Innovation Systems Research Network
City-Region Profile

London

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Summary and Highlights

Key Indicators	London	Canada
Population, 2001	432,455	30,007,085
Population Change 1996-2001	3.8%	4.0%
% Foreign Born	18.6%	18.2%
% BA Degree or higher	16.1%	15.4%
Labour Force	342,995	23,901,360
Employment Rate	62.9%	61.5%
Unemployed Rate	6.7%	7.4%
% 'Creative' occupations	33.2%	29.2%
% Science & Tech. Occupations	5.4%	6.4%
Bohemians' per 1,000 Labour Force	10.7	13.1
Number of Clusters	6	263
% Employment in Clusters	26.8%	22.1%
% Establishments in Clusters	21.1%	19.9%
Establishments	12,314	1,048,286
Compound Annual Growth 1998-2005	1.3%	1.1%
Average Household Income	$ 58,713	$ 58,360
Average Employment Income	$ 32,393	$ 31,757

1 - Demographics

London

Population	1996	2001	% Change 1996-2001
London	416,545	432,455	3.8%
Canada	28,846,770	30,007,085	4.0%

Age Groups	Under 15	15 to 64	65 and over	% 15 to 64
London	84,100	291,390	56,955	67.4%
Canada	5,725,540	20,393,000	3,888,545	68.0%

Figure 1.1 - Population by age and gender, 2001

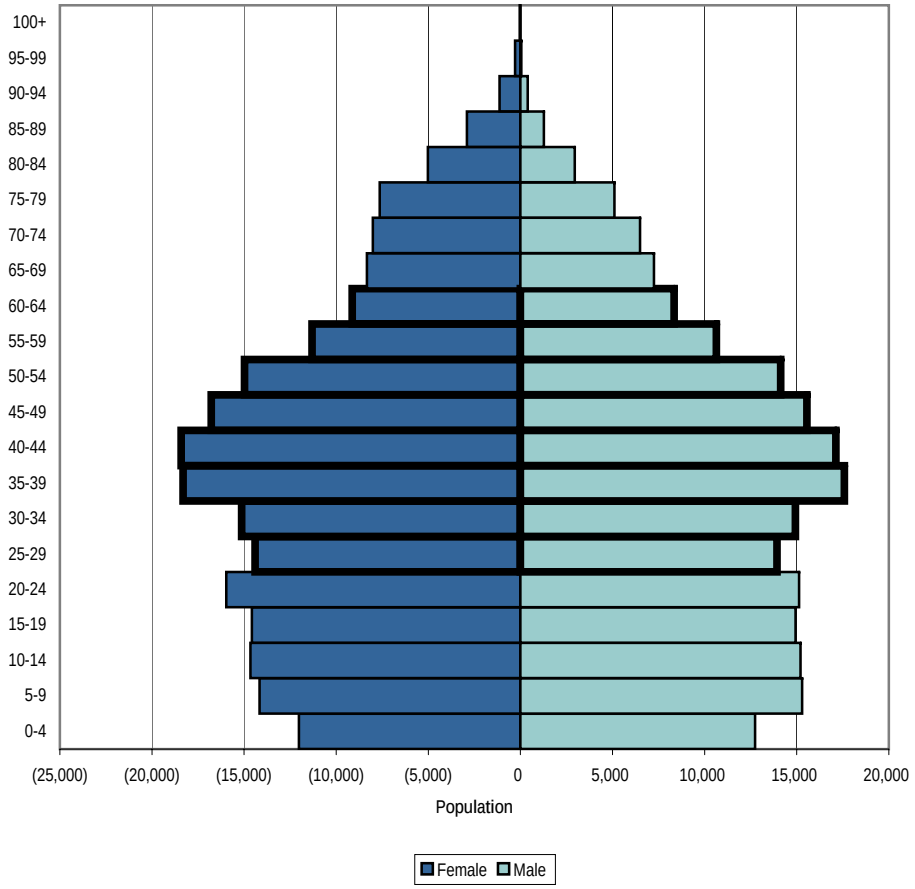


Figure 1.2 - Population by age group, 1996-2001

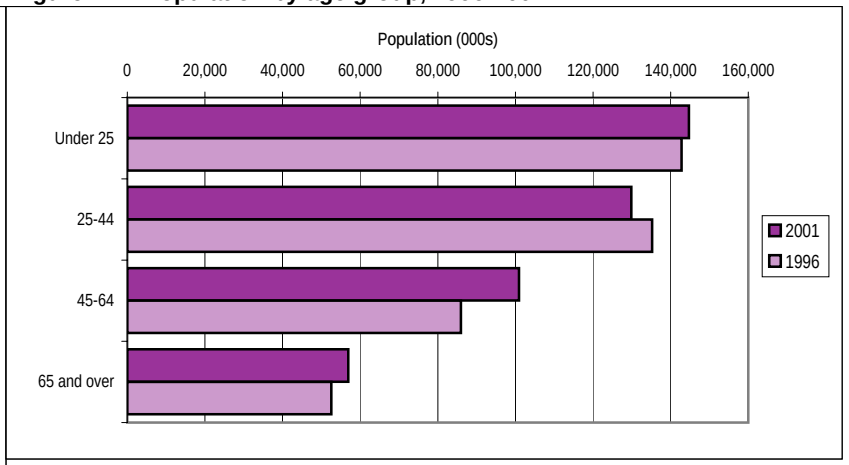
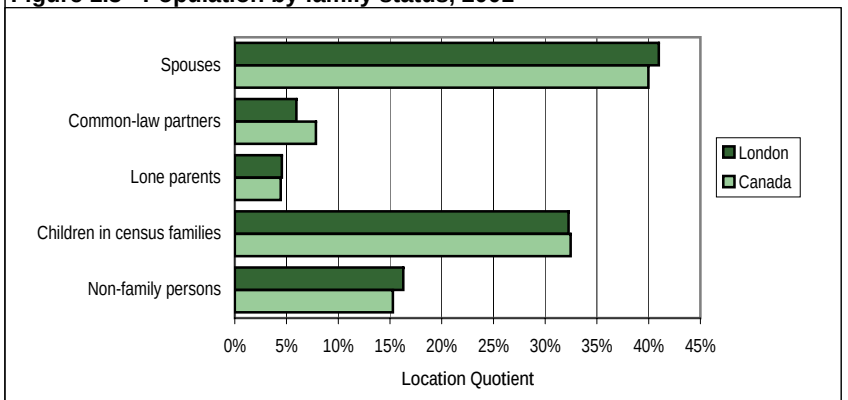


Figure 1.3 - Population by family status, 2001



2 - Migration & Population Change

London

Domestic Migration	Intra-provincial	Inter-provincial	Total
In-flows, 1996-2001	38,420	6,915	45,335
Out-flows, 1996-2001	37,580	7,935	45,515
Net, 1996-2001	840	(1,020)	(180)

	% Foreign born	Migrated post-1991	Migrated pre-1991
London	18.6%	4.5%	14.1%
Canada	18.2%	6.1%	12.1%

Figure 2.1 - Domestic migration flows between 1996 and 2001 by age

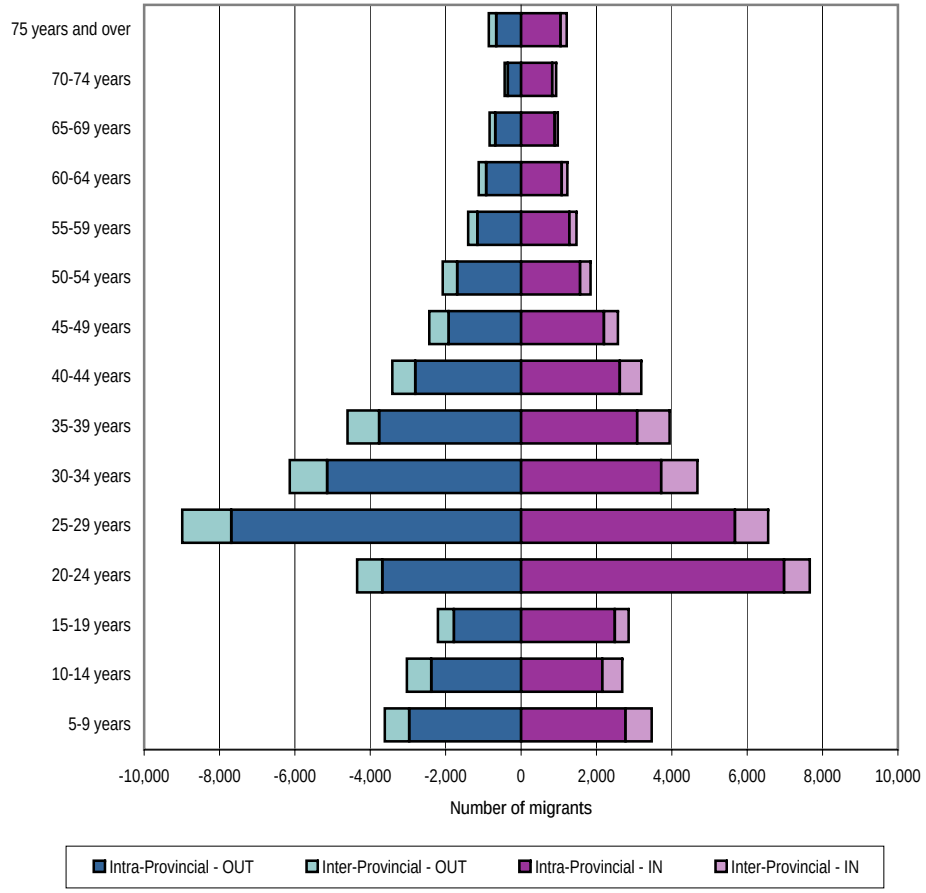


Figure 2.2 - Population by place of birth, 2001

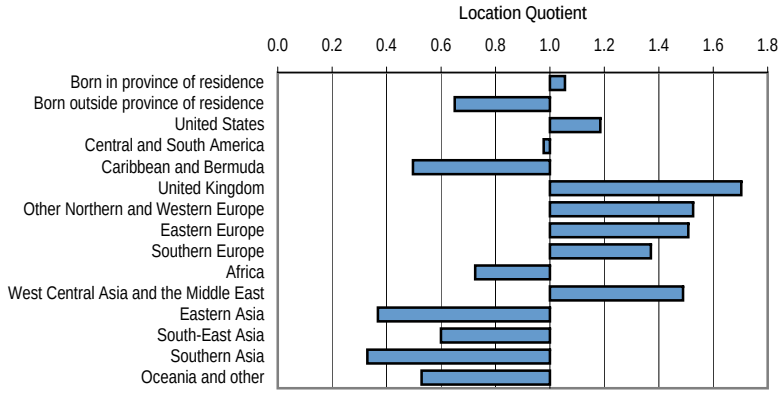
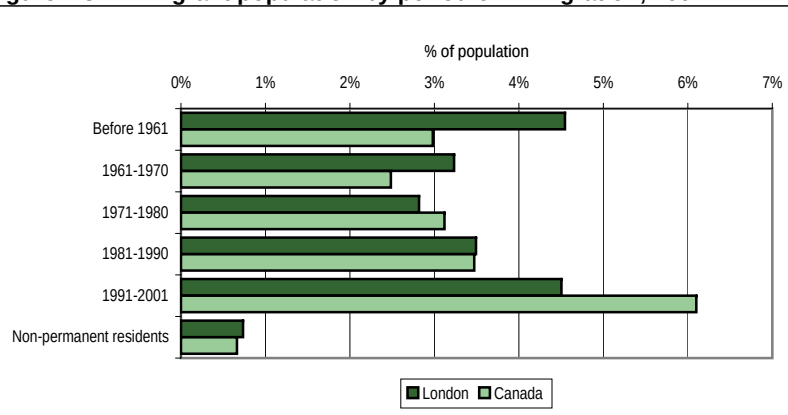


Figure 2.3 - Immigrant population by period of immigration, 2001



3 - Education

London

	% College degree or higher[1]	% BA degree or higher[1]	% MA degree or higher[1]	PhDs per 1,000[1]
London	35.5%	16.1%	3.6%	8.5
Canada	32.9%	15.4%	3.2%	5.4

	Average years of schooling[1]		
	1991	**1996**	**2001**
London	12.7	13.0	13.3
Canada	12.0	12.3	12.8

Figure 3.1 - Educational attainment for the population 15 years and over, 2001

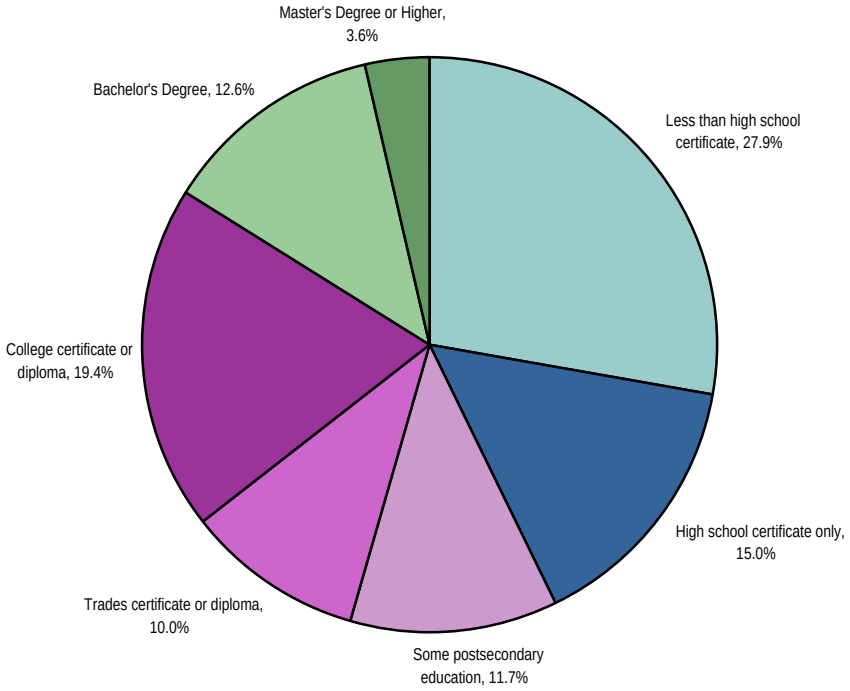


Figure 3.2 - Change in educational attainment, 1991-2001

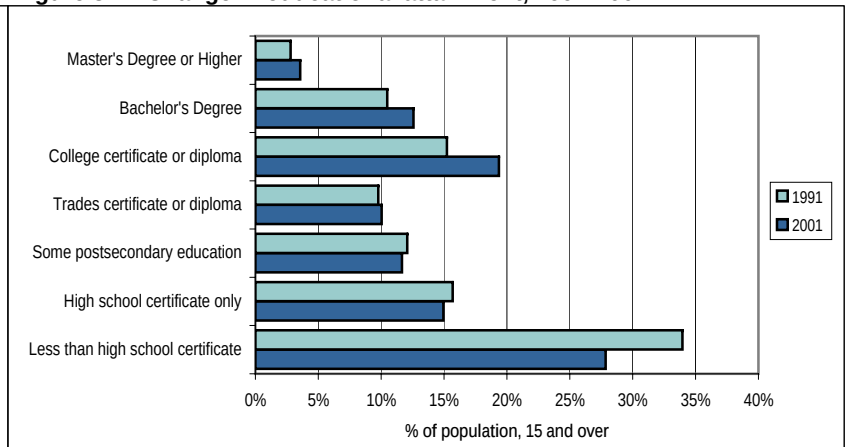
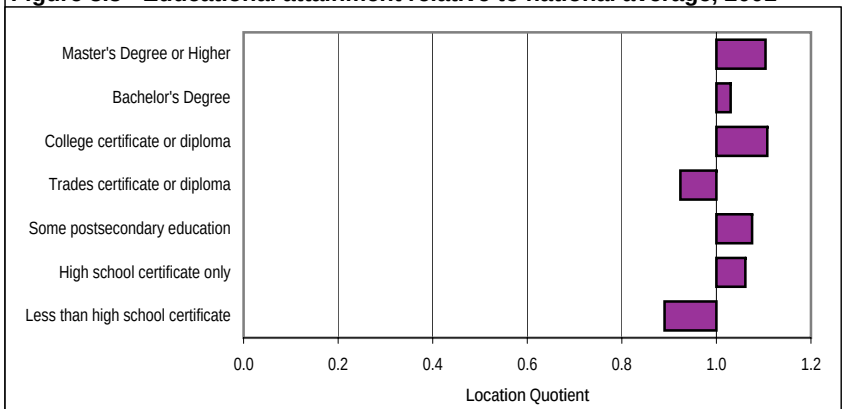


Figure 3.3 - Educational attainment relative to national average, 2001



4 - Employment

London

	Employment Rate[2]		Unemployment Rate[3]	
	1991	2001	1991	2001
London	64.7%	62.9%	8.5%	6.7%
Canada	61.0%	61.5%	10.2%	7.4%

Average hours worked per week	Female		Male	
	1991	2001	1991	2001
London	33.3	34.6	40.8	41.7
Canada	34.0	34.7	41.6	42.1

Figure 4.1 - Labour force status of the population 15 and over, 2001

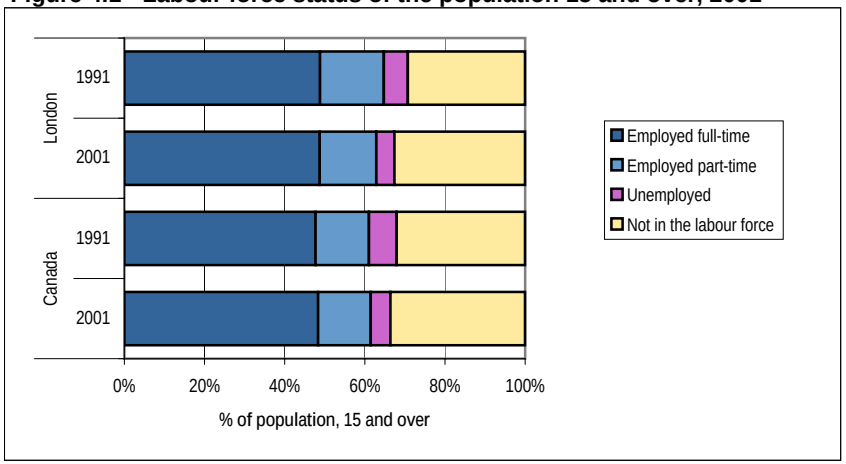


Figure 4.2 - Labour force status by gender, 2001

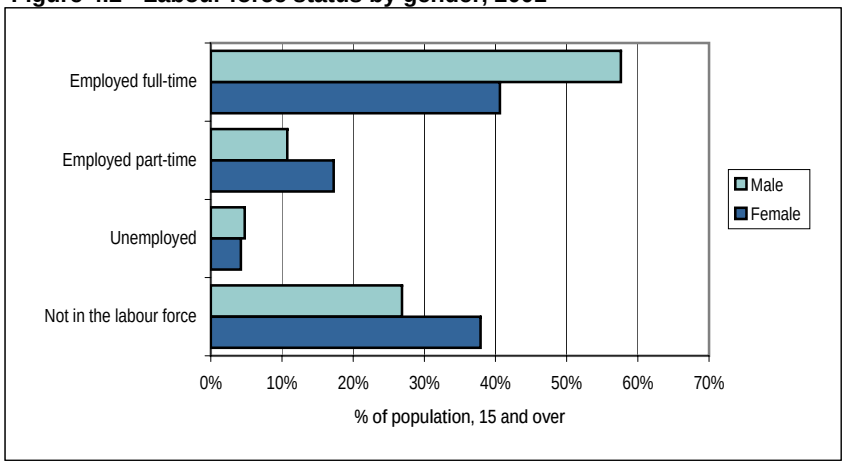


Figure 4.3 - Employment rate[2] by age, 2001

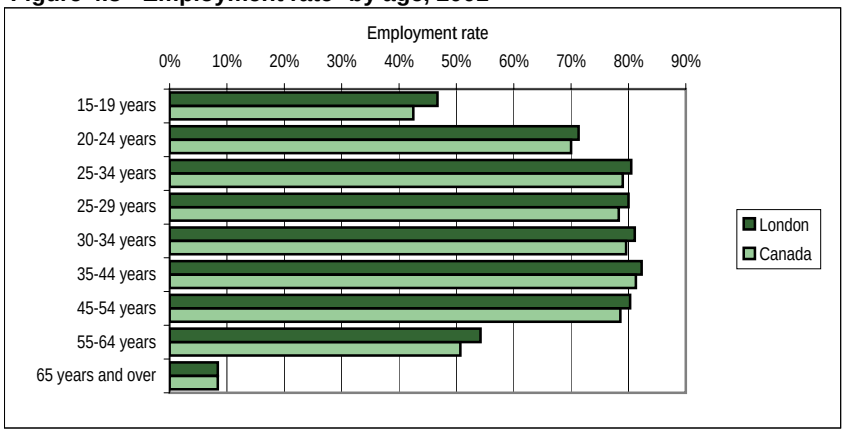
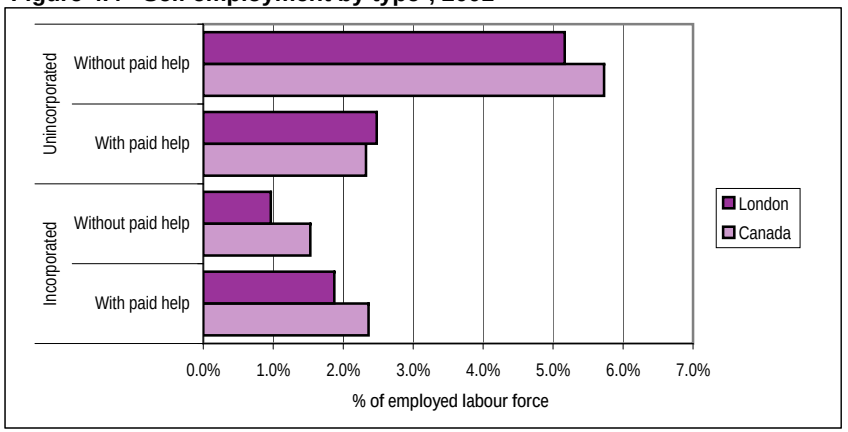


Figure 4.4 - Self employment by type[4], 2001



5 - Occupational Structure London

	A-B Management, business & finance occupations			C-F Natural/social science, health, education & artistic occupations			G-J Sales/service, trades & manual labour occupations		
	1991	1996	2001	1991	1996	2001	1991	1996	2001
London	28.1%	27.5%	27.3%	20.6%	20.9%	22.2%	51.3%	51.6%	50.5%
Canada	28.6%	27.8%	28.2%	18.8%	19.8%	21.3%	52.5%	52.4%	50.5%

Figure 5.1 - Occupational structure, 2001

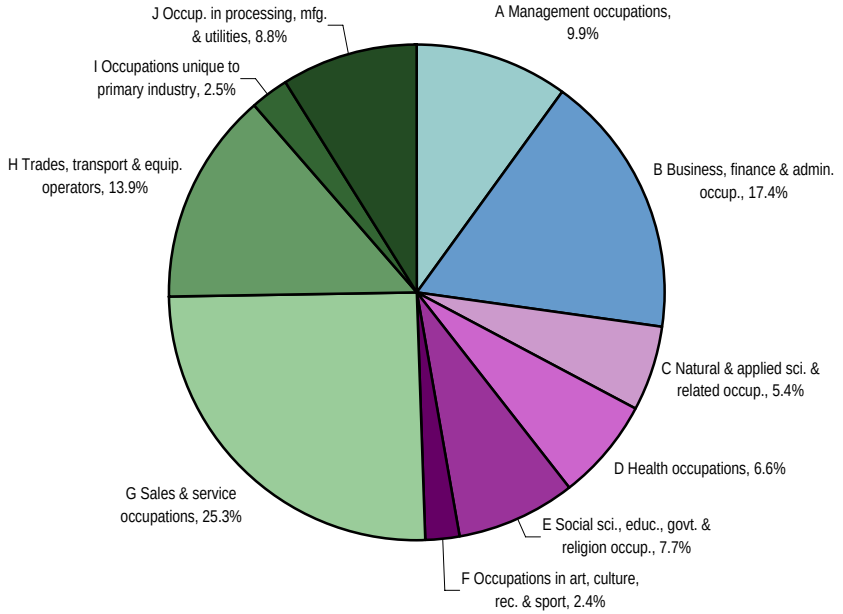
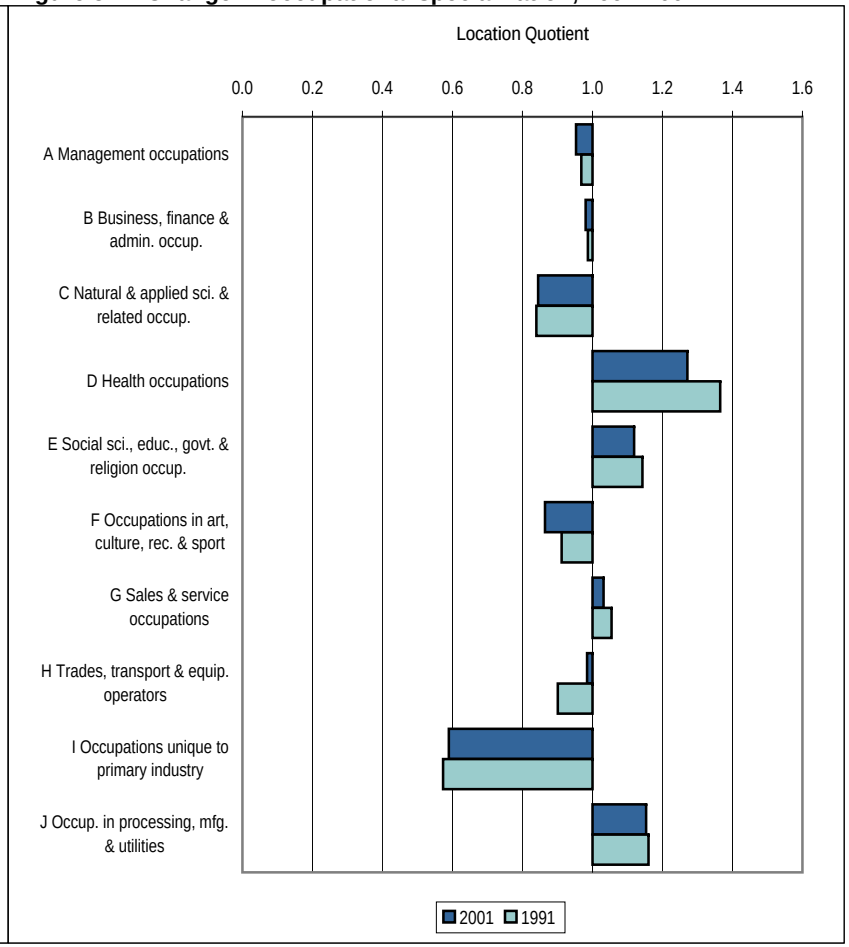


Figure 5.2 - Change in occupational specialization, 1991-2001



6 - Creative Occupations London

	Bohemians	Bohemians per 1000[5]	S&T Workers	% S&T Workers[6]
London	2,425	10.7	12,355	5.4%
Canada	204,305	13.1	1,003,810	6.4%

Occupational Groups[7]	Creative	Service	Trades & Manual	Agricultural
London	33.2%	41.5%	23.4%	1.8%
Canada	29.2%	42.7%	23.9%	4.3%

Figure 6.1 - Specialization in creative occupations

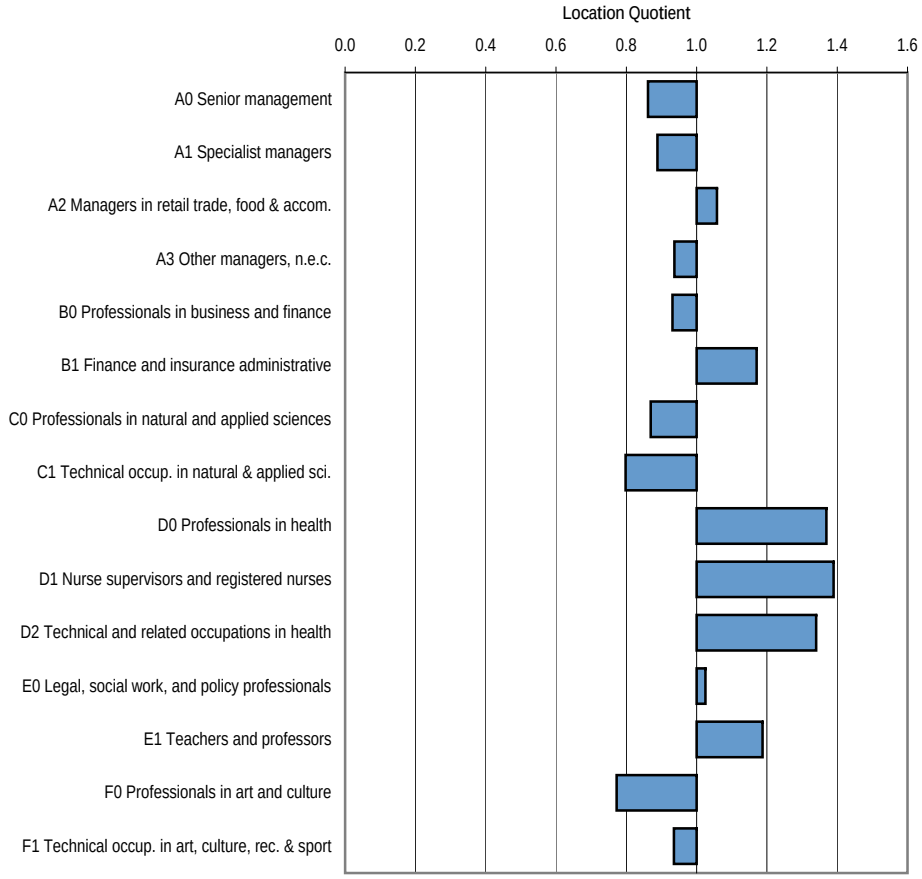


Figure 6.2 - Change in share of labour force, 1991-2001

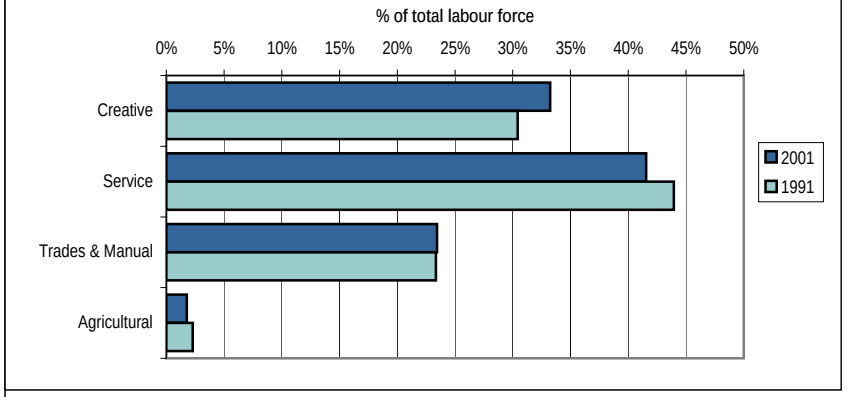
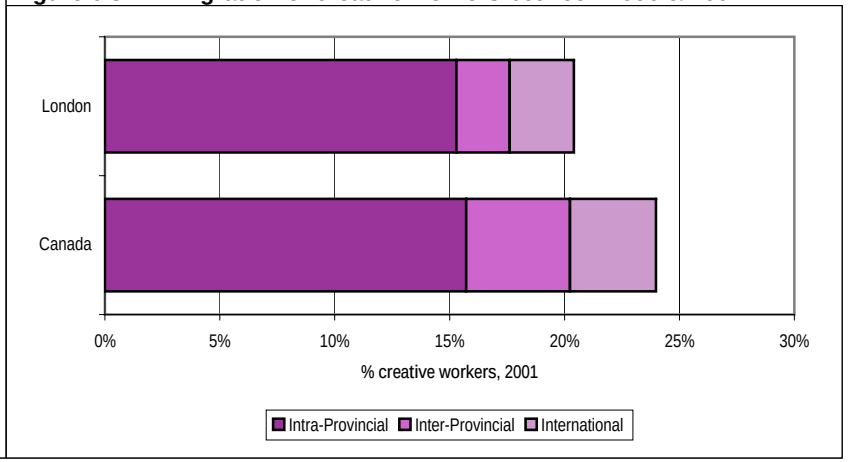


Figure 6.3 - In-migration of creative workers between 1996 & 2001

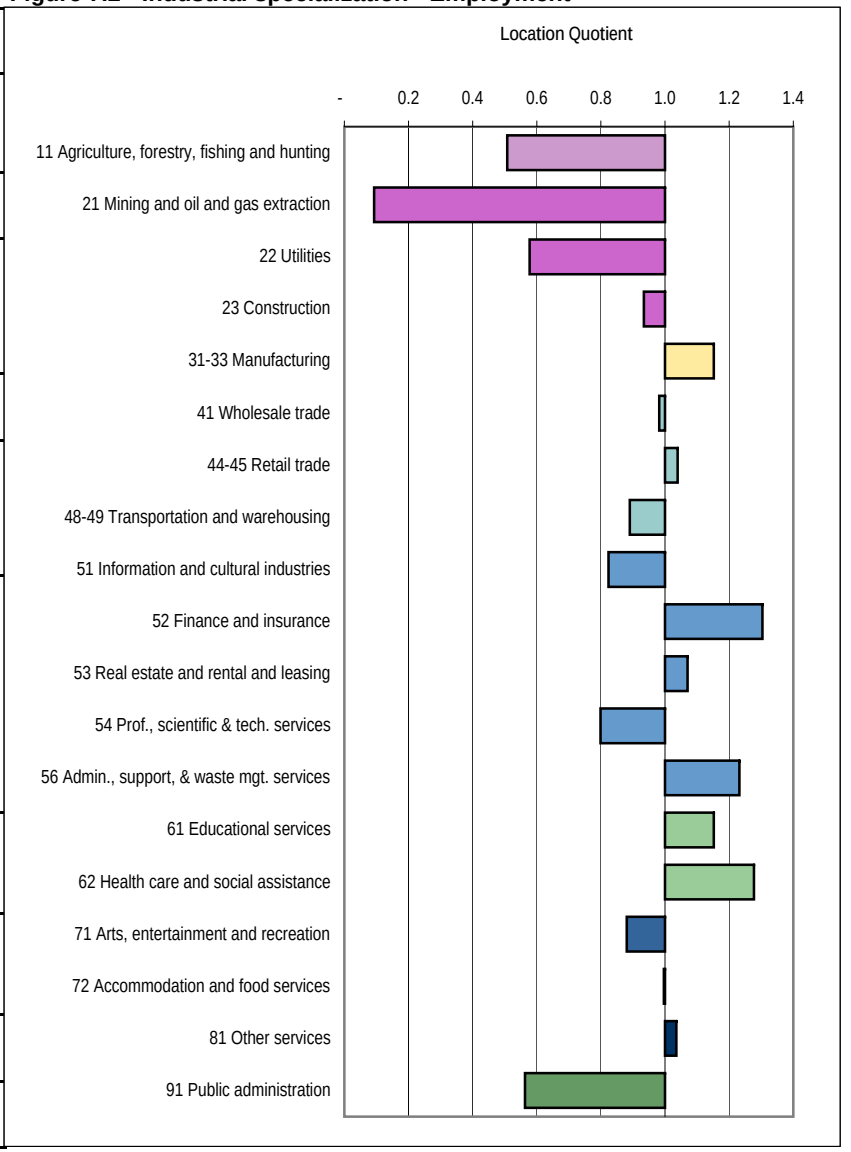


7 - Industrial Structure — London

Figure 7.1 - Industry characteristics

	# Labour force	% Labour force	% BA or higher	% Creative occups.	Average income
All industries	**246,495**	**100.0%**	**19.1%**	**33.2%**	**$ 32,694**
11 Agr., forestry, fish. & hunt.	4,750	1.9%	9.8%	5.5%	$ 20,460
21 Mining & oil/gas extraction	265	0.1%	37.0%	44.4%	$ 50,448
22 Utilities	1,145	0.5%	15.5%	28.5%	$ 45,473
23 Construction	12,730	5.2%	4.2%	18.4%	$ 33,294
31-33 Manufacturing	38,680	15.7%	10.5%	19.2%	$ 42,871
41 Wholesale trade	10,405	4.2%	12.7%	24.3%	$ 41,481
44-45 Retail trade	29,055	11.8%	9.9%	22.0%	$ 19,690
48-49 Transport & warehousing	10,630	4.3%	6.6%	11.2%	$ 34,428
51 Information & cultural ind.	5,425	2.2%	22.5%	48.1%	$ 33,568
52 Finance and insurance	12,920	5.2%	26.0%	52.7%	$ 45,818
53 Real estate/rental & leasing	4,425	1.8%	16.4%	22.6%	$ 30,550
54 Prof., sci. & tech. services	12,540	5.1%	37.2%	72.2%	$ 41,296
55 Mgmt. of companies	165	0.1%	32.1%	85.2%	$ -
56 Admin./support, & wst. mgt.	12,070	4.9%	8.6%	12.6%	$ 20,658
61 Educational services	18,995	7.7%	64.3%	73.8%	$ 37,424
62 Health care & soc. assist.	30,070	12.2%	27.1%	51.7%	$ 36,391
71 Arts, entertainment & rec.	4,555	1.8%	17.8%	49.6%	$ 15,591
72 Accom. & food services	17,100	6.9%	6.2%	16.0%	$ 12,367
81 Other services	12,575	5.1%	11.9%	22.2%	$ 23,469
91 Public administration	8,005	3.2%	28.7%	37.3%	$ 42,438

Figure 7.2 - Industrial specialization - Employment



8 - Clusters London

Number of clusters[8]	6
% employment in clusters[8]	26.8%
% establishments in clusters[8]	21.1%

Figure 8.1 - Cluster characteristics, 2001[8]

	# Labour force	Labour force LQ	% Industry LQs > 1	Cluster (yes/no)
Resource-based				
Agriculture	9,625	0.91	40.0%	NO
Mining	1,235	0.33	0.0%	NO
Oil and Gas	750	0.29	11.1%	NO
Wood & Wood Products	1,325	0.25	10.0%	NO
Maritime	295	0.14	0.0%	NO
Manufacturing				
Textiles & Apparel	1,210	0.43	16.7%	NO
Food	7,340	1.16	66.7%	YES
Steel	4,515	0.95	41.7%	NO
Automotive	15,515	2.35	76.9%	YES
Plastics & Rubber	5,935	0.98	28.6%	NO
Biomedical	2,220	1.17	50.0%	YES
ICT Manufacturing	2,225	0.63	11.1%	NO
Service-based				
ICT Services	10,340	1.13	22.2%	NO
Finance	14,915	1.21	53.3%	YES
Business Services	20,490	1.08	56.3%	YES
Creative & Cultural	5,095	0.79	25.0%	NO
Higher Education	7,970	1.50	62.5%	YES
Other				
Construction	6,060	0.81	0.0%	NO
Logistics	10,185	0.90	30.8%	NO

Figure 8.2 - Employment by industry category, 2001[9]

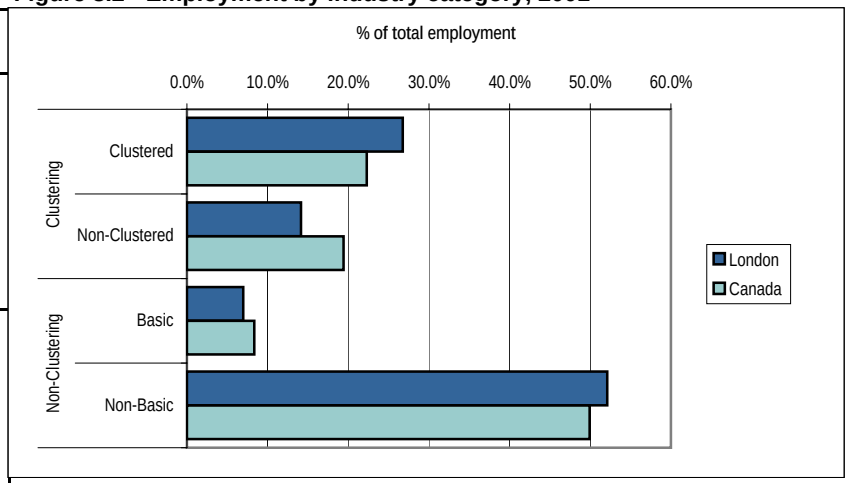
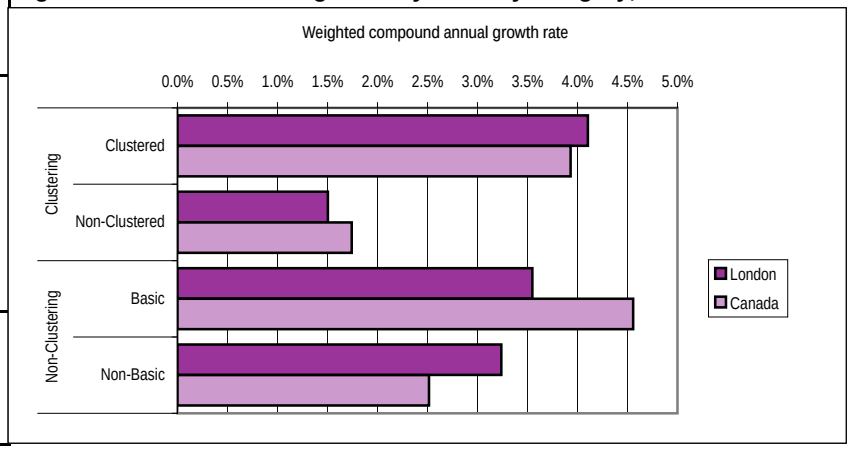


Figure 8.3 - Establishment growth by industry category, 1998-2005[9,10]



9 - Establishments — London

	Establishments		
	1998	2005	Growth[11]
London	11,562	12,174	0.74%
Canada	1,001,517	1,048,286	0.65%

	Less than 5 emp.	5 to 199 emp.	More than 500 emp.
London	51.5%	47.5%	39
Canada	56.5%	42.5%	2,916

Figure 9.1 - Establishment growth by industry, 1998-2005[11]

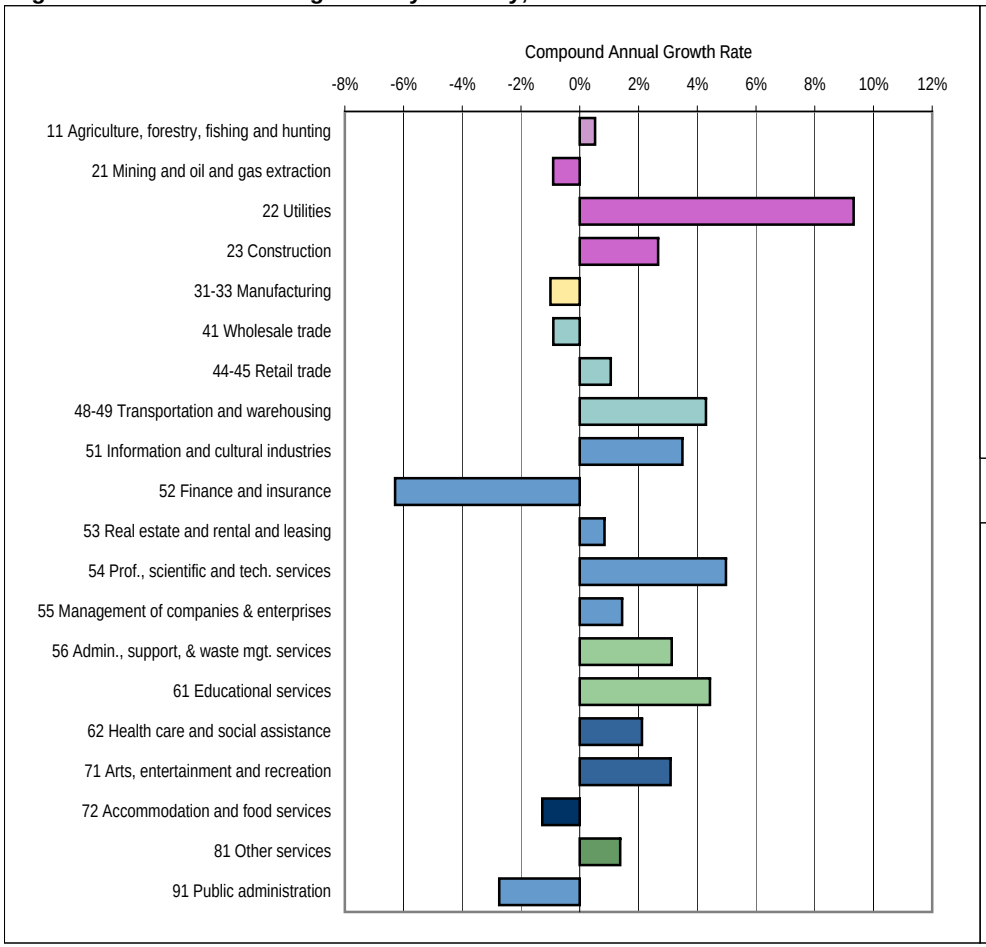


Figure 9.2 - Industrial specialization - Establishments, 2005

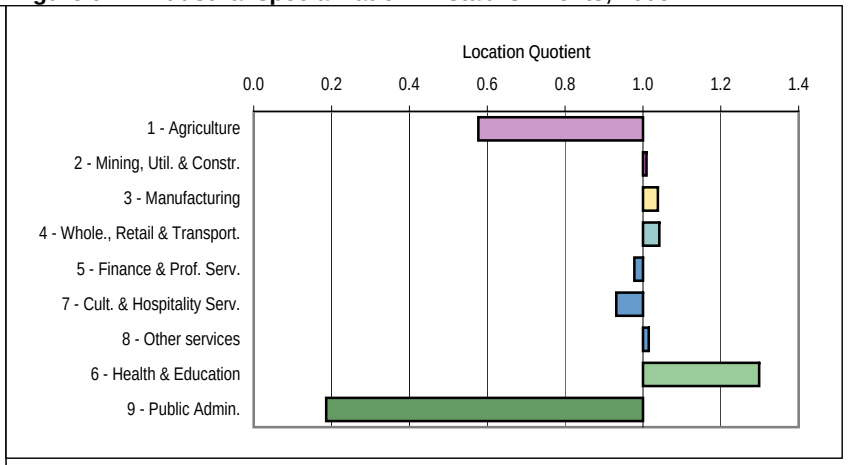
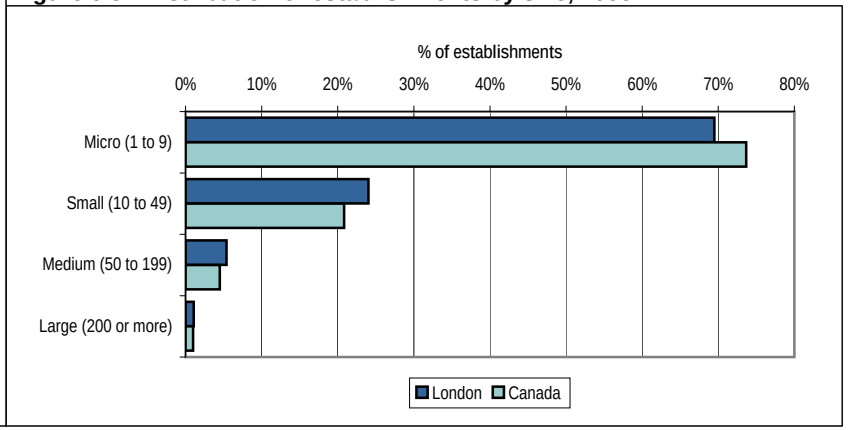


Figure 9.3 - Distribution of establishments by size, 2005



10 - Income

London

Household income[12]	Average	Median	% below LICO[13]
London	$ 58,713	$ 48,026	15.1
Canada	$ 58,360	$ 46,752	16.2

Individual income[12]	Average total	Average emp.
London	$ 31,050	$ 32,393
Canada	$ 29,769	$ 31,757

Figure 10.1 - Sources of income for population 15 and over, 2000

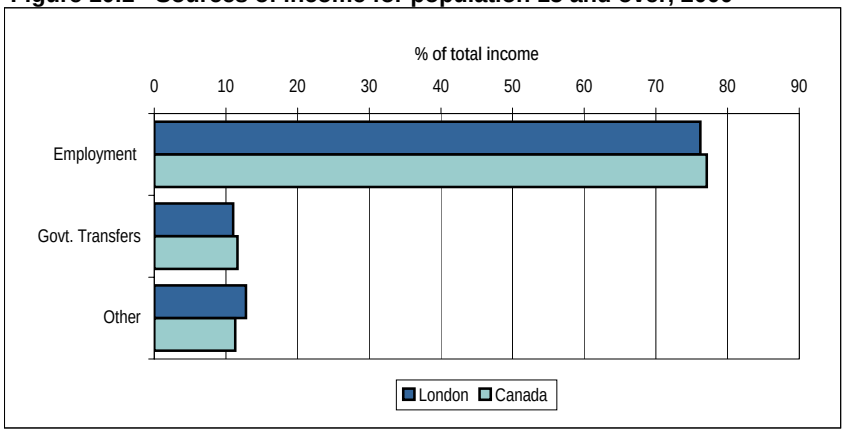


Figure 10.2 - Distribution of total income for pop. 15 and over, 2000

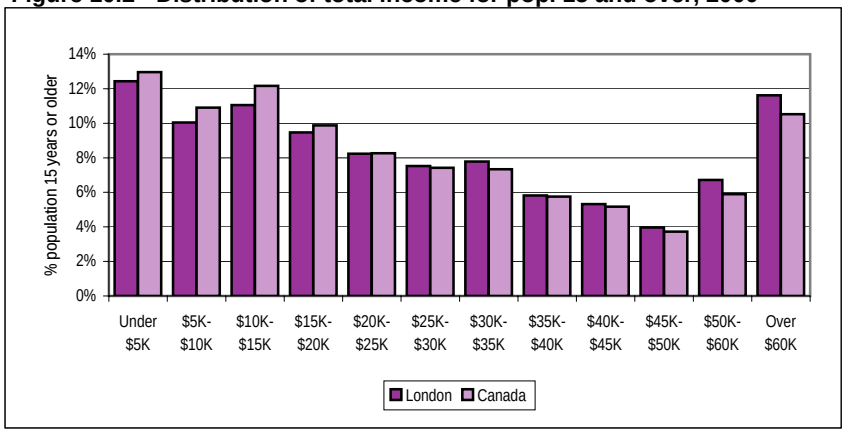


Figure 10.3 - Distribution of household income, 2000

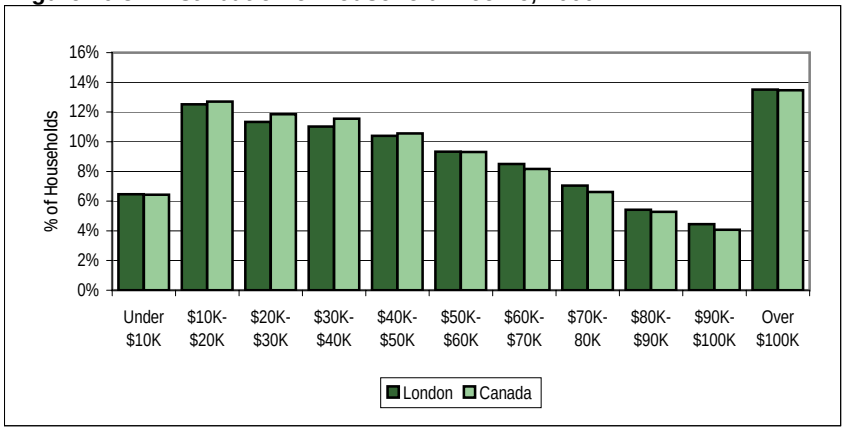
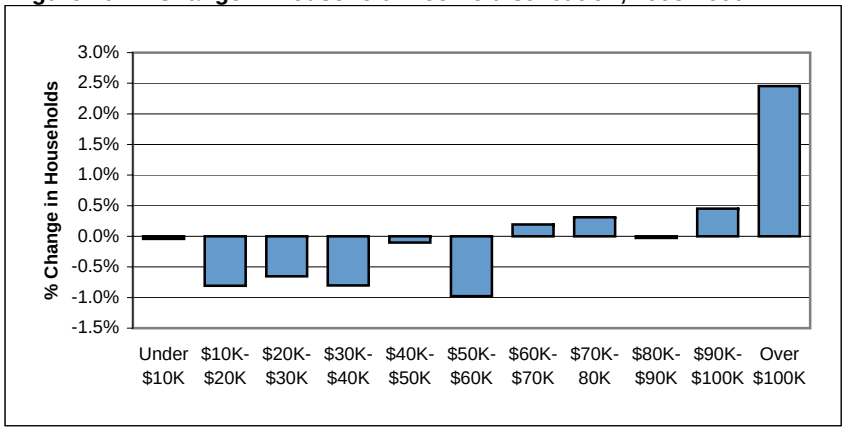


Figure 10.4 - Change in household income distribution, 1995-2000*



*Constant dollars (2000)

Notes

[1] All educational attainment statistics are calculated for the population 15 years and over.

[2] The employment rate refers to the number of persons employed expressed as a percentage of the total population 15 years of age and over (excluding institutional residents).

[3] The unemployment rate refers to the number of unemployed persons expressed as a percentage of the total labour force 15 years of age and over.

[4] Self-employment is defined as persons 15 years of age and over for whom the job reported consisted mainly of operating a business, farm or professional practice, alone or in partnership. Examples include: operating a farm; working on a freelance or contract basis to do a job (e.g. architects, private duty nurses); or operating a direct distributorship selling and delivering products (e.g. cosmetics, newspapers). Respondents were asked to specify if their business was incorporated or unincorporated, as well as if they had paid help or no paid help.

[5] Bohemians are defined as artistic occupations and include the following occupational categories: F021 Authors and writers; F031 Producers, directors, choreographers and related occupations; F032 Conductors, composers and arrangers; F033 Musicians and singers; F034 Dancers; F035 Actors and comedians; F036 Painters, sculptors and other visual artists; F121 Photographers; F141 Graphic designers and illustrators; F142 Interior designers; F143 Theatre, fashion, exhibit and other creative designers; F144 Artisans and craftspersons; and F145 Patternmakers, textile, leather and fur products. See Florida (2002) and Gertler et al. (2002).

[6] Science and technology workers include the following occupational categories: C0 Professional occupations in natural and applied sciences; and C1 Technical occupations related to natural and applied sciences. See Feinstein and McAlinden (2002).

[7] Following the method outlined in Florida (2002), we have divided the Canadian occupational structure into four broad categories: creative occupations; service occupations; trade and manual labour occupations; and agricultural and related occupations. These are defined using the National Occupational Classification for Statistics (NOCS) at the 2-digit level.

- *Creative occupations* include: A0 Senior management occupations; A1 Specialist managers; A2 Managers in retail trade, food and accommodation services; A3 Other managers, n.e.c.; B0 Professional occupations in business and finance; B1 Finance and insurance administrative occupations; C0 Professional occupations in natural and applied sciences; C1 Technical occupations related to natural and applied sciences; D0 Professional occupations in health; D1 Nurse supervisors and registered nurses; D2 Technical and related occupations in health; E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers; E1 Teachers and professors; F0 Professional occupations in art and culture; and F1 Technical occupations in art, culture, recreation and sport.

- *Service occupations* include: B2 Secretaries; B3 Administrative and regulatory occupations; B4 Clerical supervisors; B5 Clerical occupations; D3 Assisting occupations in support of health services; E2 Paralegals, social services workers and occupations in education and religion, n.e.c.; and G Sales and Service Occupations.

- *Trades and manual labour occupations* include: H Trades, Transport and Equipment Operators and Related Occupations; I2 Primary production labourers; and J Occupations Unique to Processing, Manufacturing and Utilities.

- *Agriculture and related occupations* include: I0 Occupations unique to agriculture, excluding labourers; and I1 Occupations unique to forestry operations, mining, oil and gas extraction and fishing, excluding labourers.

[8] The method for identifying and defining cluster is based on previous ISRN work (see Spencer and Vinodrai 2005). Clusters are defined as constellations of industries defined using the North American Industrial Classification Systems (NAICS) at the 4-digit level based on patterns of location and co-location within the Canadian space economy . Constellations of industries must meet three criteria within a particular place to be defined as a cluster: 1) there must be 1,000 or more employees; 2) the overall employment LQ must be greater than or equal to 1; and 3) at least half of the industries that comprise a particular cluster in a particular place must have an individual employment LQ greater than or equal to 1.

[9] The method for identifying and defining cluster is based on previous ISRN work (see Spencer and Vinodrai 2005). We divide industries and employment into four categories: Non-basic, basic, non-clustered, and clustered. Non-Basic industries are those industries which do not demonstrate a pattern of geographic concentration in particular places. Basic industries are those industries which are geographically concentrated in particular places but do not exhibit patterns of systematic co-location with other industries. The remaining industries have the potential to cluster but do not always do so. Therefore, non-clustered employment is in those industries which do co-locate with other industries, but do not exhibit cluster characteristics in a particular location (see above). Clustered employment is that employment in industries which co-locate with other industries and exhibit cluster characteristics (see above).

[10] Growth is calculated as a weighted compound annual growth rate (CAGR). The growth rate is weighted according to the size distribution of establishments within a particular group of industries in a place.

[11] Growth is measured as a compound annual growth rate (CAGR).

[12] Canadian censuses were conducted in 1996 and 2001. Income data relate to the calendar year prior to the census year, i.e. 1995 and 2000 respectively.

[13] Low income cut-offs (LICO) are established by Statistics Canada based on national family expenditure patterns on food, shelter, and clothing. LICOs reflect a consistent and well-defined methodology that identifies those who are substantially worse-off than average.

Data Sources and References

Data Sources

Statistics Canada. 2001. Census family status, age groups and sex for population in private households. Catalogue No. 95F0314XCB2001004. Ottawa, ON: Statistics Canada.

Statistics Canada. 2001. Immigrant status and period of immigration and place of birth of respondent for immigrants and non-permanent residents. Catalogue No. 97F0009XCB2001002. Ottawa, ON: Statistics Canada.

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