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How could everyone have been so wrong? Forecasting the Great Depression with the railroads☆

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Abstract

Contemporary observers viewed the recession that began in the summer of 1929 as nothing extraordinary. Using a neglected data set of forecasts by railroad shippers, we find that business was surprised by the magnitude of the Great Depression. We show that simple time series methods would have produced much smaller forecast errors than those indicated by the surveys, thus indicating that the survey forecasts were formed using more information than just the past history of the series. The depth and duration of the depression was beyond the experience of business, which appears to have believed that recovery would happen quickly as in previous recessions. Forecasts of inflation are then constructed using the survey forecasts. We find little evidence that the deflation that occurred during the Great Depression was foreseen, thus emphasizing the role of debt deflation in the propagation of the depression.

☆ Although he passed away before the paper was completed, Adam Klug provided the initial inspiration for this paper. His enthusiasm, wit, and insights are greatly missed. We offer special thanks to Howard Bodenhorn, Carl Bonham, Michael Bordo, Hugh Rockoff, seminar participants at Rutgers University and the NBER's Summer Institute, and anonymous referees for their valuable comments.
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1. Introduction

> "It seems manifest that thus far the difference between the present comparatively mild business recession and the severe depression of 1920–1921 is like that between a thunder-shower and a tornado" (May 5, 1930)
>
> "Business showed further gain last week and if improvement continues at the present rate, September should mark the low of the depression." (October 17, 1931)—Irving Fisher[1]

While some claimed to have forecast the collapse of the stock market in 1929, no guru divined the ensuing depression. At the outset, the Great Depression appeared to be an ordinary, though sharp, recession (Friedman and Schwartz, 1963). Most economic indicators had declined almost continuously from August 1929 until the end of 1930. Although consumers and investors seem to have become unusually uncertain after the 1929 stock market crash (Romer, 1989), many businessmen seemed to believe that it would be only a short contraction. In retrospect, this bullishness amazes, as the only relief from decline was an increase in industrial production and personal income in the first quarter of 1931. Mirroring this positive outlook of some business leaders, Irving Fisher of Yale and the forecasters at the Harvard Economic Service remained extraordinarily optimistic 2 years into the greatest economic recession of the twentieth century.[2]

While the extant evidence shows that professional forecasters failed to predict that the recession would turn into a depression, there is no clear consensus about whether business or the public, in general anticipated it. Much attention has focused on whether the price deflation was predicted. If deflation were anticipated, the falling nominal yields would have coincided with rising real yields, thus helping to explain the collapsing consumption and investment that is emphasized in many explanations of the Great Depression (Brunner, 1981; Cecchetti, 1992; Romer, 1992, 1993). If, on the other hand, the decline in prices was unanticipated, it would have hit the economy by adding to debt burdens, forcing otherwise solvent debtors into bankruptcy and raising risk premiums (Bernanke, 1983; Bernanke and Gertler, 1989; Calomiris, 1993; Fisher, 1933).

Evidence for correctly anticipating the deflation was provided by Cecchetti's (1992) forecasts of prices. He pointed out that changes in the price level were positively correlated in the interwar period, implying that simple rules of thumb would have led to expectations of a continued deflation. Reading the business press, Nelson

[1] Quoted in Dominguez et al. (1988, p. 607).

[2] Dominguez et al. (1988) found that even if these contemporary forecasters had modern time series methods at their disposal, they would not have been able to predict industrial production or price movements with any greater success.