Unemployment (Fears) and Deflationary Spirals

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Macroeconomists distinguish between demand and supply factors in their analysis of business cycles and each expansion and each recession is accompanied by an intense debate over the relative importance of these two features. The recent recession is no exception. In this paper, we focus on the *interaction* between these two sides of business cycles. In particular, we show that “demand” can play an essential role in the magnification and propagation even when the only driving process is a traditional productivity shock.

Our business cycle model has two key characteristics: Incomplete markets and sticky nominal wages, that is, nominal wages do not respond one-for-one to price level changes. The interaction of incomplete markets and sticky nominal wages is shown to magnify business cycles even though these two features – in isolation – dampen them. First, consider the case when nominal wages are sticky and there is perfect risk sharing. Under perfect risk sharing, the decline in real activity reduces real money demand, which put upward pressure on the price level. The resulting fall in real wages encourages investment in firm creation, which dampens the fall in employment. Next consider the case when there is imperfect risk sharing and nominal wages are not sticky. During recessions, fears of unemployment stir up precautionary sentiments which induce agents to save more than they would under perfect risk sharing. The additional saving may be used as investments in both a productive asset (equity) and an unproductive asset (money). In our general equilibrium environment, it is a robust result that at least some of the additional savings end up in the productive asset. This means that business cycles are dampened. Finally, consider the case when there is imperfect risk sharing *and* nominal wages are sticky. The desire to hold more money puts deflationary pressure on the economy, which, provided that nominal wages are sticky, increases wage costs and reduces profits. Lower profits repress the desire to save in equity, which increases (the fear of) unemployment, and so on.

The deflationary spiral is a powerful mechanism. Although the volatility of the exogenous aggregate shocks is small, the model properties are in several dimensions very different from an economy that only has idiosyncratic shocks and no aggregate uncertainty.

We use our framework to study the role of unemployment insurance, In contrast to previous results in the literature, agents uniformly prefer non-trivial levels of unemployment insurance. Why do employed workers prefer higher unemployment benefits? One reason is that it provides insurance when they become unemployed. Another reason is that better unemployment insurance reduces the strength of the deflationary mechanism. This does not only mean that unemployment increases by less during recessions, it also means that the value of investment portfolios reduce by less during economic downturns. The latter effects depend crucially on the presence of aggregate uncertainty. If aggregate uncertainty is “turned off”, then agents prefer much lower levels of unemployment insurance.