

Extended Abstract
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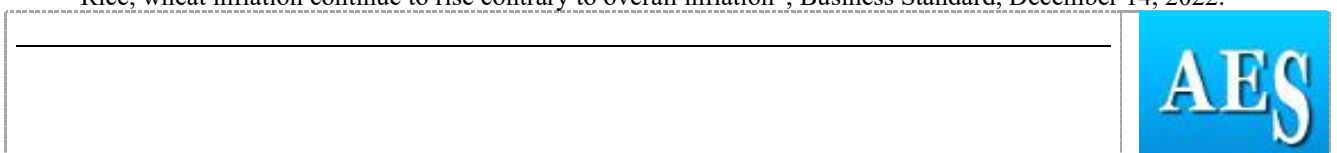
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Abstract prepared for presentation at the 97th Annual Conference of the Agricultural Economics Society, The University of Warwick, United Kingdom

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| Abstract | 200 words max |
| <p>This paper explores the impact of agri-derivative suspensions on commodity price behaviour. Agri-derivative suspensions are one of the many interventions used in India to control price volatility and inflationary pressure. Over the last two years, food price inflation has been stubbornly high both globally as well as in India. It is believed that futures market trade could potentially increase inflationary pressure and therefore suspending commodities could tame the rising price trends. We focus on two commodities in this paper- chana (Bengal gram) and mustard. Using synthetic control method, we find no empirical evidence in favour of the hypothesis that derivatives suspension rein in price rise.</p> | |
| Keywords | Futures market, market intervention |
| JEL Code | e.g. Energy: Demand and Supply Q41 see: www.aeaweb.org/jel/guide/jel.php?class=Q) |
| Introduction | 100 – 250 words |
| <p>Over the last two years, food price inflation has been stubbornly high both in India as well as globally. While the most recent overall food inflation numbers for November 2022 offer some relief, cereal inflation continues to be high.¹ High prices have implications on food security, overall inflation, and can cause political and social unrest (Bellemare, 2015). Governments worldwide therefore intervene in their food markets to ensure price stability and control food inflation. Import relaxations, export curbs, release of reserve stocks are some of the most common interventions. Given the significance of agriculture and concerns towards ensuring stable food prices, such measures are frequently implemented in India. Market interventions however come at a cost: they are distortionary, impact prices, affect farmer’s decision to sell and tax rather than support the agricultural sector (see for example Chand, 2012, Saini and Gulati, 2017, Narayanan and Tomar, 2022). In this paper, we focus on one such intervention that is unique to India: the suspension of agricultural derivatives trading.</p> <p>we set out to examine the impact of agricultural derivatives trading suspensions, particularly in the light of two recent suspensions: the <i>chana</i> derivatives suspension in August 2021 and</p> | |

¹ “Rice, wheat inflation continue to rise contrary to overall inflation”, Business Standard, December 14, 2022.



mustard seed derivatives suspension in October 2021. In addition, we also examine the *chana* derivatives suspension of June 2016. Both *chana* and mustard seed contract are heavily traded agri-derivatives commodities and thus serve as a useful case-study to analyse the effect of suspensions. Besides, in contrast to all other such episodes, the three episodes we study here were standalone suspension events that would enable us to identify the impacts, if any.²

Methodology

100 – 250 words

Traditional regression approach is not well-suited in this context due to identification as well as sample size issues. We instead rely on the synthetic control methodology (Abadie and Gardeazabal, 2003, Abadie et al., 2010 and Abadie et al., 2015) which is well suited in case studies wherein an intervention is implemented at an aggregate level affecting a small number of large units (e.g regions, countries) or a single unit such as the case discussed in this paper. Using data on wholesale and retail prices,³ as well as predictor variables including international prices, global production shocks, domestic production, net imports and *mandi* arrivals, we construct a synthetic control for each of the suspension episodes to analyse if derivatives suspension did indeed bring prices down.

Results

100 – 250 words

Our results find no empirical evidence in favor of the hypothesis that derivatives suspension rein in price rise. The analysis shows that prices of both the commodities, *chana* and mustard, would have had a similar trend even without the suspension. The presence of the same trend amongst both treated and the synthetic control series indicate that even in the absence of derivatives suspension, prices would have shown the same behaviour as observed *with*

² This was unlike the suspensions in early 2007 and 2008, when four to five commodities were suspended together, as well as in Decemeber 2021, when six commodities were suspended at once.

³ Our data sources for wholesale and retail price data are Agmarknet portal and Department of Consumer Affairs, Government of India portal respectively. Other data sources include polled prices, trading volumes from NCDEX, data on annual production, area under production and yields from 2014-2022 crop years from the website of the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, annual and monthly exports and imports data from the Ministry of Commerce and Industry web portal, global and domestic oil and oilseeds supply and demand data from the monthly oilseeds report published by the United States Department of Agriculture, and monthly international prices for major vegetable oils from the FAO price database, GIEWS.

derivatives suspension, thus suggesting that the suspension had no impact on commodity prices. 'In-space' and 'in-time' placebos further confirm our findings. Our results are robust to the analysis based on retail prices, alternative choices of predictor variables, as well as leave one out distribution of the synthetic control.

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| Discussion and Conclusion | 100 – 250 words |
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Our results give evidence that derivative market suspension do not have any impact on commodity prices. Derivative suspensions such as the mustard or chana episode hurt genuine participants and discourage the growth of domestic agri-derivatives markets. It deteriorates India's position in providing a global price benchmark, despite the country being a major producer and consumer of several agricultural commodities. Based on the findings, the study recommends that existing bans should be reviewed on an urgent basis and the development of agri-derivatives market is supported in India. Strict market surveillance and effective enforcement, transparency and timely availability of information on trends in production and existing stocks will go a long way in doing away with the fears of market misconduct.