East of England Local Government Association

East of England Forecasting Model

EEFM 2017 Baseline Forecasts

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8th August 2018

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clarity from complexity

Overview

- Model overview
- EEFM 2017 and recent developments
- Using EEFM
- Limits / limitations
- Outlook for the UK
- Outlook for the Regions
- Outlook for the LEPs and Local Authorities

Model overview

Structure of the EEFM

- Spreadsheet-based model
- A full database for:
  - 151 variables
    - Economics (workplace & residence employment, unemployment, GVA)
    - Demography (population, working-age population, migration)
    - Housing (households, dwellings)
    - Carbon emissions
  - 3 regions (East of England, East Midlands and South East), 79 local authorities and 5 LEPs
  - 31 sectors (for GVA and employment)
- Projections from 2001 to 2045

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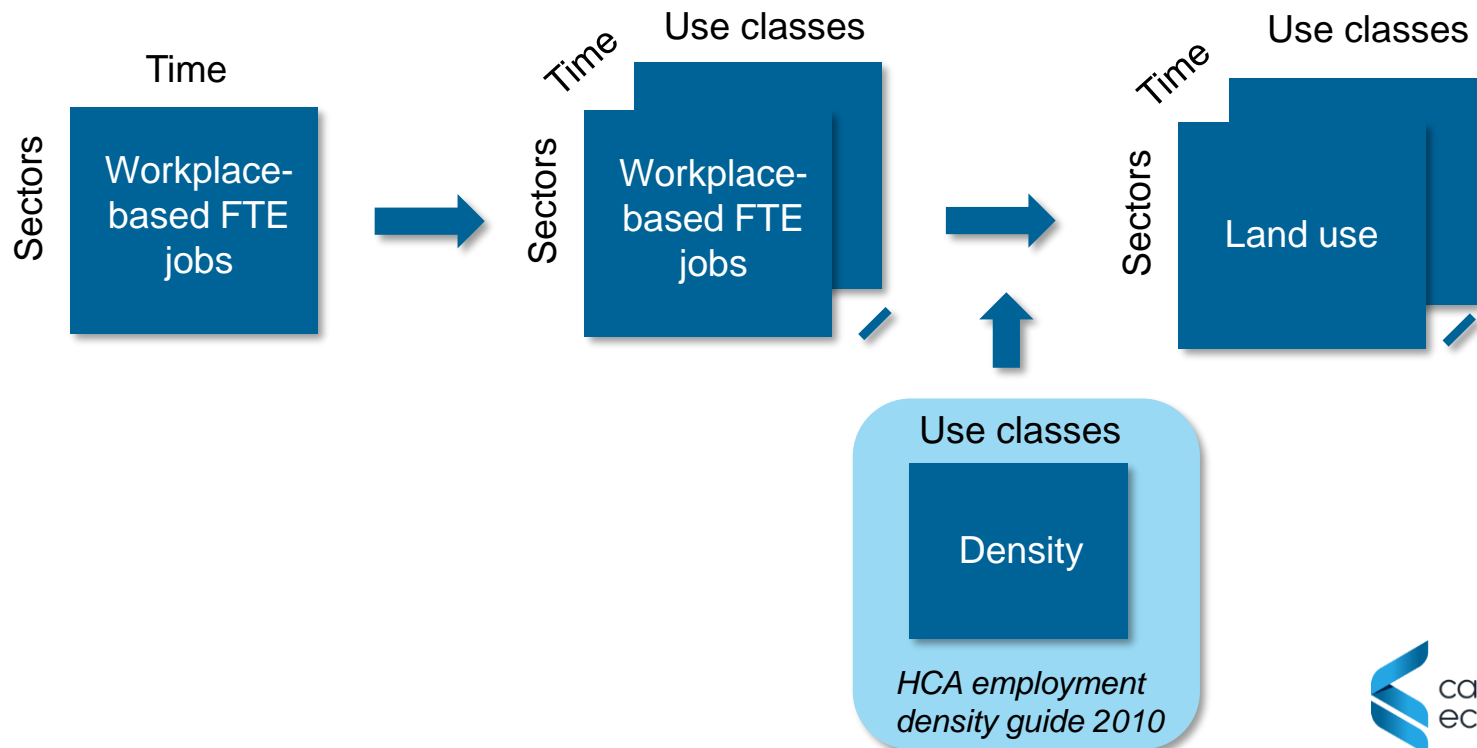econometrics

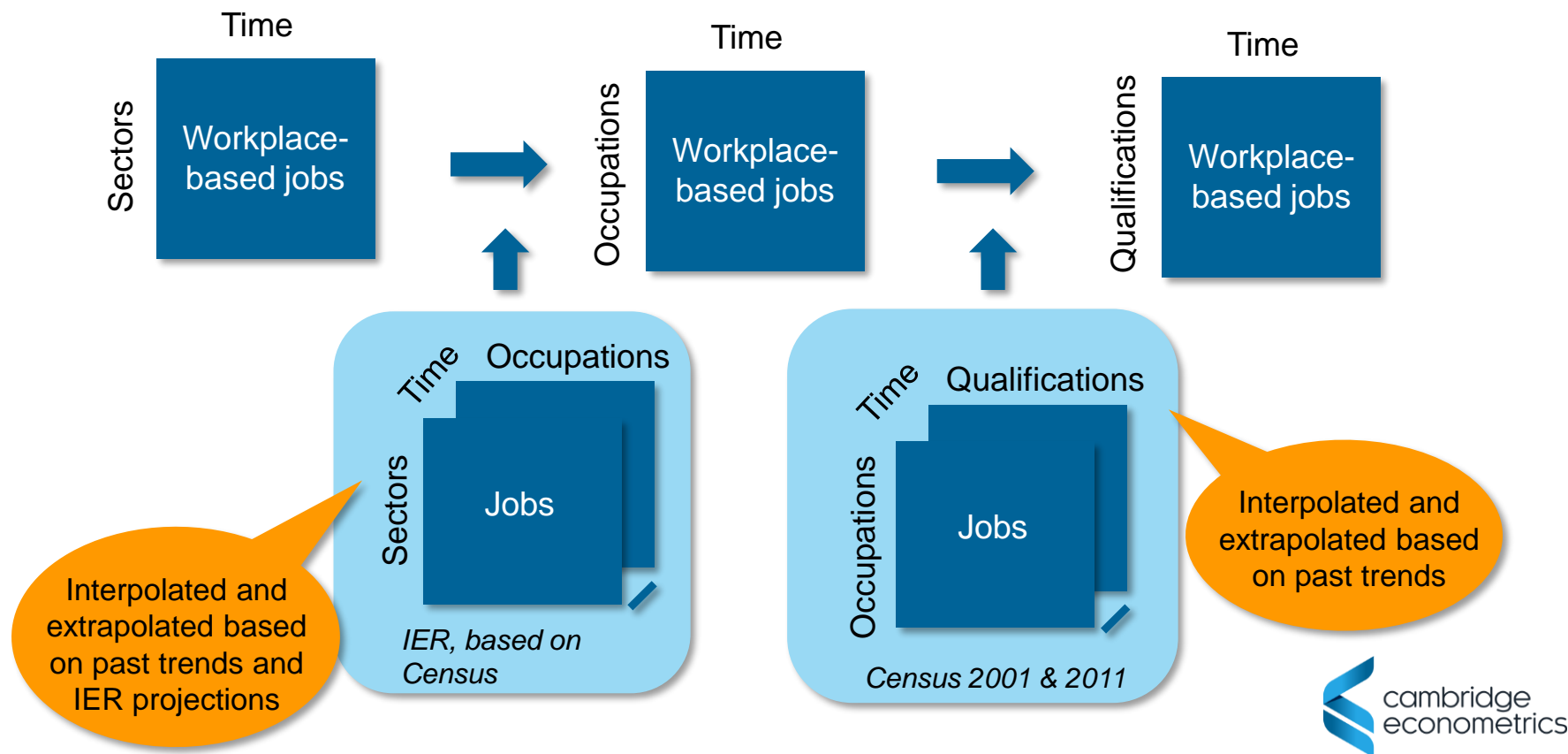# Links with other CE models
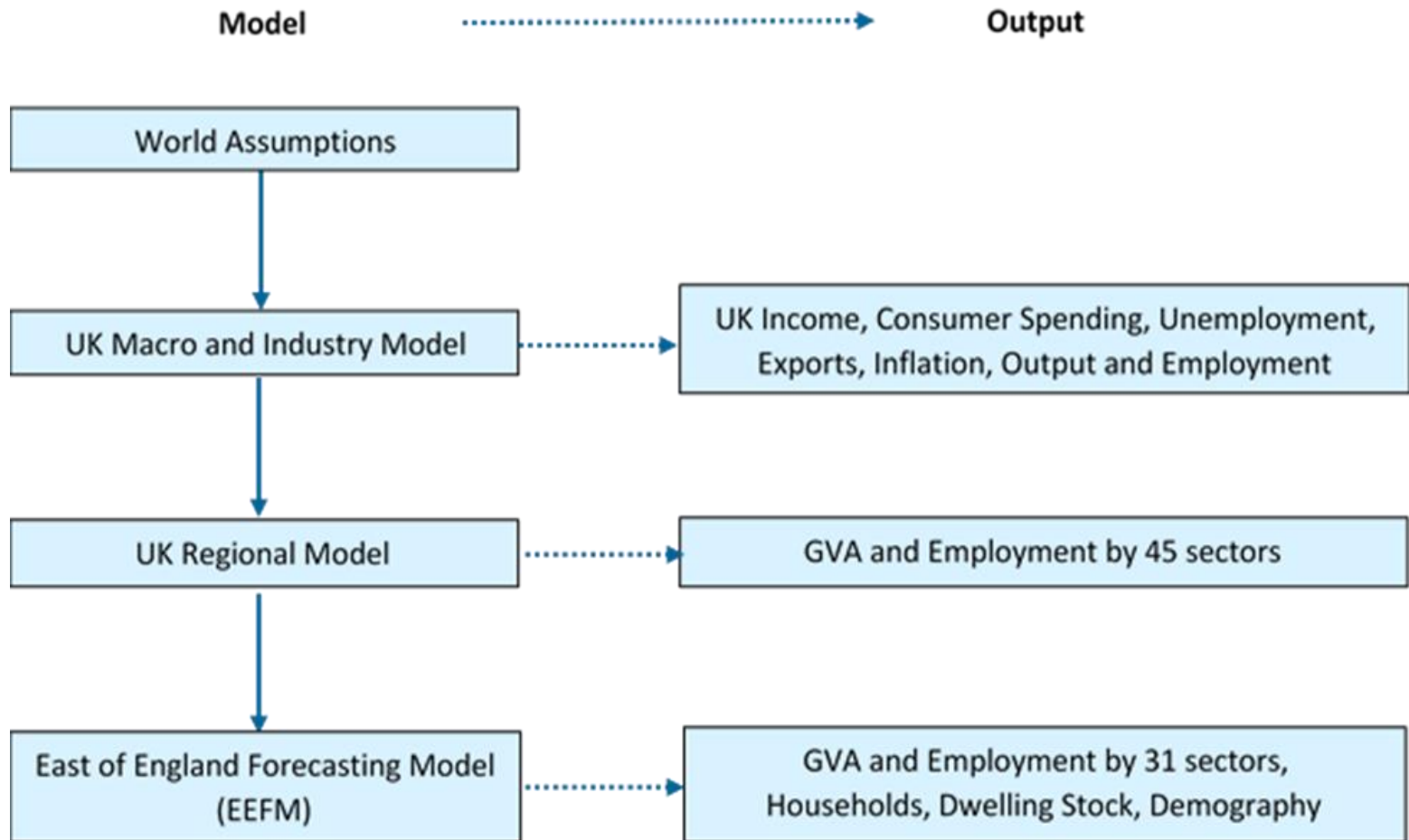
Relationships in the EEFM
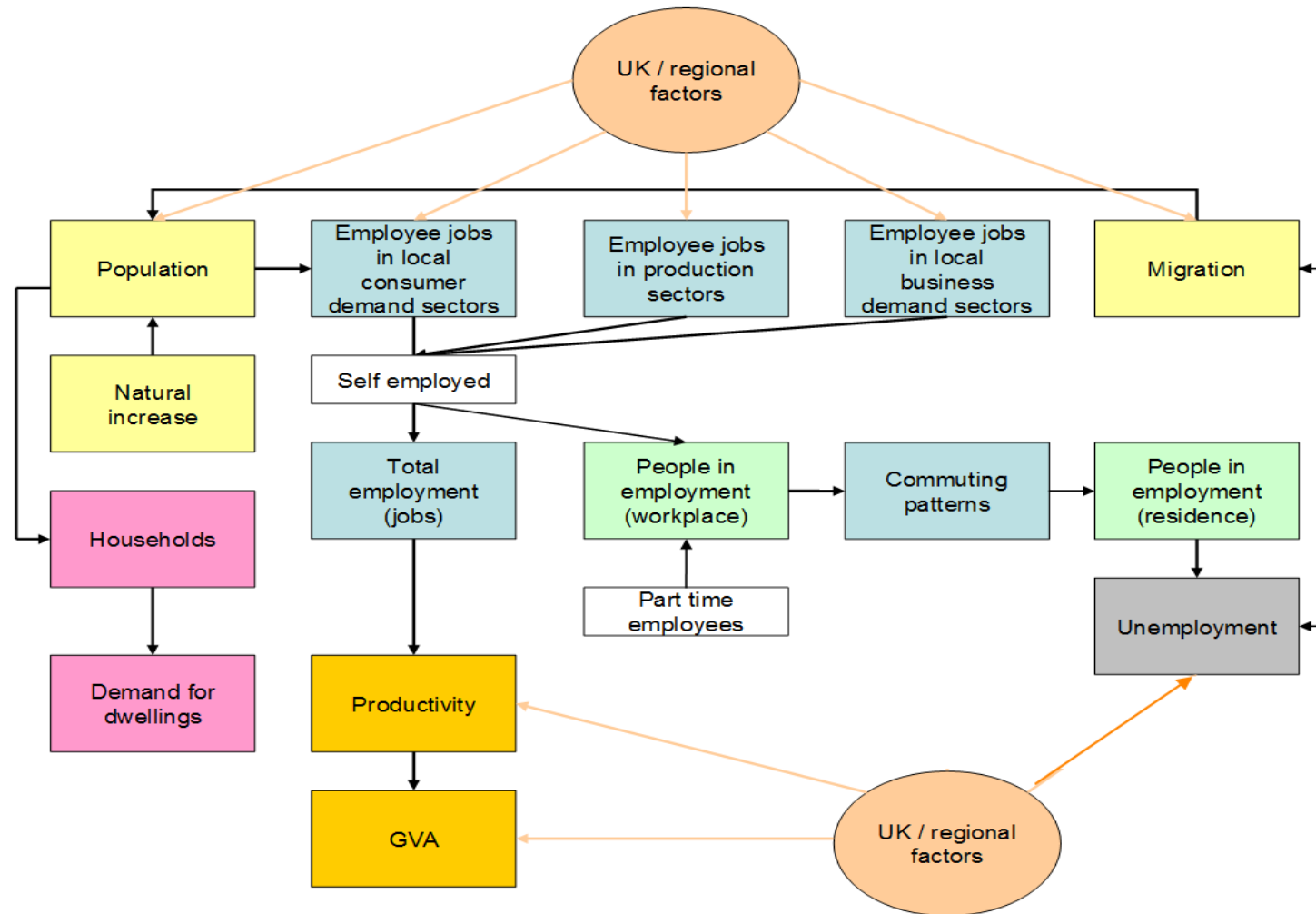
Employment land use module

- Land use forecasts by sector:
  - Industrial floorspace (B1c/B2)
  - Warehouse floorspace (B8)
  - Office floorspace (B1a/b)

Skills and qualifications module

- Job forecasts by:
  - 25 occupations (SOC2010)
  - 6 qualification levels (Census 2011)

EEFM 2017 and recent developments

EEFM 2017 update

- EEFM 2017 is one in a series of regular updates to the EEFM

- The name of the update reflects when the underlying assumptions were developed

- Known investments and policy changes are incorporated in the baseline forecasts to the extent that they are reflected in the currently available data (up to 2015)

- Changes to the data and assumptions may lead to differences from the previous update (EEFM 2016)

Changes since EEFM 2016

- Post-referendum UK and regional forecasts dated August 2017

- Additional data for 2015 (and revised historical data)

- New (2014-based) ONS sub-national population projections and household projections

- Re-estimated unemployment and migration coefficients based on more recent (1992-2015) data

- Introduction of skills & qualifications module

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Using EEFM

Local Authority uses for EEFM

- Baseline forecasts for analysis and research – key sectors, land use, skills forecasting

- Strategic documents – strategic economic plans, local plans, housing market assessments, planning policy, skills strategies

- Database – detailed sectoral data for several variables by local authority

All of these inform:

- Growth prospects

- Promotion of sectors

- Location and amount of land

- Skills requirements

Limits / limitations

Things to remember when using the model

- Data source – issues with raw data, local knowledge is helpful
- EEFM is based on observed past trends only
- LA forecasts are constrained to the region
- The forecasts are policy-neutral and unconstrained
- Reality is more complex than any model
- Forecasting models will not all agree

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Outlook for the UK

Potential impacts of Brexit

- No "cliff-edge" moment as the UK obtains a transitional deal with the EU

- The UK agrees a bespoke deal with the EU

- The UK secures an ability to reduce EU migration

- The UK can remain in the single market for goods but not services (no financial services passporting)

- Continued payments for access to the EU from the UK (negligible in macroeconomic terms)

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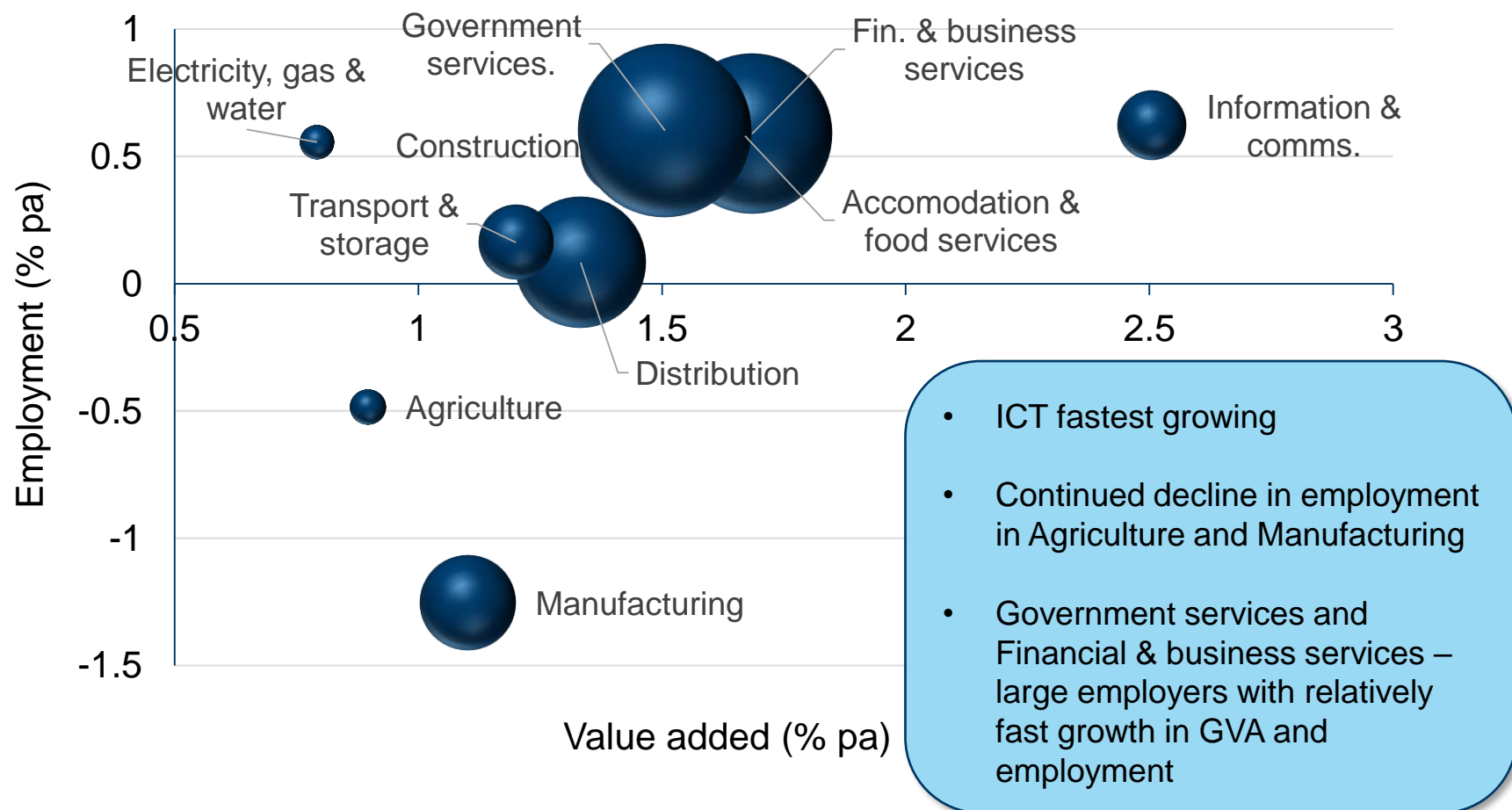
Long-term UK growth, 2020-45

UK GVA
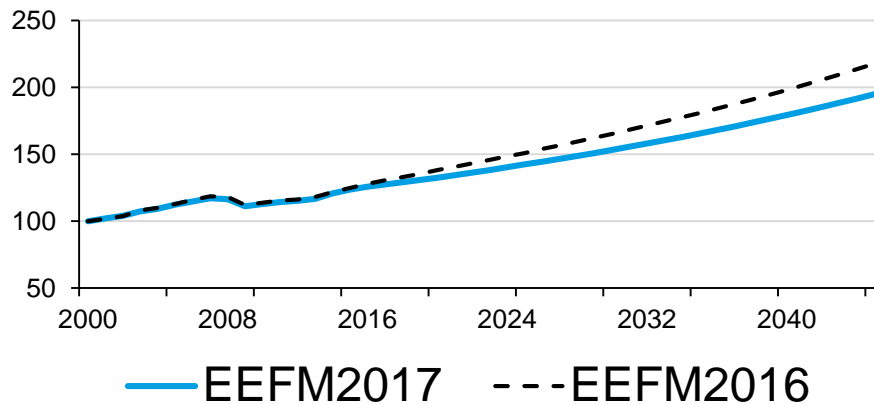
UK Employment
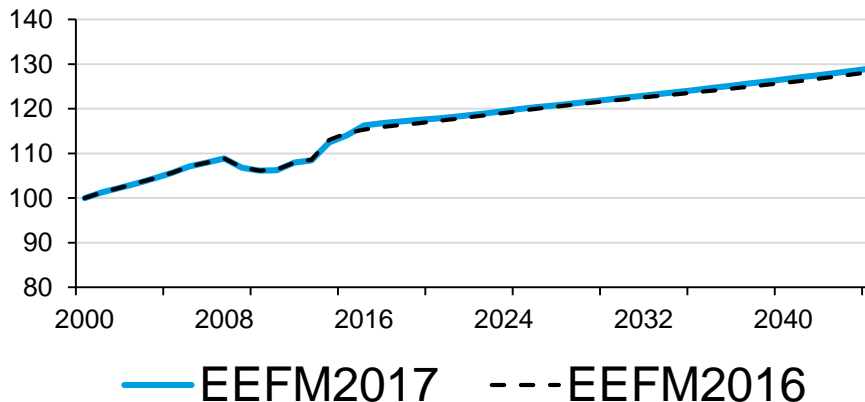
- Long-term GVA growth expected to slow because of lower productivity (resulting from skill shortages and lost investments)

- Employment at the aggregate level maintained on a similar trajectory as before the referendum

- Unemployment to stabilise at pre-recession levels

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UK sectoral prospects, 2020-45

Note: Size of bubble indicates number of jobs in sector in 2015.

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Outlook for the regions

Long-term regional economic growth

	Growth (% pa, 2020-45)			
	South East	**East of England**	**East Midlands**	**UK**
EEFM 2017				
Value-added	1.5	1.6	1.4	1.6
Population	0.6	0.7	0.5	0.5
Working age population	0.3	0.4	0.2	0.2
Employment	0.3	0.5	0.3	0.4
Value-added per capita	0.9	0.9	0.9	1.1
Value-added per job	1.2	1.1	1.1	1.2
EEFM 2016				
Value-added	1.8	1.8	1.8	1.8
Population	0.6	0.7	0.5	0.5
Working age population	0.3	0.4	0.1	0.1
Employment	0.4	0.5	0.3	0.4
Value-added per capita	1.2	1.1	1.3	1.3
Value-added per job	1.5	1.3	1.5	1.5

- Similar expected employment growth as in EEFM 2016.
- Slower expected GVA growth than EEFM 2016.

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Sectoral prospects for the East of England

Sectoral outlook, 2020-45

Value added (% pa)
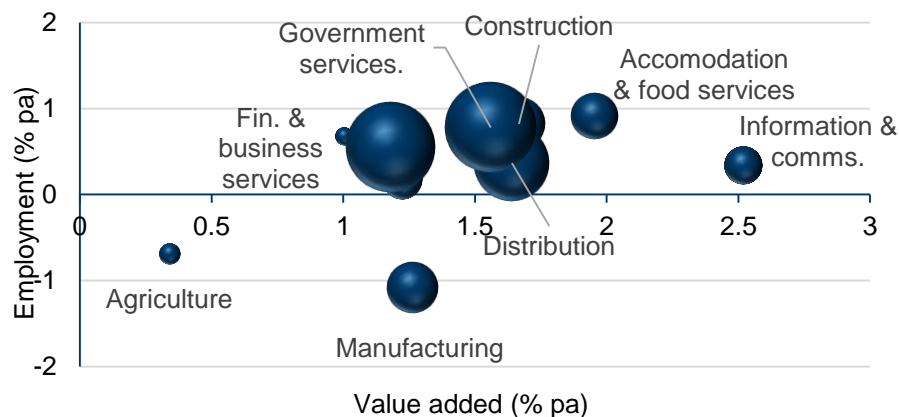
Relative performance with UK, 2020-45

GVA growth differential (pp)
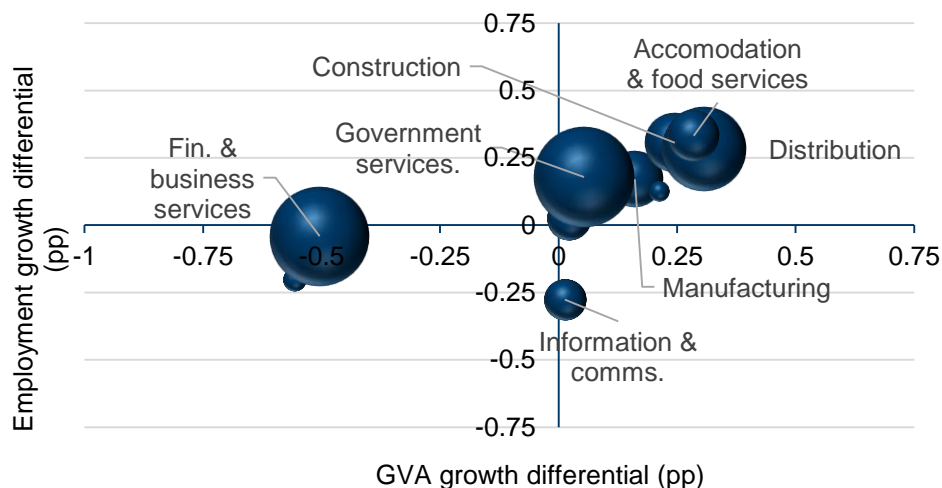
Note: Size of bubble indicates number of jobs in sector in 2015.

- GVA expected to grow the fastest in ICT, Construction and consumer services

- Employment expected to grow at a relatively similar rate across services sectors, while declining in Agriculture and Manufacturing

- The East of England expected to outperform the UK as a whole in the majority of sectors, but lag behind slightly in Financial & business services and ICT

- The decline in Manufacturing employment in East of England is not as extreme as in the UK as a whole

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Outlook for the LEPs and Local Authorities

Long-term growth, LEPs

	Growth (% pa, 2020-45)					
	East of England	**GCGP LEP**	**Herts LEP**	**New Anglia LEP**	**South East LEP**	**South East Midlands LEP**
EEFM 2017						
GVA	1.6	1.6	1.5	1.6	1.7	1.7
Population	0.7	0.7	0.6	0.6	0.7	0.9
Working age population	0.4	0.4	0.3	0.3	0.4	0.5
Employment	0.5	0.5	0.5	0.4	0.5	0.6
GVA per capita	0.9	0.9	0.9	1.0	0.9	0.8
GVA per job	1.1	1.1	1.1	1.1	1.1	1.1
EEFM 2016						
GVA	1.8	1.9	1.7	1.9	2.0	2.1
Population	0.7	0.8	0.7	0.6	0.7	0.9
Working age population	0.4	0.5	0.4	0.3	0.4	0.5
Employment	0.5	0.5	0.5	0.5	0.5	0.7
GVA per capita	1.1	1.1	1.0	1.2	1.3	1.2
GVA per job	1.3	1.4	1.2	1.4	1.5	1.4

- General slowdown in GVA (and so productivity) in region and LEPs compared to previous forecast.

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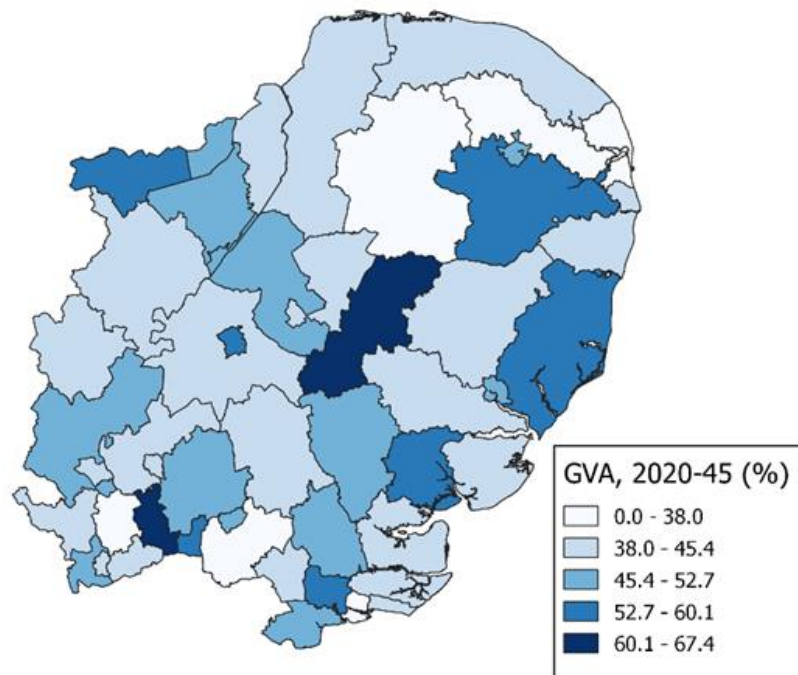
GVA and employment growth, LEPs
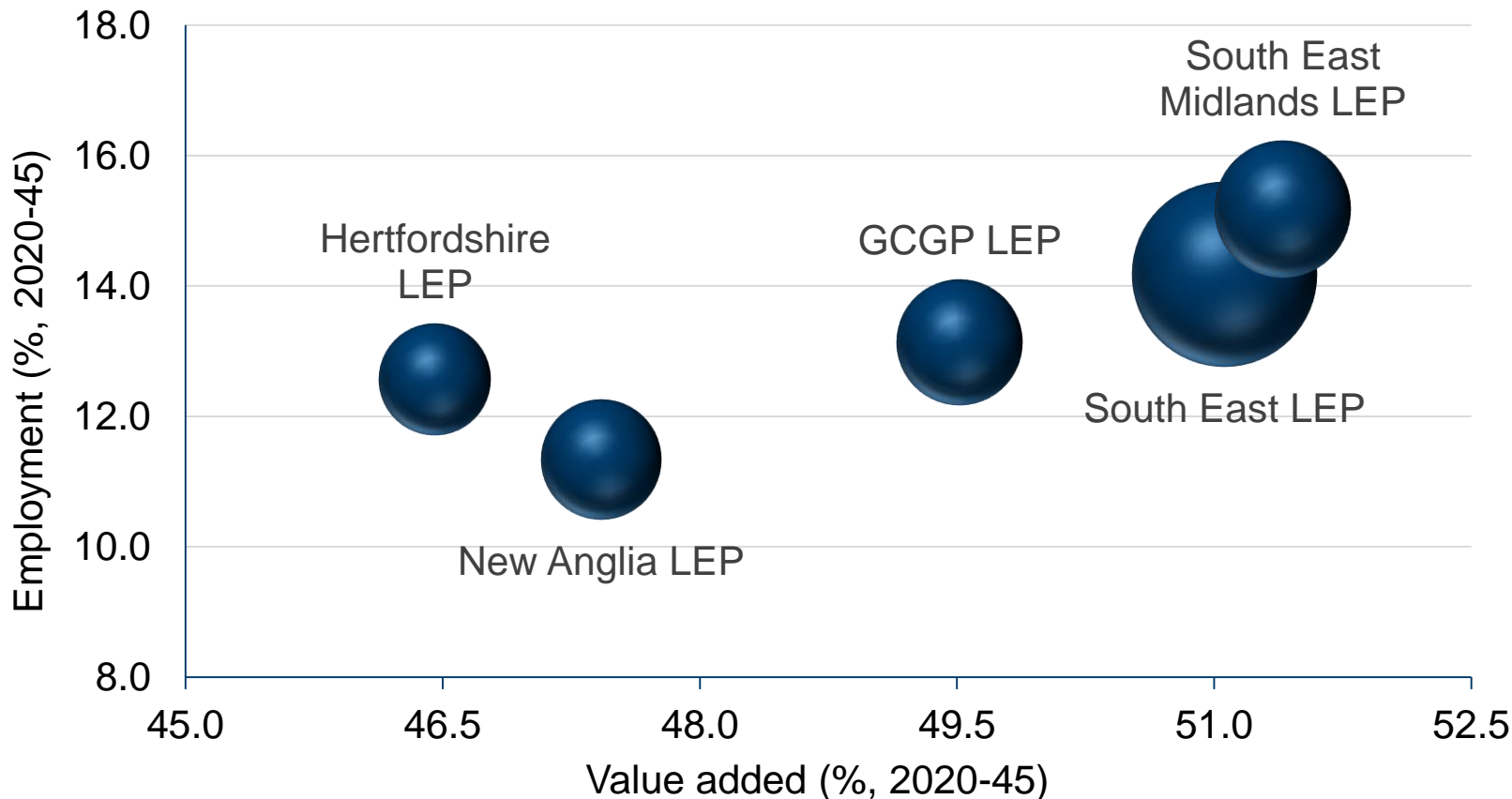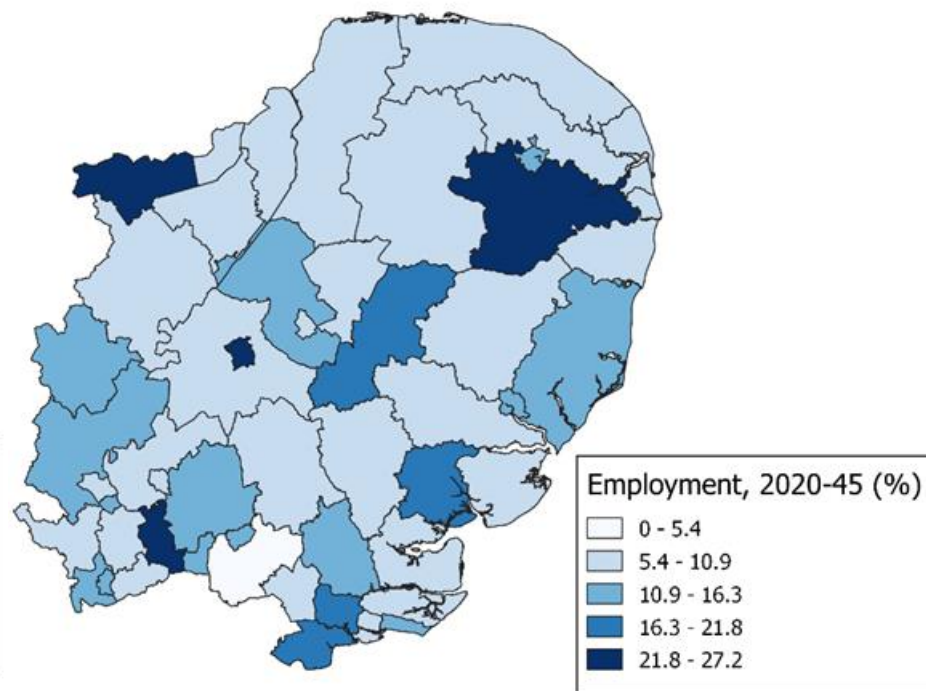

Note(s): Size of bubble indicates number of jobs in LEP in 2015.

- GCGP, South East Midlands and South East LEPs are strongest performing LEPs with strong growth in both employment and GVA.

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GVA and employment growth, LADs

GVA

Employment

GVA, 2020-45 (%)
- ☐ 0.0 - 38.0
- ☐ 38.0 - 45.4
- ☐ 45.4 - 52.7
- ☐ 52.7 - 60.1
- ☐ 60.1 - 67.4

Employment, 2020-45 (%)
- ☐ 0 - 5.4
- ☐ 5.4 - 10.9
- ☐ 10.9 - 16.3
- ☐ 16.3 - 21.8
- ☐ 21.8 - 27.2

- Both GVA and employment are expected to grow in all areas
- GVA growth strongest in St Edmundsbury, Welwyn Hatfield, Colchester, Peterborough, Cambridge and Basildon.
- Employment growth strongest in Cambridge, Welwyn Hatfield, Peterborough, South Norfolk and Colchester.
- Variations in GVA and employment growth reflect productivity differences

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High-skilled occupations, LADs

2015

High-skilled occupations
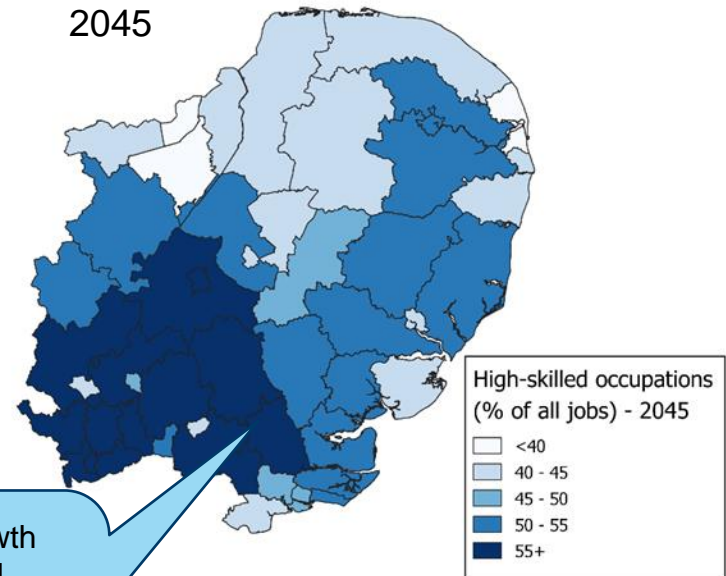(% of all jobs) - 2015

- <40
- 40 - 45
- 45 - 50
- 50 - 55
- 55+
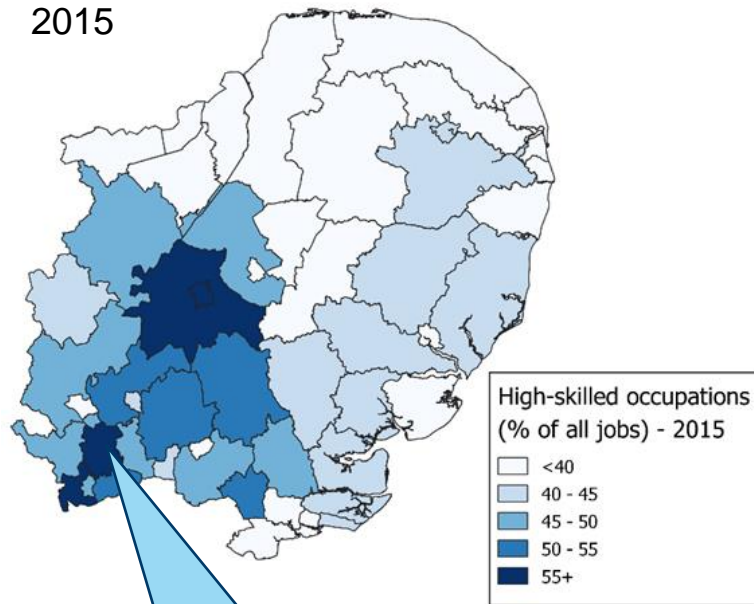
High-skilled occupation jobs concentrated in the south west corner, particularly Cambridgeshire and Hertfordshire

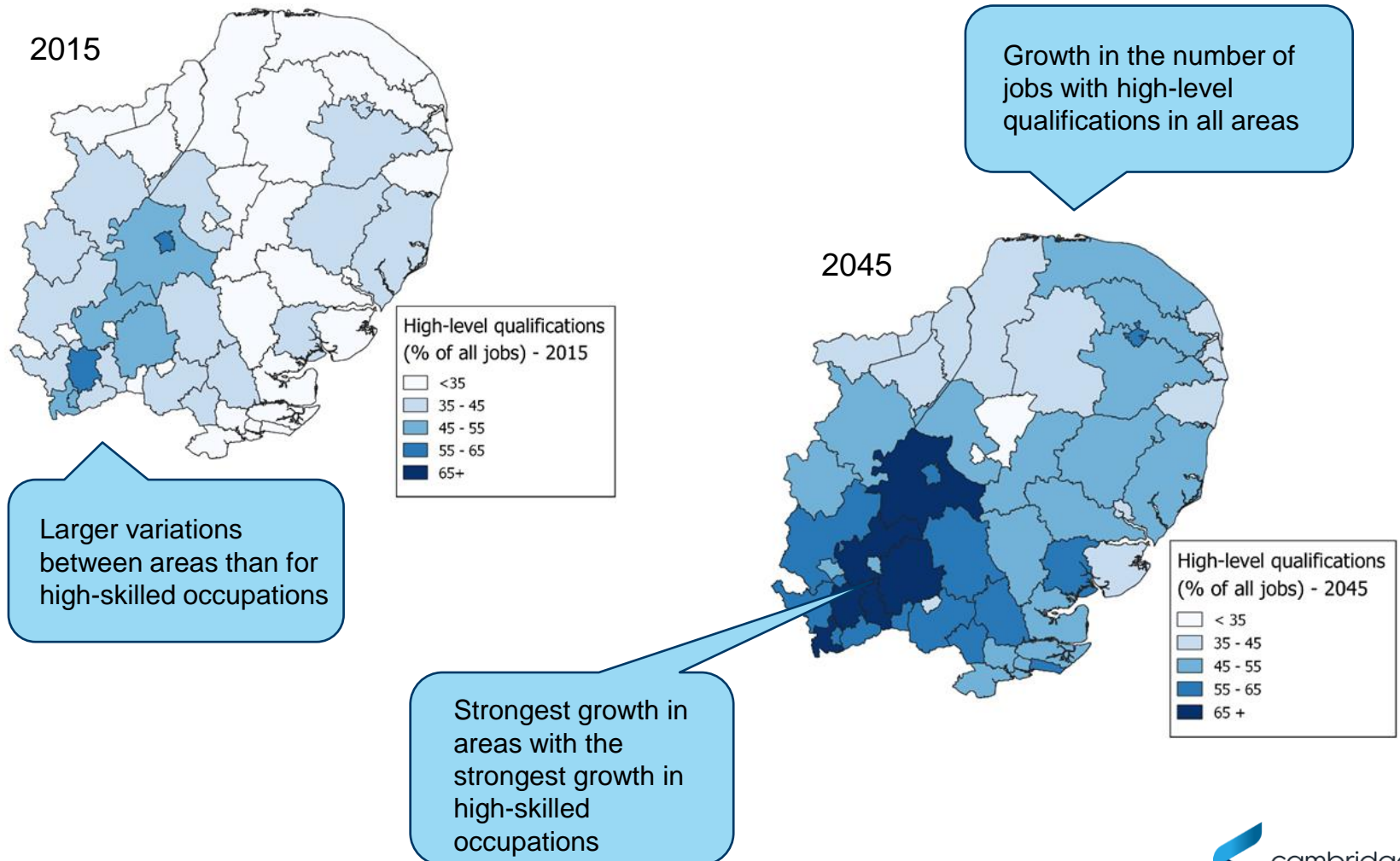The majority of additional jobs across the region will be in high-skilled occupations

2045

High-skilled occupations
(% of all jobs) - 2045

- <40
- 40 - 45
- 45 - 50
- 50 - 55
- 55+

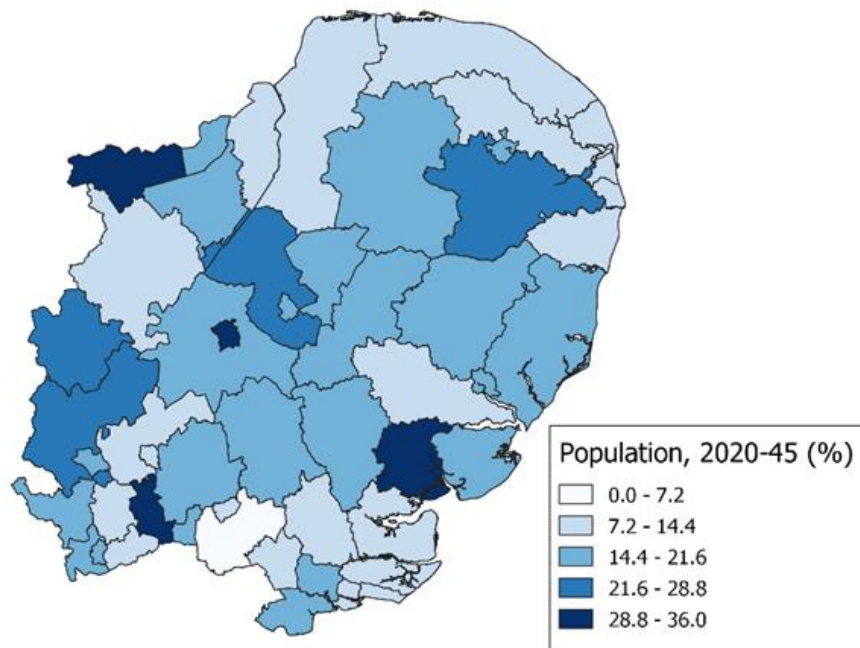Stronger growth in high-skilled jobs in Cambridgeshire, Hertfordshire and part of Essex

Note: High-skilled occupations include managers, directors & senior officials, professional occupations, and associate professional & technical occupations (SOC2010).
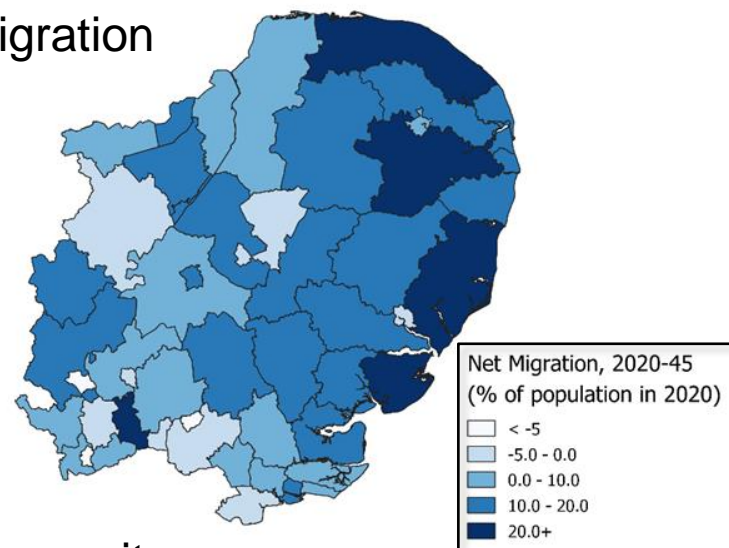
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Level 4 qualifications and above, LADs

2015

2045

High-level qualifications
(% of all jobs) - 2015
- [ ] <35
- [ ] 35 - 45
- [ ] 45 - 55
- [ ] 55 - 65
- [ ] 65+

High-level qualifications
(% of all jobs) - 2045
- [ ] < 35
- [ ] 35 - 45
- [ ] 45 - 55
- [ ] 55 - 65
- [ ] 65 +

Growth in the number of jobs with high-level qualifications in all areas

Larger variations between areas than for high-skilled occupations

Strongest growth in areas with the strongest growth in high-skilled occupations

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Demographics, LADs

Population

Population, 2020-45 (%)
- 0.0 - 7.2
- 7.2 - 14.4
- 14.4 - 21.6
- 21.6 - 28.8
- 28.8 - 36.0

Net migration

Net Migration, 2020-45
(% of population in 2020)
- < -5
- -5.0 - 0.0
- 0.0 - 10.0
- 10.0 - 20.0
- 20.0+

GVA per capita

GVA per capita, 2020-45 (%)
- 0.0 - 17.0
- 17.0 - 22.5
- 22.5 - 28.0
- 28.0 - 33.5
- 33.5 - 39.0
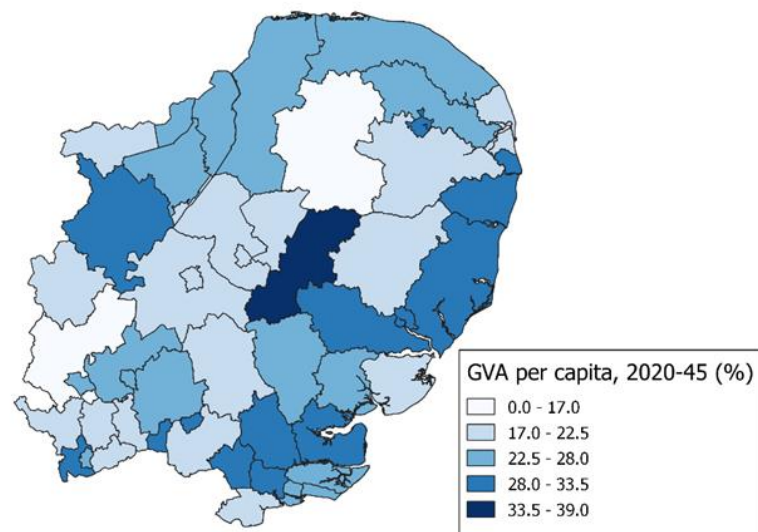
- Population growth expected to be strongest in Welwyn Hatfield, Peterborough, Cambridge, Mid Bedfordshire and Colchester.
- Only a few areas expected to have net out-migration over 2015-45
- The largest positive net migration is expected on the east coast

Average household size – East of England

An increase in average household size means that the same population would imply fewer households
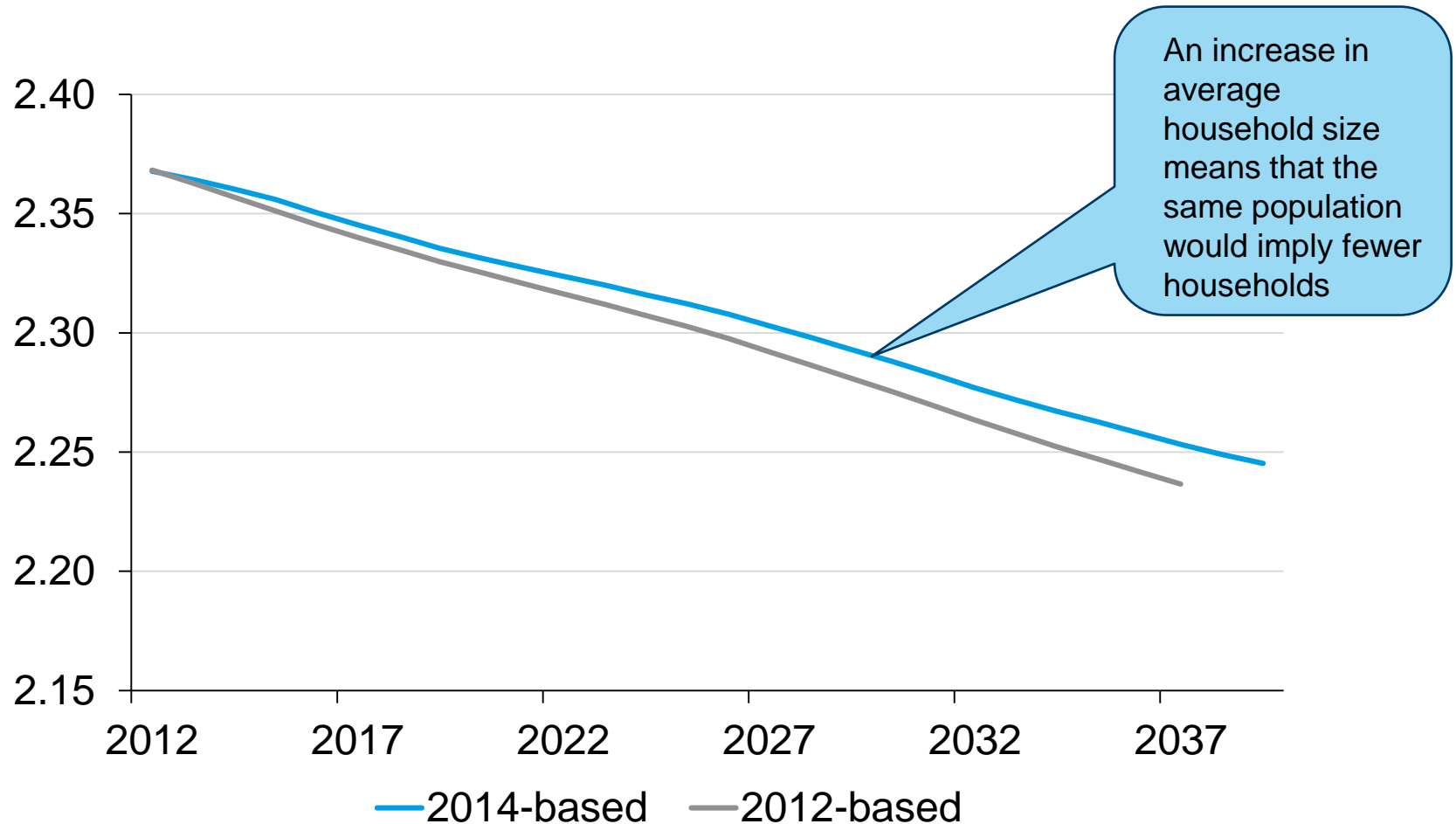
- Projected increase in households at the regional level is expected to be less than in EEFM 2016.

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Households

Households – 2016-36 (%)

Households – 2016-36 (000s)
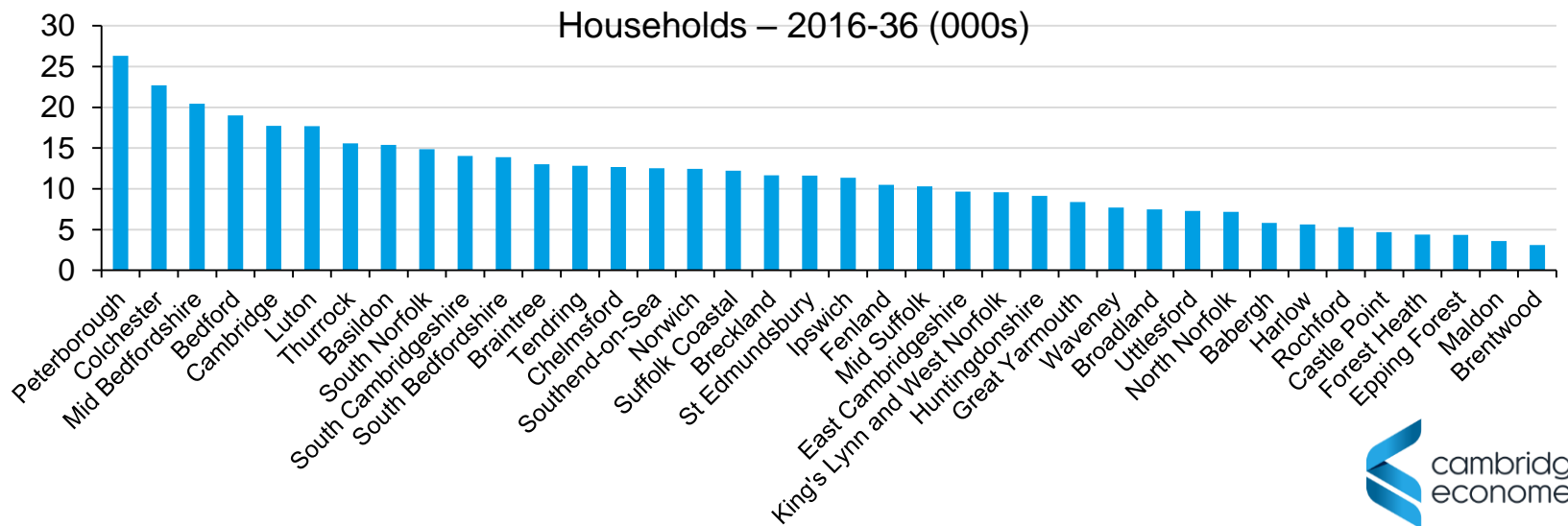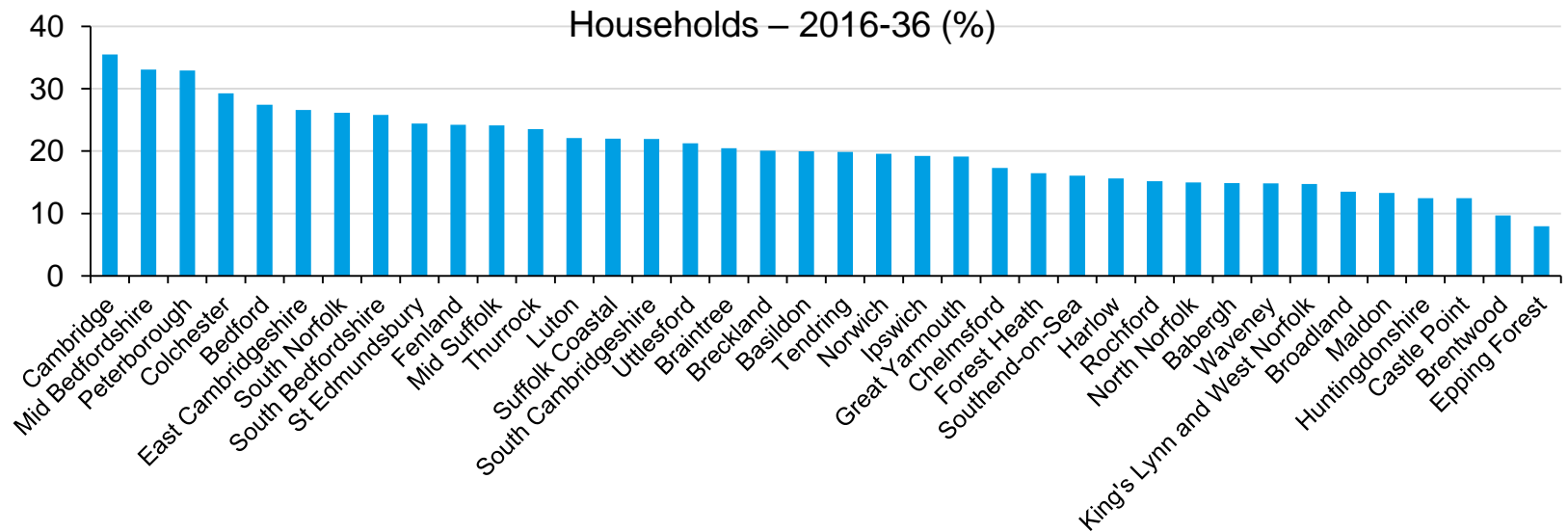
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