

# Farmed cod, where is it going?

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# Introduction

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- Cod farming is currently experiencing a crisis
  - This is a feature it has in common with most emerging aquaculture species at one point or another
  
- One are being forced to take one step back, but it is far from obvious that the next step is a continued march forward along the same path
  
- The huge production of wild cod create circumstances that are quite different for farmed cod than for most other species

# Introduction

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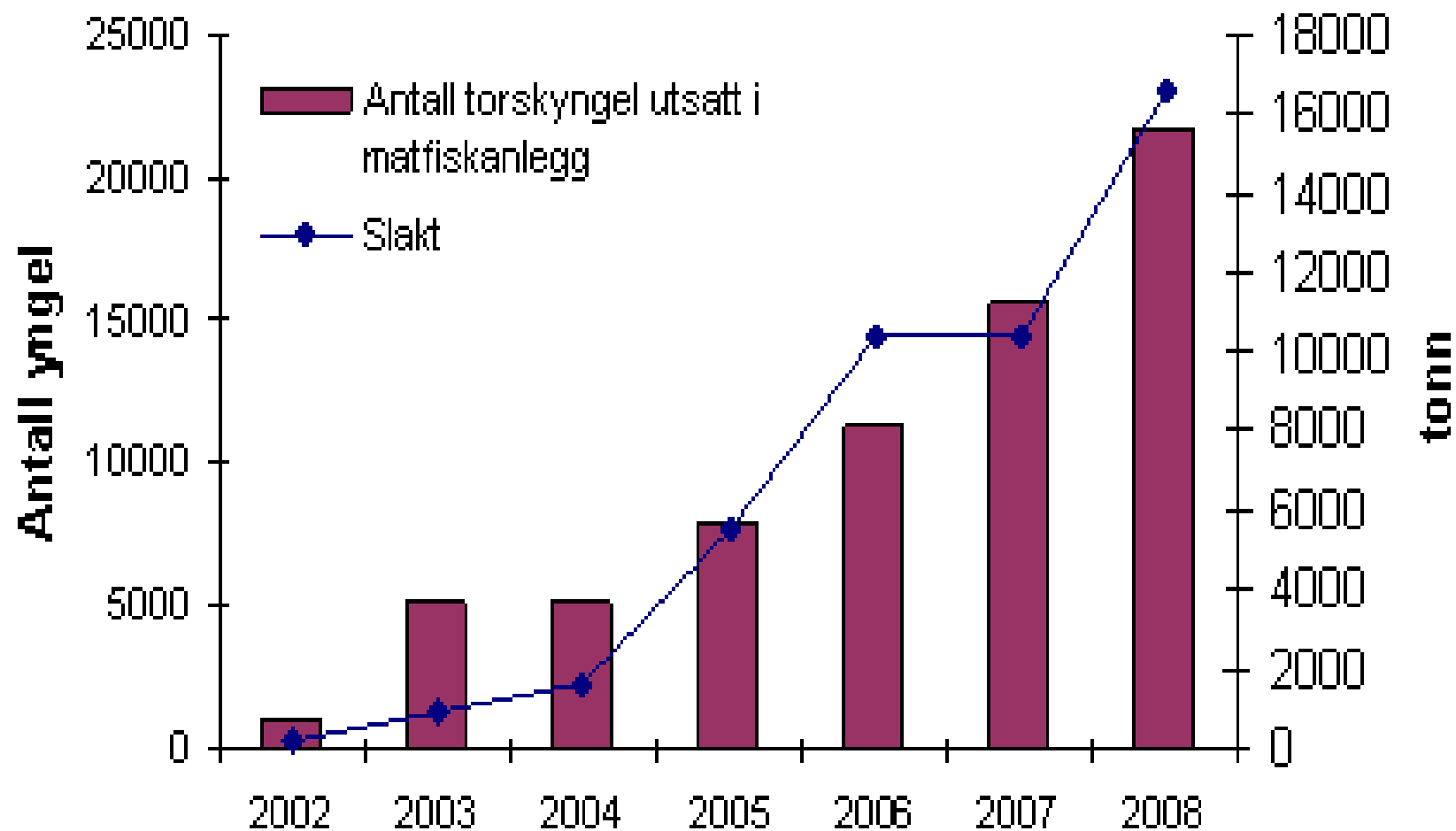
- During the ten years from 1999, there has been a unique opportunity window for farmed cod
  - Low quotas
  - High prices
  - Cheap capital
  
- This means that in the near future it will be harder to succeed, and that it may take a bit of time before the industry reovers

## Growth of farmed cod

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- Although there are significant differences among the growth strategy for different companies, there seems to be one strong common element:  
**MAXIMUM GROWTH**
- In this, one has been quite successful, at least as measured by growth in percentage terms
- And again, it is in common with most other species, and maybe even faster in search of scale economies and innovations

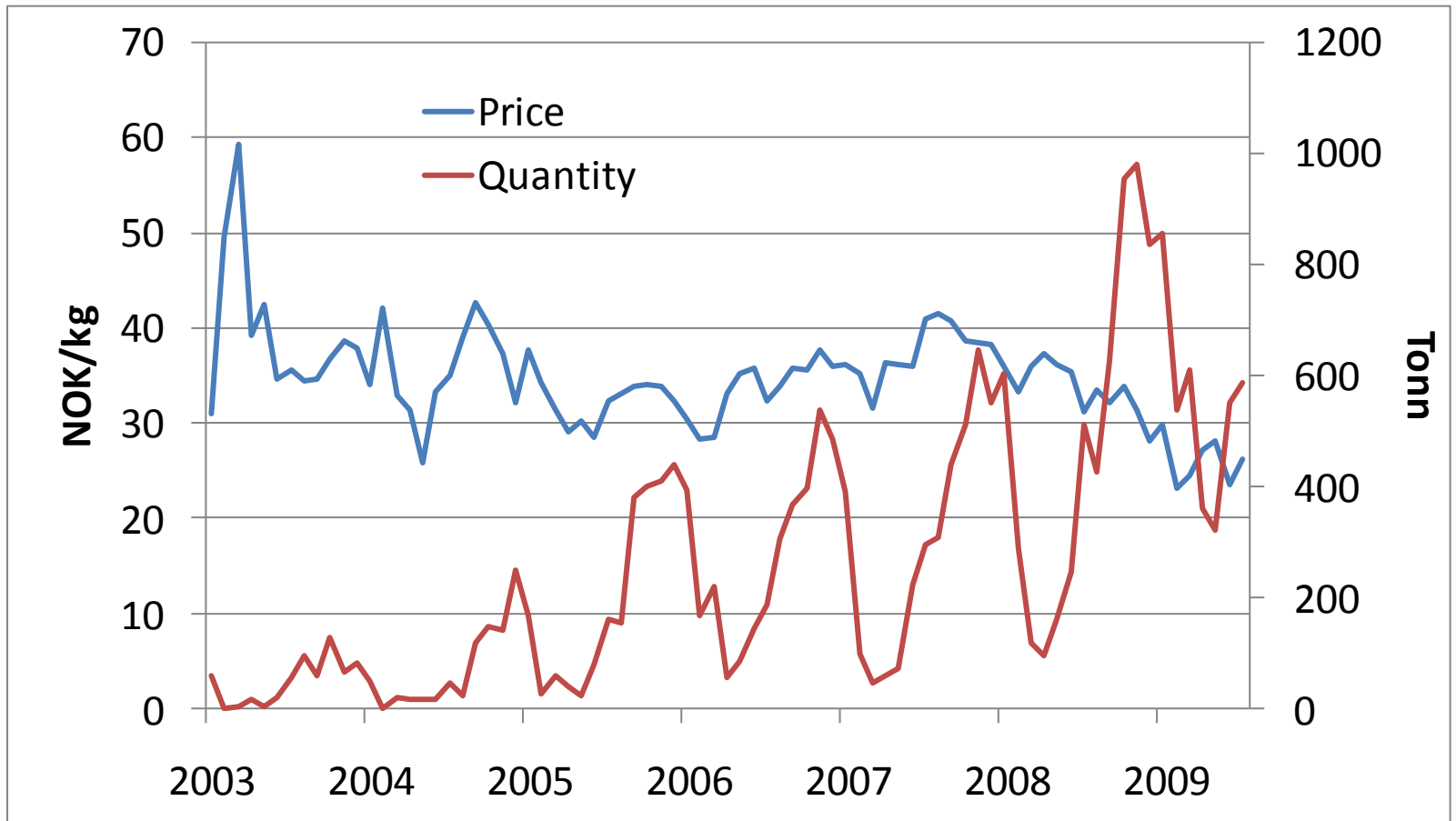
## Yngelproduksjon og slakt av torsk



# Norwegian exports of farmed cod

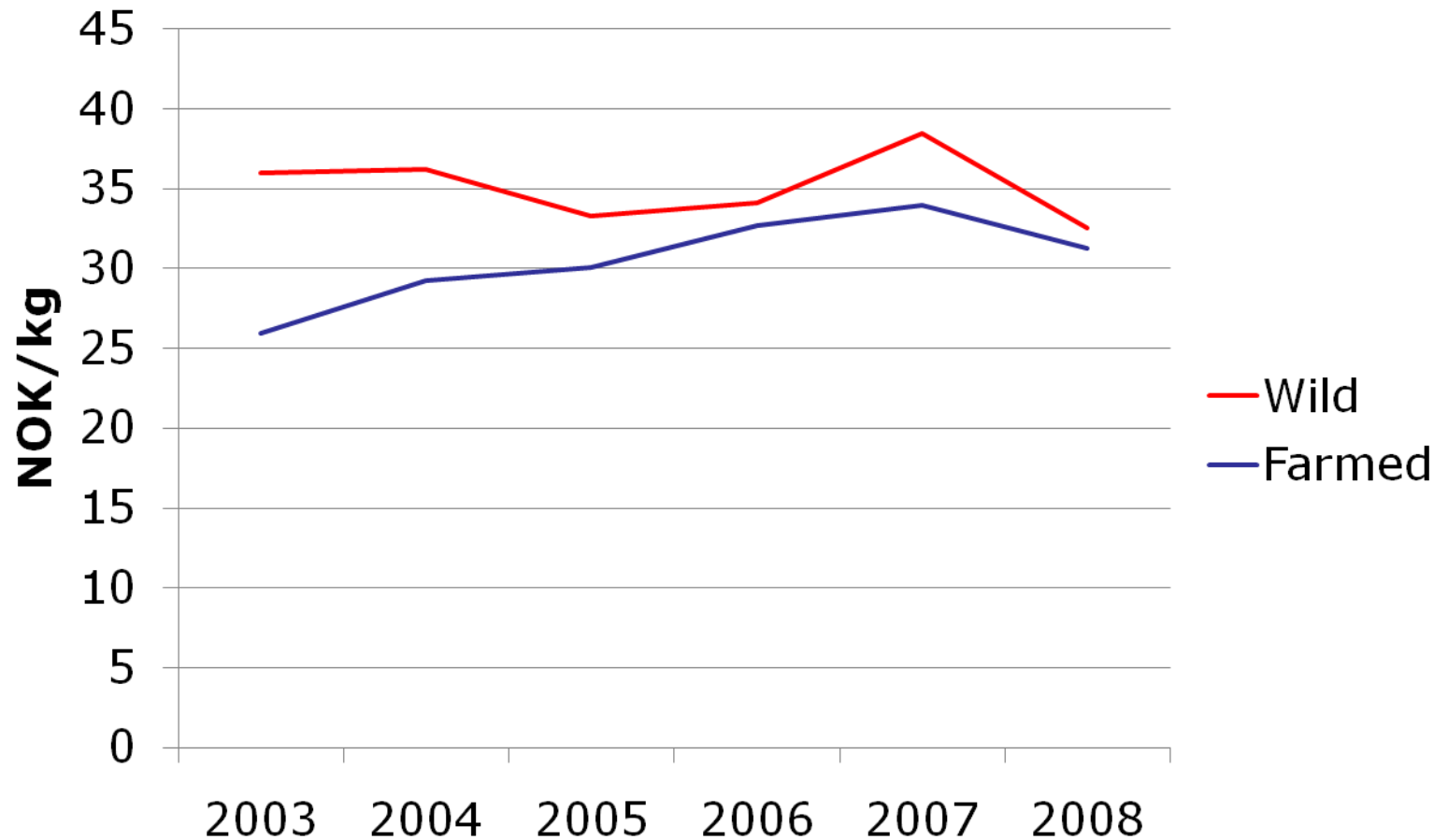
Kolonne1	Pris	Mengde							
2003	30,9	60							
2003	49,5	2							
2003	59,25	4							
2003	39,1764706	17							
2003	42,5	4							
2003	34,6363636	22							
2003	35,5263158	57							
2003	34,4536082	97							
2003	34,65	60							
2003	36,6640625	128							
2003	38,5147059	68							
2003	37,7529412	85							
2004	34,08	50							
2004	42	2							
2004	32,9545455	22							
2004	31,2631579	19							
2004	25,7777778	18							
2004	33,2941176	17							
2004	34,8979592	49							
2004	39,04	25							
2004	42,6722689	119							
2004	40,2905405	148							

# Norwegian exports of farmed cod



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- Although MAX GROWTH may be a slight misrepresentation, it is the dominating strategy for most aquaculture species, based on a philosophy that one needed to control the production process first and then find a market
    - Marine Harvest may be an exception
  
  - From salmon one has learned that scale reduce cost. However, a too quick scaling up also makes most problems to appear much faster

# Price of wild and farmed cod



# Farmed cod is no longer unique

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- Farmed cod made up a unique market segment when it was introduced
  - Fresh, countercyclical
- As production increased, it increasingly became a part of the cod market

# Opportunity window: Cheap available capital

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- Started with the high salmon prices in 1999
  - Made cheap capital available for new species
- Low capital prices has enabled several companies to attract capital in the capital markets until the financial crises
  - The investors target the future potential, but eventually the companies must give a return
  - The patient capital became much harder to come by after the financial crises



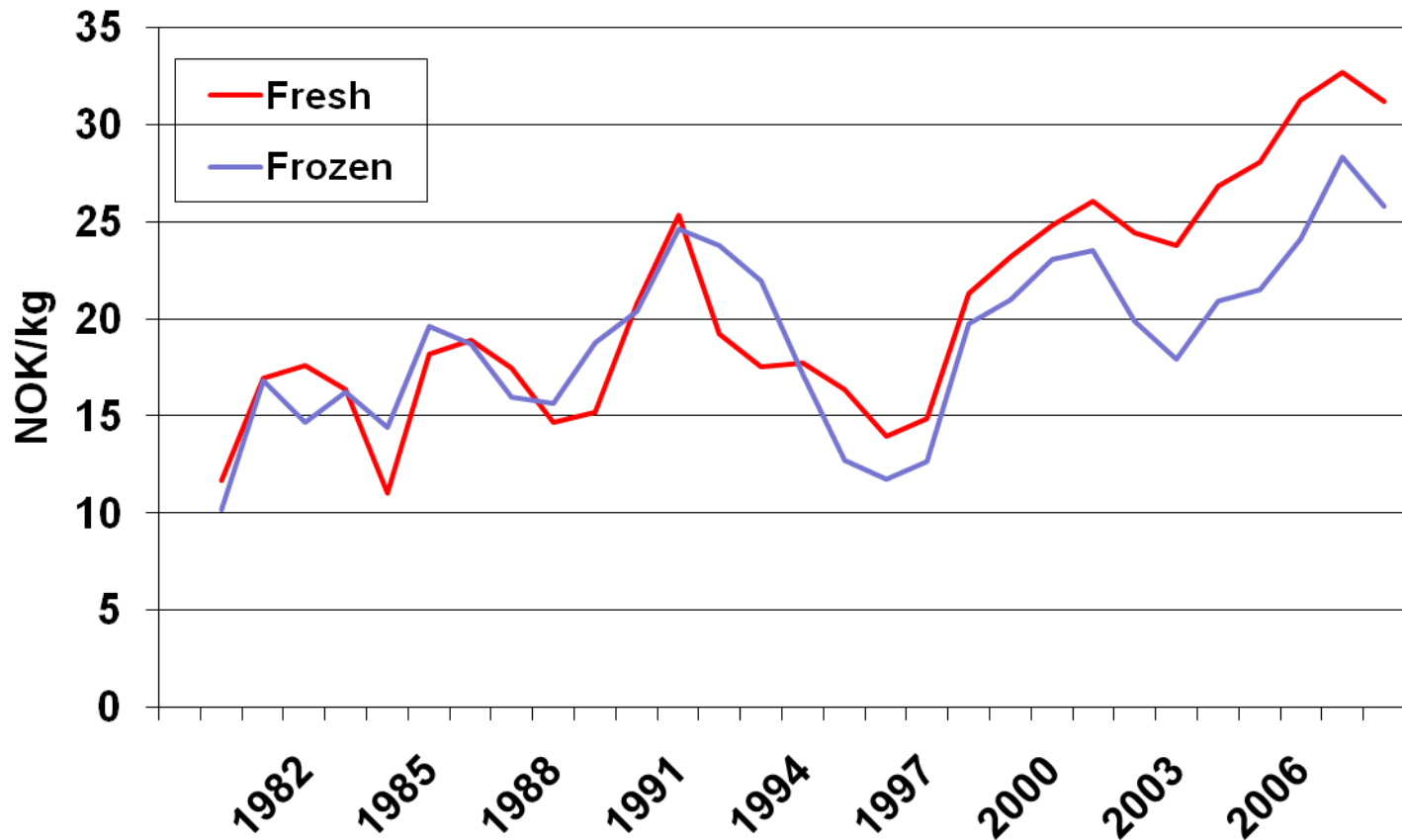
# Opportunity window: Historically high cod prices

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- The real price for wild cod peaked in 2007



# Real export price; wild cod



# Opportunity window: Historically high cod prices

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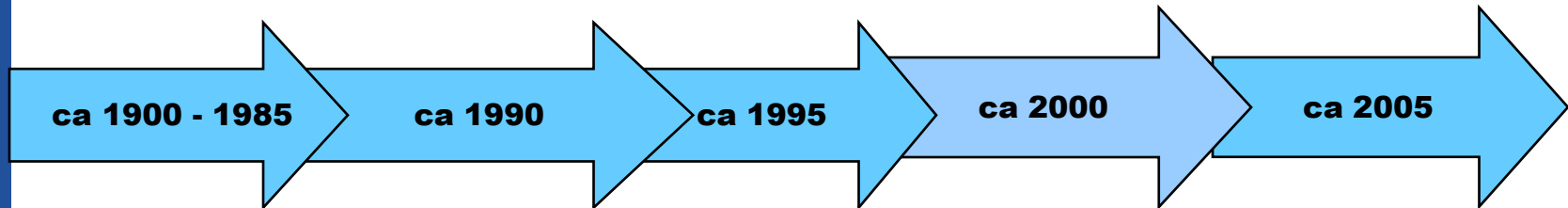
- The real price for wild cod peaked in 2007
- The wild cod price is cyclical, but the trend has been increasing for 25 years
  - With higher quotas, one are set for a period with lower prices
- During the two last cycles, frozen block fillets largely disappeared from the product spectrum
  - May reappear with lower prices
  - Wild cod is again competing with Alaska pollock
  - Is pangasius and tilapia next?
  - With higher quotas this is increasingly likely

# Whitefish

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- The whitefish market is the largest seafood market segment
  - Ca 6 million tonnes if only the main wild species are included
  - Ca 15 million tonnes if all species including aquaculture are included
- From 1980 the market has changed from a regional north Atlantic market to a global market
- The size of the market and a large number of processed product forms makes it an easy market to enter for new species

# New species in the whitefish market



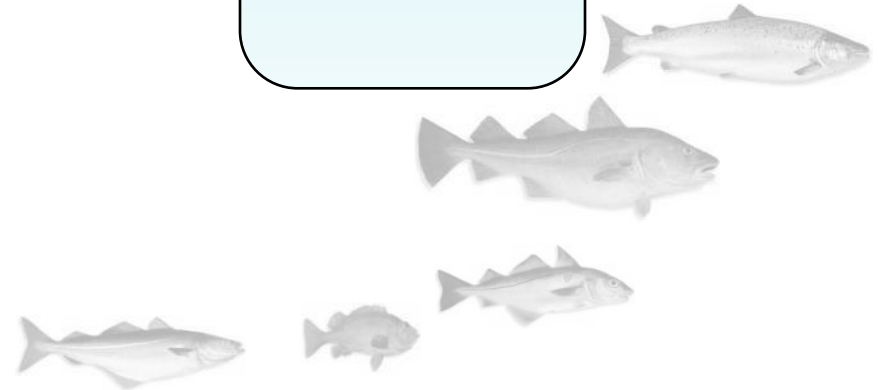
**Until 1985**  
**Cod,**  
**haddock,**  
**saithe, etc.**

**1990:**  
**Alaska**  
**Pollock**  
  
**Catfish**

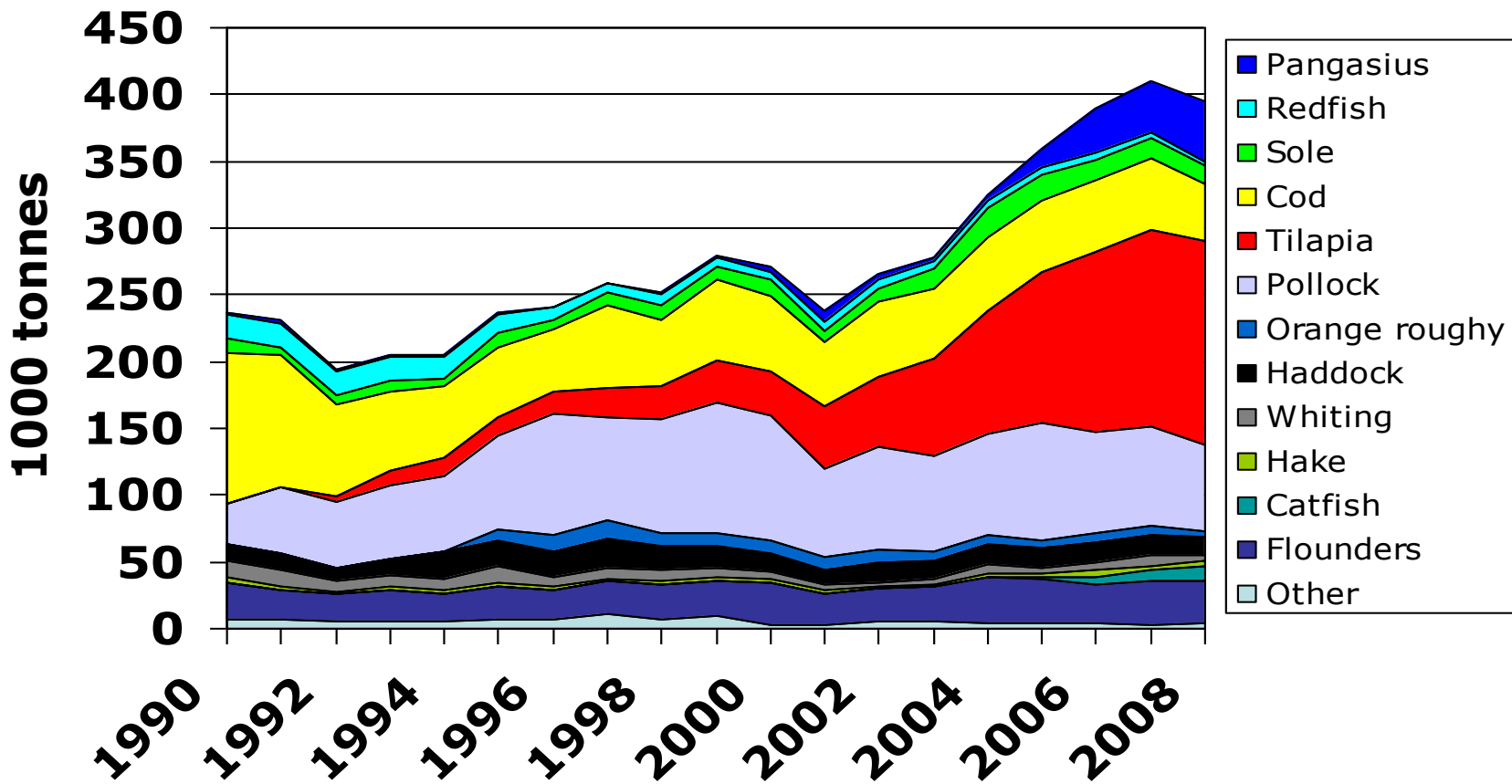
**1995:**  
**Hake**  
**Hoki**

**2000:**  
**New warm**  
**water**  
**species as**  
**tilapia and**  
**Nile Perch**

**2005:**  
**Pangasius**



# US imports of frozen whitefish, 1990-2008 (tonnes product weight)



## Is cod whitefish?

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- Cod largely left the whitefish market in the late 1990s
- With higher quotas and lower prices it is returning
  - Alaska Pollock seems to be the main competitor, but at even lower prices there is the new farmed species
  - Will wild cod be able to segment itself away from the whitefish market again?
- Will the farmed cod follow wild into the whitefish market?

## Concluding remarks

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- The existence of a large market for wild cod is an opportunity as well as a challenge for farmed cod
  - It provides a market for high quality cod that the fishermen cannot serve very well – segmentation
  - It provides a large quantity market, but only if one are competitive on cost
  
- The recent experience indicates that it is only at fairly low quantities one can segment the farmed cod away from the wild cod
  - At least when production is growing rapidly

## Concluding remarks

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- One step back may not be too bad for the industry if it allows the farmed cod to reposition itself into a high quality, high price segment
  - Some companies must disappear for quantities to be reduced
  - Necessary if the industry are to survive?
  
- In a longer perspective, the wild cod market is still there, but if wild cod competes with Alaska pollock and tilapia, also farmed cod must be competitive on price with these species
  - Large quantities of farmed cod may drive all cod in to the whitefishmarket in the future
  - Or one may find a different path. Salmon do to a large extent provide an example