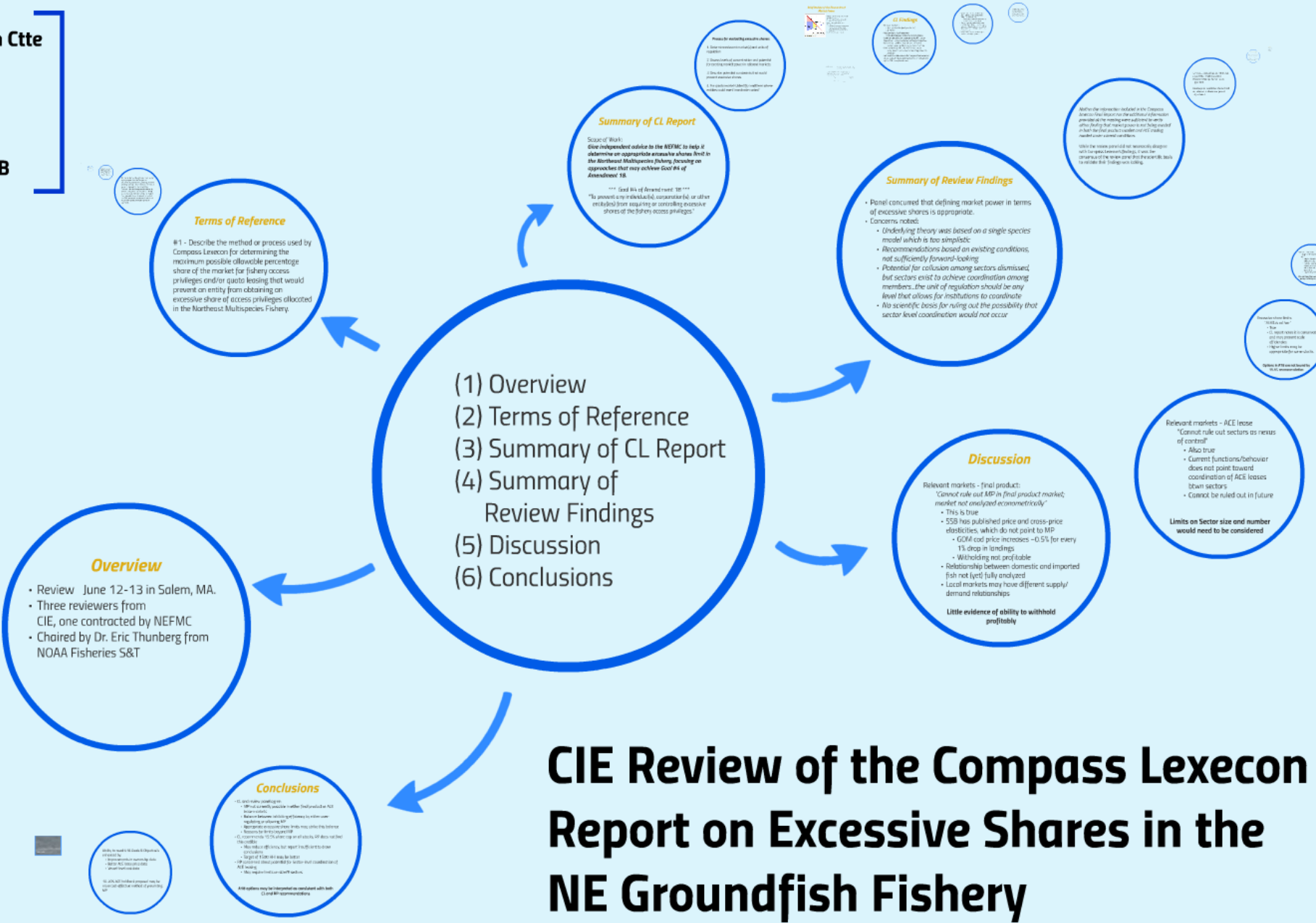





NEFMC Groundfish Ctte  
August 4, 2014

Chad Demarest  
Economist  
NOAA | NEFSC | SSB



# CIE Review of the Compass Lexecon Report on Excessive Shares in the NE Groundfish Fishery



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- (1) Overview
  - (2) Terms of Reference
  - (3) Summary of CL Report
  - (4) Summary of  
Review Findings
  - (5) Discussion
  - (6) Conclusions

## *Overview*

- Review June 12-13 in Salem, MA.
- Three reviewers from CIE, one contracted by NEFMC
- Chaired by Dr. Eric Thunberg from NOAA Fisheries S&T



- **Dr. Trond Bjorndal**, *SNF Centre for Applied Research at NGG, Bergen, Norway*
- **Dr. Jamie Brown Kruse**, *Director, Center for Natural Hazards Research, East Carolina University*
- **Dr. Andrew Schmitz**, *Department of Food and Resource Economics, University of Florida*
- **Dr. Quinn Weninger**, *Department of Economics, Iowa State University*

#2 - Evaluate the strengths and weaknesses of the proposed method or process developed by Compass Lexecon (e.g., whether defining excessive shares in terms of market power is appropriate and adequate). Evaluate whether the approach outlined by Compass Lexecon is reasonable for setting excessive share limits in fisheries managed through catch shares in general. As part of this TOR, comment on any constraints that may hinder application of the proposed approach.

## *Terms of Reference*

#1 - Describe the method or process used by Compass Lexecon for determining the maximum possible allowable percentage share of the market for fishery access privileges and/or quota leasing that would prevent an entity from obtaining an excessive share of access privileges allocated in the Northeast Multispecies Fishery.

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#3 - Evaluate application of the proposed methods or process to the Northeast Multispecies Fishery. Are Compass Lexecon's conclusions regarding market power in both the final product (seafood) and production (quota) market valid and based on appropriate economic principles? If there is disagreement with what Compass Lexecon recommended, clearly state that and your reason why.



#4 - Review and comment on the data requirements necessary for applying the proposed methods or process.

#5 - Provide any  
recommendations for  
further improvement.

## *Summary of CL Report*

Scope of Work:

***Give independent advice to the NEFMC to help it determine an appropriate excessive shares limit in the Northeast Multispecies fishery, focusing on approaches that may achieve Goal #4 of Amendment 18.***

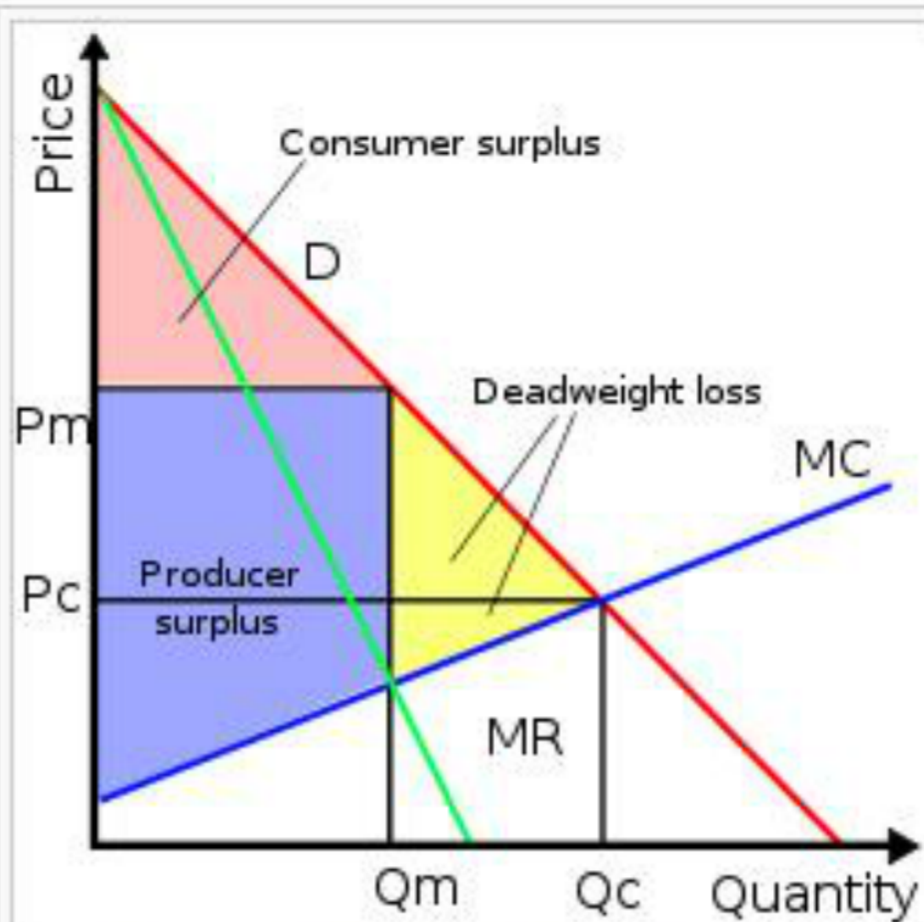
\*\*\* Goal #4 of Amendment 18 \*\*\*

"To prevent any individual(s), corporation(s), or other entity(ies) from acquiring or controlling excessive shares of the fishery access privileges."

## **Process for evaluating excessive shares:**

1. Determine relevant market(s) and units of regulation
2. Assess levels of concentration and potential for exerting market power in relevant markets
3. Describe potential constraints that could prevent excessive shares
4. For quota markets, identify conditions where entities could exert 'inordinate control'

# Brief Review of the Economics of Market Power



Surpluses and deadweight loss created by monopoly price setting

- Monopolist restricts supply to maximize producer benefits
- This can reduce welfare by shrinking total benefits from market
- Would only want to do this when benefits > costs:
  - *when a 1% reduction in supply leads to a greater-than-1% increase in price, there may be an incentive to withhold.*
- We have math to figure this out.

Limits on market share (holdings) impede efficiency by preventing efficient suppliers from acquiring harvesting privileges that, in a competitive market, they would naturally acquire.

## Failure to limit market share (holdings) may impede efficiency by, essentially, allowing suppliers to benefit at a cost to consumers.

When market power is possible, the relevant market is non-competitive. In non-competitive markets there may be incentives to act strategically.

*(Note that in competitive markets strategic behavior is irrelevant—it is overwhelmed by the actions of many consumers and producers).*

Interestingly, fisheries are non-competitive markets by definition—the ability to exhaust the resource means that, particularly in well-managed fisheries, supply (catch) is constrained by factors other than production costs and consumption benefits.

Of course, there are many 'externalities' that must be considered also if we aim to maximize welfare from fishery markets.

Externalities like...

- depletion
- habitat effects
- bycatch
- provision of jobs
- cultural heritage
- health benefits of the food provided (relative to other foods)
- etc...

...would ideally all be included in an investigation of the effects of market power on a fishery.

*(As would the joint production effects of multi-species fisheries on technology, avoidance, costs, prices, etc...)*

Collectively, these may provide a rationale for holdings limits beyond or in addition to those imposed merely to prohibit excessive shares.

All markets exist in varying states of non-competitiveness.

In general, more competition is better for consumers and less is better for producers.

Economies of scale may allow relatively fewer producers to reduce costs in ways that actually benefit consumers.

Unless they become so few that they can behave strategically...

Holdings caps are tricky business!

# CL Findings

- Relevant markets:
  - final product (seafood production)
  - ACE lease
- Appropriate units of regulation:
  - Individual owners and/or ownership groups
- Levels of concentration assessed using HHI, as per Department of Justice Horizontal Merger Guidelines
- No evidence of MP in the final product market  
*market power unlikely to emerge in the future*
- Little evidence of MP in the ACE lease market  
*many quotas not binding, withholding cannot be ruled out*
- Set excessive-share cap so that no permit owner owns or controls permits conferring more than 15.5 percent of the PSC for any/each stock

- No need for an excessive-share cap on sector-affiliated ACE separate from individual owner PSC cap
  - Sectors are not the relevant nexus of control of how ACE is utilized.*
- If sectors were to develop institutional structures that allowed them to exercise control over how vessel operators utilized ACE, it would be necessary to re-examine this conclusion.
- No need for an excessive-share cap on landings or directly on permits.



*'The evidence does not support a conclusion that market power is currently being exercised in the fishery. In particular, market power is not being exercised through the withholding of ACE in any part of the groundfish fishery.'*

## *Summary of Review Findings*

- Panel concurred that defining market power in terms of excessive shares is appropriate.
- Concerns noted:
  - *Underlying theory was based on a single species model which is too simplistic*
  - *Recommendations based on existing conditions, not sufficiently forward-looking*
  - *Potential for collusion among sectors dismissed, but sectors exist to achieve coordination among members...the unit of regulation should be any level that allows for institutions to coordinate*
  - *No scientific basis for ruling out the possibility that sector level coordination would not occur*

of an HHI of 15  
Horizontal Merger  
upper limit.

Review panel n  
considers and c  
higher levels

*Neither the information included in the Compass Lexecon Final Report nor the additional information provided at the meeting were sufficient to verify either finding that market power is not being exerted in both the final product market and ACE trading market under current conditions.*

While the review panel did not necessarily disagree with Compass Lexecon's findings, it was the consensus of the review panel that the scientific basis to validate their findings was lacking.

Compass Lexecon backed 15.5% out of an HHI of 1500 from DOJ Horizontal Merger Guidelines as upper limit.

Review panel noted that the DOJ still considers and allows mergers at higher levels

## ***Individual reviewer comments***

*'If market power were to be exercised in this market, it would have to be at the sector level'*

*'The conclusion must be that this industry is competitive in both output and input markets. For this reason, at present I see no need to introduce an excessive-share cap'*

*'If maintaining small operators is implied by the diversity goal (A18 Goal #4), setting restrictive share limits may come at the expense of industry profitability'*

*' CL do not address specialized local final product markets'*

*'Market power may be estimated econometrically, and on a stock-by-stock basis, but was not'*

*'Most importantly, the conditions under which an agent can exercise market power in PSC and ACE markets are not well understood'*

## *Recommendations*

- Absent a new data collection requirement, equal share among all affiliated persons may be used as a default, noting that setting limits at the person level would complicate the use of the HHI as a means for setting a share limit
- The fishery may benefit from:
  - creation of an ownership registry to include transactions and prices
  - further cost and earnings studies at the vessel and sector level
  - closer monitoring of quota prices
    - *if near zero and ACL is not exceeded then evidence of a competitive market whereas under same conditions an increase in quota prices may be reason for concern*

# Discussion

Relevant markets - final product:

*'Cannot rule out MP in final product market; market not analyzed econometrically'*

- This is true
- SSB has published price and cross-price elasticities, which do not point to MP
  - GOM cod price increases ~0.5% for every 1% drop in landings
  - Withholding not profitable
- Relationship between domestic and imported fish not (yet) fully analyzed
- Local markets may have different supply/demand relationships

**Little evidence of ability to withhold profitably**

Relevant markets - ACE lease

"Cannot rule out sectors as nexus of control"

- Also true
- Current functions/behavior does not point toward coordination of ACE leases btwn sectors
- Cannot be ruled out in future

**Limits on Sector size and number would need to be considered**



## Excessive share limits

*'15.5% is ad hoc'*

- True
- CL report notes it is conservative and may prevent scale efficiencies
- Higher limits may be appropriate for some stocks

**Options in A18 are not bound by  
15.5% recommendation**

## Excessive share limits

"Target an HHI of 1500 vice 15.5% caps"

- May be difficult to reconcile with ownership data
- Requires monitoring and subsequent Council action when threshold condition approached
- Less likely to inhibit efficiency

**Ctte could consider monitoring HHI, perhaps in FW/specs packages**

# *Conclusions*

- CL and review panel agree:
  - MP not currently possible in either final product or ACE lease markets
  - Balance between inhibiting efficiency by either over-regulating or allowing MP
  - Appropriate excessive share limits may strike this balance
  - Reasons for limits beyond MP
- CL recommends 15.5% share cap on all stocks, RP does not find this credible
  - May reduce efficiency, but report insufficient to draw conclusions
  - Target of 1500 HHI may be better
- RP concerned about potential for Sector-level coordination of ACE leasing
  - May require limits on size/# sectors

**A18 options may be interpreted as consistent with both  
CL and RP recommendations**

Ability to meet A18 Goals & Objective's enhanced by:

- Improvements in ownership data
- Better ACE lease price data
- Vessel-level cost data

10-20% ACE holdback proposal may be more cost-effective method of preventing MP



QUESTIONS?



