The Bank of Canada's Wage-Common: It's Largely About the SEPH

- **The Bank of Canada's wage-pressures proxy 'wage-common' tracks the co-movement of four wage indicators to identify wage pressures 'common' to all indicators, i.e. an underlying trend.**

- **Wage-common (WC) gives the least weight to wage readings from StatsCan's Labour Force Survey (LFS). In fact, over 95% of WC is driven by compensation measures from StatsCan's National Accounts (NA), Productivity Accounts (PA), and the Survey of Employment Payrolls and Hours (SEPH).**

- **Since the SEPH is used to estimate wages and salaries in the NA and PA, the SEPH accounts for most of the variation in WC in recent quarters. WC is 98% correlated to the SEPH since Q1-2016. Prior to then, the series are only 45% correlated due to greater variation across the SEPH, the NA and the PA.**

- **The SEPH accounts for most of the recent changes in the Bank of Canada's wage-common indicator. Investors should rely on the SEPH's data as very powerful leading indicators of how the Bank of Canada evaluates incipient wage pressures.**

CONTACTS

Juan Manuel Herrera
416.866.6781
Scotiabank Economics
juanmanuel.herrera@scotiabank.com

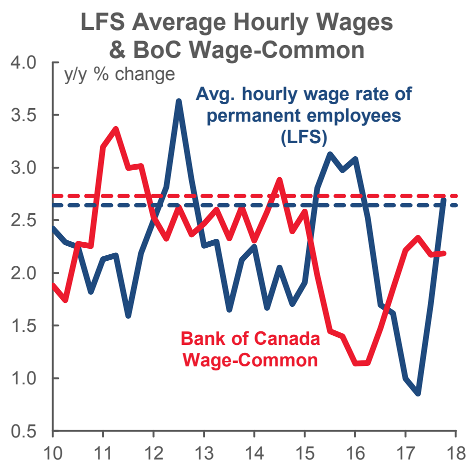
THE BANK OF CANADA'S WAGE-COMMON

At the release of the January 2018 *Monetary Policy Report (MPR)*, the Bank of Canada (BoC) noted that "wage pressures remain modest" —owing to remaining slack in labour markets—and thus "wages do not appear to be a source of inflation pressure at this point". In Q4-2017, wages increased by 2.7% year-on-year. Prior to that, wages rose by less than two percent on an annual basis for five consecutive quarters (chart 1, blue). Overall, the rise in wages in 2017 was the weakest year-on-year gain since the late 90s.

In the January 2018 *MPR*, the BoC highlighted subdued growth in wages as measured by its wage-pressures proxy 'wage-common' (WC). This newly-constructed measure grew at 2.2% y/y in Q4, unchanged from Q3. Within the range of wage measures observed by the BoC, the pace of growth in average hourly wages of permanent employees expanded at an annualized rate of 2.7% in Q4-2017 versus 1.7% in the previous quarter. **While the average wage rate of permanent employees bounced back to its long-run average growth rate, the BoC's proxy measure still sits 0.5 percentage points below its long-term average (chart 1, red).**

The BoC constructs 'wage-common' by extracting the core trend in four different wage measures gathered from the SEPH, LFS, National Accounts (NA) and Productivity Accounts (PA) (chart 2, next page). It focuses on the co-movement of the four series as opposed to relying too heavily on a single indicator to gauge changes in wages. For instance, in Q2-2010 the growth rate of the PA's wage measure fell to almost 0% y/y, but WC grew by 1.7% y/y, buoyed by stronger growth in the other three measures.

Chart 1



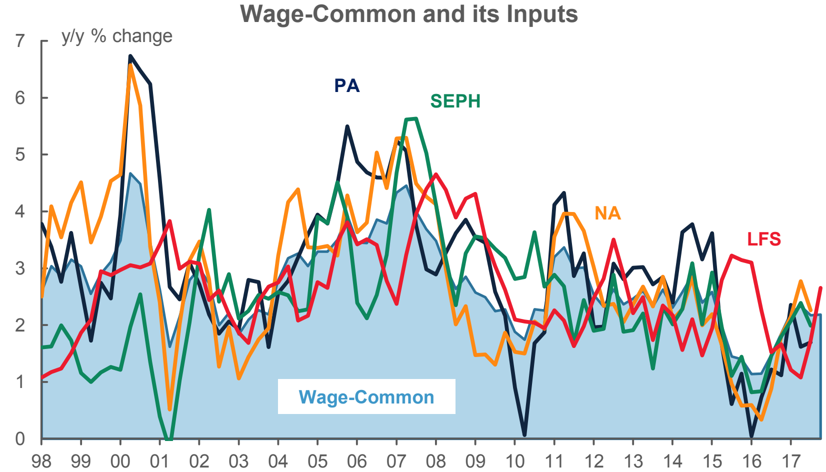
Sources: Scotiabank Economics, Statistics Canada, Bank of Canada.

WAGE-COMMON HAS BEEN DRIVEN BY THE SEPH SINCE 2016

Since 2016, the compensation data series from the SEPH, PA, and NA have moved in tandem, and have almost exclusively dictated fluctuations in WC. The estimation of wage-common weights the SEPH more heavily in recent years because data from the SEPH play an outsized role in the estimation of compensation measures in the NA and PA (see Appendix).

Only wages measured in the LFS move independently from the other three series. Given the relatively low weight placed on it, fluctuations in the LFS are not sufficient to markedly influence wage-common.

Chart 2



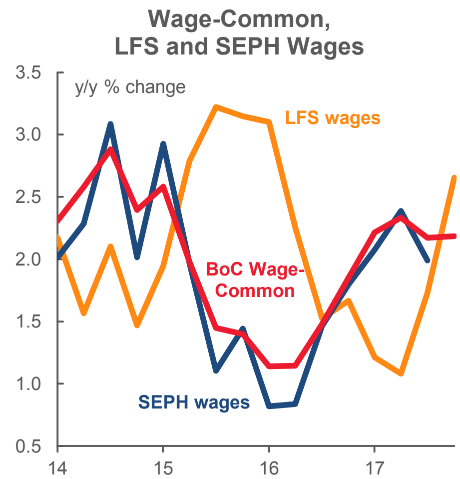
Source: Scotiabank Economics, Statistics Canada, Bank of Canada.

SUMMING UP: IT'S WORTH THE WAIT FOR THE SEPH

While the variation across the four variables is greater in the years prior to 2010, recent wage-common estimates essentially replicate the underlying SEPH series (chart 3); WC and the SEPH's wages have a 98% correlation during the 2016–17 period. Up to 2015, StatsCan has income tax data to support the construction of the NA and PA wage measures which reduces its reliance on the SEPH (see Appendix). **A simple series composed of 95% SEPH and 5% LFS shows barely any difference from wage-common since 2014** (chart 4).

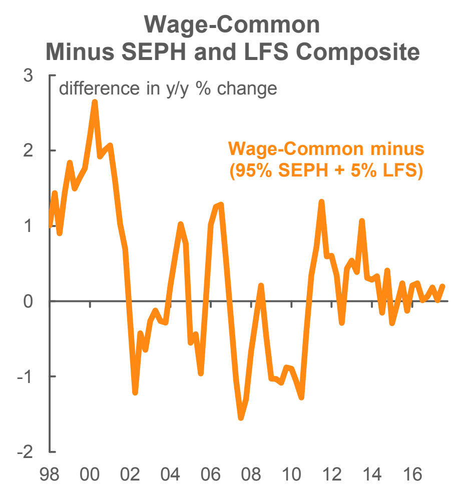
As the Bank of Canada monitors wage-common for signs of inflation and labour market tension, observers should keep a close eye on the SEPH's wages as an advance reading of WC due to the SEPH's overwhelming influence on WC, regardless of its delayed release relative to the LFS.

Chart 3



Sources: Scotiabank Economics, Bank of Canada.

Chart 4



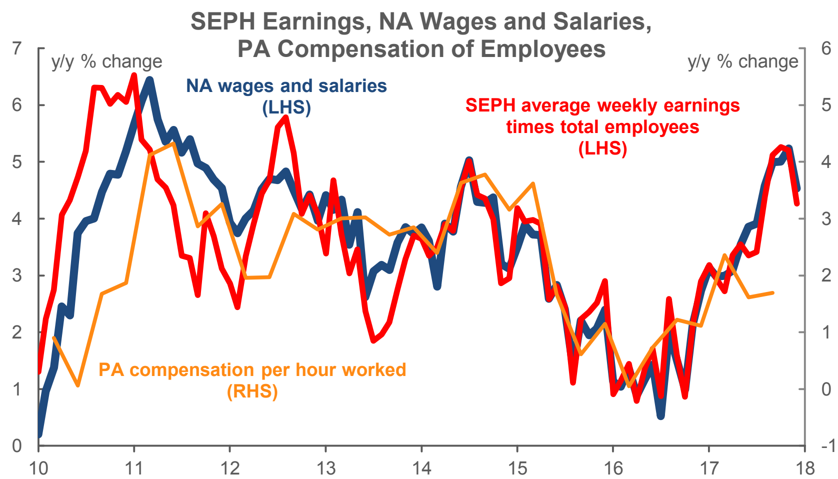
Sources: Scotiabank Economics, Bank of Canada.

APPENDIX: WAGE-COMMON'S RELIANCE ON THE SEPH

Wage-common heavily relies on information from the SEPH, not only due to the inclusion of a SEPH variable in the estimation but also due to the importance of SEPH in the estimation procedure of the NA and PA measures.

During periods when personal income tax information (T4) from Canada Revenue Agency is not available, the SEPH is the main input into the quarterly estimates of wages and salaries incorporated in the NA and PA. The latest available year for T4 data is 2015. Thus, 2016 and 2017 estimates of wages and salaries in the NA and PA closely match the SEPH's (chart A1).

Chart A1



Sources: Scotiabank Economics, Statistics Canada

If T4 data is available, the yearly annual growth rate of NA and PA's wages and salaries is simply that reported in tax filings, where the quarterly pattern in these series is derived mainly from the pattern in the SEPH. The closer the growth rate of T4 compensation is to the growth rate of SEPH compensation, the more weight is placed on the SEPH over other inputs in the estimation of NA and PA wages. Indeed, between 2011 and 2015, SEPH and T4 data matched quite closely and thus the SEPH, NA, and PA wages series moved in concert during that period.