Food system transformation and the smallholder farmer in Africa: Challenges and opportunities

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INNOVATION LAB FOR FOOD SECURITY POLICY

Based on joint work with Thomas Reardon, Steven Haggblade, Saweda Liverpool Tasie, Titus Awokuse, Bart Minten, Michael Dolislager, Christine Sauer, Jason Snyder, Laura Medwid, Sarah Chase-Walsh

Outline

Diet transformation is driving transformation throughout AFS

- Globalization means its all happening at much lower incomes than in the past

Very problematical implications for nutrition … rapidly changing food environment … nutrition transition … obesity and NCDs …

But also huge agribusiness opportunities

What has been the response?

And what does it all imply for smallholder farmers?

#1: The Diet Transformation

#1a. Diets are transforming in three ways

Food is becoming more <u>purchased</u>

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<u>perishable</u>

- Non-cereals/pulses are 50% to 70% of diets in value terms

#1a. Diets are transforming in three ways

processed and prepared

- Processed: 50% to 65% of all food; 70% to 80% of purchased food
- Food away from home: exceeds 15% in some countries of ESA
  - growing everywhere more rapidly than any other category

All three changes mean that the post-farm segment of the agrifood system is becoming ever more important

Roughly 60% now in ESA

#1b: The transformation is not just an urban middle class story

The transformation is <u>broad</u>

- In rural and urban areas
  - Processed food is penetrating into rural areas
  - "… early stages of the nutrition transition in <u>rural</u> Tanzania" (John Msuya and colleagues, 2011)
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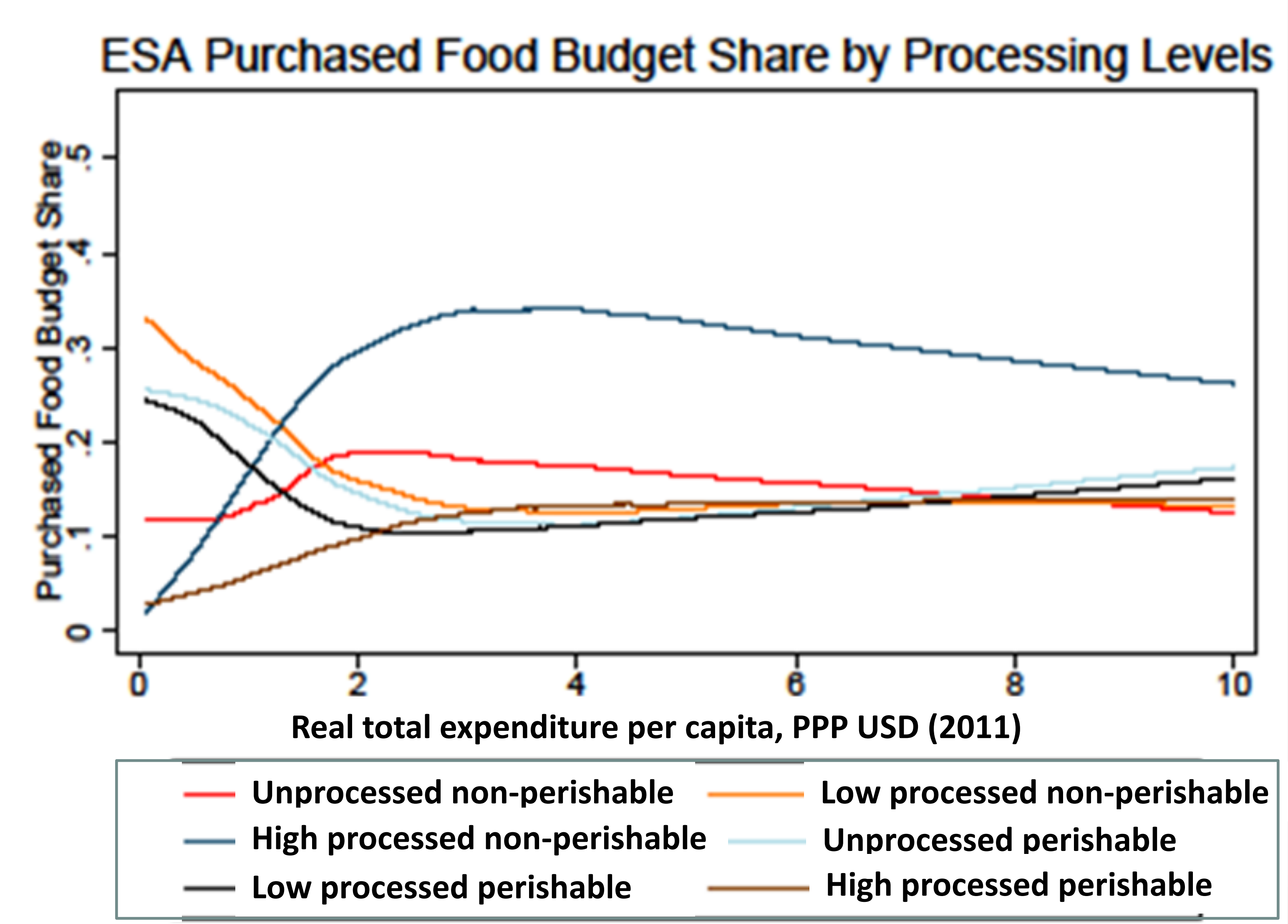
- In rural and urban areas
  - Processed food is penetrating into rural areas
  - "… early stages of the nutrition transition in rural Tanzania" (John Msuya and colleagues, 2011)
- Across the income distribution (not just the middle- and upper classes)

Kernel regression results on purchased food budget shares, additionally weighted by population across 5 countries of ESA



Source: Author calculations from LSMS data sets

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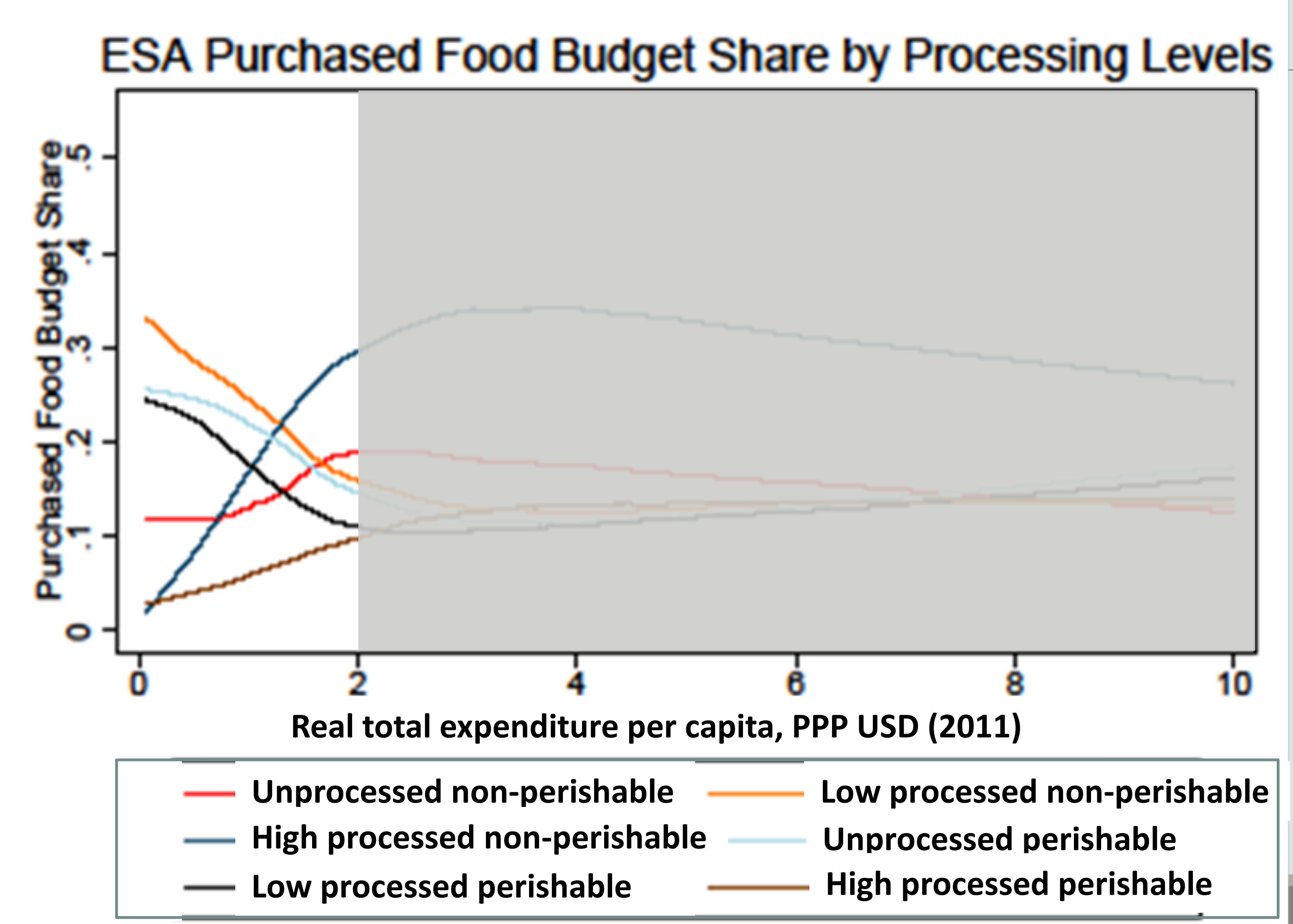

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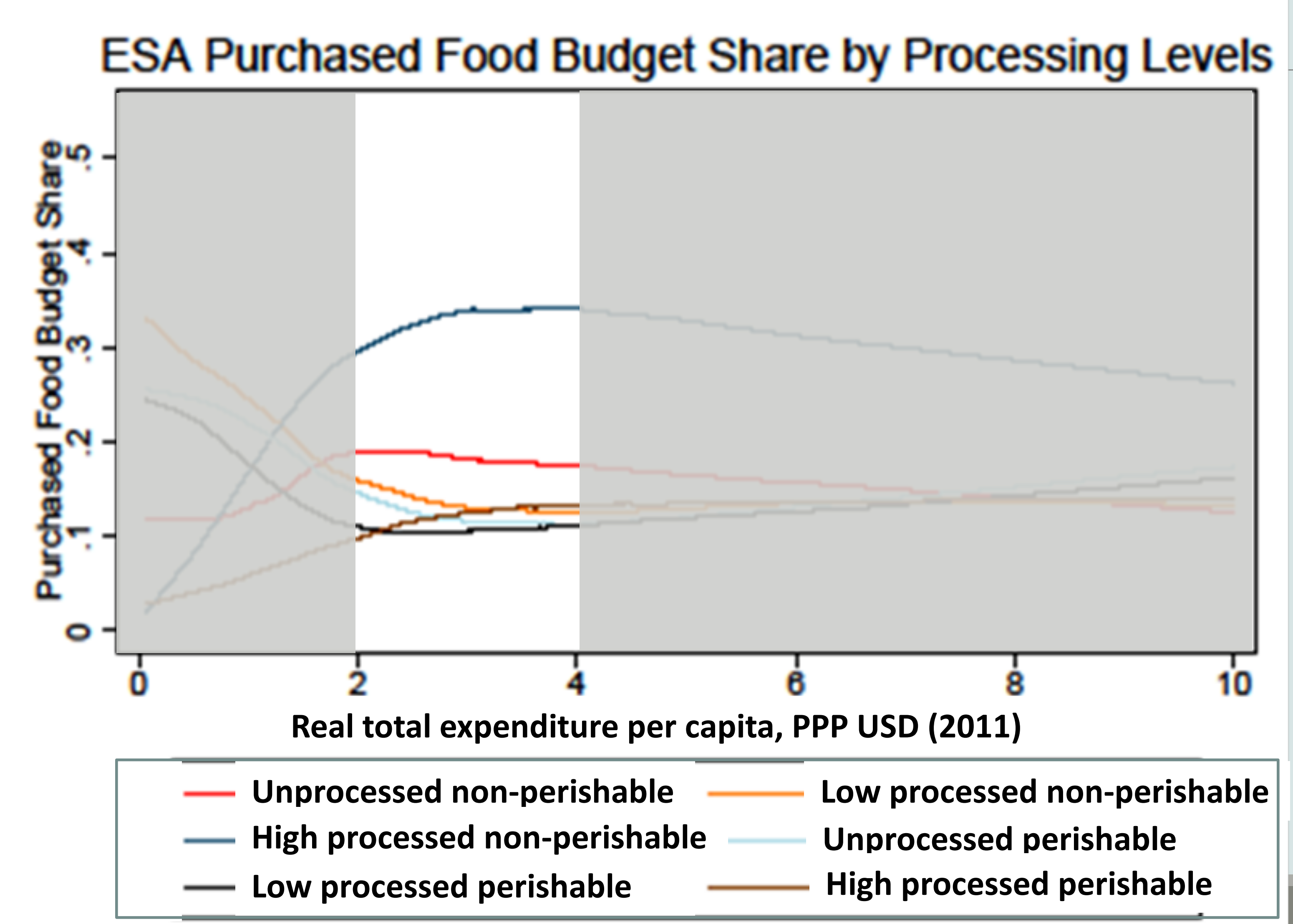

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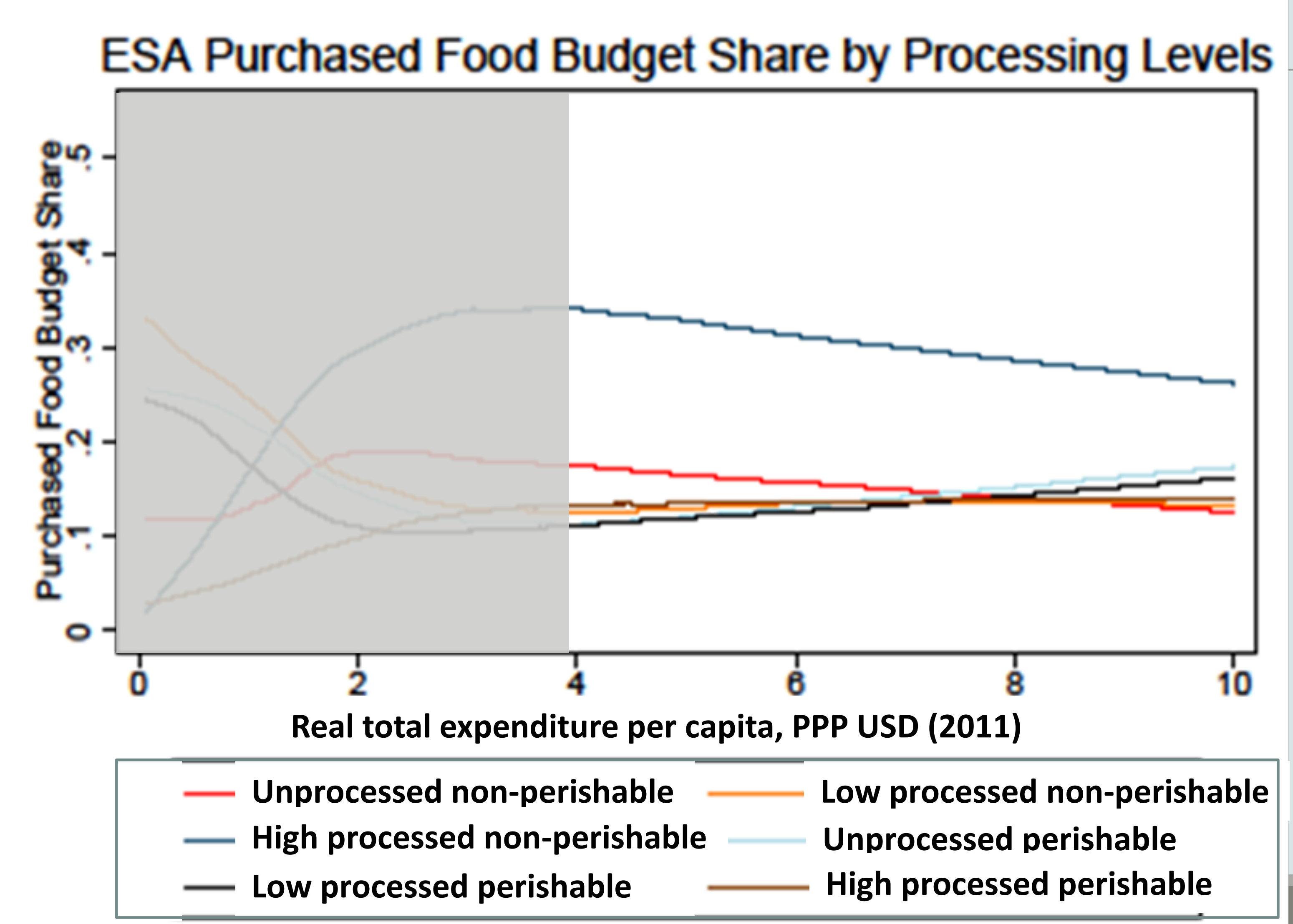

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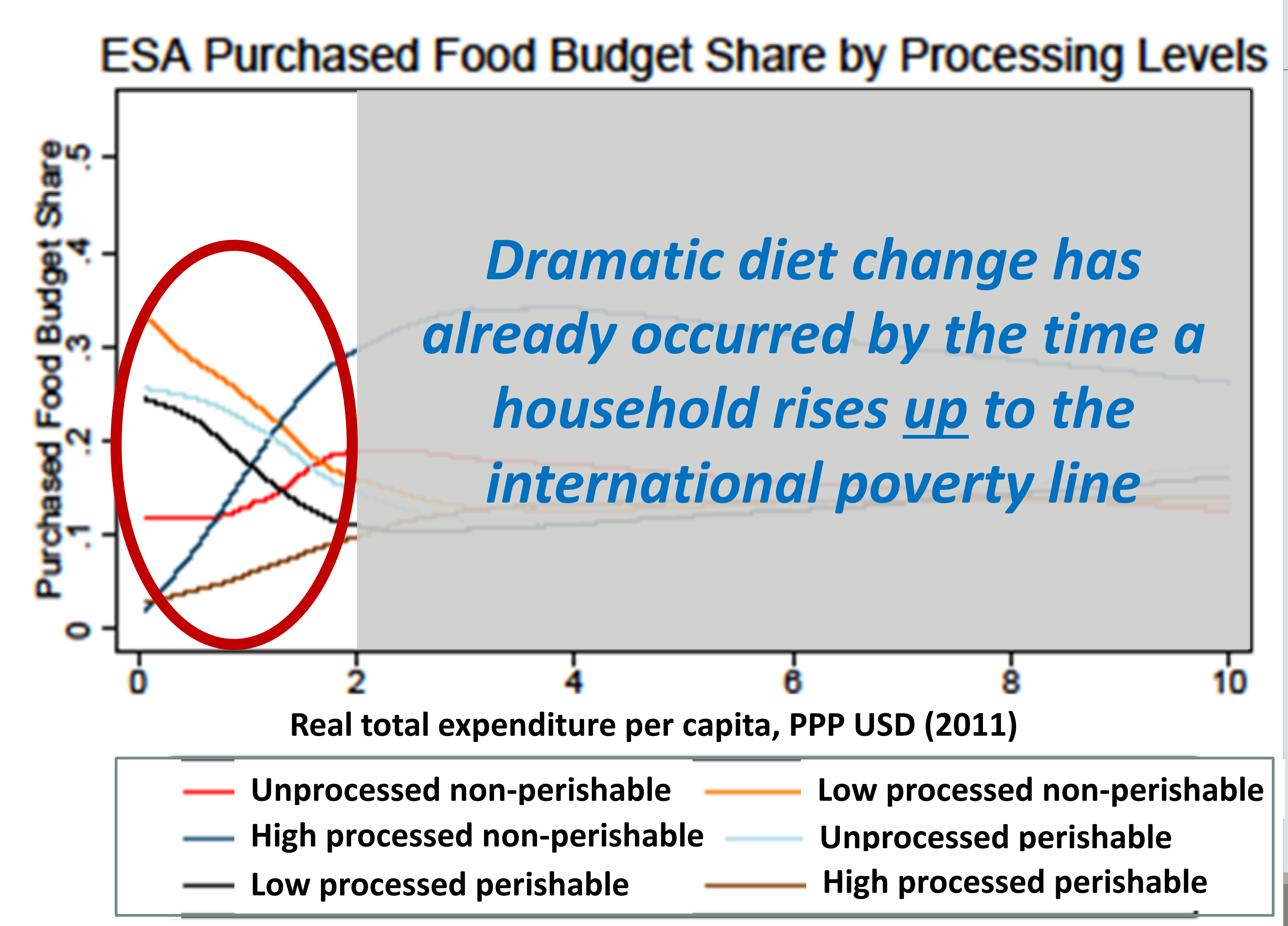

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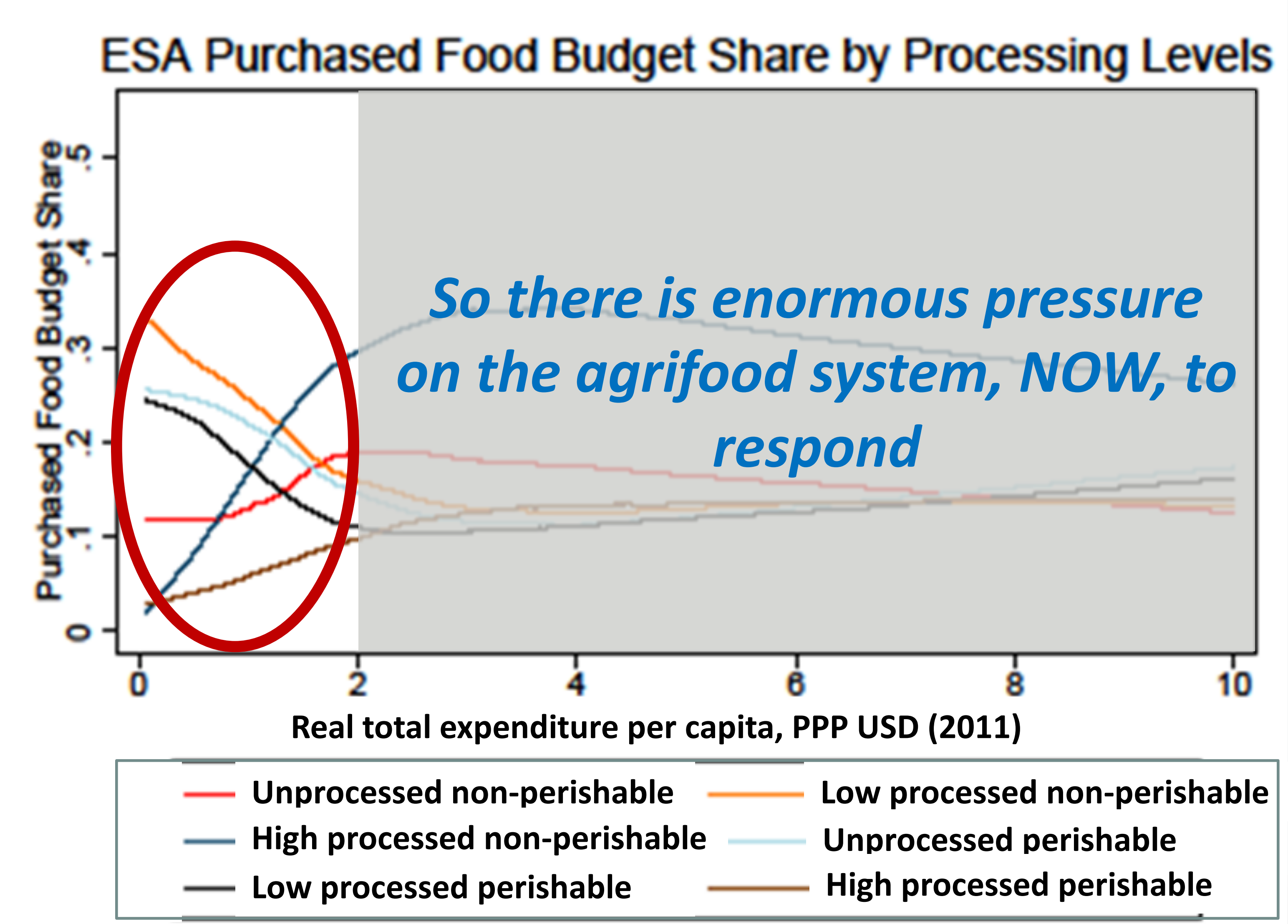

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#1c: This is creating huge agribusiness opportunities

- Demand growth through markets 5% to 8% per year
- Real growth of 3-5 times over 20 years
- Higher – 6x to 8x - for more processed and perishable products
- Highest of all for <u>food away from home</u>

#2: Very problematical implications for nutrition

Opposing trends on nutrition

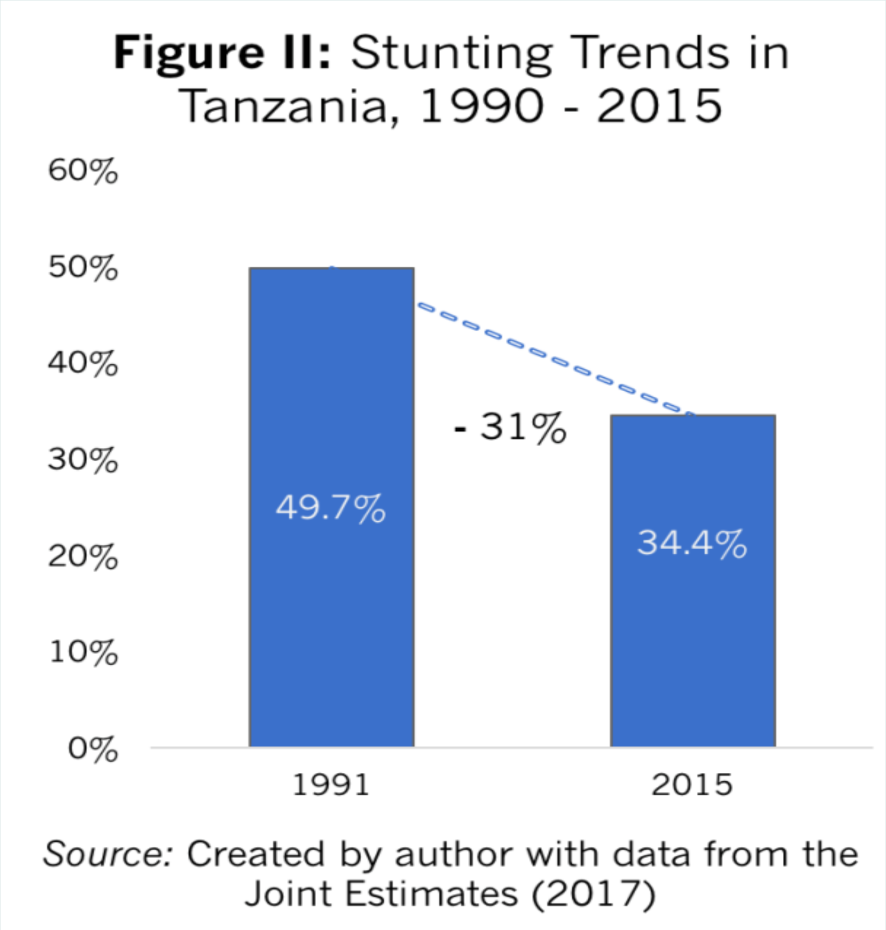
The triple burden …

High but falling undernutrition

Lower but RAPIDLY rising over-consumption

Tanzania example (Fanzo)

Falling stunting and wasting …



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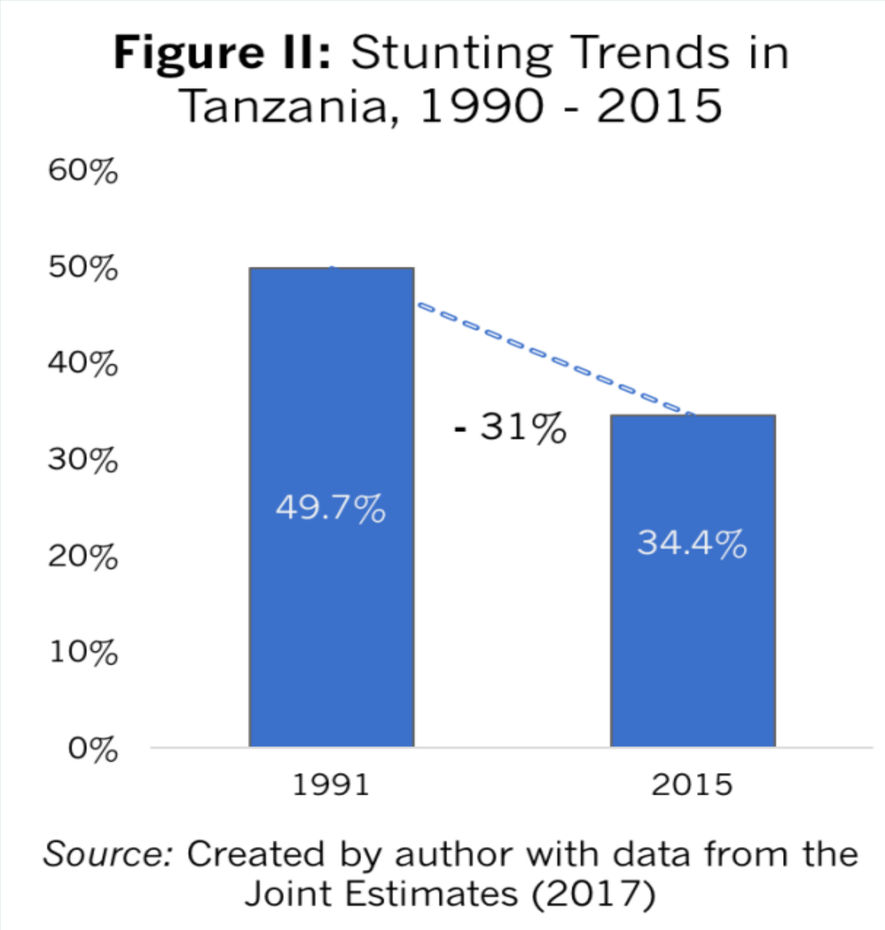
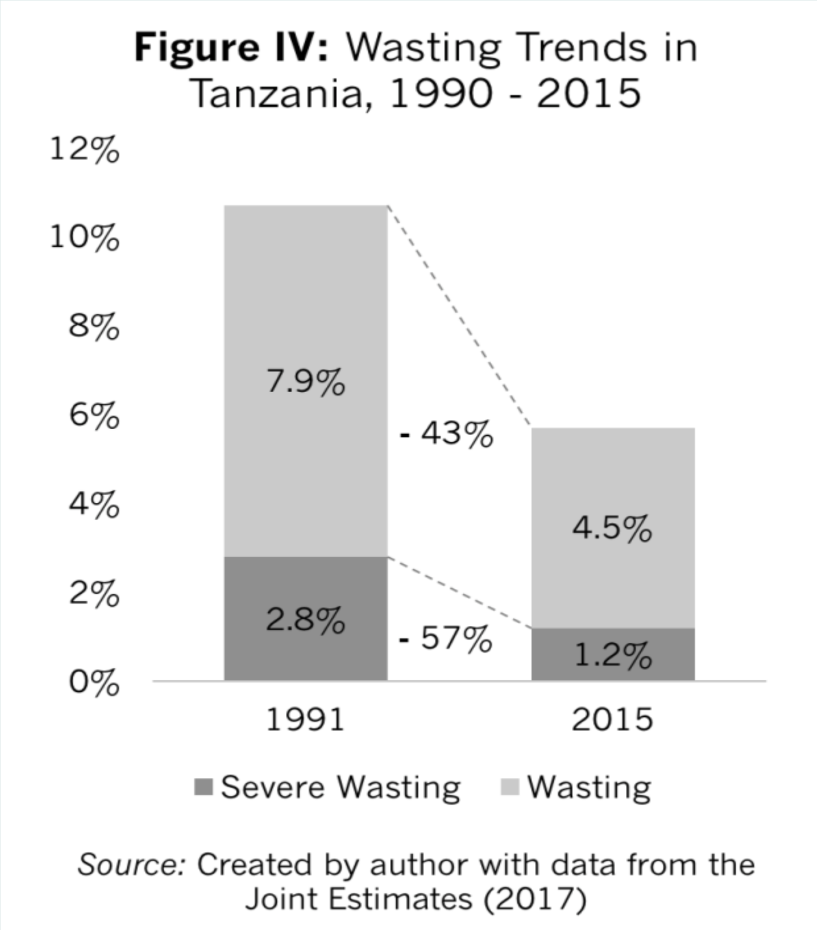
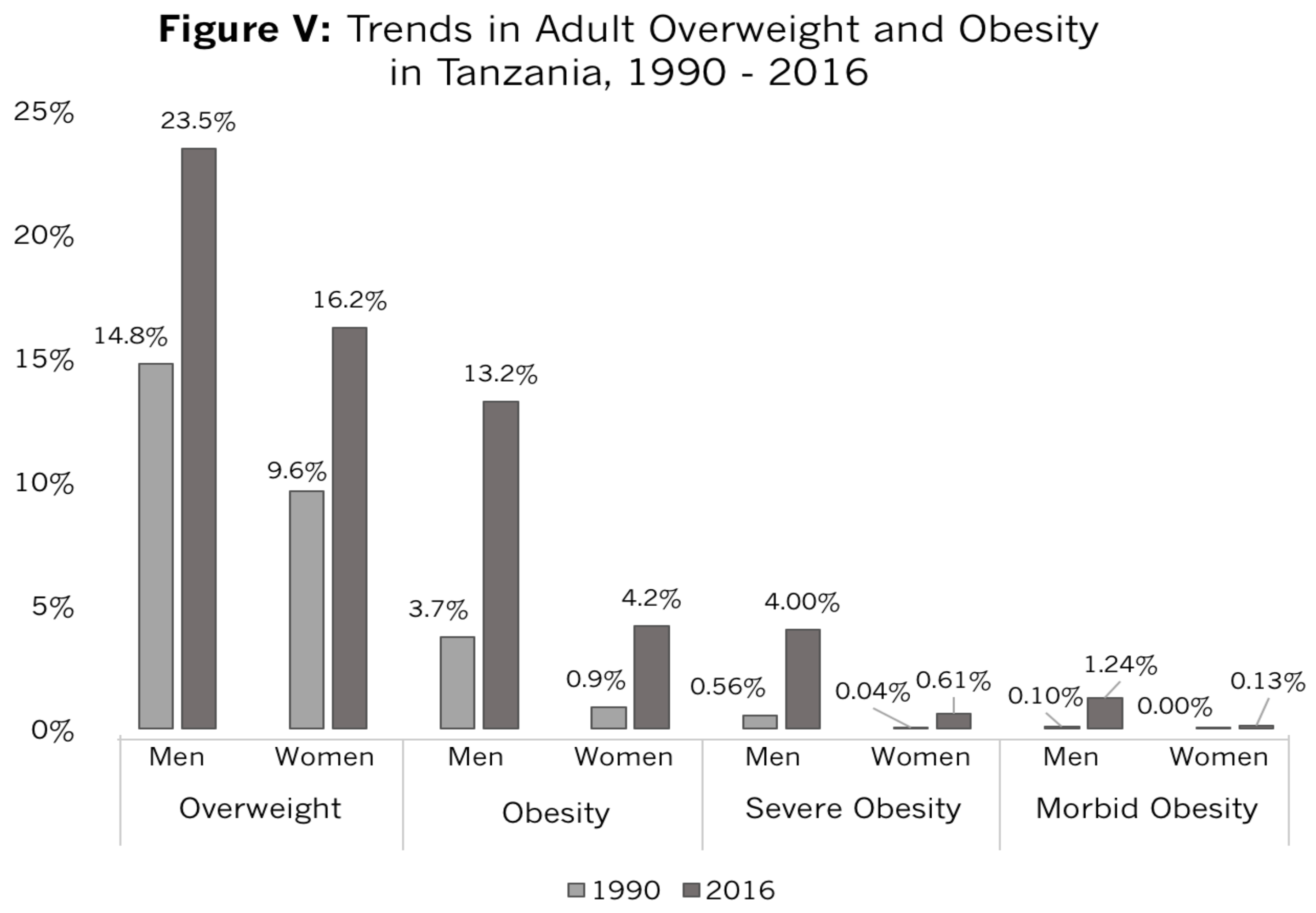




Rising obesity



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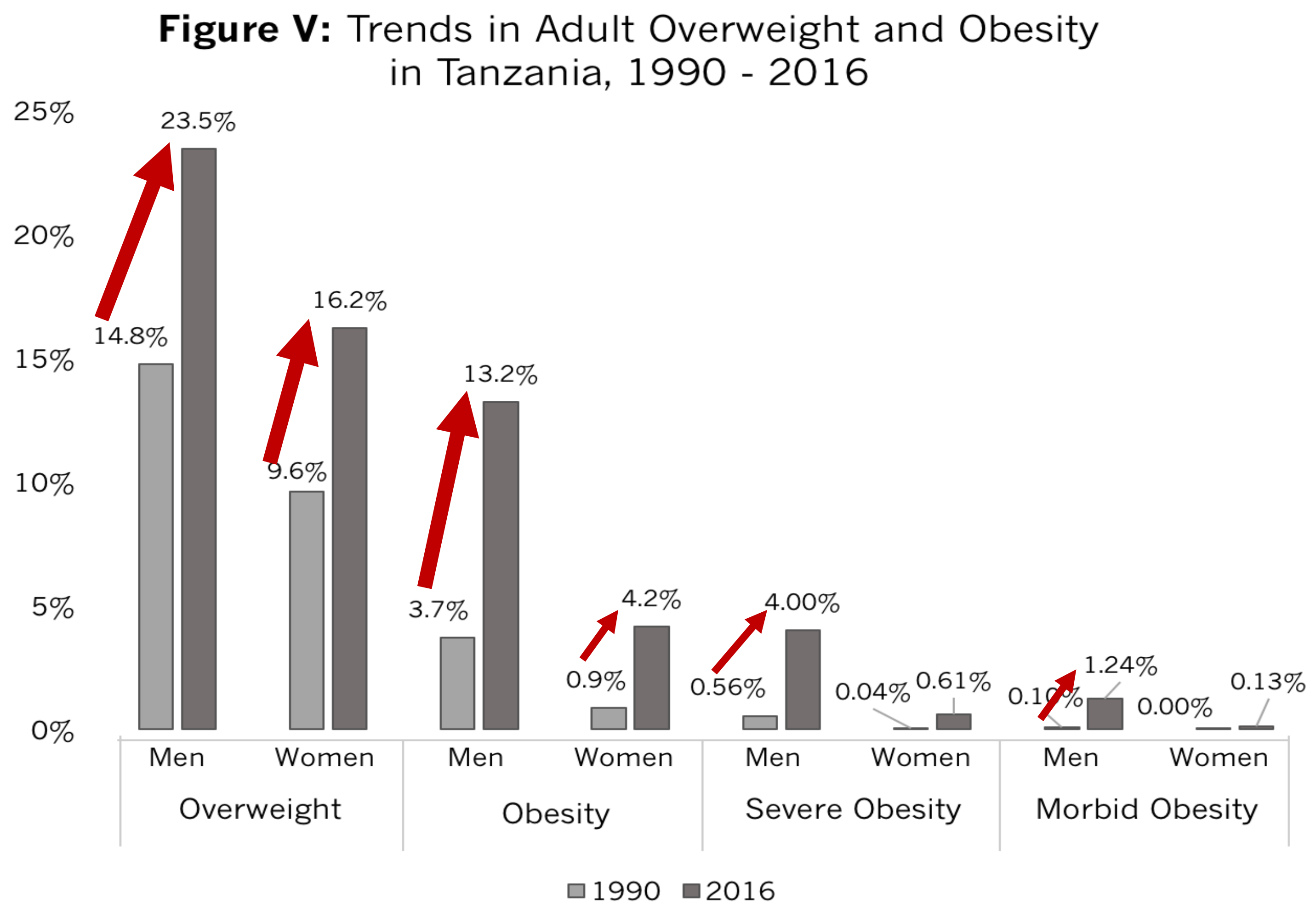

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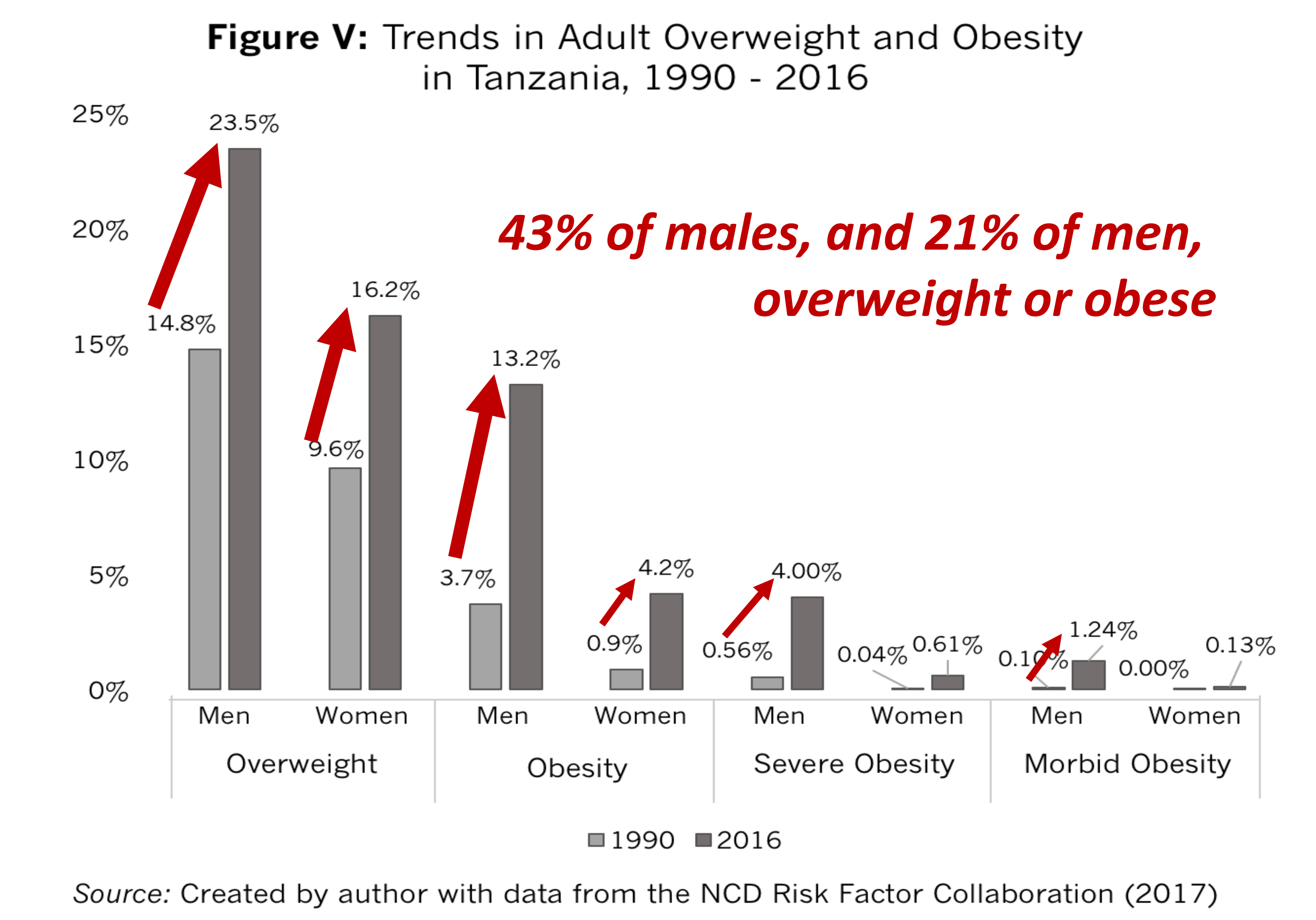

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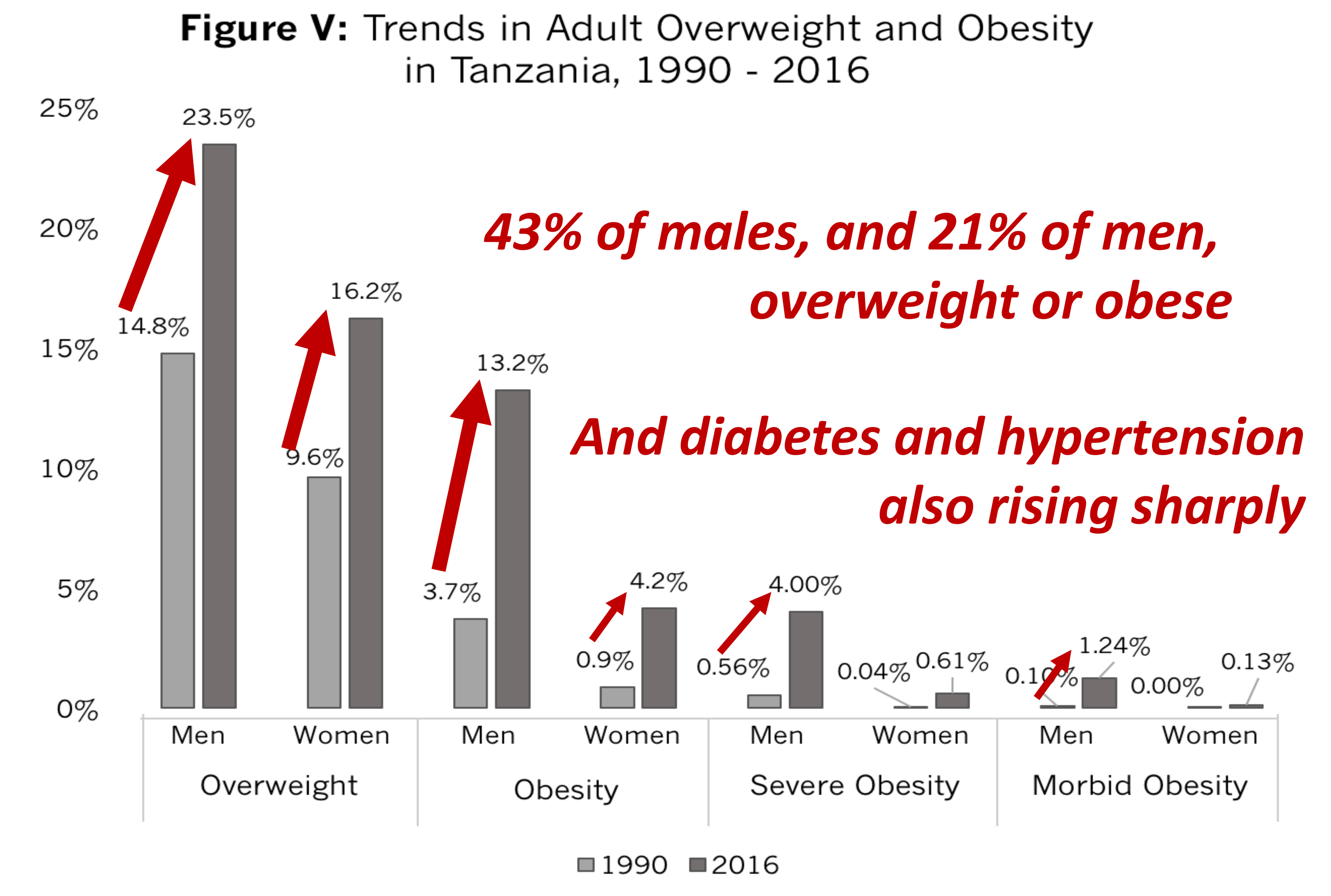

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#3: What has been the response to the huge agribusiness opportunities?

#3a: Imports have not been the systematic winner

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Real value of food imports, 2008-2015 (2011 PPP USD)

Country	Real value of food imports	Imports as share of food expenditure
Malawi	↑	↓
Mozambique	↑	↑
Nigeria	↑	↔
Rwanda	↑	↑
Tanzania	↑	↔
Uganda	↔	↓

Source: COMTRADE for imports; WB for hh consumption expenditure; authors' calculations to generate food expenditure

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Contrary to conventional wisdom, many countries in Africa are “holding their own” in meeting their food needs, and rising incomes per se won’t necessarily change this

The response at farm level

Smallholder farmers

- Sunflower in Tanzania
- Pigeon pea in Malawi, Mozambique, Tanzania
- Fresh produce to local markets in nearly all countries

The rise of medium-size farms

- 35% to 50% of all cropped land (Jayne et al.)
- Mostly grains, if size defined by land area
- But also fresh produce, poultry …

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Large (local) farms

- At least two $1 million investments in Tanzania to provide fresh produce to <u>local markets</u>
- Many medium or small (as opposed to micro) investments doing the same

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We don't have data to estimate shares … but clearly a concern for smallholder farmers' market access

The retail response

Supermarket sector far more dynamic than 15 years ago

- Tanzania: At least 13 chains with 40 outlets in Dar

But still a small share of total retail sales

- Likely very low double digits
- But no updated estimates

And presence falls dramatically outside capital cities

“Traditional” retailing sector will remain a major player for many years

The midstream response

The rise of large-scale grain wholesalers (Nick Sitko)

- Not clear yet what this implies for smallholders

Massive rise in MSME processing firms

- Poultry in many countries
- Huge growth in SME grain and sunflower processing in Tanzania
- Millet and sorghum products in Senegal
- ***All branded***

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We need much more systematic data on the structure, size, and activities of MSME sector

#4: Implications for smallholder farmers

SHFs and MSMEs

Future of MSME sector and SHFs strongly linked

- Size compatibility
  - Large firms want to import, or buy from large traders, or in final instance, from large- or medium size farms
  - MSMEs and SHFs are natural partners, often mediated by traditional marketing systems

So good news for SHFs is that traditional (MSME) retail and MSME processing sector will be important for a long time

However …

Challenges

SHFs need to adapt to big changes in consumer demand and buyer requirements

Especially for safety, quality, and reliability

And in the face of far more competition than in the past

- From SHFs in more productive or connected zones
- From rising medium-size firms
- From local farming investors who see huge opportunities in local markets
- From imports

Challenges

A small share, perhaps one-third, of smallholder farmers are in a position to compete effectively in this new and still rapidly changing environment

Per the AASR categorization

- 40% to 50% of farmers are transitioning (out of ag)
- 11% to 39% are commercialized
- 20% to 50% are trapped in low level subsistence or (being optimistic) "pre-commercial"
  - Many of these will not "make it" and will need social safety net assistance

We need more analytical work on a forward-looking categorization of farmers in the context of structural transformation

As a strategic guide to efficient assistance to the SHF sector

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Strategies for the one-third +

Improved infrastructure and policy are the foundations of improved links of smallholder farmers to agribusiness

- Roads
- Market places

Especially for secondary cities

- R&D and extension for SHFs
- Predictable trade policy (especially regional)
- Better seed and other input systems

Projects and programs are important complements, but will have low payoff in the absence of better policy and infrastructure

Strategies for the one-third +

Strengthening the MSME sector is central to strengthening smallholder farmer links to agribusiness

- Access to credit
  - Secured transactions reform: Mobile assets, collateral registries
  - Credit guarantees
- New management models for improved market places
  - Wholesale markets have been in extreme dysfunction for decades
- Information & training on technology
- Clustered service provision
  - Transport, energy, water

Strategies for the one-third +

Efforts to link smallholder farmers to large agribusiness will be important complements to the SME focus

Scaled success will depend on better policy and infrastructure

- “Impact investing” can help
  - Even though there is a large component of “marketing and branding” in what is called impact investment
- Development corridors
- Crucial that SMEs be included in these initiatives
- A key contribution of large-scale initiatives can be bringing a stronger voice to the need for better infrastructure and policy

Take home

Diet transformation driving broad AFS transformation

Major response within the local systems

- Imports are not dominating

SHFs and MSMEs a major part of the response

- Though we need better data

Take home

The relative contribution of SHFs and MSMEs will both <u>decline over time</u> and <u>remain important</u> for a couple decades or more

Improved infrastructure, policy, and <u>targeted</u> assistance can help

- Perhaps 30% of SHFs
- Selected MSMEs

For both to <u>grow</u> and compete