ILR-WPLS Matched Database

Individualised Learner Record (ILR)

- Details of learners in the FE sector and their learning aims

- Available from 2001/02

- Can be considered a census of publicly-funded FE provision

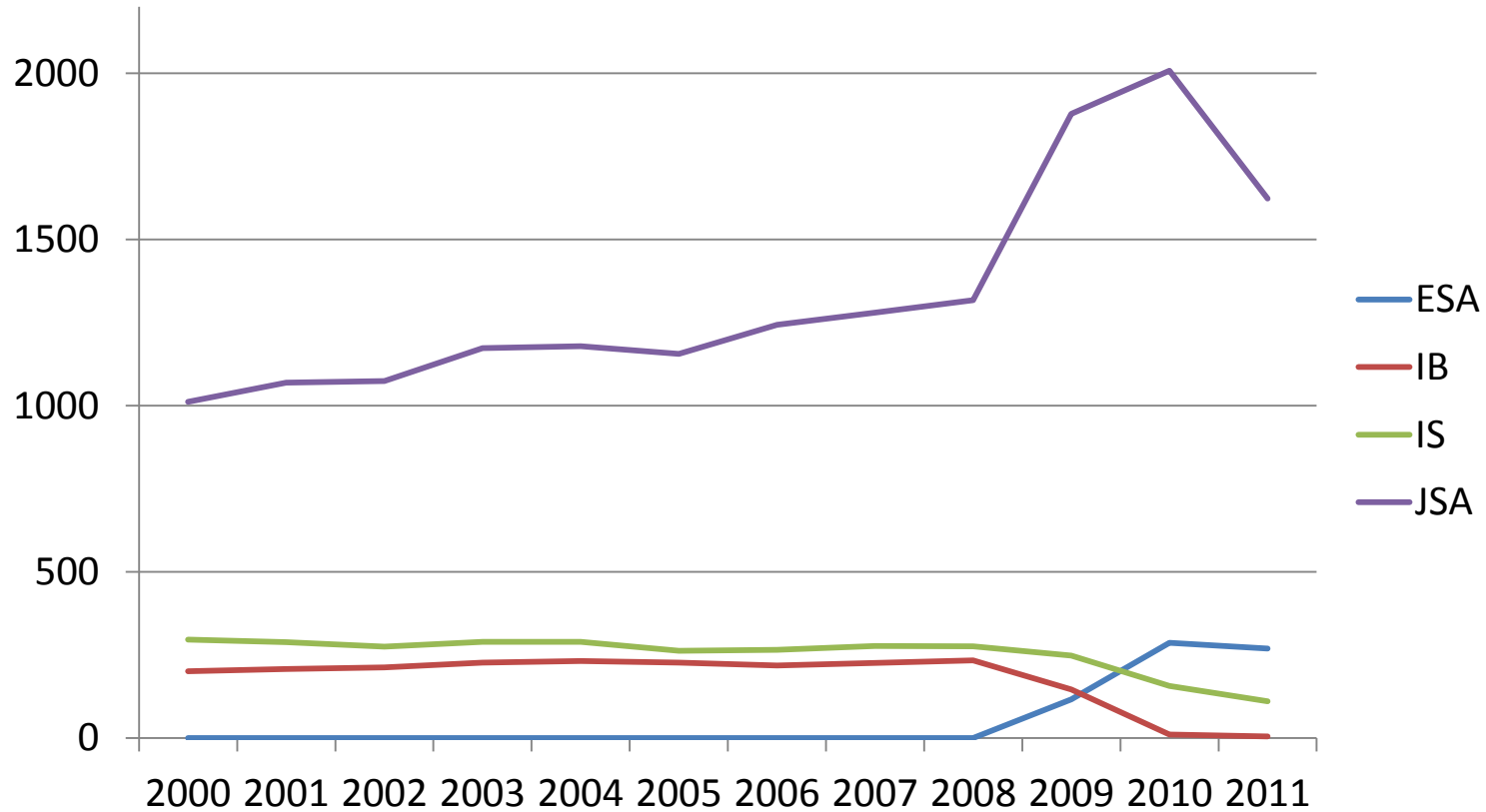- Contains details of some privately funded provision

Issues with ILR

- No person identifier
- No concept of a learning start date and end date- has to be inferred from learning aim start and end dates
- Missing reference data for some learning aims although this has improved over time
- Missing end dates for around 2% of learning aims

Work and Pensions Longitudinal Study (WPLS)

- Matched data resource created by DWP
- Mostly consists of dates on which events occurred
- Benefit histories (from 1999/2000)
- PAYE Employment (P45) data (from 1999/2000)
- Earnings from employment data (from 2004/05)
- In principle, we can observe whether an individual on any given day
  - Was in employment
  - Was in receipt of out-of-work benefits

Number of benefits started by tax year

Issues with WPLS

- Missing data
  - Missing (or default) start and end dates in employment data
  - 'Earnings' (dividends) unobserved for the self-employed
  - Earnings do not have to be reported for those earning below the lower tax threshold
  - End dates for benefits not measured precisely
- Error arising from matching of HMRC to DWP data
- All may be improved in future by RTI

ILR-WPLS

- ILR records to WPLS identifiers
- Matching undertaken by DWP
- Relatively high rate of ILR records not matched to WPLS
  - Around 20% to 25% for FE funding stream
  - Around 8% to 12% for WBL funding stream
  - Match rates much lower for under 19s
- Linkage error will affect results

Default employment dates

- Many spells have uncertain start and/ or end dates
  - 6th April start
  - 5th April end
  - Spells lasting 0 or 1 day
  - Start date is missing
  - End date is missing
- 34% of cases affected

Examples

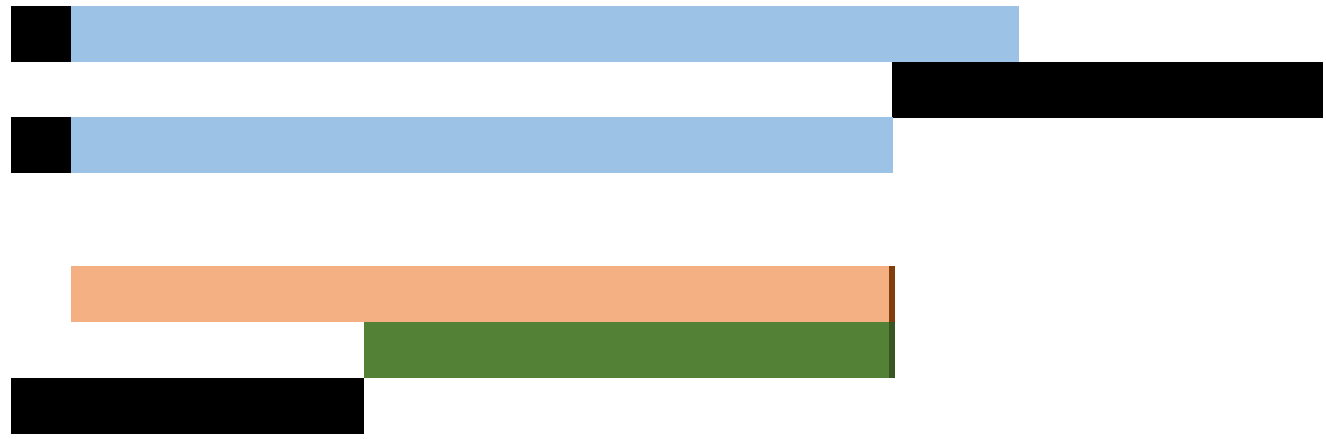| Person	Start Date	End Date
A	6th April 2005	28th October 2007
B	11th November 2009	5th April 2010
C	19th June 2012	20th June 2012

Solution

- For employment spells with uncertain end dates
  - Calculate earliest possible end date
  - Calculate latest possible end date
- Truncate the above based on known spells of
  - Employment
  - Out-of-work benefit receipt
- Impute an end date within the truncated range

Imputation

employment
benefit
adjusted employment

potential gap
random duration
imputed employment

Spans

- Overlapping or contiguous
    - Learning aims
    - Employment spells
    - Benefit spells
- Enables calculation of
    - In learning, employment or on benefits on any given date
    - Duration of continuous periods of learning, employment and benefits receipt
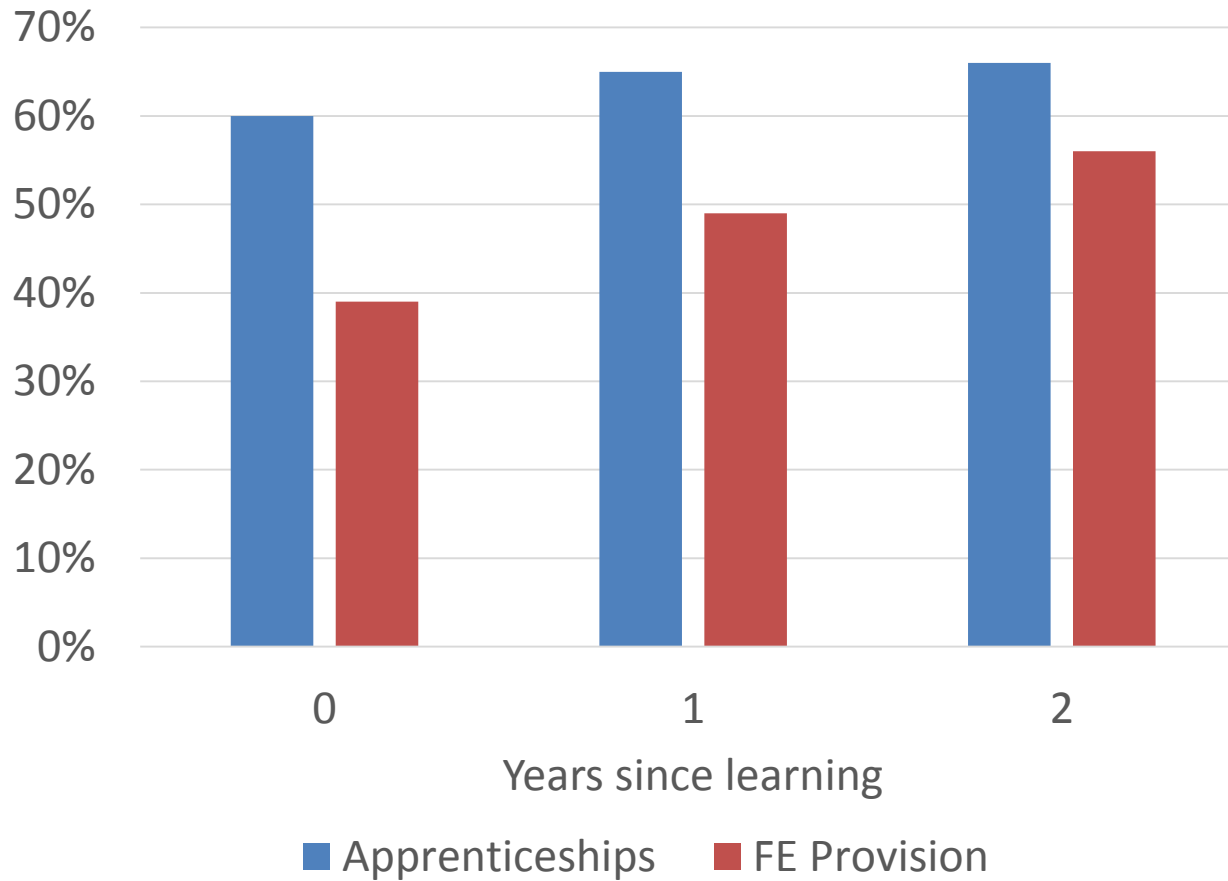
ILR-WPLS Analysis

- Prior and post-learning labour market data
- Some limited contextual data about learners
  - Age
  - Gender
  - Ethnicity
  - Postcode
- Returns to different types of FE provision
- BIS Research Paper 195
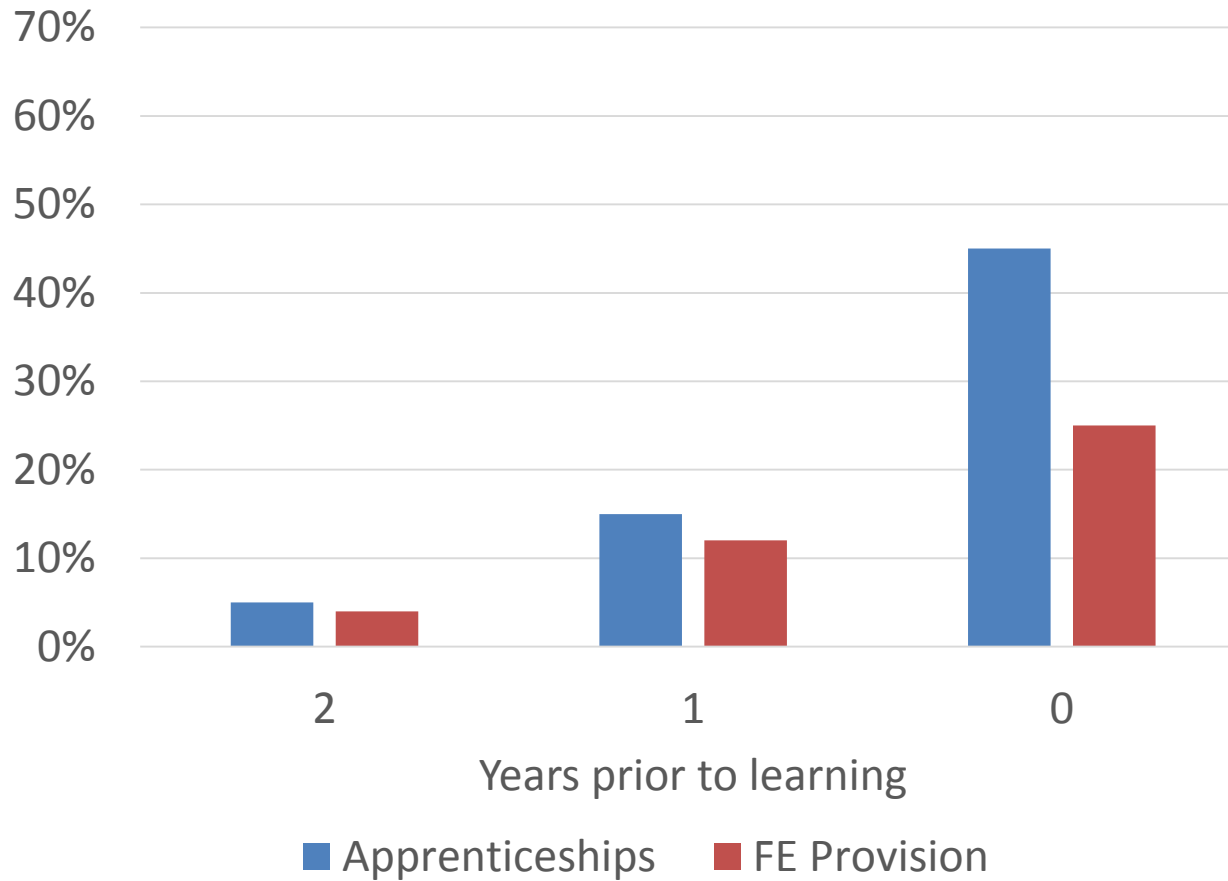- Still largely unexplored

joining the dots

Example

- Is there any additional benefit in achieving a NVQ2 hairdressing as part of an apprenticeship?

- 18 thousand 16-18 year olds achieved apprenticeship 2009 to 2011

- Similar number achieved NVQ2 hairdressing in traditional Further Education over the same period

- How many in sustained employment?

% in sustained employment post-learning

Years since learning

■ Apprenticeships ■ FE Provision

% in sustained employment pre-learning

How it could be improved

- Use of RTI will improve employment and earnings data in future
- Matching NPD to WPLS
- Re-matching historic unmatched learners
- Methods for testing sensitivity of outputs to
  - Linkage error
  - Uncertainty arising from imputation