



# Unemployment and relative labor market institutions between trading partners

Hervé Boulhol\*

University Paris 1 Panthéon-Sorbonne, 13 rue de Chabrol, 75010 Paris, France

## ARTICLE INFO

### Article history:

Received 13 February 2009  
Received in revised form 27 September 2010  
Accepted 3 October 2010  
Available online 16 October 2010

### JEL classification:

F16  
J50  
F10  
F41

### Keywords:

Unemployment  
Labor Market Institutions  
Trade

## ABSTRACT

This paper contributes to the literature that highlights the role of trading partners' institutions for a country's unemployment rate. The objective is to study whether the results established in the minimum wage–setting of Davis (1998) hold when unemployment is driven by search frictions. This paper finds that relative labor market institutions matter for equilibrium unemployment as they generate comparative advantages, but there are two main differences with Davis. With North–North trade, unemployment decreases in the low-regulation country. When South is brought into the picture, low-regulation North is not insulated, and unemployment increases in both developed countries as a result of specialization.

© 2010 Elsevier B.V. All rights reserved.

*“A more subtle – but by this more important – reason for considering a global approach is that the consequences even of purely local institutions and shocks often depend crucially on the links to the global market”*

Donald Davis

## 1. Introduction

The impact of labor market institutions on unemployment is generally assessed without taking into account increasing international economic linkages between countries. Despite globalization, most researchers focus on domestic labor market regulation to explain differences in unemployment rates both across countries and through time. This choice is motivated by theories of unemployment based on job search frictions, according to which more stringent domestic labor market regulation raises unemployment, an explanation herein referred to as the “regulation view”. In doing so, the effect of foreign labor market institutions on domestic unemployment is thus ignored.

In their seminal paper, Blanchard and Wolfers (2000) highlight that, even though labor market institutions could explain much of the differences in unemployment across countries either in the 1980s or the 1990s, changes in institutions were too small to account for the changes in unemployment rates. Blanchard and Wolfers find evidence

that the mostly common shocks that affected developed countries, such as changes in real interest rate and productivity growth, had differentiated impacts on unemployment rates based on differences in labor market institutions. The rationale is, first, that rigidities can delay the adjustment of wages in the advent of negative shocks, which might generate unemployment, and, second, that differences in rigidities are related to differences in institutions. In contrast, Saint-Paul (2004) argues that changes in institutions have been significant in the last decades and can explain by themselves the magnitude of the trends in unemployment rates.<sup>1</sup> In turn, Blanchard (2006) considers that these explanations are only partly satisfactory and encourages researchers to consider other shocks and other interactions.

This domestic focus is surprising given the prominent attention placed on the employment consequences of globalization in the public and political debate. Theoretically, Brecher (1974) shows how labor market rigidities generated by a binding minimum wage are magnified by international trade, and Davis (1998), building on Brecher's idea, draws attention to the key interactions between labor

<sup>1</sup> The most comprehensive effort to match the changes in unemployment rates with those in institutions is probably that of Nickell et al. (2005) who find support for the regulation view and assess that the shock interactions à la Blanchard–Wolfers are not robust once added to their thorough specification. On the other hand, Baker et al. (2005) and Baccaro and Rei (2005) present a sceptical analysis of the evidence produced in support of the regulation view. Following a rigorous empirical strategy, Bassanini and Duval (2006) reach more moderate conclusions as for the role of institutions, either directly or through the interactions with shocks.

\* Tel.: +33 1 45 24 84 58.

E-mail address: [hervé.boulhol@oecd.org](mailto:hervé.boulhol@oecd.org).

market institutions designed at the country level and global goods markets.<sup>2</sup> In a stylized trade model between flexible-wage “America” and minimum wage “Europe”, Davis shows that trade ties up factor prices between countries and leads to an increase in long-term unemployment in “Europe”. Davis’ main intuition lies in the fact that “even when factor markets are strictly national, with idiosyncratic institutional features, they cannot be considered in isolation when goods markets are global”. There is a major difference between the Blanchard–Wolfers hypothesis and the Brecher–Davis mechanism. The former seems implicitly optimistic in that the effects of labor market institutions, albeit persistent, are not a long-term phenomenon since “bad” institutions merely slow the necessary adjustments. In contrast, the Brecher–Davis interactions between trade and labor market institutions affect the unemployment rate in the long run.

The effects of a country’s labor market regulations on its trading partners are the subject of a growing attention. Davidson and Matusz (2005), Moore and Ranjan (2005) and Cuñat and Melitz (2007) provide evidence that labor market institutions affect comparative advantages. Boulhol (2009) and Helpman and Itskhoki (2010) highlight how trade liberalisation affects unemployment through specialization effects when countries differ in either union power or hiring costs, respectively. For example in Boulhol (2009), the threat of relocations, which trade integration makes even more credible, encourages labor market deregulation in the highly-regulated country to avoid capital outflows, thus leading to a decrease in unemployment. In an earlier contribution, Davidson et al. (1999) show that trade liberalisation between two countries, one of which is a capital abundant large country with a more efficient labor market, leads to higher unemployment in that country. In these models, labor market regulation typically affects sectors asymmetrically, which generates comparative advantages when either labor market institutions or factor endowments differ across countries. Dutt et al. (2009) focus on trade between countries having different development levels with search-generated unemployment. They show that unemployment increases with trade in the labor scarce country if comparative advantages arise from differences in factor endowments, but decreases if they are based on relative technological differences, and find empirical support for the latter.

The current paper is part of the still nascent literature trying to incorporate unemployment in trade models. Its main contribution consists in investigating the extent to which Davis’ main idea can be generalized to a broader type of labor market institutions than the simple minimum wage context. Using the two-factor matching framework of Pissarides (2000), the model developed herein highlights that foreign labor market institutions affect a country’s unemployment rate through the trade channel. The main mechanism through which institutions of trading partners influence unemployment is straightforward. To the extent that labor market institutions matter for unemployment, they affect the cost of labor and, therefore, relative factor and good prices. It follows that labor market regulation contributes to comparative advantages in an open economy.

More specifically, the paper brings three main results. First, in the case of trade between two developed countries, as in Davis, the high-regulation (“rigid”) country that has relative high labor costs tends to specialize in the capital-intensive good and unemployment increases as a result of the induced fall in labor demand. Second, and this is the main difference with Davis in the North–North context, the “flexible” economy benefits from trade with the “rigid” country in terms of total employment, through the induced increase in demand for the labor-intensive good. Through trade and induced changes in factor prices,

comparative advantages in labor market institutions enable the “flexible” economy to transfer some of the search-friction costs to the “rigid” economy. Third, when South is introduced to this North–North equilibrium, overall specialization results from the combination of endowment- and institution-driven comparative advantages. In the case where the endowment effect dominates, labor abundant South specializes in the labor-intensive good. Consequently, unemployment decreases in the developing country and increases in both developed countries from their North–North equilibrium levels: in contrast with Davis, the “rigid” developed country does not absorb the whole permanent shock related to trade with South, and “flexible” North is also negatively affected in terms of employment. Combining North–North with North–South trade, the unemployment rate rises unambiguously from the autarky level in high-regulation North, whereas the total effect is ambiguous for low-regulation North.

The rest of the paper is organized as follows. Section 2 extends the matching model to a two-sector economy. Section 3 embeds this framework into a standard trade model focusing on North–North trade, while Section 4 introduces a labor abundant country into the picture. Finally, Section 5 concludes.

## 2. A two-sector extension of Pissarides’ matching framework

This section embeds the large-firm version of the matching model of Pissarides (2000, chapter 3), which captures the main features of the regulation view, into a two-sector model. Each sector produces a homogeneous good under perfect competition. There are two factors of production, capital  $K$  and labor  $L$ . The two factors could alternatively be thought of as being skilled and low skilled labor, as in Davis, with rigidities affecting mainly low skilled labor. This framework lays the ground for an extension of the Heckscher–Ohlin trade model to search frictions, which is developed in Section 3.

Firms are identical within each sector, and sector 1 produces the capital-intensive good of price  $p$  in terms of good 2, which is chosen as the numeraire.<sup>3</sup> Let  $K_{ij}$  and  $L_{ij}$  be the capital and employment of firm  $i$  in sector  $j$ , and let  $F_j(K_{ij}, L_{ij})$  be the constant returns-to-scale production function of all firms in that sector. Each firm is large enough so that there is no uncertainty about its flow of labor, and unemployed workers are assumed to be perfectly mobile across sectors. Wages are bargained at the individual level and firms choose the number of jobs by taking the bargained wages as given. Labor market characteristics are assumed to be identical in both sectors.<sup>4</sup> While employed workers might be attached to the sector in which they work due to search frictions, it is assumed that unemployed workers have no attachment to a specific sector: they randomly take the first job possible. Hence, during a small interval  $dt$ , a vacant job is matched to an unemployed worker with the same probability  $m(\theta)dt$  in both sectors, where  $m(\cdot)$  is the matching function which decreases with labor market tightness, and  $\theta$ , defined as the ratio of total vacancy to unemployment rates. Usual properties of the matching function, discussed at greater length in Pissarides (2000), are supposed to hold:

$$m'(\theta) < 0, |\theta m'(\theta)| < m(\theta) \quad (1)$$

<sup>3</sup> As goods are homogenous, all firms within the same sector set the same price.

<sup>4</sup> There are two reasons for this assumption. The first one is analytical simplicity. The second is that the impact of differences in labor market features across sectors on trade specialization has been studied elsewhere, as pointed out in the introduction. For example, Boulhol (2009) and Helpman and Itskhoki (2010) consider differences in bargaining power and hiring costs, respectively. In these papers, the analytical complexity is resolved by assuming that there is no imperfection in one sector (i.e. it is always possible to find a job in that sector). Differences between countries in labor market institutions (of the other sector) influence specialization. In contrast here, specialization is determined by the interactions between sectoral factor intensities and labor market institutions, which differ between countries but not across sectors.

<sup>2</sup> In a different context, Krugman (1995) emphasizes that the impact of trade with developing countries on wages and employment depends on the functioning of the labor market: trade effects are likely to be mostly reflected by changes in wages in flexible economies and in employment in rigid ones.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات