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The macroeconomic effects of goods and labor markets deregulation ☆

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ABSTRACT

We study the macroeconomic effects of deregulating the goods and labor markets. To this end, we introduce endogenous product creation and labor market frictions in an otherwise-standard real business cycle model. Regulation affects producer entry costs, firing restrictions, and unemployment benefits. We find that reforms can have short-run recessionary effects, despite being expansionary in the long run. Estimates from a panel VAR for OECD countries provide empirical support for this result. Moreover, market deregulation has sizable effects on the efficiency of business cycle fluctuations. Increased flexibility in both goods and labor markets lowers the level and volatility of the inefficiency wedges that distort agents' equilibrium decisions, leading to a substantial reduction in the welfare cost of business cycles. Nevertheless, individual reforms produce contrasting effects.

1. Introduction

Since the early 1980s, the stringency of product and labor market regulation has been considered a key contributing factor to the poor record of job creation and high unemployment in many European countries. Calls for removal, or at least a reduction, of market regulation have predominantly focused on regulatory barriers to market entry, firing restrictions, and the generosity of unemployment benefits (OECD, 2005). The recent financial crisis that hit European countries reheated the debate. At a time when the conventional tools of demand-side macroeconomic policy are constrained, policies aimed at deregulating product and labor markets have been the cornerstone of international agencies' advice to the euro area periphery (see, for instance, IMF, 2010 and OECD, 2012).

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In the academic literature, a large body of research supports the view that lower product and labor market regulation improves long-run economic performance.[3] However, less is known about the short-run consequences of reducing regulation. Do product and labor market reforms entail significant adjustment costs? Does market flexibility change the characteristics of business cycles? Understanding these dynamic effects is important, for at least two reasons. It helps clarify how market reforms affect economic activity and welfare beyond steady-state outcomes; and, it may contribute to explaining the historical aversion of governments to implement reforms.

Thus far, relatively few studies have addressed how reforms affect macroeconomic dynamics, and focus solely on the business cycle implications of labor market regulation. Our contribution adds to the existing literature along three dimensions. First, we develop a novel theoretical framework that allows us to capture key empirical features of product and labor market regulation and reform. Second, we investigate how the adoption of reforms—both individually and jointly—affects short-run macroeconomic dynamics and business cycle fluctuations. Third, we address the consequences of such dynamic effects for welfare and efficiency.

To this end, we embed endogenous product creation and labor market frictions in an otherwise-standard Real Business Cycle (RBC) model. We integrate two leading frameworks developed to study product and labor market dynamics. The endogenous variation of monopolistically competitive firms builds on Bilbiie et al. (2012). Labor markets are characterized by search-and-matching frictions, with endogenous job creation and destruction as in Mortensen and Pissarides (1994) and den Haan et al. (2000).[4] Since variations in the number of producers induce changes in the competitive environment, we allow markups to endogenously vary because of demand-side pricing complementarities. The dimensions of deregulation that we consider are: (1) a reduction in barriers to entry (by cutting sunk entry costs) in the product market; (2) lower firing costs; (3) a reduction in unemployment benefits.

We calibrate the model in order to match euro area macroeconomic data, and show that the model successfully reproduces several features of euro area business cycles. We then study the effect of lowering entry barriers, unemployment benefits, and firing costs to their U.S. counterparts, in order to mimic the transition to a more deregulated economy. Consistent with previous work, we find that market deregulation increases employment and output in the long-run.

In addition, we find that market deregulation entails important dynamic effects. Two main results emerge. First, product and labor market reforms may have recessionary effects in the short run. Importantly, different types of reforms lead to adjustment along different margins. Product market deregulation features a slow reallocation of resources from incumbents to new entrants. Labor market deregulation in the form of lower firing costs leads instead to temporary layoffs of less productive workers, without triggering large firm dynamics. In both these cases, unemployment increases and output falls in the short run. We provide econometric evidence in support of these results by estimating a panel VAR for OECD countries over the period 1982–2005.

Second, market deregulation affects the volatility of business cycles, with important consequences for the efficiency of aggregate fluctuations. Increased flexibility in both goods and labor markets lowers the level and volatility of the inefficiency wedges that distort agents' equilibrium decisions, reducing the welfare cost of business cycles by 1.38 percent of pre-deregulation steady-state consumption. Yet, when only firing costs are removed, the cost of fluctuations increases by more than 2.03 percent. The intuition for this result is that the distortions induced by high barriers to entry and unemployment benefits create an endogenous connection between macroeconomic volatility and the average level of consumption around which the economy fluctuates. When these two dimensions of regulation are lifted, wages absorb more of the productivity fluctuations and markups become less volatile, leading to lower firm-level and aggregate volatility. Since product and job creation are sensitive to uncertainty about and anticipation of future profits, lower volatility increases the average value of producer entry, employment, and investment toward their socially efficient levels, raising consumption and welfare. By contrast, the removal of firing costs alone increases the measure of jobs that are sensitive to destruction, making job flows, unemployment, and output more volatile. This effect is large when real wages are acyclical and markups volatile but small in the opposite scenario. Accordingly, when both barriers to entry and unemployment benefits are high, the removal of firing costs results in business cycles that are more inefficiently volatile, increasing (instead of lowering) dynamic distortions. This result suggests that policies' interdependence is a key factor to consider when implementing market deregulation.

Before discussing how our paper relates to the literature, we note some caveats in interpreting our results. First, we assume full commitment to permanent deregulation. Second, for tractability reasons, we assume that agents engage in perfect risk sharing within their households. Thus, this paper does not address the distributional consequences of reforms. While these are important topics for future research, we believe that the channels through which market reforms affect aggregate macroeconomic dynamics in the present study are likely to be robust to future analysis.[5]

[3] Various empirical studies document that high unemployment benefits and more rigid employment laws increase aggregate unemployment; see, among others, Bernal-Verdugo et al. (2012), Botero et al. (2004), Elmeskov et al. (1998), and Nickell (1997). Bertrand and Kramarz (2002) show that barriers to entry hinder job creation and employment growth, while Fiori et al. (2012) find that product market deregulation is more effective at the margin when labor market regulation is high.

[4] den Haan et al. (2000) embed the Mortensen and Pissarides' (1994) model into a full general equilibrium RBC model. We augment their framework by introducing endogenous product creation and modeling labor market frictions within the context of a large firm setup. In so doing, we allow product and labor market regulation to affect both the size and the number of producing firms.

[5] For instance, Krusell et al. (2010) introduce Bewley–Huggett–Aiyagari incomplete markets in the one-firm-one-worker search and matching model. They show that raising unemployment benefits reduces long-run welfare, since aggregate labor-market inefficiencies significantly outweigh the benefits