Points of Difference

DOES THE SKILLED MIGRANT CATEGORY POINTS SYSTEM PREDICT WAGES?

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Background

The Skilled Migrant Category (SMC) is a points-based policy that allows people to gain permanent residence in New Zealand if they have the ability to contribute to New Zealand economically and socially. More migrants are approved for residence in New Zealand under the SMC than any other immigration category, with approvals making up in excess of half of all people approved for residence.

The research on which this report is based examined how the employability and capacity-building factors that are used to select among SMC applicants are related to the wages earned by SMC migrants 3 years after taking up residence. The report goes on to draw implications and make recommendations for SMC policy.

Method

The Longitudinal Immigration Survey: New Zealand (LisNZ) documents the outcomes of migrants up to 3 years after taking up residence in New Zealand and, for the first time, the visa category under which migrants were approved and other detailed information.

LisNZ is used to assess what points applicants were eligible for in the SMC points system. Regression models are then used to examine how the SMC points and a set of other factors are associated with wages. Finally, improvements in the allocation of points are considered, using the wages earned by migrants as a measure of their contribution to the country.

Results

Qualifications have positive returns

Among skilled migrants, qualifications have positive returns, but New Zealand qualifications are not more rewarded than foreign ones.

Migrants granted residence with a job offer earn at least as much as those already employed in New Zealand at the time of application

In the medium term, migrants who were granted residence with a job offer earn at least as much as those who were already employed in New Zealand at the time of application.

Wage increases for New Zealand work experience are low

Additional increases in wages for New Zealand work experience compared with foreign work experience are found to be low.

English language ability and skill level are not rewarded under SMC

Self-reported English language ability (additional to a minimum standard) and the skill level of the current or previous job are positively associated with wages, but are currently not rewarded under the SMC points system.

Asian and Pacific skilled migrants earn less than other skilled migrants

In line with previous studies of migrants' outcomes in New Zealand, skilled migrants from Asia and the Pacific earn less than other skilled migrants even when factors such as age, qualifications, work experience, and self-reported English language ability are controlled for. Further work is needed to better explain this difference.

Practical recommendations

Practical recommendations for the SMC are:

- simplify the system by changing the grouping within categories and joining several categories
- improve the ranking of applicants by:
  - differentiating between skilled and highly skilled migrants
  - increasing the required level of English or awarding additional points
- adjust the points weighting by awarding:
  - more points for high levels of relevant work experience
  - fewer points for vocational qualifications.

These changes could improve the selection of migrants who are more likely to earn higher wages in the medium term.

Further work

Further work could assess the association between the points framework and other objectives of the SMC policy. The potential impacts on other policy objectives also need to be considered.

1   INTRODUCTION

The Skilled Migrant Category (SMC) is a points-based policy that allows people who have the ability to contribute to New Zealand economically and socially to gain permanent residence in New Zealand. In recent years, SMC approvals have made up more than half of all residence approvals (58 percent in 2009/10).[1]

The objective of the Skilled Migrant Category is to grant residence to people who demonstrate that they:

- have skills to fill identified needs and opportunities in New Zealand
- can transfer those skills to New Zealand and link with local needs and opportunities
- can contribute to New Zealand both economically and socially
- can successfully settle in New Zealand.[2]

Points are awarded for transferable skills and employability, including recognised qualifications and years of experience in comparable or 'relevant' labour markets are awarded points. The match between skills and New Zealand's needs is stressed, through points being awarded for having a job or job offer and bonus points it is in identified future growth areas and areas of skills shortage. Migrants' ability to settle in New Zealand can be demonstrated by gaining qualifications or work experience in New Zealand, English language skills, or having close family members living in New Zealand.

Findings from analysis of data from the Longitudinal Immigration Survey: New Zealand (LisNZ) show that more than 93 percent of the principal migrants who were selected through the SMC system were employed 6 months after taking up residence, a proportion significantly higher than for other migrants granted residence (over 58 percent).[3] The factors that can be awarded points through the SMC are constrained by the information that is available and that can be produced and verified at a reasonable cost. Furthermore, there are other important ethical and legal considerations, such as not discriminating against people (for example on the basis of sex, ethnicity, or nationality), even if these factors predict labour market outcomes.

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[1] IMSED Research (2010) *Migration Trends and Outlook 2009/10*. Wellington: Department of Labour.

[2] Immigration New Zealand *Operational Manual*, section SM1. www.immigration.govt.nz/opsmanual (accessed at 12 August 2011)

[3] IMSED Research (2009) *New Faces, New Futures: New Zealand.* Wellington: Department of Labour.

This research uses data from the LisNZ to examine how the employability and capacity-building factors that are used to select among applicants are related to the wages earned by SMC migrants 3 years after taking up residence.[4] The LisNZ was specifically designed by Department of Labour in partnership with Statistics New Zealand to increase the understanding of immigration and to inform immigration policy. For the first time in a New Zealand survey, the visa category under which migrants were approved was collected. A great deal of extra demographic information was also collected, much longitudinally. As such, this survey provides a new opportunity to study the labour market outcomes of SMC migrants and to inform the upcoming review of the SMC Policy.

By focusing on the wages of successful migrants, this research only partly covers the objectives of the policy. Further research is required to understand and take into account all of the objectives, for example the identification of specific skills that are needed in the New Zealand labour market, the social capital contribution of migrants, and issues of retention.

In this paper, we discuss the skilled migration policy framework and previous research on skilled migrants' labour market outcomes, and introduce the data set and some descriptive statistics. Then, we use regression models to examine the association between employability and capacity-building points factors and the wages earned by principal SMC migrants 3 years after taking up residence while taking a set of other factors that are likely to influence wages into account. The model is then tested by removing the controlling factors to reflect that the policy does not use demographic criteria such as nationality and gender to select migrants.

We consider changing the allocation of points, using the wages earned by migrants as a measure of their contribution to the country. We extend the regression models to test criteria that are observable at the time of application but are not awarded points. Then, we explore the implications of the proposed changes for the ranking of migrants.

The report finishes with a discussion of the findings, practical recommendations, and next steps.

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[4] The outcomes for migrants 6 months after taking up residence are also analysed and reported in Appendix A.

2   BACKGROUND

2.1   Policy framework and application process

The Skilled Migrant Category (SMC) was implemented in 2003, replacing the General Skills Category. The SMC increased the focus on employability and meeting employer needs, such as having recognised qualifications, and a job or job offer. In 2009/2010, 81 percent of successful principal applicants were awarded points for a job or job offer as part of their SMC application.[5]

A person who is interested in applying for residence through the SMC must first complete an expression of interest indicating the points they claim to be eligible for (see Table 1 for a detailed summary of the points system).

Table 1: Skilled Migrant Category points

Category	Factor	Points
Skilled employment	Current employment for 12 months or more	60
	Current employment for fewer than 12 months	50
	Job offer	50
Bonus points for skilled employment	IFGA or AASS	10
	Region outside Auckland	10
	Partner employment or offer of employment	20
Relevant work experience	2 years	10
	4 years	15
	6 years	20
	8 years	25
	10 years	30
Bonus points for relevant work experience	In New Zealand 1 year	5
	In New Zealand 2 years	10
	In New Zealand 3 years or more	15
	In an IFGA or AASS 2–5 years	10
	In an IFGA or AASS 6 years or more	15
Bonus points for recognised qualifications	Bachelor (Level 7) or Postgraduate (Levels 8–10) gained in New Zealand	10
	Postgraduate gained after 2 years study in New Zealand (Levels 9–10)	15
	Qualification in an IFGA or AASS	10
	Partner's recognised vocational qualification (Levels 3–6)	10
	Partner's recognised higher qualification (Levels 7–10)	20
Close family support in New Zealand		10
Age	20–29 years	30
	30–39 years	25
	40–44 years	20
	45–49 years	10
	50–55 years	5

Source: Immigration New Zealand website, www.immigration.govt.nz

Note: IFGA = identified future growth area; AASS = area of absolute skills shortage.

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[5] IMSED Research (2010) *Migration Trends and Outlook 2009/10*. Wellington: Department of Labour.

Following the objectives of the policy, most of the points are awarded for employability and capacity building factors. However, some points are awarded for different reasons. Bonus points for a job outside Auckland are an incentive to settle away from this region. Points for age aim at maximising the economic and fiscal contribution over time, whereas points related to the partner's characteristics aim at maximising the contribution of the entire household.

If the applicant meets the prerequisites for health, character, and English language proficiency,[6] and has 100 or more points, his or her expression of interest is entered into a pool. Expressions of interest that have 140 or more points are selected automatically from the pool and invited to submit an application. Expressions of interest that have 100 or more points but less than 140 points are selected according to their points ranking in sufficient numbers to meet the objectives of the policy. If, following the selection process set out above, further places are available, additional expressions of interest may be selected from the pool on the basis of criteria set from time to time by the Minister of Immigration.

Once an expression of interest has been selected, depending on health and character requirements and the credibility of the points claimed, it may result in an invitation to apply for a residence visa. The application process then involves the applicant providing evidence to support the points claimed in the expression of interest. For instance, only qualifications that have been assessed under the New Zealand Qualifications Framework are awarded points; immigration officers will also assess whether the applicant's work experience is relevant to the job or qualification held by the applicant.

People who apply may include their spouse or partner and dependent children in their application (described as secondary applicants). In this case, all members of the application unit must meet the character and health requirements, and in some cases the English language requirement. Only the principal applicant completes an expression of interest and application. A limited number of points can be claimed for the applicant's partner's qualifications and if they have a job or job offer.

2.2   Previous research

Research in New Zealand and internationally has investigated the impacts of immigration policy on migrant outcomes. Those studies usually compared the outcomes of migrants across different groups relative to the native-born population or across time.

In the United States, some studies focused on comparing long-term outcomes of cohorts of migrants. These studies showed that selection based on skills has a positive impact on outcomes, although this effect tends to fade with time.[7]

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[6] International English Language Testing System (IELTS) General or Academic Module score of at least 6.5.

[7] G Jasso and MR Rosenzweig (1995) 'Do immigrants screened for skills do better than family reunification immigrants?' *International Migration Review* 29(1): 85–111; HO Duleep and MC Regets (1996) Admission criteria and immigrant earnings profiles.' *International Migration Review* 30(2): 571–590.

Points systems have been used to select migrants in New Zealand, Australia, and Canada for many years, and have also been introduced in countries such as the United Kingdom, Denmark, and Singapore. Studies have looked at the link between immigration policy and labour market outcomes, particularly in the three countries where this type of system was first adopted.

Canadian research using the Longitudinal Survey of Immigrants to Canada, found that the screening process based on skills leads to higher educational levels of migrants (and their spouses).[8] However, those migrants do not achieve better labour market outcomes than less skilled migrants in the short term because of the difficulties in transferring these skills to the country of migration.

Other research undertaken in Canada looked specifically at the issue of selecting economic immigrants using an 'actuarial approach'.[9] The research used data derived from a linked longitudinal administrative database to assess the feasibility of designing a points system based on a human capital regression model that predicted immigrant success, and adopted an approach similar to that used in this research. The study concluded that defining a points system based on such an approach was feasible, and suggested that the most effective system would combine actuarial-based predictions with employer-driven selection.

The Longitudinal Survey of Immigrants to Australia was used to investigate the determinants of labour market participation and employment of migrants who entered Australia under different visa categories.[10] The researcher found that initially the visa category had only a limited role in labour market participation, but had a significant effect on the employment rate. However, the gaps in employment rates narrowed at 18 months. The importance of English language was also highlighted. In another study, the researcher found that focusing the selection criteria on productive skills and employability led to a large increase in the measurable human capital of new immigrants.[11] This increase in human capital completely explained the improvements in participation rates and approximately half of the decrease in male unemployment rates.

In New Zealand, the topic of labour market assimilation of immigrants relative to similar native-born has been relatively well researched.[12] Although the focus of these studies has been on the path of convergence to the labour market outcomes achieved by the New Zealand–born, common differences are found between broad migrant groups. A consistent finding is that initial entry disadvantage and subsequent convergence is more pronounced for immigrants born in Asia.

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[8] A Aydemir (2010) *Immigrant Selection and Short-term Labour Market Outcomes by Visa Category*. Discussion paper 4966. Bonn: Institute for the Study of Labor (IZA).

[9] J McHale and K Rogers (2009) *Selecting Economic Immigrants: An actuarial approach.* Working Paper 49. Canadian Labour Market and Skills Researcher Network.

[10] D Cobb-Clark (2000) 'Do selection criteria make a difference? Visa category and the labour market status of immigrants to Australia.' *Economic Record* 76(232): 15–31.

[11] D`Cobb-Clark (2004) *Selection Policy and the Labour Market Outcomes of New Immigrants.* Discussion paper 1380. Bonn: Institute for the Study of Labor (IZA).

[12] J Poot and B Cochrane (2004) *Measuring the Economic Impact of Immigration: A scoping paper*. Wellington: Department of Labour; J Poot (1993) 'Adaptation of migrants in the

Unfortunately, the New Zealand studies were unable to identify immigrant-specific factors, such as the immigration category that people were approved under, previous experience in New Zealand (for example, work, student, or visitor), New Zealand qualifications, or English language ability. Using a survey targeted toward migrants, this research introduces these factors to the analysis for the first time in New Zealand.

New Zealand labor market.' *International Migration Review* 27(1): 121–139; L Winkelmann and R Winkelmann (1998) 'Immigrants in the New Zealand Labour Market: A cohort analysis using 1981, 1986 and 1996 census data.' *Labour Market Bulletin* 1&2: 34–70; S Boyd (2003) *Migrants in New Zealand: An analysis of labour market outcomes for working aged migrants using 1996 and 2001 census data*. Wellington: Department of Labour.

3   DATA

3.1   Longitudinal Immigration Survey: New Zealand

The Longitudinal Immigration Survey: New Zealand (LisNZ) targeted migrants whose residence was approved between November 2004 and October 2005. Interviews were conducted in three waves at 6, 18, and 36 months after taking up residence in New Zealand; around 5,000 interviews were completed at the last wave.[13]

Design of the survey

The survey was designed to increase the understanding of immigration and the settlement process. LisNZ collected data on various characteristics that had not been captured previously in New Zealand surveys (the census for instance), notably the immigration category, but also English language ability, previous experience of New Zealand before gaining residence, and family networks in New Zealand.

Sample studied

The sample studied here is composed of migrants who gained residency through the Skilled Migrant Category (SMC) as the principal applicants. The outcomes of secondary applicants are not included in the analysis.

The sample is further restricted to respondents at wave 3 in order to focus on medium-term outcomes. This restriction might lead to self-selection bias, if those who leave have noticeably different characteristics to those who stay. Previous studies of the attrition in LisNZ showed that respondents who left the sample are statistically significantly different from those who stayed.[14] However, given the small scale of the bias and the small proportion who left, the studies concluded that the sample is still representative of the original population.

Our analysis is conducted using weights designed to represent the original population of migrants. The sample size is about 1,700 individuals.

Standard errors were adjusted to account for the survey's complex sample design.

Characteristics of the sample

Demographic characteristics of the sample are reported in Table 2, and human capital characteristics are reported in Table 3, as well as employment rates and mean wages at wave 3.

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[13] Around 7,000 interviews were completed at wave 1.

[14] J Bryant and F Krsinich (2009) 'Attrition in the Longitudinal Immigration Survey: New Zealand.' Paper presented at New Zealand Association of Economists Conference in Wellington, 2009; J Luo (2011) *Attrition in the Longitudinal Immigration Survey: New Zealand wave 1 to wave 3)*. Wellington: Statistics New Zealand.

The employment rate is the proportion of the sample that is working at the time of the interview, including migrants who are self-employed or in part-time work. Mean wages are derived from a subsample, excluding the self-employed and missing values. Percentages are derived from rounded counts. All demographic and human capital characteristics are observed at wave 1.

As can be seen in Table 2, principal skilled migrants are most commonly in their twenties or thirties.[15] They are more likely to be male, and a fifth of them applied from offshore.

Skilled migrants settle mainly in the Auckland region.

The employment rate (94 percent) and average hourly wage ($30 per hour) of skilled migrants are high. By comparison, in 2008, the mean hourly earnings from salaries and wages in New Zealand was about $31 for legislators, administrators, and managers, $29 for professionals, and $22 overall.[16]

Male and offshore applicants have better outcomes than female and onshore applicants, in terms of both the employment rate and wages. The employment rate among males is 96 percent whereas it is only 89 percent among females; the average wage for males in employment is $31 per hour compared with $27 for females.

The main countries of origin are the United Kingdom, South Africa, China, and India. As a result, almost half of the principal applicants come from Europe (46 percent) and almost a third coming from Asia (29 percent). Migrants from Asia have a lower employment rate (91 percent) and earn lower wages (mean hourly earnings of $24) than average. They also have different characteristics than other migrants; they are younger, less experienced, more qualified, and more likely to have gained their qualification in New Zealand (see Appendix B). Migrants from the Pacific also earn relatively low wages but are more likely to be in paid work, whereas migrants from North America have a lower employment rate but the highest wages on average.

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[15] Note that only applicants aged 20–55 years are eligible to apply under the SMC Policy.

[16] Statistics New Zealand (2008) *New Zealand Income Survey: June 2008 quarter*. Wellington: Statistics New Zealand. http://www.stats.govt.nz/browse_for_stats/income-and-work/Income/NZIncomeSurvey_HOTPJun08qtr.aspx

Table 2: Demographic characteristics and labour market outcomes

Characteristics	Percentage (%)	Employment rate at wave 3 (%)	Wave 3 hourly income (mean $)
Age			
20–29 years	26	92	25
30–39 years	42	94	31
40–44 years	18	98	31
45–49 years	9	93	32
50–55 years	4	87	30
Region			
Europe	46	94	33
South Africa	13	98	30
North America	4	88	34
Asia	29	91	24
Pacific	3	98	24
Other	4	94	27
Composition of household			
Male	66	96	31
In couple without children	20	97	33
Single without children	16	96	27
In couple with children	30	96	32
Single with children	C	C	C
Female	34	89	27
In couple without children	11	94	28
Single without children	13	86	25
In couple with children	9	88	28
Single with children	1	67	20
Region			
Auckland	42	93	29
North Island outside Auckland	34	95	31
South Island	22	93	27
Location at approval date			
Onshore	80	93	29
Offshore	20	96	33
Total	100	94	30

Source: Longitudinal Immigration Survey: New Zealand.

Note: C = suppressed for confidentiality.

Skilled migrants are highly educated and experienced (see Table 3). More than half of them have at least a bachelors degree (57 percent), and 35 percent of them have a vocational qualification.[17] Most have more than 10 years of potential work experience.[18] Seventy-five percent of the skilled migrants have had work experience in New Zealand before gaining residency (consistent with the 80 percent of applications made onshore). This reflects the common pathway to residence that includes a period of temporary employment (driven by the central role of skilled New Zealand employment in the points system). Less than a fifth (17 percent) of the skilled migrants had been to New Zealand before without working (for example, as students or visitors), and 7 percent had never been to New Zealand.

The LisNZ data reports a measure of English language ability, derived from information declared by the respondent about his or her capacity to speak, write, and understand English. Consistent with the large numbers of United Kingdom and Ireland and South African migrants,[19] 70 percent speak English as one of their main languages. Eligibility for SMC is conditional on a minimum level of English, so it is unsurprising that only 1 percent are reported to speak poor to moderate English 6 months after arrival.

The skill level of the most recent occupation before the residence approval is reported in Table 3. The skill levels are derived from the occupation according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO). The five skill levels in ANZSCO are defined in terms of formal education and training, previous experience, and on-the-job training.

Level 1 corresponds to the highest skill level. As an illustration, managers and professionals would have a skill level of 1 or 2, technicians and trade workers correspond to level 2 or 3, and labourers to level 4 or 5.[20] In the sample, 59 percent of the migrants have a skill level 1 occupation. The information is missing for 3 percent of the sample.[21]

On the whole, the association between human capital characteristics and wages is as expected: a better qualification, more potential experience, a higher skill level, and better language ability are associated with higher wages. Migrants who have never been to or worked in New Zealand before gaining residence earn on average more than others. As can be seen, employment rates are high for every group. Therefore, the following analysis focuses on wages.

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[17] A vocational qualification refers to any post-secondary school qualification of a lower level than a bachelors degree (trade certificates, technical or professional qualifications).

[18] The potential experience equals age less the number of years of education less 5 years. It is an estimation of the number of years of work experience.

[19] Over 78 percent of South African principal applicants spoke English as their main language.

[20] Australian Bureau of Statistics, cat No 1220.0. Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1
http://www.abs.gov.au/ausstats/abs@.nsf/mf/1220.0

[21] The missing values correspond to respondents who have not worked in their source country or in New Zealand within 2 years before the date of residence approval.

Table 3: Human capital characteristics and labour market outcomes

Characteristics	Percentage (%)	Employment rate at wave 3 (%)	Wave 3 hourly income (mean $)
Qualification			
No post-school qualification	8	95	25
Vocational qualification	35	94	27
Bachelors degree	31	93	30
Masters or higher degree	26	92	34
Potential experience			
1 year or less	2	95	31
2–3 years	9	87	24
4–5 years	7	93	26
6–7years	7	94	26
8–9 years	8	94	31
10 years or more	67	95	31
Previous experience in New Zealand			
Never been to New Zealand	7	94	33
Been to New Zealand: not employed	17	95	32
Been to New Zealand: employed	75	94	29
Unspecified	1	100	29
Most recent skill level before residence			
Level 1	59	95	32
Level 2	13	95	27
Level 3	14	92	24
Level 4 or 5	11	90	24
No working spells recorded	3	89	31
English language ability			
Main language	70	95	31
Very good	20	91	28
Good	8	91	24
Moderate or poor	1	93	19
Total	**100**	**94**	**30**

Source: Longitudinal Immigration Survey: New Zealand.

3.2   Assessing eligibility for points

The LisNZ data does not contain the actual points that were awarded in migrants' applications. Instead, the information contained in LisNZ is used to assess whether applicants were eligible for points for each factor. The level of information available does not allow the SMC Policy to be reproduced exactly. For example, no estimates are derived for bonus points related to identified future growth area or areas of absolute skill shortage. These areas are based on a list of occupations that is reviewed every 6 months and includes further tests (for example, with regard to qualification and credential recognition). Therefore, this part of the policy is difficult to replicate in a robust and meaningful way.

On the other hand, because the points that migrants claim have to be verified, a disincentive may exist to claim points above the level that entitles them to progress to the next stage of the application process. Therefore, the amount of points actually claimed is likely to be lower than the amount of points applicants were eligible for. In addition, some changes have been made to SMC policy since LisNZ was administered. To make this research more relevant to policy, this research attempts to replicate current SMC Policy as much as possible, rather than the policy that was in force when LisNZ participants applied for residence.

To evaluate the quality of the estimates, the percentage of SMC migrants who could have claimed points for each factor, according to LisNZ data, is compared with the actual percentage of those claiming points over the sample period,[22] derived from the residence approvals from Immigration New Zealand's Application Management System. The results are reported in Table 4, as well as the labour market outcomes for each group. The match is generally good, in particular for the human capital and employment factors, which are the ones of primary interest in this study and have the highest weights.

Percentages for the partner's offer of employment, partner's qualification, and close family support in New Zealand seem to be largely under-reported. Because of their relatively low weighting and the need to produce proof, applicants are unlikely to claim points for these factors unless they need to. Also, in some cases, the data may not allow accurate estimation of the points.

The age distribution of migrants in the LisNZ sample is older than the actual points claimed for age. This is because migrants have up to 12 months to take up residence. Further, wave 1 is 6 months after residence so migrants could be up to 18 months older in the LisNZ sample than as the appear in the administrative data.

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[22] November 2004 to October 2005.

Table 4: LisNZ Estimates of Skilled Migrant Category points factors

Factor	Points	Actual % claiming points	Estimated % eligible for points	Employ-ment rate (%)	Hourly wage (mean $)
Skilled employment					
Current employment					
for 12 months or more	60	29	26	95	29
for fewer than 12 months	50	37	32	95	29
Job offer	50	19	19	96	33
Bonus points for employment or an offer of employment					
IFGA or AASS	10	29	No estimates		
Region outside Auckland	10	47	45	96	30
Partner employment or job offer	20	5	17	9	31
Relevant work experience in comparable labour market					
2 years	10	13	13	94	27
4 years	15	12	3	97	27
6 years	20	11	3	94	33
8 years	25	9	4	90	33
10 years	30	34	39	96	33
Bonus points for New Zealand work experience					
1 years	5	NA	24	94	30
2 years	10	12	10	97	28
3 years or more	15		3	95	28
Additional bonus points for work experience in a IFGA or AASS					
2–5 years	10	27*	No estimates		
6 years or more	15				
Recognised qualification					
Vocational (levels 3–6)	40	68*	35	94	27
Bachelor (levels 7–8)	50		31	93	30
Postgraduate (levels 9–10)	60	10	26	92	34
Bonus points for recognised qualification					
Bachelor (level 7) or postgraduate (levels 8–10)	10	NA	8	90	23
Postgrad gained after 2 years' study in NZ (levels 9–10)	15	NA	3	89	24
Qualification in IFGA or AASS	10	32	No estimates		
Partner's recognised qualification					
Vocational (levels 3–6)	10	16*	12	97	30
Higher (levels 7–10)	20		14	94	34
Close family support in NZ	10	3	17	95	28
Age					
20–29 years	30	33	26	92	25
30–39 years	25	41	42	94	31
40–44 years	20	15	18	98	31
45–49 years	10	7	9	93	32
50–55 years	5	4	4	87	30

Source: Application Management System, skilled principal applicants approved between 1 November 2004 and 31 October 2005 who took up residence within 1 year. Longitudinal Immigration Survey: New Zealand (LisNZ). Mean hourly wage at wave 3, in $/hour, missing values excluded.

Notes: IFGA = identified future growth area; AASS = area of absolute skills shortage.

    * These categories were grouped in 2004/05.

    NA = not available (policy change between 2005 and 2007).

4 SKILLED MIGRANT CATEGORY POINTS AS PREDICTORS OF LABOUR MARKET OUTCOMES

In this section, we use regression models to examine the association between points factors related to labour market outcomes and the logarithm of hourly wages earned by Skilled Migrant Category (SMC) principal applicants 3 years after taking up residence. Only wages are analysed because participation and employment rates are high among the sample and there is insufficient variation to model.

4.1 Methodology

Regression models estimate the average change in wages that is associated with a certain characteristic while controlling for a set of other factors that are likely to influence wages. For example, if experience and gender are controlled for, the increase in wages associated with a degree is defined as the average difference in wages between those who have a degree and those who have no qualification, but are otherwise similar with regard to experience and gender.

The advantage of the regression model is that it estimates an association with everything else held constant, thus allowing the identification of the specific effect of each factor. The characteristics under study may not directly cause higher wages, but represent factors that do, so can be used as indicators to inform the points system.

In a standard economic approach, wages are related to human capital characteristics, especially education and work experience. The SMC framework can be seen as a way of measuring many aspects of human capital. Given this framework, the following analysis focuses on those characteristics awarded points specifically as indicators of positive labour market outcomes, as identified by Immigration New Zealand's *Operational Manual* ('labour market factors'). These factors can be seen as human capital components or employability factors:

- current employment or job offer (employability)
- relevant work experience and New Zealand work experience (human capital and employability)
- qualification and New Zealand qualification (human capital)
- close family support (employability).[23]

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[23] A measure of potential job networks and support.

Two models are presented below (Table 5). The first model examines the link between labour market factors and wages while controlling for additional demographic characteristics (nationality, gender, and household composition).[24] However, since the policy cannot discriminate on certain demographic characteristics of migrants, this information cannot be used in practice to predict wages. In the second model, the controls are removed to reflect the constraints of the policy.

4.2   Results

When demographic factors are included, the model explains 20 percent of wage variability at wave 3, a result consistent with the literature for this type of analysis (see Table 5, Model 1).[25] However, when information about demographic characteristics is removed from the model, only 13 percent of the variability is explained (Table 5, Model 2). This lower explanatory power reflects that information that helps predict wages has been taken out of the model, even though the remaining variables may proxy some of the lost information.

Current skilled employment or a job offer is positively associated with wages

Having current skilled employment or a job offer at the residence approval date is positively associated with wages, although the coefficients for current employment are not significant.[26]

Further, when analysing the outcomes 6 months after taking up residence, current employment at application was found to have a positive significant effect on wages (see wave 1 results in Appendix C).

As can be seen in Table 5, the effect of job offers persists 3 years after taking up residence. It is important to note here that because this model includes only those who were approved through the SMC, those without employment must have scored highly in other areas.

Relevant work experience for more than 6 years increases wages

Relevant work experience is found to increase wages, but only for durations that exceed 6 years of experience (which is true for around half of the sample, see Table 4).

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[24] The location at time of application (onshore or offshore) and the time spent in New Zealand before residence approval were tested but were not found to be significant. Different groupings of the controls were also tested but this one was found to perform best.

[25] For example, similar analysis in Maré and Stillman (2009) yielded R-squared statistics consistently under this level.

[26] A large variability within the omitted category or a correlation with the New Zealand experience might affect the significance of current employment. With a different specification, it was found that not having a job offer or current employment leads to wages significantly below the average. When excluding New Zealand work experience, the coefficients for current employment become significant.

For a given level of relevant work experience in a comparable labour market, having gained any number of those years in New Zealand has no significant effect on the outcome. However, the interpretation of this result is important because applicants who claim points for 'current employment of more than 12 months' also have at least 1 year of New Zealand relevant work experience. When the indicators for current employment are excluded from the models, the effect of New Zealand work experience becomes statistically significant. Reciprocally, when New Zealand work experience is excluded from the model, the coefficients for current employment become significant. This seems to indicate that the skilled New Zealand work experience does have an additional positive effect compared with any relevant work experience, but that this advantage is mostly accounted for by awarding points to applicants with current employment.

Returns to education positive and increased between waves 1 and 3

Three years after taking up residence, the increase in wages associated with qualifications range from 14 percent for a vocational qualification to 33 percent for a masters or higher degree compared with not having any post-school qualification.

Moreover, returns to education were found to increase between waves 1 and 3. At wave 1, a vocational qualification had no significant advantage over having no qualification, and a bachelors associated with 16 percent (masters or doctorate 20 percent) higher wages (see Appendix C). A possible explanation would be that, as migrants adapt to the labour market, they are more likely to see their qualifications rewarded by employers. These findings are broadly consistent with those of Maré and Stillman who found those with higher qualifications converged to the similar New Zealand–born counterpart faster than those with lower qualifications.[27]

Positive returns from qualification may be lower if the qualification gained in New Zealand

When controlling for demographic characteristics (model 1), New Zealand qualifications are found to have similar returns to foreign qualifications. However, when the controls are removed, positive returns from qualification appear to be lower if the qualification was gained in New Zealand, as is shown by the negative coefficients on New Zealand qualifications in Model 2. For example, at wave 3, a bachelors degree gained in New Zealand is found to increase wages by 10 percent, compared to 25 percent for a foreign bachelors degree.

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[27] D Maré and S Stillman (2009) *The Labour Market Adjust of Immigrants in New Zealand*. Wellington: Department of Labour.

This difference between the two models reflects a correlation between demographic characteristics and education gained in New Zealand. Indeed, 9 out of 10 of the migrants with a New Zealand qualification came from Asia; almost half were women (45 percent) compared with one-third of the entire sample (34 percent). These two groups earn less than others on average. Hence, when these factors are not controlled for in the models, returns to New Zealand qualifications are underestimated.[28]

Consistent with previous studies of migrant outcomes in New Zealand,[29] the model shows that, while controlling for, among other things, education and work experience, migrants from Asia and the Pacific earn less than other SMC migrants. The magnitude of this effect is large: 3 years after taking residence, migrants from Asia earn on average 24 percent (18 percent for those from the Pacific) less than those from Europe. The average wage for principal SMC Asian and Pacific migrants is around $25 per hour, still a relatively high wage overall. Similarly, women earn on average 12 percent less than similar men. The interpretation of these differences in outcomes is difficult, as they could result from any factors that are not taken into account in the model, or are only partly measured, as well as reflect discrimination. Typically, those factors could be the location of the jobs, job networks, language ability, the quality of education, and occupational segregation. Further research is required to better understand those differences.

Table 5: Association between Skilled Migrant Category (SMC) labour market factors and the hourly wages of SMC migrants 3 years after taking up residence

	Model 1 (with controls)		Model 2 (without controls)	
R squared Adjusted R squared Number of observations	0.20 0.18 1,405		0.13 0.12 1,405	
Characteristics	**Parameter estimates**	**Standard error**	**Parameter estimates**	**Standard error**
SMC labour market points factor				
Skilled employment [None]				
Job offer	0.101 *	0.039	0.127 **	0.040
Current employment for fewer than				
12 months	0.060	0.037	0.031	0.038
Current employment for 12 months				
or more	0.062	0.058	0.038	0.060
Years of relevant work experience [less than 2]				
2–3 years	0.025	0.079	0.061	0.080
4–5 years	-0.067	0.076	-0.012	0.078
6–7 years	0.155	0.073	0.182 *	0.074
8–9 years	0.129	0.063	0.202 **	0.064
10 or more years	0.135 **	0.033	0.234 **	0.032

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[28] When New Zealand vocational qualifications are represented in the model a significant negative coefficient remains even after controls are added (although this is smaller than in the model without controls). Apart from the different characteristics of migrants who have studied in New Zealand, it could be that the qualifications they study for are also different, and this may be driving the different outcomes observed.

[29] J Poot (1993) 'Adaptation of migrants in the New Zealand labor market.' *International Migration Review* 27(1): 121–139; G Nana and K Sanderson (2008) *Migrants and Labour Market Outcomes*. Wellington: Department of Labour; D Maré and S Stillman (2009) *The Labour Market Adjust of Immigrants in New Zealand*. Wellington: Department of Labour.

	Model 1 (with controls)			Model 2 (without controls)		
Years of relevant work experience in NZ [less than 1]						
1 year	0.040		0.043	0.064		0.045
2 years	-0.055		0.090	-0.021		0.092
3 years	0.095		0.096	0.088		0.099
Qualification [None]						
Vocational	0.139		0.048	0.104		0.050
Bachelor	0.299	**	0.052	0.247	**	0.053
Master or higher	0.331	**	0.053	0.312	**	0.054
NZ qualification [None or Vocational]						
Bachelor	-0.009		0.055	-0.154	*	0.053
Master or higher	-0.016		0.076	-0.163		0.075
Close family support	-0.051		0.033	-0.025		0.033
Demographic characteristics						
Region [Europe]						
South Africa	-0.039		0.039			
North America	-0.018		0.061			
Asia	-0.245	**	0.035			
Pacific	-0.180	**	0.066			
Other	-0.090		0.061			
Gender: Female [Male]	-0.120	**	0.045			
Composition of household for male [couple without children]						
Single	-0.105	*	0.042			
Couple with children	-0.008		0.035			
Single parent	0.528		0.373			
Composition of household for female [couple without children]						
Single	-0.057		0.051			
Couple with children	0.075		0.054			
Single parent	-0.195		0.165			
Region: South Island [North Island]	-0.173	**	0.029			

Notes

The dependant variable is the logarithm of the hourly wage at wave 3. Explanatory variables are all dummies. Ordinary least squares estimates.

Employed part time or full time, missing values excluded. Wave 3 weights. Omitted categories are indicated in brackets. Significance levels: **1 percent; *5 percent.

Bonus points are awarded for close family support, recognising that the presence of close family enhances prospects for employability and settlement.[30] The argument is that close family support may increase the breadth and efficiency of job search. This was not found to have a significant impact on income, but may have impacted on the time taken to find a job or job offer before the residence application.

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[30] Immigration New Zealand *Operational Manual,* section SM20.1. www.immigration.govt.nz/opsmanual (accessed at 12 August 2011)*.*

5 USING THE POINTS TO BETTER PREDICT WAGES

In this section, possible improvements in the allocation of points are considered. To provide practical recommendations, this analysis focuses on changes to the Skilled Migrant Category (SMC) that could be implemented realistically. The three changes considered are:

- **simplifying** – regrouping and combining categories and that do not add additional information

- **adding** – introducing additional factors that are not currently awarded points but improve the prediction of wages (and are feasible to verify)

- **re-weighting** – adjusting the relative weights of factors to better reflect their respective importance in predicting wages.

The regression models presented previously were modified to test different ways of breaking down categories. For each factor, we considered more detailed breakdowns of the categories, but none added any further useful information. To the contrary, in many cases categories could be combined without significant loss of explanatory power.

Information that might be missing from the Skilled Migrant Category

To identify information that might be missing from the SMC, we compared the information considered under SMC with criteria used in a more standard economic modelling approach.[31] As a result, additional variables were included in the regression models presented previously. These variables are English language ability and the skill level of previous employment.

For migrants, English language ability can be seen as a component of human capital, but it is also likely to be linked with labour market status because it can be acquired in the workplace. Indeed, it is already compulsory for applicants to have a minimum standard of English.[32] However, self-assessed English ability at wave 1 may still be a predictor of wages earned 3 years after taking up residence.

The pre-migration occupation could also matter in terms of labour market outcomes.[33] In the Longitudinal Immigration Survey: New Zealand (LisNZ), this information is not available for the whole sample, so the most recent skill level available is tested instead (see p 10). This approach is more appropriate to the policy framework because it corresponds to information that is easily available at the time of selection. For instance, for migrants who are eligible for points for current skilled employment in New Zealand, the most recent skill level is the skill level of this very job.

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[31] Based on the seminal work of J Mincer (1974) *Schooling, Experience and Earnings*. New York: Columbia University Press.

[32] An overall band score of at least 6.5 in the International English Language Testing System General or Academic Module.

[33] See, for example, D Cobb-Clark (2000) 'Do selection criteria make a difference? Visa category and the labour market status of immigrants to Australia.' *Economic Record* 76(232): 15–31.

Change in migrant rankings used to test changes in the points allocation

To test changes in the allocation of points, we analysed the overall change in the ranking of migrants. This was done by simulating alternative allocations of points, ranking the sample according to those points, and comparing the average wages by deciles for each allocation. Since higher points are associated with higher wages, it is expected that the 10 percent of the sample with the highest points would earn higher wages on average. The more difference there is across the spectrum between the average wage of the 10 percent with the lowest points and the average wage of the 10 percent with the highest points, the better the allocation is at sorting migrants.

This approach is appropriate because points are used to rank among applicants, but the nominal amount of points is not relevant in this study, especially as some points are not taken into account. Moreover, this approach allows us to compare between allocations of points regardless of the chosen scale. For instance, dividing the number of points given for each factor by 10 does not affect the ranking. The alternative allocations that are tested are reported in Appendix D. They are not scaled to fit the current rules; they are used to illustrate the effect of change in the relative weights of each factor. Three different allocations are illustrated below; their features are reported in Table 6.

Table 6: Alternative allocations of points

Alternative allocation	Illustrates the impact on ranking of …	Features
Allocation 1	Simplifying	Based on Skilled Migrant Category, but: • having a job offer or current employment is joined • relevant work experience is grouped to less than 2 years, 2–5 years, 6–9 years, and 10 years or more • more than 1 year of work experience in New Zealand is grouped • New Zealand bachelors degree and above is joined.
Allocation 2	Adding and re-weighting	Based on Allocation 1, but: • points for English and previous skill level are added • weights are based on Model 4 (Table 7).
Allocation 3	Adding and re-weighting without additional controls	Based on Allocation 1, but: • additional points are awarded for previous skill level • more points are awarded for experience and less for vocational qualification.

5.1 Results for Allocation 1 – Simplified Skilled Migrant Category categories

Categories are combined where the current groupings or variables are not significantly different from each other in Table 5. The changes to the groupings are:

- having a job offer or current employment are joined
- relevant work experience is grouped to less than 2 years, 2–5 years, 6–9 years, and 10 years or more
- 1 year of work experience in New Zealand and above are joined
- New Zealand–gained bachelors degree and above are joined.

Benefits of the changes

These changes would simplify the system and could lower the cost and time of managing applications.

The predictive power of the model is not affected by these changes.

Ranking of migrants based on Allocation 1 is almost unchanged

Figure 1 compares the average wages by deciles for the current allocation of points with this alternative allocation that has fewer categories for several factors (see Appendix D for more details of the way points are allocated). As can be seen, the ranking of migrants based on this allocation is almost unchanged from the ranking based on the current SMC points allocation.

Figure 1: Comparison between the current Skilled Migrant Category (SMC) allocation and a simplified allocation
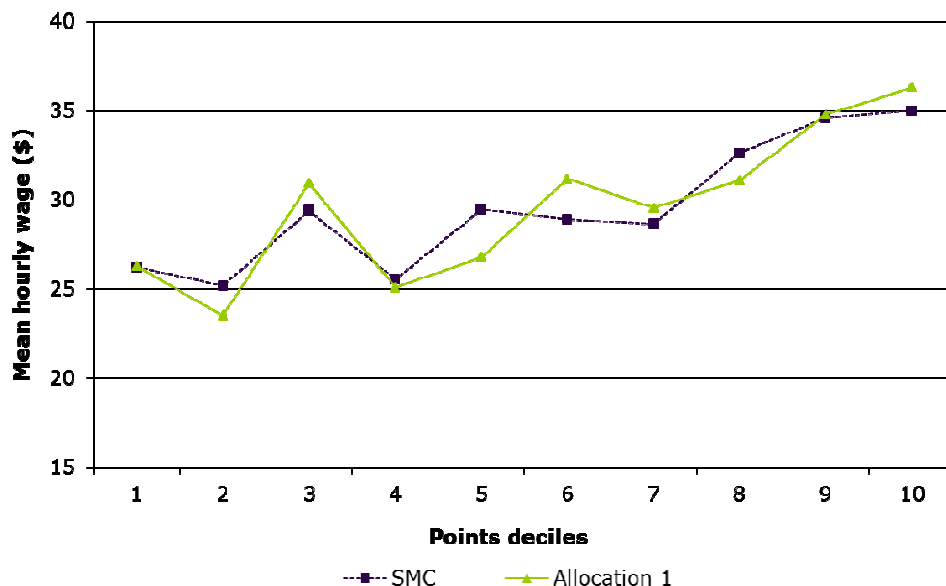
5.2 Results for Allocation 2 – New variables and adjusted weighting of Skilled Migrant Category factors

This allocation uses the groupings from Allocation 1 and adds two additional factors: English language ability, and the most recent Australian and New Zealand Standard Classification of Occupations (ANZSCO) skill level.

Table 7 shows that the inclusion of the two variables increases the predictive power of the model and lowers the impact of education on wages, but current skilled employment falls short of being statistically significant.

Lower English language ability is associated with lower wages

As expected, lower English language ability is associated with lower wages, but the effect is small and not significant when controlling for demographic characteristics. The effect becomes large and significant when the controls for demographics are removed (Model 4). As mentioned previously, this is because English language ability is highly correlated with demographics, particularly nationality.

This result could mean that English ability at the time of entry is not associated with medium-term wages other than by reflecting a set of unobserved factors associated with nationality. Alternatively, it could be that the measure of English language ability is not accurate enough, and that nationality better captures poor language ability (possibly in addition to other, unobserved, characteristics).

As is shown by this analysis, adding points for higher English language ability to the SMC would increase the predictive power, but it would not be possible to guarantee that this is not, at least in part, the result of other unobserved factors associated with nationality.

Most recent skill level is a strong predictor of wages

The most recent skill level before residence approval is a strong predictor of wages (see p 10 for details about this variable). Mostly, a higher skill level is associated with higher wages, although this is not true for skill levels 4 and 5.

A more precise differentiation between occupations may add even more power, but is not possible with this data set. The ANZSCO skill level is already an element of the SMC Policy, through the definition of 'skilled' employment (ANZSCO level 1-3).

Further differentiation between skilled and highly skilled migrants could be introduced

This analysis suggests that further differentiation between skilled and highly skilled migrants could be introduced, for example, through the skill level of either current employment or relevant experience, since both are largely observable under the current system. Note that currently relevant experience is mainly an indication of working in a 'comparable' labour market not an indication of the skill level of the experience.

Change possible in the points given for each factor

The results in Table 7 also suggest a possible change in the points given for each factor, as indicated by the relative size of the estimated coefficients. The idea is that points could be seen as a prediction of the wages applicants would earn in the medium term. By modifying the weights to align them with the coefficient, the prediction of wages would be improved. Therefore, the system would better select migrants with regard to their expected productivity. For instance, 6 years or more work experience is found to have a greater effect on wages than what is currently rewarded in the points system, suggesting that this factor could be stressed.

Gradient between points offered for lower and higher qualifications could be increased

The gradient between points offered for lower and higher qualifications could also be increased. The association between current employment and wages is found to be slight, yet this factor is awarded a large number of points in the current system. It is important to note here that this analysis includes only successful SMC applicants. The importance of employment for other migrants is relevant. This analysis could just mean that under the current system those who do not have a current job or job offer have to score a great number of points in other areas to make the points threshold and are likely to be high quality.

Table 7: Modification of the Skilled Migrant Category model

	Model 3 (with controls)		Model 4 (without controls)	
R squared	22%		16%	
Adjusted R squared	20%		15%	
Number of observations	1,405		1,405	
Characteristics	**Parameter estimates**	**Standard error**	**Parameter estimates**	**standard error**
Skilled Migrant Category labour market points factor				
Skilled employment [None]	0.064	0.038	0.044	0.039
Years of relevant work experience [less than 2]				
2–5 years	-0.039	0.042	-0.004	0.042
6–9 years	0.132 **	0.050	0.160 **	0.051
10 or more years	0.135 **	0.034	0.211 **	0.034
More than 1 year of relevant work experience in New Zealand [less than 1]	0.023	0.029	0.027	0.029
Qualification [None]				
Vocational	0.137 **	0.048	0.095	0.049
Bachelor	0.250 **	0.051	0.187 **	0.052
Master or higher	0.268 **	0.052	0.234 **	0.053
New Zealand qualification: Bachelor or higher [None or Vocational]	-0.020	0.048	-0.125 **	0.047
Close family support	-0.051	0.032	-0.027	0.032
Additional characteristics				
Previous skill level [Level 1]				0.038
Level 2	-0.115 **	0.037	-0.124 **	0.040
Level 3	-0.226 **	0.041	-0.198 **	0.052
Level 4 or more	-0.083	0.052	-0.114 *	0.081
No skill level recorded	0.031	0.079	0.062	

	Model 3 (with controls)			Model 4 (without controls)		
English ability [Main language]						0.032
Very good	-0.035		0.033	-0.074	*	0.047
Good, moderate or poor	-0.057		0.049	-0.191	**	0.038
Demographic characteristics						
Region [Europe]						
South Africa	-0.027		0.038			
North America	-0.045		0.060			
Asia	-0.215	**	0.037			
Pacific	-0.123		0.066			
Other	-0.047		0.060			
Gender: Female [Male]	-0.138	**	0.045			
Composition of household for male [Couple without children]						
Single	-0.107	**	0.041			
Couple with children	0.000		0.035			
Single parent	0.490		0.368			
Composition of household for female [Couple without children]						
Single	-0.054		0.050			
Couple with children	0.038		0.053			
Single parent	-0.252		0.163			
Region: South Island [North Island]	-0.155	**	0.029			

Notes

The dependant variable is the logarithm of the hourly wage at wave 3. Explanatory variables are all dummies. OLS estimates.

Employed part time or full time, missing values excluded. Wave 3 weights. Omitted categories are indicated in brackets. Significance levels: **1 percent; *5 percent.

Proposed changes substantially increase association between points and wages

Figure 2 compares the average wages by decile for the current allocation of points with an alternative allocation based on the results of the regression (Model 4) with additional points awarded for English language ability and skill level (described in Table 7). The proposed changes substantially increase the association between the points and wages within the sample, as would be expected.

Figure 2: Comparison between the current Skilled Migrant Category (SMC) allocation and the best prediction of wages
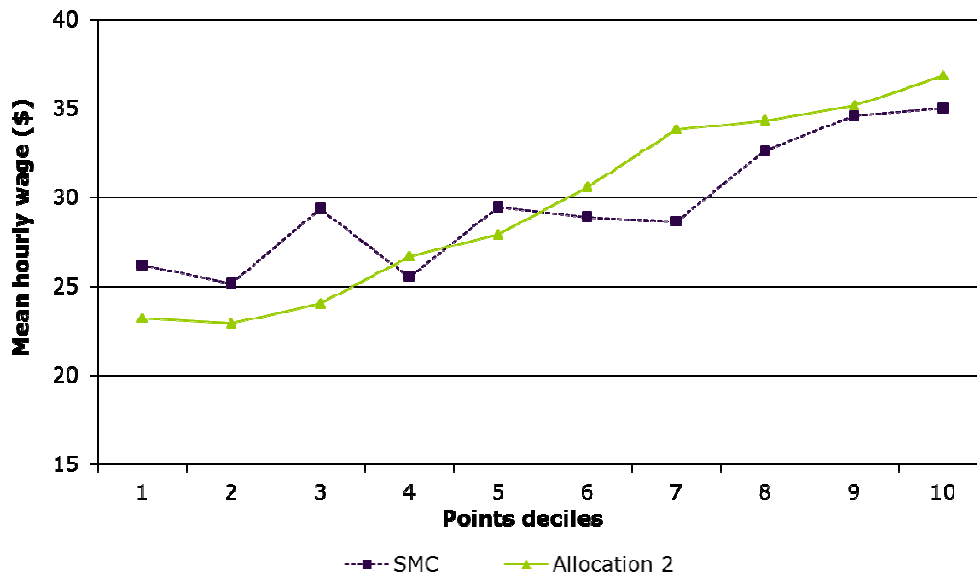
5.3   Results for Allocation 3 – Changes that do not conflict with other objectives

Limitations of ranking applicants according to expected hourly wages

The approach taken here – ranking the applicants according to their expected hourly wages – has two important limitations. First, as has been previously discussed, wages alone do not reflect the breadth of the objectives of the policy. For instance, the rationale for points being awarded for a job or a job offer is because of the role in matching migrants' skills with employers' needs. Second, the present analysis looks only at successful principal applicants, and the results could be substantially modified if a larger population was under study.

Therefore, conclusions should be considered only as indicative of the type of changes that might be useful. Such changes should not affect the other objectives of the policy, nor change dramatically the characteristics of the population that applies for residence through the SMC.

Only changes unlikely to conflict with other objectives considered.

Allocation 3 was designed to represent the considerations discussed above, with only changes unlikely to conflict with other objectives considered. In this allocation, the system is simplified, more emphasis is put on relevant work experience, and the points for vocational qualifications are reduced. On the other hand, current employment is worth a large number of points and New Zealand qualifications are still rewarded,[34] with additional points awarded for skill level but not for English ability.

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[34] For instance, promoting the New Zealand education industry is a rationale for those points.

Simple changes do improve the ranking but less than in Allocation 2

Figure 3 compares the average wages by deciles for the current allocation of points with those for this alternative allocation. As can be seen, those simple changes do improve the ranking, although the improvement is considerably less than in Figure 2 (based on Allocation 2).

Figure 3: Comparison between the current Skilled Migrant Category (SMC) allocation and an alternative allocation with minor changes
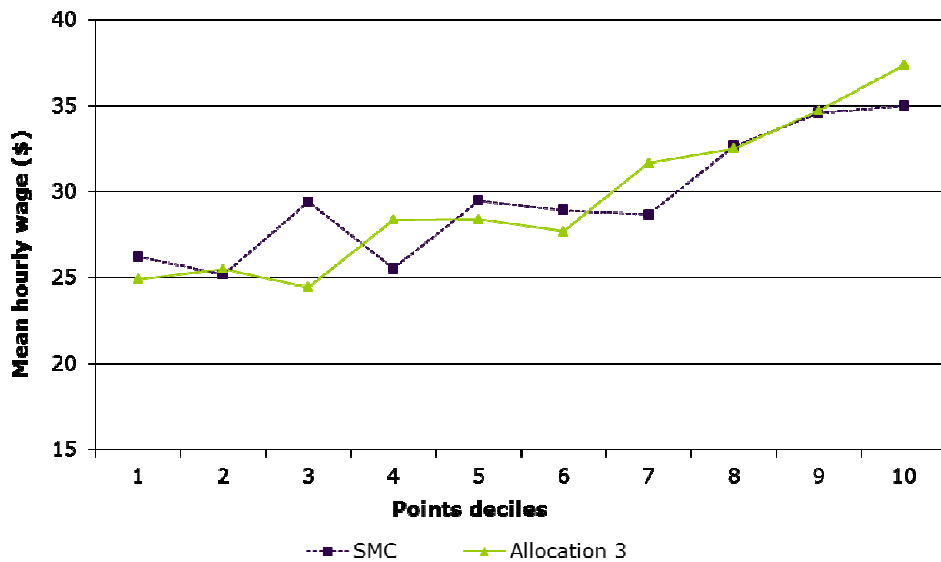
6   DISCUSSION AND LIMITATIONS

6.1   Skilled Migrant Category principal applicants are doing well in the labour market

Migrants who were granted residence under the Skilled Migrant Category (SMC) as principal applicants are doing well in the labour market. Three years after taking up residence, they have a high employment rate (94 percent) and earn on average $30 per hour. Moreover, if they have higher qualifications, these are rewarded with significantly higher earnings, suggesting that these migrants have managed to successfully transfer skills acquired abroad to their jobs in New Zealand.

6.2   Study analysed only wages

Of the labour market outcomes, only wages are analysed because participation and employment rates are high among the sample and we do not have sufficient variation to model.

By focusing on the wages of successful migrants, this research covers only some of the objectives of SMC. Further research is required to take into account all of the objectives, for example the identification of specific skills that are needed within the New Zealand labour market, the social capital contribution of migrants, and issues of retention.

6.3   Limitations

Actual points not collected

The data from the Longitudinal Immigration Survey: New Zealand (LisNZ) does not contain the actual points that were awarded in migrants' applications. Instead, the information in LisNZ is used to assess whether applicants were eligible for points for each factor. The match between the two is generally good.

Verification may act as a disincentive to claim all points

The points that migrants claim have to be verified, so there may be a disincentive to claim points above the level that entitles them to progress to the next stage of the application process. Therefore, the number of points actually claimed is likely to be lower than the number of points applicants are eligible for.

Impact of points associated with growth or skills shortage areas not tested

In addition, the impact of giving points associated with identified future growth areas or areas of absolute skill shortage were not tested because of data limitations.

Impact of having a job or job offer likely to be underestimated

Migrants who were granted residence with a job offer were doing well in the medium term, even compared with those who were already employed in New Zealand at the time of application. It should be noted that this work analyses the outcomes of successful applicants so the impact of having a job or offer is likely to be underestimated. Due to the high weighting given to current employment or a job offer in the points system, migrants without points for a job or job offer need to claim a large number of points for other factors, so are likely to be highly skilled or experienced. As a result, the importance of a job or job offer should not be discounted.

7 RECOMMENDATIONS

This research provides several recommendations regarding the way points are allocated if higher wages are seen as a key labour market outcome. These recommendations will facilitate the selection of migrants who are more likely to earn higher wages in the medium term.

The recommendations are:

- simplify the system by changing the grouping within categories and joining several categories
- improve the ranking of applicants by:
    - differentiating between skilled and highly skilled migrants
    - increasing the required level of English or awarding additional points
- adjust the points weighting by awarding:
    - more points for high levels of relevant work experience
    - fewer points for vocational qualifications.

7.1 Simplify the system

The system could be simplified by combining categories within certain factors that points are allocated for, namely:

- having a job offer or current employment (under or over 12 months) could be combined and rewarded with the same points
- relevant work experience could be grouped into fewer categories – less than 2 years, 2–5 years, 6–9 years, and 10 years or more
- points could be given simply for more than 1 year of work experience in New Zealand
- New Zealand bachelors degrees and higher degrees could be grouped and given the same points.

7.2 Improve the ranking of applicants

Differentiate between skilled and highly skilled migrants

The ranking of applicants could be improved by differentiating between skilled and highly skilled migrants, using the ANZSCO skill level of current or last occupation. This would require some information about the current or most recent occupation of migrants at the time of application. It could be done most easily among the applicants who have a job or a job offer since their occupation is already known.

Increase the required level of English or award additional points

In the current system, English language ability is already part of the selection as a compulsory requirement. It is measured by a formal test and in some case by previous background in an English-speaking country. A possible policy change is raising the required level or, as in the Australian system, awarding points in addition to the minimum threshold.

However, this study showed that English language ability at the time of application is highly correlated with the nationality of migrants. Awarding points for language ability may restrict immigration opportunities for some people for whom poor English language ability may not be the underlying cause of their labour market disadvantage.

7.3   Adjust the points

Results showed that having current skilled employment in New Zealand is associated with a relatively small increase in wages, and that New Zealand qualifications do not lead to additional gains than foreign qualifications. However, the points for these factors could be maintained to serve other objectives such as settlement or international education. Nonetheless, more points could be awarded for high levels of relevant work experience, and fewer points for vocational qualifications.

7.4   Further work

Before changing the allocation of points, sensitivity testing should be conducted to determine the impacts of the changes on the number of applications that would make the expression of interest stage. The correlation between points and objectives such as retention, settlement, or the development of social capital should be estimated.

APPENDICES

Appendix A: List of comparable labour markets

The Immigration Operational Manual (SM11.10.1) lists the following countries with comparable labour markets.

Australia

Austria

Belgium–Luxembourg

Canada

Cyprus

Denmark

Finland

France

Germany

Greece

Iceland

Ireland

Israel

Italy

Japan

Malaysia

Netherlands

New Zealand

Norway

Philippines

Portugal

Republic of South Korea

Singapore

South Africa

Spain

Sweden

Switzerland

United Kingdom

United States

Appendix B: Characteristics of principal skilled migrants by nationality

Characteristics	Region of origin				
	UK/IR	Asia	South A	Other	Total
Size					
Unweighted counts	432	798	134	394	1,758
Weighted percentage (%)	39	29	13	19	100
Demographics					
Female (%)	30	41	28	36	34
Aged 20–29 years (%)	12	54	13	25	26
Aged 30–39 years (%)	52	30	44	41	42
Offshore applicants (%)	37	7	9	13	20
Human capital					
More than 10 years of work experience[1] (%)	80	30	81	59	62
Post-school diploma Vocational (%)	38	23	49	38	35
Bachelor or higher	54	70	41	54	57
NZ post-school qualification[2] (%)	2	50	S	10	17
English main language (%)	99	35	81	57	70
Labour market outcomes					
Employment rate (wave 3) (%)	95	91	98	92	94
Mean hourly wage (wave 3, $/hour)	32	25	30	31	30

Source: Longitudinal Immigration Survey: New Zealand.

Notes: UK/IR = United Kingdom and Ireland; South A = South African.

1   Actual experience before residence approval, not potential experience.

2   Including vocational qualifications.

Appendix C: Skilled Migrant Category model for outcome at wave 1

	Model 1 (with controls)		Model 2 (without controls)	
R squared	31%		20%	
Adjusted R squared	29%		19%	
Number of observations	1,534		1,534	
	Parameter estimates	**Standard error**	**Parameter estimates**	**Standard error**
SMC points factor				
Skilled employment [None]				
Job offer	0.067 *	0.030	0.096 **	0.031
Current employment for fewer than 12 months	0.097 **	0.028	0.070 *	0.029
Current employment for 12 months or more	0.137 **	0.042	0.139 **	0.045
Years of relevant work experience [less than 2]				
2–3 years	0.060	0.055	0.110	0.057
4–5 years	0.015	0.055	0.049	0.058
6–7 years	0.159 **	0.057	0.191 **	0.061
8–9 years	0.162 **	0.047	0.246 **	0.050
10 or more years	0.151 **	0.025	0.266 **	0.025
Years of relevant work experience in NZ [less than 1]				
1 year	-0.001	0.031	0.006	0.033
2 years	-0.059	0.064	-0.056	0.067
3 years	0.073	0.068	0.073	0.072
Qualification [None]				
Vocational	0.007	0.035	-0.026	0.037
Bachelor	0.162 **	0.037	0.122 **	0.039
Master or higher	0.196 **	0.038	0.194 **	0.040
NZ qualification [None or Vocational]				
Bachelor	-0.058	0.041	-0.222 **	0.041
Master or higher	-0.081	0.057	-0.259 **	0.059
Close family support	-0.022	0.024	0.003	0.025
Demographic characteristics				
Region [Europe]				
South Africa	-0.040	0.029		
North America	0.130 **	0.044		
Asia	-0.275 **	0.026		
Pacific	-0.187 **	0.049		
Other	-0.144 **	0.044		
Gender: Female [Male]	-0.103 **	0.033		
Composition of household for male [couple without children]				
Single	-0.079 **	0.030		
Couple with children	0.027	0.026		
Single parent	0.400	0.289		

Composition of household for female [couple without children]			
Single	-0.044		0.037
Couple with children	0.061		0.040
Single parent	0.263	**	0.101
Region: South Island [North Island]	-0.131	**	0.021

Notes

The dependant variable is the logarithm of the hourly wage at wave 1. Explanatory variables are all dummies. OLS estimates.

Employed part time or full time, missing values excluded. Wave three weights. Omitted categories are indicated in brackets. Significance levels: ** = 1%; * = 5%.

Appendix D: Simulated allocations of points

	SMC	Allocation 1	Allocation 2	Allocation 3
Skilled employment				
Job offer	50	50	5	50
Current, for fewer than 12 months	50	50	5	50
Current, for 12 months or more	60	50	5	50
Relevant work experience				
2–3 years	10	10	0	10
4–5 years	15	10	0	10
6–7 years	20	20	15	30
8–9 years	25	20	15	30
10 or more years	30	30	20	50
Relevant work experience in NZ				
1 year	5	5	5	10
2 years	10	5	5	10
3 years	15	5	5	10
Qualification				
Vocational	40	20	10	25
Bachelor	50	50	20	50
Master or higher	60	60	25	60
New Zealand qualification				
Bachelor	5	10	0	5
Master or higher	10	10	0	10
Close family support	10	10	0	0
Most recent skill level				
Level 2	0	0	5	5
Level 1	0	0	10	10
English language ability				
Very good	0	0	10	0
Main language	0	0	15	0

Note: The alternative allocations are not scaled; for example, the maximum amount of points varies. They are used to illustrative the effect of change in the relative weights of each factor.

Allocation 1 combines categories of the Skilled Migrant Category (SMC).

Allocation 2 is based on the linear regression coefficients (Model 4) in order to best predict wages.

Allocation 3 illustrates the changes in the policy that do not conflict with other objectives.

Appendix E: Glossary of variables

The variables identified in this appendix are grouped into four thematic categories:

- education
- experience
- skilled employment
- demographics.

Education

Qualification

The highest post-secondary qualification of the person, grouped in four categories:

- No qualification: no degree or high school degree
- Basic: basic, skilled, intermediate, and advanced vocational degrees
- Bachelor: bachelors and honours
- Postgraduate: masters and doctorate.

New Zealand qualification

The highest qualification gained in New Zealand. No degree or high school degree and basic qualifications are aggregated.

Spouse qualification

Whether the respondent's partner has a post-secondary school qualification and speaks English best, for respondents who included a partner in their residence application. Bachelors and postgraduate degrees are aggregated.

Experience

Years of potential work experience

The age at wave 1 less the number of years of education

Previous skill level

The Australian and New Zealand Standard Classification of Occupations skill level of the most recent working spell in New Zealand that started before the residence approval date, if the person has worked in New Zealand within 2 years before the residence approval date; otherwise the skill level in the person's source country, if the person has worked in his or her source country within 2 years before the residence approval date; otherwise undefined. Skill level is derived from the occupation and ranks from 1 to 5, 1 being the best skill level.

Years of relevant work experience

The sum of the years of relevant work experience in New Zealand and of the years of relevant work experience abroad.

Years of relevant work experience in New Zealand

The number of years the respondent has spent working in New Zealand before residence approval date, with a skill level of 1, 2, or 3, if the most recent period of work in New Zealand ends later than 2 years before the residence approval date. Working spells that end before 2 years before the residency approval date are not accounted for.

Years of relevant work experience abroad

The relevant work experience abroad is equal to the difference between potential work experience and work experience in New Zealand, if the two following conditions are respected.

- The respondent has worked in his or her source country with a skill level of 1, 2, or 3 within the last 2 years.
- The respondent has a job offer or a current skilled employment, or has lived more than 12 months in a country corresponding to a 'comparable labour market', else than New Zealand, after turning 18.

Otherwise, the relevant work experience abroad is set to 0.

Skilled employment

Job offer

Onshore applicants are considered to have a job offer if they are in employment at the residence approval date, with a skill level of 1, 2, or 3, but have had this job for less than 3 months.

Offshore applicants are considered to have a job offer if they declared that their job was arranged before they came to New Zealand, or if they start to work at a skill level of 1, 2, or 3 less than 1 month after arriving in New Zealand.

Current skilled employment

Onshore applicants are considered to have a current skilled employment if they are employed at the residence approval date, with a skill level of 1, 2, or 3, and have been for at least 4 months. Respondents who have a current skilled employment are grouped in two categories:

- current skilled employment for less than 12 months
- current skilled employment for more than 12 months.

The duration of different jobs are summed providing that the skill level is always 3 or less and that any interruption of work lasts less than a month.

Spouse job offer

Whether the respondent's partner works at wave 1, with a skill level of 1, 2, or 3, and speaks English best, for respondent who included a partner in their residence application.

Job or job offer outside Auckland

Whether the first place the respondent lived after the residence approval date is outside Auckland region, for respondent who have a job offer or a current skilled employment.

Demographics

Region of origin

The nationality of the person, aggregated by region.

English ability

If the respondent speaks only English or declares English as one of his or her best spoken languages, then English is considered as the main language. Otherwise, the modalities 'moderate or poor', 'very good' and 'good' are derived from questions assessing the respondent's ability to read, write, speak and understand English. English ability is observed at wave 1.

Composition of household

The composition of the household interacted with gender, at wave 1.

Region

The region in New Zealand where the respondent lives (either North Island or South Island) at wave 1.

Close family in New Zealand

Whether the respondent has parents, siblings or adult children living in New Zealand (at wave 1).

Age

Age at wave 1.

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