



# Canadian Labour Market and Skills Researcher Network

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### Understanding the Wage Patterns of Canadian Less Skilled Workers: The Role of Implicit Contracts

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## Executive Summary

In this paper, we explore the wage patterns of high school educated males in Canada. The wages for this group have followed a flattened U-shape pattern over the last three decades, with a dramatic decline up to the mid-1990s followed by a recovery that has still left them with median wages that are over 12% lower than in 1980. The wage movements were quite different for workers with different amounts of job tenure, however. Workers whose jobs started in the early 1980s, and hence had high job tenure in the 1990s and 2000s, had real wages that were seemingly unaffected by downturns and upturns in the wages of new job starters. In contrast, real wages for new job starters declined by approximately 25% between 1980 and 1997, recovering by about 10% from their low point between 1997 and 2007. Our primary interest is in understanding this pattern.

We argue that this set of wage tenure patterns fits well with an implicit contracting model with renegotiation. In such a model, workers and firms form contracts (which may only be implicit) in which workers accept a lower average wage over time in return for greater stability in the form of not having their wages cut during downturns. However, they cannot credibly commit to refusing higher wages from other firms in good times and are able to renegotiate for high wages during upturns. As a result, the wage path has a ratchet feature in which wages are set higher during good times but do not move lower during downturns. Within such a model, a cohort of job starters beginning work in the early 1980s, when wages were high, would never renegotiate because entry wages never reached the same level again. Thus, their wage path over time is smooth and stays above the wages for later job starters. In contrast, workers entering the labour market during the upturn of the late 1990s would be expected to receive higher entry wages than those who started in the poor labour markets of the early and mid-1990s. They would also have wage-tenure profiles that would steepen with time as they renegotiate their wages with their existing employers. We show that these patterns fit the data well and that restrictions implied by the model are not rejected by the data.

The finding that this implicit contract model fits the data well is important for two reasons. First, it raises concerns about the flexibility of wages in the less skilled labour market - a feature of interest when Canada is dealing with an economic downturn. Second, it implies that understanding overall wage movements for the less skilled can be reduced to understanding movements in entry wages since even the wage movements of higher tenure workers can be described in terms of responses to outside offers reflected in the starting wage. Based on this, we investigate several explanations for movements in the entry wage.

We show that the composition of new jobs has shifted over the last twenty-five years, with particularly dramatic declines in unionization levels of new job starters. However, a standard decomposition exercise indicates that these shifts explain only about a quarter of the decline in entry wages between 1981 and 1997 and none of the increase after 1997. Instead, we need to look for explanations for why productivity first declined and then increased for this group. In the last section of the paper, we argue

that a model in which technological change is induced by relative factor flows provides a potential explanation. In particular, according to this model, unskilled wages declined because physical capital did not grow fast enough to outfit the expanding stock of skilled workers without reducing the amount of capital applied to unskilled workers. This process was reversed after 1997 as capital inflows outstripped increases in the number of skilled workers. If this is true, it implies that help for unskilled workers may lie mainly in the capital market. But whatever the forces driving the entry wage, the results in this paper indicate that they are passed through to the rest of the wage structure in such a way that they are felt for decades afterwards.