

# Indigenous self-employment: miracle cure or risky business?

B.H. Hunter

No. 176/1999

ISSN 1036-1774  
ISBN 0 7315 2611 2

Dr Boyd Hunter is Research Fellow at the Centre for Aboriginal Economic Policy Research, The Australian National University and is a Ronald Henderson Research Fellow.

## Series Note

The Centre for Aboriginal Economic Policy Research (CAEPR) was established in March 1990 under an agreement between The Australian National University (ANU) and the Aboriginal and Torres Strait Islander Commission (ATSIC). Since 1 January 1999, CAEPR operates as university centre and is funded by ATSIC, the Commonwealth Department of Family and Community Services and The ANU. CAEPR's principal objective is to undertake high quality independent research that will assist in furthering the social and economic development and empowerment of Aboriginal and Torres Strait Islander people.

CAEPR's mission is to be a world-class centre undertaking research on indigenous economic development issues that combine academic excellence with policy relevance and realism. In Australia, CAEPR is currently the only dedicated research centre focusing on indigenous economic policy issues from a national perspective: its publications which include the CAEPR Discussion Paper series aim to broadly evaluate government policy, influence policy formulation and inform rational debate.

The Director of the Centre is responsible to the Vice-Chancellor of The ANU and receives assistance in formulating the Centre's research priorities from an Advisory Committee consisting of senior academics nominated by the Vice-Chancellor and representatives nominated by ATSIC, the Department of Employment, Workplace Relations and Small Business and the Department of Family and Community Services.

CAEPR Discussion Papers are intended as one forum for the rapid dissemination of refereed papers on research that falls within the CAEPR ambit. These papers are produced for discussion and comment within the research community and indigenous affairs public policy arena. Many are subsequently published in academic journals. Publications can be purchased from:

Centre for Aboriginal Economic Policy Research  
2nd Floor, J.G. Crawford Building  
The Australian National University  
Canberra ACT 0200  
Telephone 02—6279 8211  
Facsimile 02—6249 2789

Abstracts or Summaries of all CAEPR Discussion Papers can be found at the following World Wide Web address: <http://online.anu.edu/caepr/>

**As with all CAEPR publications, the views expressed in this Discussion Paper are those of the author(s) and do not reflect an official CAEPR position.**

Professor Jon Altman  
Director, CAEPR

The Australian National University  
March 1999



## Table of Contents

Summary .....	v
Acknowledgments.....	vii
<b>Introduction</b> .....	1
<b>Recent trends in indigenous self-employment</b> .....	2
<b>A profile of the indigenous self-employed in Australia</b> .....	4
Describing indigenous self-employment .....	4
Which indigenous people become self-employed? .....	8
<b>Discussion</b> .....	9
Data issues.....	9
Opportunity structures and indigenous self-employment .....	10
Access to human, social and financial capital.....	11
The role of government assistance in developing indigenous self-employment .....	12
Access to government contracts .....	13
<b>Conclusion</b> .....	14
<b>Notes</b> .....	14
<b>Appendix</b> .....	15
Regression analysis of indigenous self-employment .....	15
<b>References</b> .....	18

### Tables

Table 1. Self-employment as proportion of labour force, 1991-96 .....	2
Table 2. Characteristics of the indigenous self-employed, 1994.....	5
Table 3. Proportion of the working-age population whose highest qualification is in the field of business and administration, 1986-96.....	7
Table A1. Probit analysis of indigenous self-employment, 1994.....	17



## Summary

Running a business, or otherwise being self-employed, is one avenue for economic advancement for indigenous people. However, employing oneself or others is a complex process with many potential pitfalls. In an increasingly competitive marketplace, where globalisation and instantaneous information processing have increased the mobility of consumers and producers alike, indigenous businesses have to be increasingly sophisticated to compete. Not only do they need to manage financial risk, but also fluctuating markets require a truly 'worldly' outlook with adequate access to collateral and social networks. In this context it is not surprising that the indigenous population continues to have a very low rate of business formation.

This paper provides a profile of the indigenous self-employed in Australia using data from the National Aboriginal and Torres Strait Islander Survey and recent censuses. It uses this profile to discuss issues raised in the international literature on race, ethnicity and self-employment.

### Recent trends in indigenous self-employment

- Indigenous Australians have markedly lower rates of self-employment than the Maori of New Zealand, but are slightly more likely to be self-employed than Canadian Indians on reserves. The Maori were almost twice as likely as Aboriginal people and Torres Strait Islanders to be employers or self-employed in 1991 with 7.4 per cent of the labour force running some type of business. The self-employment rate for Canada's Indian reservation population was 2.2 per cent in 1990 compared to 2.7 per cent among Australia's indigenous workers at the analogous census.
- There is some evidence of a relative improvement in the number of self-employed among the indigenous employed with an increase in the number of indigenous self-employed relative to other self-employed. The ratio of self-employment rates among the indigenous and non-indigenous workforce increased from 0.26 to 0.31 between 1991 and 1996. This relative improvement in self-employment rates among those in the labour force builds on low historical numbers with this ratio being only 0.15 in 1986.
- The small size of the self-employed population mean that self-employment plays a minor role in promoting economic independence among the indigenous population as a whole.

## A profile of the indigenous self-employed in Australia

- In comparison with other workers (excluding Community Development Employment Projects (CDEP) scheme workers), the indigenous self-employed enjoy on average \$2,027 more income from government payments and about \$4,400 more employment income. The higher income from employment will, in some sense, be compensation for labour on-costs usually borne by the employer. When the Australian economy enters the next recessionary phase, the self-employed income will be substantially reduced as there is no mechanism to subsidise temporary periods of unprofitability.
- The self-employed work 3.7 and 13.8 hours more per week than non-CDEP and CDEP scheme employees respectively. Also, the fact that the self-employed have been employed for less of the previous 12 months than other employed workers means they will have been more reliant on other income, probably welfare. The fact that the self-employed appear to have less continuous employment probably indicates that the nature of the work is seasonal and impermanent. An alternative explanation of the lack of continuity in employment is that there is a high rate of failure among indigenous businesses.
- Compared to other indigenous people the self-employed were more likely to have some education, but less likely to have completed high school. The self-employed were much better qualified than other indigenous people when it came to vocational training but were less well endowed in terms of tertiary education, presumably including business qualifications.
- Regression analysis is used to describe the characteristics of indigenous people who become self-employed. The results indicate that males are almost twice as likely to be self-employed as indigenous females. The analysis also points to the self-employed being concentrated in older age groups with 15 to 24 year olds being significantly less likely to set up a business. There are no significant correlations across geographical areas which indicates that there are market opportunities for the indigenous self-employed in remote Australia. Finally, living in a family where at least one person is non-indigenous is strongly positively correlated with indigenous self-employment.

## Discussion

This paper builds on previous studies, which document the circumstances of individual, indigenous self-employed people. Unfortunately, the acquisition of data on indigenous businesses is in its infancy and therefore it is not possible to understand the processes that determine the success of these entrepreneurs. Given that access to capital is a potentially important constraint on self-



employment, more detailed information is required on the capital requirements of indigenous businesses. A useful starting point might be to focus on businesses which utilise government assistance or are involved in the business plans of the relevant local Area Consultative Committee.

The Commercial Development Corporation (CDC) could address the information problems experienced in small firms, and exacerbated by the low levels of educational attainment in the indigenous population, by providing a business advisory service. One way to raise the profile of the CDC or any indigenous business advisory service is to develop networks of potential entrepreneurs through 'trade' magazines and even the world wide web. The Canadian government web site (<http://www.inac.gc.ca/ecdev/entre/index.html/>) provides an excellent model for starting up an Australian network for indigenous entrepreneurs.

The United States (US) literature points to significant barriers to minority participation in the government contracting process including: failure of governments to break large contracts down into smaller projects so that small firms can compete; extensive granting of waivers from minority subcontracting requirements; ineffective screening for false minority fronts; and limited notice of the contract tendering process. While the minority subcontracting requirements are obviously specific to the US legislation, the other barriers may need to be addressed in the Australian context. The major lesson from the literature on public contracts is that policy needs to examine government's own shortcomings as well as address the requirements of indigenous business.

While government programs for business support are important, it is more important to address the low level of education among potential indigenous entrepreneurs. This paper highlights the need to increase the level of business qualifications among the self-employed to ensure they can assess and manage the manifold risks in an increasingly globalised marketplace. Easing the constraints on indigenous entrepreneurs' access to capital will yield dividends only after their ability to utilise capital and assess market opportunities is addressed.

### Acknowledgments

This research was funded in part by the Ronald Henderson Research Foundation. I am grateful to Professor Jon Altman, Mr Bill Arthur, Mr Matthew Gray, Ms Siobhan McDonnell, and Dr John Taylor for comments on an earlier draft. Matthew also provided

invaluable research assistance in making sense of recent census data. Editorial assistance was provided by Linda Roach and Hilary Bek, with layout by Jennifer Braid.

## Introduction

Running a business, or otherwise being self-employed, is one avenue for economic advancement for indigenous people. However, employing oneself or others is a complex process with many potential pitfalls. In an increasingly competitive marketplace, where globalisation and instantaneous information processing have increased the mobility of consumers and producers alike, indigenous businesses have to be increasingly sophisticated to compete. Not only do they need to manage financial risk, but also fluctuating markets require a truly 'worldly' outlook with adequate access to collateral and social networks. In this context it is not surprising that the indigenous population continues to have a very low rate of business formation.

Daly (1993) points to several factors contributing to the low rate of self-employment among indigenous people: the historical emphasis of government funding on community enterprises, especially in urban settings where indigenous communities are relatively dispersed;<sup>1</sup> poor education and training in the organisation of viable commercial enterprises;<sup>2</sup> shortages of capital; limited opportunities in remote areas;<sup>3</sup> there is also the problem that indigenous artists and hunter-gatherers may not classify themselves or be recognised as self-employed under existing definitions;<sup>4</sup> the role of traditional value systems can act as a brake on with the efficient organisation of a viable commercial enterprise;<sup>5</sup> and, finally, relatively high transport costs and a low level of local demand, especially in remote areas, may inhibit the growth of indigenous small business.<sup>6</sup> Some of these factors may have positive as well as negative aspects. For example, Aboriginal and Torres Strait Islander people living traditional lifestyles in remote locations may be considered to have unique opportunities for the development of small business in the arts or tourism industries.

The last Federal Budget indicates an ongoing commitment to promoting economic independence for indigenous Australians through supporting indigenous business and self-employment (Commonwealth of Australia 1998). The Commonwealth Government will provide almost \$43 million in 1998-99 to economic programs for indigenous people. Most of this money is provided through the Aboriginal and Torres Strait Islander Commission (ATSIC) via the Business Development Program and the Aboriginal and Torres Strait Islander Commercial Development Corporation (CDC). The Business Development Program includes the Indigenous Business Incentives Program (IBIP), which provides seed funding, training and other support for new businesses, and the Business Funding Scheme, which offers low interest loans and business advice to borrowers. The CDC, which facilitates and promotes joint venture arrangements between

industry and indigenous people, will have its capital base augmented by an additional \$10 million in 1998–99 (siphoned from ATSI's Budget).

This paper provides a profile of the indigenous self-employed in Australia using data from the National Aboriginal and Torres Strait Islander Survey (NATSIS) and recent censuses. It uses this profile to discuss issues raised in the international literature on race, ethnicity and self-employment. This profile is designed to augment and update, rather than replace, Daly's (1993) analysis which remains the most detailed census-based analysis of the indigenous self-employed available. While it will be necessary to revisit some of the arguments put forward by Daly, the United States (US) literature allows a fresh, critical outlook on the relevant issues.

## Recent trends in indigenous self-employment

Taylor (1993) showed that while indigenous self-employment remained low, when compared to other Australians, it grew relatively fast between 1986 and 1991. Table 1 shows that this relative improvement continued to 1996, although the changes to the census question in the last inter-censal period reduced the absolute numbers of self-employed indigenous and non-indigenous population alike. For example, the general decline in Australian self-employment between 1991 and 1996 occurred, in part, because the 1996 Census question specified whether a person worked in a limited liability company. Given that there was no equivalent qualification in 1991, the census data were, unfortunately, not directly comparable (see notes in Table 1).

Table 1. Self-employment as proportion of labour force, 1991–96

	1991		1996	
	Self-employed	Indigenous /non-indigenous	Self-employed	Indigenous /non-indigenous
Australia <sup>a,d</sup>	4.0	0.26	2.4	0.31
Australia <sup>b,d</sup>	2.7	0.28	1.7	0.31
NZ, Household Labour Force Survey June Quarter <sup>a</sup>	7.4	0.38	8.2	0.40
NZ, Census <sup>b,c</sup>	4.4	0.41	NA	NA
Canadian Indians on reserves <sup>b,e</sup>	2.2	0.47	NA	NA

Notes: a. Includes employers and self-employed.

b. Self-employment only.

- c. Specified New Zealand Maori as one of their ethnic groups. Labour force estimates include unpaid workers in family business.
- d. There are two possible reasons for the decline in Australian self-employment between 1991 and 1996. First, the 1996 Census question specified whether a person worked in a limited liability company thus scaring off people who were uncertain of their company status. Second, 136,000 overseas visitors were excluded from the 1996 calculations of labour force status. However, given that only 0.08 and 0.2 per cent of non-indigenous self-employed in 1991 and 1996 were overseas visitors the major change in the Australian self-employed arises from the way in which the question was asked.
- e. The Canadian census was conducted in mid-1990.

Source: Statistics New Zealand (1991, 1996); Ministry of Maori Development 1998; and Department of Indian Affairs and Northern Development 1997.

Indigenous Australians have markedly lower rates of self-employment than the Maori of New Zealand, but are slightly more likely to be self-employed than Canadian Indians on reserves. The Maori were almost twice as likely as Aboriginal people and Torres Strait Islanders to be employers or self-employed in 1991 with 7.4 per cent of the labour force running some type of business. The self-employment rate for Canada's Indian reservation population was 2.2 per cent in 1990 compared to 2.7 per cent among Australia's indigenous workers at the analogous census.

There is some evidence of a relative improvement in the number of self-employed among the indigenous employed with an increase in the number of indigenous self-employed relative to other self-employed. The ratio of self-employment rates among the indigenous and non-indigenous workforce increased from 0.26 to 0.31 in the last inter-censal period. This relative improvement in self-employment rates among those in the labour force builds on low historical numbers, with this ratio being only 0.15 in 1986.<sup>7</sup> While changes in the census question between 1991 and 1996 mean that it is difficult, if not impossible, to directly compare changes in self-employment rates, the resulting distortions should affect the indigenous or non-indigenous populations more or less equally.<sup>8</sup> That is, the relative improvement in indigenous self-employment provides some evidence that there has been ongoing improvement even after distortions introduced by the 1996 Census are taken into account. Notwithstanding this, the small size of the self-employed population means that it still plays a minor role in promoting economic independence among the indigenous population as a whole.

The international comparisons in Table 1 show that indigenous labour forces in other developed countries also have low self-employment rates relative to their respective non-indigenous labour forces. The final section of this paper

explores the policy lessons from the international literature on race and self-employment in the US and Canada.

## A profile of the indigenous self-employed in Australia

### Describing indigenous self-employment

Daly (1993) gives a detailed description of indigenous self-employment at the time of the 1991 Census. This section updates this picture by using the more recent NATSIS data (Table 2). While NATSIS includes more information than is available in the census, the small numbers of self-employed in the survey mean that caution should be exercised in interpreting the data. In order to benchmark the circumstances of the self-employed, comparisons are made to other employed, unemployed and those outside the labour force (not in the labour force, NILF). The prominence of the Community Development Employment Projects (CDEP) scheme in overall indigenous employment makes it necessary to separately compare the self-employed to both CDEP and non-CDEP scheme employment (Taylor and Hunter 1998). The lack of any real financial data about indigenous business limits the scope of the analysis to the characteristics of the self-employed.

Table 2 indicates that the self-employed enjoyed higher incomes than any other group of indigenous Australians. For example, in comparison with other non-CDEP workers, the indigenous self-employed enjoyed, on average, \$2,027 more income from government payments and about \$4,400 more employment income. Unfortunately, even though income from self-employment is classified as business income in the NATSIS, it is not possible to draw any conclusions about the capital base of the self-employed without real financial data.

The higher income from self-employment will, in some sense, be compensation for labour on-costs usually borne by the employer. That is, costs associated with compensation, superannuation, sick leave, and self-insurance against the vicissitudes of the business cycle mean that annual income should be substantially higher for the self-employed. Given that the excess employment income is less than 20 per cent of the average income there is only a small surplus in the income of the indigenous self-employed. This observation is emphasised by the fact that the self-employed work 3.7 and 13.8 hours more per week than non-CDEP and CDEP scheme employees respectively. When the Australian economy enters the next recessionary phase, the income of the self-employed will be substantially reduced as there is no mechanism to subsidise temporary periods of unprofitability.

The substantially higher welfare payments (that is, government income) received by the self-employed, as opposed to other indigenous employees, also requires some comment. While the indigenous self-employed tend to have fewer children than other indigenous people, they tend to be older and have more health problems. Despite being currently employed, by definition, slightly more self-employed people received Jobsearch or Newstart allowances in the previous 12 months than other indigenous employed. Also, the fact that none of the self-employed have been employed for less of the previous 12 months than the other employed means they will have been more reliant on other income, probably welfare.

The fact that the self-employed appear to have less continuous employment probably indicates that the nature of their work is seasonal and impermanent. While the self-employed are by definition in non-standard employment, there is a certain stability in self-reliance with fewer working for more than one employer (presumably including himself or herself) than other employed people. An alternative explanation of the lack of continuity in employment is that there is a high rate of failure among indigenous businesses.

The distribution of self-employed indigenous people across the major industry groups differed markedly from other indigenous employed (Daly 1993).<sup>9</sup> Almost two-thirds of the indigenous self-employed were working in agriculture, construction and the wholesale and retail trades. These industries were important sources of employment for the indigenous self-employed in both remote and settled Australia. However, these three industries only accounted for 22.7 per cent of wage and salary employment. Community services, which were the major employer of indigenous wage and salary earners (32 per cent of total employment) accounted for only 1.9 per cent of employment amongst the indigenous self-employed.

Table 2. Characteristics of the indigenous self-employed, 1994

	Self-employed	Non self-employed				Non self-employed
		Non CDEP	CDEP	Un-employed	NILF	
Income (in 1994 dollars)						
Non-CDEP employment income	26,805	22,415				4,862
CDEP employment income			11,467			1,505
Government income	7,333	5,306	6,159	8,811	9,334	8,614
Business income	26,805					

---

Highest year of school completed						
Less than year 6	4.3	5.5	9.4	5.2	19.1	11.9
Year 6 to 9	44.3	34.6	44.3	44.1	39.1	39.8
Year 10 to 11	42.6	46.2	39.4	42.1	24.9	35.1
Year 12	7.8	12.3	6.8	7.0	3.8	6.7
Post-school qualification						
Degree or Diploma	4.3	6.4	2.0	2.3	1.2	2.7
Vocational qualification	21.6	14.3	3.7	7.9	3.5	6.8
Other qualification	7.8	7.7	3.8	4.4	2.3	4.1
Employment characteristics						
Number of hours worked per week						
More than 1 employer in last year	37.7	34.0	23.9			30.2
Months worked in last year	7.8	17.4	11.2	7.4	1.3	7.4
Wants to work more hours	8.4	10.0	10.1	1.4	0.5	4.0
	20.7	20.1	48.6			30.9
Welfare-related characteristics						
Number of children under 13 years						
Long-term health problem	1.1	1.1	1.4	1.3	1.4	1.3
Some income from Jobsearch or Newstart Allowance	40.5	35.6	26.0	33.2	44.6	37.8
Unemployment duration (in months)	5.2	4.2	1.7	68.4	10.0	19.8
Age (in years)				11.2		11.2
	38.2	34.5	31.8	29.7	38.1	34.7
Number of observations	116	1,891	1,144	1,814	3,869	8,718

---

Source: NATSIS unit record file.

Table 2 confirms the relatively low level of education among the indigenous self-employed identified by Daly (1993). Compared to other indigenous people they were more likely to have some education, but less likely to have completed high school. The self-employed were much better qualified than other indigenous people when it came to vocational training but were less well endowed in terms of tertiary education, presumably including many business qualifications.<sup>10</sup> For



example, they were less likely to have tertiary qualification than other employed but were more likely to have them than other indigenous people.

Daly (1993) also found that the indigenous self-employed had spent less time at school and were less likely to have formal qualifications in comparison with other self-employed Australians. They were mainly employed in trade occupations and in the lower-skilled occupations of plant and machinery operators and labourers. Self-employed Aborigines were under-represented among managers and administrators and professionals compared with other self-employed Australians. Raising educational attainment is likely to increase the number of indigenous people in these groups, but it will be more difficult to increase numbers in the professions. Entry to courses such as law and medicine is extremely competitive and it is unlikely that significant numbers of indigenous people will gain these types of qualifications in the foreseeable future.

Table 3. Proportion of the working-age population whose highest qualification is in the field of business and administration, 1986–96

	Indigenous males (1) per cent	Non- indigenous males (2) per cent	Ratio (1)/(2)	Indigenous females (3) per cent	Non- indigenous females (4) per cent	Ratio (3)/(4)
1986 Census	0.5	4.0	0.13	8.5	8.3	1.03
1991 Census	1.2	4.5	0.26	5.3	8.0	0.66
1996 Census	2.7	5.8	0.46	6.1	9.1	0.66

Note: There was a change in the classification of fields of qualification between the 1986 Census and later censuses driven by the development of the Australian Bureau of Statistics (ABS) Classification of Qualifications for use in the 1991 Census (ABS 1991). Given this change means that concordances are only possible at the broadest level, it is prudent for inter-censal comparisons to focus on changes in the ratio of indigenous to non-indigenous outcomes rather than the changes in the proportion with business qualifications.

While poor educational attainment remains a substantial constraint on increasing the number of indigenous self-employed, there appears to have been some improvement in the proportion of indigenous males whose highest field of qualification is either business or administration (Table 3). In the ten-year period between 1986 and 1996 the proportion of indigenous males with a qualification that is relevant to running a business increased by over 500 per

cent. Notwithstanding the fact that this was coming off an exceptionally low base, indigenous males increased the number of such qualifications relative to non-indigenous counterparts by a factor of more than three. However, in the same period there appeared to be a fall in the number of indigenous females with such qualifications. Despite this, the relative number of indigenous females with business-related qualifications remained closer to the non-indigenous females than the equivalent statistic for males. That is, the ratio of indigenous to non-indigenous outcomes in 1996 for females was 0.66 compared to 0.46 for males.

One positive aspect of Table 3 is that indigenous females are proportionately more likely to be qualified in business-related fields than non-indigenous males. The caveat here is that it is not possible, meaningfully, to further disaggregate the type of qualification received. However, if the quality of such qualifications is not substantially different between these two groups, then there is probably some untapped potential for conducting businesses among indigenous females.

This untapped potential is highlighted by the fact that indigenous females are significantly less likely to be self-employed than indigenous males (see Appendix Table A1), who are themselves less likely to be self-employed than non-indigenous persons (Table 1). Put another way, indigenous females should be less constrained by their educational attainment in successfully running a business. That is, the fact that indigenous females are not in business probably reflects difficulty in securing financial capital and their social position in their communities.

### Which indigenous people become self-employed?

Regression analysis is an empirical technique that can be used to describe the characteristics of people who become self-employed. Appendix A briefly details the methodology and results of the regression analysis of whether an individual is likely to be self-employed. The analysis is based on all 15 to 64 year olds in the 1994 NATSIS and focuses on age, sex, geography, education and family characteristics.

The results are consistent with the description of the self-employed given above. That is, the indigenous self-employed tend to have some education but do not, in general, have tertiary qualifications. As indicated above, vocational qualifications are associated with higher levels of indigenous self-employment. Also, indigenous males are almost twice as likely to be self-employed as indigenous females. The analysis also points to the self-employed being concentrated in older groups, with 15 to 24 year olds being significantly less likely to set up a business.

There are no significant correlations across geographical areas which indicates that there are market opportunities for indigenous self-employed in remote Australia.<sup>11</sup> One explanation may be that there is a greater potential for business diversity due to the isolation of local markets. That is, each individual locality needs a shop, petrol station, plumber etc. Other explanations might be that: barriers to entry, such as capital start-up requirements, are lower; and the larger indigenous market in remote locations counteracts the lack of mainstream commercial opportunities in such areas.

Finally, living in a family where at least one person is non-indigenous is strongly positively correlated to indigenous self-employment. The reason for this is that living in a 'mixed family' may indicate a greater exposure to mainstream economic practices. Another interpretation is that the presence of non-indigenous people means that the family is more likely to have a higher socioeconomic status and consequently may have more useful business contacts. For example, joint ventures with non-indigenous partners and the complementarity of skills within 'mixed' households may increase the incidence of self-employment.

The results of this regression analysis are consistent with Chapman, Gregory and Klugman's (1998) analysis of total Australian self-employment. The major exception is that Chapman, Gregory and Klugman found that Australia's self-employed were more likely to live in rural areas. This is probably explained by the relatively large numbers of non-indigenous farmers who are self-employed.

## Discussion

### Data issues

This paper builds on previous studies, which document the circumstances of individual, indigenous self-employed people. The only credible data sources available are the census and the 1994 NATSIS data. Unfortunately, the acquisition of data on indigenous businesses is in its infancy and therefore it is not possible to understand the processes that determine the success of these entrepreneurs.<sup>12</sup> Given that access to capital is a potentially important constraint on self-employment, more detailed information is required on the capital requirements of indigenous businesses.

In 1997 the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs (HORSCATSIA) commenced an inquiry into indigenous business. Unfortunately, the inquiry process was interrupted by 1998 federal election and reporting on findings of the inquiry is not currently on HORSCATSIA's agenda. Arthur (1999) utilises the information presented to the

inquiry by conducting a comprehensive analysis of the evidence taken. One finding from Arthur's analysis is that useful data on indigenous businesses are still in extremely short supply.

This problem has been, until recently, a characteristic of the international literature on race, ethnicity and self-employment. While Bates (1997) has taken the first steps to matching financial data for individual businesses with census characteristics of the self-employed in the US, there is no analogous data source for Australia.<sup>13</sup> Given the sparse nature of indigenous businesses in Australia, it will probably be necessary to conduct a case study of businesses. A useful starting point might be to focus on businesses which utilise government assistance or are involved in the business plans of the relevant local Area Consultative Committee.

### Opportunity structures and indigenous self-employment

The US literature suggests that self-employment may be a response to blocked opportunities in wages among educated minorities (Bates 1997; Bonachich and Light 1988; Borjas 1994; Waldinger, Aldrich and Ward 1990). In broad terms, the inability of minority groups to get the appropriate remuneration for their respective levels of education push them to attempt to be more self-reliant.<sup>14</sup> In contrast, higher levels of education, wealth and access to social resources tend to pull groups towards self-employment.

Blocked opportunities for the well educated do not appear to be an important constraint for Australia's indigenous population. For example, Junankar and Liu's (1996) study of the private rate of return to indigenous education actually finds that, all else being equal, indigenous people can expect a higher financial return on educational qualifications than non-indigenous counterparts. In such circumstances it may be difficult to entice educated indigenous people to pursue the risky returns of self-employment. Indeed, if these results are accepted, then we should question the wisdom of policies that entice educated indigenous people away from the substantial returns of waged employment.

The international literature also suggests that blocked opportunities in choice of residence may push indigenous people into self-employment. However, while residential segregation exists in Australia, it is driven by the location of public housing or indigenous preferences rather than an active process of blocking opportunity to live elsewhere (Hunter 1996).

## Access to human, social and financial capital

The main constraints on indigenous self-employment are low levels of education and, to a lesser extent, access to capital. Human, social and financial capital are properly thought of as prerequisites for success in most lines of self-employment.<sup>15</sup> Government policy should focus on increasing indigenous participation and performance in secondary education with a view to increasing business-related skills. Competency in numeracy and literacy must be the platform for improvements in indigenous self-employment. Addressing indigenous people's deficits in business and administration qualifications is another important link in upgrading the skills required by potential entrepreneurs. Finally, notwithstanding the above caveat about greater employment alternatives available to indigenous professionals, encouragement in securing vocationally-oriented professional qualifications which increase the likelihood of setting up a business, such as legal or medical qualifications, will increase the capacity of indigenous people to be self-employed. However, the apparent abundance of career opportunities for the small numbers of highly educated indigenous people may mitigate the success of a policy that focuses only on professionals. A more productive approach, which has greater potential employment spin-offs, would be to focus on the basic skill competencies required.

Despite the absence of any credible data on indigenous access to financial capital, it is necessary to consider some relevant issues. Historically there has been a recognition that indigenous Australians, and particularly indigenous entrepreneurs, lack ready access to capital. This is partly because of the low inter-generational transmission of wealth, but it is also because commercial sources of capital are either risk averse or prejudiced against indigenous clients. While governments might intervene directly to overcome this market failure, there have been several recent innovations in financial institutions that should be considered briefly, including Rotating Savings and Credit Associations (RSCAs) and Grameen-style banks.

In areas such as money lending, the strong social trust within a community may reduce the transaction costs and default risks which prevent mainstream banks lending to indigenous clientele (Bates 1997; McDonnell 1999). RSCAs are informal financial systems used to encourage thrift and to assemble business capital, which may facilitate access to the financial capital necessary to create or expand a small business (Light, Kwuon and Zhong 1990). The participants in RSCAs agree to make periodic financial contributions to a fund that is disbursed to members in rotation. In the context of indigenous communities, the major problem for setting up a successful RSCA is the lack of savings held by community members.

Grameen-style banks fulfil a similar role by providing small loans for socially homogenous groups, usually made up of poor females. Peer monitoring of small scale loans, or micro-credit, provided by a Grameen bank helps to overcome many concerns that make banks reluctant to loan to indigenous clients. For example, members of the local community are in a better position to discern whether an individual can repay a loan than is a bank. The fact that relatively large numbers of indigenous females have business qualifications means that this is definitely worth exploring in future research. McDonnell (1999) examines the issues for setting up Grameen-style banks in indigenous communities in Australia in more detail.

### The role of government assistance in developing indigenous self-employment

Direct government assistance to indigenous businesses take several forms. Micro-business or self-employment can get financial assistance via the CDEP scheme or business loans schemes. Small to medium indigenous businesses tend to rely more on the CDC. Alternatively, industry strategies attempt to increase the numbers of indigenous employers where indigenous people have a clear competitive advantage (like in the Aboriginal arts and crafts industry) or potential comparative advantage (like cultural tourism). While this diversified strategy covers a variety of potential indigenous entrepreneurs, it is desirable to enhance the role and profile of the CDC (Altman 1997).

Currently, the CDC is small, efficient, Canberra-based, has a corporate culture that is strictly commercial and is largely invisible in indigenous Australia. The CDC could address the information problems experienced in small firms, and exacerbated by the low levels of educational attainment in the indigenous population, by providing a business advisory service. In addition to, or as a part of, this service, the CDC could assist small businesses to develop risk management strategies based on accumulated experience (Altman 1997).

One way to raise the profile of the CDC or any indigenous business advisory service is to develop networks of potential entrepreneurs. The US experience provides several insights. Following Nixon's pledge to promote black capitalism in the US, several magazines saw an opportunity to cater for black businesses. One magazine, *Black Enterprise (BE)*, has been prominent in bringing black entrepreneurs together since its inception in the early 1970s. Earl Graves, the publisher of *BE*, recognises the importance of developing networks among black business people to share experiences and to mitigate the discrimination sometimes faced in the open market. For example, *BE* promotes the networking of indigenous business through a world wide web site for aspiring entrepreneurs

(<http://www.blackenterprise.com/>). The Canadian government web site (<http://www.inac.gc.ca/ecdev/entre/index.html/>) provides an excellent model for starting up an Australian network for indigenous entrepreneurs. Given the concentration of indigenous and black entrepreneurs in America is higher than that of indigenous counterparts in Australia it may be necessary for the Federal Government to give financial support to a similar exercise in this country.

In indigenous business there is a need to differentiate forms of enterprise, not only according to the scale of the operation, but also into target populations (viz. individuals, families, traditional owners, native title parties, communities or regions) and target objectives (sociocultural, public good or commercial).

The CDC currently targets medium sized enterprises and joint ventures. While joint ventures are an effective strategy for encouraging medium sized indigenous firms, and can help overcome problems of internal and external accountability, policy needs to augment existing programs to better meet indigenous need in smaller businesses. For example, it may be possible to revamp the CDEP scheme (with capital component) to assist the self-employed to generate income for commercial and sociocultural objectives (Altman 1997). Alternatively, IBIP could target community businesses, such as community-based art centres, as a public good. However, given that accountability problems may arise in organisations where responsibilities are shared, enterprise efficiency and effectiveness need to be maintained by a process of benchmarking and performance monitoring.

Arthur (1996) has expressed concerns about the dangers of business programs that mix social and commercial goals. It is certainly true that if indigenous businesses are to compete in the marketplace they must take a hard-nosed commercial attitude to any cost implications of non-commercial objectives. However, indigenous community organisations may have a competitive advantage in certain areas through their connection with traditional culture and their ability to mobilise labour in the production process. Individual financial incentives may be less effective than traditional systems of obligation in motivating craftwork. Also, organising bark painting as a factory production line might be more efficient but may result in a rapid loss of authenticity.

## Access to government contracts

In addition to the constraints on indigenous business enterprises identified above, the US literature points to significant barriers to minority participation in the government contracting process (Enchautegui et al. 1998). These barriers resulted in native American enterprises receiving only 18 per cent of the contract dollars they could expect given the availability of such enterprises. The

barriers identified by Enchautegui et al. (1998) include: failure of governments to break large contracts down into smaller projects so that small firms can compete; extensive granting of waivers from minority subcontracting requirements; ineffective screening for false minority fronts; and limited notice of the contract tendering process. While the minority subcontracting requirements are obviously specific to the US legislation, the other barriers may need to be addressed in the Australian context. The major lesson from the US literature on public contracts is that policy needs to examine government's own shortcomings as well as address the requirements of indigenous business.

## Conclusion

While Government programs for business support are important, it is more important to address the low level of education among potential indigenous entrepreneurs. This paper highlights the need to increase the level of business qualifications among the self-employed to ensure they can assess and manage the manifold risks in an increasingly globalised marketplace. Easing the constraints on indigenous entrepreneurs' access to capital will yield dividends only after their ability to utilise capital and assess market opportunities is addressed.

## Notes

1. For example, the Community Economic Initiatives Scheme administered by the Aboriginal and Torres Strait Islander Commission (ATSIC). Jarvie (1990) and Office of Evaluation and Audit (OEA) (1990, 1991) provide a critical review of the history of such programs in developing indigenous business. Arthur (1992, 1996) and Young (1988) show that there has been considerable emphasis placed on the community in the establishment of enterprises. This emphasis may in part explain or contribute to the low rate of self-employment among indigenous people.
2. An obvious limiting factor is the lower level of education, labour market experience and management skills among indigenous people compared with the rest of the Australian population. For example, Young (1987) noted that European managers often ran Aboriginal enterprises, such as community stores, because there was no Aboriginal member of the community with the necessary commercial experience. Altman (1987, 1988) also emphasised the lack of managerial skills as an inhibiting factor in the development of Aboriginal tourist enterprises.
3. Access to the necessary capital to establish an enterprise is another factor limiting the ability of indigenous people to establish their own businesses. Altman (1988) noted that even where there were significant amounts of capital available from



royalty payments, there was a tension between spending the money on the immediate needs of members of the community and investing it for the future.

4. The Aboriginal Arts and Crafts Review (Altman 1989) estimated that there were 4,838 Aboriginal artists in Australia in 1987–88, but the 1986 Census showed only 59 Aboriginal people engaged in visual arts and crafts occupations. Similarly, hunter-gatherers are unlikely to be included among the self-employed as they could not be described as 'conducting their own business' even though they are working to produce non-monetary income for themselves. Altman and Taylor (1989) estimated that about 10 per cent of the indigenous population lived at outstations where significant hunting and gathering activities were undertaken.
5. Altman (1988) and Young (1987, 1988) attributes these differences, in part, to an absence of a 'culture of entrepreneurship' among Aboriginal people. Young emphasises the importance of kinship ties and authority structures based on age and traditional knowledge as barriers to profit maximising behaviour in the management of commercial enterprises. Furthermore, in remote Australia, traditional owners of land may have particular rights of control over all enterprises conducted on this land regardless of their ability or experience in running enterprises (Ellana et al. 1988).
6. Although location may reduce the scope for the establishment of a wide range of small businesses, it also creates opportunities. Altman (1989) estimated that half of the Aboriginal artists in Australia lived in the Northern Territory. Their location offers them opportunities for sale of their work to tourists.
7. See the Miller (1985) for further comments on the low level of self-employment before 1986.
8. The changes in the coding procedures and the way the census question was asked between 1991 and 1996 are described in the notes to Table 1.
9. This probably reflects differences between industries in the technologies employed, the scale of production and the extent of public ownership. For example, poor access to capital precludes indigenous involvement in industries where a substantial investments are required.
10. Using 1991 Census data, Daly (1993) found that the two main fields in which the indigenous self-employed held qualifications were in science, engineering and architecture; and manufacturing (this group included people with qualifications such as vehicle mechanic, electrician and boiler maker). These two groups were also important among indigenous wage and salary earners and the non-indigenous self-employed. Self-employed indigenous people were less likely to hold qualifications in the fields of management and administration and, social science, humanities, education and religion than were indigenous wage and salary earners. These types of qualifications were probably important in the industries of public administration and community services. Most of the difference between the indigenous and non-indigenous self-employed in the distribution of field of qualification can be accounted for by the smaller proportion of the indigenous self-employed with qualifications in these two fields.

11. This finding does not contradict Daly (1993) who found that the relatively low rate of self-employment among indigenous people is partially due to a low level of local demand in remote areas. The reason is that non-indigenous population may have greater opportunities for self-employment in non-remote areas.
12. For example, census based analysis lacks essential data on financial capital invested in a firm by its owner, the size of the firm (either gross revenue or number of employees) or the nature of the market in which the firm competes (Borjas 1986; Portes and Zhou 1996).
13. Bates uses a creative mixture of financial and census data and concludes that successful small businesses tend to be those created with a substantial investment of the owner's financial capital, along with the strong educational credentials of business owners (Bates 1997: 4). He finds that the stereotype of the poor immigrant starting a business on a shoe string is inconsistent with the data on Asian immigrant start up capital. Asian immigrants who become self-employed are outstanding as a group for the tremendous amount of human and financial capital they invest in their new small business.
14. Bonachich and Light (1988) claim that Korean workers in Los Angeles only obtain 70 per cent of the return on human capital that non-Korean workers earned. Pursuing self-employment did not eliminate Korean disadvantage but it did narrow it.
15. For persons lacking the requisite skills and capital, self-employment entry rates are low; for those who nonetheless start a small business, business failure and self-employment exit rates are high (Bates 1990).

## Appendix A

### Regression analysis of indigenous self-employment

The rudimentary regression analysis of indigenous self-employment in this paper focuses on the factors that are correlated with an indigenous person being self-employed. A multivariate technique, known in the statistical literature as probit analysis, is used to analyse whether a person is self-employed. The Probit model provides a rigorous technique to identify the significance of correlations between certain characteristics, for example, location or education, and whether an individual is self-employed.

The 1994 NATSIS data is used to identify the relevant correlations. Of the 8,440 indigenous respondents aged between 15 and 64 years, only 8,246 were used in the analysis. The other 200 or so respondents failed to answer the questions used in Table A1.

Table A1. Probit analysis of indigenous self-employment, 1994

	Dependent variable: whether self-employed	
	Coefficient	T-ratio
Male	0.396	(4.8)**
Age 15 to 24	-0.371	(-3.4)**
Age 45 to 64	0.054	(0.5)
Urban area outside capital city	-0.165	(-1.5)
Rural	0.074	(0.6)
Remote	-0.214	(-1.5)
Difficulty in English	0.040	(0.3)
Educated to year 6 to 9	0.271	(1.7)*
Educated to year 10 or 11	0.297	(1.7)*
Educated to year 12	0.349	(1.6)
Degree/diploma	0.075	(0.3)
Vocational qualification	0.431	(3.9)**
Other qualification	0.291	(1.9)
Living in mixed family	0.512	(5.8)**
Constant	-2.752	(-13.3)**
Overall significance of regression – $\chi^2(14)$		108.8**
Pseudo R <sup>2</sup>		0.105
Number of observations		8,246

Note: \* and \*\* indicate significance at the 10 and 5 per cent level. Heteroscedasticity robust standard errors are used when non-constant variance of the residuals is significant.

The characteristics chosen to explain employment are those commonly used in the economic literature (Daly 1995; Junankar and Liu 1996; Borland and

Hunter 1997). Employment is modeled as a function of sex, age, location, education and family circumstance. Given the small number of indigenous self-employed in the NATSIS sample a parsimonious approach to specification is taken to maximise the power of the analysis.

## References

- Altman, J.C. 1987. 'The economic impact of tourism on the Warmun (Turkey Creek) community East Kimberley', *East Kimberley Working Paper No. 19*, Centre for Resource and Environmental Studies, The Australian National University, Canberra.
- Altman, J.C. 1988. *Aborigines, Tourism, and Development: The Northern Territory Experience*, North Australia Research Unit, The Australian National University, Darwin.
- Altman, J.C. (Chairman) 1989. *The Aboriginal Arts and Crafts Industry*, Report of the Review Committee, Australian Government Publishing Service, Canberra.
- Altman, J.C. 1997. 'Some notes and ideas for HORSCATSIA about indigenous business', unpublished notes.
- Altman, J.C. and Taylor, L. 1989. *The Economic Viability of Aboriginal Outstations and Homelands*, Australian Government Publishing Service, Canberra.
- Arthur, W.S. 1992. 'The Aboriginal community and community enterprise', in P. Saunders, and D. Encel, (eds) *Social Policy in Australia: Options for the 1990s*, Social Policy Research Centre, University of New South Wales, Kensington.
- Arthur, W.S. 1996. 'The Aboriginal and Torres Strait Islander Commercial Development Corporation: a new approach to enterprise?', *CAEPR Discussion Paper No. 113*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Arthur, W.S. 1999. 'What's new? The 1997 parliamentary inquiry into indigenous business', *CAEPR Discussion Paper No. 177*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra, forthcoming.
- Australian Bureau of Statistics (ABS) 1991. *ABS Classification of Qualifications*, cat. no. 1262.0, ABS, Canberra.
- Bates, T. 1990. 'Entrepreneurial human capital inputs and small business longevity', *Review of Economics and Statistics*, 72 (4): 551-59.
- Bates, T. 1997. *Race, Self-Employment and Upward Mobility: An Illusive American Dream*, The Woodrow Wilson Center Press, Washington, D.C.
- Bonachich, E. and Light, I. 1988. *Immigrant Entrepreneurs: Koreans in Los Angeles 1965-1982*, University of California Press, Berkeley.
- Borjas, G. 1986. 'The self-employment experience of immigrants', *Journal of Human Resources*, 21 (4): 485-506.
- Borjas, G. 1994. 'The economics of immigration', *Journal of Human Resources*, 21 (4): 485-506.

- Borland, J. and Hunter, B. 1997. 'Determinants of the employment status of indigenous Australians: the role of crime', *CEPR Discussion Paper No. 368*, Centre for Economic Policy Research, Research School of Social Sciences, The Australian National University, Canberra.
- Chapman, B., Gregory, B. and Klugman, J. 1998. 'Self-employment in Australia: description, analysis and policy issues', paper prepared for the OECD International Conference on Self-employment, Burlington, Canada, 24-26 September.
- Commonwealth of Australia 1998. *Addressing Priorities in Indigenous Affairs*, Statement by Senator the Honourable John Herron, Minister for Aboriginal and Torres Strait Islander Affairs, Australian Government Publishing Service, Canberra.
- Daly, A.E. 1993. 'Self-employment among Aboriginal people', *CAEPR Discussion Paper No. 39*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Daly, A.E. 1995. *Occasional Paper: Aboriginal and Torres Strait Islander People in the Australian Labour Market 1986 and 1991*, cat. no. 6253.0, Australian Bureau of Statistics, Canberra.
- Department of Indian Affairs and Northern Development 1997. *Socio-economic Indicators in Indian Reserves and Comparable Communities*, Minister of Government Services, Ottawa.
- Ellana, E., Loveday, P., Stanley, O. and Young, E. 1988. *Economic Enterprises in Aboriginal Communities in the Northern Territory*, North Australia Research Unit, The Australian National University, Darwin.
- Enchautegui, M.E., Fix, M., Loprest, P., Von der Lippe, S.C. and Wissoker, D. 1998. *Do Minority-owned Businesses Get a Fair Share of Government Contracts?*, Urban Institute Press, Washington DC.
- Hunter, B. 1996. 'Indigenous Australians and the socioeconomic status of urban neighbourhoods', *CAEPR Discussion Paper No. 106*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Jarvie, W. 1990. Review of the Economic Independence Program of the Aboriginal Development Commission, unpublished report, Department of Finance, Canberra.
- Junankar, P.N. and Liu, J. 1996. 'Estimating the social rate of return to education for indigenous Australians', *CAEPR Discussion Paper No. 123*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Light, I. Kwuon I. J. and Zhong, D. 1990. 'Korean rotating credit associations in Los Angeles', *Amerasia Journal*, 16 (2): 35-54.
- McDonnell, S. 1999. 'The Grameen Bank micro-credit model: lessons for Australian indigenous policy', *CAEPR Discussion Paper No. 178*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra, forthcoming.
- Miller, M. (Chairman) 1985. *Report of the Committee of Review of Aboriginal Employment and Training Programs*, Australian Government Publishing Service, Canberra.
- Ministry of Maori Development 1998. *Maori Employment, Household Income and Expenditure Statistics*, Te Puni, Kokiri, Wellington.

- Office of Evaluation and Audit (OEA) 1990. *Aboriginal and Torres Strait Islander Enterprise Funding*, OEA, Canberra.
- Office of Evaluation and Audit (OEA) 1991. *Evaluation of Enterprise Program*, OEA, Canberra.
- Portes, A. and Zhou, M. 1996. 'Self-employment and the earnings of immigrants', *American Sociological Review*, 61 (2): 219-30.
- Statistics New Zealand 1991. *Household Labour Force Survey*, Statistics New Zealand, Wellington, June quarter.
- Statistics New Zealand 1996. *Household Labour Force Survey*, Statistics New Zealand, Wellington, June quarter.
- Taylor, J. 1993. *The Relative Economic Status of Indigenous Australians, 1986-91*, Research Monograph No. 5, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. and Hunter, B. 1998. *The Job Still Ahead: Economic Costs of Continuing Indigenous Employment Disparity*, Aboriginal and Torres Strait Islander Commission, Canberra.
- Waldinger, R., Aldrich, H. and Ward, R. 1990. *Ethnic Entrepreneurs*, Sage, Newbury Park.
- Young, E. 1987. 'Commerce in the bush: Aboriginal and Inuit experiences in the commercial world', *Australian Aboriginal Studies*, 1987/2: 46-53.
- Young, E. 1988. 'Aboriginal economic enterprises: problems and prospects', in D. Wade-Marshall and P. Loveday (eds) *North Australia: Progress and Prospects, Vol. 1, Contemporary Issues in Development*, North Australia Research Unit, The Australian National University, Darwin.

# Centre for Aboriginal Economic Policy Research

For information on earlier CAEPR Discussion Papers and Research Monographs please contact:

Publication Sales  
Centre for Aboriginal Economic Policy Research  
Faculty of Arts  
Australian National University  
Canberra ACT 0200  
Telephone: 02—6279 8211  
Facsimile: 02—6249 2789

Abstracts or summaries of all CAEPR Publications  
can be found at the following WWW address:  
<http://online.anu.edu/caepr/>

## MONOGRAPH SERIES

1. *Aborigines in the Economy: A Select Annotated Bibliography of Policy-Relevant Research 1985–90*, L.M. Allen, J.C. Altman and E. Owen (with assistance from W.S. Arthur), 1991.
2. *Aboriginal Employment Equity by the Year 2000*, J.C. Altman (ed.), published for the Academy of the Social Sciences in Australia, 1991.
3. *A National Survey of Indigenous Australians: Options and Implications*, J.C. Altman (ed.), 1992.
4. *Indigenous Australians in the Economy: Abstracts of Research, 1991–92*, L.M. Roach and K.A. Probst, 1993.
5. *The Relative Economic Status of Indigenous Australians, 1986–91*, J. Taylor, 1993.
6. *Regional Change in the Economic Status of Indigenous Australians, 1986–91*, J. Taylor, 1993.
7. *Mabo and Native Title: Origins and Institutional Implications*, W. Sanders (ed.), 1994.
8. *The Housing Need of Indigenous Australians, 1991*, R. Jones, 1994.
9. *Indigenous Australians in the Economy: Abstracts of Research, 1993–94*, L.M. Roach and H.J. Bek, 1995.
10. *The Native Title Era: Emerging Issues for Research, Policy and Practice*, J. Finlayson and D.E. Smith (eds), 1995.
11. *The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects*, J.C. Altman and J. Taylor (eds), 1996.
12. *Fighting Over Country: Anthropological Perspectives*, D.E. Smith and J. Finlayson (eds), 1997.
13. *Connections in Native Title: Genealogies, Kinship and Groups*, J.D. Finlayson, B. Rigsby and H.J. Bek (eds), 1999.

## RECENT DISCUSSION PAPER SERIES

- 137/1997** *A profile of indigenous workers in the private sector*, J. Taylor and B. Hunter.
- 138/1997** *Indigenous TAFE graduates: patterns and implications*, R.G. Schwab
- 139/1997** *The right to negotiate and the miner's right: a case study of native title future act processes in Queensland*, J.D. Finlayson.
- 140/1997** *The future shape of ABSTUDY: practical and policy implications of the recent proposed changes*, R.G. Schwab and S.F. Campbell.
- 141/1997** *Opportunities and problems astride the welfare/work divide: the CDEP scheme in Australian social policy*, W. Sanders.
- 142/1997** *The explosion of aboriginality: components of indigenous population growth 1991-1996*, A. Gray.
- 143/1997** *Changing numbers, changing needs? A preliminary assessment of indigenous population growth, 1991-96*, J. Taylor.
- 144/1997** *The Native Title Amendment Bill 1997: a different order of uncertainty?* J. Clarke.
- 145/1997** *Indigenous heritage protection, native title and regional agreements: the changing environment*, J.D. Finlayson.
- 146/1997** *Regional agreements and localism: a case study from Cape York Peninsula*, D.F. Martin.
- 147/1997** *Towards a comprehensive regional agreement: Torres Strait*, W.S. Arthur.
- 148/1997** *The CDEP scheme in a new policy environment: options for change?* J.C. Altman.
- 149/1997** *How does (and should) DSS treat CDEP participants? (What are these allegations of racial discrimination?)*, W. Sanders.
- 150/1997** *Growth of the Aboriginal and Torres Strait Islander population, 1991-2001 and beyond*, A. Gray.
- 151/1998** *Access to government programs and services for mainland Torres Strait Islanders*, W.S. Arthur.
- 152/1998** *Native title compensation: historic and policy perspectives for an effective and fair regime*, J.C. Altman and D.P. Pollack.
- 153/1998** *The continuing disadvantage of indigenous sole parents: a preliminary analysis of 1996 Census data*, A.E. Daly and D.E. Smith.
- 154/1998** *Assessing the utility of 1996 Census data on indigenous Australians*, B. Hunter.
- 155/1998** *Estimating intercensal indigenous employment change, 1991-96*, J. Taylor and M. Bell.
- 156/1998** *The relative economic status of indigenous people in the Northern Territory, 1991-96*, J. Taylor and L. Roach.



- 157/1998** *The relative economic status of indigenous people in Western Australia, 1991 and 1996*, J. Taylor.
- 158/1998** *The relative economic status of indigenous people in Tasmania, 1991 and 1996*, J. Taylor.
- 159/1998** *Labour market incentives among indigenous Australians: the cost of job loss versus the gains from employment*, B. Hunter and A.E. Daly.
- 160/1998** *The determinants of indigenous educational outcomes*, B. Hunter and R.G. Schwab.
- 161/1998** *Educational 'failure' and educational 'success' in an Aboriginal community*, R.G. Schwab.
- 162/1998** *The supply of alcohol in remote Aboriginal communities: potential policy directions from Cape York*, D.F. Martin.
- 163/1998** *Indigenous land use agreements: the opportunities, challenges and policy implications of the amended Native Title Act*, D.E. Smith.
- 164/1998** *The relative labour force status of indigenous people 1986-96: a cohort analysis*, B. Hunter and M.C. Gray.
- 165/1998** *Homelands and resource agencies since the Blanchard Report: a review of the literature and an annotated bibliography*, R. Davis and W.S. Arthur.
- 166/1998** *Parentage and indigenous population change*, A. Gray.
- 167/1998** *New and emerging challenges for Native Title Representative Bodies*, J.D. Finlayson.
- 168/1998** *Financial aspects of Aboriginal land rights in the Northern Territory*, J.C. Altman and D.P. Pollack.
- 169/1998** *The Indigenous Land Corporation: a new approach to land acquisition?* J.C. Altman and D.P. Pollack.
- 170/1998** *A critical survey of indigenous education outcomes, 1986-96*, M. Gray, B. Hunter and R.G. Schwab.
- 171/1998** *Indigenous participation in health sciences education: recent trends in the higher education sector*, R.G. Schwab and I. Anderson.
- 172/1998** *The relative economic status of indigenous people in Queensland, 1991 and 1996*, J. Taylor.
- 173/1998** *The relative economic status of indigenous people in New South Wales, 1991 and 1996*, J. Taylor.
- 174/1998** *The relative economic status of indigenous people in Victoria, 1991 and 1996*, J. Taylor.
- 175/1999** *The relative economic status of indigenous people in the Australian Capital Territory, 1991 and 1996*, J. Taylor.
- 176/1999** *Indigenous self-employment: miracle cure or risky business?* B.H. Hunter

---

## Endnotes

1. For example, the Community Economic Initiatives Scheme administered by the Aboriginal and Torres Strait Islander Commission (ATSIC). Jarvie (1990) and Office of Evaluation and Audit (OEA) (1990, 1991) provide a critical review of the history of such programs in developing indigenous business. Arthur (1992, 1996) and Young (1988) show that there has been considerable emphasis placed on the community in the establishment of enterprises. This emphasis may in part explain or contribute to the low rate of self-employment among indigenous people.
2. An obvious limiting factor is the lower level of education, labour market experience and management skills among indigenous people compared with the rest of the Australian population. For example, Young (1987) noted that European managers often ran Aboriginal enterprises, such as community stores, because there was no Aboriginal member of the community with the necessary commercial experience. Altman (1987, 1988) also emphasised the lack of managerial skills as an inhibiting factor in the development of Aboriginal tourist enterprises.
3. Access to the necessary capital to establish an enterprise is another factor limiting the ability of indigenous people to establish their own businesses. Altman (1988) noted that even where there were significant amounts of capital available from royalty payments, there was a tension between spending the money on the immediate needs of members of the community and investing it for the future.
4. The Aboriginal Arts and Crafts Review (Altman 1989) estimated that there were 4,838 Aboriginal artists in Australia in 1987-88, but the 1986 Census showed only 59 Aboriginal people engaged in visual arts and crafts occupations. Similarly, hunter-gatherers are unlikely to be included among the self-employed as they could not be described as 'conducting their own business' even though they are working to produce non-monetary income for themselves. Altman and Taylor (1989) estimated that about 10 per cent of the indigenous population lived at outstations where significant hunting and gathering activities were undertaken.

- 
5. Altman (1988) and Young (1987, 1988) attributes these differences, in part, to an absence of a 'culture of entrepreneurship' among Aboriginal people. Young emphasises the importance of kinship ties and authority structures based on age and traditional knowledge as barriers to profit maximising behaviour in the management of commercial enterprises. Furthermore, in remote Australia, traditional owners of land may have particular rights of control over all enterprises conducted on this land regardless of their ability or experience in running enterprises (Ellana et al. 1988).
  6. Although location may reduce the scope for the establishment of a wide range of small businesses, it also creates opportunities. Altman (1989) estimated that half of the Aboriginal artists in Australia lived in the Northern Territory. Their location offers them opportunities for sale of their work to tourists.
  7. See the Miller (1985) for further comments on the low level of self-employment before 1986.
  8. The changes in the coding procedures and the way the census question was asked between 1991 and 1996 are described in the notes to Table 1.
  9. This probably reflects differences between industries in the technologies employed, the scale of production and the extent of public ownership. For example, poor access to capital precludes indigenous involvement in industries where a substantial investments are required.
  10. Using 1991 Census data, Daly (1993) found that the two main fields in which the indigenous self-employed held qualifications were in science, engineering and architecture; and manufacturing (this group included people with qualifications such as vehicle mechanic, electrician and boiler maker). These two groups were also important among indigenous wage and salary earners and the non-indigenous self-employed. Self-employed indigenous people were less likely to hold qualifications in the fields of management and administration; and social science, humanities, education and religion than were indigenous wage and salary earners. These types of qualifications were probably important in the industries of public administration and community services. Most of the difference between the indigenous and non-indigenous self-employed in the distribution of field of qualification can be accounted for by the smaller proportion of the indigenous self-employed with qualifications in these two fields.

- 
11. This finding does not contradict Daly (1993) who found that the relatively low rate of self-employment among indigenous people is partially due to a low level of local demand in remote areas. The reason is that non-indigenous population may have greater opportunities for self-employment in non-remote areas.
  12. For example, census based analysis lacks essential data on financial capital invested in a firm by its owner, the size of the firm (either gross revenue or number of employees) or the nature of the market in which the firm competes (Borjas 1986; Portes and Zhou 1996).
  13. Bates uses a creative mixture of financial and census data and concludes that successful small businesses tend to be those created with a substantial investment of the owner's financial capital, along with the strong educational credentials of business owners (Bates 1997: 4). He finds that the stereotype of the poor immigrant starting a business on a shoe string is inconsistent with the data on Asian immigrant start up capital. Asian immigrants who become self-employed are outstanding as a group for the tremendous amount of human and financial capital they invest in their new small business.
  14. Bonachich and Light (1988) claim that Korean workers in Los Angeles only get 70 per cent of the return on human capital that non-Korean workers earned. Pursuing self-employment did not eliminate Korean disadvantage but it did narrow it.
  15. For persons lacking the requisite skills and capital, self-employment entry rates are low; for those who nonetheless start a small business, business failure and self-employment exit rates are high (Bates 1990).