

### Adam Wagstaff Memorial Lecture

November 24<sup>th</sup>, 2020

Health Financing Resilience during a Prolonged Pandemic November 12 - December 10, 2020









### Interpretation - Interprétation - Interpretación

1. Click interpretation globe at the bottom of screen

Cliquez sur globe d'interprétation en bas de l'écran

Haga clic en el globo de interpretación en la parte inferior de la pantalla



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### Sven Neelsen

Economist, Health, Nutrition, and Population, World Bank



### **Session Overview**

Welcome	Sven Neelsen, Economist, Health, Nutrition, and Population (HNP) Global Practice, World Bank	
Introductory remarks	Muhammad Pate, Global Director Health, Nutrition, and Population, World Bank and Director of the Global Financing Facility for Women, Children and Adolescents (GFF)	
	<b>Deon Filmer</b> , Director of the Development Research Group, World Bank	
Memorial Lecture	Eddy van Doorslaer, Professor of Health Economics, Erasmus School of Economics and Erasmus School of Health Policy and Management	
Announcement of	Winnie Yip, Professor at Harvard T.H. Chan School of Public Health,	
the Adam Wagstaff Memorial Prize	President of the International Health Economics Association	
	HEALTH FINANCING FORUM	



## Muhammad Ali Pate

Global Director, Health, Nutrition, and Population, World Bank Director, Global Financing Facility for Women, Children and Adolescents





# Deon Filmer

Director of the Development Research Group,

World Bank



### Adam Wagstaff Memorial Lecture





### Universal Health Coverage: more than just old wine in a new bottle?

First Adam Wagstaff Memorial Lecture 24 Nov 2020

Eddy Van Doorslaer – Erasmus University Rotterdam



### Address three questions

- 1. Where did we come from?
- 2. Where did we go?
- 3. What lessons did we learn?





### Drawing on almost 40 years of friendship and collaboration









Students in York - 1981

South Africa - 2019



# Universal health coverage: Old wine in a new bottle? If so, is that so bad? (Wagstaff,2013)

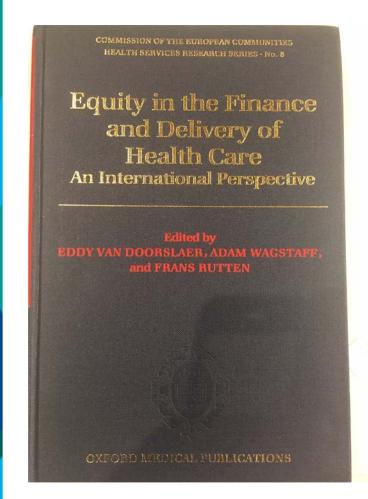


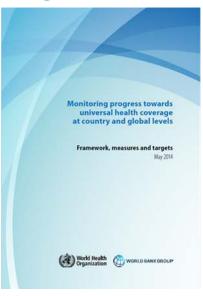


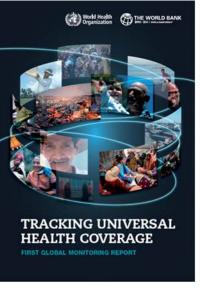


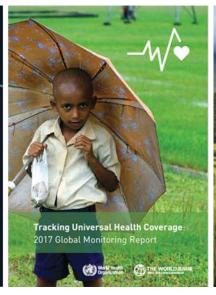
Published on Let's Talk Development (http://blogs.worldbank.org/developmenttalk)

### Just rebottled wine?













www.thelancet.com/lancetgh Vol 8 January 2020

A comprehensive assessment of universal health coverage in  $\mathscr{M}$ 111 countries: a retrospective observational study



Adam Wagstaff\*, Sven Neelsen\*



1993 2020

# What was/is meant by equity in health care in high-income countries health care systems?

#### **Principles:**

- Payments ought to be related to <u>ability to pay</u> (ATP)
- Receipt of health care according to <u>need</u> for care, irrespective of ATP
- But in an egalitarian way no net redistribution goal

Visualized using graphs (e.g. concentration curves) and indices

# What do governments want? Examples of equity statements health policy documents

#### On equitable financing:

- "adjusted to each individual's <u>ability</u> to pay"(Denmark)
- ".. On the basis of their <u>financial</u> <u>means</u>" (Ireland)
- "linking payments to <u>ability to pay</u>" (UK)

#### On equitable access/delivery:

- "equal and free for all, irrespective of economic means and social status (Denmark)
- Distribution of available services on the basis of need"(Ireland)
- "access shall <u>not depend</u> on whether they can pay or <u>any other</u> factor irrelevant to real need"(UK)

Source: Van Doorslaer and Wagstaff (1993)

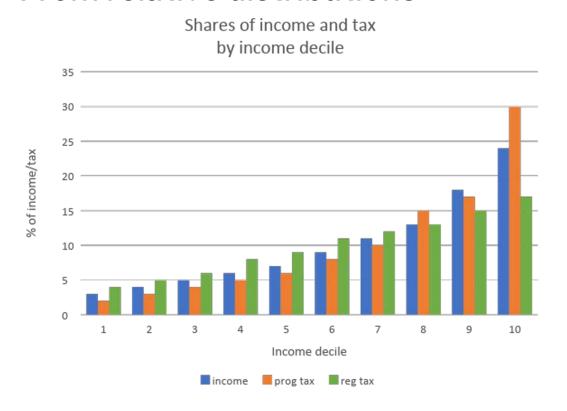


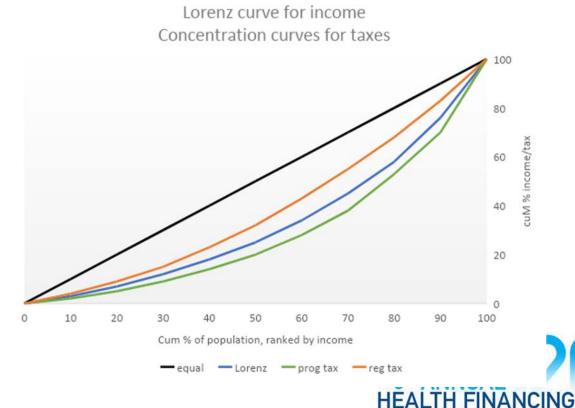
A graphical approach to unequal payment for unequal ability to pay:

Payments can be proportional to income (K=0), regressive (K<0) or progressive (K>0)

[K= C-G = Kakwani progressivity index] From relative distributions

#### To cumulative distributions

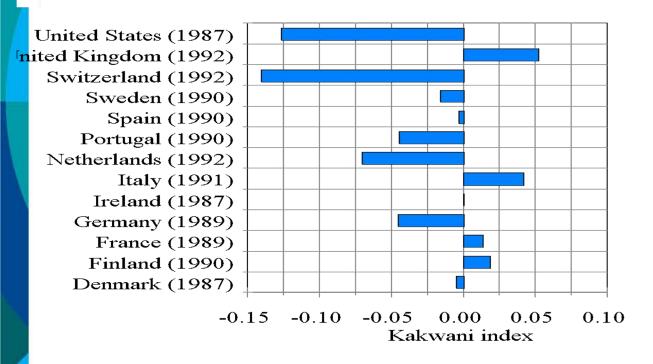




### How pro- or regressive are total health care payments?

In OECD: mostly regressive

In Asia?

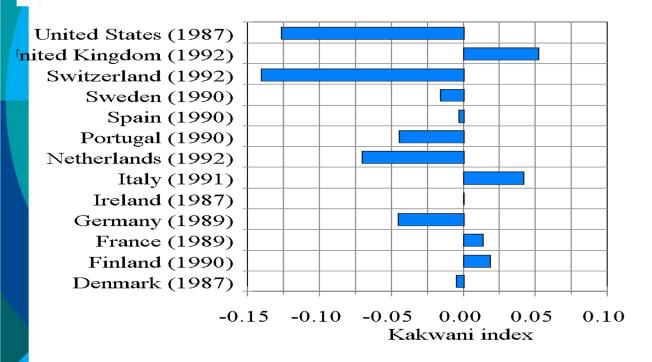


Source: Wagstaff, Van Doorslaer et al (1999)

Source: O'Donnell, Van Doorslaer et al (2008) 5TH ANNUAL HEALTH FINANCING

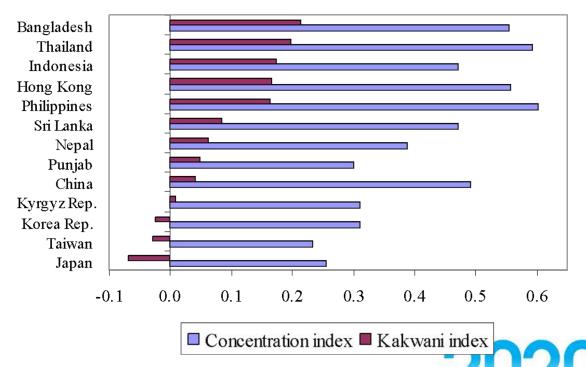
### How pro- or regressive are total health care payments?

In OECD: mostly regressive



#### In Asia: mostly (very) progressive

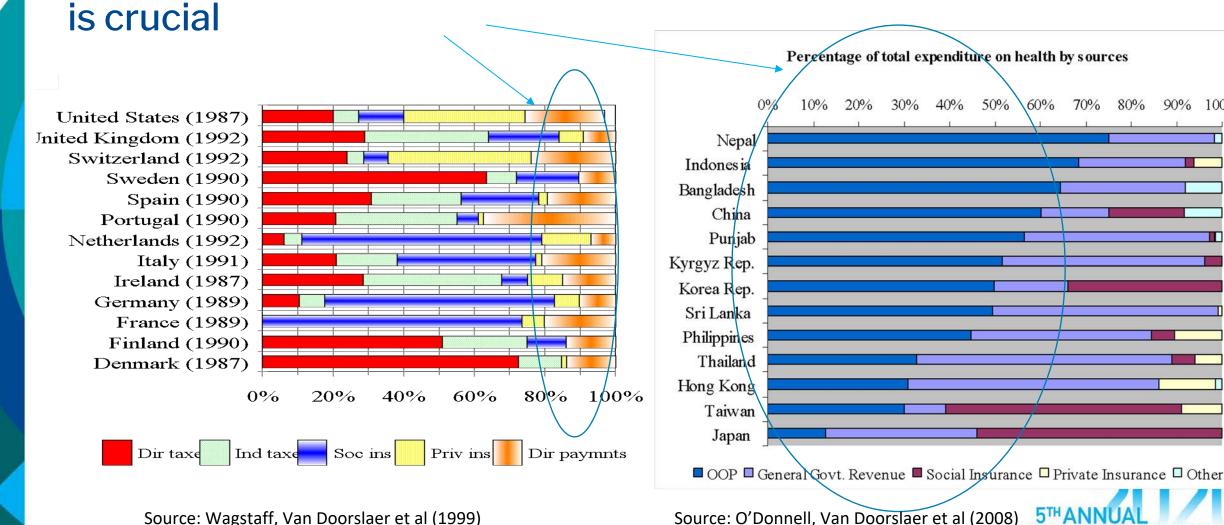
Figure 6: Concentration and Kakwani indices for total health financing



Source: Wagstaff, Van Doorslaer et al (1999)

Source: O'Donnell, Van Doorslaer et al (2008)

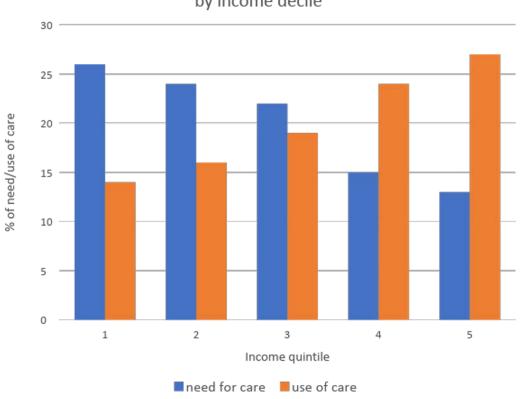
Why is that? Very different financing mixes
Prepayment share versus <u>direct out-of-pocket payments</u> share



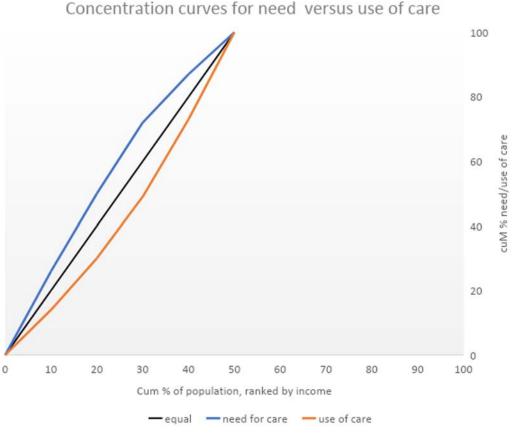
### A graphical approach to equal treatment for equal need: pro-rich inequality in use (C>0) and pro-poor inequality in need (C<0) W-VD inequity index: I>0 is pro-rich; I<0 = pro-poor inequity

#### From relative distributions

### Shares of need for and use of care by income decile



#### To cumulative distributions

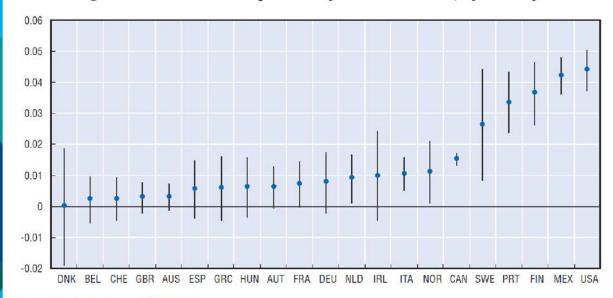




but pro-rich for some secondary care
(after need correction)

In Sub Sah Africa?

Figure 3.2. HI indices for probability of a doctor visit, by country



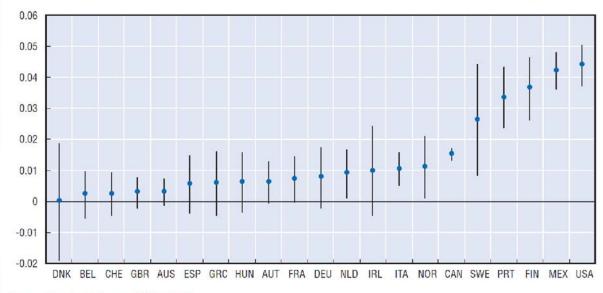
Source: Van Doorslaer et al. for OECD.



### Inequity in the delivery of care?

In OECD: often pro-poor for primary but pro-rich for some secondary care (after need correction)

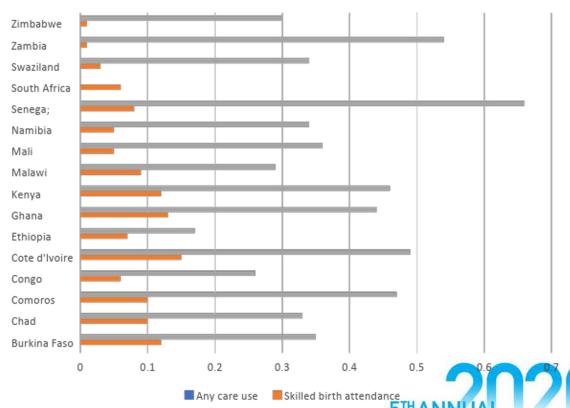
Figure 3.2. HI indices for probability of a doctor visit, by country



Source: Van Doorslaer et al. for OECD.

In Africa: also pro-rich use, but propoor needs grossly underestimated Needs adjustment makes little difference

Pro-rich inequity indices in care use



Source: Bonfrer, Van Doorslaer et al (2014) HEALTH FINANCII

## Equity measurement as in high-income countries not so suitable for LMICs

#### **Finance**

- Not egalitarian redistributive goals but avoidance of "undue financial hardship as a result of getting services they need" (SDG 3.8.2)
- Focus on two concepts: catastrophic and impoverishing out-of-pocket payments
- → Replace income redistributive effect by financial protection (=FP)

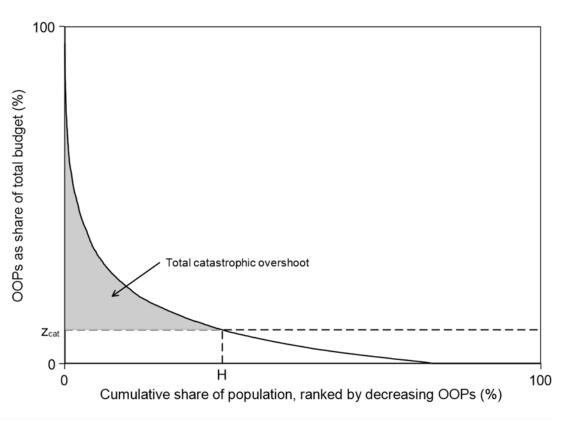
#### Delivery

- Assumption "on average, the system gets it right" is typically not satisfied (Van de Poel et al, 2012)
- Self-perceived needs can be very deceptive (Bonfrer et al, 2014)
- → Replace broad-brush system approach by bottom-up approach measuring service coverage (=SC)

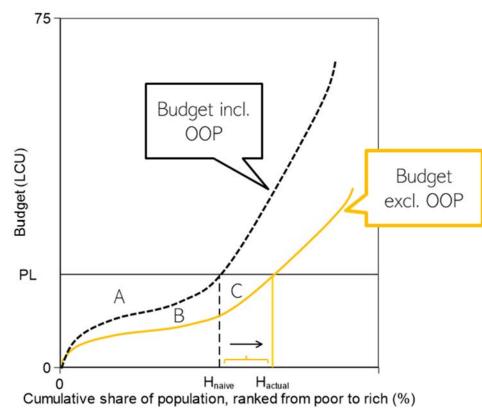
i.e. ensuring that "Everyone—poor and rich alike—gets the health services they need"

# Measuring the degree of financial protection: to what extent are out-of-pocket payments for care of households

#### Catastrophic?



#### Impoverishing?

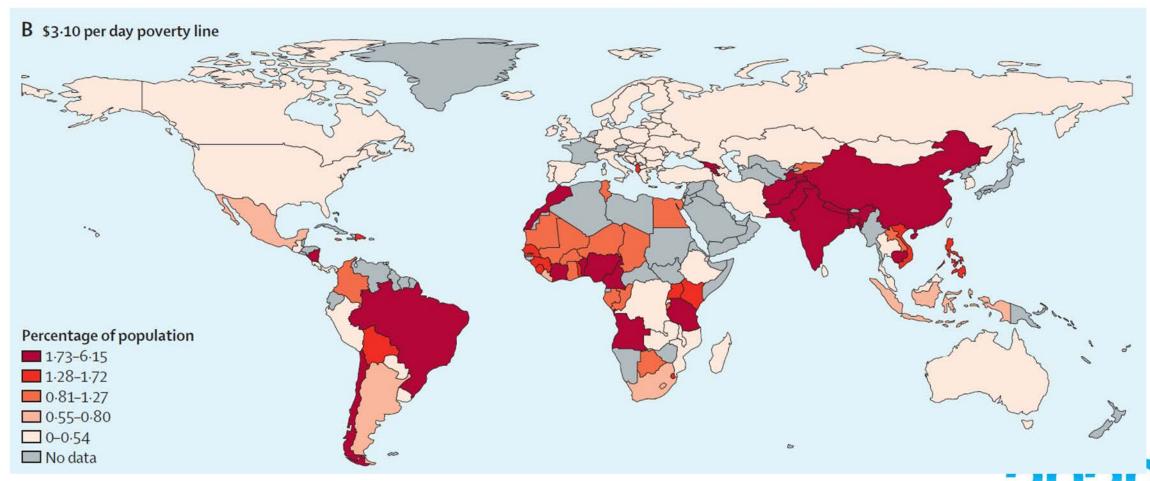


Source: Wagstaff and Van Doorslaer et al (2003)

# Which countries/systems protect their populations better?

- Initial studies by WHO and EQUITAP (for Asia)
- Measures of FP were included in SDGs and monitored in 100+ countries by WB/WHO UHC monitoring collaboration (Wagstaff et al, Lancet Global Health, 2017a,b)
- Findings in a nutshell:
  - Catastrophic payment incidence fell in over 50% of countries from 2000 to 2010
  - Impoverishment fell at low pov line (USD 1.9/day): from 2.1% of world pop in 2000 to 1.4% in 2010
  - But it increased at higher pov line level (USD 3.1/day)
  - Greater use of (<u>public</u>) prepayments is key in shielding populations against both cat and impov spending
- Good news!
  But what does financial protection mean if people forego care in absence of coverage?

# Impoverishment through out-of-pocket payments around the world



Source: Wagstaff et al (2017b)



### Effective coverage of services

- Early work by WHO and IHME
- Recent addition by Wagstaff and Neelsen (The Lancet Global Health, 2020)
- Bottom-up approach instead of broad-brush
- Two challenges:
  - 1. Selecting indicators reflecting the "health service they need"
  - 2. Capturing equity ("Everyone poor and rich alike")

And can be adjusted for pro-poorness (1-CI)



# A possible set of Service Coverage indicators what fraction of those in need receive the services?

Domain	Numerator	Denominator
Preventi on	4+ ANC visits	Pregnant women
	Child fully immunized*	Child age 15-23 months
	Mammogram in last 2 years	Women age 50-69
	Pap smear in last 3 years	Women age 20-69
Treatme nt	Skilled birth attendant at delivery	Women giving birth
	Formal provider visit for acute respiratory infection (ARI)	Children 0-59 months with ARI symptoms
	Received oral rehydration salts (ORS)	Children 0-59 months with diarrhea
	Hospital admission last year** G, Polio1-3, DTP1-3, Measles	Adults (18+)

<sup>\*\*</sup> Benchmarked against WHO's 9.03% admission rate

### The rabbit from the hat: a UHC index (Wagstaff and

Neelsen, 2020)

$$UHC_{GM} = SC^{0.5} \times FP^{0.5}$$

Not an arithmetic but geometric mean, to account for diminishing marginal substitution

For example, with

$$FP = (1 - CATA10)$$

$$\begin{array}{l} \mathbf{SC} = (ANC)^{1/16} \times (VAC)^{1/16} \times (MAM)^{1/16} \times (PAP)^{1/16} \times \\ (SBA)^{1/8} \times (ARI)^{1/8} \times (ORS)^{1/8} \times (ADM)^{3/8} \end{array}$$

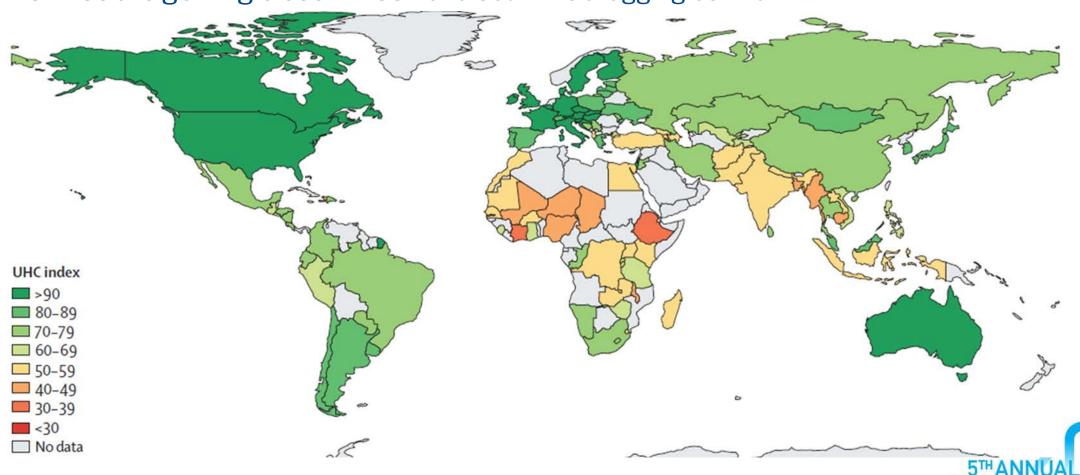
With weights according to spending shares

And possibility to penalize pro-rich distribution



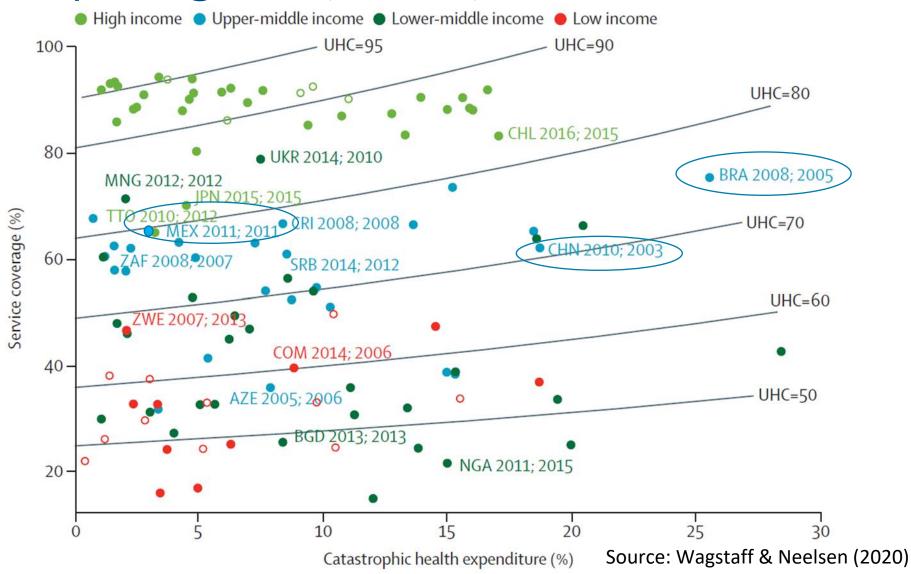
# How is the world doing?

Obviously, income matters: Most HICs have UHC (index > 90) -- Many UMICs are getting closer -- SSA and South Asia lagging behind



Source: Wagstaff & Neelsen (2020)

# UHC contours show trade-offs between SC and FP: compare e.g. China, Mexico, Brasil





### Conclusions – lessons learned from Adam's pioneering work

#### On measurement:

- UHC is about equity, but not simply old wine rebottled
- Egalitarian inequity measures developed for monitoring high-income, near-universal coverage countries – not well suited for LMICs
  - Finance: from progressivity and redistribution to financial protection
  - Delivery: from equal treatment for equal need to (effective) service coverage
  - From separate analysis to maximizing a properly weighted combination of both dimensions in a index



### Some lessons on best practices

#### On finance: how best to fund health care?

- Lesson 1: increase prepayment share
- Lesson 2: among prepayments, voluntary premiums for private cover not very successful
- Lesson 3: among (compulsory) taxes, labor taxes not the best idea (Yazbeck et al, 2020)

### On coverage: how best to cover populations?

- Lesson 4: depth of coverage matters
- Lesson 5: effective coverage embraces quality
- Lesson 5: address more objective needs assessment (denominator)

Old wine rebottled?

If ECuity indices were young Beaujolais nouveau, then the UHC index holds the promise of a Grand Cru: it still needs maturing but its "Appellation d'Origine Contrôlée" (AOC) is definitely

Adam Wagstaff!









### Adam Wagstaff Memorial Prize





# Winnie Yip

President of the International Health Economics Association (iHEA),

Professor, Harvard T.H. Chan School of Public Health





### Sven Neelsen

Economist, Health, Nutrition, and Population, World Bank



### Reminder

We look forward to seeing you at Meeting Growing Spending Needs

during a Prolonged Pandemic

**Pre-session:** 

December 2nd at 7:00am.

Session:

December 2nd at 8:00 am

