

Welsh Graduate Mobility

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Dr Gillian Bristow and Dr Madeleine Pill

Centre on Skills, Knowledge and Organisational Performance (SKOPE)

School of City and Regional Planning, Cardiff University

Rhys Davies, Wales Institute of Social & Economic Research, Data & Methods
(WISERD) Cardiff

Dr Stephen Drinkwater, WISERD Swansea



Welsh Graduate Mobility: Presentation Overview

- Context
- Aims and data sources
- Findings
- Policy implications
- Suggested avenues for further research

Context:

Why Important

- Growing interest in graduate migration
 - graduate movements “possibly represent the greatest flow of human capital around a region or country at a given point in time” (Cowling, 2009; p5)
- ‘Brain drains’ undermine potential for regional economic development
 - “the virtuous cycle of growth of favoured regions and, in the zero-sum game geography of Britain’s regions, a vicious one of the draining away of human capital in others” (Hoare and Corver, 2010; p. 480).
- Developing literature on graduate migration in UK
 - spatially uneven (but complex) employment geography for graduates: eg decentralising public sector knowledge economy; centralising private sector (Wright, 2011)
 - importance of employment opportunities for regional graduate recruitment/retention (Coombes et al, 2003)
 - path dependency of migration decisions (Faggian et al, 2007)

Context:

Determinants of Graduate Mobility

- Different propensities to migrate according to graduate characteristics (Mosca and Wright, 2010) such as ‘quality’ (Faggian et al, 2007 & 2008)
- Regions recruit graduates with prior familiarity through home or study (especially both) – London the exception (Hoare and Corver, 2010)
- Acquisition of job and region-specific human capital engenders ‘lock-in’ effects (Faggian et al, 2007)
- But increasing evidence that graduate mobility evolves over time
 - as graduates mature, long-term relationships and the suitability of their environment for family formation becomes more important (Bond et al, 2008)
- Thus graduate mobility over time likely to be influenced by complex and perhaps competing ‘pull’ forces of places where graduates grew up or studied, and powerful ‘push’ of career opportunities

Research Aims and Key Questions

Aims

1. to establish the patterns of graduate migration to and from Wales
2. to investigate the employment & partnership/ family formation outcomes of post-1992 'Welsh' graduates
3. to consider the push and pull factors influencing graduate employment and migration decisions (eg. career development opportunities, wage levels, job security; social networks; quality-of-place)

Key questions

- What happens to 'leavers' and to 'stayers'? – economic & employment; partnership and family outcomes for graduates
- How does graduate mobility evolve over time? – pull of where graduates grew up or studied and push of career opportunities
- What are the implications for Wales?

Data sources & what they tell us

- **Higher Education Statistics Agency (HESA)**
 - Students in HE (Home to University transitions)
 - Destinations of Leavers from HE (DLHE) (University to Labour transitions)
 - Provides **up-to-date picture** of new graduate pathways into regional labour markets
- **Labour Force Survey (LFS)**
 - Identifies country of birth and current residence
 - Enables outcomes analysis of successive cohorts of post-92 young graduates
 - Provides **'longitudinal' picture of evolution of graduate careers and family formation**
- **Annual Population Survey (APS)**
 - Identifies country of birth, current residence and (since 2008) where acquired highest degree
 - Augments LFS analysis regarding when migrants left or returned to their home country
 - Enables analysis of **stock of (Welsh-born) graduates** and their pathways
- **Qualitative research**
 - case studies of Welsh knowledge economy businesses which employ graduate 'talent'
 - **illuminates 'push and pull' factors** in terms of the locational decisions of knowledge economy entrepreneurs and their employees

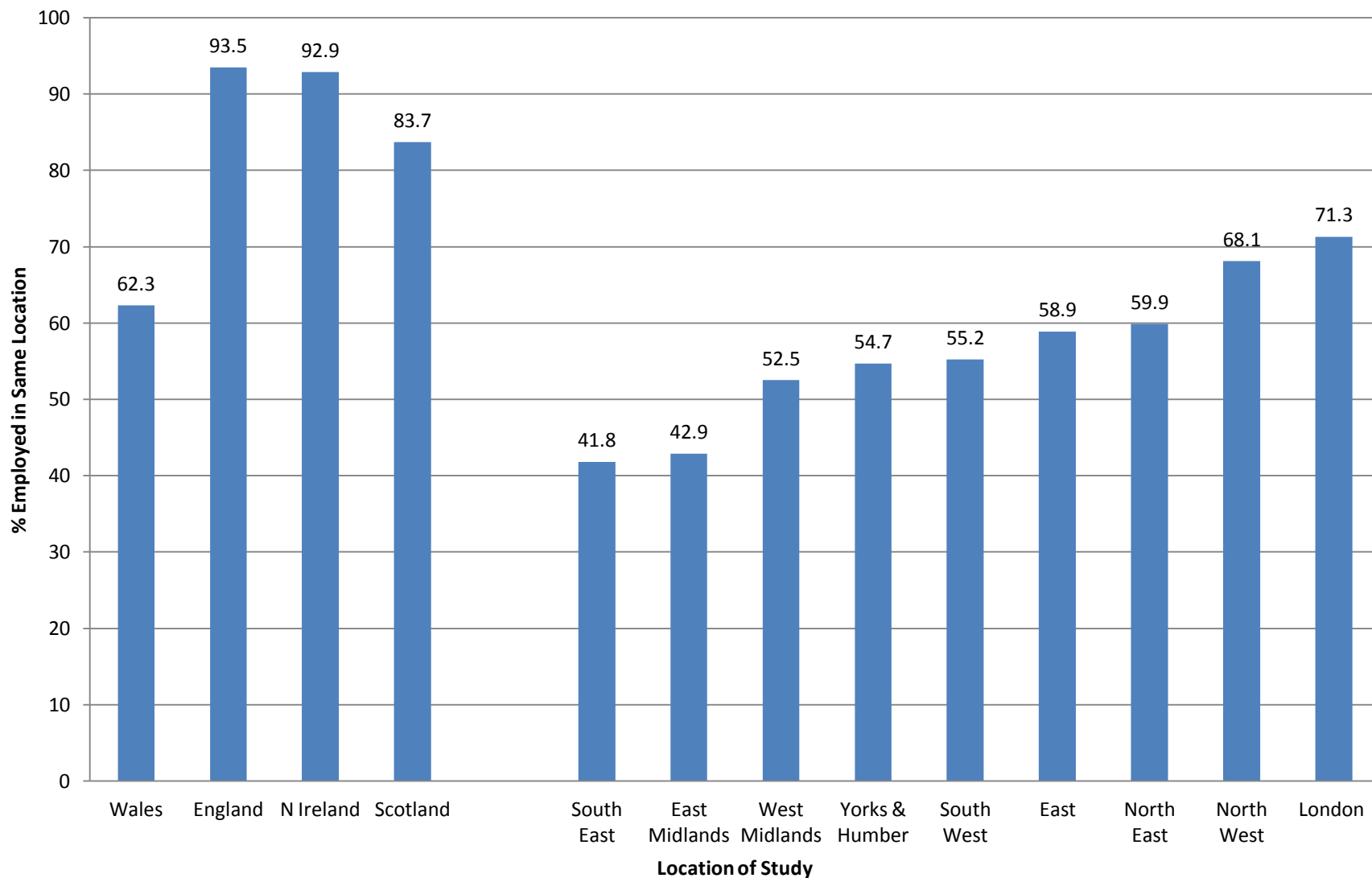
HESA Data

- Provides current picture of graduate migration
- Limited information on personal characteristics
- Sets scene for added value of LFS/APS analysis

Student migration (Home to University flows)

- Low retention rate compared to Scotland and England
- But significantly higher than English regional average
 - 69% compared to 48% (2009/10)
- Integrated England and Wales HE system (Rees and Taylor, 2006)
 - 30% Wales-domiciled undergrads study in England (15,000 students) (2009/10)
 - 42% undergrads in Wales English-domiciled (25,000 students) (2009/10)

HESA Data: Graduate Migration



HESA Data: Pathways

Pathways into regional labour markets (2005/06)

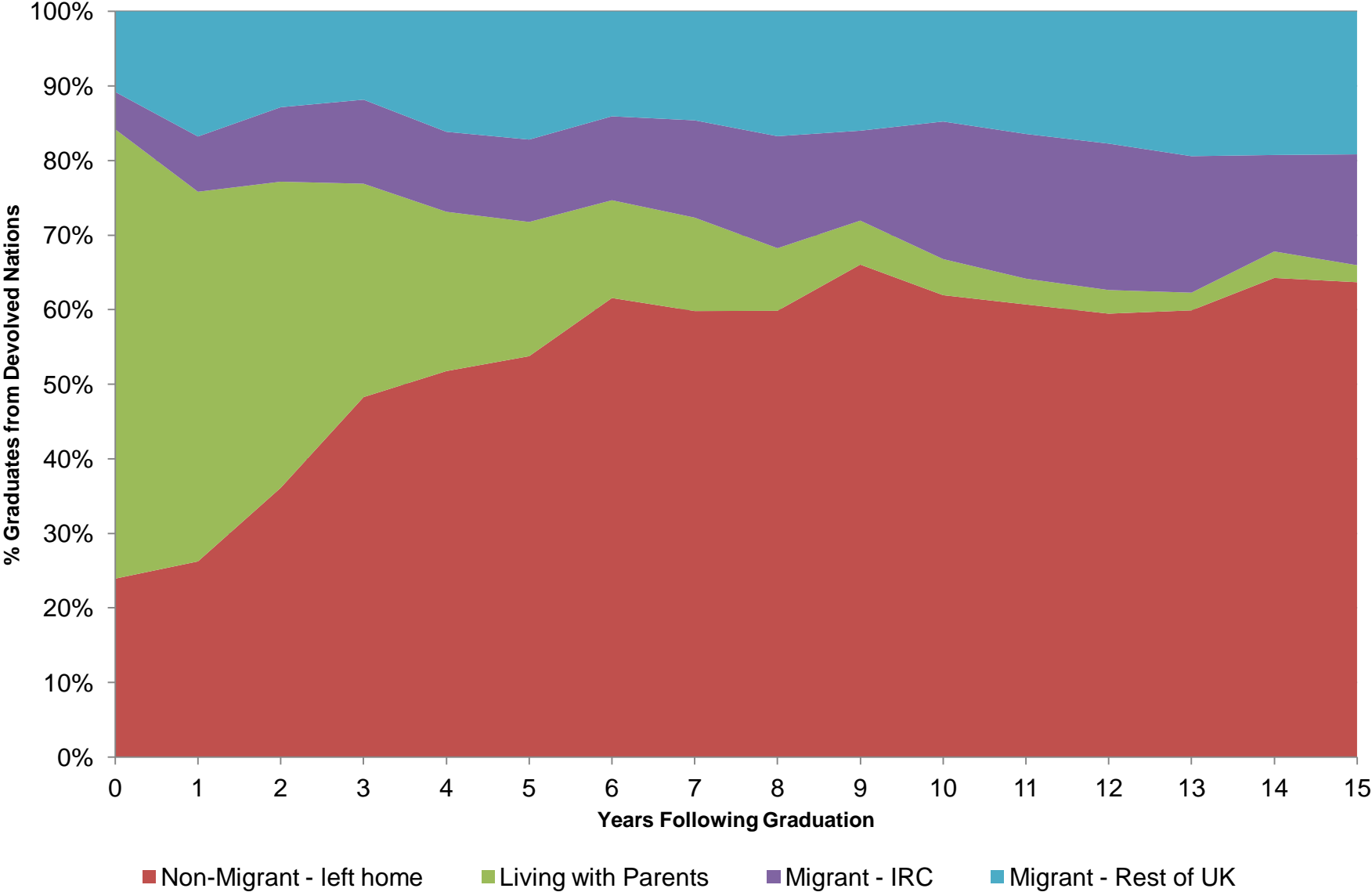
- **Locals** – Welsh-born, studied in Wales - most significant source of graduate labour recruitment for Wales (60%)
- **Returners** – Welsh-born, studied (probably) in England, return home for employment (19%)
- **Stayers** - non-Welsh born, studied in Wales, stayed to work (13%)
- **Outsiders** - working in Wales , not born or studied here (8%)
- But data only capture graduates employed 6 months after graduation
- LFS/ APS enable insights into how graduate mobility evolves over time

Insights from the Labour Force Survey:

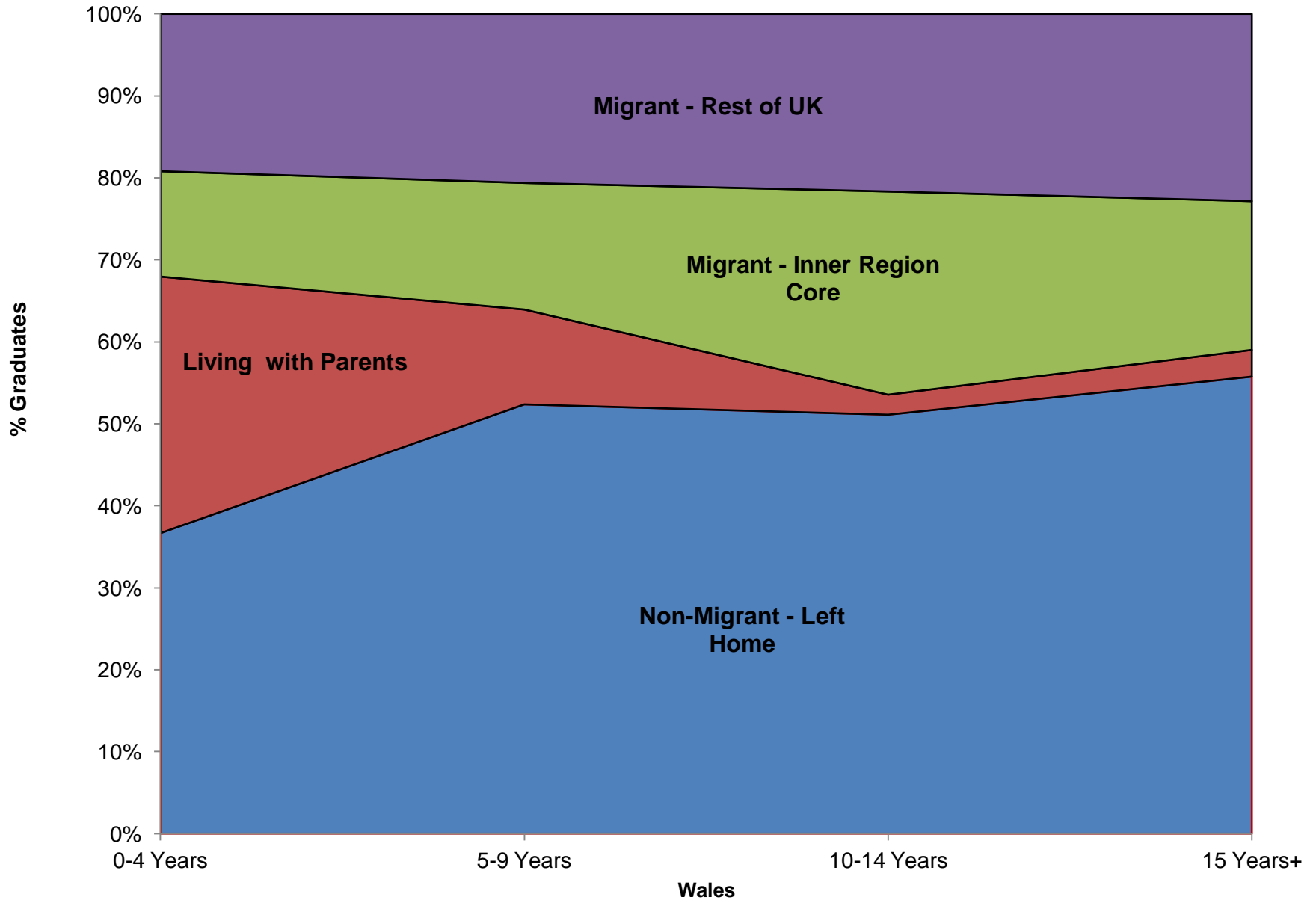
Rhys Davies, WISERD Cardiff University

- Examine circumstances of graduates from devolved nations surveyed in the Labour Force Survey between 2006-2010
 - Focus on experiences of ‘young graduates’ – those aged 25 or under at the time of graduation
 - Focus on graduates who completed their studies during the post 1992 era – expansion in HE
 - Our sample therefore contains information on graduates generally aged between 22 and 40
 - Allows us to look at the evolution of the personal circumstances and careers of graduates

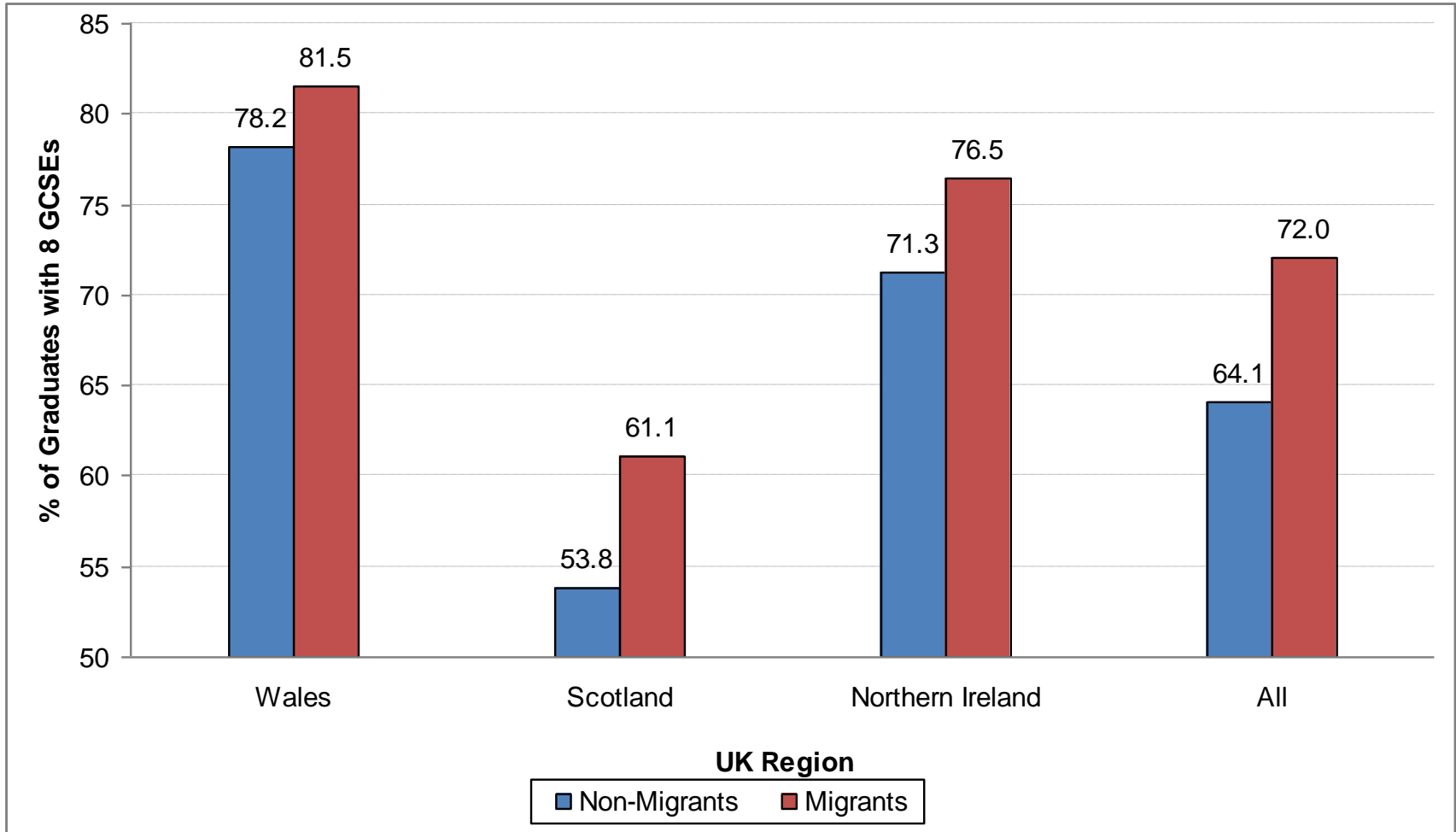
Where do graduates from devolved nations go?



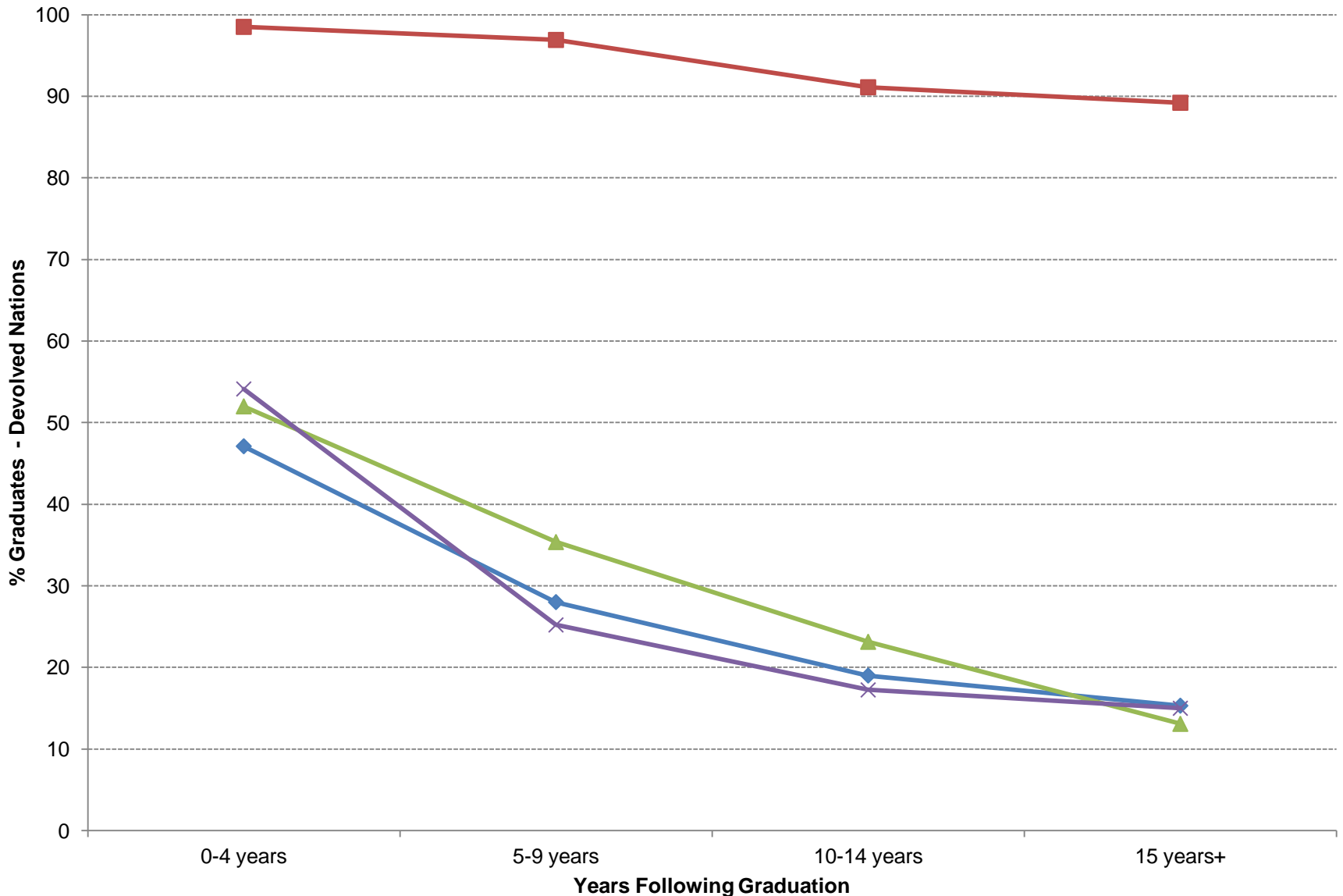
Welsh-Born Graduates



Educational Attainment Prior to HE

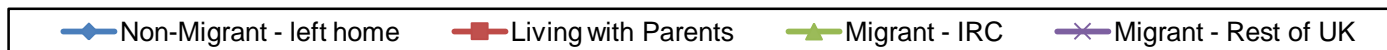
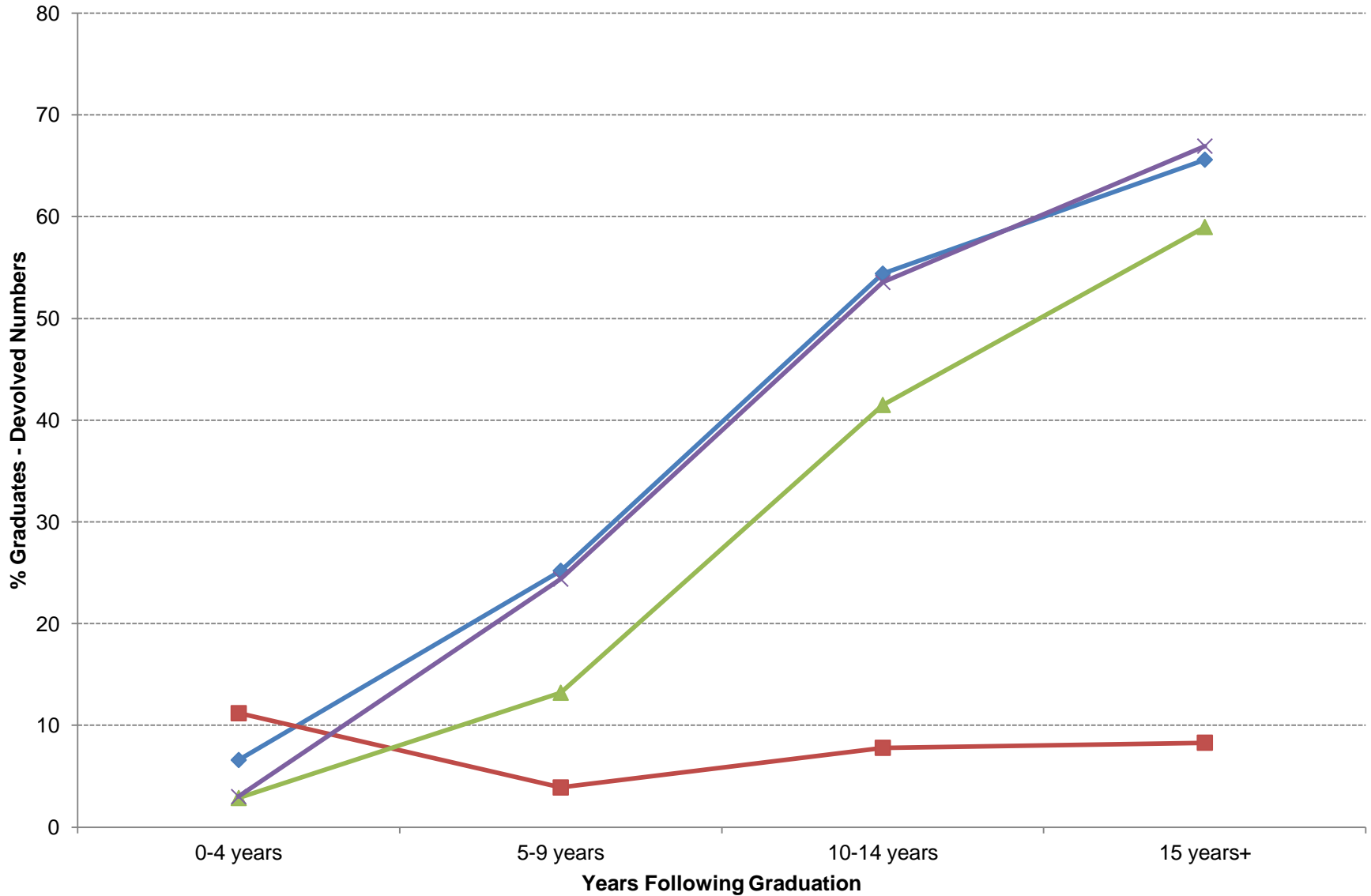


Partnership Formation (% single)

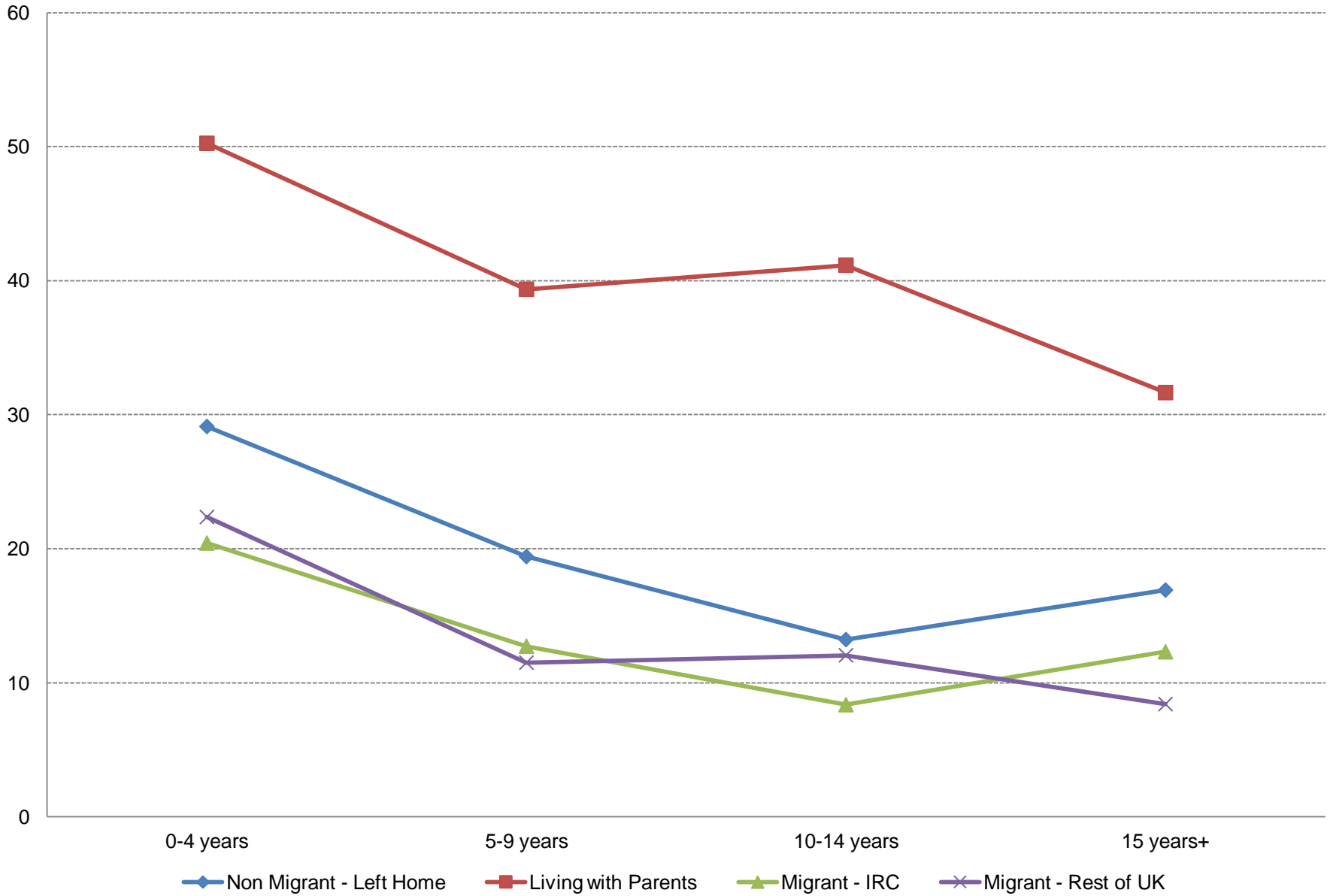


◆ Non-Migrant - left home ■ Living with Parents ▲ Migrant - IRC ✕ Migrant - Rest of UK

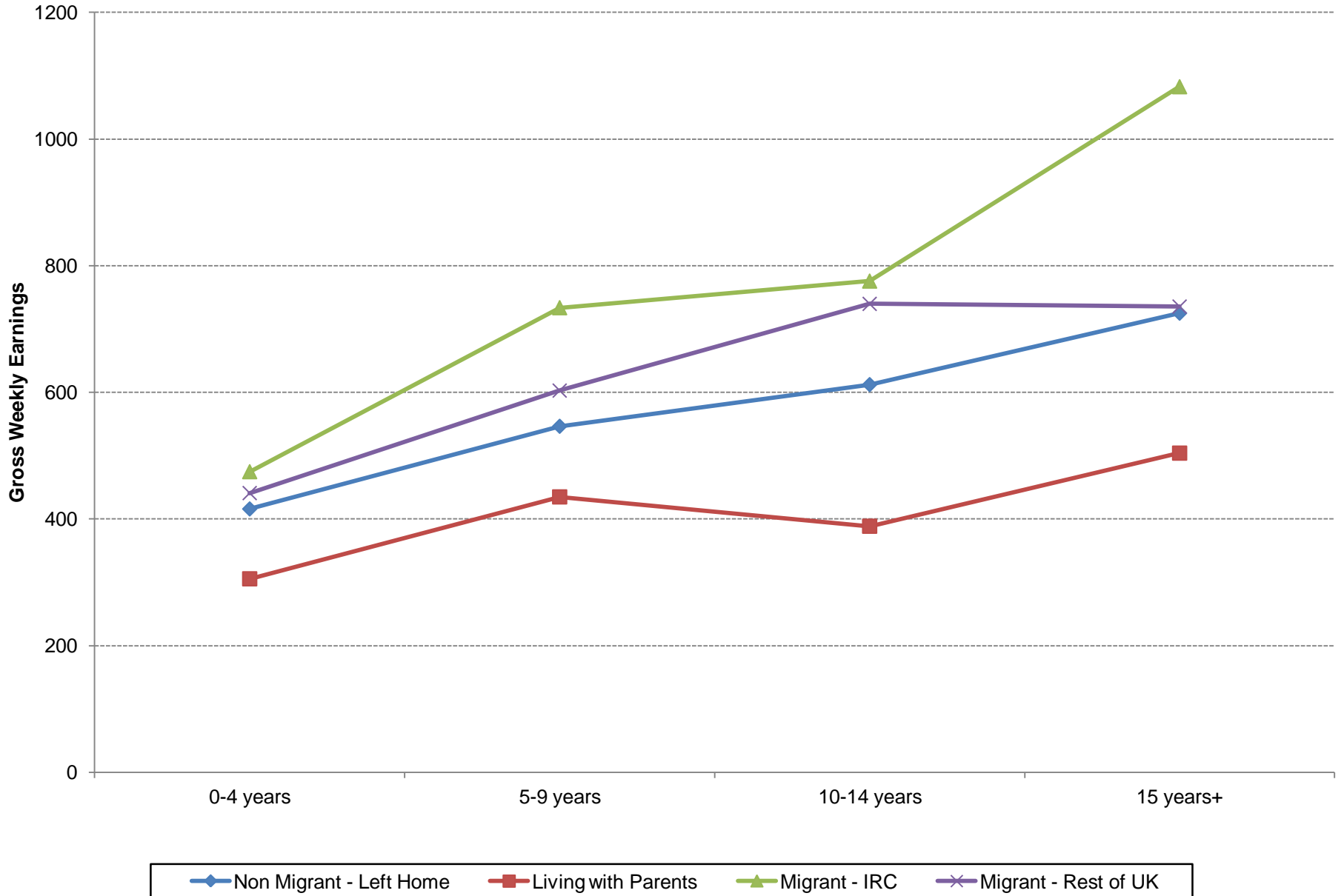
Family Formation (% with children)



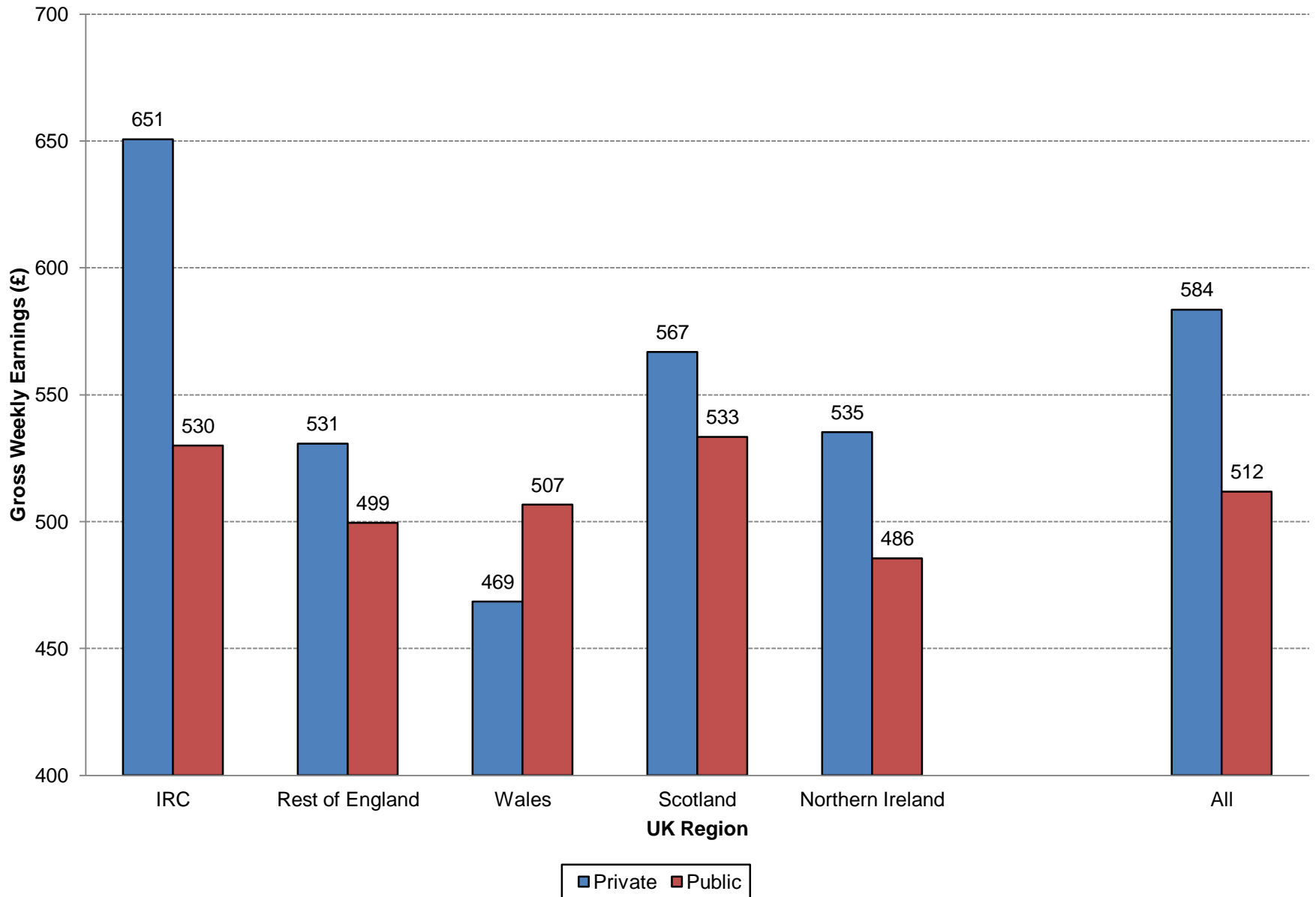
Graduates Employed in Non-Graduate Jobs



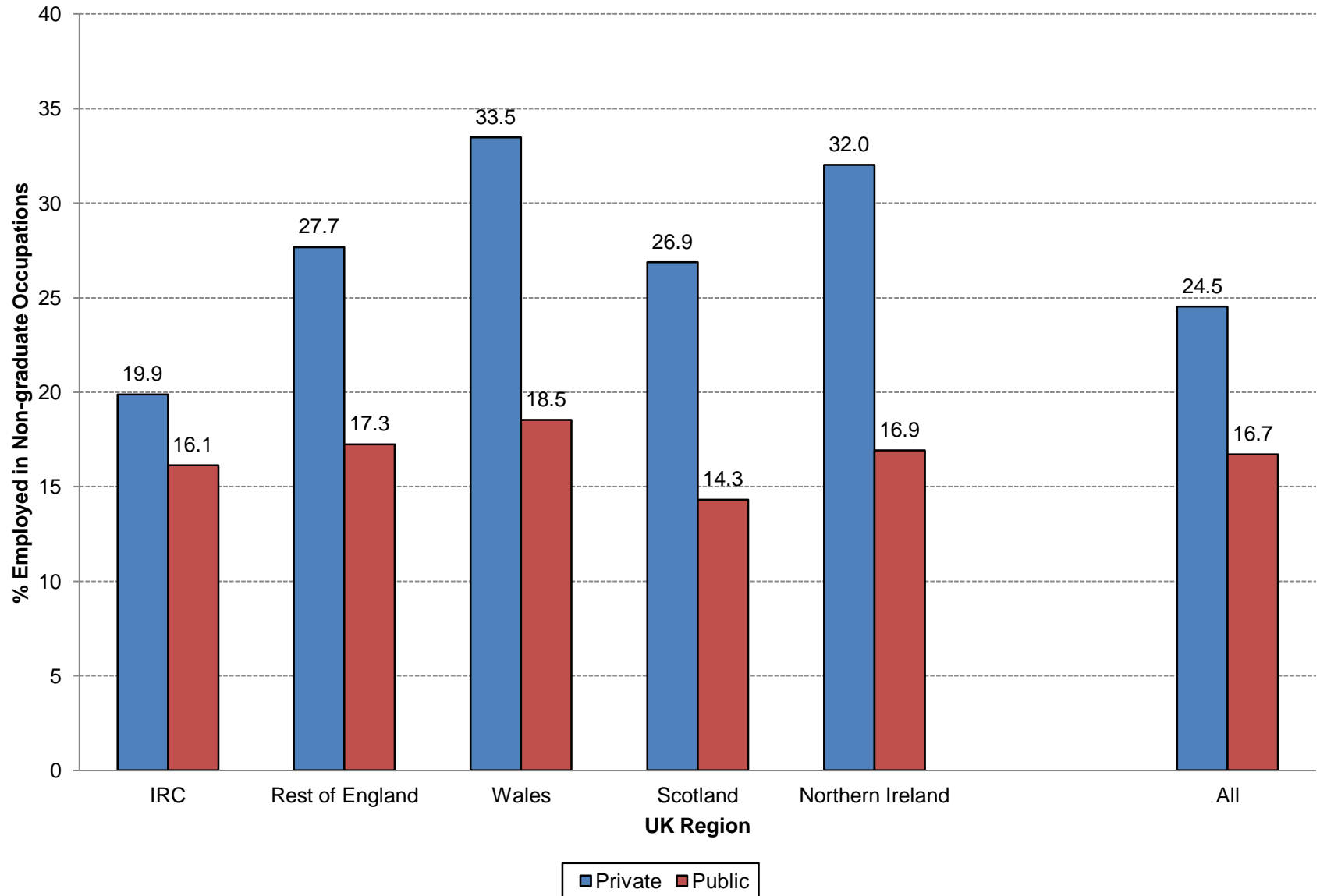
Gross Weekly Earnings



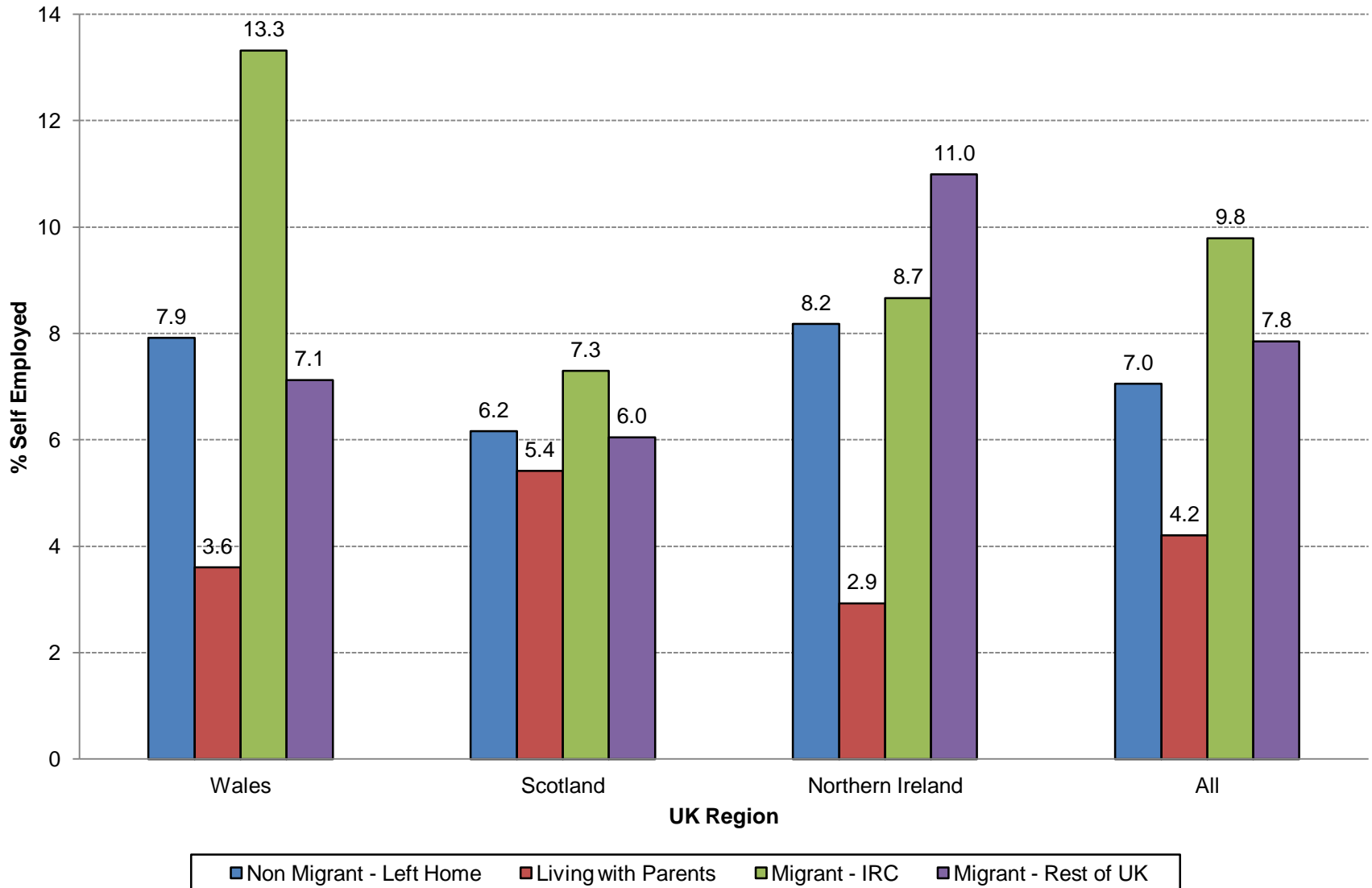
Graduate Earnings and the Public Sector



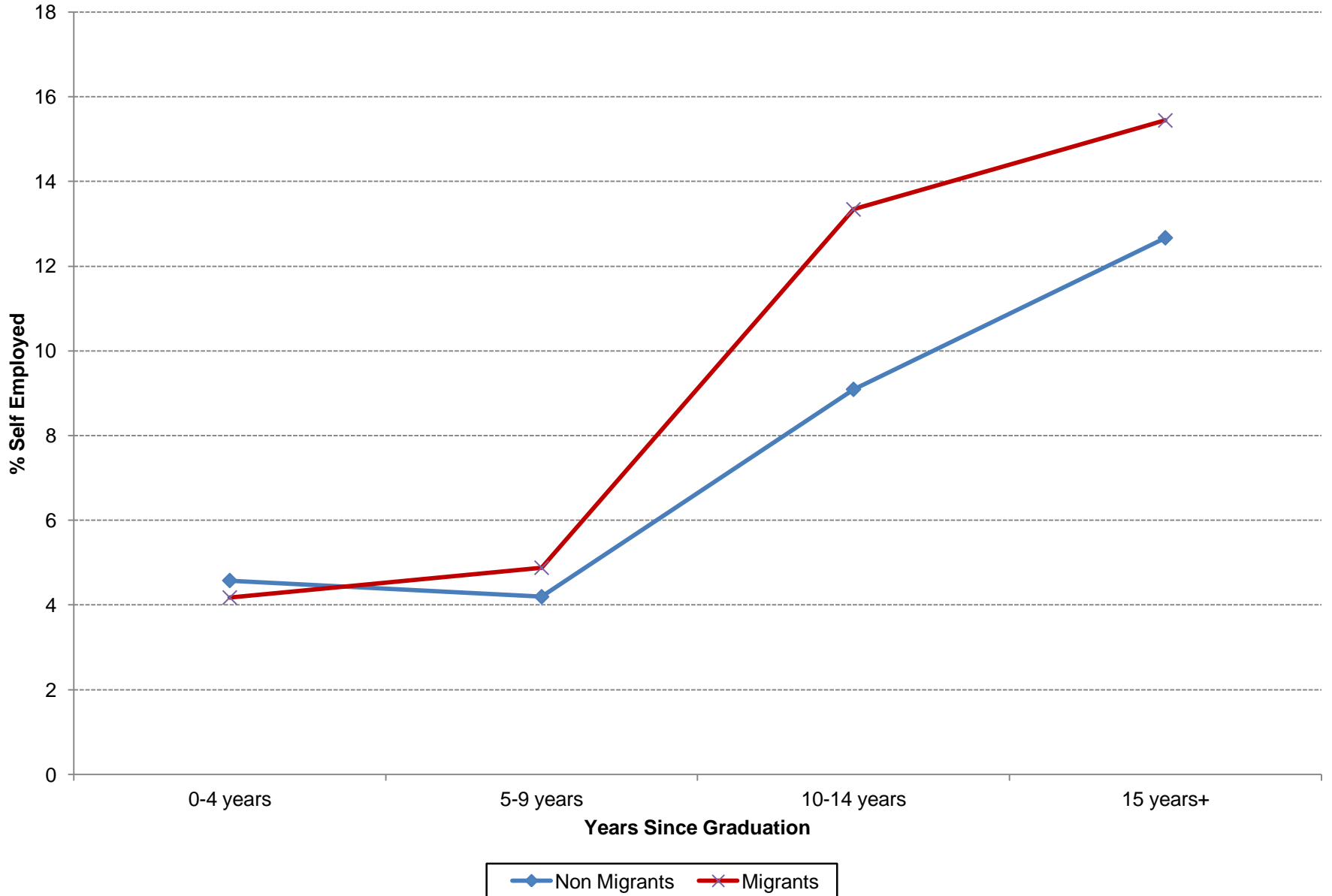
Graduate Occupations and the Public Sector



The Incidence of Graduate Self Employment



The Evolution of Self-Employment



Summary of Findings

- Evolution of graduate careers important for understanding differences between migrant and non-migrant graduates
- Migration to IRC associated with delayed partnership formation and lower levels of family formation
- Graduates take time to find 'appropriate' jobs – quicker for those who migrate away from devolved nations
- Public sector is the main source of quality employment (earnings and occupations) for non-migrant graduates in Wales
- The incidence of self-employment is low in the first decade following graduation (<5%) - subsequent increase greater among migrants

Insights from the Annual Population Survey: *Stephen Drinkwater, WISERD Swansea University*

- Mainly looks at graduate mobility amongst the Welsh-Born
- A question on (UK) country in which respondent's highest degree obtained included in APS (SL files) since Jan 2008 ('crydeg')
- Complements LFS analysis by providing more information on when migrants left or returned to their home country

Sample

- Combines unweighted data from Jan-Dec 2008 and 2009; Jan-Sept 2010
- System variables used to ensure graduates (of working age) not included more than once (respondent's most recent info used)
- Still don't know whether Welsh-born migrants left Wales prior to starting university (which some will have) but gives an extra dimension to the LFS analysis

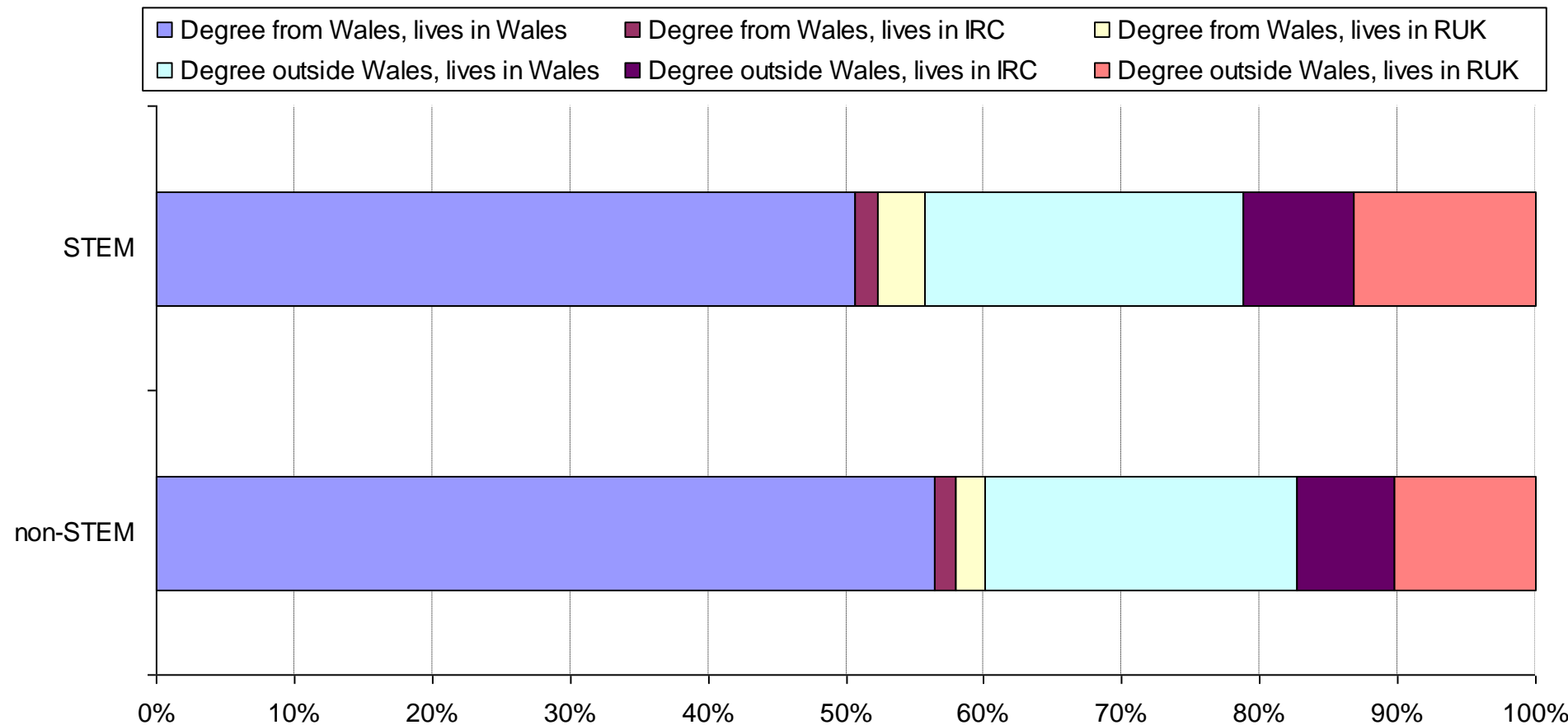
Analysis of the Welsh-born

- Two country of degree and three areas of residence categories are defined, producing six groups
- Despite a reasonably large total number of observations (around 4,700) some of the cell sizes are fairly small (distribution shown in parentheses)
- Analysis focuses on the following aspects
 - *Basic Characteristics* (Gender and Age)
 - *Degree Characteristics* (Level and Broad Subject)
 - *Labour Market Outcomes* (Employment and Earnings)

Basic and Degree Characteristics

- Higher percentage of males have studied outside Wales (many of whom have returned)
- Age statistics basically mirror the cohort analysis => increasing proportion of younger Welsh-born graduates have studied in Wales
- Those with a highest degree from a Welsh HEI are less likely to have a PG degree (and more likely to have 'other' degrees)
- Also more likely to have studied a non-STEM subject

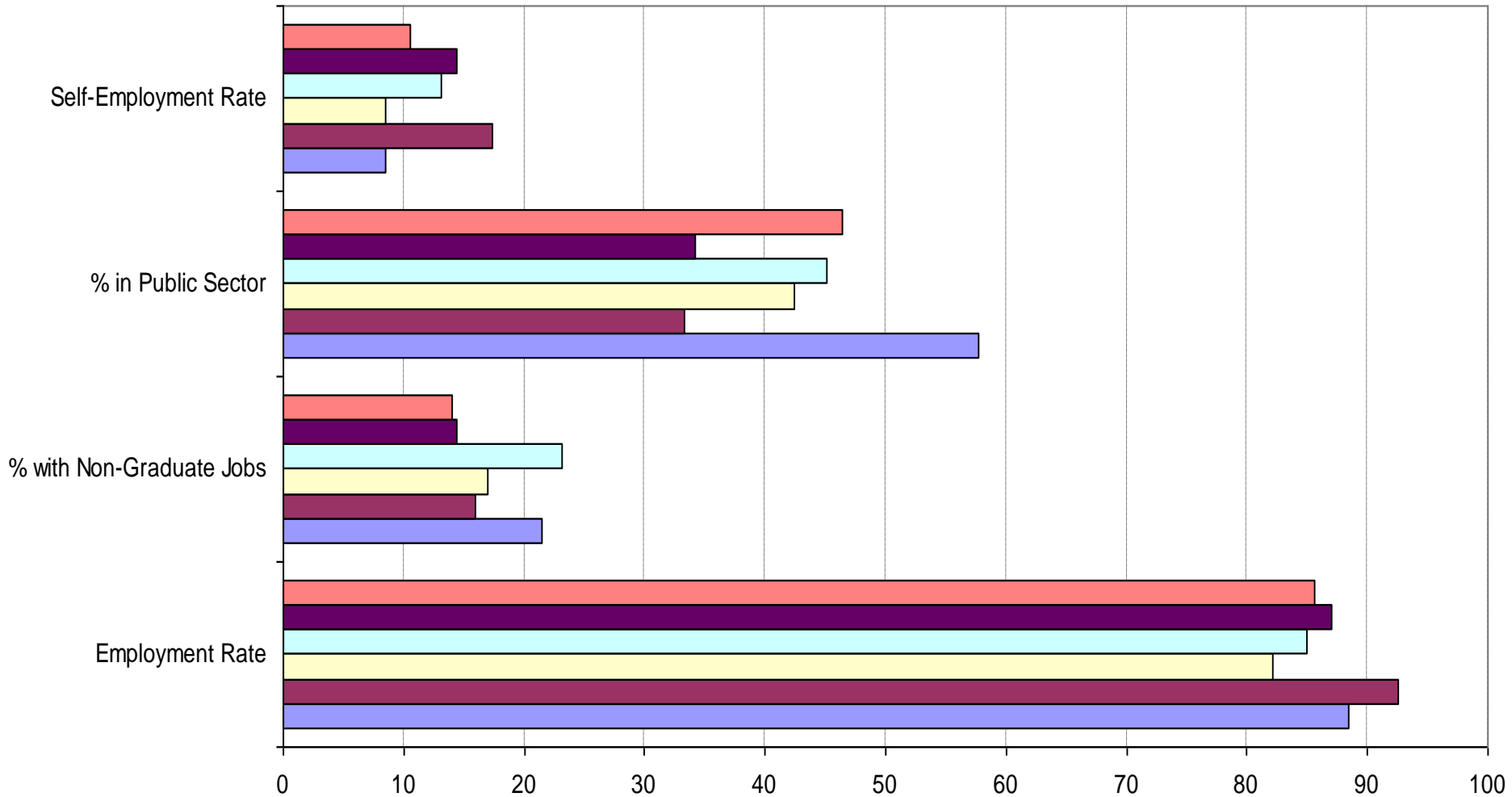
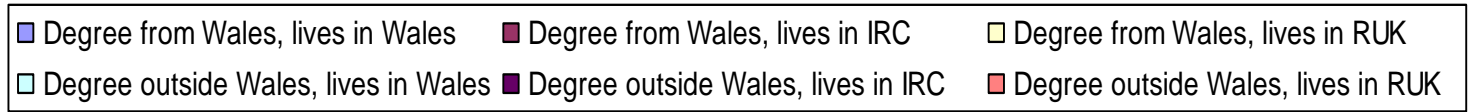
Country of Degree and Area of Residence of Welsh-Born Graduates of Working Age by Broad Degree Subject



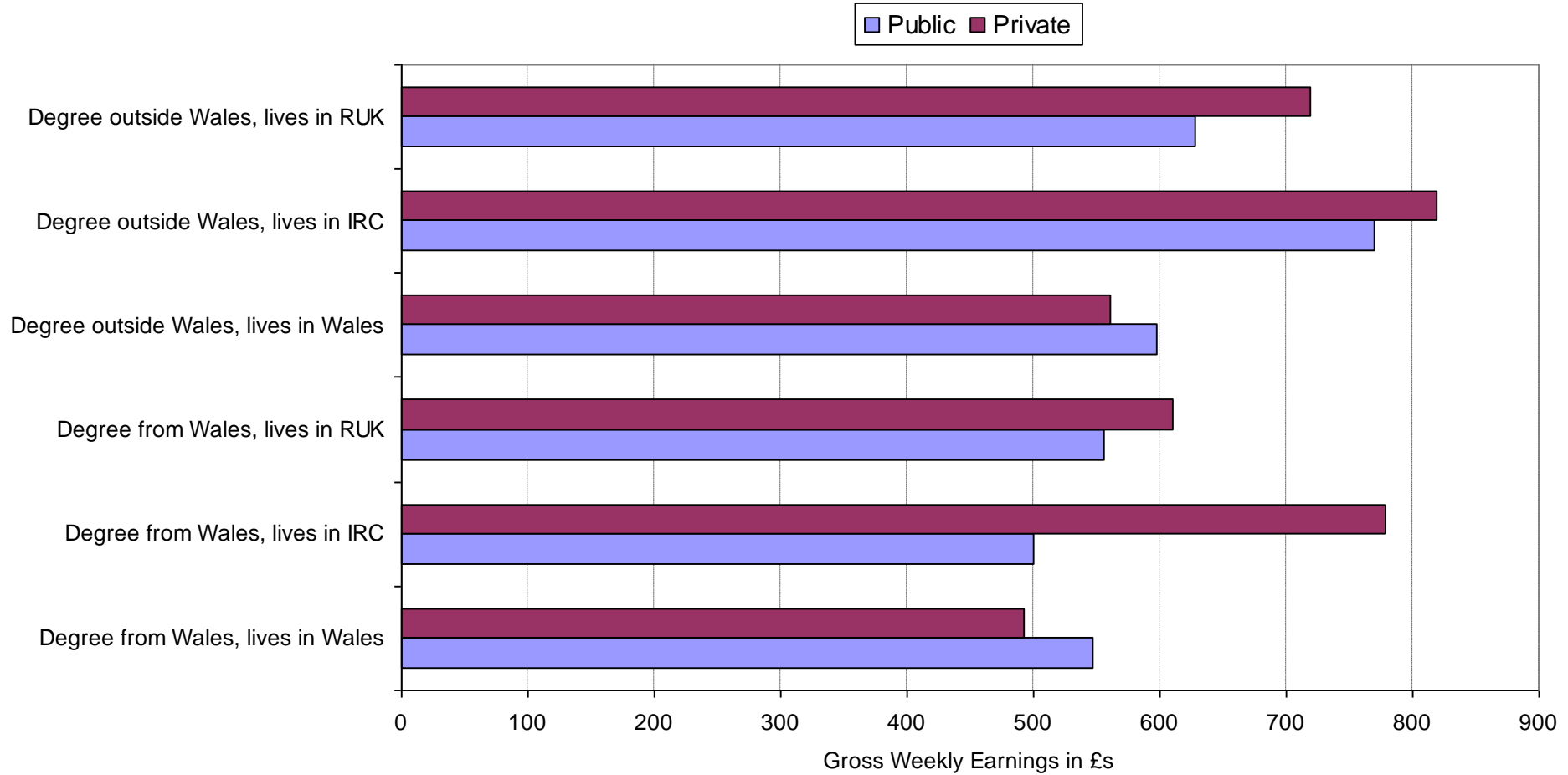
Labour Market Characteristics

- Employment rates very high for all groups (some variations)
- The percentage with non-graduate and public sector jobs (especially graduates of Welsh HEIs) much higher in Wales
- Self-employment rates are lowest in Wales (especially for graduates of Welsh HEIs) and highest in the IRC
 - slightly higher for STEM graduates in each group
- Average earnings are lowest for Welsh residents (especially graduates of Welsh HEIs) but distributional issues are important => high earners in IRC
 - average earnings are higher for Welsh residents working in the public sector (not the case for the other groups)

Employment Outcomes of Welsh-Born Graduates of Working Age by Country of Degree and Area of Residence



Average Gross Weekly Earnings of Welsh-Born Graduates of Working Age by Country of Degree, Area of Residence and Sector of Employment



Insights from the Qualitative Research:

Madeleine Pill, SKOPE Cardiff University

Selection

- Headquartered in Wales, 'leading lights'
- Plus 1 large MNC with predominantly non-graduate workforce
- Respondents: founding directors/ partners

Companies

- Recently established (2002-08), small (3-40 employees)
- 2 technology-related, 2 consultancy services
- Clients across England and Wales

Assistance

- 2 HEI 'spin outs', Objective One, SMARTCymru

Employees

- Those in Wales predominantly Welsh-born
- 2 consultancy services have associates UK-wide

Location

- All said it didn't matter - to their clients - where they were located
- For consultancies, location didn't matter to associates either

Qualitative work illustrates...

- **Pathways**
 - 2 locals
 - 2 returners
 - 1 stayer (with a Welsh identification)
 - 1 outsider (due to returner co-founding partner)
- **Inter-connectedness of Wales and England** education and employment markets
- **Complexity of graduate flows over time**
 - Mobility following entry into labour market
 - Importance of ongoing transitions –between jobs and geographically

Push and Pull Factors

Push Factors

- **Role of Inner Region Core** in developing careers, skills and networks – entrepreneurial ability (evident in 3 respondents)
- **PUSH** of career, then **PULL** of home for returners ('escalator effect')
- 'Brain drain' notion rather blunt - 'brain circulation'?

Pull Factors

- Family formation lifestage
- Availability of family support
- Bilingual education

Welsh Business Location Factors

- Public sector as client initially, then seek to diversify
- Able to offer lower costs ('near shoring')
- Links with HEIs – spin outs

Recruiting and retaining graduate talent

- Recognition of paucity of quality jobs in Wales
- Difficult to attract those without prior home or study links
- Employers aware of the value of the 'locals' pathway
- And of path dependencies/ individuals' propensity to migrate
- Links with HEIs for recruitment (eg. work placements)

Requests

Procurement

- You've got high quality jobs being undertaken by big corporates in Wales who are working for the Welsh Assembly, they've got high quality jobs, and they're the people who are bringing in people from London
- The public sector is such a large element in Wales then it can be a catalyst as well

Advice

- Public sector talking in relation to business is not quite the right conversation, but if it's business to business then there's more of a chance.

Clusters

- We need to attract areas of expertise to Wales so that people want to come and study in Wales and stay in Wales after because there's great career opportunities in certain fields.

Links with HEIs

- We haven't made the most of linking up with HEIs. We can also meet potential new recruits.

Summary of Key Findings I

- **Wales is a net exporter of graduates**
- **But there is not an unequivocal ‘brain drain’**
 - Wales imports students, so bound to export graduates
 - Post-1992 HE expansion has raised proportion of students studying locally
 - There is some evidence of returners in the short-term (students returning home) and later in the graduate life-cycle
 - Certain graduates are more likely than others to migrate

Summary of Key Findings II

- **Migrating has career consequences – a ‘penalty for staying’**
(LFS) Young graduates from Wales who have migrated are
 - less likely to be employed in a non-graduate occupation
 - less likely to be employed in the public sector
 - have higher earnings.
- (APS) Welsh-born graduates
 - the above holds true for the stock of Welsh-born, Welsh resident graduates – ie. across all cohorts
 - ‘Locals’ (Welsh born, educated and resident) have the lowest self-employment and lowest earnings
- **Importance of ‘locals’ and ‘returners’ as graduate labour force**

Policy Implications

- Range of implications for HE and economic development policy
 - ‘Growing your own’ remains vital for graduate labour market
 - Persuading leavers to return also important - can the pull of home be augmented for ‘returners’?
 - How to nurture existing graduate entrepreneurs – eg HEI spin outs? Other assistance?
 - How to match university courses with employers skills requirements in the labour market?
 - What about STEM graduates and their employment opportunities?

Possible Avenues for Further Research

- Refine intra-Wales analysis
- Focus on returners?
- Temporal aspect – impact of fees policy on Home to University and subsequent flows
- APS data
 - Becoming more valuable as sample increases – insights regarding pathways over time
 - Useful application of Welsh boost
- Mobility patterns of international students
- Cross UK and EU comparisons

Welsh Graduate Mobility

Report available on SKOPE & WISERD websites:

<http://www.skope.ox.ac.uk/>

<http://www.wiserd.ac.uk/>