

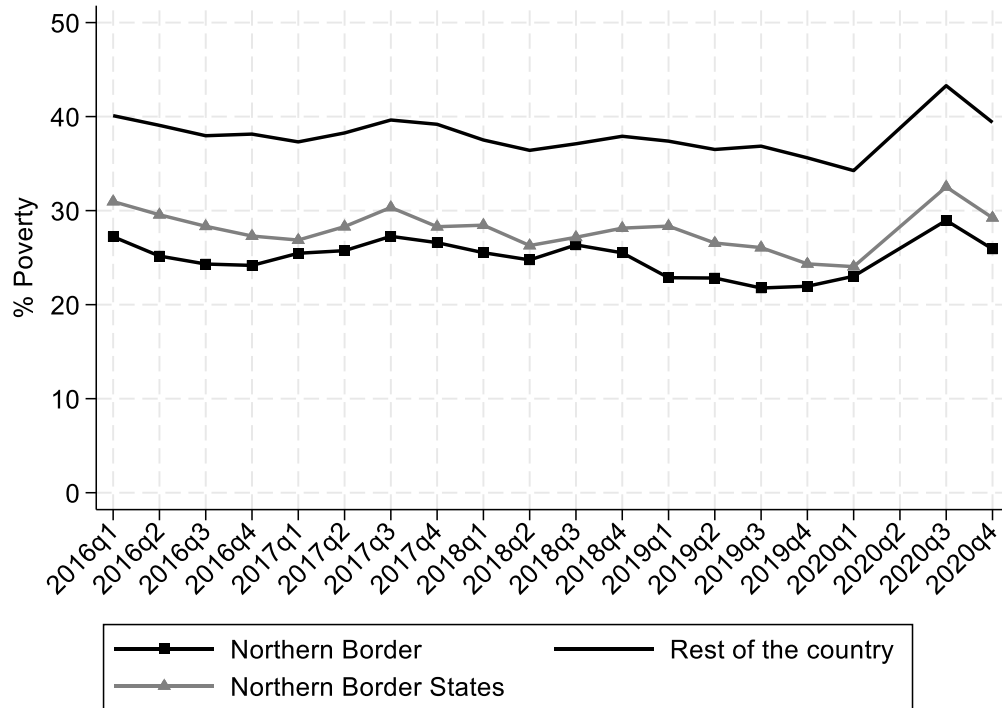
SUPPLEMENTARY MATERIALS (NOT TO BE PUBLISHED)

Table S1. Descriptive Statistics Using the CONEVAL Sample

	Border	Rest of the country	Rest of Northern region	Border	Rest of the country	Rest of Northern region
	2018:3			2020:3		
Household income	12233	9525	12138	12597	9418	12651
Per capita household income	3166	2340	3130	3354	2413	3384
Household size	4.2	4.4	4.2	4.2	4.3	4.1
Number of household members under 15 years old	1.3	1.3	1.3	1.3	1.2	1.1
Number of household members over 65 years old	0.2	0.3	0.2	0.2	0.3	0.3
Head of household: married or living together	0.74	0.78	0.78	0.74	0.75	0.75
Head of household: female	0.29	0.24	0.22	0.28	0.27	0.25
Head of household: years of schooling	9.1	8.3	9.3	9.3	8.7	9.7
Head of household: age	45.8	48.6	48.3	46.5	49.5	49.7
Rural	0.04	0.27	0.16	0.07	0.26	0.13
% Poverty	0.264	0.402	0.272	0.291	0.455	0.325
Poverty intensity	0.506	0.565	0.575	0.582	0.618	0.619
Poverty intensity squared	0.392	0.444	0.472	0.485	0.506	0.518
% Households with zero income	.080	.102	.115	.118	.133	.163
Number of households	4637	84462	14431	4929	67965	12227

Notes: Authors' calculations.

Figure S1. Evolution of labor poverty by region using CONEVAL sample, 2016-2020



Notes: Authors' calculations.

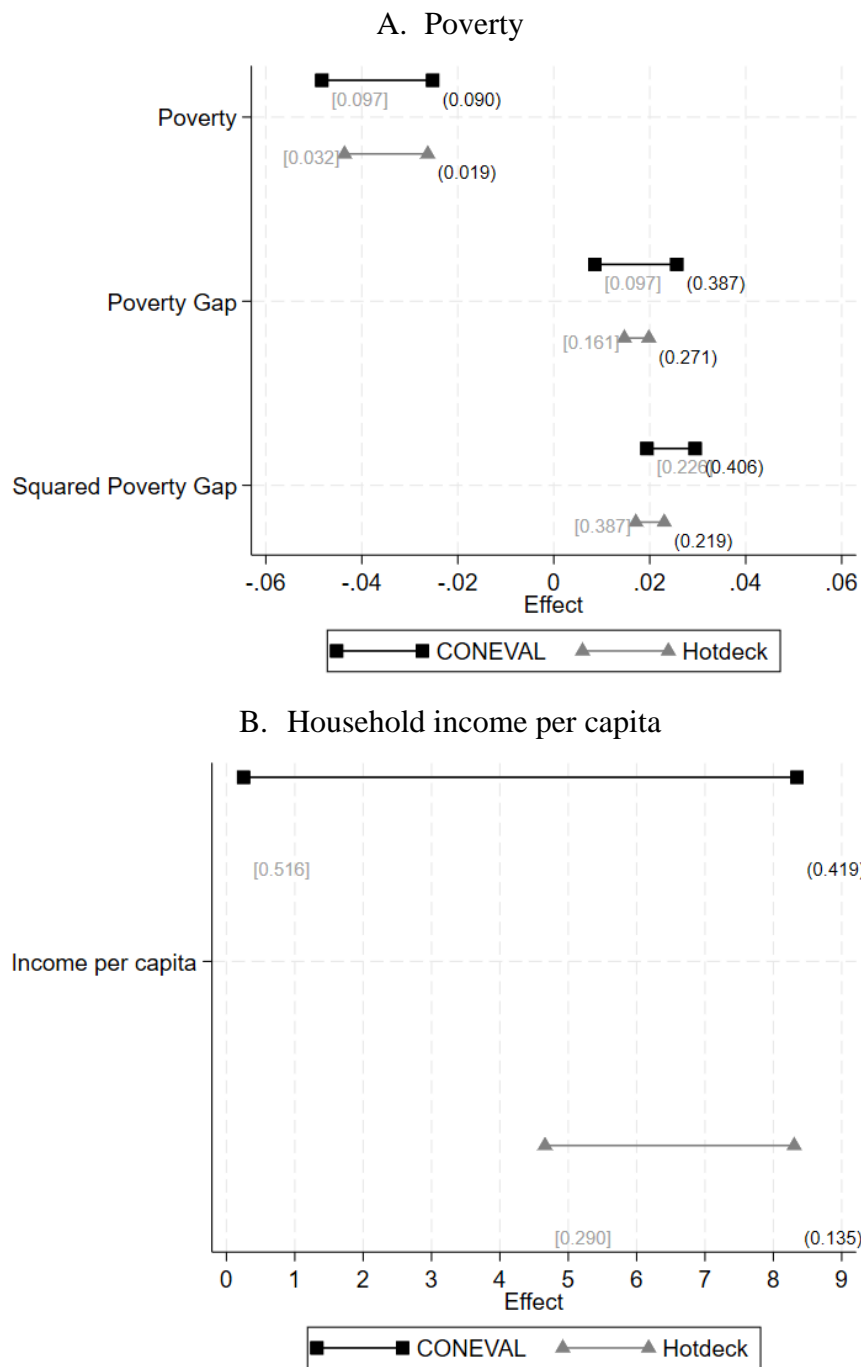
Table S2. Best Models Used in the Synthetic Control Method

	Poverty	Per capita household income	Poverty gap	Poverty gap squared
A. CONEVAL Sample				
Model 1	RMSPE: 0.007 2016: 3, 4; 2017: 3, 4; 2018: 3, 4	RMSPE: 1.471 2016: 1, 3; 2017: 1, 2; 2018: 1, 3	RMSPE: 0.008 2016: 3, 4; 2017: 3, 4; 2018: 3, 4	RMSPE: 0.012 2016: 3, 4; 2017: 3, 4; 2018: 3, 4
Model 2	RMSPE: 0.007 2016: 3, 4; 2017: 3, 4; 2018: 3, 4, demographic characteristics	RMSPE: 1.529 2016: 2, 4; 2017: 1, 3; 2018: 1, 3	RMSPE: 0.010 2017: 1,2 ; 2018: 1, 2, 3, 4	RMSPE: 0.013 2016: 3, 4; 2017: 3, 4; 2018: 3, 4
Model 3	RMSPE: 0.008 2017: 1,2 ; 2018: 1, 2, 3, 4	RMSPE: 1.547 2016: 2, 3; 2017: 2, 3; 2018: 2, 3, demographic characteristics	RMSPE: 0.010 2016: 3, 4; 2017: 3, 4; 2018: 3, 4	RMSPE: 0.013 2017: 1,2 ; 2018: 1, 2, 3, 4
Model 4	RMSPE: 0.008 2016: 1, 3; 2017: 1, 2; 2018: 1, 3	RMSPE: 1.626 2016: 2, 4; 2017: 2, 4; 2018: 1, 3	RMSPE: 0.010 2016: 2, 4; 2017: 1, 3; 2018: 1, 3	RMSPE: 0.014 2016: 1, 3; 2017: 2, 4; 2018: 2, 4
Model 5	RMSPE: 0.008 2016: 1, 4; 2017: 1, 4; 2018: 1, 4	RMSPE: 1.654 2016: 1, 3; 2017: 1, 2; 2018: 1, 3, demographic characteristics	RMSPE: 0.011 2016: 1, 3; 2017: 1, 2; 2018: 1, 3	RMSPE: 0.015 2016: 2; 2017: 2 ; 2018: 1, 3, 4
B. Hotdeck Sample				
Model 1	RMSPE: 0.004 2016: 3, 4; 2017: 3, 4; 2018: 3, 4	RMSPE: 1.417 2016: 1, 3; 2017: 1, 2; 2018: 1, 3	RMSPE: 0.007 2017: 1,2 ; 2018: 1, 2, 3, 4	RMSPE: 0.009 2016: 1, 3; 2017: 2, 4; 2018: 2, 4
Model 2	RMSPE: 0.005 2016: 1, 3; 2017: 1, 2; 2018: 1, 3	RMSPE: 1.441 2016: 1, 3; 2017: 1, 2; 2018: 1, 3, demographic characteristics	RMSPE: 0.009 2016: 1, 3; 2017: 2, 4; 2018: 2, 4	RMSPE: 0.009 2017: 1,2 ; 2018: 1, 2, 3, 4
Model 3	RMSPE: 0.005 2016: 1, 4; 2017: 1, 4; 2018: 1, 4	RMSPE: 1.466 2016: 2, 4; 2017: 1, 3; 2018: 1, 3	RMSPE: 0.009 2016: 3, 4; 2017: 3, 4; 2018: 3, 4	RMSPE: 0.010 2016: 3, 4; 2017: 3, 4; 2018: 3, 4
Model 4	RMSPE: 0.006 2016: 2, 4; 2017: 1, 3; 2018: 1, 3	RMSPE: 1.556 2016: 2, 4; 2017: 1, 3; 2018: 1, 3, demographic characteristics	RMSPE: 0.009 2016: 2, 4; 2017: 2, 4; 2018: 2, 4	RMSPE: 0.010 2016: 2, 4; 2017: 2, 4; 2018: 2, 4
Model 5	RMSPE: 0.006 2016: 2, 3; 2017: 2, 3; 2018: 2, 3	RMSPE: 1.589 2016: 2, 3; 2017: 2, 3; 2018: 2, 3, demographic characteristics	RMSPE: 0.009 2016: 1, 4; 2017: 1, 4; 2018: 1, 4	RMSPE: 0.010 2016: 3, 4; 2017: 3, 4; 2018: 3, 4

Notes: Demographic characteristics refer to rural status, number of members in the household under 15 years old or over 65 years old, and the age, sex, marital status, and years of schooling of household heads.

Figure S2. Sensitivity analysis using the synthetic control method:

Best five models for the CONEVAL and hotdeck samples



Notes: Authors' calculations. The figure plots the best five models with the lowest RMSPE for each variable. Average p -values are in square brackets and in gray. Average p -values for the joint test are in parentheses and in black. Per capita income is percent.

Table S3. Synthetic Control Results for the Probability of Poverty in Year t ,
Given That the Household is Poor or Non-poor in Year $t-1$

	Pr(Poor in t Poor in $t-1$)				Pr(Poor in t Non-poor in $t-1$)			
	CONEVAL sample		Hotdeck sample		CONEVAL sample		Hotdeck sample	
2019:Q1	-0.054	[.355]	-0.054	[.323]	-0.067	[.0968]	-0.042	[.0645]
2019:Q2	0.109	[.161]	0.094	[.323]	-0.040	[.129]	-0.033	[0]
2019:Q3	0.007	[.903]	-0.005	[.968]	-0.008	[.839]	-0.016	[.387]
2019:Q4	-0.076	[.355]	-0.035	[.452]	-0.035	[.194]	-0.007	[.71]
2020:Q1	0.094	[.161]	-0.011	[.935]	0.004	[.935]	-0.011	[.484]
2020:Q3	-0.003	[.968]	0.020	[.871]	-0.053	[.355]	-0.030	[.355]
2020:Q4	0.020	[.71]	-0.045	[.677]	-0.029	[.452]	-0.048	[.0968]
Avg. Effects (2019)	-0.004	[.444]	0.000	[.516]	-0.038	[.315]	-0.025	[.29]
Joint p -value (2019)	[.452]		[.613]		[.258]		[.032]	
Avg. Effects	0.014	[.516]	-0.005	[.65]	-0.033	[.429]	-0.027	[.3]
Joint p -value	[.613]		[.968]		[.323]		[.194]	

Notes: Authors' calculations. P -values in brackets, adjusted by match quality using the RMSPE. Joint p -value is the proportion of placebos with the ratio of the post- to pre-treatment RMSPE at least as large as the corresponding ratio for the treatment group. We estimated 22 different models for each variable and selected the model with the lowest RMSPE.

Table S4. Results for Poverty Gap and Poverty Gap Squared,
Restricted to Households with Positive Labor Income.

	Poverty Gap		Poverty Gap Squared	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL sample				
DID estimate	0.0013	-0.0022	0.0013	0.0001
s.e.	[.0084]	[.0096]	[.0071]	[.0073]
Adj. R^2	0.158	0.056	0.183	0.058
N	350,501	50,465	350,501	50,465
B. Hotdeck sample				
DID estimate	0.0034	-0.0045	0.0025	-0.0022
s.e.	[.0065]	[.0073]	[.0046]	[.0047]
Adj. R^2	0.122	0.051	0.142	0.053
N	337,802	53,186	337,802	53,186

Notes: Authors' calculations. Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure.

Table S5. Adjusting Poverty Lines by Region: Effects on the Probability of Poverty in t Given
That the Household Is Poor or Non-poor in $t-1$

	Pr(Poor in t Poor in $t-1$)		Pr(Poor in t Non-poor in $t-1$)	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample				
DID estimate	0.020	0.018	-0.025	-0.016
s.e.	[.030]	[.043]	[.016]	[.013]
Adj. R^2				
N	75,765	12,248	127,699	30,410
B. Hotdeck sample				
DID estimate	0.032	0.019	-0.032	-0.022
s.e.	[.031]	[.038]	[.007]	[.005]
Adj. R^2				
N	72,674	13,319	173,636	43,484

Notes: Authors' calculations. The regressions report the marginal effect from a probit. Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Regressions restricted to households either poor or non-poor in period $t-1$. Regression controls for year-quarter fixed effects, state x border fixed effects (both in period t), for rural status, family size, number of members under 15 years old, number of members over 65 years old, and the age, years of schooling, gender, and marital status (married or living together) of the household head (in period $t-1$).

Table S6. Adjusting Poverty Lines for Each Region: Synthetic Control Results for the Probability of Poverty in Year t Given That the Household Is Poor or Non-poor in Year $t-1$

	Pr(Poor in t Poor in $t-1$)				Pr(Poor in t Non-poor in $t-1$)			
	CONEVAL sample		Hotdeck sample		CONEVAL sample		Hotdeck sample	
2019:Q1	-0.049	[.387]	-0.058	[.258]	-0.069	[.0968]	-0.048	[0]
2019:Q2	0.101	[.129]	0.095	[.323]	-0.045	[.129]	-0.026	[.0645]
2019:Q3	0.008	[.903]	-0.008	[.968]	-0.001	[.935]	-0.007	[.774]
2019:Q4	-0.077	[.194]	-0.037	[.387]	-0.038	[.194]	-0.015	[.387]
2020:Q1	0.088	[.161]	-0.014	[.839]	0.003	[1]	-0.016	[.258]
2020:Q3	-0.012	[.871]	0.020	[.839]	-0.055	[.387]	-0.038	[.226]
2020:Q4	0.021	[.645]	-0.044	[.613]	-0.032	[.484]	-0.041	[.0968]
Avg. Effects								
2019	-0.004	[.403]	-0.002	[.484]	-0.038	[.339]	-0.024	[.306]
Joint p -value								
2019	[.323]		[.645]		[.29]		[.032]	
Avg. Effects	0.011	[.47]	-0.006	[.604]	-0.034	[.461]	-0.027	[.258]
Joint p -value	[.548]		[.903]		[.387]		[.194]	

Notes: Authors' calculations. P -values in brackets, adjusted by match quality using the RMSPE. Joint p -value is the proportion of placebos with the ratio of the post- to pre-treatment RMSPE at least as large as the corresponding ratio for the treatment group. We estimated 22 different models for each variable and selected the model with the lowest RMSPE.

Table S7. Synthetic Control Adjusting the Poverty Line by Region

	Poverty				Poverty Gap				Squared Poverty Gap			
	CONEVAL sample		Hotdeck sample		CONEVAL sample		Hotdeck sample		CONEVAL sample		Hotdeck sample	
2019:Q1	-0.034	[.000]	-0.038	[.000]	0.031	[.097]	0.007	[.613]	0.020	[.355]	0.013	[.323]
2019:Q2	-0.020	[.032]	-0.033	[.000]	0.010	[.452]	-0.007	[.613]	0.002	[.935]	0.008	[.581]
2019:Q3	-0.034	[.032]	-0.040	[.000]	0.039	[.00]	0.026	[.000]	0.038	[.129]	0.031	[.032]
2019:Q4	-0.019	[.064]	-0.033	[.000]	0.020	[.258]	0.027	[.064]	0.031	[.290]	0.029	[.064]
2020:Q1	-0.004	[.742]	-0.015	[.226]	0.013	[.290]	0.020	[.129]	0.026	[.194]	0.018	[.258]
2020:Q3	-0.066	[.097]	-0.042	[.097]	0.025	[.290]	0.050	[.097]	0.038	[.387]	0.046	[.129]
2020:Q4	-0.059	[.064]	-0.038	[.129]	0.019	[.355]	0.017	[.323]	0.022	[.613]	0.042	[.032]
Avg. Effects												
2019	-0.027	[.032]	-0.036	[.000]	0.025	[.20]	0.013	[.32]	0.023	[.43]	0.020	[.25]
Joint p -value												
2019	[.000]		[.000]		[.065]		[.160]		[.320]		[.097]	
Avg. Effects	-0.034	[.147]	-0.034	[.064]	0.022	[.249]	0.020	[.263]	0.025	[.415]	0.027	[.203]
Joint p -value	[.064]		[.00]		[.194]		[.161]		[.419]		[.097]	

Notes: Authors' calculations. P -values in brackets, adjusted by match quality using the RMSPE. Joint p -value is the proportion of placebos with the ratio of the post- to pre-treatment RMSPE at least as large as the corresponding ratio for the treatment group. We estimated 22 different models for each variable and selected the model with the lowest RMSPE.

Table S8. Effects on Poverty and Per Capita Household Income (year \leq 2019) [table 2].

	Poverty		Household income per capita	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample				
DID estimate	-0.032	-0.022	0.048	0.005
s.e.	[.013]	[.012]	[.041]	[.064]
Adj. R^2			0.197	0.200
N	1,457,050	321,914	1,457,050	321,914
B. Hotdeck sample				
DID estimate	-0.027	-0.026	0.060	0.059
s.e.	[.011]	[.0095]	[.039]	[.044]
Adj. R^2			0.172	0.174
N	1,619,678	379,950	1,619,678	379,950

Notes: Authors' calculations (period 2016-2019). Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Rest of northern region refers to northern states. Regression controls for year-quarter fixed effects, state x border fixed effects, and for rural status, family size, number of members under 15 years old, number of members over 65 years old, and the age, years of schooling, gender, and marital status (married or living together) of the household head.

Table S9. Effects on the Probability of Poverty in Period t Given That the Household Is Poor or Non-poor in $t-1$ (year \leq 2019) [table 4].

	Pr(Poor in t Poor in $t-1$)		Pr(Poor in t Non-poor in $t-1$)	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample				
DID estimate	0.017	0.002	-0.047	-0.025
s.e.	[.058]	[.075]	[.016]	[.012]
Adj. R^2				
N	61,392	9,478	101,646	23,080
B. Hotdeck sample				
DID estimate	0.030	0.017	-0.035	-0.023
s.e.	[.049]	[.057]	[.006]	[.005]
Adj. R^2				
N	58,659	10,390	139,006	33,695

Notes: Authors' calculations (period 2016-2019). The regressions report the marginal effect from a probit. Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Regressions restrict to households either poor or non-poor in period $t-1$. Regression controls for year-quarter fixed effects, state x border fixed effects (both in period t), and for rural status, family size, number of members less than 15 years old, number of members over 65 years old, and the age, years of schooling, gender, and marital status (married or living together) of the head of household in period $t-1$.

Table S10. Effects on the Poverty Gap and the Poverty Gap Squared, Conditional on Being Poor (year \leq 2019) [table 5].

	Poverty Gap		Poverty Gap Squared	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample				
DID estimate	0.029	0.032	0.030	0.036
s.e.	[.0068]	[.0083]	[.0079]	[.0088]
Adj. R^2	0.204	0.311	0.226	0.352
N	529,949	89,038	529,949	89,038
B. Hotdeck sample				
DID estimate	0.026	0.023	0.026	0.025
s.e.	[.0041]	[.0063]	[.0055]	[.007]
Adj. R^2	0.223	0.315	0.256	0.357
N	498,419	90,943	498,419	90,943

Notes: Authors' calculations (period 2016-2019). Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Estimations restricted to poor households. Regression controls for year-quarter fixed effects, state x border fixed effects, and for rural status, family size, number of members under 15 years old, number of members over 65 years old, and age, years of schooling, gender, and marital status (married or living together) of the household head.

Table S11. Results for Poverty Gap and Poverty Gap Squared, Restricted to Households with Positive Labor Income (year \leq 2019) [table S4].

	Poverty Gap		Poverty Gap Squared	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL sample				
DID estimate	0.013	-0.012	0.008	0.010
s.e.	[.0073]	[.0095]	[.0062]	[.0071]
Adj. R^2	0.165	0.054	0.191	0.057
N	300,495	42,707	300,495	42,707
B. Hotdeck sample				
DID estimate	0.014	0.009	0.009	0.007
s.e.	[.0050]	[.0061]	[.0044]	[.0045]
Adj. R^2	0.128	0.050	0.150	0.052
N	289,082	45,193	289,082	45,193

Notes: Authors' calculations (period 2016-2019). Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure.

Table S12. Effects on Poverty Incidence, Poverty Gap, and Poverty Gap Squared,
Adjusting the Poverty Line by Region (year \leq 2019) [table 7].

	Poverty		Poverty Gap		Poverty Gap Squared	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample						
DID estimate	-0.040	-0.029	0.031	0.033	0.034	0.039
s.e.	[.013]	[.012]	[.008]	[.009]	[.009]	[.009]
Adj. R^2			0.204	0.311	0.226	0.351
N	1,457,050	321,914	529,943	89,243	529,943	89,243
B. Hotdeck sample						
DID estimate	-0.035	-0.033	0.028	0.024	0.029	0.027
s.e.	[.011]	[.009]	[.004]	[.006]	[.006]	[.007]
Adj. R^2			0.223	0.314	0.256	0.356
N	1,619,678	379,950	498,436	91,178	498,436	91,178

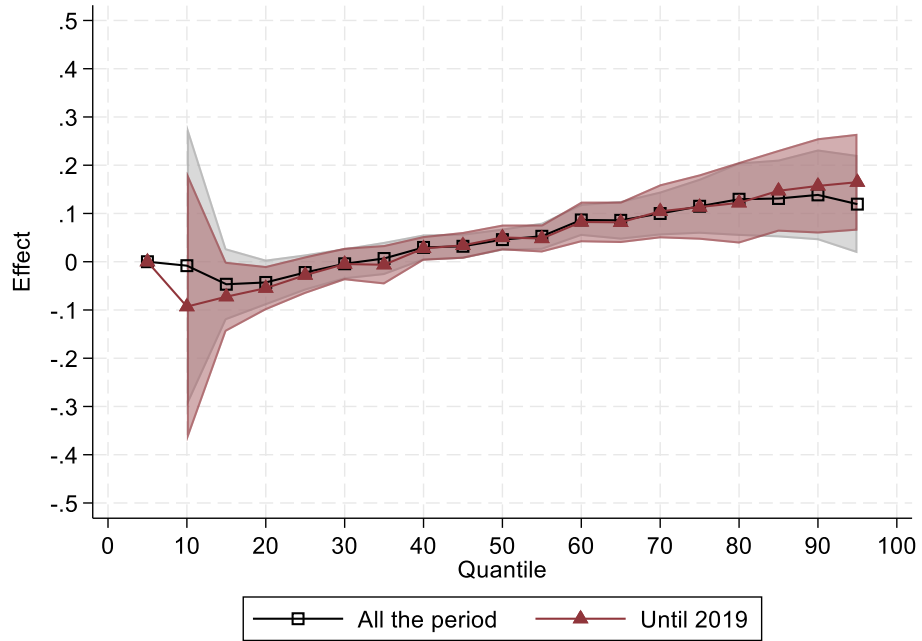
Notes: Authors' calculations (period 2016-2019). Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Estimations for the poverty gap and its square are restricted to poor households. Poverty line for rest of northern region is the same as for the rest of the country. Regression controls for year-quarter fixed effects, state x border fixed effects, and for rural status, family size, number of members under 15 years old, number of members over 65 years old, and the age, years of schooling, gender, and marital status (married or living together) of the household head.

Table S13. Adjusting Poverty Lines by Region: Effects on the Probability of Poverty in t
Given That the Household Is Poor or Non-poor in $t-1$ (year \leq 2019) [table S4].

	Pr(Poor in t Poor in $t-1$)		Pr(Poor in t Non-poor in $t-1$)	
	Rest of the country	Rest of northern region	Rest of the country	Rest of northern region
A. CONEVAL Sample				
DID estimate	0.014	-0.003	-0.044	-0.028
s.e.	[.057]	[.074]	[.015]	[.011]
Adj. R^2				
N	61,362	9,499	101,676	23,059
B. Hotdeck sample				
DID estimate	0.027	0.014	-0.038	-0.025
s.e.	[.048]	[.056]	[.005]	[.005]
Adj. R^2				
N	58,635	10,416	139,030	33,669

Notes: Authors' calculations (period 2016-2019). The regressions report the marginal effect from a probit. Robust and clustered standard errors in brackets (at the state x border level). Panel A uses the households in the CONEVAL sample to calculate poverty, and panel B uses the sample obtained from the hotdeck procedure. Regressions restricted to households either poor or non-poor in period $t-1$. Regression controls for year-quarter fixed effects, state x border fixed effects (both in period t), for rural status, family size, number of members under 15 years old, number of members over 65 years old, and the age, years of schooling, gender, and marital status (married or living together) of the household head (in period $t-1$).

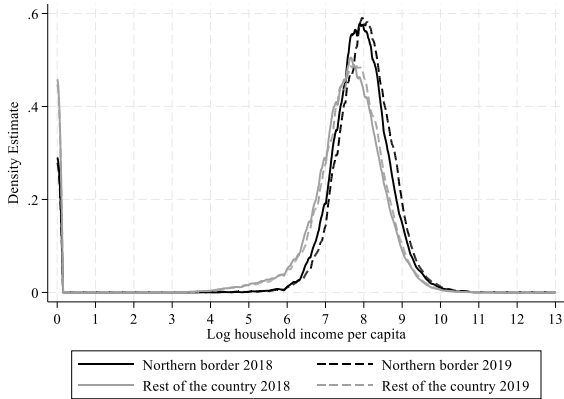
Figure S3. Unconditional quantile effects estimated from 2016-2020 vs 2016-2019.



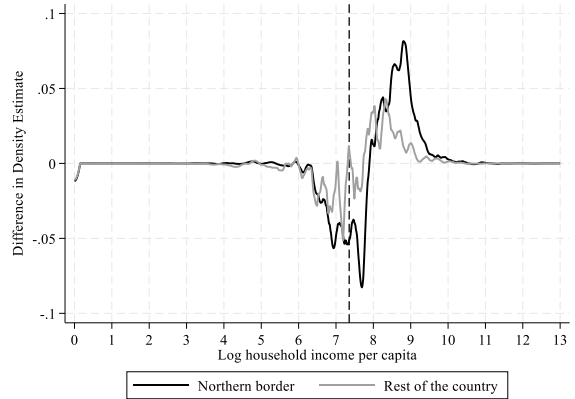
Notes: Authors' calculations. 95 percent confidence intervals in gray using robust and clustered standard errors at the state x northern border level.

Figure S4. Densities of income per capita for 2018 and 2019 and their difference.

A. Kernel density of income per capita



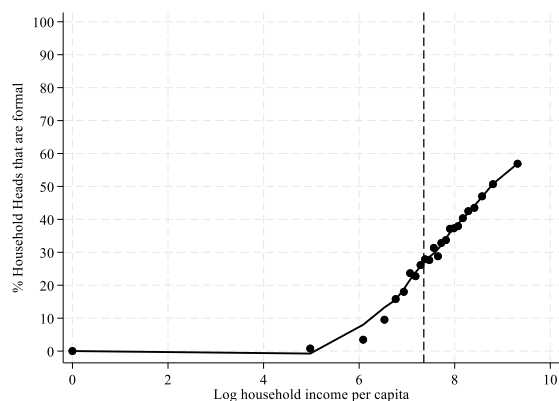
B. Difference in kernel density (2019-2018)



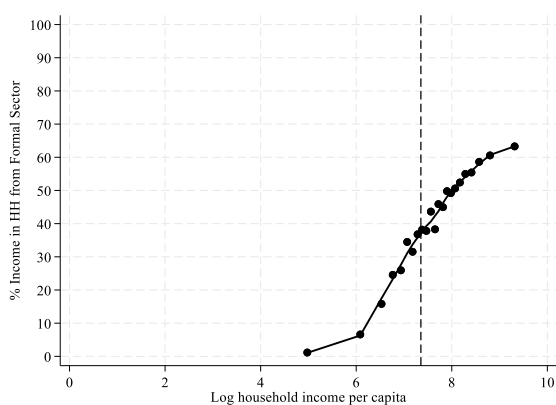
Notes: Kernel density calculated with Epanechnikov at 1500 points and with a bandwidth of 0.169. Hotdeck sample considered. Dash line in panel B is the median poverty line in 2019.

Figure S5. Formality across households and household income per capita.

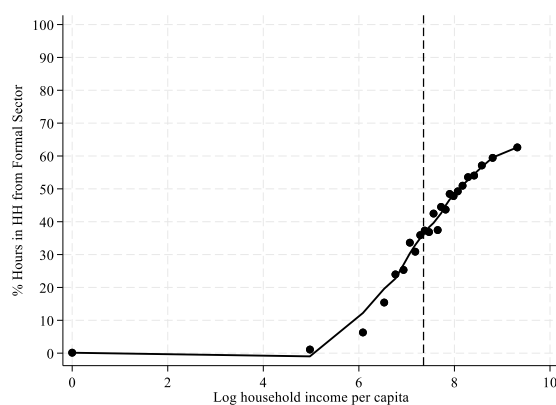
A. Percent of household heads that have formal employment



B. Percent of household income obtained in formal sector

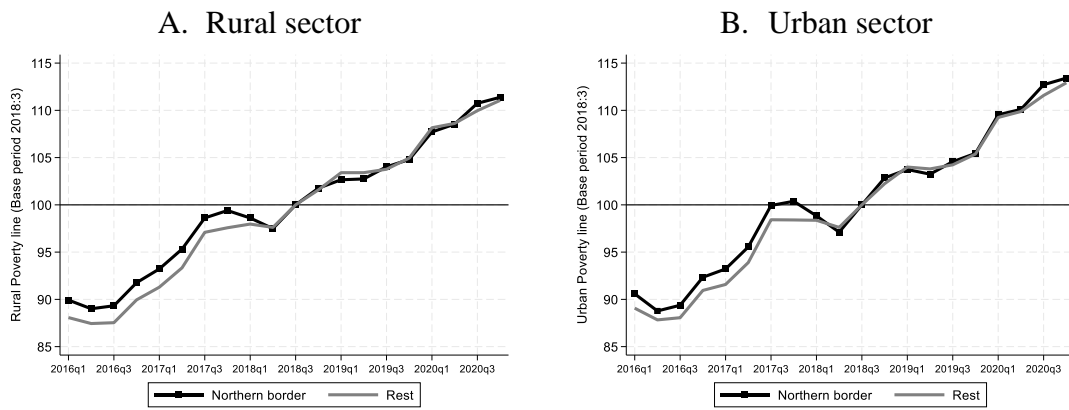


C. Percent of household hours worked in formal sector



Notes: Authors' calculations. Hotdeck sample (period 2016-2020). Figure calculated with 25 groups of income per capita. Solid line is smoothed with lowess. Dash line is the median poverty line in 2019.

Figure S6. Effect on prices: Change in the value of the poverty line.



Notes: Authors' calculations. We follow the methodology of CONEVAL (2019) to construct poverty lines at the regional level.