



▶ Nakamura, Steinsson, Sun, and Villar: “The Elusive Cost of Inflation: Price Dispersion during the U.S. Great Inflation”

▶ A discussion by Etienne Gagnon, Federal Reserve Board, September 2016

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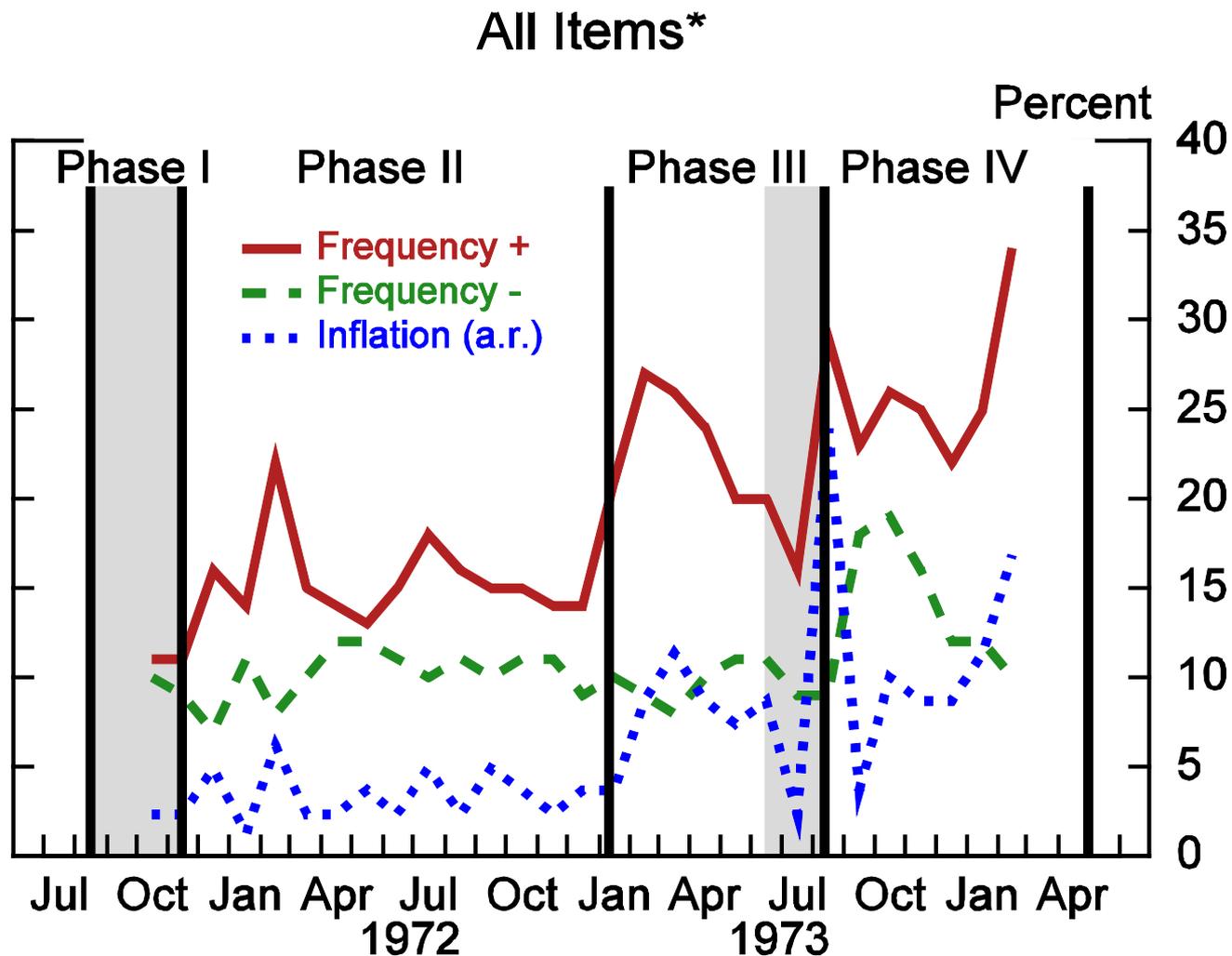
An extraordinary data undertaking

- ▶ The extension of the historical U.S. micro-CPI dataset is a contribution worth celebrating.
 - ▶ Emi and co-authors substantially expand the time coverage of the micro CPI-RDB.
 - ▶ The 1977-1987 period features high inflation and two recessions;
 - ▶ This period is crucial for the identification of monetary policy shocks;
 - ▶ A long sample can help document transformations in the marketing landscape.
 - ▶ Massive undertaking: Scanning and processing of 1 million pages... created out of old tapes...
 - ▶ The data will eventually be available to all researchers through the CPI-RDB.

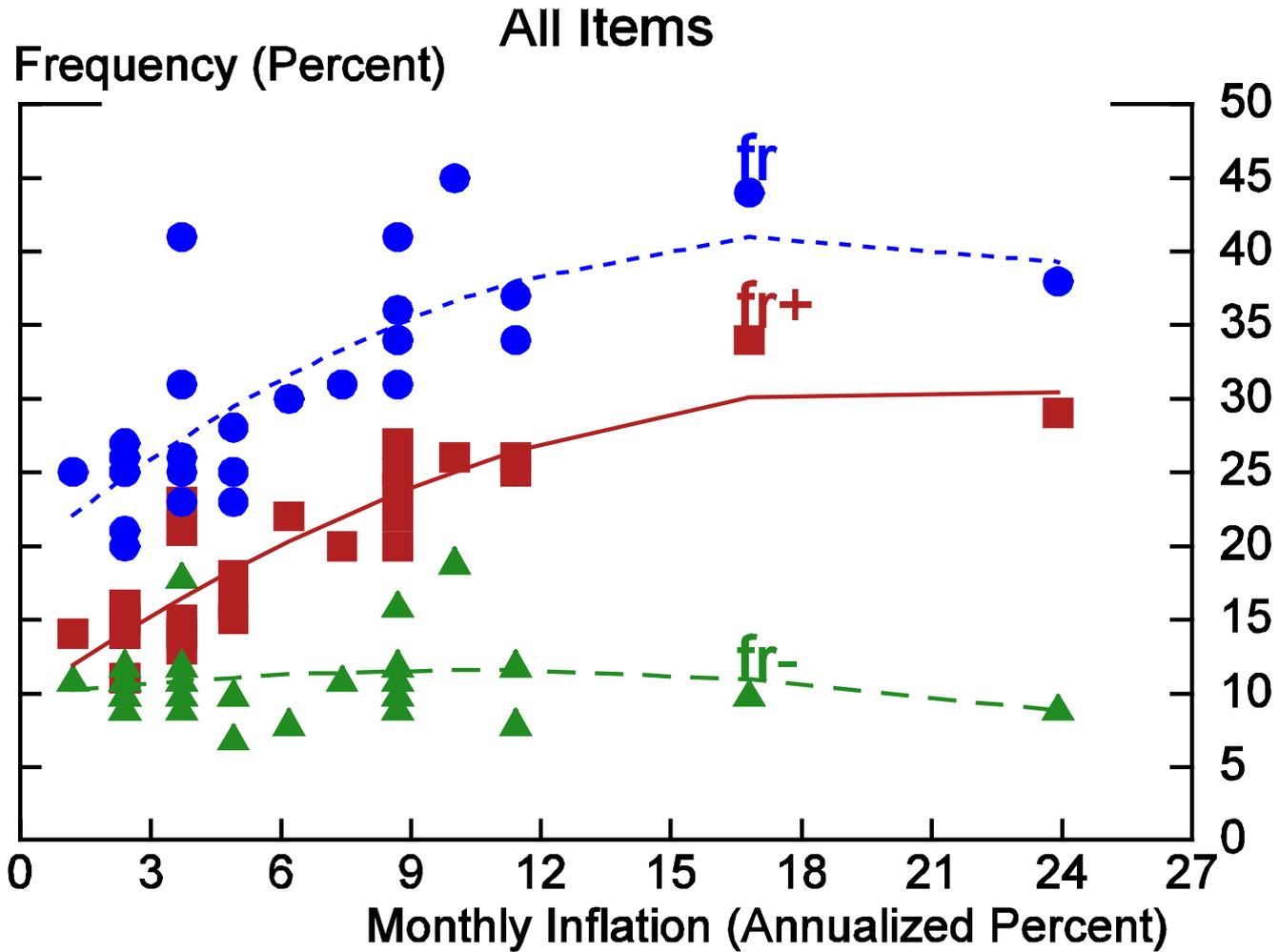
Some older U.S. micro CPI evidence

- ▶ Little known fact: The BLS published monthly statistics on the number and direction of individual price changes from October 1971 to February 1974 to monitor overall compliance with the Nixon price controls.
- ▶ The statistics provide (unweighted) average frequencies of price changes, increases, and decreases for four groups of products: all items, food at home, commodities less food, and services.
- ▶ The period corresponds to the early years of the “Great” Inflation.

Some older U.S. micro CPI evidence



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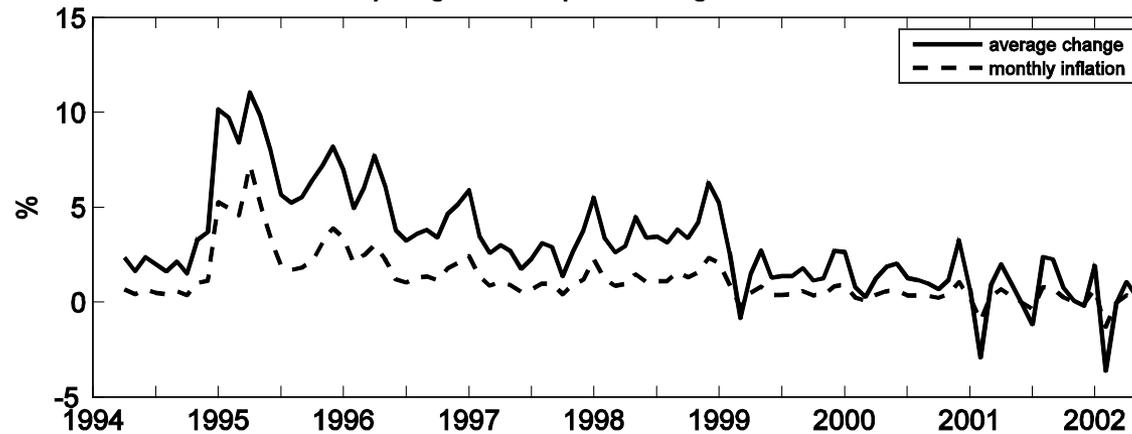


On the elusive costs of medium-to-high inflation

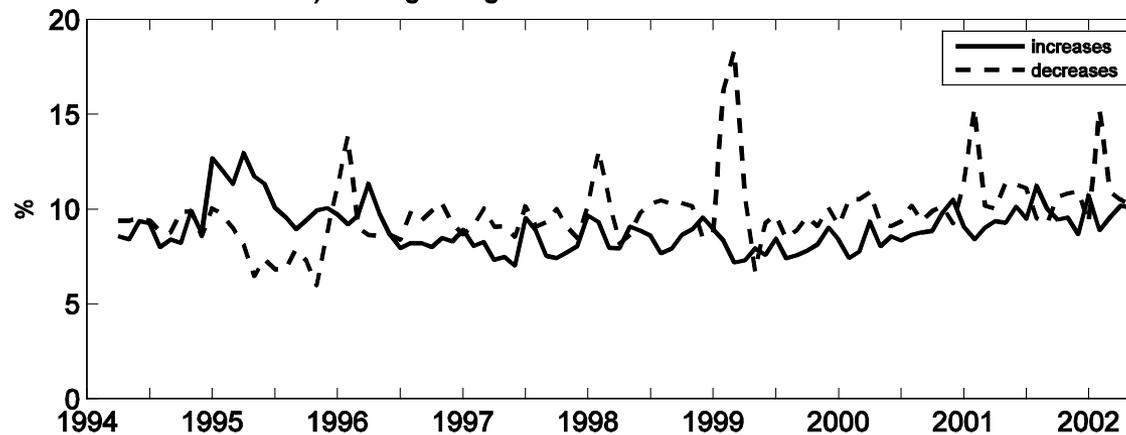
- ▶ I broadly agree with Emi and co-authors: There is scant evidence that price dispersion is responsive to movements in inflation.
 - ▶ Corollary observation: The menu cost model performs well over authors' full sample period, further highlighting the tension between the pricing frictions that help fit the micro data and the frictions macroeconomists want in their models to fit inflation persistence.
- ▶ In the Mexican micro data, the absolute size of price adjustments varies little, if at all, as annual inflation ranges from 5 to 50 percent (see next slide).
- ▶ Even when I narrow my sample to identical goods (for example, Jell-O boxes or particular brands of soft drinks), I do not find much evidence of increased dispersion in the level of individual prices.

Inflation and the absolute size of price changes

a) Magnitude of price changes vs inflation



b) Average magnitude of increases and decreases

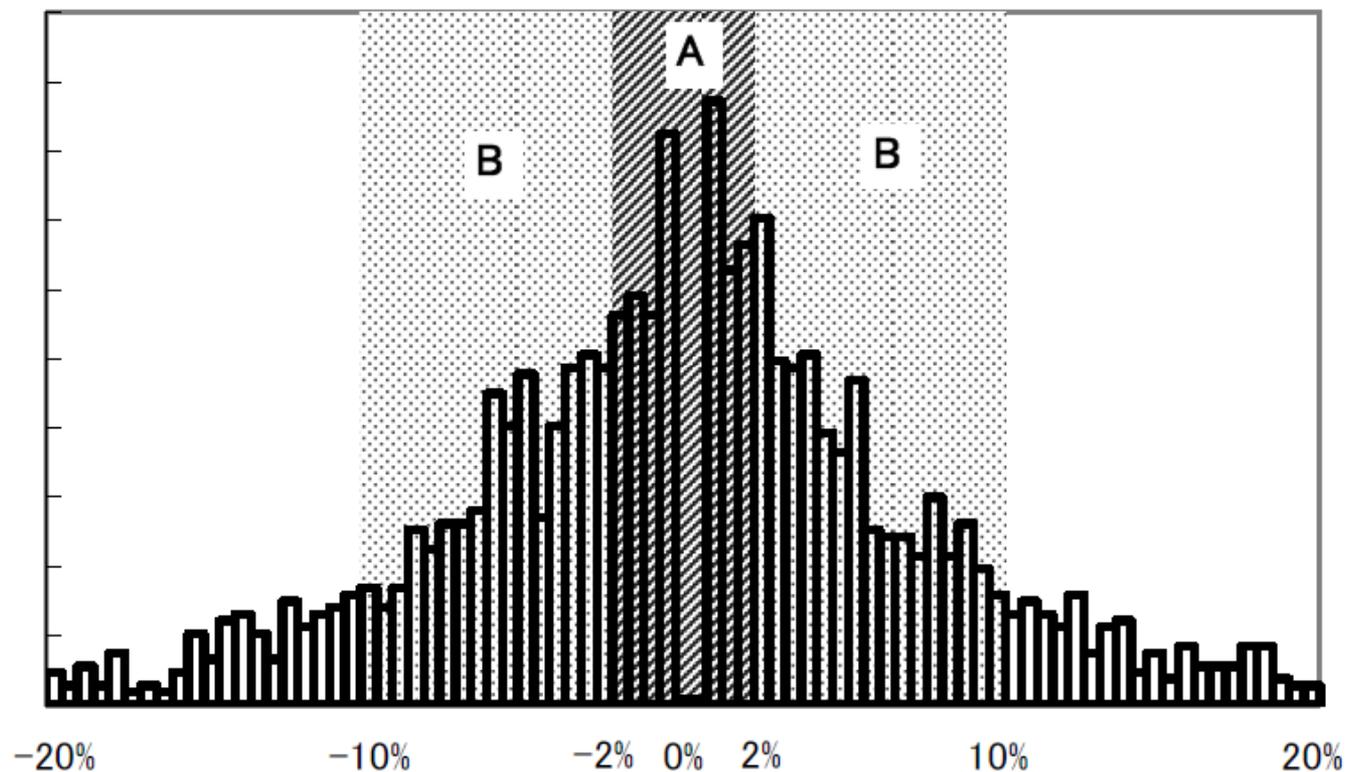


On the elusive costs of low to negative inflation

- ▶ The menu cost model and the Calvo model both imply that price dispersion is lowest in a neighborhood of zero. However, downward nominal rigidities may lead to inefficiently low output (for example, Akerlof et al. [1996]).
- ▶ This argument is different from inefficiencies due to price dispersion; mild deflation might even be associated with less dispersion than usual.
- ▶ That said, the micro data again do not suggest the existence of large downward nominal rigidities the CPI
 - ▶ In Japan, there was no “pile up” at zero in the distribution of micro CPI price changes as the country entered deflation. And while a pile up was apparent for workers’ total compensation before 1997, it quickly vanished as soon as deflation began.

The Japanese experience with mild deflation

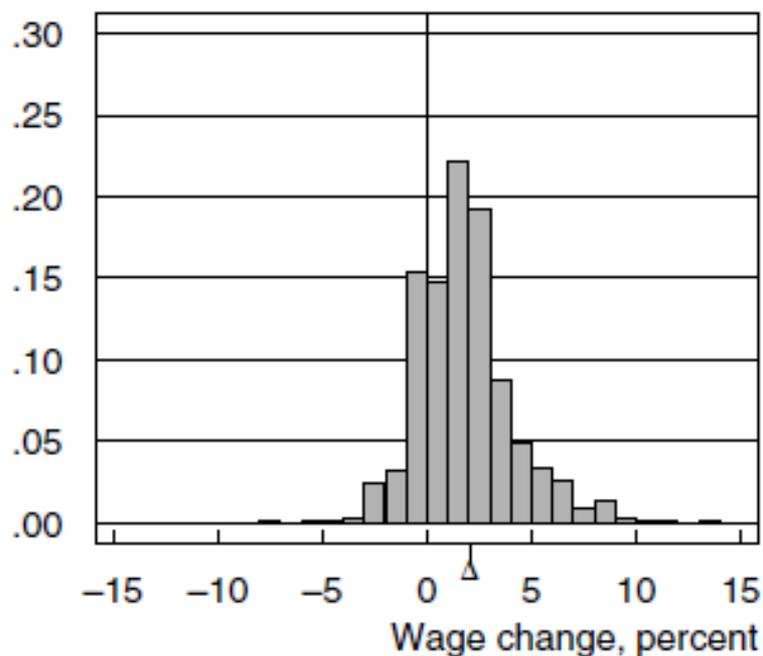
Frequency of price changes in the Japanese CPI from 1989 to 2003
(From Higo and Saita, 2007)



The Japanese experience with mild deflation

Changes in annual earnings of full-time Japanese employees (From Kuyoda and Yamamoto, 2005)

1996–1997



1998–1999

