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Racial discrimination and white
first name adoption: a field
experiment in the Australian
labour market

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RACIAL DISCRIMINATION AND WHITE FIRST NAME ADOPTION: A FIELD
EXPERIMENT IN THE AUSTRALIAN LABOUR MARKET*

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Abstract

Minorities such as Chinese households in Australia spend twice as much on a child's education relative to White families. However, despite such high investment, there is a large Chinese-White wage and employment gap. In this paper we investigate: first, if labour market discrimination is a possible cause of the wage and employment gaps observed between Chinese minorities and Whites. We address this by sending CVs to real job advertisements, and find that there is a large gap against Chinese CVs both in entry level high-skilled jobs and low-skilled administrative assistant jobs. Second, to measure labour market responses to integration signals, we also sent a third category of CVs that explicitly combines a Chinese last name with a White first name. This results in a significant decrease in White-Chinese gaps in interview offer. Third, we aim to learn what inferences are made when employers see these White names adopted by Chinese and potentially by other minorities. Understanding this will help to formulate policies helpful for parental investments and employers' education to reduce employment and wage gaps observed between minorities and Whites in Australian labour market.

JEL Codes: J71, C93.

Keywords: racial discrimination, field experiment, labour market.

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1. INTRODUCTION

This paper investigates the influence of adopting a White first name on the Chinese-White racial gap in interview offers. Recent studies have demonstrated the disadvantage that distinctive racial-sounding names incur for minority workers in the labour market (Arceo-Gomez & Campos-Vazquez, 2014; Booth, Leigh, & Varganova, 2012; Carlsson & Rooth, 2007; Kaas & Manger, 2012; Oreopoulos, 2011; Pager, 2007; Pager, Western, & Bonikowski, 2009; Riach & Rich, 1991). Bertrand and Mullainathan (2004) send fictitious CVs to job vacancies in various U.S cities and find applicants with common Black names receive significantly fewer interview offers relative to White names.² In response to expected discrimination, minorities can demonstrate their desire to assimilate with the majority group. An individual's name is a vehicle to signal group identification and is a common way of displaying a cultural investment to the broader community (Broom, Beem, & Harris, 1955; Gerhards & Hans, 2009). In the context of the labour market, the decision by a minority job applicant to adopt a White first name can be interpreted as a signal of group identification with Whites rather than one's own racial group. Conversely, retaining a distinctive ethnic name is regarded as a rejection of the majority culture. R. G. Fryer and Levitt (2004) find a growing propensity for Black parents to choose first names that are distinct from White names. The authors argue that the choice of a distinctively ethnic-sounding name is consistent with models of group identification (Akerlof & Kranton, 2000; Battu, Mwale, & Zenou, 2007), whereby Black types choose unique Black names and White types choose characteristically White names. Consequently, the use of either a first name associated with their racial ancestry or to adopt a visibly White name acts as a cultural identifier.

² For a review of the literature on the impact of names on labour market outcomes, see Charles and Guryan (2011), Guryan and Charles (2013), and Riach and Rich (2002).

Building upon this, Arai and Thoursie (2009) focus on the change in income of racial minorities who decide to adopt a localized Swedish-sounding last name in the Swedish labour market. Typically, a person's last name is hereditary and patrilineal. Consequently, the effect of replacing a minority last name with a majority last name alters the labour market's belief of the racial ancestry of the worker. For instance, those who replace their ethnic last name with a White last name will be perceived by firms to be a member of the White group. Their results reveal a sizeable benefit for racial minorities who adopt a localised last name. Compared to minorities who retain their original, racially suggestive last name, those who localised their last names experienced a substantial increase in their income. The authors interpret these results as evidence of discrimination based on the person's perceived race, as indicated by their last name.

The contribution of this paper is to study how firms treat minority workers of identical skill when a randomised proportion of those workers explicitly signal an affiliation with the White majority, under conditions where the firm continues to believe that the worker is from a racial minority. Thus far, the predominant focus is measuring the disparity in outcomes between equally skilled, but distinct racial groups, as signalled by a racially-suggestive name. In this study, we add to the current literature by measuring the impact of adopting a White first name on the probability of obtaining an interview offer for a Chinese job applicant, without altering the recruiter's perception of the race of the job applicant. In response to real world job advertisements in the Australian labour market, the first name that appears on a Chinese job applicant's CV is randomly varied between either a typically White or Chinese-sounding first name.

When manipulating first names, it is important for the purposes of this study that recruiters continue to perceive the job applicant they are screening as a person of Chinese ancestry, even though the applicant may have a White first name. To signal that the applicant is Chinese, the applicant's CV explicitly retains the Chinese last name. According to traditional naming

practices, Chinese children inherit their last name from their parents, which guarantees that Chinese job applicants with a White first name will be perceived by recruiters as being of Chinese ancestry. By randomly combining a Chinese last name with either a White or Chinese first name, this article seeks to investigate whether Chinese workers are treated differently in the labour market, conditional on their choice of first name.

For a Chinese job applicant, the decision to use a White first name in the labour market can be interpreted as a rejection of one's own ancestral group in favour of assimilating into the White majority (Broom et al., 1955; Kang, 1971). For instance, Kang (1971) describes the decision of Chinese college students studying in America to adopt a White first name as an explicit signal of assimilation to, or acculturation with, the local White community. Similarly, adopting a White first name may also indicate a job applicant's familiarity with White cultural norms and practices, or speech patterns (Lang, 1986).

To investigate the impact of a White first name on the racial gap in interview offers, fictitious CVs are sent in response to real internet job vacancies in the cities of Sydney and Melbourne, which are the two largest labour markets in Australia. The CVs are randomly assigned with one of three name types; White names (for example, 'David Smith'), Chinese names (for example, 'Xiaopeng Wang'), and a third group referred to as the 'Adopters'. The Adopters group is a random combination of a Chinese last name with a White first name (for example, 'David Wang'). Both male and female first names are included. To measure the impact of a White first name on interview offers across different skill levels, CVs are sent to entry level University graduate and administration assistant job advertisements. The administration assistant CVs are assigned with a high school qualification. Among the graduate jobs, we respond to business and engineering job ads. We also randomly allocate graduate CVs with an Honours degree. Importantly, every CV is assigned with an Australian high school qualification, which removes the possibility that any of the job seekers are recently arrived

immigrants unfamiliar with local culture or lacking in English language proficiency. In addition to measuring interview offer response rates between White and Chinese job applicants, information on recruiter characteristics is collected. Using email and phone communication, we use the recruiter's name to match the recruiter with their respective LinkedIn profile. Overall, we respond to over 1,300 job ads and send over 4,700 CVs.

Before summarising the results of the study, Table 1 offers a general overview of the Chinese community by comparing various background measures between Whites and Chinese living in Australia.³ In general, Chinese and Whites appear to have similar outcomes. In fact, across a number of measures, the direction of the difference tends to be in favour of the Chinese. Beginning with parental background in panel A, the parents of Chinese have completed slightly fewer years of schooling, on average, but are more likely to have been employed as a professional compared to White parents. With regard to household investment in child development in panel B, Chinese households spend twice as much on a child's education relative to White families, and Chinese parents are also more likely than White parents to expect their children to attend university in the future. White and Chinese parents also report similarly high levels of satisfaction with the quality of education available for their children.⁴ Panel C reports various summary measures of labour force outcomes. A significantly greater proportion of Chinese reside in urban areas than Whites. Chinese and Whites have similar hours worked, full-time employment, and unemployment. Finally, the raw mean Chinese wage is slightly higher compared to Whites, but the difference is statistically insignificant. The median hourly wage for Whites and Chinese is identical.

³ The results from Tables 1 and 2 are calculated from the Household, Income, and Labour Dynamics in Australia (HILDA) panel survey. The HILDA dataset collects a range of information on an individual's background, racial ancestry, and labour market outcomes. The survey began in 2001, and includes approximately 25,000 individuals and 9,800 households. For more information about the HILDA survey, please see the following website: <http://www.melbourneinstitute.com/hilda/>.

⁴ The survey question asks respondents, "In general, how satisfied or dissatisfied are you with the quality of your child's school education?" with a scale from 0 (Very dissatisfied) to 10 (Very satisfied).

< INSERT TABLE 1 >

< INSERT TABLE 2 >

To provide a more detailed comparison of schooling, Table 2 offers a summary of the distribution of educational attainment between Chinese and Whites. Overall, the Chinese spend more years on average in formal education than Whites. Whites are substantially more likely to drop out of high school, with 37.6 percent of Whites failing to complete high school, compared to 11.6 percent of Chinese. Beyond high school, Chinese are also substantially more likely than Whites to remain in schooling and go on to obtain a University qualification at both the undergraduate and postgraduate levels. Nearly half of the Chinese hold a University degree, compared to 18.9 percent of Whites.⁵ In contrast, Whites are more likely to select into vocational training. The comparisons presented in both Tables 1 and 2, whilst far from exhaustive, reveal that Chinese and Whites in Australia have similar backgrounds, and bring comparable levels of human capital when they enter the labour market, on average.

Despite being a relatively high-ability minority group, there are large disparities in raw earnings and employment between Chinese and Whites in Australia. The Chinese-White mean log hourly wages and employment gaps are presented in Table 3, calculated by education level and the occupation types featured in this study, aggregated over thirteen waves of the HILDA survey. Overall, the data indicate that there are large Chinese-White wage gaps, and Chinese are less likely to be employed. Beginning with panel A in Table 3, there is a large Chinese-White wage gap of 7.7 percent for those who possess a University qualification, which is statistically significant at 1 percent. Among high school graduates, the Chinese-White wage

⁵ In regards to English language proficiency, Chinese students outperform their White peers in the High School Certificate (HSC) English examination in New South Wales (NSW). The HSC is the round of exams final year high school students must sit in order to successfully graduate from High School in NSW. See: <http://www.smh.com.au/national/education/asian-students-more-likely-to-be-in-hsc-honours-list-20141213-126o4w.html>

gap is 2.4 percent, but insignificant. Similarly, panel B indicates that Chinese with university qualifications are significantly less likely to be employed. These facts are striking given that Chinese are overrepresented amongst University graduates.⁶ Panel C presents the racial disparity in wages for Business and Administration Assistant occupations. In the Business sector, the Chinese-White wage gap is 15.6 percent and highly statistically significant. In addition, the wage gap in administration jobs is 9.1 percent and statistically significant.⁷

< INSERT TABLE 3 >

The main findings in this study reveal substantial discrimination in interview offers against Chinese job seekers who retain a Chinese first name in the Australian labour market. In addition, we uncover evidence that there are substantial benefits for Chinese ‘Adopters’. Across the full sample, applicants with White names have a 12 percent chance of receiving an interview offer, compared with a 4.4 percent chance for those with a Chinese first name. The racial gap is highly statistically significant.⁸ For the Adopter job applicants, listing a White first name on the CV considerably reduces the discrimination against job applicants of Chinese ancestry. The Adopters have an 8.1 percent chance of being offered an interview opportunity. Thus, switching from a Chinese to a White first name effectively doubles the probability of

⁶ Research on wage gaps in the Australian labour market concentrates on earnings differentials between migrants and non-migrants. Booth et al. (2012) report large and significant employment and wage gaps for Indigenous, Italian, Chinese and Middle Eastern individuals. However, the gaps disappear once labour market experience, education and English language proficiency are added to the regression specification. In contrast, Breunig, Hasan, and Salehin (2013) report a wage gap for immigrants from non-English speaking backgrounds, once they control for unobserved heterogeneity.

⁷ Table A1 in the appendix presents additional results detailing the evolution of Chinese and White labour market outcomes between 2001 and 2011. Overall, the pattern of results indicate that the Chinese-White wage gap for University degree holders is increasing with time, but the wage gap is relatively stable for high school graduates. Furthermore, Chinese are also less likely to be employed over the same period.

⁸ A correspondence study by Booth et al. (2012) conducted in various Australian cities report similar results, finding that CVs with Chinese names received the fewest interview offers among the groups included in the experiment, which were White, Aboriginal, Italian and Middle Eastern names.

recei/ving an interview offer for a Chinese applicant. The improvement is directly attributable to the manipulation of the Chinese applicant's first name. As an illustration of the advantage that a White first name confers, using a White first name in the Australian labour market is equivalent to the return from having an Honours degree. Whilst there is a substantial benefit to using a White first name, it does not eliminate the racial gap; a large and significant difference in interview offers of approximately 4 percent remains between White names and the Adopters. Finally, a comparison of male and female names reveals no evidence of discrimination against applicants with female names.

Additional results reveal that the return to using a White first name differs dramatically by the skill level of the job. Within the graduate jobs, there is a large and significant racial gap between White and Chinese names; Chinese job applicants are 10 percent less likely to receive an interview offer. Among the Adopter graduates, using a White first name does not increase the probability of receiving an interview offer compared to a Chinese first name: the difference in interview offers between Chinese and Adopter CVs is insignificant, and there remains a large racial gap between the White names and Adopters. However, in the administration assistant jobs, the White-Adopter racial gap completely attenuates. That is, the Adopter CVs are just as likely as White names to receive an interview offer when applying to administration vacancies. The attenuation in the White-Adopter racial gap cannot be attributed to a lower overall level of racial discrimination in the low-skill employment sector, as a large and significant racial gap between White and Chinese names remains in administration jobs. The results demonstrate that recruiters behave differently toward workers of the same race depending on the ethnic association of their first name. Within the community of Chinese workers, those who signal that they identify with Whites benefit substantially in the Australian labour market.

The remainder of the paper is organised as follows: section 2 provides an overview of the experimental design, section 3 discusses the results, and section 4 concludes.

2. EXPERIMENTAL DESIGN

2.1. LABOUR MARKETS & APPLYING FOR JOBS

This study investigates the impact of White first name adoption on the probability of obtaining an interview offer for a Chinese job applicant. To measure whether the returns vary by skill level, we study two job markets; entry level graduate and entry level administration assistant job vacancies. When searching for graduate positions, we concentrate on vacancies from business and engineering sectors. Graduate and administration jobs in Australia are characterised by their differing education requirements. Business and Engineering graduate jobs are typically high skill and require, by definition, an education level of a university undergraduate degree. In contrast, administration is a relatively low skill sector and vacancies typically do not specify a requirement for a post-high school qualification. According to the Australian Bureau of Statistics (ABS) Labour Force survey (2013), the business and engineering labour markets are some of the most highly educated sectors in Australia, where approximately 47 percent of those employed in business possess a bachelor degree or higher, and 58 percent possess bachelor degree or higher in engineering.⁹ In contrast, 46 percent of the administration workforce does not hold a post-high school qualification.¹⁰

⁹ The business and engineering sectors also employ a large proportion of workers with post-high school qualifications. Approximately 70 percent of those employed in business, and 79 percent of those employed in engineering, possess a post-high school qualification.

¹⁰ Administration, and business and engineering are relatively large employment sectors. The proportion of the Australian workforce employed in the administration sector is 3.4 percent, while 11.6 percent of the workforce is employed in the business and engineering sectors, respectively (ABS Labour Force Survey, August 2013).

All of the job seekers that feature in the experiment are young adults who are 22-23 years of age at the time of the study, and have not yet attained extensive labour market experience.¹¹ The job applicants are exclusively young adults because older workers have spent more years in the labour force, thereby accumulating more on-the-job experience and post-school training. Differences in human capital between racial groups that accrue after entering the labour market may potentially reflect bias from recruiters who may actively select workers of certain racial backgrounds to receive extra training, or reflect endogenous worker choices. Concentrating on young adults is similar to the approach taken by Neal and Johnson (1996). Consequently, we respond exclusively to entry level positions for both graduate and administration assistant jobs when searching for online vacancies. Job ads that request applicants with two or more years of labour market experience are excluded from the study.

The job advertisements used in the experiment are sourced from the www.seek.com.au website, which is the largest online job board in Australia, as well as the www.mycareer.com.au website. Online job advertisement websites are one of the most common recruitment tools used by Australian recruiters. Upwards of 70 percent of graduate recruiters report using online job advertisement websites to recruit graduates (Carless, 2007). Similarly, internet websites were ranked as the second most favoured recruitment tool by graduate recruiters, from a total of 8 possible choices.¹²

< INSERT TABLE 4 >

¹¹ Although neither the CVs nor cover letters explicitly state the age of the job applicant, the CV does state the year of completing high school, placing them as either 22 or 23 years of age at the time of the experiment.

¹² For more information on the graduate recruiter survey, please see:
<http://www.graduatecareers.com.au/research/surveys/graduateoutlooksurvey/>

Job ads were sampled over a seven month period from March to October, 2013. Advertisements from the cities of Sydney and Melbourne were selected for the study. These cities are the most populous cities and largest employment markets in Australia, which together represent 40 percent of total employment. In total, up to six CVs are sent to each job advertisement in a random order.¹³ The job applications are sent in a randomized sequence. Within the sampling period, the same ad was occasionally reposted by a recruiter. CVs were sent in response only to the initial posting of a job ad, and never to any subsequent postings of the identical ad. Table 4 summarizes all the job types that feature in the experiment. For the graduate jobs, the degree majors that are categorised as Business jobs are accounting, finance, economics, human resources, and marketing. The Engineering graduate jobs included in the study are mechanical and civil engineering degrees.

2.2. IDENTITY OF THE JOB APPLICANTS

To successfully convey the race of the applicants to recruiters, the names used in the experiment are chosen based on their popularity. Table 5 displays the full range of White and Chinese first and last names used in the experiment. Both male and female names are included. The White first names are selected from the most popular baby names in the New South Wales and Victorian state government birth registries.¹⁴ The selection of first names was restricted to the decade of the 1990-2000 to match the age of the fictitious job applicants. White last names are taken from the 2007 Australian government list of most common last names in the nation. The Chinese first names used in the experiment are randomly selected from the website ‘Top 100 Baby Names’, and Chinese last names are based on household data collected by the Chinese

¹³ Some job advertisements were taken down by the employer or expired before a total of six CVs could be sent.

¹⁴ The New South Wales popular baby names website is available at: <http://www.nsw.gov.au/about-nsw/popular-baby-names>. And the Victorian website is available at: <https://online.justice.vic.gov.au/bdm/popular-names>.

Ministry of Public Security in 2007.¹⁵ To create a full name for the job applicants, a first name is randomly combined with a last name.

< INSERT TABLE 5 >

In addition to White and Chinese names, a third group of CVs, referred to as the ‘Adopters’, are sent to recruiters. The ‘Adopters’ is a random pairing of a Chinese last name with an ‘adopted’ White first name. The White first names of the ‘Adopters’ CVs are identical to the first names used for the White CVs from Table 5. Similarly, the Chinese last names used for the ‘Adopters’ CVs are identical to the last names used for the Chinese CVs from Table 5. Using the same pool of Chinese last names for the ‘Adopters’ CVs is necessary to assign the same racial ancestry with the Chinese CVs, and thus, minimise any potential recruiter misperception that the ‘Adopters’ job applicants belong to a different racial group. Confusion is highly unlikely given the common practice that children inherit their last name from one’s parents in both White and Chinese families.¹⁶ The familial inheritance of the last name in Chinese culture means that having a Chinese last name strongly conveys the racial ancestry of the job applicant. Thus, both the Chinese and Adopter job applicants share an identical racial ancestry.

¹⁵ It is possible that the gender of a Chinese job applicant is potentially ambiguous to a recruiter when read from a CV. Although the central focus of this paper is racial discrimination rather than gender discrimination, recruiters are nonetheless provided with subtle gender cues in the job application, such as referring to oneself as ‘Mr’ or ‘Ms’.

¹⁶ Traditional Chinese naming practices closely mirror White naming conventions. Chinese names are composed of the combination of a first (given) name(s) and an inherited last name. Importantly, a Chinese person’s last name is inherited from one’s parents, which is exactly analogous with traditional White naming conventions. This guarantees that the last name on an ‘Adopters’ CV conveys the race of the job applicant. In contrast with White naming conventions, Chinese names are traditionally ordered with the last name preceding the first name. However, in English speaking societies, it is common practice for the Chinese to revert the ordering of their name to follow White naming practices, with the first name preceding the last name.

2.3. EDUCATION, JOB HISTORY, AND OTHER CV CHARACTERISTICS

In the Australian labour market, it is common for recruiters to request a CV and a cover letter when applying for a job vacancy. Subsequently, in the experiment, two types of CVs and cover letters are created: 1) high skill for graduate jobs, and 2) low skill for administration assistant jobs. To construct a set of graduate CVs and cover letters that accurately replicate their real-life counterparts, the CVs and cover letters of business and engineering Undergraduate students from a large Australian university were collected. These documents were the basis of the graduate template CVs and cover letters. The students who volunteered their CVs and cover letters were also job seekers at the time the documents were collected, ensuring that the templates created for the study were based on the skills and qualifications of actual job seekers. Reference guides and other materials were also collected from a number of Australian University careers centres. To ensure that there are no cohort effects, the age of the Undergraduate students who supplied their CVs matches the age of the fictitious job applicants who feature in the study. Every graduate CV is assigned with a university qualification from an Australian institution. Finally, names are then randomly assigned to each CV.

To observe whether the returns to education vary across the three name types, both Honours graduates and non-Honours CVs were sent to recruiters. CVs and cover letters were collected across a range of high and low achieving students. High performing students are: 1) more likely to graduate with Honours credentials, 2) more likely to possess 'relevant' industry work experience, such as internships, and 3) more likely to be a member of an industry related Undergraduate association. Accordingly, each Honours graduate CV is assigned Honours credentials, a higher average mark, a completed summer internship, and membership with an industry related student association at University. The internships replicated those from the

actual CVs along all dimensions, such as duration of employment and tasks undertaken, with the exception of the names of real companies, which were replaced with a fictitious company.

When creating the work experience for graduates, care was taken to precisely replicate the typical work history profiles of the actual graduate CVs collected from students. All of the fictitious graduate CVs featured in the experiment, irrespective of Honours qualifications, were assigned three years of continuous work experience undertaken during the same years of undergraduate study. The work experience assigned to each graduate CV was a low skilled, casual job, which was typical of the real CVs collected from students. Also, every graduate CV possessed less than a year of office work experience with a fictitious company that was undertaken in the final year of study, performing menial tasks, such as photocopying or filing. Finally, each graduate CV was assigned with extra-curricular sport and travel interests, in many cases replicating those from the pool of real CVs collected. Honours CVs were also assigned extra-curricular interests, which were volunteering and the 'relevant' Undergraduate industry student society. In addition to a CV, graduate recruiters typically request a cover letter be included when responding to an online job advertisement. Thus, template cover letters were also created to accompany each CV. To create the template cover letters, real cover letters were collected from the same pool of University students who provided their CVs. Also, templates and writing guides for cover letters were collected from a number of University careers centres in NSW and Victoria.

Similarly, real CVs and cover letters served as the basis when creating the entry level administration CV and cover letter templates. Real CVs, cover letters, and reference materials were collected from various internet websites. When constructing the administration CVs, the actual work histories of the real CVs served as a direct reference. Each administration CV was assigned with a maximum high school education. A set of cover letter templates were designed to accompany administration CVs using real cover letters collected from various web

resources. In many instances, the content of the actual letters was replicated, but particulars such as the name of the applicant, job history, etc. were replaced with fictitious details. Similar to Deming, Yuchtman, Abulafi, Goldin, and Katz (2014) and Kroft, Lange, and Notowidigdo (2013), each CV across both job types explicitly states the year of graduation from high school and University (for graduates) to ensure that there are no gaps in the applicant's work experience. Both the graduate and administration CVs were assigned with two fictitious referees and a referee contact email address. The referee names are exclusively White and Male.

To accurately match responses from recruiters, job applicants from the same name/city/gender/job type cell are assigned a unique mobile phone number and email address. Phone calls from recruiters are not answered. Instead, voicemail messages are recorded for each phone number inviting the recruiter to leave their name, contact information, and a detailed message. Email addresses are a combination of the first name and last name of the fictitious job applicant and were generated using a free email service provider, which was either '@hotmail.com', '@outlook.com', '@gmail.com', or '@yahoo.com'. Since the names included in the study are common, the email addresses also included numbers succeeding the 'first name-last name' combination. Furthermore, every CV, including both the 'Adopters' and Chinese job applicants, is allocated with exclusively Australian high school and university (for the graduate CVs) education credentials, Australian employment history, and all voicemail messages were recorded from native speakers with Australian accents. Finally, each CV is allocated with a fictitious residential address.

When measuring outcomes, we record two responses: (1) receiving a 'Call-back' (CB), which is defined as receiving either a 'yes' or 'no' response from the recruiter either by email or telephone, and (2) receiving an interview offer (Yes). We define two types of interview offers; 'Yes1', which is whether or not a job applicant received an interview offer, and 'Yes2',

which is receiving an interview offer, conditional on receiving a call-back. If a recruiter does not respond to a job applicant at all, the absence of any response is coded as a rejection of the application. Responses are collected from both the voicemail messages and emails sent by recruiters and are matched with the recruiter's name and firm information recorded. A total of 41 responses were received whereby a recruiter invites a job applicant to proceed to the next round of the screening process, rather than an explicit interview offer. These responses were coded under outcome (2) as they represented a successful result of a job application. In total, 4,702 CVs were sent in response to 1,334 job advertisements.

2.4. COLLECTING RECRUITER INFORMATION

In addition to measuring the racial gap in interview offers, we also collect data on recruiter characteristics. We matched the recruiter's name listed in the job ad, phone or email responses with the information listed in the matching user profile from the www.linkedin.com website.¹⁷ To ensure that recruiters are accurately matched with the correct LinkedIn profile, the name of the firm listed in the recruiter's work history is matched with data records. Recruiters whose name could not be uniquely matched with a LinkedIn profile are not included in the study sample. The race, gender, and years of work history of a recruiter are recorded. A recruiter's race is subjectively determined using a combination of the recruiter's last name and the photo supplied in the LinkedIn profile. When a photo is not available, we resort to social networking websites to obtain a photo or, in some cases, relied solely on the last name of the recruiter.

Recruiters who are more experienced may recognise that each of the CVs sent in response to the job ad are comparable in skills and qualifications, and disregard race. In contrast, novice

¹⁷ LinkedIn is a large professional networking website where individuals create user profiles that contain a rich array of information detailing their education, years of work experience, professional history and other relevant qualifications. The LinkedIn website is well subscribed in Australia, with 6 million registered members.

recruiters may display their prejudices more explicitly when assessing CVs. Similarly, a prejudiced recruiter will prefer job applicants who are the same race as them, and also, minorities who adopt a White first name demonstrating a willingness to integrate.

2.5. WEAKNESSES OF THE EXPERIMENT

A limitation of the correspondence method is the inability to study network effects on job search, nor observe the characteristics of the job applicant that the firm eventually decides to hire, and the subsequent wage offered to the successful candidate. Instead, the outcomes measured in this study are limited to racial differences in interview offers. Whilst firms may systematically discriminate against Chinese job applicants or disproportionately favour applicants with White first names when awarding interview offers, there may be no detectable racial discrimination once the recruiter begins interviewing potential candidates. Nevertheless, discriminatory treatment by firms uncovered during the applicant selection phase is likely to be indicative of behaviour in the latter stages of candidate screening.

An important assumption in this study is that the last name of the job applicant reliably signals the race of the candidate to the recruiter. A potential confound of the experimental design is that the Adopters could be regarded as mixed-race, rather than Chinese job applicants, since the 'Adopters' group combines a White first name with a Chinese last name. Due to the traditional naming practice whereby children inherit the last name of their father, for an Adopter to be of mixed-race parentage, the particular racial combination of an Adopter's parents must be Chinese father with White mother. There is evidence which demonstrates that firms discriminate on the perceived race of the worker, as inferred from an individual's last name. Rubinstein and Brenner (2014) contrast the earnings of mixed-race Sephardic and Ashkenazi Jews in Israel and find that firms discriminate on the basis of the worker's last name.

For instance, mix-race Jews with a Sephardic father subsequently inherit a Sephardic last name, and were treated as if they were of ‘full’ Sephardic ancestry by firms. The wages of mixed-race workers with Sephardic last names are significantly lower than mixed-race workers with Ashkenazi last names, despite both groups being observably similar along various dimensions of human capital. The authors argue that a person’s last name influences how the firm perceives the race of the worker. Consequently, there is labour market evidence that rules out the potential mixed-race interpretation of the Adopters group.

Before we turn to the results, Table 6 presents summary statistics of the experimental data. Panel A presents the descriptive statistics for the full sample, by occupation and the name types of the job applicants and includes a balance check.¹⁸ Panel B in Table 6 offers a summary of the various recruiter characteristics collected during the experiment. Across both graduate and administration jobs, the majority of recruiters sampled in the experiment are female and White. The average number of years of experience that recruiters possess is around 10 years.

< INSERT TABLE 6 >

3. RESULTS

Table 7 summarizes the distribution of recruiter responses for the Yes1 interview offer and call-back outcomes. Starting with interview offers in column 1, approximately 81.3 percent of recruiters do not offer an interview offer to any job applicant, regardless of race. Roughly 19 percent of firms sampled invite at least one job applicant to an interview, and less than 3 percent

¹⁸ With regard to the balance of the various covariates, overall the majority of the p -values in Table 6 are large, with the odd exception by chance of the Female (between White names and Adopters), and Sydney and Melbourne (between Chinese and White names) variables. Consequently, the regression specification will include controls for gender and city fixed effects.

of firms offer every job applicant an interview. In terms of the distribution of interview offers by race, 13 percent of recruiters exclusively invite White job applicants to an interview. In comparison, 4.8 percent of recruiters invite only CVs with a Chinese name to an interview, and the p -value for the difference with White names is zero.

< INSERT TABLE 7 >

Interestingly, 8.5 percent of recruiters invite only the Adopters to an interview, and the difference compared to Chinese names is highly statistically significant. Column 2 repeats these exercises for call-back rates. The majority of recruiters do not contact any of the job applicants, and a minority choose to contact all of the job applicants. Of the three name types, recruiters are more likely to exclusively contact Whites, followed by the Adopters, and then the Chinese job applicants.

3.1. RACIAL GAPS AND WHITE FIRST NAME ADOPTION

We begin the main analysis with a comparison of job application outcomes between White and Chinese names. After determining whether there is evidence of a Chinese-White racial gap in interview offers and call-backs, we then seek to measure the impact of using a White first name on the magnitude of the racial gap for the Adopter job applicants.

Table 8 summarises the average interview offer and call-back response rate for each name type. Columns 8-10 display the p -values for each of the mean-comparison tests. Beginning with the full sample in row 1, CVs with White names are the most likely group to receive a call-back; a White job applicant has a 23.3 percent chance of being contacted by a recruiter. In comparison, a job applicant with a Chinese name is much less likely to receive a call-back.

There is a large and statistically significant call-back racial gap of 7.3 percentage points between White and Chinese names. Whilst recruiters discriminate against those who retain a Chinese first name, the use of a White first name by a Chinese job applicant is rewarded in the labour market. Compared to Chinese first names, the Adopters are 4.4 percentage points more likely to receive a call-back, which is an improvement that is highly statistically significant.

< INSERT TABLE 8 >

Whilst Adopters have a higher probability of receiving a call-back, job seekers are ultimately concerned with obtaining an interview offer. Rows 2-3 present the average Yes1 and Yes2 interview offer rates for each name type across the full sample. Beginning with Yes1, CVs with White names have a 12 percent chance of receiving an interview offer. In comparison, Chinese names have a 4.4 percent chance, which is a statistically significant difference of 7.6 percentage points. That is, White names are approximately three times more likely to receive an interview offer than Chinese names. Among the Adopters, the racial gap in interview offers is substantially reduced. The chance of receiving an interview offer for an Adopter is 8.1 percent. Thus, a simple comparison reveals that using a White first name approximately doubles the probability of being awarded an interview offer for Chinese job seekers, despite both the Chinese and Adopter job applicants having a Chinese last name and identical qualifications. The reduction in the racial gap for Adopters is highly statistically significant and is entirely attributable to the manipulation of a Chinese job applicant's first name. However, the racial gap does not completely attenuate. The difference between White names and Adopters is 3.9 percentage points and is statistically significant at the 1 percent level.

Figures 1-3 provide a graphical representation of the average Yes1 interview offer rate across White and Chinese names, and the Adopters. The large disparity in interview offers between White and Chinese names in the full sample is starkly illustrated in Figure 1. The dramatic improvement in the probability of receiving an interview offer for Adopters is also vividly demonstrable. Figure 2 contrasts the average interview offer rate for graduate jobs. While the average interview offer rate for graduate Adopters is slightly higher than Chinese CVs, the difference is insignificant. In contrast, Figure 3 displays the mean interview offer rates in administration assistant jobs. From the figure, it is clear that the chance of receiving an interview offer between White and Adopter CVs is almost identical, while Chinese names receive significantly fewer interview offers.

Turning to Yes2, which measures the probability of receiving an interview offer amongst those who received a call-back, over 50 percent of call-backs a White job applicant receives is an interview offer. For Chinese job applicants with a Chinese first name, approximately 28 percent of call-backs will result in an interview offer. In contrast, an Adopter has a 40 percent chance of being awarded with an interview offer when they are contacted by a recruiter. Overall, there is a large racial gap between White and Chinese names, and adopting a White first name substantially reduces the disparity in the interview offer racial gap.

< INSERT FIGURES 1, 2, AND 3 >

The remainder of Table 8 compares the mean call-back and interview offers by city, gender and job type. The small *p*-values across much of the table indicate that there are large disparities in outcomes across the three groups. In both the labour markets of Sydney and Melbourne, White names are most favoured by recruiters, and a large and statistically significant racial gap

is observed between White and Chinese names. Adopters in both cities are much more likely to receive a call-back and an interview offer compared to applicants who use Chinese first names. We also observe the same pattern of racial discrimination amongst females and graduate job applicants. An interesting exception is the results for the administration jobs. Whilst a significant disparity between White and Chinese names in call-backs and interview offers remains, there is no evidence of racial discrimination against the Adopters. The p -values for call-backs and both the Yes1 and Yes2 interview offers between White and Adopter CVs are very large, indicating that the racial gap completely attenuates for Adopters in administration assistant jobs. This result suggests that, for low-skill occupations, racial bias is completely eliminated for Chinese job applicants with a White first name on their CV.

We extend the analysis by presenting the marginal effect estimates from the following probit regression model:

$$\Pr(y = 1|\mathbf{x}) = G(\beta_0 + \beta_1 \text{Chinese Name}_i + \beta_2 \text{Adopter Name}_i + \beta_3 X_i) \quad (1)$$

where y is an indicator variable equal to one if the individual receives a call-back or interview offer, Chinese Name_i and Adopter Name_i are indicator variables for Chinese names and Adopters, respectively, X_i is a vector of controls that include locality and job type, and G is the cumulative distribution function of the standard normal distribution. In each specification, White names are the base case, and the standard errors are clustered at the firm-level. While the marginal effect of β_1 is of interest, as it measures the percentage difference in interview offers between Chinese and White names, the main effect of interest in this study is β_2 , which captures the *ceteris paribus* Adopter-White racial gap in interview offers. The difference between β_2 and β_1 captures whether the use of a White first name increases the chance of receiving a call-back or interview offer amongst equally skilled Chinese job applicants.

Table 9 reports the marginal effects estimates from the probit regression for the full sample, according to (1).¹⁹ Beginning with the raw differences in Yes1 interview offers in column 1, there is a large Chinese-White racial gap of 7.8 percent, which is highly statistically significant. However, the racial gap is substantially diminished for Adopters. The *p*-value comparing the mean Adopter and Chinese outcomes is zero, indicating that the reduction in the racial gap due to using a White first name is statistically significant. However, the racial gap against Adopters does not completely attenuate; a statistically significant racial gap (3.3 percent) persists between Adopters and White names.

Column 2 adds an indicator variable for gender. The marginal effect estimates for the Chinese and Adopter variables remain unchanged. Interestingly, female job applicants are favoured in the labour market, and the coefficient is significant at the 5 percent level. In column 3, an indicator variable for whether the job applicant has an Honours degree is added to the specification. Adding a control for Honours slightly increases the racial gap for Chinese names (7.9 percent), and reduces the disparity for the Adopters (3.2 percent).

¹⁹ A supplementary appendix presents results from a linear probability model (LPM). The LPM results repeat the same exercises as the probit regressions presented in the results section. Overall, the conclusions drawn from the LPM results do not differ from the marginal effect estimates produced by the probit regressions.

< INSERT TABLE 9 >

An interaction effect for Chinese and Honours is added to the regression in column 4.²⁰ The disparity between White and Chinese names increases to 8.4 percent, and the marginal effect for Adopters remains unchanged. The interaction effect is small and statistically insignificant. Column 5 adds further controls for city, and indicator variables for business and engineering sectors. The marginal effects for Chinese and Adopter CVs remain unchanged.

Overall, there is a large racial gap in interview offers against job seekers with Chinese names. The pattern of results supports the conclusions drawn from Table 8. Applying for job vacancies using a White first name significantly reduces, but does not eliminate, the racial disparity in interview offers. Interestingly, the results indicate that using a White first name in the labour market is just as valuable as having an Honours degree for a Chinese job applicant.

Turning to the other results in Table 9, column 6 repeats the same exercises according to (1), but replaces the outcome variable with the call-back (CB) rate. The results indicate that, in the full sample, recruiters are much less willing to contact a job applicant with a Chinese name. Whilst the call-back outcome measure includes interview offers, it also measures the propensity of recruiters to notify the applicant of a rejection. Thus, recruiters award fewer interview offers to Chinese CVs and are also less likely to notify the worker of an unsuccessful outcome of their job application. Once again, the use of a White first name considerably reduces the racial disparity in outcomes. The results in column 6 indicate that firms are more likely to contact a Chinese job applicant who uses a White first name (Adopters) compared to those with Chinese names.

²⁰ The interaction effects are estimated following the method proposed by Ai and Norton (2003). For each interaction effect, all the results report the cross-partial derivate.

Column 7 presents the marginal effects with Yes2 as the outcome variable, which is defined as receiving an interview offer among the job applicants who receive a call-back. Conditioning on receiving a call-back dramatically increases the magnitude of the racial gap in interview offers for both Chinese and Adopter CVs, and importantly, the direction of the marginal effects are consistent with previous results in Table 9. In addition, the difference in the probability of receiving an interview offer between Chinese names and Adopters substantially increases. Among the job applicants who receive a call-back, Chinese job applicants are 25 percent less likely, whereas the Adopters are 10.6 percent less likely to receive an interview offer. Consequently, among the job applicants contacted by a recruiter, Adopters are more than twice as likely to receive an interview offer as those with Chinese first names.

Finally, column 8 adds an indicator variable equal to one if the firm is listed on the Australian Stock Exchange (ASX). Controlling for firms that are publically listed serves as a proxy for the size of the firm. The estimates in the last column indicate that the results in Table 9 are not sensitive to whether or not the firm is publically listed.

3.2. RACIAL GAPS BY JOB TYPES

The results thus far reveal that a large racial gap in interview offers and call-back rates exists between White and Chinese names, but that using a White first name considerably reduces the racial disparity for Chinese job applicants. We complement the main analysis by asking whether recruiters in high and low skill jobs react differently towards Chinese names and Adopters. To measure this, the full sample is separated into high and low skill occupations. Tables 10 and 11 tabulate the marginal effects for Chinese and Adopter job seekers for graduate and administration assistant jobs, respectively. Beginning with graduate jobs in Table 10, there is a substantial racial gap in interview offers of approximately 10 percent for Chinese graduates.

Interestingly, although the size of the marginal effect for Adopters is 3 percentage points lower, the p -values of the hypothesis tests across Table 10 are quite large, indicating that using a White first name does not improve the chances of obtaining an interview offer for Adopter graduates. Other results in column 2 show that there is no evidence of discrimination against female seekers in interview offers. Unsurprisingly, there are substantial returns for graduates with an Honours degree. Column 3 presents the estimates for graduate jobs with call-backs as the outcome variable. Again, there is a substantial racial gap between White and Chinese names in the probability of receiving a call-back. The large p -value demonstrates that the difference between the call-back rates for Adopters and Chinese names is statistically insignificant. Column 5 shows that the results are insensitive to firm size.²¹ Overall, the results in Table 10 indicate that using a White first name does not reduce the racial gap in graduate job ads for Adopters.

Table 11 provides the estimates for the administration assistant jobs. For both interview offers and call-backs, there is a large and statistically significant racial gap between White and Chinese names. However, the disparity in interview offers and call-backs between White names and Adopters completely attenuates. The small p -values indicate that the difference between Chinese and Adopter outcomes is highly statistically significant. Thus, while Chinese CVs receive significantly fewer interview offers, there does not appear to be evidence of a racial disparity in outcomes between Whites and Adopters in administration jobs. Other results

²¹ Included in the appendix in Table B1 are probit regression results for interview offers (Yes1) in accounting and marketing jobs, respectively. The results indicate that in accounting, an occupation that is traditionally dominated by Chinese, there is substantial discrimination against both Chinese and Adopter CVs, and using a White first name does not significantly reduce the racial-gap for Adopters. In addition, the magnitude of discrimination is similar to the racial gap in the marketing job ads, which is an occupation where Chinese are not typically regarded as possessing a comparative advantage. Using a White first name benefits Adopters in marketing jobs; the difference in interview offer rates between Chinese and Adopter CVs is statistically significant at the conventional levels. This result is especially compelling given that the frequency of personal interaction is lower in accounting than in marketing jobs, meaning that the costs borne from interacting with a racial minority are potentially lower. However, this does not appear to be a factor in the gap in interview offers in accounting jobs.

show that female applicants receive more interview offers and call-backs than male applicants in administration jobs.

< INSERT TABLE 10 >

< INSERT TABLE 11 >

To summarise, breaking down the sample by job type demonstrates that in high skill occupations, there is a large racial gap for Chinese job applicants who retain a Chinese first name, and the discrimination against Adopters persists. In comparison, racial discrimination against Adopter job applicants is completely eliminated in low skill jobs; the Adopters are just as likely as applicants with White names to receive an interview offer and call-back.

3.3. RACIAL GAPS BETWEEN CITIES

In the experiment, job ads are sampled in the labour markets of Sydney and Melbourne. Tables 12 and 13 present the regression estimates for Sydney and Melbourne, respectively. In both the Sydney and Melbourne labour markets, we observe a large racial gap in interview offers for Chinese names. Beginning with the results for Sydney in Table 12, firms are more likely to offer the Adopters an interview offer, compared to Chinese who retain a Chinese first name. The p -values between Chinese and Adopters are very small, which indicates a substantial improvement in Adopter outcomes. In contrast, the pattern of results for Melbourne presented in Table 13 are mixed. The p -value in column 1 is very small, but becomes quite large once controls are added to the regression in column 2, suggesting that recruiters in Melbourne do not reward the Adopters, relative to Chinese CVs. However, the difference in interview offers

between Chinese names and Adopters is statistically significant at 10 percent in column 5, which adds a control for firm size.

< INSERT TABLES 12 AND 13 >

With regard to the chance of receiving a call-back, a disparity between Whites and Adopters persists in Sydney, suggesting that firms are more likely to contact a White job applicant. However, the racial gap in call-backs disappears in Melbourne. Finally, there is no evidence of gender discrimination across both cities. In fact, the results indicate that female job applicants in Sydney receive favourable treatment.

3.4. RECRUITER CHARACTERISTICS

Various background characteristics of the recruiters were collected during the data collection phase of the experiment. The results in Table 14 add a number of controls for recruiter traits, including an indicator variable for a female recruiter, a dummy for recruiter race equal to one if the recruiter is White, and the years of labour market experience of the recruiter.²²

< INSERT TABLE 14 >

Although the sample size is smaller, the results are robust to controlling for recruiter characteristics. The estimates in column 1 do not include variables for recruiter characteristics and the racial gaps remain robust. This indicates that the results are not sensitive to the smaller sample size. Column 6 presents the results from the preferred specification. The racial gap in

²² Recruiter experience is included as a squared term.

interview offers for job applicants with Chinese names increases substantially to 21 percent. Once again, the Adopters are substantially more likely to receive an interview offer compared to those with Chinese first names, and the difference is statistically significant at the 5 percent level. Other results show that female and White recruiters are less likely to award interview offers to job applicants. Finally, recruiter experience does not appear to influence the probability of receiving an interview offer or call-back among the job applicants in the sample.

4. CONCLUSION

The literature on racial discrimination in the labour market have shown that sizeable racial gaps for racial minorities occur across a range of labour market outcomes, and remain after controlling for differences in human capital. In response to expected discrimination, minority job applicants signal their adoption of the majority culture. This paper explores the impact of adopting a White first name among Chinese job applicants when searching for and applying to job vacancies. Adopting a White first name is interpreted as a signal of cultural identification with the White majority group, and a rejection of one's own ethnic ancestry. To capture the effect of adopting a White first name on the probability of receiving an interview offer, fictitious CVs are sent in response to real world job advertisements using three name types: White and Chinese names, and a third name type; the 'Adopters', which pairs a White first name with a Chinese last name. The last names for the Adopter CVs are drawn from the same pool of last names as those used on the Chinese CVs, and thus, both Chinese and Adopter job applicants share an identical racial ancestry. The outcomes of interest are the racial gap in interview offers (Yes1 and Yes2) and call-backs (CB).

The main findings uncover a large racial gap in interview offers between White and Chinese names; on average, Chinese names are 8 percent less likely to receive an interview offer. With respect to the Adopter CVs, recruiters respond positively to Chinese job applicants who use a White first name in the labour market. Adopters receive roughly double the number of interview offers relative to Chinese CVs, even though both have a Chinese last name. Although there is a substantial increase in the probability of being offered a job interview, which is attributable to the use of a White first name, there is evidence that the Adopters continue to experience racial discrimination. More specifically, the influence of a White first name on the probability of receiving an interview offer and a call-back varies across occupation. We do not observe a reduction in the racial gap for Adopters among graduate recruiters, but the White-Adopter CV racial gap completely attenuates in the administration jobs. Overall, using a White first name in the Australian labour market substantially reduces the level of racial bias against Chinese job seekers, particularly in low-skill jobs.

Theoretically, the results could be explained via prejudicial motives (Becker, 1971). Recruiters may have a preference toward minorities who abandon outward signifiers of ethnic identity in favour demonstrating an affiliation with the White majority. Similarly, our results are also consistent with theories of statistical discrimination (Aigner & Cain, 1977; K. J. Arrow, 1972; Phelps, 1972). The use of a White first name by racial minorities may be correlated with other signals of productivity. For instance, R. G. Fryer and Levitt (2004) find that unique Black first names are an indicator of a low socioeconomic status. As taste and statistical theories of discrimination presume vastly different behavioural motivations that ultimately lead to a racial disparity in outcomes, identifying the underlying theoretical causes in the labour market is important from a policy perspective. For instance, the appropriate policy solution that addresses prejudicial employers will be vastly different to firms who are responding rationally to imperfect information.

Racial minorities adopt a White sounding first name as a response to perceived labour market discrimination. The results presented in this paper demonstrate that using a White first name is associated with significant benefits in the labour market. However, renouncing a racially-suggestive first name may be associated with large costs related to notions of an individual's identity (Akerlof & Kranton, 2000). Using a White first name is a signal of an individual's desire to align themselves with the White majority. This paper demonstrates that positioning a job applicant's first name towards 'Whiteness' successfully reduces racial bias in the labour market, particularly in low-skill level jobs, even when it is clear that the applicant is from a racial minority group. The evidence indicates that recruiters use first names to sort among job applicants from within a racial group. Minorities who demonstrate an effort to assimilate into the White majority, and abandon ethnic identifiers associated with their respective ancestral group, benefit substantially. Recruiters in the Australian labour market discriminate against racial minorities, especially those who affiliate with their ancestral culture.

REFERENCES

- Ai, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics letters*, 80(1), 123-129.
- Aigner, D. J., & Cain, G. G. (1977). Statistical theories of discrimination in labor markets. *Industrial and Labor relations review*, 30(2), 175-187.
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715-753.
- Arai, M., & Thoursie, P. S. (2009). Renouncing personal names: An empirical examination of surname change and earnings. *Journal of Labor Economics*, 27(1), 127-147.
- Arceo-Gomez, E. O., & Campos-Vazquez, R. M. (2014). Race and marriage in the labor market: A discrimination correspondence study in a developing country. *The American Economic Review*, 104(5), 376-380.
- Arrow, K. (1971). Some models of racial discrimination in the labor market.
- Arrow, K. J. (1972). Models of job discrimination. *Racial discrimination in economic life*, 83.
- Battu, H., Mwale, M., & Zenou, Y. (2007). Oppositional identities and the labor market. *Journal of Population Economics*, 20(3), 643-667.
- Becker, G. (1971). *The Economics of Discrimination*. University of Chicago Press Economics Books.
- Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination. *American Economic Review*, 94(4), 991-1013.
- Booth, A. L., Leigh, A., & Varganova, E. (2012). Does Ethnic Discrimination Vary Across Minority Groups? Evidence from a Field Experiment. *Oxford Bulletin of Economics and Statistics*, 74(4), 547-573.
- Breunig, R., Hasan, S., & Salehin, M. (2013). The immigrant wage gap and assimilation in Australia: does unobserved heterogeneity matter? *Economic Record*, 89(287), 490-507.
- Broom, L., Beem, H. P., & Harris, V. (1955). Characteristics of 1,107 petitioners for change of name. *American Sociological Review*, 33-39.
- Carless, S. A. (2007). Graduate recruitment and selection in Australia. *International Journal of Selection and Assessment*, 15(2), 153-166.
- Carlsson, M., & Rooth, D.-O. (2007). Evidence of ethnic discrimination in the Swedish labor market using experimental data. *Labour Economics*, 14(4), 716-729.
- Charles, K. K., & Guryan, J. (2011). Studying Discrimination: Fundamental Challenges and Recent Progress. *Annual Review of Economics*, 3(1), 479-511.
- Deming, D. J., Yuchtman, N., Abulafi, A., Goldin, C., & Katz, L. F. (2014). *The value of postsecondary credentials in the labor market: an experimental study*. Retrieved from
- Fryer Jr, R. G., & Levitt, S. D. (2004). The causes and consequences of distinctively black names. *The Quarterly Journal of Economics*, 767-805.
- Fryer, R. (2003). An economic approach to cultural capital. *manuscript*. University of Chicago.
- Gerhards, J., & Hans, S. (2009). From Hasan to Herbert: Name-Giving Patterns of Immigrant Parents between Acculturation and Ethnic Maintenance¹. *American Journal of Sociology*, 114(4), 1102-1128.
- Greiner, D. J., & Rubin, D. B. (2011). Causal effects of perceived immutable characteristics. *Review of Economics and Statistics*, 93(3), 775-785.
- Guryan, J., & Charles, K. K. (2013). Taste-based or Statistical Discrimination: The Economics of Discrimination Returns to its Roots. *The Economic Journal*, 123(572), F417-F432.
- Kaas, L., & Manger, C. (2012). Ethnic discrimination in Germany's labour market: a field experiment. *German Economic Review*, 13(1), 1-20.
- Kang, T. S. (1971). Name change and acculturation: Chinese students on an American campus. *Pacific sociological review*, 403-412.

- Kroft, K., Lange, F., & Notowidigdo, M. J. (2013). Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment. *The Quarterly Journal of Economics*, 128(3), 1123-1167.
- Lang, K. (1986). A language theory of discrimination. *The Quarterly Journal of Economics*, 101(2), 363-382.
- Neal, D. A., & Johnson, W. R. (1996). The Role of Premarket Factors in Black-White Wage Differences. *The Journal of Political Economy*, 104(5), 869-895.
- Oreopoulos, P. (2011). Why do skilled immigrants struggle in the labor market? A field experiment with thirteen thousand résumés. *American Economic Journal: Economic Policy*, 148-171.
- Pager, D. (2007). The use of field experiments for studies of employment discrimination: Contributions, critiques, and directions for the future. *The Annals of the American Academy of Political and Social Science*, 609(1), 104-133.
- Pager, D., Western, B., & Bonikowski, B. (2009). Discrimination in a low-wage labor market a field experiment. *American Sociological Review*, 74(5), 777-799.
- Phelps, E. S. (1972). The statistical theory of racism and sexism. *American Economic Review*, 62(4), 659-661.
- Riach, P. A., & Rich, J. (1991). Testing for racial discrimination in the labour market. *Cambridge Journal of Economics*, 239-256.
- Riach, P. A., & Rich, J. (2002). Field Experiments of Discrimination in the Market Place. *The Economic Journal*, 112(483), F480-F518.
- Rubinstein, Y., & Brenner, D. (2014). Pride and Prejudice: Using Ethnic-Sounding Names and Inter-Ethnic Marriages to Identify Labour Market Discrimination. *The review of economic studies*, 81(1), 389-425.

TABLES

Table 1.

Background Characteristics of Chinese in Australia

	White (1)	Chinese (2)	Difference (1)-(2)
<i>Panel A. Parental Background</i>			
Father's Schooling	12.495 (0.013)	11.645 (0.175)	0.850***
Mother's Schooling	11.975 (0.012)	10.186 (0.186)	1.789***
Father Professional	0.424 (0.001)	0.590 (0.014)	-0.166***
Mother Professional	0.295 (0.001)	0.518 (0.016)	-0.223***
<i>Panel B. Household Investment in Children</i>			
Log Education Spending (Annual)	7.011 (0.008)	7.613 (0.075)	-0.602***
Attend University	0.622 (0.009)	0.812 (0.070)	-0.190**
Quality of Education	7.812 (0.035)	7.437 (0.245)	0.375
<i>Panel C. Labour Force</i>			
Urban	0.829 (0.001)	0.983 (0.004)	-0.154***
Hours Worked	34.381 (0.056)	34.499 (0.530)	-0.118
Full-time	0.628 (0.001)	0.653 (0.014)	-0.025
Unemployed	0.055 (0.001)	0.057 (0.007)	-0.002
Mean Hourly Wage	22.813	23.820	-1.007

	(0.078)	(0.665)
Median Hourly Wage	20	20

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.
The sample size consists of $N = 93,996$.
Standard errors are reported in parentheses.
Source: HILDA Survey, Waves 1-13

Table 2.
Highest Grade Completed

	White (1)	Chinese (2)	Difference (1)-(2)
High School Dropout (less than 12 years)	0.376 (0.001)	0.116 (0.007)	0.260***
High School Graduate	0.151 (0.001)	0.201 (0.001)	-0.050***
College	0.200 (0.001)	0.077 (0.006)	0.123***
Diploma	0.081 (0.001)	0.154 (0.009)	-0.073***
Bachelor	0.116 (0.001)	0.267 (0.011)	-0.151***
Graduate Diploma	0.046 (0.001)	0.065 (0.006)	-0.019***
Postgraduate Degree	0.027 (0.001)	0.118 (0.008)	-0.091***

*** p < 0.01, ** p < 0.05, * p < 0.10.
The sample size consists of $N = 144,446$.
Standard errors are reported in parentheses.
Source: HILDA, Waves 1-13.

Table 3.
Chinese and White Outcomes

<i>Panel A. Wage Gap by Education</i>						
	University			High School		
	White	Chinese	Difference	White	Chinese	Difference
	(1)	(2)	(1)-(2)	(1)	(2)	(1)-(2)
Log Hourly Wage	3.359 (0.004)	3.282 (0.030)	0.077***	2.918 (0.003)	2.894 (0.027)	0.024

<i>Panel B. Employment Gap by Education</i>						
	University			High School		
	White	Chinese	Difference	White	Chinese	Difference
	(1)	(2)	(1)-(2)	(1)	(2)	(1)-(2)
Proportion Employed	0.983 (0.001)	0.947 (0.011)	0.036***	0.929 (0.001)	0.920 (0.016)	0.009

<i>Panel C. Wage Gap by Occupation</i>						
	Business			Admin		
	White	Chinese	Difference	White	Chinese	Difference
	(1)	(2)	(1)-(2)	(1)	(2)	(1)-(2)
Log Hourly Wage	3.391 (0.009)	3.235 (0.043)	0.156***	3.054 (0.007)	2.963 (0.006)	0.091*

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.
The sample size consists of $N = 24,552$.
Standard errors are reported in parentheses.
Source: HILDA Survey, Waves 1-13

Table 4.
Occupation Categories

Education Level	Sector
1) Graduate	
Business	Accounting
	Finance
	Economics
	Human Resources
	Marketing
Engineering	Civil
	Mechanical
2) High School	
Administration	Administration Assistant

Table 5.
First and Last Names

White Male	White Female	White Last Name	Chinese Male	Chinese Female	Chinese Last Name
Matthew	Jessica	Smith	Ming	Ying	Li
James	Sarah	Jones	Wei Feng	Qingmei	Wang
Daniel	Emily	Williams	Yun Long	Ailing	Zhang
Joshua	Stephanie	Brown	Xiong	Wei	Liu
Michael	Emma	Wilson	Huangfu	Li Ping	Chen
Thomas	Rebecca	Taylor	Feng	Mei Li	Yang
Nicholas	Samantha	Johnson	Shengli	Li Fen	Huang
Jack	Lauren	Martin	Xiaoping	Jiaying	Zhao
Benjamin	Laura	White	Jian	Ming Yu	Wu
Patrick	Georgia	Anderson	Xiaogang	Xiaojing	Zhou
Adam	Ashleigh	Chapman	Xiaoming	Lihui	Cheng
Aaron	Courtney	Fletcher	Benshan	Xiyuan	Lin
Andrew	Rachel	Stevens	Jianguo	Chi Ling	Liang
David	Nicole	Cooper	Ding Xiang	Ai Shi	Zheng

Table 6.
Summary Statistics and Balance Check

<i>Panel A. Summary Statistics and Balance Check</i>						
<i>(N = 4,702)</i>						
	Full Sample			H_0 : White=Chinese	H_0 : White=Adopter	H_0 : Adopter=Chinese
VARIABLES	White	Chinese	'Adopters'	<i>p</i> -value	<i>p</i> -value	<i>p</i> -value
Female	0.513 (0.013)	0.498 (0.013)	0.492 (0.013)	0.152	0.039	0.516
Sydney	0.557 (0.012)	0.580 (0.013)	0.571 (0.012)	0.022	0.163	0.342
Melbourne	0.443 (0.012)	0.420 (0.013)	0.429 (0.012)	0.022	0.163	0.342
Honours	0.278 (0.011)	0.297 (0.011)	0.281 (0.011)	0.216	0.856	0.248
Graduate	0.520 (0.013)	0.515 (0.013)	0.520 (0.013)	0.621	0.952	0.571
Business	0.465 (0.013)	0.463 (0.013)	0.464 (0.013)	0.883	0.955	0.924
Engineering	0.056 (0.006)	0.052 (0.006)	0.055 (0.006)	0.413	0.881	0.496

Administration	0.480 (0.013)	0.485 (0.013)	0.480 (0.013)	0.621	0.952	0.571
<i>Panel B. Summary of Recruiter Characteristics</i>						
Male Recruiter	0.310 (0.024)	0.275 (0.025)	0.246 (0.024)	0.136	0.008	0.234
White Recruiter	0.862 (0.018)	0.844 (0.021)	0.876 (0.018)	0.340	0.370	0.116
Experience (Years)	11.471 (0.463)	10.793 (0.479)	11.439 (0.495)	0.162	0.947	0.150

Standard errors are reported in parentheses.

Table 7.
Distribution of Outcomes

	Interview Offer (Yes1)	Call-back (CB)
None	0.813 (0.011)	0.659 (0.013)
At Least One	0.187 (0.011)	0.341 (0.013)
All Applicants	0.027 (0.004)	0.112 (0.088)
White Only	0.129 (0.009)	0.232 (0.011)
Chinese Only	0.048 (0.005)	0.151 (0.010)
Adopter Only	0.085 (0.008)	0.194 (0.011)
H_0 : White=Chinese	0.000	0.000
H_0 : White=Adopter	0.000	0.021
H_0 : Adopter=Chinese	0.000	0.003

The p -values are presented for the hypothesis tests.
Standard errors are reported in parentheses.

Table 8.
Summary of Outcomes

	White		Chinese		Adopter		H_0 :	H_0 :	H_0 :
	Mean	S.E	Mean	S.E	Mean	S.E	White=Chinese	White=Adopter	Adopter=Chinese
Call-back (CB)	0.233	0.011	0.160	0.009	0.204	0.010	0.000	0.015	0.000
Interview Offer (Yes1)	0.120	0.008	0.044	0.005	0.081	0.007	0.000	0.000	0.000
Interview Offer Conditional on CB (Yes2)	0.516	0.026	0.278	0.029	0.399	0.027	0.000	0.000	0.000
Sydney CB	0.245	0.015	0.163	0.012	0.213	0.014	0.000	0.048	0.001
Sydney Yes1	0.141	0.012	0.048	0.007	0.094	0.010	0.000	0.000	0.000
Sydney Yes2	0.574	0.034	0.297	0.038	0.440	0.036	0.000	0.001	0.001
Melbourne CB	0.217	0.016	0.155	0.014	0.191	0.015	0.000	0.139	0.021
Melbourne Yes1	0.094	0.011	0.039	0.008	0.065	0.009	0.000	0.015	0.014
Melbourne Yes2	0.434	0.040	0.250	0.044	0.338	0.042	0.000	0.042	0.067
Female CB	0.256	0.015	0.152	0.013	0.211	0.015	0.000	0.010	0.000
Female Yes1	0.142	0.012	0.042	0.007	0.091	0.010	0.000	0.000	0.000
Female Yes2	0.553	0.035	0.276	0.042	0.430	0.039	0.000	0.005	0.002
Graduate CB	0.293	0.016	0.204	0.014	0.243	0.015	0.000	0.005	0.014
Graduate Yes1	0.168	0.013	0.068	0.009	0.103	0.011	0.000	0.000	0.005
Graduate Yes2	0.573	0.032	0.335	0.037	0.423	0.035	0.000	0.000	0.033
Admin CB	0.167	0.014	0.113	0.012	0.160	0.013	0.000	0.663	0.001
Admin Yes1	0.069	0.009	0.019	0.005	0.058	0.008	0.000	0.323	0.000
Admin Yes2	0.409	0.044	0.167	0.041	0.361	0.044	0.000	0.340	0.000

Business CB	0.330	0.050	0.228	0.047	0.218	0.045	0.142	0.053	0.870
Business Yes1	0.159	0.039	0.076	0.030	0.103	0.033	0.036	0.106	0.441
Business Yes2	0.483	0.094	0.333	0.114	0.474	0.118	0.256	0.944	0.255
Engineering CB	0.288	0.017	0.201	0.015	0.247	0.016	0.000	0.028	0.006
Engineering Yes1	0.169	0.014	0.068	0.009	0.103	0.011	0.000	0.000	0.006
Engineering Yes2	0.585	0.034	0.336	0.040	0.418	0.037	0.000	0.000	0.062

The p -values are presented for the hypothesis tests.
The S.E column reports the standard error of the mean.

Table 9.
Full Sample: Interview Offers and Call-backs

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1	(5) Yes1	(6) CB	(7) Yes2	(8) Yes1
Chinese	-0.078*** (0.009)	-0.078*** (0.009)	-0.079*** (0.009)	-0.084*** (0.013)	-0.084*** (0.013)	-0.073*** (0.014)	-0.250*** (0.045)	-0.087*** (0.014)
Adopter	-0.033*** (0.008)	-0.033*** (0.008)	-0.032*** (0.008)	-0.032*** (0.008)	-0.032*** (0.008)	-0.026** (0.011)	-0.106*** (0.029)	-0.033*** (0.008)
Female		0.019** (0.008)	0.019** (0.008)	0.019*** (0.008)	0.020*** (0.008)	0.017* (0.010)	0.063** (0.028)	0.021*** (0.008)
Honours			0.070*** (0.009)	0.068*** (0.010)	0.041*** (0.010)	0.047*** (0.016)	0.125*** (0.039)	0.042*** (0.010)
Chinese*Honours				-0.046*** (0.012)	-0.026*** (0.009)	-0.021** (0.010)	-0.007 (0.030)	-0.024*** (0.009)
Sydney					0.022* (0.011)	0.009 (0.019)	0.087* (0.047)	0.026** (0.012)
Business					0.038*** (0.013)	0.072*** (0.021)	0.042 (0.055)	0.037*** (0.013)
Engineering					0.044 (0.029)	0.086** (0.042)	0.042 (0.101)	0.045 (0.029)
Listed								0.007 (0.019)
<i>N</i>	4,702	4,702	4,702	4,702	4,702	4,702	936	4,504
<i>H</i> ₀ : Adopter=Chinese	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000
<i>H</i> ₀ : Adopter=Chinese*Honours	-	-	-	-	0.034	0.033	0.350	0.031

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 10.
Graduate Jobs

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.097*** (0.026)	-0.098*** (0.026)	-0.085*** (0.030)	-0.222*** (0.071)	-0.101*** (0.027)
Adopter	-0.057*** (0.012)	-0.058*** (0.012)	-0.048*** (0.017)	-0.150*** (0.036)	-0.061*** (0.013)
Female	0.006 (0.011)	0.005 (0.012)	0.001 (0.015)	0.023 (0.035)	0.005 (0.012)
Honours	0.060*** (0.014)	0.059*** (0.014)	0.058*** (0.020)	0.142*** (0.042)	0.060*** (0.014)
Chinese*Honours	-0.040*** (0.015)	-0.026* (0.015)	-0.021 (0.014)	-0.050 (0.034)	-0.041*** (0.015)
Sydney		0.035* (0.020)	0.021 (0.030)	0.109* (0.063)	0.046** (0.020)
Business		-0.007 (0.036)	-0.013 (0.047)	-0.001 (0.100)	-0.012 (0.036)
Listed					0.005 (0.028)
<i>N</i>	2,439	2,439	2,439	603	2,318
<i>H</i> ₀ : Adopter=Chinese	0.140	0.282	0.204	0.346	0.138
<i>H</i> ₀ : Adopter=Chinese *Honours	0.133	0.562	0.749	0.223	0.115

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 11.
Administration Assistant Jobs

VARIABLES	(1) Yes1	(2) CB	(3) Yes2	(4) Yes1
Chinese	-0.057*** (0.012)	-0.055*** (0.014)	-0.238*** (0.057)	-0.060*** (0.013)
Adopter	-0.008 (0.008)	-0.006 (0.014)	-0.027 (0.046)	-0.008 (0.009)
Female	0.033*** (0.010)	0.033*** (0.012)	0.140*** (0.048)	0.035*** (0.010)
Sydney	0.009 (0.011)	-0.002 (0.024)	0.049 (0.070)	0.008 (0.012)
Listed				0.015 (0.020)
<i>N</i>	2,263	2,263	333	2,186
<i>H</i> ₀ :	0.000	0.001	0.000	0.000
<u>Adopter=Chinese</u>				

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 12.
Sydney

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.096*** (0.014)	-0.112*** (0.021)	-0.103*** (0.021)	-0.288*** (0.065)	-0.113*** (0.021)
Adopter	-0.039*** (0.011)	-0.037*** (0.010)	-0.028* (0.015)	-0.119*** (0.038)	-0.038*** (0.011)
Female		0.032*** (0.010)	0.020 (0.013)	0.105*** (0.035)	0.032*** (0.010)
Honours		0.045*** (0.015)	0.034 (0.022)	0.163*** (0.050)	0.046*** (0.015)
Chinese*Honours		-0.013 (0.012)	0.041*** (0.013)	-0.015 (0.038)	-0.012 (0.012)
Business		0.042** (0.019)	0.074*** (0.027)	0.046 (0.069)	0.046** (0.020)
Listed					0.004 (0.025)
<i>N</i>	2,676	2,676	2,676	554	2,596
<i>H</i> ₀ : Adopter=Chinese	0.000	0.000	0.000	0.016	0.000
<i>H</i> ₀ : Adopter=Chinese *Honours	-	0.014	0.017	0.181	0.014

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 13.
Melbourne

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.057*** (0.012)	-0.052*** (0.015)	-0.040** (0.019)	-0.197*** (0.060)	-0.056*** (0.015)
Adopter	-0.026** (0.011)	-0.025** (0.011)	-0.025 (0.017)	-0.087* (0.045)	-0.026** (0.011)
Female		0.003 (0.011)	0.012 (0.015)	-0.000 (0.047)	0.005 (0.011)
Honours		0.054*** (0.017)	0.102*** (0.027)	0.093 (0.064)	0.056*** (0.018)
Chinese*Honours		-0.050** (0.020)	-0.098*** (0.019)	0.023 (0.044)	-0.057*** (0.021)
Business		0.011 (0.019)	0.029 (0.032)	0.014 (0.080)	0.001 (0.020)
Listed					0.015 (0.025)
<i>N</i>	2,026	2,026	2,026	382	1,908
H_0 : Adopter=Chinese	0.012	0.102	0.457	0.093	0.072
H_0 : Adopter=Chinese*Honours	-	0.436	0.206	0.217	0.791

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 14.
Recruiter Characteristics

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) CB	(5) Yes2	(6) Yes1
Chinese	-0.195*** (0.054)	-0.210*** (0.054)	-0.209*** (0.054)	-0.089* (0.051)	-0.260*** (0.069)	-0.208*** (0.053)
Adopter	-0.094*** (0.031)	-0.085*** (0.030)	-0.085*** (0.030)	-0.005 (0.036)	-0.115*** (0.043)	-0.085*** (0.030)
Female	0.067*** (0.024)	0.068*** (0.025)	0.065*** (0.025)	0.033 (0.030)	0.089** (0.035)	0.065*** (0.025)
Honours	0.086** (0.038)	0.087** (0.035)	0.088** (0.037)	0.021 (0.046)	0.131** (0.051)	0.087** (0.036)
Chinese*Honours	0.016 (0.031)	0.031 (0.035)	0.028 (0.036)	0.043 (0.031)	0.056 (0.051)	0.028 (0.036)
Female Recruiter		-0.085* (0.046)	-0.095** (0.046)	-0.057 (0.060)	-0.110* (0.065)	-0.094** (0.046)
White Recruiter		-0.195*** (0.053)	-0.184*** (0.052)	-0.081 (0.078)	-0.251*** (0.070)	-0.184*** (0.051)
Recruiter Experience		0.0003 (0.008)	0.0009 (0.0002)	-0.015 (0.011)	0.007 (0.010)	0.001 (0.007)
Recruiter Experience ²		-0.00007 (0.0002)	-0.00007 (0.0002)	0.0005 (0.0003)	-0.0002 (0.0002)	-0.00009 (0.0002)
Sydney	0.096** (0.045)		0.082** (0.042)	0.030 (0.056)	0.130** (0.057)	0.082** (0.042)
Business	-0.014 (0.052)		-0.022 (0.048)	-0.091 (0.068)	0.012 (0.067)	-0.023 (0.048)
Engineering	0.049 (0.118)		-0.022 (0.090)	-0.009 (0.110)	-0.054 (0.115)	-0.020 (0.091)
Listed						0.038 (0.058)
<i>N</i>	730	730	730	730	464	729
<i>H</i> ₀ : Adopter=Chinese	0.082	0.032	0.033	0.092	0.066	0.034
<i>H</i> ₀ : Adopter=Chinese *Honours	0.009	0.005	0.005	0.560	0.010	0.005

Probit marginal effects are reported.
Clustered standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

FIGURES

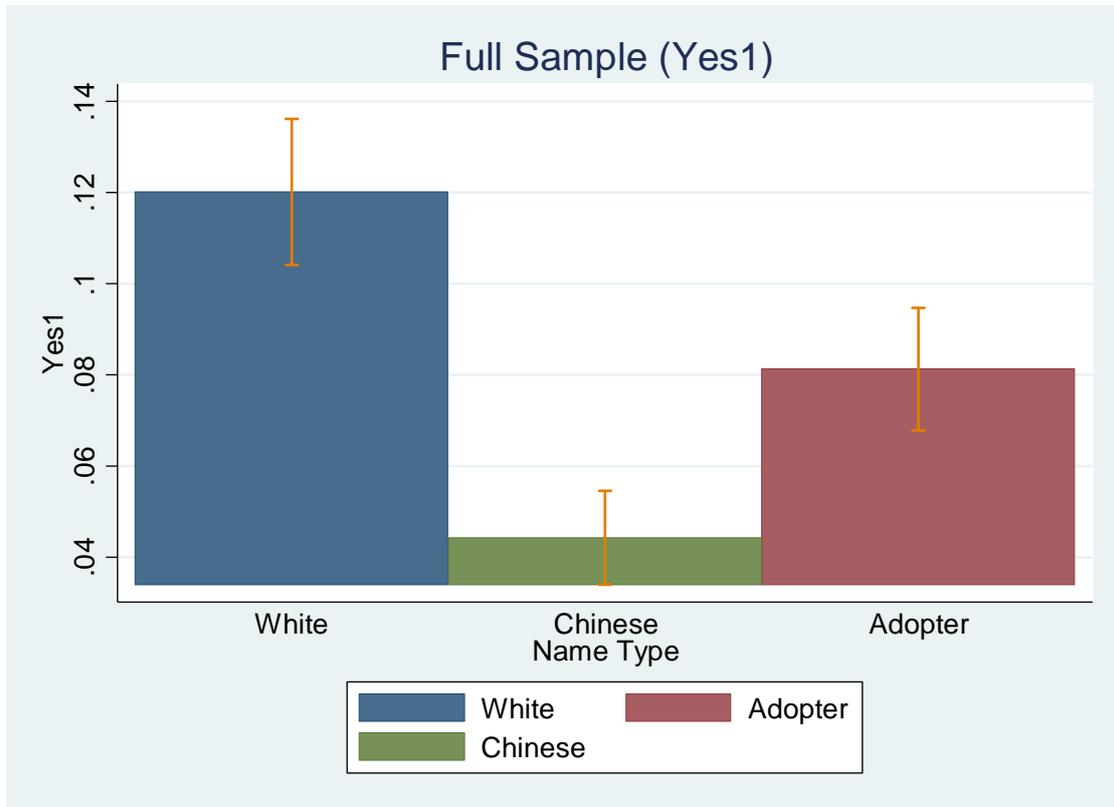


FIGURE 1. Mean Interview Offers (Yes1): Full Sample

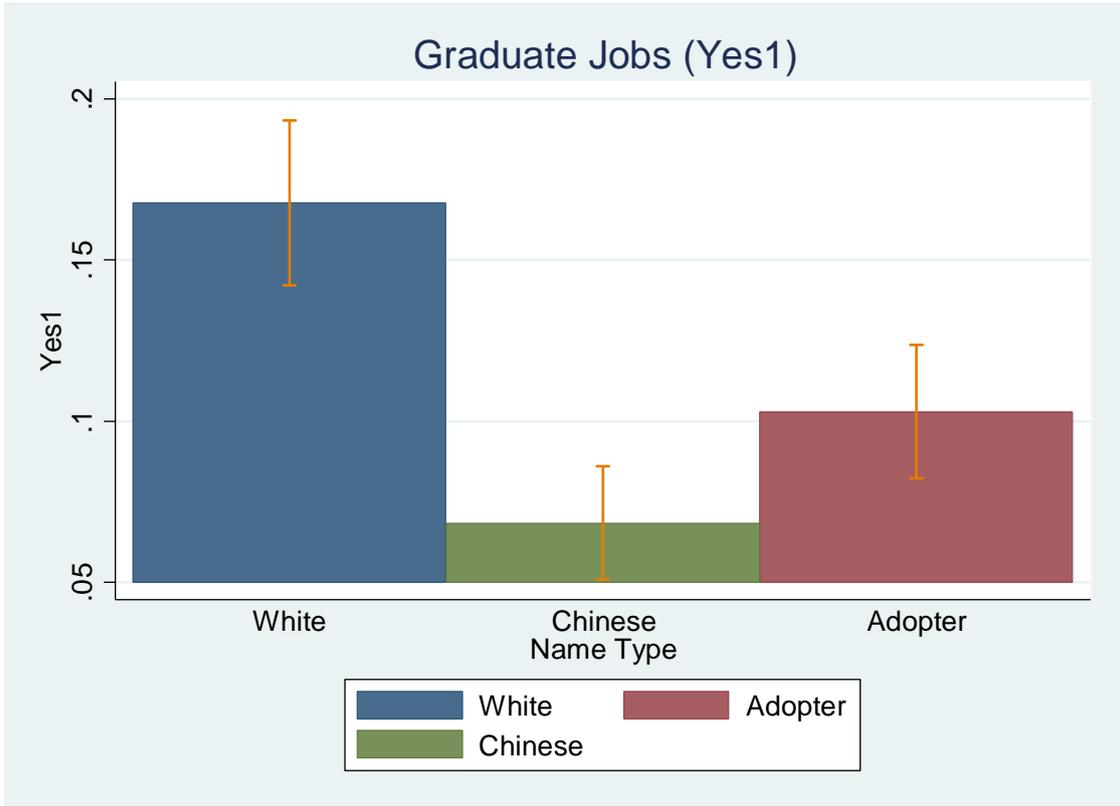


FIGURE 2. Mean Interview Offers (Yes1): Graduate Jobs

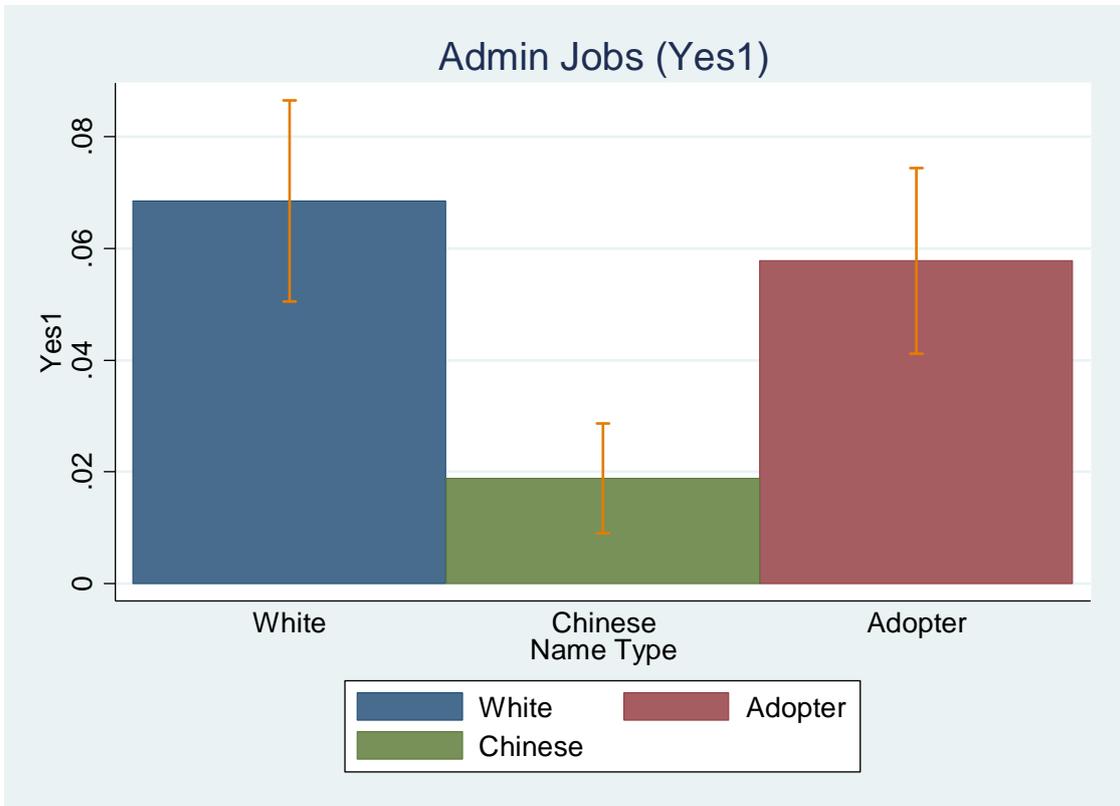


FIGURE 3. Mean Interview Offers (Yes1): Administration Assistant Jobs

APPENDIX

A. EVOLUTION OF CHINESE AND WHITE OUTCOMES

Table A1 tabulates the evolution of Chinese wages and employment using the 2001, 2006, and 2011 Australian Census 1% confidential sample. Again, the Chinese-White wage gap for University degree holders is large and increasing over time. Strikingly, the Chinese-White wage gap among university graduates doubled between 2001 and 2006 from 11.9 percent to 23 percent, and has remained steady at approximately 20 percent in 2011. At the high school level, the wage gap remains positive and significant, but does not appear to be increasing. With respect to employment by education level, the disparity in the level of employment between Chinese and Whites is large and statistically significant, and appears to remain stable over time. Finally, the wage gap in Business jobs was approximately 11 percent in 2001, but appears to have decreased over the past decade. In administration jobs, there has been a dramatic increase in the Chinese-White earnings disparity.

Table A1: .Evolution of Chinese and White Outcomes

<i>Panel A. Wage Gap by Education</i>																		
	2001						2006						2011					
	University			High School			University			High School			University			High School		
	White (1)	Chinese (2)	Difference (1)-(2)															
Log Hourly Wage	3.158 (0.006)	3.039 (0.021)	0.119***	2.874 (0.004)	2.903 (0.016)	-0.029*	3.410 (0.006)	3.180 (0.017)	0.230***	3.049 (0.003)	3.011 (0.012)	0.038***	3.603 (0.005)	3.405 (0.013)	0.198***	3.285 (0.003)	3.256 (0.010)	0.029***
<i>Panel B. Employment Gap by Education</i>																		
	2001						2006						2011					
	University			High School			University			High School			University			High School		
	White (1)	Chinese (2)	Difference (1)-(2)															
Proportion Employed	0.975 (0.001)	0.926 (0.009)	0.049***	0.937 (0.001)	0.895 (0.007)	0.042***	0.983 (0.001)	0.936 (0.006)	0.047***	0.954 (0.001)	0.918 (0.004)	0.036***	0.980 (0.001)	0.933 (0.005)	0.047***	0.951 (0.001)	0.914 (0.004)	0.037***
<i>Panel C. Wage Gap by Occupation</i>																		
	2001						2006						2011					
	Business			Admin			Business			Admin			Business			Admin		
	White (1)	Chinese (2)	Difference (1)-(2)															
Log Hourly Wage	2.929 (0.008)	2.820 (0.045)	0.109***	2.721 (0.005)	2.721 (0.026)	0	3.271 (0.010)	3.202 (0.026)	0.069**	2.967 (0.018)	2.890 (0.075)	0.077	3.471 (0.009)	3.450 (0.020)	0.021	3.214 (0.018)	3.031 (0.056)	0.183***

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. The sample size consists of $N=22,848$. Standard errors are reported in parentheses. Source: Census 1% CURF

B. BUSINESS JOBS

In this section of the supplementary appendix, Table B1 presents the probit marginal effect estimates for accounting and marketing jobs. The outcome of interest are the Yes1 interview offers for Chinese and Adopter job applicants, in comparison with White names, which form the base case. Each column reports standard errors clustered at the firm-level. The results indicate that, in both accounting and marketing jobs, Chinese names are roughly 13 percent less likely to receive an interview offer, when compared to White names, and the results are highly statistically significant. In contrast, the pattern of results for Adopters is mixed. The difference in the marginal effects between Chinese and Adopter CVs is statistically insignificant in accounting jobs; the p -value is 0.159. In contrast, the reduction in the racial gap for Adopters in marketing jobs is statistically significant at the 10 percent level. The p -value for the null hypothesis that the marginal effects for Chinese and Adopter CVs are indistinguishable is 0.069. In sum, the results indicate that there is a substantial improvement in outcomes for Adopters in marketing jobs, but not in accounting jobs. In other words, there are substantial returns for the use of a White first name for a Chinese job applicant in marketing jobs.

Table B1.
Interview Offers in Accounting and Marketing (Probit)

VARIABLES	Accounting		Marketing	
	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1
Chinese	-0.118*** (0.031)	-0.127** (0.061)	-0.101*** (0.022)	-0.126*** (0.042)
Adopter	-0.042* (0.024)	-0.041* (0.023)	-0.053*** (0.018)	-0.053*** (0.018)
Female		0.006 (0.022)		0.021 (0.019)
Honours		0.075*** (0.025)		0.041* (0.021)
Chinese*Honours		-0.064 (0.051)		-0.004 (0.019)
Sydney		0.036 (0.028)		0.024 (0.030)
<i>N</i>	652	652	1,076	1,076
<i>H</i> ₀ : Adopter=Chinese	0.010	0.159	0.031	0.069
<i>H</i> ₀ : Adopter=Chinese *Honours	-	0.422	-	0.096

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

C. LINEAR PROBABILITY MODEL REGRESSION RESULTS

This section of the supplementary appendix includes results from a linear probability model (LPM) specification, which repeats the same exercises as the probit regression marginal effect estimates from the results section of the study. The LPM follows the general form:

$$y = c + \delta_1 \text{Chinese Name}_i + \delta_2 \text{Adopter Name}_i + \alpha X_i + \varepsilon_i (2)$$

where y is a binary outcome variable equal to one if the job application receives a call-back or interview offer, c is the constant term, Chinese Name_i is a dummy variable equal to one if the job applicant has a Chinese first and last name, Adopter Name_i is a dummy variable equal to one if the job applicant is an Adopter, X_i includes controls for gender, locality, and job type, and ε_i is the error term. In all specifications, White names are the base category and the standard errors are clustered at the firm-level. The main effect of interest is δ_2 , which measures the *ceteris paribus* effect of a White first name on the probability of receiving a call-back or interview offer for a Chinese job applicant. A direct comparison of δ_1 and δ_2 will reveal whether adopting a White first name benefits equally skilled job applicants of Chinese ancestry.

Overall, the pattern of results from the LPM do not differ from the marginal effect estimates from the probit regressions. The LPM results indicate that there is a large Chinese-White racial gap in both interview offers (Yes1 and Yes2) and call-backs. Once again, using a White first name leads to a large improvement in the job search outcome for Adopter job applicants. Similar to the probit marginal effects, in the LPM results, we do not observe an improvement in outcomes for Adopters, compared to applicants with Chinese names, in graduate jobs. But, the Adopter-White racial gap in outcomes attenuates in administration assistant jobs.

Table C1.
Full Sample (LPM)

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1	(5) Yes1	(6) CB	(7) Yes2	(8) Yes1
Chinese	-0.0757*** (0.00880)	-0.0755*** (0.00878)	-0.0769*** (0.00873)	-0.0671*** (0.00907)	-0.0669*** (0.00911)	-0.0674*** (0.0130)	-0.239*** (0.0407)	-0.0692*** (0.00928)
Adopter	-0.0388*** (0.00903)	-0.0384*** (0.00901)	-0.0386*** (0.00895)	-0.0386*** (0.00896)	-0.0388*** (0.00896)	-0.0289** (0.0118)	-0.112*** (0.0305)	-0.0404*** (0.00921)
Female		0.0198*** (0.00761)	0.0201*** (0.00753)	0.0198*** (0.00753)	0.0199*** (0.00756)	0.0167* (0.00966)	0.0630** (0.0286)	0.0209*** (0.00765)
Honours			0.0789*** (0.0115)	0.0902*** (0.0145)	0.0667*** (0.0144)	0.0597*** (0.0189)	0.136*** (0.0411)	0.0685*** (0.0148)
Chinese*Honours				-0.0339* (0.0183)	-0.0340* (0.0185)	-0.0204 (0.0260)	0.00264 (0.0673)	-0.0352* (0.0190)
Sydney					0.0220** (0.0109)	0.00965 (0.0191)	0.0890* (0.0478)	0.0264** (0.0110)
Business					0.0320*** (0.0116)	0.0689*** (0.0203)	0.0396 (0.0540)	0.0308** (0.0120)
Engineering					0.0374 (0.0353)	0.0850* (0.0480)	0.0383 (0.103)	0.0385 (0.0359)
Listed								0.00737 (0.0230)
Constant	0.120*** (0.00888)	0.110*** (0.00929)	0.0878*** (0.00838)	0.0848*** (0.00855)	0.0621*** (0.00991)	0.165*** (0.0179)	0.351*** (0.0498)	0.0605*** (0.0101)
<i>N</i>	4,702	4,702	4,702	4,702	4,702	4,702	936	4,504
<i>R</i> ²	0.013	0.014	0.031	0.031	0.035	0.024	0.076	0.038
<i>H</i> ₀ : Adopter=Chinese	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000
<i>H</i> ₀ : Adopter=Chinese*Honours	-	-	-	0.814	0.809	0.759	0.113	0.803

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table C2.
Graduate Jobs (LPM)

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.0843*** (0.0185)	-0.0862*** (0.0186)	-0.0819*** (0.0278)	-0.220*** (0.0670)	-0.0895*** (0.0191)
Adopter	-0.0649*** (0.0140)	-0.0654*** (0.0140)	-0.0502*** (0.0175)	-0.154*** (0.0378)	-0.0689*** (0.0145)
Female	0.00688 (0.0116)	0.00708 (0.0116)	0.000950 (0.0146)	0.0239 (0.0355)	0.00676 (0.0118)
Honours	0.0669*** (0.0154)	0.0660*** (0.0155)	0.0604*** (0.0208)	0.146*** (0.0439)	0.0676*** (0.0159)
Chinese*Honours	-0.0310 (0.0242)	-0.0288 (0.0244)	-0.0176 (0.0365)	-0.0411 (0.0906)	-0.0299 (0.0250)
Sydney		0.0341* (0.0186)	0.0202 (0.0293)	0.110* (0.0637)	0.0441** (0.0188)
Business		-0.00582 (0.0360)	-0.0134 (0.0481)	-0.000843 (0.102)	-0.00950 (0.0366)
Listed					0.00383 (0.0286)
Constant	0.128*** (0.0161)	0.113*** (0.0367)	0.260*** (0.0490)	0.407*** (0.102)	0.113*** (0.0376)
<i>N</i>	2,439	2,439	2,439	603	2,318
<i>R</i> ²	0.025	0.028	0.012	0.068	0.031
<i>H</i> ₀ : Adopter=Chinese	0.267	0.236	0.226	0.351	0.251
<i>H</i> ₀ : Adopter=Chinese*Honours	0.220	0.190	0.420	0.233	0.175

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table C3.
Administration Assistant Jobs (LPM)

VARIABLES	(1) Yes1	(2) CB	(3) Yes2	(4) Yes1
Chinese	-0.0497*** (0.00985)	-0.0540*** (0.0138)	-0.225*** (0.0527)	-0.0513*** (0.00998)
Adopter	-0.0108 (0.0107)	-0.00700 (0.0156)	-0.0319 (0.0509)	-0.0112 (0.0109)
Female	0.0330*** (0.00938)	0.0329*** (0.0125)	0.141*** (0.0492)	0.0351*** (0.00960)
Sydney	0.0101 (0.0112)	-0.000957 (0.0245)	0.0518 (0.0703)	0.00918 (0.0115)
Listed				0.0181 (0.0255)
Constant	0.0468*** (0.0103)	0.151*** (0.0205)	0.293*** (0.0645)	0.0465*** (0.0107)
<i>N</i>	2,263	2,263	333	2,186
<i>R</i> ²	0.016	0.007	0.068	0.018
<i>H</i> ₀ :	0.000	0.001	0.002	0.000
Adopter=Chinese				

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table C4.
Sydney (LPM)

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.0924*** (0.0129)	-0.0855*** (0.0136)	-0.0926*** (0.0188)	-0.279*** (0.0589)	-0.0861*** (0.0139)
Adopter	-0.0469*** (0.0130)	-0.0457*** (0.0128)	-0.0312* (0.0160)	-0.124*** (0.0399)	-0.0467*** (0.0130)
Female		0.0323*** (0.0101)	0.0204 (0.0129)	0.106*** (0.0359)	0.0321*** (0.0103)
Honours		0.0690*** (0.0195)	0.0425* (0.0250)	0.172*** (0.0526)	0.0706*** (0.0203)
Chinese*Honours		-0.0195 (0.0252)	0.0370 (0.0338)	-0.00726 (0.0900)	-0.0203 (0.0262)
Business		0.0361** (0.0174)	0.0716*** (0.0267)	0.0435 (0.0697)	0.0402** (0.0180)
Listed					0.00228 (0.0289)
Constant	0.141*** (0.0129)	0.0836*** (0.0132)	0.184*** (0.0203)	0.418*** (0.0596)	0.0841*** (0.0135)
<i>N</i>	2,676	2,676	2,676	554	2,596
<i>R</i> ²	0.017	0.040	0.026	0.095	0.042
<i>H</i> ₀ : Adopter=Chinese	0.000	0.001	0.000	0.010	0.001
<i>H</i> ₀ : Adopter=Chinese*Honours	-	0.351	0.063	0.232	0.363

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table C5.
Melbourne (LPM)

VARIABLES	(1) Yes1	(2) Yes1	(3) CB	(4) Yes2	(5) Yes1
Chinese	-0.0553*** (0.0115)	-0.0445*** (0.0115)	-0.0383** (0.0177)	-0.187*** (0.0547)	-0.0480*** (0.0114)
Adopter	-0.0295** (0.0121)	-0.0301** (0.0121)	-0.0268 (0.0175)	-0.0918* (0.0475)	-0.0322** (0.0126)
Female		0.00334 (0.0116)	0.0117 (0.0148)	-0.000601 (0.0474)	0.00529 (0.0116)
Honours		0.0763*** (0.0243)	0.120*** (0.0329)	0.0993 (0.0689)	0.0790*** (0.0248)
Chinese*Honours		-0.0503* (0.0272)	-0.102** (0.0412)	0.0299 (0.103)	-0.0532* (0.0274)
Business		0.0102 (0.0197)	0.0286 (0.0324)	0.0137 (0.0809)	-5.77e-05 (0.0201)
Listed					0.0192 (0.0321)
Constant	0.0942*** (0.0115)	0.0705*** (0.0124)	0.171*** (0.0213)	0.390*** (0.0596)	0.0717*** (0.0126)
<i>N</i>	2,026	2,026	2,026	382	1,908
<i>R</i> ²	0.008	0.023	0.021	0.037	0.024
<i>H</i> ₀ : Adopter=Chinese	0.014	0.201	0.524	0.095	0.157
<i>H</i> ₀ : Adopter=Chinese*Honours	-	0.485	0.084	0.269	0.472

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table C6.
Recruiter Characteristics (LPM)

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) CB	(5) Yes2	(6) Yes1
Chinese	-0.169*** (0.0391)	-0.177*** (0.0392)	-0.177*** (0.0392)	-0.0899* (0.0531)	-0.236*** (0.0554)	-0.177*** (0.0393)
Adopter	-0.105*** (0.0338)	-0.0970*** (0.0335)	-0.0967*** (0.0336)	-0.00444 (0.0365)	-0.127*** (0.0469)	-0.0970*** (0.0335)
Female	0.0701*** (0.0246)	0.0689*** (0.0249)	0.0678*** (0.0249)	0.0334 (0.0304)	0.0925** (0.0362)	0.0677*** (0.0249)
Honours	0.0991** (0.0420)	0.0978** (0.0410)	0.0985** (0.0406)	0.0232 (0.0472)	0.145*** (0.0552)	0.0972** (0.0407)
Chinese*Honours	0.0317 (0.0544)	0.0488 (0.0557)	0.0481 (0.0540)	0.0388 (0.0662)	0.0745 (0.0820)	0.0479 (0.0540)
Female Recruiter	0.0701*** (0.0246)	-0.0954* (0.0527)	-0.105** (0.0525)	-0.0548 (0.0602)	-0.118* (0.0704)	-0.104** (0.0523)
White Recruiter		-0.231*** (0.0736)	-0.220*** (0.0718)	-0.0777 (0.0745)	-0.277*** (0.0843)	-0.220*** (0.0723)
Recruiter Experience		0.00158	0.00277	-0.0148	0.00899	0.00342
Recruiter Experience ²		(0.00771) -0.000109 (0.000201)	(0.00773) -0.000124 (0.000197)	(0.0106) 0.000450* (0.000257)	(0.00996) -0.000265 (0.000237)	(0.00771) -0.000134 (0.000197)
Sydney	0.0925** (0.0423)		0.0822** (0.0410)	0.0329 (0.0578)	0.138** (0.0588)	0.0823** (0.0412)
Business	-0.0138 (0.0460)		-0.0215 (0.0432)	-0.0905 (0.0683)	0.0118 (0.0637)	-0.0217 (0.0432)
Engineering	0.0490 (0.133)		-0.00773 (0.0961)	-0.0118 (0.101)	-0.0479 (0.112)	-0.00657 (0.0970)
Listed						0.0393 (0.0680)
Constant	0.167*** (0.0451)	0.480*** (0.100)	0.431*** (0.105)	0.859*** (0.119)	0.493*** (0.135)	0.420*** (0.107)
<i>N</i>	730	730	730	730	464	729
<i>R</i> ²	0.061	0.107	0.116	0.028	0.167	0.117
<i>H</i> ₀ :	0.123	0.053	0.052	0.094	0.072	0.054
Adopter=Chinese						
<i>H</i> ₀ :	0.020	0.014	0.013	0.553	0.019	0.012
Adopter=Chinese*Honours						

Clustered standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table C7.
Interview Offers in Accounting and Marketing (LPM)

VARIABLES	Accounting		Marketing	
	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1
Chinese	-0.107*** (0.0271)	-0.0772*** (0.0265)	-0.101*** (0.0212)	-0.107*** (0.0293)
Adopter	-0.0527* (0.0296)	-0.0530* (0.0292)	-0.0602*** (0.0207)	-0.0599*** (0.0204)
Female		0.00907 (0.0223)		0.0216 (0.0190)
Honours		0.0896*** (0.0277)		0.0456* (0.0241)
Chinese*Honours		-0.0526 (0.0366)		0.00456 (0.0350)
Sydney		0.0358 (0.0264)		0.0231 (0.0285)
Constant	0.136*** (0.0257)	0.0602* (0.0331)	0.180*** (0.0214)	0.130*** (0.0305)
<i>N</i>	652	652	1,076	1,076
<i>R</i> ²	0.024	0.047	0.015	0.023
<i>H</i> ₀ : Adopter=Chinese	0.009	0.321	0.036	0.074
<i>H</i> ₀ : Adopter=Chinese*Honours	-	0.992	-	0.131

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

D. RACIAL GAPS BY GENDER

In this section, we examine the effect of adopting a White first name for male and female job applicants of Chinese ancestry. To investigate whether the impact of White first name adoption on the probability of obtaining an interview offer varies by gender, race and gender interaction effects are included in the probit regression specification for both Chinese and Adopter job applicants, according to (1). The results are presented in Table D1. In all cases, White names form the comparison group, and the standard errors are clustered at the firm level.

The results for the preferred specification are presented in column 4, which measures the influence of White first name adoption on the probability of receiving a Yes1 interview offer. The difference in the marginal effects between males and females indicate that the benefit of using a White first name in the labour market accrues mainly to male job applicants. Chinese males are -5.9 percent less likely to receive an interview offer, holding all other factors constant, than White males. In contrast, Adopter males are 3.4 percentage points more likely to receive an interview offer than Chinese males, and the reduction in the racial gap is highly statistically significant. In contrast, among the female job applicants, the difference in interview offers between Chinese and Adopter women is statistically insignificant.

Both Chinese male and female job applicants are substantially less likely to receive an interview offer, in comparison with White males. Furthermore, despite the benefit of using a White first name, male Adopters are -2.5 percent less likely to receive an interview offer, which is statistically significant at the 5 percent level. Interestingly, the results do not suggest that female Adopters face discrimination in interview offers; the marginal effect for female Adopters is -1.8 percent, but is not statistically significant. The results suggest that female Adopters are just as likely as White males to receive an interview offer. Thus, even though the CVs are observably identical, there are substantial benefits associated with using a White first name in the Australian labour market for a Chinese job applicant.

Turning to call-backs (CB), recruiters are reluctant to contact job applicants with a Chinese first name. The marginal effects for both Chinese males and females are large and negative. However, the results for the Adopter job applicants are statistically insignificant, implying that recruiters are just as likely to contact Adopters, relative to White males.

Table D1.
Full Sample: Race and Gender Effects (Probit)

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1	(5) CB	(6) Yes2	(7) Yes1
Chinese	-0.078*** (0.033)	-0.077*** (0.009)	-0.056*** (0.012)	-0.059*** (0.012)	-0.043*** (0.016)	-0.203*** (0.046)	-0.061*** (0.013)
Adopter	-0.033*** (0.077)	-0.032*** (0.007)	-0.024** (0.010)	-0.025** (0.010)	-0.012 (0.015)	-0.099** (0.040)	-0.025** (0.010)
Female		0.018** (0.007)	0.033*** (0.011)	0.032*** (0.011)	0.043*** (0.016)	0.081* (0.042)	0.033*** (0.011)
Chinese*Female			-0.045*** (0.010)	-0.042*** (0.010)	-0.059*** (0.014)	-0.072** (0.034)	-0.044*** (0.011)
Adopter*Female			-0.021* (0.011)	-0.018 (0.011)	-0.028 (0.016)	-0.0155 (0.041)	-0.020* (0.011)
Honours				0.043*** (0.009)	0.045*** (0.013)	0.130*** (0.034)	0.044*** (0.009)
Sydney				0.021* (0.011)	0.009 (0.019)	0.087* (0.047)	0.026** (0.011)
Business				0.038*** (0.012)	0.072*** (0.020)	0.043 (0.054)	0.037*** (0.013)
Engineering				0.044 (0.028)	0.086** (0.042)	0.042 (0.100)	0.045 (0.029)
Listed							0.006 (0.018)
Constant	-1.174*** (0.0444)	-1.243*** (0.0529)	-1.297*** (0.0621)	-1.651*** (0.0846)	-1.036*** (0.0761)	-0.439*** (0.147)	-1.670*** (0.0877)
<i>N</i>	4,702	4,702	4,702	4,702	4,702	936	4,504
H_0 : Adopter=Chinese	0.000	0.000	0.000	0.008	0.048	0.033	0.010
H_0 : Adopter*Fem=Chinese*Fem	-	-	0.183	0.213	0.168	0.460	0.193
H_0 : White*Fem=Chinese*Fem	-	-	0.004	0.008	0.005	0.140	0.006
H_0 : White*Fem=Adopter*Fem	-	-	0.040	0.060	0.051	0.306	0.051

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

E. FULLY SATURATED MODEL

The results from Table E1 report the marginal effects from a fully saturated probit regression for the full sample. Overall, the pattern of results in Table E1 is similar to the estimates reported in Table 9, and the main conclusions remain unchanged. When comparing Adopters and Chinese who possess an Honours degree, the results indicate that Adopters with an Honours degree are more likely to receive both an interview offer and a call-back than Chinese with an Honours degree. Thus, it appears that an identical job applicant with an Honours degree of Chinese ancestry benefits from the use of a White first name in the Australian labour market. However, the difference is not statistically significant at the conventional levels.

Table E1.
Full Sample: Fully Saturated Model

VARIABLES	(1) Yes1	(2) Yes1	(3) Yes1	(4) Yes1	(5) Yes1	(6) CB	(7) Yes2	(8) Yes1
Chinese	-0.078*** (0.009)	-0.078*** (0.009)	-0.079*** (0.009)	-0.083*** (0.013)	-0.083*** (0.013)	-0.070*** (0.014)	-0.246*** (0.047)	-0.085*** (0.014)
Adopter	-0.033*** (0.008)	-0.033*** (0.008)	-0.032*** (0.008)	-0.030*** (0.009)	-0.029*** (0.009)	-0.021 (0.014)	-0.101*** (0.038)	-0.029*** (0.010)
Female		0.019** (0.008)	0.019** (0.008)	0.019*** (0.007)	0.019*** (0.007)	0.017* (0.009)	0.063** (0.028)	0.021*** (0.007)
Honours			0.070*** (0.009)	0.068*** (0.010)	0.044*** (0.013)	0.055** (0.022)	0.130** (0.053)	0.046*** (0.013)
Chinese*Honours				-0.046*** (0.012)	-0.026*** (0.009)	-0.021** (0.010)	-0.009 (0.029)	-0.030*** (0.010)
Adopter*Honours				-0.027** (0.012)	-0.018** (0.009)	-0.020** (0.010)	-0.021 (0.028)	-0.023** (0.009)
Sydney					0.021* (0.011)	0.009 (0.019)	0.087* (0.047)	0.026** (0.011)
Business					0.038*** (0.012)	0.072*** (0.020)	0.042 (0.054)	0.037*** (0.013)
Engineering					0.044 (0.028)	0.086** (0.042)	0.042 (0.101)	0.045 (0.029)
Listed								0.007 (0.019)
<i>N</i>	4,702	4,702	4,702	4,702	4,702	4,702	936	4,504
<i>H</i> ₀ : Adopter=Chinese	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000
<i>H</i> ₀ : Adopter*Honours=Chinese*Honours	-	-	-	0.510	0.479	0.815	0.642	0.417

Probit marginal effects are reported.

Clustered standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1