**Journal of Business and Management Studies (JBMS)**
ISSN: 2709-0876
DOI: 10.32996/jbms
Journal Homepage: www.al-kindipublisher.com/index.php/jbms

JBMS
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

**| RESEARCH ARTICLE**

# Does Inflation Scramble Relative Prices? Evidence from 74 Economies and the Case of Bangladesh

**Ibrahim[1]✉, Abdur Rahman[2], and Md Majedul Islam[3]**
[1]*Master's Student, School of International Business, Southwestern University of Finance and Economics, Chengdu, Sichuan, China*
[2]*School of Computer Science and Engineering, East West University, Dhaka, Bangladesh*
[3]*Master's Student, School of International Business, Southwestern University of Finance and Economics, Chengdu, Sichuan, China*
**Corresponding Author**: Ibrahim, **E-mail**: 2251202z1946@smail.swufe.edu.cn

**| ABSTRACT**
This study examines how far inflation scrambles relative prices, measured as relative price variability (RPV), the cross-sectional dispersion of price changes across consumer-price divisions, and where Bangladesh stands in that relationship. Drawing on menu-cost, imperfect-information and relative-supply-shock theories, the study assembles a panel of 74 economies observed monthly from 2010 to 2026 with eight harmonised divisions of the consumer price index, and estimates economy fixed-effects regressions with standard errors clustered by economy. A one-point rise in absolute monthly inflation is associated with a 0.51-point rise in RPV. The relationship is V-shaped, steeper for negative than for positive inflation, and it is reduced by about half or more, but remains positive, when food, housing-fuel and transport divisions are removed. Exchange-rate movements add no dispersion once inflation is controlled. Economy-specific slopes are positive in all 74 economies and significant in 92%, yet Bangladesh is the exception, with the lowest slope in the panel (0.07, standard error 0.11), a result that also appears in national twelve-division indices. The estimates are conditional associations rather than causal effects, and the Bangladeshi result may reflect administered prices and a narrow range of inflation that this study cannot separate. The findings suggest that disinflation brings a further benefit through narrower relative-price distortions in most economies, but not automatically in Bangladesh.

**| KEYWORDS**

Relative Price Variability; Inflation; Consumer Price Divisions; Menu Costs; Bangladesh

**| ARTICLE INFORMATION**

**ACCEPTED:** 19 March 2025 **PUBLISHED:** 15 November 2025 **DOI:** 10.32996/jbms.2026.8.12.2

## 1. Introduction

Inflation is costly not only because it erodes purchasing power but also because it does not move all prices together: buyers and sellers misread relative prices and resources drift towards the wrong uses (Lucas, 1973), and firms that pay a cost to change prices adjust them in steps (Sheshinski and Weiss, 1977). The summary measure of this distortion is relative price variability (RPV), the cross-sectional dispersion of price changes across goods.

A positive association between RPV and inflation is among the oldest regularities in macroeconomics (Vining and Elwertowski, 1976; Parks, 1978), yet most evidence comes from the United States, Turkey and Europe (Baglan et al., 2016; Khan and Eggoh, 2019), the functional form is contested (Choi, 2010; Choi and Kim, 2010), and harmonised division-level data for many economies have rarely been used together. A broad, comparable test can address all three.

Bangladesh is an informative case outside the usual sample. Twelve-month inflation rose from 5.3% in December 2020 to 11.7% in July 2024 (Bangladesh Bureau of Statistics, 2026), and in May 2024 the central bank replaced a tightly managed taka with a crawling peg (Modak, 2024). Existing studies of Bangladeshi inflation examine aggregate determinants such as money, output, world food prices and exchange-rate pass-through (Akter and Rahman, 2025; Jahan, 2024; Salma, 2021; Ullah and Islam, 2023), but none asks how price changes are spread across the consumer basket.

This study uses division-level consumer price data for 74 economies and Bangladesh to ask four questions. How strongly is RPV related to inflation from 2010 to 2026? Is the relationship asymmetric, and does it survive without the divisions most exposed to

**Copyright**: © 2026 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

supply shocks? Do exchange-rate movements disperse relative prices beyond inflation? Where does Bangladesh stand? It contributes a comparable RPV measure for a wide panel, a division-level decomposition of the inflation–RPV link, and a Bangladeshi result that departs from the panel.

## 2. Literature Review and Hypothesis Development

Vining and Elwertowski (1976) and Parks (1978) found that higher inflation in the United States coincided with greater dispersion of price changes, and Fischer (1981) showed that relative supply shocks, such as energy price rises, can raise inflation and RPV together. Ball and Mankiw (1995) argued that, with menu costs, the skewness of relative price changes feeds into aggregate inflation, so causation may run from relative prices to the price level. Later studies questioned the sign and shape of the association. Reinsdorf (1994) reported a weaker or even negative association in the 1980s, Debelle and Lamont (1997) found the relationship across U.S. cities, and Caglayan and Filiztekin (2003) found it to be nonlinear. Choi (2010) located the minimum of a U-shaped relationship at a non-zero inflation rate, whereas Choi and Kim (2010) argued that apparent asymmetry arises when a piecewise-linear model is fitted to a smooth U-shape. More recent work keeps the focus on nonlinearity: Baglan et al. (2016) found a hump-shaped relationship in Turkish micro prices, Khan and Eggoh (2019) a threshold relationship in 32 European economies, and Nakamura et al. (2018) no rise in the size of price changes during the U.S. Great Inflation. Three gaps follow: almost no study applies one set of divisions to many economies, few ask which divisions carry the relationship although supply-shock theories point to food and energy, and none examines Bangladesh, where administered prices and a managed exchange rate coexist with high inflation. Filling them shows through which prices inflation distorts the consumer basket. Menu-cost theory gives the first prediction. When firms pay to change prices, inflation makes them adjust at different times and by different amounts (Sheshinski and Weiss, 1977; Golosov and Lucas, 2007), and micro evidence shows that price changes are infrequent and differ widely across goods (Bils and Klenow, 2004; Nakamura and Steinsson, 2008; Alvarez et al., 2019). H1: RPV increases with the absolute value of inflation. The imperfect-information view adds an asymmetry, since buyers cannot separate aggregate from relative price movements (Lucas, 1973), although Choi and Kim (2010) caution that asymmetry may reflect misspecification. H2: the slopes of RPV on positive and on negative inflation differ.

Relative supply shocks offer a competing account in which causation runs from relative prices to inflation (Fischer, 1981; Ball and Mankiw, 1995), so the association should be concentrated in food, housing and fuels, and transport, and should weaken without them. Exchange-rate movements may also feed unevenly into the prices of different goods, for instance through invoicing currency (Auer et al., 2021). H3: the relationship remains, although weaker, when food, housing-fuel and transport divisions are excluded. H4: absolute exchange-rate movements raise RPV beyond inflation. Because no theory implies that Bangladesh should differ, the last hypothesis is a null. H5: the economy-specific slope for Bangladesh does not differ from the panel mean.

## 3. Data and Methodology

### *3.1. Data and Measurement*

The panel contains 74 economies with consumer price indices for the same eight divisions (clothing, food, furnishings, health, housing and fuels, miscellaneous, recreation and transport) from the International Monetary Fund (2026), seasonally adjusted with STL decomposition (Cleveland et al., 1990). Headline inflation comes from the same panel and the nominal effective exchange rate from Bruegel (2026). For Bangladesh, the study uses the IMF series and, as a check, the twelve-division indices of the Bangladesh Bureau of Statistics (2026) from November 2023. The sample spans 2010M02 to 2026M08 (13,212 one-month and 12,403 twelve-month observations). Let $\Delta^h p$ denote the log change in the price index of division $j$ in economy $i$ over $h$ months, and $m$ its average across the $J = 8$ divisions:

$$\Delta^h p_{jit} = \ln P_{jit} - \ln P_{ji,t-h}. \quad (1)$$

RPV is the unweighted standard deviation of these changes, with $h = 1$ for one-month and $h = 12$ for twelve-month changes:

$$\mathrm{RPV}_{it}^h = \left(\frac{1}{J}\sum_{j=1}^{J} d_{jit}^2\right)^{1/2}, d_{jit} = \Delta^h p_{jit} - m_{it}^h. \quad (2)$$

Core RPV uses only the five divisions other than food, housing and fuels, and transport. Index spikes more than 15 points from the median of neighbouring months (170 values in 41 economies, including a 43% jump and reversal in Bangladesh's recreation index) are set to missing. RPV, inflation and exchange-rate changes are winsorised at the 1st and 99th percentiles, and inflation $\pi$ has positive and negative parts $\pi^+$ and $\pi^-$. The measure is unweighted because expenditure weights are not available for all economies.

### *3.2. Empirical Strategy*

The baseline relates RPV to absolute inflation with economy fixed effects $\alpha_i$, which remove permanent differences in basket composition and price-collection practice:

$$\mathrm{RPV}_{it} = \alpha_i + \beta \mid \pi_{it} \mid + \varepsilon_{it}. \quad (3)$$

The asymmetric specification separates positive and negative inflation, adds month effects $\delta_t$ that absorb common shocks, and adds the absolute exchange-rate change |Δs|:

$$\mathrm{RPV}_{it} = \alpha_i + \delta_t + \beta^{+}\pi_{it}^{+} + \beta^{-}\pi_{it}^{-} + \gamma \mid \Delta s_{it} \mid + \varepsilon_{it}. \quad (4)$$

Under H2, $\beta^{+} \neq \beta^{-}$; under H4, $\gamma > 0$. Standard errors are clustered by economy (Cameron and Miller, 2015), with two-way clustering by economy and month as a check. Economy-specific slopes come from Eq. (3) estimated for each economy with Newey–West standard errors (six lags), and, following Choi and Kim (2010), the kink of the V is located by grid search. All estimates are conditional associations, not causal effects, because inflation and RPV respond to the same shocks.

## 4. Empirical Results And Discussion

### *4.1. Descriptive Statistics and Time Variation*

Across 13,212 one-month observations, RPV averages 0.91 points against mean inflation of 0.44 points, and core RPV averages 0.64 points; for twelve-month changes, RPV averages 3.73 points and inflation 5.25 points. Bangladesh's mean one-month RPV of 0.59 lies at the 19th percentile of economy means, and its twelve-month inflation varies far less (standard deviation 1.73 points against 5.70).

Figure 1(a) shows that the cross-economy averages of RPV and absolute inflation move together. Their correlation across 198 monthly averages is 0.59, and both rise from 0.75 and 0.49 points in 2019 to 1.20 and 0.98 points in 2022. Yet RPV reached its sample maximum of 1.55 points in April 2020, when mean absolute inflation was only 0.69 points, so dispersion can rise sharply without a matching rise in inflation. This episode is consistent with relative shocks.

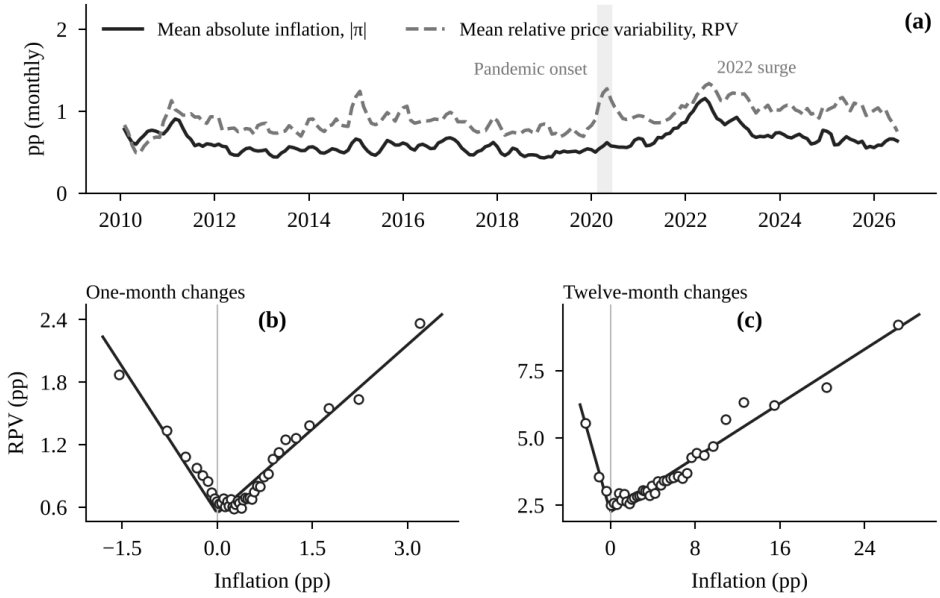
### *4.2. Baseline and Asymmetric Estimates*

Panels (b) and (c) of Figure 1 plot RPV against inflation in 40 equal-sized bins. Both show a V in which RPV is lowest near zero inflation and rises on both sides, but disinflation and deflation months are few (2,856 of 13,212 one-month and 1,044 of 12,403 twelve-month observations), so the left arm rests on a small share of the data.

Table 1 confirms the pattern. In column (1), a one-point rise in absolute monthly inflation is associated with a 0.51-point rise in RPV (SE 0.03), and the twelve-month slope is 0.26, so H1 is supported. Column (2) gives slopes of 0.49 for positive and 0.75 for negative inflation, a significant difference ($p < .001$); for twelve-month changes, the slopes are 0.27 and 0.90 ($p = .006$). Month effects change little (column 3), so H2 is supported, with the caveat that the negative-inflation slope rests on few observations.

**Figure 1**

Relative Price Variability and Inflation over Time and across Bins




*Notes:* Panel (a): three-month centred moving averages of monthly cross-economy means (one-month changes; months with at least 30 economies); the correlation of the unsmoothed means is 0.59. Panels (b)–(c): mean RPV in 40 equal-sized inflation bins with piecewise-linear fits (pooled). *Source:* International Monetary Fund (2026); authors' calculations.

### *4.3. Threshold, Divisions and Core RPV*

The kink of the V sits close to zero. For one-month changes, the grid search selects a threshold of 0.10 points, with slopes of 0.51 above and 0.67 below it, but the fit improves by only 0.24% relative to a kink at zero, and for twelve-month changes the best threshold is exactly zero. The asymmetry in Table 1 is therefore not an artefact of forcing the kink to zero, and the positive kink found by Choi (2010) is not supported here.

Column (4) of Table 1 removes the divisions most exposed to food and energy shocks. The slopes fall to 0.23 for positive and 0.27 for negative inflation, 48% and 36% of the full-RPV values, yet they remain significant and the asymmetry disappears ($p$ = .302). H3 is therefore supported in part: inflation is associated with dispersion even among the remaining divisions, but about half or more of the effect comes from food, housing-fuel and transport. Column (5) does not support H4: the coefficient on $|\Delta s|$ is 0.009 (SE 0.009) for one-month and −0.010 (SE 0.007) for twelve-month changes, even though Akter and Rahman (2025) find a significant link between the exchange rate and aggregate inflation in Bangladesh.

**Table 1**
Inflation and Relative Price Variability: Panel Estimates

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Dependent variable** | **RPV** | **RPV** | **RPV** | **Core RPV** | **RPV** |
| *Panel A. One-month changes* | | | | | |
| $\|\boldsymbol{\pi}\|$ | 0.511*** | | | | |
| | (0.027) | | | | |
| $\boldsymbol{\pi}^+$ | | 0.488*** | 0.473*** | 0.234*** | 0.471*** |
| | | (0.026) | (0.027) | (0.027) | (0.028) |
| $\boldsymbol{\pi}^-$ | | 0.747*** | 0.701*** | 0.270*** | 0.700*** |
| | | (0.049) | (0.049) | (0.048) | (0.049) |
| $\|\Delta s\|$ | | | | | 0.009 |
| | | | | | (0.009) |
| $H_0$: $\boldsymbol{\pi}^+ = \boldsymbol{\pi}^-$, $p$ | | < .001 | < .001 | .302 | < .001 |
| Within $R^2$ | 0.147 | 0.155 | 0.155 | 0.044 | 0.155 |
| *Panel B. Twelve-month changes* | | | | | |
| $\|\boldsymbol{\pi}\|$ | 0.259*** | | | | |
| | (0.014) | | | | |
| $\boldsymbol{\pi}^+$ | | 0.265*** | 0.247*** | 0.134*** | 0.253*** |
| | | (0.014) | (0.017) | (0.014) | (0.018) |
| $\boldsymbol{\pi}^-$ | | 0.903*** | 0.821*** | 0.404 | 0.830*** |
| | | (0.235) | (0.248) | (0.263) | (0.249) |
| $\|\Delta s\|$ | | | | | −0.010 |
| | | | | | (0.007) |
| $H_0$: $\boldsymbol{\pi}^+ = \boldsymbol{\pi}^-$, $p$ | | .006 | .018 | .298 | .018 |
| Within $R^2$ | 0.268 | 0.283 | 0.281 | 0.088 | 0.281 |

*Notes:* Fixed-effects regressions of RPV on $|\pi|$ (column 1) or on $\pi^+$ and $\pi^-$ (columns 2–5); standard errors clustered by economy in parentheses. Column (4) uses core RPV. $|\Delta s|$ is the absolute change in the nominal effective exchange rate. Economy effects in all columns; month effects in columns (3)–(5). 74 economies; 13,212 observations in Panel A and 12,403 in Panel B. * $p$ < .05. ** $p$ < .01. *** $p$ < .001. *Source:* Authors' estimation.

Figure 2 traces the result to individual divisions. In panel (a), the slopes of absolute deviation on absolute inflation for transport (0.50) and food (0.49) are about twice those for clothing and furnishings (0.24). Panel (b) shows the direction: when inflation rises, food (0.56) and transport (0.20) prices rise faster than average while every division except housing falls behind, with slopes of −0.14 to −0.27. Rising inflation thus scrambles relative prices mainly by pulling food and transport away from the basket.

### *4.4. Robustness*

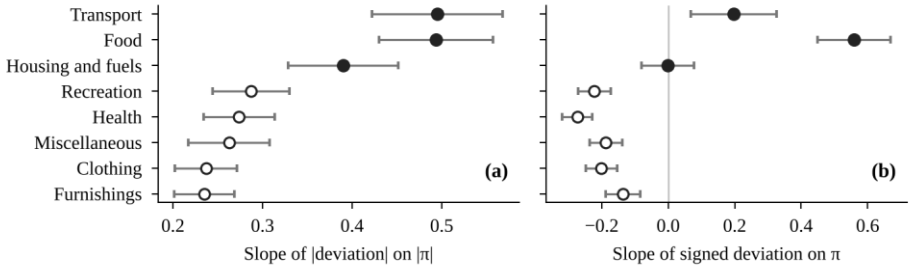
The baseline slope of 0.51 is robust to measurement and sample choices. Two-way clustering by economy and month raises the standard error only from 0.027 to 0.029, and the mean absolute deviation gives a smaller but highly significant slope of 0.38, as expected from a change of scale. Lagged inflation (0.29), excluding 2020–2022 (0.49), excluding the top 5% of RPV values (0.36) and dropping the ten highest-inflation economies (0.54) all give slopes with $p < .001$.

### *4.5. Heterogeneity across Economies and the Bangladeshi Case*

Table 2 reports stability checks and economy-specific slopes. The slope is similar before the pandemic (0.43), in 2020–2022 (0.44) and in 2023–2026 (0.40), and it does not depend on the inflation state (interaction 0.019, SE 0.035). Across economies, the mean slope is 0.55 (median 0.52, standard deviation 0.29); it is positive in all 74 economies and significant at the 5% level in 92% of them, and Figure 3(a) shows that economies with higher mean absolute inflation have higher mean RPV.

**Figure 2**

Division-Level Contributions to the Inflation–RPV Relationship

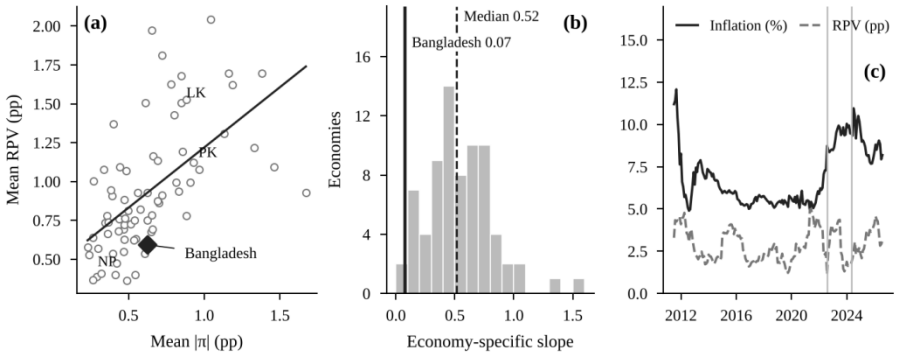



*Notes:* Fixed-effects slopes with 95% confidence intervals. Panel (a): absolute deviation of division price change from the cross-division mean on $|\pi|$. Panel (b): signed deviation on $\pi$. Filled markers: divisions excluded from core RPV. *Source:* International Monetary Fund (2026); authors' estimation.

Bangladesh does not fit the panel. Its slope is 0.075 (SE 0.110), the lowest of the 74 economies; the next lowest is the Republic of Congo (0.093), while Pakistan (0.57) and Sri Lanka (0.74) follow the panel. The 95% interval, −0.14 to 0.29, excludes the panel mean of 0.55, and the difference of 0.44 from the pooled slope is 3.8 standard errors, so H5 is rejected. The result survives dropping the April 2023 rebasing months (0.083), robust regressions (about 0.10), twelve-month changes (0.048) and the Bureau's own indices (0.089), although the narrow range of Bangladeshi inflation lowers precision.

**Figure 3**

Economy-Specific Relationships and the Bangladeshi Series




*Notes:* Panel (a): mean RPV against mean absolute inflation by economy (PK = Pakistan, LK = Sri Lanka, NP = Nepal). Panel (b): distribution of the 74 economy-specific slopes. Panel (c): twelve-month inflation and RPV in Bangladesh; vertical lines mark August 2022 (fuel-price rise) and May 2024 (crawling peg). *Source:* International Monetary Fund (2026); authors' estimation.

Panel (c) of Figure 3 shows the flat slope: twelve-month RPV stays between about 1 and 5 points while inflation moves between 5% and 12%. In the Bureau's twelve divisions, cumulative price changes between

November 2023 and September 2026 range from 16.7% (Division 06) to 37.3% (Division 12) around a general rise of 25.3%, so relative prices moved far but division by division, not in proportion to monthly inflation. Administered prices and a narrow range of inflation could both explain this, but this study does not test them.

## 5. Implications

The findings suggest that menu-cost and supply-shock explanations are complements rather than rivals. A positive slope in core RPV is hard to attribute to food and energy shocks alone, yet the large contribution of food and transport shows that supply shocks matter, so models of price setting should combine heterogeneity in adjustment frequency (Nakamura and Steinsson, 2008) with sector-specific shocks. Where the slope is clearly positive, as in 92% of the panel, disinflation should also narrow relative-price distortions. For Bangladesh, lowering inflation would not by itself compress the gap between division price changes, so monitoring should include division-level trends, especially for food and administered prices.

**Table 2**

Stability, Economy-Specific Slopes and the Bangladeshi Slope

| | Estimate | SE | Obs. | Econ. |
|---|---|---|---|---|
| *Panel A. Slope of RPV on $\|\pi\|$, one-month changes* | | | | |
| All observations | 0.511*** | 0.027 | 13,212 | 74 |
| 2010–2019 | 0.427*** | 0.036 | 7,984 | 74 |
| 2020–2022 | 0.436*** | 0.050 | 2,528 | 72 |
| 2023–2026 | 0.399*** | 0.037 | 2,700 | 69 |
| Difference, high minus low state | 0.019 | 0.035 | 13,212 | 74 |
| *Panel B. Economy-specific slopes (74 economies)* | | | | |
| Mean of slopes | 0.551 | 0.034 | | 74 |
| Share of economies with positive slope | 1.00 | | | |
| Share significant at 5% | 0.92 | | | |
| *Panel C. Bangladesh: robustness of the slope* | | | | |
| IMF eight divisions, monthly | 0.075 | 0.110 | 191 | 1 |
| Excluding rebasing months (2023M03–M06) | 0.083 | 0.118 | 187 | 1 |
| IMF eight divisions, twelve-month | 0.048 | 0.101 | 180 | 1 |
| BBS twelve divisions, monthly (2023M12–2026M09) | 0.089 | 0.094 | 34 | 1 |

*Notes:* Slopes of RPV on $|\pi|$ for one-month changes unless stated. Panel A: standard errors clustered by economy. Panel B: one regression per economy with Newey–West standard errors (six lags). Panel C: Bangladesh only; BBS denotes the twelve-division indices of the Bangladesh Bureau of Statistics; Huber and median regressions give about 0.10. * $p < .05$. ** $p < .01$. *** $p < .001$. *Source:* International Monetary Fund (2026); Bangladesh Bureau of Statistics (2026); authors' estimation.

## 6. Conclusion, Limitations and Future Research

This study asked how far inflation scrambles relative prices, and where Bangladesh stands in that relationship. It used a panel of 74 economies from 2010 to 2026, with relative price variability (RPV) built from eight harmonised divisions of the consumer price index. The central finding is that RPV rises with the absolute rate of inflation. A one-point increase in absolute monthly inflation is associated with a 0.51-point increase in RPV, and the twelve-month slope is 0.26. The relationship is V-shaped, with a slope of 0.49 for positive inflation and 0.75 for negative inflation. The threshold test shows that this asymmetry is not produced by forcing the kink to zero. The kink lies at 0.10 points for one-month changes and exactly at zero for twelve-month changes, and it improves the fit by only 0.24%. These results confirm the long-standing association reported for advanced economies (Vining and Elwertowski, 1976; Parks, 1978) in a much wider and more recent sample.

The division-level results show where the relationship comes from. When food, housing and fuels, and transport are removed, the slopes fall to 48% and 36% of their full-sample values but remain positive and significant, and the asymmetry disappears. The slopes of absolute deviations on absolute inflation are about 0.50 for transport and 0.49 for food, roughly twice the 0.24 for clothing and furnishings. The signed results show that food (0.56) and transport (0.20) prices rise faster than the average basket when inflation rises, while most other divisions fall behind. Inflation therefore scrambles relative prices mainly by pulling food and transport away from the rest of the basket. The monthly averages also show that dispersion can rise without inflation. RPV reached its

sample maximum of 1.55 points in April 2020, when mean absolute inflation was only 0.69 points. Exchange-rate movements add no dispersion beyond inflation, and the coefficient is 0.009 (SE 0.009) for one-month changes.

The Bangladesh result is the clearest departure from the panel. Economy-specific slopes are positive in all 74 economies and significant at the 5% level in 92% of them, with a mean of 0.55. Bangladesh has the lowest slope, 0.075 (SE 0.110), which is 3.8 standard errors below the pooled estimate. It remains low when the 2023 rebasing months are dropped, in robust regressions, in twelve-month changes and in the Bangladesh Bureau of Statistics' own twelve-division indices (0.089). Cumulative price changes between November 2023 and September 2026 range from 16.7% to 37.3% across divisions around a general rise of 25.3%. Relative prices in Bangladesh have therefore moved a long way, but persistently and division by division rather than in step with monthly inflation.

These findings have implications for theory and policy. For theory, they suggest that menu-cost and relative-supply-shock accounts are complements rather than rivals. A positive slope remains in core RPV, which is hard to attribute to food and energy shocks alone. The large contribution of food and transport shows that supply shocks determine the size of the effect. For policy, disinflation should also narrow relative-price distortions in the great majority of economies, which is an additional benefit of price stability. In Bangladesh, lowering inflation would not by itself compress the gap between division price changes. Monitoring should therefore include division-level trends, especially for food and administered prices, and statistical agencies could publish RPV alongside headline inflation.

Several limitations qualify these conclusions. RPV is unweighted because expenditure weights are not available for all economies, and only eight divisions are common to the panel, so the measure may understate dispersion within divisions. The 15-point rule used to remove index spikes is a judgement, and the national Bangladeshi samples are short. Bangladeshi inflation also varies little, which lowers statistical power, so a low slope is partly a feature of the data. Most importantly, the estimates are conditional associations and not causal effects, because inflation and RPV respond to the same shocks. The explanations offered for the Bangladeshi result, administered prices and a narrow range of inflation, are therefore untested.

Future research can address these limitations in four ways. First, expenditure-weighted RPV and item-level or scraped online prices (Cavallo and Rigobon, 2016; Cavallo, 2018) would show whether the division-level findings hold at a finer level. Second, histories of administered prices could test directly whether they explain the flat Bangladeshi slope. Third, the slope could be re-estimated as more post-2024 data accumulate, to see whether it changes after the move to a crawling peg. Fourth, identification strategies built on exogenous supply or exchange-rate shocks could separate the monetary and relative-shock channels that this study can only describe.

**Funding**: This research received no external funding.
**Conflicts of Interest**: The authors declare no conflict of interest.
**ORCID iD (if any):** Ibrahim: https://orcid.org/0009-0007-6635-3836
**Publisher's Note**: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

**References**

1) Akter, S., and J. Rahman, 2025, "Exchange rate pass-through and inflationary dynamics in Bangladesh: A cointegration and VECM analysis", *Economic Annals*, 70(246), 37–67.
2) Alvarez, F., M. Beraja, M. Gonzalez-Rozada, and P. A. Neumeyer, 2019, "From hyperinflation to stable prices: Argentina's evidence on menu cost models", *The Quarterly Journal of Economics*, 134(1), 451–505.
3) Auer, R., A. Burstein, and S. M. Lein, 2021, "Exchange rates and prices: Evidence from the 2015 Swiss franc appreciation", *American Economic Review*, 111(2), 652–686.
4) Baglan, D., M. E. Yazgan, and H. Yilmazkuday, 2016, "Relative price variability and inflation: New evidence", *Journal of Macroeconomics*, 48, 263–282.
5) Ball, L., and N. G. Mankiw, 1995, "Relative-price changes as aggregate supply shocks", *The Quarterly Journal of Economics*, 110(1), 161–193.
6) Bangladesh Bureau of Statistics, 2026, *Consumer price index and inflation rate: Monthly bulletins, November 2023–September 2026* [data set], Dhaka: Statistics and Informatics Division, Ministry of Planning.
7) Bils, M., and P. J. Klenow, 2004, "Some evidence on the importance of sticky prices", *Journal of Political Economy*, 112(5), 947–985.

8) Bruegel, 2026, *Real effective exchange rates database* 11 October 2026, https://www.bruegel.org.
9) Caglayan, M., and A. Filiztekin, 2003, "Nonlinear impact of inflation on relative price variability", *Economics Letters*, 79(2), 213–218.
10) Cameron, A. C., and D. L. Miller, 2015, "A practitioner's guide to cluster-robust inference", *Journal of Human Resources*, 50(2), 317–372.
11) Cavallo, A., 2018, "Scraped data and sticky prices", *The Review of Economics and Statistics*, 100(1), 105–119.
12) Cavallo, A., and R. Rigobon, 2016, "The Billion Prices Project: Using online prices for measurement and research", *Journal of Economic Perspectives*, 30(2), 151–178.
13) Choi, C.-Y., 2010, "Reconsidering the relationship between inflation and relative price variability", *Journal of Money, Credit and Banking*, 42(5), 769–798.
14) Choi, C.-Y., and Y. S. Kim, 2010, "Is there any asymmetry in the effect of inflation on relative price variability?", *Economics Letters*, 108(2), 233–236.
15) Cleveland, R. B., W. S. Cleveland, J. E. McRae, and I. Terpenning, 1990, "STL: A seasonal-trend decomposition procedure based on loess", *Journal of Official Statistics*, 6(1), 3–73.
16) Debelle, G., and O. Lamont, 1997, "Relative price variability and inflation: Evidence from U.S. cities", *Journal of Political Economy*, 105(1), 132–152.
17) Fischer, S., 1981, "Relative shocks, relative price variability, and inflation", *Brookings Papers on Economic Activity*, 1981(2), 381–441.
18) Golosov, M., and R. E. Lucas, Jr., 2007, "Menu costs and Phillips curves", *Journal of Political Economy*, 115(2), 171–199.
19) International Monetary Fund, 2026, *Consumer price index (CPI)* [data set], IMF Data, https://data.imf.org.
20) Jahan, N., 2024, "An empirical analysis of exchange rate dynamics, inflation, money supply, and economic growth in Bangladesh", *The International Journal of Business Management and Technology*, 8(4), 206–215.
21) Khan, M., and J. Eggoh, 2019, "Sectoral variability and the foundations of optimal inflation rate", *Applied Economics*, 51(38), 4203–4217.
22) Lucas, R. E., Jr., 1973, "Some international evidence on output-inflation tradeoffs", *American Economic Review*, 63(3), 326–334.
23) Modak, T., 2024, "Crawling peg: Promising a stable dollar market ahead", *The Business Standard*, 25 May.
24) Nakamura, E., and J. Steinsson, 2008, "Five facts about prices: A reevaluation of menu cost models", *The Quarterly Journal of Economics*, 123(4), 1415–1464.
25) Nakamura, E., J. Steinsson, P. Sun, and D. Villar, 2018, "The elusive costs of inflation: Price dispersion during the U.S. Great Inflation", *The Quarterly Journal of Economics*, 133(4), 1933–1980.
26) Parks, R. W., 1978, "Inflation and relative price variability", *Journal of Political Economy*, 86(1), 79–95.
27) Reinsdorf, M., 1994, "New evidence on the relation between inflation and price dispersion", *American Economic Review*, 84(3), 720–731.
28) Salma, U., 2021, "Macroeconomic determinants of inflation in Bangladesh", *European Journal of Business and Management Research*, 6(5), 264–267.
29) Sheshinski, E., and Y. Weiss, 1977, "Inflation and costs of price adjustment", *The Review of Economic Studies*, 44(2), 287–303.
30) Ullah, M., and M. J. Islam, 2023, "What drives inflation in Bangladesh? An econometric analysis", *BAUET Journal*, 4(1), https://doi.org/10.59321/BAUETJ.V4I1.27.
31) Vining, D. R., Jr., and T. C. Elwertowski, 1976, "The relationship between relative prices and the general price level", *American Economic Review*, 66(4), 699–708.