Just-cause dismissal in an efficiency wage model

Giuseppe Cusin

Department of Economics, University Ca’ Foscari, Fond.ta S. Giobbe, 873, 30121 Venice, Italy.

Abstract
Restrictions on the ability of employers to fire employees are generally blamed for increasing labour costs. This effect on costs is not generally true if firms pay an efficiency wage. Under a rule that protects workers from wrongful dismissals, firms pay a lower wage provided that wages are flexible in the local labour markets. The opposition of employers to just-cause dismissals is a consequence of the legal costs generated by the dismissal rules and wage rigidity that prevents attainment of the optimal wage.

IEL classification: K31, J41

Keywords: Labour Law, Just-cause dismissal, Efficiency wage model

* E-mail address: gcusin@unive.it.
1. Introduction

In most European Countries employment relationships are governed by contracts without a fixed term that do not generally permit the ad nutum dismissal of an employee (OECD, 1999). A firm can fire an employee only if there are valid conditions that can be grouped into two broad categories: the employee has not fulfilled all the terms of the labour contract and the firm has a workers’ redundancy. The negligence of the employee to carry out his tasks is included in the first category. In this article the withdrawal of a firm from a labour contract for this reason is called just-cause dismissal.

When a worker possesses some discretion on carrying out the tasks assigned to him and the employer is not able to monitor the worker’s on-the-job effort continually because it is too expensive, the employee has to receive a wage higher than his opportunity cost, namely an efficiency wage. The aim of this article is to show that, in this case, firms bear lower labour costs by signing contracts without a fixed term that provide for just-cause dismissal. These contracts have to provide for final premium in addition to periodic payment of wages. But the just-cause clause generates additional costs owing to disputes.

These contracts are less expensive than a sequence of temporary contracts. The worker’s ability to obtain a wage higher than the reservation wage and the final premium in the future as well, adds to the periodic efficiency wage and contributes to encouraging employee diligence.

For the duration of employment firms have an incentive not to acknowledge worker productivity and to dismiss employees without paying them the entire compensation agreed to. Workers lose not only their compensation, but also the reliability required to find similar jobs. This “reputation effect” precludes other firms hiring the workers for a wage higher than their reservation wage. Just-cause dismissal, as a clause of a labour

---

1 In the United States labour law does not require justification for dismissal (dismissal at will). Nevertheless, in the last twenty years, the state courts have placed significant limitations on the ability of firms to unilaterally terminate a labour contract at any time, for any reason, and without penalty. In a great number of states the courts have recognised many exceptions to the at-will rule by giving workers the opportunity to sue for unjustified dismissal even in absence of an explicit contractual clause (Miles, 2000). In European countries and in the United States employment security is justified mainly by a desire to protect civil rights, so as to prevent that dismissal occurs because of union activity by employees, because of their refusal to commit illegal acts, or because of employees’ objections to a firm’s observance of the rules concerning environment preservation and workers’ safety.

2 Other cases in which an employee does not fulfil the terms of labour contract are, for instance, the inability, such as insufficient knowledge, and the misconduct of a worker, such as violation of loyalty.
contract or as a feature of labour legislation, protects employees from this sort of dishonesty of firms\(^3\).

Just-cause dismissal as a feature of labour legislation is the best way to safeguard workers, and permits to firms to pay the lowest compensation. This feature is effective only if wrongful dismissal involves a penalty for the firm and an indemnity to the worker for the damages suffered. These conditions are satisfied both by the reinstatement of dismissed workers in their former jobs and by compensating them for the cost of finding a similar job. The first solution is less expensive for firms.

Firms may oppose just-cause dismissal because it increases litigation with employees. The workers dismissed justifiably can start legal proceedings against firms and this generates costs that otherwise would not exist. Moreover, if the wages are downwardly rigid firms often cannot lower these to their optimal level, and the cost of disputes can predominate the wage reductions allowed by just-cause dismissal.

The basic problem is to find the minimum wage that induces employees to work hard in each period. The problem is worked out in a model that is based on an expected working lifetime of a limited length and considers the reputation effect of dismissal\(^4\).

Levine (1989) studies just-cause employment policies using a version of the Shapiro and Stiglitz model (1984). These authors suppose that a working lifetime is not limited and rules out a loss of reputation for the worker being dismissed. So the incentive to wrongfully dismiss an employee is much reduced, and the damage of the worker dismissed is also smaller\(^5\). In the Shapiro and Stiglitz model workers are wrongfully fired only by mistake. This is the case studied by Levine. Unjustified dismissals generate increased labour costs because they add to the number of vacancies and the probability of finding a job in the same labour market. This makes it less expensive not to work hard and increases the efficiency wage. Any employment policy “that moves toward just cause …will increase efficiency” of the competitive equilibrium (Levine, 1989, p. 905).

---

\(^3\) The view that firms have an incentive to be dishonest with their workers about their productivity is found in economic literature; for instance, see Lazear (1995, pp. 105, 113 and passim).

\(^4\) A similar model is used by Becker and Stigler (1974) to inquire into how to prevent law enforcement officers from accepting bribes.

\(^5\) In the Shapiro and Stiglitz model the firm does not have to pay a final premium, and a sequence of subsequent temporary contracts is as expensive as a contract without a fixed term. At the beginning of every working period the firm is indifferent to dismissing an employee and to hiring a different worker or to continuing the employment relationship begun in the previous period. The worker justly dismissed may find a similar job, though with a probability is less than one. The Shapiro and Stiglitz assumptions are used to show that efficiency wages are a cause of unemployment.
Carter and De Lancey (1997) also consider the effects of a just-cause employment law in a version of the Shapiro and Stiglitz model. In their model a just-cause law raises the average welfare of diligent workers and does not change profits.\(^6\)

The remainder of the paper is organized as follows. Sections 2 and 3 present the basic model. The efficiency wage, the final premium and some of their implications are derived. Section 4 shows that contracts without a fixed term are less expensive than temporary contracts. In section 5 the benefits and costs of just-cause dismissal and the varieties of this kind protection are discussed. Section 6 explores the effects of minimum wages on the incentives for firms to accept just-cause dismissal.

2. The basic framework

In the economy there are many different labour markets based on the skills required, job characteristics and geographic location. Nominal wages are flexible. I consider a single labour market characterized by the fact that the firms can only measure total production, but cannot observe workers’ on-the-job effort, because it is too expensive continually to monitor employees. Workers can choose not to work hard; consequently the firm has to pay an efficiency wage to encourage its employees to make the required effort and occasionally to monitor them.

Firms employ workers with identical skills, and actual labour is the only input. All firms ask for the same effort. Every firm has complete information about the wages paid by the other firms in the same market. A firm pays its employees the same wage and competes with other firms for workers who will accept the lowest wage. On a given date a firm formulates a production plan for a horizon that encompass \(N\) periods.

A firm and a worker draw up an employment contract without a fixed term. The contract determines the worker’s effort. If the employee does not achieve the agreed level of effort, he is fired. The worker can terminate the contract at any time, but a change of occupation is expensive: it involves mobility costs, the costs of looking for a new job and, if necessary, of changing location.\(^7\)

\(^6\) Carter and De Lancey consider a one period model and assume that the firms hire two types of workers. The effort level of type 1 (diligent) worker depends on the wage. Type 2 workers always choose not to work hard. The two types of workers appear identical before hiring. The choice variables of a firm are the number of hired workers and an evidence rule of worker effort.

\(^7\) The cost of mobility includes the wages lost during the job search. Because of the efficiency wage paid in the labour market, a few workers may not find a job. In this case the cost of mobility is high.
The firm occasionally monitors employees to see if they are working hard or not. Workers who do not work hard are not certain to be detected, and they can continue in their jobs. An employee who has been working hard can be dismissed without getting his due remuneration, if the firm claims he has not been diligent. Workers dismissed for not working hard do not find jobs similar to one they have lost.\(^8\)

In the market the workers have identical skills and plan over a horizon containing \(T\) (lesser than \(N\)) working periods. Every worker can find a job in a different labour market. In this job his net income in one period is \(\beta\) that is evaluated after having subtracted the value of his effort on the job. The price level is supposed to equal one, so it is not necessary to distinguish between nominal values and real values. For simplicity, we assume that workers are risk neutral. The workers’ preferences are identical in every period and the indirect utility function of a worker is

\[
U = y - e,
\]

where \(y\) is income and \(e\) is monetary value of the effort on the job. The worker only receives an income from his labour.

For a given date an employee chooses an identical level of effort for the remainder of his expected working lifetime. The worker can provide either a minimal effort \((e = 0)\), and he is not productive, or the required level of effort \((e = e_1)\), and he is productive. In each period, an unproductive employee has a probability \(q_s\) of being detected and dismissed; a productive employee has a probability \(q_n\) of being unjustly dismissed. An obvious assumption is \(q_s > q_n\).

An employee chooses the level of effort that maximizes his expected working lifetime utility with a discount rate of \(r\). A dismissed worker loses the reputation necessary to find a job like the one lost and must accept a job with the net income \(\beta\). He also loses his remuneration for the current work period but receives the entire wage in the new job. His value of effort \(e\) is weighted for the whole period.\(^9\)

### 3. The efficiency wage

---

\(^8\) A firm that is not reliable might alter its subsequent contracts with other workers. But there is no empirical evidence that this “reputation effect” compels a firm to fulfil its labour contract. On the contrary, frequent job turnover by workers has negative effects on their subsequent wages. There is a lot of empirical evidence on this, mostly for the USA (Aruvalpalam, Gregg, Gregory, 2001).

\(^9\) The damage of unjustified dismissal is overvalued. This does not alter the results. However, there is not a simple and satisfactory solution for this kind of assumptions.
The problem is to find the minimum wage an employee can be paid in each period that induces him to work hard. The minimum wage is assumed to be the wage that makes an employee indifferent to working hard or not. Let $v_{en}(t)$ and $v_{es}(t)$ be the expected working lifetime utility of an employee at the beginning of the working period $t$, the first for the diligent and the second for the negligent. The expected working lifetime utility of a worker dismissed before the $t$ period is labelled $v_u(t)$. The incomes refer to the beginning of each period. These income stream values are given by

\begin{align}
  v_{en}(t) &= (1 - q_n)w_t - e_1 + q_d\beta + (1 + r)^{-1}[(1 - q_n)v_{en}(t + 1) + q_nv_u(t + 1)], \\
  v_{es}(t) &= (1 - q_s)w_t + q_s\beta + (1 + r)^{-1}[(1 - q_s)v_{es}(t + 1) + q_sv_u(t + 1)], \\
  v_u(t) &= \beta[1 + (1 + r)^{-1} + \ldots + (1 + r)^{-(T-t)}],
\end{align}

$t = 1, 2, \ldots, T$; $w_t$ is the wage for the working period $t$. The minimum wage in each period satisfies the condition

$$v_{en}(t) = v_{es}(t).$$

To compute the minimum wage, it is worthwhile to start from the final period of employment and work backwards in time. The employee plans to quit the job at the end of the period $T$. At the beginning of period $T$ the expected income streams are

\begin{align}
  v_{en}(T) &= (1 - q_n)w_T - e_1 + q_d\beta, \\
  v_{es}(T) &= (1 - q_s)w_T + q_s\beta.
\end{align}

Thus, equation (4) implies

$$e_1 = (q_s - q_n)(w_T - \beta);$$

$e_1$ is the cost of working hard and $(q_s - q_n)(w_T - \beta)$ is the expected cost of not working hard. The minimum wage for the period $T$ is

$$w_T = \beta + e_1(q_s - q_n)^{-1}.$$

The employee is paid the alternative income $\beta$ plus a reward for giving up the advantage of not working hard.

If the employee does not lose the job, in period $T-1$ he receives the wage and may obtain a reward for the diligent behaviour in the following period. Consequently, the firm can reduce the wage for period $T-1$ without tempting the worker to be negligent. The present value of net benefit for working hard in period $T$ is deducted from $w_T$ in order to compute $w_{T-1}$:

$$w_{T-1} = w_T - (1 + r)^{-1}[(1 - q_n)(w_T - \beta) - e_1].$$
Rearranging terms one can write
\[ w_{T-1} = \beta + e_1 (r + q_s) [(1 + r) (q_s - q_n)]^{-1}. \]
Likewise, by continuing to go backwards in time one can derive the general expression of the efficiency wage:
\[ w_t = \beta + e_1 (r + q_s) [(1 + r) (q_s - q_n)]^{-1}, \quad t = 1, 2, ..., T - 1. \]
The efficiency wage is the same in each period before the last, when the employee is paid a larger wage\(^{11}\).

In each working period an employee receives a wage higher than his opportunity cost \((w_t > \beta + e_1)\); the difference between these two values before the last period is
\[ p = e_1 (1 + r)^{-1} [(r + q_n) (q_s - q_n)^{-1} - r]. \]
The firm pays a periodic premium in addition to the opportunity cost to encourage the employee to behave diligently. In the last working period the difference \((F)\) between \(w_T\) and \(w_{T-1}\) can be considered a final premium:
\[ F = e_1 (1 - q_s) [(1 + r) (q_s - q_n)]^{-1}. \]
The final premium matures at the end of the first period but payment is deferred until the employee quits the firm. The periodic premium can be divided in two parts: \(p = p_r + p_w\), where \(p_r = rF\). The excess of the efficiency wage over the opportunity cost includes the forgone interest on the deferred final premium \((p_r)\), and only the remaining part \((p_w)\) is the “true” reward for diligent behaviour.

The efficiency wage and the final premium decrease when the probability of wrongful dismissal is reduced, and fall to the minimum levels for \(q_n = 0\). The efficiency wage is higher the higher the discount rate of the worker’s future incomes is. A rise of this rate lowers the final premium. The total reward received in the last period does not depend on the discount rate. Finally, the efficiency wage and the final premium are higher the higher the alternative net income \(\beta\) and the level of effort required are.

4. Labour contracts without a fixed term

One may think that at the beginning of any working period, except the last, the worker is employed under a fixed-term contract of one period. If the employee has not been

\(^{10}\) Remember that the incomes refer to the beginning of the period, even if they are received later in the period.

\(^{11}\) Also, condition (5) can be obtained by letting \(v_{es}(t) = v_{es}(t)\) and remembering that the firm pays the minimum wage after period \(t\).
wrongfully dismissed and he has worked hard, at the end of the period he can choose to quit the job or renew the contract. In the first case, he receives the efficiency wage and the final premium. In the second case, the payment of the final premium is postponed until the following period and he receives the efficiency wage only, but he can also receive the efficiency wage in the following period.

This choice is repeated at the end of each period until the period $T$ when the employee quits the job. If the employee receives the efficiency wage in each period, he has an incentive to renew the contract until the last period. In other firms where his skills are in demand he could obtain the same wage (with the final premium) but he would suffer a loss because of the mobility of changing jobs. The cost of mobility has to be larger than the final premium, on the contrary the worker would gain by changing jobs at the end of each period.

The firm increases its profit if it signs a long-term contract instead of a short-term contract. At the termination date of a short-time contract the firm is obliged to pay the final premium that can be deferred only by renewing the contract. The cost of a sequence of $T$ short-term contracts is higher than the cost of a long-term contract that lasts $T$ periods. An employment contract without a fixed term can be considered the employment contract with the longest possible duration.

In the course of the employment contract a firm gains if it dismisses the employee on the pretext of negligence and so does not pay him the wages owed or the final premium\textsuperscript{12}. The firm may have a labour redundancy; and so the vacancy does not have to be filled and the firm is able to receive the maximum gain from the unjustified dismissal. But if the vacancy has to be filled, the firm has to sustain the cost of recruiting a new employee. In this case dismissal is profitable provided that the recruitment cost is lower than the final premium plus the wages owed\textsuperscript{13}. Therefore, the incentive to fire an employee without acknowledging the work he has done is greater when the firm has a redundancy.

Because of the firm’s opportunistic behaviour, the employee suffers a loss made up of three components: the wage not paid for his services performed, the final premium and

\textsuperscript{12} The model does not take into account all the benefits that a worker expects from an employment relationship and he loses for wrongful dismissal. These benefits include career progression and rewards not provided by the contract, but paid at the employer discretion or according to custom. This increases the gain that a firm obtains by opportunistic behaviour.

\textsuperscript{13} Workers with poor skills generally satisfy this condition.
the opportunity to receive a reward for diligent work \( (p_w) \) in the course of later periods\(^{14}\).

This last occurs because of the loss of reputation that precludes the worker from filling a vacancy similar to which of the lost job.

The worker dismissed for poor performance can raise two objections: the non-fulfilment of the labour contract and wrongful dismissal. In the first case he can only demand the wages he had already earned but had not been paid, whereas the second allows him also to demand damages caused by the loss of the job. The dismissal \textit{ad nutum} does not preclude the objection of the non-fulfilment of the labour contract, but this is not sufficient to prevent the firm from being opportunistic and the protection of the employee is incomplete. The recognition of employee rights would at most require the payment of rewards explicitly provided by the labour contract. The employee would not be compensated of his whole loss since he has to sustain the mobility cost of finding a job similar to his previous one.

5. Just-cause dismissal

If the value attributed by the worker to the probability of an unjustified dismissal diminishes, the firm can pay a smaller efficiency wage and a smaller final premium. In absence of labour law on dismissals for poor performance, a firm will gain by inserting a clause that determines the reasons why a worker can be fired in the labour contract\(^{15}\). To be effective the clause must define the evidence required for dismissal has to be clear to a third party. The formal procedure for monitoring worker performance has to be agreed upon in the contract. The clause has to permit to complain to a tribunal. If the dismissal is determined to be wrongful, the firm must pay a penalty and the worker must be compensated for all damages suffered\(^{16}\).

The penalty inflicted on the employer and the worker’s compensation are essential in order for the clause on the worker’s protection to be effective. The penalty is the cost

\(^{14}\) Note 12 points out other losses by the worker due to wrongful dismissal.

\(^{15}\) Just-cause dismissal requires that a worker be employed on a trial basis to evaluate his reliability before drawing up an employment contract without a fixed term. A firm often employs a worker through a temporary labour contract and only afterwards signs a long-period labour contract. In the USA the findings of exceptions to dismissal at will by the courts has caused an increase of temporary labour contracts (Miles, 2000, p. 76).

\(^{16}\) I assume that the firm’s decision to dismiss involves the suspension of an employee from his job. The employee could continue to work until the separation becomes definitive. In Germany the unfair dismissal regulation establishes that “the employment relationship continues until the court has settled the conflict” (Birk, 1993, p. 250).
that the firm, in addition to the payment of the wages owed the employee has to bear when an unfair dismissal is recognized. Without the penalty the clause is ineffective, because the unjustified nullification of the contract would not include a loss for the firm. The worker’s compensation has to be at least equal to the employer’s loss; otherwise the just-cause clause does not protect the worker entirely.

Two basic types of employee protection satisfy the two conditions. The first type of employment protection is constituted by the payment of wage credits (earned wages and wages lost during forced absence from the work) and the reinstatement of the dismissed worker in his old job. In this case the payment of final premium is postponed until the employee quits his job. If one supposes that the firm at once fills the vacancy caused by the dismissal, the penalty for the firm is constituted by the wages paid to the worker employed until the dispute is resolved.

The second type of employment protection consists of the payment of the wage credits, including the final premium, in addition to an indemnity for mobility costs. This last indemnity compensates the worker for not being reinstated in his old job. The indemnity must take into consideration the individual reemployment probability of the worker. The penalty for the firm is constituted by the wages paid for the forced inactivity of the worker and by the compensation paid for mobility costs. The second type of protection presupposes that the favourable resolution of dispute for the worker is sufficient to restore his reputation and so he can find a similar job. This type of protection is more expensive for the firm than the first because the penalty is increased by the reimbursement of mobility costs.

With just-cause dismissal the firm must bear some costs to improve the monitoring of employees. The effectiveness of the internal dismissal procedure determines the firm’s ability to catch employees who are really negligent and the length of subsequent litigation. To finalize a separation, the firm also has to bear the expense of a lawyer and legal proceedings. The legal costs depend on the internal dismissal procedure. The

---

17 The argument overlooks the legal costs that a worker must sustain for his right is recognized. These expenses can be considerable; they depend on the effectiveness of judicial remedies. The adhesion of the worker to a union often limits his legal costs.

18 If the vacancy is not filled the penalty is a production loss. When the firm fires the employee for negligence but it has a redundancy, the penalty is the wages paid for the forced inactivity of the worker.
inefficiency of monitoring increases the number of disputes, and can force a firm to retain a worker, and to pay the penalty, even when dismissal is justified\textsuperscript{19}.

The just-cause dismissal reduces the wages that a firm has to pay to an employee over his working life, but it generates an additional cost for disputes connected to the dismissal procedure. If the wage is flexible, for a firm the advantage of a just-cause dismissal clause depends on the comparison between the reduction in wages when a just-cause clause is included and legal costs\textsuperscript{20}.

To provide the most efficient level of employment protection is a dismissal law or an agreement between firms and workers better? A worker is rarely able to understand whether the rules on dismissal provided by a labour contract protect him enough. Furthermore, employers collect the evidence on negligence and may easily manipulate the monitoring of performance. Working conditions, monitoring methods and causes of dismissal vary among the firms. It is difficult for a court to decide uniformly on the basis of labour contracts with different dismissal rules. For these reasons, without a dismissal law workers are not completely protected against opportunistic behaviour by firms. Only labour law that defends the workers against unfair dismissal significantly reduces the subjective evaluation of probability of a wrongful dismissal and so reduces the wage firms must pay.

In order to consider the differences in working conditions and the difficulty of obtaining suitable proof, the dismissal procedure should be based on three subsequent stages. After the decision to dismiss, the question should be submitted to a Work Council that hears the Workers’ representatives. The Work Council, after having considered and integrated the evidence furnished by the firm, gives its opinion on the legitimacy of the dismissal. Only if one of the parties does not accept this opinion, does it go to court. This procedure allows a more careful consideration of the question, leads to broader consent to the firm decision and reduces the amount of litigation that goes before a court. In Germany one makes use of a similar procedure (Birk, 1993).

\textsuperscript{19} If the evidence of negligence is poor, it is easier for the employee to oppose dismissal.

\textsuperscript{20} It is difficult to separate the true legal costs from the monitoring cost necessary to verify a worker effort. Worker monitoring must be able to furnish proof of the negligence that can be used in front of the third party that has to resolve the dispute. It will probably be necessary to establish a structure that collects all the needed information about every employee. The cost of such a structure is a quasi-fixed cost. Therefore, dispute costs are only partially variable.
6. Wage rigidity and just-cause dismissal

Employers often oppose a just-cause dismissal law and, in its absence, they rarely agree to a labour contract that regulates dismissals. How is this explained? One reason are the costs of disputes generated by a rule on dismissals. But the major reason is found in the imposition of a minimum wage above the equilibrium wage.

A firm accepts just-cause dismissal in exchange for a reduction in labour costs. But a minimum wage prevents the attainment of the optimal wage level, especially for unskilled workers that can be easily replaced and, therefore, are more exposed to unjustified dismissal. With an effective minimum wage, in every working period the wage paid is higher than the efficiency wage. In the last period, so that the worker will make the required effort, the firm has to pay him a total reward, efficiency wage plus final premium, irrespective of the wages paid in the previous periods. In spite of the fact that in the periods preceding the last the firm paid a wage higher than the efficiency wage, the final premium has to be paid in full. When there is a minimum wage the current value of the wages that the firm expects to pay during the T periods of the worker’s employment is greater than the current value of its optimal wages.

Minimum wages are a cause of involuntary unemployment, at least in some local labour markets. This should reduce the efficiency wage for the firm because unemployment decreases the expected income that an employee could get elsewhere because of the greater difficulty in finding another job. But the last effect is not real if the firm cannot reduce the wage to the optimal level.

In the labour market considered in this paper, the minimum wage causes a contraction of employment if this wage is higher than the efficiency wage. Consequently an employee (dismissed or who quits) does not easily find a similar job. This has two effects: the compensation for the mobility costs of the worker wrongly dismissed increases, and the costs of disputes increase as well. This latter costs rise because the risk of remain unemployed drives the (rightly or wrongly) dismissed worker to oppose dismissal with a greater determination. This increases the average cost of a worker and becomes an independent cause of unemployment.

In conclusion just-cause dismissal can reduce the labour costs and increase employment, if wages are flexible. The wage premium above the opportunity cost of the

---

21 A rule on just-cause dismissal may be introduced in labour contracts because of unions’ pressure.
worker is a wage differential that compensates the worker reliability, and it is not a true cause of unemployment because the worker can always find another job in a different labour market. On the contrary, when there is an effective minimum wage the dismissal law prevents the reduction of the wage to the optimal level and causes an increase in disputes. This increases the labour costs and by itself generates unemployment.

References