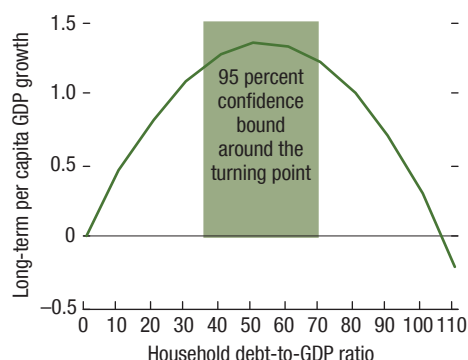**Figure 2.1.1. Long-Term per Capita GDP Growth and Household Debt**

1. Effect of Household Debt on per Capita GDP Growth (Percent)

2. Panel Regression of per Capita GDP Growth and Household Debt, 1970–2010[1]

Variables	(1) Per Capita GDP Growth	(2) Per Capita GDP Growth	(3) Per Capita GDP Growth
HHD	0.051*	0.007	0.021
	(1.726)	(0.346)	(0.762)
HHD^2	−0.048**	−0.024	−0.051**
	(−1.980)	(−1.494)	(−2.057)
Crisis		−0.017***	−0.015***
		(−6.319)	(−4.688)
EME × HHD			−0.000
			(−0.015)
Education	0.028	0.018*	0.017
	(1.117)	(1.818)	(1.576)
Initial per capita GDP	−0.012**	−0.004	−0.000
	(−1.973)	(−1.227)	(−0.078)
Constant	−0.035	−0.038	−0.066
	(−0.353)	(−0.933)	(−1.507)
Observations	278	278	278
Number of countries	73	73	73
AR^2	0.0186	0.137	0.185
Hansen	0.253	0.797	0.361
Instruments	55	73	68

Source: IMF staff calculations.
Note: Figure shows nonlinear effect of household debt on long-term per capita GDP growth at various levels of household debt, based on a long-term panel regression. It uses the Arellano-Bover general method of moments estimator of five-year average per capita GDP growth (shown in panel 2) on household debt to GDP (HHD), the squared ratio of household debt to GDP (HHD^2), initial per capita GDP, secondary education enrollment, dummies for banking crises (Crisis), and emerging market economies' household debt-to-GDP ratio (EME × HHD).
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.
[1] Z-statistics in parentheses.