ONLINE APPENDIX: CAPITAL FLOW SURGES AND RISING INCOME INEQUALITY

RENUKA DIWAN, ZHENG LIU, AND MARK M. SPIEGEL

Abstract. This online appendix presents some details of the empirical results discussed in the *FRBSF Economic Letter* 2021-09, "Capital Flow Surges and Rising Income Inequality" by Diwan, Liu, and Spiegel published March 29, 2021. https://www.frbsf.org/economic-research/publications/economic-letter/2021/march/capital-flow-surges-and-rising-income-inequality/

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Diwan: Federal Reserve Bank of San Francisco; Email: Renuka.Diwan@sf.frb.org. Liu: Federal Reserve Bank of San Francisco; Email: Zheng.Liu@sf.frb.org. Spiegel: Federal Reserve Bank of San Francisco; Email: Mark.Spiegel@sf.frb.org.

Table 1 shows the regression results for the baseline model estimated from the sample winsorized at the 1% level (Column (1)), the baseline model estimated using the sample without winsorizing (Column (2)), and the models that include alternative measures of capital account policies (Columns (3)-(5)).

Table 2 shows the alternative regression model with gross inflows and gross outflows included as separate regressors, instead of net private inflows. When both gross flows are included as regressors, the point estimate of the coefficient on gross inflows is positive and that on gross outflows is negative, both are statistically significant. These estimation results suggest that a surge in gross capital inflows raises income inequality in EMEs, whereas a short-run increase in gross capital outflows reduces inequality, consistent with the findings by Liu et al. (2020).

TABLE 1. Regressions of income inequality on net private capital inflows

Dependent variable: *GGINI*	(1)	(2)	(3)	(4)	(5)
NPINFLOWS	0.021**	0.021**	0.020*	0.061***	0.060***
	(0.010)	(0.010)	(0.011)	(0.019)	(0.020)
KAOPEN			0.000		
			(0.000)		
KA				0.001	
				(0.002)	
KAI					0.001
					(0.004)
KAO					-0.000
					(0.003)
REMOTE	0.003**	0.003**	0.004***	0.005***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
GDP	-0.000	-0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
POP	0.000**	0.000**	0.000**	0.000**	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
GGDP	0.004	0.004	0.003	0.007	0.007
	(0.011)	(0.011)	(0.011)	(0.010)	(0.011)
GPOP	-0.031	-0.031	-0.030	0.088**	0.083*
	(0.036)	(0.036)	(0.036)	(0.038)	(0.045)
Constant	-0.031**	-0.031**	-0.033***	-0.046***	-0.046***
	(0.012)	(0.012)	(0.011)	(0.012)	(0.013)
Observations	59	59	59	38	38
P-value	0.041	0.041	0.065	0.003	0.005
R-squared	0.383	0.383	0.386	0.620	0.621

Notes: In each model, the dependent variable is the average growth rate of the Gini coefficient ("GGINI") and the independent variable of interest is the share of net private capital inflows in GDP ("NPINFLOWS"). The columns report five alternative specifications that differ in the sample or the set of control variables. The baseline model (Column (1)) is estimated using the sample winsorized at the 1% level and it includes the five control variables: the log great circle distance from New York City ("REMOTE"), real per capita GDP in 2001 ("GDP"), population in 2001 ("POP"), the average annual growth rate of real GDP ("GGDP"), and the average annual growth rate of population ("GPOP"). Column (2) reports the estimation results for the baseline model using the sample without winsorizing. Columns (3)-(5) add controls for alternative measures of capital account policies, including the Chinn-Ito index of capital account openness ("KAOPEN"), the average index of overall capital account restrictions ("KA") constructed by Fernández et al. (2016) , and also their capital account restriction index for inflows ("KAI") and for outflows ("KAO"). Statistical significance levels are indicated by the asterisks: *** p<0.01, ** p<0.05, * p<0.10.

TABLE 2. Regressions of income inequality on gross private capital flows

Dependent variable: *GGINI*	(1)	(2)	(3)
PINFLOWS	0.021**	0.011	
	(0.010)	(0.009)	
POUTFLOWS	-0.072***		-0.049**
	(0.026)		(0.021)
REMOTE	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)
GDP	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
POP	0.000**	0.000**	0.000**
	(0.000)	(0.000)	(0.000)
GGDP	0.009	0.006	0.013
	(0.011)	(0.010)	(0.010)
GPOP	-0.047	-0.032	-0.055
	(0.034)	(0.036)	(0.035)
Constant	-0.030**	-0.031**	-0.029**
	(0.013)	(0.012)	(0.012)
Observations	59	59	59
R-squared	0.422	0.354	0.379

Notes: This table shows the regression of the average growth rate of Gini ("GGINI") on gross private capital inflows ("PINFLOWS") and gross private capital outflows ("POUTFLOWS"), with the same control variables as in the baseline model specified under Table 1. Statistical significance levels are indicated by the asterisks: *** p<0.01, ** p<0.05, * p<0.10.

TABLE 3. List of countries included in sample

ALBANIA	GUATEMALA	NEPAL
ARGENTINA	HONDURAS	PAKISTAN
ARMENIA	HAITI	PERU
BURUNDI	INDONESIA	PARAGUAY
BANGLADESH	INDIA	RWANDA
BULGARIA	JAMAICA	SIERRA LEONE
BOSNIA AND HERZEGOVINA	JORDAN	EL SALVADOR
BELARUS	KAZAKHSTAN	TAJIKISTAN
BOLIVIA	KENYA	TONGA
BRAZIL	CAMBODIA	TUNISIA
CHINA	SRI LANKA	TURKEY
CAMEROON	MOLDOVA	TANZANIA
COLOMBIA	MADAGASCAR	UGANDA
ALGERIA	MEXICO	UKRAINE
ECUADOR	MONGOLIA	VENEZUELA
EGYPT	MOZAMBIQUE	VIETNAM
ETHIOPIA	MAURITANIA	YEMEN
GEORGIA	MALAWI	SOUTH AFRICA
GHANA	NIGERIA	ZAMBIA
GUINEA	NICARAGUA	ZIMBABWE

References

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Liu, Z., M. M. Spiegel, and J. Zhang (2020, September). Capital controls and income inequality. Federal Reserve Bank of San Francisco Working Paper 2020-14. https://www.frbsf.org/economic-research/publications/working-papers/2020/14/.