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Working hours reduction and wage contracting style in a dynamic model with labor adjustment costs

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Abstract

This paper formulates a dynamic framework that highlights the roles of wage contracting style and labor adjustment costs in order to inquire into the short-run transitional dynamics and the long-run steady effects of work-sharing arrangements. We show that the hourly wage system tends to increase the degree of wage flexibility, and therefore hours reductions may be an effective policy in terms of increasing the employment stock. However, within a salary-style wage regime workers' salaries are fixed by contract, and therefore a policy of reducing working hours will lead firms to hire fewer new workers, thus giving rise to less employment accumulation. Moreover, our analysis of the transition reveals that if the labor adjustment cost is low in response to a *pre-announced* reduction in working hours, the number of newly hired workers will *overshoot* its long-run level and will move in the opposite direction during the periods before and after the policy is actually implemented.

JEL classification: J22; J23; O41

Keywords: Working hours reduction; Wage contracting style; Adjustment costs for labor; Transitional dynamics

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1. Introduction

'Hours reductions as *work-sharing*' (arguing that a reduction in hours per worker will spread the available work around and hence increase employment) have resurfaced in Europe since unemployment began to rise around 1975. It also became an important policy issue during the Great Depression in the United States and in some Asian countries, such as Japan and Taiwan, which recently entered a phase of high-unemployment-and-low-growth. Nevertheless, in different countries, governments entertain different views on this issue. In France, a law passed in 1998 set up a method for introducing a statutory 35-hour week by 2002 at the latest (the standard working hours were 39 per week in 1998) and a similar move was made in Italy (although this was never accomplished in Italy). In Germany and Japan, reductions in the standard week justified on work-sharing grounds were carried out stepwise in the 1980s and, as a result, compared with other OECD countries, they have experienced the largest reductions in working hours since 1984 (see Hunt, 1998). In the United States, raising the overtime premium has been seen as the most relevant tool for achieving working time reductions. However, more recently in France and Germany there has apparently been a move in the opposite direction. Besides, the EU parliament is even on the verge of forbidding the UK to extend the work week above 48 h. This novel evolution potentially indicates that the *work-sharing* arrangement is still a contentious issue that deserves more careful investigation and intensive discussion.

This paper is a theoretical attempt to provide such a study. The main novelty of this paper is that two distinctive styles of wage contract, namely, salaried and hourly contracts, are incorporated into a unified *dynamic* model. By virtue of the inclusion of adjustment costs for newly hired workers (including training, recruitment, and hiring and firing costs, etc.), we will show that the wage contracting style is a decisive factor in terms of determining not only the *steady-state effects* but also the *transitional dynamics* of work-sharing.

In practice, the labor market is indeed characterized by distinctive styles of wage contract across countries. In some countries, such as Japan and Taiwan, the labor market is dominated by salary arrangements, for instance, weekly or monthly compensation contracts, while in other countries, such as America, the labor market is characterized by a predominance of hourly arrangements (see Hashimoto and Raisian (1988) and Contensou and Vranceanu (2000, Chapter 2) for cross-nation comparisons concerning wage structures). In addition, cuts in working time are often associated with some kind of compensation rigidity. For example, in 1982 the government of France intervened with new legislation that cut standard weekly hours to thirty-nine with 'full wage compensation' via a fifth paid week of vacation (see Crépon and Kramarz, 2002). Marchand et al. (1983) conducted a survey, showing that in September 1982 more than 90% of all workers had their monthly pay unchanged after the implementation of a law to reduce working hours. Similarly, in Germany, trade unions often called for full wage compensation, in order to keep workers' monthly earnings unchanged after a reduction in working hours. Since workers' compensation is institutionally fixed at a weekly or monthly wage level, the