

Nowcasting economic activity with electronic payments data: A predictive modeling approach - Portal de Investigaciones Económicas

Nowcasting economic activity with electronic payments data: A predictive modeling approach

Borradores de Economía

Número:

1037

DOI:

<http://doi.org/10.32468/be.1037>

Publicado:

Martes, 13 Febrero 2018

Clasificación JEL:

E27, C53, C45

[Descargar documento](#)

Lo más reciente

[Evaluación de los efectos de las recientes normas de provisiones sobre la asignación del crédito de consumo en Colombia](#)

Diego Fernando Cuesta-Mora, Fredy Alejandro Gamboa-Estrada, Camilo Eduardo Sánchez-Quinto

[Educación e inclusión financieras en América Latina y el Caribe: programas de los bancos centrales y las superintendencias financieras](#)

María José Roa-García, Gloria Amparo Alonso Masmela, Nidia García Bohórquez, Diego A. Rodríguez-Pinilla

[Deuda Pública, Expectativas sobre el Déficit Fiscal y su Transmisión al Componente Cíclico de las Tasas de Interés de Largo Plazo](#)

José Vicente Romero-Chamorro, Hernando Vargas-Herrera

[Otras Publicaciones](#)

Economic activity nowcasting (i.e. making current-period estimates) is convenient because most traditional measures of economic activity come with substantial lags. We aim at nowcasting ISE, a short-term economic activity indicator in Colombia. Inputs are ISE's lags and a dataset of payments made with electronic transfers and cheques among individuals, firms, and the central government. Under a predictive modeling approach, we employ a nonlinear autoregressive exogenous neural network model. Results suggest that our choice of inputs and predictive method enable us to nowcast economic activity with fair accuracy.

Also, we validate that electronic payments data significantly reduces the nowcast error of a benchmark non-linear autoregressive neural network model.

Nowcasting economic activity from electronic payment instruments data not only contributes

Nowcasting economic activity with electronic payments data: A predictive modeling approach

Nowcasting economic activity with electronic payments data: A predictive modeling approach - Portal de Investigaciones Económicas

to agents' decision making and economic modeling, but also supports new research paths on how to use retail payments data for appending current models.
