# WHEN COLLECTIVE BARGAINING LEADS TO INEQUALITY: DETERMINANTS OF TWO-TIER PROVISIONS IN CANADIAN COLLECTIVE AGREEMENTS

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This study examines two-tier provisions—a form of labor segmentation in firms that is increasingly formalized in collective agreements. Drawing on a large population of Canadian collective agreements from the private sector, the authors show that the adoption of these provisions is related more to industrial relations context than to economic uncertainty. Also, depending on whether the two-tier provisions focus on compensation or on job security, their determinants operate dissimilarly. This study contributes to labor market segmentation theory by showing the circumstances under which collective bargaining can marginalize newly hired workers in the primary labor market, namely, weak union power, pressures from sectoral comparisons, employer use of concessionary tactics and, ironically, collective agreements featuring advantageous working conditions.

 $\mathbf{E}$  conomic fluctuations, increased competition, new consumer demands, and the introduction of new technologies have created uncertainty around the world, leading firms to reconfigure organizational structures and forms of traditional jobs (Weil 2014). This trend has resulted in the precarization of a growing portion of the workforce (ILO 2015), which contributes to the dualization of the labor market and creates two types of industrial citizens, one being better protected than the other. According to the labor market segmentation theory, the labor market is therefore divided

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into two segments, distinguished mainly by the level of compensation and degree of job stability: the primary market, in which jobs are stable and well paid, and the secondary market, in which jobs are insecure and less well remunerated (Doeringer and Piore 1971; Hudson 2007).

Union presence has historically been highest in the primary labor market, with unions concentrating their organizing efforts in this segment to consolidate better conditions for workers. Despite recent attempts by trade unions to organize "outsiders" (those working not in the primary labor market) (Hyman and Gumbrell-McCormick 2017), these workers still do not enjoy adequate protection afforded by collective agreements, and they are too often disadvantaged by social protection schemes set up by the state (Lindbeck and Snower 1988; Rueda 2007). Nonetheless, even workers in the primary market, where they are better represented and better protected, are targeted by employers' rationalization and flexibilization efforts. The work of Chaison (2012) showed that the ability of unions to make gains through bargaining has declined significantly in recent years. Caught in a logic of concession bargaining, unions struggle to negotiate agreements that meet workers' security needs (Laroche 2013), and some have even accepted two-tier provisions on wages, job security, and other working conditions (Chaison 2012; MacNeil 2013; Lauzon Duguay, Jalette, and Hallé 2017a).

Two-tier provisions allow for differences in the treatment of workers according to the date they were hired, with newly hired workers granted less advantageous working conditions than their previously hired co-workers have, even though they are performing the same tasks in the same establishment (Rees 1993). These disparities can affect wages or other conditions, such as the pension plan, access to tenure, job security, or work schedules, and are clearly unjust for the workers targeted. In practice, two-tier provisions lead to segmentation, not only between core and peripheral workers but also within the group of core workers. Inequalities have persisted for many years, mostly between insiders and outsiders, but they are now being integrated into the primary labor market, within the union's bargaining unit itself. These provisions, which represent a significant breach of equity between workers in the primary market, also constitute a threat to solidarity among the ranks of trade unions, as these new internal outsiders could deem that their interests are not being adequately represented by the union (Martin and Lee 1996; Dufour-Poirier and Laroche 2015). This phenomenon reaffirms the relevance of the current debate on the capacity and willingness of trade union organizations to reverse the widespread insecurity (Hyman and Gumbrell-McCormick 2017) embodied by these provisions.

Possible factors explaining the presence of two-tier provisions have received little attention to date. Our investigation seeks to better understand the conditions under which collective bargaining, a tool designed to create and maintain equity in the workplace, has facilitated the development of this source of inequality. Could this be a red flag, indicating that collective bargaining no longer has the capacity to effectively play its primary role as a mechanism for worker protection and the promotion of equity with regard to all aspects of work? Our analysis is based on the entire population of collective agreements in force in the private sector in Quebec on December 31, 2012 (N = 5,285). We conducted multivariate statistical analyses to assess and control for the influence of various factors. This Canadian province was selected because its industrial relations system appeared to offer a particularly rich field for study given its high level of decentralization, which is likely to foster inequality (Kristal and Cohen 2007) and generate a more advantageous balance for employers between flexibility-enhancing measures and security commitments to workers (Marginson and Galetto 2016).

## Two-Tier Provisions: Types, Their Development, and Determinants

In their most common form, two-tier provisions seek to apply different wage scales to various groups of employees on the basis of their hiring date, thus preventing new employees from gaining access to wages granted to an earlier generation of workers (Rees 1993; Chaison 2012). As a general rule, such clauses provide for two-tier wage plans, with the pay scale for newly hired employees (Scale B) being less advantageous than the one in place for previously hired employees (Scale A). These plans can be applied on a permanent or a temporary basis (MacNeil 2013). In the latter case, the two pay scales will gradually converge over time. These two-tier wage provisions can take on various forms, such as multi-tier wage structures (two or more pay scales or different wage rates) for the same occupation, a lower entry-level wage, or additional steps in the pay scales for newly hired workers, such that it will take them longer to reach the top wage level.

Whereas the most classic type of two-tier provision essentially concerns wages, a broader understanding of this notion is required since two-tier provisions can also involve other conditions related to compensation (e.g., fringe benefits: insurance, pension plan, and so forth) or job security (e.g., duration of the probationary period). In all cases, under these provisions newly hired workers will not have access to the working conditions in question or will have reduced access to them compared to workers who were hired before the provisions came into effect. Thus, two-tier provisions create two classes of citizens in the workplace, a privileged class that has all the advantages and an underclass that has fewer advantages.

## Two-Tier Provisions: A Permanent Development Imposed by Employers?

Two-tier provisions can be traced back to the 1960s in the United States, especially in the retail food industry, followed in the 1970s by the air transport industry (Martin and Heetderks 1990; Gallun 1999). Then, during the subsequent economic crisis in the 1980s, "institutionalized" recourse to these provisions in the collective agreement became more common as a result of the financial difficulties experienced by many unionized firms, along with market deregulation and increasing competition from non-unionized firms (Ichniowski and Delaney 1990). According to Kochan, Katz,

and McKersie (1994), one of the important changes transforming industrial relations at that time was that employers took the initiative, demanding significant union concessions in response to these competitive pressures. Some employers saw two-tier provisions as the best way to bring down labor costs and to survive the competition from non-unionized firms with lower labor costs (Jacoby and Mitchell 1986), without angering senior workers (Townsend and Partridge 1999), given that across-the-board wage decreases have generally been associated with a negative impact on employee morale and productivity (Bewley 1999). Although concession bargaining subsequently receded until the early 2000s, the prevalence of these provisions nevertheless remained stable in collective agreements (Chaison 2008).

In Canada, two-tier provisions emerged during the recessions of the 1980s and 1990s, in the same industries as in the United States, particularly the air transport industry and the wholesale and retail trade sector (Walker 1987). Although many of these provisions subsequently disappeared, some of them persisted in the retail sector in spite of the economic recovery. In the province of Quebec, two-tier provisions first emerged in the retail sector and later in the municipal sector, which was forced by the Government of Ouebec in the late 1990s to reduce municipalities' wage bill by 6%. Studies conducted in the 1990s revealed that the percentage of collective agreements including multi-tier wage structures (two or more tiers) varied over the years from 2.6% to 8.0% (Ministère du Travail 1998). These results might suggest that such measures were merely a passing phenomenon, a temporary response to the economic situation. Other studies conducted in the late 1990s, however, adopted a broader perspective of this issue and considered not only wages but also hours of work, holidays, annual leave, rest days, family-related leave, work uniforms, and the length of the probationary period-the results of which painted a very different picture (Ministère du Travail 1999). These studies showed that two-tier provisions were concentrated in three sectors, being present in 80% of collective agreements in the food industry, 40% of those in the municipal government sector, and 20% of those in the manufacturing sector. In addition, these studies showed the relevance of considering not only wage disparities but also widespread disparities affecting other conditions in order to provide a more comprehensive picture of precariousness in unionized workplaces.

In a report on the application of the provisions of the *Act Respecting Labor Standards* concerning two-tier provisions,<sup>1</sup> the Quebec Ministry of Labour observed that the proportion of collective agreements containing permanent

<sup>&</sup>lt;sup>1</sup>Essentially, the law prohibits disparities on wages, hours of work, statutory general holidays and nonworking days with pay, paid annual leaves, rest periods, absences owing to sickness, accident or a criminal offense, absences and leaves for family reasons or parental reasons, notice of termination of employment or layoff, and work certificate and miscellaneous other standards (e.g., uniform, equipment, and tools). It also establishes that a working condition based on seniority or length of service does not derogate from the law, nor are they a temporary disparity, to the extent that it is reabsorbed within a reasonable time.

two-tier provisions decreased only slightly, from 6.2% to 5.3%, between 2000 and 2004 (Ministère du Travail 2004). During this same period, the proportion of agreements with temporary two-tier wage provisions, permitted by law, more than doubled (from 3.3% to 7.8%). In 2016, according to data from the Quebec Ministry of Labour, approximately 13.7% of all collective agreements in the province included two-tier provisions pertaining to various working conditions. These provisions are more often found in the private sector (15.2%) than in the public sector (9.7%) (Lauzon Duguay, Laroche, and Jalette 2017b). The sectors in which disparities are most frequent are retail trade (23.0%); the primary sector (21.3%); wholesale trade (20.9%); real estate services, advertising agencies, and insurance (20.9%); and manufacturing industries (20.0%). These findings show that two-tier provisions were not just a passing phenomenon in Quebec. As noted by Chaison (2012) and MacNeil (2013), the 2008 financial crisis led to a resurgence in the need for American and Canadian employers to cut labor costs. One of the best ways to accomplish this, without causing too much pain to current workers, was still to impose two-tier provisions granting less generous wages, fringe benefits, and job security measures to newly hired employees.

#### **Issues Raised for Unions**

Although two-tier provisions are often a lesser bargain negotiated by unions to save jobs or to protect certain working conditions of its current members, they raise several issues for unions. The negative effects of two-tier provisions on workers' attitudes, behaviors, and the working climate are well documented (Cappelli and Sherer 1990; Brown, Gardner, Oswald, and Qian 2008) and raise significant challenges for unions regarding equity (Martin and Peterson 1987) and fairness (Rees 1993) among workers. Two-tier provisions are criticized because they challenge the principle of equity, the basic tenet of equal pay for equal work that is so dear to union organizations and promoted in the compensation management literature (Martin and Peterson 1987; Martin and Lee 1996; Lauzon Duguay et al. 2017a). By agreeing to introduce two-tier provisions, unions (and employers) violate the principles of equity and fairness in the determination of wages and working conditions (Rees 1993).

Introducing two-tier provisions in collective agreements also challenges the union's duty of fair representation of the employees in its bargaining units (Jacoby and Mitchell 1986; MacNeil 2013). In most Canadian jurisdictions, this duty is recognized; however, case law has shown that recourse by employees affected by two-tier provisions, on the grounds of a failure of the duty of fair representation by their union, has not been the most effective way to force the withdrawal of such provisions from collective agreements (MacNeil 2013).

Two-tier provisions are also likely to create serious tensions within the bargaining unit and to significantly weaken internal solidarity (Rose and

Chaison 1996; Dufour-Poirier and Laroche 2015), because these provisions sow divisions within the ranks, especially as low-tier employees become increasingly representative and begin to express their opposition and discontent (Jacoby and Mitchell 1986). Indeed, protest movements within union organizations have been organized to denounce these provisions, which are deemed to be unfair and discriminatory. The tensions within employee groups can be so serious as to lead the employees targeted by these provisions to question the very legitimacy of the union actor, whose effectiveness as a bargaining agent has been harshly criticized (Chaison 2008).

Two-tier provisions raise serious debates within union organizations and workplaces. The various issues surrounding these provisions call for a closer examination of the factors explaining their adoption in collective agreements.

## The Determinants of Two-Tier Provisions

The vast majority of studies examining two-tier provisions were conducted in the 1980s and '90s and were aimed primarily at better understanding the effects of these provisions in financial terms and with regard to the attitudes of the employer and union actors concerned (Jacoby and Mitchell 1986; Martin and Peterson 1987; Cappelli and Sherer 1990; Brown et al. 2008). Recent literature has not often addressed these provisions, which nevertheless remain highly relevant, as shown by the development and tenacious presence of two-tier provisions in collective bargaining (Chaison 2012; Lauzon Duguay et al. 2017b). In seeking to bring out the main determinants of the presence of two-tier provisions in collective agreements, we thus hope to contribute significantly to this literature. We identified five explanations for the adoption of the provisions: economic uncertainty, union capacities and resources, concessions negotiated by the parties, the maturity of the collective bargaining agreement, and sectoral comparisons.

# Economic Uncertainty

Over recent decades, employers have tried, and mostly succeeded, to make collective agreements compatible with economic uncertainty. This approach has led them to introduce more flexibility in work organization and working conditions (Jalette, Laroche, and Trudeau 2017) and, in some cases, to demand two-tier provisions relating to wages, employment status, and other working conditions (Chaison 2012; MacNeil 2013; Lauzon Duguay et al. 2017b).

The impact of economic uncertainty is put forward in the literature to explain the use of two-tier provisions (Jacoby and Mitchell 1986; Walker 1987; Ichniowski and Delaney 1990; Chaison 2007; Bunkley 2008). In fact, according to these studies, the increased recourse to these provisions can be explained by the economic difficulties experienced by firms, whether during periods of recession or economic crises, or through exposure to international competition. The economic and financial crisis of 2008 provided a significant incentive for employers to resort to two-tier provisions in an effort to reduce labor costs. Adopting these provisions was also considered a valid way for the parties to avoid plant closures and associated job losses during economic downturns (Barkholz 2007; Chaison 2007). Although the prevalence of two-tier provisions was expected to decrease when the economy recovered, Chaison (2012) observed that the ultraconcessions negotiated during the crisis were made without any promise by the employer that they would be temporary. As shown earlier, their recurrent presence in the industrial relations landscape, for decades now, is another significant blow to the assumption of their cyclical or temporary presence. Moreover, beyond the financial crisis, various other economic factors can fuel the uncertainty that is likely to influence the power of the parties and the bargaining process itself, such as fluctuations in business cycles, inflation, and unemployment rates (Sano and Williamson 2008).

**Proposition 1:** Two-tier provisions will be more likely to be found in collective agreements negotiated during periods of greater economic uncertainty.

#### Union Capacities and Resources

The context of insecurity is known to be a factor that can limit the impact of unions in the workplace (Lehndorff and Haipeter 2011). However, union's bargaining power is likely to make a difference in its overall capacity to improve its members' working conditions. According to Lévesque and Murray (2005), union power is closely tied to the capacity of a local union to mobilize various power resources related both to external factors, such as union sectoral coverage, and to internal factors, such as the number of union members. Previous studies have shown, for instance, that higher union coverage is associated with higher benefits for workers (Jaumotte and Osorio Buitron 2015) and a reduction in inequality in workplaces (Kenworthy and Pontusson 2005; Lin and Tomaskovic-Devey 2013). The most powerful unions, those with the capacity to develop and mobilize their power resources, may be better able to resist employer demands for concessions at the bargaining table, including twotier provisions. And yet, as mentioned earlier, some unions see their bargaining power weakened and are forced to make concessions, so they have chosen to agree to two-tier provisions, believing them to be the only alternative to job losses (Chaison 2007).

**Proposition 2:** Two-tier provisions are more likely to be found when the union that negotiated the collective agreement has fewer capacities and resources.

#### Concessions Negotiated by the Parties

The prevailing discourse aimed at justifying the recourse to two-tier provisions in collective agreements also puts forward the employers' need for flexibility, in terms of both work organization and wages. In the early 2000s, the logic of collective bargaining underwent a considerable transformation, allowing employers to demand significant concessions on work organization, seniority, wages, and other benefits (Chaison 2012; Jalette et al. 2017). Note that two-tier provisions are likely to be adopted in this kind of concession-driven dynamic and are thus most often found in collective agreements containing other union concessions on various issues, such as flexibility and security. As such, union concessions on two-tier provisions are not likely to appear on their own in collective agreements, but rather as part of a "bundle of union concessions."

**Proposition 3:** Two-tier provisions are more likely to be found in collective agreements that contain more employer-centered flexibility provisions and fewer employee-centered security provisions.

#### Maturity of the Collective Agreement

Jalette et al. defined mature collective agreements as "the product of several rounds of negotiations that have resulted in content covering a range of working conditions and provisions relating to the relations between the parties and of which they have been relatively satisfied over the years" (2017: 490). Thus, over time and rounds of negotiations, the parties have succeeded in constructing a collective agreement reflecting their respective concerns and covering a wide range of working conditions and processes governing their relationships.

Consequently, collective agreements that have been built over time generally contain better working conditions and cover a wider range of issues than do newer collective agreements (Stieber 1959; Laroche, Jalette, and Lauzon Duguay 2014). Given the level and range of working conditions contained in these mature contracts, they are likely to be targeted by employers in concession bargaining. In addition, current employees may also wish to retain their vested interests and accept lower conditions for future employees.

**Proposition 4:** Two-tier provisions are more likely to be found in mature collective agreements.

#### Orbits of Comparison

Every collective bargaining process involves some form of comparison aimed at enabling the parties to adopt the same or similar measures as those adopted by other organizations in the same organizational field (Marginson and Sisson 2004). Ross (1948) introduced the concept of *orbits*  of coercive comparison to describe the tendency in collective bargaining to match the working conditions provided in other workplaces. Sectoral dynamics and the game of coercive comparisons, forcing firms in the same sector to adopt similar practices, play a role in the determination of bargaining outcomes. We believe that the recourse to two-tier provisions may result from this process of comparison. For employees and their union, fairness and equity play an essential role in setting their expectations regarding the targeted bargaining outcomes. Moreover, our literature review clearly showed that two-tier wage provisions are more prevalent in industries such as the retail, airline, and manufacturing sectors, which lends support to this argument and shows the relevance of empirically examining whether belonging to a given sector or region leads the parties to adopt two-tier wage provisions.

**Proposition 5:** Two-tier provisions are more likely to be found in collective agreements when the prevalence of such provisions is higher in their orbits of comparison.

#### **Data and Sources**

The data used in this research were provided by the Quebec Ministry of Labour, which analyzes and codifies various aspects of the content of all labor contracts signed by the parties in the province. The parties are legally required to send a copy of the labor contract they have agreed on to the Ministry, which also collects administrative information on the local union and management. This information was merged with the data on collective agreements. We obtained other information on the prevailing economic context in Quebec from the Institut de la statistique du Québec. The database we constructed contains information on the entire population of 5,285 collective agreements in force on December 31, 2012, in Quebec's private sector. Thus, our research is based on a cross-sectional analysis comparing collective agreements at a given moment in time. Although we compared agreements that had been settled at different times, we were able to adequately control for the prevailing environmental factors by including economic data from the year prior to the settlement year in our analysis, enabling us to capture the economic conditions prevailing at the time the parties negotiated the agreement (and were likely considered by them).

A short definition, descriptive statistics, and the expected sign of each variable are presented in Table 1. In addition to the dependent variables and control variables, this table lists the independent variables, classified into the following groups corresponding to the theoretical factors described earlier in the article.

#### **Dependent Variables**

To take into account the various possible forms of disparity among workers in the same bargaining unit brought out in several studies in Quebec

	<i>I able 1.</i> Summary Statistics			
Variable	Description	Mean	Standard deviation	Expected signs
	Dependent variables			
Two-tier provisions Two-tier compensation provisions	Dummy for two-tier provision (all types) Dummy for two-tier compensation provision (lower entry-level wage,	$0.1489 \\ 0.0681$	0.3560 0.25197	
	lower wages for certain categories of employees, creation of new categories with lower wages, longer period before reaching top			
Two-tier job security provisions	wage level, less generous benefits for newly hired employees) Dummy for two-tier job security provision (abolition of job security	0.0448	0.20698	
	for newly hired employees, longer period required to become a permanent employee)			
	Independent variables			
Economic uncertainty				
Economic crisis	Dummy for the 2008–2012 economic crisis	0.9177	0.27486	+
Regional unemployment rate	Annual regional unemployment rate (signature year minus 1)	7.7301	0.92615	+
Anticipated inflation	Anticipated inflation rate (signature year plus 1)	1.7415	0.83388	I
Union capacities and resources				
External union bargaining power	Percentage of unionized workers in the sector represented by the union confederation	0.4599	0.27397	I
Unionization rate	Percentage of unionized workers in the sector	0.3258	0.16376	I
Internal union power	Number of workers in the bargaining unit	61.70	129.17	I
Resources, union leave	Dummy for full-time union leave for union representatives	0.6339	0.48179	I
Concessions negotiated by the parties				
Work organization flexibility	Dummy for the planned implementation of changes in work organization	0.0225	0.14837	+
Production flexibility	Dummy for lack of restrictions on outsourcing	0.3758	0.48437	+
Employment protection mechanism	Dummy for employment protection mechanism (arrangements	0.0163	0.12653	I
	protecting current jobs and/or workers)			

(continued)

Variable	Description	Mean	Standard deviation	Expected signs
Employer contributions to employee benefits	Dummy for employer contributions to group insurance and pension plans	0.7359	0.44092	I
Maturity of the collective agreement Maturity (age of union) Orbits of comparison	Number of years since the local union had been certified	15.19	11.67	I
Sectoral comparison	Dummy variable indicating whether the proportion of two-tier provisions in the two-digit sector was lower or higher than that observed in all sectors	0.7359	0.45582	+
Regional comparison	Dummy for Montreal, Laval, Quebec City and Outaouais areas	0.2664	0.44213	I
	Control variables			
Women workers	Percentage of women in the sector (two-digit industry code)	0.4310	0.17229	+
Young workers	Percentage of young workers (under 30 years of age) in the sector (two-digit industry code)	0.2593	0.11196	+
Duration of collective agreement	Length in years	4.3650	1.65677	+
First agreement	Dummy variable indicating whether the agreement was the first concluded between the parties	0.0763	0.26543	I

Table 1. Continued

*Notes*: Number of observations = 5,285.

(Ministère du Travail 2004; Lauzon Duguay et al. 2017b), we considered two-tier wage provisions as well as two-tier provisions related to other working conditions. We used three indicators of our dependent variable. Our first indicator was whether any two-tier provision was present in the collective agreement. We found two-tier provisions in 14.9% of the collective agreements included in our study. The other two indicators referred to specific types of two-tier provisions. The first, two-tier compensation provisions, was a dummy variable for two-tier wage plans, covering clauses for a lower entry-level wage for new employees, lower wages for certain categories of employees (e.g., temporary workers), the creation of new job categories with lower wages, a longer period before reaching the top wage level, and less generous benefits or a lack of benefits for new employees. This type of two-tier provision was found in 6.8% of the collective agreements included in our study. The second type, two-tier job security provisions, was a dummy variable that included arrangements such as the abolition of job security for newly hired employees and the requirement of a longer time period before becoming a permanent employee. These were found in 4.5% of the collective agreements included in our study.<sup>2</sup> Although we do not know whether these provisions were introduced in the last bargaining round, the parties nevertheless had the opportunity at that time to decide whether to keep them or take them out of the new contract. We thus refer to the adoption and extension of two-tier provisions in this article. One last limitation of the database is that it does not allow us to differentiate between two-tier provisions with temporary effects and those with permanent ones.

#### **Independent Variables**

#### Economic Uncertainty

We used three indicators to explore the economic context in which the negotiations took place and to reflect economic uncertainty, which may have influenced the bargaining outcomes (Murphy 2000). The first indicator was whether the labor contract was signed during, or as of, 2008; that is, whether it was signed during the economic crisis experienced from 2008 to 2012.<sup>3</sup> According to previous studies (Chaison 2012), the context of this crisis was conducive to the adoption or extension of two-tier provisions. The second indicator was the regional unemployment rate during the year

<sup>&</sup>lt;sup>2</sup>Overall, 787 collective bargaining agreements contained some form of two-tier provisions. Some collective agreements (190) containing two-tier provisions were classified as "Others" by Ministry of Labour analysts. Thus, we were not able to classify these collective agreements in one of the categories we used (compensation or job security).

<sup>&</sup>lt;sup>3</sup>We ran sensitivity analysis on three other operationalizations of our economic crisis variable (2008–2011, 2009–2012, 2009–2011) because it is not possible to know what the parties at the bargaining table considered the beginning and ending of the financial crisis. This analysis revealed that our operationalization of this variable did not have any significant bearing on our findings, with the models remaining quite robust to the change of indicator. The results of these alternative specifications are available on request.

before the signing of the contract, measuring the economic uncertainty in the local labor market when the contract was being negotiated. The last indicator was the inflation rate anticipated for the year following the signing of the contract. Economic uncertainty, as measured by these three indicators, was expected to be associated with a higher prevalence of two-tier provisions.

# Union Capacities and Resources

We measured the capacities and resources of the union actor using four indicators. The first indicator,<sup>4</sup> external union bargaining power, was proxied by the percentage of the unionized workforce in the sector represented by the union confederation to which the local union was affiliated. Greater union bargaining power was expected to be negatively associated with the presence of two-tier provisions. Following the same logic, the second indicator, the unionization rate (the percentage of unionized workers in a given sector), was also expected to be negatively associated with these provisions. The third indicator, the number of workers in the bargaining unit, represents internal union power and was expected to be negatively associated with the presence of two-tier provisions in the collective agreement. The fourth indicator, union leave, was a dummy variable for provisions in the collective agreement granting full-time leave to union representatives. Such leave can be an important resource for union organizations because it can help maintain an active union life. Thus, in line with the other union resources studied here, we expected that unions having the benefit of fulltime union leave would show a greater capacity to avoid the introduction of two-tier provisions.

#### Concessions Negotiated by the Parties

We created a second set of four indicators to determine whether two-tier provisions were generally associated with other types of concessions in the collective agreement. We focused on two indicators of employer-centered flexibility provisions and two indicators of employee-centered security provisions. The first indicator, work organization flexibility, was a dummy variable for the planned implementation of changes in work organization. The second indicator, production flexibility, reflected a lack of restrictions on outsourcing. We expected the prevalence of two-tier provisions to be higher in collective agreements that contained provisions allowing for these types of flexibility sought by employers. As mentioned earlier, concessions rarely appear singly. The third indicator, mechanisms protecting current jobs and/or workers, and the fourth indicator, employer contributions to

<sup>&</sup>lt;sup>4</sup>Similar measures of union bargaining power have been used in previous studies (see Murphy 2000; Lin and Tomaskovic-Devey 2013).

employee benefits (group insurance and pension plans), were expected to be negatively associated with the presence of two-tier provisions.

## Maturity of Collective Agreement

The indicator of the maturity of the collective agreement was the number of years since the local union had been certified. Mature collective agreements that feature advantageous working conditions gained over many years might lead employers to target these conditions for concession bargaining and/or lead current workers to protect them. Therefore, we expected the maturity of the collective agreement to be positively associated with the presence of two-tier provisions in the labor contracts.

# Orbits of Comparison

As explained above, the bargaining parties may make collective agreement comparisons on the basis of the industry sector or region to which they belong. We selected two indicators of these orbits of comparison. First, we created a dummy variable indicating whether the proportion of two-tier provisions in the bargaining parties' specific sector was lower or higher than that observed in all sectors. Based on the two-digit industry classification, we expected that collective agreements in sectors presenting a higher prevalence of two-tier provisions would be more likely to also contain two-tier provisions. Second, we distinguished between urban and non-urban areas, expecting two-tier provisions to be more prevalent in the latter than in the former. Collective agreements in non-urban areas are more likely to involve two-tier provisions, presumably because the parties might want to make regional locations more attractive for investment by lowering labor costs (Murray 2012) and maintain jobs in the regions for youth.

## **Control Variables**

To bring out the effects of the independent variables, we introduced four control variables into the model. The first two indicators are related to the profile of the workforce in the sector (two-digit). Studies show that two-tier provisions often target certain categories of workers, such as young workers and women (Jacoby and Mitchell 1986; MacNeil 2013). Indeed, two-tier provisions based on the hiring date effectively introduce poorer working conditions for newly hired employees, who are often young workers, women, or immigrants, as shown by legal studies (MacNeil 2013), and should thus be considered a source of indirect discrimination. Given the strong correlations between these different categories of workers, and thus, to avoid the problem of multi-collinearity, we chose two indicators, namely, the percentage of women and the percentage of young workers in the sector (two-digit classification). We expected the provalence of both women and young workers in a given sector to be positively associated with the adoption or

extension of two-tier provisions in collective agreements in this sector. The third indicator was a first contract dummy, which appeared relevant because two-tier provisions are not usually introduced the first time an agreement is negotiated between the parties. The final control variable was the duration of the collective agreement. In a previous study (Laroche et al. 2014), we had observed a significant difference in the use of two-tier provisions between short-term collective agreements (three years or less) and long-term collective agreements (five years and longer); it appeared relevant to include this control variable in the current study.

## Results

To test our hypotheses, we conducted a logistic regression for each of the dependent variable indicators, namely, two-tier provisions (all types), two-tier compensation provisions, and two-tier job security provisions (Table 2).

#### **Regression for All Types of Two-Tier Provisions**

The results of the first logistic regression show that none of the indicators assessing economic uncertainty were significantly associated with two-tier provisions (all types). Proposition 1 was thus not supported by the results.

As for union capacities and resources, the results were partially in line with Proposition 2. Perhaps surprising, the first indicator, external union bargaining power, was positively and significantly associated with the presence of two-tier provisions. The odds ratio (OR) indicates that the odds of an agreement including any kind of two-tier provision increases 1.5 times for each 1% increase in the number of workers represented by the union confederation with which the local union is affiliated. A positive and significant association was also found for the third indicator, internal union power. The odds ratio implies that for a one unit increase in the number of workers in the union, the odds of an agreement including any of the twotier provisions increases by 1.3 times. The second and fourth indicators, the unionization rate in the sector and union leave, were not significantly associated with the presence of this dependent variable.

Regarding union concessions, results indicate that concessions never appeared singly in a collective agreement, as stipulated in Proposition 3. All indicators were positively and significantly associated with the presence of two-tier provisions and the odds of including any kind of two-tier provision are respectively 2.3 times, 1.2 times, 2.7 times, and 1.6 times greater. What is puzzling here is that provisions that could be identified as union concessions, namely those relating to work organization or production flexibility, varied in the same direction as provisions that could be identified as employer concessions, namely those relating to employment protection mechanisms or employer contributions to employee benefits.

The maturity of the collective agreement indicator was positively associated with the presence of two-tier provisions, lending support to Proposition

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Two-tier	Two-tier provisions (all types)	(səd		L	wo-tier co	Two-tier compensation provisions	visions			Two-tier jo	Two-tier job security provisions	isions	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					OR <sup>e</sup> con interval	fidence (95%)				OR <sup>c</sup> con interval	fidence (95%)				OR <sup>c</sup> con interval	fidence (95%)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Variable	$B^{a}$	$SE^b$		Lower	Upper	$B^{a}$	$SE^b$		Lower	Upper	$B^{a}$			Lower	Upper
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Economic uncertainty															
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Economic crisis	0.252	0.155	1.287	1.052	1.743	0.215	0.220	1.239	1.241	1.907	-0.030	0.266	1.030	1.635	1.736
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Regional unemployment rate	0.024	0.046	1.024	1.068	1.120	0.013	0.063	1.013	1.118	1.146	0.088	0.086	1.092	1.084	1.294
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Anticipated inflation	0.041	0.051	1.042	1.060	1.152	0.056	0.070	1.058	1.086	1.214	-0.046	0.096	1.047	1.153	1.264
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	The second second cost and resources	0 410***	0150	1 5 1 1	0111	0100	*006.0	0000	1.01	101	0 0 10	***000	1000	6 020	010.6	11 411
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	External union bargaming power	-0.106	0 292	116.1	1.119	040.2	- 0.096	0.209	1.491	110.1	2.240 9 206		1.524 0.696	0.000	2.210 2.507	114-11 4 905
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Internal union neuror (size)	0.130	1900	1 96 1	9401	1 470	070.0	0110	1.020	071717	1 960	1C0.0	0.160	060.6	1 440	0 016
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Descritted untion power (Size)	940 O	100.0	1.075	1105	1 977	-0.997**	2110	000/T	1 007	1 508	0 100 ***	01.00	1 202	CTT-1	010.2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Compression nearest and the the marked	710.0	000.0	C/01	601.1	117.1	0.767.0	111.0	1.207	100.1	C6C.1	760.0	01.09	1.000	11.411	020.2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Concessions negonated by the parties	***				10.0	****		1		0000					1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Work organization flexibility	$0.821^{***}$	0.218	2.273	1.482	3.487	$1.014^{***}$	0.271	2.757	1.621	4.689	0.644	0.466	1.903	1.309	4.741
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Production flexibility	$0.183^{**}$	0.084	1.201	1.018	1.417	$0.240^{**}$	0.117	1.271	1.011	1.598	0.041		1.042	1.306	1.417
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Employment protection mechanism	$1.002^{***}$	0.265	2.725	1.621	4.582	-1.081	0.728	2.948	1.414	12.284	$2.407^{***}$		11.098	5.266	23.385
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Employer contributions to employee benefits	0	0.107	1.574	1.275	1.943	0.257*	0.140	1.293	1.017	1.700	$0.730^{***}$	0.244	2.075	1.288	3.345
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Maturity of the collective agreement															
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Maturity (age of union)	$0.015^{***}$	0.003	1.015	1.008	1.021	$0.011^{**}$	0.005	1.011	1.002	1.020	$0.012^{*}$	0.007	1.012	1.001	1.025
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Orbits of comparison															
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sectoral comparison	$0.986^{***}$	0.181	2.679	1.879	3.820	$1.090^{***}$		2.973	2.027	4.362	$1.750^{***}$		5.757	3.804	8.715
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Regional comparison	$-0.246^{**}$	0.101	1.279	1.049	1.559	$-0.313^{**}$	0.148	1.368	1.023	1.829	-0.249	0.178	1.283	1.104	1.817
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Control variables		1			1										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Women workers	-0.175	0.574	1.191	2.586	3.667	-1.163	0.714	3.200	1.266	12.959	1.412	0.864	4.105		22.306
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Young workers	1.034	0.782	2.813	1.646	13.030	0.718	0.960	2.051	3.198	13.456	$2.564^{**}$	1.216	12.985		140.749
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Duration of collective agreement	$0.120^{***}$	0.026	1.128	1.071	1.188	$0.115^{***}$		1.122	1.044	1.205	-0.016	0.052	1.016	1.089	1.125
$\begin{array}{ccccccc} -4.698 & 0.787 & -3.857 & 1.167 & -8.949 & 1.423 \\ & 4100.326 & 2411.243 & -8.949 & 1.423 \\ & 0.112 & 0.092 & \\ & 0.111 & 0.274 & \\ & 5.285 & 5.095 & \end{array}$	First agreement	$-0.764^{***}$	0.263	2.148	1.281	3.600	-0.302	0.317	1.353	1.375	2.516	$-2.886^{***}$	1.020	17.924		132.290
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Constant	-4.698	0.787				-3.857	1.167				-8.949	1.423			
0.112 0.092 0.111 0.274 0.274 5.285 5.095	-2 log likelihood			4100.326					2411.243					1429.392		
0.111 0.274 5.285 5.095	Nagelkerke R2			0.112					0.092					0.291		
5.285 5.095	Hosmer and Lemeshow			0.111					0.274					0.388		
	n (number of cases)			5,285					5,095					5,095		

Table 2. Logistic Regressions

<sup>a</sup>B: coefficient. <sup>b</sup>SE: standard error. <sup>c</sup>[OR]: absolute odds ratio. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

4. Thus, the more mature (or older) the collective agreement, the more likely the presence of these provisions. With regard to the orbits of comparison, the results show that both region and sector were associated with the presence of two-tier provisions, as proposed in Proposition 5. More specifically, sectors in which the prevalence of two-tier provisions was higher than in the overall economy were also significantly associated with this first dependent variable. Thus, the odds ratio (OR) shows that the likelihood of an agreement including any kind of two-tier provision increases by 2.7 times for sectors where these provisions were prevalent. Finally, the collective agreements of bargaining parties located in urban areas presented 1.3 times fewer two-tier provisions than did those located in non-urban areas.

With regard to our control variables, the duration of the collective agreement and the first collective agreement dummy variable were significantly associated with the presence of two-tier provisions. In the first case, the longer the duration of the collective agreement, the greater the likelihood that it would contain these provisions. In the second case, the negotiation of a first collective agreement decreased the likelihood of the presence of twotier provisions.

To clarify the results, we ran separate regressions with two-tier compensation provisions and two-tier job security provisions as dependent variables. In the first regression (all types), the Hosmer and Lemeshow test was barely significant at 10% (0.11), meaning it did not predict the results very well. The goodness of fit between the observed and the expected values in the model measured with this test was better in the other two regressions. As shown in the following sections, this outcome helped us to better understand the relationships involved and to obtain more robust models, with the downside being that we had to exclude some cases.<sup>5</sup>

## **Regression for Two-Tier Compensation Provisions**

The results of the second logistic regression show that none of the indicators assessing economic uncertainty were significantly associated with twotier compensation provisions. Proposition 1 was thus not supported by our results.

As for union capacities and resources, the results were partially in line with Proposition 2. The first indicator, external union bargaining power, was negatively associated with the presence of two-tier compensation provisions. The odds ratio (OR) indicates that the likelihood of an agreement including a two-tier compensation provision decreases by almost 1.5 times for each 1% increase in the number of workers represented by the union confederation with which the local union is affiliated. We also found a

<sup>&</sup>lt;sup>5</sup>Since we were not able to classify 190 collective agreements—identified as "other" types of two-tier provisions—into one of our two classifications (two-tier compensation provisions or two-tier job security provisions), we had to exclude these cases. We thus excluded a bit less than 25% of the collective agreements containing two-tier provisions from our study.

negative association for the second indicator, the unionization rate in the sector, but this result was not significant at the conventional levels of significance. The third indicator, internal union power, was also not significantly associated with the presence of this dependent variable, although the coefficients had the expected signs. In addition, the fourth indicator, union leave, was significantly and negatively associated with the presence of these provisions. Thus, the absence of union representatives granted full-time union leave increased by 1.3 times the chance that the collective agreement would contain two-tier compensation provisions.

Regarding union concessions, the results indicate that concessions never appeared singly in a collective agreement, as stipulated in Proposition 3. Both the first and second indicators, namely work organization and production flexibility, were positively associated with the presence of these provisions. We can thus conclude that a collective agreement containing these concessions relating to employer-centered flexibility would also be more likely (respectively, 2.7 times and 1.2 times more) to contain two-tier compensation provisions. The third indicator, the presence of an employment protection mechanism, was not statistically associated with the presence of these two-tier compensation provisions, although the coefficients had the expected sign. The fourth indicator, employer contributions to employee benefits, was statistically associated with the presence of two-tier compensation provisions but not in the direction expected in Proposition 3. Indeed, the presence of such contributions was associated with the presence of twotier compensation provisions, which was not predicted.

The maturity of the collective agreement indicator was positively associated with the presence of two-tier compensation provisions, lending support to Proposition 4. Thus, the more mature the collective agreement, the more likely the presence of these provisions. With regard to coercive comparisons, the results show that both region and sector were associated with the presence of two-tier compensation provisions, as proposed in Proposition 5. More specifically, sectors in which the prevalence of two-tier compensation provisions was higher than in the overall economy were also significantly associated with this second dependent variable. Thus, collective agreements in sectors where these provisions were more prevalent were 2.9 times more likely to contain two-tier compensation provisions. Last, the collective agreements of bargaining parties located in urban areas presented 1.3 times fewer two-tier compensation provisions than did those located in non-urban areas.

With regard to our control variables, only the duration of the collective agreement was significantly associated with the presence of two-tier compensation provisions. In other words, the longer the duration of the collective agreement, the greater the likelihood that it would contain these provisions.

## **Regression on Two-Tier Job Security Provisions**

The third logistic regression concerned our third dependent variable, twotier job security provisions. The results show that none of the three indicators assessing economic uncertainty, namely the economic crisis, regional unemployment rate, or anticipated inflation rate, were associated with these provisions, contrary to what was stipulated in Proposition 1.

As for union capacities and resources, the results concerning two-tier job security provisions contrast considerably with those concerning two-tier compensation provisions and are not in line with Proposition 2. The first indicator, external union bargaining power, was positively associated with the presence of two-tier job security provisions. The odds ratio (OR) indicates that the likelihood of an agreement including two-tier job security provisions increases by 6 times for each 1% increase in the number of workers represented by the union with which the local union is affiliated. The second indicator, the unionization rate in a given sector, was not significantly associated with the dependent variable. The third indicator, internal union power, was also associated with the presence of two-tier job security provisions. Thus, the greater the number of workers in the unit, the more likely the presence of these provisions (2 times more). The fourth indicator, union leave, was positively associated with this third dependent variable. Thus, the presence of a provision granting union representatives full-time leave increased the likelihood that the collective agreement would contain two-tier compensation provisions (1.8 times more).

Some of the concessions negotiated by the parties were also associated with two-tier job security provisions. The first two indicators, namely work organization and production flexibility, were not significantly associated with the presence of these provisions. The third and fourth indicators, namely the presence of an employment protection mechanism and employer contributions to employee benefits, were both associated with this dependent variable. However, the relationship was not in the direction expected in Proposition 3. Thus, the odds ratio (OR) indicates that the presence of mechanisms protecting current jobs and/or workers increases by 11 times the likelihood of two-tier job security provisions. Moreover, when the employer contributed to the workers' group insurance and pension plans, there was also a greater likelihood (more than 2 times) that the collective agreement would contain two-tier job security provisions.

The maturity of the collective agreement was significantly associated with the presence of two-tier job security provisions. Thus, as proposed in Proposition 4, these provisions were more likely to be found in mature collective agreements. With regard to coercive comparisons, while the region indicator was not significantly linked with the presence of two-tier job security provisions, the sector indicator was. The likelihood of two-tier job security provisions was greater in collective agreements from sectors in which the prevalence of two-tier compensation provisions was higher than in the overall economy (5.8 times greater). These results lend partial support to Proposition 5.

With regard to our control variables, the first agreement indicator was significantly (in this case, negatively) associated with the third dependent variable. Thus, first collective agreements were not likely to contain two-tier job security provisions. Also, we found an association between two-tier job security provisions and the percentage of young workers in a given sector. The higher the percentage of young workers, the greater the likelihood that the collective agreement would contain two-tier job security provisions.

#### Discussion

In addition to dealing with a phenomenon that has not been studied in depth in recent decades, our study sheds new light on two-tier agreements using evidence based on a rather large population of collective agreements. Our results clearly show that employees in the internal primary market (or "insiders"), who have long been better represented and tend to have better working conditions, are now being targeted by employer strategies aimed at the rationalization and flexibilization of working conditions. Workers who recently entered the internal market are seeing their compensation, job security, and protections provided by the collective agreement weakened by the introduction of two-tier provisions. The originality of our study lies in its demonstration that the logic underlying the adoption and extension of two-tier *compensation* provisions is different from that underlying the adoption and extension of two-tier *job security* provisions, despite some similarities.

What factors explain the presence of these two types of two-tier provisions? First, we observed that the factors related to economic uncertainty did not explain the presence of two-tier provisions, regardless of the indicator considered. This finding is surprising given that previous studies have highlighted these factors in explaining the recourse to these provisions as a way for firms to get through periods of economic uncertainty. Thus, we had to acknowledge that the factors that appear to guide employer strategies respond less to considerations related to the economic situation and possibly more to various bargaining dynamics, which fall within the strong tendency toward concession bargaining. Also, the maturity of collective agreements was associated with the presence of two-tier provisions in all our analyses. This latter finding shows that two-tier provisions are more likely to be found in mature collective agreements, featuring advantageous working conditions gained over many years. Our results suggest that the more advantageous the working conditions for current workers, the more likely the employer will introduce a two-tier provision for new workers. We reaffirm the actors' tendency to include, in their collective agreement, provisions found in firms within their orbit of comparison, whether in the same industry sector or region (Ross 1948).

Our study brought out two different narratives regarding the two types of two-tier provisions considered. Regarding two-tier compensation provisions, the results are mostly as expected and relatively straightforward. This narrative has to do with classic industrial relations features: orbits of comparison, power, and concessions. First, we found that two-tier compensation provisions were less prevalent in urban areas. With globalization, the "new normal" firms located outside of urban areas appear to be concession bargaining, with a particular focus on concessions that reduce labor costs, making the location more favorable to investment in order to maintain jobs and ensure its competitiveness (Murray 2012) relative to other firms in the same orbit (Marginson and Sisson 2004).

As for union capacities and resources, two-tier compensation provisions were less prevalent when the external union bargaining power was greater and when the union had been able to negotiate clauses providing for fulltime union leave. According to these results, we can surmise that a powerless and resourceless union will not be in a good position to resist two-tier provisions. Thus, union power and resources make a difference.

In addition, two-tier compensation provisions were accompanied by other concessions, such as the introduction of work organization flexibility and of not imposing restrictions on outsourcing. This emphasizes that the flexibility sought by the employer is multifaceted, including the flexibility afforded by two-tier provisions and relating to production and work organization (Atkinson 1987). Another interesting finding, although in the opposite direction from what was expected, is that the collective agreements providing for employer contributions to employee benefits also contained more two-tier provisions. We will return to this finding below, which was also found in the case of the third dependent variable.

Moreover, another indicator supporting the argument that two-tier provisions are part of a bundle of union concessions is the significant link found between such provisions and collective agreements of a longer duration, generally considered a major concession by the union (Stieber 1959; Laroche et al. 2014).

The second narrative, based on the results regarding two-tier job security provisions, is more complex and raises several questions. The analysis becomes more complex when we consider the factors related to union capacities and resources. The prevalence of two-tier job security provisions was higher where the power and the resources of unions were greater. This result, which was contrary to expectations, suggests that while more powerful unions have managed to limit gaps related to compensation, they have nevertheless made concessions relating to job security and access to it. Although they have the capacity to resist monetary concessions, as seen in the second regression, unions may see these job security concessions for newly hired employees as a lesser evil since they do not involve cuts in wages or benefits.

Also, the concession indicators associated with two-tier job security provisions were those involving the security of current workers, namely, the presence of an employment protection mechanism and employer contributions to employee benefits. These are unanticipated results though, because contrary to what was expected, the presence of these provisions was linked to

the presence of two-tier job security provisions. In other words, the absence of union concessions (which could be equated with the presence of employer concessions) on these issues was associated with two-tier job security provisions. These results suggest some kind of a trade-off, involving lower access to job security for newly hired employees in exchange for secure employment protection and benefits for more senior workers.

These findings are in line with the results of the first and second regressions regarding the link between the dependent variables and employer contributions to employee benefits. They suggest some kind of an exchange between the union and employer. As pointed out by Townsend and Partridge (1999), two-tier provisions protect the working conditions of the employees in place while facilitating trade union concessions that introduce less advantageous working conditions for newly hired employees. In exchange for concessions related to job security and employer contributions to employee benefits for employees with more seniority, the employer asks the union to make concessions on two-tier provisions aimed at new employees. If concessions are too significant and the chances of gaining concessions on employee benefits for all the workers covered by the bargaining unit are slim, the employer might prefer a strategy that would bring about long-term gains and avoid stirring up anger among workers with more seniority while lowering the risk of a labor conflict, namely, introducing a two-tier provision. By introducing a provision that targets new workers, the employer begins a slow and sure process of reducing labor costs and disengagement with regard to the level of employment, which will be very beneficial in the long term without causing much disruption in the short term.

Moreover, we observed that the prevalence of these provisions was higher in sectors with a high percentage of young workers, suggesting that young workers are the most vulnerable category of workers and the most affected by these provisions that lower job security for newly hired employees. Our results thus confirm the observations reported by others (MacNeil 2013) that two-tier provisions target the most vulnerable workers in the labor market, including young workers, who, until they can form a majority in the bargaining unit, will work to eliminate this form of indirect discrimination depriving them of important rights.

#### Conclusion

To sum up, our findings suggest that the logic underlying the adoption and extension of two-tier provisions is much more complex than was previously thought. Our results bring out contrasting logics and diverse actions and strategies, highlighting the importance of specifying the type of disparity when explaining two-tier provisions. Anecdotal evidence suggests these provisions are negotiated during periods of economic turbulence as the only alternative to job losses and the way to restore the firm's competitiveness. But, our results suggest that the prevalence of these clauses can be explained by other factors. Thus, the adoption and extension of two-tier provisions in collective agreements appear to be motivated more by employer demands for permanent union concessions than by employer demands in response to temporary difficulties caused by economic downturns.

The orbits of comparison also impose certain patterns to be pursued at the bargaining table, and two-tier provisions do not escape this reasoning. Moreover, this study clearly shows that the logic underlying the adoption and extension of these clauses is related to the dynamics between the bargaining parties, their power, and the content of the collective agreement. Thus, our results effectively show that the actors are not simply forced to succumb to the environmental pressures at play but can respond in various ways depending on the context of the workplace influencing them.

These results make it possible to better situate the debate regarding the capacity of unions to truly promote the values of equity and fairness. In line with Chaison's studies (2012) that proposed a rather bleak view of the capacity of unions to make gains through collective bargaining, our findings suggest that the power of employers is so great that they can dictate the content of the collective agreement and no longer need to justify their demands for concessions on the basis of economic difficulties. Unions are therefore forced to negotiate in favor of existing members of the bargaining unit even if this means sacrificing some working conditions for future members. Fighting for members that one does not yet know is not a significant vector of mobilization, even though, in the long term, union life will be negatively affected by these disparities, whether accepted willingly or by force. In fact, recent studies have shown that young workers, targeted by two-tier provisions, have difficulty seeing the usefulness and legitimacy of their union and feel that their interests are not being effectively represented (Dufour-Poirier and Laroche 2015). While this is by no means a simple problem to resolve, union organizations should nevertheless address this issue that is dividing union members and undermining solidarity within the ranks. Indeed, at a time when union organizations are seeking to renew themselves and to integrate the next generation of members, there are strong reasons to deal with the debate over two-tier provisions. As our results suggest, the best way to avoid two-tier provisions is to secure greater bargaining power. Resisting such provisions will encourage the commitment of new workers toward the union, which will then reinforce its bargaining power, which will in turn increase the union's capacity to resist two-tier provisions, and so forth.

Our study certainly could not capture all the subtleties associated with the complex and dynamic social interactions involved in collective bargaining. For this reason, and because of the limitations of the data available to us, the model we constructed represents an oversimplification of these multifaceted concepts and relationships. Moreover, the cross-sectional nature of this study makes it impossible to draw definitive conclusions concerning causality. Also note that several difficult-to-grasp factors were not assessed,

such as the labor relations history, demographics of the members of the local union, and firm-level organizational performance. Despite these limitations, we believe this original research sheds new light on two-tier provisions. Our approach differs from that of previous studies in that we were able to identify the factors explaining the presence of two-tier provisions in a large population of collective agreements and to reveal multiple types of two-tier provisions, showing that the factors influencing them play out in various ways.

Our results raise some questions that merit further investigation. In particular, our understanding of the influence of economic factors on the types of two-tier provisions could be deepened, notably by targeting factors at the firm level. A deeper reflection should also lead to a better understanding of why some powerful and resourceful unions would agree to include two-tier job security provisions in their collective agreements, despite the negative effects that such clauses can have on the internal solidarity among members and their commitment to the union.

More broadly, our study brings out a form of market segmentation within firms that is being formalized in collective agreements. In addition to differentiating between outsiders and insiders, it now appears necessary to distinguish between workers in the primary market based on the date they were hired. With two-tier provisions, newly hired workers become the outsiders of the primary market or the "outsiders of the inside." Thus, by introducing and, in some cases, maintaining through time two-tier provisions, employers have been able to successfully renegotiate the terms of the historically better protected workers' agreements on the primary labor market. Our study shows the circumstances under which collective bargaining can create this marginalization of newly hired workers in the primary labor market, namely, the presence of low union power, pressures from their orbits of comparison, concessionary dynamics and, ironically, collective agreements featuring advantageous working conditions. In such circumstances, the capacity of collective bargaining to protect workers and to ensure equity appears greatly diminished, representing a serious concern from a public policy point of view. Perhaps such a dualization is inevitable under a decentralized regime in which establishment-level bargaining tips the balance of power in favor of the employer, leading to the introduction of measuressuch as two-tier provisions-that increase flexibility while decreasing the security of workers.

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