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The Role of Real Wages, Productivity, and Fiscal Policy in Germany's Great Depression 1928–1937[1]

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We study the behavior of output, employment, consumption, and investment in Germany during the Great Depression of 1928–1937. In this time period, real wages were countercyclical, and productivity and fiscal policy were procyclical. We use the neoclassical growth model to investigate how much these factors contribute to the depression. We find that real wages, which were significantly above their market clearing levels, were the most important factor for the economic decline in the depression. Changes in productivity and fiscal policy were also important for the decline and recovery. Even though our analysis is limited to a small number of factors, the model accounts surprisingly well for the depression in Germany. *Journal of Economic Literature* Classification Numbers: E13, E32, E62, N14, O47.

Key Words: Great Depression; Germany; growth model; real wages; productivity; fiscal policy.

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1. INTRODUCTION

The Great Depression was a period of extraordinary turbulence in modern German economic history. From 1928 on, output declined within 4 years by more than 30% relative to trend and then almost completely recovered within the following 5 years. Employment, consumption, and investment also fell dramatically during the depression. After the trough of the depression in 1932, employment and investment recovered, along with output, but consumption stagnated.

We study the depression in Germany from the perspective of the neoclassical growth model. In particular, we study how changes in real wages, productivity, and fiscal policy affected the performance of the economy. We find that these three factors largely account for the macroeconomic dynamics of the German depression.

Furthermore, we find that changes in real wages were the most important of these three factors in accounting for the depression in Germany. Real wages increased by 10% relative to trend while labor productivity declined. In the recovery period, real wages and labor productivity returned to trend. We argue that a large part of the real wage movement was due to distortions in the labor market of the German economy. In the growth model, we treat the observed real wage changes as exogenous, and employment is determined by the demand for labor. Holding the other two factors fixed, real wage changes account for somewhat more than two-thirds of the decline in output and for all of the decline in employment during the depression. They also account for the later recovery in employment, some of the stagnation in consumption, but little of the recovery in output. This suggests that labor market distortions were important causes of the depression in Germany.

Changes in productivity are also important factors of the depression. Total factor productivity declined by 13% relative to trend and then returned to trend in the recovery period. We treat these productivity movements as exogenous country-specific changes of the efficiency of production. Holding the other two factors—real wages and fiscal policy—fixed, productivity changes account for somewhat less than two-thirds of the decline in output and two-fifths of the decline in employment during the depression. During the recovery phase, the subsequent return of productivity to trend predicts too strong a recovery.

Changes in fiscal policy also have a noticeable effect on the depression, but that effect is significantly smaller than the effect of real wage and productivity changes. Under restrictive fiscal policy, effective tax rates increased by one-fifth, and government purchases declined by about 16% relative to trend. In the recovery phase, fiscal policy became expansive: government purchases almost tripled from their 1932 value, while tax rates