

# Abstract

**BBVA Research<sup>4</sup>**

In this paper we extend the Stock and Watson's (1991) single-index dynamic factor model in an econometric framework that has the advantage of combining information from real and financial indicators published at different frequencies and delays with respect to the period to which they refer. We find that the common factor reflects the behavior of the Spanish business cycle well and helps to estimate with high precision the regime-switching probabilities in line with business cycle phases. We also show that financial indicators are useful for forecasting output growth, particularly when certain financial variables lead the common factor. Finally, we provide a simulated real-time exercise and prove that the model is a very useful tool for the short-term analysis of the Spanish Economy.

*Keywords:* dynamic factor model, GDP forecast, financial variables.

*JEL classification:* E32, C22, E27.

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