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# Immigration and crime: Do Asian immigrants bring more crimes to Australia?

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**Abstract**

The link between the increased Asian immigration to Australia and crime rates has been subjected to debates in Australian contemporary society. With the concern of Australia being overwhelmed by Asians, some politicians, scholars and the public strongly oppose the increase in Asian immigrants. Most of anti-Asian debates are however based on rather subjective claims that Asian immigrants bring more crimes and social disorders to Australia, and these claims have not been supported by any convincing empirical research.

Applying multivariate regression analysis, this paper statistically examines the relationship between Asian population, Asian immigrants and crime rates in six states and two territories of Australia from 1981 to 2004. After controlling for the relevant factors such as the population size, state-specific fixed effects, and a measure of urbanisation, the results are mixed. On the one hand, an increase in Asian immigrants has no effect on crime against persons and crime against properties. On the other hand, an increase in the size of Asian population has a statistically significant effect on crime against persons.

# IMMIGRATION AND CRIME: DO ASIAN IMMIGRANTS BRING MORE CRIMES TO AUSTRALIA?

**Tran Nguyen**

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*This discussion paper is a revised version of a Policy Analysis Report written as part of the requirements for master in public policy, Australian National University.*

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## 1. INTRODUCTION

> *I believe we are in danger of being swamped by Asians. Between 1984 and 1995, 40 per cent of all migrants coming into this country were of Asian origin. They have their own culture and religion, form ghettos and do not assimilate* (Pauline Hanson, Maiden Speech to the Parliament, September 1996)

> *Asians are not responsible for our crime rate. In fact, to the extent that the Bureau of Criminology keeps statistics of crime rates of different ethnic groups in this country, the ethnic Asian community has one of the lowest crime rates in Australia* (Senator Bill O'Chee, October 1996).

The recent increase in the proportion of Asian population has caused a growing public concern in Australia. After the abolishment of the 'White Australia Policy' under the E. G. Whitlam government in 1972, the specific geographic position of Australia has made the country a favourable destination for Asian immigrants. In 2001, there were 969,782 Asian-born in Australia, compared to 101,387 in 1966 (ABS 2005). At the same time, crime rates have tended to increase over the last decades. The household crime victimisation rate[1] in New South Wales, for example, increased from 4.6 per cent in 1998 to 5.7 per cent in 2002, and in Victoria, it increased from 4.2 per cent to 5.2 per cent during the same period (ABS 2003). For those who have negative opinions toward the Asian immigration, these statistics provide them convincing evidence: the more arriving Asian immigrants, the higher crime rates.

For a long time, there has been an ongoing public debate on the issue of Asian immigration in Australia. A number of politicians and scholars have claimed that Asian immigrants brought social disorders to Australia and have argued for tightening immigration policy. The first Minister for Immigration, Arthur Calwell asserted that: 'What is wrong with most coloured migrants is that they form hard core, anti-white, "black power" pressure groups in every country that accepts them' (1972:5). By mentioning 'coloured migrants', he referred mainly to Asian and African immigrants, who according to him, would lead to bloodshed and disaster in Australia (Calwell 1972). Furthermore, responding to the issue of Asian immigration, John Howard, as the leader of Liberal Party in 1988, remarked that 'it would be in our medium term

[1] 'For household crimes, information was collected on households that had experienced a break-in to their dwelling, that had found signs of an attempted break-in, and that had any motor vehicles stolen in the 12 months prior to the survey' (ABS, Crime and Safety 2002:2)

interest and supportive of social cohesion if it were slow down a little so the capacity of the communities to absorb were greater' (Jupp 2002:111).

The controversy about *Asianisation* of Australia was expressed in G Blainey's '*All for Australia'* published in 1984, and by the substitute views collected by two authors: A. Markus and M.C. Ricklefs in '*Surrender Australia?'* published in 1985 (Jupp 1988). Another rampant anti-Asian immigration view was raised openly by Pauline Hanson in her maiden speech to the Parliament on 10th September 1996, and later in her book '*The Truth'* published in 1997 (Jupp 2002). Recently, an associate professor in the Department of Public Law of Macquarie University, Andrew Fraser, claims that there is a threat of rising ruling class of Asians and suggests Australia to withdraw from the refugee conventions to avoid becoming 'a colony of the Third World' (SMH 2005).

These continuing anti-Asians claims have caused certain influences on a large number of ordinary people. For example, public opinion polls, such as Morgan Gallup Poll, have shown little approval of Asian immigration. In 1977, for example, the arriving of the boat people from Vietnam contributed to the increase in the opposition of Asian immigrants from one in five to one in three. By 1981, 70 per cent of respondents wanted immigrants from white English culture or with European backgrounds (Goot 1988).

On the other hand, politicians recognise that Australia needs to increase labour force, which will no longer come from the founding British nations. Pro-immigration scholars argue that immigration contributes to higher living standards in Australia through improving human capital accumulation and introducing cultural diversity (Withers 1999). Also, it is pragmatic to consider that increases in Asian tourists and students contribute a great proportion of incomes for Australian tourism and education industries (Jupp 2002). There is a dilemma whilst confronting two aspects. First, the increasing influx of Asians to Australia has brought substantial economic benefits. Second, as the proportion of Anglo-Celtic population is reducing in the coming decades, there is a threat of *Asianisation* of Australia (Jupp 2002). This dilemma put a question mark on the multiculturalism policy and immigration policy: Should or should not Australia continue to promote multiculturalism and to open for more relaxed immigration policy in the future. Predictably, conservative critique on

multiculturalism often reveals that Asians bring more crime to Australia and argues for tightening immigration policy to reduce the number of Asian intakes.

The objective of this policy analysis report is to contribute empirical evidence to the debate on the link between Asian immigration and crime in Australia through applying statistical analysis. Multivariate regressions are applied to analyse data from six states and two territories from 1981 to 2001. After controlling for the relevant factors such as the population size, state-specific fixed effects, and a measure of urbanisation, the results of the regressions are mixed. An increase in the annual influx of Asian immigrants has no effect on crime against persons and crime against properties. However, an increase in the size of Asian population has a statistically significant effect on crime against persons. This is a complex phenomenon that should be analysed further.

The organization of this paper is following. The next section reviews the literature on the link between immigration, ethnicity and crime. The third section explains data, variables, and presents the findings of multivariate analysis. Finally, the last section discusses the avenue of future studies and policy implications.

## 2. IMMIGRATION, ETHNICITY AND CRIME

This section reviews the literature on the links between immigration, ethnicity and crime, in particular, the link between Asian immigration and crime in Australia. In general, academic researches on these issues have raised three conventional arguments. First, immigrant groups from different ethnicities may involve to crime at disproportional rates. Second, some immigrant groups tend to inherit disadvantaged socio-economic status from their ethnic communities in the hosted countries. As the results of poverty and lack of economic opportunities, immigrants may commit more crimes than natives do. Third, immigrants often face problems of acculturation and assimilation. Thus, conflicts between different ethnic immigrant groups may contribute to increases in crime rates in the hosted countries.

It has been stated that different immigration groups contribute disproportional rates to crime offences in the hosted countries. For example, Australian prison census data

reports in the late 1980s showed that the proportions of prisoners from some Asian groups are higher than the average levels (Hazelhurst and Kerley 1989, Mukherjee 1999). Many empirical studies on immigration, ethnicity and crime conclude that there is not sufficient evidence to conclude that higher number of immigration leads to higher crime rates (Hazelhust and Kerley 1989, Mukherjee 1999, Martinez and Lee 2000, and Shloenhardt 2001). However, most of these studies have not been based on comprehensive data but on different case studies on specific locations and specific ethnic groups of immigrants. Up to now, there is no substantiation of a compelling empirical study that uses statistical analysis to examine the relationship between Asian immigrants and crime rates in Australia.

Available statistics (often incomplete) on the immigration-crime link in Australia show four main patterns. First, the incidence of crimes among immigrants is considerably lower than crimes among the general population (Hazelhust and Kerley 1989). This conclusion is based on the figures of prisoners provided by the Dovey[2] reports of 1952, 1955 and 1957. National prison sensus, with the database standardised by the Australian Institute of Criminology (AIC) in 1982, shows the same results for the period 1982-1985: the number of Australian-born prisoners is higher than the number of overseas born prisoners (Hazelhust and Kerley 1989). Second, immigrants tend to commit offences against persons. From the Dovey reports 1952-1957, the largest proportion of offences committed by overseas-born residents was crime against persons. Immigrants aged 20-35 committed 67.6 per cent of all alien crimes. The Prison Census in 1971 produced similar result (Hazelhust and Kerley 1989:269). Third, the longer the immigrants' period of residence, the closer their offending rates draw to those of the general population (Hazelhust and Kerley 1989). This convergence in crime offending rates are revealed in the Dovey reports and reinforced by later findings but the underlying logic of this convergence is not satisfactorily explained (Hazelhust and Kerley 1989). Finally, the crime rates of different ethnic groups are varied (Hazelhust and Kerley 1989). Nevertheless, from these findings, the relationship between Asian immigrant group and crime rates has not been analysed.

[2] In the 1950s, there were three reports (called Dovey reports) generated by the Common Wealth Advisory Council (1952, 1955 and 1957). These reports were made due to the concern about the possible links between ethnicity and crime. Nevertheless, these three Dovey reports found that in fact, migrants were under-represented in crimes (Collins 2002:7)

From the above four main patterns of immigration-crime link, this study emphasises two crucial issues that should be considered whilst verifying the claim that Asian immigrants bring more crimes to Australia. First, the interaction between Asian immigrant group and crime rates should be analysed whilst considering the effect caused by the other immigrant groups on crime. Statistical analysis therefore should be able to examine and compare the effects caused by Asian immigrant group and the effect caused by non-Asian immigrant groups on crime rates. Second, it is important to make a distinction between the short-term effect and the long-term effect caused by the new Asian arrivals and the existing Asian communities in Australia respectively. This classification is based on a simple logic: Asian immigrants may either import violence and social disorders from the source countries or inherit the socio-economic disadvantages from Asian communities in the hosted countries.

Over the last two decades, criminological literature has indicated that in some cases, socio-economic disadvantages and disorganised communities of some ethnic groups may contribute to the crime problems. Also, new immigrants from some source countries may likely inherit these disadvantages and fall into more disorganised communities than others (Mukherjee 1999). Official statistics from Europe, North America, New Zealand and Australia show members of some immigrant groups are arrested, convicted and imprisoned at a disproportionately high rate. A large number of them also appear as the victims. The evidence however is based on neither comprehensive statistics within countries nor data gathered over time (Mukherjee 1999). In 1981, R.D. Francis tried to prove that the immigrant crime rates would be higher than that of the Australian born. However, statistical data did not support this hypothesis (Collins 2002). In general, there is no compelling quantitative analysis shows whether Asian immigrant groups, including existing Asian population and Asian immigration are linked to more crime offences in Australia.

Satyanshu Mukherjee (1999) conducts a statistical analysis on the ethnicity-crime link in Australia by examining (1) alleged offenders by country of birth across 25 migrant groups in Victoria, comparing data from 1993-94 with data from 1996-97, and (2) prisoners by country of birth across nine migrant groups in Australia using National Prison Census data from 1983 to 1997. This analysis showed that immigrants from

some source countries such as New Zealand, Lebanon, Vietnam, Turkey, and Cambodia had a higher involvement in crime per capita than those were born in Australia (Mukherjee 1999:3). However, this analysis was not based on a large number of observations to have a reliable conclusion. In order to improve the understanding of ethnicity-crime link, Mukherjee proposes three recommendations. First, statistics on ethnicity and crime should be collected at each stage of the criminal justice system, especially at the police level (Mukherjee 1999). Second, demographic and socio-economic statistics for immigrant groups should be collected regularly to analyse the differences between immigrant groups and to explain the ethnicity-crime relationship (Mukherjee 1999). Third, it is vital to have a proper definition of ethnicity and this definition should include a clear definition of first, second and third generations of immigrants (Mukherjee 1999).

Two thirds of the world's population are Asians that contributes to the rapid increasing influx of Asian immigrants to Australia, Europe and North America. Prejudicial attitudes toward Asian immigrants are prominent not only in Australia. In the 1980s, reported crimes against Asian Americans were emerged in some communities in the USA. Some claim that Asian immigrants come from 'jungle communities', eat dogs, and cause unfair labour competition as they work 'day and night' (Martinez and Lee 2000). In 1986, an article in the *Nation* asserted that the United States and Canada should cooperate to limit the number of Asian immigrants, otherwise America would be a 'mere entertainment' for Asians (Martinez and Lee 2000). These prejudices and the claim that Asian immigrant group is a highly criminal population can trigger crimes against Asian immigrants (Martinez and Lee 2000). Whilst examining the increases in crime rates, it is essential to classify clearly the whether Asians are offenders or victims of crimes. The current statistics in Australia unfortunately do not provide this clarification.

Schloenhardt (2001) also indicates the problems of 'racist' and 'xenophobia' that has been arisen in the destination countries and other forms of violence toward immigrant groups. He indicates that the local population tends to have hostile attitude toward immigration when there is a coincidence between a declining economy, increasing unemployment rates and higher number of illegal immigrants (Schloenhardt 2001). As a consequence of the illegal status and lack of working opportunities, many

immigrants engage or are forced to criminal activities such as prostitution and pimping, drug-related crime and other minor property offences (Schloenhardt 2001). Although this logic is compelling and simple however, Schloenhardt (2001) admits that there is no appropriate evidence to support this hypothesis.

Furthermore, three main obstacles should be considered whilst designing a statistical analysis to examine the relationship between ethnicity and crime in Australia. First, ethnicity is a difficult and concept to quantify as it involves many aspects such as country of origin, language, religion and physical appearance (Mukherjee 1999). Second, there are problems in the definition of crime patterns across the country. Adam Graycar, the director of AIC remarks: 'It has only since 1993 that Australia has had crime statistics that can in any way be described as uniform. Even so, they cover nine sets of offences, and are confined to report to police' (Graycar 2001:3). Third, reported crime patterns and recording methodologies have been changed. For example, one hundred years ago in Australia, crime included drunkenness, gambling, and 'Chinese opium dens', whereas nowadays crime concerns other issues such as cyber crime, drug trafficking, domestic violence and family burglary (Graycar 2001).

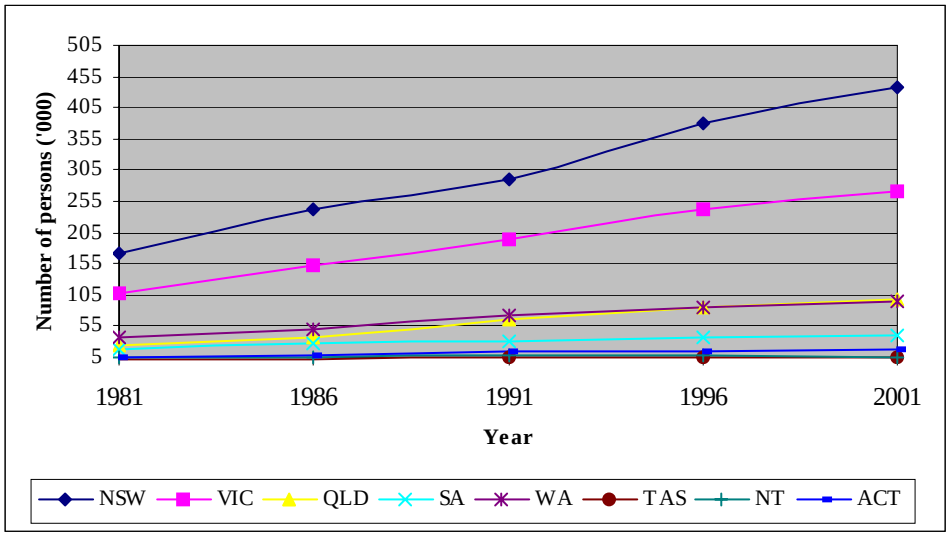
This study, however, states that whilst applying statistical analysis on the links between immigration, ethnicity, and crimes, these obstacles can be overcome in by conducting a reliable and systematic analysis on two issues. Firstly, the ethnicities of immigrants can be clearly defined by referring to the person's country of birth, not by physical appearance and religion. For example, Asian immigrant group can be defined as people who were born in a list of Asian countries such as China, Vietnam, and India. Secondly, statistical analysis should select common crime patterns that have been recorded consistently in all states and territories at least for some decades. For example, the number of homicide, the number of vehicle theft, and the number of household break in and so on.

Figure 1 illustrates the distribution of Asian population in the eight states and territories of Australia for the period 1981-2001. This indicates that although Asian population has increased rapidly in all states and territories, it is highly concentrated in some states such as New South Wales, Victoria, and Queensland. For example, in New South Wales, the number of Asian population has been almost triple over twenty

years from 1981 to 2001. Figure 2 shows the total number of Asian settler arrivals have entered Australia at each state and territory for the period 1993-2003. This figure exhibits that the total number of Asian immigrants arriving to each state and territory in each year has been fluctuated with an upward trend. These two figures also show that Asian immigrants tend to choose New South Wales, Victoria and Queensland, where have the big Asian population to settle down. This study therefore states that the statistical analysis on the Asians-crime link would be more comprehensive and objective if all states and territories are included in the regression analysis model.

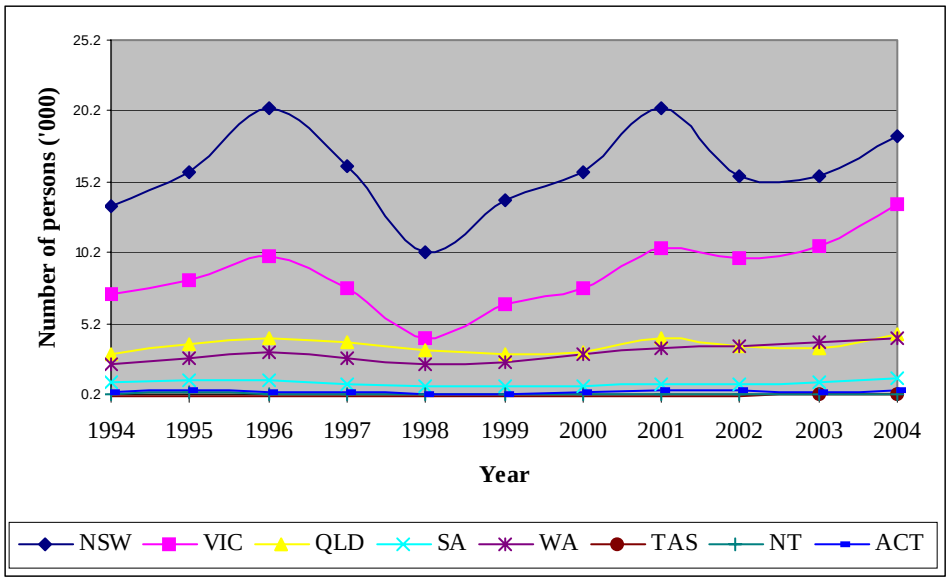
Figure 3 and figure 4 show the relationships between the number of Asian immigrants, the total of crime against persons, and the total of crime against properties in eight states and territories of Australia over the period 1994-2001. Figure 3 demonstrates that during the observing period, the high number of Asian immigrants correlated to the high number of crime against persons. Figure 4 indicates that increases in the number of Asian immigrants do not associate with increases in the number of crime against properties. However, without considering the other factors such as socio-economic conditions, the effects caused by existing population and other ethnic groups, the relationship between Asian immigration and crime cannot be conclusive. This study will discuss these relevant factors in the next section.

Figure 1. **Asian Population in Australia 1981-2001**



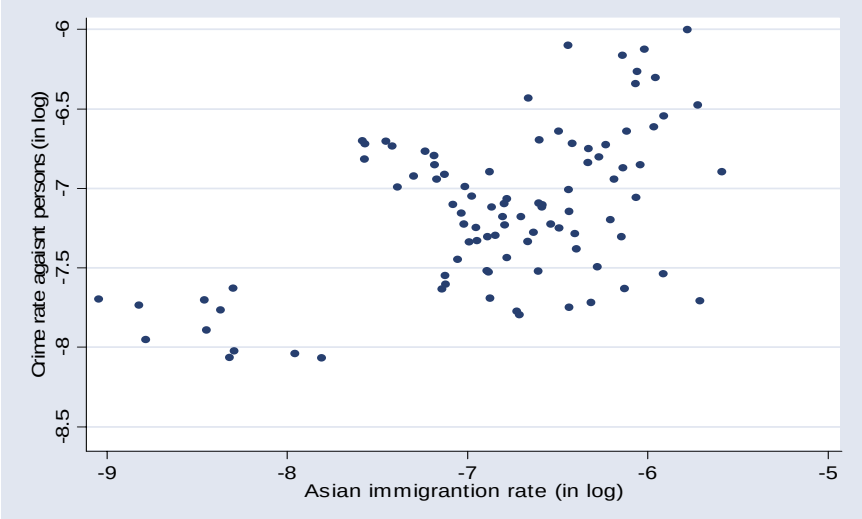

Source: Data collected from ABS Statistic Yearbooks 1981 – 2001

Figure 2. **Asian settler arrivals entered Australia 1994-2004**



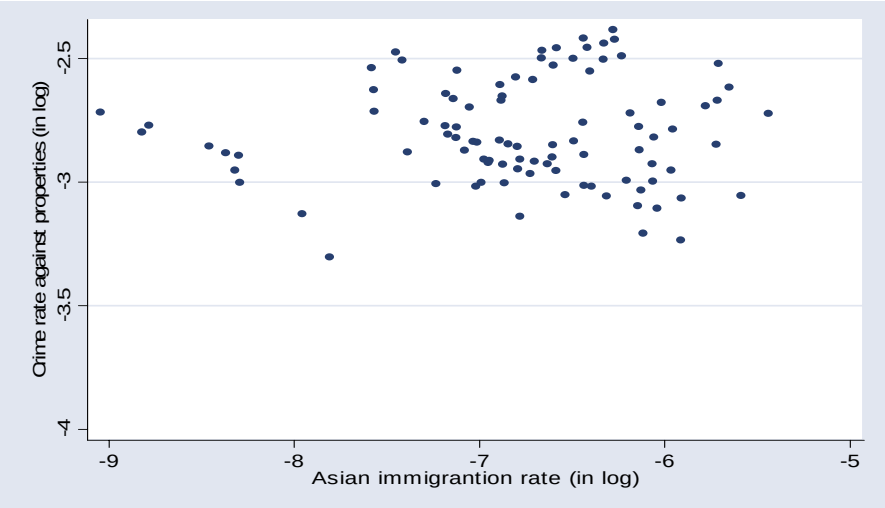

Source: ABS, 2004. *Migration*, available at [www.abs.gov.au](http://www.abs.gov.au)

Figure 3. **Asian Immigration and Crime against Persons in Australia**




Source: ABS, *Australian Yearbooks 1981-2004* and ABS, 2002. C*rime and Safety*

Figure 4. **Asian Immigration and Crime against Properties in Australia**




Source: ABS, *Australian Yearbooks 1981-2004* and ABS, 2002. C*rime and Safety*

In summary, reviewing the criminology literature on the link between immigration, ethnicity and crime, this study states that an emerging issue from this debate is lack of a persuasive statistical research on this complex relationship. In order to apply statistical analysis to verify this link, there are three crucial aspects that should be included. First, the Asian immigration-crime relationship should be analysed whilst considering effects caused by the other communities on crime rates. These communities include existing Asian communities, other ethnic communities, and other immigrant groups. Second, this study notes impediments whilst applying statistical analysis to verify the claim that Asians bring more crime to Australia. For example, lack of consistent definition and statistic records on crime patterns at the state levels, and lack of the consistent definition of ethnicity. These problems however can be addressed by conducting a systematic and consistent statistical analysis on ethnicity and crime patterns. Third, without controlling the effects of socio-economic conditions on crime, the analysis on the Asians-crime link would be rather subjective. In the next section, this study presents the statistical analysis on data and variables, and shows the results for the link between Asians and crime rates in Australia.

## 3. MULTIVARIATE ANALYSIS

As discussed in the previous section, the existing literature suggests that Asian immigrant group may affect crime rates in Australia in two ways. First, the existing

Asian population in Australia may contribute to higher crime rates due to their disadvantages of socio-economic status. This may be regraded as a long-term effect or a structural effect of the increase in Asian immigration on crime. Second, there is a short-term effect caused by new Asian immigrants on crime rates as new Asian immigrants may import social disorders from their source countries to Australia. Moreover, the problems of cultural conflicts, language and poor knowledge on legal issues will exacerbate the situation of new Asian immigrants. Hence they may involve to criminal activities. Considering these two effects, this study tests the following two hypothesises:

- *Hypothesis 1:* The larger the proportion of Asian population as the percentage of the total population in Australia, the higher the crime rates.
- *Hypothesis 2:* The larger the annual influx of Asian immigrants as a percentage of the total population, the higher the crime rates.

Policy implications toward Asian immigrants would be different according to whether the above two hypothesises are accepted or rejected. If the hypothesis 1 is accepted, more attention should be paid to analyse the underlying causes of the correlation between Asians and crime in Australia in order to have timely remedies for this problem. If the hypothesis 2 is supported, immigration policies should pay more attention to provide services to the newly arriving Asian immigrant groups to help them integrating with the society.

In order to test these two hypothesises, this paper applies multivariate regression analysis using panel data for eight states and territories in Australia over the period 1981 to 2004. The dependent variables are the recorded crime rates of two categories: crime against persons and crime against properties. The key independent variables are the annual number of Asian population at state/territory level and the annual number of Asian immigrants arriving at each state/territory. In addition, a range of demographic and socio-economic indicators is included in the analysis as control variables.

### 3.1 Unit of Analysis

The units of analysis are the six states and two territories of Australia, including: New South Wales (NSW), Victoria (VIC), Queensland (QLD), South Australia (SA), Western Australia (WA), Tasmania (TAS), Northern Territory (NT) and Australian Capital Territory (ACT). The period of investigation is from 1981 to 2004. The detailed panel data that shows all data used for the regression analysis is provided in Appendix 1. The number of observations in this panel data is 192.

All data presented in the Appendix 1 are collected from two main sources. The first source is the ABS annual statistical yearbooks at each state and territory. The second source is the data from the ABS website.[3] In order to increase the number of observations and produce more stable results of the statistical analysis, missing variables of all dependent variables, independent variables and control variables are linearly interpolated. All the variables included in the regression analysis are standardised by population size. The next step is to transform all variables to natural log (except the dummy variables). It is valid to take a natural log because all variables take positive value and are often skewed. Moreover, it its useful to take natural log because the regression coefficients, which indicate elasticity can be directly compared across variables.

### 3.2 Dependent variables

The dependent variables are crime rates of two categories: (1) the annual total number of offences against persons and (2) the annual total number of offences against properties. Each category includes crime patterns that have been recorded consistently in the ABS state level yearbooks over the last 20 years.

*Crime against persons*

The annual total number of crime against persons is the aggregate number of officially reported cases of homicide, robbery, and other offences against persons including kidnapping and abduction, personal blackmailing and extortion. This

[3] The ABS website is www.ABS.gov.au

definition is based on the observations of crime records in ABS yearbooks at state/territory levels. Before 1993, the definition of crime against persons was only introduced in some states such as South Australia, Queensland and for some years in Victoria. The crime items included in this category are varied from state to state. For example, South Australia recorded all cases of homicide, robbery and extortion in the category of 'crime against persons' in the state published yearbooks from 1986 to 1989 (ABS South Australia Yearbook 1980-93). Victoria has started to record kidnapping, abduction and other offences against persons since 1993 (ABS Victoria yearbook 1980-93). After 1993, there has been more uniformity of the recording methodology of cross-state crime data (Graycar 2001).

In the *Recorded Crime – Victims* published by ABS in 2004, the number crime victims are recorded uniformly in seven offence categories[4] since 1995. In this study, the number of 'crime against persons' is calculated based on three crime patterns: 'homicide and related offences', the number of 'robbery', and the aggregate number of 'kidnapping/abduction' and 'blackmail and extortion'. By this calculation, this study can observe the change in the same crime patterns for over 24 years and the crime statistics are consistently analysed. Some unintended minor discrepancies might occurs in the analysing data due to the methodology changes[5] in crime recording of the state police which will not be considered in the scope of this study.

*Crime against properties*

The second category is the annual total number of 'crimes against properties', including the crimes of the following three categories: 'unlawful entry with intent', 'motor vehicle theft', and 'other theft'. These three offence categories are defined in the *Recorded Crime – Victims* (ABS 2004) with the data collection at the state level from 1995 to 2004.

[4] The seven categories of crime victims are defined as 'homicide and related offences', 'robbery', 'kidnapping and abduction', 'blackmail and extortion', 'unlawful entry with intent', 'motor vehicle theft', and 'other theft' (ABS 2004)

[5]According to the ABS, 'incidents that are reported to police are not always recorded on police recording systems as crimes. This may be because investigation indicates that no offence has occurred, or that the offence reported is in actual fact another offence altogether. Recording practice, systems and legislation all contribute to differences occurring at this stage, and the level of crime reported is not always consistent across offence types or jurisdictions' (2004:3)

Data before 1995 were also collected from the statistical yearbooks of all states and territories from 1980 to 1994. In some states, data of some crime patterns are not available for all the period. For example, the number of 'motor vehicle theft' has been collected in Tasmania only after 1995 (ABS Tasmanian Yearbooks 1980-1995). The Queensland Police, however, has only recorded 'motor vehicle theft' and 'other crime' since 1987 (ABS Queensland Yearbooks 1980-1995). In order to keep the data consistency whilst measuring the dependent variable, this study excludes some crime patterns from the category of 'crime against properties' that are measured in some states but not in other states.

### 3.3 Independent variables

The two key independent variables are (1) the size of Asian population estimated in each state and territory, and (2) the annual number of Asian immigrants arriving at each state and territory. The census data for Asian population at the state/territory level are available on the basis of five years period from 1981 to 2001. The annual influx of Asian immigrants is estimated based on the number of Asian settler arrivals and their tentative states and territories for settling in Australia. This variable has been measured uniformly since 1994. Prior 1994, immigration data classified at the state/territory level were only available for some years in New South Wales and in Western Australia.

In measuring these independent variables, it is crucial to classify which ethnic groups in Australia are included in the Asian category. The definition of Asian group had been confused until the late 1990s. For example, in the 1980s, according to the Australia census, the 'Asia' category included a variety of different societies and ethnic groups, and was not uniformly used in the implementation of the White Australia Policy (Jupp 1988). In the 1981 census data, calculating the number of Asians in Australia, ABS included 36 countries,[6] which included Lebanon, Israel and Cyprus. However, in the 2001 census data, these three countries were no longer

[6] The 36 Asians countries in the 1981 census include: Bahrain, Jordan, Saudi Arabia, Kuwait, Muscat & Oman, Qatar, Yemen, Bangladesh, Burma, China, Christmas Island, Cocos (Keeling) Islands, Cyprus, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Kampuchea, Korea, Laos, Lebanon, Malaysia, Pakistan, Philippine, Singapore, Sri Lanka, Syria, Taiwan, Thailand, Timor, Turkey, and Vietnam (ABS 1981)

considered as 'Asian': Cyprus was included in Eastern Europe, and Lebanon and Israel were calculated under the category 'Middle East and North Africa'. Table 1 illustrates the new ABS classification of Asians. According to the new classification, Asians in Australia are persons who were born in countries that belong to one of three regions: 'South-East Asia', 'North-East Asia', and 'South and Central Asia'. Table 1 shows the list of 18 countries that contribute the largest share of the number of Asians in Australia. These countries have also been included in calculating the number of Asians in Australia since the 1980s. This study collects the independent variables based on the new ABS definition.

The data of Asian population are collected from the state/territory statistical yearbooks before 2000 and from ABS website for the data after 2000. The Asian population includes persons who were born in the countries belong to the three regions in Asia but currently are permanent residents or Australian citizens. Although there are some differences in estimating the number Asians due to the changes in the definition of this group, this study argues that the these differences are minor in estimating the number of Asian population and immigration in Australia.

Table 1. **List of countries of birth of Asian population in Australia**

| **Region** | **Country** |
|---|---|
| **South-East Asia** | 1. Burma (Myanmar)<br>2. Cambodia<br>3. Indonesia<br>4. Malaysia<br>5. Philippine<br>6. Singapore<br>7. Thailand<br>8. Vietnam<br>*Other* |
| **North-East Asia** | 9. China (exclude SARs and Taiwan)<br>10. Hongkong (SAR of China)<br>11. Japan<br>12. Korea Republic of (South)<br>13. Taiwan<br>*Other* |
| **Southern and Central Asia** | 14. Afghanistan<br>15. Bangladesh<br>16. India<br>17. Pakistan<br>18. Sri Lanka<br>*Other* |

Source: ABS, 2001. 'Australian Historical Population Statistics: TABLE 86. Population, sex, country of birth (a), states and territories, 2001 census' available at www.abs.gov.au

### 3.4 Control variables

The following four control variables measure socio-economic and demographic factors that might influence variations in crime rates. The socio-economic factors include unemployment rates, incomes, regional-specific effects, and whether the region is highly metropolitan. The demographic factors include the size of population, the size of overseas-born population and the influx of annual immigration.

*Urbanisation*

Often, it has been argued that high unemployment rate, low income, and densely population contribute to explain crime differentials among regions (Carcach 2000). Hence it is necessary to control these factors. This study employs data of unemployment rates and weekly average incomes, and the percentage of people living in major urban areas at state/territory level from ABS website. The annual unemployment rates at each state and territory are estimated based on calculating the average of the monthly unemployment rates (Appendix 1). A methodological problem is that these three factors are highly correlated to each other. For example, a high percentage of unemployment rate in a region often associates with low income, and highly populated metropolitan area normally has low unemployment rate and so on.

In order to solve this problem of 'high multicolinearity', this study develops a compositional index called 'Urbanisation' to summarise information contained in the three correlated factors in one variable without wasting information.[7] Table 2 shows the scoring coefficients of the three factors in the compositional index. 'Urbanisation' is negatively correlated with unemployment rate and positively correlated with income and metropolitan rate. Hence, it is logical to consider this new variable as a representable variable for all the mentioned three socio-economic factors.

[7] The 'Urbanisation' index is calculated base on factor analysis of the three variables: unemployment rate, average income and metropolitan rate. The factor analysis uses the principal-components factor method. The communalities are assumed to be 1. Based on the results of the factor loadings, scoring coefficients are new variables that are estimates of the factor analysis.

Table 2 **Scoring Coefficients of 'Urbanisation'**

| **Variable** | **Urbanisation** |
|---|---|
| Unemployment rate | -0.44314 |
| Income | 0.46818 |
| Metropolitan rate | 0.29059 |

*State-specific fixed effects*

It is important to control differences between different states and territories in examining crime rates. Indeed, holding other variables constant, the crime rates might depend on the specific characteristics of each region (Carcach 2000, Hung and Nguyen 2002). In a condition of 'ceteris paribus', after controlling for other demographic and socio-economic factors, crime rates may be different in different regions. For example, whilst classifying different crime patterns according to the geographical regions in Canada, Hung and Nguyen (2002) indicate that minor crimes are higher in British Columbia and lower in Quebec. From the appendix 1, it can be seen that some states such as New South Wales and Victoria have quite similar socio-economic conditions but have different crime rates in all categories. In this study, these time-invariant factors are the state-specific fixed effects that are represented by a set of eight dummy variables for states and territories.

*Sizes of non-Asian-overseas-born population*

One important demographic factor that should be included in examining the crime rates is the presence of overseas-born people in Australia. As mentioned earlier, the long-term effect of Asian migrant groups on crime rates is understood as the effect of the existing Asian population on crime rates. With the same logic applied, it can be argued that other groups of immigrants also contribute to the crime rates in Australia. For example, the Prison Census in the 1980s showed that the homelands of the most prominent groups of prisons were Middle East, New Zealand, Oceania, and Yugoslavia (Hazelhurst and Kerley 1989). Hence, when estimating the long-term effect, it is necessary to control the effects of other migrant groups on crime rates.

In particular, this study uses the number of overseas-born people divided by the total population at each state/territory as a control variable. The census data of overseas-born population are collected from each ABS state/territory yearbooks from 1980 to 2000. After 2000, the data are obtained from the ABS website. The number of overseas-born population provided in the census data has included the number of Asian population. In order to separate the effect of the Asian group from the overall effect of the other overseas-born groups on crime rates, the number of Asian population is subtracted from the total of the whole overseas-born population.

*Sizes of annual non-Asian immigrants*

Similarly, this study includes the size of annual influx of non-Asian immigrants measured by the number of non-Asian immigrants as a control variable when estimating the short-term effect of the Asian immigrants on crime rates in Australia. As discussed in the previous section, the newly arriving immigrants may cause the short-term effect on crime rates in Australia. According to the conventional argument on the immigration/crime link, the immigrants may bring social disorders from the source countries to the host countries. It would be fair to assert that even if this argument is valid, it should not only Asian migrant group but also other migrant groups that may cause the increase in crime rates.

This control variable is calculated by taking the number of annual overseas settler arrivals of each state/territory after subtracting the annual number of Asian settler arrivals of each state/territory. Data of the annual numbers of total overseas settler arrivals and Asian settler arrivals are uniformly collected at state/territory level since 1994 and are available in the ABS website. Prior 1994, this data were only available in New South Wales and Western Australia for some years.

### 3.5 Results

This study applies four regression models. All models are estimated on the ordinarily-squared regression (OLS). Model 1 and Model 3 examine the short-term effects of Asian immigrants and non-Asian immigrants on crime rates. Model 2 and Model 4 analyse the long-term effects of Asian population and non-Asian-overseas population

on crime rates. All the other control variables are included in the four models. The results of the four regression models are presented in the Table 3 below.

It can be seen from the Table 3 that all the models fit data well. Indeed, all the models explain roughly 80 per cent of variances in the dependent variables. For example, the adjusted $R^2 = 0.829$ in the Model 1 shows that this model is accounting for more than 82 per cent of the variation in the elasticity of crime against person rates.

Table 3 **Results of Regression Analysis**

| | **Crime against persons rates** | | **Crime against properties rates** | |
|---|---|---|---|---|
| **Variables** | **Model 1** | **Model 2** | **Model 3** | **Model 4** |
| Asian immigration ratio | -0.129 | | -0.095 | |
| | (0.110) | | (0.057) | |
| Non-Asian immigration ratio | -0.265 | | -0.154* | |
| | (0.171) | | (0.089) | |
| Asian population ratio | | 2.000*** | | 0.093 |
| | | (0.490) | | (0.257) |
| Non-Asian-overseas population ratio ) | | -3.012** | | -0.321 |
| | | (0.860) | | (0.442) |
| Urbanisation | 0.186*** | 0.006 | 0.047** | 0.017 |
| | (0.034) | (0.069) | (0.017) | (0.036) |
| NSW | 1.345*** | 0.558** | 0.208* | -0.129 |
| | (0.157) | (0.204) | (0.081) | (0.111) |
| NT | -0.068 | -0.427 | 0.206*** | 0.185 |
| | (0.103) | (0.314) | (0.053) | (0.170) |
| QLD | 0.587** | 1.159** | 0.126 | 0.043 |
| | (0.169) | (0.323) | (0.088) | (0.174) |
| SA | 0.625*** | 2.067*** | 0.182** | 0.302* |
| | (0.125) | (0.299) | (0.065) | (0.151) |
| TAS | -0.588** | 0.962 | -0.197* | 0.032 |
| | (0.213) | (0.849) | (0.110) | (0.463) |
| VIC | 0.267* | 0.076 | 0.004 | -0.034 |
| | (0.118) | (0.106) | (0.061) | (0.056) |
| WA | 0.901*** | 1.279*** | 0.623*** | 0.533*** |
| | (0.176) | (0.194) | (0.091) | (0.095) |
| ACT | -10.076*** | -6.800* | -4.548*** | -3.206*** |
| | (1.062) | (1.846) | (0.553) | (1.006) |
| Number of Observations | 81 | 64 | 81 | 66 |
| F | 40.03 | 29.05 | 23.85 | 26.13 |
| $R^2$ | 0.851 | 0.845 | 0.773 | 0.826 |
| Adjusted $R^2$ | 0.829 | 0.816 | 0.740 | 0.794 |

Note: *** p<0.01, ** p<0.05, *p<0.10 (two-sided). The numbers in parentheses are standard errors.

Model 1 shows that the relationship between the Asian immigration ratio and the crime against persons is negative (-0.129) but not statistically significant (p=0.246). Similarly, the non-Asian immigration ratio also has a negative effect (-0.265) on crime against persons but statistically insignificant (p= 0.125). Hence, it can be said

that holding other variables constant, an increase in the number of immigrants, regardless of their ethnic groups, tends to decrease crime against persons, although this relation is not statistically significant.

Model 2 shows an interesting result. There is a positive and statistically significant relationship between the Asian population and the crime against persons ($p<0.001$). The regression coefficient for the Asian population ratio is positive (2.000). This implies that one per cent increase of the Asian population ratio causes two per cent increase in the rate of crime against persons. It is important to note that this positive and significant relationship is maintained even without controlling variables.[8] Surprisingly, Model 2 also shows that an increase in the size of other overseas-born population decreases crime against persons (-3.012) and this effect is statistically significant ($p=0.001$).

From the regression results of Model 3, it can be seen that the sizes of both newly arriving Asian immigrant groups and non-Asian immigrant groups have negative effects on crimes against properties. Increases in one per cent of the Asian immigration and other overseas immigration ratios lead to decreases of 0.095 and 0.154 per cent of crimes against properties respectively. However, these relationships are not statistically significant at the conventional level of significance ($p=0.057$).

Although the regression coefficient for the Asian population ratio is positive (0.093) in Model 4, the relationship is statistically insignificant ($p=0.719$). Similarly, there is no significant relationship between other overseas population and crime against properties ($p=0.470$). Thus, it can be claimed that increase in the ratio of Asian population does not significantly relate to increase in the level of crime against properties.

These models also suggest some interesting effects regarding to the control variables. First, from the four models, the relationships between the socio-economic compositional index – 'Urbanisation' and the two categories of crime rates are

[8] I have run the regression analysis without controlling variables and found the negative and statistically significant relationship between each crime patterns in the category of crime against person and the Asian population ratio (in natural log). In some cases, the elasticity is high (e.g. with robbery rates).

positive and statistically significant in Model 1 and Model 3 (p= 0.000 and p=0.009 respectively) but insignificant in Model 2 and Model 4 (p=0.930 and p=0.634 respectively). As there are interactions between socio-economic indicators and different groups of ethnicity, the discussion of the effect of this compositional index and crime rates is complex and beyond this study's scope. Further research is needed to analyse this issue. Second, some of the state-specific control variables have significant effects on crime rates. For example, holding the 'ceteris paribus', crime rates tend to be higher in some states such as New South Wales, South Australia, and Western Australia, but lower in the Australian Capital Territory.

Based on the above analysis, this study summarises the two following results:

- First, there is a significant long-term effect of Asian immigration on crime against persons but no significant effect on crime against properties. In other words, the first hypothesis is partly accepted. The increase in Asian population results in the significantly higher crime against persons. However, the increase in other overseas-born population does not result in higher crimes. This result supports the empirical observation that the longer the immigrants stay, the closer the crime rates of immigrant groups to the native group (Hazelhust and Kerley 1989) and the crime rates among different ethnic groups are disproportioned (Mukherjee 1999). But is an increase in crime rates a consequence of increasing Asian offenders and/or victims? The available crime statistics in Australia are not sufficient to answer this question.

- Second, there is no significant short-term effect of Asian immigration on crime. The second hypothesis proposed in this study is rejected. The annual influxes of Asian immigration and overseas immigration arriving to each state/territory of Australia have no statistically significant relationship with the increase in crime against persons and crime against properties. This result supports some recent research in the criminological literature (Hazelhust and Kerley 1989, Martinez and Lee 2000, Shloenhardt 2001), which state that the link between immigration and crime is not sufficiently supported by empirical evidence.

## 4. CONCLUSION AND RECOMMENDATION

Being located in a strategic geographic position of the Asia-Pacific region and being affected by the growing globalisation, Australia is still the desired destination for Asian immigrants in the coming years. On the one hand, the rapid increase in the proportion of Asian population leads to the fear of *Asianisation* of Australia. There has been ongoing claim that Asian immigrants bring more crimes to Australia. This claim has been strongly supported by a number of politicians and scholars with enthusiastic involvements of the mass media and public opinion. Many scary stories and reports on the crime activities carried by young Asian gangs in big cities such as Sydney and Melbourne contribute to public resistance to accept more Asian immigrants.

This study contributes to the literature by providing a statistical analysis on the relationship between Asian population, Asian immigration, and crime rates of two categories: crime against persons and crime against properties in Australia for the period 1981-2004. The analysis, however, shows some mixed results, with which definite conclusion cannot be made. Basically, there are three reasons. First, due to the insufficiency of available statistics, many crime patterns are not included in the study such as cyber crime, drug-related crime, organised crime, and so on. Second, the complex interactions between different crime patterns such as the links between homicide rates and the organised and drug-related crimes are not considered within the scope of this study. Moreover, some minor discrepancies might occur while calculating the number Asian immigrants, as the number of illegal Asian immigrants is not included.

Nevertheless, this study would be useful in providing quantitative evidence (at least from the collecting data) for developing evidence-based policies in response to the ongoing political and literature debates on the link between Asian immigrants and crimes in Australia. The results of this study can give some crucial inputs for immigration policies. As the hypothesis 1 is partly accepted, more policy analysis should be conducted to understand the underlying causes of the positive relationship between Asian population and crime against persons. The rejection of hypothesis 2 can be useful in providing more information to improve the public awareness and

reduce the public xenophobic attitudes toward Asian immigrants in Australia. At the same time, more data collection and analysis are required to improve our understandings and to present concrete policy recommendations. In particular, this study suggests the following two areas for future studies.

*The need on improving and standardising crime statistics*

As recommended by Mukherjee, in order to understand better the involvement of members of ethnic and immigrant groups in crimes, ethnicity and crime statistics should be improved and data should be collected at every stage of the criminal justice system (1999). More importantly, the data of crime offenders and crime victims should be collected whilst considering two issues. First, data should be disaggregated by different groups such as country of birth, country of origin, religion, gender, age and so on. Second, definitions of ethnicity and crime patterns should be consistent at all state levels and over years. Since 1993, crime statistics have been recorded uniformly and available in ABS website for all states and territories. However, the records are still confined within seven crime patterns (Graycar 2001). Crime statistics should be expanded to include new crime items such as frauds on Internet and Credit Card, which are more prevalent nowadays. These statistics should also be recorded uniformly at state/territory level.

*More research is needed to examine the interaction relationship between ethnicity, immigration and crimes*

As discussed on the previous section, this paper intends to present some preliminary results of analysis on the complex relationship between Asians and crimes. Indeed, the regression analysis can only provides a snapshot on the correlation between Asians and two categories of crimes in Australia based on the selecting data. The same methodology can be applied to examine the ethnicity/crimes relationship for other ethnic communities in Australia. However, in the future research, it would be useful to collect more data in a longer observing period and to identify and analyse more "*impactors*" that might contribute to the variations of crime rates. Moreover, demographic indicators on different ethnic groups should be more disaggregated by gender, age, country of birth, and number of generations and years of staying in Australia.

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