# Testing for racial discrimination in the labour market

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In recent years there have been several studies of racial discrimination in the British labour market which made use of an experimental technique. Between November 1983 and November 1988 we applied such a technique to provide a direct measure of labour market discrimination in the Australian state of Victoria. The results of our test for sexual discrimination in the labour market have been published (Riach and Rich, 1987), and this paper provides the results of our test for racial discrimination.

The experimental technique which we used is known as 'correspondence testing' and was first applied in 1969 to measure the incidence of racial discrimination in the British labour market. This technique, which involves sending carefully matched pairs of written job applications in response to advertised vacancies, was devised by Jowell and Prescott-Clarke (1970). In their study, one letter purported to be from a white British applicant and the other purported to be from a West Indian, an Asian, an Australian or a Cypriot. The same technique has subsequently been used by McIntosh and Smith (1974), Firth (1981), Hubbock and Carter (1980), and Brown and Gay (1985). All five studies were concerned with testing the extent of racial discrimination in the British labour market.

We have applied this same experimental technique to assess the incidence of racial discrimination in the Victorian labour market. Victoria is the most densely populated Australian state: in 1986 it had a total population of 4,019,000 of whom 2,833,000 were located in the capital city, Melbourne. Two recent immigrant groups, Greeks and Vietnamese, were chosen to match against the long-established, predominantly Anglo-Celtic population. The build-up of the Greek and Vietnamese immigrant groups is shown in Table 1. The choice of these two groups enables us to compare the experience of a European group, which has an immigration record stretching back several decades, with the experience of a group of much more recent arrivals from Asia. The former group is less distinguished than is the latter from the dominant Anglo-Celtic population, both in skin colour and geographical origin. However, both minority groups are encompassed by Australian racial discrimination legislation.

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Table 1. Population components in Victoria

	1954	1961	1971	1981	1986
Adult population	1,621,000	1,837,000	2,185,000	2,534,000	2,744,000
Greek-born	7645	64,275	79,048	72,270	67,796
(%)	0.005	3·5	<b>3</b> ⋅6	2.9	2.5
Vietnamese-born	Not	Not	128"	12,841	27,899
(°.')	available	available	0.006	0.03	1.0

Source: Australian Bureau of Statistics, Census of Population and Housing (1981).

The Australian Federal Parliament passed a Racial Discrimination Act in 1975 which made it unlawful to exercise a distinction or preference based on race, colour, descent or national or ethnic origin in a variety of activities, including employment. The provisions of the Act are administered by a Race Relations Commissioner who operates within a Human Rights and Equal Opportunity Commission. The Victorian State Parliament enacted complementary legislation in 1984, which specified race as one of its grounds and defined it to include colour, nationality and national or ethnic origin. Employment is included amongst the circumstances covered by the Equal Opportunity Act, which is administered by a Commissioner for Equal Opportunity and an Equal Opportunity Board. In this paper the term 'race' is applied consistently with this legal usage; i.e. to encompass colour, and national or ethnic origin.

#### 1. Correspondence testing

The precise nature of our technique was as follows. Two standard letters of application were sent in response to job advertisements. In order to avoid detection, they obviously could not be identical, but in all essential job characteristics, such as age, qualifications and experience, candidates were carefully matched, so that the only effective distinguishing characteristic was race. To control for the possibility that the style of a particular letter might influence employer response, letter-type was alternated regularly, and allocated equally between the racial groups, i.e. if 100 applications were made, then on 50 occasions the Anglo-Celtic applicants would be allocated letter A and the Greek or Vietnamese letter B. On the other fifty occasions this would be reversed and the Anglo-Celtic ones would get letter B. If both applicants were invited to job interview this was treated as a case of no discrimination, or 'equal treatment'. If only one applicant was invited to interview this was treated as a case of discrimination. Where neither applicant was invited to interview this was treated as a non-observation, as it tells us nothing about an employer's use of race as a screening device. Instead, it may simply indicate that a short-list was determined before our applications arrived, or that several other superior applications were received, or that the employer was not prepared to short-list applicants who had not included a contact telephone number. In these cases, the employer's penchant for discriminating on the basis of race would have been put to the test only if our applications had arrived earlier, contained qualifications and experience of a different nature, or included contact telephone numbers (McIntosh and Smith, 1974, p. 24).

The advantages of 'correspondence testing' are that it is possible to exercise precise control over the content of applications; to ensure that all relevant characteristics other

<sup>\*</sup>Cambodia, Laos and Vietnam grouped together.

than race are carefully matched; to ensure, by reversal of letter-type, that no unintended bias is introduced by any stylistic difference which is present to minimise the possibility of detection; and to demonstrate the controlled and objective nature of this procedure to the reader. The disadvantage is that it only tests for discrimination in labour-hiring at the initial stage of selection for interview. Some employers may delay their discriminatory activity until the interview, and in the final choice from amongst the interviewed short-list. Thus correspondence testing does not measure the full extent of discrimination in the hiring decision, but, on the other hand, it does highlight one quite decisive form of discrimination—that of denying the applicant the chance even to compete for a job.

Because it is a controlled, experimental technique, correspondence testing provides a direct and unequivocal measure of the incidence of employment discrimination at the point of selection for interview. It is therefore a valuable complement to the popular econometric studies which establish the existence of labour market discrimination by inference from the inability of objective factors affecting labour productivity, such as qualifications, labour force breaks or absenteeism, fully to explain racial or sexual earnings differentials (Chiplin and Sloane, 1976, ch. 8). The availability of an empirical procedure, alternative to the regression technique, has become all the more pertinent because of growing disenchantment with regression studies; e.g.

Serious questions exist, therefore, about the reigning empirical devices used to isolate the effects of labour market discrimination and, in turn, about the theoretical models on which they rely and which generally are not alive to these possibilities (D'Amico, 1987, pp. 312-3).

In light of such sensitivity of the magnitude of discrimination to plausible alternative specifications of the underlying regression equations, and the fact that neither productivity nor discrimination itself is directly observable, some scepticism has arisen about the adequacy of this technique for measuring discrimination (Blau and Ferber, 1987, p. 318).

Several publications on labour market discrimination (Chiplin and Sloane, 1976, p. 79; Bergman, 1989, p. 49; Blau and Ferber, 1987, p. 319) do in fact draw upon experimental studies to provide some direct evidence of discriminatory activity, but all acknowledge that these studies have been undertaken by social scientists other than economists, and principally relate to non-economic areas of endeavour, such as assessment of essays, works of art, or articles submitted for publication.

Much of the economic literature on discrimination refers implicitly to the use of sex as a screen in hiring but it is in the field of psychology that controlled experiments to demonstrate its existence have been carried out (Chiplin and Sloane, 1976, p. 79).

In concluding their recent survey of empirical evidence on discrimination in the United States, Blau and Ferber (1987, p. 320) called for those using conventional regression studies to seek better data, and recommended that 'Such information might be complemented by data on perceptions and attitudes from direct surveys of employers and workers as well as from experiments.' This study is intended in this spirit and adds to the small literature, cited in the opening section of the paper, which involves the application of direct experimental techniques in the labour market.

Although correspondence testing is an experimental technique, it is not strictly comparable to a physical scientist's laboratory experiment, in that it is not possible to predetermine fully the events being tested. The occupations for testing can be chosen, but then the experiment is reliant upon the vacancies which arise during the natural process of labour market search over the time period of the study. This means that the distribution of results between public and private employment, between competitive and non-competitive

industries, or between employments which involve employee-customer contact and those which do not, cannot be pre-determined. Therefore, whilst correspondence testing can give us an unequivocal direct measure of employment discrimination, its use in distinguishing the precise source of discrimination is limited.

The occupations chosen for the study were those for which written applications were required, and in which advertised vacancies arose at a steady rate. Unfortunately there was no manual occupation with a regular flow of vacancies which usually specified written application. This outcome is consistent with the five studies cited above, all of which confined their correspondence-testing to non-manual occupations. The occupations chosen were secretary, for female applicants, and sales representative and clerk, for male applicants. The experiment was conducted over a four-year period, from October 1984 until November 1988. During that period the Victorian unemployment rate was relatively stable with a high of 7.5% in March 1985 and a low of 5.7% in September 1987.

The sole source of job advertisements was the daily morning newspaper, The Age. This is one of four morning dailies circulating in Victoria. It has a very large classified advertisement section on a Saturday and, on a typical Saturday, it carries 30,000 job advertisements. The number of households in Victoria is 1.2 million and the average circulation of The Age on Saturday is 390,000 with an estimated readership of 970,000. It thus represents the principal source of formal labour market information in Victoria. All vacancies in the chosen occupations, which were advertised in The Age, were applied for, unless a telephone application or personal attendance was specified, or unless the vacancy was being handled by a personnel recruitment agency. We also excluded a vacancy from our study if we had previously made an application for the same occupation to the employer now advertising. In addition we placed a limit of two applications in total which would be made to any employer. This was to reduce the risk of detection and to minimise any inconvenience to employers.

Two standard letters were devised for each occupation, and an example is included in the Appendix. In the case of the clerk, three pairs of letters were prepared to accommodate different specialities—accounts payable, accounts receivable, and payroll. In these letters the marital statuses of the two applicants were always identical and their age varied by one year. The level of qualifications and the extent of work experience were carefully matched, but, to avoid detection, names of educational institutions and employers were eschewed. Instead general statements were made, such as:

'I am competent at basic bookkeeping and have had several years experience with computerised accounting systems.'

'My sales experience of eleven years is quite diverse and includes the servicing of established accounts with wholesalers, petrol chains, and department stores.'

'I completed a twelve months course at a business college.'

'My current position . . . is that of secretary to a partner in a large firm of Chartered Accountants.'

Effectively, the applicants were identical in all but race, which was identified by the name given the applicant. For each of the occupations three standard names were devised and used throughout the study. For instance, the Anglo-Celtic secretary was identified by the name Joanne Baker, the Greek secretary by Nina Papadopoulas and the Vietnamese secretary by Thi Nguyen. In the Melbourne telephone directory Papadopoulas is listed 300 times and Nguyen 2000 times.

It was because of the need to describe former experience and employers in general terms that we decided to conduct two sets of paired experiments, i.e., Anglo-Celtic against Greek and Anglo-Celtic against Vietnamese, rather than a single, three-applicant test. The latter approach was adopted by Hubbock and Carter (1980) and by Brown and Gay (1985). We decided that the receipt of three applications from people with very similar backgrounds, and all couched in the same general terms, would heighten the danger of arousing employer suspicions and lead to non-observations or perhaps bias in the results. In conducting separate sets of paired experiments we are following the practice of Jowell and Prescott-Clarke (1970) and McIntosh and Smith (1974).

The standardised letters were held on word processor disks and each week all that was necessary was to fill in names of advertisers and applicants' names. Six Melbourne addresses were used for the applicants and they were in comparable socio-economic areas of the city. Applications were always posted simultaneously in the same mail box to ensure that they would arrive at the advertiser's address on the same day, and always within a week of the advertisement first appearing.

When an invitation to job interview was received by letter or telegram, a telephone call was made early the following day declining the invitation, so as to minimise any inconvenience to the employer. Correspondence testing imposes on the employer, briefly, a non-genuine transactor in a manner which is not infrequent in the labour market, as participants carry out the process of search and the acquiring of bargaining chips for negotiations with current and prospective employers. The justification for this minor act of deception is that it is the only effective way of discovering how employers actually do behave in practice, as distinct from how they might claim to behave when questioned about their employment practices. The distinction between actual and claimed behaviour was dramatically demonstrated over fifty years ago by La Piere (1934) in a classic study. In an extensive trip through the USA with a Chinese couple, admittance was gained to all except one of 251 hotels and restaurants approached, whereas, in response to questionnaires sent six months later to the same establishments, over 90% replied that they would not accept Chinese guests. Employers' replies have been kept strictly confidential to the authors of this paper.

# 2. The results

The results of the correspondence-testing are set out in Tables 2 and 3. Column 4 shows the number of occasions when one or both applicants received an invitation to interview. This number is divided into three categories: both invited to interview (column 5); only the Anglo-Celtic invited to interview (column 6); only the Greek or Vietnamese invited to interview (column 7). Columns 9 and 10 record the distribution of letter-type on occasions of discrimination; e.g. in the case of the Anglo-Celtic versus the Vietnamese secretary there were thirty-seven occasions of discrimination and on nineteen occasions it was the sender of letter A who was preferred, whilst on the other eighteen occasions it was the sender of letter B who was preferred. In the majority of cases, where neither, or only one, applicant was invited for interview, letters of rejection were received, but in a minority of cases no reply was received. Therefore columns 3, 6 and 7 include 'failures to reply' as well as 'formal rejections'. We defined discrimination as 'differential treatment' of applicants. In almost all cases this involved the invitation to interview of one applicant whilst the other was rejected, but occasionally it involved a difference in the timing of an invitation to interview. Where there was a delay in the issue of an invitation to one of the applicants, this

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Table 2. Results of corn	respondence testin	g: Anglo-C	eltic versus Viett	ramese			sity of		
Table 2. Results of core	respondence testin (2)	(3)	(4) Invitation(s)	(5)	(6) Discrimination	(7) Discrimination	໘ <b>Ne</b> t	(9) Lette	(10) er-type
			(4)	<del></del>			ල Net ⊱discrimination		er-type
(1) Occupation Sales representative	(2)	(3) Neither	(4) Invitation(s) issued (i.e. 2-3)	(5) Equal treatment	Discrimination against Vietnamese	Discrimination against Anglo-Celtic	on Net discrimination (i.e. 6-7)	Lette	er-type
Occupation Sales representative	(2) Applications	(3) Neither invited	(4) Invitation(s) issued (i.e. 2-3)  42 100	(5) Equal treatment 23 54.8	Discrimination against Vietnamese  15 35-7	Discrimination against Anglo-Celtic  4 9.5	on Net Sediscrimination (i.e. 6-7)  15, 2013	Only A	Only B
Occupation Sales representative % Clerk	(2)	(3) Neither invited	(4) Invitation(s) issued (i.e. 2-3)  42 100 15	(5) Equal treatment  23 54-8 10	Discrimination against Vietnamese  15 35-7 4	Discrimination against Anglo-Celtic  4 9.5	Net Sdiscrimination (i.e. 6-7)  11, 26.2  3	Only A	Only B
Occupation  Sales representative  % Clerk %	(2) Applications  178 — 39	(3) Neither invited  136 — 24	(4) Invitation(s) issued (i.e. 2-3)  42 100 15	(5)  Equal treatment  23 54-8 10 66-7	Discrimination against Vietnamese  15 35-7 4 26-7	Discrimination against Anglo-Celtic  4 9.5 1 6.7	on Net Sediscrimination (i.e. 6−7)  11, 2013  20.0	Only A	Only B
Occupation  Sales representative  % Clerk  % Sub-total males	(2) Applications	(3) Neither invited	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57	(5)  Equal treatment  23 54-8 10 66-7 33	Discrimination against Vietnamese  15 35.7 4 26.7 19	Discrimination against Anglo-Celtic  4 9.5 1 6.7 5	on Net Sediscrimination (i.e. 6-7)  11, 2013  20:0 14	Only A	Only B
Occupation  Sales representative  % Clerk  % Sub-total males  %	(2) Applications  178 — 39	(3) Neither invited  136 — 24	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57 100	(5)  Equal treatment  23 54-8 10 66-7	Discrimination against Vietnamese  15 35-7 4 26-7	Discrimination against Anglo-Celtic  4 9.5 1 6.7	on Net Sediscrimination (i.e. 6−7)  11, 2013  20.0	Only A	Only B
Occupation  Sales representative  % Clerk  % Sub-total males  % Secretary	(2) Applications  178 — 39	(3) Neither invited  136 — 24 — 160	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57	(5)  Equal treatment  23 54-8 10 66-7 33	Discrimination against Vietnamese  15 35-7 4 26-7 19 33-3 33	Discrimination against Anglo-Celtic  4 9.5 1 6.7 5	on discrimination (i.e. 6-7)  11  26-2  3  20-0  14  24-6  29	Only A	Only B
Occupation  Sales representative  % Clerk  % Sub-total males  % Secretary	(2) Applications  178 — 39 — 217	(3) Neither invited  136 — 24 — 160 —	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57 100	(5)  Equal treatment  23 54-8 10 66-7 33 57-9	Discrimination against Vietnamese  15 35-7 4 26-7 19 33-3	Discrimination against Anglo-Celtic  4 9.5 1 6.7 5 8.8	on Net Sediscrimination (i.e. 6-7)  11, 2013  20.0 14 24.6	Only A	Only B
Occupation  Sales representative  % Clerk  % Sub-total males  %	(2) Applications  178 — 39 — 217	(3) Neither invited  136	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57 100 100	(5)  Equal treatment  23 54-8 10 66-7 33 57-9 63	Discrimination against Vietnamese  15 35-7 4 26-7 19 33-3 33	Discrimination against Anglo-Celtic  4 9.5 1 6.7 5 8.8 4	on discrimination (i.e. 6-7)  11  26-2  3  20-0  14  24-6  29	Only A	Only B
Occupation  Sales representative % Clerk % Sub-total males % Secretary %	(2) Applications  178 — 39 — 217	(3) Neither invited  136	(4) Invitation(s) issued (i.e. 2-3)  42 100 15 100 57 100 100	(5)  Equal treatment  23 54-8 10 66-7 33 57-9 63	Discrimination against Vietnamese  15 35-7 4 26-7 19 33-3 33	Discrimination against Anglo-Celtic  4 9.5 1 6.7 5 8.8 4	on discrimination (i.e. 6-7)  11  26-2  3  20-0  14  24-6  29	Only A	Only B

was interpreted as that applicant having been ranked lower in the short-listing process and receiving a second-round offer of an interview, subsequent to the withdrawal of a candidate or candidates from the first round. If an invitation to one of our applicants was clearly issued subsequent to the withdrawal of our other applicant, or where the letters or telegrams requesting attendance at an interview were dated two or more days apart, it was classified as a case of 'differential treatment'. Columns 6 and 7 include all cases of 'differential treatment'.

Table 2 provides direct evidence of substantial discrimination against Vietnamese in the Victorian labour market. Applicants with Vietnamese names encountered discrimination almost six times more frequently than applicants with Anglo-Celtic names. The Vietnamese applicant for a secretarial post was denied an interview on one-third of the occasions when employers issued an invitation (or invitations), whereas the Anglo-Celtic applicant was so denied at a rate of one in 25. Consequently, the net rate of discrimination against Vietnamese secretarial applicants was 29%. Applicants for the two 'male' jobs (sales representative and clerk) who had Vietnamese names, also encountered discrimination on one-third of the occasions when an invitation (or invitations) was issued, but in these 'male' jobs the Anglo-Celtic group was denied an interview at a rate of one in 12. Hence the net rate of discrimination against Vietnamese male applicants was somewhat lower, at 24.6%. We have applied a chi-squared test to these results to determine whether there is a significant association between race and encountering discrimination when applying for employment. In this case, where Vietnamese-named applicants were matched against Anglo-Celtic-named applicants the value is 37.62. Where there is one degree of freedom, the critical value of chi-squared at the 0.001 level of significance is 10.83. Therefore, the probability is much less than one in a thousand that the result is the outcome of chance, and the null hypothesis—that there is no association between race and invitation to job interview—is rejected.

Table 3 provides direct evidence of discrimination against Greeks in the Victorian labour market. When Greek-named applicants were matched against Anglo-Celticnamed applicants they did encounter discrimination, but at a lesser rate than the Vietnamese-named applicants discussed above. Whereas Vietnamese applicants encountered discrimination at approximately six times the Anglo-Celtic rate, Greek applicants encountered discrimination at two-and-a-half times the rate of the Anglo-Celtics against whom they were matched. The net rate of discrimination against Greek-named applications was 8.8%, compared with a net rate of discrimination against Vietnamese of 27.4%. The chi-squared value in this case, where Greeks were matched against Anglo-Celtics, is 7.16. Where there is one degree of freedom, the critical value of chi squared at the 0.01 level of significance is 6.63. Therefore, the probability is less than one in a hundred that the result is the outcome of chance, and the null hypothesis—that there is no relationship between ethnicity and invitation to job interview—is rejected. Moreover, it is appropriate to re-emphasise the point, made in section 1, that correspondence testing does not capture the full extent of discrimination that may occur in labour hiring. What it does capture, though, is discrimination of an especially decisive and absolute form: the denial to the individual of the opportunity even to present herself/himself in a competitive fashion before an interview panel; the screening-out of applicants at the very outset of the hiring process, because of some personal characteristic, such as race or sex.

What is quite remarkable and disturbing is the similarity between our results and those of British researchers testing for discrimination against 'non-white' job applicants. Table 4 demonstrates that Vietnamese secretaries in Victoria face a rate of labour market

Table 3. Results of	f correspondence testing.	: Anglo-Celtic versus (	Greek
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Table 3. Results of corr	respondence testin (2)	(3)	(4) Invitation(s)	(5)	(6) Discrimination	(7) Discrimination	ago (8) Net	(9) Lette	(10) er-type
Occupation	Applications	Neither invited	issued (i.e. 2-3)	Equal treatment	against Greek	against Anglo-Celtic	discrimination (i.e. 6-7)	Only A	Only B
Sales representative	182	136	46	34	9	3	5, 2013 13.0	4	7
%	_	_	100	73.9	19.6	6.5	13.0		
Clerk	40	31	9	6	3	0	3		
%	40	71	_						
	_	_	100	66.7	33.3		33⋅3		
Sub-total males	222		100 55	40	12	3	9		
Sub-total males %		 167 	100 55 100	40 72·7	12 21·8	5.5	9 16·4		
% Secretary	_	_	100 55 100 115	40 72·7 95	12 21·8 13	5·5 7	9 16·4 6	7	13
% Secretary %		 167 	100 55 100	40 72·7	12 21·8	5.5	9 16·4	7	13
% Secretary		167 — 125	100 55 100 115	40 72·7 95	12 21·8 13	5·5 7	9 16·4 6	7	13

discrimination which is virtually identical to that encountered by West Indian, Pakistani, and Indian secretaries in Britain. The most significant factor which distinguished the 1973–1974 study of McIntosh and Smith (1974), and which most likely explains the lower incidence of discrimination, was the lower unemployment rate at that time—between 2·1 and 3·5%. Quite simply, at times of high employment, employers have less opportunity to indulge their penchant for labour market discrimination. With the exception of this 1973–1974 study, the results show a temporal and spatial consistency in discrimination against 'non-white' applicants in the labour market of countries where Anglo-Celtic people are the dominant social group.

In our study of sexual discrimination in the Victorian labour market (Riach and Rich, 1987), we found statistically significant discrimination against women in two of the seven occupations investigated—computer analyst-programmer and gardener. In both occupations, women encountered discrimination at three times the male rate. What we can conclude therefore is that, despite the existence of federal and state legislation which proscribes it, discrimination of a racial and sexual nature occurs in the Victorian labour market, with the incidence being highest in the case of the Vietnamese.

#### 3. Interpretation of the results

As explained in Section 1 above, the principal purpose of correspondence testing is to provide a direct and unequivocal measure of discrimination in labour market hiring (cf. Tables 2 and 3). However, as a corollary, we can investigate the pattern of our results for possible inferences about the sources of discrimination. Why do a proportion of employers deny themselves the opportunity to consider, for employment, a group of applicants distinguished only by names associated with racial minorities? In eschewing such minority groups for interview are they acting inconsistently with profit-maximising norms, especially in a society where such discrimination is legally proscribed? First, we must briefly survey the theoretical literature on discrimination, as a reference point for the investigation of our data. But we do so with D'Amico's caveat in mind:

... they [neo-classical economic theories of discrimination] are almost purely speculative in nature, the lack of systematic empirical verification emanating in part from the theories themselves, which tend to yield vague and untestable conclusions (D'Amico, 1987, p. 314).

The proposition that discrimination can be analysed as a 'taste' possessed by various individuals, which they indulge at some economic cost, was proposed by Becker (1957). Employers are analysed as being prepared to pay a wage premium to the preferred group of workers, in order to avoid labour market contact with the group to whom they are averse. Alternatively, customers pay a higher price to indulge their taste of containing product market contact to the preferred group. In this approach employers are no longer strict profit maximisers, as avoidance of the psychic cost of contact with the 'wrong' race, sex, etc. takes precedence. If employer tastes are heterogeneous there is an obvious competitive advantage to those without discriminatory tastes, and therefore the process of economic Darwinism should ensure the long-run elimination of labour market discrimination. As Arrow observed, Becker's model '... predicts the absence of the phenomenon it was designed to explain' (Arrow, 1973, p. 192). A competitive product or capital market would put paid to discriminatory employers, so that labour market discrimination could not persist. There have been several suggestions to reconcile this theoretical conclusion with the obvious empirical failure of market forces to dispatch discrimination. Arrow postulated that adjustment costs in the hiring and firing process would significantly slow

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Study and time span	Vacancies responding	Equal treatment (%)	Discrimination against non-white (%)	Discrimination against white (%)	Net discrimination (%)
McIntosh and Smith, 1973-1974	36	79	19	, 201 <b>2</b>	17
Hubbock and Clarke, 1977-1978	- 20	60	35	<sup>ω</sup> 5	30
Brown and Gay, 1984-1985	89	61	33	6	27
Riach and Rich, 1984-1988	100	63	33	.4	29

Notes: (1) 'White' refers to Anglo-Celtic in all four studies. 'Non-white' refers to West Indian, Indian or Pakistani in McIntosh and Smith, and in Hubbock and Clarke; to West Indian and Indian in Brown and Gay; to Vietnamese in Riach and Rich. (2) Hubbock and Clarke, and Brown and Gay were three-applicant tests, so the results have been reworked as a pair of two-applicant tests (Brown and Gay, 1985, pp. 25–27).

the market's elimination of discrimination (Arrow, 1973). Alchian and Kessel (1962) explained that a competitive capital market might not ensure the absence of discrimination where there is monopoly in the product market, as maximisation of money profits might provoke reaction from government or a regulatory authority, in which case performance below this maximum level of profitability would not pose a risk of take-over. Therefore, in such a situation, a monopolist could indulge a taste for labour market discrimination, without the consequent loss of profit threatening the discriminator's survival. Which all leads, in respect of Becker, to the conclusion which Marshall drew:

The implication of this analysis is that economic discrimination is mainly a reflection of 'market imperfections' and monopoly power; otherwise discrimination should tend to disappear in the long run (Marshall, 1974, p. 852).

Where it is consumers who display discriminatory tastes there will be a transmission to the labour market, with employers, in this case, acting merely as agents in the process. Such an expression of discriminatory tastes would manifest itself in an avoidance of hiring the 'wrong' race, sex etc. in employments where worker-customer contact occurred.

Bergman has recently written a trenchant criticism of the proposition that competitive market forces will eliminate discrimination:

The applicability of this theory to a real situation (as opposed to its validity as a piece of deductive logic) depends on three assumptions that may or may not be true in any particular time or place: (1) that there are large numbers of people who are willing and able to openly violate social customs, which they themselves support and enjoy, for purposes of making money, (2) that violating customs does not entail costs that cancel out the advantages of cheap wages, and (3) that competition is intense enough to put out of business those who refrain from violating customs (Bergman, 1989, p. 50).

She goes on to cite a legal case, involving the still extant car-hire firm Hertz, in which the judge concluded that Hertz's history of discriminatory behaviour against women in management positions was a long one (Bergman, 1989, p. 51).

It is therefore appropriate to investigate the pattern of our results to see if discrimination is associated with product market circumstances which curtail the intensity of competition, and/or with employee-customer contact where the violation of social customs may entail significant costs to the employer, thereby inducing their conformity.

An alternative theoretical approach to discrimination stresses incomplete information about the productivity of individual workers, which induces employers to resort to generalisations about the labour force characteristics of groups, as a screening device to minimise the cost of information acquisition in the hiring process. This approach has been particularly identified with Arrow (1973) and Phelps (1972):

... the employer who seeks to maximise expected profit will discriminate against blacks or women if he believes them to be less qualified, reliable, long-term, etc. on the average than whites and men, respectively, and if the cost of gaining information about the individual applicants is excessive. Skin colour or sex is taken as a proxy for relevant data not sampled (Phelps, 1972, p. 659).

In these statistical theories of discrimination the employers' beliefs may be based on genuine empirical experience, prejudice or misperceptions of reality, perhaps deriving from obsolete information. We must therefore investigate whether there is any basis for Victorian employers holding beliefs that Greek and/or Vietnamese workers, as groups, are less productive or more costly to hire.

In Table 5 we provide a classification of our results by competitive and non-competitive sectors. The non-competitive sector includes government; public employers, such as emergency services; non-profit organisations, such as charities and sporting clubs; and

Table 5. Results of correspondence testing, classified by sector

	Vietn	amese	Greek			
Sector Competitive	Discrimination	Equal treatment	Discrimination	Equal treatment		
	24	47	14	80		
%	33.8	66-2	14.9	<b>85</b> ·1		
Non-competitive	24	46	10	50		
%	<b>34</b> ⋅3	65.7	16.7	83⋅3		

Totals are not identical with Tables 2 and 3, as several employers provided only contact telephone numbers and it was impossible to determine who they were.

large firms which benefit from a degree of market protection. The competitive sector is composed of small to medium firms which are subject to competitive market pressures. It is quite clear that discrimination is not associated with a lack of competitive pressure, as the percentage of competitive firms who discriminated against both Vietnamese and Greeks is virtually identical to the percentage of non-competitive employers who so discriminated. For instance, those discriminating included several small firms in the service sector providing accounting, consultancy and real estate services. This result is consistent with Oster's findings in respect of sex discrimination (Oster, 1975).

We now turn to examine the hypothesis that labour market discrimination derives from employers' desire to avoid the costs of violating social custom. Akerlof constructed a model to analyse whether the pursuit of economic gain would erode those social customs which produce labour market discrimination, and concluded '... such customs may, once established, continue to be followed with a stable fraction of the population believing in those customs and also following them' (Akerlof, 1980, p. 772).

In examining this hypothesis it is relevant to draw out the diversity of our results in Tables 2 and 3. We have already noted that Vietnamese encountered discrimination at a much higher rate than Greeks, but there was also a significant difference betweeen the experience of male and female Greek applicants. Whilst Greek secretarial applicants encountered discrimination at a rate of 11.3%, Greek male applicants faced a rate of 20%, with the sub-category of sales representative experiencing a rate of 17.4%.

There are opinion poll data which demonstrate antipathy towards Asian immigration to Australia. For instance, a Gallup Poll conducted in May 1984 showed that 62% of Victorians disapproved of the increasing proportion of immigrants coming from Asia, as compared with Europe (*The Herald*, 1984). A random telephone survey conducted by *The Australian* newspaper in August 1988 asked 'Do you agree or disagree with the recent statement by the Leader of the Opposition, Mr Howard, that Asian immigration to Australia should be slowed down?'—77% of participants agreed (*The Australian*, 1988). Thus, the relatively high rate of discrimination in hiring, which we have detected for Vietnamese, may be explained by these employers conforming to social customs and excluding Vietnamese at this initial stage of selection, to avoid the costs of antagonising non-Asian customers and/or employees.

The different rates of discrimination experienced by secretarial and sales representative applicants with Greek names may also be the outcome of some employers acting to

appease social custom, as the incidence of employee-customer contact is obviously higher for sales representatives than for secretaries.

Finally, we must consider whether stereotyped views about the labour force characteristics of Greeks and/or Vietnamese act to their disadvantage in the hiring process, keeping in mind Lundal and Wadensjo's advice: 'Nor should one anticipate that there is only one form of discrimination in each individual case, combinations of most of the forms are quite possible . . .' (Lundal and Wadensjo, 1984, p. 58).

In a valuable survey of the Australian literature, Rubenstein, a research officer with a health centre servicing an area of heavy Southern European migrant settlement in Melbourne, demonstrates the extent of stereotyped views with respect to the health problems of Southern European migrants. Whilst she concludes that several publications which allege malingering are statistically challengeable, and cites studies which produce contrary conclusions, she demonstrates that, nevertheless, there is much published material available to create a climate of misinformation and prejudice about the physical and psychological robustness of Southern European migrants. Rubenstein cites a survey of invalid pensioners undertaken by Hackett, a medical officer in the Commonwealth Department of Health, and demonstrates its statistical deficiencies, but laments that 'Hackett's statistical procedures have been given little scrutiny, and his findings have tended to seep into general circulation as established fact' (Rubenstein, 1982, p. 300). She goes on to quote an article by Stagall in *The Australian Journal of Family Therapy*.

Hackett surveyed all applicants for the Invalid Pension over twelve months (1976–1977) and found (after rates of invalidity were standardised by age, sex and occupation) that Greek born citizens had three times the invalidity rates of Australian born, 15 times the rate of disability due to 'vertebral disease' and 12 times the rate of neurosis (Stagall, 1981, p. 64).

Such attitudes have also been presented in the popular press, and Rubenstein quotes from a national weekly, *The Bulletin* (October 1981):

A Melbourne doctor told *The Bulletin* that 'middle men or touts frequented ethnic clubs encouraging people to claim workers' compensation for back pain. He said these touts even coached the intending claimant on the symptoms of severe back pain (Rubenstein, 1982, p. 296).

It is therefore possible that some employers are acting in accordance with the Phelps hypothesis when denying interviews to Greek-named applicants; avoiding them as a group because of the mythology which is abroad about their workers' compensation claims and the incidence of 'Mediterranean Back'. It may be that this factor also has some responsibility for the higher rate of discrimination experienced by Greek males than Greek females, as the stereotypical views about Mediterranean Back are generally associated with men.

We can now sum up our survey of the possible sources of discriminatory behaviour towards Greeks and Vietnamese in the hiring process in the Australian State of Victoria. We could find no evidence of a greater incidence of discrimination in product markets where employers were protected from competitive pressure. Instead, we concluded that some of our results could be construed as consistent with the hypothesis that discrimination derives from adherence to social custom and/or the application of statistical screening criteria.

#### 4. Policy implications

What policy implications can be drawn from our experimental studies of employer practices in selecting candidates for job interview? As noted previously, it has been rare for

experimental techniques to be used to obtain information about how employers actually do behave, as distinct from how they might claim to behave when questioned about their employment practices.

In cases of discrimination it was usual for the candidate declined an interview to receive a standard letter of rejection simply informing that the application had been unsuccessful, with no explanation offered. But in some cases employers felt a need to explain their decision, which involved them in providing inconsistent replies to the two candidates. For instance, in one case in the occupation of secretary, on 2 September the Anglo-Celtic was invited to interview, whereas, on 4 September, the Vietnamese was rejected with the following explanation: 'However, by the time we received your letter we had made an appointment to the post'. The applications had been posted simultaneously in the same letter box. This job was re-advertised on 12 and 19 September. In another case the Anglo-Celtic was invited but the Vietnamese rejected, because, 'As we received a number of applications from people already in the publishing and media industries I regret to advise you that we will not be interviewing all applicants'. The Anglo-Celtic applicant had claimed experience in hotel/hospital wholesale supply, small engineering and a university. This technique of alleging that the candidates successful in the short-listing process possessed superior background experience was not uncommon; e.g. in two cases where an Anglo-Celtic applicant was invited to interview, for a sales representative position, the following replies were received by Greek and Vietnamese applicants respectively:

We had a large number of applicants and obviously couldn't afford the time to interview you all, so that those whose resumés and/or references showed that their qualifications and experience appeared to meet our requirements were selected.

Unfortunately, this time your application was unsuccessful. We have filled the position with someone whose background is suited to our requirements a little closer than yours.

Our interpretation of such activity by some employers, is that they are conscious of government policy in respect of labour market discrimination and take such initiatives in their letters of rejection as a device by which they hope to forestall any complaint of discrimination on their part.

Even where employers did not go to these lengths to conceal discriminatory hiring practices, in none of the cases of discrimination which we recorded would the role of race as a screening criterion have been in any way apparent to the rejected applicant. Whilst an unsuccessful job applicant may at times suspect that some personal characteristics, such as race, was responsible for their failure to be interviewed, given current hiring practices, as exemplified in this study, there is no way in which such a suspicion could be confirmed. It follows that an applicant who has been discriminated against would rarely be in a position to initiate a complaint under the Racial Discrimination Act or the Equal Opportunity Act. This is well-demonstrated by the contrast between the incidence of employment discrimination detected in this experimental study and the fact that, during the twelve months July 1987 to June 1988, the Australian Human Rights and Equal Opportunity Commission received only seventeen complaints of racial discrimination in employment in Victoria. (Human Rights Australia, 1987–1988, p. 28). Moreover, in some cases, where an application must be addressed to a post office box number, an unsuccessful applicant would not even know by whom he/she had been rejected.

It is uncommon for rejected applicants to be informed who the successful applicant was, and virtually unknown for details of that person's qualifications and experience to be circulated to unsuccessful candidates. But without such information a rejected applicant is

in no position to know, let alone to demonstrate, that a prima facie case of discrimination exists. The Australian Racial Discrimination Act and Victorian Equal Opportunity Act could be strengthened to deal with this problem. One approach would be to ensure that rejected job applicants were placed in a position where they were better able to detect and demonstrate discrimination; a second approach would be to extend the powers which the Federal Race Relations Commissioner and the Victorian Equal Opportunity Board have to take the initiative and undertake investigations.

The first approach would involve requiring employers to identify themselves in all job advertisements and to inform all unsuccessful applicants of the name, qualifications and experience of the successful candidate. It is the practice of the vast majority of employers to advise rejected applicants that they have been unsuccessful and in a small minority of our observations they did name the successful candidate. What we are suggesting therefore is that, in the letter advising that a job application has been unsuccessful, employers be required to name the successful candidate, cite her/his education qualifications and give brief details of her/his recent employment experience. This would involve very little extra time and cost for employers, and it could hardly be construed as an intrusion into the privacy of successful applicants. Numerous editions of Who's Who, and similar publications around the world, are crammed with such information, which has been volunteered by those included.

If such a practice were adopted, unsuccessful applicants would be alerted, at least, to blatant cases of discrimination. On the other hand, many unfounded suspicions of discrimination would be allayed by this practice. Such a disclosure requirement would make those responsible for the hiring decision much more cautious about engaging in discriminatory behaviour, as they would realise that any applicant treated in a discriminatory fashion would now possess prima facie evidence to initiate a complaint with the Race Relations Commissioner or the Equal Opportunity Board. It would certainly curtail their ability to engage in the type of apocryphal activity cited above. This suggestion for increasing the availability of labour market information is the logical concomitant of Acts which put on job applicants the principal onus for the activation of investigations. A complementary approach would be to empower the Race Relations Commissioner and/or Equal Opportunity Board to conduct random audits of hiring and personnel practices. If employers were required to keep all records of job applications for a period of twelve months, and obliged to justify decisions on short-listing for interview and final choice of candidate, in the event of a random audit, it would reinforce the pressure for scrupulousness in the hiring decision, which derives from the former policy proposal.

Since we made these complementary recommendations about disclosure of information and auditing initiatives as a means of strengthening anti-discrimination legislation (Riach and Rich, 1987), Bergman (1986) has become available to us. In that work Bergman makes a strong case for an *investigative strategy*, on the model of tax enforcement, rather than the existing complaint-oriented strategy which operates under Title VII of the US Civil Rights Act.

Even if the enforcement agencies had far more resources than they do, there are other reasons for not relying on a complaint-oriented strategy. Many—indeed, most—victims of discrimination may be unaware they are being discriminated against. People who apply for a job and are turned down are in no position to judge whether the refusal has been based on their race or their sex, or represents merely a fair judgement on their qualifications. Sometimes the news of job openings does not get to anyone but members of the race—sex group already incumbent. Rejected job applicants are not in a good position to get together to organise a lawsuit. Yet such cases, were they brought by an enforce-

ment agency, might be among the most useful in setting patterns of fair behaviour for employers (Bergman, 1986, pp. 158-159).

It is important to stress the complementary nature of our recommendations. On the one hand, those who feel they have incurred labour market discrimination because of their sex, race etc. should either have their suspicions allayed, by having it demonstrated to them that the successful candidate had superior qualifications and/or experience, or be in a position where they have *prima facie* evidence to produce to an enforcement agency. On the other hand, it is necessary that enforcement agencies have power to initiate audits or investigations such as Bergman recommends, otherwise there could be no assurance that accurate details of successful candidates would be circulated to rejected applicants. Also, as Bergman points out, some employers may go so far as to implement their discriminatory penchant by denying knowledge of job openings to certain minority groups, in which case, the members of such groups would be unable to activate our first recommendation.

It is even possible that correspondence testing and like procedures could be used as techniques for auditing/investigative activity. *The Guardian* (1989) reported that the Commission for Racial Equality had investigated a complaint of discriminatory activity by a property developing company. The Commission for Racial Equality reacted by conducting telephone tests—matching white and Asian applicants and telephoning for details about bungalows in a new development, which resulted in only the white applicants receiving the details requested.

An appropriate analogy can be drawn here with the capital market. Public corporations have various duties with respect to reporting to shareholders, potential shareholders and the business community at large. They are also subject to independent financial audit, and they are usually required to satisfy an independent commission about various aspects of their financial activities. In effect, capitalist economies provide a range of regulations and checks to protect the owners of financial capital against unscrupulous practices and to guard against the waste of this resource. Therefore it seems entirely appropriate that similar protection be afforded the owners of human capital, and that steps be taken to prevent it being wasted through employers using screening devices, such as sex or race, for purposes unrelated to job performance.

There is room for debate on how to strengthen anti-discrimination legislation but what cannot be in dispute is the need to strengthen it. Research in Britain and Australia has shown that systematic racial discrimination exists many years after Parliament declared it illegal. As Brown and Gay (1985, pp. 32–33) conclude, it persists because the risk of detection is minimal '... the heart of the problem is that employers know that cases rarely get as far as legal action because the victim is very unlikely to be aware that he or she has been discriminated against' (Brown and Gay, 1985, p. 32). We would add that even where an applicant suspects he/she has been the victim of discrimination, current labour market practices make it extremely difficult to present a prima facie case to the courts.

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# Appendix

Secretary A

Dear

I am writing in reply to your advertisement for a Secretary.

In 1980 I completed a twelve months course at a business college where I learnt typing and shorthand as well as other skills such as basic book-keeping and office procedures. In 1979 I finished fifth form at High School passing in all five subjects.

After completing this course I worked for two years for an Australian company which was a subsidiary of a multi-national corporation in the hotel/hospital wholesale supply area. As a stenographer in the office of this firm, I was required to place

orders for special "logos" to be printed on various items, learn to send out telexes, handle correspondence as well as do general typing.

I then worked for three years at a university as a stenographer to four lecturers. I was required to type reports, letters and general correspondence, take shorthand notes and was trained to use the word processor. My other responsibilities were to relieve the secretary to a Professor of the department and in this position I gained considerable experience in making appointments and arranging meetings, seminars and conferences, as well as making travel arrangements. It was also necessary to file records and liaise with other departments.

My present position is as secretary to the production manager of a small engineering firm, a position I have held for the last two years.

My present job requires me to liaise with other sections of the firm, arrange travel, meetings and appointments, as well as type letters and reports (my typing speed is 70 words a minute). I am often required to attend meetings and take shorthand notes in confidence (my shorthand speed being 90 words a minute), as well as to handle the filing of records and other necessary information.

I am 23 years old and hold a position of responsibility and confidence in my present employment.

Yours faithfully,

Secretary B

Dear

I wish to apply for the position of secretary which was advertised in "The Age".

I am twenty-three years old and have had six years' experience as a stenographer and secretary since I completed my course at commercial college. I had previously been at High School for five years and successfully completed my studies there. At commercial college I studied shorthand, typing, office practices, communication skills and book-keeping.

My first job was as a stenographer in the city office of a large retailer and subsequently I moved to a more senior stenographic job in a public hospital. During that time I gained valuable experience, including the skills of operating a telex, a small switchboard and a word processor.

Two years ago I obtained my current position which is that of secretary to a partner in a large firm of Chartered Accountants. This job requires me to keep the diary of my employer, draft some of his correspondence and arrange his travel. I also am involved in liaison with clients and have responsibility for filing and keeping confidential staff records. I have had experience of helping in the organisation of a conference and this included taking the minutes of meetings.

My shorthand speed is 90 words per minute and my typing speed is 70 words per minute.

My current employer would vouch for my reliability and initiative.

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Yours sincerely,