The granular origins of inflation and its international comovement *

Santiago Alvarez-Blaser[†] Raphael Auer [‡] Sarah M. Lein[§] Andrei Levchenko [¶]

Very preliminary, please do not circulate. August 2022

Abstract

Do large firms, product categories, and products affect the inflationary process? In this paper, we show empirically that granularity features are important for understanding retail inflation dynamics in low-inflation environments and international inflation comovement, and we trace along which dimensions it does so. We first develop a methodology to decompose aggregate retail inflation in an unweighted component and granular components for the category, firm and product dimension. After showing the importance of each dimension for price setting at the firm level using a large disaggregated multi-country homescan data set spanning the years 2008 to 2020, we estimate the components and show that granular components contribute significantly to aggregate retail inflation in our data in low-inflation economies. Finally, we study the role of large firms for inflation co-movement across countries: inflation in two countries could be correlated because the same large, multinational firms sell their products in both countries. Our preliminary results show that inflation is more correlated in countries with a higher share of common firms, suggesting that the presence of multinational firms may also help to explain international inflation co-movement.

JEL classification: E31, E32, F44

Keywords: Inflation, Aggregate Fluctuations, Firm-Level Shocks, Granular Economies, Large Firms.

^{*}The views presented in this paper are those of the authors and not necessarely those of the Bank for International Settlements.

[†]University of Basel

 $^{\ddagger}\mathrm{Bank}$ for International Settlements and CEPR

[§]University of Basel, CEPR, and KOF ETHZ

[¶]University of Michigan