

Backgrounder on the Business Outlook Survey question on wage growth

Firms in the [Business Outlook Survey](#) are asked whether they expect increases in their labour costs (hourly wages) to be higher, lower or about the same over the next 12 months compared with the previous 12 months. This document describes the correlations between the responses to this wage growth question and various publicly available measures of wages and employment.¹

Results are expressed as a balance of opinion obtained by subtracting the percentage of respondents reporting lower expected wage growth from the percentage of those expecting higher growth. In addition to the balance, we gather narratives from firms to add context to their responses. These are confidential but form a key part of our interpretation of the balance of opinion and overall survey results. Narratives may include details on sources of pressure as well as firm-specific strategies related to wage expectations.

To assess how informative the responses to this question are regarding Canadian business activity, we compare them with several measures of wages and employment. While a comparison with wage measures is expected, we also compare the results with employment measures to see if our balance of opinion reflects firms' assessment of current and expected strength in the general labour market. For example, if hiring conditions are tight, firms tend to expect they will need to offer higher wages to attract and retain workers. In this sense, firm-level wage expectations capture information about broader employment conditions.

Table 1 shows the correlations between the balance of opinion on wage growth and (i) nominal wage growth, (ii) change in nominal wage growth, (iii) employment growth and (iv) change in employment growth. Data on nominal wages and employment are published by Statistics Canada, and the wage-common measure is published on the Bank of Canada's website (**Chart 1**).

¹ For more information on wage growth and background on other survey questions, see M. Martin and C. Papile, "[The Bank of Canada's Business Outlook Survey: An Assessment](#)," Bank of Canada Staff Working Paper No. 2004-15 (April). More detailed information on the Business Outlook Survey history and methodology will be included in a forthcoming publication; see D. Amirault, N. Rai and L. Martin, "A User's Guide to the Business Outlook Survey (BOS)," Bank of Canada Staff Discussion Paper (forthcoming).

Table 1: Correlations between balance of opinion on the change in wage growth and measures of private sector wages and employmentBOS, ELI, LPM, LFS and WC sample:^{*} 1998Q3 to 2020Q1SEPH sample:[†] 2002Q1 to 2020Q1

BOS series at time t	Data Source	Measures of wages and employment [‡]	t-2	t-1	t	t+1	t+2	t+3	t+4
Wage growth balance of opinion [§]	Estimates of labour income	(i) Wages and salaries (y/y)	25%	46%	64%	75%	73%	61%	44%
		(ii) Change in wages and salaries growth	35%	47%	55%	53%	37%	11%	-16%
	Labour productivity measures	(i) Business sector compensation growth (y/y)	7%	17%	27%	39%	50%	53%	55%
		(ii) Change in business sector compensation growth	27%	27%	28%	29%	33%	28%	22%
	Labour Force Survey	(iii) Employment growth – private sector (y/y)	29%	45%	61%	70%	66%	50%	29%
		(iv) Change in employment growth – private sector	24%	32%	39%	39%	27%	3%	-25%
		(i) Wage growth (y/y)	-30%	-26%	-19%	-13%	-2%	14%	28%
		(ii) Change in wage growth	5%	12%	17%	18%	22%	30%	35%
	Survey of Employment, Payroll and Hours	(iii) Employment growth – private sector (y/y)	12%	34%	60%	79%	84%	73%	51%
		(iv) Change in employment growth – private sector	27%	39%	51%	61%	55%	31%	-7%
		(i) Wage growth (hourly workers) – private sector weighted (y/y)	-1%	4%	20%	26%	38%	51%	41%
		(ii) Change in wage growth (hourly workers) – private sector weighted	25%	29%	31%	25%	27%	32%	14%
	Bank of Canada	(i) Wage-common (y/y)	22%	32%	35%	38%	38%	41%	42%
		(ii) Change in wage-common	47%	48%	37%	26%	13%	7%	5%

Notes: Peak correlations are in bold. y/y = year-over-year.

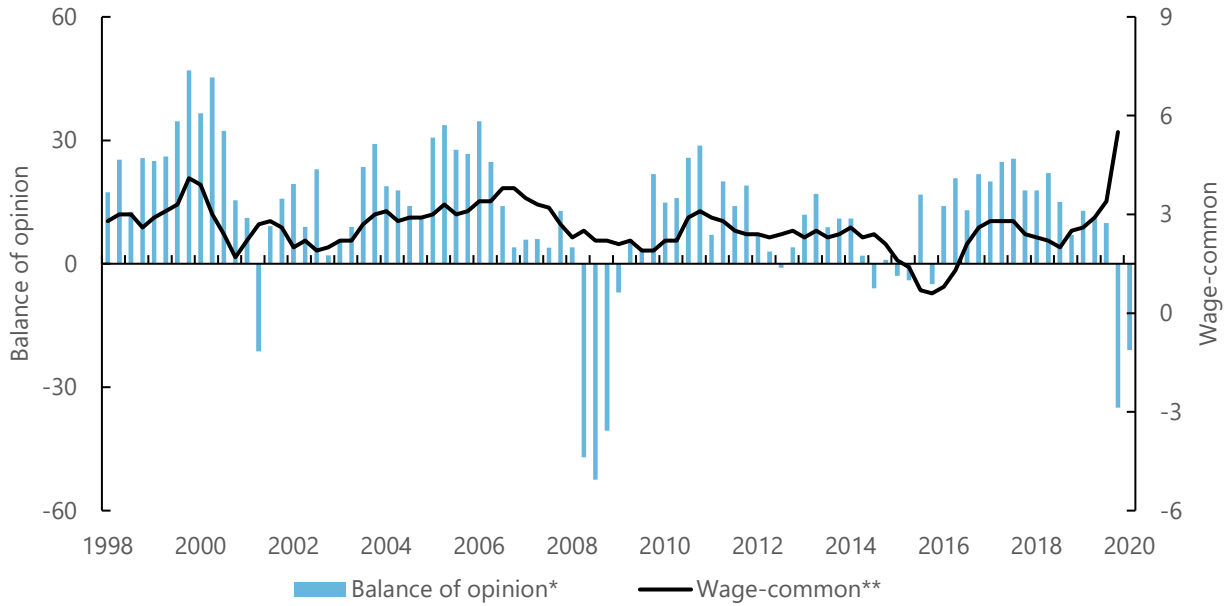
* BOS = Business Outlook Survey; ELI = Estimates of labour income; LPM = Labour productivity measures; LFS = Labour Force Survey; WC = Wage-common. The unprecedented shock to economic activity from the COVID-19 pandemic weakened correlations between BOS balances of opinion and economic data. We believe historical relationships will be re-established going forward. Therefore, to best illustrate these relationships, we exclude economic data beyond the first quarter of 2020.

[†] SEPH = Survey of Employment, Payroll and Hours

[‡] Wages and salaries (Statistics Canada table 36-10-0205-01) make up the aggregate income of all employees, including other types of remuneration (stock options, gratuities, fees, commissions, etc.). Business sector compensation per hour worked (Statistics Canada table 36-10-0206-01) is an index of wages and salaries as well as employer social contributions, restricted to private sector employees. Private sector employment (Statistics Canada table 14-10-0355-02 and table 14-10-0223-01) is total payroll employment excluding public administration, health care and education. Labour Force Survey wage data (Statistics Canada table 14-10-0063-01) are the average hourly wage rate of full- and part-time employees in all sectors. Survey of Employment, Payroll and Hours wage data (Statistics Canada table 14-10-0221) are the average hourly earnings including overtime for hourly workers, weighted by private sector employment shares (excludes public administration, health care and education). Wage-common is a composite measure of year-over-year wage growth. It can be found on the Bank's [website](#).

[§] Percentage of firms expecting faster growth in wages over the next 12 months than in the past 12 months minus the percentage of firms expecting slower growth.

Chart 1: The Bank's preferred measure of wage growth is moderately correlated with business expectations of wage growth



* Percentage of firms reporting faster growth minus the percentage reporting slower growth

** Wage-common is expressed as year-over-year percentage change

The balance of opinion is a useful indicator of wage growth, although it performs better as an indicator of employment growth. The balance of opinion series has moderate to strong correlations with measures of wages and employment, and has stronger correlations with year-over-year growth than with the change in growth. Some correlations are also stronger when the balance of opinion is lagged by one or two quarters, suggesting the balance of opinion is best suited as a leading indicator of wage and employment growth.