

## **MARKET POTENTIAL FOR TRIPLETAIL AQUACULTURE**

### **ABSTRACT**

This Newsletter attempts to develop an approach to assessing the market potential of marine species for aquaculture. The superior quality of Tripletail flesh, coupled with the lack of domestic commercial fisheries, stimulated interest in developing the aquaculture of this species. This Newsletter presents Tripletail's long-term commercial landings and dockside values in the United States and by major producing states.

### **KEYWORDS**

Market potential, Tripletail, Marine aquaculture.

### **SUGGESTED CITATION**

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**ATLANTIC TRIPLETAIL**  
**SCIENTIFIC NAME: LOBOTES SURINAMENSIS**

Source: <https://www.usm.edu/fisheries-research-development/tripletail-tag-release.php>.



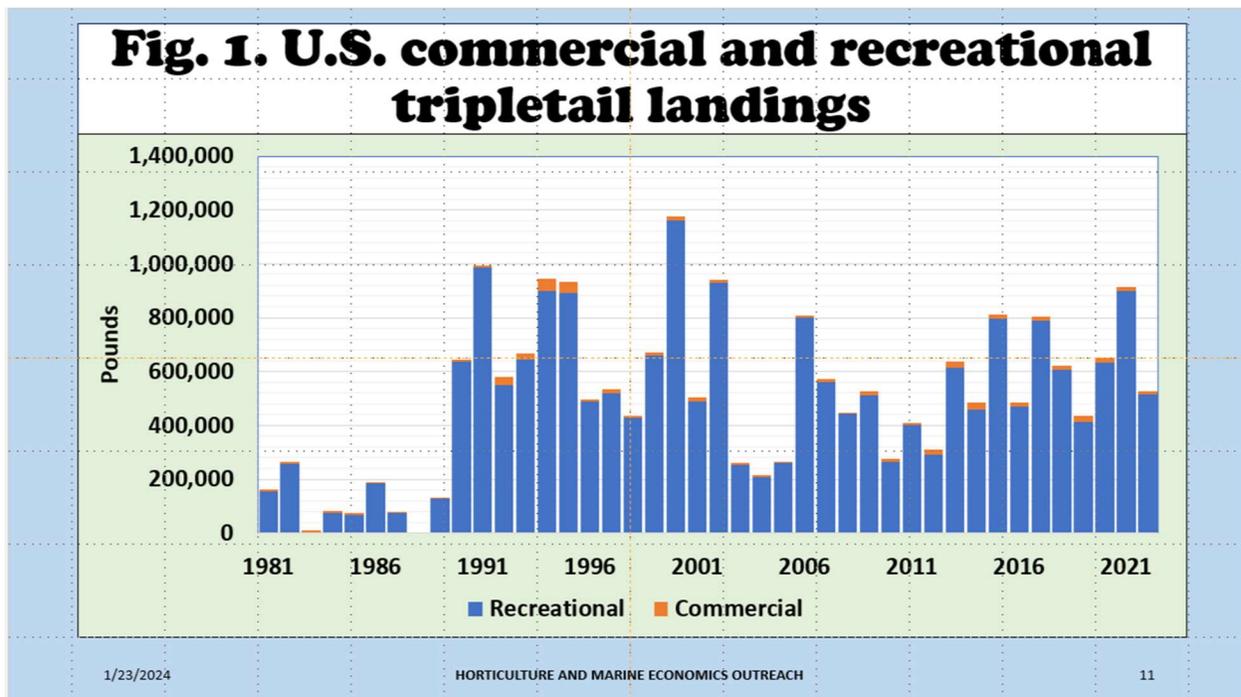
- Common names: Tripletail, blackfish, buoy fish, black perch, and many other local names throughout its worldwide distribution.
- The Atlantic Tripletail (Tripletail) is the only member of the family Lobotidae in the Atlantic Ocean and Gulf of Mexico.
- The common name Tripletail is derived from the appearance of the large and rounded soft dorsal fin and anal fin that extend far back on the body and closely resemble the tail in color and shape.
- The Atlantic Tripletail reaches a length of more than three feet and a weight of more than 40 pounds, though fish typically encountered by anglers weigh 2 to 10 pounds.
- Tripletails are found worldwide in most tropical and subtropical seas. In U.S. waters, they occur from Massachusetts south along the Atlantic coast and throughout the Gulf of Mexico.
- Tripletail are managed in each Gulf and South Atlantic state by specific catch/harvest regulations.
- In Mississippi waters, recreational and commercial limits for Tripletail are a minimum total length of 18" and 3 fish/person daily possession.

## LET US START OUR MODELING EFFORT!

- The commercial landings and dockside values of Tripletail in the United States since 1950 were compiled from the NOAA Fisheries website.
- Major producing states were identified, and shifts in landings were measured.
- Nominal dockside prices are in \$/lb. Dockside prices are imputed from commercial landings (lb/yr) and dockside values (\$/yr).
- Empirical commercial landings and dockside price models are developed, identifying significant determinants.

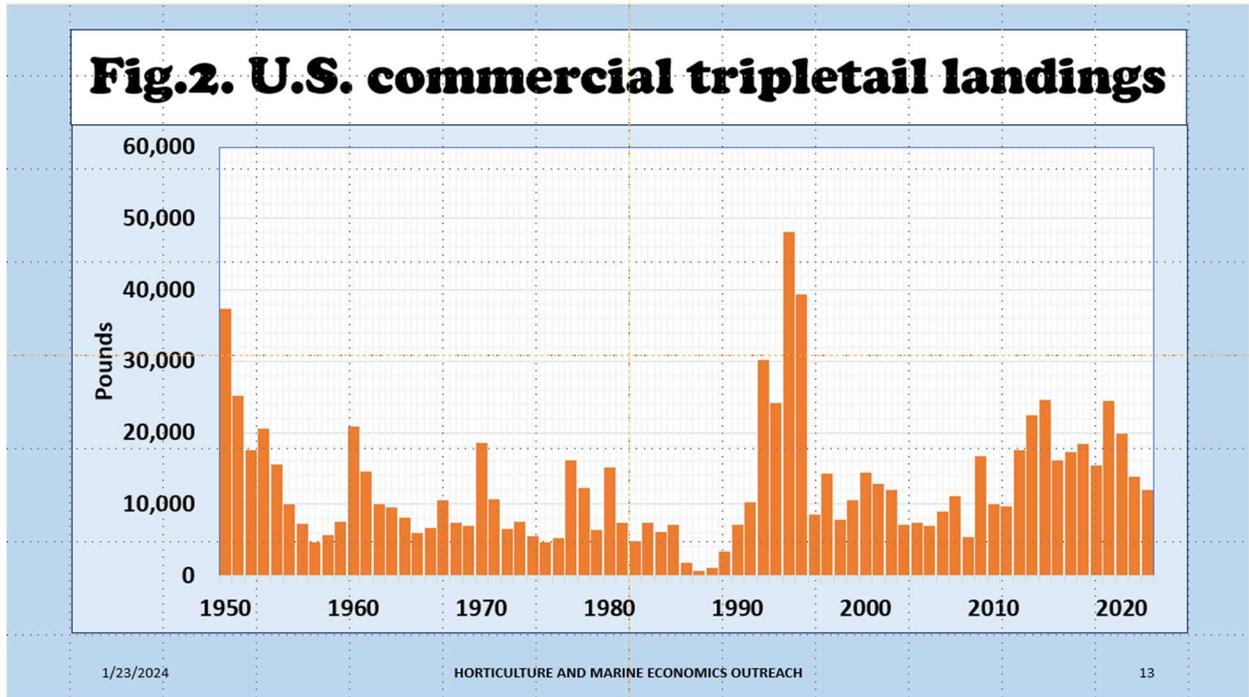
## U.S. COMMERCIAL AND RECREATIONAL TRIPLETAIL LANDINGS

- In Fig. 1. NOAA Fisheries data show commercial and recreational landings of tripletails in the U.S. since 1981.
- Combined landings peaked in 2000 at almost 1.2 million pounds.
- Recreational landings contributed to an average of 97% of total landings since 2000.



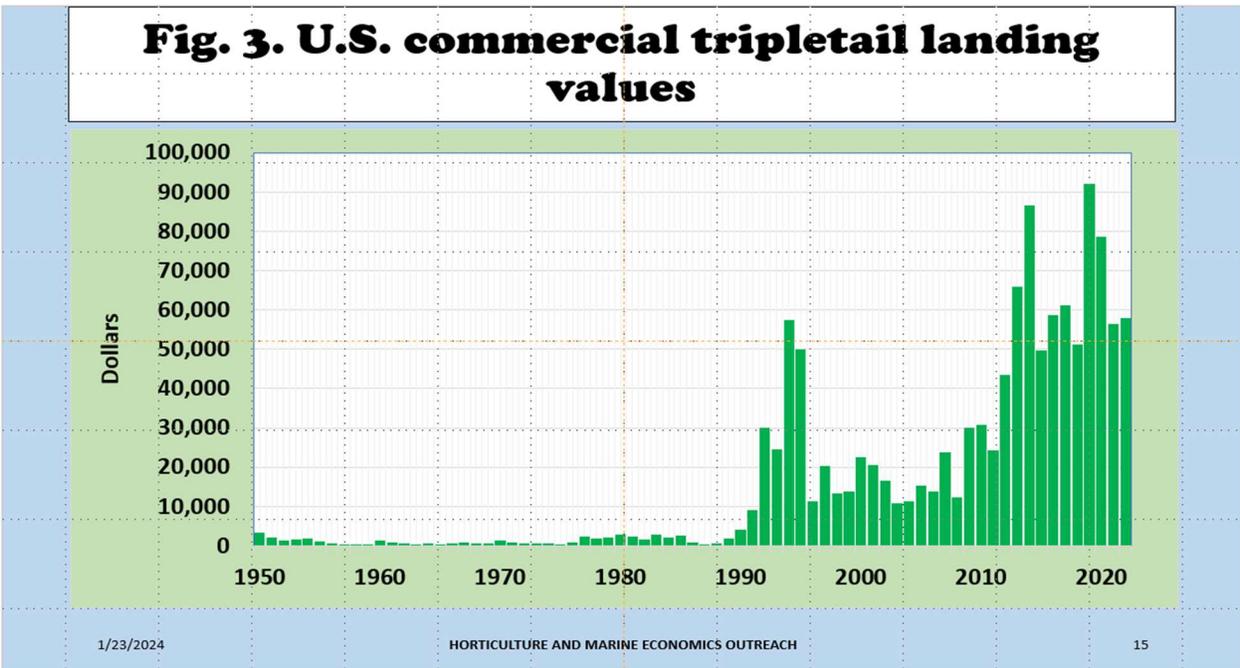
## U.S. COMMERCIAL TRIPLETAIL LANDINGS

- Fig. 2. shows NOAA Fisheries data on commercial landings of tripletails in the U.S. since 1950.
- Commercial landings peaked in 1994 at almost 50,000 pounds.
- Commercial landings contributed to an average of 3% of total landings since 2000.



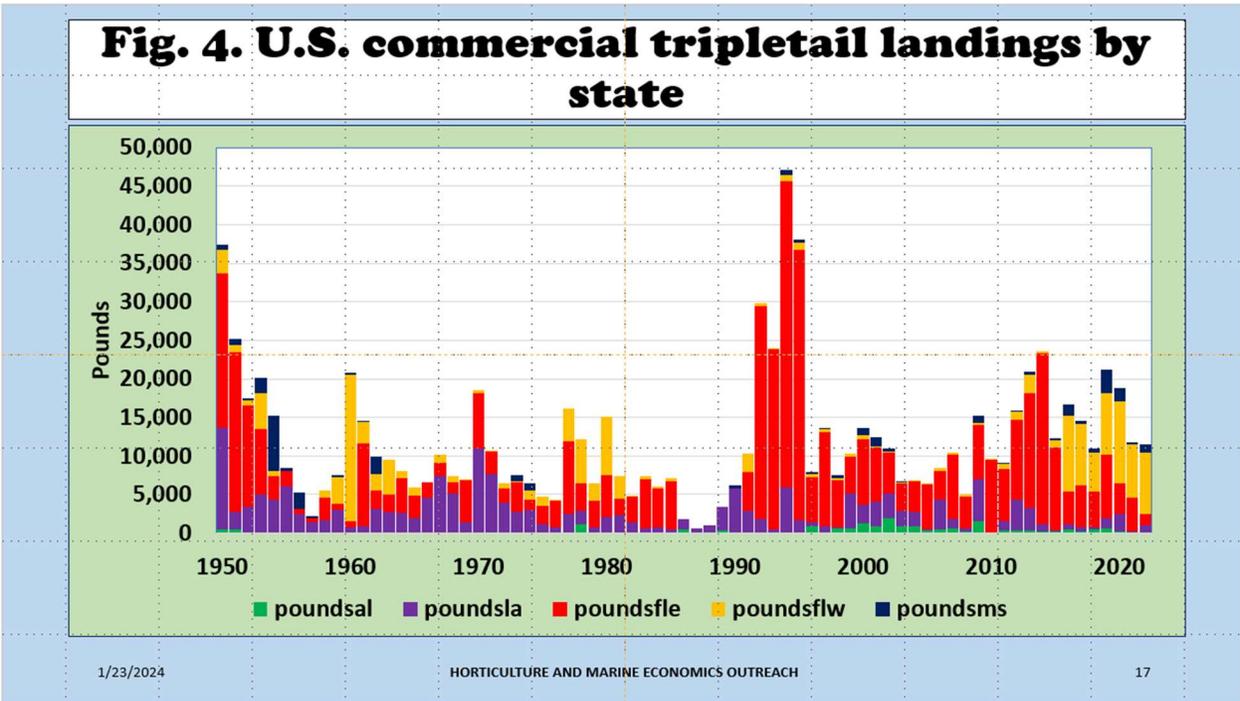
## U.S. COMMERCIAL TRIPLETAIL LANDING VALUES

- Fig. 3. shows NOAA Fisheries data on commercial landing values of tripletails in the U.S. since 1950.
- Commercial landing values peaked in 2019 at more than \$90,000.
- Commercial landing values have averaged more than \$64,000 since 2020.



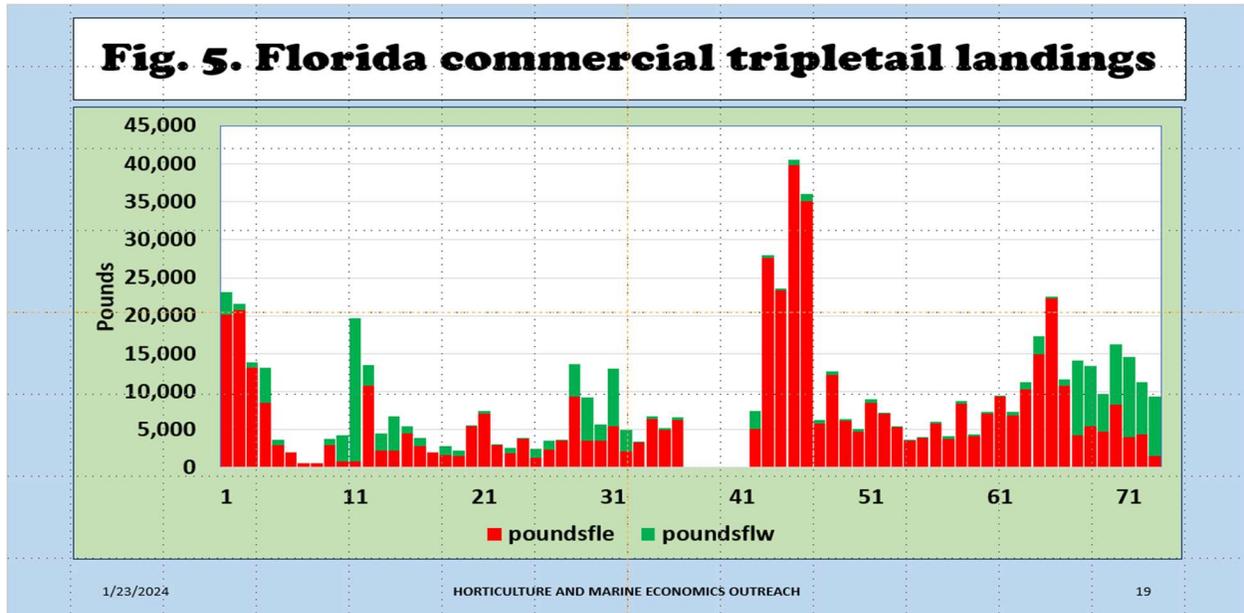
**U.S. COMMERCIAL TRIPLETAIL LANDINGS BY STATE**

- The major producing states are Florida East Coast, Florida West Coast, Louisiana, Alabama, and Mississippi, as Fig. 4 shows.



## FLORIDA COMMERCIAL TRIPLETAIL LANDINGS

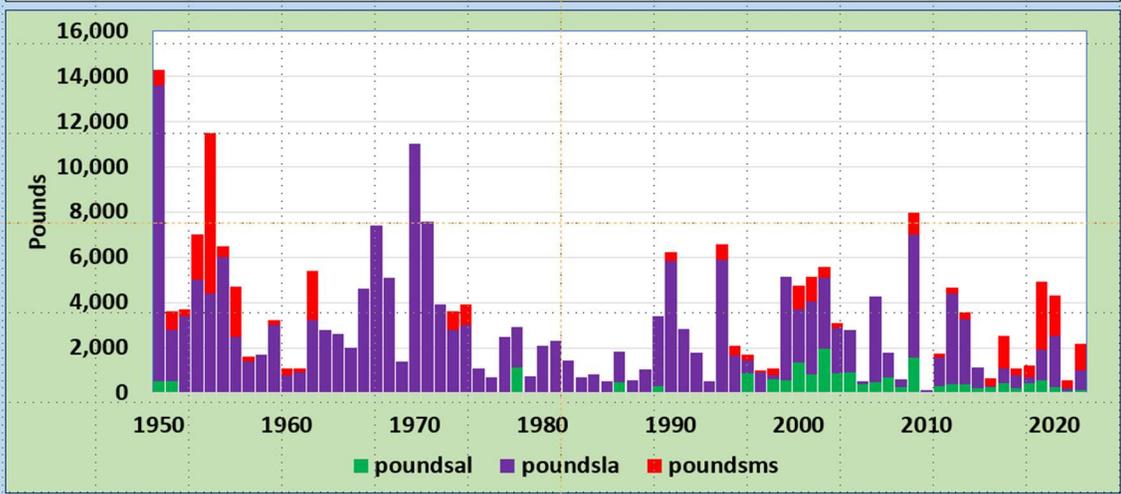
- As Fig. 5 shows, the Florida East Coast produced almost 10,000 lb/yr from 2010 to 2019. Its share of total U.S. landings fell from 55% in 2010-19 to 22% in 2020-22.
- Florida West Coast landed more than 8,000 lb/yr in 2020-22. Its share of total U.S. landings rose from 20% in 2010-19 to 56% in 2020-22.



## U.S. COMMERCIAL TRIPLETAIL LANDINGS IN NORTHERN GULF OF MEXICO REGION

- As Fig. 6 shows, Louisiana produced over 1,200 lb/yr in 2010-2019. Its share of total U.S. landings remained at 7% since 2010.
- Alabama's share of total U.S. landings fell from 2% in 2010-19 to 1% in 2020-22.
- Mississippi's share of total U.S. landings rose from 4% in 2010-19 to 7% in 2020-22.

**Fig. 6. U.S. commercial tripletail landings in Northern Gulf of Mexico region**



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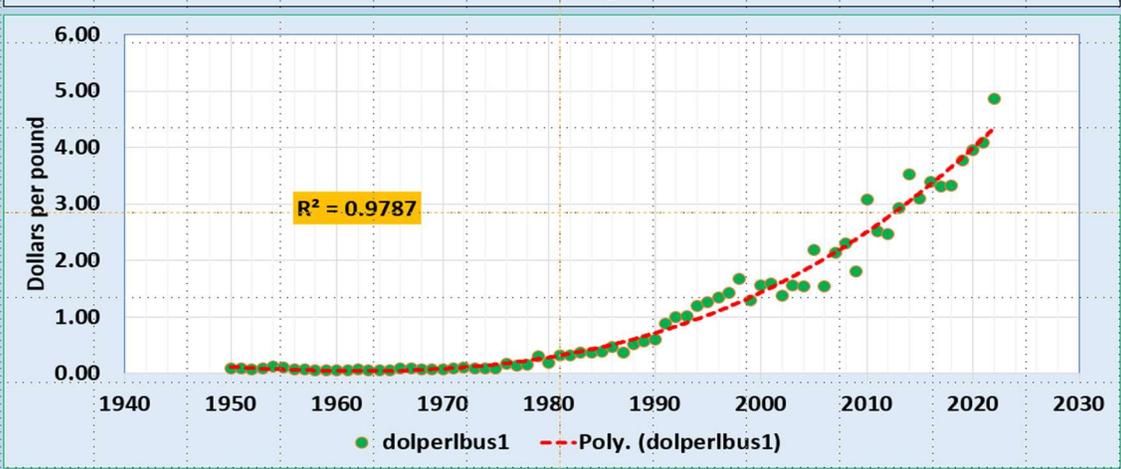
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**IMPUTED U.S. COMMERCIAL TRIPLETAIL DOCKSIDE PRICES**

- The imputed dockside prices in the U.S. are shown in Fig. 7.
- U.S. dockside prices continued to rise and peaked in 2022 at \$4.86 per pound.

**Fig. 7. Imputed U.S. commercial tripletail dockside prices**



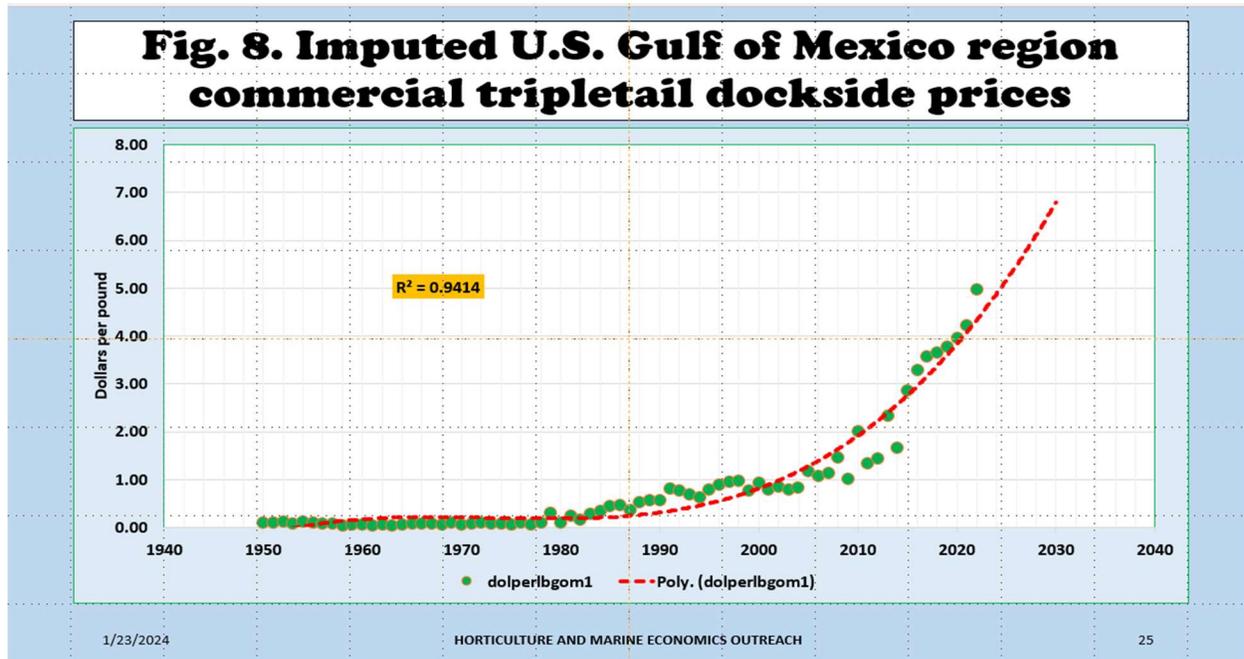
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## IMPUTED GULF OF MEXICO COMMERCIAL TRIPLETAIL DOCKSIDE PRICES

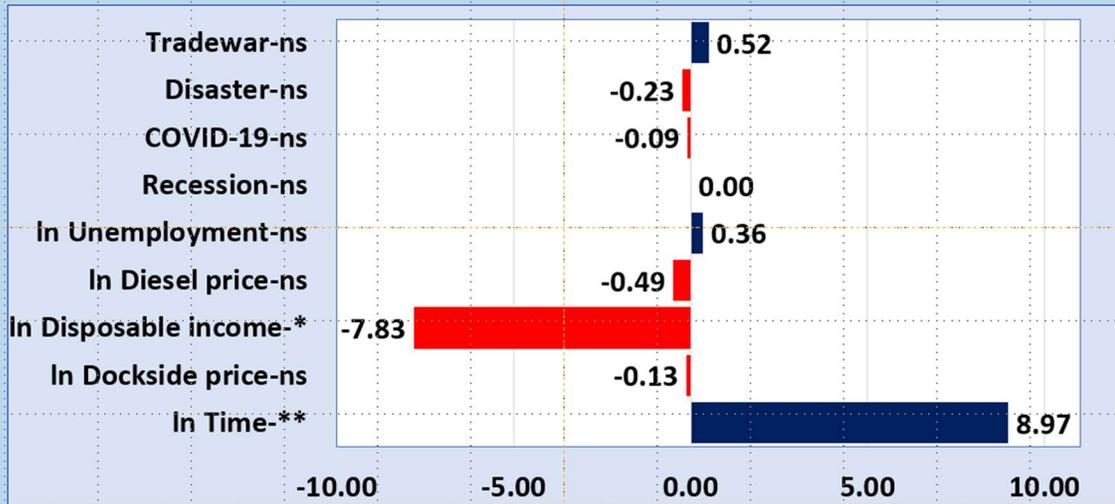
- The imputed dockside prices in the U.S. Gulf of Mexico region are shown in Fig. 8.
- U.S. Gulf of Mexico region dockside prices continued to rise and peaked in 2022 at \$4.98 per pound.



## MARGINAL EFFECTS ON U.S. TRIPLETAIL COMMERCIAL LANDINGS

- Fig. 9 summarizes the double-log regression results, with the natural logarithm of U.S. commercial tripletail landings as the dependent variable.
- The addition of diesel prices reduced the number of observations to 28 covering the years from 1995 to 2022.
- Only two variables were statistically significant. First, U.S. commercial landings significantly grew by 8.97 percent yearly over time.
- Second, U.S. commercial landings significantly fall by 7.83 percent when real per capita disposable income rises by one percent.
- U.S. commercial landings tend to decline during disasters, the COVID-19 pandemic, and higher diesel prices.
- Dockside prices tend to fall when U.S. commercial landings increase.

**Fig. 9. Marginal effects on U.S. commercial landings of tripletail**



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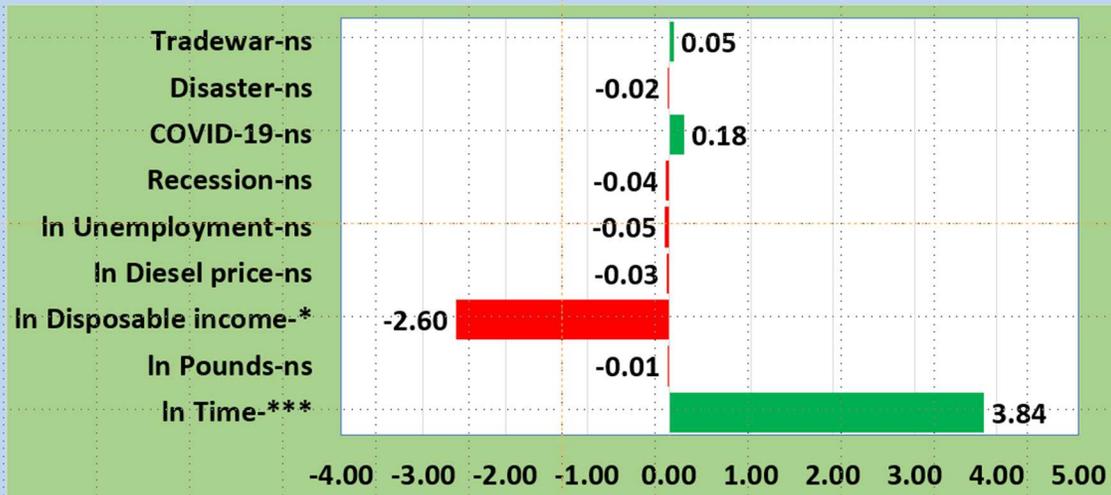
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### MARGINAL EFFECTS ON IMPUTED DOCKSIDE PRICES OF U.S. TRIPLETAIL COMMERCIAL LANDINGS

- Fig. 10 summarizes the double-log regression results, with the natural logarithm of the real imputed dockside prices of U.S. commercial triple landings as the dependent variable.
- The addition of diesel prices reduced the number of observations to 28 covering the years from 1995 to 2022.
- Only two variables were statistically significant. First, the imputed real dockside prices of U.S. commercial tripletail landings significantly grew by 3.84 percent yearly over time.
- Second, the imputed real dockside prices of U.S. commercial tripletail landings significantly fall by 2.6 percent when real per capita disposable income rises by one percent.
- The imputed real dockside prices of U.S. commercial tripletail landings tend to decline during disasters, recessions, lower unemployment, and higher diesel prices.
- Dockside prices tend to fall when U.S. commercial landings increase.

**Fig. 10. Marginal effects on imputed dockside prices of U.S. tripletail commercial landings**



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## SUMMARY, LIMITATIONS, AND IMPLICATIONS

- U.S. tripletail commercial landings remained below 20,000 pounds per year in most years since 1950 and added very limited amounts compared to recreational landings.
- There were observable shifts in the production areas in the South Atlantic to the Gulf of Mexico side of Florida.
- The imputed real dockside prices of U.S. commercial landings of tripletail rose by an average of 3.84 percent per year.
- The imputed real dockside prices tend to fall as the U.S. commercial landings of tripletail increase.
- The imputed real dockside prices of U.S. commercial tripletail landings significantly fall by 2.6 percent when real per capita disposable income rises by one percent.
- The imputed real dockside prices of U.S. commercial tripletail landings tend to decline during disasters, recessions, lower unemployment, and higher diesel prices.