



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Labour market dynamics

Swiss Federal Statistical Office

Anouk Bläuer Herrmann
May 2013, LFS methodology





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Contents

Presentation of the Swiss LFS

Key figures of the swiss labour market

Labour market accounts

- Construction
- Output

Occupational mobility





Swiss LFS (SLFS)

Sampling of households

Permanent resident population aged 15 and older

- up to 2009: annually, 2nd quarter
- since 2010: continuous survey, quarterly results

- 4 interviews over a period of 1,5 year (2-(2)-2 scheme)
- presently about 125'000 interviews per year

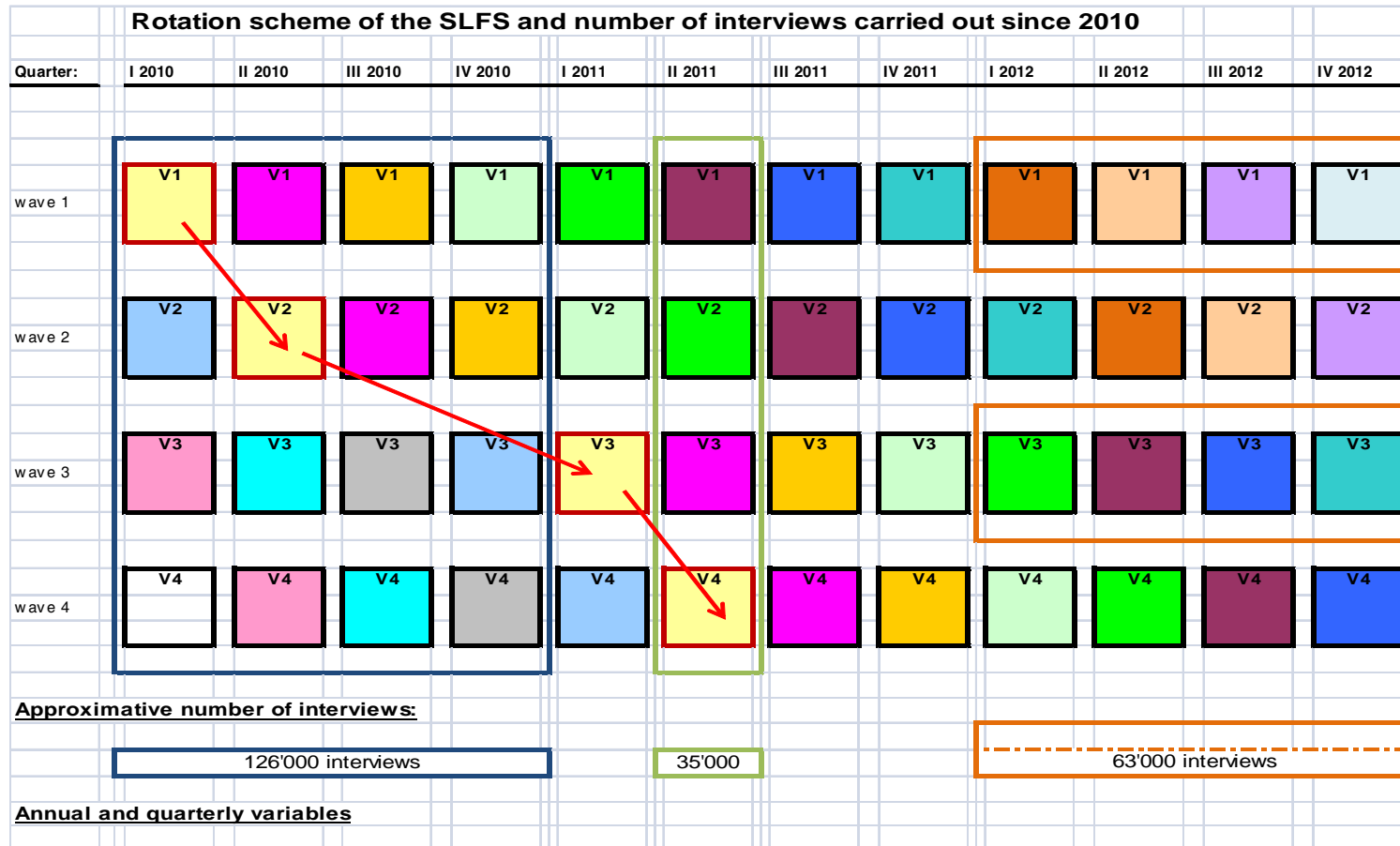
⇒ www.slfs.bfs.admin.ch





Swiss Confederation

Swiss LFS (SLFS)





Key figures of the swiss labour market

Permanent resident population: 8.037 m,
aged 15 and older: 6.778 m

Employed persons (domestic concept): 4.815 m,
of them Swiss (3.429 m), foreigners (1.386 m, 29%)

Unemployment rate (ILO-based): 4.4%

Employed persons of foreign origin according to category of work permit

Averages in 2nd quarter 2012



Source: ES

© FSO



Labour market accounts

Annual derived statistics, employment according to the domestic concept.

Main source: SLFS

- Transitions from employment, unemployment and inactivity
- Migration flows as well as natural change (births and deaths)

⇒ Complement to Employment Statistics (ES) and Unemployment Statistics (ILO-based)

⇒ Link between labour market statistics and population statistics





Labour market accounts: construction

Longitudinal weighting up to 2010, then transversal weighting quarter q $t-1$

Number of observations considered: about 35'000

Rotation scheme of the SLFS

Quarter	I 2010	II 2010	III 2010	IV 2010	I 2011	II 2011	III 2011	IV 2011	I 2012	II 2012	III 2012	IV 2012
wave 1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1
wave 2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2
wave 3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3
wave 4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4

The diagram illustrates the rotation scheme of the SLFS. It shows a grid of waves (V1 to V4) across quarters (I 2010 to IV 2012). Red boxes highlight the transition from longitudinal weighting (up to 2010) to transversal weighting (starting in 2011). Red arrows indicate the flow of observations from one wave to the next, showing how the same individuals are followed over time (longitudinal) and then different individuals are sampled in each quarter (transversal).





Labour market accounts: construction

- 1) Calculation of the labour force on 1. Jan. and on 31. Dec.
- 2) Calculation of the entering population (immigrations and births)
- 3) Calculation of the leaving population (emigrations and deaths)
- 4) Calculation of the transitions between employment, unemployment and inactivity
- 5) Equalization procedure





Labour market accounts: output

Labour force overview

Domestic concept, in '000

	2007	2008	2009 ³⁾	2010 ⁴⁾	2011 ⁵⁾
Total					
Labour force on 1. Jan.	4515	4618	4735	4775	4834
+ Entering labour force ¹⁾	308	297	316	289	300
- Leaving labour force ²⁾	250	289	302	273	271
+ Labour force immigration	151	171	135	149	172
- Labour force emigration	106	108	109	106	93
= Labour force on 31 Dec.	4618	4690	4775	4834	4943

Labour market dynamics: transitions between employment, unemployment and inactivity, migration flows, births and deaths, 2011, in '000

	Population on 31.12.11:			Persons leaving 2011:	
	Employed persons	Unemployed (ILO-based)	Inactive persons	Emigrations	Deaths
Population on 01.01.11:	4743	199	3353	144	62
Employed persons	4635	4228	84	222	88
Unemployed (ILO-based)	200	96	63	36	5
Inactive persons	3339	259	41	2938	51
Entries 2011					
Immigrations	247	160	12	75	
Births	81			81	



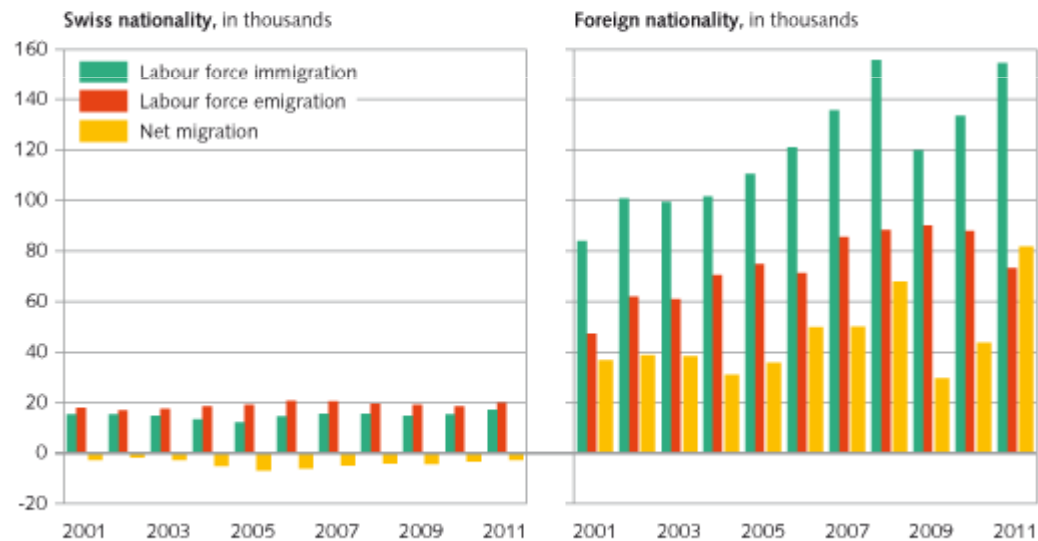


Labour market accounts: output

Trend in net migration

In 2011, the net migration of economically active persons was 79,000. It was responsible for 73% of the total increase in the labour supply.

Migration of economically active persons



Source: Labour Market Accounts (LMA)

© FSO

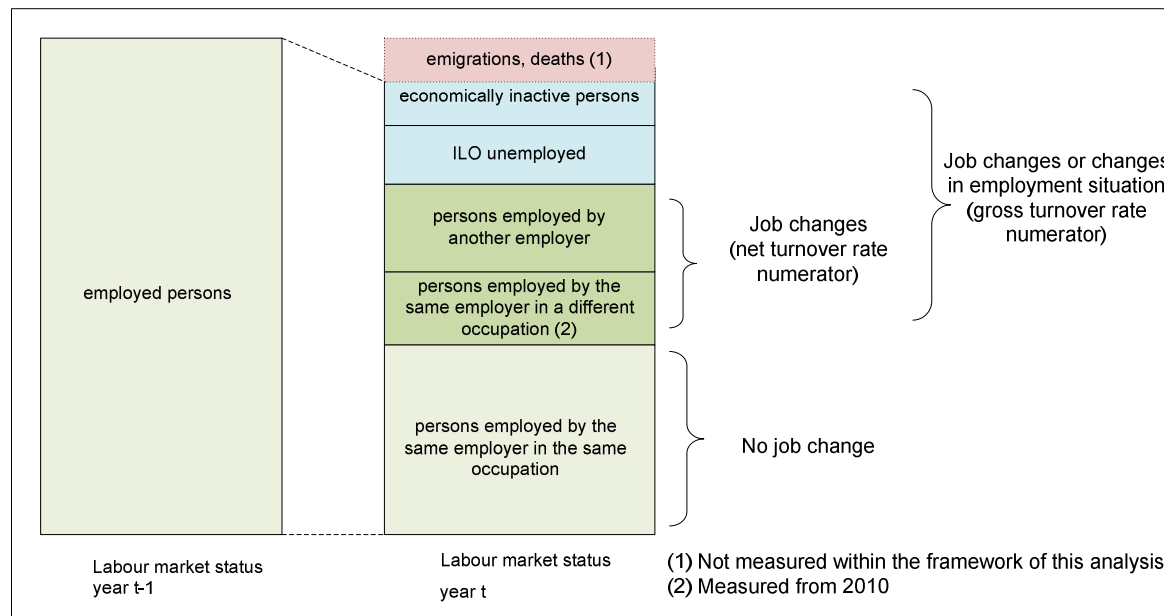




Occupational mobility

Job changes: net turnover rate

Job changes and persons leaving the labour market:
gross turnover rate





Occupational mobility

Job changes: net turnover rate

$$\text{Net turnover rate} = \frac{1}{4} \sum_{q=1}^4 \frac{\text{persons who changed jobs between the quarter } q \text{ of the year } t-1 \text{ and the same quarter of the year } t}{\text{employed persons in the quarter } q \text{ of the year } t-1}$$

Job changes and changes of labour market status: gross turnover rate

$$\text{Gross turnover rate} = \frac{1}{4} \sum_{q=1}^4 \frac{\text{persons who lefted their job between the quarter } q \text{ of the year } t-1 \text{ and the same quarter of the year } t}{\text{employed persons in the quarter } q \text{ of the year } t-1}$$





Occupational mobility

Transversal weight, quarter q $t-1$

Allows to also consider annual variables (breakdowns)

Rotation scheme of the SLFS												
Quarter	I 2010	II 2010	III 2010	IV 2010	I 2011	II 2011	III 2011	IV 2011	I 2012	II 2012	III 2012	IV 2012
wave 1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1
wave 2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2	V2
wave 3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3	V3
wave 4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4



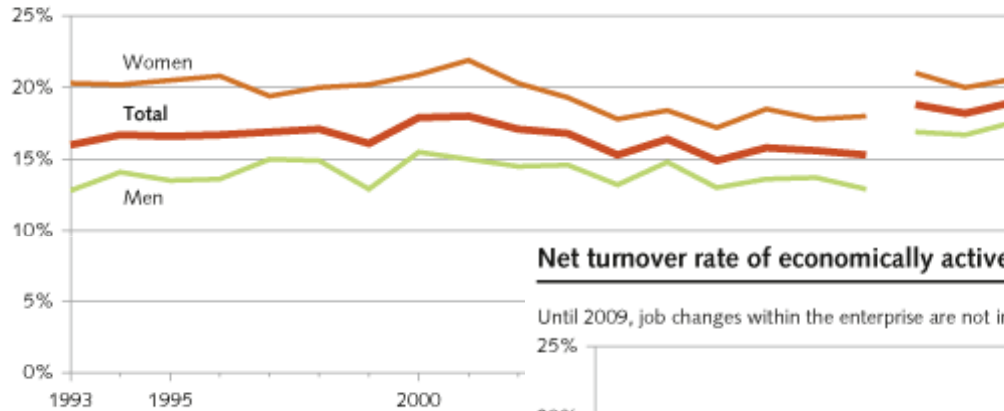


Swiss Confederation

Occupational mobility

Gross turnover rate of economically active persons

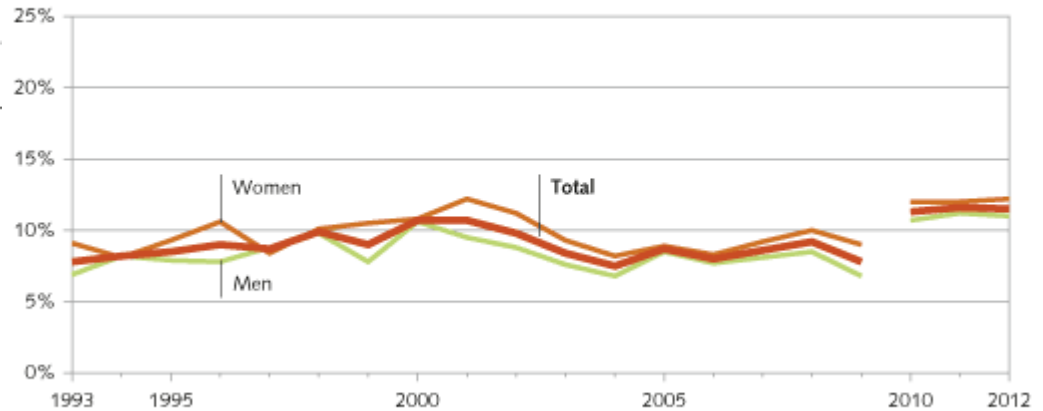
Until 2009, job changes within the enterprise are not included.



Source: SLFS

Net turnover rate of economically active persons

Until 2009, job changes within the enterprise are not included.



Source: SLFS

© FSO





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Thank you for your attention!

For more informations:

About the SFO:

www.bfs.admin.ch

About the surveys, statistics and analysis of the “Labour force section”, choose English / topics / employment and income:

<http://www.bfs.admin.ch/bfs/portal/en/index/themen/03.html>

About the SLFS:

www.slfs.bfs.admin.ch

