

BC's Income  
and Earnings:

Inflation – which  
inflation?

## Dimensions of Diversity: 2006 Census Snapshot

### The facts about incomes in British Columbia are not in the headlines; Inflation Adjustments

While data on changes in individual employment incomes provide useful insights into the effects of economic change on consumer behaviour, the more critical data are those on changes in household incomes. The importance of, and interest in, household incomes stems from the reality that consumer spending, particularly for durables and big ticket items, is largely derived from the income of the spending unit – the household – rather than from the incomes of individual household members. It was therefore somewhat surprising to see little mention of changes in household incomes in last week's release of 2006 Census data by Statistics Canada.

This was not the only surprise we found in Statistics Canada's last official data release from the 2006 Census; the suggested widening gap between Canadian born and recent immigrant incomes, and the supposedly falling earnings of full time workers in British Columbia were two other topic areas where the headlines painted a different story than that found in the data. *For more details see the previous report in the publication list.*

While not based on one particular headline from the incomes and earnings release, we also found it surprising to see that inflation adjustments made by Statistics Canada to estimate changes in incomes in constant dollars used the same Consumer Price Index (CPI) deflator for all provinces and regions in Canada: the national average inflation rate of 12.2 percent. The reason for the surprise is that inflation differs considerably across Canada. As an example, inflation in British Columbia was only 10.6 percent, 1.5 percentage points (or 13.7 percent) lower than the national average over the 2000 to 2005 period. Given this difference, and the headlines which stated median full time earnings in BC fell by 3.4 percent between 2000 and 2005 (and 11.3 percent between 1980 and 2005), we thought it would be interesting to see the impact of using the BC specific CPI deflator on the picture of the changing earnings of British Columbians.

What we found was that the effect of using national (rather than provincial or regional) inflation rates to deflate provincial data significantly understated income growth in the province of British Columbia. At the most aggregate level, rather than median incomes of full time full year workers in the province declining by the reported 3.4 percent, using provincial inflation as the adjustment indicates a decline of only 2.0 percent. More importantly, using the regional inflation adjustment

shows that median earnings for full time full year workers in Abbotsford and Victoria grew (by 0.9 and 0.2 percent respectively, Table 1) rather than the decline (-0.6 and -0.7 percent respectively) indicated using the national inflation rate.

Even with the appropriate inflation adjustment, it appears that median incomes for full time full year workers in BC as a whole and in the Vancouver CMA

declined. This does not necessarily mean that everyone (or anyone) saw a decline in their wages: it may well be that the decline in median incomes was the result of many more entry level workers being able to work full time in 2005, with their lower than average incomes pulling down the median. Before drawing any conclusions about income change it is necessary to do a lot more

Table 1

Employment Income for Those Working Full-time Full Year					
2005 Median Individual Income	2000 Median Individual Income			Change in Median Real Incomes, 2000 to 2005	
	Current Dollars	Constant 2005 Dollars		National Inflation	Actual Inflation
		National Inflation	Actual Inflation		
\$ 41,401	\$ 36,059	\$ 40,443	\$ 40,443	2.4%	2.4%
\$ 42,230	\$ 38,976	\$ 43,715	\$ 43,113	-3.4%	-2.0%
\$ 43,215	\$ 39,967	\$ 44,827	\$ 44,131	-3.6%	-2.1%
\$ 40,151	\$ 36,025	\$ 40,405	\$ 39,777	-0.6%	0.9%
\$ 42,817	\$ 38,457	\$ 43,133	\$ 42,734	-0.7%	0.2%

research into the compositional factors that have worked to change the profile of earnings over the past decades.

As noted above, while the picture of individual earnings is interesting, it masks changes in the composition and incomes of households. Using national rather than provincial inflation rates to deflate provincial data also understates household income growth in the province: it reveals that rather than median household incomes in Vancouver and Abbotsford declining once adjusted for inflation, they actually moved in the opposite direction, increasing slightly between 2000 and 2005.

The below table provides a preliminary examination of trends in household incomes in British Columbia over the 2000 to 2005 period and the impact of using a national rather than a provincial inflation rate. The reason for the emphasis on preliminary is that before the actual change in household incomes can be measured, it would be necessary not only to use the appropriate adjustment for inflation, but to consider other changes such as the changing age composition of the population.

As Table 2 shows, in Canada median household incomes were \$46,753 current dollars in 2000; in terms of purchasing power this represented \$52,438 in 2005 dollars. The constant dollar increase from \$52,438 to \$53,634 in 2005 indicates that median household incomes increased by 2.3

**Table 2**

<b>Median Household Incomes</b>					
<b>2005 Median Household Income</b>	<b>2000 Median Household Income</b>			<i>Change in Median Real Incomes, 2000 to 2005</i>	
	Current Dollars	Constant 2005 Dollars		<i>National Inflation</i>	<i>Actual Inflation</i>
		National Inflation	Actual Inflation		
\$ 53,634	\$ 46,753	\$ 52,438	\$ 52,438	2.3%	2.3%
\$ 52,709	\$ 46,799	\$ 52,490	\$ 51,767	0.4%	1.8%
\$ 55,231	\$ 49,990	\$ 56,069	\$ 55,198	-1.5%	0.1%
\$ 54,535	\$ 48,718	\$ 54,642	\$ 53,793	-0.2%	1.4%
\$ 53,310	\$ 46,393	\$ 52,034	\$ 51,553	2.5%	3.4%

percent, once adjusted for inflation. If inflation in British Columbia was the same as it was nationally, median household incomes in the province would have increased modestly, from \$52,490 (constant 2005 dollars) in 2000 to \$52,709 in 2005, an increase of only 0.4 percent.

But, as shown above, inflation in British Columbia over this period was only 10.6 percent relative to the national 12.2 percent. Adjusted for the inflation that

was actually experienced in the province, average household incomes in British Columbia grew by 1.8 percent over the five year period, compared to the 0.4 percent indicated in the Statistics Canada data release. In the case of both the Vancouver and Abbotsford Census Metropolitan areas, inflation was even lower, with only a 10.4 percent increase in consumer prices recorded. This means that rather than seeing their median household incomes decline (by 1.5 percent and 0.4 percent respectively), median household incomes actually grew by 0.1 and 1.4 percent. Inflation in the Victoria CMA was slightly higher than in the Lower Mainland, although it remained below the national average. Using the inflation rate for the Victoria CMA indicates a significant increase in median household incomes of 3.4 percent in constant dollars, significantly above not only the provincial average of 1.8 percent, but the national average of 2.3 percent.

Can we now draw any strong conclusions about household incomes in the province? Yes and no. Yes, we can draw the conclusion that once adjusted for the inflation experienced in the province and its three largest metropolitan regions (rather than the national average), a much different, and more positive, picture of income change emerges. And the no? Until more data are released by Statistics Canada, it will not be possible to determine the *why* of different rates of change regionally, provincially and nationally – are they merely demographic, the result of a changing population? Are they the result of changing household composition as more 25 somethings are living still at home? Or are they result of changing work patterns and differences in sectoral incomes? Any, all, or a combination of, are all plausible hypotheses, which they must remain until more data are available.