Stock Status and Recent Consumption Trends of Major Groundfish Species

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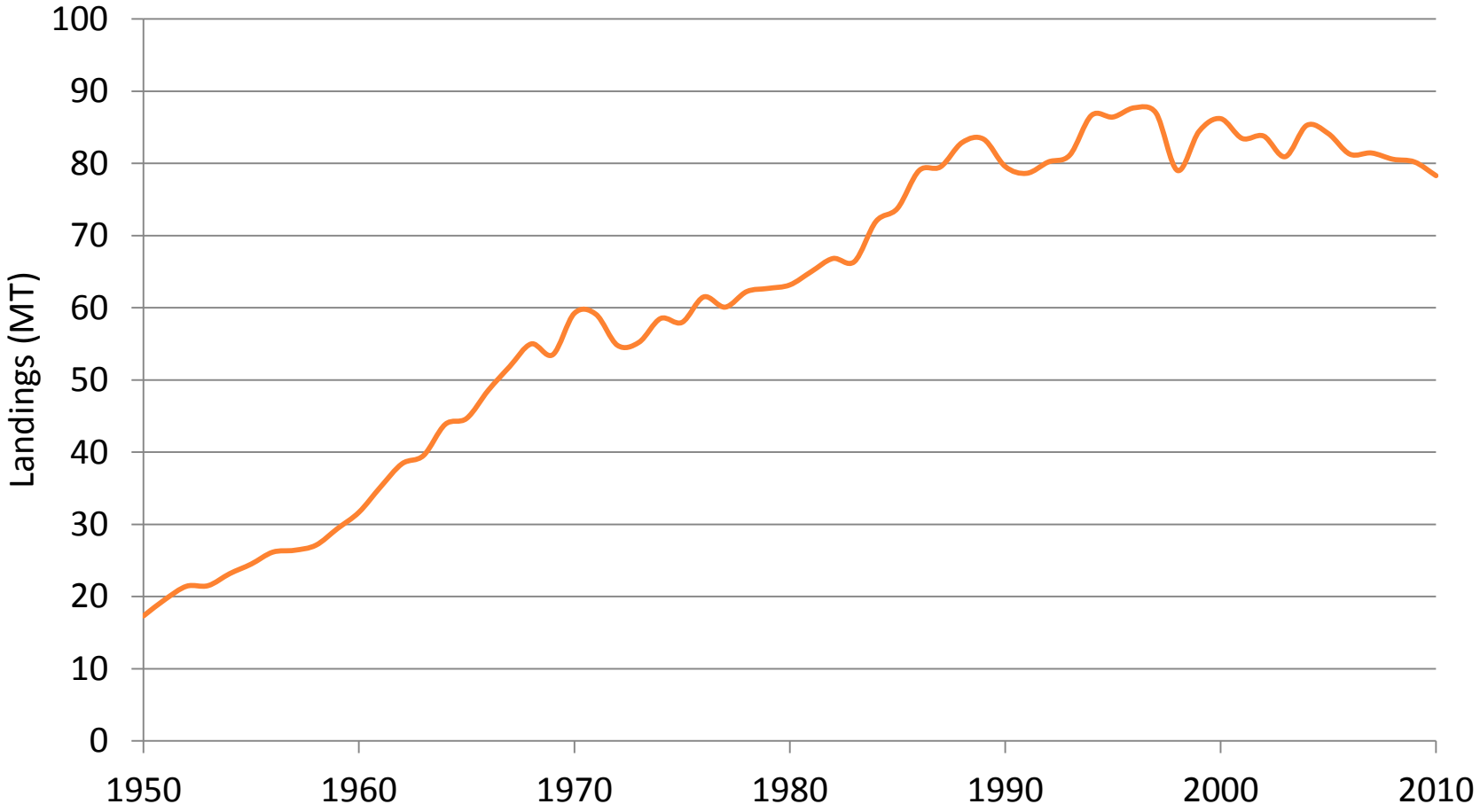
Grand Hótel Reykjavík 8.-9. nóvember 2012.

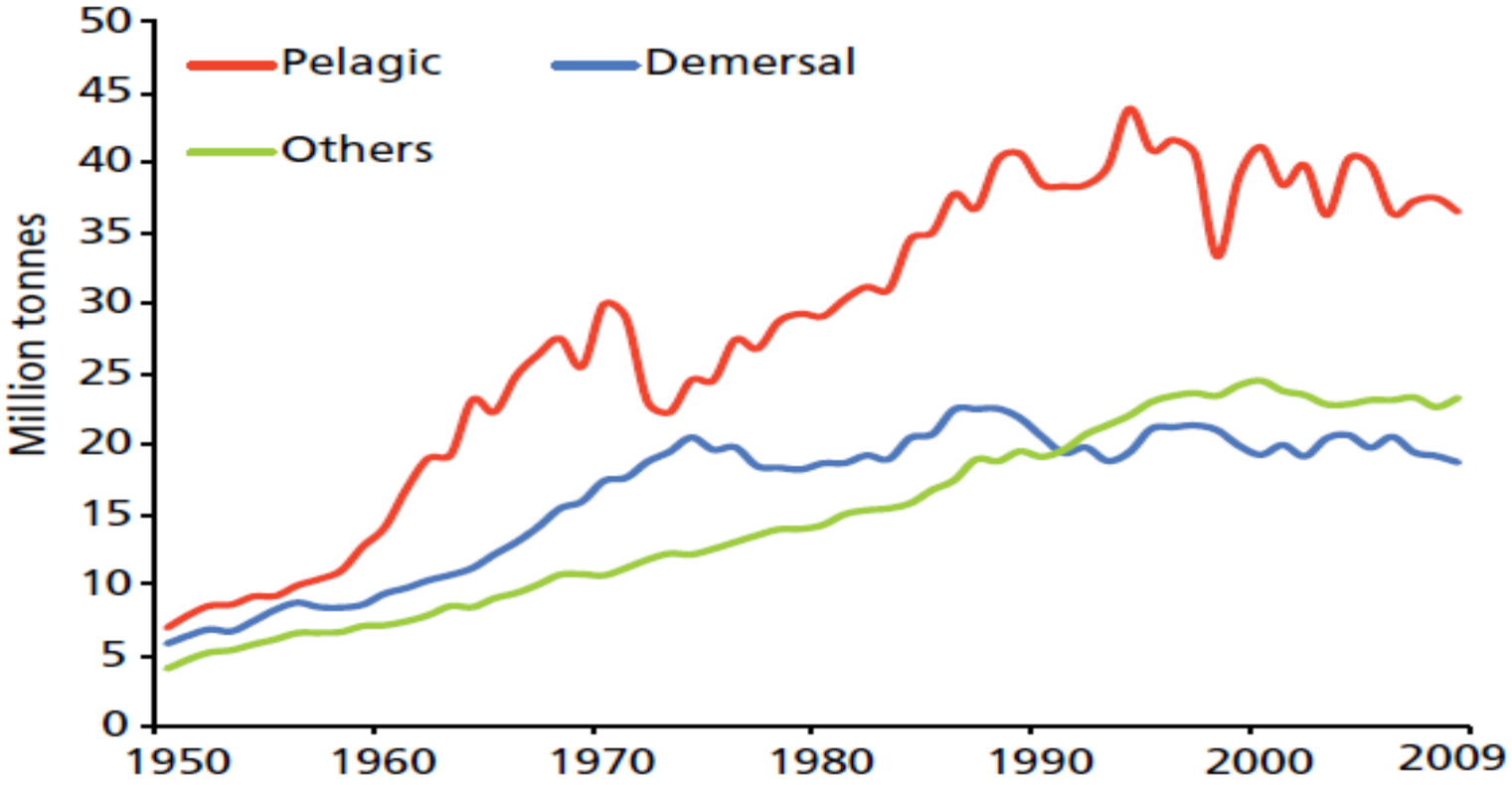
Outline

- Overview of the state of the world marine fishery resources
- Landings and stock status of groundfish
- Predicted changes in groundfish landings from 2009-2012
- Potential reasons behind the increase in landings

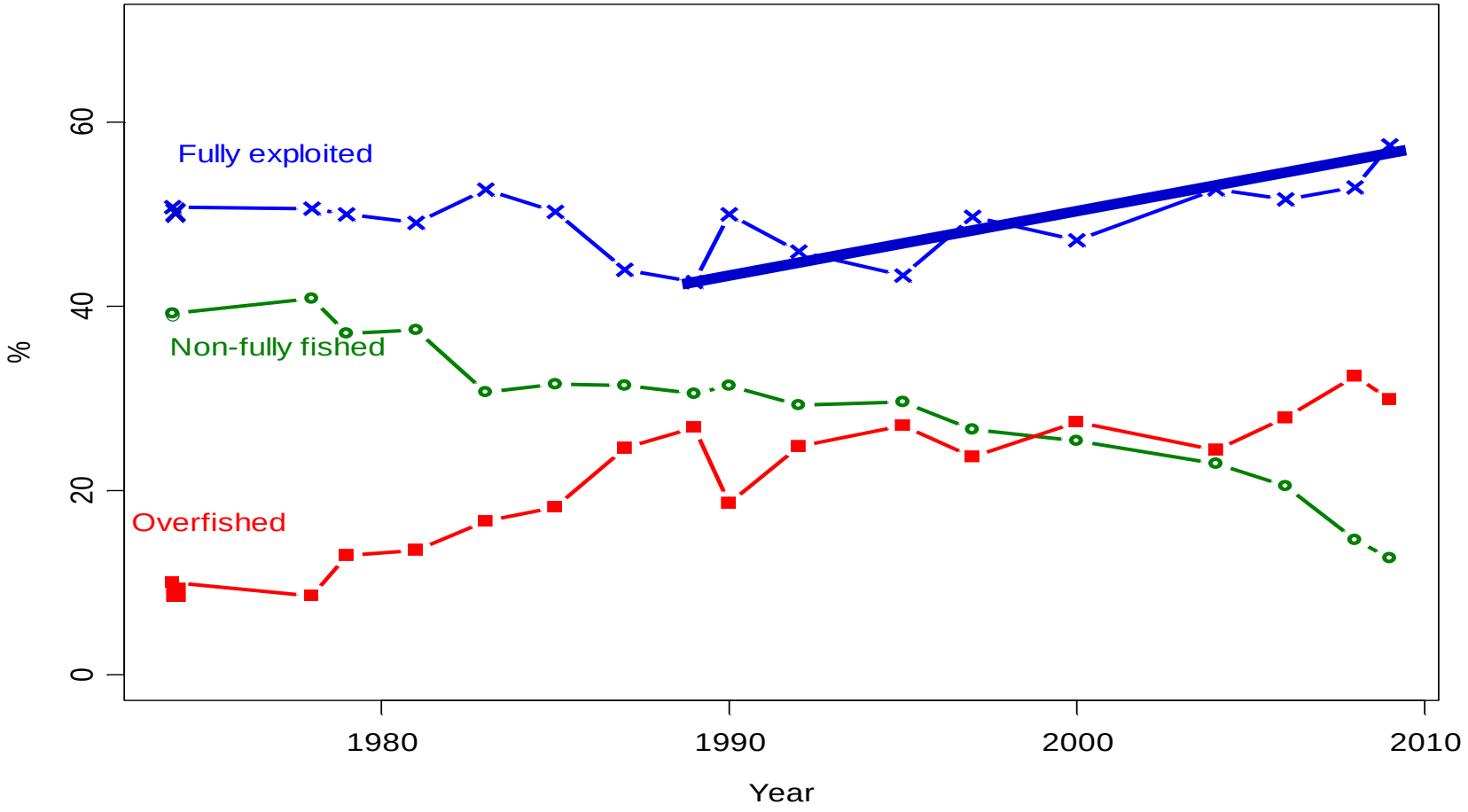
Landings of Global Marine Fish



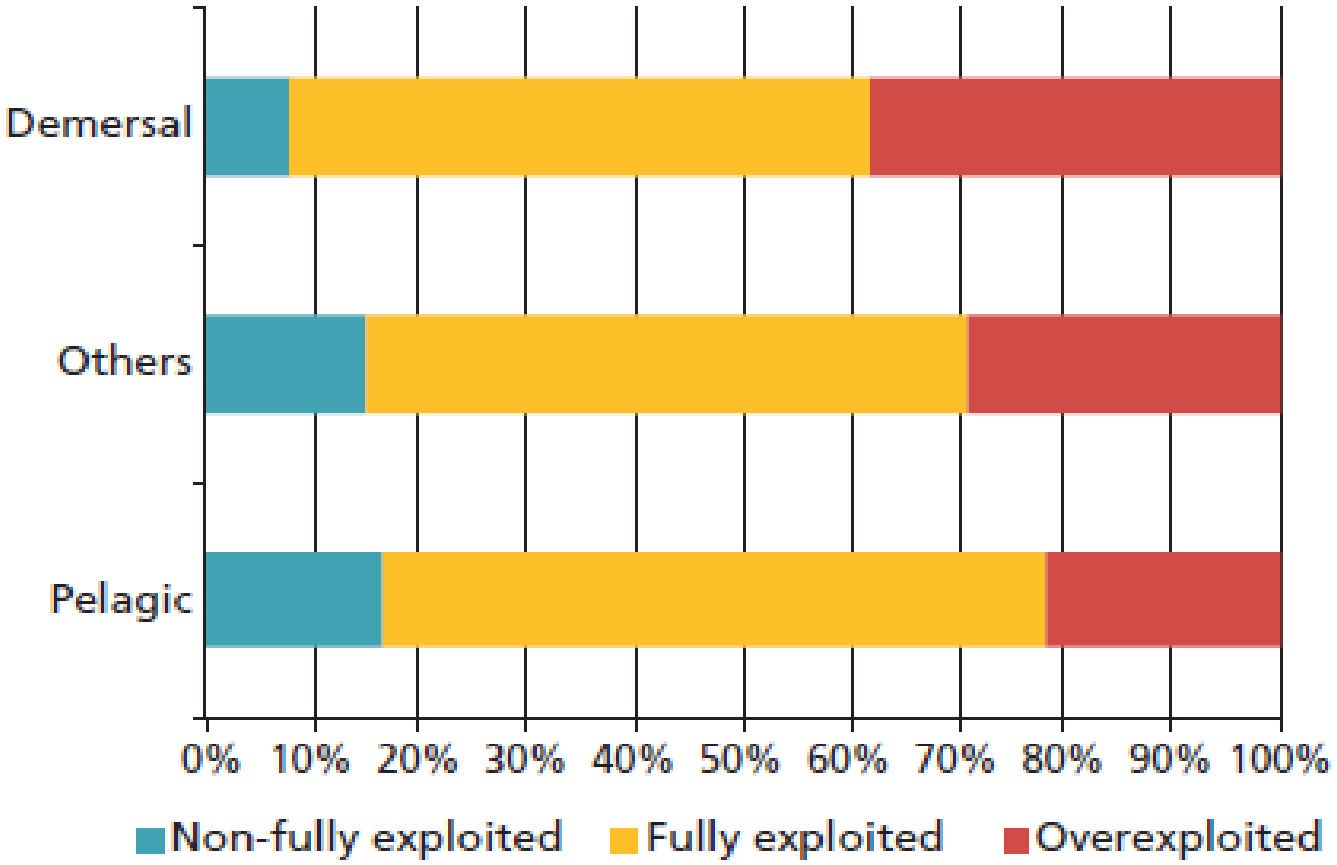
Development Tracks of the Three Groups



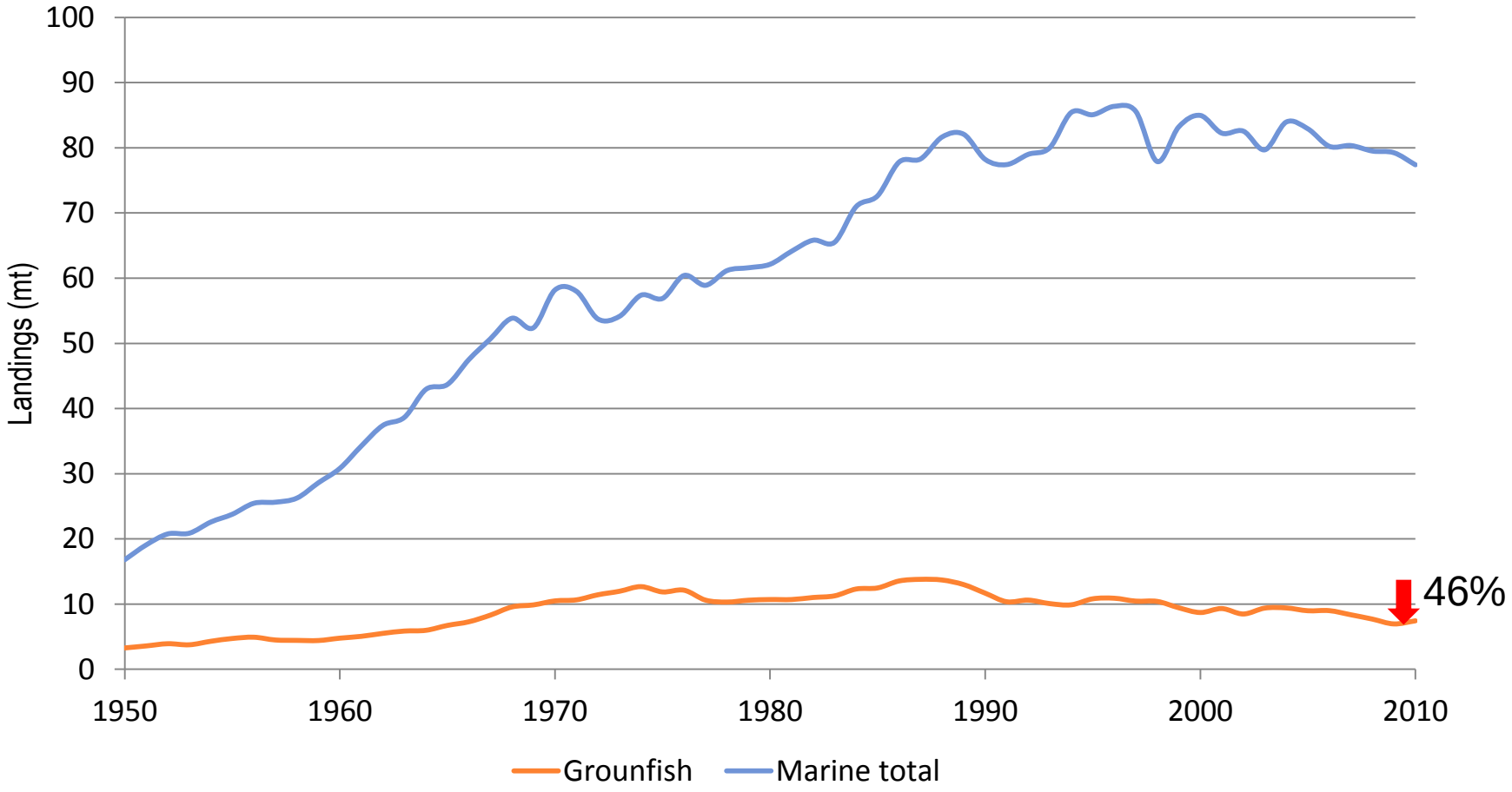
Stock Status of Global Marine Fish Resources



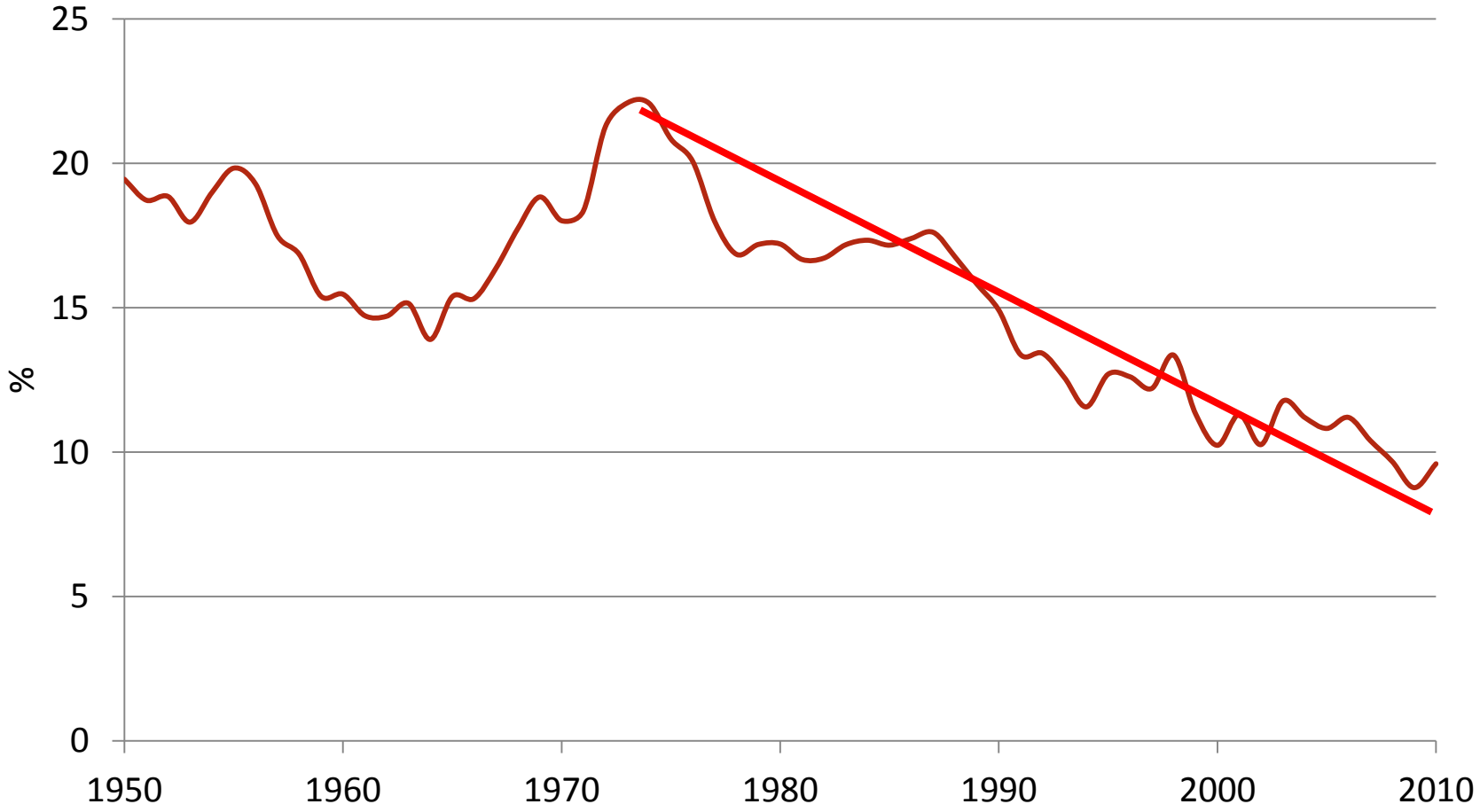
% of Fish Stocks in Different Status by Groups in 2009



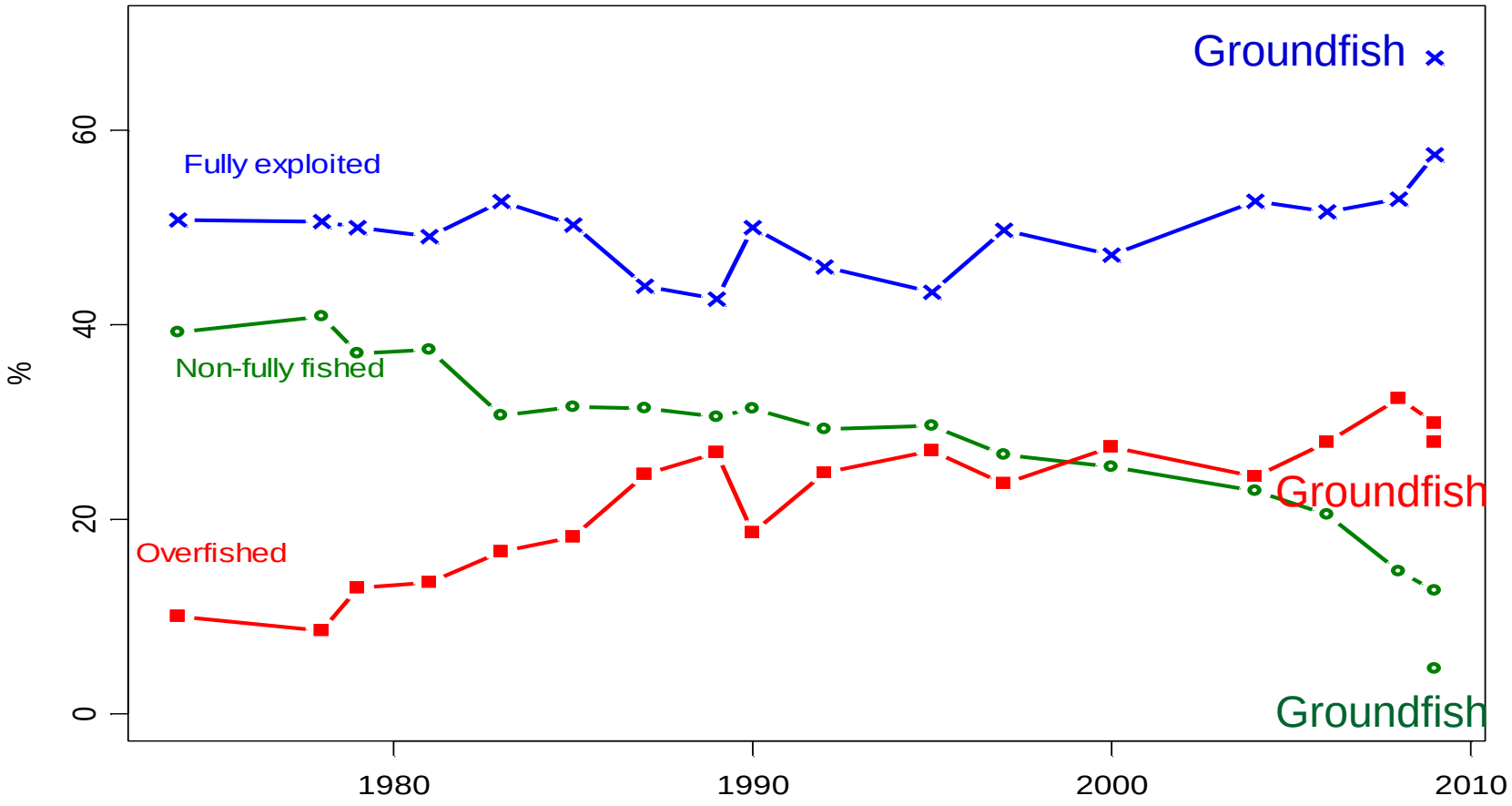
Importance of Groundfish in Global Landings



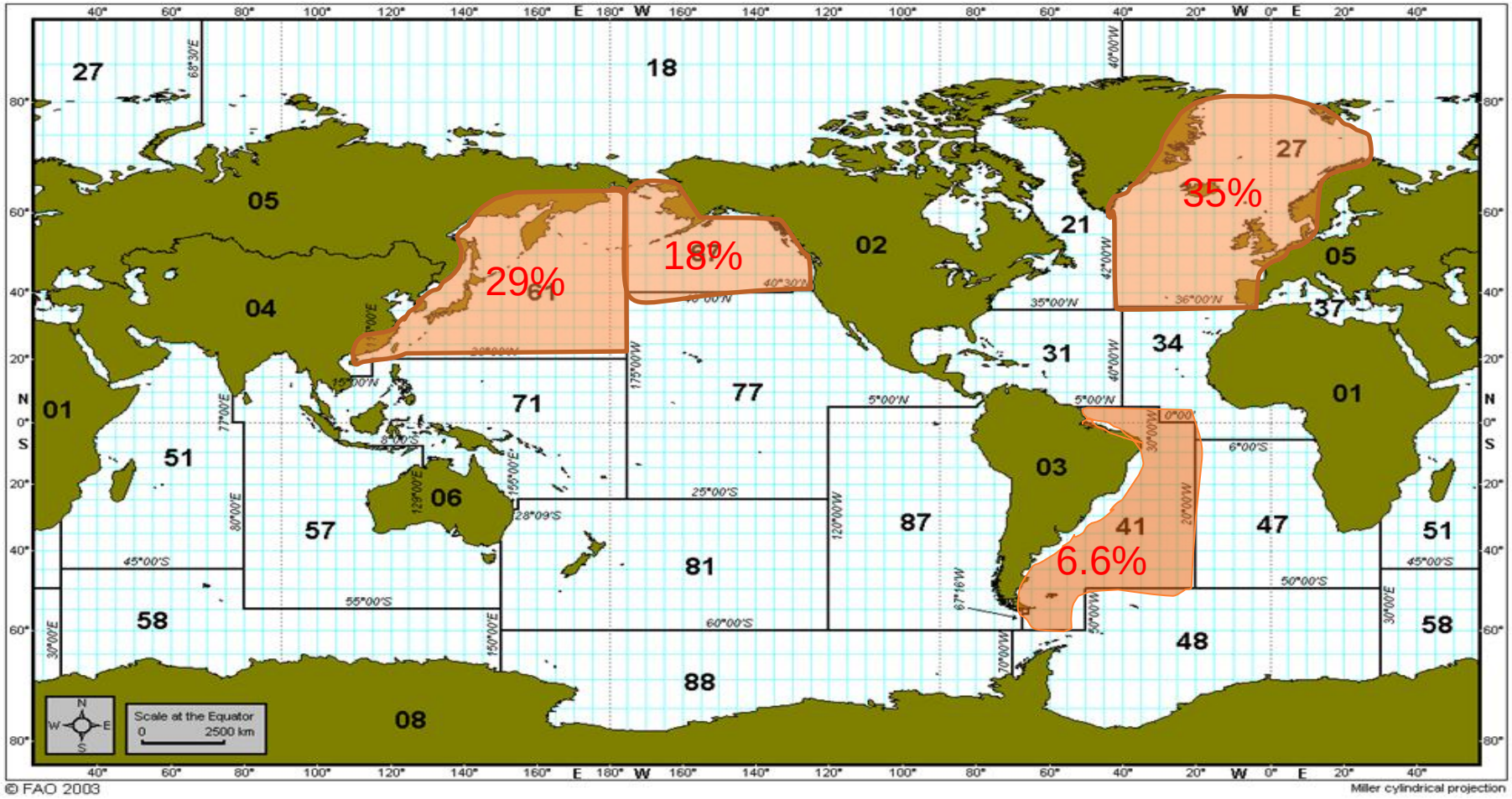
% of Groundfish Landings in the Total



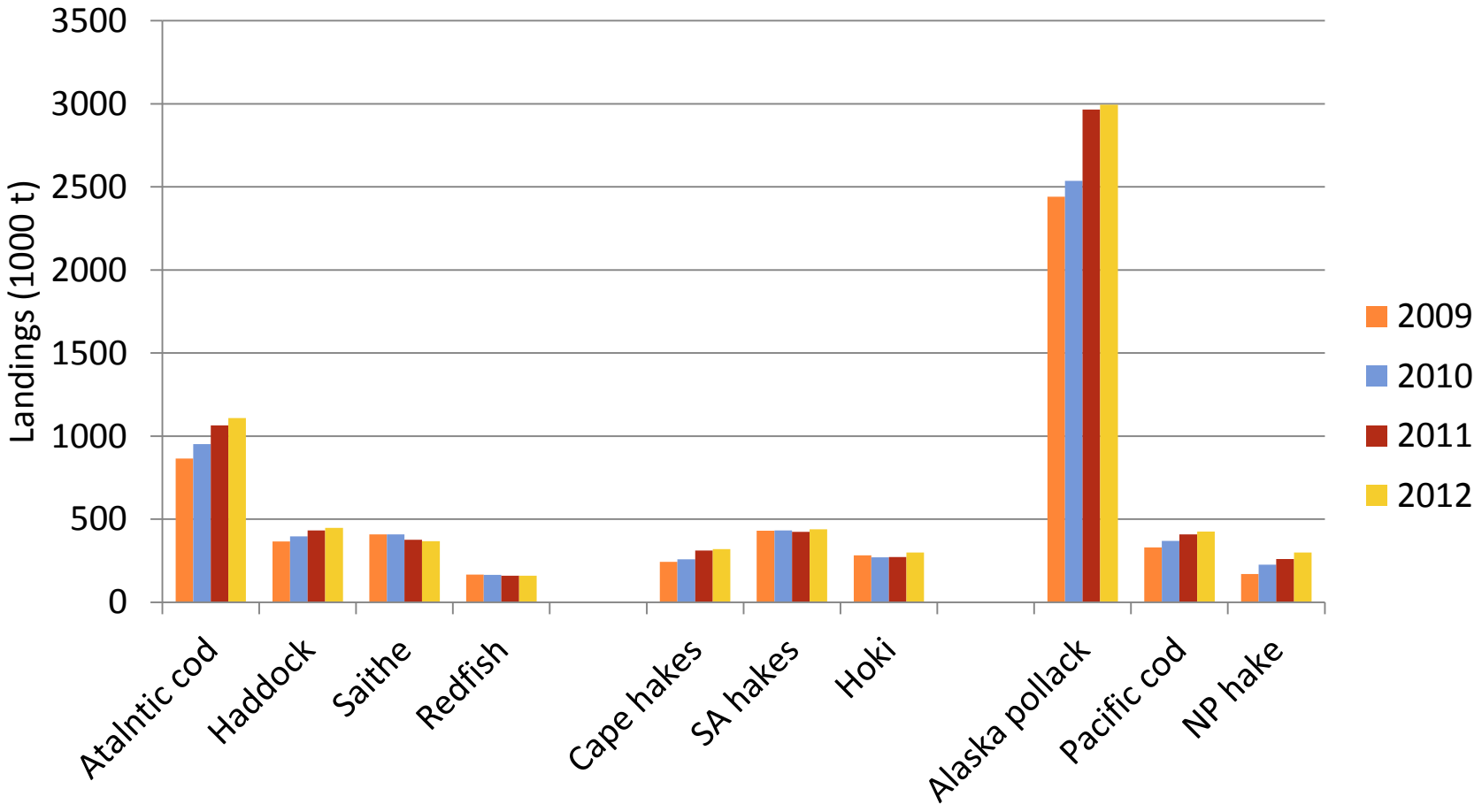
Comparison of the State between Groundfish and the World Average



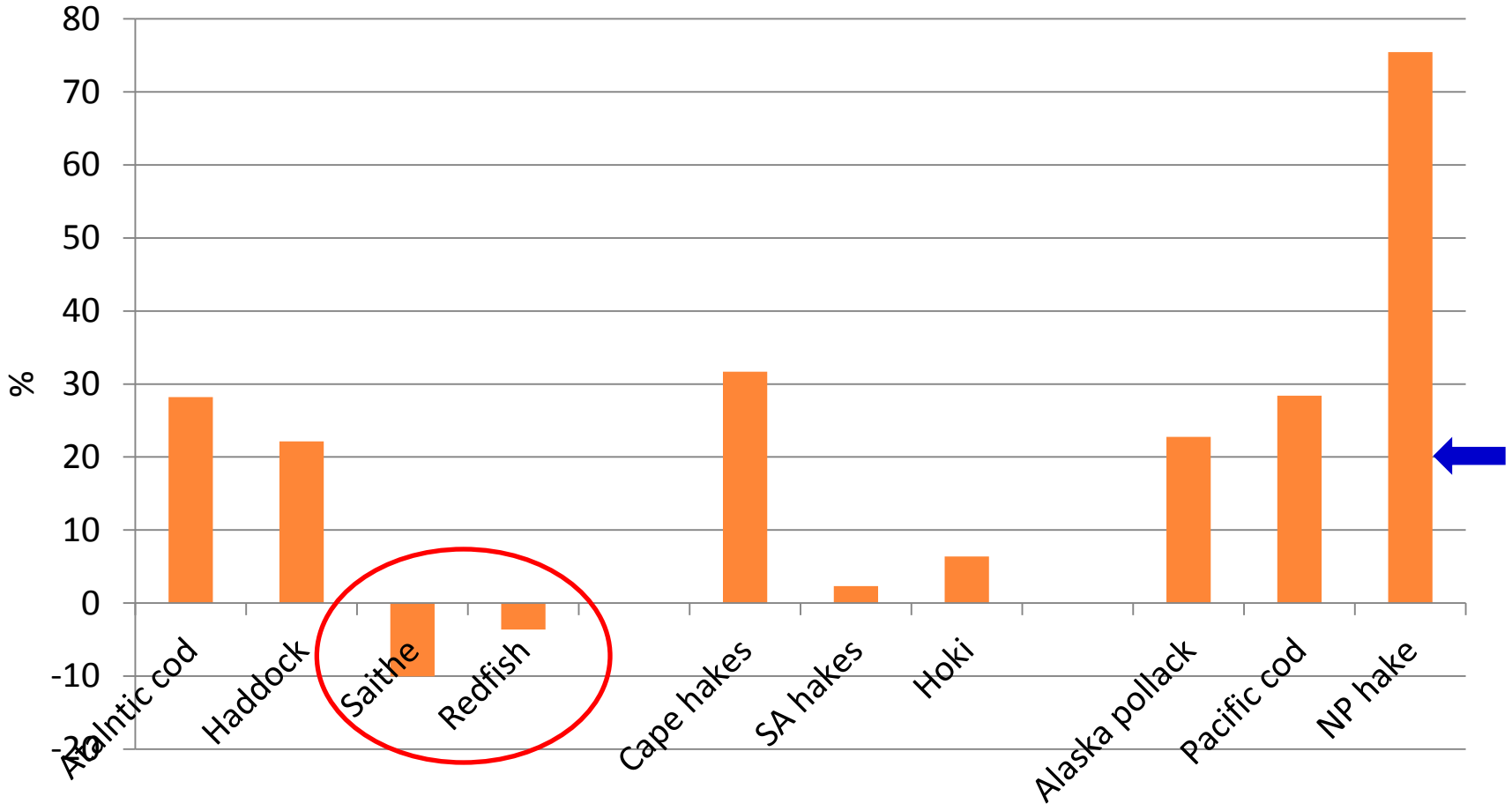
Major Distribution Areas in 2010



Landings (2009) and Predictions (2010-12) of Major Groundfish Species (GF)



Changes (%) of Major Groundfish Species from 2009 to 2012



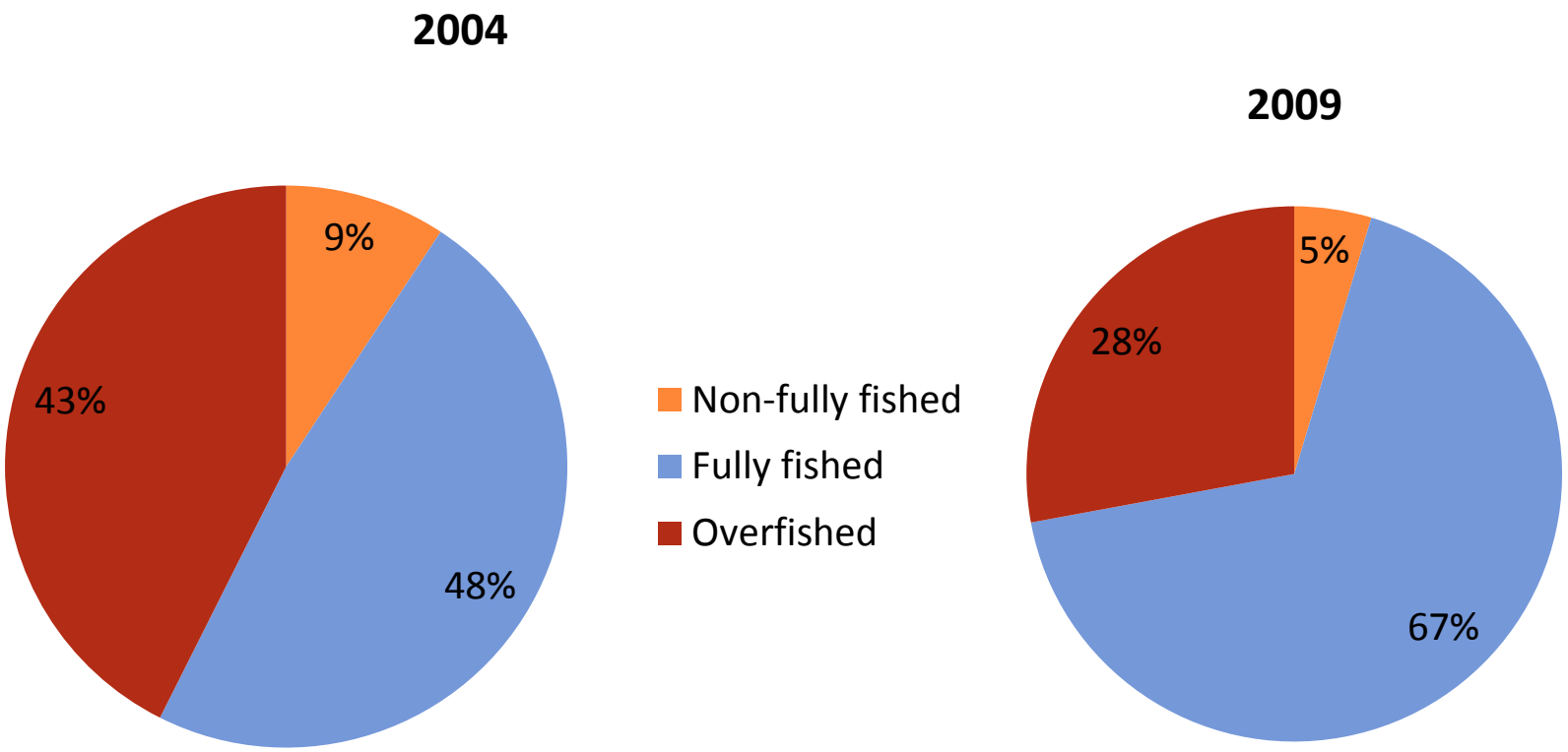
Questions

- Does the increase in expected landings reflect the improvement in stock abundance?
- Does the improved abundance result from management?
- Is the improved abundance a result of environmental changes?

Changes in Abundance of Groundfish Stocks

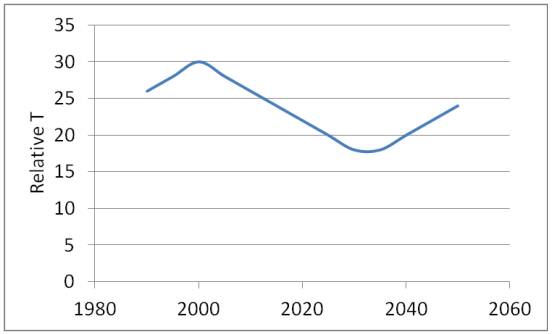
- The estimated abundance of mature Alaska pollock in 2012 is projected to be 11% higher than in 2011, and is projected to increase gradually over the next five years. (http://www.afsc.noaa.gov/REFM/docs/2011/GOApollock.pdf)
- Atlantic cod, haddock, saithe, cape hake, Pacific cod (http://www.fishonline.org/)

Improvement in Groundfish Stock Status



Temperature Impact on Alaska pollock (Walley pollock: global view, O Bulatov 2012, PICES Annual Meeting)

- Temperature impacts recruitment & growth



- Stock abundance increases until 2020
- Working hypothesis: pollock stock in 2020-30
  - Decreases in Bering Sea
  - Increases in the Sea of Japan

Impact of Climate Events on Pollock Biomass

(http://www.pices.int/publications/scientific_reports/Report36/291-295-Dynamics-of-walleye-pollok.pdf)

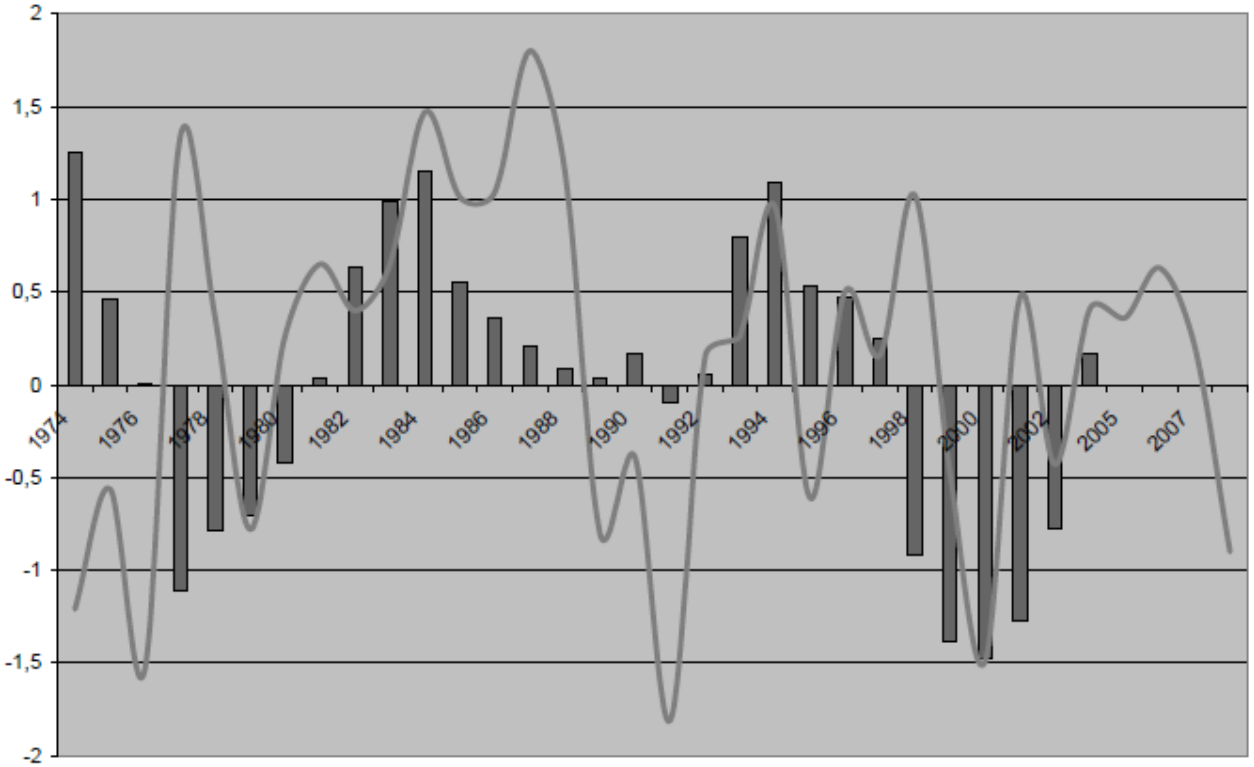


Fig. 4 Fishable biomass of pollock (millions of t, bars) in the eastern Sea of Okhotsk and PDO anomalies (line).

Impact of Oceanographic Environment on fish Stocks

- Growth and recruitment
- Abundance & concentration of food species
- Distribution of fish stocks
- Species/stock specific
- Interaction with other factors

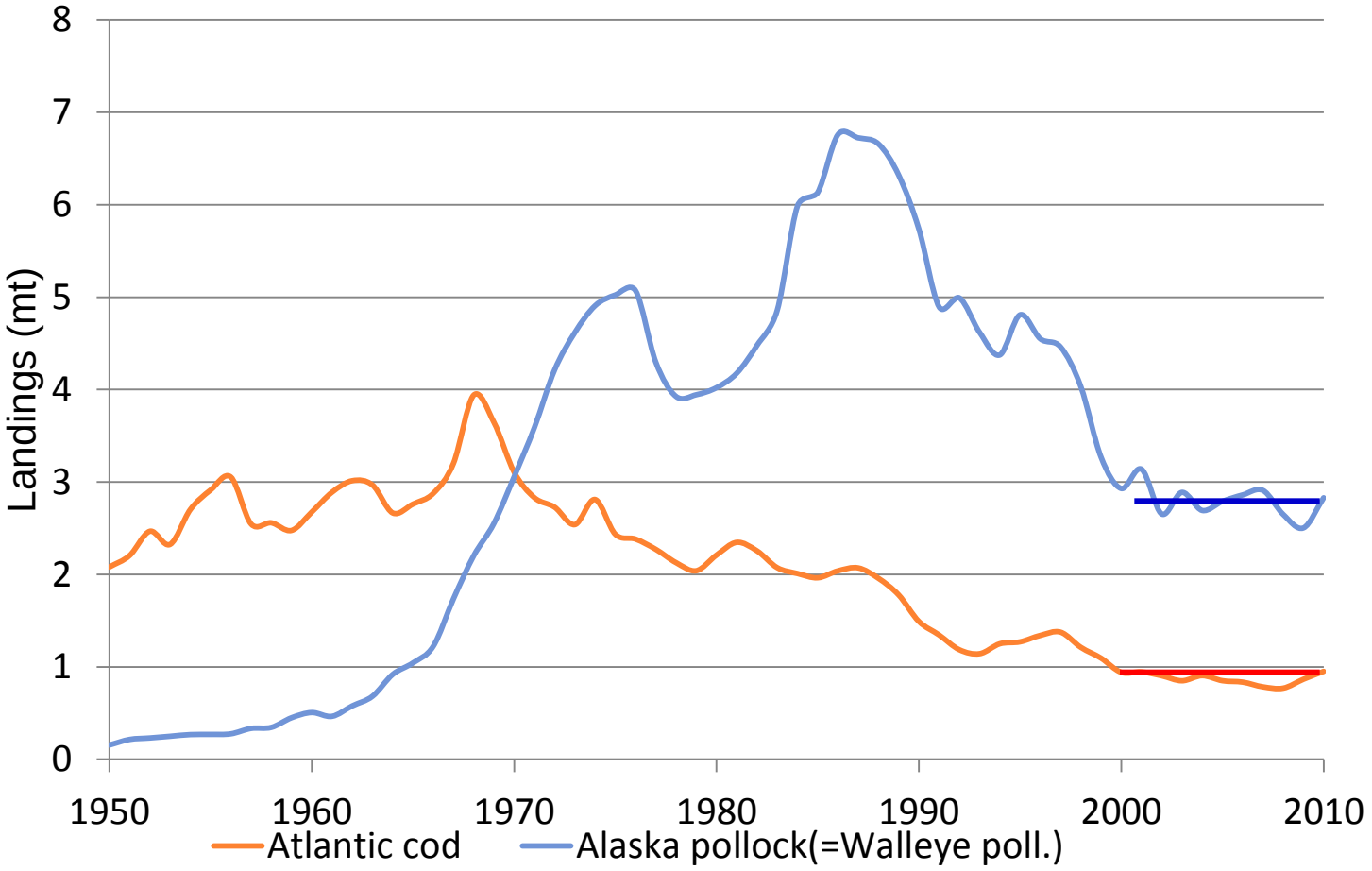
Answers to the Questions

Yes • Does the increase in expected landings reflect the improvement in stock abundance?

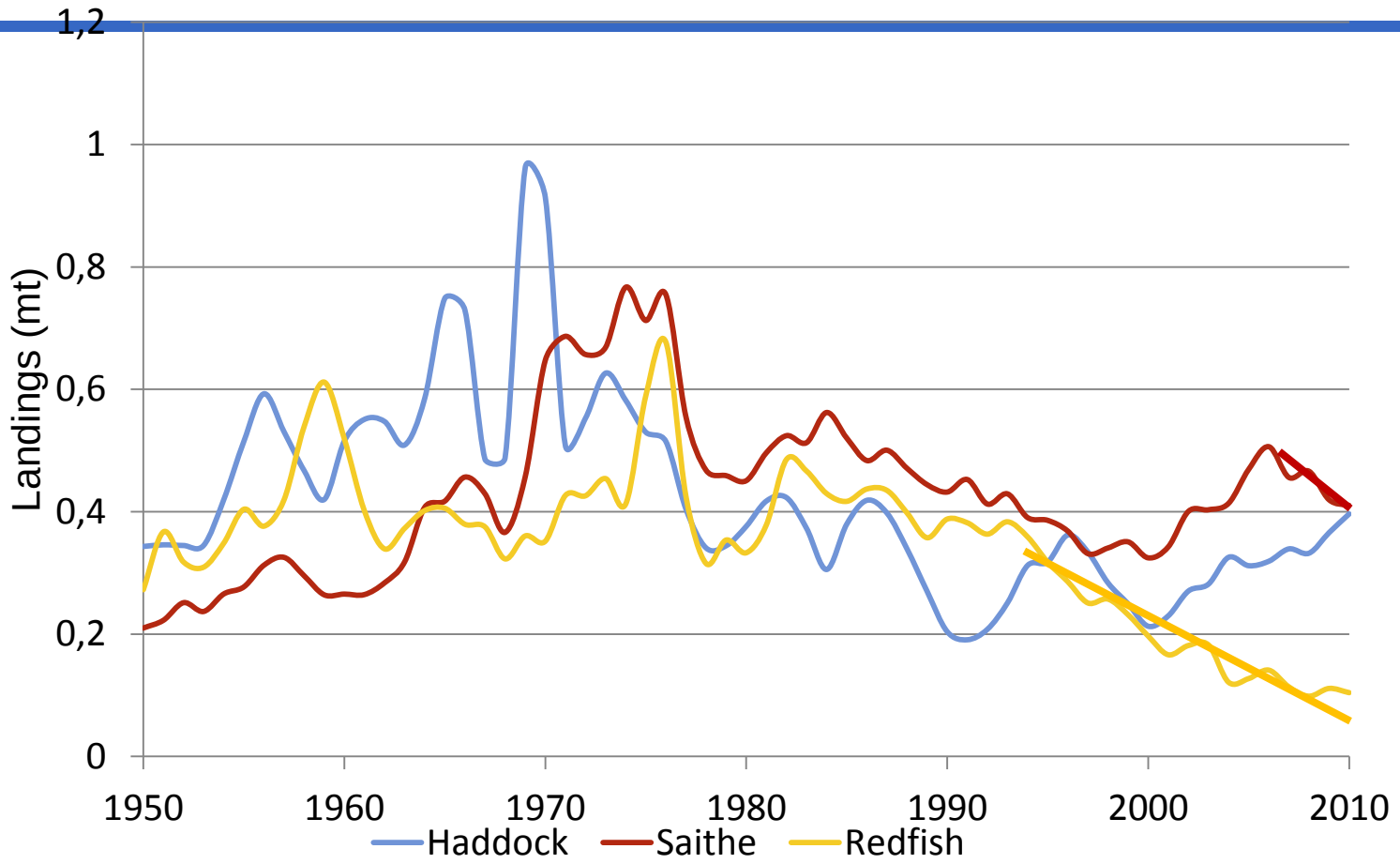
Yes • Is the improved abundance caused by management?

Yes • Is the improved abundance a result of environmental change?

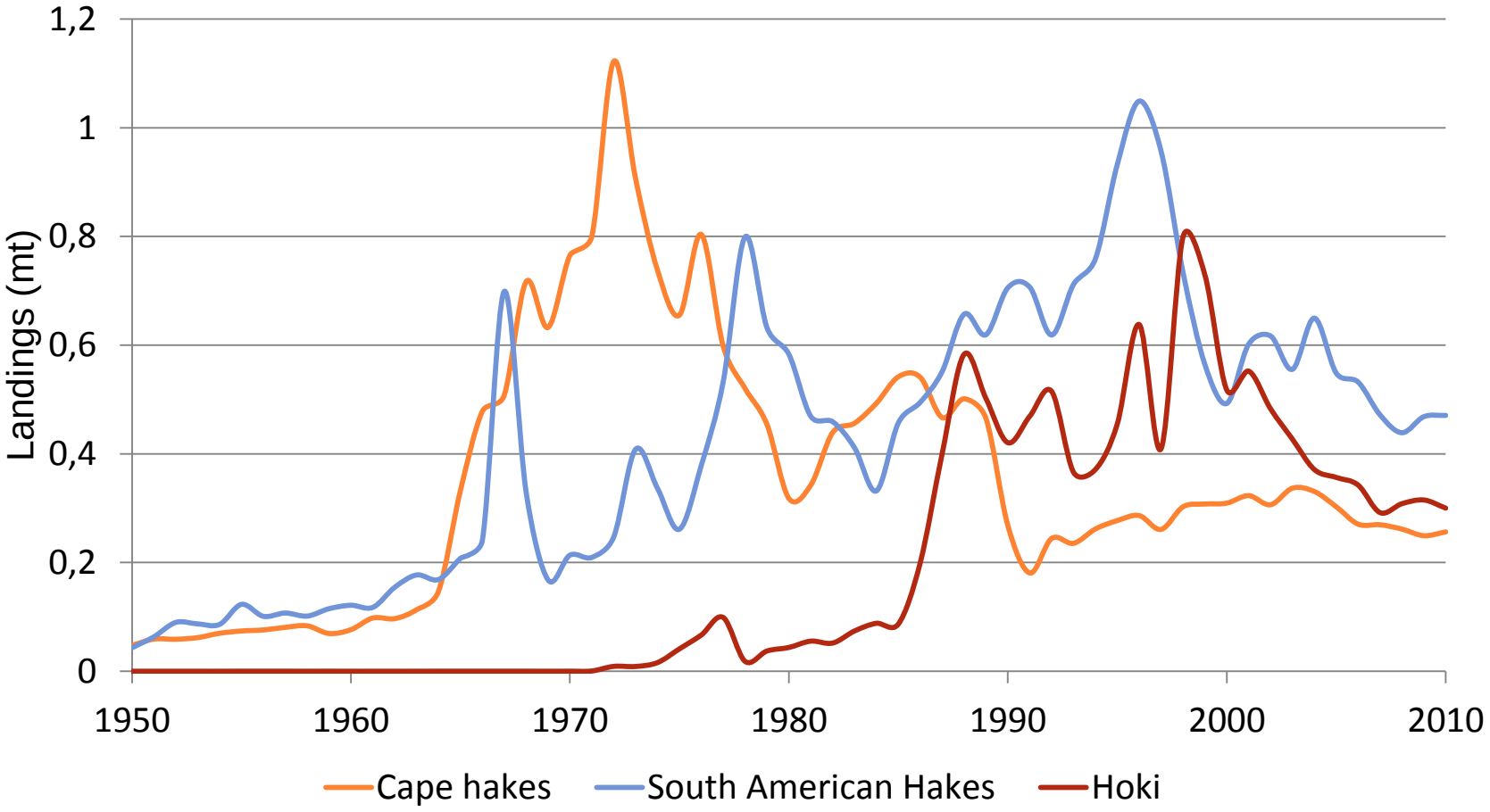
Landings Trends of Major Groundfish Species (1)



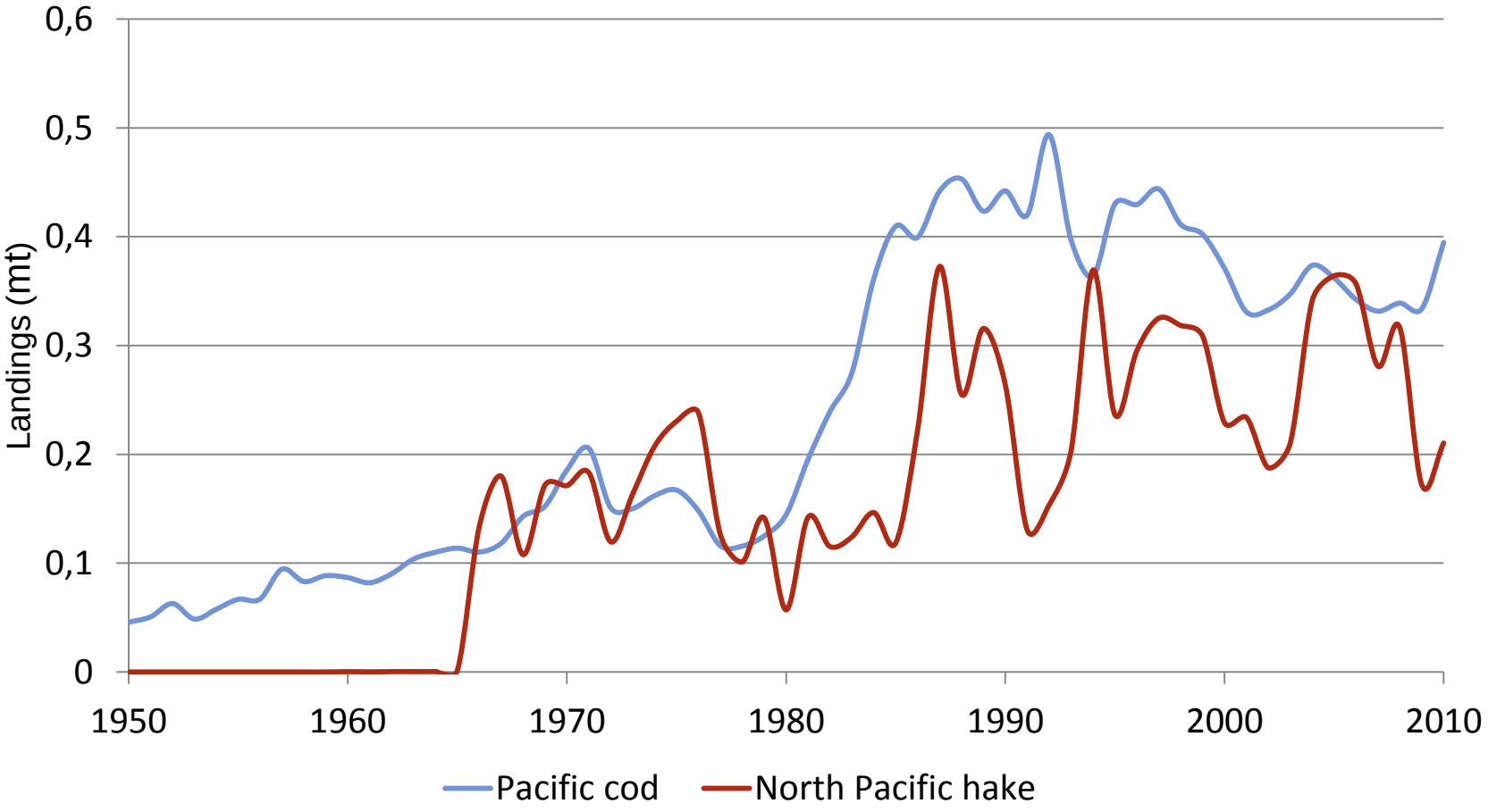
Landings Trends of Major Groundfish Species (2)



Landings Trends of Major Groundfish Species (3)



Landings Trends of Major Groundfish Species (4)



Factors to Be Considered in Prediction of Fish Supply

- Stock abundance
  - Environment caused
  - Management derived
- Management regulations –fishing effort
- Landings trends
- Stock specific

Estimates by Species by Country

GROUNDFISH FORUM 2011
Supply Trends 2009 - 2012

2009= FAO Statistics, 2009 - 2012 = Groundfish Forum Panel Estimates
All in thousands of metric tons ('000 MT)

Atlantic cod

	FAO 2009	GF 2009	2010	2011	2012
Norway	243	243	282	342	357
Russia	234	228	276	312	332
Iceland	189	189	179	185	190
EU/Greenland	143	145	157	165	170
Faroes	27	27	33	35	35
US/Canada	29	28	25	25	25
Total	865	860	952	1064	1109

Recap of the Presenation

- Overview of the state of the world marine fishery resources
- Landings and stock status of groundfish
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Thank You for Your Attention!