



Food policies and their implications on overweight and obesity in selected countries in Near East and North Africa region

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Introduction

- Near East and North Africa (NENA) countries are known for high levels of overweight and obesity
- For instance, according to the 2015 DHS, 75 percent of adult Egyptian women are overweight, and more than 40 percent are obese.
- These rates are almost twice the world rates of overweight and obesity (WHO, 2017).
- Most predictions suggest increasing trends (e.g., Ng et al., 2014; Kilpi et al., 2013).

- These high rates of overweight and obesity are strongly linked with high prevalence of non-communicable diseases (NCD).
- NCDs remain major causes of death in many of the NENA countries (Musaiger, 2011; Kilpi et al., 2013).
- Several explanations, including:
 - (i) change in lifestyle and hence reduction of physical activities,
 - (ii) nutrition transition: shifting of dietary patterns
 - (iii) demographic transitions: urbanization

- This study examines the implication of food policies, mainly trade and government food subsidies.
- We examine the evolution of trade (food) policies, food systems, and body weight outcomes across selected countries in the NENA region.
- We investigate the implications of important food policies on the rising levels of overweight and obesity in the NENA region.
- We conduct both macro and micro-level analyses of the evolution of trade (food) policies and associated obesity trends.

Summary of major findings

- The NENA region, especially the GCC member countries, have among the highest rates of overweight and obesity in the world.
- Overweight and obesity rates have almost doubled between 1975 and 2016: NENA trends remain distinct and increasing
- Rural body weight has been rising over the past few decades
- Overall food supply quadrupled in the period 1960–1970 to 2010–2013
- Food import dependence in the NENA region increased
- Significant relationships between alternative food policy indicators and body weight outcomes.
- The price of food items appears to be an important mechanism, prices of “unhealthy” diets are inversely associated with body weight.

2. Food Policies and Nutritional Implications

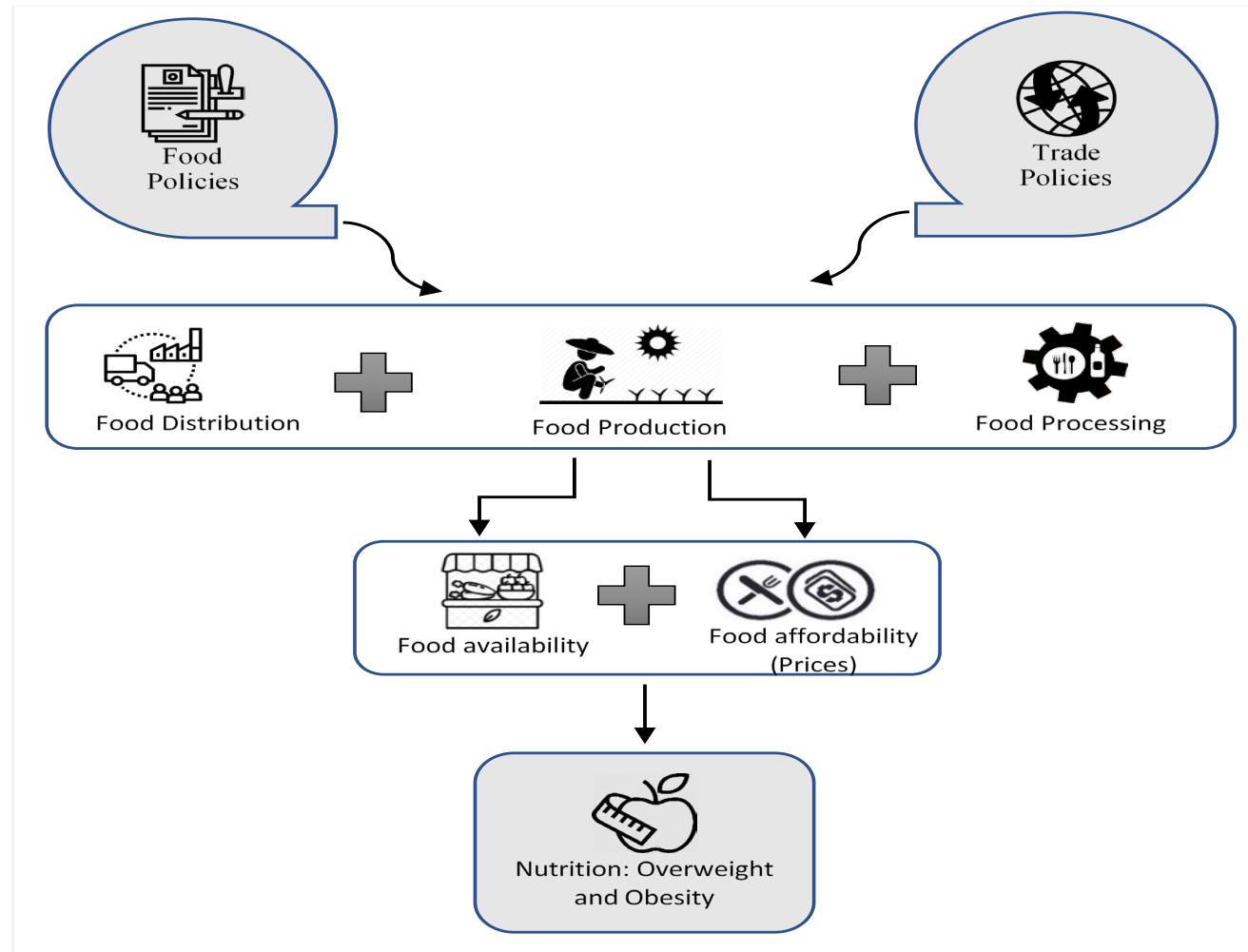
- Trade policies and food subsidies represent important policy instruments in the NENA region.
- Most countries in the NENA region satisfy a substantial share of their food demand through imports.
- Some countries are also known for long-existed food subsidies.
- These food policies could have important nutritional implications
- Understanding the implication of food policies is crucial to inform public health initiatives to reduce diet-related diseases

Why and How

- Several direct and indirect channels through which trade policies can affect domestic food environment and global food system
- First, trade policies, can increase food imports, which in turn, increase the availability of food.
- Second, these may encourage the flow of foreign direct investment, including investment in food processing industries.
- Third, trade policies can also influence the relative prices of foods.
- Fourth, trade policies can affect the income and purchasing power of individuals.

- Similarly, agricultural input and food subsidies can also influence domestic food systems.
- These agricultural policies can affect the food system in two important ways.
- First, agricultural input subsidies could induce overproduction of specific types of foods (cereals).
- Second, agricultural input subsidies can make these specific foods cheaper.
- Direct food subsidies are also common policy instruments in the NENA region.
- Food subsidies can affect prices of subsidized food items relative to other food items.

- The following figure, depicts the conceptual linkages between gov't food (trade) policies and nutritional outcomes.



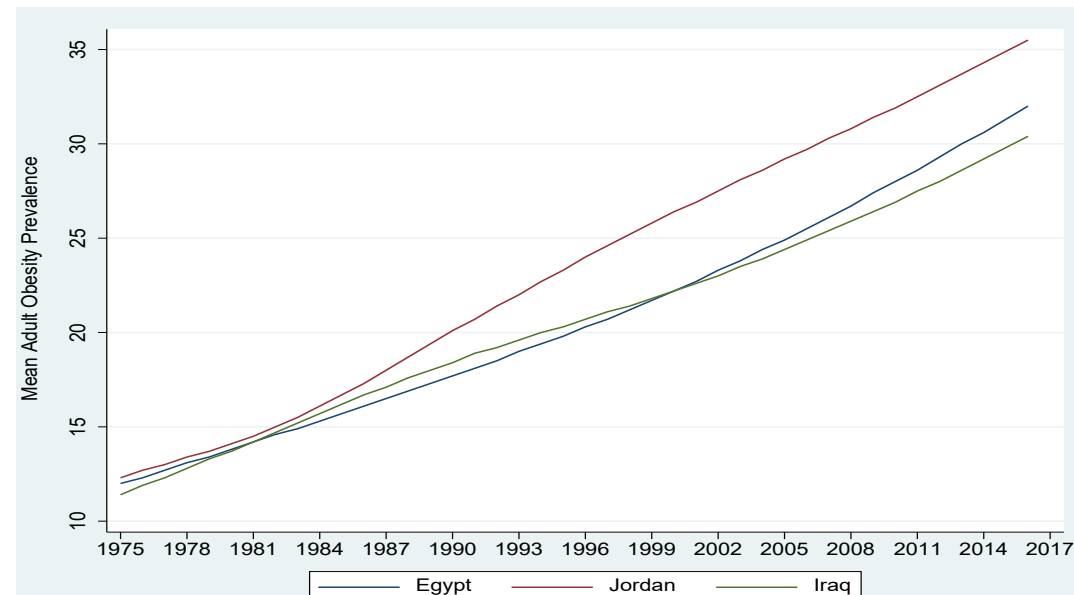
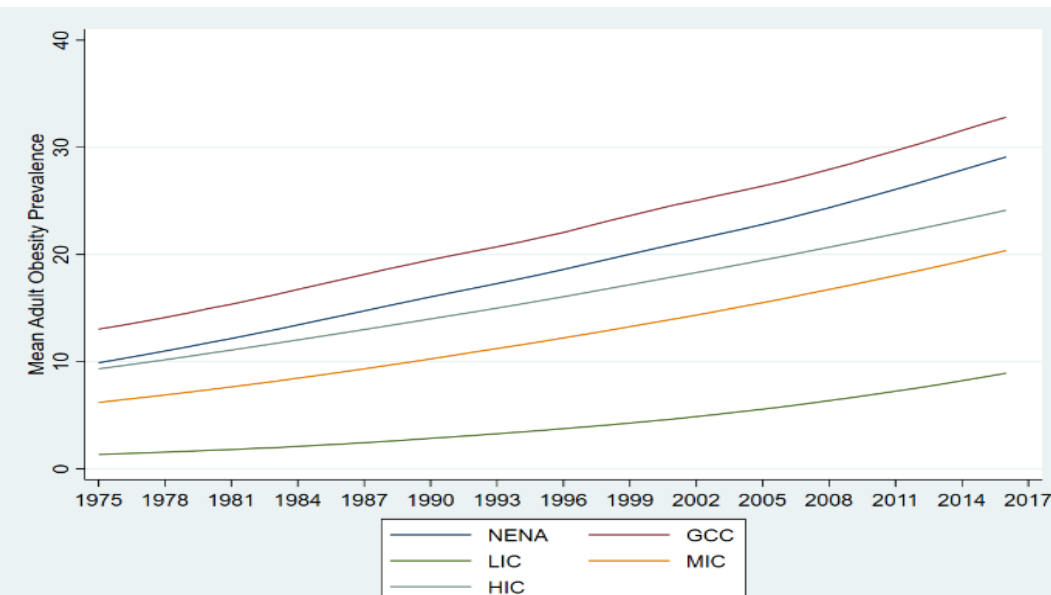
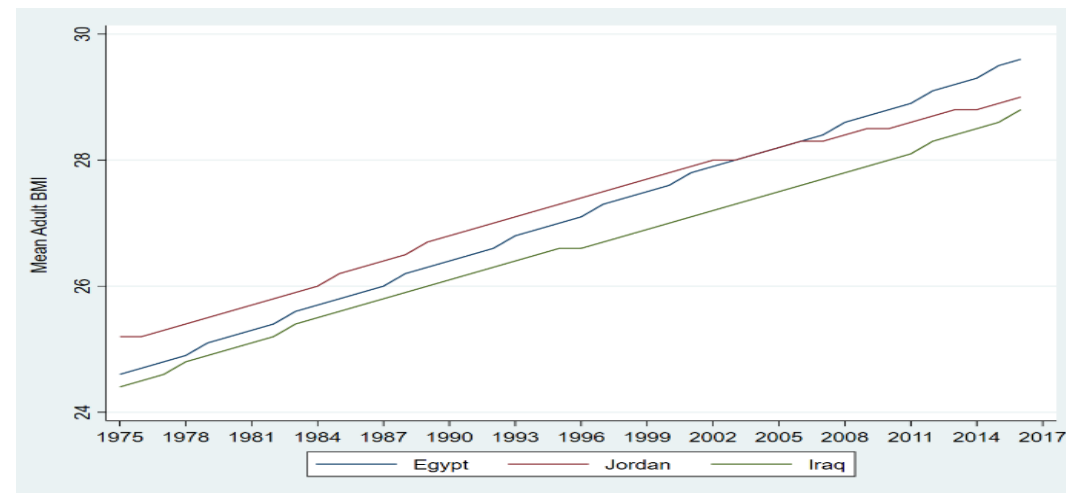
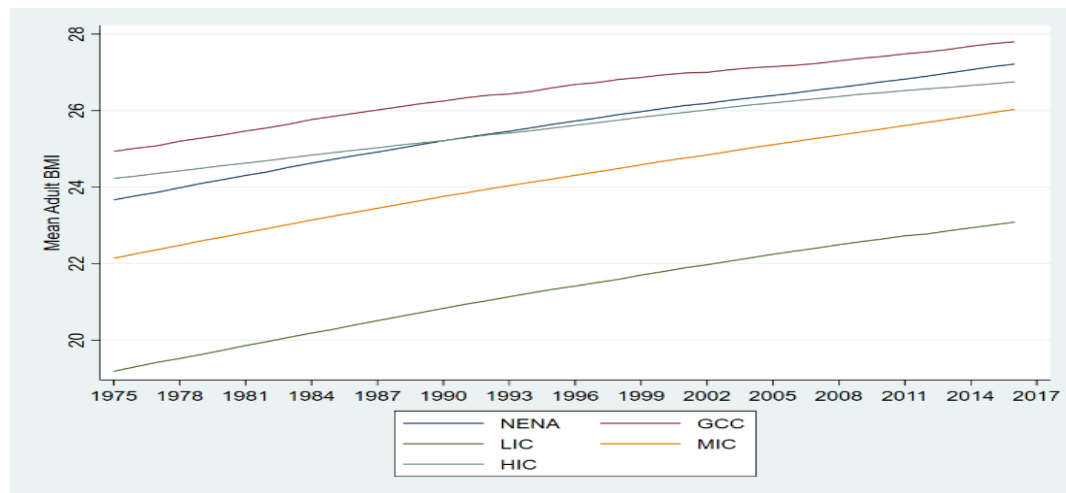
3. Data and Data sources

- The NENA region is one of the regions known for data scarcity.
- Publicly available household- and individual-level data on nutrition, consumption, and related health outcomes remain scarce
- To address this limitation, we combine various macro-and micro-level data sources.
- We employ several sources of macro data, the World Development Indicators (WDI), Global Health Observatory (GHO), and the FAOSTAT.
- We complement these macro-level data using micro-level data from various country-specific sources.
- We mainly employ three major sources of individual data, the DHS HIECS, LSMS data.

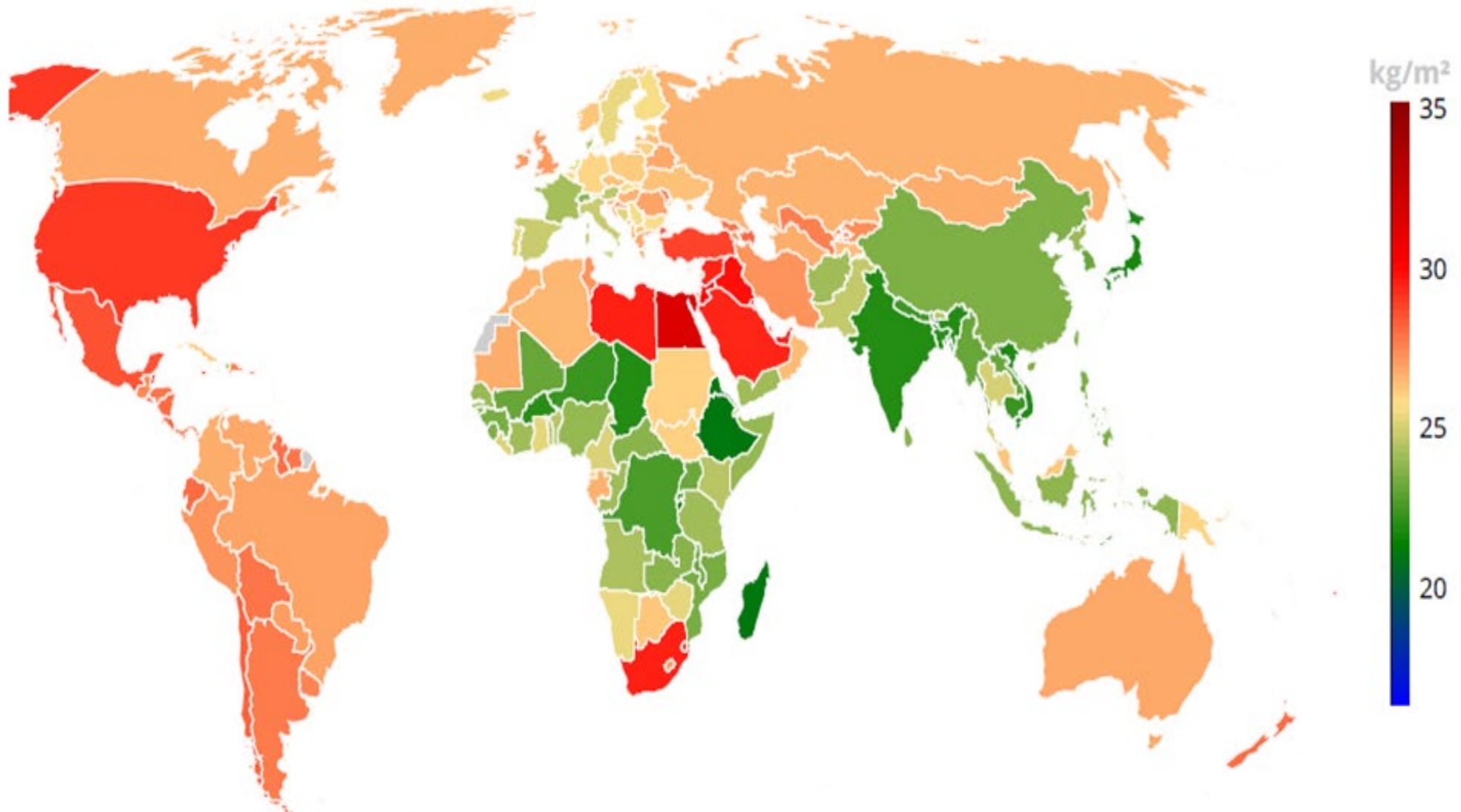
4. Macro-level Analysis and Evidence

4.1 Evolution of Body Weight in the NENA Region

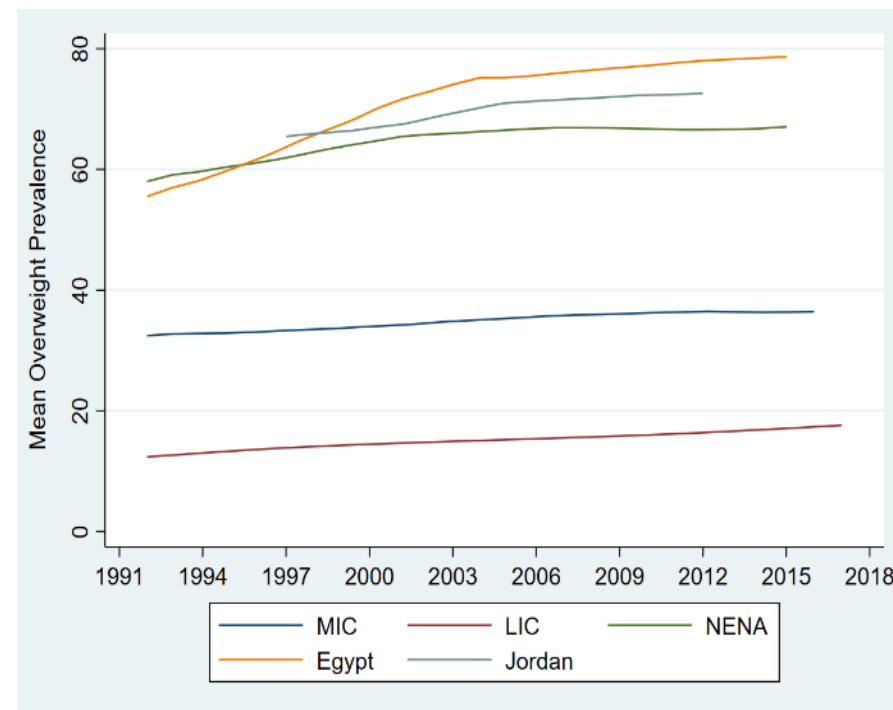
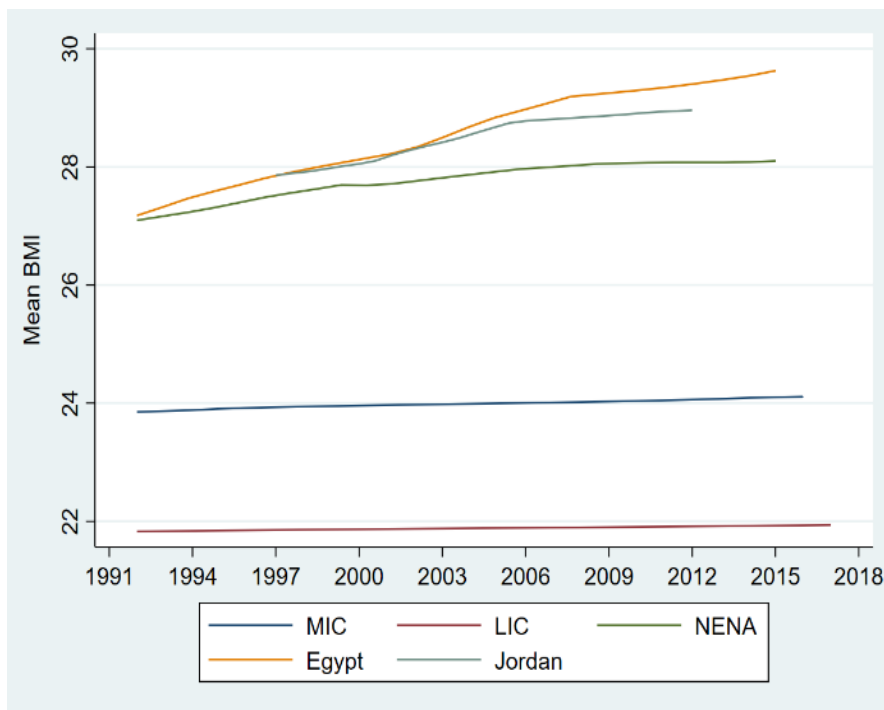
- Overweight/obesity rates almost doubled between the years 1975-2016.



- The NENA region, especially GCC, has among the highest BMI and rate of overweight

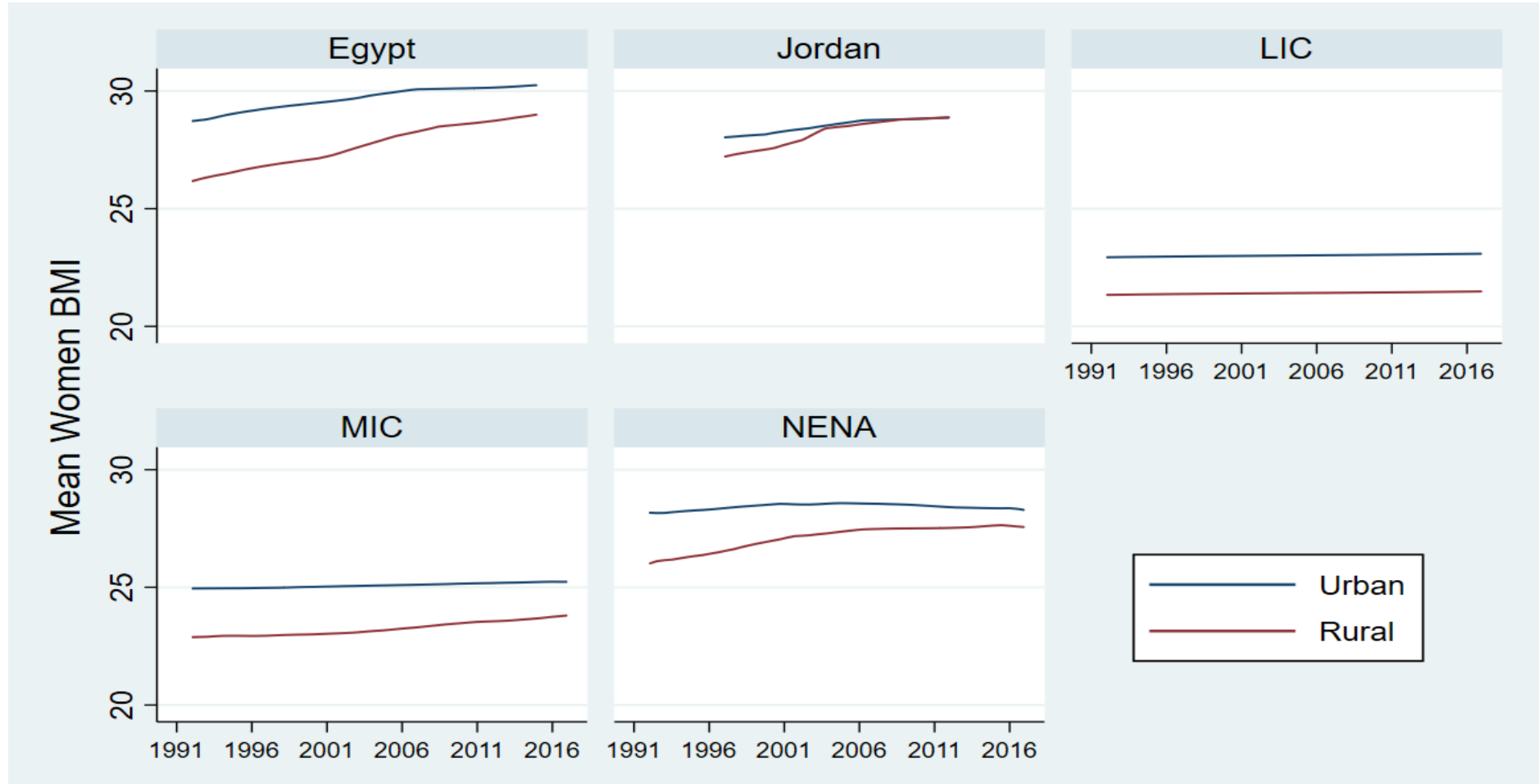


- Similar evidence using DHS data, NENA countries have the highest BMI/rate of overweight.



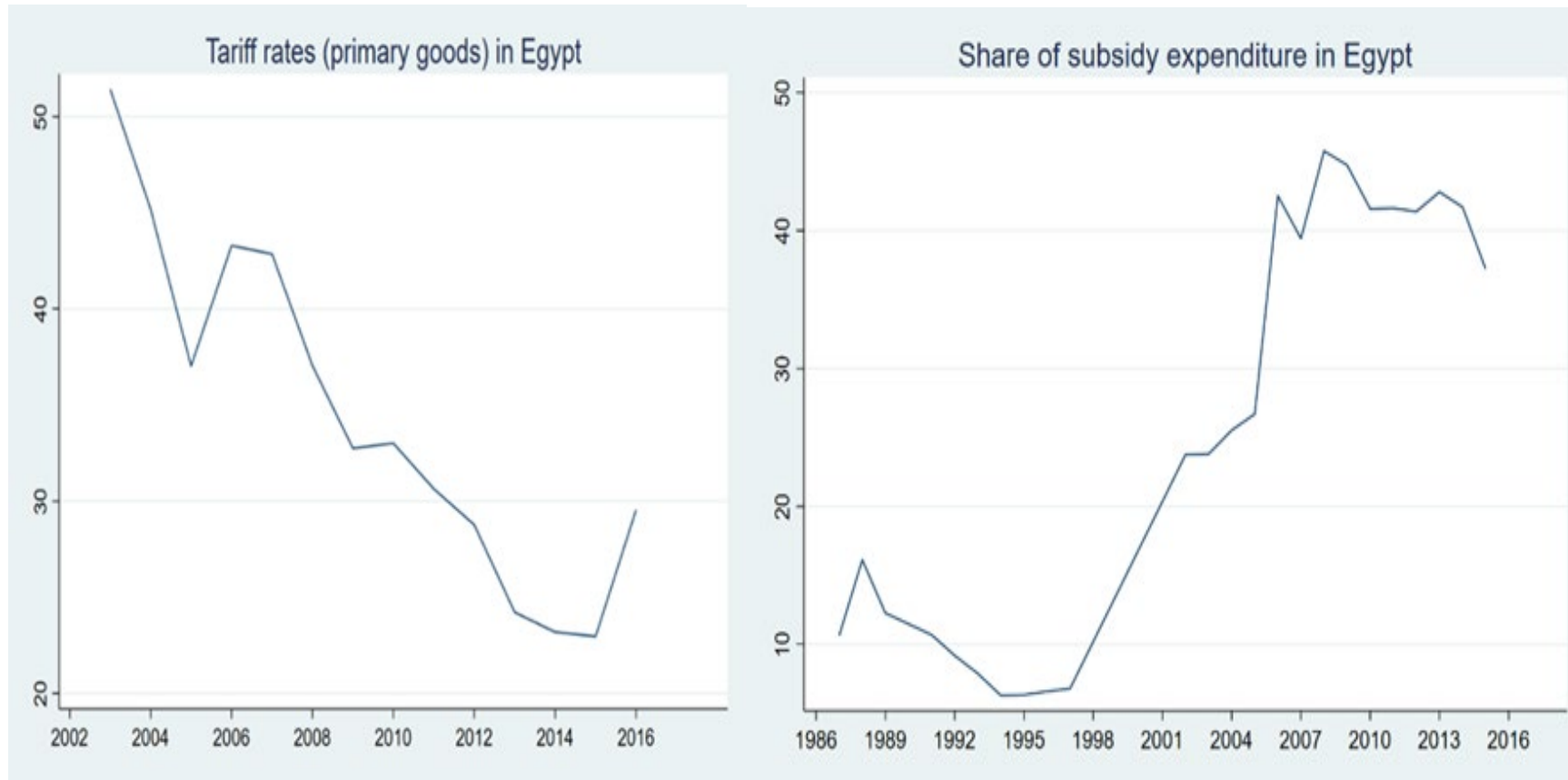
- Source: Authors' illustration based on the DHS (DHS 2018)

■ Rural areas are catching up



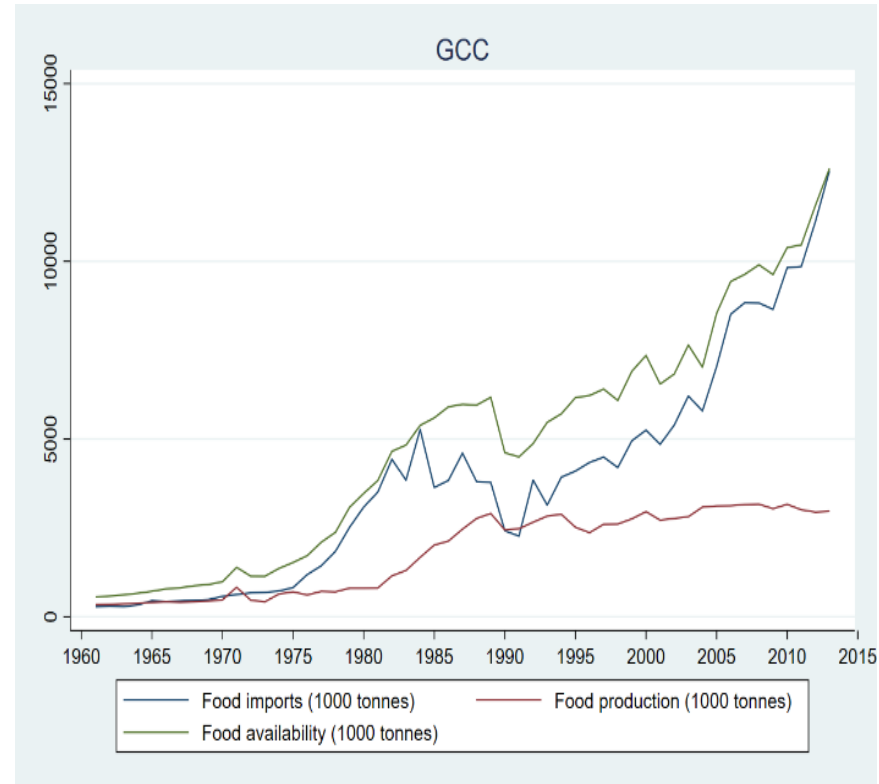
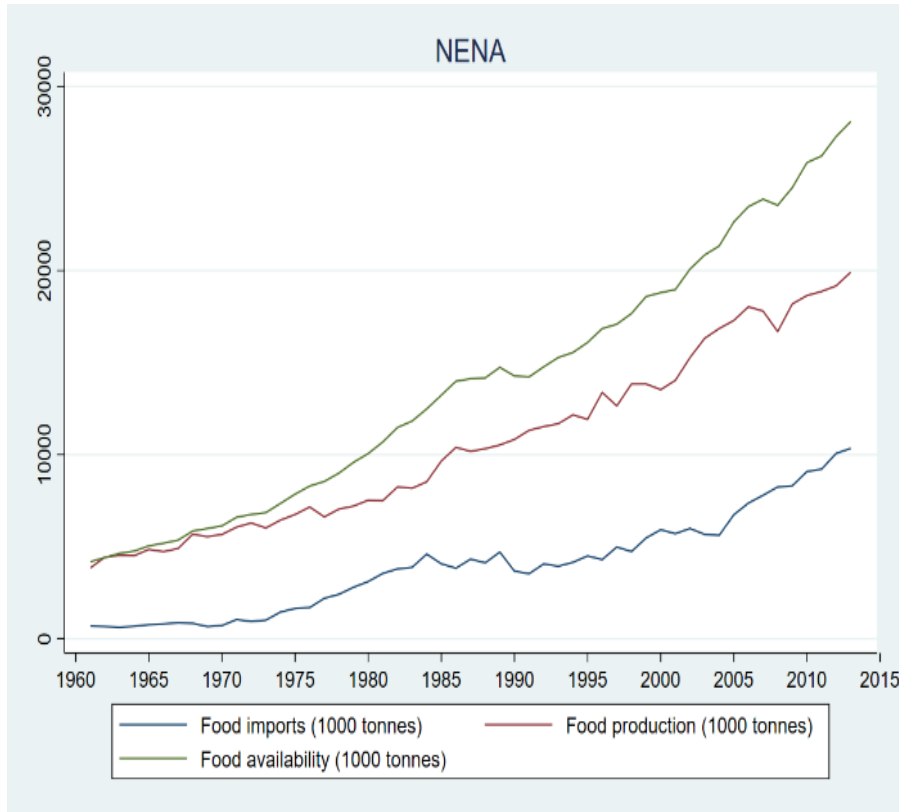
Source: Authors' illustration based on the DHS (DHS 2018)

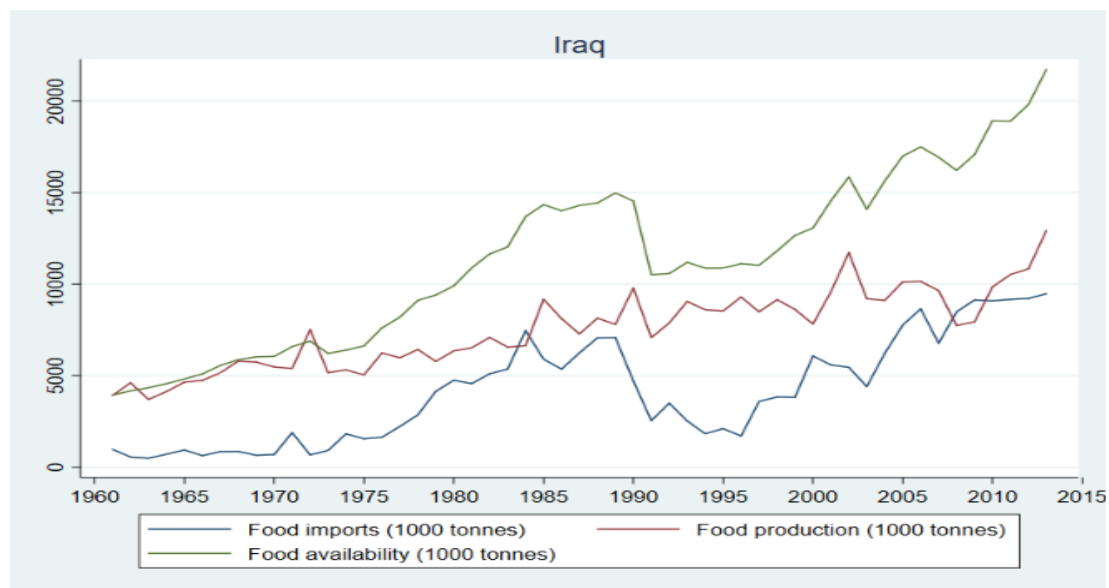
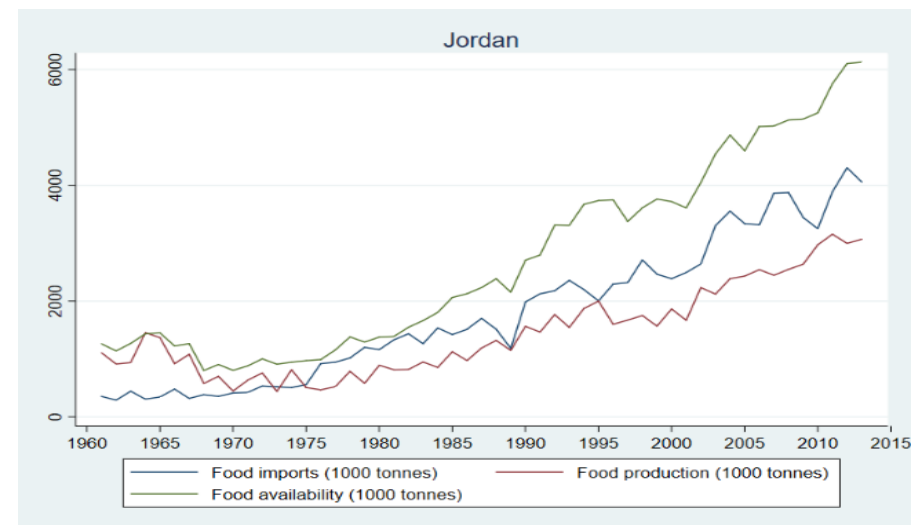
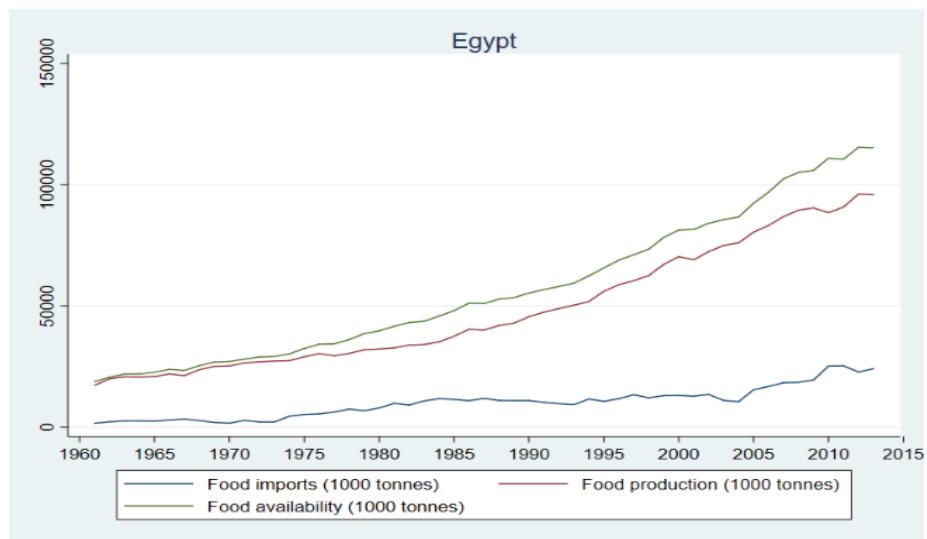
4.2 Evolution of Food (Trade) Policies in Selected NENA countries



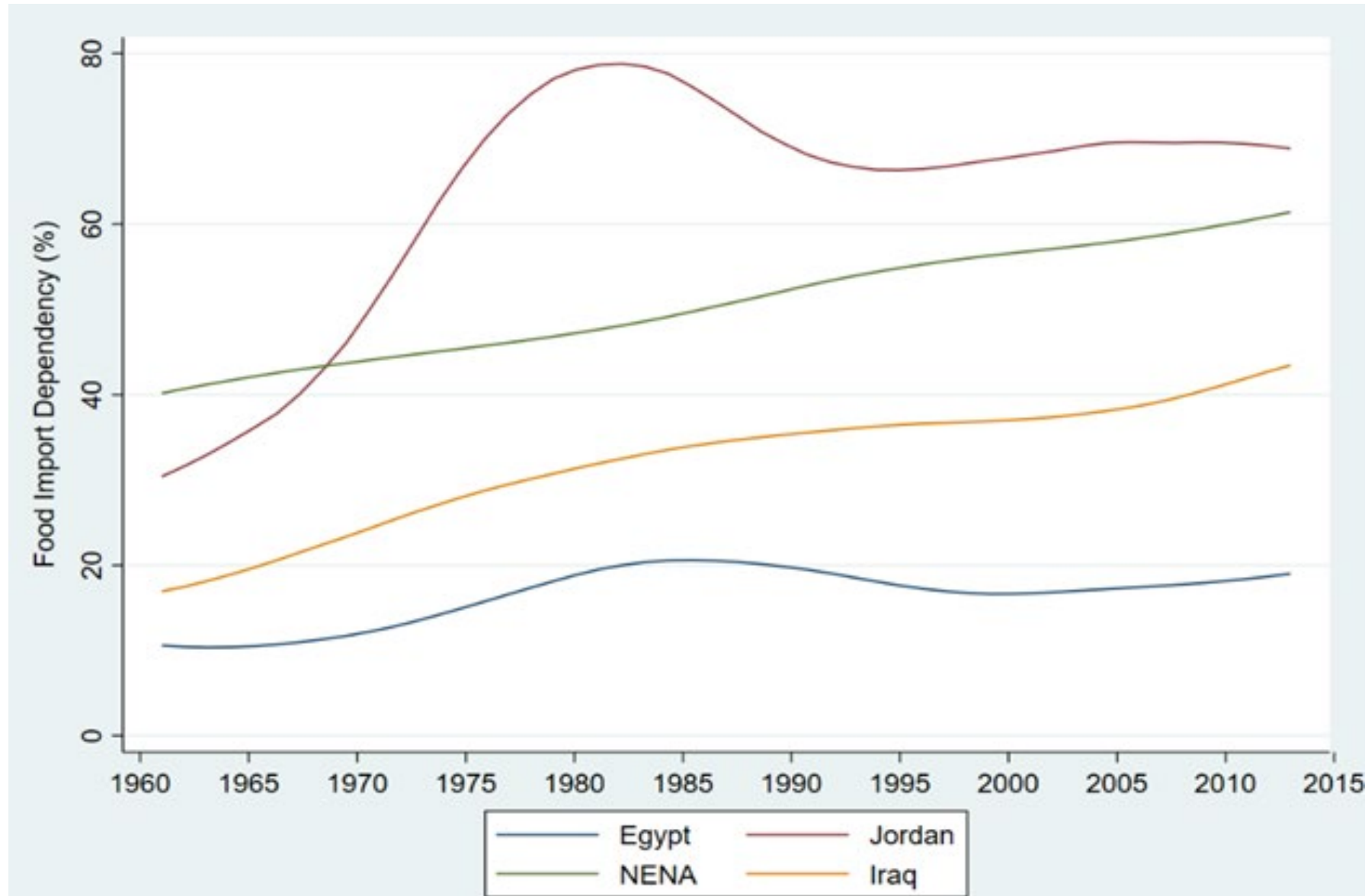
4.3 Evolution of Food Systems in Selected NENA countries

Food availability quadrupled over the period 1960s to 2010s

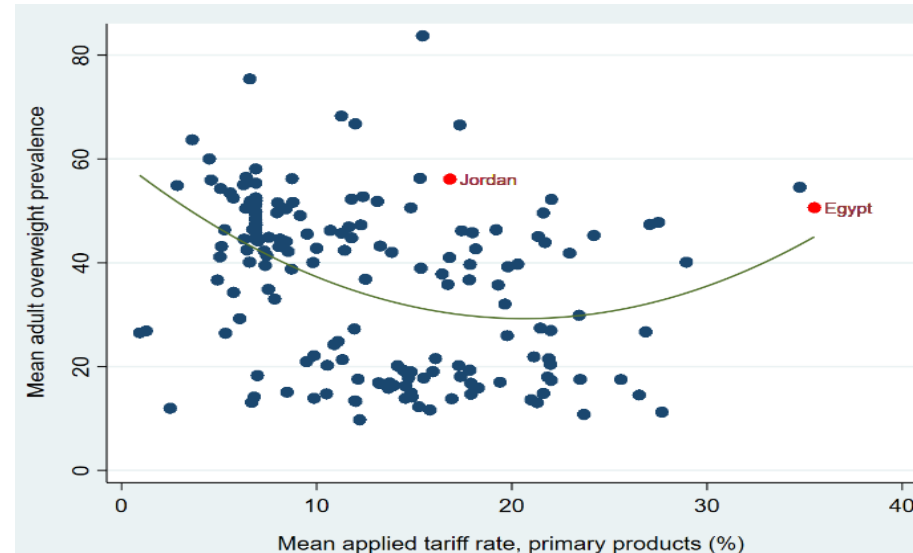
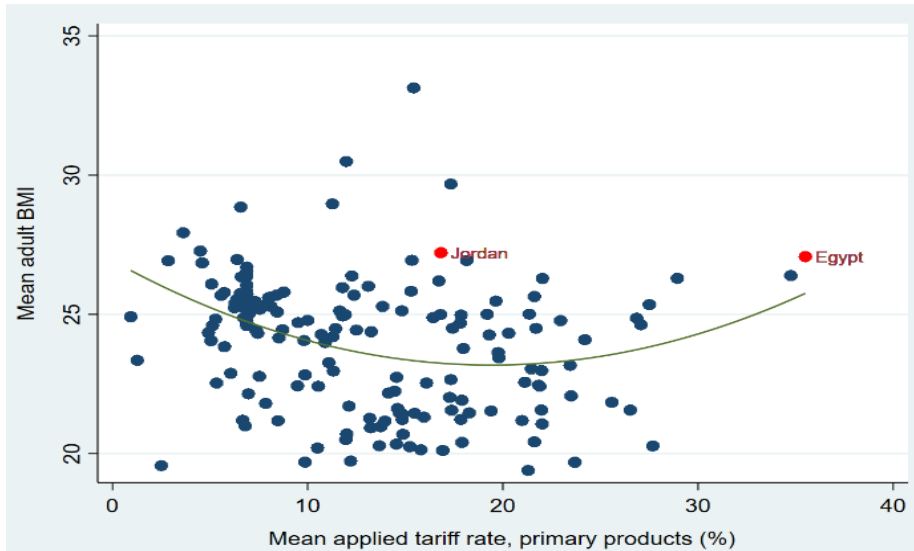
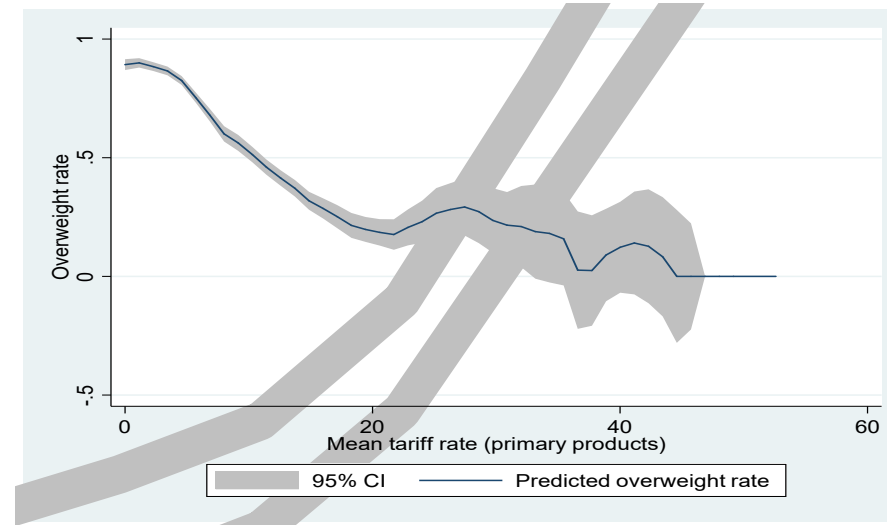
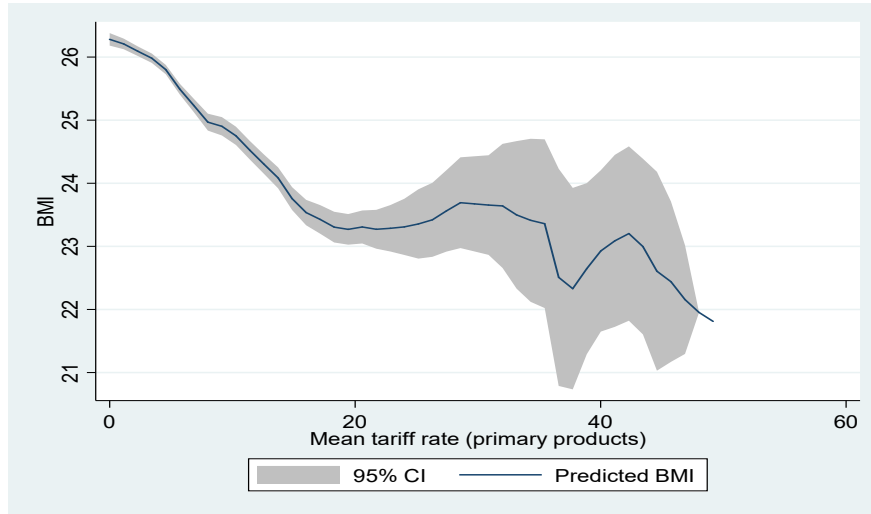


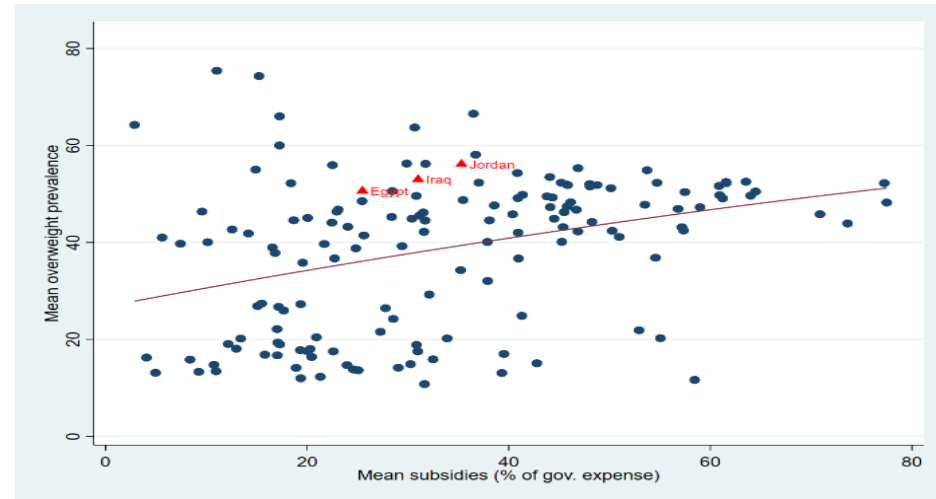
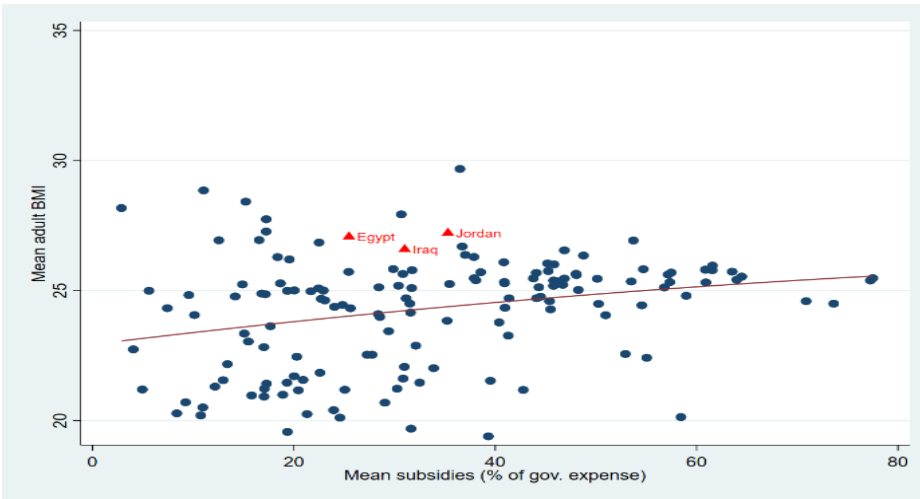
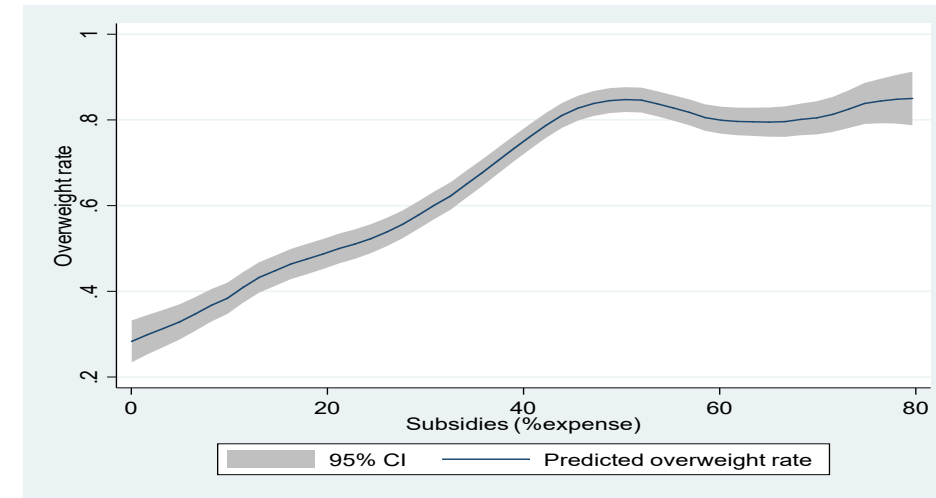
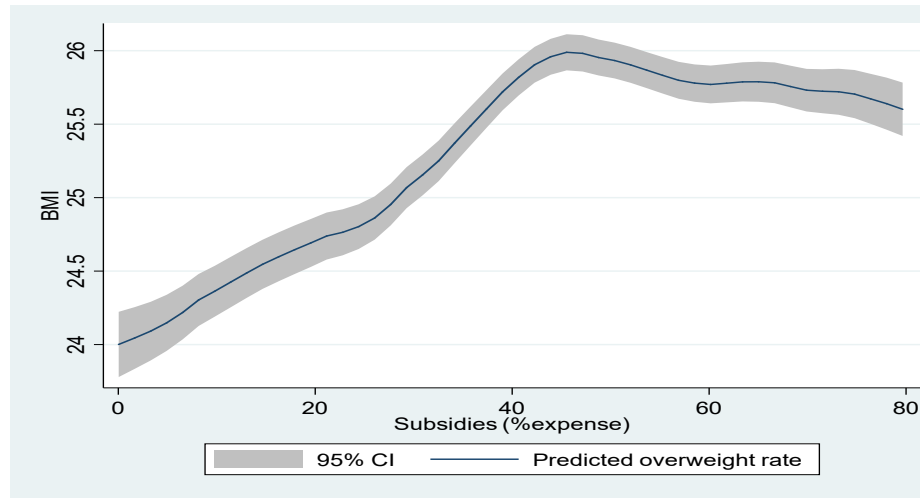


The role of trade (import) has been increasing



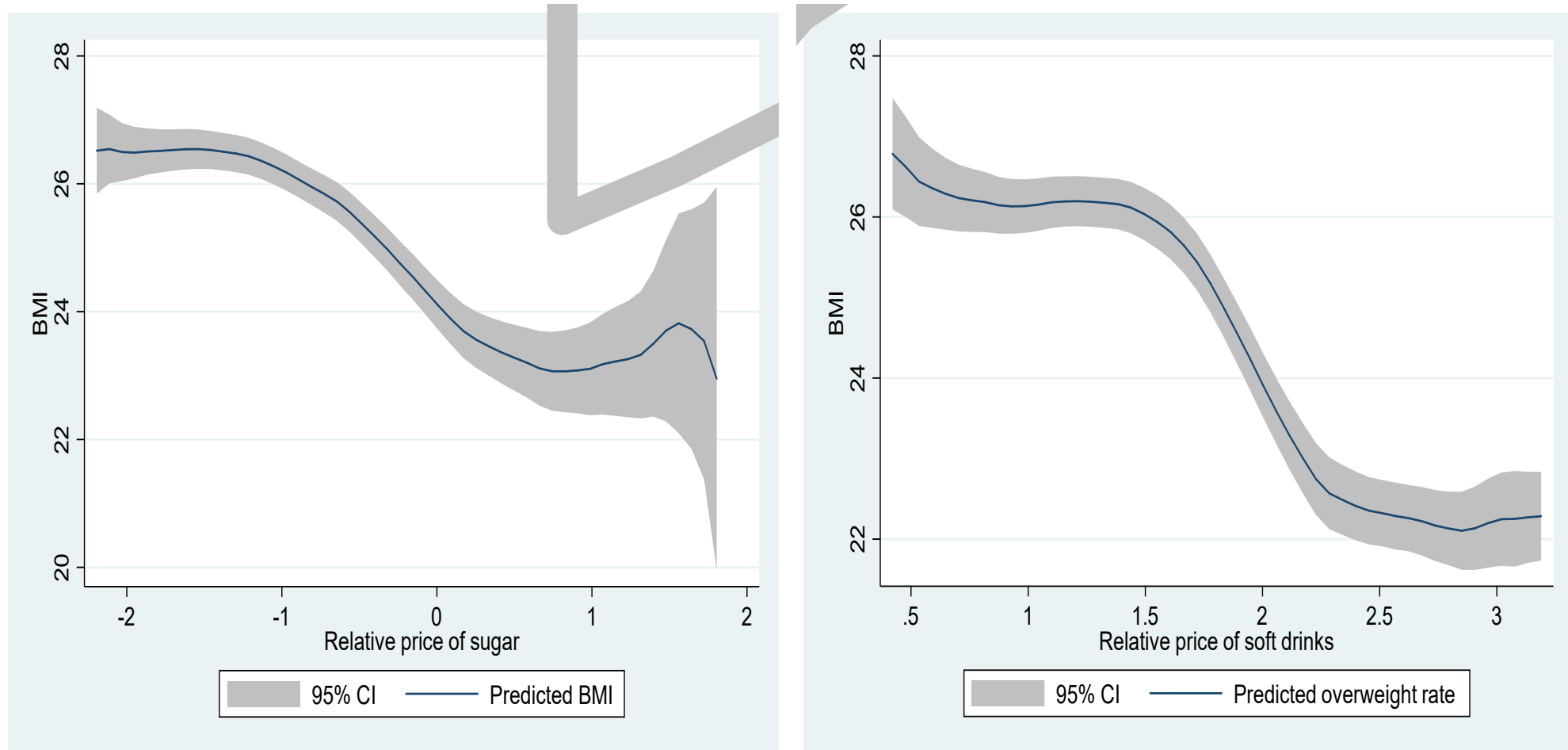
4.4 Relationships between food policies and body weight





Source: Authors' illustration based on the GHO and World Bank WDI (World Bank 2019; WHO 2019)

Price and body weight outcomes

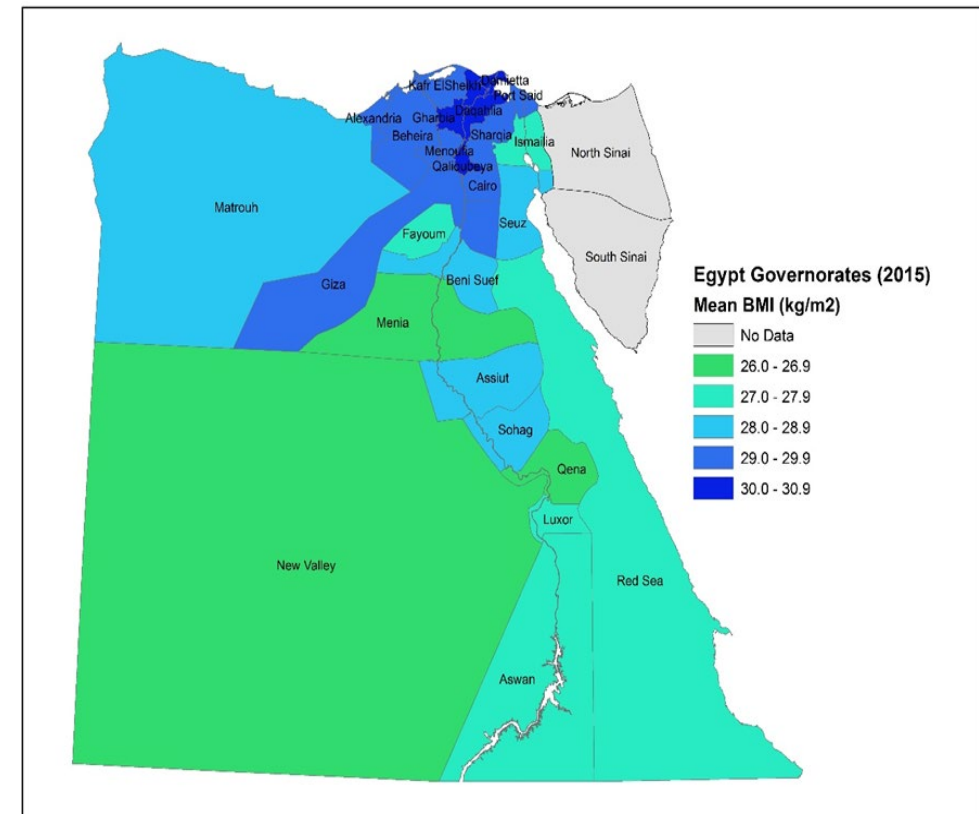


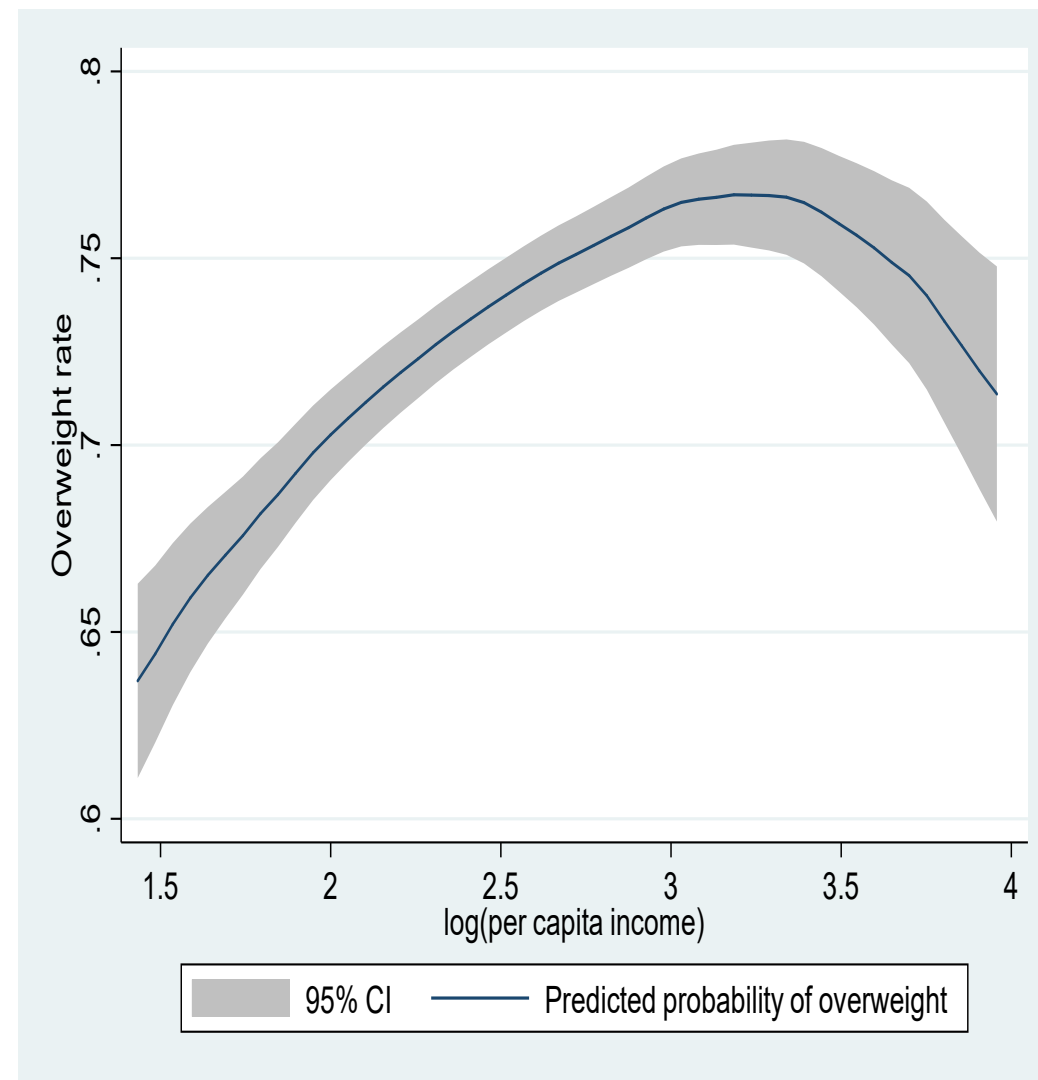
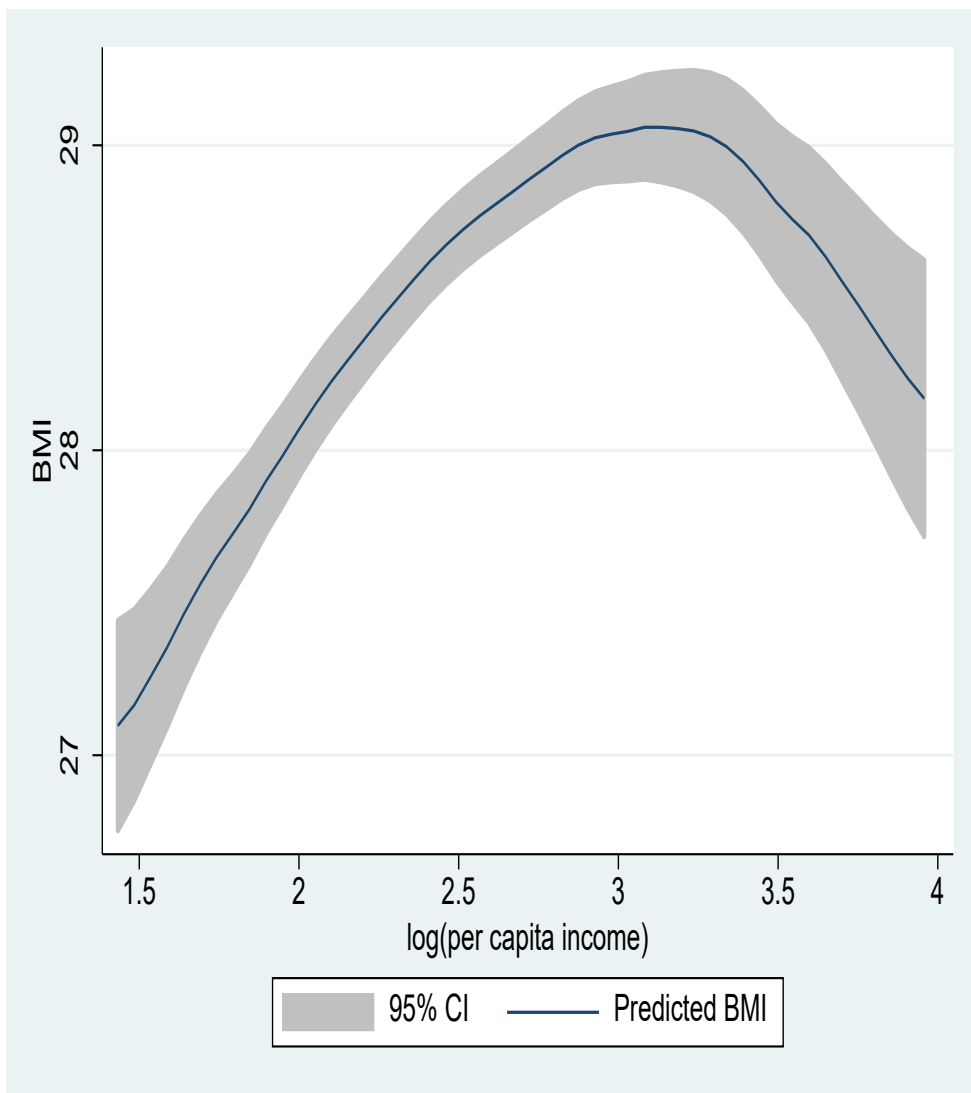
5. Micro-level Analysis and Evidence

5.1 Egypt

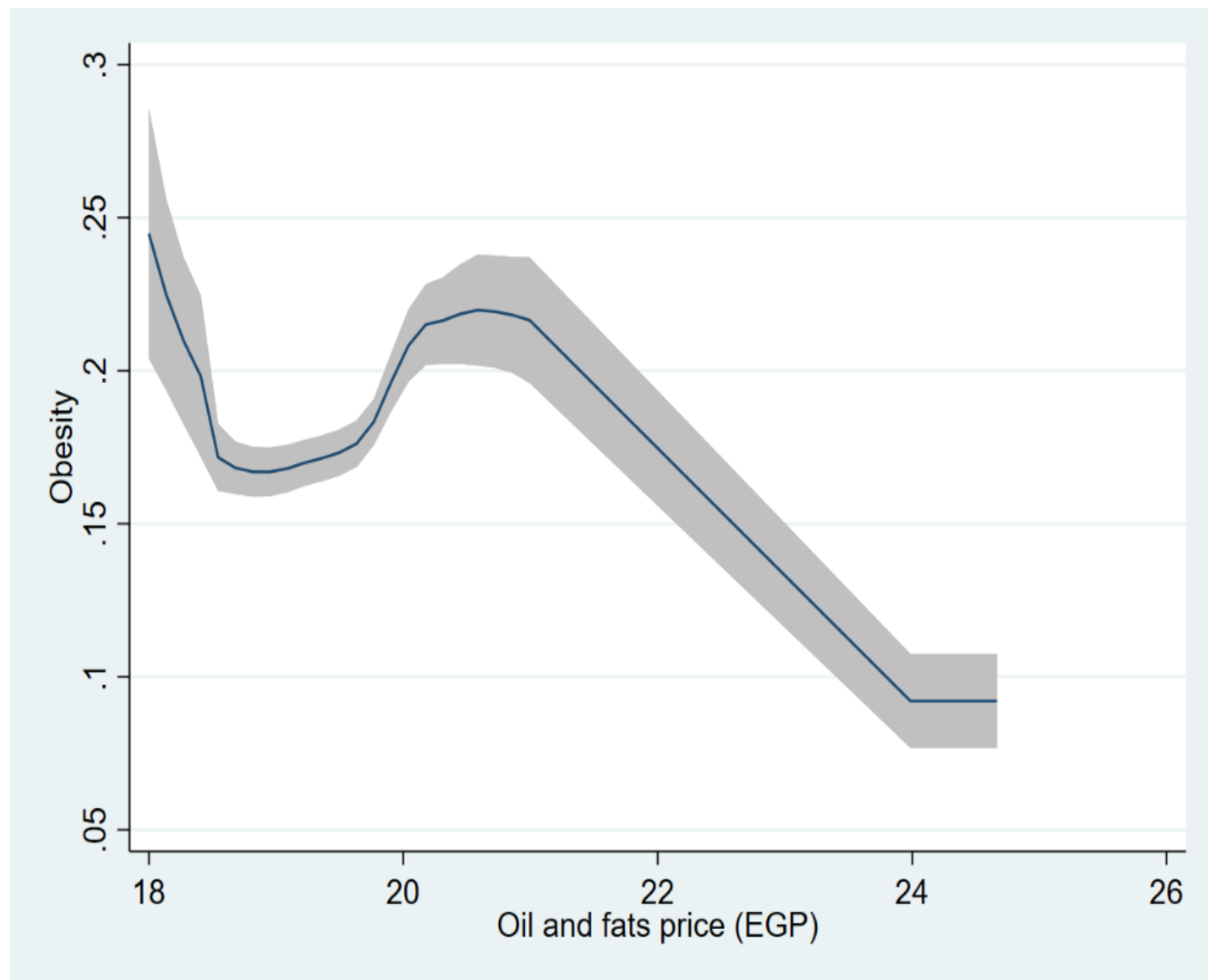
- The overall obesity rate has doubled in 23 years (1992 to 2015).
- The increase in obesity rates appears to be higher for rural areas (NCD-RisC, 2019)

	1992	2015	% Change
Full sample			
Mean BMI	26.8	30.3	12.9
Mean overweight (%)	56.8	75.2	32.4
Mean obesity (%)	23.8	47.5	99.5
Rural			
Mean BMI	25.6	29.8	16.4
Mean overweight (%)	45.8	73.1	59.4
Mean obesity (%)	14.9	44.1	196.3
Urban			
Mean BMI	28.6	30.9	8
Mean overweight (%)	71.8	77.6	8.1
Mean obesity (%)	35.9	51.2	42.5



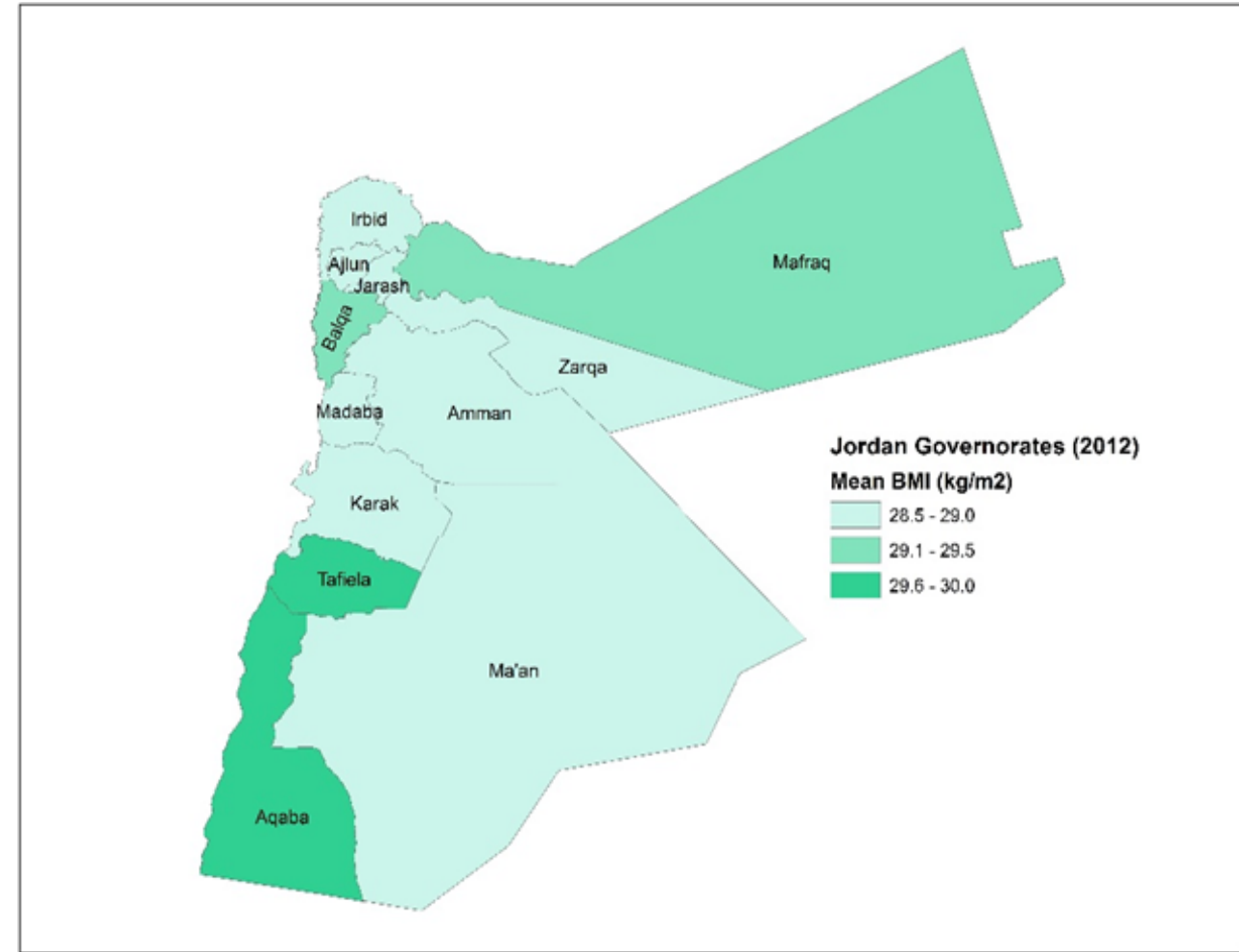


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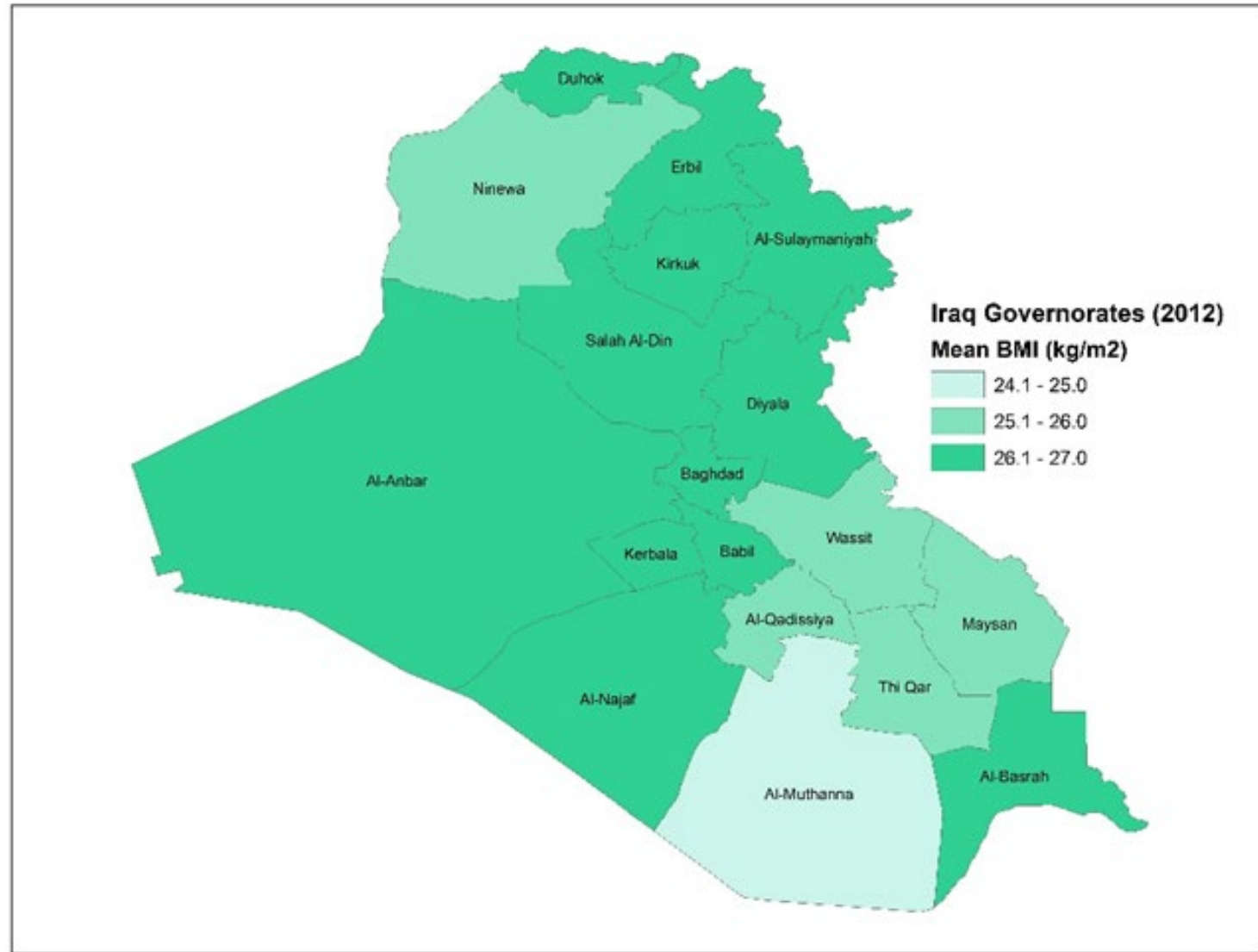
5.2 Jordan

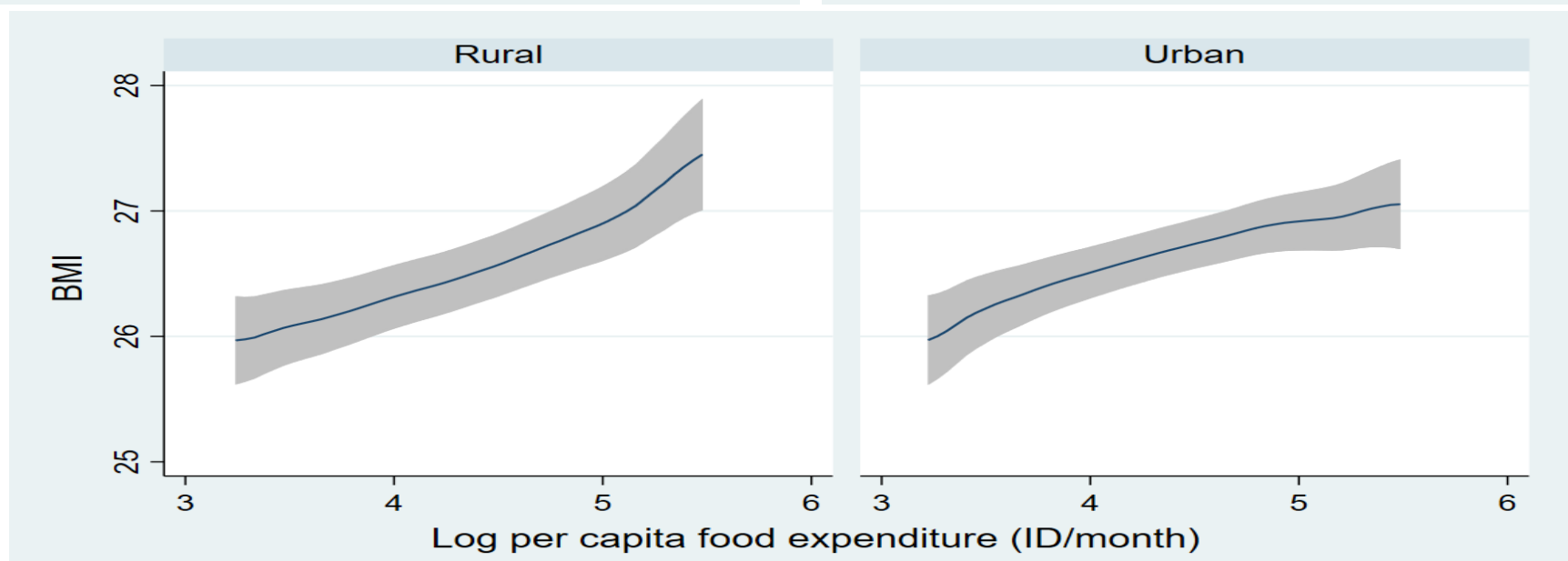
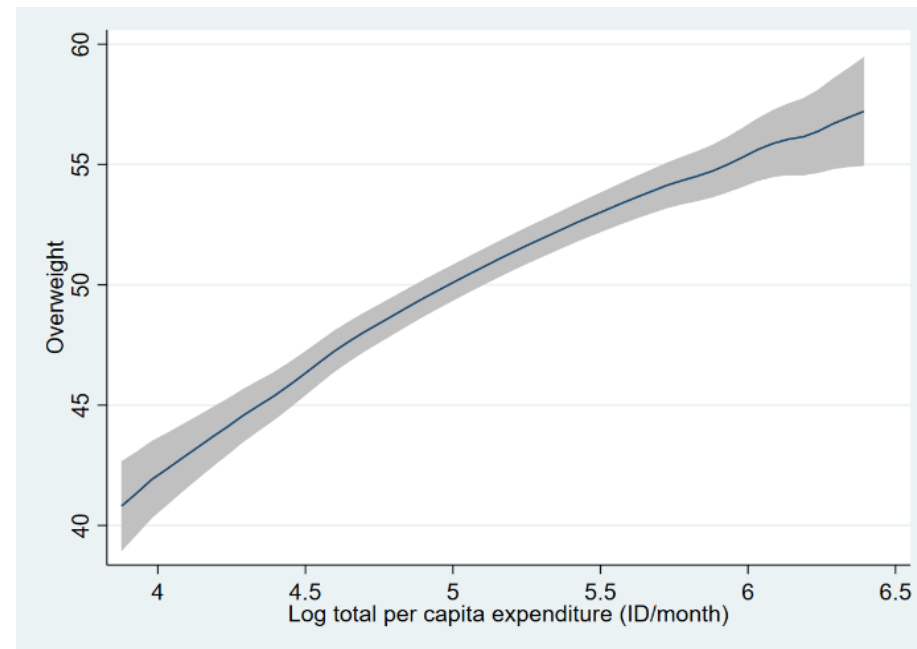
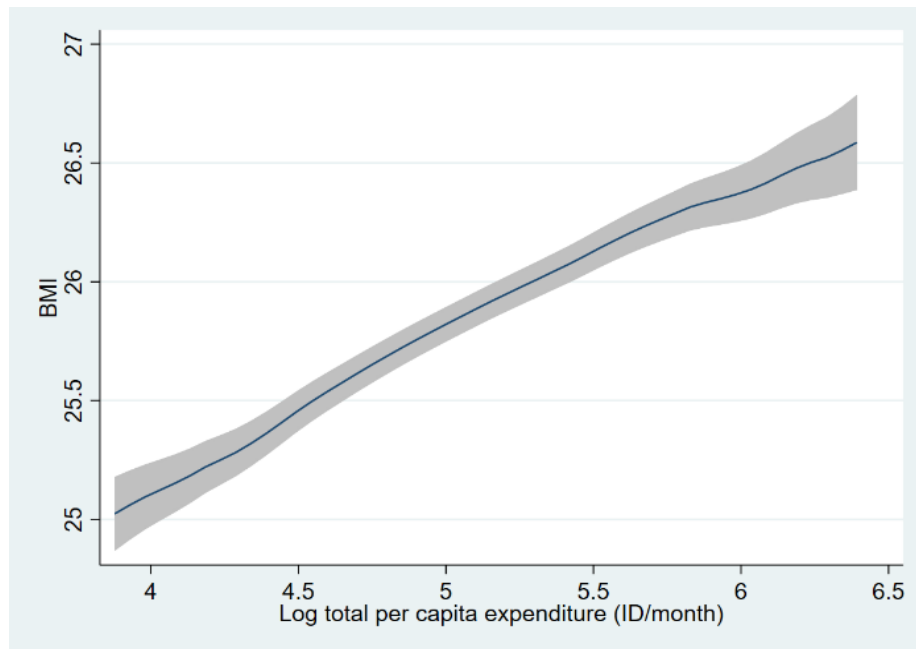
	1997	2012	% Change
	Full sample		
Mean BMI	27.4	29.0	6.0
Mean overweight (%)	61.5	73.2	19.1
Mean obesity (%)	28.2	40.2	42.6
	Rural		
Mean BMI	26.7	28.9	8.0
Mean overweight (%)	56.8	73.5	29.5
Mean obesity (%)	27.3	40.4	47.9
	Urban		
Mean BMI	27.5	29.0	5.3
Mean overweight (%)	62.8	73.1	16.5
Mean obesity (%)	28.4	40.2	41.4



5.3 Iraq

	Males	Females	Total
Rural			
Mean BMI (kg/m ²)	25.9	27.1	26.5
Mean overweight (%)	52.7	59.7	56.5
Mean obesity (%)	16.4	26.1	21.7
Urban			
Mean BMI (kg/m ²)	25.5	27.5	26.7
Mean overweight (%)	48.5	63.4	57.1
Mean obesity (%)	13.9	29.4	22.8
Total			
Mean BMI (kg/m ²)	25.7	27.4	26.6
Mean overweight (%)	50.1	62.1	56.9
Mean obesity (%)	14.8	28.2	22.4





Policy Options and Experiences

- The ever-increasing trend in obesity rates, including in rural areas, calls for integrated interventions that can address diet-related weight gains
- As the region's population increases and arable land/water resources continue to shrink, food (trade) policies remain critical instruments
- Integrating nutritional targets and designing nutrition-sensitive food policies
- Recently, economists and policymakers are considering the idea of integrating health costs into cost-benefit analysis of trade agreements.
- But trade agreements have multidimensional objectives and are complex

Policy Options and Experiences

- Domestic and complementary policies to address unintended (adverse) dietary and public health impacts of trade policies
- For instance, many governments have enacted alternative forms of taxes on energy-dense foods
 - The Mexican sugar-sweetened beverage tax
- Regulating food marketing and nutrition labeling practices can help reduce the consumption of “unhealthy diets”
- Tailoring agricultural production to produce healthy and nutritious food products
- Government food subsidies will have to be more nutrition-sensitive.
- Given that that food policies have other major objectives, including poverty reduction and food security targets.
- This justify the need for economy-wide cost-benefit analysis food policies

THANK YOU

Comments and questions are welcome