Focus on Rural Ontario

RURAL ONTARIO INSTITUTE
Vision, Voice and Leadership

Change in occupation mix: Wholesale trade sector 2006 - 2016

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Highlights

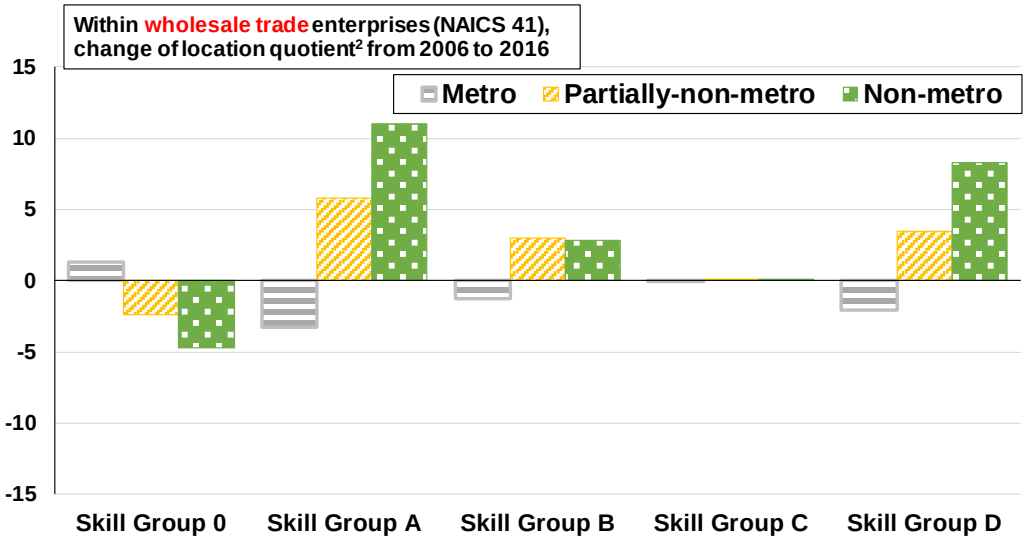
- **In non-metro census divisions in 2016, 49% of employment in wholesale trade was in occupations usually requiring a high school diploma or occupation-specific training (Skill Group "C").**
- **Between 2006 and 2016, the non-metro change in the share (or percent) of employment in this occupation group was the same as the change for Ontario as whole.**
- **Between 2006 and 2016, the relative intensity of employment in Skill Groups "A" and "B" increased in the non-metro wholesale sector. This implies a relative shift in non-metro wholesale trade towards these occupation groups, relative to Ontario as a whole.**

- Cautionary caveat: We are using a delineation of skills as delineated by Employment and Skills Development Canada that is based on the level of educational attainment usually required for a given occupation. However, non-metro workers know that heavy equipment mechanics (Skill Group "B") are not less skilled than teachers (Skill Group "A") – the required skills are simply different.

Why look at the mix of occupations?

Within each industry sector, the mix of occupations and the associated skills are changing over time. The change in the occupation mix in a given sector shows whether a type of region is gaining or losing employment in a given skill group, relative to the change in other regions.

Figure 1 **Among wholesale trade enterprises, the share of non-metro employment in Skill[1] Groups "A","B" & "D" increased relative to the Ontario average, 2006-2016**



1. Occupations are classified to Skill Groups based on: Employment and Skills Development Canada. **National Occupational Classification Matrix 2011** (http://noc.esdc.gc.ca/English/NOC/Matrix2011.aspx?ver=11). Group A usually requires a university education; Group B usually requires a college education or apprenticeship training; Group C usually requires a secondary school or occupation-specific training; Group D usually requires on-the-job training; Group O includes management occupations
2. A location quotient is a measure, for each industry sector, of the relative intensity of employment in a skill group in, say, non-metro census divisions, compared to the employment in the skill group for Ontario as a whole. It is calculated as the percent of employment in a skill group in an industry sector for, say, non-metro census divisions, divided by the percent of employment in the skill group in the industry sector for Ontario as a whole (and then multiplied by 100).

Source: OMAFRA, EMSI ANALYST database. Chart by RayD.Bollman@sasktel.net

The objective of this Fact Sheet is to show the change in the mix of skills[1] in wholesale enterprises[2] from 2006 to 2016[3].

Summary data for each sector is in an appendix[4].

[1] Occupations are classified to Skill Groups based on: **Employment and Skills Development Canada. National Occupational Classification Matrix 2011** (http://noc.esdc.gc.ca/English/NOC/Matrix2011.aspx?ver=11). **Group A** usually requires a university education; **Group B** usually requires a college education or apprenticeship training; **Group C** usually requires a secondary school or occupation-specific training; **Group D** usually requires on-the-job training; and **Group O** includes management occupations & self-employed individuals.

[2] Specifically, NAICS 41 in Statistics Canada. (2017) **North American Industry Classification System: 2017** (Ottawa: Statistics Canada, Catalogue no. 12-501) (http://www5.statcan.gc.ca/olc-cel/olc.action?objId=12-501-X&objType=2&lang=en&limit=0).

[3] From 1991 to 2001 in most industries, the share of employment in higher-skilled jobs increased (slightly) more in urban areas than in rural areas. See Erik Magnusson and Alessandro Alasia. (2004) "Occupational patterns within industry groups: A rural-urban comparison." **Rural and Small Town Canada Analysis Bulletin** Vol. 5, No. 6 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (www.statcan.gc.ca/bsolc/english/bsolc?catno=21-006-X&CHROPG=1).

[4] **Appendix: Tables and Charts showing the Level and Change of Employment by Skill Group for each Industry Sector, by Type of Census Division, Ontario, 2006 – 2016.**

Findings

Employment in wholesale enterprises increased by 8% in Ontario from 2006 to 2016 (Table 1). The increase was smaller (5%) in non-metro[5] census divisions (CDs) but was 8% in each of partially non-metro CDs and metro CDs.

Employment increased in each skill group in each type of census division – except there was a small decline in non-metro CDs in Skill Group "O" (-2%) and Skill Group "C" (-1%).

About one-half of total employment in wholesale enterprises is in Skill Group "C" (45% to 53%, depending upon the year and the type of census division). Slightly over one-quarter are employed in Skill Group "B". Finally, 13% are employed in Skill Group "O" (which includes managers and self-employed operators).

A location quotient (LQ) calculates a relative intensity (Columns 6 and 7 in Table 1). For example, Skill Group "B" represented 29% of wholesale sector employment in non-metro CDs in 2016. When we take this 29% share and divide by the 27% share at the Ontario level (and multiply by 100), we generate an LQ (or relative intensity) of 107 (in Column 7) as a measure of the relative intensity of non-metro wholesale employment in Skill Group "B", relative to 100 for Ontario as a whole. A figure greater than 100 indicates that this group has a higher share (or is more intensive) compared to Ontario as a whole. From 2006 to 2016, the non-metro LQ for employment in Skill Group "B" increased by 3 points (Figure 1). This increase indicates a shift in non-metro wholesale employment towards Skill Group "B", compared to the size of the shift for Ontario as a whole.

From 2006 to 2016, the positive change in Figure 1 for the non-metro LQ for Skill Group "A" and Skill Group "B" indicates a relative increase in the share of these occupations in the non-metro wholesale sector, compared to Ontario as a whole.

Summary

Between 2006 and 2016, the relative intensity of employment in Skill Groups "A" and "B" increased in the non-metro wholesale sector. This indicates a relative shift in non-metro employment in wholesale trade towards these occupation groups, relative to Ontario as a whole. Nonetheless, both non-metro and partially-non-metro parts of Ontario remain more weighted to skills groups B, C and D than metro Ontario is.

Table 1. Level and change in skill[1] structure of employment in wholesale trade enterprises (NAICS 41), by type of census division in Ontario, 2006 and 2016

Skill group[1]	Number employed (,000)		Percent change, 2006 to 2016	Number employed as percent of total		Location quotient[2]		
	2006	2016		2006	2016	2006	2016	Change[3]
	Metro census divisions[4]							
O	32	34	6	13	13	101	102	1
A	19	27	42	8	10	121	118	-3
B	63	69	10	26	26	99	98	-1
C	117	118	1	48	45	97	97	0
D	12	13	10	5	5	101	99	-2
Total	243	262	8	100	100	100	100	0
	Partially-non-metro census divisions[4]							
O	9	10	3	13	12	97	94	-2
A	3	4	62	4	5	55	61	6
B	19	22	15	26	28	101	104	3
C	39	40	2	53	49	107	107	0
D	4	4	16	5	5	99	102	3
Total	74	80	8	100	100	100	100	0
	Non-metro census divisions[4]							
O	4	4	-2	13	13	102	97	-5
A	1	1	84	2	4	38	49	11
B	8	9	12	27	29	104	107	3
C	16	16	-1	52	49	106	106	0
D	1	2	19	5	5	96	104	8
Total	30	32	5	100	100	100	100	0
	All census divisions							
O	46	48	5	13	13	100	100	0
A	22	33	46	6	9	100	100	0
B	90	101	11	26	27	100	100	0
C	171	173	1	49	46	100	100	0
D	17	19	12	5	5	100	100	0
Total	347	374	8	100	100	100	100	0

1. Occupations are classified to Skill Groups based on: Employment and Skills Development Canada. **National Occupational Classification Matrix 2011** (http://noc.esdc.gc.ca/English/NOC/Matrix2011.aspx?ver=11). **Group A** usually requires a university education; **Group B** usually requires a college education or apprenticeship training; **Group C** usually requires a secondary school or occupation-specific training; **Group D** usually requires on-the-job training; **Group O** includes management occupations and self-employed individuals.

2. A location quotient is a measure, for each industry sector, of the relative intensity of employment in a skill group in, say, non-metro census divisions, compared to the employment in the skill group for Ontario as a whole. It is calculated as the percent of employment in a skill group in an industry sector for, say, non-metro census divisions, divided by the percent of employment in the skill group in the industry sector for Ontario as a whole (and then multiplied by 100).

3. The change in the location quotient indicates whether a given geographic group (e.g., non-metro census divisions) reported an increase or decrease in the percent of their employment in a given skill group, relative to Ontario as a whole.

4. The classification of census divisions is shown in Table 2 in ""Rural Ontario's Demography: Census Update to 2016" **Focus on Rural Ontario** (March, 2017).

Source: OMAFRA, EMSI ANALYST database.

[5] Defined in "Rural Ontario's Demography: Census Update 2016." **Focus on Rural Ontario** (Guelph: Rural Ontario Institute, March) (http://www.ruralontarioinstitute.ca/focus-on-rural-ontario.aspx).

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