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Can deunionization lead to international outsourcing?☆

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ABSTRACT

We analyze unionized firms' incentives to outsource intermediate goods production to foreign (low-cost) subcontractors. Such outsourcing leads to increased wages for the remaining in-house production. We find that stronger unions, which imply higher domestic wages, *reduce* incentives for international outsourcing. Though somewhat surprising, this result provides a theoretical reconciliation of the empirically observed trends of deunionization and increased international outsourcing in many countries. We further show that globalization – interpreted as either market integration or increased product market competition – will increase incentives for international outsourcing.

1. Introduction

Many fear the consequences of globalization for 'ordinary workers' in the developed world. Will their jobs disappear to countries where labor costs are only a fraction of what they are in Western Europe and the US? Perhaps the rich world is left with 'the new enterprise' where highly skilled workers perform a firm's core activities — and where everything that can be outsourced to low-income countries, is in fact outsourced. What will then happen to the less skilled?

An interesting question concerns the role of trade unions in such a situation. Are they the cause behind job losses in rich countries? Could it be that weaker unions would lead to more flexible wage setting, so that job losses could have been prevented — albeit at the price of higher wage dispersion among skilled and unskilled workers?

The role of trade unionism has evolved dramatically differently in different countries over the recent years.[1] The perhaps most drastic example of deunionization is the UK, where the percentage of workers covered by collective bargaining has fallen sharply over the last 15 years. The US always had weaker unions than Europe, but also there union coverage has been falling, albeit from a level that was low to begin with. In Continental Europe and Scandinavia union coverage is almost unchanged. Many of these countries are characterized by more centralized bargaining systems than in the UK and the US, and union membership rates remain at a high level. There are also a couple of countries, notably France and Portugal, where membership rates have fallen to quite low levels, but where union coverage – the percentage of the workforce that is covered by collective agreements – is still very high.

If trade unions and a lack of downwards wage-flexibility were important factors behind firms' rush to outsource tasks to low-income countries, one would expect that outsourcing was more prevalent in countries with strong unions than in countries with weak unions. The facts do not seem to support this notion. Although it is not easy to find good data on country-wide outsourcing, one possible measure that may capture international outsourcing activities is the share of parts and components (input factors) in total imports. In Fig. 1, we use data on this share found in Yeats (2001), and plot them against bargaining coverage levels – which is arguably the most relevant measure of the degree of unionization in a country – from OECD (1997), augmented by data from Dell'Aringa et al. (2004) for the case of Ireland.

It is not advisable to draw any strong conclusions from such a picture, although it suggests that parts and components constitute a relatively low share of total imports for countries with high bargaining coverage rates. This is the opposite of what one would expect if trade unionism drove outsourcing. The US is an outlier in this figure, maybe because of the much larger possibility of US firms to outsource domestically due to the presence of many potential domestic

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[1] Some core facts are documented in OECD (1997) and EEAG (2004).

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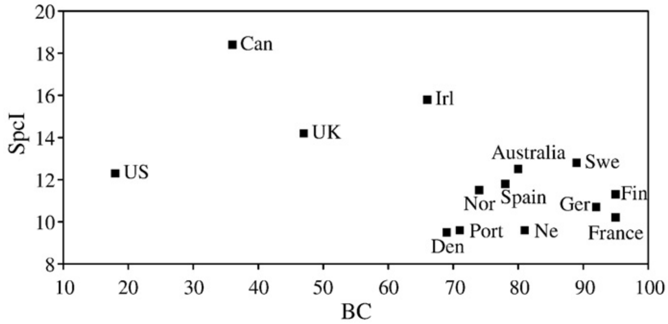

Fig. 1. Share of parts and components in total imports (SpcI) vs. bargaining coverage (BC) (both in %).

subcontractors.[2] One could alternatively see Canada as the outlier (perhaps because Canadian production is so interrelated with what goes on in the US); then the impression becomes that outsourcing is rather independent of the strength of unions.[3]

This paper presents a theoretical model of deunionization and outsourcing decisions. The main result of the analysis is that deunionization can in fact trigger outsourcing. The main building block behind this argument is that as more and more tasks are outsourced, the incentives for the remaining workforce to show wage restraint are weakened. Deunionization reduces the wage hike following outsourcing — and makes outsourcing more attractive. This suggests that union bashing is *not* an effective way to preserve jobs and income opportunities for less skilled workers in rich countries.

There is a quite substantial existing literature that studies theoretically the effect of globalization (most often taken to mean trade liberalization) on outcomes for unionized workers. Both Staiger (1988) and Naylor (1998, 1999) present models where unionized labor in fact might benefit from globalization. For example, Naylor presents a rather rosy picture: Unionized workers gain both in terms of higher wages and in terms of more jobs. Trade liberalization means more competition in the market, which lowers firms' profits but also expands total production. Firms lose market shares at home, but they gain shares abroad, and total production goes up. This leads to higher labor demand — which unions manage to translate both to higher wages and more jobs. Lommerud, Meland and Sørgard (2003) warn that the picture becomes more complex if domestic firms can move production out of the country, and there is then a tendency that unionized workers can suffer from globalization. In fact, it is exactly the possibility that unionized wages go up following trade liberalization that makes ‘offshoring’ of final goods production more attractive.[4]

International outsourcing of intermediate input production is barely mentioned in the literature on trade unions and globalization. One exception is Skaksen and Sørensen (2001).[5] They find that outward FDI can lead the bargained wage to go up, provided that there is a sufficient degree of complementarity between the activities in the home country and the activities in the host country. This superficially resembles results as those of Staiger and Naylor, that unions can benefit from harder international competition. However, the basis for the Skaksen–Sørensen outsourcing result is quite different. They take as their starting point the well-known article by Horn and Wolinsky (1988), who pointed out that unions could benefit (lose) from more fragmented (integrated) production if tasks where compliments (substitutes). Outsourcing typically means to move out some tasks that are complimentary to tasks that will stay in the firm, and the Skaksen–Sørensen result then follows as a variant of the Horn–Wolinsky finding.

In the present paper, we take the analysis a step further by developing a theoretical model equipped to answer how deunionization will affect outsourcing decisions. We find, perhaps surprisingly, that outsourcing incentives are inversely correlated with trade union strength, implying that strong unions can in effect deter outsourcing. Although consistent with the stylized facts, this result may appear quite counterintuitive, since another implication of stronger unions is higher in-house production costs. Establishing a theoretical relationship between deunionization and international outsourcing is the main contribution of the paper; however, we also use the model to study the interrelation of deunionization and outsourcing with technology level and globalization.

Outsourcing, internationally and domestically, is a topical issue in the recent economics literature. In the theory of the multinational firm there is a tradition where the international firm is assumed to be organized as it is because it has carefully considered the costs and benefits of the various alternatives (see, e.g., Markusen, 1995). Grossman and Helpman have recently written a much noted string of papers (2002, 2003, 2005) that can be seen as studying outsourcing in such a perspective: These models open up for many complications as search processes and contract incompleteness, but in the end the organizational structure of a firm is determined by the relevant costs and benefits of the various alternatives.[6] There also exists a vein of literature that considers outsourcing decisions as strategic:[7] The outsourcing decision itself influences the price structure that a firm faces. The theory of outsourcing with trade unions can be seen as an example of a strategic outsourcing theory: Outsourcing influences the wage rate the firm has to pay, and this in turn influences the outsourcing decision.

The present model sees production as a series of interrelated tasks, which in principle all can be outsourced to a foreign economy. In line with the tradition in international economics[8], we choose to work with a model of monopolistic competition. Although we perform our analysis in a partial equilibrium setting, we think it is an advantage to work within the same framework as most recent studies of outsourcing — for example Grossman and Helpman's mentioned series of papers. This should make it easier at some point to integrate the insights from the standard theory on outsourcing on the one side and the theory on trade unions and outsourcing and other forms of competitive pressures from abroad on the other.[9] We underline that our central results can be reproduced in a model of international Cournot oligopoly with linear demand — a framework often favored by the literature on trade unions and globalization.

The remainder of this paper is organized as follows: Section 2 presents the model framework, while Section 3 studies wage bargaining and employment decisions within this format. Section 4 studies a firm's outsourcing decision, and the impact of deunionization on this decision. Section 5 analyzes how globalization will affect

[2] Of course, this effect must also dominate the similar effect that makes *final good* imports low, due to the presence of many final goods manufacturers in a large country.

[3] It has been suggested to us that since, following Machin (2000), deunionization could be a result of increased importance of new industries, we could circumvent this potential problem by using coverage and imports related to manufactures only. The limited data we found (not reported) does still not seem to run contrary to our main result.

[4] In a related setting of unionized international oligopoly, Lommerud, Straume and Sørgard (2006b) show that cross-border merger is another channel through which globalization might hurt unionized workers.

[5] See also Zhao (2001).

[6] From the vast recent literature on outsourcing, we mention Feenstra and Hanson (1999), Glass and Saggi (2001), Kohler (2004), Antràs and Helpman (2004), Görg, Hijzen and Hine (2005), and Thesmar and Thoenig (2007).

[7] See, for example, Lyons and Sekkat (1991), Chen, Ishikawa and Yu (2004), Shy and Stenbacka (2003) and Choi and Davidson (2004).

[8] See, for example, the well-known textbook by Dixit and Norman (1980).

[9] Blanchard and Giavazzi (2003) develop a model that combines monopolistic competition in the product market and bargaining in the labor market, and our model shares many traits with that work, but their focus is neither on firm structure nor on open economy issues.