Tracking Industrial Location Propensities of 60s Immigrants in Canada: An Analysis of Metropolitan Census Microdata

by

Ravi Pendakur and Fernando Mata
Multiculturalism Programme,
Department of Canadian Heritage

Introduction:

Canada's immigration policy in the 1960s marked a profound departure from that which had been in force during the previous decade. Where previously, policy had emphasized family reunification, the new regulations also stressed skills and schooling. While during the late 1940s and fifties, immigrants had been primarily from Europe, changes to policy and regulations in 1960 meant that immigrants would gradually begin coming from countries outside Europe and North America.

The changes in intake which followed took place when the Canadian economy was shifting away from manufacturing toward service industries. Thus the labour force roles newly arrived immigrants would play in Canada's would likely be very different from those of previous generations. We use correspondence analysis to examine the propensities of immigrant cohorts (defined by age, birthplace and education) living in Montreal, Toronto and Vancouver, to locate in different industrial sectors. By examining the locations in 1971, 1981 and 1991, we are able to show how the labour force role of this new wave of immigrants changed over time, both in response to changes in the regulations which governed their entrance to Canada, and in response to the length of time in Canada.

Historical Context:

In 1960, two years after the John Diefenbaker's Progressive Conservative government took power, Ellen Fairclough, the Minister of Citizenship and Immigration reviewed the state of immigration policy. She argued that Canada required a steady flow of immigrants to balance and offset emigration. She further asserted that counter to popular belief, immigrants brought productive capital to Canada and established businesses which employed Canadian and immigrant workers. She went on to say that her government had made several significant changes concerning immigration. First, the regulation which formerly prevented Canadian residents of Asian origin from sponsoring their spouses and children until they became Canadian citizens was changed. Second, the immigration appeal board was strengthened and its scope expanded. Third, a new policy governing temporary residents of Canada was announced in August 1958 which made it possible to regularize the status of several thousand persons who had

previously entered the country on a non-immigration basis (Canada. June 9, 1960: 4711-4712).

On January 24, 1962, she introduced an immigration intake system stressing, in large part, selection based on skills and qualifications (Citizenship and Immigration, 1962). Sponsorship was maintained, but sponsorship of extended relatives required that prospective immigrants possess skills deemed necessary for Canada. References to either geographic area or ethnicity were for the most part removed. In principle all visitors and immigrants to Canada (with the exception of Americans) now had to be in possession of a visa. However, there were some vestiges of the past. The Minister retained the right to make regulations on the grounds of ethnicity and other cultural attributes, and intake agreements were still in place with countries in the Indian subcontinent. Further, the range of relatives eligible for sponsorship from outside Europe was narrower than was the case for Europeans.

Intake was divided into three categories. Independent class immigrants (and the accompanying family) were admitted based on education, training, skills or other qualifications. Family class immigration was retained essentially intact, with immigration from the Americas and Europe allowing a broader range of possible relatives than was possible from Asia and Africa. The nominated class represented a hybrid of the two previous classes. Immigrants in this class were admitted based on skill but also had a relative living in Canada who was willing to sponsor their admittance and provide some degree of support.

The changes were sweeping, and necessary. First, the supply of European immigrants was starting to slow down. Despite advertising campaigns abroad, the number of skilled European immigrants had slowed dramatically. Even sponsored immigration had fallen off, and total intake had dropped to almost one quarter of what it was when it peaked in 1957. The range of eligible immigrants therefore had to be broadened. Second, there was Canada's international reputation. In the summer of 1961, the World Council of Churches had laid down several principles regarding immigration, one of which was the need to avoid any exclusion of migrants on the basis of race, nationality or religion. The new regulations would allow Canada to argue that it was attempting to follow those guidelines. Finally, and perhaps not entirely coincidentally, Britain, just a few months earlier had changed its Immigration Act to concentrate on skills rather than sponsorship, so this worked out nicely.[1]

The impact of the new regulations was slow compared to previous regulatory changes, however, this was in part because the selection criteria, although approved in principle, had not yet been established. Nevertheless, there was a steady increase in intake over the next five years as the new immigration regulations were put into practice.

---

[1]. Granted, Macmillan's Conservative government had done so to reduce the intake of what was seen as low skill, Commonwealth immigration from the Caribbean, but the principle was still there and the rationale was not common knowledge (see Dean, 1993). In Canada's case however, the restrictions against non-white immigration were, for the most part, lifted, and the range of eligible immigrants was broadened across the board.

In October of 1966, the Liberals, under Lester Pearson released the White Paper on Immigration. It was basically an advocacy piece, designed to sell the status quo. The document laid out a somewhat revised schema for immigration which for the most part just tinkered with the 1962 regulations. However, it also explicitly linked immigration to economic requirements, stating that immigration policy must be consistent with national economic policy in general and with national manpower and social policies in particular as well as demographic requirements (Manpower and Immigration, 1966: 7). As well, it identified a nondiscriminatory policy as a goal, if for no other reason than 'any discrimination in the selection of immigrants creates strong resentments in international relations' (Ibid: 17).

The White Paper outlined a system of immigration which built on the 1962 regulations -- a rigorous recruitment of educated and skilled unsponsored immigrants, and controlled intake within two classes of sponsored relatives, who were assumed to be (rightly or wrongly) unskilled and poorly educated -- family and sponsored relatives (Manpower and Immigration, 1966: 13). Control of sponsorship was seen as necessary because:

> 'Such sponsorship has a potential for explosive growth. One skilled immigrant comes to Canada and quickly established himself. Very soon, he can sponsor the immigration of his brothers and sisters and his wife's brothers and sisters. They do not have to meet any standards of education or skill. They bring their wives and husbands....' (Ibid: 14)

Nevertheless, the authors of the report recognized that 'we cannot expect to bring workers in, without also welcoming their dependents'.

In December of 1965, Pearson announced authority for immigration was to be transferred to a new department of Manpower and Immigration. Ostensibly, this move allowed immigration to be much more tightly aligned with labour force requirements. In August of 1967, the Minister, Jean Marchand, announced that they had revised immigration regulations again (P.C. 1967-1616). The same basic classes were maintained, but the schema for evaluating the skills and training of independent class applicants was formalized under a system awarding points for socio-economic and demographic attributes. Further, the same sponsorship privileges were granted to all groups, making Canada's immigration policy (on the surface at least) 'colour blind'.

The point system was both elaborate and flexible, requiring prospective immigrants to gain a specified number of points depending on the class under which they wished to enter. The point system was heavily weighted in terms of occupation and skills with up to forty assessment units based on industrial demand, skill and employment. Next in importance was education and training, worth up to twenty points, followed by the personal assessment (fifteen points). Finally, attributes such as age and official language were worth up to ten points each.

Impact of the Regulatory changes:

The regulatory changes had their effect. At only seventy-one thousand immigrants, intake in 1961 was the lowest it had been since 1947, a time when there were similar changes occurring to immigration regulations and procedures. In 1966 intake had increased by more than two and a half fold to just short of two hundred thousand (see Figure 1). The mix also changed, for although sponsored immigration continued, the new regulations allowed increased (and skilled) immigration from outside Europe. Thus, immigration from Asia gradually increased through the 1960s from about two thousand in 1961 to twenty-three thousand by 1970.

Immigration from Southern Europe, which was primarily sponsored, remained constant through most of the period, but started to decline by the early 1970s. Immigration from Italy in particular reached a high of thirty-one thousand in 1966, but had fallen to less than six thousand by 1971. In the same way, while immigration from the UK remained relatively strong and was generally the highest source country in the early 1960s, there was a slow decline from the mid 1960s. Where one third of all immigrants were from the UK in 1966, this was true of only one in seven by 1971 (Manpower and Immigration: 1965 through 1971).

The intake pattern for European countries was one which followed a kind of rise and fall, but was primarily based on sponsored intake. As the supply of sponsored immigrants ran dry, so did the intake from a particular country. Intake from Asia and outside Europe rose however, because the new regulations allowed a new supply of skilled entrants who established roots in Canada and then called for their relatives. The pattern for Asians was similar to that of Italian immigration a decade earlier when changes to regulations allowed a broader range of relatives, thereby encouraging immigration from Southern Europe.

Overall, the changes in regulations served to alter the intake which then in turn changed the shape of the immigrant population. Given that the new regulations were more economically focussed, and that immigration was dynamically linked to labour force requirements when sistered with Manpower during the Liberal regime, new immigrants had to closely match the new demands for labour in Canada. This was particularly the case given Canada's changing economic base at the time.

Immigrants arriving in Canada during the 1960s came during a time of tremendous change. Manufacturing, although experiencing a slight increase in overall jobs, was in decline, accounting for one quarter of all jobs, as opposed to almost thirty-percent ten years earlier. The service sector, on the other hand was growing. This was particularly the case for the major urban centres. In the three CMAs examined here, the number of jobs in consumer services alone had doubled since 1961, business services had increased by almost 80 percent and social services (health, education and welfare) went up by one and half times, accounting for 13 percent of all jobs. The real growth was in the service sectors, with relatively little growth in manufacturing, construction, or distributive services such as communication, transportation and utilities.

The transformation of the labour force was in some sense mirrored by a dramatic rise in

the number of women who entered the labour force. Between 1971 and 1991, the proportion of native-born women active in the labour force rose from just less than 60 percent to 80 percent. These women gravitated toward the newly open positions in the service sectors, suggesting that to a degree the new shape of the labour market is a product of women in the labour force.

By splitting intake into independent and sponsored streams, the changes to immigration intake regulations acted to create an immigrant population with a bipolar schooling distribution as compared to the Canadian-born population. Looking at immigrants living in Montreal, Toronto or Vancouver in 1971, it is possible to see that this distribution was a byproduct of the new place of birth distribution. Immigrants from new source countries in Asia and Latin America, often had high levels of schooling (see Table 1). For example, while 9 percent of Canadian-born males, and 5 percent of Canadian-born females had university degrees, almost one third of South Asian males, and 14 percent of South Asian females had university degrees. Immigrant males from the United States also tended to have higher levels of schooling with over one-quarter having university degrees. The same was true for 19 percent of males from Latin America and the Caribbean. The opposite end of the spectrum, over 90 percent of immigrants (both men and women) from Italy and Portugal had less than twelve years of schooling. Immigrants from other European countries were more likely to have 12 to 13 years of schooling than was the case for Canadian-born males and females, and were about as likely to have university degrees.

The level of schooling constrained the choices immigrants could make in terms of entry into industry sectors. Jobs in certain sectors of the labour force such as social services or public administration were more likely to require higher levels of formal schooling. This was not so for others such as those found in consumer services or the construction sector. The sector demands were thereby reflected back in the work of immigrants because different groups had different schooling backgrounds. These differences were ‘re-reflected’ by employment status, because different sectors of the labour force had both different rates of self-employment and of growth from one census period to another.

Examining Industrial Location Propensities:

Past studies undertaken in immigrant economic integration suggest that, due to due to their specific skills, education and patterns of adjustment to the urban economy, some immigrant cohorts end up being concentrated in specific economic sectors (Beaujot, 1988). Occupational and industrial propensities, for instance, have substantially differed between unskilled Southern European, immigrants from Western, Central and Eastern Europe as well as from the U.K. or U.S.A. (Reitz et al: 1981; Reitz: 1982). Major differences in the labour force position of these groups have been regularly highlighted in the literature.

"Entrance status" theory predicts that the industrial location of an immigrant is a function of the degree he/she has moved away from, or remained closer to its original entrance status to the labour force. Limited occupational choices for immigrant cohorts lead to the stratification of the labour force and concentration of workers in particular occupations, branches of industry and

earning brackets (Darroch, 1979; Reitz et al. 1981, Porter 1985; Lautard and Guppy, 1990). The role played by "ethnic networks" in urban economies has also been identified as an explanatory factor in defining why immigrants choose to work in a particular economic niche (Breton, 1984; Driedger 1989). In the major cities of Canada, immigrant communities attain a high degree of "institutional completeness" which affect the economic adaptation of immigrants within communities. Industry sectors tied to institutions and networks such as business, welfare organizations, churches and schools can be used as channels for initial and subsequent occupational mobility within certain segments of the labour market.

From a longitutinal perspective, five central questions seemed pertinent to answer with regards to the choice of industrial location made by immigrant cohorts of the 1960's in Canada:

a) within which industrial niches did immigrants choose to work on entry?
b) did the choice of niches remain stable over the 30 years period?
c) to what extent does education in combination with age and birthplace determine these choices?
d) to what extent did choice of industrial location differ between males and females? and;
e) to what extent were there differences or similarities between the wage labour and self-employment sides of any given industry sector?

To address these research questions with appropriate longitudinal data, we hypothesized that, in general, the industry choices were directly related to the schooling requirements of the industry sectors, the levels of human capital brought to the country by immigrants and to the degree to which Canadian-born "retreated" from particular sectors of the economy. Industry niches were also expected to vary substantially in terms of their ethnic concentrations. Jobs related to manufacturing, construction and consumer services were expected to be loci of concentration of a few immigrant groups while other sectors were expected to be more ethnically diversified given the universality of the post-secondary degree requirements.

Data and Methods:

The ideal dataset for exploring these hypotheses is one that contains labour force data for a representative sample of immigrant and Canadian-born workers at several points in time. Such a longitudinal dataset would provide the individual work histories and could be used to measure both location in the labour force and change over time. The problem is that such a database does not yet exist in Canada. An alternative lies in examining like groups or cohorts of individuals which can be tracked down from census to census. In this way it is possible to study the same group of individuals using snapshot data. Although, this approach does not tell us precisely how any given individual has fared from one census to another, it is possible to determine the degree to which an entire cohort of individuals has changed over the period and identify relative changes in the size of the cohort itself with respect to particular industry / labour force positions.

We have chosen to use a 'quasi-longitudinal' cohort approach in order to look at the same group of individuals at several points in time. Using information from three census periods we

describe the employment patterns of immigrant workers born in different countries who came to Canada during the 1960s, comparing them to like education-age cohorts of Canadian-born workers. As suggested in the policy review above, this group of immigrants came when there were radical shifts in the nature of immigration policy and in the nature of the labour force itself.

Our data were drawn from the 1971, 1981 and 1991 Canadian census database and contains information on the active immigrant and non-immigrant labour-force whose members lived in three Census Metropolitan Areas: Toronto, Montreal, Vancouver. In 1971, these three CMAs were home to 59 percent of all immigrants to Canada who arrived between 1961 and 1971 (1971 Census of Canada). Information on respondents' age, schooling and place of birth were used to create cohorts of individuals which could be tracked from one census period to another. The position of these cohorts relative to industry-employment niches was then tracked from one census period to another. The labour force position of males and females are examined separately. Thus, the industry location of Canadian-born males relative to immigrant males is analyzed separately from Canadian-born females and immigrant females.

Box 1 describes the age-education-place of birth cohorts and industry- employment niches:

Box 1:

Cohort	Age in 1971 (3 categories)	15-24 25-34 35-44
	Education (4 categories)	Less than highschool Highschool certificate[2] Post-Secondary schooling University degree
	Place of Birth (16 categories)	Canada, USA, United Kingdom/Ireland, Germany/Austria, Poland, Czechoslovakia/Hungary, Portugal, Greece, Italy, Yugoslavia, Other Europe, South Asia, China/Hong Kong, Other Asia, Latin America/Caribbean, Other.

[2]. For 1971, highschool is estimated using years of schooling (12 years in British Columbia, 12 or 13 years in Ontario and 10 years in Quebec). Post Secondary includes all post-secondary schooling including trades and university.

Industry-employment sector	(17 categories)	Wage labour Sectors: – manufacturing (other than needle trades) – construction – distributive services – restaurants – consumer services (other than restaurants) – business services – health services – public administration Self-employed sectors: – manufacturing (other than needle trades) – construction – distributive services – restaurants – consumer services (other than restaurants) – business services – health services Combined sectors (wage labour and self-employed) – needle trades – education
Sex	(2 categories)	Males Females

Based on the combinations of age, education and place of birth we created a total of 192 cohorts of men and 192 cohorts of women (including those born in Canada) comprising approximately 1.8 million individuals. Using these three components we could track a group such as males from China with a degree who were 25 to 34 years old in 1971, across the three census periods. It was therefore possible to examine the location of this cohort in relation to the seventeen industry-employment niches across the three census periods. The shift across industries and the way in which the labour force position of immigrants differs from that of Canadian-born cohorts could then be compared.

Correspondence analysis (CA) was used to study the propensities of the different cohorts to concentrate around specific industry niches. CA is a multivariate analysis technique based on dual scaling procedures, which allow examination of the relationships between two nominally scaled variables in a multidimensional space. By determining departures from the independence model through the X^2 statistic, CA expresses relationships between variables and groups as points in a bi-plot (Weller and Romney, 1990). It partitions the unexplained deviations from independence into orthogonal dimensions (components) of descending order of explanatory power. One major advantage that Correspondence analysis has over other traditional cross-tabular analytical techniques is that it describes associations between variables in a graphical fashion in accordance with a measure of statistical independence such as the X^2 statistic. In doing so it illustrates the underlying relationships between variable categories.

To reduce the complexity of the data and increase their interpretability, the original five-way tables were compressed into two-way tables (6 in total, one for each gender - census period). The rows of the new tables represent age-birthplace-schooling cohorts while columns represent the type of industrial niche within which cohort members worked (employment status and industry sector). The basic structure of the two-variable tables allowed statistical manipulation as quasi-proximity matrices. By calculating row and column profiles of the table

and breaking down the X^2 statistic, points corresponding to cohorts and sectors, could be plotted in a plane spanned by the two major principal components (dimensions).[3] Given the property of orthogonality between dimensions, industrial preferences (expressed in over-representation of workers in particular economic niches) can be measured by the relative distance between cohort and sector points in the CA bi-plots. A total of 3,264 coordinate points (192 cohorts by seventeen sectors) were computed for each gender in each census period.[4]

Summary statistics of correspondence analysis' inertia statistics for each of the census tables are presented in Table 2. The total inertia statistic (which ranges from 0 to 1) is the proportion representing the magnitude of departure from the independence model which is left unexplained. Overall, total inertia represented no less than .40 or 40% of the data variation across the three census tables.

Table 2:

Correspondence Analysis: Inertia Statistics

Group	Dimension	Inertia	% Inertia
Males			
1971	All	0.416	100.00%
N=900,578	1: Human capital	0.224	53.80%
	2: blue vs white collar	0.065	15.60%
1981	All	0.418	100.00%
N=1,083,648	1: Human capital	0.255	48.10%
	2: blue vs white collar	0.078	14.70%
1991	All	0.466	100.00%
N=936,122	1: Human capital	0.23	49.40%
	2: blue vs white collar	0.061	13.00%
Females			
1971	All	0.47	100.00%
N=517,317	1: Human capital	0.258	54.90%
	2: blue vs white collar	0.106	22.50%
1981	All	0.436	100.00%
N=848,833	1: Human capital	0.234	53.70%
	2: blue vs white collar	0.104	23.70%
1991	All	0.394	100.00%
N=812,243	1: Human capital	0.217	55.00%
	2: blue vs white collar	0.09	22.90%

The first dimension present in the data, the more important one, explained approximately about

---

[3]. Principal Components Axes have a similar interpretation to those in the factor analytic literature.

[4]. A total of 43,681 points were obtained from the procedure (192 cohorts + 17 sectors)^2. Of these, we selected points that crossed cohorts with industry sectors (3,264 points) for each gender in each of the three census periods.

half of the total inertia across the male and female cohorts while the second dimension explained about a fifth or less. The two dimensions combined accounted for the bulk of the total deviations from the independence model. Bi-plots reveal that the first dimension captures human capital related attributes (age and education) while the second dimension, a industry-class related variable, captured differences in white and blue collar work. Dimensions present in the data have been identified accordingly.

CA provides coordinates for each sector and cohort defined within a two dimensional plane with a general limit of three standard deviations on each dimension. Comparing the location of coordinates for different sectors and cohorts in the biplot it is possible to define the propensity of any given cohort to work in a given sector. However, with 209 points on the biplot, comparing distances can get somewhat confusing. For this reason, we transformed the coordinates into Euclidean distances between cohorts and sectors. In this form, the propensity of any given cohort to choose and remain in any given economic niches is measured by the Euclidean distance between points representing cohorts and industry sectors.[5] Shorter distances between cohort and sector points are good proxies for strong industrial propensities of cohorts while larger distances reflect the opposite. Given the wealth of information contained in the bi-plots, we concentrated our efforts in identifying the twenty cohorts which were closest to each industry sector. We therefore sorted the cohorts by distance from each sector in order to identity the cohorts which were most attracted to the industry sectors (the cohort to sector distances are found in the Appendix). A minimal threshold of an Euclidean distance less than or equal to 0.5 was used to identify a strong industrial preference for any given sector[6].

Data Analysis:

As previously discussed, different sectors of the labour force have different schooling profiles. Jobs in construction, and consumer services tend to have lower schooling level requirements while those in business services, education and health services tend to require higher levels of schooling(see Myles and Fawcett: 1990). Distributive services, manufacturing and public administration have schooling profiles that are more moderate. In recognition of these attributes our discussion is organized into sectors with low, medium and high schooling

---

[5] Euclidean distances were calculated by the following formula:

$$D_{ij} = \sqrt{\sum (X_{ir} - X_{jr})^2 + (X_{is} - X_{js})^2}$$

where:

D_{ij} = Euclidean distance between cohort i and industry sector j
X_{ir} = X coordinate of cohort i in dimension R
X_{jr} = X coordinate of sector j in dimension R
X_{is} = X coordinate of cohort i in dimension S
X_{js} = X coordinate of sector j in dimension S

[6] X^2 distances in CA are expressed in a standardized form similar to that of principal components metric. An Euclidean distance less or equal to half a unit was estimated as the most adequate measure of over-representation of cohorts in particular industry-employment sectors.

requirements.

Because the schooling profile of immigrant cohorts is indirectly a product of the schooling system present in the source country, we expected that immigrant groups would gravitate toward different sectors of the labour market. This would have resulted in various levels of ethnic homogeneity and heterogeneity in industrial niches. High levels of attraction on the part of one place of birth group in any given industrial sector could be taken as evidence of ethnic specific enclaves. Lower levels of attraction suggests that no dominant pattern of ethnic enclaves exists.

Within this context, it was expected that men and women would exhibit different patterns of industry sector attraction and could be concentrated in different enclaves. Females would operate in different enclaves than males. In order to study the nature of such enclave attraction and formation we examined the industrial location propensities of men separately from that of women.

MALES

Industry Sectors with Low Schooling Requirements:

Needle trades, restaurants and the construction sector are examples of three strong ethnic-industry enclaves, having low entry requirements. The needle trades, which is part of the manufacturing sector, is a declining sector, characterized by high turnover and low entry requirements. It is a sector which has been strongly over-represented by immigrant workers and in a very large sense, it is 'propped up' by a constant immigrant inflow. Surprisingly, we observed that for men, the needle trades was a magnet for Southern Europeans with moderate rather than low levels of schooling across all three census periods. Italians Portuguese and Yugoslavians were among the most noticeable groups (distances ranged from .03 to .25). Young Portuguese men with post secondary schooling for example were located only .03 units away from the sector. Twenty years later, there was a general move away from the sector (the closest point was .12 units away -- young Portuguese with highschool). Italian men were still well represented (eight of the twenty closest groups were Italian with distances ranging from .17 to .53 units) as well as Portuguese, (four of the twenty groups). However, there was a broadening of the groups. Young and old Chinese males with post-secondary schooling had moved toward the sector (distances of .43 or less).

In comparison to the other sectors, the manufacturing sector was in decline over the three census periods. However, unlike jobs in the needle trades, a large number of manufacturing jobs offered the potential of relatively high wages, while at the same time requiring relatively low entry requirements. In 1971, Canadian-born and UK workers who were attracted to the wage labour side of sector tended to have low levels of schooling, regardless of age (distances of between .15 and .20 units). Immigrant workers from other countries had relatively higher levels of schooling. Old and mid age U.S.A. born males for example had highschool (distance of .20 and .12 units respectively). Young South Asians with highschool or post-secondary schooling

showed high levels of attraction (distances of only .09 and .05 respectively) . Canadian workers dominated self-employed manufacturing (eight of the closest twenty groups were Canadian with distances of .31 units or less). However, South Asian and UK born males were also attracted to the sector (with distances ranging from .18 to .31 for the wage labour side of the sector).

Over time two trends are noticeable. First Canadian-born workers become less attracted to the sector, second the schooling profiles of manufacturing workers were observed to improve on both the wage labour and self employed side of the sector. Overall, by 1991, there was a broadening of representation with young and old German and Polish workers as well as other cohorts showing increased attraction to the sector. In particular, Latin American and Caribbean workers of all age groups with moderate levels of schooling were strongly attracted to both sides of the sector (distances of between .02 and .16 units).

Construction, the restaurant sector and consumer services also represent sectors with relatively low entrance requirements. However, as opposed to the manufacturing sector, the construction sector was fairly stable over time and both restaurants and consumer services were growth sectors. The different dynamics of the sector allowed for greater ethnic heterogeneity.

In 1971, Canadians with low levels of schooling from all age groups were attracted to the self-employed construction sector (distances between .08 and .35 units). By 1991, only Canadian-born workers with moderate and low levels of schooling flocked to both wage labour and self-employed construction. Immigrants however, were less likely to move out of the sector. Further, the schooling profiles of immigrants in the construction sector tended to be higher than was the case for Canadian-born males, particularly in the self-employed side of the sector. Among immigrant cohorts, inspection of the locational propensities of these sectors among wage labour males suggests, for instance, that Yugoslavian immigrants in particular with low and mid levels of schooling, have been consistently attracted to this sector in the last 30 years (distances of between .04 and .25 in 1971; .08 and .25 in 1991). Further, where in 1971 Yugoslavs were initially attracted only to the wage labour side, in 1991, they were strongly represented on both sides of the sector. This pattern suggests that Yugoslavs moved from wage labour to self-employed construction over the 20 year period.

The restaurant sector displayed a different pattern. First, the distances tended to be further than was the case for construction, and second, the distances increased dramatically over time. In 1971, Only mid-age Greek men with moderate and low levels of schooling, young Greek men with highschool and Chinese men with highschool showed high levels of attraction to the wage labour restaurant sector (distances were between .22 and .34 units). On the self-employed side of the sector, there was a greater degree of attraction. Southern European and Chinese workers, particularly those with low schooling were attracted to the self-employed side of the sector (distances were between .11 and .50 units). By 1991, only older Greek men with highschool or less and young Chinese men with low levels of schooling were strongly attracted to wage labour restaurant work. On the self-employed side, only mid-age Greek men with low levels of schooling were strongly attracted. The restaurant sector is interesting because it is a growth sector and it has traditionally been identified as being an integral part of an ethnic

enclave. However, our findings indicate that the immigrants from the 1960s were not strongly attracted to the sector. Rather it may be that immigrants working in restaurants may be more recently arrived.

The consumer services sector, attracted workers with somewhat higher levels of schooling. In wage labour consumer services sector cohorts with low through post-secondary schooling of a wide variety of nationalities were present and strongly attracted to the sector (distances for the closest twenty cohorts ranged from .08 to .26). On the self-employed side of the sector, Canadian, U.K., U.S.A. and South Asian cohorts were attracted (distances of between .07 and .24). There was a shift over time however because by 1991, both the self-employed and employed side of the sector were more ethnically diversified with Polish and German cohorts with low and moderate levels of schooling joining the top twenty groups.

Industry Sectors with Moderate Schooling Requirements:

Distributive are those related to transportation, storage, communications and wholesale trade. Both distributive services and public administration are sectors demanding moderate levels of schooling. As such, cohorts attracted to this sector were more likely to have highschool or post-secondary schooling than was the case for consumer services or construction, where low schooling cohorts were common.

As with consumer services, distributive services is a growth sector however, jobs in this sector are a mixed bag with a range of both skills and wages. In 1971, Canadian cohorts gravitated to both sides of this sector -- eight of the top twenty groups on the wage labour side and nine on the self-employed side were Canadian. Four cohorts from the UK were also well represented (young and mid age with either highschool or post-secondary schooling). This was also true of mid- and older age South Asian cohorts with low and moderate levels of schooling (distances ranged from .12 to .42 units). Twenty years later, Canadian-born cohorts had retreated from the self-employed side of the sector resulting in greater ethnic diversification. South Asian, Latin American and Caribbean, Polish and German cohorts (generally with post-secondary schooling) gravitated to this sector. However, the wage labour side remained more homogenous. Cohorts from the UK were particularly well represented with seven of the top twenty groups being from the UK (distances ranged from .04 to .18) as were Canadian-born and Latin American/Caribbean cohorts (five groups and five groups respectively).

The public administration sector comprises jobs in the Federal, provincial and municipal government workers, as well as the military.[7] Jobs in this sector have traditionally offered relatively high rates of job security and pay. We observed that in 1971 six of the closest cohorts were Canadian-born. These cohorts were characterized by either having highschool or post-secondary schooling and came from all three age groups. In part this was a result of a public

---

[7]. Toronto, being a provincial capital largely has a mix of provincial and local public administration. In Montreal and Vancouver, while all three levels of administration are represented is likely dominated by local level public administration.

service policy which encouraged citizenship. Non-immigrants were generally ineligible to work in the public service. This meant that in 1971, Canadian-born males formed a tight ethnic enclave with the public service niche. However, cohorts from the UK, and South Asia were also well represented (five and four cohorts respectively of the most attracted groups) all with similar schooling credentials to Canadian-born workers. Over time, the public administration sector opened up somewhat to other groups. Canadian-born cohorts became less attracted to the sector and those from the UK became more attracted (five and eight groups respectively).

Industry Sectors with High Schooling Requirements:

Similar to consumer services, the business, education, and health services are growth sectors. However, unlike consumer services, these sectors have far higher schooling requirements and there is lower evidence of ethnic niches. In these sectors, the post-secondary degree was dominant as an educational credential. We saw that between 1971 and 1991, this niche has been occupied by workers of post-secondary degrees of a wide variety of age and place of birth cohorts. On both the wage labour and self-employed side of the sector, the possession of a post-graduate degree rather than the origin of the worker seems to have greater explanatory power in defining industrial location. In fact, ethnic diversity increased over time as immigrants with higher schooling moved into the sector.

The broad representation of ethnic and age groups meant that as compared to other sectors, the level of attraction these sectors was lower. For example in 1971, the average distance from the wage consumer services sector to the top twenty cohorts was .18, and .15 for wage manufacturing. It was .58 to the wage business services sector and .47 to the education sector. The average distance increased over time for health and education sectors, although the schooling requirement did not, suggesting that representation in the sectors became even broader.

There were some groups which were particularly attracted to these high education sectors. In 1971, Chinese cohorts with degrees from all age groups were attracted to wage level health services (distances ranged from .21 to .53 units) as were mid- and young Yugoslav cohorts with degrees (.10 units away from the sector). Immigrant cohorts from the UK and USA were strongly attracted to the education cohort. By 1991, the self-employed side of business services were proving more attractive to a wide variety of immigrant cohorts with degrees. With distances ranging from .08 to .52, immigrant cohorts from the UK, Germany, Italy, Czechoslovakia/Hungary and China with degrees all showed a high propensity to work in self-employed business services. As well, self-employed health services which exhibited very low attraction in 1971, was beginning to show some attraction by 1991. Older Latin American/Caribbean males with degrees for example, were only .32 units from the sector.

Canadian cohorts of all ages with degrees and mid and old cohorts of UK and USA immigrants were attracted to the education sector in 1971 (distances ranged from .17 to .40 units). By 1991, although these groups were still represented, the sector had broadened ethnically to include groups from Italy and Latin America/Caribbean.

FEMALES

In 1971, about two thirds of women of labour force age were active in the labour force. This proportion grew over time and the proportion of immigrant women active in the labour force was higher than that for the Canadian-born population (67 versus 59 percent respectively). However, as was the case among men, immigrant women, particularly those with low levels of schooling were expected to be attracted to different sectors of the labour force than was the case for Canadian-born women. Further, it was also expected that women would gravitate toward the newly opening positions in the service economy.

Industry Sectors with Low Schooling Requirements:

As will be remembered, for men, the needle trades was dominated by cohorts with either highschool or post-secondary schooling. Among women, the needle trades was more likely to attract those with low schooling. In 1971, fifteen of the twenty closest female cohorts had less than highschool. However on average, immigrant women were not strongly attracted to the needle trades -- the average distance from the closest twenty cohorts to the sector was .71 units. Greek, Italian and Chinese women with low schooling of all ages did congregate around the sector in 1971 (distances were between .34 and .46 units). Over the twenty years that followed, attraction to the sector decreased suggesting a great deal of turnover. Immigrants from the 1960s who remained close to the sector were those with low levels of schooling. Mid-aged Italian Greek and Chinese women with low schooling for example were closest to the sector (.02, .13 and .30 units away respectively). Canadian-born women were not represented among the twenty closest cohorts in any of the three census periods.

Canadian cohorts of women with low levels of schooling from all age groups were more likely to be attracted to wage labour manufacturing (distances ranged from .10 to .25 units). Often, immigrant women with moderate levels of schooling were attracted to the manufacturing sector. Mid-aged German women with low and moderate levels of schooling were very close to wage labour manufacturing (distances ranged from .07 to .28 units respectively). Canadian-born cohorts were not represented on the self-employed side of the sector and schooling tended to be somewhat higher. Half of the twenty closest cohorts attracted to self-employed manufacturing had highschool. In 1971, for example, young Chinese women with highschool were located only .04 units away from self-employed manufacturing while young Latin American/Caribbean women with low levels of schooling were .11 units away.

As was the case for men, restaurants constituted another industry sector with relatively low entrance requirements. Canadian, Czech and German-Austrian born cohorts of lower education were attracted to this niche in 1971. Most had "retreated" to other sectors by 1991 leaving a more diversified niche comprised of the above groups as well as Chinese, South Asians, Latin Americans and Yugoslavian women. Of interest is the fact that the pattern of attraction for women was different than that for men. Where Southern Europeans clearly formed a strong niche among men, among women, Eastern European groups as well as the newer, non-European groups were as likely to be part of this industry niche.

In 1971, the consumer services sector was highly ethnically diversified and growing. However there were definite differences between the self-employed and wage labour sides of the sector. We observed that women from all ages with low schooling born in Canada and the UK were attracted to the wage labour side (distances ranged from .12 to .25 units). However, these groups were absent from the twenty closest groups on the self-employed side of the sector. Rather, self-employed workers in consumer services attracted a diverse group of immigrant workers, many cohorts of which had high-school or post-secondary schooling. This sector points to the different demands between the wage labour and self-employed of any given sector. By 1981, among self-employed consumer services women workers, the schooling requirements became even higher. Fifteen of the twenty closest groups had post-secondary schooling. By 1991, mid-aged South Asian women with a degree were within the top twenty groups (.43 units away from the sector).

Sectors with moderate levels of schooling:

Being a growth sector, the distributive services sector attracted a broad range of women, both immigrant and Canadian-born. The dominant cohorts in 1971 were those with highschool certificates, particularly in the wage labour side of the sector (sixteen of the twenty closest groups were characterized by highschool education). There was a notable split between the wage labour and self-employed side of the sector because self-employed cohorts were more likely to have post-secondary schooling. Further, where Canadian-born cohorts as well as those from the UK and USA were well represented on the wage labour side, among the self-employed other immigrant groups were more prevalent. Canadian-born women with highschool from all three age groups were attracted to the wage labour side of the sector, but only older Canadian-born women were attracted to the self-employed side. In 1991, Canadian-born women with highschool education were strongly attracted to both sides of the sector. Immigrant cohorts were more likely to have post-secondary schooling. Chinese women with post-secondary schooling for example were strongly attracted to the self-employed side of the sector (distances for the three age groups ranged from .01 to .21 units away).

In 1971, the public administration sector was a strong magnet for women born in Canada, the UK and the USA, generally with post-secondary schooling (distances ranged from .01 to .25 units). In 1981, the sector was beginning to diversify. This process continued through the 1980s so that by 1991, it was fully ethnically diversified. However, schooling requirements were tightening, so that post-secondary schooling or better became the norm for the closest cohorts. For example, new cohorts of well educated women such as Chinese and South Asian women, some degrees were strongly attracted to the sector (distances ranged from .01 to .32).

Sectors with high schooling requirements:

As was seen for men, sectors with high schooling requirements tended to be more 'universal' and less ethnically defined. The business and social services sectors (health and education) were characterized by a broad representation of groups, both immigrant and Canadian-born. However the closest cohorts to this sector were increasingly those with degrees or at least

post-secondary schooling. In wage labour business services, for example, by 1991, fourteen of the twenty closest groups had post-secondary schooling, whereas this was the case for only six groups in 1971. On the self-employed side, schooling levels tended to be higher – by 1991, thirteen of the twenty closest groups were those with degrees.

In 1971 wage labour business services were very attractive to Canadian-born and immigrant women from the UK and the USA (distances ranged from .05 to .35 units). South Asian and Latin American/Caribbean cohorts with moderate levels of schooling were also represented. Twenty years later, these groups were joined by European and non-European immigrant groups such as German cohorts, additional South Asian cohorts and Chinese cohorts. Self-employed business services continued to attract cohorts with higher levels of schooling than was the case for the wage labour side.

Health services displayed a similar pattern to that seen in business services. In 1971, the Canadian cohorts with post-secondary schooling along with immigrant women from the UK and Latin American/Caribbean gravitated toward the sector (distances ranged from .02 to .32 units). Women were less attracted to the self-employed side of the sector. Save for Latin American / Caribbean women with degrees, which were only .05 units from the sector, most cohorts were beyond the .50 limit. Over time, schooling requirements appear to have increased, particularly among self-employed health workers. In fact, by 1991, with only one exception the cohorts closest to the self-employed health services sector all had degrees.

With respect to the educations services sector, we observed a cluster of highly educated women of all nationalities. Almost all the cohorts attracted to this sector were those with degrees. Further, the sector became more diversified over time with South Asian and Latin American Caribbean women move gradually to these niches over time.

Conclusions:

In this paper we have looked at the industrial propensities at different points in time of different cohorts of immigrant and Canadian-born workers living in the three largest Census Metropolitan Areas in Canada. Specifically, using correspondence analysis we looked at where, in the labour force, immigrants who arrived in Canada during the 1960s worked over time, controlling for age and schooling. Further, we looked at how this labour force role changed over the course of a twenty year period (1971 - 1991). This cohort of immigrants was of particular interest because changes to immigration intake regulations caused a substantial shift in the type of intake. Rather than intake being primarily focused upon family reunification, immigrant intake during the 1960s was split into two streams, a sponsored stream based on family reunification and an independent stream based on labour force requirements. The two streams created a bipolar schooling profile which had an underlying national composition. Immigrants with low levels of schooling tended to be from Southern Europe and Asia. Those with high levels of schooling came from the USA, Eastern Europe and South Asia. Each of these groups displayed specific patterns of labour force participation and industrial location.

Overall, we found that the picture of labour force integration is one of substantial change both in response to shifts in the labour market itself and to the social integration of immigrants themselves. However the opportunities for changing labour force position were far more prevalent at the higher end of the labour market than at the lower end. Central to our findings is that high levels of schooling over-road ethnicity and attractiveness of the ethnic enclave. Thus, while we found tight ethnic enclaves at the lower end of the education/industry market, we did not find such enclaves in industries requiring higher levels of schooling. In these 'low human capital' niches, among immigrants, low levels of schooling appeared to override age in determining industry position and resulted in concentration in an enclave.

We found that over the twenty year period, Canadian-born workers slowly moved away from areas which could be considered dying sectors, as the economy shifted toward one based on services rather than manufacturing. Often, their place was filled by immigrants with low levels of schooling. Thus ethnic niches were formed around the needle trades, construction and manufacturing. This pattern was observable in self-employment and wage labour niches. Industrial niches requiring higher levels of education became more and more ethnically diversified over time.

We also witnessed substantial moves toward self-employment on the part of immigrants working in these high education industries. The motivation for entering self-employment has been explored by a number of sociologists (see Yoon: 1995; Portes: 1987; Portes and Zhou: 1996; Beaujot et al: 1994; Mata and Pendakur: 1999). These scholars have attempted to explain self-employment in terms of looking at structural barriers which force immigrants to seek alternatives to wage labour. These barriers may include lost human capital as a product of the migration process. Such losses can take a number of forms such as inability to speak the dominant language, non-recognition of foreign earned credentials or the loss of a network to contacts and other business associates as well as discrimination. In addition, workers with low levels of schooling may have a limited set of occupational choices available for them. "Bleak" social mobility prospects in combination with feelings of disappointment with a society that does not recognize their abilities may therefore make self-employment a desirable option. Within this theoretical framework, the shifts we saw from wage labour to self-employment could be evidence that immigrants are using self-employment as a path to upward mobility, rather than staying in a wage labour sector where opportunities may be more limited. Within this framework of analysis, our research provides preliminary evidence in support of theories pointing to "blocked" mobility.

Finally, we found substantial differences between industrial propensities of immigrant women versus immigrant men. Where immigrant men with low levels of schooling worked in sectors which were in decline, such as construction or manufacturing, immigrant women, despite being concentrated in the needle trades, were also likely to work in growth sectors such as restaurants or consumer services. Immigrant men and women with higher levels of schooling found greater opportunities in the growing social services sectors such as health and education.

Bibliography:

Bates,-Timothy. 1994. 'Social Resources Generated by Group Support Networks May Not Be Beneficial to Asian Immigrant-Owned Small Businesses' Social-Forces; 72, 3, Mar, 671-689.

Bearse, P. 1984. 'An econometric analysis of black entrepreneurship,' The Review of Black Political Economy. vol 12 (4). pp: 111-134.

Beaujot, R . (1986). 'The Relative Economic Situation of Immigrants in Canada: Review of Past Studies and Multivariate Analysis of the 1981 Data' report prepared to the Review of Demography and Its Implications for Economic and Social Policy', Health and Welfare Canada.

Beaujot, R and P. Maxim, J. Zhao. 1994. 'Self-employment among immigrants: a test of the blocked mobility hypothesis,' Canadian Studies in Population. vol 21(2). pp: 81-96.

Bonacich, E. 1973. 'A theory of middleman minorities,' American Sociological Review. vol 38 (5). pp: 583-594.

Borjas, G. 1990. Friends or Strangers: the impact of immigrants on the US Economy. New York: Basic Books.

Breton, R . (1984). 'Institutional Completeness of Ethnic Communities and Personal Relations to Immigrants', American Journal of Sociology 70:193-205.

Campbell, Iain, R. Fincher, and M. Webber. 1991. 'Occupational Mobility in Segmented Labour Markets: The Experience of Immigrant Workers in Melbourne,' Australian and New Zealand Journal of Sociology 27, 2, Aug, 172-194.

Canada. 1960. House of Commons Debates. Ottawa: Government of Canada.

Citizenship and Immigration. 1962. 'Aide Memoire: RE: Proposed immigration regulations, Immigration regulations part I.' mimeo. for Minister's use in discussion with Prime Minister.

Darroch, G.A. (1979). 'Another Look at Ethnicity, Stratification and Social Mobility in Canada', Canadian Journal of Sociology 4: 1-25.

Dean, D. 1993. 'The Conservative government and the 1961 Commonwealth Immigration Act: the inside story,' Race and Class vol 35 (2). pp: 57-74.

England, P., G. Farkas, B. Stanek Kilbourne and T. Dou. 1988. 'Explaining occupational sex segregation and wages: findings from a model with fixed effects,' American Sociological

Review, vol 53 (August). pp: 544-558.

Light,-Ivan; Rosenstein,-Carolyn. Race, Ethnicity, And Entrepreneurship in Urban America. U California, Los Angeles 90024 PB: xi+255pp, CI, New York, NY: Walter de Gruyter, Inc.

Manpower and Immigration. 1966. White Paper on Immigration. Ottawa: Manpower and Immigration.

Manpower and Immigration. 1965-1977. Immigration Statistics. For the years 1965 through to 1977. Ottawa: Manpower and Immigration

Marger,-Martin-N.; Hoffman,-Constance-A. 1992. 'Ethnic Enterprise in Ontario: Immigrant Participation in the Small Business Sector' International-Migration-Review; 26, 3(99), fall, 968-981.

Mata, F and . Pendakur. Forthcoming May 1999. 'Immigration, Labour Force Integration and the Pursuit of Self-employment' International Migration Review.

Maxim, P. 1992. "Immigrants, Visible Minorities and Self-employment," Demography 29, 181-198

Morokvasic,-M. 1991. 'Roads to Independence. Self-Employed Immigrants and Minority Women in Five European States' International-Migration / Migrations-Internationales / Migraciones-Internationales; 29, 3, Sept, 407-419.

Myles, J and G. Fawcett. 1990. Jobs Skills and the Service Economy. Ottawa: Economic Council of Canada.

Papademetriou, D. et al. 1989. The Effects of Immigration on the US Economy and Labour Market. Immigration Policy and Research Report 1. Washington DC: Us Department of Labour, Bureau of International Labour Affairs.

Pendakur, R. 1996. 'The changing role of post-war immigrants in Canada's labour force: an analysis across four census periods,' Ottawa: unpublished doctoral dissertation, Sociology and Anthropology, Carleton University.

Portes,-Alejandro; Jensen,-Leif . 1989. 'The Enclave and the Entrants: Patterns of Ethnic Enterprise in Miami before and after Mariel' American-Sociological-Review; 54, 6, Dec, 929-949.

Portes,-Alejandro. 1987. 'The Social Origins of the Cuban Enclave Economy of Miami' Sociological-Perspectives; 30, 4, Oct, 340-372.

Portes,-Alejandro; Zhou,-Min. 1996. 'Self-Employment and the Earnings of Immigrants,' American-Sociological-Review; 61, 2, Apr, 219-230.

Reitz, J.G. (1982) ' Ethnic Group Control of Groups', University of Toronto: Centre for Urban and Community Studies, Research Paper No. 133

Reitz,J.G. , Calzavara,L and Dasko, D. (1981). 'Ethnic Inequality and Segregation of Jobs', University of Toronto: Centre for Urban and Community Studies, Research paper No. 123

Sanders,-Jimy-M.; Nee,-Victor. 1996. Immigrant Self-Employment: The Family as Social Capital and the Value of Human Capital. American-Sociological-Review; 61, 2, Apr, 231-249.

Satzewich, V. and P. Li. 1987. 'Immigrant labour in Canada: the cost and benefit of ethnic origin in the job market,' Canadian Journal of Sociology. 12 (3). pp: 229-241.

Sullivan, T. 1981. 'Sociological views of labour markets: Some missed opportunities and neglected directions,' in I. Berg (editor). Sociological Perspectives on Labour Markets. Toronto: Academic Press. pp: 329-346.

Weller, S. C and Romney, A.K. 1990. Metric Scaling: Correspondence Analysis, Sage University papers, series 07-075

Yoon, In-Jin. 1995. 'The growth of Korean immigrant entrepreneurship in Chicago,' Ethnic and Racial Studies vol 18 (2). pp: 315-335.

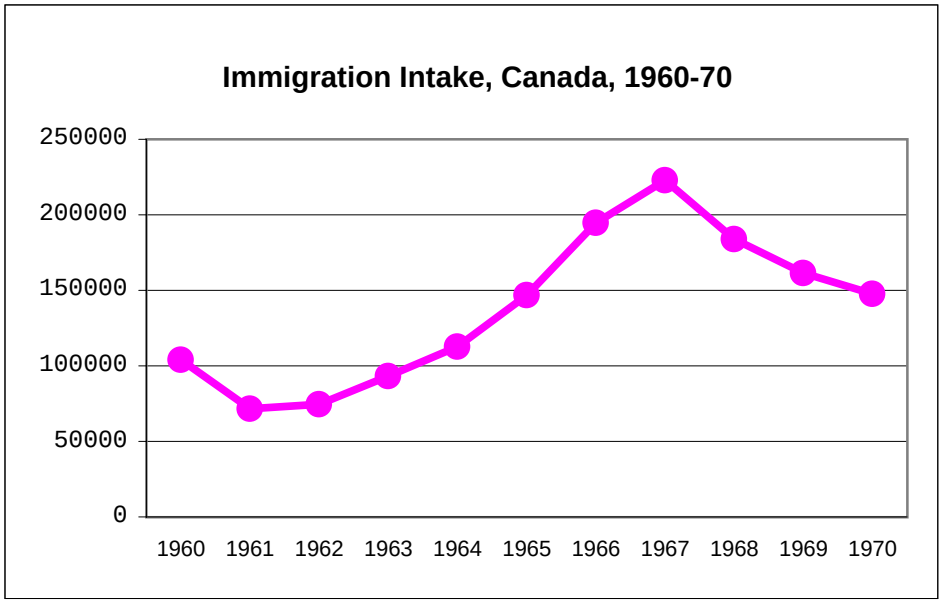
TABLE 1

Highest Level of Schooling for Canadian-born and Immigrant (1961-1970) Males and Females, Living in Montreal, Toronto and Vancouver, 1971

	Total	LT Gr 9	Gr 9-11	Gr. 12-13	Some Univ	University Degree
MALES						
Total	1,861,851	35%	31%	19%	5%	10%
Canada	1,239,507	33%	36%	17%	5%	9%
Immigrants 1961-70	622,344	41%	22%	22%	5%	10%
USA	27,087	23%	19%	18%	14%	26%
UK Ireland	162,688	22%	26%	37%	7%	7%
Austria Germany	37,797	24%	29%	32%	8%	7%
Poland	33,357	54%	20%	14%	5%	6%
Czech. / Hungary	23,492	30%	19%	26%	11%	14%
Portugal	16,443	76%	16%	6%	2%	1%
Greece	28,071	64%	16%	14%	4%	2%
Italy	117,213	76%	15%	6%	2%	1%
Yugoslavia	16,488	48%	21%	18%	8%	5%
Other Europe	84,132	36%	24%	23%	8%	10%
S. Asia	9,198	11%	18%	22%	17%	31%
China/Hong Kong	14,170	49%	19%	16%	6%	10%
Other Asia	12,496	20%	17%	22%	15%	26%
Latin Amer./Carib.	19,193	16%	32%	33%	9%	10%
Other	20,519	19%	22%	29%	12%	19%
FEMALES						
Total	2,076,905	35%	34%	22%	3%	5%
Canada	1,420,627	31%	39%	21%	3%	5%
Immigrants 1961-70	656,278	44%	24%	24%	3%	5%
USA	37,257	24%	23%	26%	19%	8%
UK Ireland	201,550	27%	32%	36%	4%	2%
Austria Germany	41,000	28%	33%	31%	5%	3%
Poland	30,164	58%	21%	14%	4%	3%
Czech. / Hungary	20,002	36%	23%	29%	7%	5%
Portugal	16,372	83%	11%	4%	1%	0%
Greece	26,572	78%	11%	9%	2%	1%
Italy	105,006	84%	10%	4%	1%	0%
Yugoslavia	14,082	61%	17%	15%	5%	2%
Other Europe	80,601	40%	25%	24%	6%	4%
S. Asia	7,871	23%	20%	27%	16%	14%
China / Hong Kong	13,474	60%	14%	17%	6%	3%
Other Asia	14,442	25%	18%	20%	23%	13%
Latin Amer./Carib.	26,245	19%	35%	36%	7%	4%
Other	21,640	24%	27%	35%	8%	6%

Source: 1971 census of Canada.

Note: population age 15-64 not in school full time.


Immigration Intake, Canada, 1960-70
250000
200000
150000
100000
50000
0
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970

males 1971

Sum of 164:swneedl	
group	Total
czemps	0.20
czeyps	0.25
germlo	0.25
itamhs	0.23
itamps	0.19
itaops	0.15
itayhs	0.22
itayps	0.23
otemhs	0.13
oteyhs	0.26
oteyps	0.17
othmlo	0.20
othylo	0.10
pololo	0.04
poryhs	0.12
poryps	0.03
yugmlo	0.20
yugops	0.12
yugylo	0.25
yugyps	0.25

Sum of 165:smanuf	
group	Total
canmlo	0.17
canmps	0.18
canohs	0.26
canolo	0.11
canops	0.23
canyhs	0.31
canylo	0.27
canyps	0.20
oasmps	0.27
oasops	0.30
othops	0.26
polmps	0.29
sasmhs	0.22
sasmlo	0.22
sasmps	0.21
sasyhs	0.31
sasyps	0.28
ukimhs	0.18
ukimps	0.24
ukiyps	0.23

Sum of 166:sconst	
group	Total
canmlo	0.08
canmps	0.35
canolo	0.16
canylo	0.12
canyps	0.34
czemhs	0.23
czemlo	0.31
latyps	0.36
oasmps	0.34
oasops	0.30
polmps	0.31
sasmlo	0.04
sasyhs	0.34
sasylo	0.35
sasyps	0.30
ukimlo	0.28
ukimps	0.33
ukiylo	0.24
ukiyps	0.28
usamhs	0.35

Sum of 167:sdistr	
group	Total
canmhs	0.27
canmlo	0.38
canmps	0.35
canohs	0.24
canolo	0.34
canops	0.31
canyhs	0.28
canylo	0.47
canyps	0.39
oasmps	0.48
othops	0.44
sasmhs	0.39
sasmlo	0.40
sasmps	0.23
sasohs	0.26
sasops	0.42
ukimhs	0.29
ukimps	0.45
ukiyhs	0.46
ukiyps	0.46

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 173:wmanuf	
group	Total
canmlo	0.17
canolo	0.15
canylo	0.19
canyps	0.19
latmps	0.20
latyps	0.11
oasmps	0.13
oasops	0.05
othops	0.21
othyhs	0.21
polmps	0.06
sasyhs	0.09
sasyps	0.05
ukimlo	0.19
ukimps	0.14
ukiolo	0.20
ukiylo	0.19
ukiyps	0.07
usamhs	0.12
usaohs	0.20

Sum of 174:wconst	
group	Total
germlo	0.03
germps	0.19
gerylo	0.27
itamps	0.25
itaops	0.24
itayps	0.15
oasohs	0.27
oasylo	0.18
othylo	0.17
pololo	0.27
polops	0.18
polylo	0.26
pormps	0.27
poryps	0.20
yugmlo	0.04
yugmps	0.21
yugops	0.19
yugyhs	0.25
yugylo	0.16
yugyps	0.07

Sum of 175:wdistr	
group	Total
canmhs	0.17
canmlo	0.38
canmps	0.27
canohs	0.13
canolo	0.32
canops	0.21
canyhs	0.17
canyps	0.32
oasmps	0.42
othops	0.37
sasmhs	0.31
sasmlo	0.42
sasmps	0.12
sasohs	0.17
sasops	0.31
ukimhs	0.20
ukimps	0.39
ukiyhs	0.36
ukiyps	0.41
usayps	0.42

Sum of 168:sconsu	
group	Total
canmlo	0.17
canmps	0.13
canolo	0.07
canyps	0.11
latyps	0.20
oasmps	0.13
oasops	0.16
othops	0.15
othyhs	0.23
polmps	0.14
sasmhs	0.15
sasmlo	0.23
sasyhs	0.16
sasyps	0.14
ukimhs	0.19
ukimps	0.11
ukiyps	0.08
usamhs	0.23
usaohs	0.24
usayps	0.22

Sum of 169:sresta	
group	Total
chimps	0.33
chiyps	0.43
gremps	0.14
greyps	0.22
itamhs	0.50
itamlo	0.33
itamps	0.54
itaolo	0.22
itayhs	0.45
itaylo	0.35
otemlo	0.40
oteolo	0.31
oteylo	0.14
pololo	0.62
pormlo	0.21
porolo	0.11
porylo	0.21
yugolo	0.40
yugops	0.61
yugylo	0.66

Sum of 170:sbusin	
group	Total
canmdg	0.31
canodg	0.20
canydg	0.18
czemdg	0.69
germdg	0.50
latydg	0.55
oasmdg	0.64
otemdg	0.57
oteydg	0.56
othmdg	0.58
othodg	0.35
othydg	0.45
polmdg	0.41
sasmdg	0.67
sasodg	0.20
ukimdg	0.48
ukiodg	0.55
ukiydg	0.38
usamdg	0.65
usaodg	0.68

Sum of 172:shealt	
group	Total
canmdg	1.63
canodg	1.87
canydg	1.90
itaydg	2.20
latmdg	0.94
latydg	2.08
otemdg	1.99
oteodg	1.85
oteydg	1.96
othmdg	1.63
othodg	2.05
othydg	2.07
polmdg	2.13
sasodg	2.07
ukimdg	1.69
ukiodg	1.51
ukiydg	2.18
usamdg	1.53
usaodg	2.18
usaydg	1.21

Sum of 176:wconsu	
group	Total
canmlo	0.11
canolo	0.16
canylo	0.08
czemhs	0.14
czemlo	0.16
czeops	0.26
latyps	0.21
oasmhs	0.26
oasmps	0.24
oasops	0.16
polmps	0.18
sasmlo	0.14
sasyhs	0.21
sasylo	0.23
sasyps	0.17
ukimlo	0.13
ukimps	0.25
ukiylo	0.10
ukiyps	0.18
usamhs	0.20

Sum of 177:wresta	
group	Total
chimhs	0.22
chimps	1.06
chiohs	0.38
chiyhs	0.30
chiyps	0.70
gremhs	0.15
gremlo	0.30
gremps	0.75
greolo	0.77
greyhs	0.34
greylo	0.87
greyps	0.61
itamlo	1.00
itaolo	0.93
itaylo	0.98
oteolo	1.12
oteylo	0.90
pormlo	1.00
porolo	0.79
porylo	0.88

Sum of 178:wbusin	
group	Total
canmhs	0.67
canops	0.65
canyhs	0.65
chimdg	0.56
chiodg	0.50
czeodg	0.53
czeydg	0.64
gerydg	0.48
latohs	0.68
oasydg	0.44
sasmdg	0.68
sasops	0.53
sasydg	0.48
ukiohs	0.53
ukiops	0.68
ukiyhs	0.54
usamps	0.66
usayhs	0.68
usayps	0.64
yugydg	0.44

Sum of 179:whealt	
group	Total
chimdg	0.21
chiodg	0.53
chiydg	0.35
czemdg	0.30
czeodg	0.22
czeydg	0.12
germdg	0.48
gerydg	0.31
itaydg	0.51
latydg	0.56
oasmdg	0.34
oasodg	0.27
oasydg	0.32
othydg	0.60
polmdg	0.58
sasmdg	0.38
sasydg	0.27
usaodg	0.47
yugmdg	0.10
yugydg	0.45

Sum of 171:sweduca	
group	Total
canmdg	0.17
canodg	0.37
canydg	0.41
germdg	0.76
latmdg	0.76
latydg	0.58
otemdg	0.51
oteodg	0.47
oteydg	0.48
othmdg	0.21
othodg	0.54
othydg	0.55
polmdg	0.62
sasodg	0.61
ukimdg	0.20
ukiodg	0.09
ukiydg	0.68
usamdg	0.21
usaodg	0.70
usaydg	0.40

Sum of 180:pubad	
group	Total
canmhs	0.20
canmps	0.42
canohs	0.26
canops	0.31
canyhs	0.21
canyps	0.47
oasmps	0.56
othops	0.47
sasmhs	0.42
sasmps	0.31
sasohs	0.21
sasops	0.24
ukimhs	0.36
ukimps	0.54
ukiohs	0.39
ukiops	0.56
ukiyhs	0.32
usamps	0.56
usayhs	0.56
usayps	0.48

FEMALES

Sum of 133:swneedl	
group	Total
chimlo	0.43
chiylo	0.71
gremhs	0.41
gremlo	0.34
greolo	0.27
greyhs	1.04
greylo	0.46
itamlo	0.56
itaolo	0.34
itayhs	1.19
itaylo	0.44
itayps	0.63
oasmlo	1.25
otholo	0.78
pololo	0.96
polyhs	1.18
pormlo	0.89
porolo	0.53
porylo	0.66
yugmlo	1.23

Sum of 134:smanuf	
group	Total
chiyhs	0.04
czemhs	0.25
czemlo	0.25
czeohs	0.16
germhs	0.24
latolo	0.29
latylo	0.11
oasmhs	0.36
oasylo	0.16
otemhs	0.35
otemps	0.34
oteohs	0.21
oteolo	0.37
oteops	0.11
othohs	0.24
othylo	0.17
polylo	0.30
poryhs	0.24
sasylo	0.27
yugyhs	0.25

Sum of 135:sconst	
group	Total
canohs	0.27
czemps	0.16
czeops	0.06
czeyhs	0.10
czeyps	0.21
germps	0.24
gerops	0.17
geryhs	0.15
geryps	0.08
latmlo	0.29
latohs	0.14
oasyhs	0.29
polyps	0.20
sasmhs	0.27
sasmlo	0.15
ukimhs	0.09
ukimlo	0.17
ukiohs	0.09
ukiolo	0.11
ukiylo	0.19

Sum of 136:sdistr	
group	Total
canohs	0.28
chiyps	0.10
czeyhs	0.28
czeyps	0.18
germps	0.27
gerops	0.20
latmlo	0.17
latohs	0.21
latyps	0.23
oasmps	0.28
oasyhs	0.21
otemhs	0.17
otemps	0.28
oteyhs	0.20
oteyps	0.20
othmps	0.27
othops	0.13
polyps	0.16
sasmhs	0.26
usayhs	0.19

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 142:wmanuf	
group	Total
canmlo	0.14
canolo	0.10
canylo	0.25
chiyhs	0.32
czemlo	0.04
czeohs	0.20
czeylo	0.28
germhs	0.07
germlo	0.19
germps	0.28
gerylo	0.20
latolo	0.13
latylo	0.20
oteops	0.33
othohs	0.31
othylo	0.21
polylo	0.26
poryhs	0.21
yugyhs	0.08
yugyps	0.19

Sum of 143:wconst	
group	Total
canmhs	0.24
canohs	0.16
canyhs	0.25
czeops	0.19
czeyhs	0.21
gerops	0.24
geryhs	0.15
geryps	0.16
latohs	0.20
latyhs	0.19
oasyhs	0.21
othyhs	0.23
polyps	0.24
sasmhs	0.17
ukimhs	0.06
ukiohs	0.06
ukiolo	0.23
ukiyhs	0.24
usamps	0.22
usayhs	0.22

Sum of 144:wdistr	
group	Total
canmhs	0.23
canohs	0.15
canyhs	0.21
czeops	0.24
czeyhs	0.26
geryhs	0.17
geryps	0.20
latohs	0.25
latyhs	0.17
oasyhs	0.22
othyhs	0.20
sasmhs	0.18
sasyhs	0.24
ukimhs	0.11
ukiohs	0.12
ukiolo	0.28
ukiyhs	0.20
usamhs	0.22
usamps	0.18
usayhs	0.24

Sum of 137:sconsu	
group	Total
chiyps	0.12
czeyps	0.23
germps	0.31
gerops	0.26
latmlo	0.21
latohs	0.27
latyps	0.26
oasmhs	0.25
oasmps	0.22
oasyhs	0.27
otemhs	0.16
otemps	0.23
oteyhs	0.23
oteyps	0.16
othmps	0.26
othohs	0.27
othops	0.09
polyps	0.22
sasmhs	0.31
usayhs	0.24

Sum of 138:sresta	
group	Total
canmlo	0.29
canolo	0.31
canylo	0.38
chiolo	0.29
czemlo	0.32
czeohs	0.29
czeylo	0.02
germhs	0.26
germlo	0.18
gerylo	0.13
latolo	0.42
oteolo	0.28
oteylo	0.38
othylo	0.28
polmlo	0.24
polylo	0.17
poryhs	0.21
yugolo	0.42
yugyhs	0.25
yugyps	0.42

Sum of 139:sbusin	
group	Total
canmps	0.19
canops	0.36
canyps	0.10
czeydg	0.06
gerydg	0.34
latmhs	0.30
latmps	0.31
latops	0.17
oasmdg	0.28
oasydg	0.26
oasyps	0.32
oteyps	0.44
othmps	0.36
othyps	0.07
sasmps	0.04
sasyps	0.37
ukimps	0.32
ukiops	0.34
ukiyps	0.37
usayps	0.28

Sum of 141:shealt	
group	Total
canmdg	0.54
canodg	0.43
canydg	0.59
canyps	0.93
chiydg	0.60
czeydg	0.95
gerydg	0.68
latmdg	0.34
latydg	0.05
oasmdg	0.84
otemdg	0.23
oteydg	0.53
othmdg	0.58
othydg	0.48
sasmdg	0.40
sasmps	1.04
sasydg	0.53
ukiydg	0.38
usamdg	0.76
usaydg	0.51

Sum of 145:wconsu	
group	Total
canmlo	0.17
canolo	0.16
canylo	0.12
czemlo	0.27
czemps	0.20
czeops	0.22
czeyhs	0.22
czeyps	0.27
germlo	0.29
germps	0.18
gerops	0.26
geryps	0.29
latmlo	0.28
latohs	0.29
latolo	0.22
sasmlo	0.25
ukimlo	0.15
ukiolo	0.20
ukiylo	0.25
yugyps	0.06

Sum of 146:wresta	
group	Total
canmlo	0.19
canolo	0.22
canylo	0.25
chiolo	0.40
czemlo	0.29
czeohs	0.34
czeylo	0.15
germhs	0.25
germlo	0.07
gerylo	0.06
latolo	0.37
latylo	0.44
oteolo	0.41
othylo	0.34
polmlo	0.38
polylo	0.27
poryhs	0.28
ukimlo	0.47
yugyhs	0.25
yugyps	0.32

Sum of 147:wbusin	
group	Total
canmhs	0.17
canohs	0.21
canops	0.34
canyhs	0.08
latyhs	0.15
latyps	0.31
oasyhs	0.27
oteyhs	0.32
othyhs	0.09
sasmhs	0.23
sasyhs	0.16
sasyps	0.32
ukimhs	0.32
ukiohs	0.32
ukiops	0.35
ukiyhs	0.05
ukiyps	0.32
usamhs	0.09
usamps	0.09
usayhs	0.30

Sum of 148:whealt	
group	Total
canmps	0.02
canops	0.18
canyps	0.26
czeydg	0.24
latmhs	0.13
latmps	0.17
latops	0.02
latyps	0.32
oasydg	0.29
oasyps	0.19
oteyhs	0.36
oteyps	0.34
othmps	0.23
othyps	0.11
sasmps	0.15
sasyps	0.19
ukimps	0.14
ukiops	0.18
ukiyps	0.20
usayps	0.11

Sum of 140:sweduca	
group	Total
canmdg	0.42
canodg	0.30
canydg	0.47
canyps	1.02
chiydg	0.66
czeydg	1.05
gerydg	0.77
latmdg	0.49
latydg	0.19
oasmdg	0.90
otemdg	0.19
oteydg	0.44
othmdg	0.47
othydg	0.36
sasmdg	0.24
sasydg	0.60
ukimdg	0.94
ukiydg	0.26
usamdg	0.64
usaydg	0.40

Sum of 149:pubad	
group	Total
canmhs	0.25
canmps	0.19
canops	0.11
canyhs	0.28
latmhs	0.12
latmps	0.22
latops	0.20
latyps	0.25
oasyps	0.13
oteyhs	0.29
othmps	0.25
othyhs	0.28
othyps	0.30
sasyhs	0.24
sasyps	0.07
ukimps	0.09
ukiops	0.04
ukiyps	0.01
usamhs	0.27
usayps	0.12

MALES

Sum of 150:swneedle	
group	Total
czemlo	0.20
greops	0.12
itamhs	0.31
itamlo	0.38
itaohs	0.19
itayhs	0.13
itaylo	0.37
oasyps	0.36
otemlo	0.24
oteolo	0.14
oteyhs	0.29
oteyps	0.26
othmhs	0.03
othmlo	0.32
othyhs	0.23
othylo	0.33
pormhs	0.15
pormps	0.22
yugmlo	0.20
yugylo	0.36

Sum of 151:smanuf	
group	Total
czemps	0.17
czeops	0.10
czeyps	0.12
germps	0.16
latmhs	0.03
latolo	0.10
latylo	0.14
otemps	0.20
oteops	0.15
othmps	0.10
othohs	0.10
othops	0.14
othyps	0.17
pololo	0.07
porops	0.07
poryps	0.20
ukiolo	0.22
usaops	0.18
usaylo	0.09
yugops	0.17

Sum of 152:sconst	
group	Total
czemps	0.16
germlo	0.12
germps	0.11
gerops	0.17
itaops	0.16
latmlo	0.13
latolo	0.19
latylo	0.14
othohs	0.18
polylo	0.17
pormlo	0.15
porohs	0.04
poryps	0.08
sasmlo	0.20
sasyhs	0.03
sasylo	0.18
usaylo	0.20
yugmps	0.05
yugops	0.11
yugyps	0.14

Sum of 153:sdistr	
group	Total
canmlo	0.16
canolo	0.13
canylo	0.19
czeyps	0.13
latmhs	0.17
latmlo	0.19
latolo	0.11
latylo	0.16
latyps	0.09
othmps	0.20
othohs	0.14
polmps	0.15
porops	0.18
sasmps	0.14
sasops	0.11
ukimhs	0.15
ukimlo	0.13
ukiolo	0.07
usaops	0.15
usaylo	0.11

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 159:wmanuf	
group	Total
canmhs	0.16
canmlo	0.08
canohs	0.19
canolo	0.04
canyhs	0.15
canylo	0.12
canyps	0.17
latolo	0.20
latops	0.20
latyps	0.01
polmps	0.08
polyps	0.13
sasmps	0.11
sasops	0.11
sasyps	0.20
ukimhs	0.11
ukimlo	0.08
ukiolo	0.04
ukiyhs	0.19
usaylo	0.20

Sum of 160:wconst	
group	Total
canylo	0.24
germlo	0.24
germps	0.22
itaolo	0.26
itaops	0.10
latmlo	0.12
latolo	0.25
latylo	0.21
othohs	0.24
polmlo	0.19
polylo	0.05
pormlo	0.24
porohs	0.15
poryps	0.14
sasolo	0.22
sasyhs	0.13
sasylo	0.07
yugmps	0.10
yugops	0.23
yugyps	0.24

Sum of 161:wdistr	
group	Total
canmhs	0.08
canmps	0.18
canohs	0.12
canolo	0.21
canops	0.21
canyhs	0.12
canyps	0.15
latmps	0.02
latops	0.05
latyhs	0.20
polyps	0.10
sasmps	0.21
sasyps	0.04
ukimhs	0.20
ukimlo	0.20
ukimps	0.19
ukiohs	0.17
ukiops	0.19
ukiyhs	0.07
ukiylo	0.13

Sum of 154:sconsu	
group	Total
czemps	0.15
czeops	0.08
germps	0.21
gerops	0.20
geryps	0.15
latmhs	0.16
latylo	0.24
oasmps	0.22
otemps	0.03
oteops	0.09
oteylo	0.23
othmps	0.19
othohs	0.23
othops	0.23
othyps	0.01
pololo	0.12
polops	0.16
porops	0.16
usaylo	0.24
yugops	0.20

Sum of 155:sresta	
group	Total
chimlo	0.25
chimps	3.62
chiolo	1.00
chiylo	1.75
chiyps	3.58
gremhs	0.40
gremlo	0.36
gremps	2.62
greohs	0.85
greolo	1.59
greyhs	1.10
greylo	0.45
greyps	2.23
itamhs	3.58
oasmlo	2.13
oasolo	0.56
oasylo	1.49
otemhs	3.30
otemlo	3.63
poryhs	3.50

Sum of 156:sbusin	
group	Total
canmdg	0.15
canodg	0.13
canydg	0.57
chimdg	0.48
chiodg	0.34
czeodg	0.40
itamdg	0.36
itaydg	0.45
latmdg	0.12
oasodg	0.61
otemdg	0.20
oteodg	0.22
oteydg	0.44
othmdg	0.34
othodg	0.40
othydg	0.51
sasodg	0.44
ukimdg	0.13
ukiodg	0.45
usamdg	0.61

Sum of 158:shealt	
group	Total
canmdg	1.14
canodg	1.16
chimdg	1.73
chiodg	1.27
czeodg	1.39
itamdg	1.03
itaydg	1.68
latmdg	1.33
latodg	0.34
otemdg	1.24
oteodg	1.24
oteydg	1.66
othmdg	1.19
othodg	0.96
othydg	1.79
sasodg	1.73
ukimdg	1.40
ukiodg	0.84
usamdg	0.74
usaodg	0.59

Sum of 162:wconsu	
group	Total
canmhs	0.14
canmlo	0.06
canohs	0.18
canolo	0.02
canyhs	0.11
canylo	0.10
canyps	0.16
latops	0.18
latyhs	0.19
latyps	0.05
polmps	0.06
polyps	0.11
sasmps	0.13
sasops	0.15
sasyps	0.16
ukimhs	0.12
ukimlo	0.09
ukiolo	0.09
ukiyhs	0.17
ukiylo	0.18

Sum of 163:wresta	
group	Total
chimps	1.11
chiylo	0.81
chiyps	1.09
gremps	0.07
greolo	0.97
greops	1.22
greyps	0.35
itamhs	1.03
itaohs	1.31
itayhs	1.33
oasmlo	0.45
oasylo	1.08
otemhs	0.75
otemlo	1.07
othmhs	1.33
pormhs	1.42
pormps	1.17
poryhs	0.95
yugmlo	1.41
yugylo	1.11

Sum of 164:wbusin	
group	Total
canops	0.64
canydg	0.54
chiops	0.60
chiydg	0.38
czemdg	0.43
czeydg	0.47
germdg	0.33
latydg	0.46
oasmdg	0.35
oasodg	0.54
oasops	0.58
oasydg	0.33
othydg	0.63
sasmdg	0.17
sasydg	0.12
ukiydg	0.40
usamps	0.54
usaydg	0.42
usayps	0.65
yugmdg	0.26

Sum of 165:whealt	
group	Total
canydg	0.41
chimdg	0.53
chiops	0.52
chiydg	0.28
czemdg	0.29
czeydg	0.28
germdg	0.14
itaydg	0.58
latydg	0.33
oasmdg	0.14
oasodg	0.36
oasydg	0.27
oteydg	0.60
othydg	0.46
sasmdg	0.16
sasodg	0.55
sasydg	0.22
ukiydg	0.32
usaydg	0.25
yugmdg	0.46

Sum of 157:sweduca	
group	Total
canmdg	0.21
canodg	0.23
chimdg	0.81
chiodg	0.43
czeodg	0.54
itamdg	0.21
itaydg	0.77
latmdg	0.42
latodg	0.59
otemdg	0.33
oteodg	0.34
oteydg	0.75
othmdg	0.36
othodg	0.17
othydg	0.86
sasodg	0.80
ukimdg	0.48
ukiodg	0.09
usamdg	0.27
usaodg	0.40

Sum of 166:pubad	
group	Total
canmhs	0.40
canmps	0.29
canohs	0.34
canops	0.25
canyps	0.36
latmps	0.40
latops	0.38
oasops	0.37
polyps	0.43
sasmps	0.42
sasydg	0.41
ukimhs	0.42
ukimlo	0.45
ukimps	0.27
ukiohs	0.26
ukiops	0.22
ukiyhs	0.38
ukiyps	0.31
usamps	0.34
yugmdg	0.19

FEMALES

Sum of 148:swneedle	
group	Total
chimlo	0.24
chiolo	0.64
gremlo	0.15
gremps	1.13
greolo	0.29
greylo	0.18
itamhs	1.07
itamlo	0.39
itamps	1.15
itaolo	0.58
itaylo	0.05
oasmlo	0.85
oasolo	0.02
oasylo	1.29
polmlo	1.21
pololo	1.25
pormlo	0.51
porolo	0.46
porylo	0.78
yugmhs	1.30

Sum of 149:smanuf	
group	Total
chiops	0.39
chiyhs	0.40
czeops	0.21
gerolo	0.38
gerops	0.25
latmhs	0.32
latolo	0.35
oasmhs	0.35
otemps	0.36
oteohs	0.12
oteops	0.18
oteyps	0.38
othops	0.29
othyps	0.39
poryps	0.35
sasops	0.40
ukiolo	0.39
usaops	0.40
yugops	0.32
yugyps	0.39

Sum of 150:sconst	
group	Total
canmlo	0.19
canolo	0.19
chiyhs	0.16
czeops	0.09
czeyps	0.14
germps	0.24
gerolo	0.24
latmhs	0.24
latolo	0.09
oasmhs	0.24
otemhs	0.23
oteohs	0.22
oteops	0.24
oteyhs	0.23
othylo	0.16
poryhs	0.21
poryps	0.09
ukiolo	0.22
yugops	0.16
yugyps	0.16

Sum of 151:sdistr	
group	Total
canmhs	0.21
canohs	0.11
chiops	0.15
chiyhs	0.25
czemps	0.15
germps	0.19
gerops	0.10
latmhs	0.03
oteohs	0.19
oteops	0.14
oteyps	0.08
othmhs	0.23
othyps	0.14
polmps	0.23
polyps	0.25
sasyps	0.20
ukiohs	0.18
ukiolo	0.15
usaops	0.24
usaylo	0.20

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 157:wmanuf	
group	Total
canmlo	0.22
canolo	0.17
germlo	0.22
gerolo	0.15
greyps	0.02
itayhs	0.23
latmlo	0.08
latolo	0.26
latylo	0.07
oasmhs	0.21
otemhs	0.12
oteyhs	0.26
oteylo	0.15
othohs	0.08
othylo	0.22
polylo	0.09
sasmlo	0.18
yugops	0.19
yugyhs	0.18
yugyps	0.16

Sum of 158:wconst	
group	Total
canmhs	0.19
canylo	0.14
chiyhs	0.16
czemlo	0.21
czemps	0.18
czeyps	0.20
germps	0.12
gerylo	0.14
geryps	0.16
latyhs	0.04
oasyhs	0.14
oteyhs	0.18
othmhs	0.13
othyhs	0.06
polyps	0.07
poryhs	0.12
sasolo	0.12
ukimlo	0.05
ukiolo	0.17
ukiylo	0.19

Sum of 159:wdistr	
group	Total
canmhs	0.08
canohs	0.17
canyhs	0.10
chiyps	0.20
czemps	0.16
geryps	0.18
latyhs	0.21
latyps	0.19
oasyps	0.20
oteyps	0.21
othmhs	0.13
othyhs	0.21
polmps	0.05
sasyps	0.18
ukimhs	0.18
ukiohs	0.18
ukiylo	0.20
ukiyps	0.19
usayhs	0.20
usaylo	0.08

Sum of 152:sconsu	
group	Total
canops	0.47
chiops	0.40
czeops	0.34
gerops	0.28
latmhs	0.38
latolo	0.47
oasmhs	0.47
otemps	0.31
oteohs	0.19
oteops	0.22
oteyps	0.44
othmps	0.39
othops	0.18
othyps	0.40
poryps	0.47
sasops	0.30
usamps	0.36
usaops	0.37
usayps	0.42
yugops	0.45

Sum of 153:sresta	
group	Total
chimhs	0.31
chiylo	0.15
gremhs	0.14
greyhs	0.26
itayhs	0.29
itayps	0.19
oasylo	0.33
otemlo	0.22
oteolo	0.20
othmlo	0.21
otholo	0.23
pololo	0.34
pormhs	0.27
pormps	0.18
sasylo	0.08
yugmhs	0.35
yugmlo	0.32
yugmps	0.24
yugolo	0.21
yugylo	0.38

Sum of 154:sbusin	
group	Total
canmps	0.45
canops	0.49
canydg	0.40
chimdg	0.39
chiydg	0.33
czemdg	0.12
itaydg	0.26
latydg	0.03
oasmdg	0.54
oasodg	0.47
oasydg	0.54
oteydg	0.40
othmps	0.59
othops	0.60
sasmdg	0.43
sasops	0.55
sasydg	0.45
ukimps	0.57
ukiydg	0.20
usaydg	0.29

Sum of 156:shealt	
group	Total
canmdg	0.45
canodg	0.32
canydg	0.44
chimdg	0.44
czemdg	0.73
itaydg	0.58
latmdg	0.17
otemdg	0.24
oteodg	0.16
oteydg	0.43
othmdg	0.06
othydg	0.13
sasmdg	0.40
sasodg	0.24
ukimdg	0.41
ukiodg	0.57
ukiydg	0.64
usamdg	0.09
usaodg	0.27
usaydg	0.55

Sum of 160:wconsu	
group	Total
canmlo	0.10
canolo	0.16
canylo	0.13
chiyhs	0.04
czemps	0.23
czeyps	0.05
germlo	0.15
germps	0.15
gerylo	0.22
latolo	0.11
latyhs	0.17
oteyhs	0.08
othyhs	0.20
othylo	0.10
polyps	0.12
poryhs	0.03
poryps	0.09
ukimlo	0.16
ukiolo	0.16
yugyps	0.18

Sum of 161:wresta	
group	Total
canmlo	0.26
canolo	0.23
canylo	0.30
czeyps	0.33
germlo	0.20
gerolo	0.31
greyps	0.14
itayhs	0.32
latmlo	0.23
latylo	0.23
otemhs	0.27
oteyhs	0.27
oteylo	0.01
othohs	0.23
othylo	0.28
polylo	0.07
sasmlo	0.12
yugops	0.34
yugyhs	0.03
yugyps	0.26

Sum of 162:wbusin	
group	Total
canmhs	0.22
canohs	0.23
canyhs	0.27
canyps	0.22
chiops	0.23
chiyps	0.10
czemps	0.28
latmps	0.24
latohs	0.23
latyps	0.08
oasyps	0.16
oteyps	0.28
othyps	0.22
polmps	0.16
sasmps	0.22
sasyps	0.11
ukiohs	0.13
ukiyps	0.01
usayhs	0.06
usaylo	0.21

Sum of 163:whealt	
group	Total
canmps	0.17
canops	0.15
canyps	0.24
chimps	0.16
latmps	0.30
latops	0.21
oasmdg	0.22
oasmps	0.25
oasodg	0.24
oasops	0.13
oasydg	0.18
otemps	0.28
othmps	0.16
sasmps	0.22
sasops	0.27
ukimps	0.06
ukiops	0.07
usamps	0.24
usaops	0.27
usayps	0.15

Sum of 155:sweduca	
group	Total
canmdg	0.37
canodg	0.23
canydg	0.50
chimdg	0.51
itaydg	0.64
latmdg	0.08
latodg	0.73
otemdg	0.17
oteodg	0.15
oteydg	0.51
othmdg	0.07
othydg	0.03
sasmdg	0.47
sasodg	0.23
ukimdg	0.34
ukiodg	0.50
ukiydg	0.71
usamdg	0.05
usaodg	0.31
usaydg	0.63

Sum of 164:pubad	
group	Total
canmps	0.20
canops	0.16
canyps	0.19
chimps	0.11
chiops	0.30
latmps	0.28
latops	0.21
oasmdg	0.29
oasmps	0.26
oasops	0.07
oasydg	0.25
otemps	0.21
othmps	0.12
sasmps	0.17
sasops	0.24
ukimps	0.09
ukiops	0.13
usamps	0.17
usaops	0.20
usayps	0.09

MALES

Sum of 146:swneedle	
group	Total
chiops	0.32
czeops	0.29
germps	0.42
greops	0.38
itamhs	0.17
itamps	0.32
itaops	0.42
itayhs	0.26
itaylo	0.30
oasmhs	0.37
oasmlo	0.25
otemhs	0.04
otemlo	0.29
oteyhs	0.27
othmhs	0.26
othmlo	0.09
pormhs	0.31
poryhs	0.12
porylo	0.20
yugmlo	0.38

Sum of 147:smanuf	
group	Total
canohs	0.22
canolo	0.20
czeyps	0.22
gerops	0.10
geryps	0.05
latmhs	0.19
latohs	0.17
oasmps	0.17
oasops	0.06
oasyps	0.15
oteops	0.15
oteyps	0.17
othohs	0.06
othyps	0.15
polops	0.21
polyps	0.18
pormps	0.16
porops	0.19
sasmps	0.22
ukiolo	0.12

Sum of 148:sconst	
group	Total
canylo	0.21
czemps	0.18
germlo	0.01
itaolo	0.23
itayps	0.10
latmlo	0.11
oasohs	0.02
oasolo	0.28
oasyps	0.26
oteylo	0.12
oteyps	0.23
otholo	0.24
porolo	0.25
poryps	0.15
sasylo	0.12
sasyps	0.14
yugmhs	0.11
yugmps	0.13
yugolo	0.10
yugops	0.16

Sum of 149:sdistr	
group	Total
canmlo	0.13
canolo	0.10
canylo	0.18
czemps	0.14
gerops	0.13
geryps	0.13
latmhs	0.13
latohs	0.21
latops	0.19
oasops	0.23
oasyps	0.06
oteops	0.21
oteyps	0.10
othohs	0.17
polyps	0.12
pormps	0.19
porops	0.23
sasyps	0.14
ukiylo	0.17
yugops	0.13

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 155:wmanuf	
group	Total
canmlo	0.12
canohs	0.18
canolo	0.02
canyhs	0.15
canyps	0.20
gerops	0.10
geryps	0.17
latmhs	0.02
latmps	0.15
latohs	0.12
latolo	0.16
latops	0.08
latyps	0.13
oasyps	0.16
polyps	0.03
porops	0.13
sasmps	0.14
ukimlo	0.14
ukiylo	0.07
ukiyps	0.17

Sum of 156:wconst	
group	Total
canmlo	0.21
canolo	0.29
canylo	0.07
czemps	0.25
germlo	0.17
itayps	0.28
latmlo	0.27
latyhs	0.24
latylo	0.13
oasohs	0.18
oasyps	0.27
oteylo	0.24
oteyps	0.27
sasylo	0.15
sasyps	0.14
ukiylo	0.33
yugmhs	0.08
yugmps	0.09
yugolo	0.25
yugops	0.22

Sum of 157:wdistr	
group	Total
canmhs	0.03
canmps	0.17
canohs	0.16
canyhs	0.12
canyps	0.14
latmhs	0.21
latmps	0.09
latohs	0.19
latolo	0.09
latops	0.16
latyps	0.13
porops	0.17
sasmps	0.14
ukimhs	0.11
ukimlo	0.11
ukimps	0.13
ukiohs	0.18
ukiyhs	0.04
ukiylo	0.18
ukiyps	0.10

Sum of 150:sconsu	
group	Total
czemps	0.25
czeyps	0.12
gerops	0.29
geryps	0.20
latmlo	0.31
oasmps	0.05
oasops	0.16
oasyps	0.25
otemps	0.23
oteolo	0.16
oteops	0.10
oteyps	0.23
othmps	0.08
othohs	0.15
othyps	0.06
pormps	0.13
ukiolo	0.23
usamps	0.17
yugops	0.28
yugyps	0.30

Sum of 151:sresta	
group	Total
chimlo	1.16
chimps	2.62
chiolo	1.70
chiyhs	1.21
chiylo	0.78
gremhs	0.80
gremlo	0.27
gremps	2.29
greohs	1.28
greolo	0.90
greyhs	1.86
greylo	1.29
greyps	1.42
oasmhs	2.67
oteyhs	2.75
othmhs	2.70
othyhs	2.47
othylo	1.96
poryhs	2.85
yugylo	2.25

Sum of 152:sbusin	
group	Total
canmdg	0.22
canodg	0.11
canydg	0.33
czemdg	0.11
czeodg	0.08
germdg	0.21
itamdg	0.22
itaydg	0.44
latmdg	0.22
oasodg	0.35
oteodg	0.05
oteydg	0.12
othmdg	0.44
othodg	0.33
sasodg	0.20
ukimdg	0.18
ukiodg	0.25
ukiydg	0.38
usaydg	0.09
yugmdg	0.36

Sum of 153:sweduca	
group	Total
canmdg	0.23
canodg	0.35
czemdg	0.49
czeodg	0.53
germdg	0.58
itamdg	0.24
latmdg	0.66
latodg	0.34
oasodg	0.60
otemdg	0.26
oteodg	0.41
oteydg	0.44
othmdg	0.02
othodg	0.11
sasodg	0.64
ukimdg	0.28
ukiodg	0.20
usamdg	0.35
usaodg	0.43
usaydg	0.53

Sum of 158:wconsu	
group	Total
canmlo	0.11
canolo	0.04
czemps	0.19
gerops	0.10
geryps	0.15
latmhs	0.07
latmps	0.20
latohs	0.16
latops	0.13
latyps	0.18
oasyps	0.11
oteyps	0.15
othohs	0.19
polyps	0.07
porops	0.18
sasmps	0.18
sasyps	0.18
ukimlo	0.19
ukiylo	0.11
yugops	0.19

Sum of 159:wresta	
group	Total
chimps	1.37
chiops	1.79
chiyhs	0.11
chiylo	0.54
gremlo	1.49
gremps	0.99
greohs	0.10
greolo	0.43
greyps	0.30
itaylo	1.72
oasmhs	1.38
otemhs	1.66
oteyhs	1.45
othmhs	1.38
othmlo	1.63
othyhs	1.15
othylo	0.73
poryhs	1.54
porylo	1.70
yugylo	0.93

Sum of 160:wbusin	
group	Total
canmps	0.59
canops	0.51
chimdg	0.53
chiodg	0.64
chiydg	0.57
czeydg	0.56
latydg	0.33
oasmdg	0.54
othydg	0.55
polops	0.51
sasmdg	0.20
sasydg	0.20
ukimhs	0.64
ukimps	0.62
ukiolo	0.59
ukiops	0.51
ukiydg	0.61
usamps	0.61
usayps	0.40
yugmdg	0.63

Sum of 161:whealt	
group	Total
canmps	0.56
canops	0.49
chimdg	0.57
chiodg	0.58
chiydg	0.52
czeydg	0.54
latydg	0.44
oasmdg	0.49
oasmps	0.59
oasops	0.57
othydg	0.53
othyps	0.58
polops	0.44
sasmdg	0.30
sasydg	0.29
ukiolo	0.49
ukiops	0.54
usamps	0.47
usaops	0.59
usayps	0.33

Sum of 154:shealt	
group	Total
canmdg	0.89
canodg	1.00
czemdg	1.09
czeodg	1.16
germdg	1.25
itamdg	0.90
latmdg	1.28
latodg	0.32
oasodg	1.27
otemdg	0.80
oteodg	1.05
oteydg	1.10
othmdg	0.68
othodg	0.77
sasodg	1.29
ukimdg	0.90
ukiodg	0.84
usamdg	0.47
usaodg	0.41
usaydg	1.17

Sum of 162:pubad	
group	Total
canmhs	0.43
canmps	0.33
canohs	0.41
canops	0.26
canyps	0.39
latohs	0.47
latyps	0.46
polops	0.34
porops	0.45
sasmps	0.45
sasops	0.36
ukimhs	0.35
ukimlo	0.46
ukimps	0.32
ukiohs	0.44
ukiolo	0.45
ukiops	0.20
ukiyhs	0.43
ukiyps	0.44
usayps	0.28

FEMALES

Sum of 141:swneedle	
group	Total
chimhs	1.72
chimlo	0.30
chiolo	0.48
chiylo	0.88
gremhs	1.41
gremlo	0.13
gremps	1.23
greolo	0.40
greyhs	1.39
greylo	0.24
itamhs	1.39
itamlo	0.02
itaolo	0.50
itaylo	0.47
oasyhs	1.78
pormlo	1.24
porolo	1.02
porylo	1.59
sasylo	1.66
yugmlo	1.84

Sum of 142:smanuf	
group	Total
canmps	0.25
canohs	0.36
canops	0.23
canyps	0.35
chimps	0.18
chiyps	0.29
gerops	0.28
oasops	0.24
oasydg	0.33
otemps	0.15
oteops	0.20
oteyps	0.25
othops	0.15
othyps	0.24
polmps	0.35
sasmps	0.34
ukimps	0.31
ukiops	0.27
usamps	0.10
usayps	0.29

Sum of 143:sconst	
group	Total
canmhs	0.22
canohs	0.15
canyhs	0.27
chimps	0.18
chiyps	0.23
czemps	0.20
germps	0.08
geryhs	0.27
latolo	0.27
otemps	0.27
oteyhs	0.14
oteyps	0.24
othmhs	0.28
othops	0.24
polmlo	0.26
polmps	0.12
polops	0.11
ukimlo	0.25
ukiolo	0.09
yugmps	0.23

Sum of 144:sdistr	
group	Total
canmhs	0.13
canohs	0.12
canyhs	0.16
chimps	0.21
chiops	0.10
chiyps	0.01
czeyps	0.21
gerops	0.13
geryhs	0.14
geryps	0.19
latyhs	0.13
oasyps	0.10
otemps	0.14
oteyps	0.04
othops	0.15
othyps	0.19
polmps	0.14
ukiohs	0.14
ukiyhs	0.20
usayps	0.20

NOTE:
cohorts are divided into 3
attributes:
- place of birth, age and schooling
The first three characters
represent the place of birth
can=Canadian-born, USA=USA
UKI=UK/Ireland, Ger=Germany/
Austria; Pol=Poland; Cze=Hungary
Czechoslovakia; Por=Portugal
Gre=Greece; Ita=Italy; Yug=Yugo-
slavia; Ote=Other Europe; SAS=
South Asia' Chi=China/Hong Kong;
Oas=Other Asia; Lat=Latin America
Caribbean; Oth=Other
the fourth character represents
age in 1971
(y=25-34 m=35-44 and o=45-54)
Characters 5-6 are schooling
lo=LT than highschool,
hs=highschool
ps=post secondary, dg=degree

Sum of 150:wmanuf	
group	Total
canmlo	0.08
canolo	0.04
canylo	0.09
chiyhs	0.10
germhs	0.22
greyps	0.21
itayhs	0.12
latmlo	0.08
latolo	0.10
oasmhs	0.28
otemhs	0.16
othmhs	0.08
othohs	0.26
othylo	0.24
polmlo	0.17
pormhs	0.11
ukimlo	0.28
yugmps	0.22
yugyhs	0.18
yugyps	0.27

Sum of 151:wconst	
group	Total
canmhs	0.17
canohs	0.17
canyhs	0.20
czemps	0.02
czeyps	0.20
germps	0.12
geryhs	0.22
latyhs	0.24
oteyhs	0.06
othyhs	0.17
polmlo	0.22
polmps	0.17
polops	0.13
sasmlo	0.22
ukimlo	0.12
ukiolo	0.11
ukiyhs	0.24
yugmps	0.17
yugyhs	0.24
yugyps	0.21

Sum of 152:wdistr	
group	Total
canmhs	0.10
canohs	0.17
canyhs	0.05
chiops	0.12
chiyps	0.17
czeyps	0.05
geryhs	0.05
geryps	0.19
latmhs	0.09
latohs	0.13
latyhs	0.04
oasyps	0.12
polmps	0.21
polyps	0.07
poryhs	0.09
poryps	0.10
sasmhs	0.13
ukimhs	0.06
ukiohs	0.04
ukiyhs	0.02

Sum of 145:sconsu	
group	Total
canmps	0.39
canohs	0.42
canops	0.37
chimps	0.21
chiyps	0.39
czeops	0.35
gerops	0.41
itayps	0.26
oasops	0.38
oasydg	0.42
otemps	0.26
oteops	0.10
oteyps	0.35
othmps	0.41
othops	0.25
othyps	0.38
polmps	0.40
sasmdg	0.43
ukiops	0.41
usamps	0.23

Sum of 146:sresta	
group	Total
chimhs	0.41
chiylo	0.61
gerolo	0.63
gremhs	0.41
gremps	0.29
greyhs	0.06
itamhs	0.17
itamps	0.65
oasyhs	0.43
otemlo	0.64
oteolo	0.55
otholo	0.47
pololo	0.61
pormlo	0.23
porolo	0.42
porylo	0.27
sasyhs	0.62
sasylo	0.58
yugmlo	0.52
yugolo	0.53

Sum of 147:sbusin	
group	Total
canmps	0.71
canodg	0.63
canydg	0.50
chimdg	0.18
chiydg	0.45
czemdg	0.04
germdg	0.34
latydg	0.21
oasmdg	0.57
oasodg	0.14
oasydg	0.51
otemdg	0.59
oteydg	0.38
othmps	0.38
othydg	0.20
sasmdg	0.38
sasops	0.49
sasydg	0.51
ukiydg	0.54
usamps	0.71

Sum of 149:shealt	
group	Total
canodg	0.37
canydg	0.49
czemdg	0.95
germdg	0.65
itaydg	0.29
latmdg	0.22
latodg	0.42
otemdg	0.40
oteodg	0.21
oteydg	0.62
othmdg	0.26
othodg	0.25
othydg	0.80
sasydg	1.01
ukimdg	0.37
ukiodg	0.61
ukiydg	0.45
usamdg	0.14
usaodg	0.12
usaydg	0.22

Sum of 153:wconsu	
group	Total
canmlo	0.20
canolo	0.09
canylo	0.18
chiyhs	0.08
czemps	0.23
germps	0.22
itayhs	0.23
latmlo	0.20
latolo	0.03
othmhs	0.06
othyhs	0.17
othylo	0.18
polmlo	0.04
polops	0.18
pormhs	0.24
sasmlo	0.20
ukimlo	0.16
yugmps	0.09
yugyhs	0.08
yugyps	0.17

Sum of 154:wresta	
group	Total
chimhs	0.23
germlo	0.22
gerolo	0.15
latylo	0.23
oasmhs	0.38
oasmlo	0.18
oasyhs	0.21
otemhs	0.38
otemlo	0.35
oteolo	0.21
oteylo	0.13
otholo	0.35
polylo	0.46
pormhs	0.46
porylo	0.38
sasyhs	0.13
sasylo	0.33
yugmlo	0.12
yugolo	0.11
yugylo	0.15

Sum of 155:wbusin	
group	Total
canops	0.24
canyps	0.09
chiops	0.16
gerops	0.14
geryps	0.06
latmps	0.13
latops	0.17
latyhs	0.23
latyps	0.12
oasmps	0.19
oasyps	0.16
othyps	0.18
polyps	0.24
poryhs	0.18
sasmps	0.09
ukimhs	0.23
ukiohs	0.22
ukiops	0.21
ukiyps	0.12
usayps	0.12

Sum of 156:whealt	
group	Total
canmps	0.05
canops	0.10
canyps	0.18
chiydg	0.26
gerops	0.24
geryps	0.30
latmps	0.32
latops	0.28
oasmdg	0.31
oasops	0.07
oasydg	0.21
otemps	0.30
othyps	0.18
sasmps	0.18
sasops	0.24
ukimps	0.01
ukiops	0.09
ukiyps	0.17
usamps	0.21
usayps	0.18

Sum of 148:sweduca	
group	Total
canodg	0.19
canydg	0.32
czemdg	0.78
germdg	0.47
itaydg	0.47
latmdg	0.11
latodg	0.60
otemdg	0.22
oteodg	0.26
oteydg	0.45
othmdg	0.43
othodg	0.34
othydg	0.63
sasydg	0.84
ukimdg	0.54
ukiodg	0.79
ukiydg	0.28
usamdg	0.05
usaodg	0.10
usaydg	0.11

Sum of 157:pubad	
group	Total
canmps	0.16
canops	0.22
canyps	0.32
chiydg	0.13
gerops	0.38
latops	0.39
latydg	0.39
oasmdg	0.20
oasops	0.19
oasydg	0.11
othmps	0.36
othyps	0.31
sasmdg	0.28
sasmps	0.32
sasops	0.10
ukimps	0.15
ukiops	0.22
ukiyps	0.30
usamps	0.27
usayps	0.32