Disparity between Immigrant and Native Saving Behaviour in Australia

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Abstract

There is increasing evidence of disparities between the wealth and portfolio behaviour of immigrant and native Australian households (for example, Bauer et al. 2007 and Cobb-Clark & Hildebrand 2008). While immigrant assimilation in the Australian labour market has been investigated extensively, we understand very little about the consumption and saving behaviour of these two groups of households. This paper seeks to fill that gap with a systematic investigation of the consumption and savings behaviour of immigrant and native households in Australia. Specifically, it examines the hypothesis that differences in wealth accumulation behaviour are related to income, educational background and demographic characteristics of the two groups of households using quantile regression and semi-parametric decomposition methods.

Keywords: consumption, saving, immigrants, Australia

JEL classifications: F22, J61, D10
Outline

Introduction

Three recent papers (Bauer et al., 2007, Doiron and Guttmann, 2009 and Cobb-Clark & Hildebrand, 2009) document the existence of a significant gap between the stocks of wealth held by immigrant and native households in Australia without providing much insight into behaviour contributing to the emergence of this gap. Household wealth is accumulated from positive savings flows. Hence, consumption/saving behaviour is the fundamental driver of the wealth accumulation process. We are not aware of any studies that systematically address the stock-flow relation between wealth and savings that characterizes immigrant and native household behaviour in Australia. While a large body of literature assesses immigrant assimilation in the Australian labour market, we understand very little about the consumption and saving behaviour that leads to the difference in the respective wealth holdings. The present paper seeks to fill that gap.

Bauer et al. (2007) find that in 2002 immigrant households held approximately $18,000 less wealth than native households (at the median) after correcting for age and period since arrival. They pointedly note that this gap exists despite the relative advantage in education and other demographic characteristics of migrants. These factors may help to explain the relative smallness of the gap observed in Australia compared to Germany and the United States. Cobb-Clark & Hildebrand (2009) corroborate the observed difference in the respective wealth holdings and asset portfolios of immigrant and native households.

The theory of consumption-saving behaviour as well as the migration literature suggests many reasons that may lead to differences in consumption-saving choices of migrants and natives (Australia-born persons). These potential explanators can be grouped into three broad categories: factors influencing labour market outcomes, cultural and institutional factors and cyclical factors. The former include household-specific characteristics such as labour supply and family composition which influence labour force participation, employment and earnings. Systematic differences in this category between migrant and native households in Australia have been well documented (Miller and Neo, 2003, Cobb-Clark, 2003). The second category of factors includes peer effects (Maurer & Meier, 2008), the possibility of return migration and remittances (Dustmann, 1995), inter-
temporal time preferences (Browning & Crossley, 2001) and precautionary behaviour (Amuedo-Dorantes & Pozo, 2002). Differential access to formal and informal insurance arrangements to protect against cyclical shocks may also affect savings behaviour as does age at the time of arrival, nativity status and cultural practices (Bonin et al. 2007). These influences are either restricted to immigrants or are likely to affect migrants and natives differentially (cultural practices). Cultural differences are likely to affect savings behaviour although Carroll et al. obtain mixed findings for Canada and the United States. They do not find any differences of saving patterns of Canadian immigrants from different origins (1994) but they do observe that immigrants in the US from different countries of origin exhibit different saving patterns (1999). The third category comprises cyclical phenomena related to the ‘internal’ life-cycle and the ‘external’ business cycle. To the extent that these life-cycle patterns differ between immigrant and native households, the gap between savings flows of the two groups of households is likely to change over the life cycle. In addition to the usual life-cycle factors, it is necessary to consider also the impact of migrants’ assimilation process in the host country. Lastly, business cycles shocks may affect migrants and natives asymmetrically (McDonald and Worswick, 1999), further contributing to the evolution of the difference in their respective wealth holdings.

The specific aims of this paper are to:

i. document the consumption and saving behaviour of migrant and native households in Australia, and to

ii. identify determinants of the differential savings behaviour of migrants and natives that explain the observed gap in their respective wealth holdings.

Data and methodology

Australian household expenditure survey (HES) data for 1984, 1988/89, 1993/94, 1998 and 2003/04 are used. Since household surveys rarely report a direct, robust and consistent measure of savings it is necessary to calculate savings from data on income and consumption. Savings can be viewed either as changes in the stock of wealth or as the difference between income and consumption. Given the lack of reliable wealth data in cross-section surveys, we focus on the latter perspective. The variable of interest, the savings rate, is defined as the difference between consumption and after-tax income divided by after-tax
income. This definition, in turn, requires accurate treatment of income and consumption in the presence of capital gains and accounting for the durable nature of some consumption items.

- **Income**: Income comprises cash and in-kind receipts of a regular and recurring nature, i.e., the sum of wage and salary disbursements, tips, other labour income, farm income, business income (net proprietor’s income from unincorporated business), net rental income, interest on savings and dividend, and transfer income from government, private institutions and other households, employer’s and employee’s contribution to pension funds, inheritance, gifts and other income from family members. Net family income is deflated using GDP deflator. Disposable income is defined as total income minus taxes.

- **Capital gains**: We exclude all capital gains from household income. Differentiating between unrealized and realized gains is problematic, while including capital gains in the estimates of savings would be difficult because of the high degree of volatility of this component. Therefore, we consider the “active” component of saving to be represented by the difference between income exclusive of capital gains, and consumption. But we account for the “wealth effect” capital gains by including household wealth as an explanatory variable in our estimating model.

- **Consumer durables**: We apply the perpetual inventory equation to obtain an estimate of expenditure for the year corresponding to consumer durables (Jalava and Kavonius (2009). Thus, we consider part of the expenditure on durables goods as investment as such consumption is not immediate but spread over time. In order to analyse the sensitivity of our estimates we use 3 measures of consumption: (1) C1: includes imputed value of consumer durables [use a flat 15 percent depreciation for consumer durables] (include the car registration and insurance fee as 100 percent expenditure for the year) (2) C2 excludes consumer durables and treats them as investment. This definition uses only items purchased for the year, and applies depreciation method (3) C3 includes all expenditure on consumer

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1 We acknowledge that capital gains, even unrealized capital gains, can influence saving. This is illustrated, for instance, by the consumption booms prior to the global financial crisis. The stock market booms sustained massive spending sprees by reducing the savings rate as households treated capital gains as a substitute for savings.
durables for the survey year (as consumption expenditure). The expenditure on housing and transport is treated in a similar manner.

The sample consists of households with the head of the household between 30-60 years of age. Excluding the ‘extreme’ groups of the age spectrum reduces the potential impact of labour market entry and exit on savings behaviour. In order to allow for transition to the immigration experience and to exclude the potentially distorting adjustment behaviour after arrival we also exclude immigrant households who have arrived in Australia during the two years preceding the survey round. Households with income below $2000 per year, households with invalid income or missing key variables (such as age) and households with very high levels of savings (active savings greater in absolute value than $1,000,000) are also excluded.

All savings rates are reported on an annual basis, and all income figures are in 2000 dollars. To avoid undue influences from extreme values of the savings rate when income is close to zero, “average” savings rates are employed. These are calculated as the average savings rate for the group (of a given age-nativity status) divided by the average income for that group. Alternatively, the savings rate for this group can be imputed by running a regression of age-nativity savings on covariates, and using the resulting savings estimate to predict the savings rate for that group.

Quantile regression models are used to analyse the panel consisting of migrant and native households covering a twenty year span. Linear regression is inappropriate in the presence of the skewed distributions which typically characterise consumption and savings data. The different characteristics of the immigrant and native-born populations, and the fact that the former self-select in migrating to Australia, raises the problem that unobserved characteristics may contribute to the observed differences in consumption and savings behaviour. To deal with this potential source of endogeneity we adopt a control function approach and a simple two-step estimator that exploits the partially linear structure of the model (Lee, 2007). The first step estimates the residuals of the reduced-form equation for the potentially endogenous explanatory variables. In the second step we estimate the primary equation with the reduced-form residuals obtained in the first step. These residuals are included nonparametrically as additional explanatory variables.
The semi-parametric decomposition method proposed by DiNardo, Fortin and Lemieux (1996) is employed to assess the relative impact of explanatory factors on the savings gap. To this end the savings gap is decomposed into four components explained by disparities in conditional income distributions, educational backgrounds, demographic characteristics and an “unexplained” component that represents differences in the conditional distributions of immigrants and natives.

Hypotheses

This paper examines the consumption/savings behaviour of immigrant and native households. To this end it formally tests the quantitative influence of labour market outcomes and cultural influences – the first two of the three categories of explanatory variables mentioned above. The third set of considerations, namely cyclical factors, will be explored in a follow-up study.

Differences in labour market outcomes are likely to result in differences in saving. However, a priori their net effect is ambiguous. As documented by various studies including Miller and Neo (2003), migrants experience lower wages and higher unemployment compared to natives. These outcomes are likely to exert opposing effects on savings behaviour: lower incomes would directly result in lower savings, while a higher probability of unemployment and more sensitivity to adverse macroeconomic conditions (McDonald and Worswick, 1999) could result in higher precautionary savings.

Immigrants and natives differ in terms of age, education and other demographic characteristics. Immigrants in Australia have more years of schools compared to natives (Antecol et al., 2003) and a higher proportion belong to the working age group. These differences in the life cycle variables would result in saving differences (Browning and Lusardi, 1996).

The literature on the “nativity gap” provides some evidence of the effect of country of origin on saving and, hence, of the potential importance of social and cultural norms. Differences in initial socioeconomic strata in the source country, the motivation behind migration and the probability of return migration would be reflected in migrant saving behaviour (Carroll et al. 1998). Bauer et al. (2007) discuss the ways in which differences in social norms and risk attitudes can affect wealth formation.
Policy Implications

This paper provides a comprehensive analysis of migrant savings behaviour that recognises core elements of internal life-cycles of households and the external environment. Its policy significance derives from the potential contribution the findings can render to the formulation of migration policy in Australia aimed at wealth accumulation behaviour of migrants and, hence, at macroeconomic stability and growth.

The aim of immigration policy is not only to attract migrants to Australia but also to assist their economic and social assimilation after arrival. Through the latter channel it contributes to the larger policy objectives of stability and growth of the Australian economy. Clarification of the determinants of immigrant wealth formation behaviour can provide useful input for Australian immigration policy in promoting migrant assimilation and supporting Australia’s macroeconomic management. Specifically, improved understanding of migrants’ savings behaviour patterns will inform policies to ensure adequate consumption possibilities for migrants at all ages. This is particularly important in light of Australia’s ageing population.
References:


