

UTILITY PRICING AND THE POOR

Lessons from Armenia

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Economic crisis, reform & recovery

④ Series of shocks

- ④ breakup of FSU, earthquake, closing of borders

④ At height of crisis (1993)

- ④ GDP down to half, inflation of 10000% per year, fiscal deficit – 2/3rds of GDP

④ Turnaround: economy stabilizes

- ④ GDP growing at 5% & inflation at 1-2%

④ Achieved through strict monetary policy & deficit reduction

Collapse in the utility sector

- ④ Cost of energy imports ↑ (market price vs FSU price)
- ④ Production costs of electricity, water, heat ↑
- ④ Impact on households (HH)
 - ④ 1992-95, electricity supply for 2-4 hrs/day
 - ④ Central heating & natural gas supply virtually terminated
 - ④ Water supply falls in areas requiring pumping
- ④ By 1994, HH payments fall to 10% of billing

Reforming the electricity sector

④ Reform Program

- ④ Targeted investments
- ④ Price increases & elimination of subsidies
- ④ New energy law & creation of regulatory agency

④ Results

- ④ From 4 hrs of service to 24 hr supply
- ④ Bill collection rates ↑
- ④ Improved cost recovery
- ④ But continued political resistance to tariff hikes

How are the households, especially the poor, faring?

Research design

④ Qualitative field work

- ④ Focus groups, interviews
- ④ Use to design questionnaire

④ Quantitative survey

- ④ Cross-section data
- ④ Panel data (1 yr before & after price increase)
- ④ Sample of 2000 households
- ④ Timing: Dec. 1999 - Jan 2000

Coping strategies

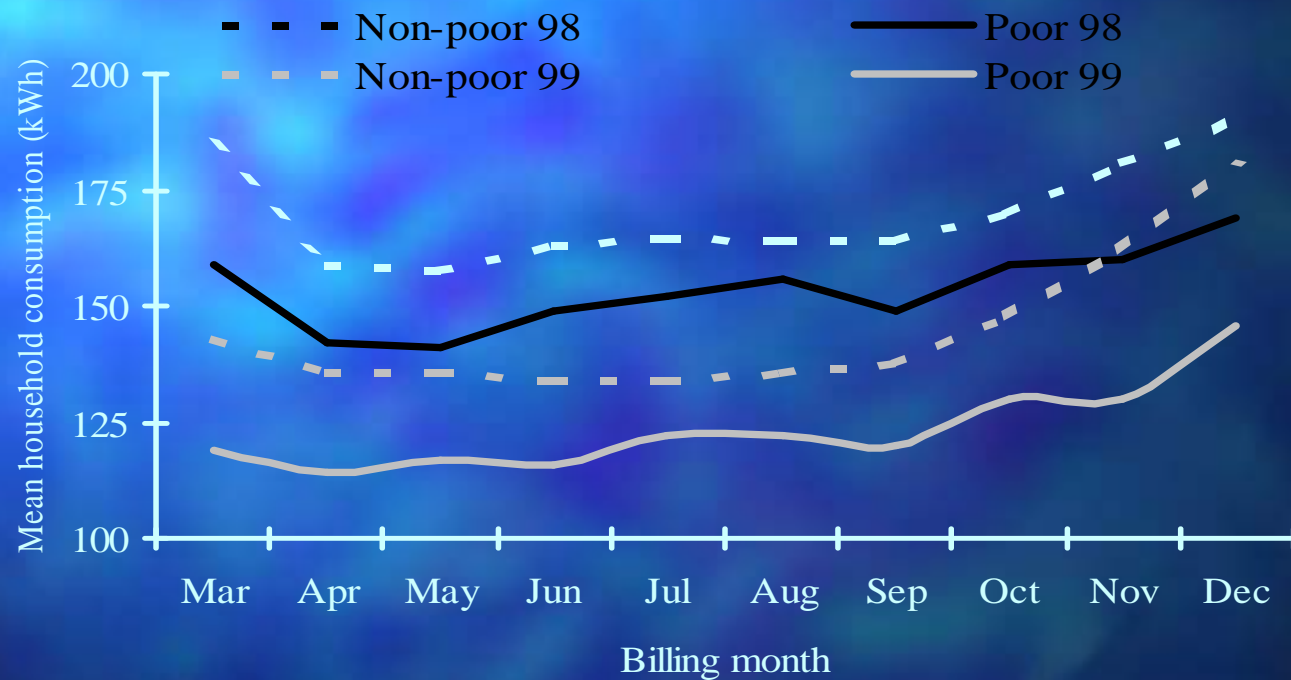
- ④ Increased use of substitutes--wood, gas
- ④ Conservation and austerity measures
 - ④ Turn off lights, watch the meter, wear warm clothes
- ④ Partial payments of bills

The 1999 price increase

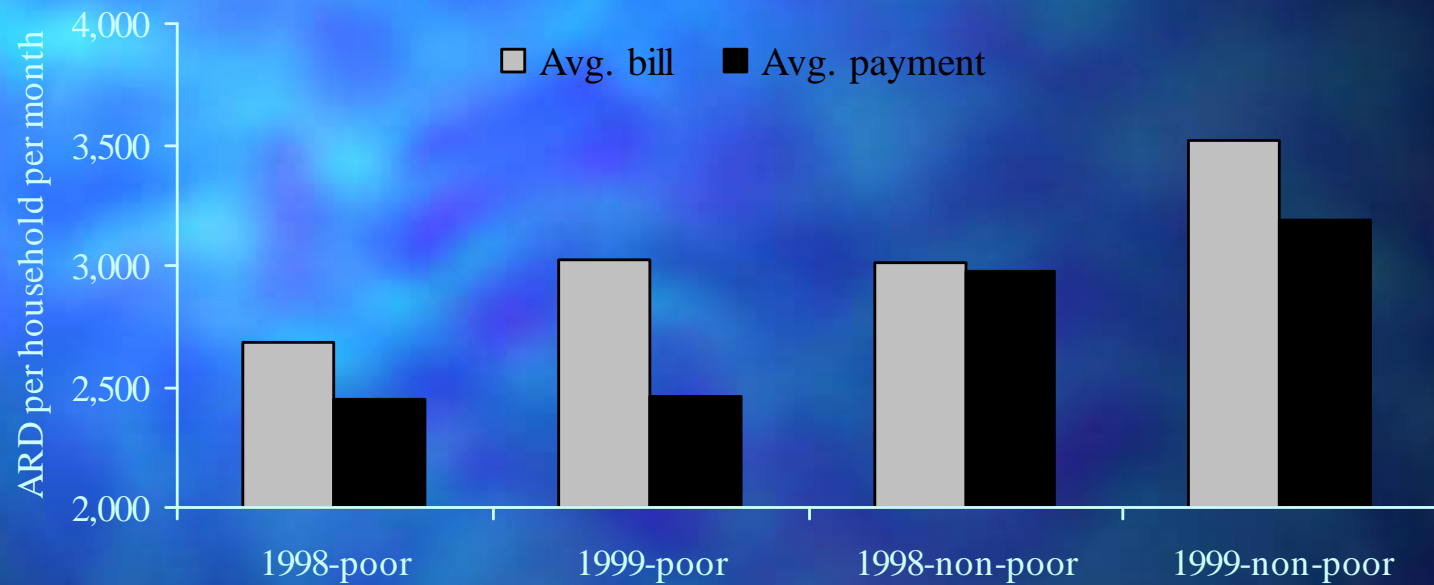
- ④ Elimination of increasing block tariff
 - ④ ADR 15, 20, 25 per kwh
- ④ Replaced with a uniform tariff of ADR 25/kwh
- ④ Seen as price increase of 30%
 - ④ From average price of ADR 19.2 to 25/kwh
- ④ Actual price increase is about 47%
 - ④ HHs were actually paying on avg. ADR 17/kwh
- ④ 28% + 9% get ADR 1450 as compensation
 - ④ only 55% of the poor received it--targeting is hard
 - ④ more analysis required to assess effectiveness

Household electricity consumption

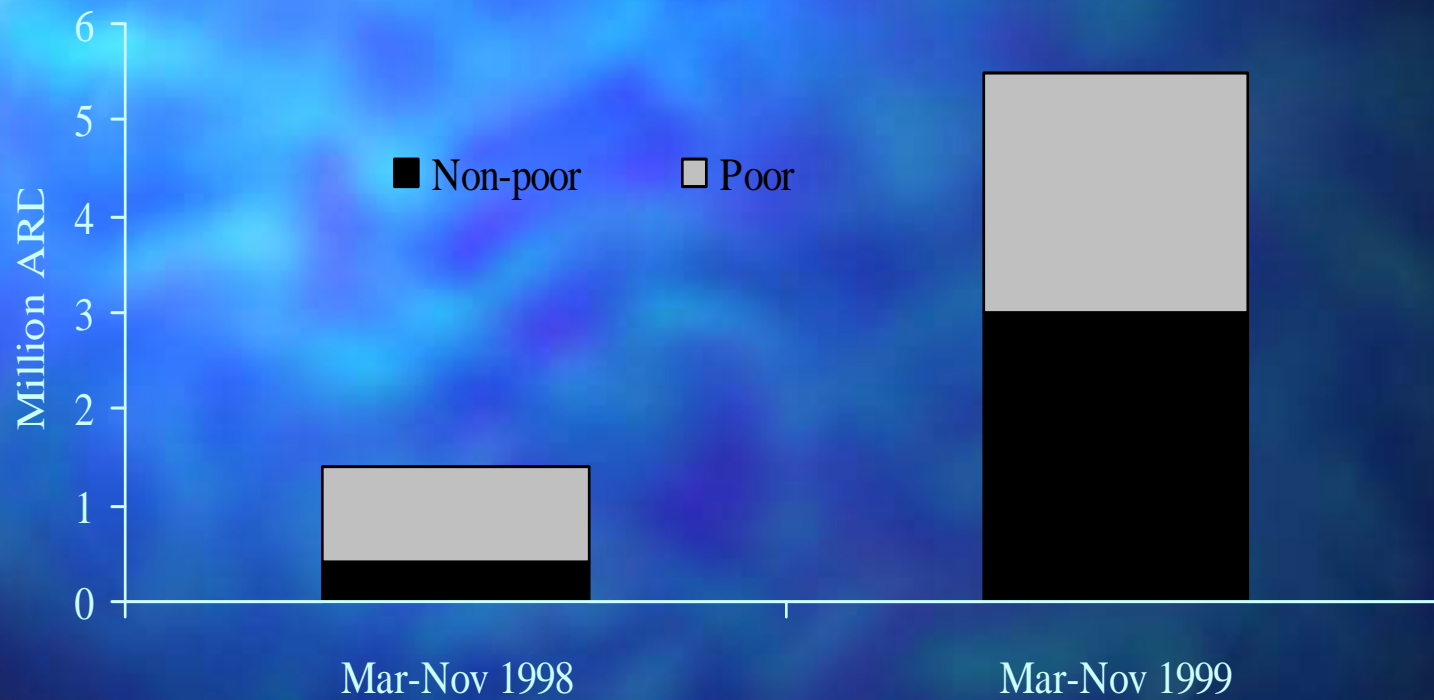
1998 and 1999



Average monthly bills and payments



Total arrears or unpaid balances



Aggregate impact of change in electricity tariff*

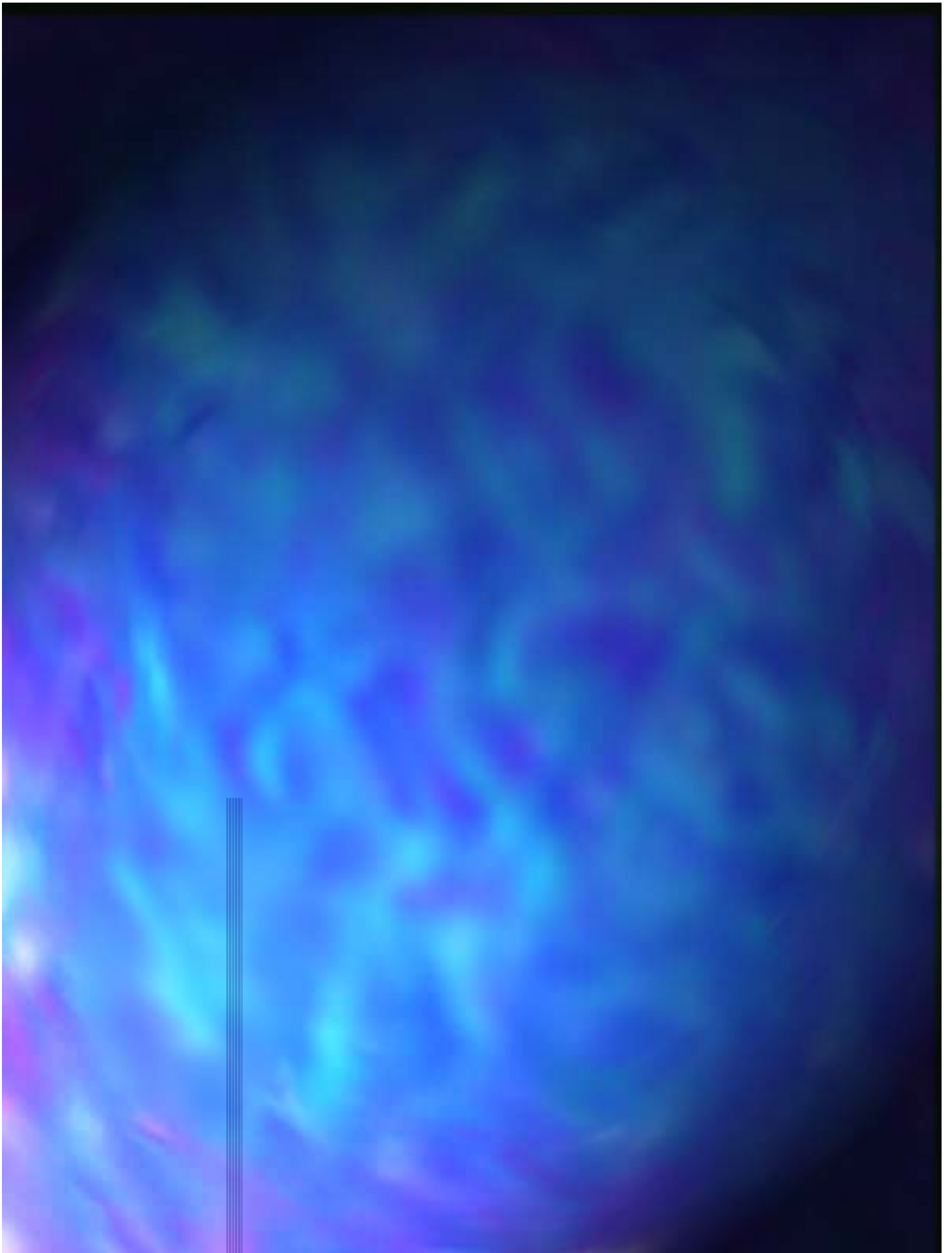
<i>Household</i>	1998	1999	Change between 1998 and 1999	
Consumption —million kWh (a)	2.22	1.83	-0.38	-17%
Billings —million ARD (b)	39.57	45.79	6.22	16%
Payments —million ARD (c)	38.22	40.33	2.11	6%
Collection rate —percent (c/b)	97%	88%		-9 pp.**

*For sample households only, **Percentage points

Study conclusions and impact

- ④ Disproportionate impact on the poor
- ④ Marginal improvement in utility finances
- ④ Price increases require careful design
- ④ Structural Adjustment Credit (SAC) IV
 - ④ No new increase in electricity price
 - ④ Privatization conditionality kept

Protests in the streets and privatization derailed in 2001. Revision of conditionality to Floating Tranche



Impact of study

- ④ Highly controversial
- ④ SAC IV: No new increase in electricity price
- ④ Privatization conditionality kept in SAC IV
 - ④ Protests in the streets and privatization derailed in 2001
 - ④ Changed conditionality to Floating Tranche

Why the study?

- ④ Ambitious economic reform program
 - ④ steep price increases
- ④ Government concerned with impact on the poor and political economy
- ④ Need to design equitable and politically feasible sector strategy
 - ④ electricity sector used as case study

Increasing wood consumption and price in 1999

