

The price of labour

Henry Pold and Fred Wong

Labour compensation studies often focus exclusively on wages and salaries. But workers receive more than earnings from a job. The economic benefits accruing to paid workers from their employment also include a range of non-wage items. These include employers' contributions to pension, medical and dental plans and unemployment insurance; and premiums for life insurance and workers' compensation.

The non-wage component of labour income has risen dramatically over the years as a consequence of pension reforms, changes in unemployment insurance regulations, and the increasing portion of medical and dental plan premiums paid by employers. A more complete picture of labour compensation, including its effects on employers' labour costs and workers' economic welfare, requires an analysis of both wage and non-wage components.

This article examines trends in the two major components of labour income since the mid-70s, [\(1\)](#) spanning both a major inflationary period and the worst recession since the 1930s. Developments by industry and province are also discussed.



Chart A **Change in average annual labour income, 1975 to 1988**

Sources: Labour Force Survey and Estimates of Labour Income

Divergent trends in wage and non-wage labour income

In 1988, Canadian paid workers earned an average of \$29,969 in labour income, comprising wages and

salaries and supplementary labour income. (For definitions of these terms, see [Labour compensation concepts](#).) This represents an increase of 158% since 1975. But adjusting these figures by the Consumer Price Index (CPI) to remove the effects of inflation reveals a different picture. ⁽²⁾ (Unless otherwise stated, all income figures or comparisons hereafter are in 1988 dollars.) Average labour income in 1988 was actually 1.6% (\$485) below the 1977 peak. This decline can be attributed to wages and salaries, which comprise about 90% of labour income. Between 1977 and 1988, average annual wages and salaries dropped by 3.3% (almost \$1,000).



Figure 1 Terminology of Labour Cost

From 1978 to 1983, wages and salaries declined every year, losing a total of 6.7% by 1983. The largest annual decrease (-3.1%) occurred in 1978, possibly reflecting the impact of the 1975 federal wage and price control program. The 1981-82 recession also had a strong, but delayed, effect on wages and salaries - they declined by 1.4% in 1983. From 1984 to 1988, the trend reversed, as wages and salaries recorded a cumulative gain of 3.6%.

In contrast, supplementary labour income continued to grow throughout most of the 1977-1988 period, offsetting about one-half of the wage and salary decline. But, despite the 17% jump in this component between 1977 and 1988, its share of total labour income increased minimally, from 8.3% to 9.9%.



Table 1 Labour income per employee by industry in 1988 constant dollars

Sources: Labour Force Survey and Estimates of Labour Income

Changes by industry uneven

Between 1977 and 1988, average labour income increased in the goods-producing sector but declined in the services-producing sector. Both sectors, however, experienced declines in wages and salaries and growth in supplementary labour income. The increase in the goods-producing sector resulted from the substantial growth of the supplementary labour income component (\$881), more than compensating for the slight loss in the wages and salaries (-\$260). The labour income loss in the services-producing sector resulted from the large decline in wages and salaries (-\$963), surpassing the modest supplementary

labour income growth (\$281).

Several factors may account for the different patterns in the two sectors: the higher rate of unionization, the preponderance of adult men, and the slower employment growth in the goods-producing sector, versus the high levels of youth and female employment and the higher rate of part-time employment in the services-producing sector. (For a discussion of some of these factors, see [Dumas](#), [Lévesque](#), and [Picot, et al.](#))

Incomes grew in most goods-producing industries...

The income gains in manufacturing occurred mainly after the 1981-82 recession, reflecting the large productivity gains since 1982. The extraordinary growth in supplementary labour income for workers in agriculture and fishing (78.9%) may be due to the extension of workers' compensation and unemployment insurance coverage to more of these workers.

Within the goods-producing sector, only the construction industry experienced a decline in average labour income (-13.2%). The increase in supplementary labour income could not completely offset a substantial loss in wages and salaries. Growth in non-union construction activity and a weakening of closed-shop provisions on many construction sites may have kept wage and salary increases below the rate of inflation.

Throughout the 1975-1988 period, mining and forestry workers maintained the highest average labour incomes in the goods-producing sector (\$45,600 and \$42,400 respectively in 1988). Workers in agriculture and fishing were consistently the lowest paid (\$14,700 in 1988).

... but declined in the larger services-producing industries

For the service sector as a whole, labour income averaged almost one-fifth less than the goods-producing sector. The large numbers of part-time and temporary workers in the service sector have doubtless exerted considerable downward pressure on both components of labour income. Part-time employees working less than a minimum number of hours per week are excluded from unemployment insurance coverage. As well, most part-timers and nearly all temporary workers are not included in private pension plans. In some service-sector industries, workers receive a significant portion of their earnings as tips and gratuities (for example, those in the food and beverage service industries). Two factors may combine to depress the reported earnings for these workers: their wages are usually lower because they are expected to receive tips and gratuities, and the amounts received in this form are likely underestimated.

Average annual labour income declined in community, business and personal services and in trade, but increased for the other three industry groups. In fact, the finance, insurance and real estate industries had the largest increase of any major industry group - 23.2%. The booming real estate and financial markets in the 1980s no doubt contributed to the increased earnings for workers in this industry. The other high-income industry group - transportation, communication and other utilities - likely benefited from relatively large proportions of high-technology and unionized workers.

Although belt-tightening by all levels of government restrained earnings increases, workers in public administration continued to enjoy high levels of supplementary labour income.

Provincial differences were also significant

The Canadian economy actually comprises several regional economies. One obvious perspective is provincial. The analysis of constant-dollar labour income is, however, constrained by the lack of provincial CPIs prior to 1979. At the national level, labour income peaked in 1977, but given differing provincial economies, the provincial peaks may have occurred either earlier or later.

Between 1979 and 1988, average labour income fell significantly in only two provinces: Newfoundland (5.4%) and British Columbia (4.0%). During the same period, supplementary labour income grew substantially in most provinces, with Quebec maintaining its leading position. The relatively high share of supplementary labour income in Quebec (12.4% in 1988) resulted partly from increases in the hospital insurance payroll tax on all employers, and partly from the introduction and growth of the public service employees pension plan.



Chart B Percentage change in real¹ labour income

Sources: Labour Force Survey and Estimates of Labour Income

¹ Labour income adjusted by the CPI (1988 = 100)

Conclusion

Labour costs are often one of the largest expenses incurred by employers. For more than a decade, average wage and salary increases have almost paralleled general price increases. During the same period, however, supplementary labour income has risen considerably faster than the CPI. And it appears this trend will continue because of various legislative changes.

For example, Alberta, New Brunswick, Nova Scotia, Quebec, Ontario and the federal government have

amended their pension acts to increase the coverage among workers and to raise the levels of future benefits. Pensions will be locked-in and vested after two years (five years in Alberta), with at least 50% of the accrued benefit provided through employer contributions.

As well, the incidence of pension indexing will probably continue to expand. Several unions in the automotive, forestry and transportation industries have recently negotiated partial indexing of pension benefits. As well, the revised Ontario Pension Benefits Act, which covers about half the pension plans in Canada, calls for mandatory indexing. [\(3\)](#)

Legislation at the federal level and in Alberta, Manitoba, New Brunswick, Nova Scotia, Quebec, and Ontario requires mandatory participation of all full-time employees, and voluntary participation for part-time workers, in an employer's pension plan, if one exists. In addition, the combined employer/employee contribution rate under the Canada Pension Plan has been rising every year since 1986, and will reach 4.6% in 1991. From 1992 until 2011, the contribution rate will increase more slowly, reaching 7.6% in 2011.



Table 2 Provincial labour income per employee in 1988 constant dollars

Sources: Labour Force Survey and Estimates of Labour Income

Another significant increase in supplementary labour income has been introduced in Ontario with the new payroll tax for funding the Ontario Health Insurance Plan. A rough estimate, based on the Quebec and Manitoba experiences, suggests an increase of about 10% in supplementary labour income for Ontario in 1990 (and perhaps 2% nationally).

These costs, plus expected changes in other fringe benefits (such as paid vacations, parental leave and childcare) will increase employers' non-wage labour costs in the future. At the same time, employers may also face pressure to increase wages and salaries in response to a tightening labour market due to the shifting age-structure of the Canadian population.

Labour compensation concepts

As defined by the System of National Accounts, labour compensation comprises all benefits accruing to workers for labour services rendered: wages and salaries, supplementary labour income and fringe benefits.

Capturing the monetary value of these items is difficult. Information comes from many sources, and values are often derived indirectly. Ideally, labour compensation estimates should reflect employers' labour costs - not only the actual payments of wages and salaries and supplementary labour income, but also the monetary value of fringe benefits such as subsidized meals, uniforms and clothing; low cost loans and housing; discounts on merchandise; and athletic, recreational and daycare facilities. These data were collected by Statistics Canada's Labour Cost Survey until its cancellation in 1978. Currently, no other survey provides similar data.

Labour income estimates are the closest available approximation of labour costs. These estimates consist of total wages and salaries and supplementary labour income accruing to paid workers for services rendered. Paid workers are persons normally residing in Canada who receive a wage, salary or remuneration in kind, or who are working owners of incorporated businesses. Also included in the definition is the labour income of resident Canadians temporarily working abroad.

Wages and salaries include, in addition to basic pay, directors' fees, bonuses, commissions, tips and gratuities, taxable allowances and retroactive wages. The estimates are calculated on a "gross" basis, that is, before deductions for income tax, unemployment insurance premiums, pension contributions, and so on.

Supplementary labour income comprises payments made by employers for future and contingency benefits of their employees. The payments include employers' contributions to health and welfare schemes, pension plans, workers' compensation and unemployment insurance funds.

Excluded from labour income is the monetary value of fringe benefits such as subsidized meals, merchandise, loans, housing, recreational and daycare facilities. Incomes and allowances of non-resident Canadians are also excluded from the labour income estimates, as are Canadian Armed Forces pay and allowances. Earnings received by independent professionals, proprietors of unincorporated businesses, or farmers are not part of labour income. Furthermore, workers' compensation, unemployment insurance, and pensions are not considered labour income.

Labour income estimates are projected from Revenue Canada benchmarks using data from many sources, some of which are, at best, only poor proxies. Because the estimates are not derived from a survey, it is difficult to provide any measure of reliability. The estimates are revised annually as new benchmarks become available. (For details, see *Estimates of Labour Income*.)

Average annual labour income

Aggregate labour income conveys little information about the income of an individual worker. Fluctuations in total labour income reflect changes in both employment and compensation levels. Average income, however, provides a good, although imperfect, measure of the compensation received by a worker. It is the total annual labour income divided by an average annual number of paid workers.

Average income estimates in this article are calculated using data series published in *Estimates of Labour Income* and *The Labour Force*.

These estimates offer not only estimates of wages and salaries but also supplementary labour income. Wage and salary estimates could be derived from other sources such as the Survey of Consumer Finances (SCF) and the Survey of Employment, Payrolls, and Hours (SEPH). Missing from the SCF and SEPH estimates, however, is the supplementary labour income component. Moreover, SEPH estimates do not cover all industries.

Factors affecting average income

Many factors affect the average income figures of paid workers. These factors can be divided into two groups: those that influence an individual worker's labour income and those that do not. Factors such as the rate of labour compensation, the number of hours worked, job tenure, overtime, and labour statutes affect an individual worker's labour income. For example, changes in labour statutes dealing with minimum wage and overtime regulations can affect the labour income of individual workers. A change in legislation may extend coverage of various subcomponents of supplementary labour income to new groups of workers or increase supplementary labour income contributions made on behalf of existing workers.

Factors that do not affect an individual worker's labour income, but which may affect average labour income, concern the distributional aspects of employment in the labour market. They include industrial, occupational, and provincial distributions of paid workers, and shifts in the proportion of part-time and full-time workers or persons holding more than one job. If, for example, substantial employment growth were to occur in low wage industries, then average labour income would decline but an individual worker's labour income might remain constant (assuming no job change). Similar effects would be observed if employment growth in part-time jobs was proportionally greater than in full-time jobs.

Notes

Note 1

The employment estimates in the analysis are available only from 1975 onward. To construct a longer

time series would require a linkage between the current LFS and its predecessor.

Note 2

This article uses the CPI because it is widely known and commonly used to adjust income. Other measures of price changes are also available; for example, the consumer expenditure implicit price index from the income and expenditure accounts, and the overall gross domestic product implicit price index.

Note 3

At the time of writing, the indexing formula and the effective date had yet to be announced.

References

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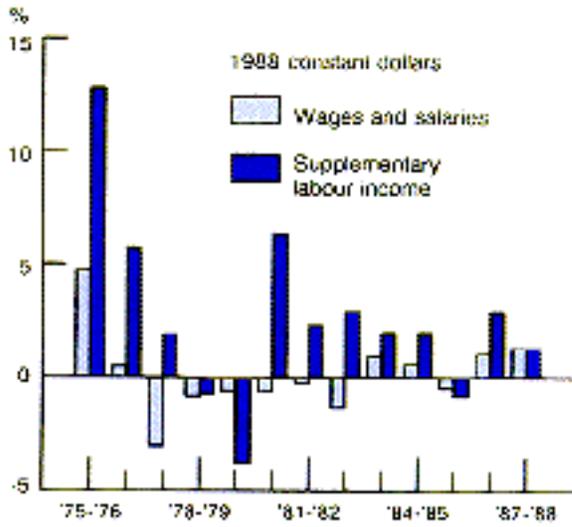
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Change in average annual labour income, 1975 to 1988

From 1975 to 1988, supplementary labour income grew relatively more than wages and salaries.



Sources: Labour Force Survey and Estimates of Labour Income

Terminology of Labour Cost

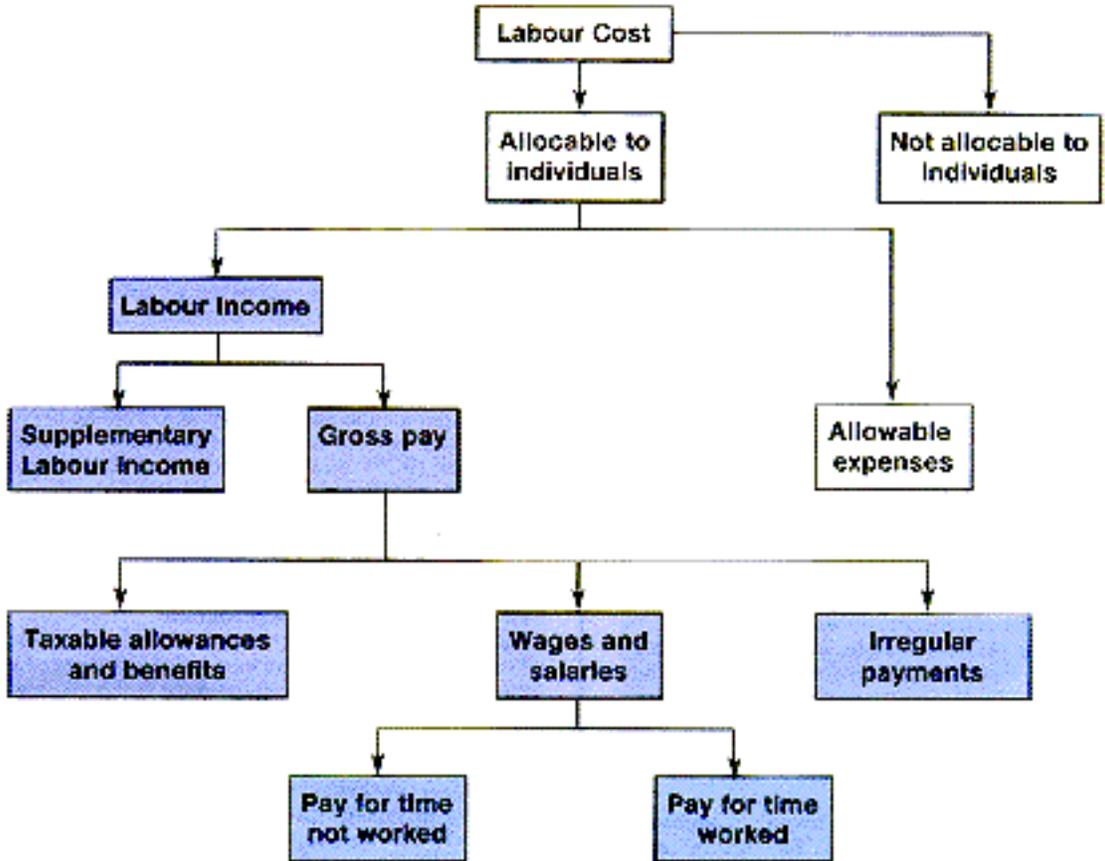


Table 1

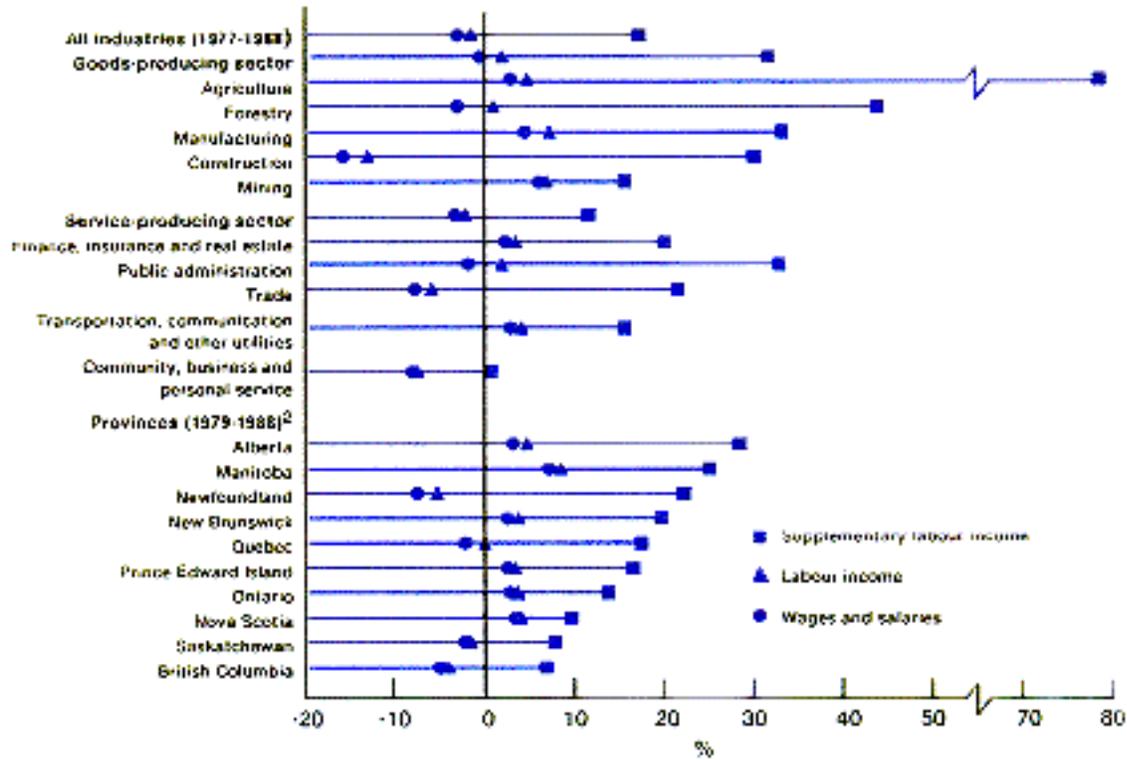
Labour income per employee by industry in 1988 constant dollars

	1977			1988		
	Labour income	Wages & salaries	Supplementary labour income	Labour income	Wages & salaries	Supplementary labour income
	\$					
All industries	30,453	27,916	2,537	29,969	26,999	2,970
Goods-producing sector	33,519	30,705	2,814	34,141	30,445	3,695
Agriculture, fishing and trapping	14,017	13,663	354	14,666	14,033	633
Forestry	42,019	38,354	3,665	42,439	37,180	5,259
Mining	42,727	38,482	4,245	45,632	40,724	4,908
Manufacturing	31,659	28,711	2,948	33,887	29,963	3,925
Construction	42,030	39,505	2,525	36,472	33,193	3,279
Services-producing sector	29,192	26,772	2,420	28,510	25,808	2,701
Transportation, communication and other utilities	36,170	32,390	3,780	37,667	33,299	4,368
Trade	23,775	22,283	1,492	22,328	20,518	1,810
Finance, insurance, and real estate	32,417	30,486	1,931	39,934	37,234	2,700
Community, business and personal service	28,744	26,361	2,383	26,602	24,208	2,394
Public administration	32,166	28,785	3,380	32,754	28,270	4,483

Sources: Labour Force Survey and Estimates of Labour Income

Percentage change in real¹ labour income

Supplementary labour income growth between 1977 and 1988 offset about half of the wage and salary decline.



Sources: Labour Force Survey and Estimates of Labour Income

¹ Labour income adjusted by the CPI (1988 = 100).

² Provincial CPIs not available for years preceding 1979.

Table 2

Provincial labour income per employee in 1988 constant dollars

	1979			1988		
	Labour income	Wages & salaries	Supplementary labour income	Labour income	Wages & salaries	Supplementary labour income
	\$					
Newfoundland	26,231	24,409	1,822	24,822	22,595	2,227
Prince Edward Island	20,544	19,025	1,519	21,236	19,469	1,767
Nova Scotia	23,588	21,608	1,980	24,537	22,370	2,167
New Brunswick	23,655	21,772	1,883	24,551	22,302	2,249
Quebec	29,953	26,800	3,153	29,929	26,227	3,702
Ontario	31,014	28,366	2,649	32,130	29,123	3,007
Manitoba	25,418	23,564	1,855	27,546	25,230	2,316
Saskatchewan	25,213	23,316	1,897	24,822	22,781	2,041
Alberta	27,591	25,721	1,870	28,892	26,492	2,400
British Columbia	30,323	27,794	2,529	29,108	26,408	2,700

Sources: Labour Force Survey and Estimates of Labour Income