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South Australia

Labour Branching After Plant Closure: Evidence from Australia

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Paper presented at the
Future Work Future Communities Seminar,
Adelaide, July 3, 2023

Labour Branching

- In EEG and GPE, labour branching processes contribute to the trajectories of regional change
- Related vs Unrelated Variety in destinations assessed in terms of skills
- Neffke et al (2022) assesses the ‘directionality’ change
- Mackinnon (2017) considers worker preferences and embodiment
- EU work with big data sets – has too much going on to draw conclusions, no anchoring in knowledge of what really happens

BLADE and MADIP Data

- Longitudinal data linking employer-employee records spanning 2011-2022

Advantages	Disadvantages
Full population - no sampling bias	Annual industry data but occupation data only for census years
Accurate data on income, employment and lump sum payments	No information on precarious and intermittent work
Enables comparison of production to office workers' branching	No personal satisfaction data

Overall outcomes

Table 1 Overall Reemployment Outcomes

Occupational Group	Full-Year Work		No Full-Year Work		Total	
	No.	%	No.	%	No.	%
Auto-specific skill	2,059	82.9	425	17.3	2,484	100.0
Non-auto skill	3,664	85.6	614	14.4	4,278	100.0
Unskilled	2,658	71.6	1,055	28.4	3,713	100.0
Total	8,381	80.0	2,094	20.0	10,475	100.00

Note: A full-year work is defined, from PAYG tax records, as working for one employer from 1 July to 30 June in any year after the relevant automotive closure.

Worse outcomes for unskilled

Table 2 Change in Income

Occupation Group	Before Closure Median Income (\$AU000s)	After Closure Median Income (\$AU000s)	Income Change (\$AU000s)	Percent Change
Auto-specific skill	127.2	114.0	-13.2	-10.4
Non-auto skill	117.6	115.1	-2.5	-2.1
Unskilled	85.9	66.3	-19.6	-22.8

Note: n- 1030 auto-specific skill, 1832 non-auto skill, and 1329 skilled.

Main Destinations

Table 4 Post-Closure Industries of Employment, 2019-20

ANZSIC Industry	Auto-specific	Nonauto skills	Un-skilled	Total
	85	166	177	
Employment Placement and Recruitment Services				540
Labour Supply Services	48	105	106	336
Road Freight Transport	29	109	90	261
Car Wholesaling	50	89		176
	39	80		
Engineering Design and Engineering Consulting Services				164
Motor Vehicle Manufacturing	35	86		162
Urban Bus Transport (Including Tramway)	24	44	29	122
State Government Administration	26	68		119
	20	53		
Management Advice and Related Consulting Services				106

Predictors of Post Closure Income

	All Workers	Automotive Skill	Non-Auto Skill	Unskilled
(Intercept)	47845.49***	48457.06***	42851.26***	47018.20***
Income before	0.65***	0.69***	0.70***	0.35***
Over 55 years	-11381.17***	-15972.08***	-13368.76***	-4430.33***
Under 45 years	9019.25***	11049.50***	8793.03***	6704.11***
Lump Sum	-29010.76***	-40927.93***	-30056.53***	-14713.00***
Auto-specific	407.18			
Unskilled	-18844.03***			
Observations	6206	1619	2874	1713
Adjusted R2	0.549	0.494	0.415	0.241

Note: *** indicates significance at <0.001.

Predictors of Income Decline (Logit)

Predictors	Odds Ratios	CI	p
(Intercept)	0.59	0.53 – 0.66	<0.001
Over 45	2.60	2.34 – 2.90	<0.001
Auto-specific	1.59	1.40 – 1.80	<0.001
Unskilled	4.36	3.82 – 4.97	<0.001
Adelaide	2.48	2.12 – 2.90	<0.001
Geelong	0.63	0.54 – 0.74	<0.001
Left at or after closure	1.04	0.92 – 1.16	0.550

Observations n = 7168, R2 Tjur = 0.160

Discussion

- Occupational destinations shape income and working conditions, so they should be the focus
- Most people move to similar or related work
- Strong movement downstream to other autorelated industries for both auto-specialised and other skilled groups. Makes sense
- Interventions that push workers to rapid reemployment in skills in demand are probably counterproductive
- Successful outcomes for regional development upskill for future industries

Conclusion

- Change the emphasis of interventions?
- Change the emphasis of which outcomes are evaluated?



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Thanks for listening