

++++Internal migration across NSW

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Background

- People move between the regions for a number of reasons: *economic opportunities, better facilities & amenity reasons*
- This phenomenon has implications for both labour market adjustment & regional development
- This study investigates the determinants of internal migration
- There several studies on this issue in Europe and America, but in Australia, data limitations have restricted the study of internal migration
- Internet search in EBSCOhost database indicated only 6 studies on this in Australia

Background...

- A new, experimental, data set is now available from 2006/07, enabling us to investigate this issue
- In NSW, more labour exit the market than enter, although it has shown a declining trend

	2006-07	2008-09	2010-11
Arrivals	528,560	567,345	532,401
Departures	555,594	568,176	545,619
Net	-27,400	-19,981	-13,218

- Predictions are that from around 2016, NSW will have a greater number of older people
- It will have significant implications for labour market & regional development

Research Questions

- Does the state of the labour market in a region impact on the level of immigration to or from that region?
- Does the ageing of a region's population inhibit migration flows?
- Do non-economic factors impact internal migration decisions?

The Determinants of internal migration (IM)

- The higher the unemployment rate the lower the inflow of migration and the greater is the outflows
- The older the population the lower the mobility (both inflow and outflow)
- In normal circumstances, one would expect that the inflow of migration is negatively related to inland & remote regions but the outflow is positively related
- We expect that inflow of migration is positively related to costal regions, but outflow is negatively related

Model

$$M_{rt} = f(L_{rt}, A_{rt}, PS_{rt}, T)$$

where, for each year,

M_{rt} = the internal migration experience of the region

L_{rt} = the labour market experience of the region (Unemployment rate)

A_{rt} = the amenity structure of the region

PS_{rt} = the population structure of the region

t = year

r = region

Data

- For the first time, the ABS has prepared a series of annual experimental estimates of regional migration
- Data summaries internal migration for years ending 30 June 2007 to 2011
- We group this into eight regions within NSW

Data

- Internal migration data is drawn from ABS (2012)
- Two separate variables are used:
 1. outflows from the region
 2. inflows into the region(both divided by population)
- Labour force data is from ABS (2011)
- Variables used are: (i) unemployment rate, (ii) population structure, & (iii) regional amenity dummies

Data

- Dummy variables are used to test the prediction that regional amenity impacts the region's immigration experience
- Unemployment rate is used to capture labour market experience
- The population structure variable is the proportion of the region's population aged 15 years and over
- The research covers the period 2007-2011

	Random Effect Models			Fixed Effect Models		
	Inflow	Outflow		Inflow	Outflow	
Constant	12.408 (4.56) ^{***}	17.522 (5.01) ^{***}		15.823 (6.40) ^{***}	20.622 (6.18) ^{***}	
UnemRate	-0.452 (-2.63) ^{**}	0.115 (0.53)		-0.042 (-2.69) ^{**}	0.131 (0.62)	
Pop15Pop	-13.272 (-4.05) ^{***}	-19.318 (-4.70) ^{***}		-13.496 (4.49) ^{***}	-19.442 (-4.79) ^{***}	
Inland	3.047 (3.82) ^{***}	2.962 (2.20) ^{**}		2.920 (6.80) ^{***}	2.834 (5.23) ^{***}	
Remote	4.427 (4.47) ^{***}	5.187 (3.12) ^{***}		4.35 (5.76) ^{***}	5.133 (5.41) ^{***}	
Coastal	4.128 (5.17) ^{***}	3.325 (2.47) ^{**}		4.05 (9.04) ^{***}	3.256 (7.76) ^{***}	
No. of Observations	40	40		40	40	
F(k-1,40-k)				202.23 ^{***}	106.23 ^{***}	
R2	0.59	0.45		0.59	0.45	

Notes: ^{***}, ^{**}, ^{*} denotes significance at the 1%, 5% & 10% levels respectively. t-values in parentheses

Discussion

- Labour market conditions have a small but significant impact on inflow, but not on outflow
- The results confirm the dampening impact of ageing populations on mobility
- Limitations:
 - Short-time period
 - Results are preliminary findings
 - More work needs to be done to refine our model

References

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