

APPENDIX C: DISTRIBUTIONAL INCIDENCE OF SUBSIDIES

Country	Energy subsector	Source	Energy expenditure as a share of household expenditure	
			Poor	Non-poor
Albania	No subsidy	PSIA, 2003	>20% on electricity of the cash income of the core poor (bottom 12%)	
Argentina	Patagonian gas	PER, Sept. 2003	...	...
Armenia	Utilities	PSIA, 2001	18% on utilities such as telephone, gas, central heat, and water for the poor	11% on utilities such as telephone, gas, central heat, and water for the non-poor
	Electricity	Tajikistan PSIA, 2006	13.9% for bottom quintile	6.5% for top quintile
Bangladesh	Residential gas	PER, Sept. 2003	...	...
Bolivia	Hydrocarbon derivatives	PSIA 2004, Coady, Grosh, and Hoddinott 2006	7.8% on transportation, fuel, and lubricants	9.3% on transportation, fuel, and lubricants
	Transportation	PSIA, 2004	5.4% on transportation	5.9% on transportation
	Fuels and lubricants for vehicles	PSIA, 2004	0.6% on fuels for vehicles	2.2% on fuels for vehicles
	Fuels and lubricants to cook	PSIA, 2004	1.9% on fuels for cooking	1.2% on fuels for cooking
	LPG	Coady, Grosh, and Hoddinott 2006	2.6% for bottom quintile	1.1% for top quintile
	Gasoline and diesel	Coady, Grosh, and Hoddinott 2006	0.0% for bottom quintile	2.5% for top quintile
Djibouti	No subsidy	PSIA, 2005	18.2% (18.5) ^a on biomass, electricity, and other energy sources in bottom quintile	16.3% (13.4) ^a on biomass, electricity, and other energy sources in top quintile
Ecuador	Cooking gas	PER, Nov. 2004	...	...
	Electricity, cooking gas and fuel	PER, Nov. 2004	...	...
Egypt, Arab Rep. of	Kerosene	PSIA, 2005	...	...
	Natural gas	PSIA, 2005	...	...

Income impact of subsidy removal/price increase		Share of benefit from the energy subsidy	
Poor	Non-poor	Poor	Non-poor
...
...	...	Subsidy excludes 95% of poor gas consumers, while 63% of its beneficiaries are non-poor; 100% of the resources of the subsidy go to the far south, which has only 3% of the nation's poor.	
9 percentage point increase in expenditure for the poor	3 percentage point increase in expenditure for the non-poor	...	...
...
...	...	The 4% of households with gas access receive Tk1.6 billion in implicit subsidies	
5.8% reduction in real income for bottom quintile	4.7% reduction in real income for top quintile	15.3% for bottom two deciles	...
...
...
...
...
...
...
...	...	3% to bottom quintile	17% to top quintile
...	...	...	67% to top four deciles
2.2 percentage point reduction of income for bottom quintile	0.1 percentage point reduction of income for top quintile	...	...
0.1 percentage point reduction of income for bottom quintile	0.6 percentage point reduction of income for top quintile

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Distributional Incidence of Subsidies (continued)

Country	Energy subsector	Source	Energy expenditure as a share of household expenditure	
			Poor	Non-poor
Egypt, Arab Rep. of (continued)	Gasoline	PSIA, 2005	...	...
	LPG	PSIA, 2005	...	...
	Above four products	PSIA, 2005	...	...
Georgia	Electricity	Tajikistan PSIA, 2006	6.3% for bottom quintile	2.0% for top quintile
Ghana	Petrol	Coady and Newhouse 2006	0.1% for bottom quintile	2.1% for top quintile
	Kerosene	Coady and Newhouse 2006	5.9% for bottom quintile	1.6% for top quintile
	LPG	Coady and Newhouse 2006	0.0% for bottom quintile	0.2% for top quintile
	Above three products	Coady and Newhouse 2006; Coady and others 2006	...	...
	Electricity	PSIA, 2004	...	...
Hungary	Electricity	Tajikistan PSIA, 2006	6.5% for bottom quintile	3.7% for top quintile
Indonesia	Fuel	DPL-II Program Document, 2005	3.6% for the bottom two deciles spent on fuel (3% on kerosene)	...
	Electricity	PER, 2007	...	...
Jordan	Fuel	Coady and others 2006	7.1% for bottom quintile	7.1% for top quintile
	Kerosene	Coady and others 2006	1.0% for bottom quintile	0.3% for top quintile
	LPG	Coady and others 2006	1.8% for bottom quintile	0.7% for top quintile
	Gas, regular	Coady and others 2006	0.9% for bottom quintile	2.3% for top quintile
	Gas, premium	Coady and others 2006	0.0% for bottom quintile	1.1% for top quintile
	Diesel	Coady and others 2006	0.3% for bottom quintile	0.9% for top quintile
	Electricity	Coady and others 2006	3.1% for bottom quintile	1.8% for top quintile
Kazakhstan	Electricity	Tajikistan PSIA, 2006	0.9% for bottom quintile	0.6% for top quintile
Mali	Fuel	Coady and others 2006	...	...

Distributional Incidence of Subsidies (continued)

Country	Energy subsector	Source	Energy expenditure as a share of household expenditure	
			Poor	Non-poor
Mexico	Electricity	Coady and others 2006	...	...
Moldova	Electricity	Tajikistan PSIA, 2006; Moldova PSIA, 2004	6.3% for bottom quintile, 4.7% for the poor	3.0% for top quintile, 3.4% for the non-poor
	Central heat	PSIA, 2006	0.1% for bottom quintile	1.8% for top quintile
	Central gas	PSIA, 2006	1.0% for bottom quintile	1.9% for top quintile
	LPG	PSIA, 2006	0.4% for bottom quintile	0.4% for top quintile
Mongolia	Heating	PSIA, 2003	10.8% for the poor on heating (18% in winter months) ^b	5.7% for the poor on heating (10.1% in winter months) ^b
Morocco	Diesel and fuel	Coady and others 2006	...	...
	Energy	Program document for DPL-II, 2007	8.7% for bottom quintile	9.3% for top quintile
Poland	Electricity	Tajikistan PSIA, 2006	5.8% for bottom quintile	2.9% for top quintile
Sri Lanka	Fuel	Coady and others 2006	...	...
Tajikistan	Electricity	PSIA, 2007	< 4% for bottom quintile	...

a. Numbers are calculated for Djibouti Ville and shown in parentheses for other towns.

b. For ger districts in Ulaanbaatar.

Note: LPG = liquefied petroleum gas.

Income impact of subsidy removal/price increase		Share of benefit from the energy subsidy	
Poor	Non-poor	Poor	Non-poor
...	...	Majority of subsidy goes to upper-middle-income households (deciles 6-8)	
1.6–5.4% increase in household expenditure for bottom quintile	1.1–3.6% increase in household expenditure for top quintile	...	...
0.0–0.1% increase in household expenditure for bottom quintile	0.7–1.8% increase in household expenditure for top quintile	...	...
0.4–1.0% increase in household expenditure for bottom quintile	0.7–1.9% increase in household expenditure for top quintile	...	...
0.2–0.4% increase in household expenditure for bottom quintile	0.1–0.4% increase in household expenditure for top quintile	...	...
...	...	15% of lifeline tariff to the poor	85% of lifeline tariff to non-poor
...	...	<10% for bottom quintile	33% for top quintile
...
2.9% reduction in real income for bottom quintile	2.2% reduction in real income for top quintile	25.1% for bottom four deciles	...
16% increase in spending for poor households under tariff adjustment, even with continued subsidies and lifelines.	...	...	...