

Title of dissertation: “The Effect of Expected Demand on Employment in the United States”

The objective of this dissertation is to determine the effect of expected demand on aggregate employment in the United States (U.S.) for the period 1948 Q1 to 2023 Q3. The relationship is studied using both qualitative and quantitative analysis.

My work is primarily based on expectations theory and on Keynesian economic theory, carefully considering the work of Lucas, Muth, and Sargent on expectations theory; and the work of Keynes on unemployment and effective demand. My model results indicate that economic expectations have a significant effect on aggregate employment.

The Research Problem is “What are the determinants of changes in aggregate employment in the United States of America (U.S.)?” This is an important research topic because significant increases in unemployment can have profound effects on an entire society, not just on its unemployed workers. When unemployment increases significantly, public health declines, crime increases, suicides increase, and public revenues decrease. Government is then placed in the unenviable position of facing increased demand for public services at the very time that public revenue is declining.

The Research Hypothesis is “Firms increase and decrease employment in response to changes in expected demand.” Two proxies for expected demand are used in the dissertation: nonresidential fixed investment, and personal consumption expenditures.

The literature review was used to identify specific variables that some labor economists believe have a significant impact on employment. The literature review identifies two major research gaps in the study of aggregate employment in the U.S. These gaps are a shortage of papers on the effect of expected demand on aggregate employment; and that papers on expected demand and aggregate employment have not been updated to account for the economic effects of Covid-19, which began in the autumn of 2019.

The author addresses these research gaps by submitting a dissertation on expected demand and aggregate employment; and by including data for the period 1948 Q1 to 2023 Q3, thereby accounting for the economic effect of the Covid-19 pandemic.

As a result of the Covid lockdowns, civilian employment declined by twenty-two million jobs from February 2020 to April 2020. The U.S. government then spent approximately \$5 trillion dollars to provide relief to businesses, individuals, and local government. As a result of the relief programs, total employment rose from 130.4 million in April 2020 to 156.9 million in December 2023.

The relief programs increased disposable income thereby increasing personal consumption. In so doing, government changed expectations as measured by personal consumption expenditures and nonresidential fixed investment. The increase in personal consumption raised business expectations and resulted in increases in nonresidential fixed investment, which increased employment.

The empirical results confirm my hypothesis. A total of sixteen models are presented in this dissertation. Every one of these models indicate that the two expected demand proxies have a significant effect on employment at below the 0.05 level.

The short-run models used included OLS, WLS, and ARCH-family models. A Fractionally Integrated GARCH (FIGARCH) model was used to estimate the long-run effects. The FIGARCH model estimated that the two expected demand proxies accounted for over 41% of the average change in employment over the course of this study.