

Labour market flows in London

Date: September 2011

Coverage: London **Theme:** Labour market

This analysis uses longitudinal data from the Labour Force Survey (LFS). These data are used to show the movement, or flow, between employment, unemployment and inactivity from one quarter to the next. These flows show the underlying movements which sit behind published headline labour market rates which, in contrast, take a snapshot of the Labour Market at a point in time. More information about LFS longitudinal datasets follows in the Notes and Definitions section.

Labour Market Flows – Summary

Between Q4 2010 (Oct-Dec) and Q1 2011 (Jan-Mar)

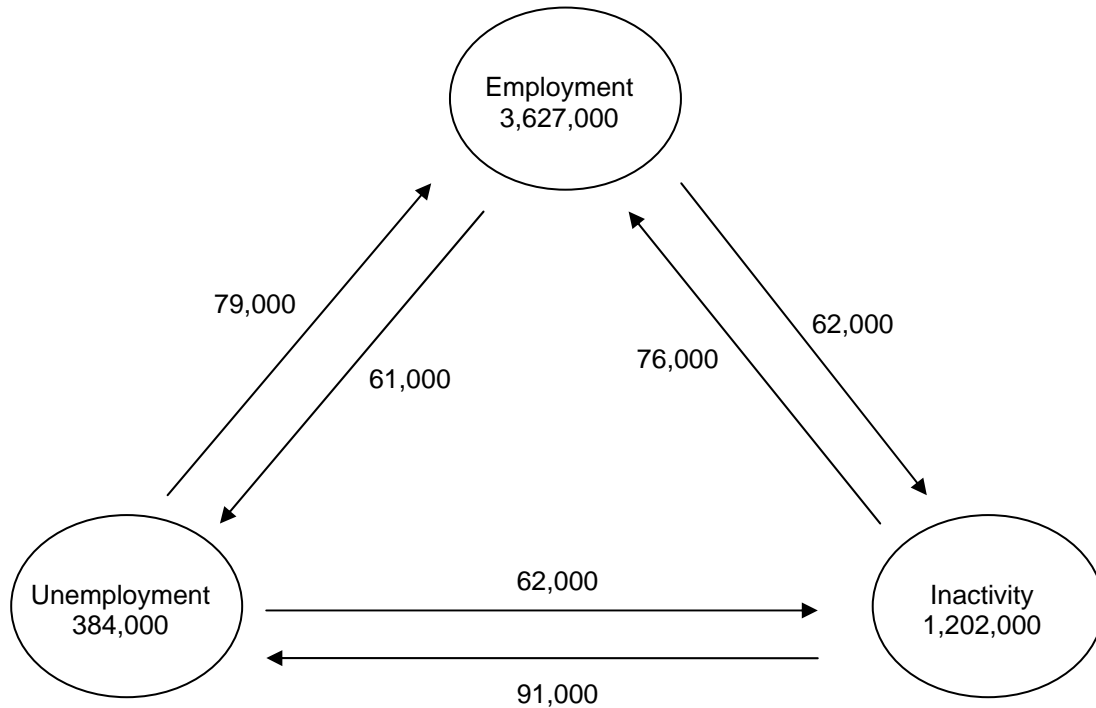
- 152,000 people became unemployed in London during this period
 - 61,000 moved from employment to unemployment and
 - 91,000 moved from inactive to unemployed.
- 79,000 people moved from unemployment to employment.
- 76,000 people moved from inactivity to employment.
- The number of people remaining inactive over the two quarters was 1,078,000 (21 per cent of the working age population).

Transition Probabilities

Probability of changing Labour Market state between Q4 2010 and Q1 2011

- For a Londoner who was unemployed in Q4 2010, there was a 21.1 per cent chance of being in employment 3 months later.
- For a Londoner in employment in Q4 2010, there was a 1.7 per cent probability of becoming inactive 3 months later and also a 1.7 per cent probability of becoming unemployed 3 months later.
- For a Londoner who was economically inactive in Q4 2010 (not in employment or actively seeking work), there was a 6.1 per cent probability of being in employment 3 months later.

Quarterly working age labour market flows, Q4 2010 to Q1 2011: London



Notes:

Source: LFS 2Q longitudinal dataset

4 quarter moving average

Men aged 16-64, women aged 16-59

Stocks are from the Longitudinal dataset and differ from headline published data

Table 1

Categories of flows, Q4 2010 to Q1 2011

London and Rest of UK

Status in first quarter	Status in second quarter	London		Rest of UK	
		Gross flow (thousands)	Gross flow (per cent)	Gross flow (thousands)	Gross flow (per cent)
Aged 15	Working age	19	0.4	167	0.5
Employed	Employed	3,472	66.4	23,128	70.3
Employed	Unemployed	61	1.2	348	1.1
Employed	Inactive	62	1.2	410	1.2
Unemployed	Employed	79	1.5	481	1.5
Unemployed	Unemployed	232	4.4	1,242	3.8
Unemployed	Inactive	62	1.2	342	1.0
Inactive	Employed	76	1.5	373	1.1
Inactive	Unemployed	91	1.7	433	1.3
Inactive	Inactive	1,078	20.6	5,985	18.2
Total		5,232	100.0	32,907	100.0

Source: Labour Force Survey 2Qtr longitudinal dataset

4 quarter moving average

Labour market flows

The 2 quarter longitudinal dataset is used in this analysis; a person’s economic status is recorded at the beginning of the 3 month period and at the end.

Gross labour market flows show the estimated total inflow or total outflow for each economic status group (employment, unemployment and inactivity) from one quarter to the next. Each gross inflow or gross outflow can be broken down by which economic status group people are coming from or leaving to. A small number of people might change economic status more than once over the quarter, so total flows throughout the whole quarter may be slightly higher than presented in this analysis.

Employment

The gross inflow to employment has risen steadily since the first quarter of 2009 and was 155,000 in the latest quarter (between Q4 2010 and Q1 2011). The inflow to employment from unemployment has been driving this change.

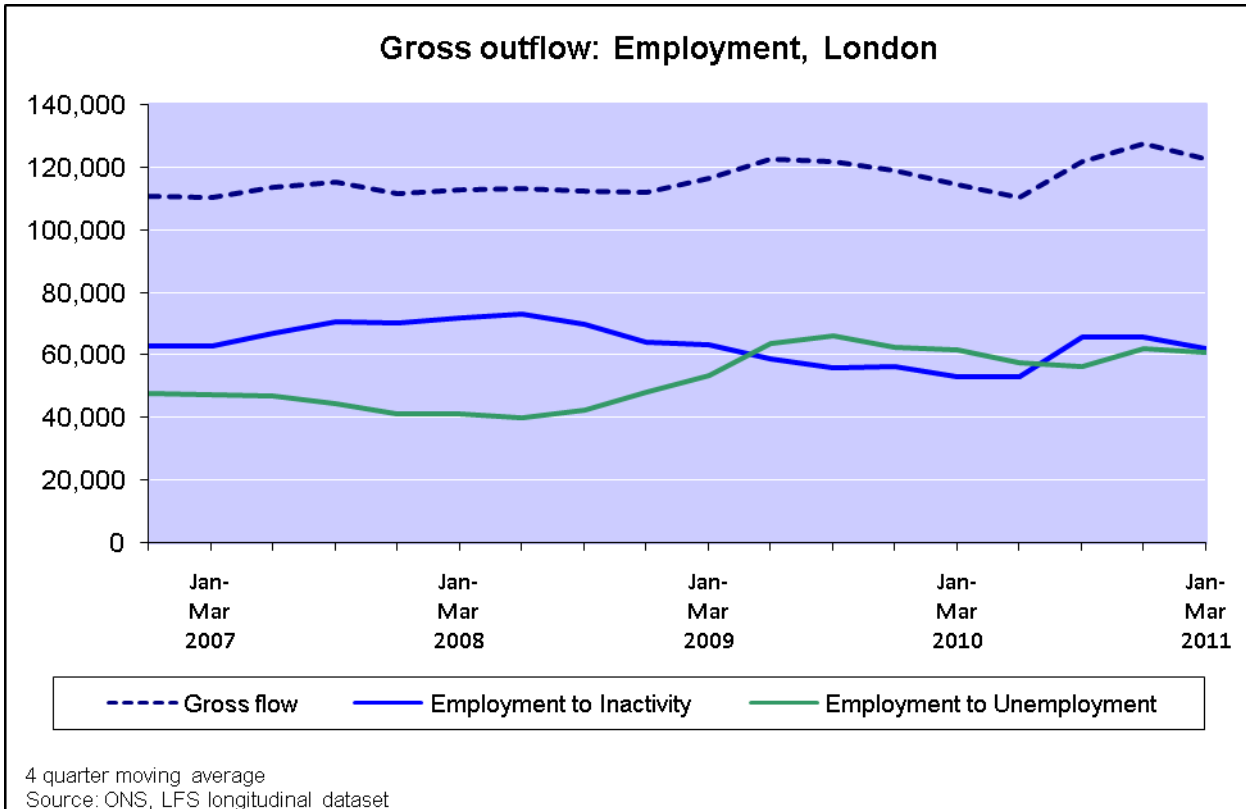
The probability of moving to employment from unemployment (21.1 per cent in the latest quarter) is higher than the probability of moving to employment from inactivity (6.1 per cent).

However, since the number of Londoners who are unemployed is lower than those who are inactive, the inflow from unemployment is similar to the inflow from inactivity (79,000 in comparison to 76,000 in the latest quarter).



The gross outflow from employment showed an increase from Q4 2008 that has levelled off in recent quarters. Outflows from employment to inactivity fell for five successive quarters since Q2 2008 and were broadly offset by an increase in flows from employment to unemployment during this period.

Latest quarter (Q4 2010 to Q1 2011) outflows to unemployment (61,000) are now similar to outflows to inactivity (62,000). The probability of moving from employment to unemployment (1.7 per cent) was the same as the probability of moving from employment to inactivity (1.7 per cent).

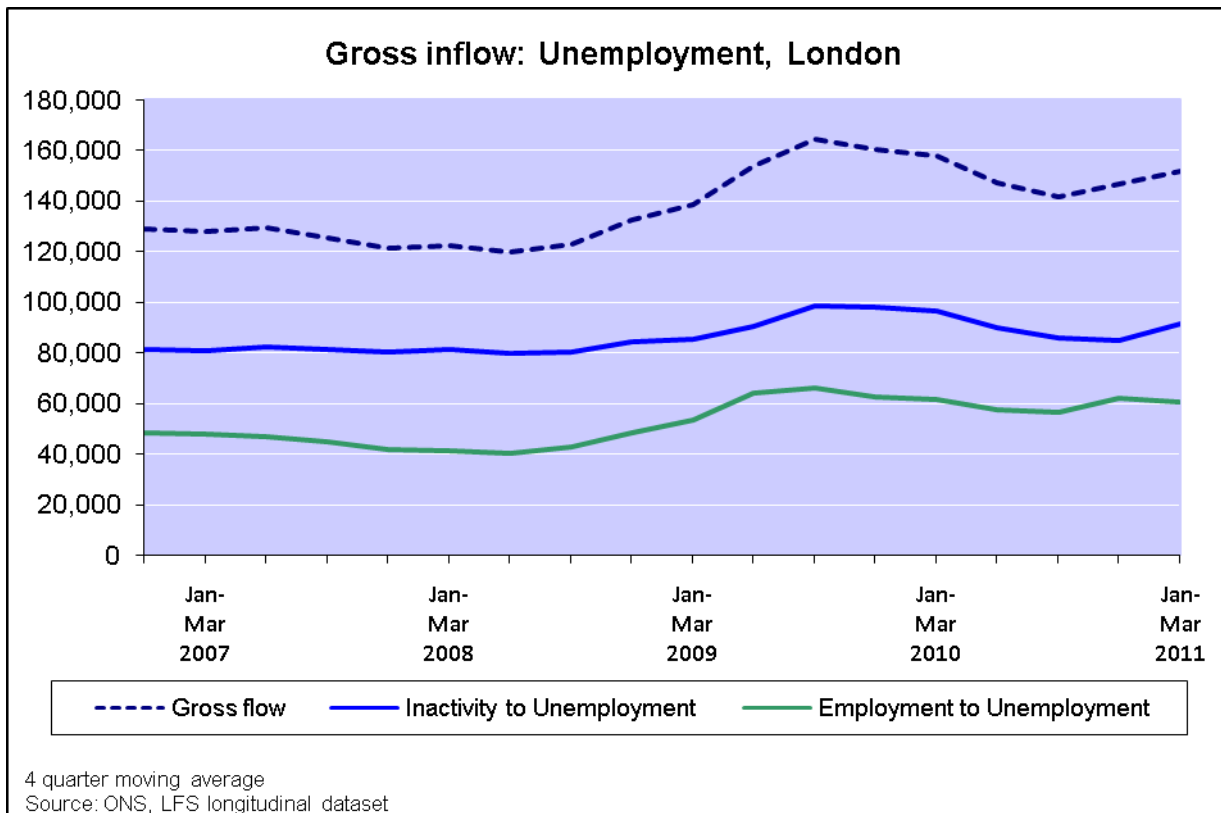


Unemployment

152,000 people in London moved into unemployment between Q4 2010 and Q1 2011. People moving from inactivity into unemployment made up the majority of those moving into unemployment (91,000 or 60 per cent) compared to those moving from employment (61,000 or 40 per cent).

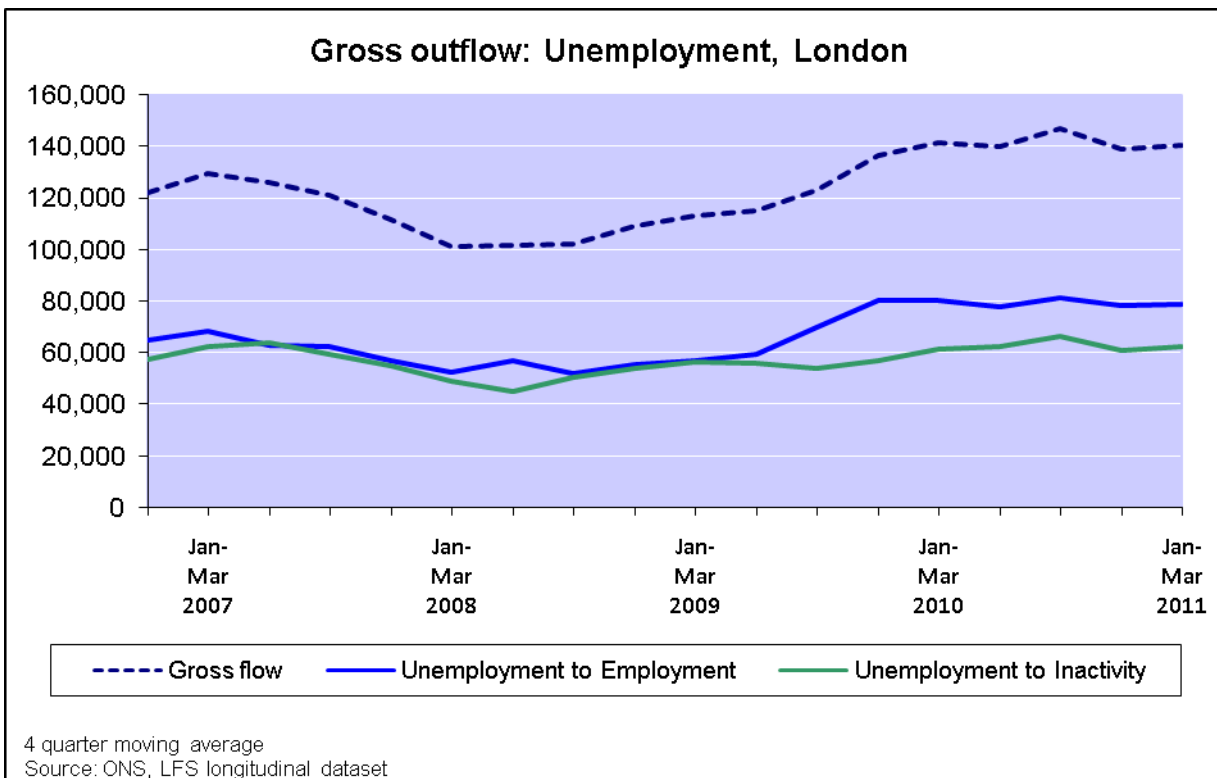
This differs to the pattern before the recession where between Q4 2007 and Q1 2008 the gross inflow to unemployment in London was lower (122,000) with a larger proportion moving into unemployment from inactivity (66 per cent) and a lower proportion from employment (33 per cent).

From Q1 2008 to Q1 2011 the probability of a Londoner moving from employment to unemployment increased from 1.2 per cent to 1.7 per cent and the probability of moving from inactivity to unemployment also increased from 6.3 per cent to 7.3 per cent over this period.



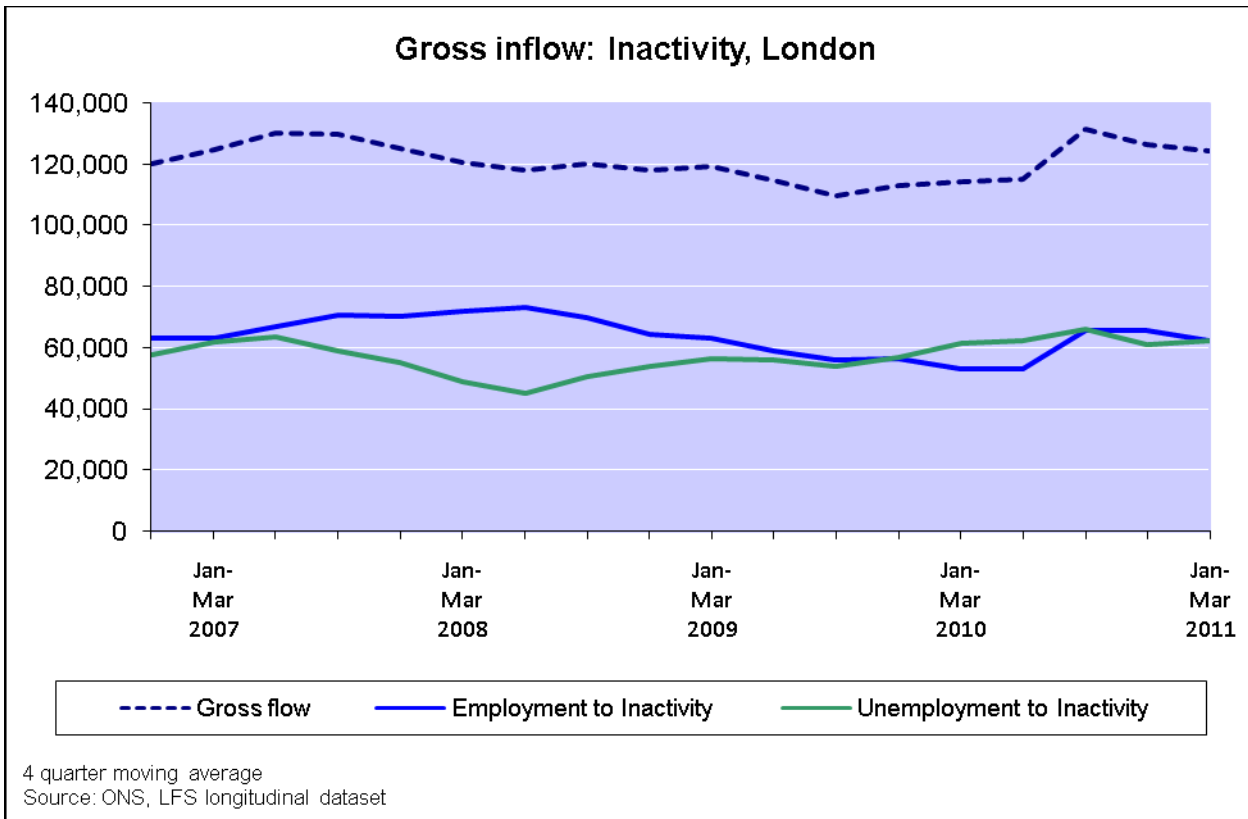
The gross outflow from unemployment in the latest quarter was 141,000, and has been at a similar level for the past 5 quarters. People moving from unemployment to employment made up the majority of those moving from unemployment (56 per cent). However, before Q2 2009 outflows from unemployment to employment and to inactivity were broadly similar; it is since Q3 2009 that the outflow to employment has increased by more than the outflow to inactivity.

This position was reflected in the change in transition probabilities. The probability of an unemployed Londoner moving to employment has remained at 21.1 per cent from before the recession in Q1 2008 to the present, whereas the probability of moving from unemployment to inactivity has decreased from 19.4 per cent to 16.6 per cent over this period.

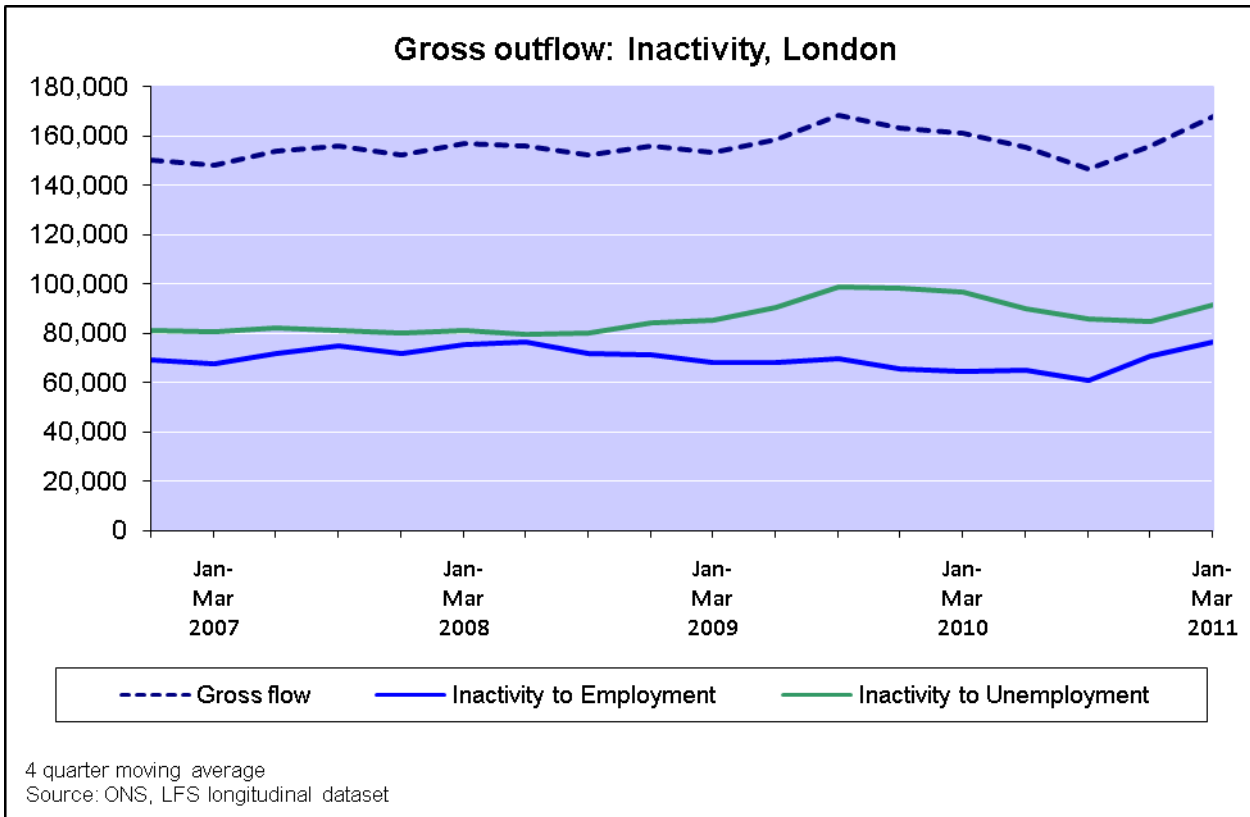


Economic inactivity

The gross inflow to inactivity over the latest quarter (between Q4 2010 and Q1 2011) was 124,000. This was an increase of 10,000 or 8.7 per cent from the same period a year ago. Currently the inflows to inactivity from both unemployment and employment are equal (62,000) although at the onset of the recession in Q2 2008 the flow from employment to inactivity made a greater contribution (62 per cent).



Gross outflow from inactivity between Q4 2010 and Q1 2011 was 168,000. This was an increase of 7,000 or 4 per cent from the same period a year ago. Outflows from inactivity to unemployment drive the overall outflow (currently 54 per cent) and have increased in share since the beginning of the recession. However, the outflow to employment has been steadily increasing over the last three quarters, narrowing the gap between the outflow to unemployment and employment.



Transition Probabilities (Hazard rates)

The transition probability is a measure of the likelihood that an individual will change labour market status over the quarter. This is calculated by taking the gross flow from the second quarter as a percentage of the total stock from the previous status in the first quarter.

Probability of changing Labour market status, Q4 2010 to Q1 2011: London

Transition Probabilities %

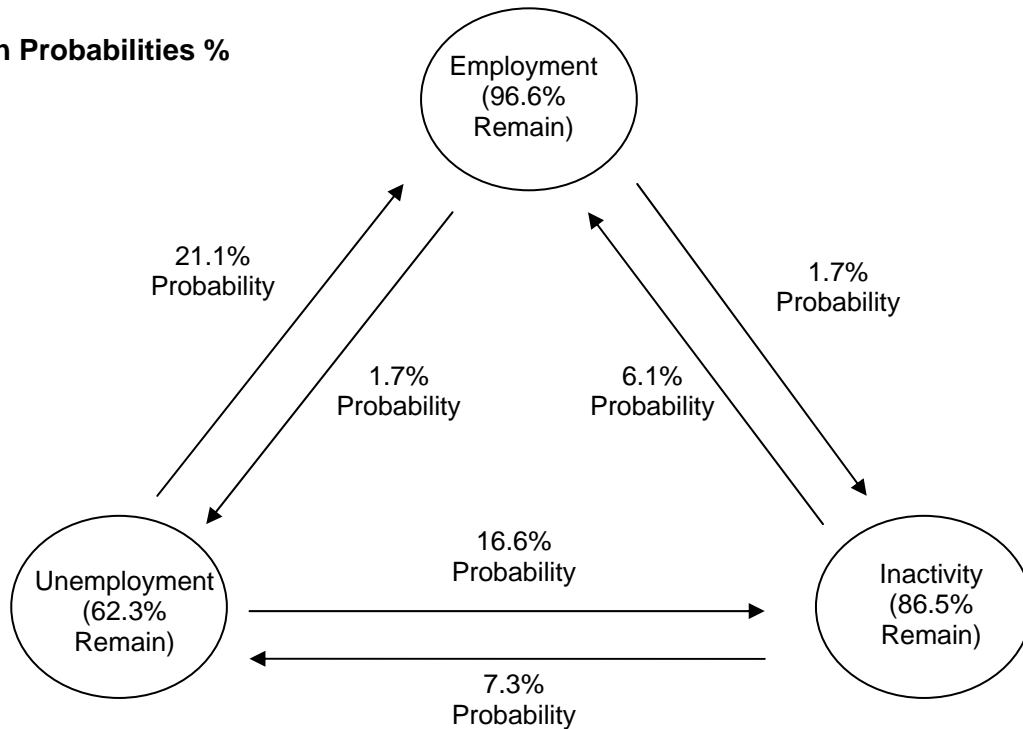


Table 2 shows that between 2007 and 2011, on average, 21.2 per cent of those who were in unemployment in the first quarter had moved into employment by the next quarter. The transitions need to be taken in context relative to the stocks for each series. For example, 1.7 per cent moved from employment to unemployment in Q1 2011 which corresponds to approximately 61,000 people. This number is similar in size to the 16.6 per cent of people moving from unemployment to inactivity (62,000).

Table 2: Transition Probabilities, 2007 to 2011, London

	4qtr rolling average						per cent, Q1 each year		
	Remain in employment	Employment to unemployment	Employment to Inactivity	Remain in unemployment	Unemployment to employment	Unemployment to inactivity	Remain in inactivity	Inactivity to employment	Inactivity to unemployment
2007	96.8	1.4	1.8	57.1	22.5	20.5	87.9	5.5	6.6
2008	96.7	1.2	2.1	59.6	21.0	19.4	87.9	5.8	6.3
2009	96.7	1.5	1.8	58.9	20.6	20.5	87.2	5.7	7.1
2010	96.7	1.8	1.5	63.1	20.9	16.0	87.5	5.0	7.5
2011	96.6	1.7	1.7	62.3	21.1	16.6	86.5	6.1	7.3

Table 3: Transition Probabilities, 2007 to 2011, Rest of UK

	4qtr rolling average			per cent, Q1 each year					
	Remain in employment	Employment to unemployment	Employment to inactivity	Remain in unemployment	Unemployment to employment	Unemployment to Inactivity	Remain in inactivity	Inactivity to employment	Inactivity to unemployment
2007	96.9	1.3	1.9	53.8	27.7	18.5	88.7	6.4	4.8
2008	97.0	1.2	1.8	51.0	30.0	19.0	88.1	6.9	5.0
2009	96.6	1.6	1.8	55.4	25.7	18.9	88.2	6.2	5.6
2010	96.6	1.6	1.8	61.5	21.1	17.4	89.0	5.0	6.0
2011	96.8	1.5	1.7	60.2	23.3	16.6	88.1	5.5	6.4

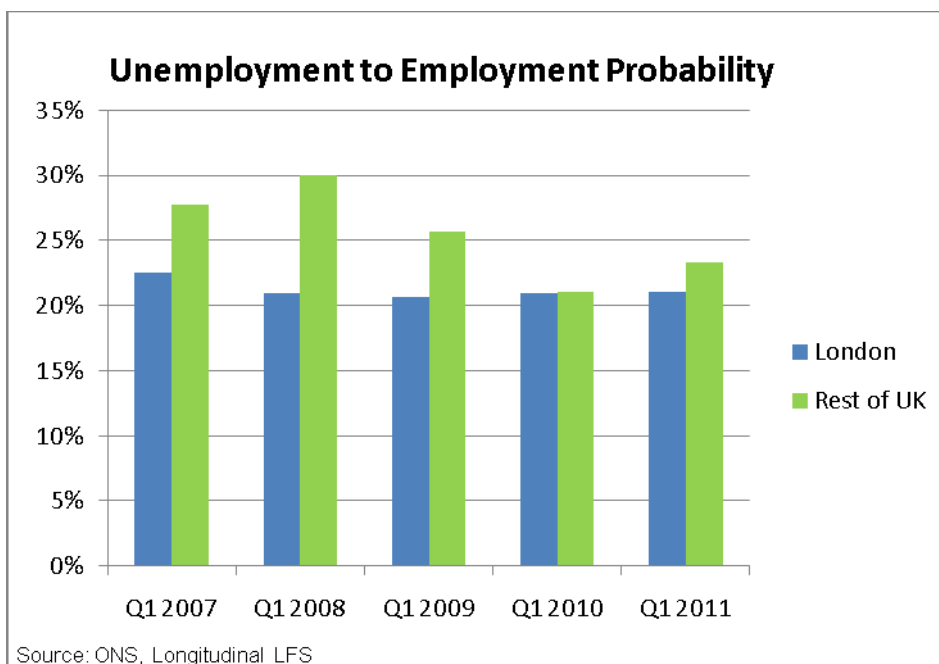
Comparison of London and UK Transition probabilities over time

Currently the largest difference in the probability between London and the rest of the UK in changing labour market status is seen in the probability of the change from unemployment to employment. This difference has also shown the most variation over the past 5 years.

In Q1 2011 unemployed Londoners had a 21% chance of finding work three months later, compared with a 23 per cent chance for unemployed people in the rest of the UK.

Before the start of the recession (Q1 2008) unemployed Londoners had around a 1 in 5 chance of finding employment over a quarter; this remained at a stable level throughout the recession.

Unemployed people in the rest of the UK had an almost 1 in 3 chance of finding employment over a quarter at the beginning of the recession, however this fell to the same level as London in 2010, a 1 in 5 chance.

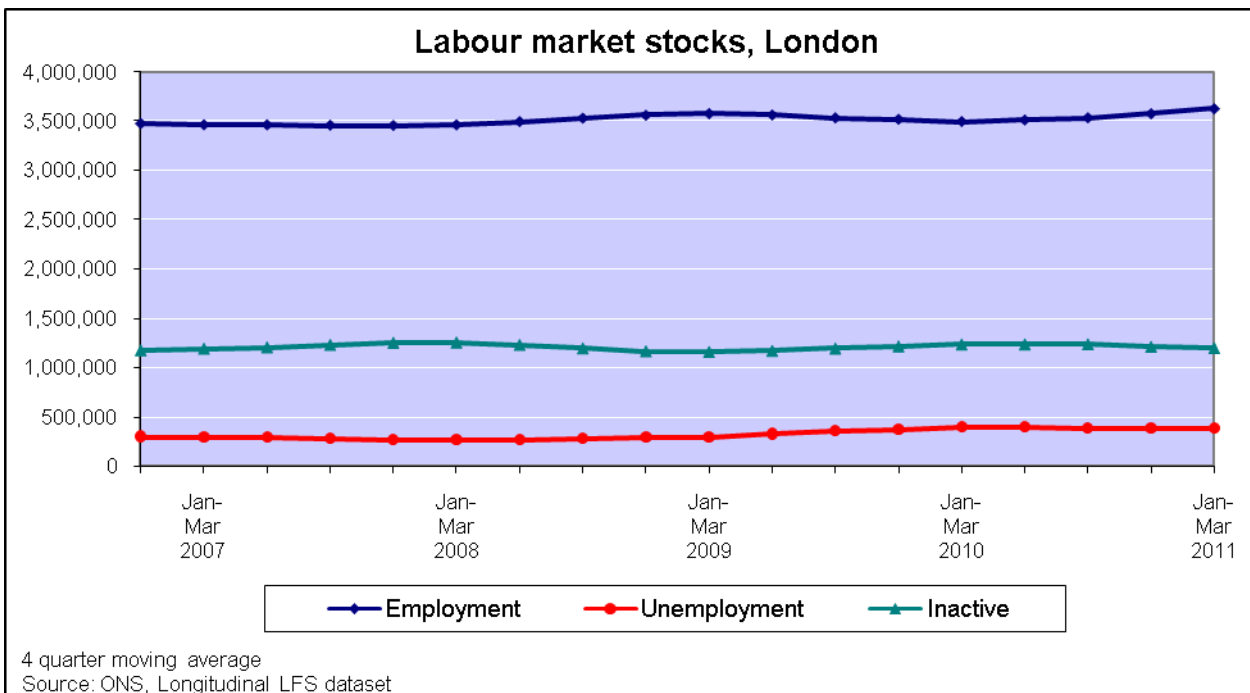


Annex A: Labour market stocks

For analysis of the longitudinal datasets and calculating transition probabilities, the stock of the employed, unemployed and inactive at each quarter are obtained by summing the three corresponding flow categories. Labour market stocks from the longitudinal datasets are similar to the headline levels of employment, unemployment and inactivity derived from the more usual cross-sectional datasets. The difference is accounted for by people entering or leaving working age over the quarter.

The longitudinal stock is recorded at the end of the 3 month longitudinal period.

- Employed – is given by summing those employed at both quarters (EE), those who move from unemployment to employment (UE) and those moving from inactivity to employment (NE)
- Unemployed – is given by summing those moving from employment to unemployment (EU), those remaining unemployed (UU) and those moving from inactivity to unemployment (NU)
- Inactive – is given by summing those moving from employment to inactivity (EN), those moving from unemployment to inactivity (UN) and those remaining inactive (NN).



Background Notes

The aim of this brief has been to give some background to how the longitudinal datasets are produced and to show some of their uses, looking at gross flows over time between the states of employment, unemployment and inactivity. The patterns shown here generally reflect the changes which have been seen in the recent cross-sectional figures produced from the LFS, in terms of an increase in unemployment and the decline in employment.

Labour Force Survey: Longitudinal datasets

The Labour Force Survey (LFS) is a quarterly sample survey of around 52,000 households living at private addresses in the UK, representing about 0.2 per cent of the population. The survey gathers information on a wide range of labour market characteristics and related topics. The survey has a rotating sample design, with the same households interviewed for five consecutive quarters and the last interview being a year after the first. The rotating design means there is replacement of one-fifth of households each quarter.

The main use of the survey is to provide cross-sectional data, but with households sampled consecutively, it is possible to link responses to provide longitudinal data, which is useful in identifying how individuals' economic circumstances change over time. The Office for National Statistics (ONS) produces two types of longitudinal datasets, linking respectively two and five quarters of data. These datasets include men aged 16 to 64, and women aged 16 to 59.

One of the key uses of these datasets is to analyse the gross flows of people moving between different labour force categories, most notably the three economic activity groupings of employment, unemployment and inactivity. Gross flows are the total number of people moving, for example from employment (E) to unemployment (U), or inactivity (N), and the total number of people who move in the opposite direction. In total there are nine different flow categories for the three economic activity groupings, with another two – those individuals entering or leaving working age. Looking at the gross flows from one group to another, for example from employment to unemployment (EU), and from unemployment to employment (UE), shows more information than the net flow. This is the difference between the total number of people employed and unemployed at two different times. Each month, ONS publish net changes in the stocks of people in each of the three economic activity categories, and while these changes may be small, the underlying gross flows are much larger.

Further information on the longitudinal dataset

Economic and Labour Market Review (February 2010): *Labour market gross flows data from the Labour Force Survey*

<http://www.ons.gov.uk/ons/rel/elmr/economic-and-labour-market-review/no--2--february-2010/labour-market-gross-flows-data-from-the-labour-force-survey.pdf>

Labour Market Trends (July 2006): *Labour market gross flows data from the Labour Force Survey*

<http://www.ons.gov.uk/ons/rel/lms/labour-market-trends--discontinued-/volume-114--no--6/labour-market-gross-flows-data-from-the-labour-force-survey.pdf>

National Statistics

National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference. © Crown copyright 2011.

Contacts

This briefing note has been issued by the ONS London Statistical Support team. Their contact details are:

Tom Knight
London Statistician
Email: thomas.knight@ons.gsi.gov.uk

Lorraine Robinson
London Analyst
Email: lorraine.robinson@ons.gsi.gov.uk

Website: www.ons.gov.uk