Catch Shares and Shoreside Processors: An Exploration into the Impacts of IFQs on the Downstream Sector

Marie Guldin
Economist, NWFSC
PhD Candidate, Economics, University of Washington

Photos: EDC Program
Processing Sector

• Understudied sector
  • Data is sparse
• Directly and indirectly affected by fisheries management decisions
• Stakeholders who participate in the management process, and are considered during construction of policies
• Important to gain better understanding of the sector in general, and the impacts of management policies on the sector
Unique Opportunity to Contribute

• EDC data
  • Mandatory for all first receivers and shorebased processors that participate in the catch share program
  • Detailed information on production costs, capital investments, product choices, employment decisions, etc.
• West Coast Groundfish Trawl Catch Share Program
  • 20% of Pacific whiting harvesting quota was initially allocated to eligible shorebased processors
Research Projects In Progress

• Catch Shares and Shorebased Processors: A Costs and Earnings Exploration into the Downstream Sector
  • Marie Guldin, Chris Anderson (UW, SAFS)

• Allocating Harvesting Quota to Processors in Individual Fishing Quota Programs: An Analysis of the Shoreside Pacific Whiting Fishery
  • Marie Guldin, Chris Anderson (UW, SAFS)
Catch Shares and Shorebased Processors: A Costs and Earnings Exploration into the Downstream Sector

- Shoreside Pacific whiting processors
- Compare predicted outcomes to observed changes
- Unable to conduct a formal impact analysis
- Present economically-informed descriptions of observed changes and, where possible, support empirical findings with qualitative and narrative interpretations from industry
Season Lengthening

Pacific Whiting Purchases (millions of lbs)

MONTH

Period
- Pre-IFQ
- Under IFQ

* Do Not Cite
Predictions

• Final Environmental Impact Statement
  • Consolidation
    • IFQ Program “is expected to result in decline in processing demand,” which could lead to consolidation
  • Raw fish costs & costs of production
    • “Even though processors may have to pay fishermen higher ex-vessel prices, processors may see cost savings… to the degree that rationalization allows… processors and fishermen greater ability to plan the timing, location, and species mix of landings.”
  • Some effects may be mitigated by allocation of quota to processors.
Observed Changes

• Consolidation
  • Decrease in number of Pacific whiting buyers
  • Exiters comprised about 5-10% of market share

• Ex-vessel prices
  • Higher ex-vessel price under IFQ program

• Costs of production
  • Expenses on labor and utilities per processed pound
  • No strong evidence of efficiency gains
Pacific whiting ex-vessel prices

- Predictions in Final Environmental Impact Statement:
  - Ex-vessel prices could rise under IFQs if the longer season allows “new and additional products in the market, and allow specialized niche markets to develop.”
  - Season lengthening and IFQs could also lead to shifts in bargaining power in the ex-vessel market.
Whiting Product Choices

The chart shows the percentage of processors choosing different types of products for whiting over the years 2010 to 2014. The products are categorized as Fillet or Frozen whole, Other, and Headed-and-gutted. The chart indicates a consistent trend in the choice of products over the years.
Allocating Harvesting Quota to Processors in Individual Fishing Quota Programs: An Analysis of the Shoreside Pacific Whiting Fishery

• Build theoretical & empirical models to explore how processors are using their quota and what the impacts are of this decision to allocate harvesting quota to the processing sector.
Using Processor Quota

- In order for processor-allocated quota to be fished, must be transferred to a vessel
- Do processors sell quota to vessels?
  - In quota market?
  - In ex-vessel market?
“I have a quota… I tell them you bring your fish to me and I will match your deliveries by 20%… I am going to transfer it to your boat… I am going to let you catch it and I am going to pay fair market value for it.”

(Pacific whiting Processor)
How much quota are processors giving to vessels?

Kernel density estimate

Quota as Percent of Landings

* Do Not Cite
Moving Forward

• Production of non-whiting groundfish
  • Supply-chain impacts of rationalization for non-whiting groundfish
  • Implications of giving processors non-whiting quota set aside in Adaptive Management Program
• Project on Community Quota Funds with Aaron Mamula & Rosemary Kosaka (SWFSC)
  • Community-level socio-cultural & economic implications of distributing quota to CQFs vs. processors

* Do Not Cite