





### **Health Taxes Seminar Series**



Modelling the impact of SSB tax on health and beyond: the role of modelled analysis in shaping pro-health fiscal policies

Thursday, March 3, 7.00-8.30 am EST

### Meeting Guidance

- Please mute your mic when others are speaking by clicking this icon on your screen 🥑 . You are muted when you see the following icon 1.
- If you have <u>technical difficulties</u>, please contact Aditi Nigam or Vrishali Shekhar using the Chat feature. This can be found by clicking this 2.



Please use the chat feature by clicking this icon 3.

and to send a question that can be seen by 'Everyone'.

### Session moderator



### Dr. Hideki Higashi

Senior Health Economist, World Bank



### Dr. Jahanzaib Sohail

Health Economist, World Bank

# Agenda

Agenda Item	Speaker
OPENING REMARKS	<b>Ms. Trina Haque</b> Practice Manager for Health, Nutrition and Population, South Asia
MODELLING THE IMPACT OF SSB TAX IN PAKISTAN AND SRI LANKA	<ul> <li>Dr. Lennert Veerman</li> <li>Professor of Public Health, Griffith University, Australia</li> <li>Dr. Linda Cobiac</li> <li>Senior Research Fellow, School of Medicine, Griffith University, Australia</li> <li>Ms Sarah Mounsey</li> <li>PhD Candidate and Researcher, Menzies Centre for Health Policy and Economics, University of Sydney, Australia.</li> </ul>
SHAPING SSB TAX POLICY IN SOUTH AFRICA	<b>Dr. Michele Cecchini</b> Project Leader, Public Health, Organisation for Economic Co-operation and Development
INTERVIEWS WITH COUNTRY REPRESENTATIVES	<ul> <li>NIGERIA- Dr Zainab Shinkafi-Bagudu</li> <li>Chief Executive Officer, Medicaid Radio-Diagnostics and Medicaid Cancer Foundation</li> <li>SRI LANKA- Dr. Renuka Jayatissa</li> <li>Head, Department of Nutrition, Medical Research Institute, Ministry of Health.</li> <li>PAKISTAN- Dr Samra Mazhar</li> <li>Deputy Director, Ministry of Health</li> </ul>
QUESTIONS AND DISCUSSIONS	Moderated by: Dr. Hideki Higashi, Senior Health Economist, World Bank Dr. Jahanzaib Sohail, Health Economist, World Bank
CLOSING REMARKS	<b>Dr. Kate Mandeville</b> Senior Health Economist, World Bank

## Opening remarks



### Ms. Trina Haque

Practice Manager for Health, Nutrition and Population, South Asia

# Polling the experts

Do you support or oppose the idea of taxing sugar-sweetened beverages because of their negative health effects in order to reduce the actual consumption?

- Strongly support
- Somewhat support
- Somewhat oppose
- Strongly oppose
- Don't know

### Modelling the impact of SSB tax in Pakistan and Sri Lanka Industry arguments against Mexico's SSB tax



#### **Dr. Lennert Veerman**

Professor of Public Health, Griffith University, Australia



### Dr. Linda Cobiac

Senior Research Fellow, School of Medicine, Griffith University, Australia



### **Ms Sarah Mounsey**

PhD Candidate and Researcher, Menzies Centre for Health Policy and Economics, University of Sydney, Australia

# Impact assessment of fiscal policies on obesity and related health outcomes in South Asia

### Sarah Mounsey, Linda Cobiac, Lennert Veerman Thursday 3 March, 2022





## Formal beverage market



Source: www.euromonitor.com





# Beverage taxes

	PAKISTAN	SRI LANKA
CURRENT	<ul> <li>Sales tax 17%</li> </ul>	<ul> <li>Sales tax 15%</li> </ul>
TAXES	<ul> <li>Federal excise duty</li> </ul>	<ul> <li>National Building Tax 2%</li> </ul>
	<ul> <li>Soft drinks 13%</li> </ul>	<ul> <li>Excise tax on sugar</li> </ul>
	- Juice <mark>5%</mark>	<ul> <li>Rs 0.30 per gram sugar</li> </ul>
	- Concentrates 50%	(US\$0.002)
	- Milk <mark>0%</mark>	
MODELLED	1. Remove all drink taxes	1. Remove all drink taxes
SCENARIOS	2. Soft drinks <mark>20%</mark>	2. Rs 0.50 per gram sugar
	3. Soft drinks <mark>30%</mark>	3. Rs 1.00 per gram sugar
	4. All drinks <mark>50%</mark>	





# Tax impact on drink purchasing







### Tax impact on drink consumption



### Population model



## Impact on overweight and obesity – in year 10



### Prevention of disease incidence – first 10 years



## Lifetime health gain



### Fiscal implications – first 10 years

### Average annual impact in the first 10 years after tax changes

		Scenario 1	Scenario 2	Scenario 3	Scenario 4
Pakistan	Health gain or loss (DALYs)	-6,400	590	1,300	8,500
	Economic value of health impact (USD)	-\$6.7M	\$0.62M	\$1.4M	\$8.9M
	*Tax revenue (USD)	\$530M	\$840M	\$960M	\$810M
Sri Lanka	Health gain or loss (DALYs)	-1,100	550	1,500	
	Economic value of health impact (USD)	-\$3.3M	\$1.7M	\$4.8M	
	*Tax revenue (USD)	\$73M	\$110M	\$120M	

\* Tax revenue includes drink taxes, sales tax and National Building Tax (in Sri Lanka)

# Sensitivity

- We examined sensitivity of results to a range of modelling assumptions:
  - Pass-through of taxes: 50% 150%
  - Variations in age/sex distribution of drink consumption
  - Assumptions around background market trends
- Variation in magnitude of results
- No difference in direction or significance of tax effects





# Conclusions from modelling

- Raising taxes on sugar-sweetened drinks in Pakistan and Sri Lanka is very likely to improve population health
  - particularly in prevention of overweight/obesity, diabetes and cardiovascular diseases
- There are substantial financial benefits
  - Both tax revenue and added value of keeping people alive and healthy
- Both ad valorem and volumetric taxes are effective
- The bigger the tax, the bigger the benefits





### Model as a "live tool" in shaping SSB tax policy in South Africa



### Dr. Michele Cecchini

Project Leader, Public Health, Organisation for Economic Cooperation and Development

# MODELLING AS A "LIVE TOOL" IN SHAPING SSB TAX POLICY IN SOUTH AFRICA

Michele Cecchini Head of Public Health OECD



# In 2016, Obesity Was Booming in South Africa, Also Fuelled by Growing Consumption of SSBs

Between 2000 and 2014, the prevalence of obesity in South Africa almost doubled for men and grew by almost one third for women

Ref: WHO, 2017





In 2016, sales volume of regular cola reached 25.5 liters/capita, while low calorie colas were at 2.9 liters/capita. In both cases, there was a significant increase since 2011 Ref: Euromonitor International, 2017

# South Africa Was Committed To Tackling The Obesity Epidemic

- The 2013-17 South African National Plan for NCDs set an objective of decreasing obesity prevalence by 10% over five years;
- The 2015-20 Strategy for the Prevention and Control of Obesity in South Africa used OECD-WHO economic analyses to make the economic case for strengthening obesity policies;
- South Africa already experimented an excise duty on soft drinks, primarily for revenue reasons, but the policy was ended in 2002. The duty was of USD 0.035 per liter and was considered as effective. For example it raised USD 71 million in revenues in 1997-98.



# Different Design Options Were On The Table: Modelling Outputs Were Used To Promote Agreement

### Treasury

- Effective tax rate 12%
- 0.0046 USD per gram of sugar on a liter
- Only sugar content above 4g/100ml to be taxed

# WHO & civil society

- Effective tax rate 20%
- 0.0046 USD per gram of sugar on a liter
- All sugar content to be taxed

### Industry

- Single-digit effective tax rate (8%)
- 0.0046 USD per gram of sugar on a liter
- All sugar content to be taxed

### Elasticity uncertainty

 stakeholders had different positions on assumptions, e.g. on whether to include milk, and on the data sources

### Regulation of sugar content

VS

# This Was Not A 'One-off' Analysis But Rather A 1-Year-Long Continuous Partnership



Modelling assumptions and scenarios were adapted throughout as debate developed in South Africa, with intermediary outputs presented in meetings and events with civil society and institutions

# Establishing A Strong Partnerships Was Key To Success



# There Were A Number Of Attempts At Stopping Or Watering Down the Proposed Legislation



# Sugar tax is about revenue not health: IRR

nce the tax was ring industry,
nce the tax was ring industry,
nce the tax was ring industry,
nce the tax was ring industry,
peen met with
idustry during tegies used by South African
dustry vay arise from other middle form of policy istry misused business and
intext-specific contemplating
x, SSBs, South

NEWS



On December 2017 the Parliament passed the new legislation on SSBs; The health promotion levy was implemented in April 2018

- 0.0046 USD per gram of sugar on a liter
- Only sugar content above 4g/100ml to be taxed
- Small producers using <500 kg of sugar per year are exempt





### South Africa introduces sugar tax

By Rachel Arthur 🗗 03-Apr-2018 - Last updated on 03-Apr-2018 at 09:23 GMT





### https://oe.cd/publichealth

### Michele.cecchini@oecd.org

# Polling the experts

• What kind of evidence (including modelled analysis) can play a critical role in the policy-making process for SSB tax? (select two that are most relevant)

- The overall health gains from SSB tax
- The impact of SSB tax on government revenue
- The impact of SSB tax on health expenditure
- The impact of SSB tax on household expenditure
- Evidence has little role in the policy-making process.

# **Country Discussions**

## Country reflections - NIGERIA



### Dr Zainab Shinkafi-Bagudu

Chief Executive Officer, Medicaid Radio-Diagnostics and Medicaid Cancer Foundation

### Country reflections – SRI LANKA



### Dr. Renuka Jayatissa

Head, Department of Nutrition, Medical Research Institute, Ministry of Health.

# Country reflections - PAKISTAN



### Dr. Samra Mazhar

Deputy Director, Ministry of Health

# Questions & Discussions

# Closing Remarks



Dr. Kate Mandeville

Senior Health Specialist, World Bank







### Thank you

Please fill out feedback form shared in chat

The World Bank's support to the Joint Learning Network for UHC is made possible with financial contributions from the following partners:







### Stay Connected

- jointlearningnetwork.org
- 🍸 @JLN4UHC / @WBG\_Health
- @jointlearningnetwork