployed in 2009, and almost half of the LFS-unemployed persons were registered as unemployed.

However, there are also persons, who are only compiled as unemployed in one of the two unemployment figures. 41,000 persons, i.e. each third registered unemployed person was not a LFS unemployed person, either because he was employed, did not look for work or could start in a new job within 2 weeks.

95,000 persons, i.e. more than half of all LFS unemployed persons were not registered as unemployed, either because they did not claim unemployment benefits or social assistance, although they were out of work or were students/pupils looking for a job.

Since 2007, the number of LFS unemployed persons has exceeded the number of registered unemployed persons.

The number of LFS unemployed persons is higher than the number of registered unemployed persons because of the differences in the definitions of the two unemployment figures.

If a person is unemployed for 2 weeks only, he is counted as one LFS unemployed person, whereas in the statistics on registered unemployment, he is counted as “half-time unemployed”. In addition to this, a person may be LFS unemployed, independent of he is claiming a benefit or not, whereas he is only incorporated in the statistics on registered unemployment, if he is claiming unemployed benefits or social assistance.

In 2007 when the Labour Force Survey was changed and extended, the calculation of unemployment was optimised. This gave rise to an increase in the number of LFS unemployed persons. Not least the low unemployment in the years 2007-2008 could have resulted in a minor overlap between the two unemployment figures.

It is important that the two unemployment figures are used in an expedient way.

LFS unemployment should be used, e.g. if interest is focused on unemployed persons who are not entitled to claim unemployment benefits or social assistance, and LFS unemployment is also used for international comparisons of data.

The register-based unemployment should be used, e.g. if a monthly up-to-date unemployment indicator is required for small personal groups or for statistics distributed by unemployment insurance funds.

This paper gives a more detailed overview of the two unemployment figures.

LFS UNEMPLOYMENT

Where are the figures coming from?

LFS unemployment is quarterly unemployment compiled on the basis of the Labour Force Survey.

Why is the LFS carried out?

The LFS is conducted

- to analyse the population’s status in relation to the labour market and
- to compare results across EU borders.

All EU Member States conduct the Labour Force Survey in accordance with homogeneous principles and thereby the Survey forms the most appropriate basis for international comparisons of labour market statistics used by the EU and the OECD.

How is the LFS carried out?

The LFS comprises 89,000 interviews conducted every year concerning subjects relating to the labour market.

LFS unemployment shows unemployment among persons who want to work from a few hours per week to full-time. The LFS has been published annually since 1984 and quarterly since 1994.

The quarterly LFS unemployment level is estimated monthly by Eurostat on the basis of the register-based unemployment. The estimation is adjusted when the new LFS figures have been published.

Who is included as unemployed in the LFS?

LFS unemployment is based on the international definition, which was laid down by the International Labour Organisation (ILO) in 1982. The ILO definition is operationalised in the LFS to provide a picture of the number of persons who are, in real terms, available for work. See table 1.

Table 1 ILO definition versus LFS unemployment

	ILO definition	LFS unemployment
Unemployed persons	<ul style="list-style-type: none"> – are out of work in a given reference period – are available for work and – are actively looking for work 	<ul style="list-style-type: none"> – are out of work in a specific reference week and – are available for work over the next 2 weeks and – have actively looked for work in the past four weeks

When should LFS unemployment be used?

- when attention is focused also on analysing unemployed persons who are not entitled to claim unemployment benefits or social assistance
- when attention is focused on estimating the number of persons who want to work
- in conducting cross-sectional analyses, e.g. by means of supplementary questions

FAKTA

International Labour Organisation (ILO)

is the international labour organisation of the United Nations.

The purpose of the ILO was to set up an organisation defending the rights of workers in the labour market.

Further details at: ilo.org

- in connection with information on, e.g. youth unemployment (15-24 year-olds). Few young people are covered by insurance against unemployment, which implies that youth unemployment is frequently underestimated in the register-based unemployment, particularly in the case of comparisons among countries.
- in conducting international comparisons of unemployment levels and unemployment trends.

Registered unemployment

What is the registered unemployment?

The registered unemployment is a monthly full-scale survey of all *registered* unemployed persons, i.e. persons claiming unemployment benefits from an unemployment insurance fund, or recipients of social assistance who are ready for work (match-category 1-3).

Where are the data coming from?

Data reported by the unemployment insurance funds concerning recipients of unemployment benefits and data collected by the National Labour Market Authority from the municipalities concerning recipients of social assistance, which are subsequently passed on to Statistics Denmark.

The unemployed recipients of social assistance are included, who have match category 1-3, are not participating in an activation programme and are neither exempted from being available for work. Before unemployment benefits are paid out by the unemployment insurance fund, they must ensure that the recipients of unemployment benefits are ready for work and thereby unemployed.

How are register-based unemployment and gross unemployment compiled?

In the register-based unemployment, unemployed persons are converted into full-time unemployed. A person, who is only unemployed half the time of a month will be counted as “a half-time unemployed person” in the statistics covering the month in question. The statistics on the register-based unemployment have been published in Denmark since 1979.

From March 2010, seasonally adjusted figures for total gross unemployment are also published. In this context, gross unemployment is defined as the sum of the registered unemployed persons and persons participating in an activation programme and who are ready for work.

When should the registered-based unemployment be used?

- when a monthly up-to-date unemployment indicator is requested
- when a long time series from 1979 is requested
- in connection with small personal groups (e.g. women aged 55-59 living in Bornholm)
- in connection with statistics distributed by unemployment insurance funds or by unemployed hours
- in conducting linkages with other register variables, e.g. education, descent and country of origin.

The register-based unemployment statistics do not fully comply with the international ILO definition of unemployment. The most important differences are that:

- students and pensioners are never registered as unemployed, as they are not entitled to claim unemployment benefits nor social assistance.
- part-time unemployed persons in the reference period are converted into full-time unemployed.

Review of the Two Unemployment Figures

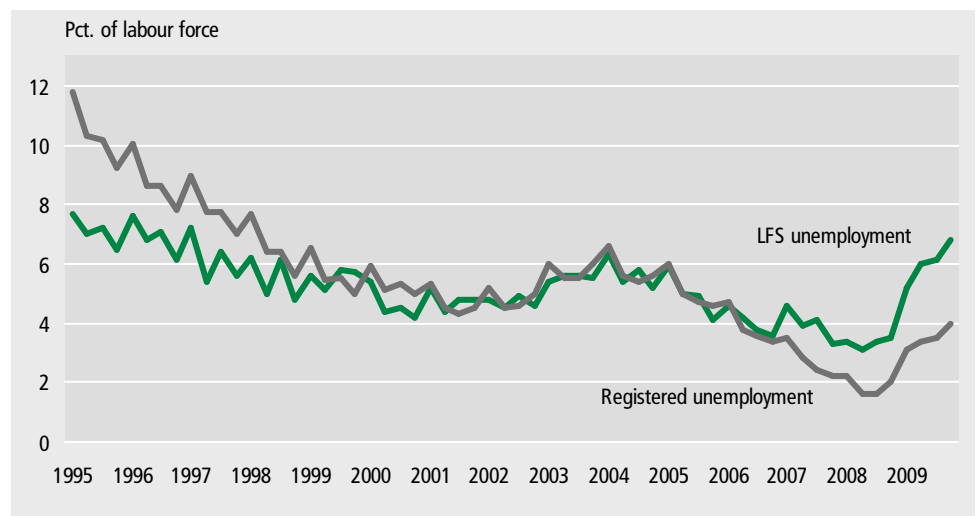
Table 2 Review of the two unemployment figures

	LFS unemployment	Register-based unemployment
Data from	Labour Force Survey(LFS)	National Labour Market Authority
Method	LFS is a quarterly questionnaire-based sample survey with 89,000 interviews per year	Monthly register-based full-scale survey
Age group	aged 15-74, are usually published for all persons aged 15-66	Aged 16-64
Definition	Complies with international definitions of unemployment (ILO definition): Unemployed persons: <ul style="list-style-type: none"> - are out of work, - are available for work and have - actively looked for work in the past four weeks 	All registered unemployed persons, <ul style="list-style-type: none"> - who claim unemployment benefits from an employment insurance fund or - are recipients of social assistance who are ready for work (match-category 1-3)
International comparability	<ul style="list-style-type: none"> - the Danish contribution to EU's Labour Force Survey - incorporated in Eurostat's and OECD's unemployment figures - homogeneous principles in all EU Member States for data collection 	
Unit	Number of PERSONS	Persons are converted to FULL-TIME
Published since	1995	1979
Strengths	<ul style="list-style-type: none"> - can also analyse unemployed persons who are not entitled to claim unemployment benefits or social assistance - can estimate the number of persons who is looking for work - in conducting cross-sectional analyses, e.g. by means of supplementary questions - in connection with information on ,e.g. youth unemployment (15-24 year-olds) - best suited for international comparisons of labour market statistics 	<ul style="list-style-type: none"> - is a monthly up-to-date unemployment indicator - a long time series from 1979 - can analyse unemployment for small personal groups - possible to compile statistics by unemployment insurance funds or by unemployed hours - in conducting linkages with other register variables
Weaknesses	<ul style="list-style-type: none"> - statistical uncertainty - large uncertainty for small personal groups - not compiled monthly 	<ul style="list-style-type: none"> - only complies partially with the ILO definition, as it only covers persons who are entitled to claim unemployment benefits or social assistance
Other	The quarterly LFS unemployment level is projected quarterly by Eurostat on the basis of the register-based unemployment.	Gross unemployment, i.e. the sum of the registered unemployed persons and persons participating in activation pro-

The level of the two unemployment figures

When the LFS was published quarterly for the first time in 1994, the number of registered unemployed persons was higher than the number of LFS unemployed persons. During the 1990's the levels of the two unemployment figures approached each other, and they followed closely each other in the period between 1999 and 2006. In 2007 they again diverged from each other. However, the number of LFS unemployed was higher than the number of registered unemployed.

Figure 2 Trends in the two unemployment figures, 1995-2009¹



The definitions of the two unemployment figures open up the possibility that the number of LFS unemployed is higher than the number of registered unemployed.

Unit

LFS unemployment shows the number of unemployed persons, while registered unemployment covers persons who are unemployed on “full time”. If a person was only unemployed half of the time over a month, he will be counted as one LFS unemployed person, but in the registered-based unemployment as a “half-time unemployed person”.

Relationship with the maintenance benefits in the definitions

LFS unemployment shows the number of unemployed persons, irrespective of whether they are claiming maintenance benefits or not. The following LFS unemployed persons are not included in the registered unemployment:

- unemployed persons who are not claiming unemployment benefits or social assistance

¹ Attention should be paid to the following reservations in relation to the figure:

- From 2000 the changed definition of registered unemployment implied that recipients claiming holiday pay are no longer included as unemployed persons. The difference in the two definitions is equal to a downward parallel shift of about 0.5 percentage point in the unemployment curve, compared to the corresponding curve for the earlier definition of registered unemployed persons.

- students, pensioners, pensioners and recipients of early retirement pay, recipients of social benefits who are not ready for work
- persons who during their period of notice are made redundant

Optimised calculation of unemployment

The increase in LFS unemployment from 4th quarter 2006 until 1st quarter 2007 coincided with the extension of the LFS in 2007 and may be due to changes in the method of raising figures.

Low unemployment

The low unemployment in the years 2007-2008 may also have contributed to the reason that the unemployment figures diverged from each other and that the overlap between the two figures was diminished. The economic boom was characterised by fewer persons deciding not to insure themselves against unemployment. The unemployment insurance funds lost members, while at the same time job shifts or job applications of newly qualified persons went so fast that the newly qualified persons did not need to claim unemployment benefits between the two jobs.

Looking at LFS unemployment distributed by registered unemployed persons and other LFS unemployed persons, we can see that the periods with high unemployment are characterised by a high share of registered unemployed persons among LFS unemployed persons.

Figure 3 Share of registered unemployed persons in the LFS

