

[Optimal Unemployment Insurance over the Business Cycle](#)

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The goal of this paper is to shed light on the controversial debate about the appropriate design of unemployment insurance over the business cycle. The paper develops a methodology to design unemployment insurance in a scientific fashion, guided by empirical observations and not by theoretical assumptions or ideological considerations.

The main contribution of the paper is to provide a formula that describes the optimal generosity of unemployment insurance as a function of the state of the labor market and three parameters---how much people value insurance against the risk of unemployment, how much people's job search is influenced by their unemployment benefits, and how firms' demand for labor is influenced by unemployment insurance. The formula is valid in a large class of models of the labor market; hence, the formula can be applied in a broad range of contexts.

The paper explains how economists and policymakers can apply the formula to determine the desirable level of unemployment insurance at different stages of the business cycle. The first step is to obtain the values of the three parameters in the formula (value of insurance, response of job search, response of labor demand). The second step is to obtain a measure of the current state of the labor market by collecting various indicators such as the current unemployment rate and the current vacancy rate. Using the formula, policymakers can then determine whether unemployment insurance should be lowered or raised from its current level. Using the best available empirical evidence about the three parameters, the paper shows that it is desirable to increase significantly the generosity of unemployment insurance in recessions.

Our formula captures the four main economic forces that are part of the unemployment insurance debate. First, unemployment insurance provides a safety net to workers, which is good. Second, unemployment insurance may raise wages obtained by workers, which may raise unemployment. Third, unemployment insurance may lead jobseekers to search less, which may also raise

unemployment. However, the low job-search effort of unemployed workers may not be relevant in recessions, when firms are not keen on hiring new workers and a large pool of unemployed job applicants is available.

The formula rigorously synthesizes the effect of these forces on the optimal level of unemployment insurance with the help of statistics that can be measured in real-world data. We hope that the formula will move the unemployment insurance debate to a discussion about the best techniques to measure the relevant statistics, away from ideological considerations.