

Development of labour force projections for local authorities

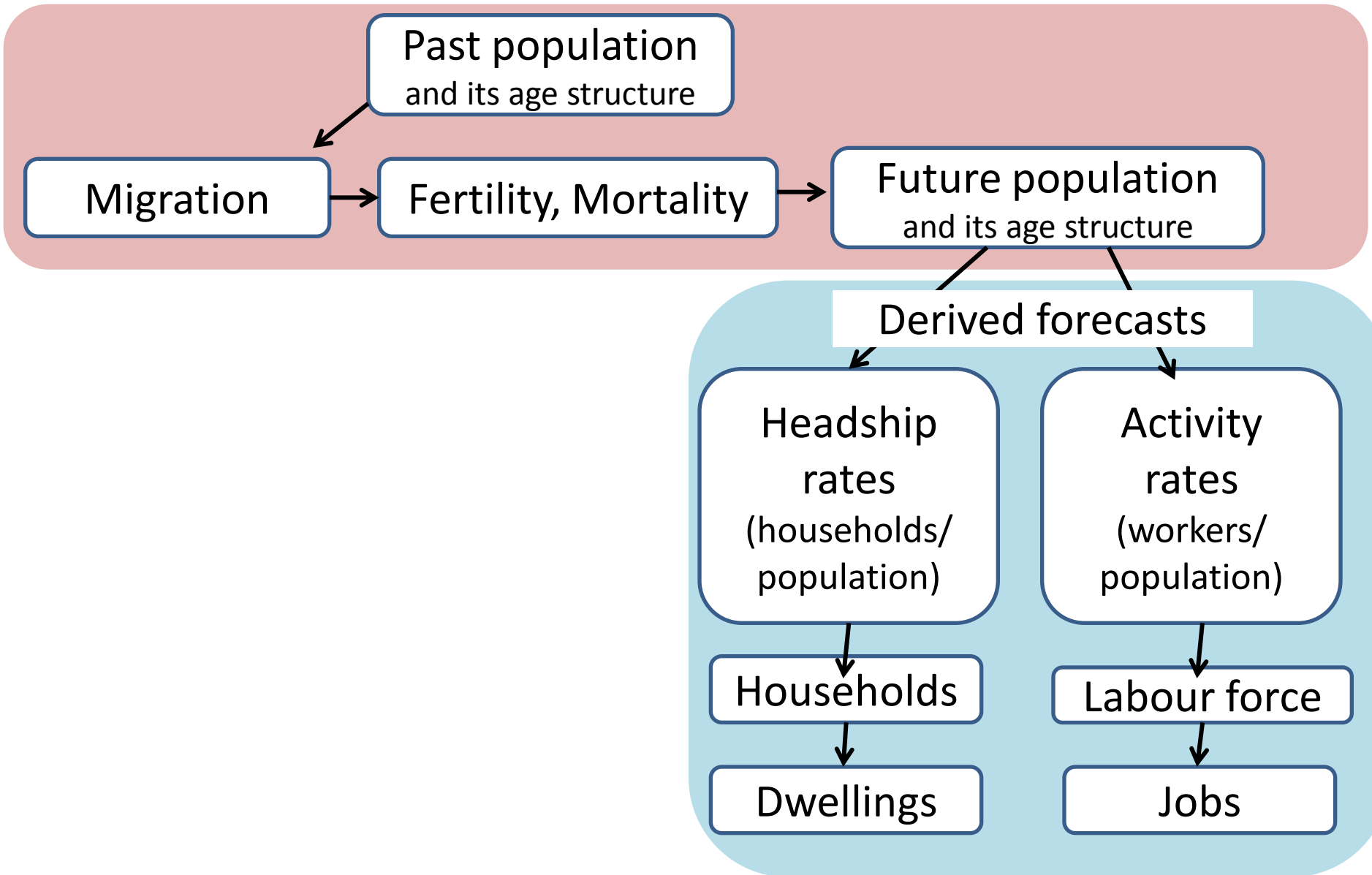
WSLC , 9 June 2016

Ludi Simpson, University of Manchester

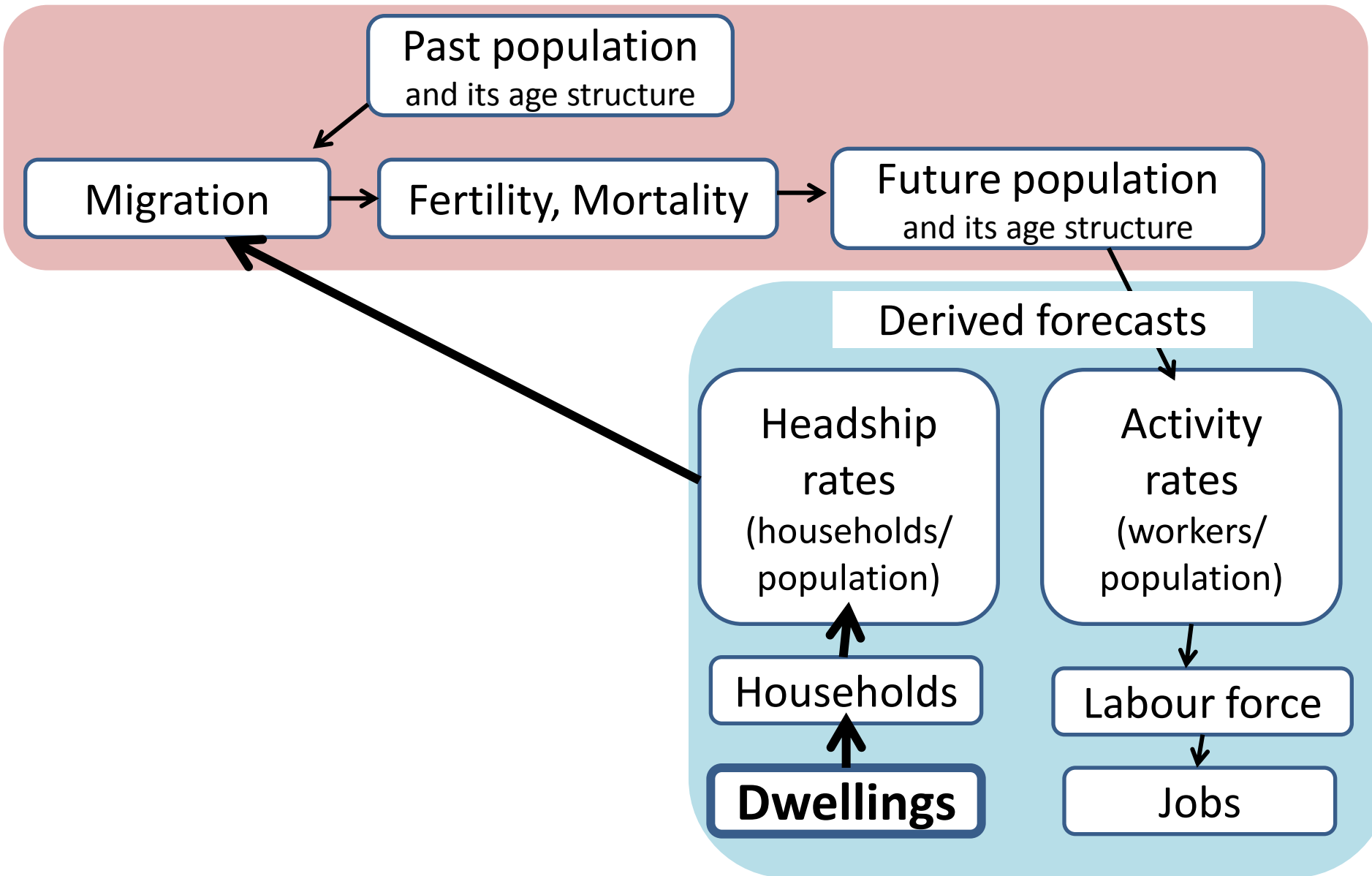
Labour force projections: summary

1. Planning scenarios: impact of population on jobs *and* the impact of jobs on population
2. Required: national projection, local anchor
3. No official projection of economic activity
4. OBR and EC make different policy projections
5. POPGROUP module and user guide
6. Exploring local scenarios

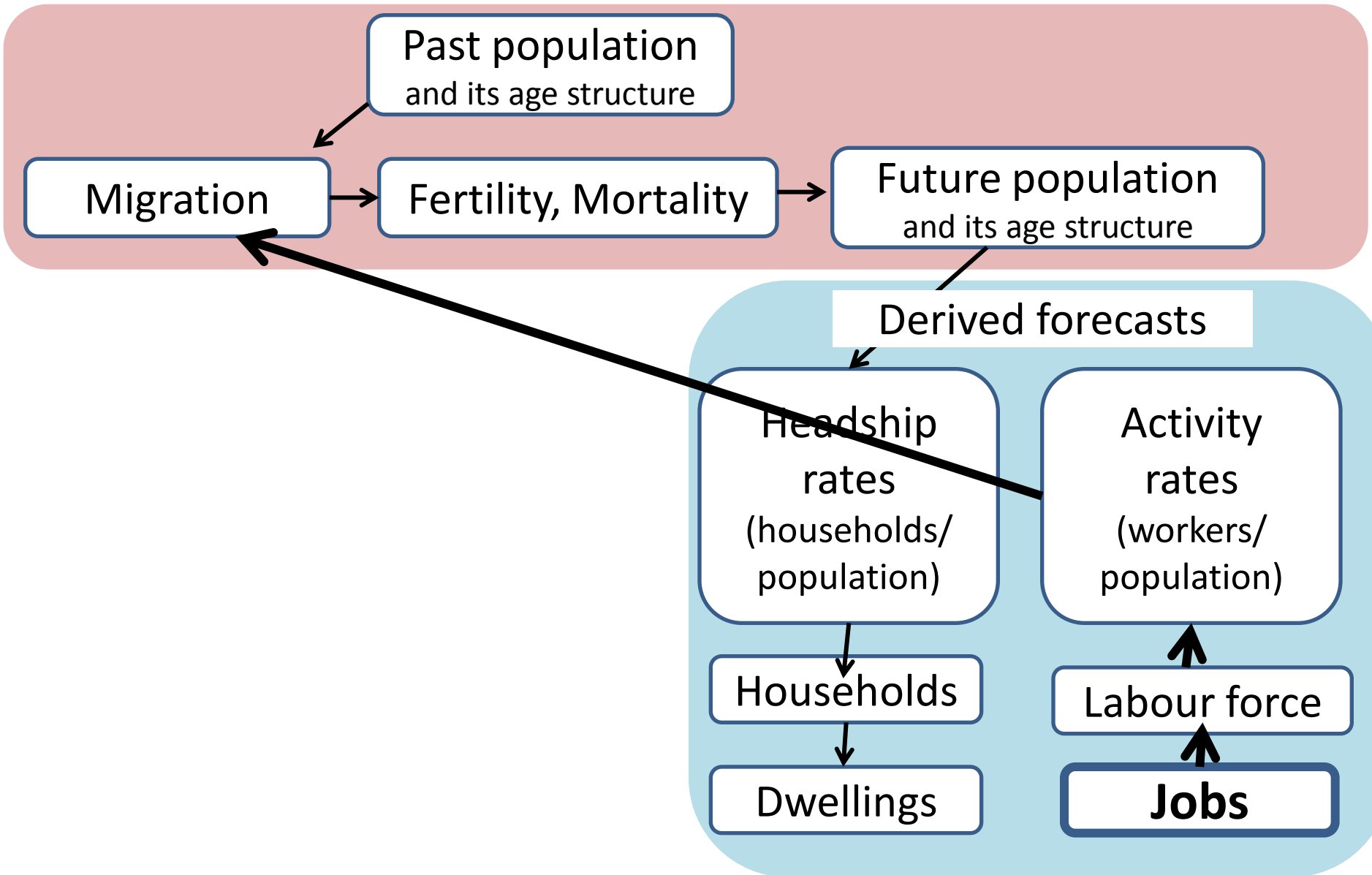
(a) Business as usual



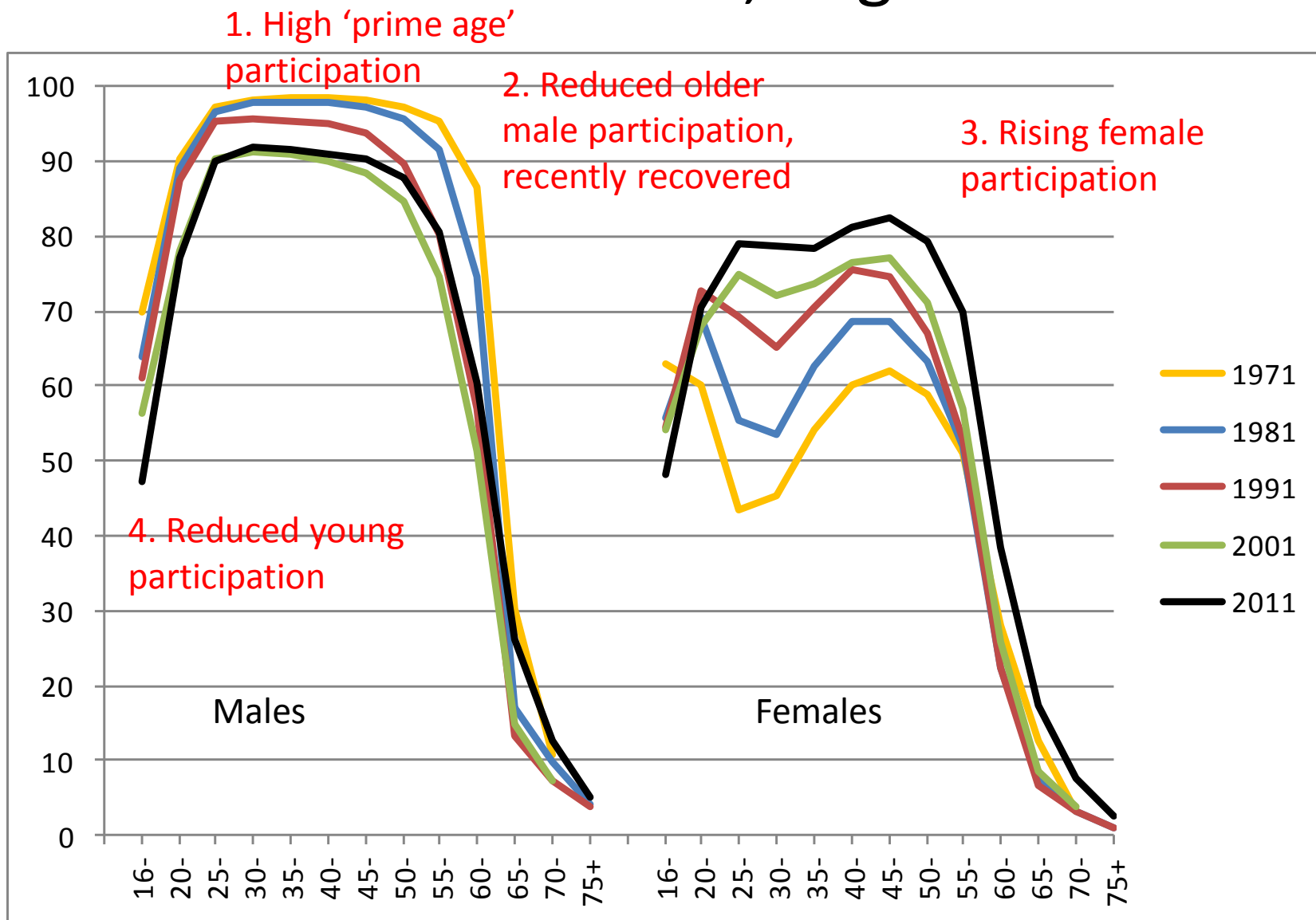
(b) A housing plan



(c) A jobs target



Economic activity rates, age and sex 1971-2011 Censuses, England & Wales



How to approach local projections in a standard way

- National trends are somewhat predictable
- Local trends are much less predictable
 - Change in local economic activity is more closely related to national change than to past local change
 - Local differences tend to remain over time
- Conclusions
 - Use a recent local profile of economic activity
 - Project it forward by adding the change in a good national projection

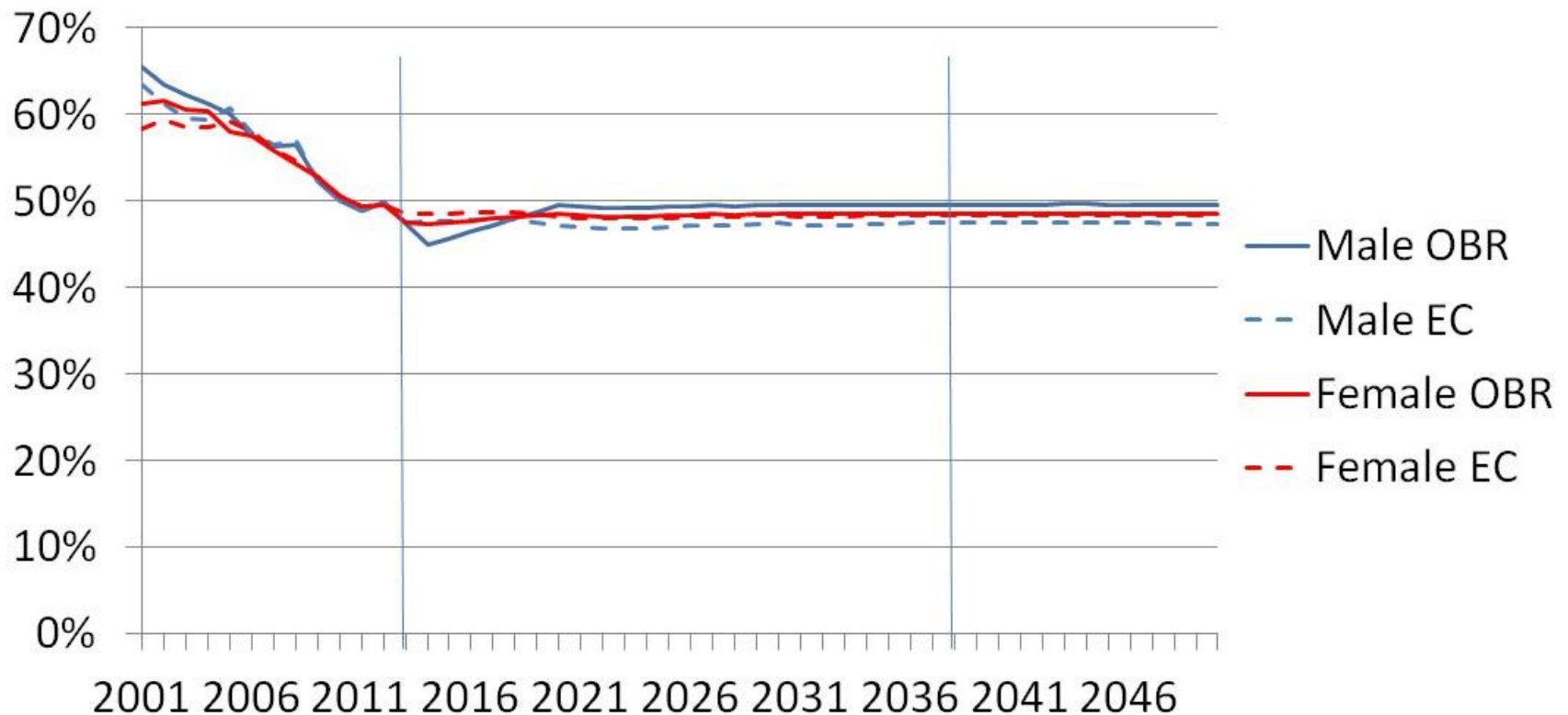
Labour Force forecasts for the UK

Age	EC(2014) 2015 Ageing report	OBR (2015) Fiscal Sustainability Report
16-24	Constant at 2013 values	Reduced participation rates, accelerated entry rates age 20-24 to compensate. Judgemental.
25-54	Constant entry and exit rates, based on LFS 2003-2013	Constant entry and exit rates, based on LFS 1997-2008.
55-74	Shift upwards to reflect pension changes, using average retirement age and judgement.	Reduce female exit rates near retirement age to equalise with male. Shift exit rates 1 year to reflect rise in SPA 1 year, starting 10 years earlier. Not well specified.
75+	Not included	Included but method not specified
Doc.	Incomplete methodology	Brief and incomplete methodology.
Data	Available on request for research	Available since November 2016

There are no official statistics of projected economic activity

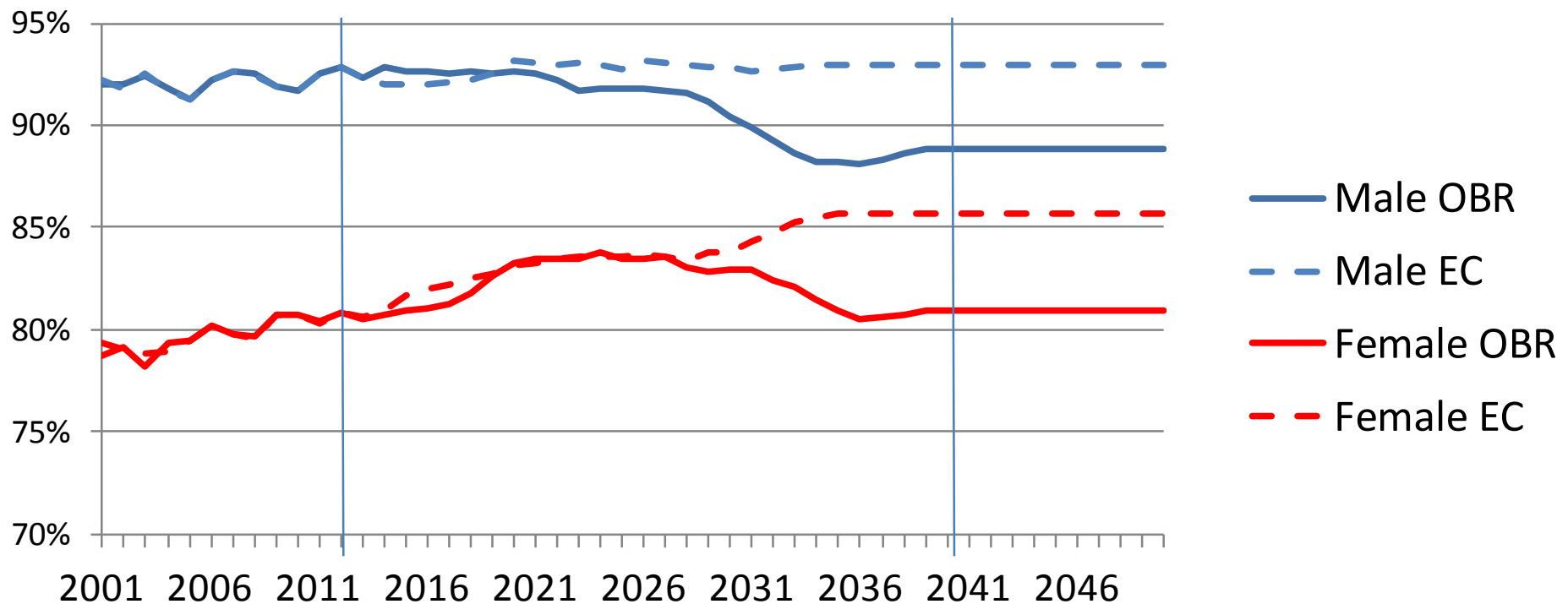
OBR & EC similar for 16-24

Economic activity for age group 16-19 projected by OBR (2015 FSR)
and EC (2015 Ageing Report)

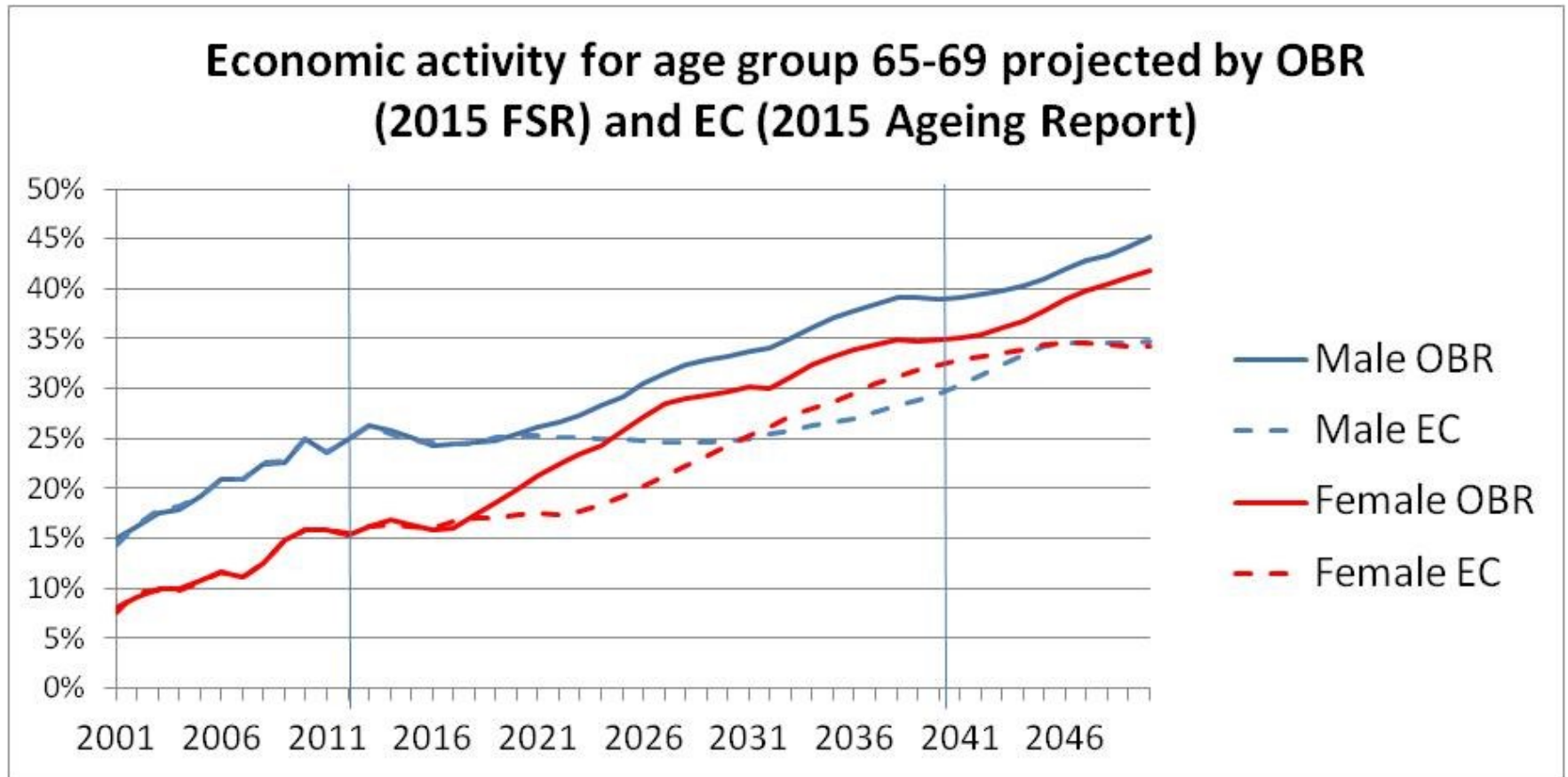


OBR less than EC for prime ages 25-59

**Economic activity for age group 40-44 projected by OBR
(2015 FSR) and EC (2015 Ageing Report)**



OBR more than EC for older ages 60+

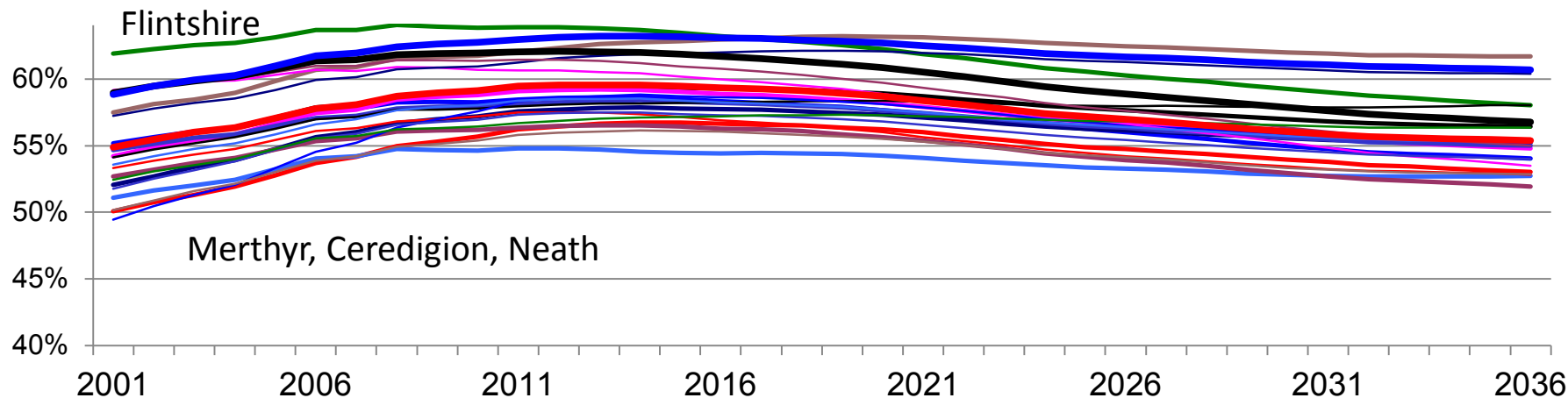


Local scenarios

- POPGROUP Data Module
 - Model with 5-year age groups 16-19, ..., 75+, male/female
 - Local Census 2001-2011
 - Choice of trends: Constant after 2011; EC trend; OBR trend
- Consider alternative future activity based on:
 - Plausible alternative trajectories
 - Continue local change 2001-2011
 - Each area's capacity for change
 - Removing unsustainable local oddities
 - Policy alternatives
 - Consider alternative to 2011 Census anchor
- Employment-led projections
 - Impact on migration, commuting, unemployment

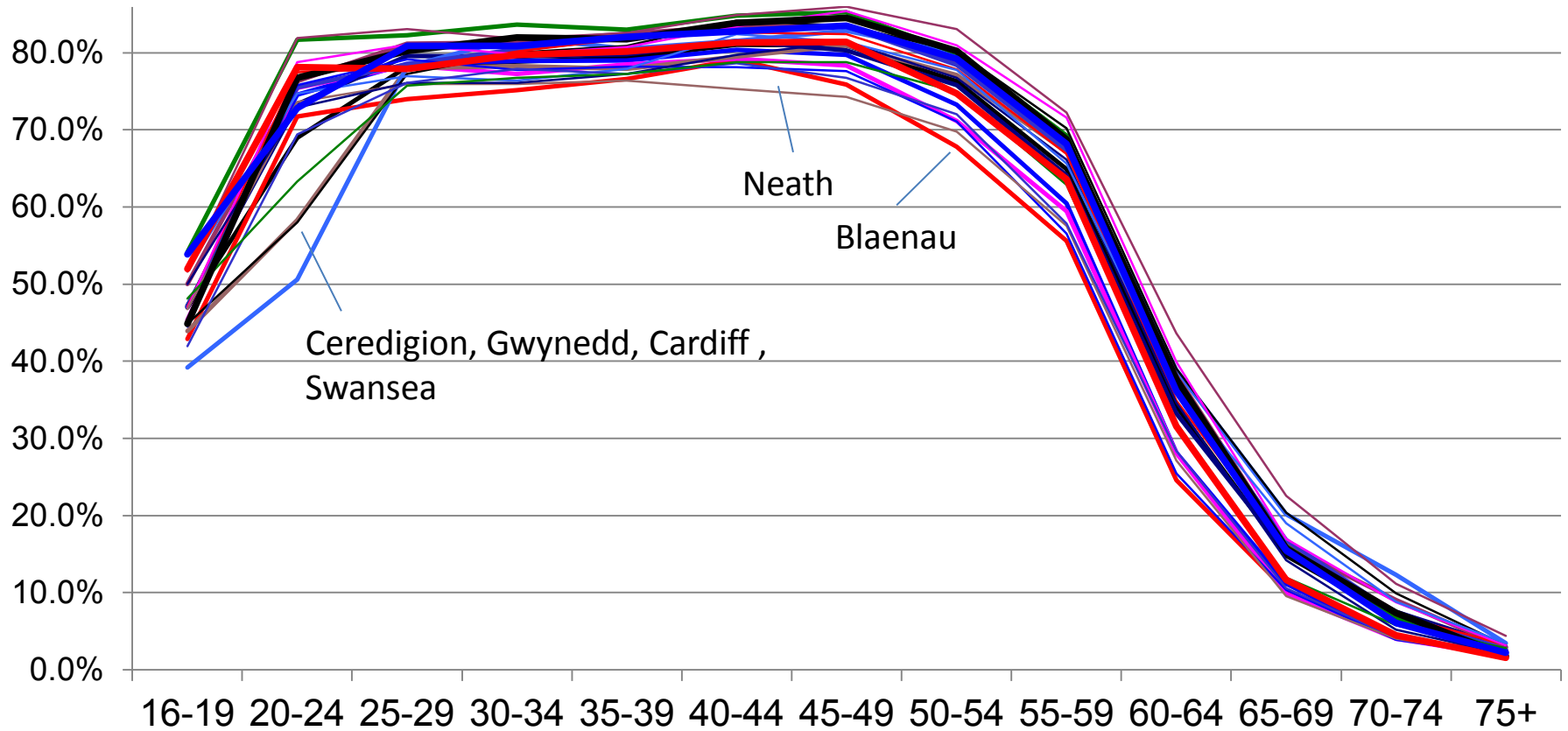
Projection of Wales UAs' activity – OBR future trend

All Ages - All Persons



- | | |
|--|-------------------------------------|
| — Wales | — Blaenau Gwent / Blaenau Gwent |
| — Bridgend / Pen-Y-Bont Ar Ogwr | — Caerphilly / Caerffili |
| — Cardiff / Caerdydd | — Carmarthenshire / Sir Gaerfyrddin |
| — Ceredigion / Ceredigion | — Conwy / Conwy |
| — Denbighshire / Sir Ddinbych | — Flintshire / Sir Y Fflint |
| — Gwynedd / Gwynedd | — Isle of Anglesey / Ynys Môn |
| — Merthyr Tydfil / Merthyr Tudful | — Monmouthshire / Sir Fynwy |
| — Neath Port Talbot / Castell-Nedd Port Talbot | — Newport / Casnewydd |
| — Pembrokeshire / Sir Benfro | — Powys / Powys |
| — Rhondda Cynon Taf / Rhondda Cynon Taf | — Swansea / Abertawe |

Wales UAs' activity – 2011 by age: Females

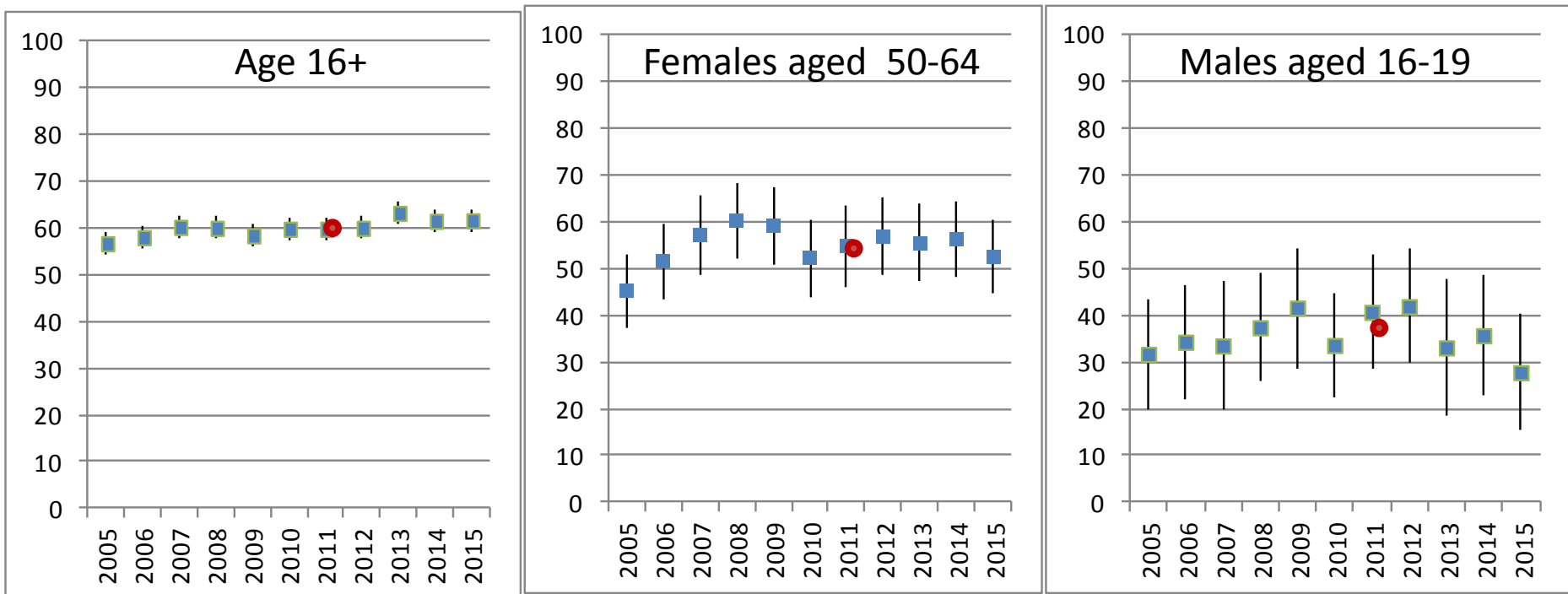


- | | | |
|---------------------------------------|-------------------------------|--|
| Wales | Blaenau Gwent / Blaenau Gwent | Bridgend / Pen-Y-Bont Ar Ogwr |
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| Rhondda Cynon Taf / Rhondda Cynon Taf | Swansea / Abertawe | The Vale of Glamorgan / Bro Morgannwg |
| Torfaen / Tor-Faen | Wrexham / Wrecsam | |

Previous LAD projections

- Cambridge Econometrics age-sex- economic activity for LADs, used by Warwick IER's Working Futures
 - No documentation
- Oxford Economics all-age economic activity as a product of a model of employment
 - East of England, E. Midlands, Greater Manchester, ...
 - Unspecific documentation
- Local authority and planning agency submissions
 - Great variety of approaches in reports
 - Plausible scenarios of future change (judgemental approach)
 - Impact of State Pension Age rise of X years modelled by shifting activity to that of a younger group by X years (Shropshire and others).

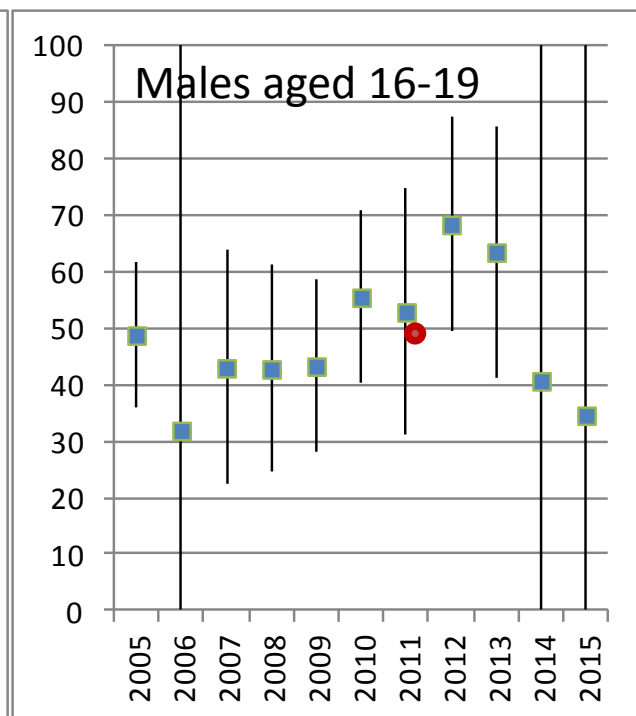
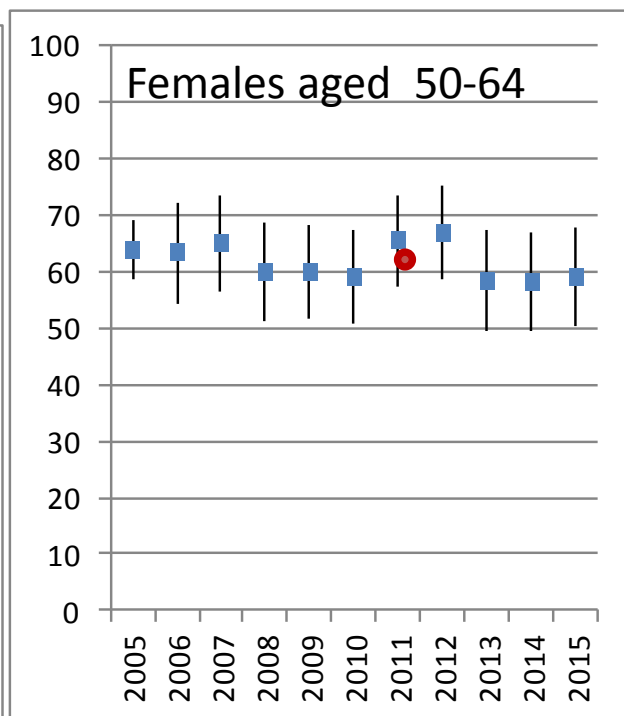
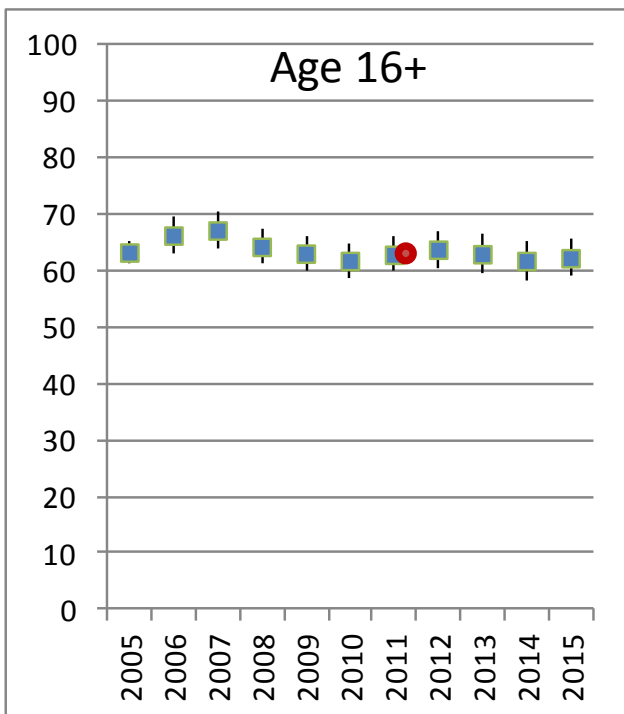
Does the APS provide a better starting point than the 2011 Census?



Manchester: economic activity year ending March, 2005-2015, with 95% CI

● 2011 Census

Cheshire East: economic activity year ending March, 2005-2015, with 95% CI



APS of interest in fast-changing areas, but not of benefit to standard projections

Conclusions

- UK needs a serious national forecast
 - Age-sex cohort history for UK
 - Time series analysis of period and cohort rates
 - Separate student population and its activity
 - Quality assured and documented to National Statistics standards
- Co-ordination of OBR and EC projections
- In the mean time:
 - Explore alternatives
- Publications:
 - CMIST Working Paper 2015-04: [National and local labour force projections for the UK](#)
 - POPGROUP user guide on labour force forecasts:
<http://www.edgeanalytics.co.uk/popgroup-manuals-guides.php>