Extra results from Henderson, Storeygard and Weil (2011) using household electricity data

(footnote 19)

In order to determine whether the extensive margin of household electrical connections has additional predictive power in measuring GDP, beyond that of lights or national electricity consumption, we turn to a small sample of country-years for which the Demographic and Health Surveys (DHS)[1] report the fraction of households with electricity. This sample disproportionately includes countries for which this extensive margin might matter. Rich countries, in which DHS surveys never occur, have nearly universal electricity coverage.

In column 1, the basic panel relationship between lights and GDP holds for this subsample. In column 2, the fraction of households with electricity has an insignificant effect, with no additional explanatory power, and does not substantially affect the elasticity of lights. Columns 3 and 4 repeat this exercise including national electricity use. Again, the extensive margin of household connections has essentially no effect.

	(1) ln(GDP)	(2) ln(GDP)	(3) ln(GDP)	(4) ln(GDP)
ln(lights/area)	0.261***	0.252***	0.317**	0.284**
	[0.070]	[0.069]	[0.125]	[0.126]
Fraction of households with electricity		0.283		0.280
		[0.244]		[0.342]
ln(electricity use, KWH)			0.099**	0.104**
			[0.042]	[0.042]
Observations	118	118	82	82
Countries	42	42	32	32
(Within country) R-sq	0.863	0.865	0.831	0.834

All specifications include country and year fixed effects
Robust standard errors in brackets
*** p<0.01, ** p<0.05, * p<0.1

[1] http://www.measuredhs.com. Accessed 10 October, 2010. For the 23 surveys conducted over the course of two different calendar years, we match to our annual data using the year of the median survey month.