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THE IMPACT OF STRUCTURAL CHANGE ON EMPLOYMENT OF

MIGRANTS IN AUSTRALIA DURING THE SEVENTIES

by

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The views expressed in this paper do not necessarily reflect the opinions of the participating agencies nor of the Commonwealth Government.

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Abstract

During the nineteen seventies there were some marked shifts in the occupational composition of the Australian workforce. It is sometimes argued that these had a particularly adverse effect on migrants. Such claims cast doubt upon the efficacy of the selection criteria applied in past immigration programmes. However we conclude that structural pressures and the recession had only a minor impact on the relative labour market performance of different birth-place groups in Australia. The analysis involves the construction of a measure of the impact of structural pressures on employment by birthplace. The correlation between this measure and various indicators of labour market performance by birthplace is found to be low.

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Blandy, R., Boundy, G., Chung, S., Cronin, P., Davies, T., Fallon, T.,

Ive-Smith, D., Rintoule, D., Schubert, G. and Thompson, D. (1977),

'Migrant Workers in Australia : Industrial Cannon Fodder?',

Australian Bulletin of Labour, 3, 2, 20-31.

I Introduction

In 1981, twenty seven per cent of the Australian labour

force was overseas born. In periods of macroeconomic recession, opinions are often expressed that this part of the labour force bears a disproportionate share of the costs associated with structural changes. Such arguments cast doubt on the efficacy of past and present immigration policies. If it were true that migrants have been unable to adjust to structural changes, then this would support a revision of immigration policy. It would imply that greater emphasis should be given to manpower planning considerations in preference to family reunion, refugee and other criteria in the selection of new migrants.

Filmer, R. and Silberberg, R. (1977), 'Fertility, Family Formation and Female Labour Force Participation in Australia, 1922-1974', IMPACT Preliminary Working Paper No. BP-08, mimeo, 86 pp. Available from Industries Assistance Commission, Canberra.

Fisher, N.W.F. (1982), 'Immigration and Australian Labour Markets :

Issues and Evidence'. Paper presented at the Conference on the Economics of Immigration held at Sydney University, mimeo, 20 pp.

Sheehan, P. (1981), 'Migrants and the Labour Market : The Impact of Structural Changes in the 1970's and 1980's'. Paper presented at the seminar on Structural Change, Immigration and Ethnic Relations held at La Trobe University, mimeo, 22 pp.

Stricker, P. and Sheehan, P. (1981), Hidden Unemployment : The

Australian Experience, Melbourne, Institute of Applied Economic and Social Research.

We find no support for this proposition. Our findings are consistent with those of Blandy et al. (1977) who failed to detect significant birthplace related segmentation in the Australian labour market.

The paper is organized as follows. In section 2, we detail the Stricker-Sheehan theory. In section 3 we define a measure of the effects of changes in the occupational composition of the demand for labour on employment prospects by birthplace.

The measure chosen is the percentage change that would have taken place from 1971 to 1976 in employment by birthplace on account of changes in the occupational composition of employment if total employment for the economy and birthplace shares in each occupation had remained constant. In section 4 we study the relationship between our measure of the occupational composition effects and indicators of labour market performance by birthplace. Section 5 lists conclusions for 1971-76 while section 6 examines the post 1976 period. Section 7 contains concluding remarks.

- 11 Migrant Experience in the Seventies in the Australian Labour Market : the Stricker and Sheehan Argument
2. In their recent book, Hidden Unemployment, Stricker and Sheehan (1981, ch. 8) argue that the recession of the seventies has had a particularly adverse effect on employment prospects for migrants. They cite statistics showing that compared with Australian-born workers, migrants (a) suffered higher unemployment rates, (b) had a lower rate of growth of employment and (c) experienced a relative decline in their rate of workforce participation. Stricker and
3. For a study of participation behaviour including these factors, but not disaggregated by birthplace, see Filmer and Silberberg (1977).

Footnotes

- * The initial version of this paper was prepared for the Conference on the Economics of Immigration held in February 1982 at the Sydney University and sponsored by the Department of Immigration and Ethnic Affairs.
- We are indebted to Dennis Sams for technical advice and Peter Stricker for help with data. We also received valuable advice concerning the data from officers of the Australian Bureau of Statistics. T.C. Chew provided competent research assistance.
- 1. If structural changes for the period 1971 to 1976 had been concentrated in a particular year, then annualizing the five-year effects would not be legitimate. Comparison of 1966, 1971 and 1976 Census data suggests that changes in the occupational composition of employment were not sudden.
- 2. A possibility not investigated in this paper is that the slowing in the rate of immigration may itself have affected the labour market performance of migrants. As Fisher (1982) has noted, newly arrived migrants experience high unemployment rates.
- 3. For a study of participation behaviour including these factors, but not disaggregated by birthplace, see Filmer and Silberberg (1977).

VII Conclusion

The statistics quoted in section 6 are consistent with the view that, with respect to the labour market, 1976-79 was a more difficult period for young migrants than for young non-migrants. For young people there can be little occupational attachment. Thus, for this group, Stricker and Sheehan's general theory linking labour market performance to shifts in the occupational composition of the demand for labour seems particularly inappropriate. A more promising approach would involve a consideration of the academic achievements of migrant and non-migrant children. With excess supply in the teenage labour market, employers may be using school performance as a convenient selection criterion even for jobs where the skills acquired at school are largely irrelevant.

Apart from the statistics for 15-19 year olds, we found little evidence in section 6 suggesting a deterioration in the labour market position of migrants relative to non-migrants. Even for 15 to 19 year olds the decline in the employment rate of migrants compared with that of non-migrants which occurred at the onset of the recession has now been offset by movements since 1979. Thus our conclusions concerning the period since 1976 are similar to those reached in the earlier part of the paper for 1971-76.

Overall the seventies have been a period of narrowing economic opportunities for many Australians. However the incidence of the recession has not been significantly birthplace related.

Sheehan explain what they see as the creation of a "dismal situation for migrants" by noting that a higher proportion of migrants than Australian-born workers are employed as tradesmen, process workers and labourers. Correspondingly the share of migrants in the white collar occupations is smaller than that of the Australian-born. This situation they describe as "occupational segmentation on a massive scale". Next, they point out that over the last decade, the composition of the workforce has shifted in favour of the white-collar occupations. They conclude that

"During the post 1973 recession, the employment position of migrants has deteriorated much more than that of the Australian born population with the deterioration being spectacular for migrants from the three Southern European countries [Italy, Greece and Yugoslavia] and more marked for migrants from other non-English speaking countries than from the United Kingdom, Ireland and New Zealand. This relative deterioration seems to be largely founded in the change in the occupational structure of the demand for labour in the recession, employment falling heavily in those areas in which migrants are concentrated." Stricker and Sheehan (1981, p. 174).

III A Measure of the Effect of Changes in the Occupational Composition
of Labour Demand on Employment Prospects by Birthplace

In table 1 we provide a measure of the occupational-structure effect underlined by Stricker and Sheehan. Column I shows the results of computing

$$c_b = 100 \left[\sum_{j=1}^{71} \bar{S}_{bj} [Q_j(76) - Q_j(71)] \right] / \bar{N}_b \quad \text{for } b=1, \dots, 11, \quad (1)$$

where c_b is our measure of the effect on employment prospects for workers from birthplace b of shifts in the occupational composition of employment from 1971 to 1976. \bar{S}_{bj} is the average of the shares of employment in occupation j in 1971 and 1976 accounted for by workers of birthplace b . $Q_j(71)$ and $Q_j(76)$ are the proportions of workers in the two years belonging to occupation j . \bar{N} is the average of the total numbers of employed people in 1971 and 1976 and \bar{N}_b is the average of the numbers of people from birthplace b in employment. Thus, c_b is the percentage change in the employment of birthplace group b which would have occurred over the period 1971 to 1976 if occupational shares had changed from $Q_j(71)$ to $Q_j(76)$, $j=1, \dots, 71$, while the total number of people employed had remained fixed at \bar{N} and birthplace b 's shares in each occupation had remained fixed at \bar{S}_{bj} , $j=1, \dots, 71$. As indicated in (1), the computations were made with total employment divided into 11 birthplace groups and 71 occupations. The birthplace

graphed participation rates by age, sex and birthplace (Australian and overseas born) for 1966-81. The graphs suggest that one would need to look further back than the current recession to explain the relative decline in migrant participation rates. For example, why were participation rates so low for Australian-born females over the age of 25 in 1966? Could the decline in participation rates for migrant females relative to non-migrant females simply mean that during the seventies the attitudes of the Australian-born community concerning working wives and working mothers came more into line with attitudes already existing in Europe and North America? Perhaps the only evidence of a recession-related shift in migrant/non-migrant participation rates is in the graphs for young males. By 1979, quite large gaps had opened between the participation rates for male migrants under 25 and those for non-migrant males under 25. Recently, however, these gaps have been closing. In any case, we consider the evidence does not justify the interpretation of the relationship between falling participation rates and hidden unemployment posited by Stricker and Sheehan. For 1974 to 1979 they attributed the differences between changes in migrant and non-migrant participation rates wholly to additional hidden unemployment for migrants.

PARTICIPATION RATES BY AGE
Australian and Overseas born*
1966 — 1981
FEMALES

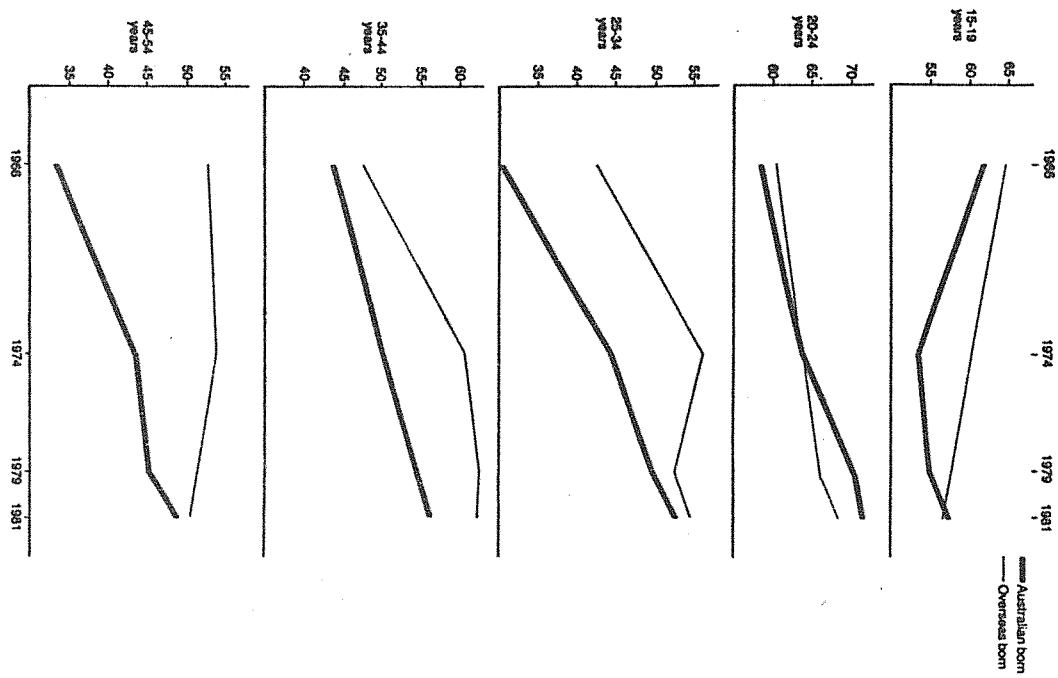


Table 1. A Measure of the Effect of Changes in Occupational Composition on Employment Prospects by Birthplace and a Decomposition of Changes in Employment : 1971 to 1976*

Birthplace	Percentage changes				
	I Occupational composition effect (c_b)	II Employment (g_b)	III Population, 15 years and over (n_b)	IV Labour force participation rate (r_b)	V Employment rate (e_b)
Australia	0.66	11.00	8.37	5.45	-2.82
U.K. and Eire	-0.51	5.85	6.57	1.79	-2.51
Italy	-5.09	1.20	-0.26	3.67	-2.21
Greece	-5.89	-2.39	-2.23	2.55	-2.71
Yugoslavia	-5.96	11.12	13.34	1.00	-3.23
Poland	-3.63	-14.34	-5.76	-6.35	-2.23
Netherlands	-1.54	-5.71	-4.37	0.84	-2.18
Malta	-4.70	8.35	7.12	3.84	-2.61
Germany	-1.73	-2.65	-1.30	0.95	-2.30
Other Europe	-1.93	-3.65	0.80	-1.36	-3.08
Other Countries	1.40	32.56	28.77	7.44	-3.65
All birthplace groups	0.00	9.93	8.16	4.58	-2.80

* Computations based on data from the Census of Population and Housing 1971 and 1976, Australian Bureau of Statistics.

*The labour force participation rate for any group is the number of people in the civilian labour force in the group expressed as a percentage of the number of civilians in the group.

Source: Unpublished data provided by the ABS from the Labour Force Survey for 1974, 1979, 1981 and the Population Census 1966.

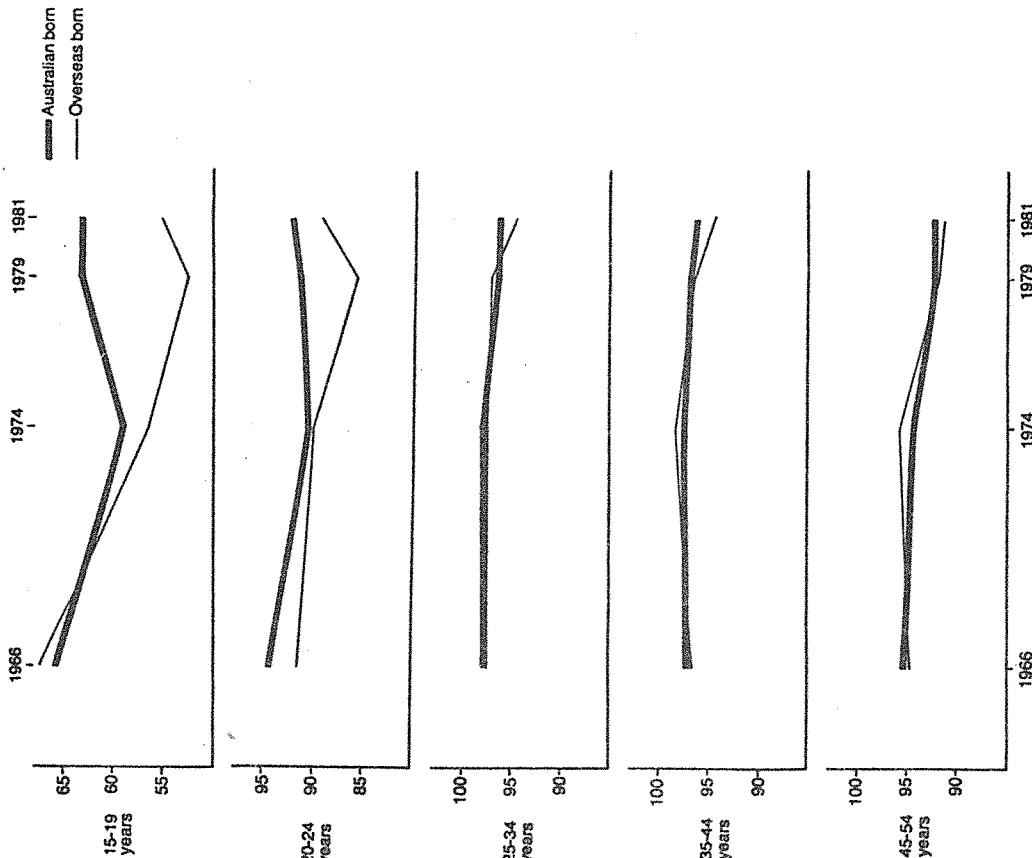
groups are listed in table 1. The occupations are a slightly modified version of the A.B.S. Minor Groups (see note (a) in table 2).

The results for c_b , $b=1, \dots, 11$, support Stricker and Sheehan, at least qualitatively. Italian, Greek and Yugoslav migrants are shown as having lost between 5 and 6 per cent of their jobs through shifts in the occupational composition of employment. By contrast, these shifts increased employment opportunities for Australian-born workers by 0.66 per cent. From table 2, which explains the composition effects in terms of what happened in each occupation, it becomes clear that the unfavourable results for the Southern European groups arise from the relatively heavy concentration of their employment in blue-collar occupations, especially textile-related occupations. For example, consider occupation 40 (spinners and weavers, etc.). Table 2 shows the decline in this occupation as reducing employment for Yugoslav-born workers by 7 times as much in percentage terms as for the Australian-born. Employment of spinners declined by 28.93 per cent while aggregate employment increased by 9.93 per cent. Hence, the share of occupation 40 in aggregate employment fell by 38.86 per cent ($28.93 + 9.93$). Because the percentages of Yugoslav- and Australian-born workers in spinning were 2.60 and 0.37 respectively, the contributions of the reduction in the share of spinners to employment opportunities for these two

Figure I:

PARTICIPATION RATES BY AGE
Australian and Overseas born*
1966 — 1981

MALES



*The labour force participation rate for any group is the number of people in the civilian labour force in the group expressed as a percentage of the number of civilians in the group.

Source: Unpublished data provided by the ABS from the Labour Force Survey for 1974, 1979, 1981 and the Population Census 1966.

birthplace groups increased from 1971 to 1976. From 1976 to 1979 they decreased for all major groups except the Yugoslavs. In both periods, the participation rates of most migrant groups fell relative to that of non-migrants.

In arguing that the recession has disadvantaged migrants relative to non-migrants, Stricker and Sheehan have attached great importance to the relative decline of migrant participation rates. They cite this decline as evidence

"that one major response of migrants to their deteriorating employment situation has been to withdraw from the labour force, so that hidden unemployment is heavily concentrated in this group" (Stricker and Sheehan, p. 169).

In section 4 we have seen that for 1971-76 there was little connection between changes in the "employment situation" by birthplace as measured by our c_b 's and changes in participation rates by birthplace. Without being able to calculate the c_b 's for 1976-79 we cannot check whether the Stricker-Sheehan theory fares any better for this period than it did for the earlier one.

We suspect that it would be a major research task to provide a satisfactory explanation for the relative decline in migrant participation rates. Consideration of many factors would be required, including changes in preferences for education, changes in the average age at marriage, changes in fertility rates and family size and changes in the conditions governing social welfare payments.³ Such research is beyond the scope of this paper. Nevertheless, in figures 1 and 2 we have

Table 2. Changes in Employment by Occupation and the Contributions to Employment by Birthplace of Changes in Occupational Shares: 1971 to 1976

Occupation (a)	I Percentage changes in employment	Contributions by Birthplace(b)(c)					
		II Australia	III U.K.	IV Italy	V Greece	VI Yugoslavia	VII All birth- places
1-20. White-collar occupations	16.55	3.19	2.65	0.51	0.33	0.45	2.94
21-26. Farmers, fishermen, hunters, timbergetters	8.13	-0.17	-0.09	-0.01	-0.03	-0.08	-0.14
27-29. Miners, quarrymen	-6.28	-0.10	-0.10	-0.06	-0.03	-0.13	-0.10
30-39. Workers in transport and communication	3.54	-0.39	-0.36	-0.19	-0.18	-0.13	-0.35
40-60. Tradesmen, production - process workers and labourers	1.31	-2.23	-3.24	-5.57	-6.48	-6.55	-2.78
60. Spinners, weavers, etc.	-28.93	-0.16	-0.19	-0.77	-1.25	-1.08	-0.22
41. Tailors, cutters, etc.	-10.23	-0.09	-1.37	-1.64	-0.29	-0.19	-0.13
42. Leather, curtains, etc.	-39.01	-0.09	-0.03	-0.40	-0.56	-0.39	-0.18
43. Butchers, bakers, sellers, etc.	-32.45	-0.09	-0.19	-0.18	-0.14	-0.35	-0.11
44. Metalworkers, tailors, etc.	12.40	0.01	0.01	0.01	0.01	0.01	0.01
45. Tool makers, machine, etc.	3.91	-0.39	-0.53	-0.57	-0.43	-0.76	-0.43
46. Electricians, etc.	5.72	-0.11	-0.15	-0.07	-0.06	-0.07	-0.11
47. Metal workers, n.e.c.	-7.56	-0.31	-0.41	-0.54	-0.96	-1.26	-0.31
48. Carpenters, etc.	1.30	-0.15	-0.15	-0.28	-0.32	-0.37	-0.21
49. Printers, decorators	-1.35	-0.08	-0.15	-0.19	-0.19	-0.26	-0.11
50. Bootmakers, plasterers	5.17	-0.08	-0.18	-0.33	-0.07	-0.17	-0.10
51. Compositors, signwriters, etc.	-5.61	-0.18	-0.15	-0.07	-0.08	-0.08	-0.12
52. Potters, kilnmen, etc.	-16.68	-0.04	-0.07	-0.11	-0.15	-0.22	-0.15
53. Millmen, bakers, butchers	1.89	-0.10	-0.10	-0.21	-0.27	-0.30	-0.15
54. Chemists, sugar workers, etc.	-19.37	-0.12	-0.24	-0.17	-0.17	-0.21	-0.14
55. Rubber, painters, etc.	20.00	0.00	0.00	0.00	0.00	0.00	0.00
56. Paper, rubber workers, etc.	4.04	-0.04	-0.08	-0.09	-0.18	-0.18	-0.05
57. Painters, varnishers, etc.	-22.18	-0.18	-0.23	-0.41	-0.50	-0.21	-0.21
58. Equipment operators, etc.	4.44	-0.07	-0.08	-0.17	-0.05	-0.14	-0.08
59. Stewards, freight handlers	80.07	-0.07	-0.05	-0.05	-0.05	-0.07	-0.07
60. Labourers, n.e.c.	18.03	0.07	0.05	0.38	0.40	0.09	0.09
61-71. Other occupations	14.71	0.41	0.64	0.25	0.50	0.58	0.45
Total	9.93	0.66	-0.51	-5.09	-5.89	-5.96	0.00

(a) The computations were made with 71 occupations derived from the Minor Groups in the Classification and Classified List of Occupations (CSCS, June 1971) and Occupation Classification Extract (ABS, Catalogue No. 2114.0). To improve comparability between data for 1971 and 1976, it was necessary to aggregate Dentists and Doctors in 1971 and (ii) to distribute Apprentices to all other occupations in 1976. For both years the Group Occupation inadequately described or Not Stated was aggregated to all other occupations. For presentation, the results for the 71 occupations exists of the first 20 of our 71 occupations.

(b) The contribution (c_{bj}) of the change in the share of occupation j in total employment to the employment for birthplace b was calculated as

$$c_{bj} = 100 \sum_j (q_j(76) - q_j(71)) \bar{W}_b$$

where the notation is described following equation (1). The results for the aggregated occupations in the table were computed by aggregating the relevant c_{bj} 's.

(c) The column sums of the contribution effects are the c_b 's appearing in table 1. For the "all birthplaces" column the sum is zero. Recall that we are examining the effects of changes in occupational shares holding aggregate employment constant.

birthplace groups are shown in table 2 as

$$c_{Yug,40} = -0.3886 \times 2.60 = -1.02$$

and

$$c_{Aus,40} = -0.3886 \times 0.37 = -0.14 .$$

While our calculations support the qualitative conclusions of Stricker and Sheehan, we would not describe the results as quantitatively "spectacular". On an annual basis, shifts in the occupational composition of employment displaced only 1.19 (i.e. 5.96/5) per cent of the employees of the worst affected group (those born in Yugoslavia).¹ Seemingly sharp changes in occupational shares (see column 1 of table 2) become muted when they are turned into changes in employment opportunities by birthplace. This was also observed by Cook and Dixon (1982), who made projections of the effects on the occupational composition of the workforce of various pressures likely to operate on the Australian economy in the eighties. When they translated their occupational projections (assuming constant birthplace shares in each occupation) into projections of employment by birthplace, they found surprisingly small effects. The reason is that each birthplace group is spread over all the occupations. Thus, in any change in the occupational composition of employment each birthplace group is represented in both "winning" and "losing" occupations.

table 4 shows little difference across birthplace groups in the e_b 's. From 1976 to 1979, the greatest decrease in employment rate (1.8 per cent) was for the Greeks while the smallest (1.1 per cent) was for the Italians. The decrease for the Australian-born (1.5 per cent) was about average. These figures can, of course, hide problems for particular age groups within the migrant labour force. Stricker and Sheehan have noted that employment rates for young migrants fell relative to those of young non-migrants. From 1976 to 1979, the unemployment rate for 15 to 19 year old migrants increased from 16.4 per cent to 23.8 per cent whereas for Australian-born workers in this age group, unemployment increased from 13.9 per cent to 16.4 per cent. Since 1979, unemployment among young migrants has fallen so that by August 1981, the situation was close to that of 1976 with the unemployment rate for 15-19 year old migrants being 16.8 per cent and that for young Australian-born workers being 13.5 per cent. If we go back to the beginning of the recession, August 1974 say, we find that the percentage increase in unemployment rates for young migrants has been less than that for young non-migrants. For the seven years from August 1974 to August 1981, the unemployment rate for young Australian-born workers increased by 141 per cent (from 5.6 to 13.5) while for young migrants the increase was 124 per cent (from 7.5 to 16.8).

The one respect in which table 4 seems to be telling a different story from that in the corresponding part of table 1 is with regard to participation rates. Participation rates for all the major

Table 4. A Decomposition of Changes in Employment
by Birthplace : 1976 to 1979*

Birthplace	Percentage changes		
	Employment (e_b)	Population, 15 years and over (n_b)	Labour force participation rate (p_b)
Australia	4.1	5.9	-0.3
U.K. and Eire	1.5	3.5	-0.7
Italy	-1.3	4.2	-4.4
Greece	-2.7	2.8	-3.7
Yugoslavia	3.2	3.9	0.8

* Computations based on unpublished data from the Household Population Survey, supplied by the ABS.

In commenting on the paper by Cook and Dixon, Sheehan (1981, p. 19) objected to the assumption of fixed birthplace shares in each occupation. He suggested that "sharp changes in industry structure may have a direct impact on ethnic shares, perhaps because of the last on/first off principle or for other reasons". If there were in fact a tendency for migrant spinners, say, to be the first to lose jobs when their occupation declined, then formula (1) would underestimate the disadvantage suffered by migrants relative to Australian-born workers from structural change in conditions where jobs in alternative occupations are hard to find. However, if migrants were "first off", then we would expect to observe increases in the shares of employment in declining occupations accounted for by Australian-born workers. Table 3 lists for 1971 and 1976 the shares of the main birthplace groups in all occupations in which there was a reduction in employment over the period. In the 22 declining occupations, the Australian-born share increased in 11 and decreased in 11. Overall, the Australian share of the declining occupations increased by only 0.12 percentage points from 65.36 per cent to 65.48 per cent. In the 7 occupations experiencing employment losses of more than 20 per cent, the Australian-born share increased in 4 and decreased in 3. Correspondingly, the table reveals no systematic tendency for migrant groups to lose share in declining occupations. Migrants from the U.K. and Eire gained share in 12 out of the 22 declining occupations and Italian, Greek and Yugoslav migrants gained share in 10, 7 and 15 respectively. The overwhelming impression

Table 3. Declining Occupations 1971 to 1976 : Birthplace Shares
and the Percentage Changes in Employment

Occupation	Percentage Change 1971-1976	Birthplace Shares						Most of the work of Stricker and Sheehan (1981, ch.8)
		Australia 1971	Australia 1976	U.K. and Eire 1971	U.K. and Eire 1976	Italy 1971	Italy 1976	
15. Book-keepers	-3.54	78.08	76.44	11.42	11.24	0.92	1.22	0.24 0.70 0.25 0.43
19. Commercial travellers	-5.19	79.45	78.93	12.70	12.56	0.58	0.74	0.16 0.21 0.13 0.16
23. Wool classers	-58.06	93.51	95.03	3.26	1.55	0.42	0.55	0.16 0.19 0.16 0.00
24. Hunters and trappers	-46.52	95.00	93.98	2.13	2.84	0.18	0.03	0.00 0.00 0.00 0.00
25. Timbergetters, etc.	-16.58	88.14	88.90	3.68	3.97	2.07	2.76	0.23 0.28 1.71 1.43
27. Miners	-6.90	75.16	76.32	10.01	10.51	2.13	1.68	0.71 0.52 2.20 1.92
29. Nail drillers	-21.39	74.58	76.46	9.73	9.10	0.94	1.15	0.00 0.23 0.76 0.92
30. Deck engineers, etc.	-8.58	55.85	56.02	29.47	29.66	0.30	0.38	0.15 0.19 0.24 0.32
37. Telephone, etc.	-3.73	83.51	82.41	10.74	11.16	0.52	0.62	0.15 0.15 0.16 0.16
40. Spinners, weavers, etc.	-28.93	45.94	47.64	8.31	8.55	11.38	10.14	11.17 8.68 6.43 7.44
41. Tailors, etc.	-10.25	48.67	47.53	7.77	8.25	13.83	13.68	10.36 9.72 3.76 4.08
42. Leather cutters, etc.	-29.71	56.16	53.54	7.25	7.19	10.30	11.15	8.34 8.17 4.43 5.72
43. Furnacesmen, tailors, etc.	-21.95	59.45	58.58	14.97	15.08	5.09	4.89	2.35 2.11 4.40 5.01
47. Metal workers, n.e.c.	-7.64	49.26	48.45	14.98	13.33	6.45	6.22	5.72 5.14 5.69 6.58
49. Painters, decorators	-1.33	57.29	59.61	15.52	14.45	5.50	5.45	3.06 2.73 3.66 3.80
51. Compositors, engravers, etc.	-5.55	73.75	75.41	12.50	12.25	1.68	1.76	1.19 1.10 0.87 1.08
52. Potters, faience, etc.	-16.66	52.89	53.33	15.01	14.28	6.95	5.94	5.24 4.06 6.23 5.90
54. Chemical, sugar workers, etc.	-19.31	61.16	61.95	17.40	16.15	3.05	3.62	2.53 1.72 1.99 2.49
57. Bakers, bakers, etc.	-22.77	63.65	64.93	11.76	10.59	4.87	4.96	3.68 3.17 3.79 5.40
65. Barbers, etc.	-6.13	71.71	72.14	6.62	6.76	8.06	8.10	2.95 2.55 1.15 1.36
66. Launderers	-10.86	65.41	63.75	7.92	8.14	7.60	7.12	4.77 5.69 2.86 3.24
71. Armed forces	-6.10	81.22	81.02	11.52	12.13	0.59	0.26	0.12 0.04 0.16 0.17
All declining occupations	-9.66	65.36	65.48	11.64	11.47	4.99	4.75	3.58 3.14 2.60 2.79

All declining occupations

Source : Census of Population and Housing, 1971 and 1976.

VI Migrant Experience in the Labour Market since 1976

(b) suggests that the disadvantage to migrants from shifts in the occupational composition of aggregate employment was small, and

(c) that migrants were able to cope with this disadvantage without it causing a significant deterioration in their labour market performance relative to that of Australian-born workers either in terms of labour force participation rates or rates of unemployment.

It cannot be denied that the rate of growth of migrant employment slowed relative to that of Australian-born employment.

From table 1 it is apparent that differences across birthplace groups in their percentage employment increases (the g_b 's) are closely associated with differences in the percentage increases of their working age populations (the n_b 's). The correlation coefficient between the n_b 's and g_b 's is 0.93. One effect of the recession may have been to discourage potential migrants, lowering the n_b 's and thus the g_b 's for $b \neq$ Australia.² However, for actual migrants in the Australian workforce, we find no evidence suggesting that the onset of the recession led to a weakening in their labour market position compared with that of Australian-born workers.

from table 3 is that birthplace shares in declining occupations changed very little. The table gives no suggestion that migrants have suffered a disproportionate share of the job losses in any of the declining occupations.

IV The Relationship Between Shifts in the Occupational Composition of Employment and the Labour Market Performance of Migrants

1971-76

In view of table 3, it is reasonable to accept c_b as measuring for birthplace group b the change in employment opportunities for the period 1971 to 1976 arising from shifts in the occupational composition of the employed labour force. Of course, these shifts were not the only influence on the relative employment performance of different birthplace groups. In fact, contrary to the position of Stricker and Sheehan, it appears to us that they were of only minor importance.

In column 11 of table 1 we have shown the percentage changes in employment for each birthplace group from 1971 to 1976. In columns III, IV and V we have decomposed these changes into three parts according to the formula

$$g_b = n_b + p_b + e_b, \quad b=1, \dots, 11, \quad (2)$$

where g_b is the percentage growth in employment for workers of birthplace b (i.e., the g_b 's are the figures in column II), n_b is the percentage growth in the number of people of birthplace b over the age of 15 (the n_b 's are in column III), P_b is the percentage change in the share of people of birthplace b over the age of 15 who are in the workforce, i.e., P_b is the percentage change in birthplace b's participation rate (the P_b 's are in column IV), and e_b is the percentage change in birthplace b's employment rate, i.e., e_b is the percentage change in one minus birthplace b's unemployment rate (the e_b 's are in column V).

It is clear, as was emphasized by Stricker and Sheehan, that the number of Australian-born workers in employment grew at a faster rate than the number of foreign-born. While Australian-born employment grew by 11 per cent, employment of workers from some of the main migrant groups actually fell. In total, migrant employment grew by 7 per cent. It appears, however, that changes in migrant employment rates were similar to those for Australian-born workers.

Column V shows very little variation across birthplace groups. In all cases, the rate of employment fell by between 2.21 and 3.65 per cent. In more familiar terms, this means that the increases in unemployment rates were between 2.21 and 3.65 percentage points.

While column IV shows more variation across birthplace groups than column V, it does not show a systematic tendency for migrant participation rates to fall. Participation rates for most migrant groups increased although not by as much as for the Australian-born.

From our point of view, the most striking feature of the figures in columns II - V is their lack of correlation with the c_b 's. Among the migrants for which the change in the occupational composition of the workforce was the least favourable we find some (the Yugoslavs and Maltese) with high rates of growth of employment and some (the Italians, Poles and Greeks) with low rates of growth, we find some (the Italians, Greeks, Poles and Maltese) with relatively small increases in their rates of unemployment and one (the Yugoslavs) with a relatively large increase, and finally, we find some (the Italians, Greeks, Yugoslavs and Maltese) with increased labour force participation and one (the Poles) with reduced participation. If we exclude the rather volatile category "other countries", then the correlation coefficient (r) between the c_b 's and the employment increases (the g_b 's) is 0.05; between the c_b 's and the e_b 's it is 0.13; and between the c_b 's and P_b 's it is 0.08.

V Conclusions Concerning Migrant Experience in the Labour Market 1971-76

In summary, our analysis of migrant labour market experience over the period 1971 to 1976 :

- (a) confirms that the share of migrant employment in declining occupations was greater than that for Australian-born workers, but