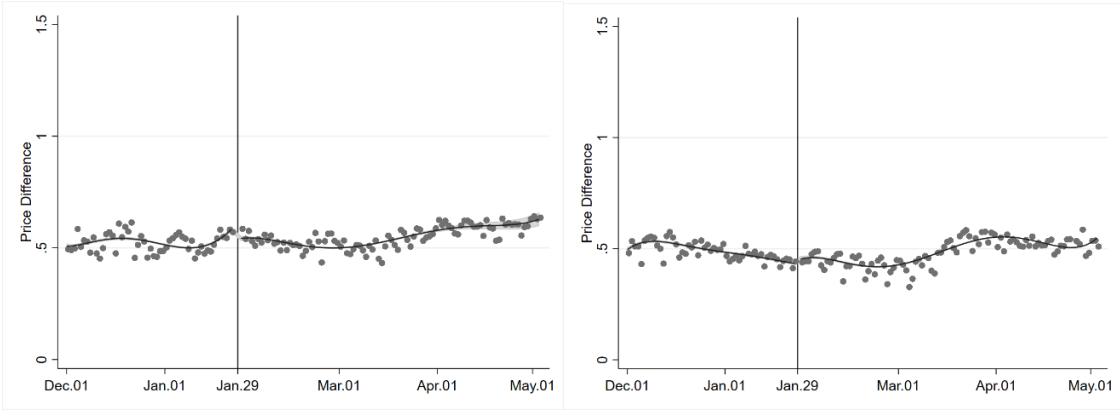


**AJAE appendix for Impact of COVID-19 and Nationwide Lockdowns  
on Vegetable Prices: Evidence from Wholesale Markets in China**

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**Figure A1. Falsification test: price difference of 2018 and 2019**

*Notes:* The solid line shows the fit of fourth-order polynomial RD estimation and the shaded areas are the 95 percent confidence intervals.

**Table A1. Impacts (ATEs) of nationwide lockdown on Chinese cabbage price:**

**RD estimates with lagged dependent variable**

	(1)	(2)
<i>After</i>	0.451*** (3.05)	0.364*** (2.91)
<i>Time</i>	0.0102* (1.91)	0.0110*** (4.04)
<i>After</i> × <i>Time</i>	-0.0122 (-0.98)	-0.00499 (-0.84)
<i>LnPrice</i> <sub><i>t-1</i></sub>	0.232*** (3.18)	0.473*** (7.28)
<i>After</i> × <i>LnPrice</i> <sub><i>t-1</i></sub>	-0.0652 (-0.44)	-0.123 (-0.98)
<i>LnPrice</i> <sub><i>t-2</i></sub>		-0.117** (-2.14)
<i>After</i> × <i>LnPrice</i> <sub><i>t-2</i></sub>		0.0277 (0.36)
Constant	0.270*** (7.94)	0.235*** (8.54)
Market Fes	Yes	Yes
Month Fes	Yes	Yes

Market×Month FEs	Yes	Yes
Effective $N$	742	980
adj. $R^2$	0.929	0.935

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*Notes:* This table presents the robustness check using AR(1) and AR(2) estimation to check for autoregression.

Standard errors are clustered at market level and  $t$  statistics are in parentheses. Asterisks indicate the following: \* =  $p$

< 0.1, \*\* =  $p$  < 0.05, and \*\*\* =  $p$  < 0.01.

**Table A2: Alternative falsification tests: Moving the policy timing by three weeks earlier or later**

	(1)	(2)	(3)	(4)
<b>Panel A: <math>\ln(\text{Price})</math></b>				
Cut = (3 weeks before)	-0.0422 (-1.31)	-0.0579 (-1.21)	-0.0720 (-1.42)	-0.0675 (-1.19)
Cut = (3 weeks after)	-0.0148 (-0.42)	-0.00488 (-0.11)	-0.0509 (-0.89)	-0.0545 (-0.81)
<b>Panel B: <math>\ln( P_i - P_j )</math></b>				
Cut = (3 weeks before)	0.0197 (1.05)	-0.0165 (-1.08)	-0.00923 (-0.60)	-0.0140 (-0.88)
Cut = (3 weeks after)	-0.0218 (-1.18)	-0.00866 (-0.38)	-0.0122 (-0.60)	-0.0101 (-0.48)
Order of Polynomial	1	2	3	4

*Notes:* Each cell reports the coefficient of *After* from one regression with controls for market FE, month FE, the interaction, and different-order polynomial time trend. The dependent variable of Panel A is  $\ln(\text{Price})$  and that of Panel B is  $\ln(|P_i - P_j|)$ . Standard error is clustered at market level and *t* statistics are in parentheses. Asterisks indicate the following: \* =  $p < 0.1$ , \*\* =  $p < 0.05$ , and \*\*\* =  $p < 0.01$ .

**Table A3. Impacts (ATEs) of nationwide lockdown on price difference:**

**RD estimates with different bandwidth**

	(1)	(2)
<b>Panel A</b>	<b>Conventional</b>	
	0.854***	0.817***
	(16.75)	(43.34)
<b>Panel B</b>	<b>Bias-corrected</b>	
	0.865***	0.877***
	(16.98)	(46.49)
<b>Panel C</b>	<b>Robust</b>	
	0.865***	0.877***
	(10.27)	(35.24)
Bandwidth	0.5×Best Bandwidth	1.5×Best Bandwidth
<i>N</i>	771377	771377
Effective <i>N</i>	115844	371621

*Notes:* Each cell reports the coefficient of *After* from one regression with controls for market FE, month FE, the interaction, and a fourth-order polynomial time trend. In each panel, the dependent variable is  $\ln(|P_t - P_j|)$  and the results are calculated with different types of standard errors. Columns 1 and 2 respectively choose 0.5 and 1.5 times the best bandwidth in column 4 of Table 1. Standard error is clustered at market level and *t* statistics are in parentheses. Asterisks indicate the following: \* =  $p < 0.1$ , \*\* =  $p < 0.05$ , and \*\*\* =  $p < 0.01$ .

**Table A4. Impacts of nationwide lockdown on price dispersion (RD estimates)**

**Dependent variable:  $P_i/P_j$**

	(1)	(2)	(3)	(4)
<i>After</i>	0.139*** (5.24)	0.125*** (2.96)	0.102** (1.99)	0.103** (2.52)
<i>Time</i>	-0.00155 (-0.67)	-0.0138 (-1.54)	-0.00939 (-0.55)	-0.00306 (-0.37)
<i>After×Time</i>	-0.0200*** (-3.51)	0.0149 (0.57)	0.0324 (0.83)	0.0188 (0.70)
<i>Time</i> <sup>2</sup>		-0.00209 (-1.56)	-0.00175 (-0.40)	-0.000612 (-0.33)
<i>After×Time</i> <sup>2</sup>		-0.000713 (-0.19)	-0.00842 (-0.87)	-0.00875 (-1.60)
<i>Time</i> <sup>3</sup>			-0.000101 (-0.32)	-0.0000735 (-0.47)
<i>After×Time</i> <sup>3</sup>			0.000818 (1.56)	0.000991** (2.49)
<i>Time</i> <sup>4</sup>				-0.00000230 (-0.53)
<i>After×Time</i> <sup>4</sup>				-0.0000234** (-2.26)
Constant	0.244*** (27.09)	0.228*** (17.06)	0.231*** (12.82)	0.254*** (18.67)

Market-pair FE	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes
Market×Month FE	Yes	Yes	Yes	Yes
Bandwidth	10.18	13.48	17.74	35.31
Number of obs	49165	58310	80082	182034
adj. R2	0.192	0.190	0.176	0.176

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*Notes:* The best bandwidth is calculated using MSE-optimal bandwidth selector for the RD treatment effect

estimator (MSERD). Standard error is clustered at market level and *t* statistics are in parentheses. Asterisks indicate

the following: \* =  $p < 0.1$ , \*\* =  $p < 0.05$ , and \*\*\* =  $p < 0.01$ .



**Table A5: Time of first-level lockdown**

<b>Province</b>	<b>Lockdown</b>	<b>Province</b>	<b>Lockdown</b>
Hunan	2020/1/23	Shanxi	2020/1/25
Zhejiang	2020/1/23	Neimenggu	2020/1/25
Guangdong	2020/1/23	Liaoning	2020/1/25
Beijing	2020/1/24	Jilin	2020/1/25
Tianjin	2020/1/24	Heilongjiang	2020/1/25
Hebei	2020/1/24	Jiangsu	2020/1/25
Shanghai	2020/1/24	Henan	2020/1/25
Anhui	2020/1/24	Hainan	2020/1/25
Fujian	2020/1/24	Shanxi	2020/1/25
Jiangxi	2020/1/24	Gansu	2020/1/25
Shandong	2020/1/24	Ningxia	2020/1/25
Hubei	2020/1/24	Xinjiang	2020/1/25
Guangxi	2020/1/24	Qinghai	2020/1/26
Chongqing	2020/1/24	Xizang	2020/1/29
Sichuan	2020/1/24		
Guizhou	2020/1/24		
Yunnan	2020/1/24		