

# Do English Canadian Hockey Teams Discriminate Against French Canadian Players?

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## INTRODUCTION

In a paper recently published in this journal, Neil Longley (1995) presents evidence arguing that French Canadian hockey players suffer from significant salary discrimination in the NHL, but that this discrimination is present only on teams in English Canada. We will argue that this conclusion is not justified by the evidence, because the statistical relationship between salary and the combination of ethnicity and location that Longley finds is not particularly strong. Furthermore, such a relationship would not necessarily imply causality, because there are other plausible explanations for the observed phenomenon that are not consistent with discrimination.

Longley constructs a model that predicts 1989-90 wages<sup>1</sup> for forwards based upon their offensive production and upon the revenues earned by each team. Offense is measured by two variables — games played and points per NHL game.<sup>2</sup> The revenue variable presumably captures the higher salaries paid by wealthy teams because of competition

for free agents and because of their desire to keep their players happy. Longley then includes three dummy variables for player origin (French Canadians, Europeans, and Americans) and finds no significant result.<sup>3</sup> However, when Longley introduces team location (Quebec, rest of Canada, and United States) and creates interaction variables for player origin and team location,<sup>4</sup> he finds a significant result for French Canadians playing on English Canadian teams. The coefficient is  $-.371$ , indicating that these French Canadian players are underpaid by 37 percent relative to English Canadian players on English Canadian teams.

From these results, Longley concludes that “these results provide quite strong evidence that teams based in English Canada discriminate against French Canadian players” (Longley 1995, p. 417). He offers two possible explanations for this: (i) fans and media in English Canada prefer not to have French Canadians on their teams, and (ii) coaches and general managers in English Canada are English Canadians who themselves are biased against French Canadian players.

## THE MINOR NATURE OF THE RESULTS

The first problem is that the econometric results are simply not that strong. First, Longley divides players into 12 categories (three team locations by four player origins). This means that even if all groups were actually treated the same way by all teams, pure chance would generate a significant coefficient in the model for at least one group about half the time.<sup>5</sup> In this case, that group is French players on English teams. But the result is hardly strong enough to justify the conclusion that there is salary discrimination.

Second, there were only *five* French Canadian forwards playing for English Canadian teams in 1989-90. Longley's key result is that these five players were paid less in 1989-90 than a model based on pure offensive production would suggest. But with only five players, this result is hardly overwhelming. For example, it is particularly sensitive to inclusion of one or two observations: adding to the group one more player who happens to be overpaid relative to the model's prediction can destroy the result altogether. And in fact, beginning several years after 1989-90, the Ottawa Senators signed a multi-year contract that continues to pay an enormous salary to Alexandre Daigle, a French Canadian player who has been relatively unproductive.<sup>6</sup> We suspect that adding one such player to Longley's regression would reverse his results. Results that are sensitive to the particular year being studied are hardly robust.

The problem is not easily overcome, given the relatively small number of French Canadian forwards playing for English Canadian teams in any one season. It would be necessary either to examine significantly more years worth of data, or to find some way to include defensemen and goalies in the analysis, before any conclusions about discrimination can be drawn.<sup>7</sup>

## PROBLEMS OF CAUSALITY

But even if we accept the statistical results presented by Longley, correlation need not imply causality. That is, although Longley finds a relationship between low salaries for five players and the fact that the five players are all French Canadians playing for English Canadian teams, one cannot logically jump to the conclusion that the five players are therefore underpaid *because* they are French Canadians playing for English Canadian teams. This is the classic econometric problem of omitted variables — if some other characteristic common to these five players caused their low salaries, and if this characteristic was omitted from the wage equation, then ethnicity would serve as a proxy for that omitted characteristic and would pick up its effect.

It is thus useful to look at the five French Canadian players in Longley's paper in some detail. They are Vincent Damphousse, Daniel Marois, Gilles Thibaudeau, and Dan Daoust, all of whom played for the Toronto Maple Leafs, and Martin Gelinas, who played for the Edmonton Oilers.<sup>8</sup> This clustering of the players by itself suggests that if there was salary discrimination against French Canadian players on English Canadian teams, it was due largely to the behaviour of only one of those teams (the Leafs). No statement could be made about the three teams (the Jets, Flames, and Canucks) without French Canadian forwards in 1989-90.

More critically, the concentration of players on two teams suggests one critical omitted variable that might have caused the apparent salary discrimination. The low salaries for these players might be due to the peculiar behaviour of the Leafs and the Oilers rather than to discrimination based on being French Canadian. Specifically, if Toronto and Edmonton underpaid their players relative to the other three English Canadian teams, then this would cause Longley's results. In fact, any group of five players playing for these teams would appear to have faced discrimination.<sup>9</sup>

Since four of the five players were on the Toronto Maple Leafs, the behaviour of that particular franchise should be considered first. In 1989-90, the Leafs were still owned by Harold Ballard, who managed his team in a highly idiosyncratic manner. Although Longley's regressions report that teams with higher revenues paid more than teams with lower revenues to players with the same offensive statistics, Ballard appeared to be focused on profitability rather than artistic success.<sup>10</sup> In Longley's Appendix A, he shows Toronto to be among the top four teams in terms of revenue, about \$5 million above average, yet our data shows the Maple Leafs with a total payroll for 1989-90 of \$4.8 million, ranking them twelfth in the 21-team league (the average team payroll for that year was \$5.3 million).<sup>11</sup> Ballard's views of French Canadians are unclear, but his view of salaries was not. Thus, the French Canadian players with the Maple Leafs were underpaid not because they were French Canadian, but because Ballard underpaid everyone (relative to Longley's model) he could. This might account for the low salaries of four of the five players, and would thus generate Longley's results.

Although the general level of salaries paid by the Leafs is enough to create the appearance of discrimination against players who happened to be on that team in 1989-90, the case of the fifth player (Martin Gelinac) reinforces our point. In 1989-90, the Edmonton Oilers were in the top half of the League in revenue and in team payroll. However, the Oilers had just traded their superstar Wayne Gretzky, and this presaged a series of trades, all of which shed high salaried players (including Mark Messier and Grant Fuhr) in exchange for lower paid young players and draft choices. It was suggested in the press at that time that financial difficulties (outside hockey) facing the team owner were behind these moves. In fact, Martin Gelinac was one of the players obtained in the Gretzky trade, and if the press rumours are to be believed, Gelinac's low salary<sup>12</sup> was a good part of the reason for his inclusion. Thus, the single young French Canadian on the Oilers was

not underpaid because he was French Canadian, but instead was acquired precisely because he was underpaid.

Even if one ignores the particular behaviour of these two teams, there is a second possible explanation for Longley's result. Four of these five players were early in their NHL careers in 1989-90.<sup>13</sup> These types of players tend to be underpaid, relative to their offensive statistics, because they are still on "rookie" contracts and have not yet been able to negotiate for better salaries. This is partially captured in Longley's model by the variable for games played. But if players on rookie contracts were underpaid relative to the model's predictions, then the explanation for Longley's result may simply be that this group was young, rather than French Canadian. And Longley's model predicts that higher revenue teams will pay more to untried rookies; but the Leafs and Oilers might not be willing to do that.

Finally, it is worth noting that Longley's suggestion of discrimination was not echoed in media coverage of the players in question. In particular, the Maple Leafs are located in a large city with many hockey fans. Three newspapers fight daily for readership and engage in extensive coverage of the hockey team. Any evidence that four skilled French Canadian players were badly underpaid relative to their teammates, or any evidence that they were disgruntled because of their salaries would likely have been front-page news in the sports sections of these papers. Furthermore, anti-French Canadian feeling among Maple Leaf fans (one explanation offered by Longley for salary discrimination), and the reaction of those four players to it, would also have been newsworthy. We do not, however, recall any such controversy in 1989-90, and the one story we uncovered that dealt with ethnicity and these four players explicitly denied the existence of discrimination and spoke well of the players themselves.<sup>14</sup>

## CONCLUSION

In a nation often obsessed with hockey, discrimination against French Canadian players by English Canadian teams is a serious matter. But Longley's suggestion that such discrimination exists lacks appropriate supporting evidence. Only five French Canadian players are involved, and only one year's worth of data is used. Furthermore, a closer examination of the five cases suggests other factors which might well have generated the observed phenomena.

## NOTES

Michael Krashinsky is a Professor of Economics while Harry A. Krashinsky is a graduate student. Both authors spend far too much of their spare time watching and discussing hockey.

<sup>1</sup>The natural logarithm of wages is used as the dependent variable, as is usual in wage equations.

<sup>2</sup>Both points and games are derived only from NHL games played prior to 1989-90. This leaves unclear what value Longley assigns to the points-per-game variable for rookies. The salaries paid to those on rookie contracts pose other problems, discussed later. That these rookies are included in the sample seems clear from the fact that Longley includes 250 forwards on 21 teams, an average of 12 forwards per team (most teams carry 12 forwards, 6 defensemen, and 2 goalies).

<sup>3</sup>The coefficients are negative but very small and insignificant for both Americans and Europeans. The coefficient for French Canadians is  $-.0943$ , indicating that these players are paid about 9 percent less than English Canadians, but the  $t$ -statistic is only  $-1.54$ , making the result insignificant at even the 10 percent level.

<sup>4</sup>There are 11 such interaction variables — English Canadian players on English Canadian teams are the base case.

<sup>5</sup>In Longley's "Regression 3," when the base case is  $FRE*QUE$  — that is, when Longley is comparing all other groups to French Canadians playing on Quebec teams — the coefficient on  $FRE*CAN$  (French Canadians playing for English Canadian teams) is  $-.328$  with a  $t$ -statistic of  $-2.03$ . This is barely significant at the 5 percent level. If

there were no "real" differences in the underlying model among the salaries for the 12 groups, the odds are about 50 percent that an OLS regression would kick out at least one coefficient that appeared to be significant at the 5 percent level. Another way to say this is that the appearance of one significant result out of eleven does not suggest that adding information on location and origin is useful in predicting wages. And, in fact, in Longley's Regression 1, which includes no location variables and three dummy variables for ethnicity, none of the ethnicity coefficients are significant, and the adjusted R-squared statistic is 0.71; adding all the location variables and creating interactive terms with ethnicity only raises the adjusted R-squared statistic to 0.72.

<sup>6</sup>According to the website NHLPA.com, Daigle's 1995-96 salary was \$2.85 million, twentieth in the league among centres, despite scoring only 17 points (placing him ninety-eighth among the league's centres!).

<sup>7</sup>Additional data might confirm the hypothesis of discrimination, but it might also weaken it. We have already mentioned the case of Alexandre Daigle. And if defensemen are added, we have the example of Steve Duchesne, a French Canadian defenseman playing for the Ottawa Senators, who, according to NHLPA.com, was the fifteenth highest paid defenseman in the league in 1995-96, despite scoring only 31 points (low for a defenseman, especially one noted for offense).

<sup>8</sup>The players are not listed in the paper, but their identities were confirmed in a phone conversation with Neil Longley.

<sup>9</sup>One way to address this problem would be to include 20 team-specific dummy variables in the analysis.

<sup>10</sup>In 1988-89, the Leafs had missed the playoffs with a total of 62 points (out of a possible 160), only one point better than the worst team in the league. This actually represented an improvement over the previous season, when the team had earned only 52 points, but had nevertheless made the playoffs. One explanation for this performance was Ballard's heavy involvement in the management of the team, and his refusal to spend money on all levels of the organization.

<sup>11</sup>These figures come from the National Hockey League (1989), the same source used by Longley.

<sup>12</sup>In 1989-90, Gelinis earned about \$90,000, the lowest

on the Oilers and just about at the league minimum.

<sup>13</sup>Dan Daoust was the veteran of the group, clearly near the end of his career. Marois was a regular with the Leafs as a rookie in 1988-89. Gelinac played six games as a rookie in 1988-89. Thibault played intermittently for Montreal in 1988-89 and 1987-88. Only Damphousse had played full seasons in both 1988-89 and 1987-88, and clearly emerged as a good player in 1988-89, with 68 points in 80 games.

<sup>14</sup>In the *Sunday Toronto Star* of 25 February 1990, the lead story in the sports section was entitled "Maple Leafs are taking on French Accent" and spoke favourably of the play of the four French Canadian Leafs and of their reception in Toronto. The story did suggest that there might have been some negative views of French Canadian players in the distant past in Toronto, but that this was no longer the case. The story went on to state:

Daoust, the longest serving French Canadian player

in Leaf history, says he has never subscribed to any rumours about the Leafs being anti-French. "I've been treated well since I've been here," says Daoust. "If there ever was any prejudice in Toronto, it's gone now."

Of course, few players are likely to criticize their current employers. However, had there been the hint of discrimination against French Canadian players on the Leaf team, it might well have surfaced at some point in this story or in another.

## REFERENCES

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