

# **The distribution of household financial contributions to the health system: A look outside Latin America and the Caribbean**

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**Santiago**



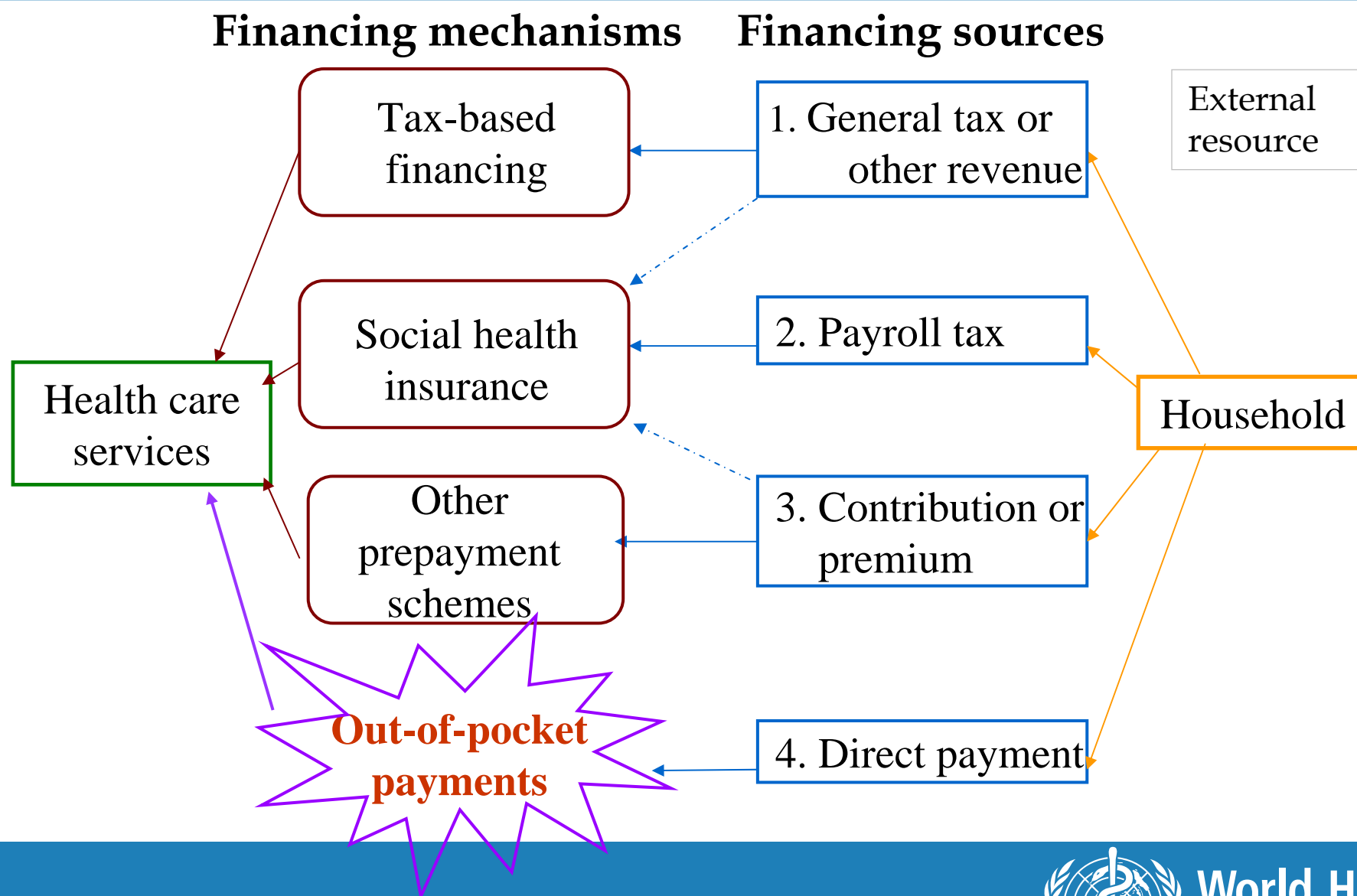
**World Health  
Organization**

# Outline

- Health financing mechanisms
- Measures of the distribution of out-of-pocket health payments
- General trends in health financing
  - By region
  - By economy size
  - By health financing system
- Highlights



# Health Financing Mechanisms



# Measures of OOP distribution

	Income Approach	Burden Approach
<b>Theoretical bases</b>	Progressivity principle	Equal sacrifice principle
<b>Distribution measure</b>	Change of income distribution (RE)	Distribution of burden (FFC)
<b>Threshold measure</b>	Impoverishment (headcount)	Percentage of households with catastrophic expenditure
<b>Policy concern</b>	Progressivity	Catastrophic expenditure Horizontal equity Some progressivity
<b>Policy application</b>	Impoverishment Prepayment contributions	Catastrophic expenditure Financial burden from prepayment and out-of-pocket payment

# Specific measures

## ● Catastrophic expenditure

- When the medical bills of one or more household members are high in relation to a household's capacity to pay, it must reduce its expenditure on other necessities for a period of time. This is considered as catastrophic expenditure.
- Defined as the percentage of households whose out-of-pocket health expenditures equal or exceed a certain percentage (for example here 40% is used) of their non-subsistence expenditure (calculated from a food-based poverty line).

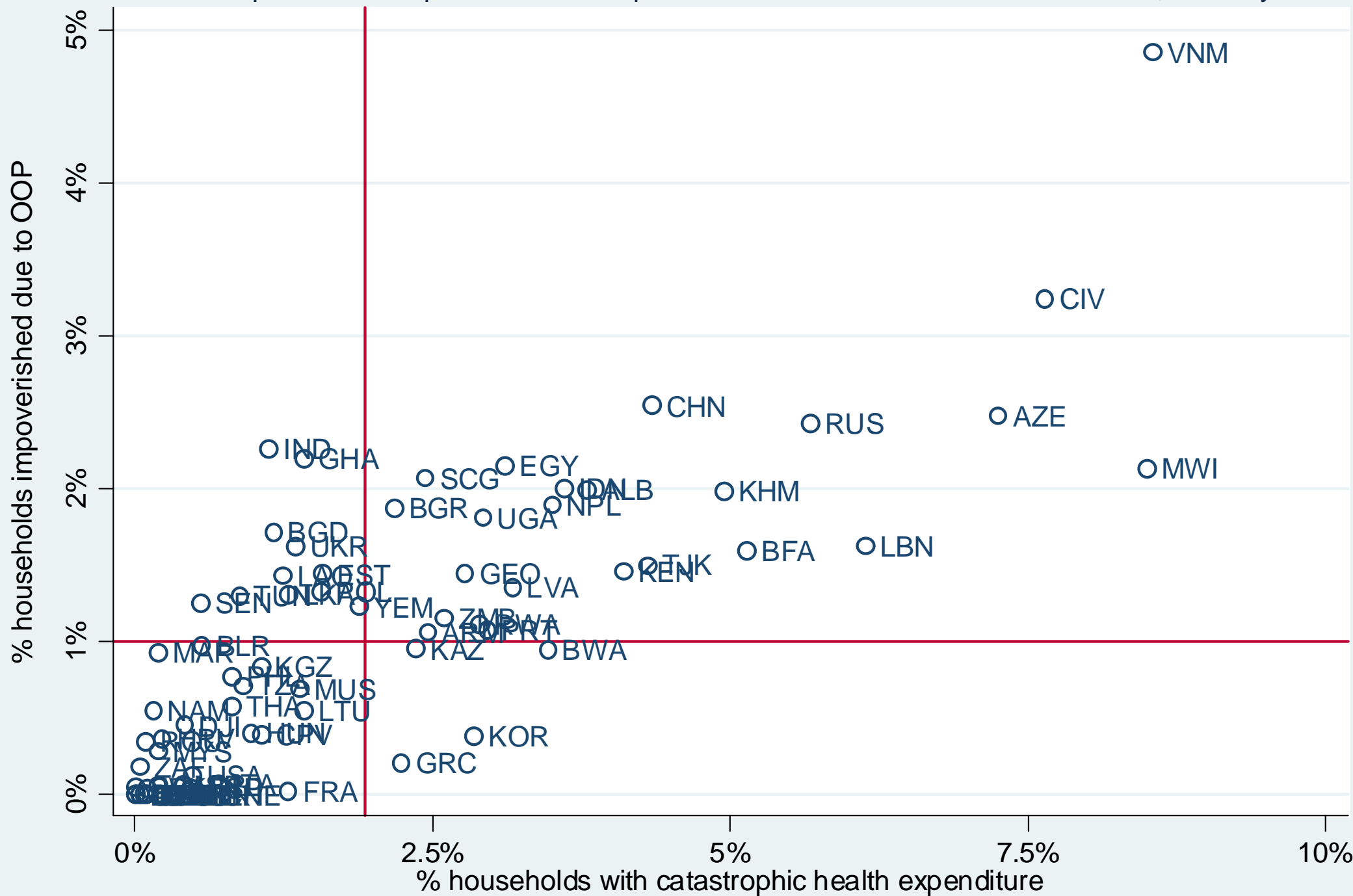
## ● Impoverishment

- As a result of out-of-pocket health expenditures, a household may fall below the poverty line. This is considered as impoverishment.
- Defined as the percentage of households falling below the food-based poverty line due to out-of-pocket health expenditures.

# Data sources

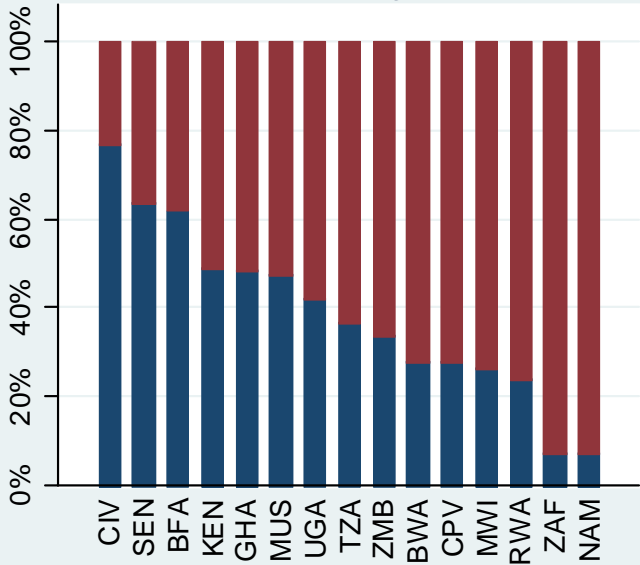
- 76 countries outside Latin America and the Caribbean presented here
- Data from household surveys (e.g. household budget surveys, income expenditure surveys, etc.)
- From 1993-2006 (latest year available used for each country)

## Catastrophic health expenditure and impoverishment in countries outside LA/CAR, lastest year

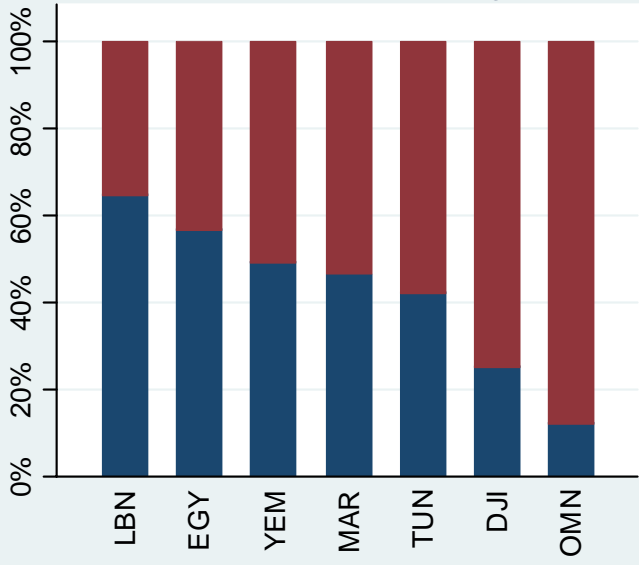




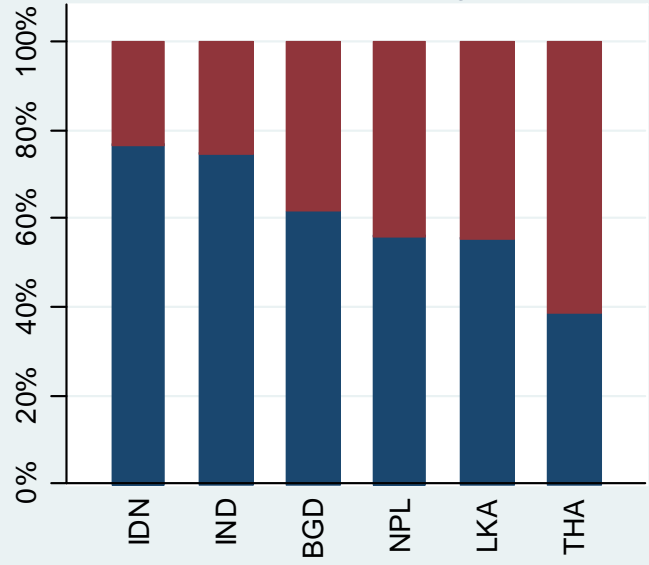
African Region



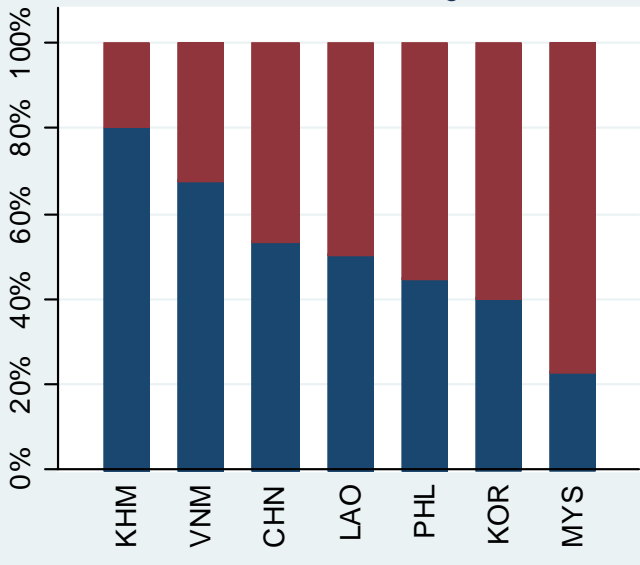
Eastern Mediterranean Region



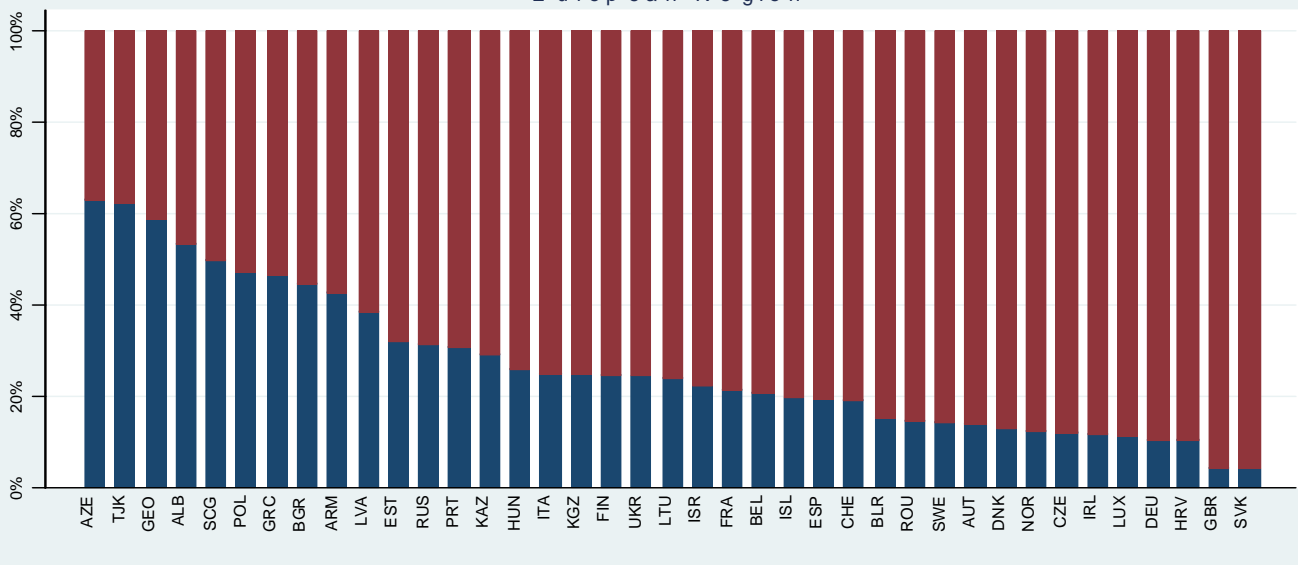
South-East Asia Region



Western Pacific Region



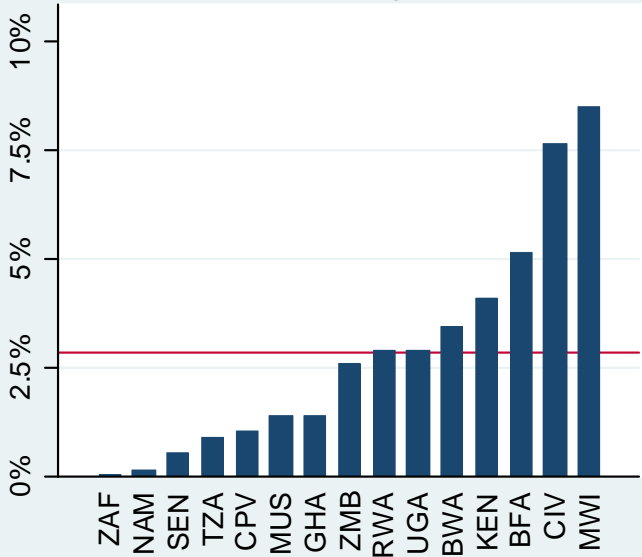
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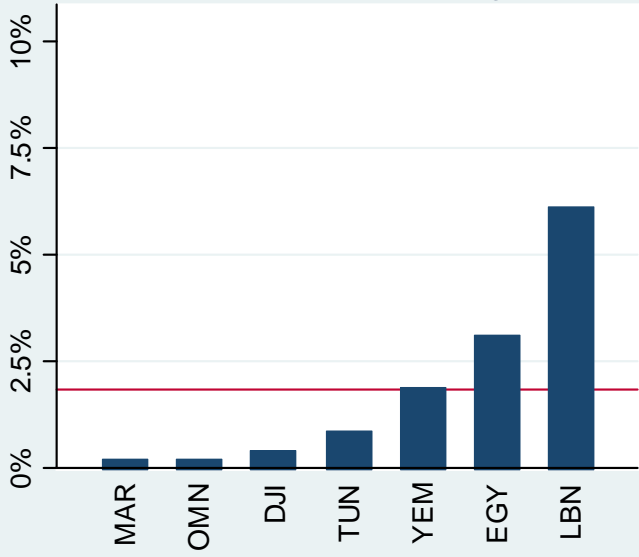




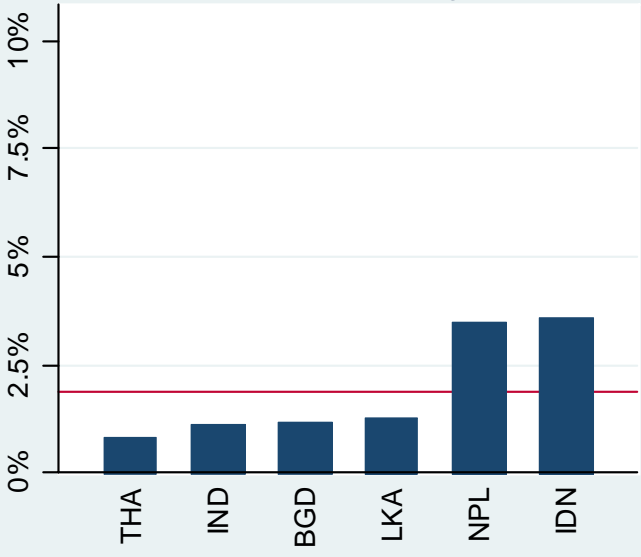
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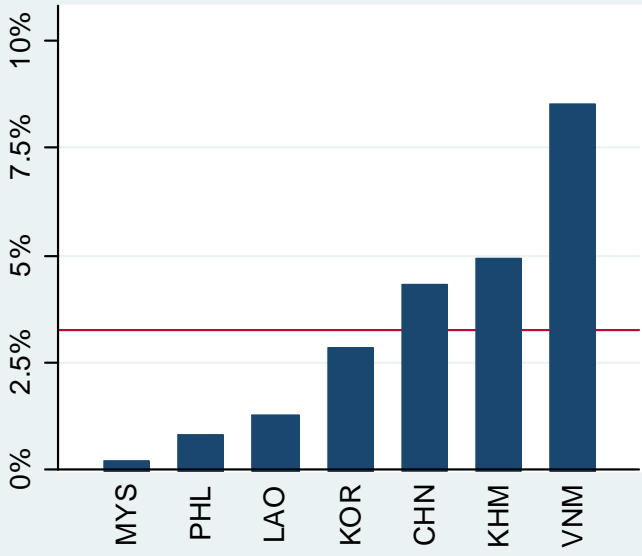
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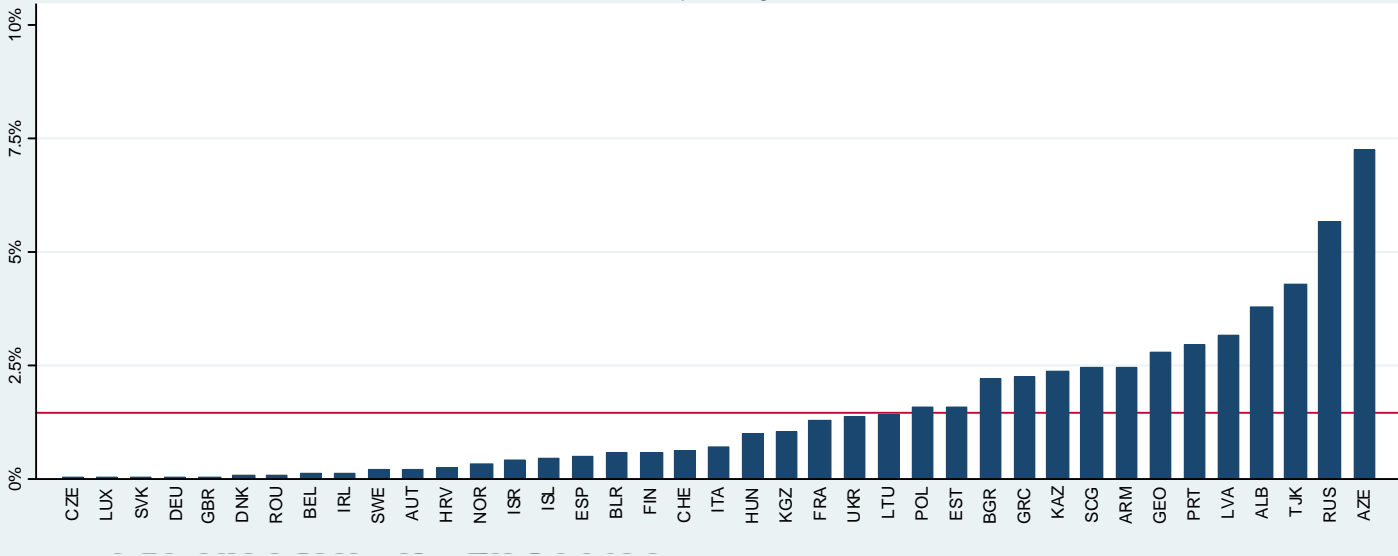
South-East Asia Region



Western Pacific Region

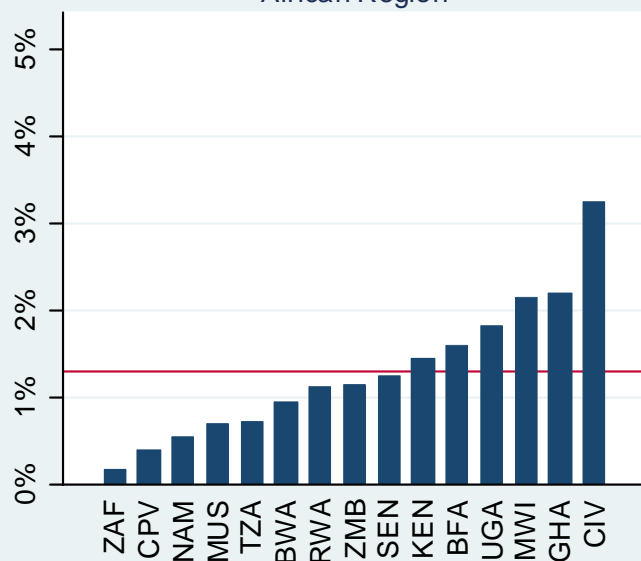


European Region

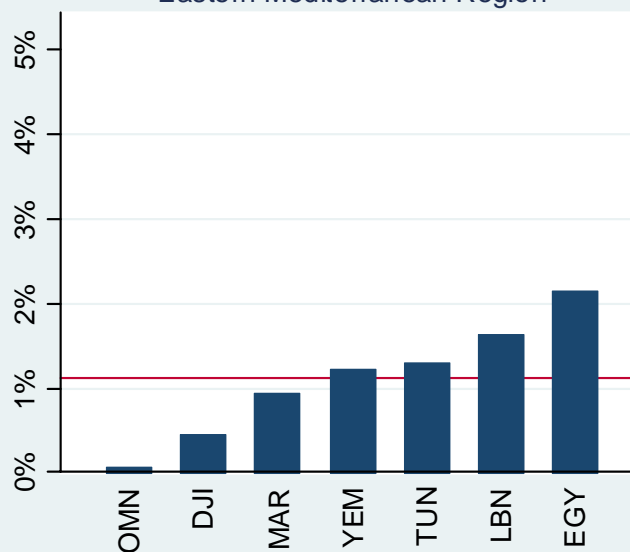


% of Households impoverished

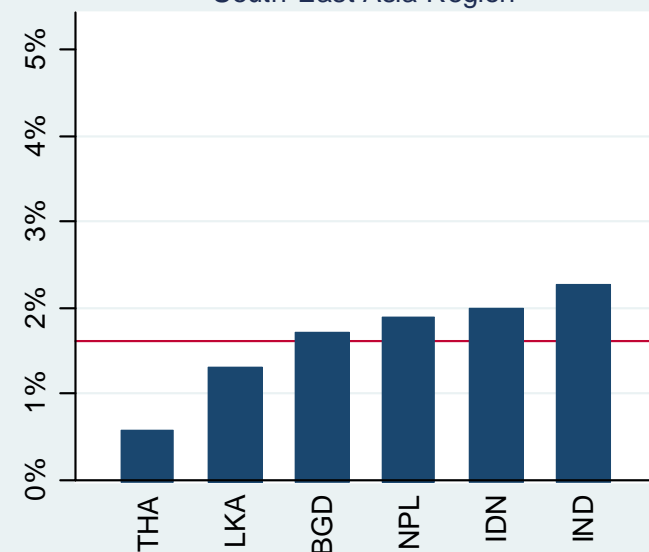
African Region



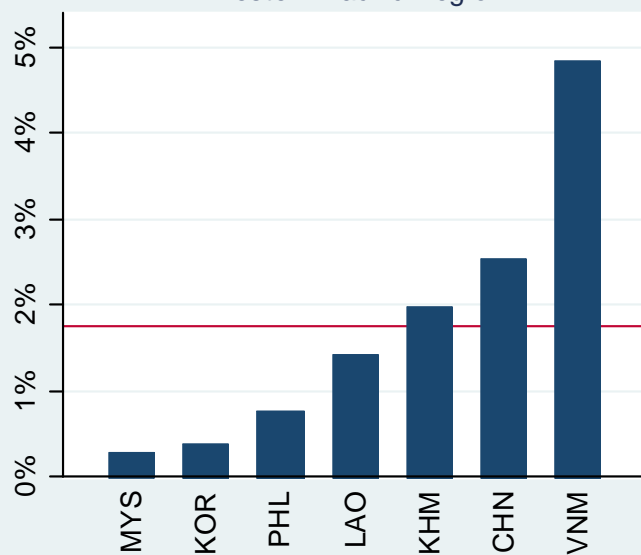
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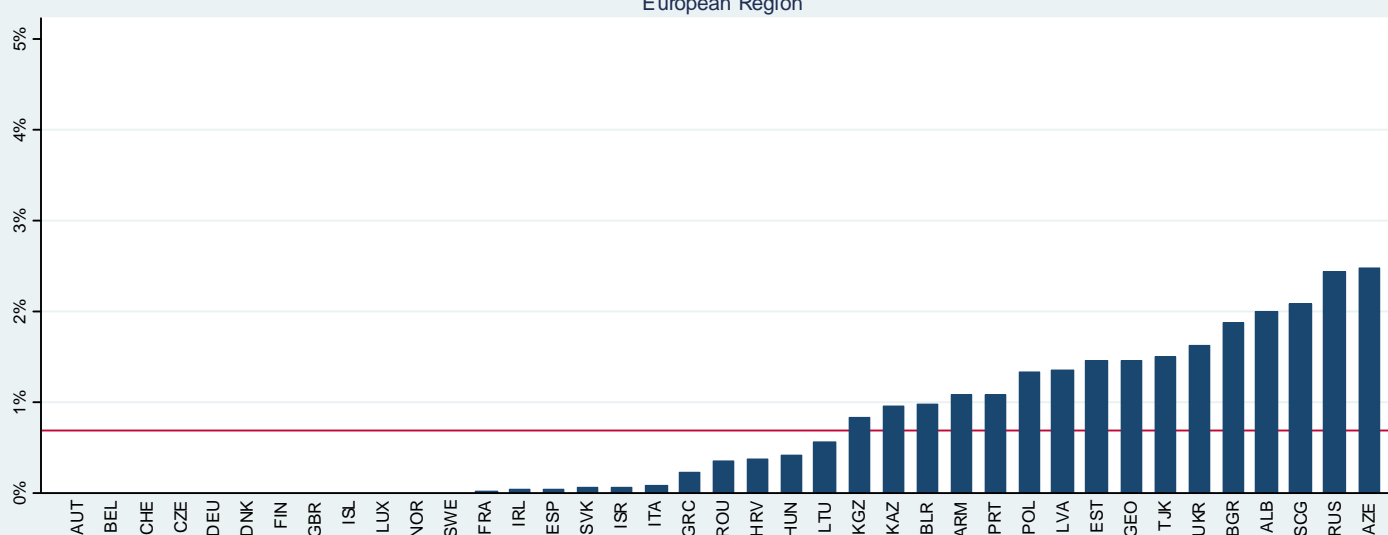
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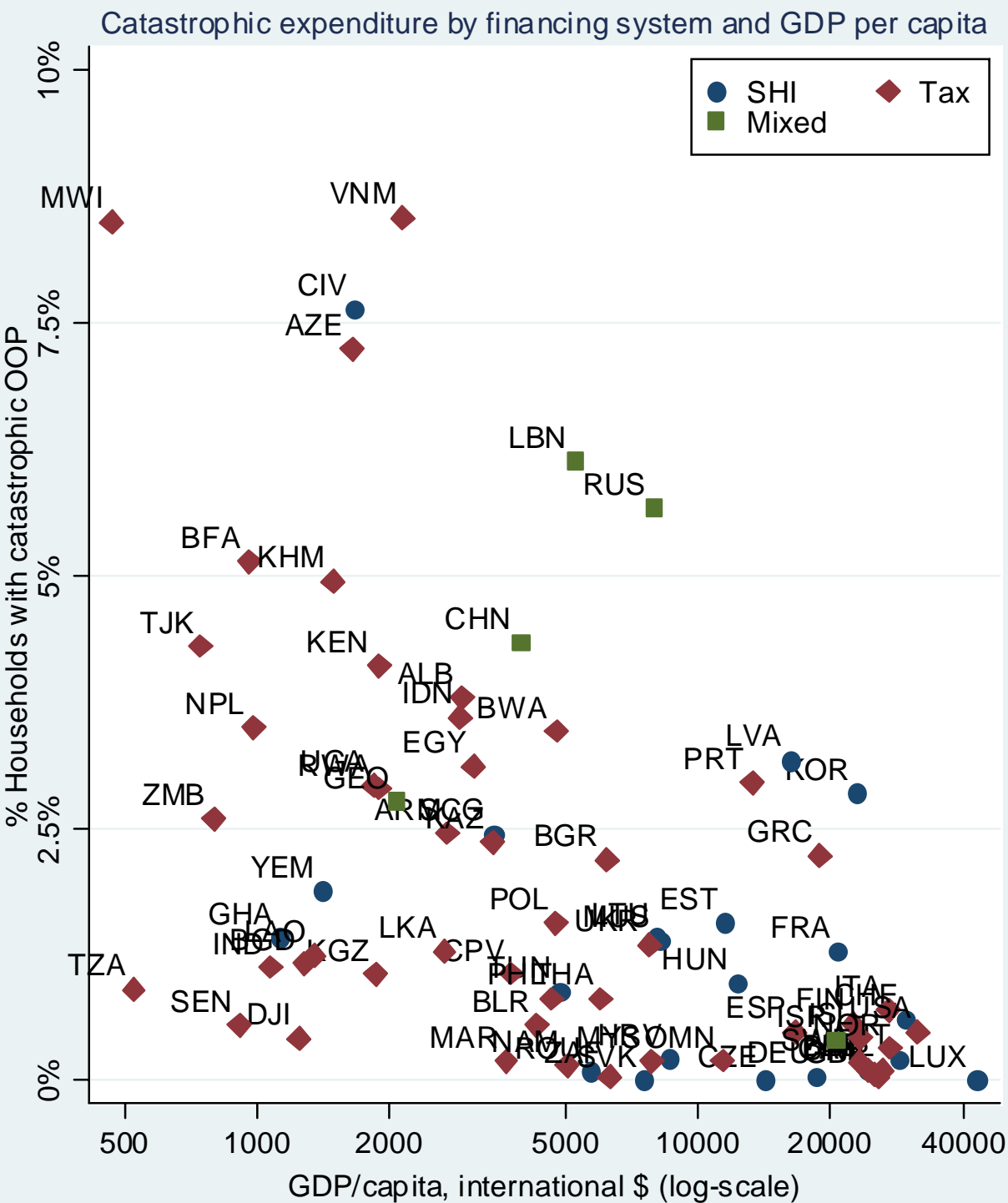


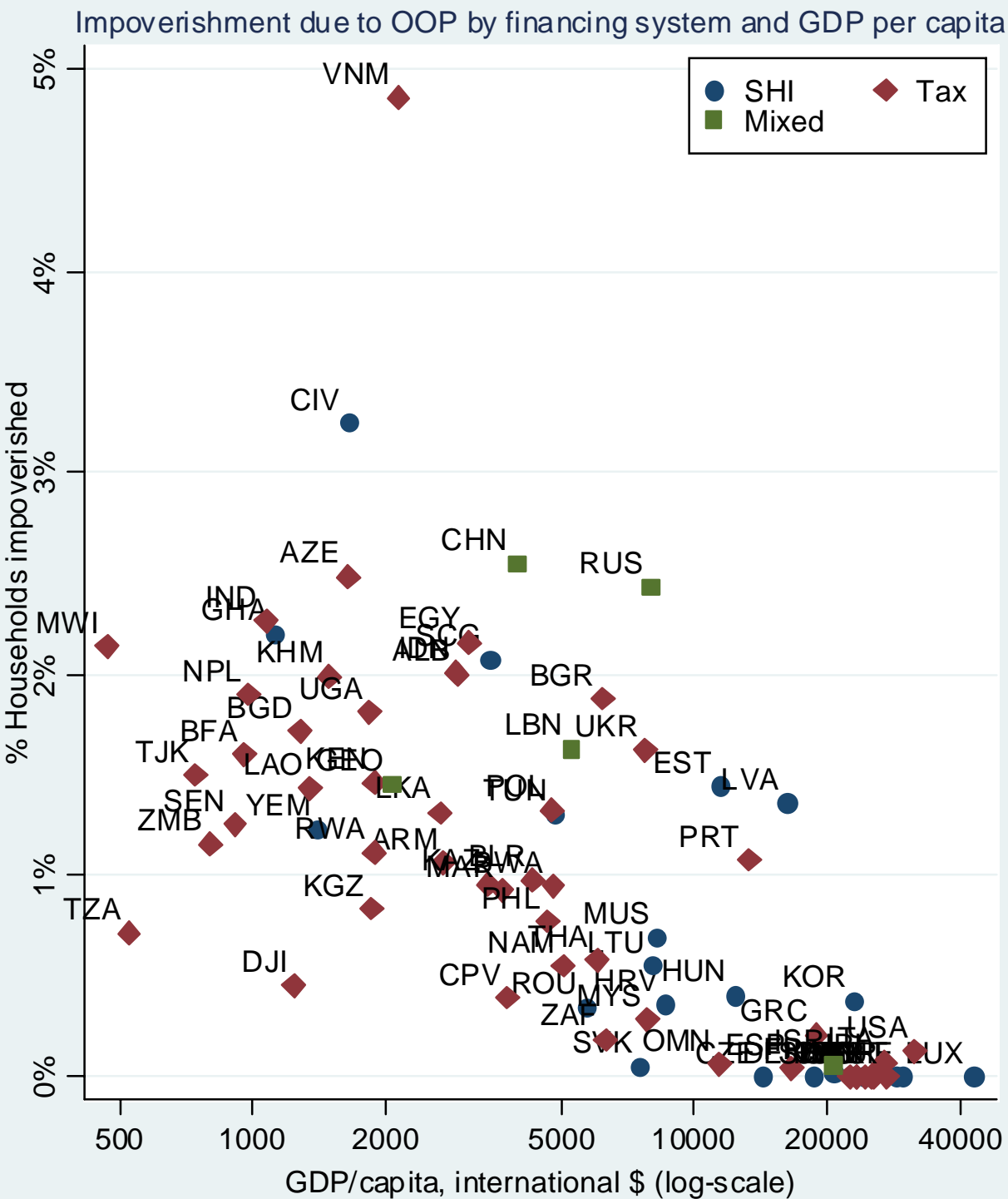
Western Pacific Region



European Region

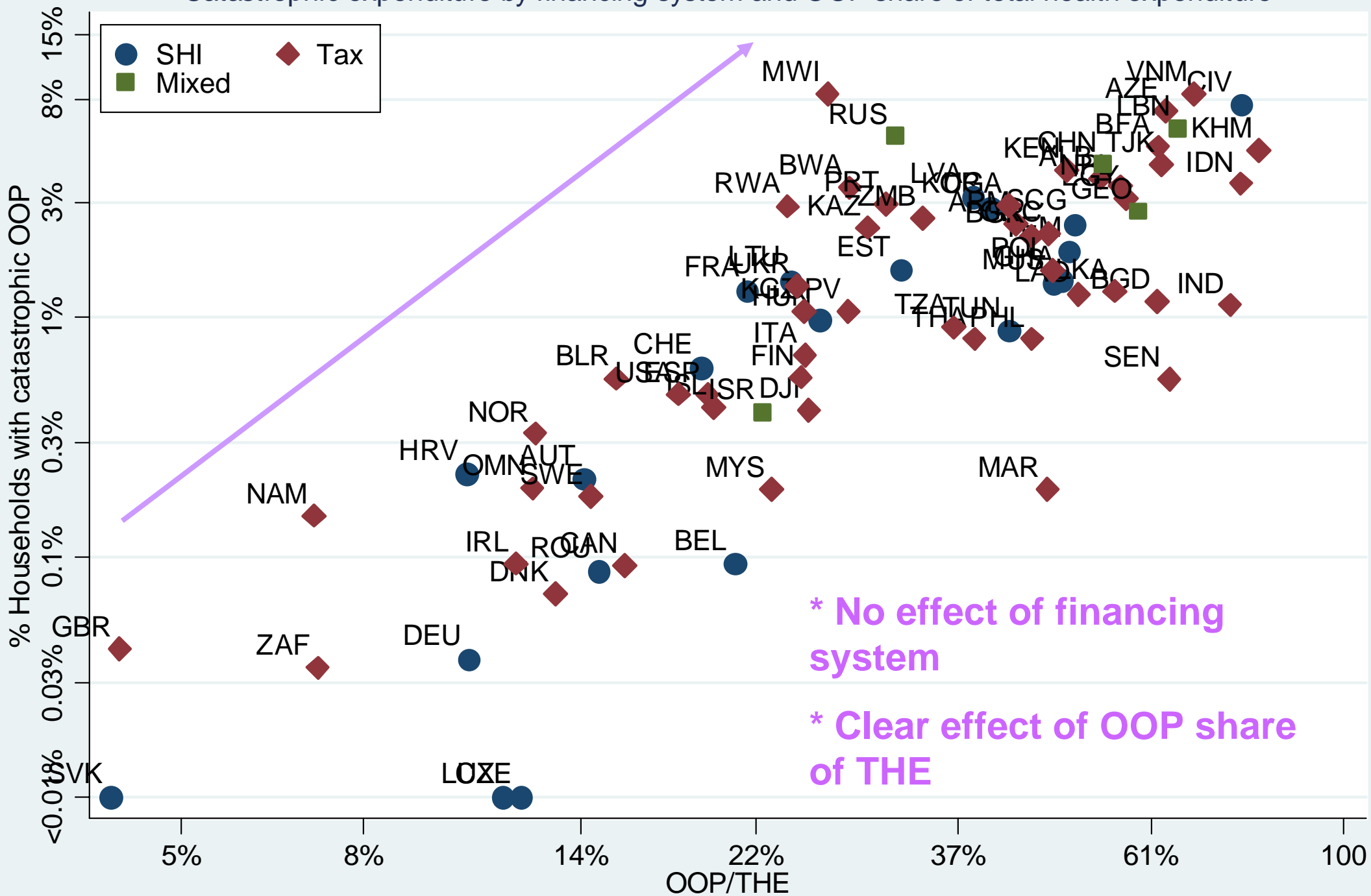






- Similarly to the incidence of catastrophic health expenditure, impoverishment also decreases as national income rises
- Once again, no particular effect of different types of health financing systems

Catastrophic expenditure by financing system and OOP share of total health expenditure



# Regression Results: Estimated Effects Of Various Factors On Household Catastrophic Health Spending

Factor	Middle income							
	Low income		All		Prepayment more than 50% of health spending		High income	
	Coefficient	p value	Coefficient	p value	Coefficient	p value	Coefficient	p value
GDP per capita	0.15	0.55	-0.87	0.05	-1.26	0.03	-1.16	0.41
Gini coefficient	2.05	0.02	3.01	0.01	3.78	0.00	3.13	0.08
Fraction of population under age 5	0.11	0.67	0.50	0.09	0.64	0.06	0.66	0.35
Fraction of population above age 60	0.47	0.37	1.47	0.00	1.85	0.00	0.27	0.64
Total health spending share in GDP	0.66	0.08	0.82	0.06	0.88	0.09	1.39	0.31
Prepayment share in total health spending	-1.34	0.00	-2.53	0.00	-5.21	0.01	-7.54	0.00
SHI	0.04	0.92	-1.30	0.00	-0.36	0.55	-0.89	0.22
Mix	-0.32	0.65	0.15	0.64	0.13	0.79	0.29	0.56
_cons	-0.18	0.95	12.35	0.02	16.71	0.01	13.48	0.37
No. of obs.	36		49		35		31	
No. of clusters	28		39		30		27	
R <sup>2</sup>	0.55		0.70		0.74		0.69	

**SOURCE:** Authors' analysis of survey data.

**NOTES:** Variables are defined in the text. GDP is gross domestic product. SHI is social health insurance.

# Highlights

- Reducing out-of-pocket payment is one of the key factors in protecting households from financial catastrophe
- No difference is found between social health insurance or tax-based financing systems in terms of protecting households against catastrophic expenditures.
- Income inequality associated with a high level of catastrophic health expenditure
- Countries at different income levels may have different focus:
  - Increasing the availability of health services with current prepayment level may cause more households to face financial catastrophe in low and middle income countries, but not in high income countries.
  - Demographic factors (children and elderly population) are associated with high catastrophic expenditure in middle income, but not in low and high income countries

