EMPLOYER AND EMPLOYEE EXPERIENCES OF THE LABOUR MARKET FOR HEALTH ECONOMISTS IN THE UK

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Background

- Rapid growth in health economics since HESG was formed in 1972
 - e.g. there are now over 40 members of the Heads of Health Economics Units group
- There are now opportunities for health economists in many sectors, including NICE, consultancies, Arm's Length Bodies and industry
- This means that
 - Health economists have more career options than in the past
 - Employers may find it difficult to recruit health economists
 - Employers may struggle to retain their existing health economist staff

Background

- There is little published evidence on the labour market for health economists in the UK
 - Croxson (2012) historical account of development of HESG over first 25 years (to 1997)
 - Kaambwa & Frew (2013) survey of careers in health economics in 2008
 - Sheard & Caruana-Finkel (2025) analysed progress of women in academic health economics

Aims and objectives

- Aim: to undertake a review of the labour market situation for health economists in the UK
 - Describe the current situation from employer and employee perspectives
 - Examine how the market situation varies by career stages
 - Consider trends over time and differences by sector and region
- Intended audiences:
 - Employees benchmarking, e.g. what can I expect, what opportunities are out there?
 - Employers market situation, e.g. what do employees expect, where are the shortages?
 - Trainers where are the gaps in skills?
 - Professional bodies and potential funders how well is the market functioning?

Methods - The review is based on three analyses

- I. Analysis of health economics job adverts on the healthecon-all jiscmail list available at https://www.jiscmail.ac.uk/ (run by Bruce Hollingsworth)
 - Adverts from January 2018 to May 2024 (77 months)
 - Only UK based roles were included
- 2. Employer survey
 - Online Qualtrics survey from 8th 21st October 2024
 - Recruitment: HESG mailing list, Head of Health Economics Units, snowballing, personal networks, social media (LinkedIn, X)
- 3. HESG member survey
 - Online Qualtrics survey from 28th November 16th December 2024
 - Recruitment: Mailing list for current HESG members

Respondents to survey of employers of health economists

- 176 respondents
- 71% in HEIs
- 55% classified their career stage as senior and 27% as mid-career
- Vast majority (n=167) were themselves health economists

Response	N	%
A Higher Education Institution (e.g university)	125	71.0
Private company	14	8.0
NHS	9	5.1
Central government, Arms' Length Body	5	2.8
For-profit consultancy or Clinical Research Organisation	5	2.8
Independent Research Organisation	5	2.8
Life science company	5	2.8
Not stated	3	1.7
Not-for-profit consultancy or Clinical Research Organisation	<5	-
A charity or voluntary organisation	<5	-
Freelance	<5	-
Other (please state)	<5	-

Respondents to survey of employers of health economists

- 90% of health economists had been so for 5 years or more, median duration = 15 years
- Over half (85 of 167) had worked in another field previously
- 27% worked in organisations based in London, 15% in North West, 11% in Yorks & Humber

Response	N	%
London	48	27.3
North West	26	14.8
Yorkshire & Humberside	20	11.4
South West	17	9.7
South East (excluding London)	15	8.5
West Midlands	15	8.5
Scotland	10	5.7
Wales	8	4.6
East of England	6	3.4
North East	5	2.8
Not stated	3	1.7
East Midlands	<5	-
Northern Ireland	<5	-

Respondents to the survey of HESG members

- 104 respondents
 - Experience in health economics: median (IQR) 10 (4-18) years
 - 34% classified themselves at midcareer level and 27% at senior level
 - 56% had worked in a field other than health economics
 - 84% in HEIs, 6% in other non-profit organisations, 10% in for-profit orgs.
 - 23% based in North West, 20% in London, 13% in Yorks & Humber

Response	N	%
North West	24	23.1
London	21	20.2
Yorks & Humber	14	13.5
West Midlands	9	8.7
East of England	7	6.7
North East	7	6.7
South East (excl. London)	7	6.7
South West	6	5.8
Not stated	1	1
Wales	<5	-
Scotland	<5	-
East Midlands	<5	-
Prefer not to say	<5	-

Respondents to the survey of HESG members

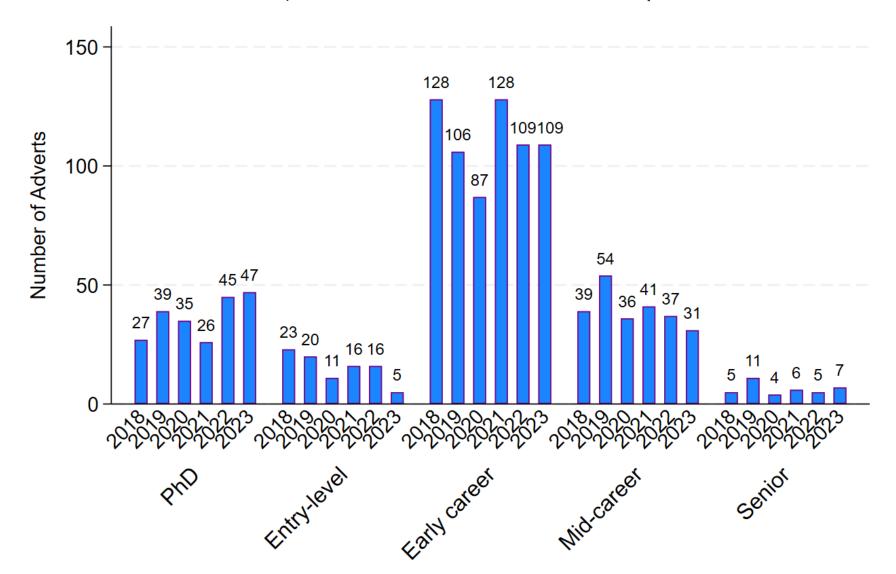
• 51% female

- 30% aged under 35 years, 44% aged
 35-49 years, 26% aged 50+
- 73% had PhDs (51 in health economics, 13 in economics)
- Many other disciplines represented in educational qualifications, but no other major group

Response	N	%
<25	<5	-
25 – 29	14	13.5
30 – 34	13	12.5
35 – 39	21	20.2
40 – 44	13	12.5
45 – 49	12	11.5
50 – 54	11	10.6
55 – 59	10	9.6
60+	<5	-
Prefer not to say	<5	-

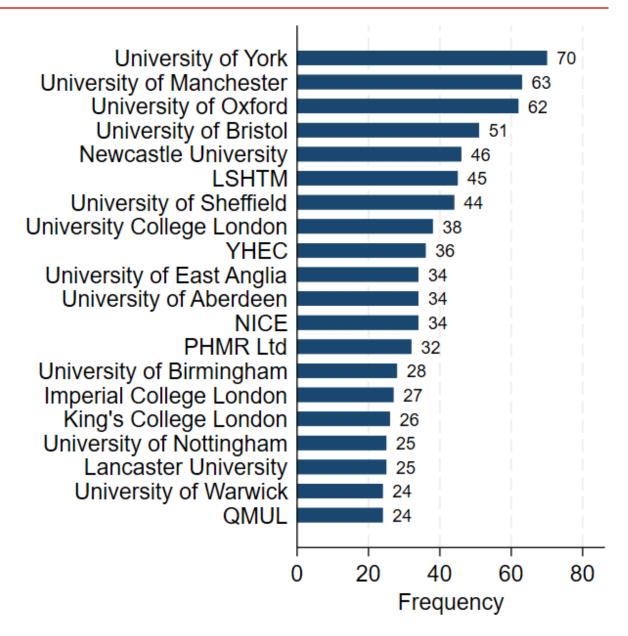
Advertisements for health economist positions (Jan2018-Dec2023)

• Out of 1,306 adverts, 82.5% were job adverts and 17.5% were PhD positions



Advertisements for health economist positions

- Adverts from 100 different organisations
- 38% required a Master's, 57% PhD
- Wide variety in job titles
 - 33 unique job titles in HEls
 - 51 unique job titles in other institutions



Advertisements for health economist positions

 Most common duration was 1.5-2.5 years in HEIs, no end date in other organisations

Not stated

• Salary: 50%

• Grade: 63%

• Contract length: 38%

Qualifications required: 49%

Length	HEIs	Non-HEI organisations
<1.5 years	91	16
	(16%)	(19%)
1.5 – 2.5 years	208	7
	(36%)	(8%)
2.5 – 3.5 years	119	1
	(20%)	(1%)
>4 years	71	4
	(12%)	(5%)
Permanent / no end	92	57
date	(16%)	(67%)
Not stated	292	118
	-	-

Notes: Adverts were classified as 'not stated' if there was no contract length given in the advert. Adverts were classified as 'Permanent/ no end date' if the advert stated permanent/open/no end date.

- 132 respondents gave details of most recent recruitment attempt
- Two-thirds had recruited in last year
- Less likely to report their most recent recruitment attempt was for midcareer health economist than what was found in the job advert analysis

Response	N	%
Pre-doctoral early-career	51	39
Post-doctoral early-career	59	45
Mid-career	19	14
Senior level	3	2
Total	132	100

- Pre-doc early-career level (N=51)
 - 25% reported having to extend or readvertise the position
 - Most reported over five people had applied, and this was often over ten
 - Average number of appointable candidates post interview was three
 - 60% of appointees had moved from another UK region for the role
 - Nearly 50% filled vacancy in <3months, significant minority (6/51) took >6months
- Post-doc early-career (N=57)
 - 30% of vacancies had to be extended or readvertised
 - Most reported over ten applications and judged two as appointable after interview
 - First-ranked candidate did not take up the role in over 30% of cases
 - One-third of appointees came from abroad
 - 9 of 57 attempts took over six months to fill the role

- Mid-career (N=19)
 - Nearly 40% of vacancies had to be extended or readvertised
 - Typically, fewer than ten applications
 - On average, two candidates were judged to be appointable
 - 9 of 19 appointees moved from another UK region and 2 moved from abroad
 - 4 of 19 roles took over six months to fill
- Senior (N=3)
 - All reported two appointable candidates following interview
 - All first-ranked candidates took up the position
 - Two out of three asked for more favourable terms and conditions

Sector differences

- Non-HEIs were more likely to extend or readvertise
- Volumes of applications and appointable candidates were similar
- HEI more likely to report a job offer was made but candidate did not accept
- More regional and international mobility in HEIs

Regional differences

- London, the South West of England and Yorkshire and The Humber were more likely to have sought to recruit at mid-career or senior level
- International recruitment was more common in London, Scotland, West Midlands and Yorkshire and The Humber
- Employers in Scotland, Wales, London and South West of England were more likely to have had to extend or readvertise vacancies

Employer experiences of recruiting health economists in the last three years

	Number of recruitment attempts	Number of vacancies advertised	Suitably qualified applications (mean)	First-ranked candidate appointments (%)	Positions filled (%)
Senior	52	49	8.5	75%	40 (77%)
Mid-career	99	89	9.0	83%	(89%)
Post-doctoral early career	245	242	10.1	77%	(89%)
Pre-doctoral early career	135	125	12.1	79%	(94%)

- 101 respondents had recruited more than one health economist
- 531 total recruitment attempts

Employer experiences of recruiting health economists in the last three years

How hard is it to recruit for specific skills?

I="Very easy"; 2 = "Easy"; 3 = "Neither difficult nor easy"; 4 = "Difficult"; 5 = "Very difficult"

Skill	N	Mean score	SD
Securing funding	65	4.15	0.85
Staff supervision/management	73	3.78	0.99
Project management	78	3.74	0.90
Stakeholder communication	77	3.70	0.81
Economic evaluation	86	3.65	1.09
Econometric analysis	71	3.52	0.97
Paper/report writing	85	3.33	0.86
Teaching	44	3.32	1.07
Presentation skills	88	3.14	0.85
Literature reviews	72	2.78	0.88

Employees' experiences of finding a new position on the labour market

45 (43%) of 104 respondents reported they had actively searched or applied for a new position in the last three years

Response	Pre-doc	Post-doc	Mid-career	Senior
I actively searched for a new position	7	4	4	3
I casually searched for a new position	5	3	9	3
I did not search, I was encouraged to apply for a role	1	1	2	2
I did not search, but I was open to opportunities	0	0	1	0
Total	13	8	16	8

Employees' experiences of finding a new position on the labour market

- Saw a suitable position in <3months
 - 80% at pre-doctoral level
 - 75% at post-doctoral level
 - 82% at mid-career level
 - 50% (3 of 6) at senior level
- 65% of respondents had accepted a new position within six months
- 23% of respondents were still searching for a new position

Reasons why vacancies were not suitable	Frequency
Not my preferred location	22
Poor salary	13
Not interesting	13
I didn't have the right skills and qualifications	11
Poor job security	9
Poor work-life balance	7
Lack of opportunities for career progression	3
Insufficient opportunities for training and development	1
Other	6

Employees' experiences of finding a new position on the labour market

"How does your new position compare to what you had hoped for when you started actively searching for a new position?"

I = Much worse, 2 = Worse, 3 = About the same, 4 = Better and 5 = Much better

Aspect	Pre-doc	Post-doc	Mid-career	Senior
Taking everything into account, how does your new	4.3	3.7	4.2	3.8
position compare to what you had hoped for?				
Amount of responsibility you are given	4.4	3.8	3.7	4.0
Recognition you get for good work	4.2	3.5	4.0	3.5
Colleagues and fellow workers	4.2	3.8	3.8	2.5
Opportunity to use your abilities	4.6	2.8	3.5	3.8
Amount of variety in your job	3.9	3.3	3.8	3.3
Hours of work	4.1	3.5	3.3	2.8
Location	3.6	3.2	3.3	3.8
Remuneration	3.6	2.8	3.7	3.5
Amount of leisure time	4.0	3.3	3.2	2.8

Job satisfaction

Domain of job satisfaction	Mean score	Percent satisfied
Colleagues and fellow workers	5.9	89.4
Freedom to choose your own method of working	5.7	85.6
Amount of responsibility you are given	5.6	83.7
Opportunity to use your abilities	5.5	81.7
Amount of variety in your role	5.3	77.9
Hours of work	5.2	73.1
Recognition you get for good work	5.2	70.2
Amount of leisure time	4.7	60.6
Remuneration	4.5	56.7
Overall satisfaction	5.2	78.8

Contract durations, hours and new roles

- 19% had contracts lasting <1.5 years,
 36% <2.5 years
- Hours worked per week: mean=38,
 IQR=35 to 42
- 60% worked at home three or more days per week
- 50% had been promoted or moved to higher grade role in last three years

When does your current contract end?	N
In less than 1.5 years	20
In 1.5 – 2.5 years	17
In 2.5 – 3.5 years	6
In 4+ years	1
It is permanent	54
Don't know	5
Not stated	<5

Gross annual pay

- Average gross annual pay was approximately £62,000
- Perceived adequate gross pay
 - Mean was just over £70,000 (IQR £50,000 to £80,000)

Gross annual pay	N
Less than £20,000	2
£20,000 - £29,999	3
£30,000 - £39,999	12
£40,000 - £49,999	24
£50,000 - £59,999	13
£60,000 - £69,999	19
£70,000 - £79,999	12
£80,000 - £89,999	5
£90,000 - £99,999	5
£100,000 - £109,999	3
£120,000 - £129,999	4
£150,000 or more	2
Number of respondents	104

Determinants of pay

- Main determinants are:
 - PhD (versus Masters) qualification
 - Years of HE experience
 - Hours worked per week
 - Sector
- Also significant differences by:
 - Ethnicity
 - Region

Variable	Elasticity	Z	p-value
Male	-0.010	-0.17	0.866
PhD qualified	0.245	3.59	<0.001
Years of HE experience (In)	0.170	4.44	<0.001
Has worked outside HE	-0.121	-2.04	0.042
Hours per week (In)	0.347	2.54	0.011
For-profit	0.308	1.79	0.074
Non-profit	0.373	2.69	0.007

Results from interval regression of logged annual income. N=101

Perceived job security

- 30% did not think their job was secure
 - Insecurity was more prevalent among females
 - Insecurity was least prevalent among people with White British background
 - Insecurity was patterned by seniority
 - Insecurity was almost exclusively reported in the HEI sector

"My job is secure"

Response	Pre-doc	Post-doc	Mid-career	Senior	Total
Strongly disagree	2	4	3	1	10
Disagree	5	6	5	4	20
Neither disagree not agree	5	7	4	2	18
Agree	3	3	20	14	40
Strongly agree	2	4	3	7	16
Total	17	24	35	28	104

Health economics as a career

- Health economics as a career
 - Most positive interesting work and good career prospects
 - Least positive pay and mentorship opportunities
- 16% were likely to leave health economics within next five years, most due to retirement

	Mean
Interesting work	4.52
Good career prospects	4.29
Impactful work	4.17
Good education and learning opportunities	4.15
Good networking opportunities	4.15
Good opportunities to attend conferences	3.99
Good mentorship opportunities	3.84
Good pay	3.73

Perceptions of whether there are labour shortages in health economics

73% of employers and 66% of employees agreed/strongly agreed

65% of employers in non-HEIs agreed or strongly agreed

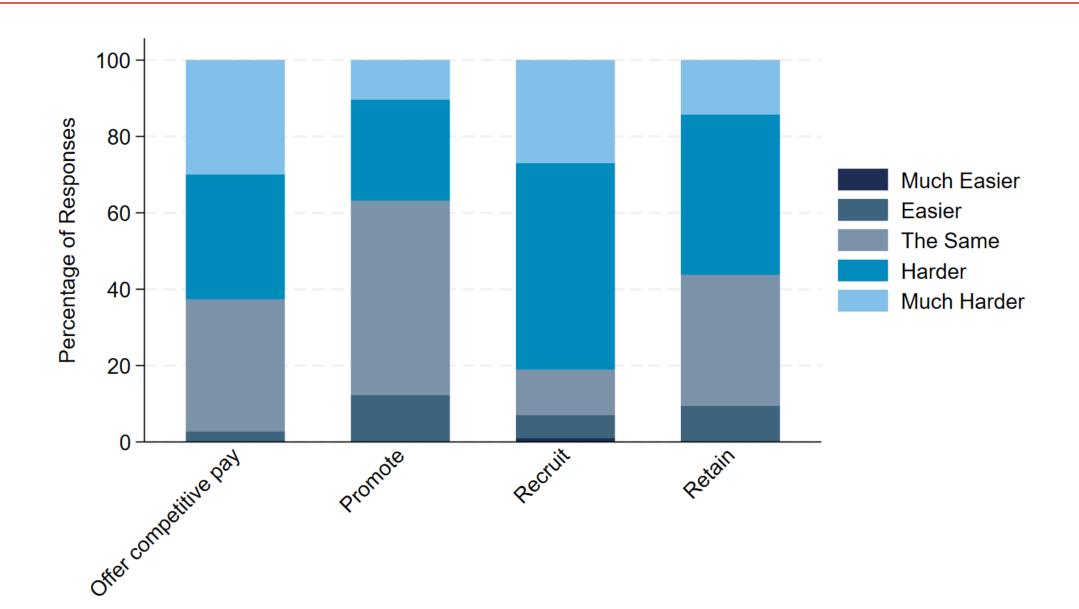
77% of employers in HEIs agreed or strongly agreed

Pagnanga	Employers	Employees
Response	N	N
Strongly disagree	13	1
Disagree	9	15
Neither disagree nor agree	15	16
Agree	59	36
Strongly agree	42	26
Total	138	94

Perceptions of whether there are labour shortages in health economics

Region	Agreement	Proportion	N
	score	agreeing	
London	3.5	66%	32
North West	3.9	67%	18
Scotland	4.0	80%	5
South East (excl. London)	4.1	88%	8
South West	4.1	86%	14
Wales	3.8	80%	5
West Midlands	3.8	78%	9
Yorks & Humber	3.9	81%	16

What aspects do employers have most difficulty with?



Some limitations

- Surveys are only of those currently active in health economics
- Only HESG members in the employee survey (defined sample frame required for ethics)
- Concentration of respondents from Higher Education Institutions, despite our efforts
- Regional representation in the surveys is a concern
- Possible that multiple respondents from the same organisation could be reporting the same recruitment experiences in the employer survey
- No specific questions on PhD positions in the surveys

Themes in the free-text responses

- Employer survey
 - Lack of competitiveness of HEIs
 - Problems recruiting specific skills
 - Suitability of Master's programmes
 - Difficulties of international recruitment
- Employee survey
 - Uncompetitive remuneration
 - Financial strain in HEIs
 - Difficulty hiring health economists
 - Changing nature of health economics over time

Tentative take-aways

Context suggests likely heterogeneity and fluidity

- Financial challenges for HEIs
- Fiscal squeeze on public research funding (less so health)
- Push to reduce numbers in civil service/ALBs
- Growth of HTA internationally
- Life sciences seen as a driver of growth

Tentative take-aways

Evidence that health economics is a shortage occupation

- A sellers' market excess demand for health economists?
- Need more information on benchmarks and averages for other sectors
- Evidence for?
 - Employers: 25% 40% (by seniority) of vacancies extended or readvertised
 - Employers: 16% 40% too 6 months or more to fill
 - Employees: 65% of those looking for a new post secured one in 6 months
- Evidence against?
 - 77% 94% of posts filled
- Equivocal?
 - Mean of 2-3 appointable applicants per position
- Most health economists think so!

Tentative take-aways

Evidence on working conditions

- Job security is an issue for many
 - Employees: 36% have contract of less than 2.5 years
 - Employees: 30% do not think their jobs are secure
- Employee concerns about:
 - Leisure time (61% satisfied)
 - Remuneration (57% satisfied)
- But overall, only 16% planning to leave health economics in next 5 years (most retiring)
- Real challenge of average strong prior of differences between sectors
 - Suggestion of higher remuneration in non-profit and profit sectors vs HEI

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