

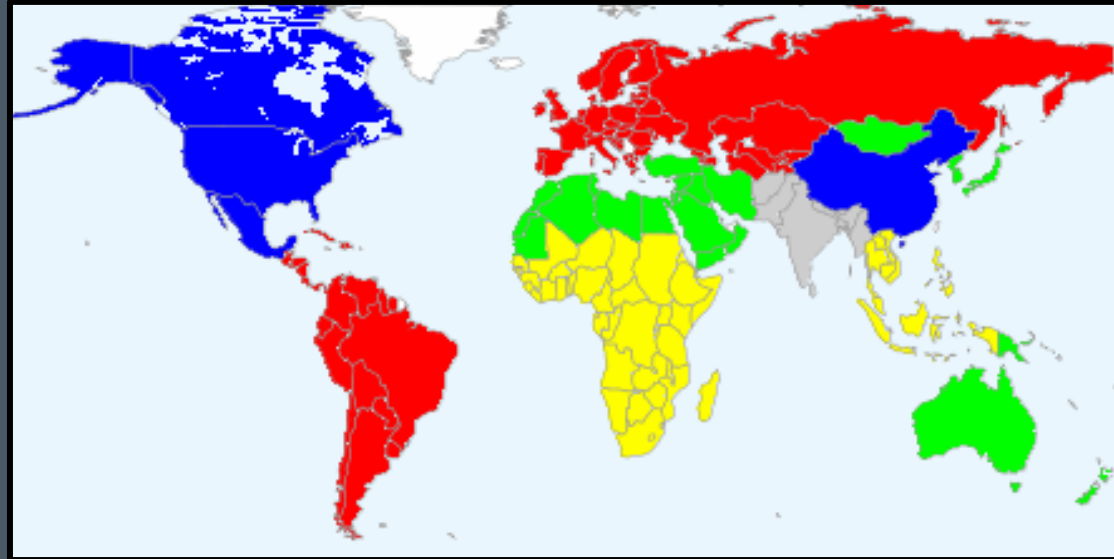
Knowing Your Market: Finfish Consumers

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ENGLE-STONE
Aquatics

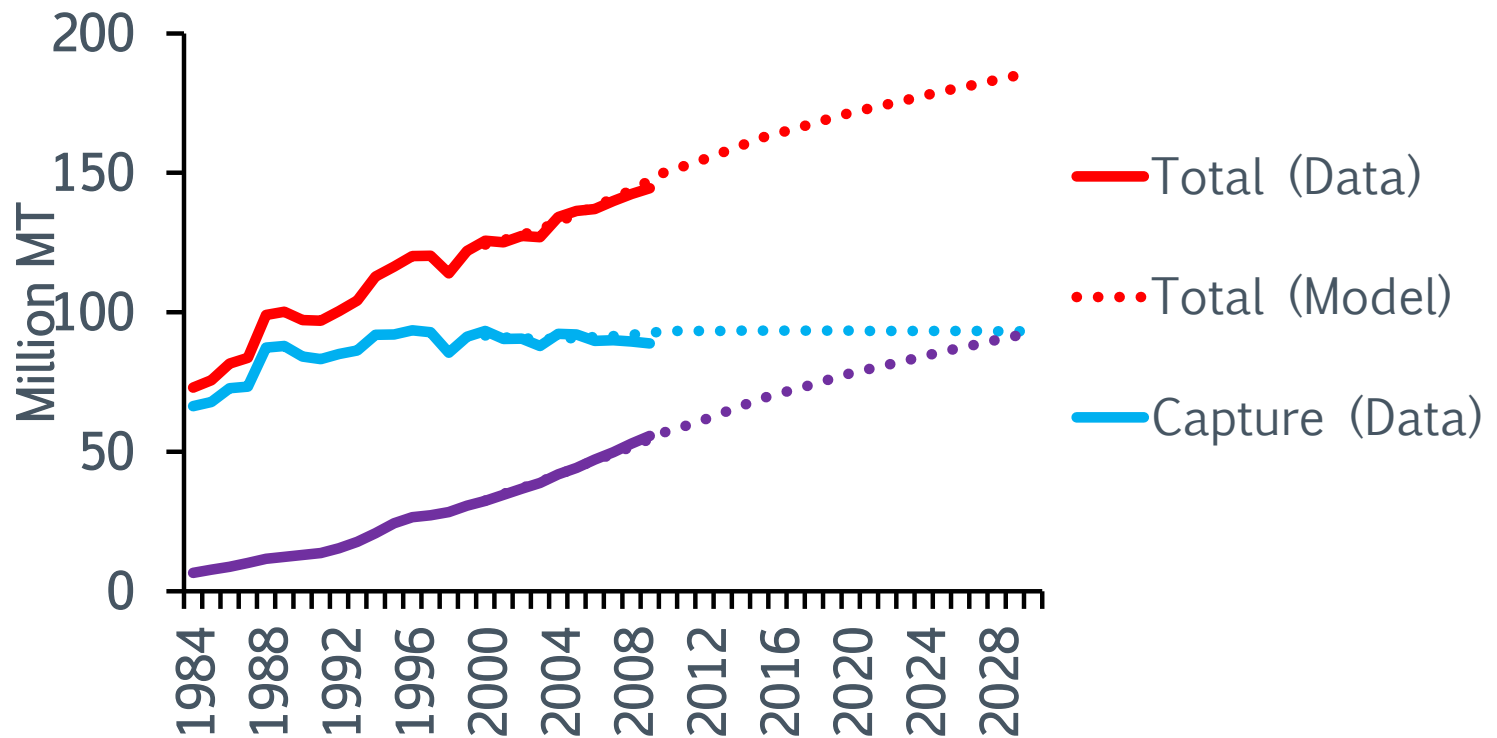
FISH TO 2030: THE ROLE & OPPORTUNITY FOR AQUACULTURE

Kobayashi, M., S. Msangi,
M. Batka, S. Vannucini,
M.M. Dey, and J. L.
Anderson. 2015.
*Aquaculture Economics &
Management* 19(3):282-
300.



DEFINITION OF REGIONS

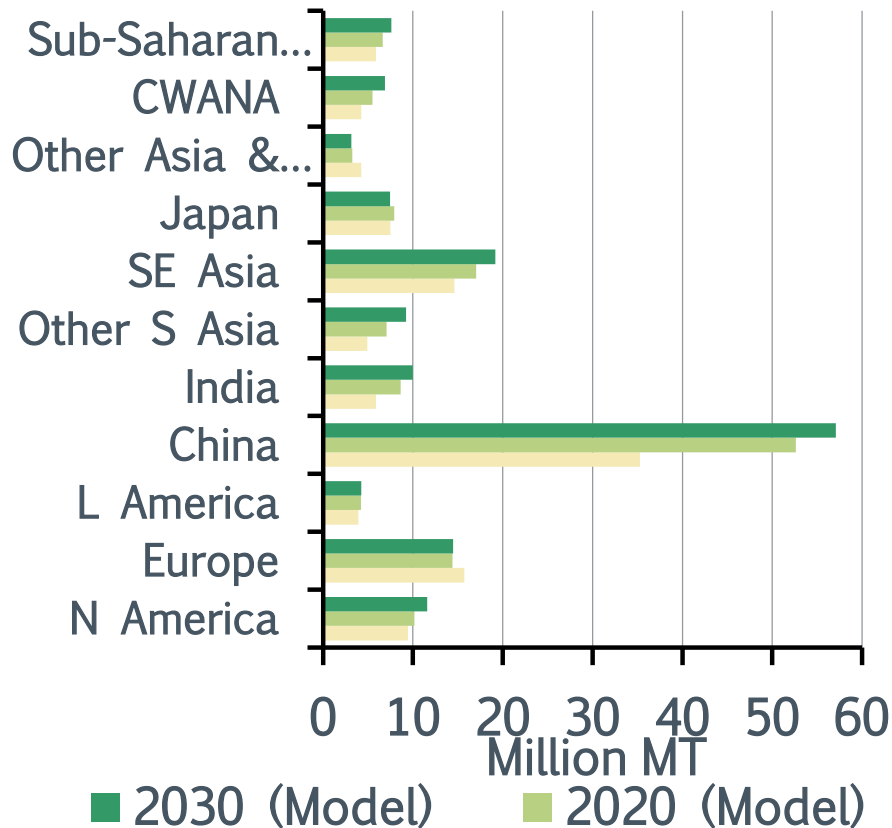
Total Fish Production: 1984-2030



Commodity Groups

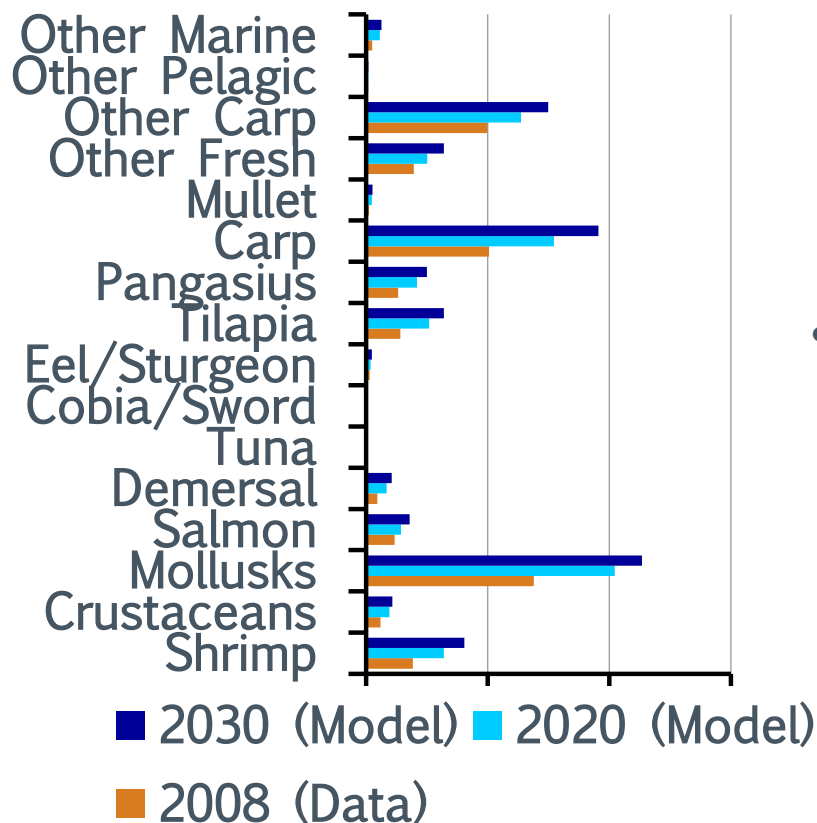
<i>Consumption Aggregation</i>	<i>Production Aggregation</i>
Shrimp and Prawns	Shrimp and Prawns
Other Crustaceans	Other Crustaceans
Mollusks and other Aquatic Invertebrates and Animals	Mollusks and other Aquatic Invertebrates and Animals
Salmon, Trout and other Salmonoids	Salmon, Trout and other Salmonoids
Tuna	Tuna
Freshwater and other Diadromous Fish	Tilapia and other Cichlids
	Pangasius and other Catfish
	Major Carp and Milkfish
	Eels and Sturgeon
	Silver, Bighead and Grass Carp
	Other Freshwater and Diadromous Fish
Demersal Fish	Demersal Fish
	Mullet
Other Marine Fish	Other Marine Fish
Other Pelagic Fish	Other Pelagic Fish
	Cobia and Swordfish

Consumption Growth



- › More than 50% increase 2006 to 2030
 - China
 - India
 - Other South Asia
 - Cent./West Asia & N. Africa
- › Less than 20% increase 2006 to 2030
 - Southeast Asia
 - Sub-Saharan Africa
 - **North America**
 - Latin America
- Regions with little growth or decline
 - Other Asia & Pacific
 - Europe
 - Japan

Sources of Aquaculture Supply Growth By Commodity



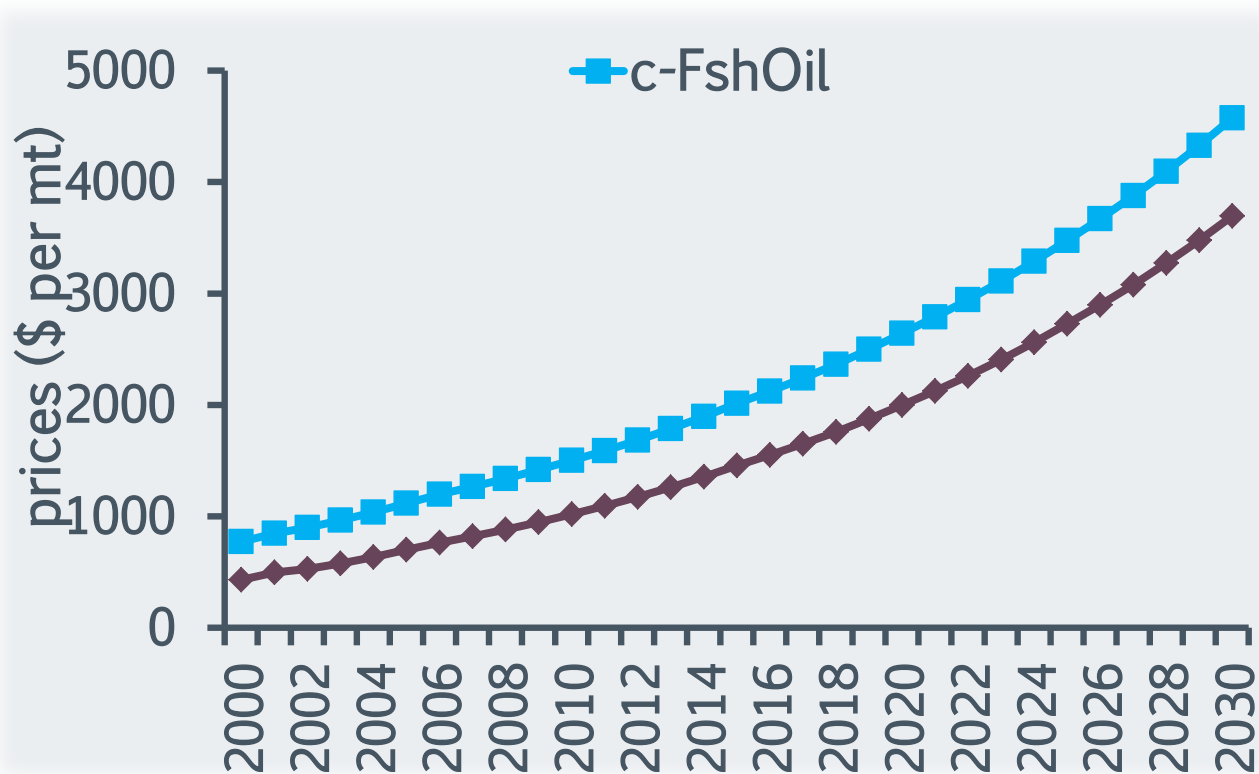
- More than 100% increase 2008 to 2030

- Other marine Fish (152%)
- Demersal (131%)
- Tilapia (126%)
- Mullet (113%)
- Shrimp (110%)

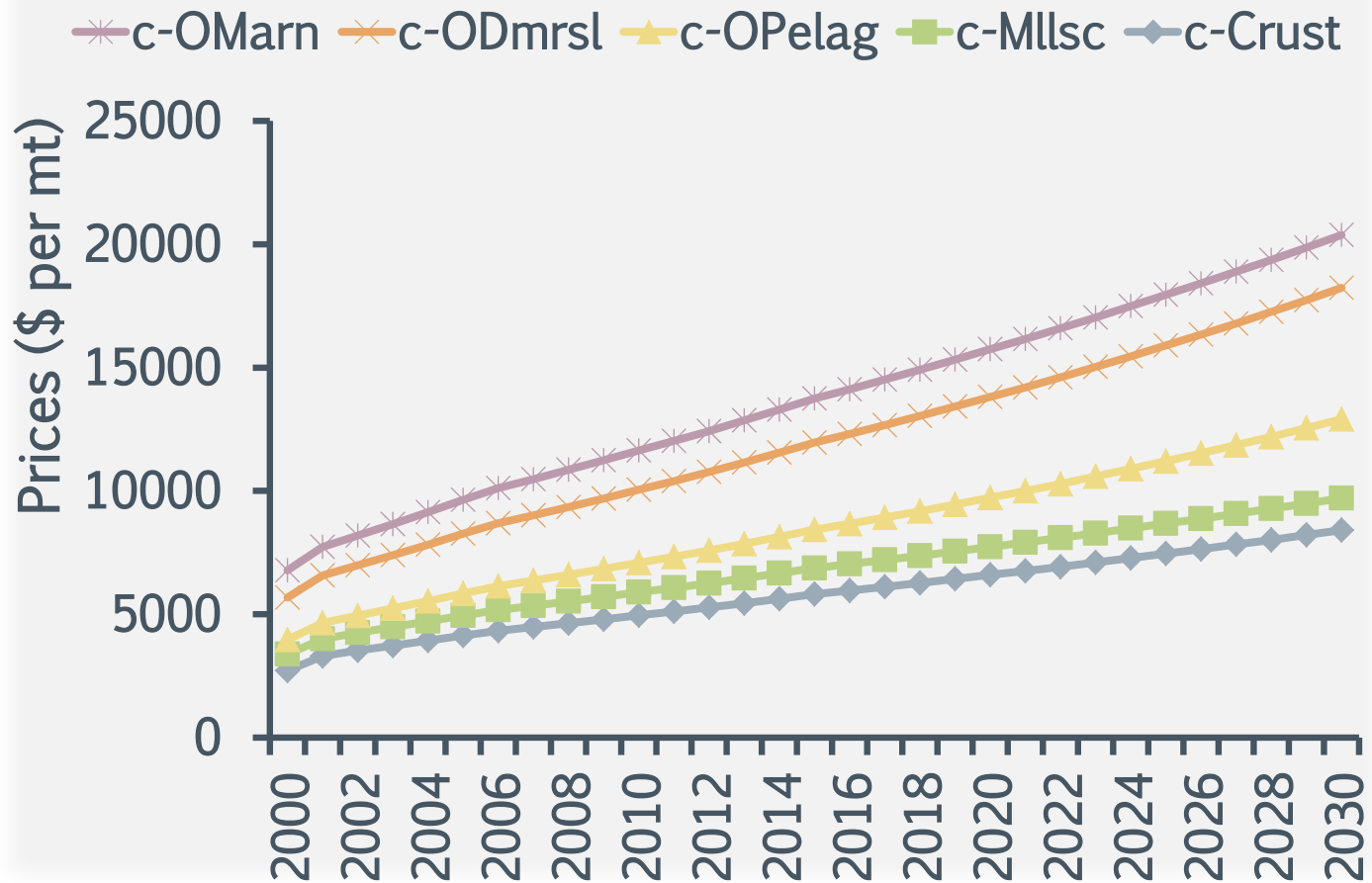
- 40-100% increase 2008 to 2030

- Pangasius (90%)
- Carp (89%)
- Crustaceans (82%)
- Molluscs (64%)
- Other fresh fish (63%)
- Eel/sturgeon (58%)
- **Salmon (53%)**
- Other carp (50%)
- Tuna (48%)
- Cobia/swordfish (42%)

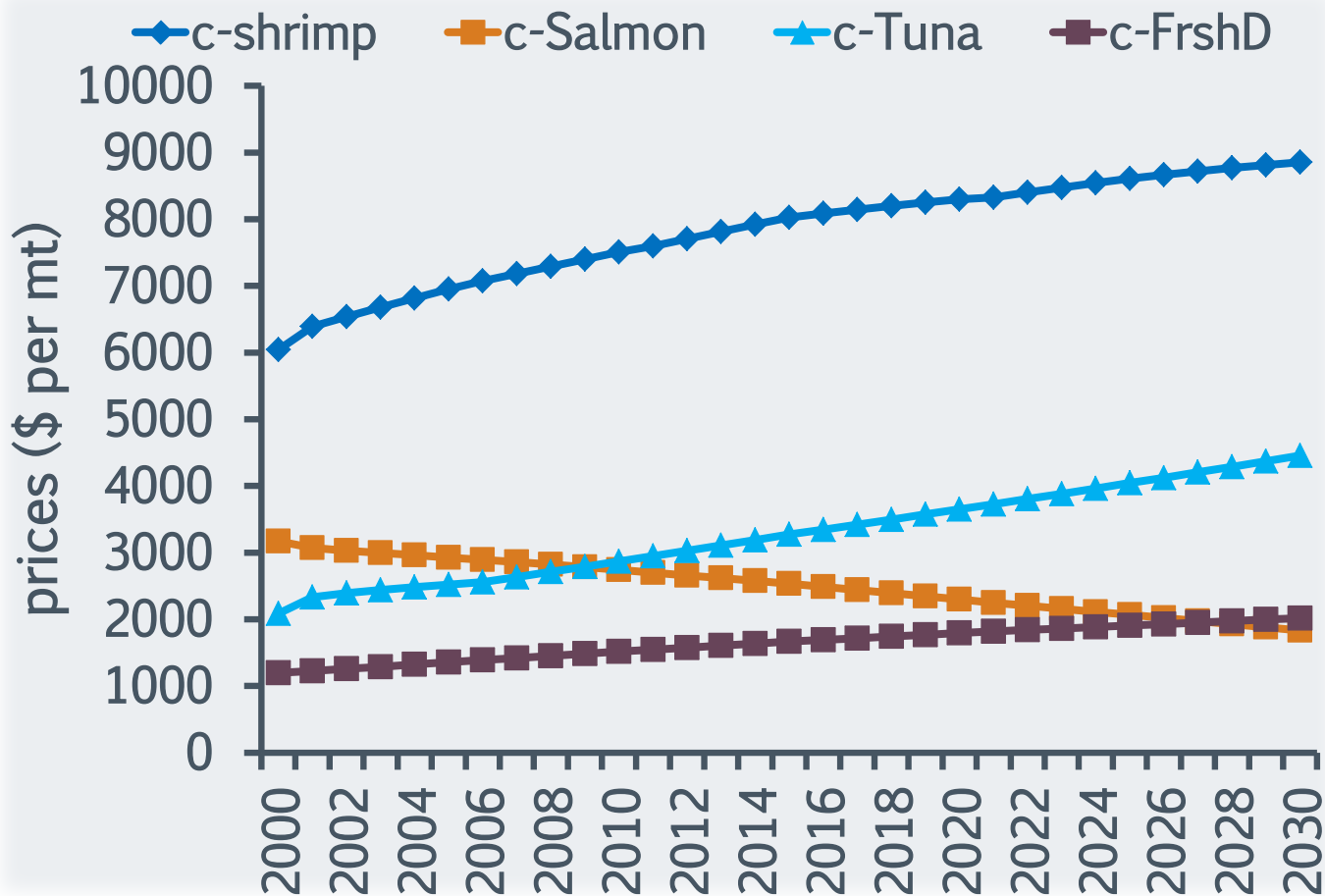
Projected Prices (\$/MT): Fish Meal, Fish Oil



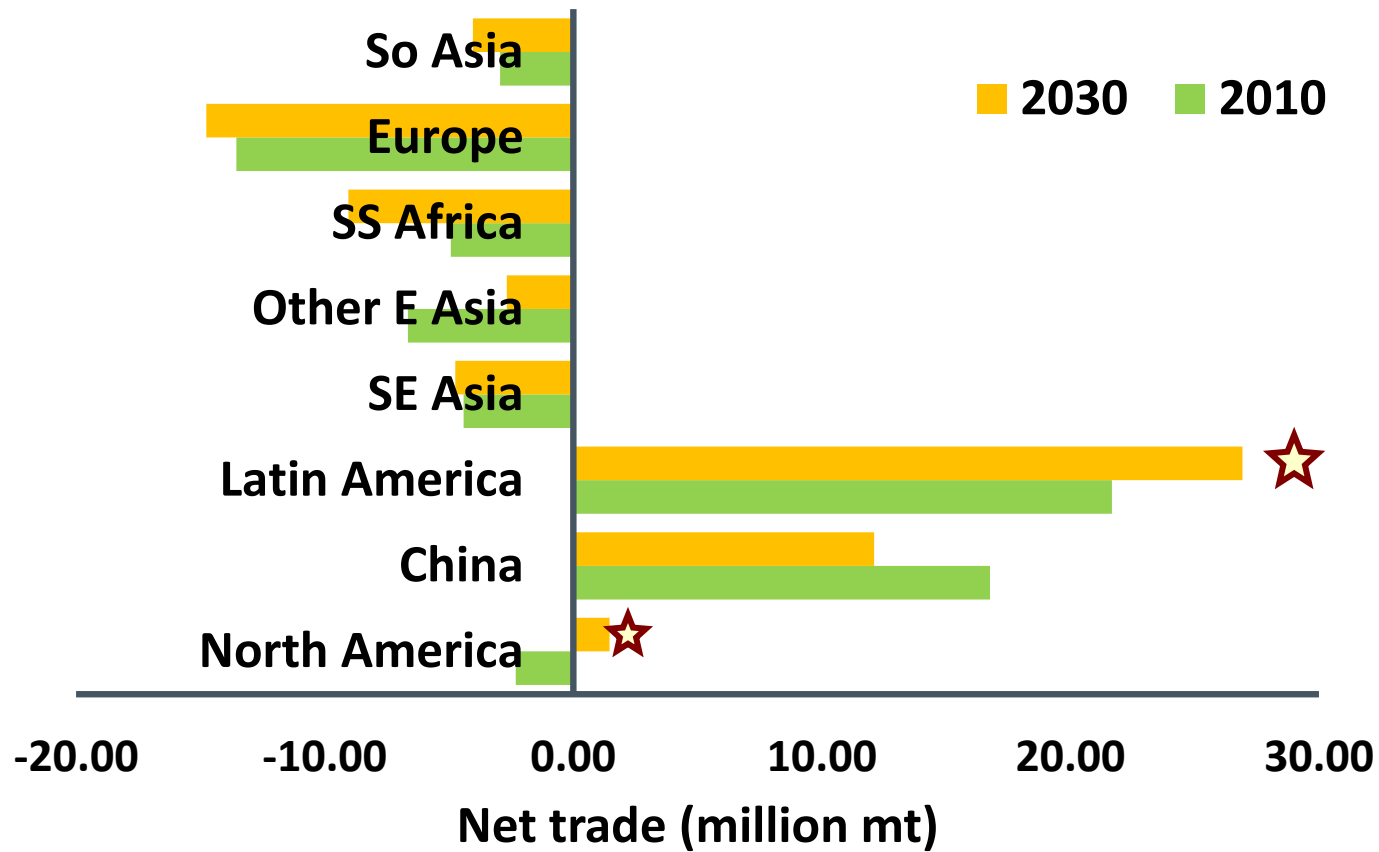
Projected Prices (\$/MT): Other Marine, Demersal, Pelagic



Projected Prices (\$/MT): Shrimp, Salmon, Tuna, Freshwater



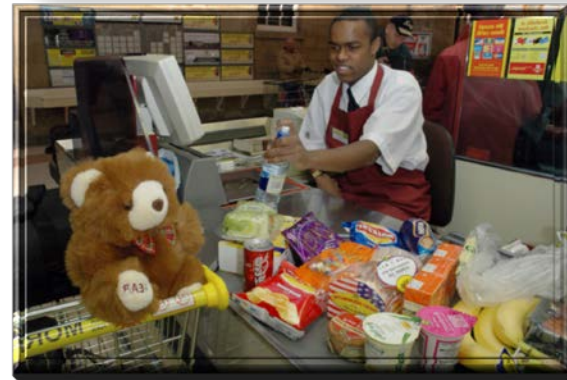
Projected Net Trade in 2030 as Compared to 2010



SUPERMARKET SALES TRENDS FOR AQUACULTURE PRODUCTS

- › In terms of **value**, restaurants account for about two-thirds of seafood sales
- › However, in terms of **quantity** of seafood sold, grocery sector has almost equal share with restaurants (~50% each)
- › Supermarkets are the fastest growing food-retailing businesses
- › Supermarkets have:
 - Expanded seafood counters
 - Created separate seafood depts.
 - Established own brands of seafood.

What Is Retail Store Scanner Data?



INFORMATION COLLECTED THROUGH THE
SCANNING OF UPC / BAR CODES

A very popular tool in marketing
research; but not tried in seafood
marketing sector

Types of Stores Covered

Gas Convenience
Stores



Supermarkets



Mass
Merchandisers



Independent
Food Stores



Supercenters

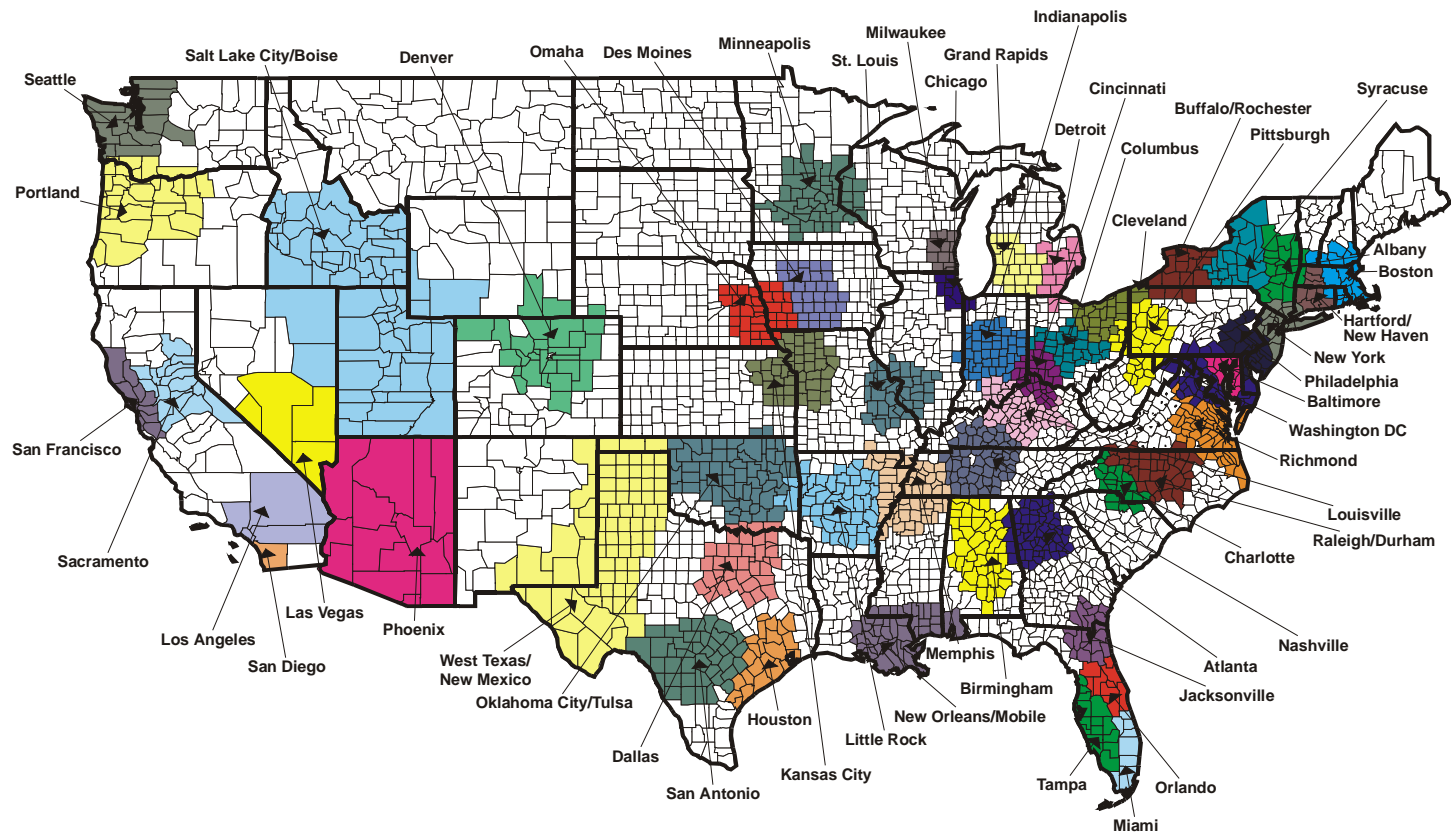


Chain Convenience
Stores

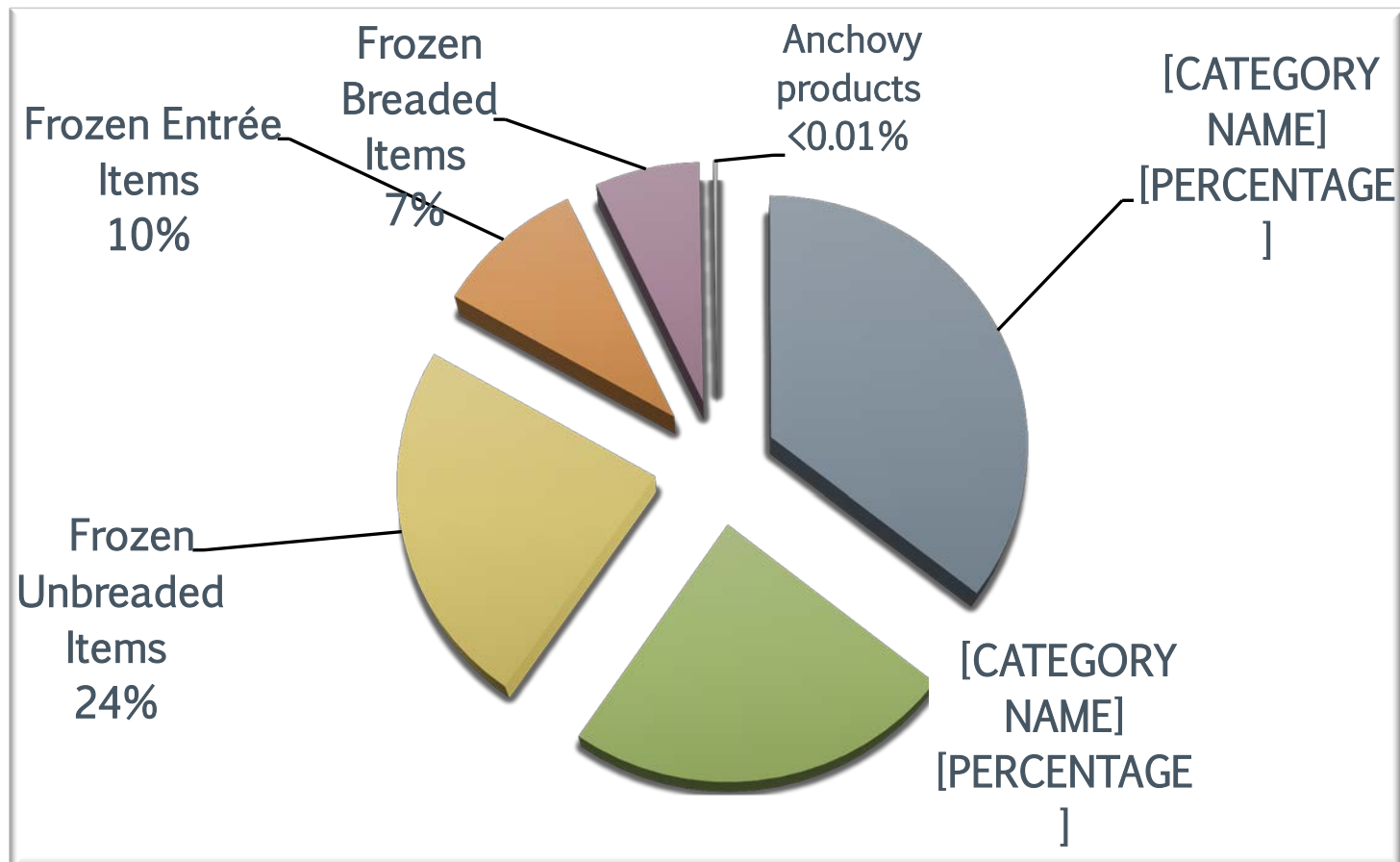


Drug Stores

Markets Covered



Composition of Retail Seafood Sales



The Three Frozen/Chilled Seafood Categories

Value-added products

Breaded seafood



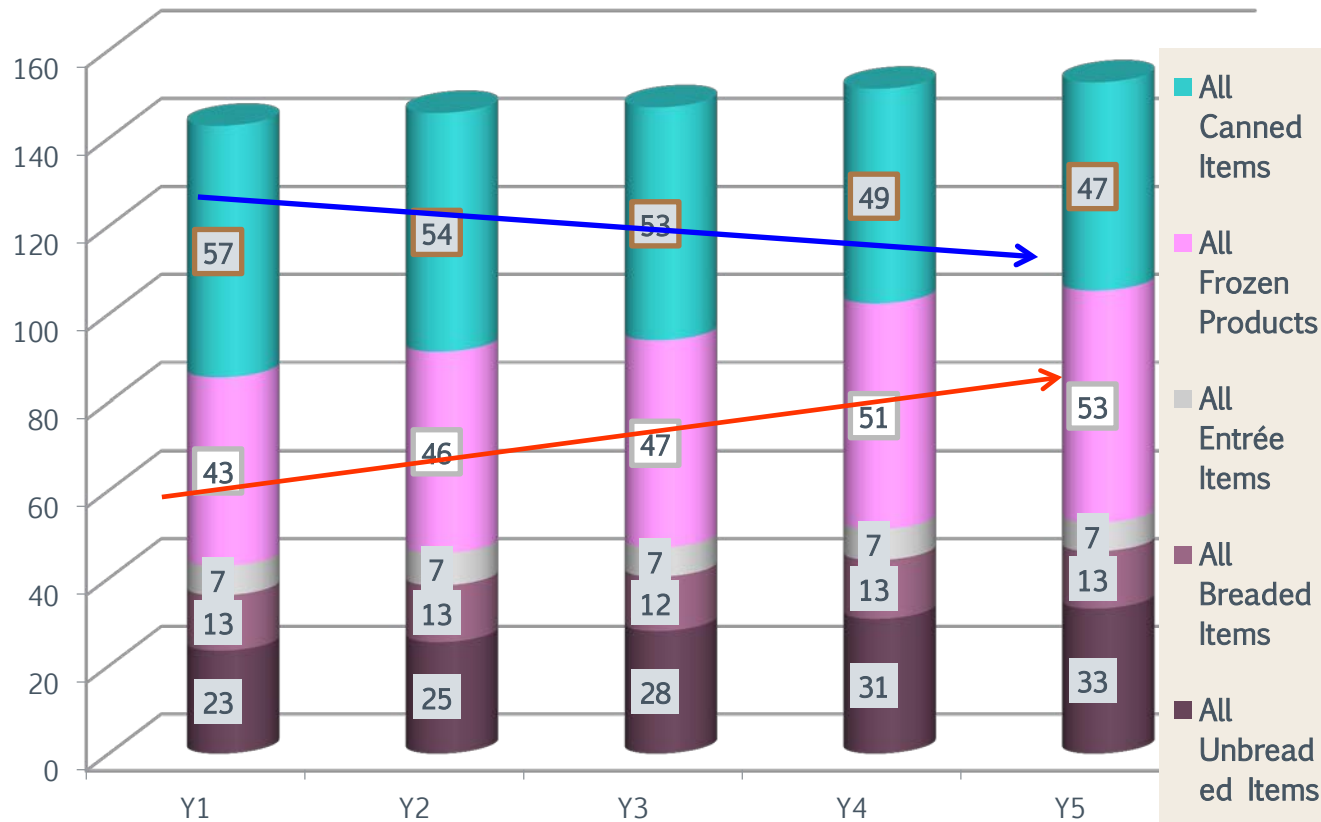
Seafood Entrée



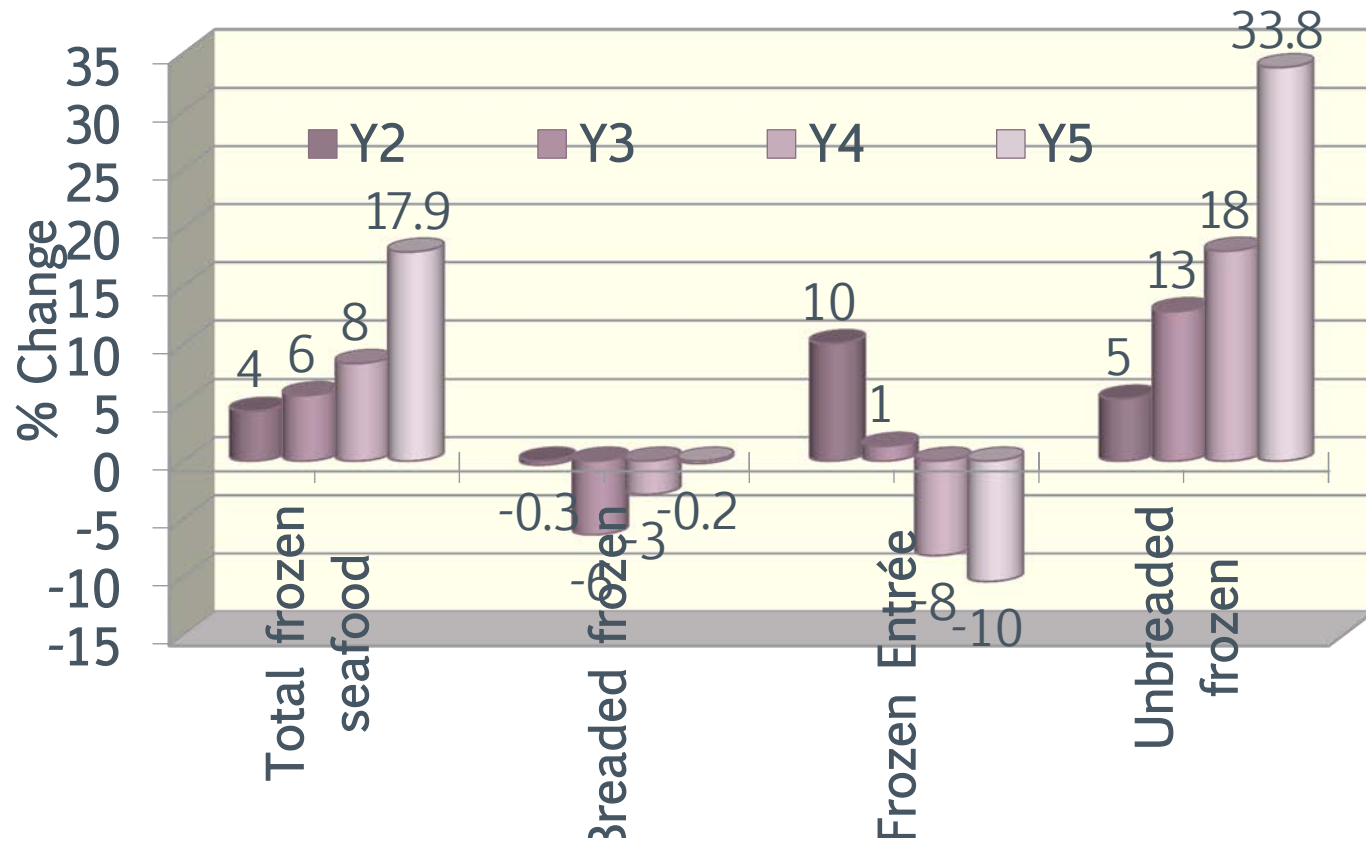
Unbreaded seafood



% Shares of Product Categories (52 markets)

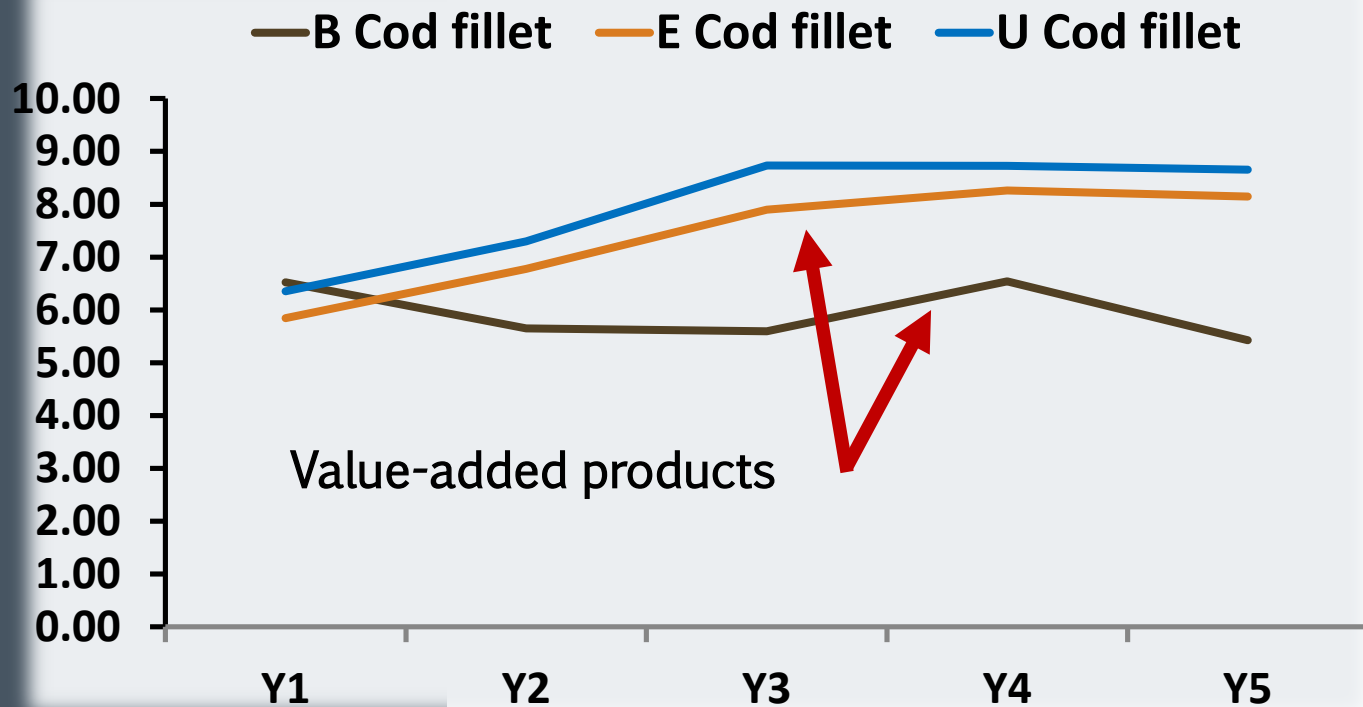


Sales Volume of Frozen/chilled Products: Trends w.r.t 2005-06



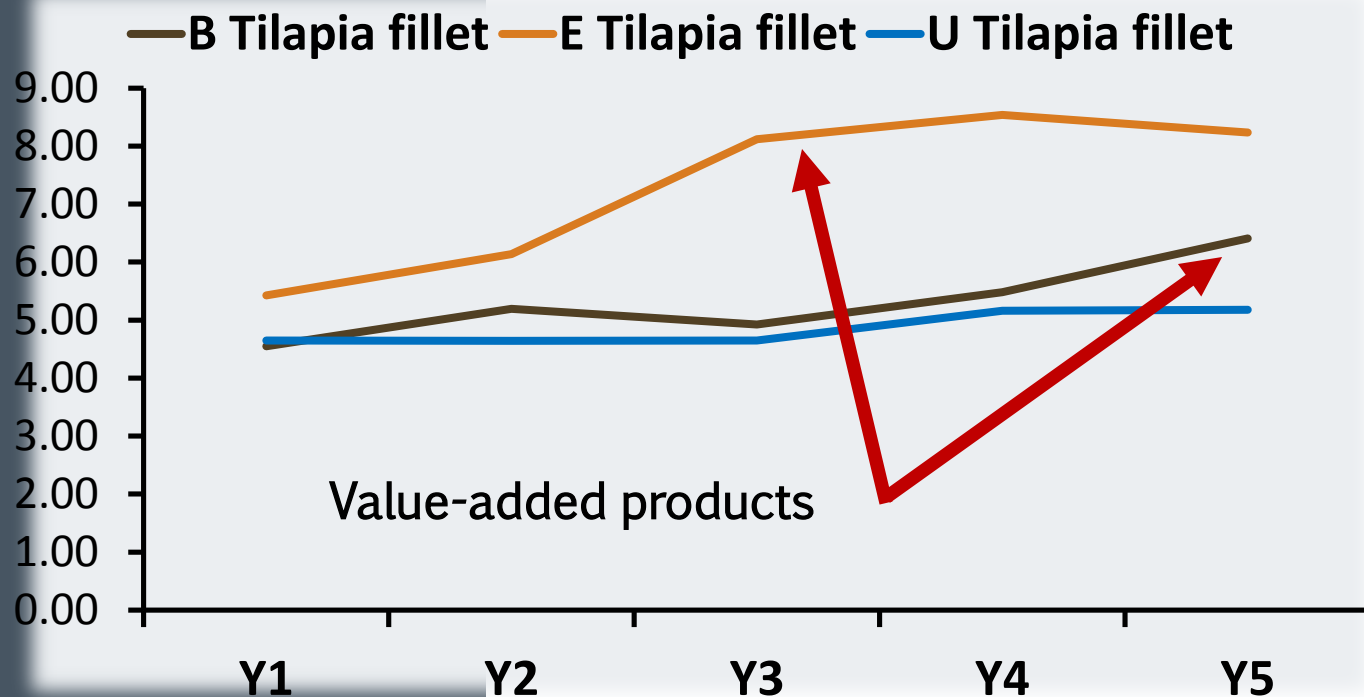
WHAT'S WRONG WITH THIS PICTURE?

PRICES OF COD PRODUCTS: 12-OZ PACKS



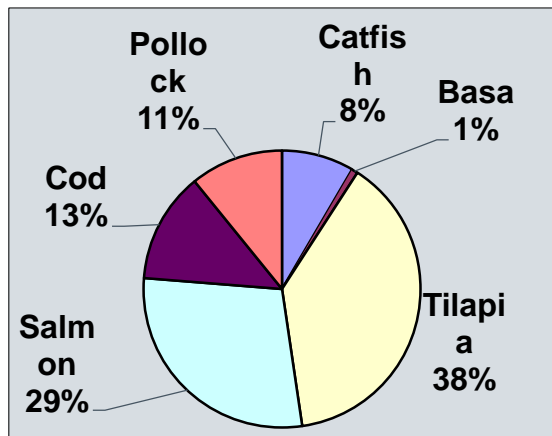
THIS IS HOW TO
DO VALUE-
ADDED
CORRECTLY!

PRICES OF TILAPIA PRODUCTS: 12-OZ PACKS

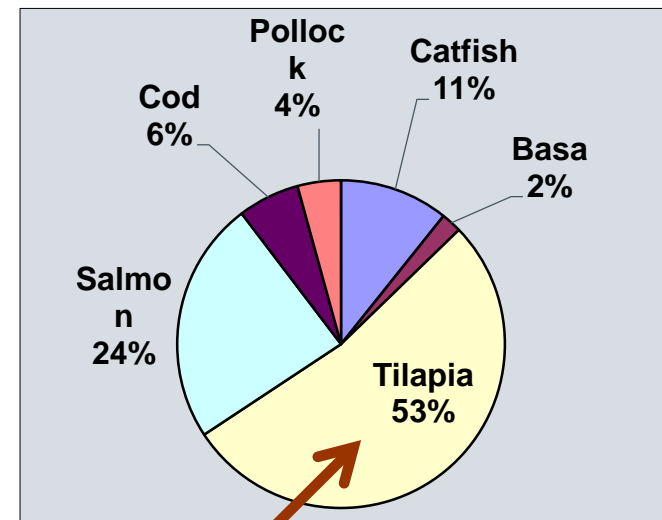


Volume Share of Major Fish Species

2005-2006



2009-2010



Tilapia Growth

Dataset: Types of Tilapia Entrees

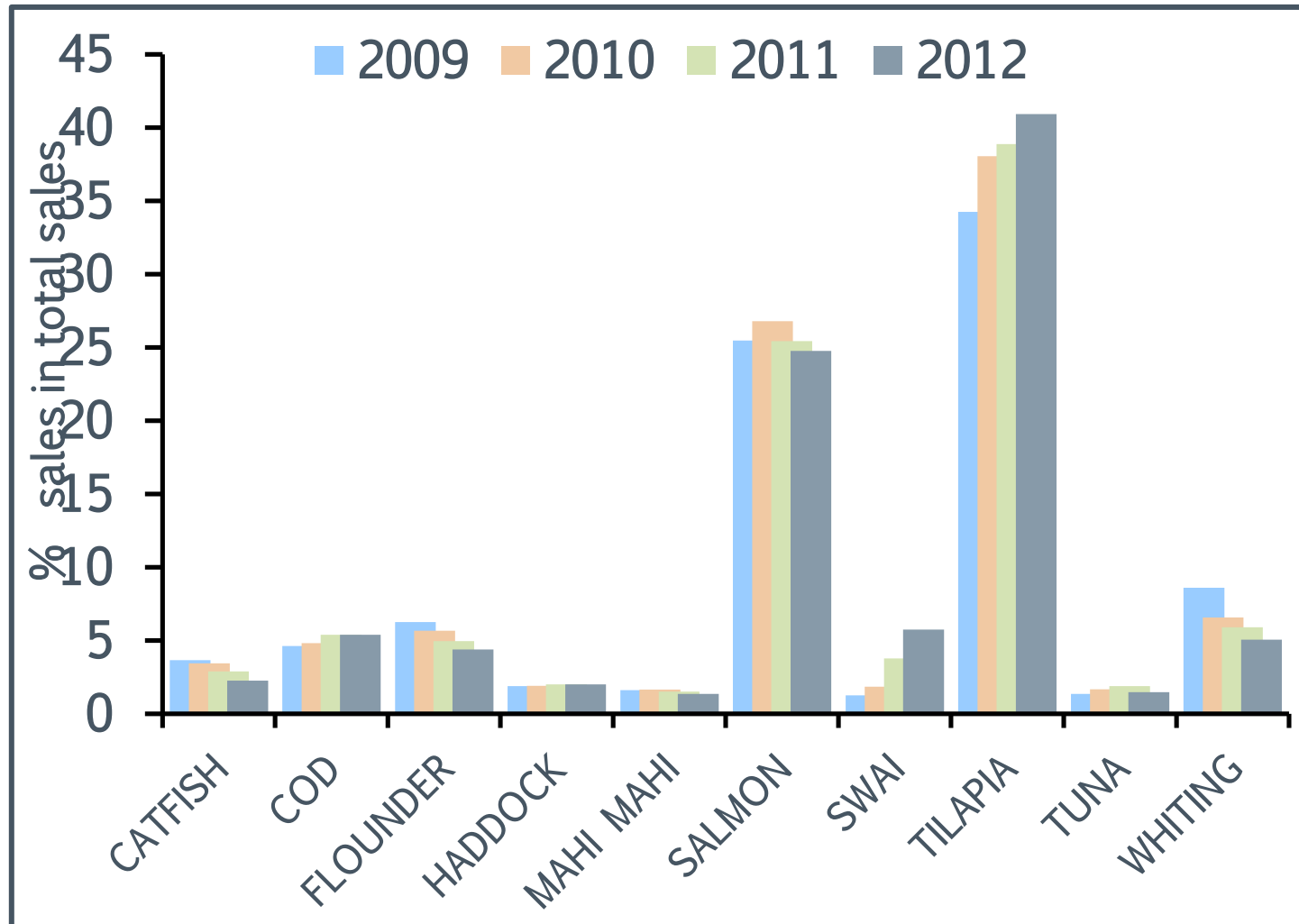
Tortilla crusted chipotle lime	W/pineapple, mango salsa
Gourmet with red pepper	Stuffed with spinach & cheese
Parmesan crusted Tuscan herb	W/ adobo sauce
Herb crusted Parmesan	W/ rolled scallop & red pepper
With artichoke & pesto	Potato crunch
Pecan encrusted	W/chimichurri

Markets covered

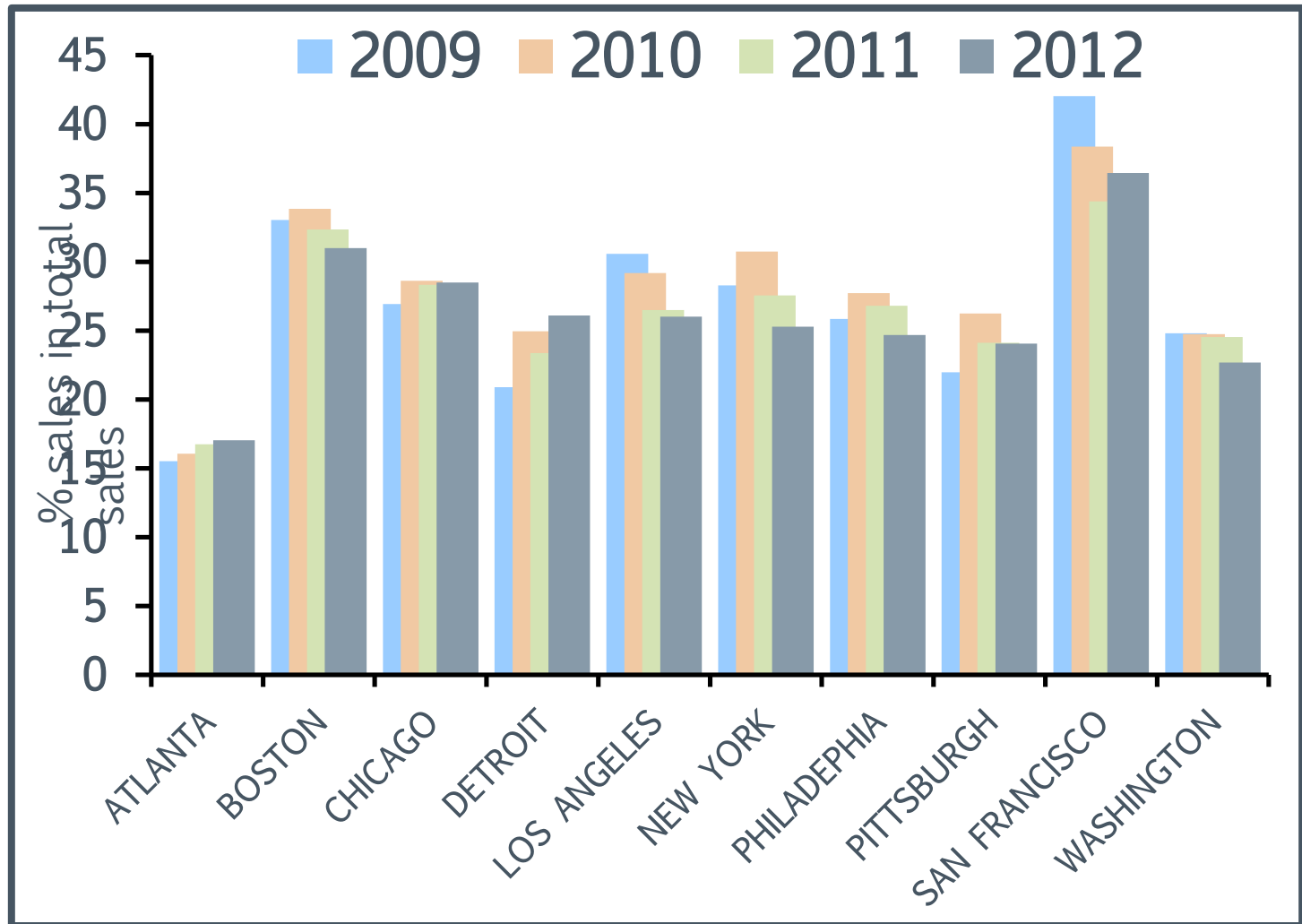
Atlanta, Boston, Chicago, Detroit, Los Angeles,
New York, Philadelphia, Pittsburgh,
San Francisco & Washington D.C



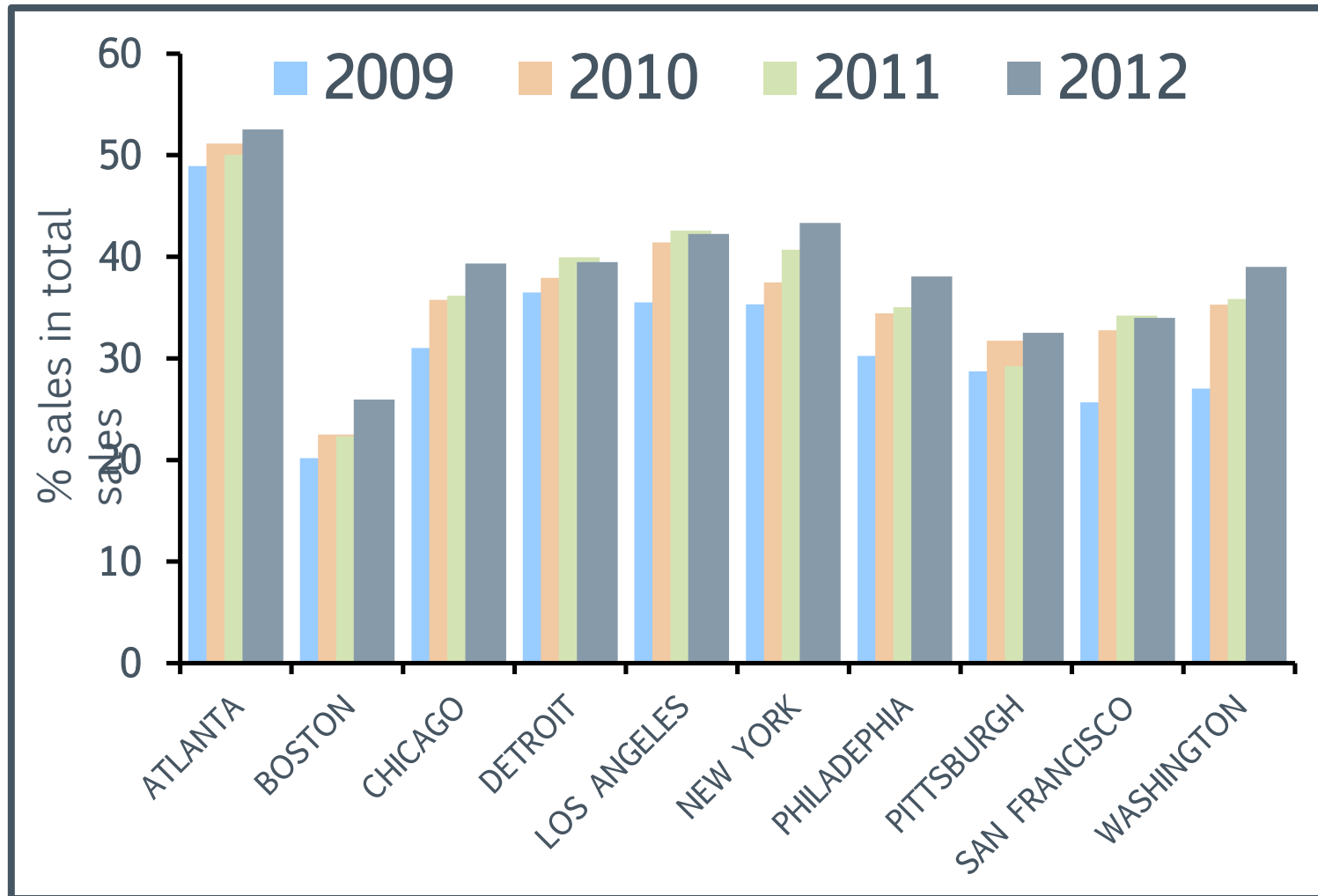
10 Markets: Top 10 Unbreaded Finfish



10 Markets for Unbreaded Salmon



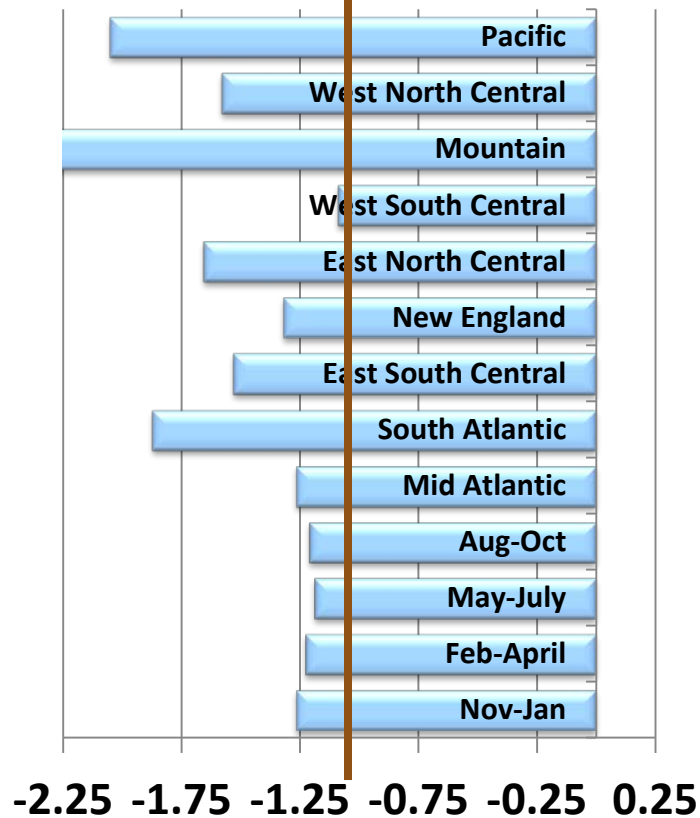
10 Markets for Unbreaded Tilapia



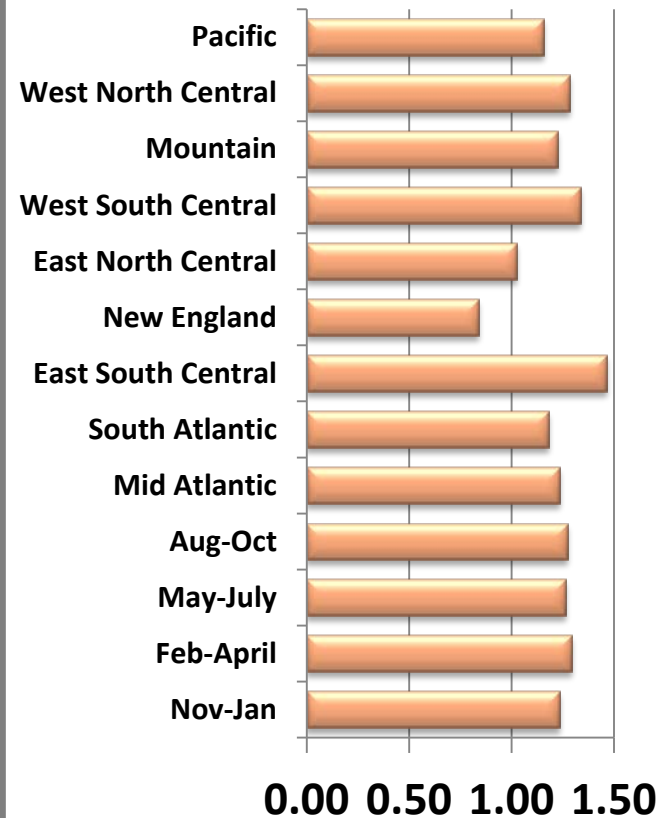
To talk about pricing strategies, we need to talk about elasticities

Own-price elasticity

Tilapia

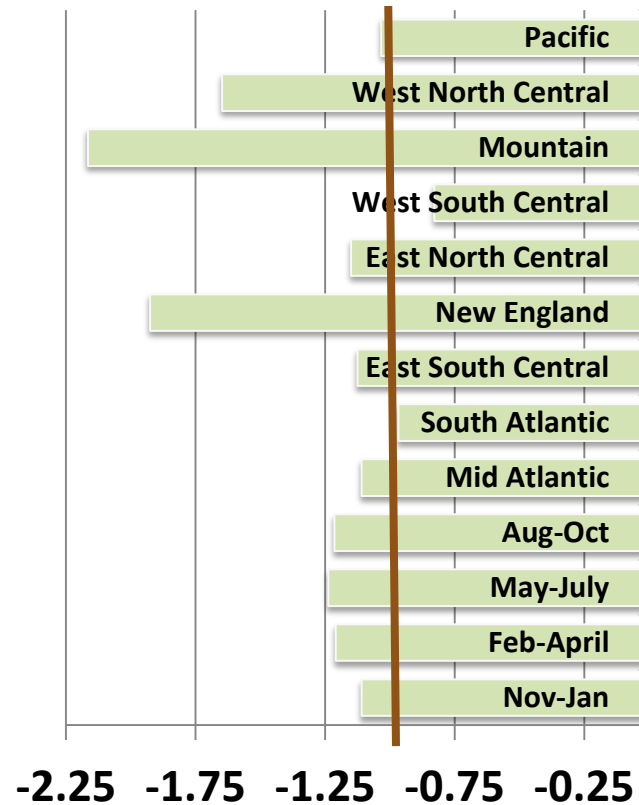


Expenditure elasticity

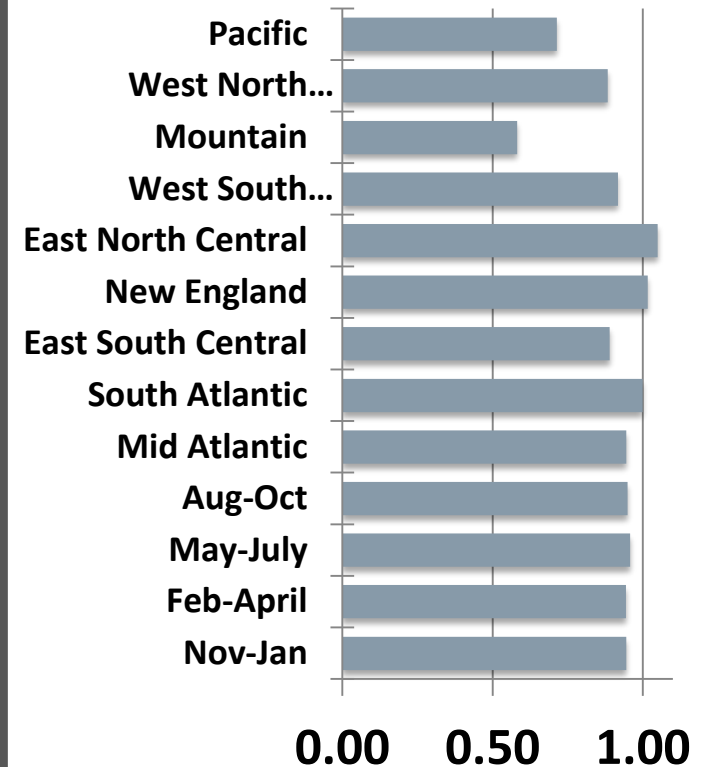


Salmon

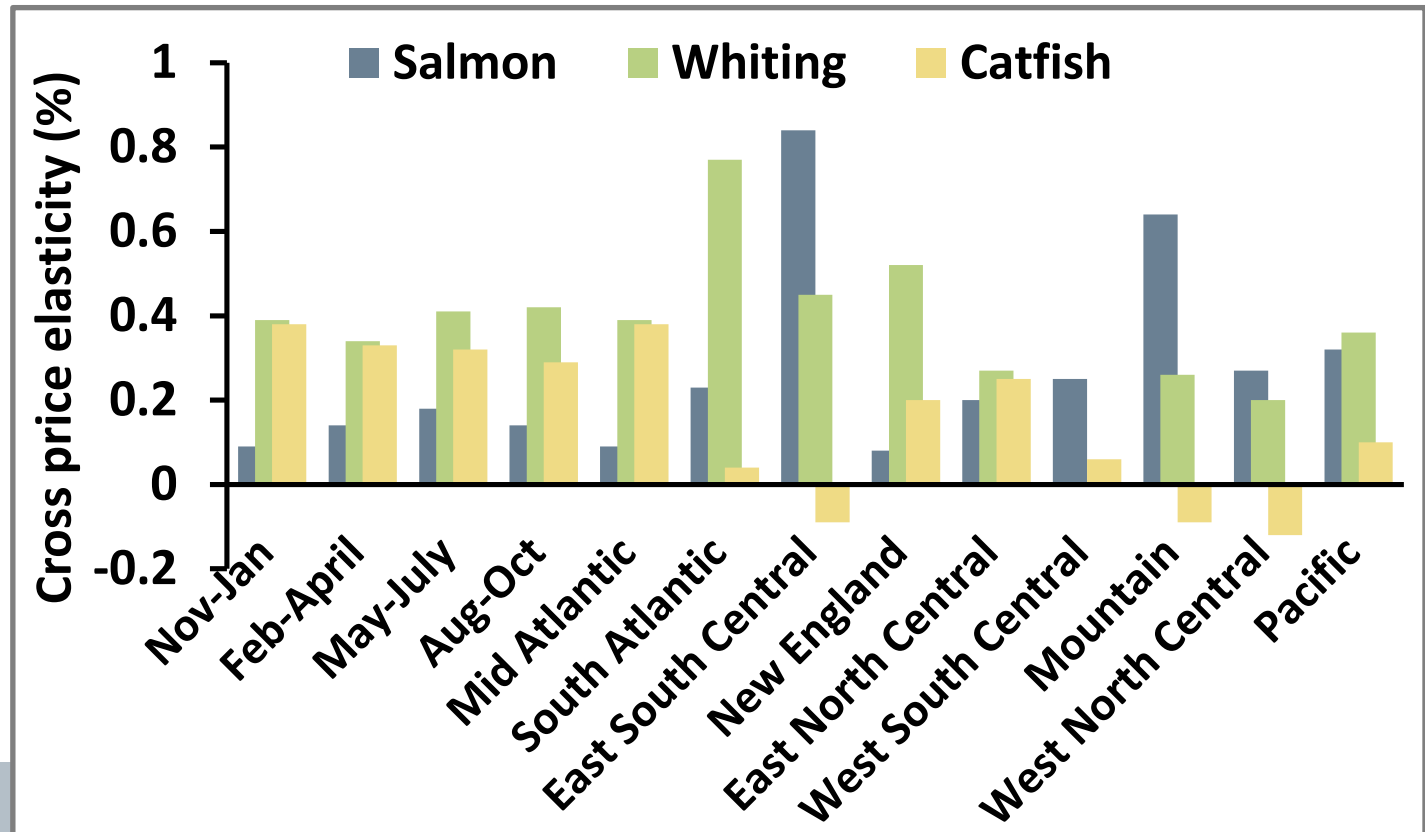
Own-price elasticity



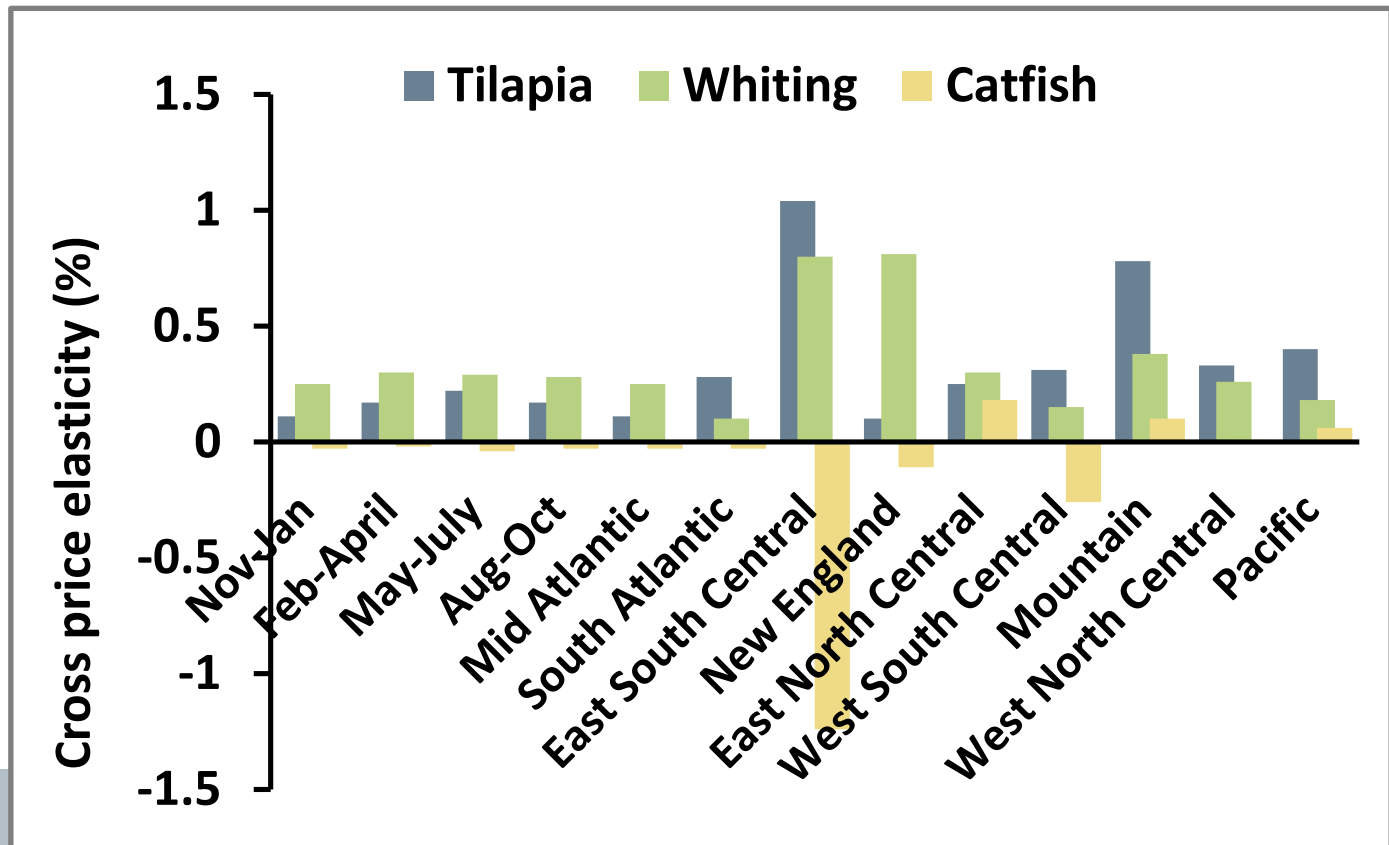
Expenditure elasticity



Cross-price Elasticities of Tilapia (Substituting Tilapia for others) (substitute = Positive value)



Cross-price Elasticities of Salmon (Substituting Salmon for others) (substitute = Positive value)



CONCLUDING REMARKS

- Global trends indicate that North America has potential to reduce its seafood trade deficit as China becomes more of a net importer.
- Degree of competition among products vary considerably across region
- Substituting relationship in one region but complementary relationship in another region.

CONCLUDING REMARKS:

MARKETING STRATEGIES

- Not one uniform product/type/size
- Regional variation in
 - Trends
 - Demand
 - Substitutability
- One- size- fits-all does not work
- Importance of
 - Market segmentation
 - Product differentiation

CONCLUDING REMARKS:

MARKETING STRATEGIES

- Need to find ways to differentiate your product
- And continue to add new “value” to it; markets change constantly
- Does “local” matter?
 - In some markets
 - May be a way to differentiate your product
 - However, you have to tell the story of why yours is better; not just assume that people will buy it because it's local

Bottomline: More Important Than Ever to Really Know Your Consumers

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Questions?