Table 1 Micro Consumption Regression on Simulated Data

$$\Delta \log \mathbf{c}_{t+1,i} \quad = \quad \varsigma + \chi \Delta \log \mathbf{c}_{t,i} + \eta \mathbb{E}_{t,i}[\Delta \log \mathbf{y}_{t+1,i}] + \alpha \bar{a}_{t,i} + \epsilon_{t+1,i}.$$

Model of Expectations	χ	η	α	$\bar{R}^2$
Frictionless				
	0.033			0.001
	(–)			
		0.002		0.000
		(–)		
			−0.109	0.011
			(–)	
	0.034	0.002	−0.108	0.013
	(–)	(–)	(–)	
Sticky				
	0.022			0.001
	(–)			
		0.002		0.000
		(–)		
			−0.109	0.011
			(–)	
	0.023	0.001	−0.108	0.012
	(–)	(–)	(–)	

Notes: $\mathbb{E}_{t,i}$ is the expectation from the perspective of person i in period t; $\bar{a}$ is a dummy variable indicating that agent i is in the top 99 percent of the normalized a distribution. Simulated sample size is large enough such that standard errors are effectively zero. Sample is restricted to households with positive income in period t. The notation "(—)" indicates that standard errors are close to zero, given the very large simulated sample size.

Table 2 Aggregate Consumption Dynamics in SOE Model

$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$

Expectations : Dep Var Independent Variables			OLS or IV	2nd Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
$0.394^{\bullet\bullet\bullet}$			OLS	0.156	
(0.062)					
$0.688^{\bullet\bullet}$			IV	0.049	0.206
(0.281)					0.569
	$0.466^{\bullet\bullet}$		IV	0.041	0.058
	(0.192)				0.393
		−7.10e–4	IV	0.031	0.000
		(5.43e–4)			0.336
0.459	0.261	0.60e–4	IV	0.049	0.522
(0.405)	(0.337)	(8.74e–4)			0.502
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.047$					
Sticky : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
$0.876^{\bullet\bullet\bullet}$			OLS	0.768	
(0.033)					
$0.827^{\bullet\bullet\bullet}$			IV	0.394	0.000
(0.044)					0.309
	$0.871^{\bullet\bullet\bullet}$		IV	0.278	0.052
	(0.159)				0.123
		−8.45e–4$^{\bullet\bullet\bullet}$	IV	0.091	0.000
		(3.24e–4)			0.000
$0.731^{\bullet\bullet\bullet}$	0.132	0.62e–4	IV	0.394	0.310
(0.073)	(0.108)	(2.03e–4)			0.359
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.385$					

Notes: Reported statistics are the average values for 100 samples of 200 simulated quarters each. Bullets indicate that the average sample coefficient divided by average sample standard error is outside of the inner 90%, 95%, and 99% of the standard normal distribution. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.

Table 3 Aggregate Consumption Dynamics in HA-DSGE Model

$$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$$

Expectations : Dep Var Independent Variables			OLS or IV	2$^{\text{nd}}$ Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.258$^{\bullet\bullet\bullet}$			OLS	0.067	
(0.071)					
0.507			IV	0.024	0.287
(0.335)					0.538
	0.369		IV	0.019	0.102
	(0.300)				0.437
		−0.40e–4	IV	0.018	0.000
		(0.92e–4)			0.419
0.308	0.226	0.00e–4	IV	0.025	0.576
(0.484)	(0.586)	(1.86e–4)			0.522
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.027$					
Sticky : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.845$^{\bullet\bullet\bullet}$			OLS	0.715	
(0.038)					
0.802$^{\bullet\bullet\bullet}$			IV	0.361	0.000
(0.049)					0.351
	0.917$^{\bullet\bullet\bullet}$		IV	0.209	0.093
	(0.217)				0.103
		−1.02e–4$^{\bullet\bullet}$	IV	0.085	0.000
		(0.45e–4)			0.000
0.735$^{\bullet\bullet\bullet}$	0.114	0.13e–4	IV	0.361	0.407
(0.085)	(0.173)	(0.41e–4)			0.443
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.354$					

Notes: Reported statistics are the average values for 100 samples of 200 simulated quarters each. Bullets indicate that the average sample coefficient divided by average sample standard error is outside of the inner 90%, 95%, and 99% of the standard normal distribution. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.

Table 4 Aggregate Consumption Dynamics in RA Model

$$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$$

Expectations : Dep Var Independent Variables			OLS or IV	2nd Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.017			OLS	0.003	
(0.078)					
0.421			IV	0.017	0.339
(0.378)					0.569
	0.378		IV	0.018	0.077
	(0.294)				0.453
		−0.27e–4	IV	0.018	0.000
		(1.04e–4)			0.472
0.126	0.202	0.20e–4	IV	0.021	0.531
(0.525)	(0.555)	(2.04e–4)			0.582
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.020$					
Sticky : $\Delta \log \mathbf{C}_{t+1}$ (no measurement error)					
$\Delta \log \mathbf{C}_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.790•••			OLS	0.625	
(0.044)					
0.825•••			IV	0.306	0.000
(0.069)					0.401
	0.684•••		IV	0.195	0.068
	(0.147)				0.106
		−0.50e–4	IV	0.107	0.000
		(0.41e–4)			0.003
0.725•••	0.078	0.15e–4	IV	0.305	0.275
(0.112)	(0.142)	(0.40e–4)			0.431
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.298$					

Notes: Reported statistics are the average values for 100 samples of 200 simulated quarters each. Bullets indicate that the average sample coefficient divided by average sample standard error is outside of the inner 90%, 95%, and 99% of the standard normal distribution. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.

Table 5 Aggregate Consumption Dynamics in SOE Model

$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$

Expectations : Dep Var Independent Variables			OLS or IV	2^{nd} Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.350***			OLS	0.122	
(0.006)					
0.988***			IV	0.082	0.000
(0.025)					0.685
	0.666***		IV	0.070	0.000
	(0.013)				0.000
		−11.75e–4***	IV	0.075	0.000
		(0.28e–4)			0.000
0.783***	0.080*	−1.37e–4	IV	0.082	0.000
(0.101)	(0.046)	(0.97e–4)			0.930
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.082$; $\text{var}(\xi_t) = 5.99\text{e–}6$					
Sticky : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.598***			OLS	0.358	
(0.005)					
0.873***			IV	0.359	0.000
(0.008)					0.000
	0.954***		IV	0.317	0.000
	(0.013)				0.000
		−12.30e–4***	IV	0.164	0.000
		(0.19e–4)			0.000
0.785***	0.053	−1.57e–4***	IV	0.361	0.000
(0.022)	(0.032)	(0.30e–4)			0.332
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.361$; $\text{var}(\xi_t) = 5.99\text{e–}6$					

Notes: Reported statistics are for a single simulation of 20000 quarters. Stars indicate statistical significance at the 90%, 95%, and 99% levels, respectively. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.

Table 6 Aggregate Consumption Dynamics in HA-DSGE Model

$$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$$

Expectations : Dep Var Independent Variables			OLS or IV	2nd Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.254***			OLS	0.064	
(0.007)					
0.989***			IV	0.073	0.000
(0.029)					0.159
	0.733***		IV	0.067	0.000
	(0.016)				0.000
		−1.78e–4***	IV	0.074	0.000
		(0.04e–4)			0.089
0.268	0.108**	−1.07e–4***	IV	0.074	0.000
(0.193)	(0.054)	(0.32e–4)			0.791
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.074$; $\text{var}(\xi_t) = 4.16\text{e–}6$					
Sticky : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.585***			OLS	0.342	
(0.005)					
0.874***			IV	0.366	0.000
(0.008)					0.000
	0.973***		IV	0.315	0.000
	(0.014)				0.000
		−1.90e–4***	IV	0.216	0.000
		(0.02e–4)			0.000
0.787***	−0.006	−0.37e–4***	IV	0.370	0.000
(0.023)	(0.051)	(0.08e–4)			0.557
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.370$; $\text{var}(\xi_t) = 4.16\text{e–}6$					

Notes: Reported statistics are for a single simulation of 20000 quarters. Stars indicate statistical significance at the 90%, 95%, and 99% levels, respectively. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.

Table 7 Aggregate Consumption Dynamics in RA Model

$$\Delta \log \mathbf{C}_{t+1} = \varsigma + \chi \Delta \log \mathbf{C}_t + \eta \mathbb{E}_t[\Delta \log \mathbf{Y}_{t+1}] + \alpha A_t + \epsilon_{t+1}$$

Expectations : Dep Var Independent Variables			OLS or IV	2[nd] Stage $\bar{R}^2$	KP p-val Hansen J p-val
Frictionless : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.056***			OLS	0.003	
(0.008)					
1.000***			IV	0.073	0.000
(0.034)					0.878
	0.673***		IV	0.060	0.000
	(0.015)				0.000
		−1.64e–4***	IV	0.072	0.000
		(0.04e–4)			0.006
1.622	−0.029	0.97e–4	IV	0.073	0.899
(1.321)	(0.139)	(1.95e–4)			0.938
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.073$; $\text{var}(\xi_t) = 3.33\text{e–}6$					
Sticky : $\Delta \log \mathbf{C}^*_{t+1}$ (with measurement error $\mathbf{C}^*_t = \mathbf{C}_t \times \xi_t$);					
$\Delta \log \mathbf{C}^*_t$	$\Delta \log \mathbf{Y}_{t+1}$	A_t			
0.567***			OLS	0.322	
(0.005)					
0.913***			IV	0.358	0.000
(0.009)					0.000
	0.838***		IV	0.321	0.000
	(0.011)				0.000
		−1.66e–4***	IV	0.253	0.000
		(0.02e–4)			0.000
0.798***	0.006	−0.30e–4***	IV	0.361	0.000
(0.025)	(0.029)	(0.04e–4)			0.320
Memo: For instruments $\mathbf{Z}_t$, $\Delta \log \mathbf{C}^*_{t+1} = \mathbf{Z}_t \zeta$, $\bar{R}^2 = 0.361$; $\text{var}(\xi_t) = 3.33\text{e–}6$					

Notes: Reported statistics are for a single simulation of 20000 quarters. Stars indicate statistical significance at the 90%, 95%, and 99% levels, respectively. Instruments $\mathbf{Z}_t = \{\Delta \log \mathbf{C}_{t-2}, \Delta \log \mathbf{C}_{t-3}, \Delta \log \mathbf{Y}_{t-2}, \Delta \log \mathbf{Y}_{t-3}, A_{t-2}, A_{t-3}, \Delta_8 \log \mathbf{C}_{t-2}, \Delta_8 \log \mathbf{Y}_{t-2}\}$.