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Consumer Confidence under Economic Crises: Empirical Analysis across Regions and Countries

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Extended Abstract

This paper attempts to differentiate the impact of five economic crises having occurred since 1990s on consumer confidence across key regions and countries. In the empirical investigation based on the Organization of Economic Cooperation and Development (OECD) dataset, focus is placed on balanced subsamples including three country groups (OECD, G7, and the euro area), two OECD advanced economies (the US and Japan), and two non-OECD emerging economies (China and South Africa). The study begins in January 1991, ends in December 2022, and covers the 1992-1993 European Monetary System (EMS) Crisis, 1997-1998 Asian Crisis, 2000-2002 Dotcom Bubble Burst, 2008-2009 Global Financial Crisis, and 2020-2021 Covid-19 Crisis.

Regression models adopt the year-on-year change in the monthly consumer confidence index (CCI) as the explained variable and include three categories of explanatory variables.

The first is represented by changes in key monthly macroeconomic variables including the industrial production index, headline consumer price index inflation, long-term interest rate, and nominal effective exchange rate. The second selects two measures in global financial markets: the stock market performance in terms of the annual return on the S&P 500 Index and Chicago Board Options Exchange Volatility Index (VIX). The third specifies five dummies for the crises examined. Besides contemporaneous links with CCI, the lead-lag effect is analyzed with two regression models incorporating three-month and six-month lags for non-dummy variables and one best-fit regression model.

Major findings are as follows. First, consumer confidence in the three country groups, the US, and Japan dynamically responds to contemporaneous changes in the business cycle indicator proxied by industrial production. More specifically, there exists an amplification effect through which a rise in current industrial production unambiguously leads to an accelerated rise (fall) in CCI having increased (decreased) in the previous month. In contrast, the effect is lagged by six months in China, implying more complex cyclical patterns.

Second, a negative lagged effect of inflation on consumer confidence is found in the euro area and Japan, with slower adjustment in response to inflation signals at the national level. The role for the inflation and long-term interest rate is overall absent, suggesting limits for monetary policy in consumer confidence management. S&P 500 returns dynamically exert a positive effect on consumer confidence, whereas the effect of the VIX appears minimal.

Third, two distinct dynamic relations for the nominal effective exchange rate are observed. In the euro area, the US, Japan, and South Africa, a positive link implies that consumer confidence is sensitive to changes in purchasing power caused by currency appreciation or depreciation. In China, a negative link suggests that Chinese consumers respond to currency movements that lead to changes in exports acting as a key driver in the Chinese economy.

Fourth, the 1992-1993 EMS Crisis mainly affects the euro area, Japan, and South Africa where consumer confidence is further dampened. The Chinese CCI is instead strengthened over the crisis where alternative positive shocks are possible to offset its adverse effect. The 1997-1998 Asian Crisis intensifies the downward shift in Japanese and Chinese consumer confidence, while the 2000-2002 Dotcom Bubble Burst enhances consumer confidence in most subsamples with the exception of South Africa and the US.

At last, consumer confidence fluctuates in both directions during the 2008-2009 Global Financial Crisis (GFC) except for China where a positive coefficient for the crisis dummy may in part result from special government measures that attenuate a continual drop in consumer confidence. A higher volatility but a lower mean in CCI movements over the Covid-19 Crisis than over the GFC suggests a steady improvement in the household resilience against the economic crisis through dynamic adaptation over the past decade.