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One useful labour market indicator



by René Morissette

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Analysts often use the unemployment and labour force participation rates as key indicators of the dynamism—or lack thereof—of the labour market, while some analysts want to know what percentage of jobs are part-time or temporary, or what percentage of workers are self-employed. One labour market indicator summarizes the influence of these five factors: the percentage of the population holding a paid job that is full-time and permanent.¹

The percentage of the population holding a paid full-time permanent job is obtained by multiplying the following five components: (1) the percentage of full-time employees that hold permanent jobs, (2) the percentage of employees that hold full-time jobs, (3) the percentage of workers that are employees, (4) the percentage of labour force participants that are employed and (5) the percentage of the population that participates in the labour market.

The first component captures precarious (i.e., non-permanent) jobs within paid full-time jobs. The second component measures the proportion of part-time jobs among paid jobs. The third component equals 1 minus workers' self-employment rate. The fourth component equals 1 minus the unemployment rate, and the fifth component represents the labour force participation rate.

The resulting indicator allows analysts to answer the following question: to what extent are changes over time in the percentage of the population holding a paid full-time permanent job driven by each of the five aforementioned components? For example, to what extent is a decline in this percentage the result of (1) fewer paid full-time jobs that are permanent, (2) fewer paid jobs that are full-time, (3) fewer jobs that are paid jobs, (4) a higher unemployment rate, and (5) a lower labour force participation rate?

To illustrate the usefulness of this indicator, the answer to this question is provided in Table 1 for two groups of individuals: men aged 15 to 24 with a high school education (young male high school graduates) and men aged 55 to 64 with a high school education (older male high school graduates).

The first column of Table 1 shows that the percentage of young male high school graduates holding a paid full-time permanent job fell from 57.7% in 1998/1999 to 47.1% in 2018/2019—a decline of 18.4% (i.e., -10.6 percentage points divided by 57.7%).

The lower half of Table 1 shows that declines in the proportion of paid full-time jobs that are permanent, in the proportion of paid jobs that are full-time and in the labour force participation rate each account for roughly one-third of this 18.4% decline. Changes in the unemployment rate of young male high school graduates or in the degree to which they are self-employed were fairly small. Therefore, these changes played virtually no role in the decline.²

^{1.} To the author's knowledge, Canadian labour market analyses have not used this indicator to date.

This decomposition can be performed as follows. First, for each period, compute the indicator (i.e., the percentage of the population holding a paid full-time permanent job) and the five aforementioned components. Second, compute the logarithmic value of the indicator and of each of the five components. Lastly, compute the first-difference of these logarithmic values over time.

While proportionally fewer young male high school graduates held a paid full-time permanent job in 2018/2019 than in 1998/1999, the opposite is true for older male high school graduates. The percentage of older male high school graduates holding a paid full-time permanent job increased from 32.6% to 44.1% over this period. This represents an increase of 35.3% (i.e., 11.5 percentage points divided by 32.6%). Two factors each account for about half of this 35.3% increase—the growing proportion of older male high school graduates employed as paid workers (i.e., a decline in their self-employment rate) and their growing labour force participation rate.

In summary, the percentage of the population holding a paid full-time permanent job provides valuable information that synthesizes the role played by changes in job characteristics, unemployment rates and labour force participation rates. It can be used to shed light on changes in job characteristics over time or across groups of individuals.³

Table 1 Changes in the proportion of the population with a paid full-time permanent job, 1998/1999 to 2018/2019, men aged 15 to 24 and 55 to 64 with a high school education

	Men aged 15 to 24 with a high school education	Men aged 55 to 64 with a high school education	
	percent		
Percentage of the population with a paid full-time permanent job			
1998/1999	57.7	32.6	
2018/2019	47.1	44.1	
	percentage points		
1. Change	-10.6	11.5	
	percent		
2. Change as a percentage of the 1998/1999 figure	-18.4	35.3	
Portion of 2 that is the result of changes in			
% of paid full-time jobs that are permanent	31.3	-5.9	
% of paid jobs that are full-time	38.4	2.5	
% of jobs that are paid	-2.6	51.9	
the unemployment rate	-2.1	1.6	
the labour force participation rate	35.0	49.9	
Total	100.0	100.0	

Note: Part-time and full-time students were excluded.

Source: Statistics Canada, Labour Force Survey (March and September files).

Author

René Morissette is with the Social Analysis and Modelling Division, Analytical Studies Branch, at Statistics Canada.

^{3.} For an analysis of changes in job characteristics over time, see Morissette, R. 2020. "The changing job landscape, 1981 to 2019." *Economic Insights*, Catalogue no. 11-626-X, Statistics Canada.