



The Economic Society of Australia Inc.

Proceedings of the 37th Australian Conference of Economists

Papers delivered at ACE 08



30th September to 4th October 2008 Gold Coast Queensland Australia

ISBN 978-0-9591806-4-0

Welcome

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The Society was formed 83 years ago in 1925. At the time, the Society was opposed to declarations of policy and instead focused on open discussions and encouraging economic debate. Nothing has changed today, with the Society and the conference being at the forefront of encouraging debate.

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At the time of preparing for this conference we could not have known that it would have been held during the largest credit crisis since the Great Depression. The general public and politicians both look to central banks for the answers.

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The Paper following forms part of - Proceedings of the 37th Australian Conference of Economists ISBN 978-0-9591806-4-0

The Determinants of Financial Satisfaction: Evidence from African Immigrants in Australia

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Abstract

According to the 2006 Census 2 in 9 Australians were born overseas and various studies of immigrant assimilation have occurred by looking at the labour market success of immigrants. However, a study that focuses on employment/unemployment, though important, does not give a full picture of immigrant assimilation because it excludes individuals not in the labour force. One type of study, that includes individuals who are employed, unemployed and not in the labour force, is based on self-reported life satisfaction data. The panel-type HILDA Survey provides source of data about different aspects of life satisfaction. Based on this data set our preliminary findings show that African immigrants in Australia are less satisfied with their financial situation compared to almost all other groups. Further investigation reveals that variables such as age, labour force status and education play a significant role in determining financial satisfaction of the African-born people in Australia.

The Determinants of Financial Satisfaction: Evidence from African Immigrants in Australia

1. Introduction

Australia has the largest percentage of foreign-born citizens in the world, with 22.2% born overseas (ABS, 2006). Since the end of the White Australia Policy in the late 1960s, the proportion of non-Anglo Saxons living in Australia has increased markedly, and recent years has seen a sharp increase of immigrants from Africa, be they skilled, family-based, or humanitarian immigrants. The 2006 Census showed that the number of people in Australia who were born in Sub-Saharan Africa was 191,819 - a 27% increase over 2001 Census.

This increased heterogeneity of immigrants has led to divergent assimilation outcomes among different immigrant groups in Australia. One way in which successful assimilation has been studied is by looking at labour market success. Nevertheless, these studies exclude those who are out of the labour force, and as such, provide an incomplete picture of immigrant assimilation in an Australian context. For Australia, it has been found that immigrants from English-speaking background (ESB) countries have lower levels of unemployment than immigrants from non-English-speaking background (NESB) (Miller and Neo, 1997). If anything, ESB immigrants have employment rates very similar to the native-born, sometimes even exceeding the latter group. One obvious reason is proficiency in spoken English, which immigrants from NESB lack, especially at time of arrival.

Furthermore, other researchers have looked at the education-job match of the employed and have found that NESB immigrants in Australia suffer from higher rates of overeducation than ESB immigrants and the native born (Junankar and Mahuteau, 2005; Green, Kler and Leeves, 2005). In other words, not only do NESB immigrants face higher levels of unemployment, but if employed, also face a higher likelihood of being employed in occupations beneath their education levels. As well, those coming in on humanitarian visas are much more likely to be unemployed, and if employed, of being overeducated (Green, Kler and Leeves, 2005). The majority of humanitarian entrants into Australia in recent years are Africans. In 2006-07, around 33% of the humanitarian settler arrivals in Australia were from Sub-Saharan Africa (DIMA, 2008).

The life satisfaction literature attempts to study the various levels of satisfaction based on a number of measures. It seeks not uniformity, but rather, seeks to explain what makes people satisfied or dissatisfied with their lives. It allows us to present another measure of immigrant assimilation in Australia; one that might show if African immigrants are not as badly off as labour market statistics might suggest. This is as we can include non-labour market entrants and compare outcomes between different immigrant groups.

Research on assessment of life satisfaction is relevant because it measures quality of life and helps to identify the extent of socio-economic problems within a country. The effect of policy in a country and the need for intervention can be evaluated by the degree of satisfaction or dissatisfaction of individuals in their life. It is common that immigrants face numerous problems and considerable stress in the process of adjustment to a new culture (Vohra and Adair, 2000).

One way of assessing individual's satisfaction with life is through the analysis of selfreported measures of life satisfaction scores. Theses scores are useful measures of how well people's lives are going relative to their priorities. The person questionnaire of the Household, Income and Labour Dynamics in Australia (HILDA) Survey asks respondents to rank their life satisfaction with eight aspects of their life using 0-10 scale, where 0 indicates completely dissatisfied and 10 completely satisfied. The list of different aspects of life includes satisfaction with: the home in which people live; employment opportunities; financial situation; personal safety; feeling part of the local community; personal health; the neighborhood in which people live; and amount of free time.

Pooling data from the first 5 waves of the HILDA Survey, the average life satisfaction scores by birthplace show that immigrants from Africa are less satisfied with their

financial situation and the amount of free time they have in comparison with all birthplace groups except for immigrants from the rest of America (ROA) excluding USA and Canada (see Table 1). In terms of satisfaction with employment opportunities, personal health and safety African immigrants have comparatively high average scores. With the rest aspects of life satisfaction scores (home, community, and neighborhood) African immigrants are neither in a better nor a worse position.

	Africa	AB	ESB	Europe	Asia	Pacific	ROA
Home	7.86	7.98	8.04	8.20	7.81	7.65	7.42
Employment	6.91	6.93	6.76	6.35	6.60	7.05	6.25
Finance	5.91	6.28	6.47	6.16	6.13	6.07	5.30
Safety	7.91	8.12	8.03	7.50	7.50	7.79	7.42
Community	6.59	6.77	6.66	6.50	6.63	7.04	5.74
Health	7.61	7.40	7.26	6.90	7.51	7.91	7.07
Neighborhood	7.95	7.97	8.01	7.83	7.66	8.11	7.65
Free time	6.15	6.66	6.93	6.84	6.34	6.31	5.66
Sample size	820	49762	6368	3473	3523	420	300

Table 1 Average life satisfaction scores by birthplace

The above statistics only shows the basic features of the data used and thus it is important to analyze the data econometrically to reach conclusions that extend beyond the immediate description of the dataset. In this study, a probit adjusted ordinary least squares (POLS) method is used to estimate whether the differences in average life satisfaction scores by birthplace are statistically significant.¹ The regression results only confirm some of the initial findings, namely that African immigrants have significantly

Note: AB, ESB and ROA are abbreviations for Australian-born, immigrants from English speaking background excluding South Africa and Zimbabwe and immigrants from the rest of America excluding USA and Canada.

¹ Econometric methodology is available upon request from the authors.

lower satisfaction with their financial situation and amount of free time relative to AB and immigrants from ESB, Asia² and the Pacific islands (see Appendix 1).

These preliminary findings raise further questions about the factors determining the financial satisfaction of African immigrants. Thus, the main objective of this study is to investigate empirically the determinants of financial satisfaction for African immigrants in Australia

The rest of the paper is structured as follows. Section two reviews literature on life satisfaction. Sections three and four contain the econometric model and a description of the dataset respectively. Section five presents the regression results and section six summarizes the main findings and conclusions.

2. Literature Review

Life satisfaction can be defined as the degree to which an individual judges the overall quality of his/her life as a whole (Veenhoven, 1991). It is a subjective assessment of the quality of one's life. Life satisfaction as a whole is different from life-domain satisfaction, as the latter includes specific areas of an individual's life such as finance, home, health, among other characteristics.

Considerable attention has been given to life satisfaction in the last few decades from different disciplines, with Economics a relative latecomer, mainly due to the subjective assessment that measures what people say rather than what they do.

The available evidence indicates that measures of financial satisfaction are influenced by demographic and socio-economic characteristics. Age, education, gender, marital status and income are the most widely mentioned characteristics that play a role in a person's

² Regression results do not show that immigrants from Asia have significantly higher satisfaction with the amount of free time they have relative to African immigrants.

satisfaction with financial situations (Davis and Schumm, 1987; Hong and Swanson, 1995; Joo, 1998). Other factors that influence financial satisfaction include financial stress, financial behaviour, financial attitudes and financial knowledge (Joo and Grable, 2004). There is also an argument that it is not the absolute income level that determines individuals' financial satisfaction but rather how they perceive their income as sufficient to gratify their needs (Vera-Toscano, Ateca-Amestoy and Serrano-del-Rosal, 2006). Past circumstances, desires and social comparisons are the basic benchmarks to identify needs (Michalos, 1985).

Many studies have found a convex relationship between age and financial satisfaction (Schieman, Van Gundy and Taylor, 2001; Praag and Ferrer-i-Carbonell, 2004; Seghieri, Desantis and Tanturri, 2006). For Australia, Peiro (2006) has found that financial satisfaction turns to be U-shaped in age - reaching minimal at the age of 34, but rising thereafter.

According to Hansen, Slagsvold and Moum (2008) a considerable part of the higher financial satisfaction with increasing age can be explained by greater assets and less debt among the aged. However, it is still a paradox that older people, despite low incomes, are financially more satisfied compared to younger adults (George, 1992; Stoller and Stoller, 2003). One possible explanation for the high financial satisfaction at old age is that the gap between resources and aspirations is narrower for older people (Hansen, Slagsvold and Moum, 2008). This is quite similar to the aspiration theory which says that the degree of satisfaction relates to the gap between what people need and the level that they actually attain (Michalos, 1985).

One reason for the narrow gap is that elderly people have relatively limited opportunities to improve their economic situations and thus they try to adjust down their needs and ambitions so as to keep their wellbeing, whereas for individuals at the beginning of life expectations are high because they experience improvements in their life. It is difficult for younger adults to accommodate to their financial situation, and this leads them to report low financial satisfaction (Henretta and Campbell, 1976; Campbell, Converse and

Rogers, 1976; Carp and Carp, 1982; Praag and Fererr-i-Carbonell, 2004; Hansen, Slagsvold and Moum, 2008).

There is a strong negative association between long term health problems and financial satisfaction. For Australia, Peiro (2006) has found a significant negative relationship between bad health and financial satisfaction, happiness and life satisfaction. It is expected that people with bad health experience less labour income (due to smaller working ability and high medical costs (Vera-Toscano, Ateca-Amestoy and Serrano-del-Rosal, 2006).

Past research also shows a positive link between individuals' educational background and their level of financial satisfaction (Lown and In-Sook, 1992 Financial Counseling and Planning, Vol. 3, pp. 105-125; Delaney, Newman and Nolan, 2006, Bobo and Tuan, 2006)

Further, several studies have revealed that unemployed people and people not in the labour force have less financial satisfaction compared to employed ones (Vera-Toscano, Ateca-Amestoy and Serrano-del-Rosal, 2006; Peiro, 2006)

As discussed above, income is not the only factor that influences financial satisfaction. Other socio-economic and demographic factors also contribute to an individual's satisfaction with financial situation.

3. Methodology

A binomial probit model is utilized to estimate the determinants of financial satisfaction for African immigrants in Australia. It is an estimation technique for equations with a dummy dependent variable. In this study the dependent variable is coded 1, if an individual's satisfaction (with financial situation) score is above the mean score, and 0 otherwise. Since the reported mean score is 5.9, a dummy (dependent) variable takes on the value 1 if financial satisfaction score is between 6 and 10, and 0 otherwise. In our sample around 59.3% reported a financial score between 6 and 10 and the rest between 0 and 5. The binary dependent variable explains the probability that the dummy variable equals 1. Independent variables entered into the model contain information on personal, family and labour force status (for more information see Table 2). In addition, a dummy independent variable is added to the regression to look for financial satisfaction differences among immigrants from South Africa and Zimbabwe, North Africa and the rest of Africa. The reason for this breakdown is because in Australia most South African and Zimbabwean immigrants are of Anglo-Saxon descent and thus immigrants from these countries are considered to assimilate quicker. As well, being Anglo-Saxon and skilled, they are less likely to face discrimination. These three distinct groups, therefore, roughly capture African ESB immigrants, Arab-African immigrants and immigrants from Sub-Saharan Africa (excluding South Africa and Zimbabwe).

Using the above method of analysis the model to estimate the probability of reporting high satisfaction with financial situation can be expressed as:

$$y_i^* = b_0^{} + \sum_{j=1}^k b_j^{} x_{ij}^{} + u_i^{}$$
, where

 y_i^* is not observed. It is commonly called a latent variable. What we observe is a dummy variable y_i defined by $y_i = \begin{cases} 1 \\ 0 \end{cases}$, $y_i = 1$ if $y^* > 0$, and y = 0 otherwise.

Since the observed dummy variable (y_i) in this model is whether or not an individual's financial satisfaction score is above the mean score, y_i^* is the additional utility (financial satisfaction) that individual *i* would get by choosing $y_i = 1$ rather than $y_i = 0$ The coefficients from the probit model measure the change in the unobservable y_i^* associated with a change in one of the explanatory variables

4. Descriptive Data Analysis

A sample size of 820 African immigrants is drawn from the first 5 waves of the HILDA Survey dataset. As can be seen from Table 2, around 48.3% of these immigrants were from South Africa and Zimbabwe (ESB African countries), 21.0% from North Africa and the rest from other African countries. While the highest percentage of respondents (31.7%) arrived before 1980, the lowest percentage of entrants (7.4%) arrived between 2000 and 2005. Of this sample 49.3% were female and the average age of respondents was 41 years. The proportion of people in a de facto relationship was 60.2% and 84.4% of respondents were living in cities.

Most of the respondents (45.1%) had no post-school qualifications, followed by 18.1% holding degree, 12.9% certificate, 11.0% diploma, 9.5% postgraduate level and 3.4% holding masters qualification and above.

In relation to family characteristics, 51.6% had no kids and 56.3% had dependants with them.³ Concerning labour force status, around 69.1% were working either full-time or part-time, 25.5% were not in the labour force and the rest were unemployed. With regard to health condition, about 84.1% had no long term health problems.

³ It does not mean that respondents with no kids have no dependants. They could be taking care of their aged parents, for example.

	Mean (standard deviation)		
Wave 1	0.2390 (0.4267)		
Wave 2	0.2037 (0.4030)		
Wave 3	0.1854 (0.3888)		
Wave 4	0.1707 (0.3765)		
Wave 5 (omitted category)	0.2012 (0.4011)		
Female	0.4927 (0.5003)		
Couple	0.6024 (0.4897)		
Age	41.00 (15.6893)		
Long term health problems	0.1585 (0.3655)		
South Africa and Zimbabwe	0.4829 (0.5000)		
North Africa	0.2098 (0.4074)		
Rest of Africa (omitted category)	0.3073 (0.4617)		
Arrived before 1980 (omitted category)	0.3171 (0.4656)		
Arrived 1980-1984	0.0756 (0.2645)		
Arrived 1985-1989	0.2475 (0.4319)		
Arrived 1990-1994	0.1366 (0.3436)		
Arrived 1995-1999	0.1488 (0.3561)		
Arrived 2000-2005	0.0744 (0.2626)		
Employed – full time (omitted category)	0.4890 (0.5002)		
Employed – part time	0.2024 (0.4021)		
Unemployed	0.0537 (0.2255)		
Not in the labour force	0.2549 (0.4361)		
City	0.8439 (0.3632)		
Having no kinds	0.5159 (0.5001)		
Household with dependant	0.5634 (0.4963)		
Masters	0.0341 (0.1817)		
Postgraduate	0.0951 (0.2936)		
Degree	0.1805 (0.3848)		
Diploma	0.1098 (0.3128)		
Certificate	0.1293 (0.3357)		
Year 12 (omitted category)	0.2219 (0.4158)		
Year 11	0.2293 (0.4206)		
Sample size	820		

Table 2 Sample Statistics for African Immigrants

5. Regression Results

The regression results indicate that the probability of African immigrants (whose financial satisfaction score is above the mean value) is significantly associated with age,

long term health problems, year of arrival, educational background and labour force status (see Appendix 2). The coefficients on age and its square imply a convex age-financial satisfaction profile. Financial satisfaction decreases with age to reach a minimum at the age of 36, and thereafter increases. While coefficients on long term health problems, unemployed and not in the labour force are negatively associated with financial satisfaction, high levels of education (such as masters and postgraduate) increase individuals' financial satisfaction scores.

Despite the fact that immigrants from South Africa, Zimbabwe and North Africa have different characteristics compared to those from the rest of Africa, we have not found any significant evidence that these differences influence financial satisfaction.⁴ Further, our result does not show any significant proof that the presence of children (in any age brackets) affect financial satisfaction.

6. Conclusion

Research on domains of life satisfaction is relevant because it measures quality of life and assists to identify the extent of socio-economic assimilation of immigrants. As a particular domain of satisfaction with life, measures of financial satisfaction explore how self-reported scores are related to demographic and socio-economic characteristics. Taking a sample from the first 5 waves of the HILDA Survey dataset, we have found that African immigrants in Australia are less satisfied with their financial situation compared to most birthplace groups. For African immigrants, the determining variables that significantly impact high financial satisfaction scores are age, health, education and labour force status. Most of the results found are consistent with previous findings on financial satisfaction. We have found a convex age-financial satisfaction profile - implying financial satisfaction begins to increase when an individual reaches midlife.

⁴ We admit that this could be due to small sample size.

Appendix 1

	AB	ESB	Europe	Asia	Pacific	ROA
Home	ns	ns	ns	ns	ns	ns
Employment	ns	ns	ns	ns	ns	-
Finance	+	+	ns	+	+	ns
Safety	ns	ns	-	-	ns	ns
Community	ns	ns	-	ns	ns	-
Health	ns	ns	ns	ns	+	ns
Neighborhood	ns	ns	-	-	ns	ns
Free time	+	+	ns	ns	+	ns

Regression results by place of birth (Africa omitted category)

Note: A separate regression for each domain-specific life satisfaction was done, and the results shown in the above table explains the association between different birthplace groups. Since Africa is an omitted category, '+' sign implies less satisfaction. The regression includes other variables such as gender, marital status, age, long term health problems, labour force status, presence of kids and educational. The abbreviation 'ns' stands for not significant.

Appendix 2

Variable	Coefficient
Wave 2	-0.403**
Age	-0.071**
Age squared	0.001***
Long term health problems	-0.522***
Arrived 1995-1999	-0.531*
Unemployed	-1.334***
Not in the labour force	-0.752***
Masters	1.185**
Postgraduate	1.139***

Estimates of the determinants of financial satisfaction for African immigrants

Note: Only statistically significant variables are shown in the above table. ***, ** and * denote 1%, 5% and 10% levels of significance

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