

Stay, Leave or Return?

Understanding Welsh Graduate Mobility

WISERD Summer Conference 2011
Panel: Skills and Employment in Wales

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Context

- 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
- Developing literature on graduation migration in UK
 - spatially uneven (but complex) employment geography for graduates
 - importance of employment opportunities for regional graduate recruitment/ retention
 - path dependency of migration decisions e.g. HULT model (Hoare and Corver, 2010)
- Key question
 - What happens to ‘leavers’ and to ‘stayers’? – economic & employment outcomes for graduates

Aims and data sources

- **Overall aims**

- to establish the patterns of graduate migration to and from Wales
- to investigate the employment outcomes of post-1992 'Welsh' graduates

- **Data Sources**

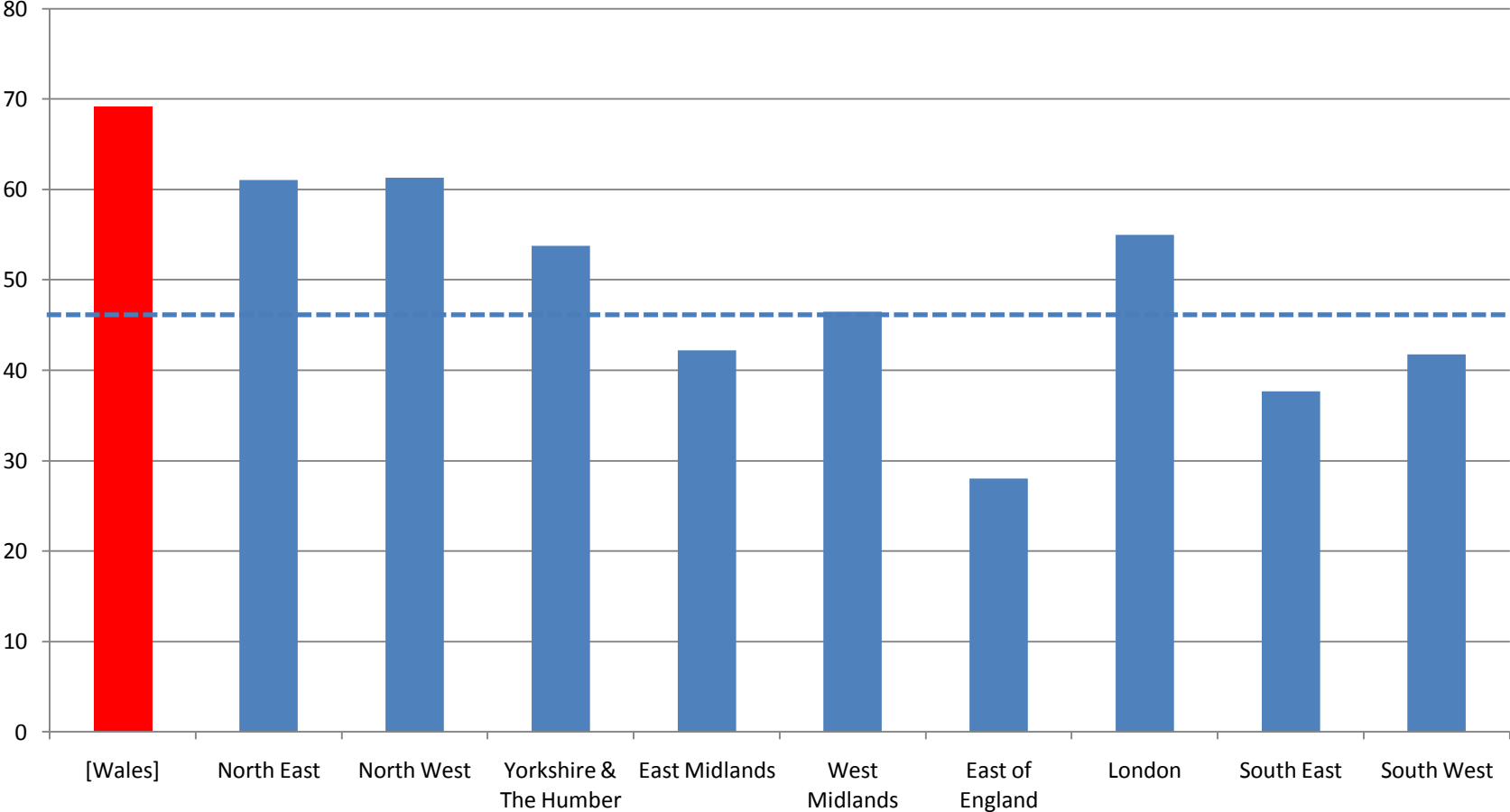
- Higher Education Statistics Agency (HESA) Data
 - Students in Higher Education data
 - Destinations of Leavers from Higher Education Survey (DLHE)
- Labour Force Survey (LFS)/ Annual Population Survey (APS)
 - APS identifies country of birth, region of current residence and (since 2008) country where acquired highest degree
- *Initial Qualitative Research Findings*
 - Case studies of Welsh knowledge economy businesses which employ graduate 'talent'

Country of domicile by country of study for full-time first degree students (% & number), 2009/10

Country of domicile	Country of study (% and nos)								<i>Total Students</i>
	Wales		England		Scotland		N Ireland		
Wales	69.1	34,950	30.0	15,170	0.8	405	0.0	20	<i>50,545</i>
England	2.9	25,220	95.3	818,245	1.7	14,815	0.0	410	<i>858,690</i>
Scotland	0.1	140	5.0	4,775	94.8	89,680	0.0	40	<i>94,635</i>
N Ireland	0.8	310	19.9	8,065	9.7	3,930	69.6	28,200	<i>40,505</i>
<i>Total Students</i>		60,620		846,255		108,830		28,670	<i>1,044,375</i>

Source: Adapted from HESA 'Students in Higher Education' 2009/10, table 7b

Region of Domicile Retention Rate for full-time first degree graduates, 2009/10 (%)



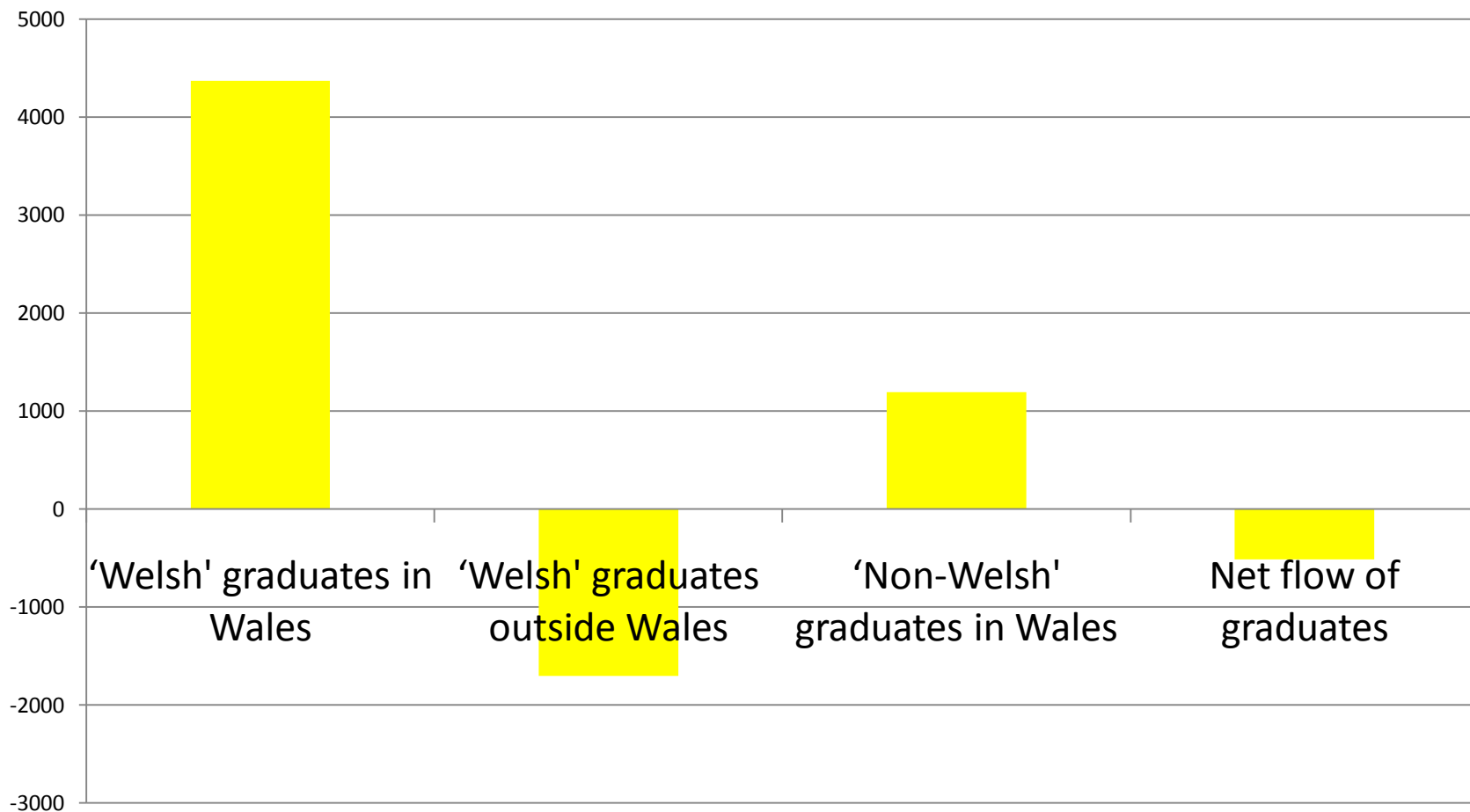
Source: Adapted from HESA 'Students in Higher Education' 2009/10, table 7b

Country of study by country of employment six months after graduation: for employed undergraduate graduates (including non-degree) (%), 2002/03-2006/07

Country of study	Country of employment			
	Wales	England	Scotland	N Ireland
Wales	61.3	35.7	0.4	0.2
England	1.2	95.7	0.6	0.3
Scotland	0.3	11.5	83.5	1.5
N Ireland	0.1	3.4	0.8	91.8

Source: Mosca and Wright (2010), using HESA 'Students in Higher Education' 2002/03-2006/07. Nos observations: 837,279

Summary flows to and from Wales (within UK) of full-time undergraduate students (including non-degree) entering employment, annual average for 2004/05-2008/09



Source: WAG Statistical Bulletin, SB 78/2010, using HESA 'Destinations of Leavers from Higher Education' (DLHE) data

Graduates from 2005/6 who were working six months after graduation, by region and location of domicile and study (Nos & % of total employed in region)

UK region	Locals		Returners		Stayers		Outsiders		Total employed
	Nos	%	Nos	%	Nos	%	Nos	%	
Wales	3,820	60	1,205	19	840	13	485	8	6,350
England	48,655	42	31,420	27	16,050	14	20,790	18	116,905
Scotland	10,835	84	655	5	935	7	490	4	12,920
N Ireland	3,830	83	685	15	15	0	70	2	4,600

Source: 'Graduate Mobility: who goes to work in each region' (2008) prepared by HECSU for Prospects.ac.uk, using HESA 'Destinations of Leavers from Higher Education' (DLHE) 2005/06

Region of Highest Degree and Residence for Welsh-Born Graduates (%), by Age

	Under 30	30-39	40-49	50-64	Total
Welsh degree, lives in Wales	60.4	51.2	48.8	50.6	52.4
English degree, lives in Wales	20.3	25.1	23	21.4	22.6
Other degree, lives in Wales	0.6	0.5	0.3	1.0	0.6
Welsh degree, lives in England	3.9	4.2	5.4	4.3	4.4
English degree, lives in England	14.0	17.0	19.3	19.9	17.7
Other degree, lives in Other UK	0.9	2.1	3.2	2.9	2.3
<i>Number of observations</i>	<i>828</i>	<i>1,119</i>	<i>968</i>	<i>979</i>	<i>3,894</i>

Source: Annual Population Survey 2008-2010

What jobs? Graduate & Non-Graduate Occupations

SOC(HE) category	Description	Examples
1. Traditional graduate occupations	The established professions: normal route via an undergraduate degree.	Solicitors Medical practitioners HE & secondary ed teachers Biological scientists/ biochemists
2. Modern graduate occupations	The newer professions, particularly management, IT and creative vocational areas, emerged since 1960s educational expansion.	Directors, chief executives Software professionals, computer programmers Primary school & nursery teachers Authors/ writers/ journalists
3. New graduate occupations	Areas of employment in new or expanding occupations, where the route is now via an undergraduate degree.	Marketing & sales managers Physiotherapists, OTs Management accountants Welfare, housing, probation officers
4. Niche graduate occupations	Occupations where the majority not graduates, but specialist niches which require HE skills and knowledge.	Leisure, sports, hotel managers Nurses, midwives Retail managers

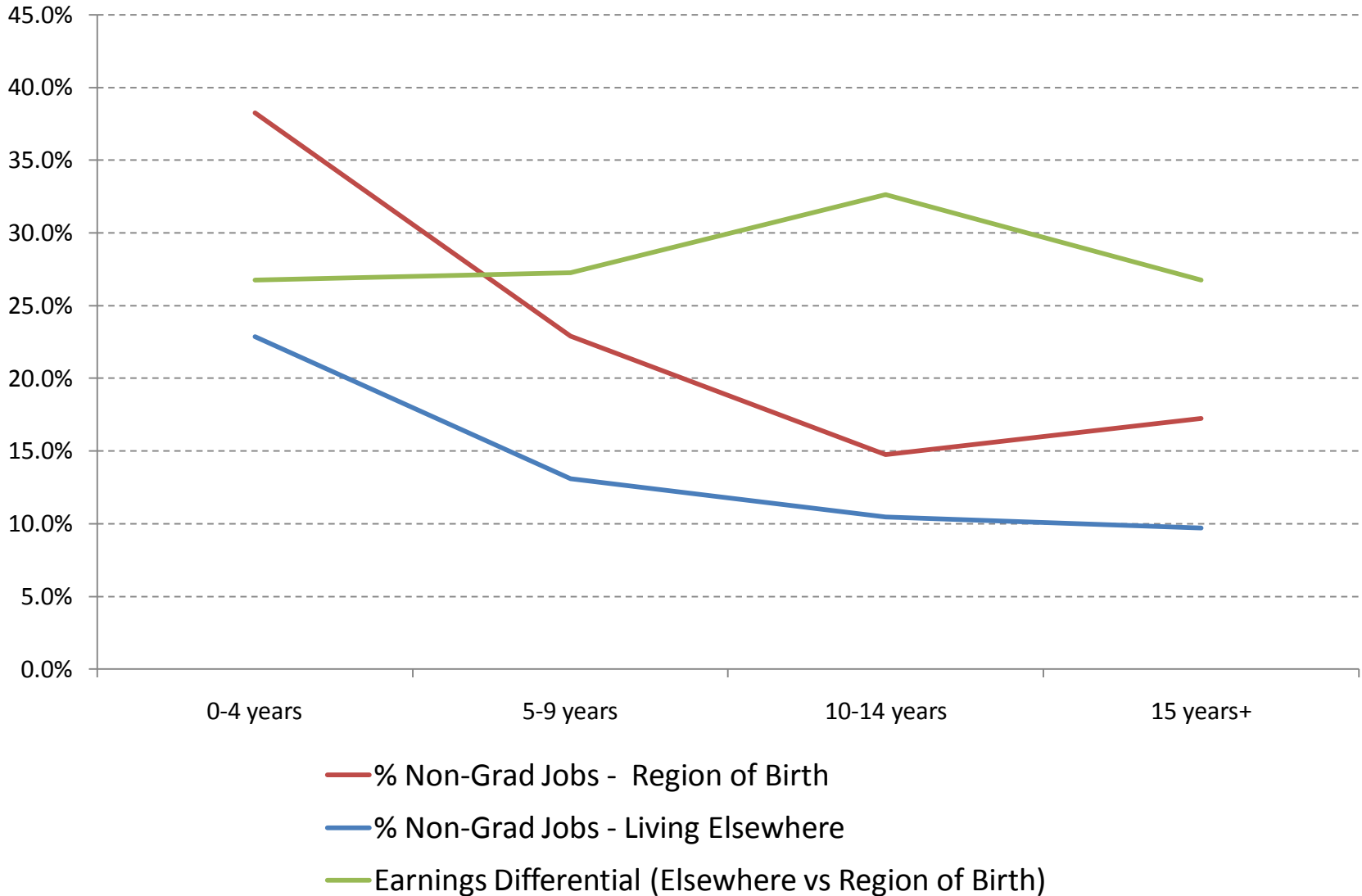
Plus 'non-graduate' occupations

The Evolution of Graduate Careers Among Recent Graduates

Years following graduation	Living in Region of Birth	Living Elsewhere	All	Differential
In employment (%)				
0	65.5	63.4	65.2	-2.1
1	74.5	83.9	76.5	9.4
2	86.6	87.4	86.8	0.8
3	89.3	89.9	89.4	0.7
4	90.8	88.8	90.3	-2.0
5	94.5	94.1	94.4	-0.4
In Non-Graduate Employment (%)				
0	59.0	46.2	57.2	-12.8
1	47.7	30.5	43.7	-17.1
2	36.6	26.0	34.4	-10.6
3	33.5	17.3	30.1	-16.2
4	26.6	12.7	23.3	-14.0
5	28.2	15.6	25.1	-12.6
Gross Weekly Earnings (£)				
0	248.47	374.27	267.15	125.80
1	304.72	373.91	322.34	69.19
2	343.21	420.36	363.02	77.15
3	388.03	482.81	410.00	94.79
4	419.96	514.66	446.90	94.70
5	450.25	589.96	489.35	139.70

Source:
Labour Force Survey
2006-2010

The Evolution of Graduate Careers Among Post 1992 Young Graduates (Earnings and % in Non-Graduate Jobs)



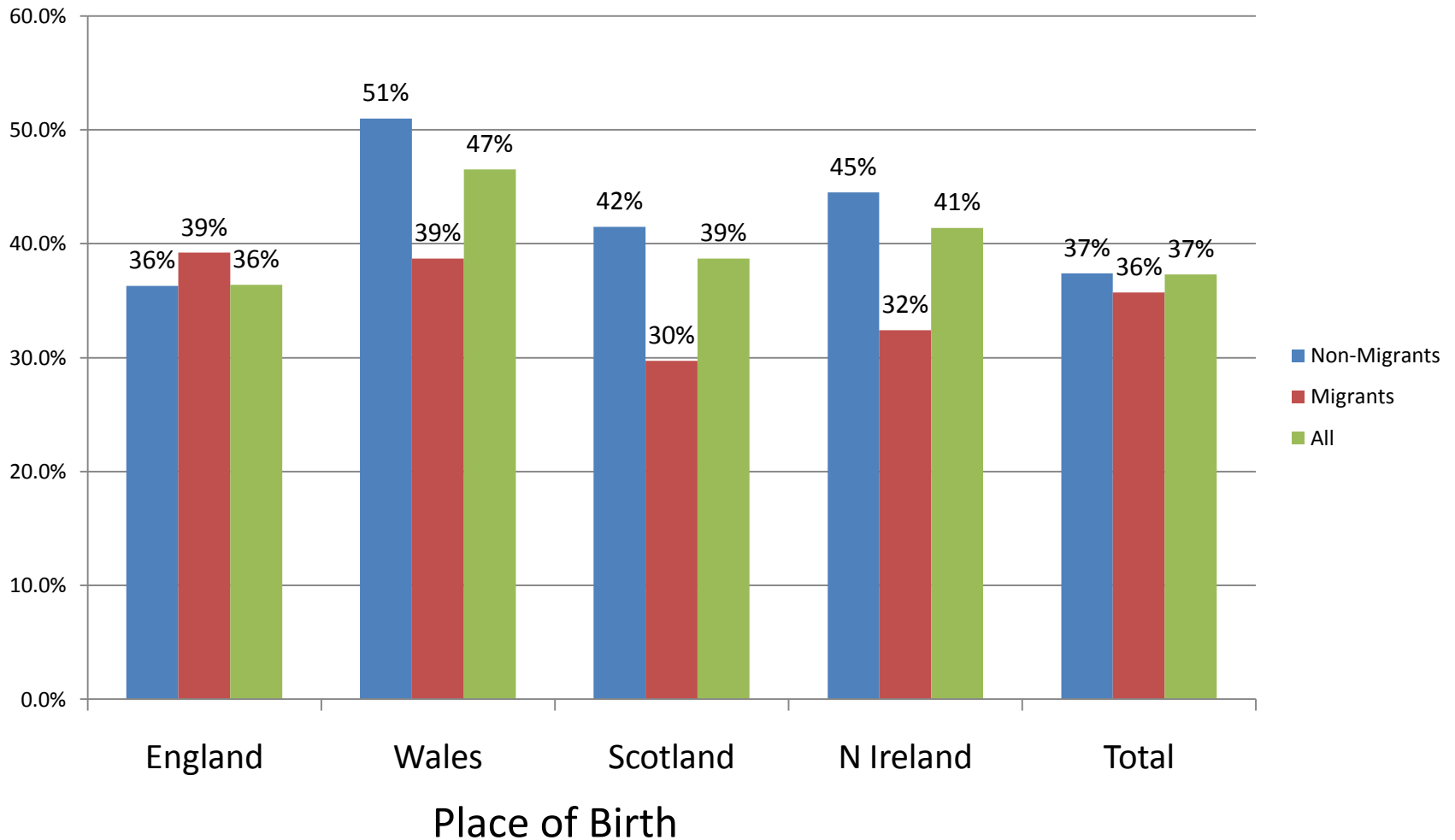
Source: Labour Force Survey 2006-2010

Estimated association between graduate migration and labour market outcomes

	Males	Females
Relative probability of being in a non-graduate occupation (relative to non-migrants)		
Wales	<i>-37.4%</i>	-51.4%
Scotland	-46.5%	-41.1%
Northern Ireland	<i>-44.5%</i>	-65.1%
Relative gross weekly earnings (% differential relative to non-migrants)		
Wales	28.4%	20.3%
Scotland	15.9%	15.6%
Northern Ireland	15.2%	22.6%

Italicised= not statistically significant

Comparing Employment Outcomes of Post 1992 Young Graduates: Employed in the Public Sector (% of those in work)



Source: Labour Force Survey 2006-2010

Key Findings

- Wales a net exporter of graduates – but not an unequivocal ‘brain drain’
- Migrating has career consequences – a ‘penalty for staying’
 - 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.
- This relates to lower earnings levels, public sector knowledge economy and higher incidence of non-graduate employment in Wales
- **Clear path dependencies**
 - Importance of ‘locals’ as graduate labour force
 - Strong relationships between regional economic structure and subsequent opportunities
- **Implications for HE and regional economic development policy**

Welsh Knowledge Economy Employers

Location	Est	Sector	Business Assistance	Employees	Client base
Central Cardiff	2005	Software developers	SMARTCymru R&D	9, incl: 4 Welsh-born founding partners; 3 Welsh HEI graduates; 2 work placement students from Welsh HEIs	Across England and Wales: WAG initial key client, developing private sector and overseas business
Inner Cardiff	2008	Expert forensic witness & consultancy services	KEF, Cardiff Univ spin out, incl 1 year CBTC office space	3, incl: 2 former work placement students from Welsh HEIs (1 Welsh-born); plus associates across England and Wales	Across England and Wales, developing commercial services
Valleys	2005	Energy management technology	KEF, Univ of Glamorgan spin out, ESRC CASE PhD studentships, Objective 1	18 majority Welsh-born staff, including PhD students; plus undergraduate work placements	Across England and Wales, tend to visit client sites
Rural Monmouthshire	2002	Management & business consultancy	N/A	20 consultants (some locally located) and 20 support staff; 85 associates across England and Wales	Across England and Wales, consultant staff client-based

Welsh Knowledge Economy Entrepreneurs: HULT transitions

Home	University		Labour			
	<i>Undergrad</i>	<i>Postgrad</i>				
Wales: Penarth	England: Liverpool	<i>N/A</i>	Cardiff (temping)	Cheltenham	Newport (much work in London)	Cardiff
Middle East (English schooling; Welsh grandparents)	Wales: Cardiff	England: Bournemouth	Cardiff (Univ)	Newport	Cardiff	
Wales: Valleys	Wales: University of Glamorgan	Wales: University of Glamorgan	Ebbw Vale	Tredomen Business Park, Caerphilly		
Wales: Valleys	Wales: Aberystwyth	England: Kingston	Bristol	South East (Epsom)	Newport	Outside Monmouth
England: Windsor	England: Plymouth	<i>N/A</i>	Bath	<i>As above</i>	<i>As above</i>	<i>As above</i>

Employees

- **Getting talent**

If you're looking at people who are at the peak of their consulting career, they will be earning eighty thousand plus. How many jobs in Wales are there? Very, very few. But we can create those jobs... For those people who've gone to England and for whom their career and their earning potential is their number one, they will only be drawn back to Wales if the money is there. And to an extent we do want those people, because they tend to be people who are highly focused on their work.

- **Nurturing talent**

There were a lot of Eastern Europeans we interviewed who were very good... but we felt OK, we've got two Welsh candidates... they can potentially live from home early years and sort themselves out financially so they're going to be attracted to this and positive about it, whereas potentially East Europeans they've already migrated and done their degree in Wales, where are they going to go next, London, North America perhaps. Do we need to invest as a small business in that? Probably not.

Region of Highest Degree for Welsh Working Age Population (%), by Age

	Under 30	30-39	40-49	50-64
England	28.2	39.3	43.4	47.8
Wales	68.2	53.0	51.5	48.1
Scotland & N Ireland	0.8	1.6	1.7	1.8
<i>Number of observations</i>	<i>1,014</i>	<i>1,518</i>	<i>1,388</i>	<i>1,445</i>

Source: Annual Population Survey 2008-2010

Personal Location Factors

Family formation/ family support/ bilingual education

- It was a very, very conscious decision for me to come back... I wanted to have children ... that's another strong driver, which is coming back to Wales, that you've got a wider family to support... I've got three daughters and they all go to Welsh medium school. It was a dominant thing for me.*
- When you're young it's fine, London and there's a buzz to it and everything, and then after a while you realise it's a bit of a rat race I suppose... We'd had enough of the South East, and I think our lifestyle decision at the time of starting a family was to get out.*
- I've got two children... we were quite keen on the Welsh education, I feel that a bi-lingual education offers advantages... So that was certainly something I wanted to come back to, the environment here and what we have here in access to Cardiff is superb, so yes there's lots of reasons.*

Ongoing work

Further refining quantitative analysis, for example

- Graduate classification:
 - Non-migrants
 - living at parental home
 - left home
 - Migrants (from devolved nations)
 - migrated to Inner Region Core (London/ South East)
 - migrated elsewhere in UK
- Migration and
 - Educational attainment
 - Degree subject (STEM/ non-STEM) & degree type
- How graduate migration relates to partnership status and family formation – push and pull/ personal and career factors