



## Imperfect Information, Shock Heterogeneity, and Inflation Dynamics

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Tatsushi Okuda<sup>1</sup>, Tomohiro Tsuruga<sup>3</sup>, Francesco Zanetti<sup>2,4</sup>

<sup>1</sup>Bank of Japan, <sup>2</sup>Centre For Macroeconomics, <sup>3</sup>International Monetary Fund, <sup>4</sup>University of Oxford

We establish novel empirical regularities on firms' expectations about aggregate and idiosyncratic components of sectoral demand using industry-level survey data for the universe of Japanese firms. Expectations of the idiosyncratic component of demand differ across sectors, and they positively comove with expectations about the aggregate component of demand. To study the implications for inflation, we develop a model with firms that form expectations based on the inference of distinct shocks from a common signal. We show that the sensitivity of inflation to changes in demand decreases with the volatility of idiosyncratic component of demand that proxies the degree of shock heterogeneity. We apply principal component analysis on Japanese sectoral-level data to estimate the degree of shock heterogeneity, and we establish that the observed increase in shock heterogeneity plays a significant role for the reduced sensitivity of inflation to movements in real activity since the late 1990s.