# THE SIGNIFICANCE OF PART-TIME EMPLOYMENT IN THE CONTEXT OF LABOUR-MARKET ADJUSTMENT

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https://doi.org/10.15017/4493034

出版情報：經濟學研究. 57 (5/6), pp.21-32, 1992-09-10. 九州大学経済学会
バージョン：
権利関係：

# THE SIGNIFICANCE OF PART-TIME EMPLOYMENT IN THE CONTEXT OF LABOUR-MARKET ADJUSTMENT

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**ABSTRACT**

This paper explores the way in which wages and employment are determined in the economy where there are two types of employment, regarded as the heterogenous inputs: full-time workers who organize monopoly unions and part-time workers who are not organized. A sufficient condition for the firm to employ the part-timer is that there is flexible working hours for the full-timer. If the distinctive inputs are substitutes and the part-timer's wage rate are constant, it is never optimal for the firm to reduce the full-timers in the recession. Hence, unlike full-time employment, the part-time employment is likely to be adjusted with higher flexibility. The analysis may help to affirm that we should have paid more attention to the siginificant role of part-time employment in the economy.

## I. Introduction

The purpose of this study is to offer a possible microeconomic foundation for part-time employment in a wage bargaining model.

Many economists have tried to explain the problem of unemployment and showed that the causes of unemployment come from the supply-side in the labour contract theory (see e. g., Azariadis (1975) and Baily (1974)) as well as from the demand-side in line with Keynes (1936). Although the model developed here focuses mainly on the demand-side factors by which the level of employment is bound to fluctuate, it includes an important point which has been ignored hitherto: part-time employment. The level of part-time employment has increased rapidly, especially since 1970 and it has become an indispensable component of total employment in the advanced economies. It is also notable that the demand for part-time jobs has been more elastic than that for full-time jobs. Therefore it would be misleading to analyze the problem of

unemployment without mentioning the difference between full- and part-time employment.[1] In spite of the importance of these questions, little attention has been paid to this distinction in connection with the unemployment problem. The present study investigates the consequences of introducing the distinction into a wage bargaining model.

It should be noted that any firm can choose an optimal mix of full- and part-time employees. Although they are classified only by the length of the working week (for example, in Japan, part-time workers are those who actually worked less than 35 hours during the reference week), it is not justified to accept that these two factors are completely substitutable. In fact, full-time workers usually receive job training and they benefit from lifetime employment systems whereas most part-time workers, just like seasonal workers, are probationary, unskilled and have little leverage to demand job security. Moreover, as wages are structured to the advantage of workers with seniority, particularly in Japan, there is a large wage discrepancy between full- and part-time employment. Therefore it is likely for a firm to treat full- and part-time workers as heterogeneous input factors.[2]

The cost of labour related to part-time employment can be a function of working hours while the cost of the full-time employees can be related to two separate factors; the number of employees and the working hours. As for full-time employment, Plessner and Yitzhaki (1983), for example, have looked at the impact of companies' organizational structures on the cost of labour and have analysed employment adjustment costs in the employer's profit function. Calmfors (1985), Hoel and Vale (1986), Booth and Schianterelli (1988), Toedter (1988), though their main concern was worksharing in Europe, have looked at the effect of a change in working hours on the labour cost as a whole. The model which follows is an extension of their works taking part-time employment into consideration.

The plan of the paper is as follows: In the next section we outline and discuss the basic model. In Section III, we look at the case where the wage rate of part-time workers is fixed under the minimum wage system. In Section IV, the case where the part-time worker's wages are determined in a competitive labour market is discussed. Finally, in Section V, we discuss further considerations and give conclusions.

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1) Although the definition of part-time workers differs from nation to nation, it is possible to say that the proportion of part-time workers has increased in most OECD countries, e. g. from 7.9% in 1973 to 11.7% in 1986 in Japan. It is also notable that in general, about 80% of part-timers are women. However, there is a large divergence in the ratio of part-time workers, from 1 : 20 in Italy to 1 : 4 in Denmark. See eg. Fallon and Verry (1988) and Blyton (1989).

2) In general, a drastic change in part-time working is attributable to the growth in service sector. This teaches us that the importance in part-time working may be different among industy sectors. However, this subject is beyond the scope of this paper.

## II. The Model

Suppose there are two types of workers: full-time and part-time, and the representative firm regards them as heterogenous input factors for producing output. Our assumption that we assume about the input of labour force are as follows:

(i) The total labour service ($L^f$) of full-time workers is defined by

$$L^f = nh, \tag{1}$$

where $n$ represents the number of workers and $h$ denotes the average number of working hours per worker. The labour costs of full-time workers include the non-wage as well as the wage labour costs. The wage labour costs are related to the labour services in terms of the number of working hours. The non-wage labour costs consist of hiring and training costs and employee carrying costs and, unlike the wage labour costs, are related to the number of full-time employees. As discussed by Plessner and Yitzhaki (1983), whether $n$ and $h$ are substitutes or complements depends on the structure of the non-wage labour costs, in particular the employee carrying costs. The firm incurs the employee carrying costs, including fringe benefits such as company-built recreational or health facilities, and dispensation with management activities, as recurring and ordinary expenditures. Hence, all labour costs are given by

$$nhw + c, \tag{2}$$

where $w$ represents the hourly wage costs and $c$ denotes the non-wage labour costs. The hourly wage costs are assumed to be an increasing function of working hours as given by

$$w = w(h),\ w'(h) > 0.^{3)} \tag{3}$$

As for the non-wage labour costs, we assume

$$c = c(n),\ c' > 0. \tag{4}$$

A specific assumption (proposed by Plessner and Yitzhaki, 1983) on the sign of $c''(n)$ should be given a priori as $c'' > 0$, the case of non-decreasing marginal non-wage labour costs. In this model we assume $c''' = 0$.[4] (For example, this is the case when the non-wage labour cost is a quadratic function of $n$.)

(ii) As far as part-time workers are concerned, it would seem that, in reality, their hourly wage rate is not related to working hours. Moreover, the hiring conditions are notably inferior

3) In reality, it must be a step function. For example, in Japan, overtime pay is 25% greater than a normal hourly wage. Therefore, eq. (3) is an approximate to reality. Moreover, it should be noted that the basic working hours are significantly extended by the practice of overtime working. For example, the proportion of overtime in Japan was about 8% in 1986.

4) It indicates the case where the marginal non-wage labour cost is linear. Although it is slightly complicated, it is not very difficult to prove that the results derived from the system (15b)-(18b) can be stand even when c''' is positive.

to full-time employment and there is negligible expenditure on the non-wage labour costs of part-time workers. Therefore labour costs of part-time employment can be written simply as

$$w^p t, \tag{5}$$

where $w^p$ and $t$ denote the part-time workers' hourly wage and the total number of working hours, respectively.

(iii) All the full-time workers are assumed to be union members but the part-time workers are not. In attempting to model the bargaining process, we encounter what appear to be the two main models of trade union: the monopoly union model and the efficient bargaining model. In the efficient bargaining model, both the wage rate and the employment level are determined so as to maximize joint returns of the firm and the union (see McDonald and Solow, 1981), while employment is determined unilaterally by the firm and the wage rate is determined unilaterally by the trade union in the monopoly union model (see Oswald, 1985). As Calmfors (1985) pointed out, the monopoly union model is simple but may be regarded as a reasonable explanation of the wage formation process. The trade union has a standard utility function of the form

$$U = U((w-w^p)h,\ h,\ n),\ U_1>0,\ U_2<0,\ U_3>0, \tag{6}$$

so that if the difference in wages between full- and part-time workers becomes greater, the union's utility will tend to increase.

(iv) Part-time workers are assumed to be selfish and face no employment risk. Their individual labour supply schedule ($t^s$) is given as

$$t^s = t^s(w^p),\ t^{s\prime}\geqq 0,\ t^{s\prime}\to 0 \text{ for } t^s\to t^*, \tag{7}$$

where $t^*$ is a maximum level of working hours (e. g., 35 hours per week in Japan). Employees working more than 35 hours a week are considered to be full-time workers. If the labour supply is perfectly elastic for $w^p = w^{p*}$, then $t^{s\prime}(w^{p*})=0$. Suppose part-time workers are homogeneous so that eq. (7) also represents the aggregate supply of part-time workers. A competitive labour market for part-time employment assures an equilibrium given by

$$t = t^s. \tag{8}$$

A representative firm produces a homogeneous output according to the Cobb-Douglas production function

$$Y = A(nh)^\alpha t^\beta,\ A>0;const.0<\alpha,\ \beta<1. \tag{9}$$

In terms of the productivity of full-time employment, eq. (9) shows no difference in marginal products between the workforce and the number of working hours. As we hold capital constant in the short-run, capital is not included in eq. (9) explicitly and we assume there is no capital cost. Hence $\alpha+\beta$ is equal to unity.[5)]

5) If the capital cost is positive and its share relative to output is $\gamma$ which is assumed to be constant, then $\alpha+\beta$ is equal to $1-\gamma$.

Suppose demand is always deficient and there is Keynesian unemployment. The following demand constraint obtains:

$$pY = G, \tag{10}$$

where $p$ denotes the given price and $G$ represents the nominal demand assumed to be the parameter.

Profit ($\Pi$) is usually defined by

$$\Pi = G-(w(h)hn+w^pt)-c(n), \tag{11}$$

where the second term represents the total wage labour costs and the third term denotes the non-wage labour costs of full-time employment. Maximizing profit with respect to the number of full-time workers and the total number of working hours of part-time workers yields

$$\frac{\partial \pi}{\partial n} = \frac{\alpha G}{n} - w(h)h - c'(n) = 0, \tag{12}$$

and

$$\frac{\partial \pi}{\partial t} = \frac{\beta G}{t} - w^p = 0. \tag{13}$$

Eq. (13) shows that, at the optimum, $\beta$ is the part-time worker's share of the firm's output. Moreover, for the optimality with respect to the full-time worker's working hours, the first order condition is

$$\frac{\partial \pi}{\partial h} = \frac{\alpha G}{h} - w(h)n(1+\varepsilon) = 0, \tag{14}$$

where $\varepsilon( = w'h/w > 0)$ denotes the working hours' elasticity of wages.

It is worth assessing the simplest case in which the model is assumed to be based on a fixed number of working hours of full-time workers and on the constant wages of part-time workers. Assuming $h$ and $w^p$ to be constant, by eqs. (12) and (13), we obtain

$$\Phi(n, t; G, h, w^p) = (G-tw^p) - w(h)hn - c'n = 0. \tag{15}$$

This produces

$$\frac{dt}{dn} = \frac{w(h)h + c'(1-\eta(c'; n))}{w^p}, \tag{16}$$

where $\eta(c'; n)$, defined by $-c''n/c'$, represents the elasticity of the marginal non-wage labour costs with respect to the number of full-time employees. When $c''$ is positive or equal to zero, the sign of eq. (16) should be negative, meaning that increasing the number of full-time workers can be substituted for a reduction of the level of part-time workers if the firm produces the same output as before. Therefore, the two factors, i. e., full- and part-time workers, are substitutes.

The monopoly union faces a problem, which may be written as:

$$\text{Max}_{(n)}\ U \text{ subject to eq. (15) for given } G,\ h \text{ and } w^p.$$

In solving this problem of the $n-t$ space, it is easy to recognise that there is no interior solution

if full-time employees are substitutable for part-time workers. Thus, we obtain the first result.

**Result 1.** *When two input goods, full-time workers and part-time workers, are substitutes for producing a given level of output, no part-time workers are employed at the firm if both the length of the workday of full-time workers and part-time workers' wages remains unchanged.*

The intuitive content of this result is that substitution between the number of workers and the number of hours worked in full-time employment is essential to assure that part-time workers become an indispensable means of production.

## Ⅲ. A Model with Variable Working Hours

Assume the simplest form of union behaviour : a monopoly union. We shall look at the case where the wage level of part-time workers is fixed by the institutional factors, such as the minimum wage system, irrespective of the demand-supply condition of the labour market. The working time of full-time workers here is assumed to be variable.

From eqs. (12) and (14), the two optimum conditions concerning full-time employment reduce simply to

$$\Psi(n,\ h) = w(h)h\varepsilon - c'(n) = 0. \tag{17}$$

If working time is taken as endogenous for the monopoly union, the trade union can choose the wage, and hence choose the working hours, that maximize its utility given by eq. (6) subject to eq. (17). The first order condition becomes

$$\chi(n,\ h\,;\ w^p) = \left[(1+\varepsilon)w(h) - w^p\right] - MRS_{12} + \frac{\varepsilon(1+\varepsilon)w(h)}{c''(n)} MRS_{13} = 0, \tag{18}$$

where $MRS_{12}(\ = -U_2/U_1)$ is the marginal rate of substitution between wages and working hours, and $MRS_{13}(\ = U_3/U_1)$ is that between wages and full-time workers, i. e., union size. For simplicity, we shall assume that these $MRS$' s are constant.

From eq. (17), we obtain

$$\frac{dh}{dn} = \frac{c''(n)}{\varepsilon(1+\varepsilon)w(h)} \gtreqless 0. \tag{19}$$

As far as full-time employment is concerned, it should be noted that even if hours of work and workers seem to be perfect substitutes as shown in the production function eq. (9) and, even if this naturally results in $dh/dn < 0$, the opposite sign pattern may occur in $dh/dn$ due to the non-wage labour cost incurred by the firm. Eq. (19) proves this. It is clear that $dh/dn = 0$ if $c'' = 0$. This means that only a change in the number of full-time workers can occur and the workday remains constant. Therefore, this case is identical with what **Result 1** suggests. Hereafter we shall deal with only the case of $c'' > 0$. Moreover, it is also notable that the marginal rate of technical

substitution between hours of work and workers depends upon the working hours' elasticity of wages ($\varepsilon$). If $\varepsilon \to 0$, then $dh/dn$ tends to infinity, which implies that there is no employment adjustment by reducing (or increasing) the number of full-time workers. This is the case in the economy where hourly wages do not change with the number of actual hours worked.

As for part-time employment, eqs. (15) and (17) produce

$$\beta(n\,;\,G) = 1 - \frac{(1+\varepsilon)c'(n)n}{\varepsilon G} \tag{20}$$

It can clearly be shown that $\beta_G > 0$ but the sign of $\beta_n$ (which indicates whether or not part-time workers are substitutable for full-time workers) is not fixed. By differentiating eq. (20) with respect to $n$, we obtain

$$\beta_n = -c'(n)\left[1-\eta(c'\,;\,n)\right]\frac{1+\varepsilon}{\varepsilon G} < 0.$$

Eqs. (20) and (21) have a notable implication that the part-time portion of the work force is bound to change in the process of economic growth.

To summarize the system for $n$, $h$ and $t$, we shall rewrite eq. (15) and take eqs. (17) and (18) into consideration as well. Together they yield the following simultaneous equations:

$$\Phi(n,\ h,\ t\,;\,G,\ w^p) = 0, \tag{15a}$$

$$\Psi(n,\ h) = 0, \tag{17a}$$

$$\chi(n,\ h;w^p) = 0. \tag{18a}$$

The system (15a)−(18a) has some distinct implications as follows:

a) Once the wage rate of part-time employment is given, working hours and workers of full-time employment are determined through bargaining between the trade union and the firm.

b) There is no impact of a change in the demand level on the optimal bargaining values of $n$ and $h$ because the subsystem composed of eqs. (17a) and (18a) is separable from eq. (15a). A change in the demand level can affect only the optimal level of part-time employment.

By applying the comparative statics analysis to the system, we obtain

$$\frac{dn}{dw^p} = \frac{\Phi_t \Psi_h \chi_{w^p}}{D} > 0, \tag{22}$$

$$\frac{dh}{dw^p} = -\frac{\Phi_t \Psi_n \chi_{w^p}}{D} > 0, \tag{23}$$

and

$$\frac{dt}{dw^p} = -\frac{\Phi_n \Psi_h \chi_{w^p} - \Phi_{w^p} \Psi_n \chi_h + \Phi_h \Psi_n \chi_{w^p}}{D} < 0, \tag{24}$$

where

$$D = \Phi_t \Psi_n \chi_h > 0.^{6)}$$

Hence the following conclusions can be drawn:

**Result 2.** *With variable working hours, there can be an interior solution which assures employment for part-time workers. An increase in the wage rate of part-time workers will induce the firm to decrease the labour demand for part-time workers. In order to substitute part-time workers, the firm increases the number of full-time workers as well as their working hours.*

A corollary of **Result 2** is

**Result 3.** *A rise in the wage rate of part-time workers increases the full-time workers' wage rate and will cause a decrease in the part-time workers' share of the firm's output as well as the amount of part-time employment.*

This can be proved easily because $dt/dG = 1/w^p$ and, hence, $d\beta/dG = (1-\beta)/G > 0$. As for the effect of a change in the demand level, we obtain:

**Result 4.** *Regardless of what happens to the labour market situation, no change in full-time employment will occur if the demand for output changes, as long as the wage rate of the part-time workers is exogenously given.*

Therefore, an increase in the demand for output will cause only part-time employment to increase. This means that a more flexible adjustment of arrangements for part-time workers tends to occur compared with the rigid arrangements for full-time workers so that in a recession (boom) the proportion of workers who are part-time will decrease (increase).

## Ⅳ. Competitive Labour Market for Part-Time Workers

So far we have assumed the hourly wage of part-time workers to remain constant. Below we shall concentrate on the case when this wage rate changes in connection with the market conditions.

Thus, from eqs. (7), (8) and (13), we obtain:

$$t^s(w^p)w^p - \beta G = 0. \tag{25}$$

Moreover, eqs. (25) and (15) together reduce simply to

$$\omega(n,\ h,\ w^p;G) = G - t^s(w^p)w^p - w(h)hn - c'(n)n = 0.$$

Therefore, our new system will be rewritten as follows:

$$\omega(n,\ h,\ w^p;G) = 0, \tag{15b}$$

$$\phi(n,\ h) = 0, \tag{17b}$$

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6) It may be useful to list:

$\Phi_n = -w(h)h - c''(n)n - c'(n) < 0$, $\quad \Psi_n = -c''(n) < 0$,

$\Phi_h = -(1+\varepsilon)nw(h) < 0$, $\quad \Psi_h = \varepsilon(1+\varepsilon)w(h) > 0$,

$\Phi_t = -w^p < 0$, $\quad \chi_n = 0$

$\Phi_G = 1 > 0$, $\quad \chi_h = \varepsilon(1+\varepsilon)w(h)\left[1+\varepsilon MRS_{13}/c''(n)\right]/h > 0$,

$\Phi_{w^p} = -t < 0$, $\quad \chi_{w^p} = -1 < 0$.

$$\chi(n,\ h,\ w^p) = 0. \tag{18b}$$

The most important feature of this system is that, unlike the system (15a)−(18a), a change in demand for output can affect the number of full-time workers employed as well as their working hours through an induced change in the wage rate of part-time workers.

The main results of this system are obtained by the standard procedure of comparative statics analysis, which gives

$$\frac{dn}{dG} = \frac{\omega_G \psi_n \chi_{w^p}}{\Delta} > 0, \tag{26}$$

$$\frac{dh}{dG} = -\frac{\omega_G \psi_n \chi_{w^p}}{\Delta} > 0, \tag{27}$$

$$\frac{dw^p}{dG} = \frac{\omega_G[\psi_n \chi_h - \psi_h \chi_n]}{\Delta} > 0, \tag{28}$$

where

$$\begin{aligned}\Delta &= \chi_{w^p}[\omega_h \psi_n - \omega_n \psi_h] - \omega_{w^p} \psi_n \chi_h \\ &= -(1+\varepsilon) w(n) n[(1+\varepsilon) c'(n)\{1-\eta(c';\ n)\} + t^s\{1+\eta(t^s;\ w^p)\} \\ &\quad \times \varepsilon^2 n\{\varepsilon MRS_{13} + c''(n)\}/c'(n)] < 0,\end{aligned} \tag{29}$$

where $\eta(t^s;\ w^p)$, defined by $t^{s\prime} w^p / t^s$, denotes the wage elasticity of the part-time workers.[7]

Unlike **Result 4**, the following conclusions can be drawn:

**Result 5.** *Both the working hours and the number of full-time workers employed decreases in response to an exogenously imposed reduction in the demand for output if the hourly wage of part-time workers is adjusted by the supply-demand situation of the 'part-time' labour market.*

As for part-time workers, we obtain

$$\frac{d\beta}{dG} = \frac{[1+\eta(t^s;\ w^p)]t^s}{G} \cdot \frac{dw^p}{dG} - \frac{\beta}{G}. \tag{30}$$

Since $dw^p/dG$ tends to be zero if $\varepsilon \to 0$, it is certain that for a sufficiently small $\varepsilon$, the sign of eq. (30) can be negative.[8] Then it follows:

**Result 6.** *A decrease in the demand for output is also accompanied by a reduction in the number of part-time workers employed. However, in a recession, the proportion of part-time workers can increase if the working hours' elasticity of full-time workers' wages is very close to zero.*

This result contradicts the case where the wage rate of part-time workers is completely rigid. Which type of employment should be regarded as the more flexible input? As Ono (1989) points

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7) The signs of the partial derivatives of eq. (15b) are
$\omega_n = \Phi_n < 0$, $\omega_h = \Phi_h < 0$,
$\omega_{w^p} = -t^s[1+\eta(t^s;\ w^p)] < 0$, $\omega_G = 1 > 0$.

8) The numerator of eq. (28) tends to become zero because $\Psi_h \to 0$ as well as $\chi_h \to 0$ if $\varepsilon \to 0$.

out, Japanese firms have taken advantage of part-time workers as a buffer against unexpected fluctuations in the economy. It is the firm's incentive for greater flexibility and for lowering labour costs that must stimulate the growth in part-time employment, at least in the short run.

The next proposition is concerned with the difference in wages between full- and part-time workers.

**Result 7.** *The hourly wage of full-time workers will be less affected by the recession than the hourly wage of part-time workers.*

The result is established by a simple manipulation:

$$\frac{d(w-w^p)}{dG}=\left[-c''\left\{\frac{c'}{h^2}+\frac{1}{c'}\right\}-\frac{eMRS_{13}}{c'}\right]n<0. \tag{31}$$

It may be not so complicated if we regard the hourly wages of part-time workers as a proxy of the wage rate at which the outsiders (i. e., employed non-union members) are hired. Thus, this result also implies that the union mark-up, defined as the ratio of union wages to non-union wages (i. e., $w/w^p$ in this case) tends to move countercy-clically. Thus, the wage rate of the union sector will grow at a faster rate than will that of the non-union sector when the economy is recovering. This point has been variously made by Oswald (1982) and Lazear (1983), who stated that the wage differential is likely to narrow in a boom and to widen in a slump.[9)]

## V. Further Considerations and Conclusions

The effects of changes in union behaviour on employment adjustment deserve closer examination. In the system described in this paper, a change in the union's preference will be revealed as a change in $MRS_{13}$, an index of how important the trade union regards employment as compared to wages. As Shimada and Hayami (1985) have pointed out, Japanese trade unions prefered employment rather than wages after the first oil crisis. Therefore, it follows theoretically that a reduction in the demand for output in this case must lead to a rise in $MRS_{13}$.

A change in $MRS_{13}$, which we refer to as a kind of structural change in trade union behaviour, affects $\Delta$ to give $d\Delta/dMRS_{13}<0$, which is derived from eq. (29). By careful manipulation of the system (15b)−(18b), some effects of a rise in $MRS_{13}$ on employment and wages are given by

$$\frac{d(dn/dG)}{dMRS_{13}}<0,$$

$$\frac{d(dh/dG)}{dMRS_{13}}<0,$$

9) As for the empirical studies of the union mark-up, cf., for example, Lewis (1986) who has estimated union mark-ups during 1970s using US data. Accoding to numerous studies carried out, the union mark-ups estimated also vary the nations, the industries and the occupation.

and

$$\frac{d(dw^p/dG)}{dMRS_{13}}<0.$$

Hence the following conclusion emerges:

**Result 8.** *The effect of an increase in the demand for input on full-time employment as well as part-time workers' wages will be weakened if the trade union comes to prefer job security to wages.*

It is also implied that such change in the pattern of union behaviour will lead firms to change their behaviour in relation to the employment of part-time workers. In this case, an increase in $MRS_{13}$ will reduce the effect of output demand on part-time employment. As far as wage rigidity is concerned, it is clear that wage elasticity with respect to demand for output, concerning both full-time and part-time employment, will decrease because of a rise in $MRS_{13}$ (i. e., wages will be more rigid). Moreover, since $d(d(w-w^p)/dG)/dMRS_{13}$ is negative from eq. (31), we obtain a corollary of **Result 7**:

**Result 9.** *In a recession, if trade unions increase $MRS_{13}$, then the wage difference between full - and part-time workers will become greater than in the case where trade unions do not increase $MRS_{13}$.*

The present study represents an attempt to explore the way in which wages and employment are determined in the economy where there are full-time workers who organize trade unions as well as part-time workers who are not organized. The analysis developed here has applied theories of trade unions to a new framework which, in particular, takes part-time employment into consideration. The major purpose of this paper has been to assess how significant a role part-time employment plays in the context of labour market adjustment. The basic point which emerges from this investigation is that it is misleading to deal with unemployment issues without considering part-time employment, which has already established itself as a staple component of total employment.

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