

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Economic Modelling

journal homepage: www.journals.elsevier.com/economic-modelling

Upward wage rigidity and Japan's dispatched worker system

W.D. Chen *

Department of Economics, Tunghai University, Taichung City 40767, Taiwan

ARTICLE INFO

JEL:
C23
C52

Keywords:

Dispatched worker
Upward wage rigidity
Mean reversion
Persistent
Dynamic equilibrium

ABSTRACT

This article focuses on the salary rigidity problem and provides an interpretation to explain why wages easily stick at low prices. Associated with weak correlations between wages and productivity, we reveal the relationship between Japan's dispatched worker system and upward wage rigidity. Unlike the traditional approach focusing on downward wage rigidity, we discover that firms naturally press wages down to gain benefit, in which a high cost of switching jobs for workers fosters businesses to suppress salaries and increase upward wage rigidity. The findings show that upward wage rigidity widely exists in Japan labor markets and significantly increased during the 2008 financial crisis. At that time, the number of temporary workers skyrocketed upward. As dispatched workers usually get lower salaries than regular job workers, this pulls down the payment and increases the degree of upward wage rigidity. In the result analysis, we discover that the revision in the Dispatch Worker Law of 2009 significantly raised temporary workers' wages and improved market efficiency.

1. Introduction and background

Unlike the traditional literature whereby economists usually focus on downward wage rigidity, this article emphasizes upward wage rigidity. Recent studies reveal that the relationship between wages and productivity is rather unstable, and even in some places their correlations are negative. This article provides an insightful interpretation to explain this phenomenon. Through a dynamic equilibrium model, we display the interaction between firm and workers and reveal that Japan's labor markets have broad upward wage rigidity. This study concentrates on Japan's dispatched worker system and discovers that it has a significant effect on wage adjustment. From the historical data, we realize that Japan has a low unemployment rate, with it averaging 2.73% from 1953 to 2016. To aid such a flat unemployment rate, one of the essential support factors comes from the use of a significant portion of temporary workers. According to a survey by the Ministry of Health, Labor, and Welfare, about 80.5% of companies that employ over 1000 people use dispatched workers in 2012. Furthermore, in 2014 non-regular employees hit 37.4% of the total labor force. This shows that the structure of Japan's labor market has gradually changed, and that the Japan government is aware of this problem. Considering that more and more workers are involved in the dispatched worker system, it is important to figure out the influence of a higher rate of temporary workers in this country's labor market. As the dispatched agencies usually pay a relatively low salary, if firms hire a lot of temporary workers, then that could affect

the labor markets' price mechanism.

Japan's government has regulated the temporary staffing industry through the Worker Dispatch Law since 1985. The initial aim of this law was to monitor the subcontractors, as dispatching personnel had become common in the automobile and electronic industries; thus, the government limited temporary staffing to 13 professional jobs. For the revision in 1999, the Japan government expanded the temporary staffing industry to most labor markets, except for some restricted manufacturing sectors. A change in 2004 eventually removed most of the remaining restrictions on temporary staffing in the manufacturing industry. With an enormous expansion of temporary labor in the Japan labor market, the number of regular employees declined by about 1.9 million, while the number of non-regular workers increased by approximately 4.5 million between 2000 and 2007. During the 2008 financial crisis, short-term contract and temporary staffing workers grew to more than 30% of the Japan labor force.

This problem is turning severe, because temporary workers get few of the rights and benefits compared to full-time regular employees. For example, many non-regular workers do not qualify for unemployment benefits, because they have not held their jobs for a year or longer. In many cases, short-term contract workers are laid off before the terms of their contracts end due to a lack of penalties in the labor laws. To improve the benefits for non-regular workers, the Democratic, Social Democratic, and People's New parties submitted a proposal to revise the Worker Dispatch Law on June 26, 2009; and then on March 3, 2010,

* P.O. Box 95, No. 1727, Sec. 4, Taiwan Blvd., Taichung City 40704, Taiwan.

E-mail address: wdchen@thu.edu.tw.

<https://doi.org/10.1016/j.econmod.2018.03.010>

Received 18 December 2017; Received in revised form 30 January 2018; Accepted 13 March 2018

Available online XXX

0264-9993/© 2018 Elsevier B.V. All rights reserved.

the Japan government approved the bill for partial amendment. The main points of the revisions are as follows. (1) Prohibit problematic registration-type dispatches in principle, except for highly specialized jobs like language interpretation. (2) Ban dispatches to manufacturing industries, except for regular-type long-term employment. (3) Ban day-work dispatches and dispatches shorter than two months in principle. Lastly, (4) in the case of an illegal dispatch, the user company or other user organization will be obliged to offer an employment contract to the dispatched worker. This revision law provided an improvement for dispatched workers with job security guarantees. We are thus curious whether the policy has a similar effect on different industries. For instance, the policy may be useful in the finance and insurance (FI) industry, but it might not work well in the information and communication technology (IC) industry, because the FI industry usually has regular and routine work, while the IC industry needs innovations with a flexible working environment.

As dispatched workers could lead to a low and sticky wage problem, we have to figure out how profound it is and what is the effect of the policy. Through an estimation of the dynamic equilibrium model, we can detect whether a market exhibits upward or downward rigidity. Considering the low coefficients between productivity and wages in the Japan labor markets, we do see an apparent upward rigidity phenomenon. We attempt to evaluate the effect of the revision of the Dispatch Worker Law in the labor market. This study divides the data into three different periods and then measures their structure changes and performance. The first period is from January 2000 to July 2007, which is Japan's so-called Lost Decade and between the dot-com collapse and the global financial crisis. The second time is between August 2007 and May 2009, including the global financial crisis. Since the economy crashed down in 2008 and a lot of workers lost their jobs, the proportion of non-regular employees primarily increased. The dispatched workers hired hit a peak in May 2008; see Fig. 1a. During the financial crisis, we find that not only did productivity decrease, but wages for the 21 industries also showed diversification, with some of them diving and some of them sticky; see Fig. 1b. This demonstrates their heterogeneity. The third period is from June 2009 to October 2015, or the time after the revision of the Dispatch Worker Law. After the amendment, the salaries of dispatched workers significantly improved, because the government applied the rules with 'the same pay for the same work' and the 'least hiring length.'

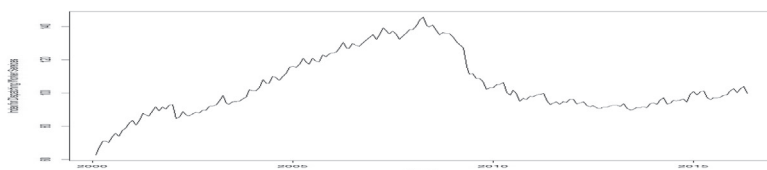
This study looks to explore the wage trap phenomenon in the Japan market and shows its influence on wage dispersion. During the 2008 financial crisis, many workers lost their jobs, which caused wages to vaporize and diversify, as seen in Fig. 1b. Associated with the 21 indus-

tries in this country's labor markets, we explain why the coefficients of productivity on wages are so low, with even some of them negative. Considering heterogeneity in wage distribution, we apply a dynamic equilibrium model to express the wage change, in which we coordinate with a multiple-factor panel data model and then evaluate the degree of market failure in each industry. With mean-reversion and persistent components, we examine the market efficiency during different time periods.

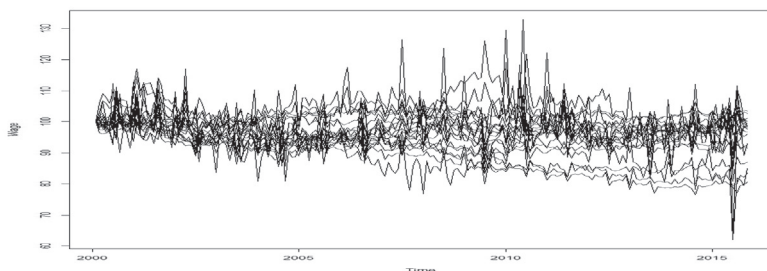
We arrange the remainder of this paper as follows. Section 2 explores the recent studies about dispatched workers in the Japan labor market, which reveal the differences between part- and full-time workers in the workplace. We are concerned for why firms increasingly employ part-time workers in jobs that were offered for full-time workers before. We refer to several essential studies associated with the matching theory to display the background behind the relationship between wage and productivity. Section 3 develops a dynamic equilibrium model to discuss the surplus flow between firm owners and labors. We discover that it is natural to stick wages at low prices and make the market inefficient. Section 4 applies our model to the labor markets of 21 industries in Japan, in which the portions associated with non-stationary and stationary factors are measured to show the degrees of instability and market failure. In the estimation, we apply the bootstrap method to recognize the stationarity and non-stationarity of each factor. Section 5 gives concluding remarks, summarizing this paper's contributions.

2. Literature review

With an increasing amount of non-regular workers, such a change intrigues our interest in the influence of the dispatched worker system in the Japan labor market, which has some well-known regulations, especially the revision of Dispatch Worker Law in 2009. Some studies have provided reasons why the temporary staffing industry has grown so prosperously. Gaston and Kishi (2007) and Tanaka (2013) explored why Japan has seen such a rapid growth of non-regular workers. To cost-down, many firms increasingly hire part-time workers in traditional jobs initially offered for full-time workers. They demonstrated that not only has the service sector tended to employ temporary workers, but this also has widely spread to the manufacturing industry, especially on outsourcing. Kahn (2012), Jahn and Pozzoli (2013), and Aoyagi and Ganelli (2015) investigated the difference between temporary and regular workers from various aspects, including contract duration, wage gaps, and training cost. They discussed the advantages and disadvantages when recruiting for temporary employment. These articles



(a) Activity index for dispatched worker services, implying the number of dispatched workers.



(b) The wage indices show diversification and stickiness for 21 industries.

Fig. 1. In order to reduce the production cost, (1a) demonstrates that firms hired a lot of dispatched workers during the 2008 financial crisis, showing a peak in May 2008. Fig. (1b) shows the wage changes are diversified and sticky in the 21 industries.

Download English Version:

<https://daneshyari.com/en/article/7346763>

Download Persian Version:

<https://daneshyari.com/article/7346763>

[Daneshyari.com](https://daneshyari.com)