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# Reefer trade in South America - evolution and prospects

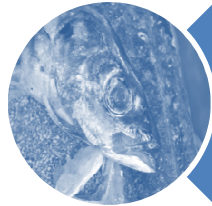
Gordon Wilmsmeier & Ruth O. Vagle

Infrastructure Services Unit

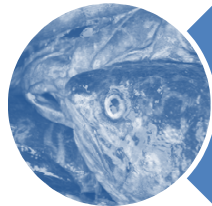
Natural Resources and Infrastructure Division, UN-ECLAC

IMSF Annual Meeting London, April 2013

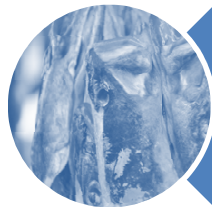




evolution of demand and supply



competition and market structure



conventional reefers - declining market shares



emerging topics





### San Antonio resumes fruit shipments

Almost two weeks after halting port operations San Antonio Terminal Internacional is working as normal and yesterday loaded out 800 reefer containers.

## Reefer trade a hot topic

Reefer trends

09 April 2013

08 April 2013

scrutiny for what critics say are 'chronically

Reefer trends

from reefers rate increase

### From TPM: In Reefer Trade, Cold Facts

William B. Cassidy, Senior Editor | Mar 06, 2013 2:34PM EST

print

Maersk Line is having mixed results in its attempt to raise reefer rates, with prices varying by commodity and lane, according to at least one ocean analyst. The overall direction of refrigerated freight pricing is unclear.

Wal Mart intensifies push for lower reefer rates. But the US retail giant comes under fire for 'understaffed' stores.

success rate for move

Lloyds List, 07 Jan 2013

### Reefer Prospects Heat Up

### Picture fluid as Chilean port strike ends

08 April 2013 '13

As specialised reefer vessels resume loading at the Port of Valparaíso, stevedores at the container Port of San Antonio refuse to accept conditions and remain on strike.

Reefer trends

### Maersk sacrifices market share for change of taste: Sea-Air to Asia

Ian Putzger | Mar 01, 2013 8:45AM EST

print

Fresh fruit shipments, such as cherries and blueberries, to Asia no longer go automatically by sea. Instead, they go by air, a move that has led to a loss of cold chain capabilities in the maritime industry.

### Cosco to Raise Asia-North America Reefer Rates

Staff | Apr 02, 2013 10:35AM EDT

### Dole eyes reefer fleet renewal

Friday 25 January 2013, 16:25

FRUIT company Dole has hinted that it may place newbuilding contracts for specialised reeferships as it looks to renew its fleet, a move that would defy claims that the niche is a dying sector. During its full-year financial results, Dole said it was looking to replace its ageing fleet of specialised reeferships.

Back to Lloyd's List Containers

CONTAINERS

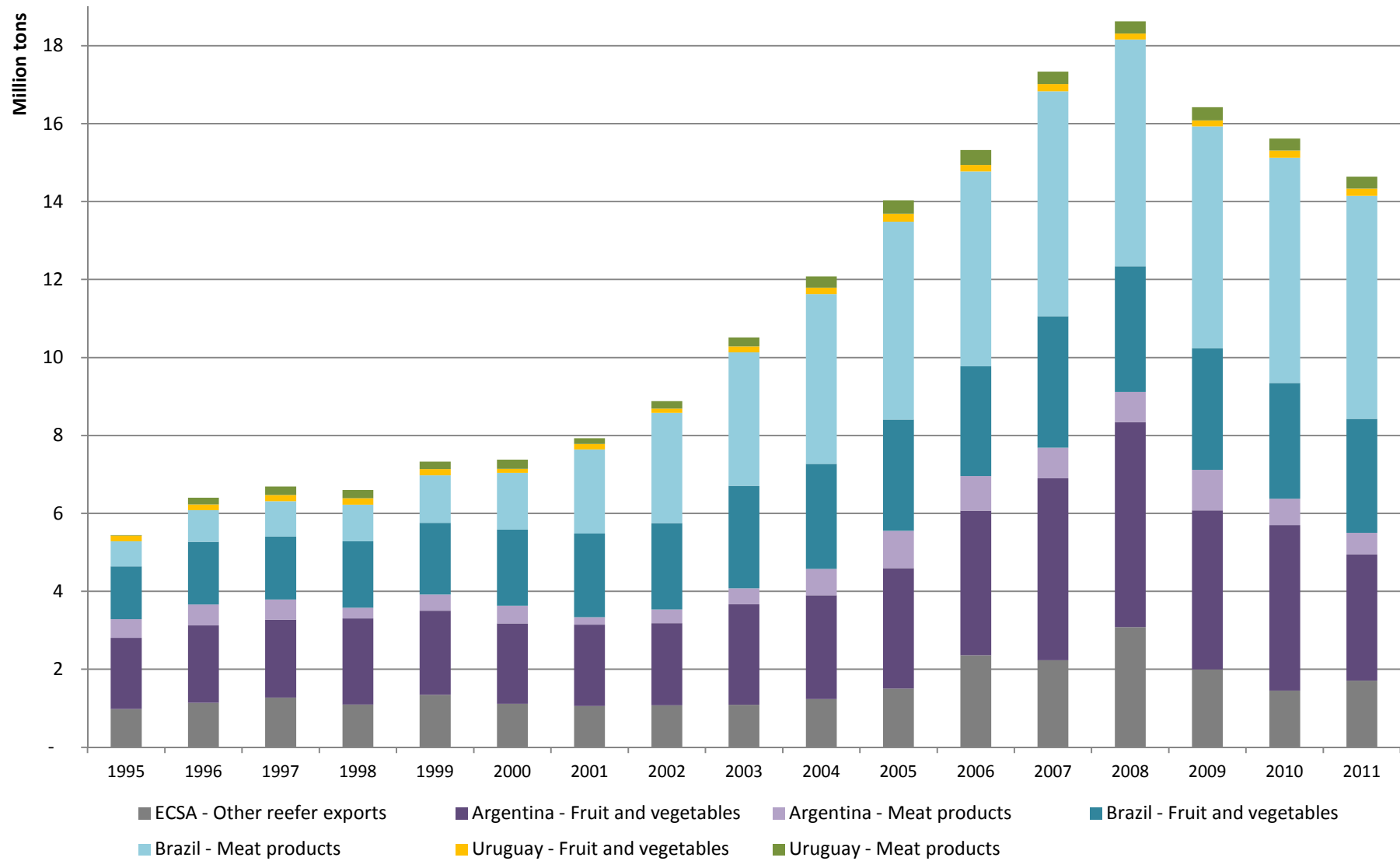
### Lines plan hefty rate hikes for reefer cargoes

More carriers follow Maersk's lead with large new year increases

Lloyds List, 28 Dec 2012



## East Coast South America (ECSA) Reefer products export evolution 1995-2011

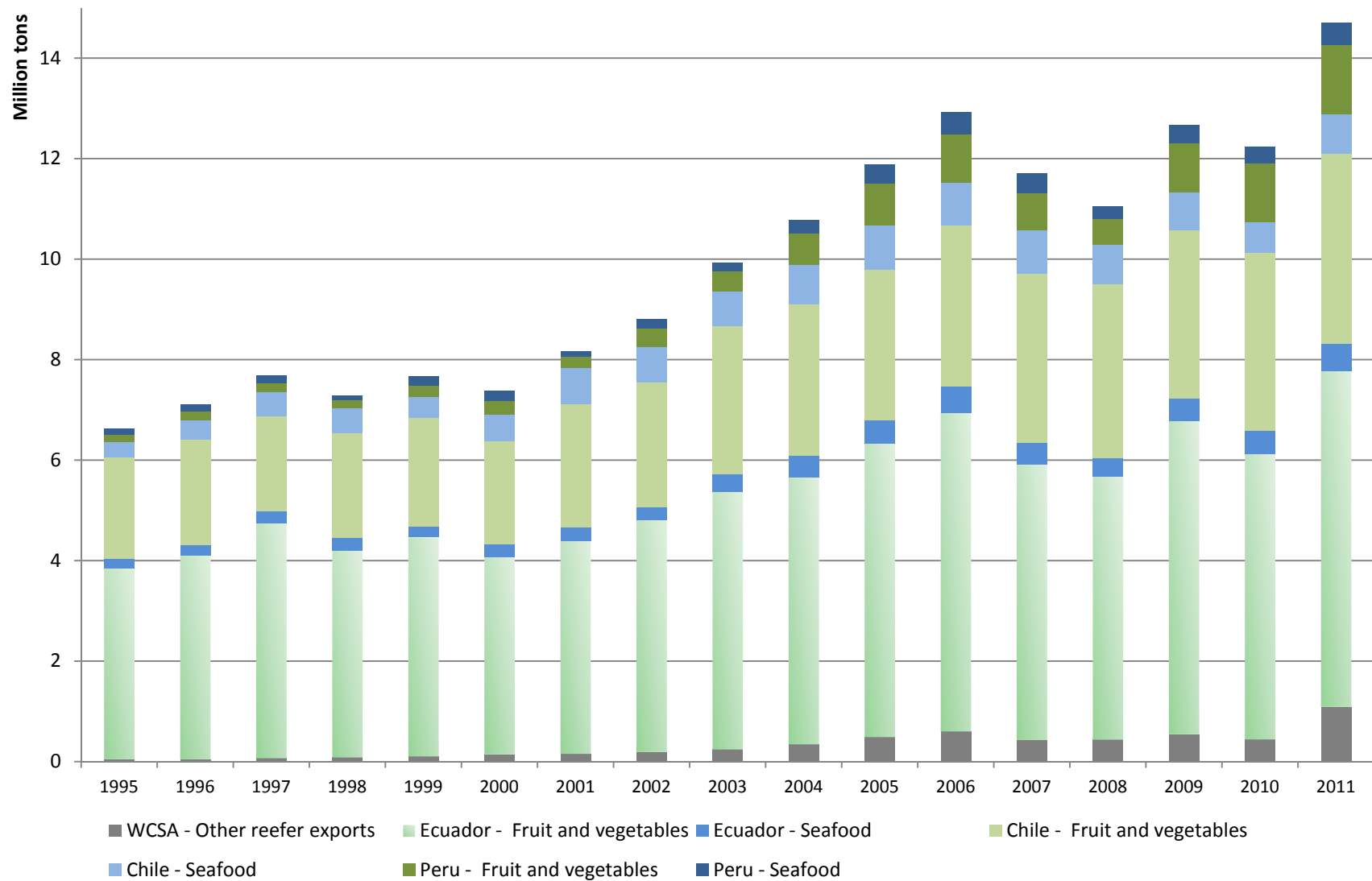


Source: Vagle, based on BADECEL 2012

© Wilmsmeier & Vagle 2013



## West Coast South America (WCSA) Reefer products export evolution 1995-2011



Source: Vagle, based on BADECEL 2012

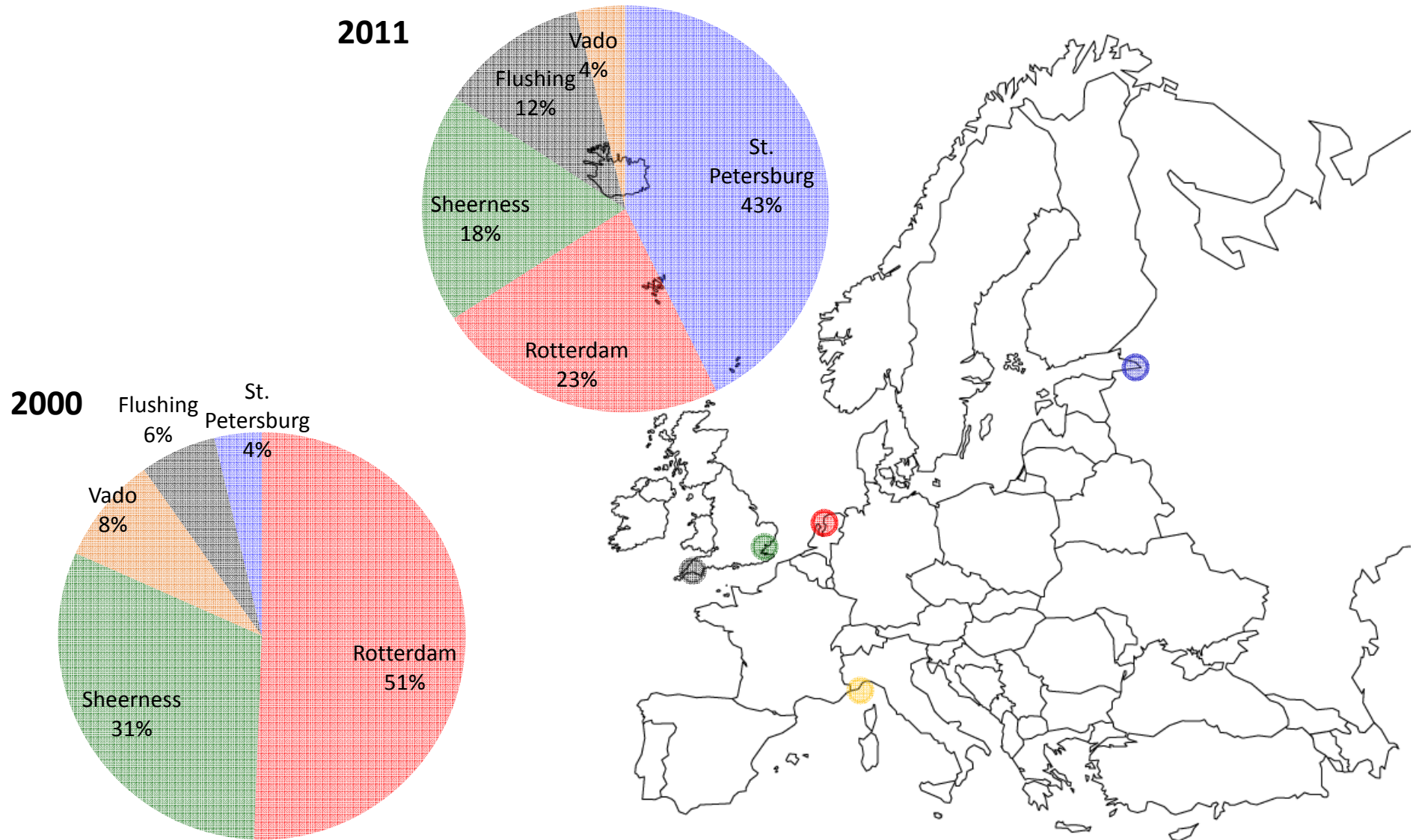
© Wilmsmeier & Vagle 2013



# Conventional reefer trade



## Chilean fruit exports - European discharge ports

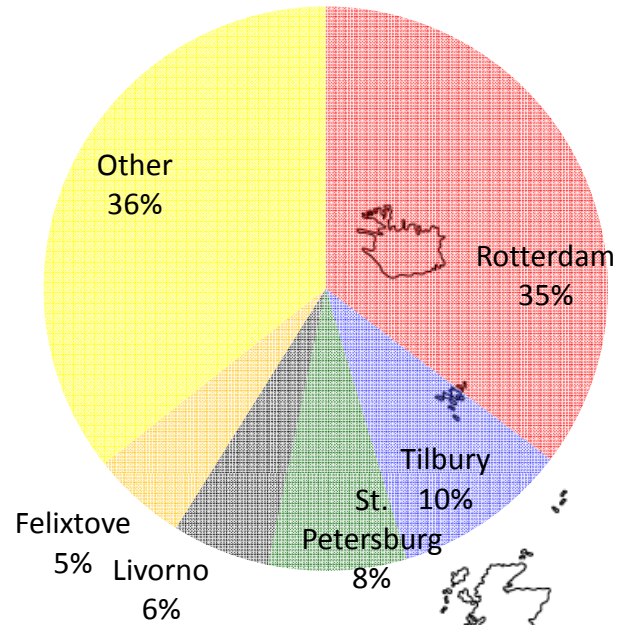




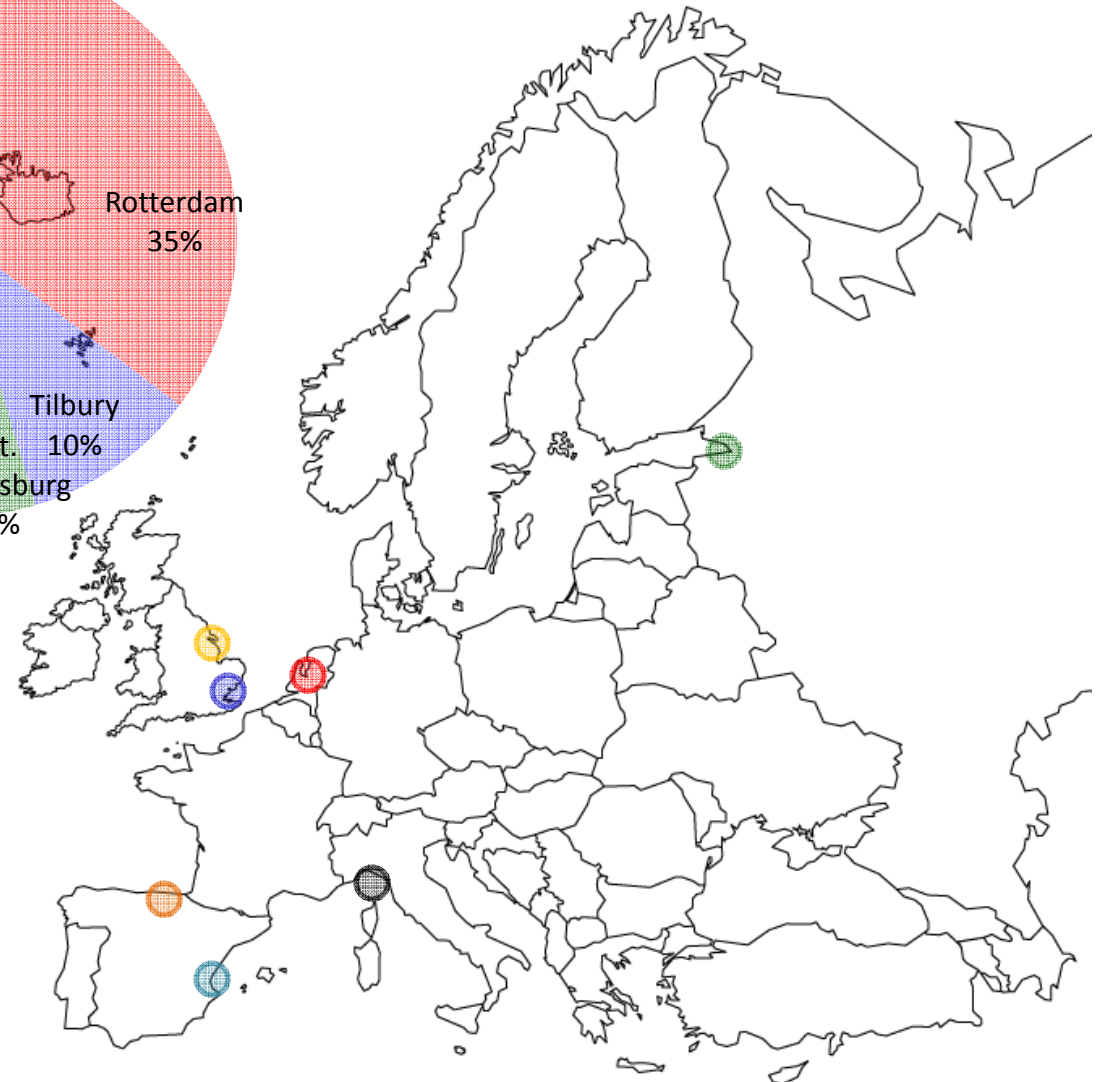
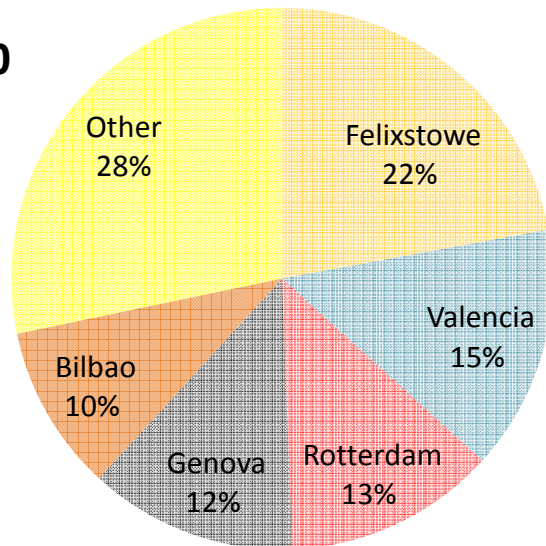
# Containerized reefer trade

## Chilean fruit exports - European discharge ports

2011



2000



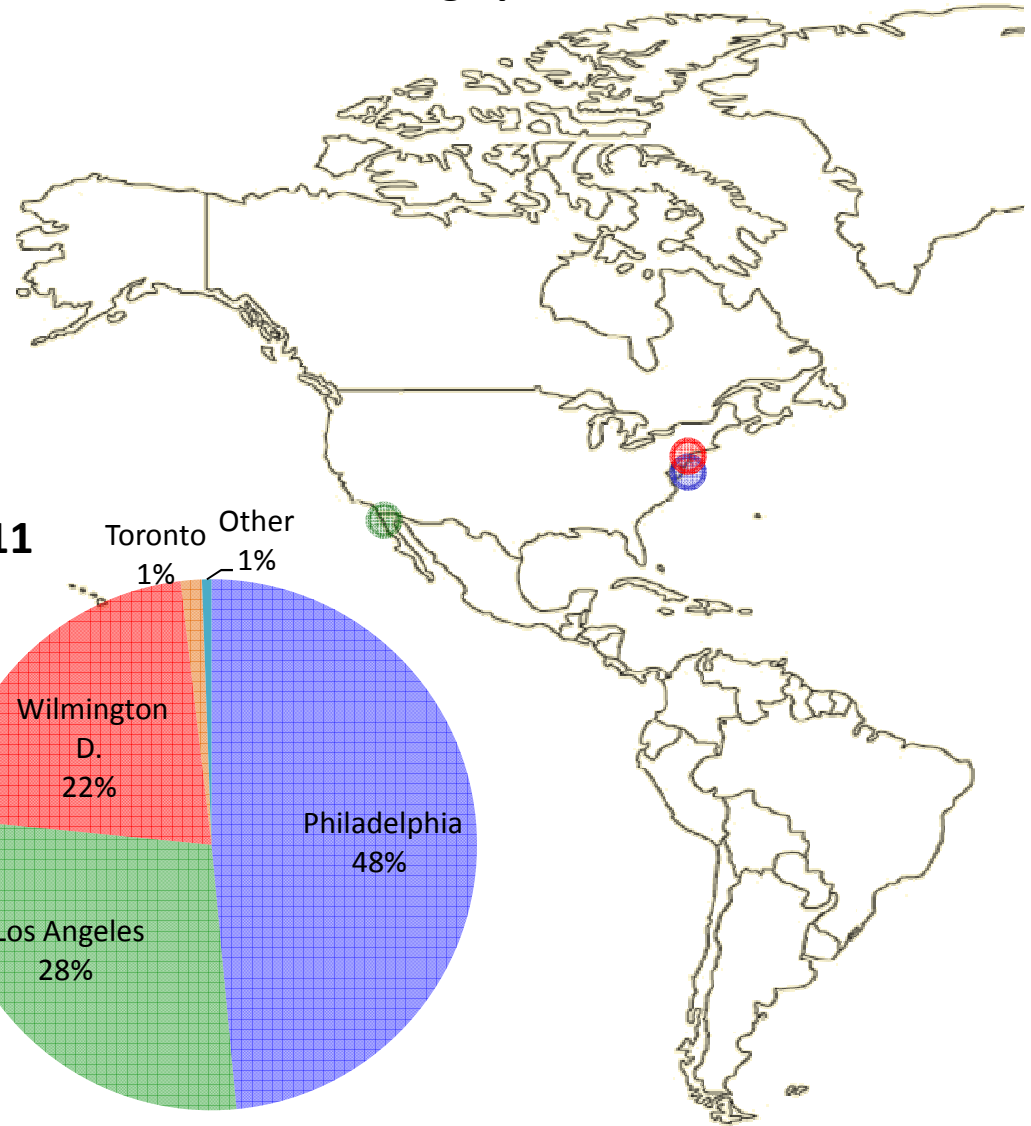
Source: based Decofruit (2000-2011)

© Wilmsmeier & Vagle 2013

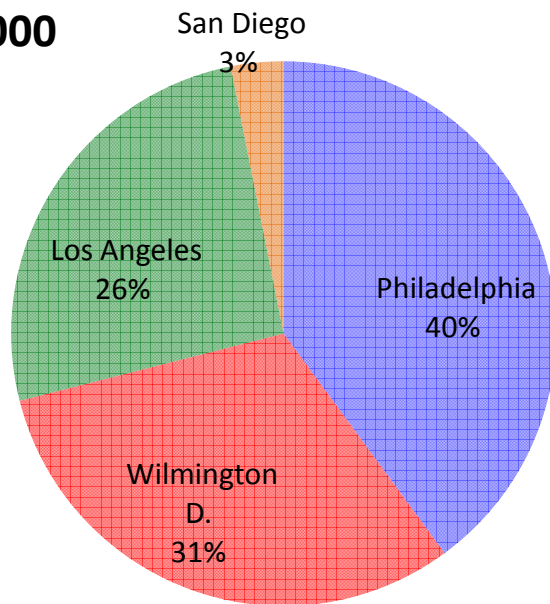


# Conventional reefer trade

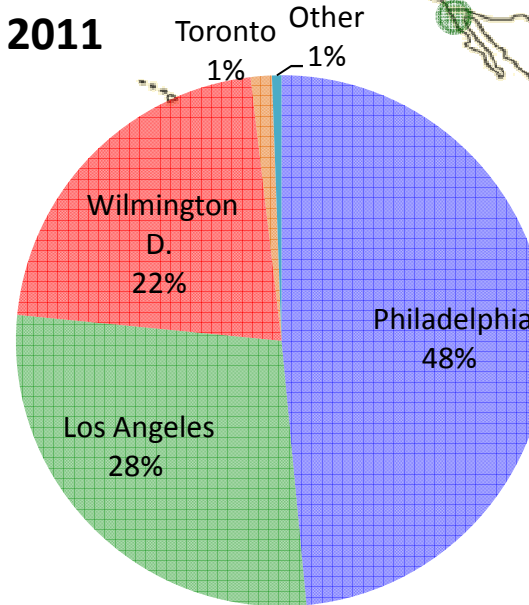
## Chilean fruit exports - North American discharge ports



2000



2011

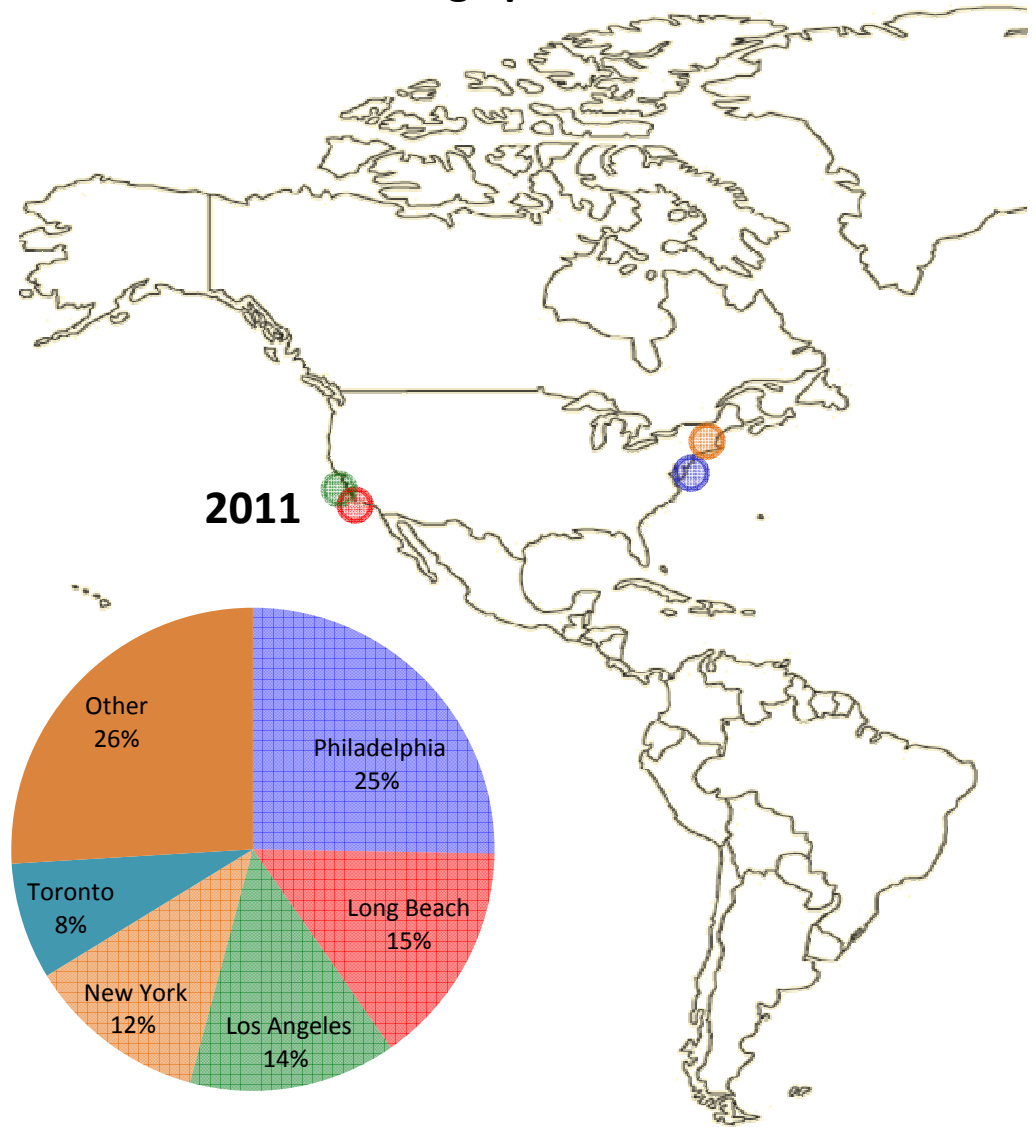




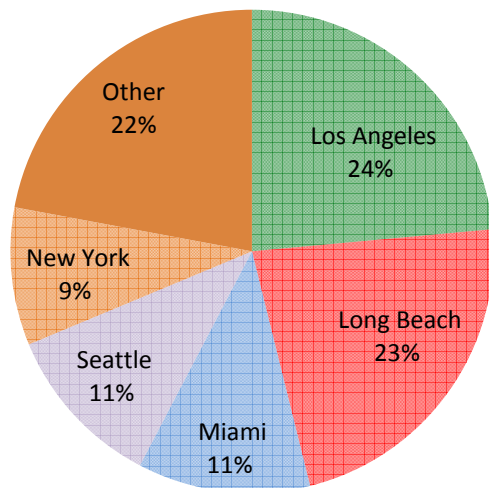


# Containerized reefer trade

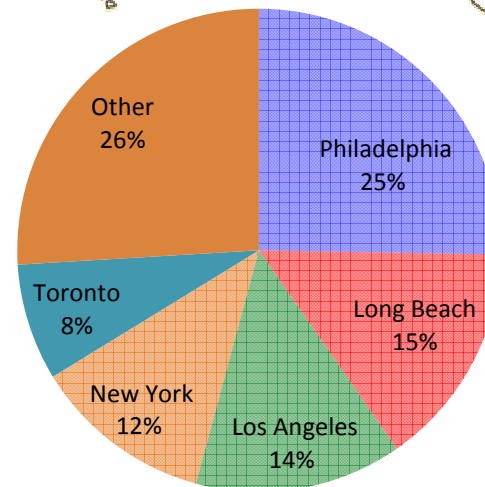
## Chilean fruit exports – North American discharge ports



2000



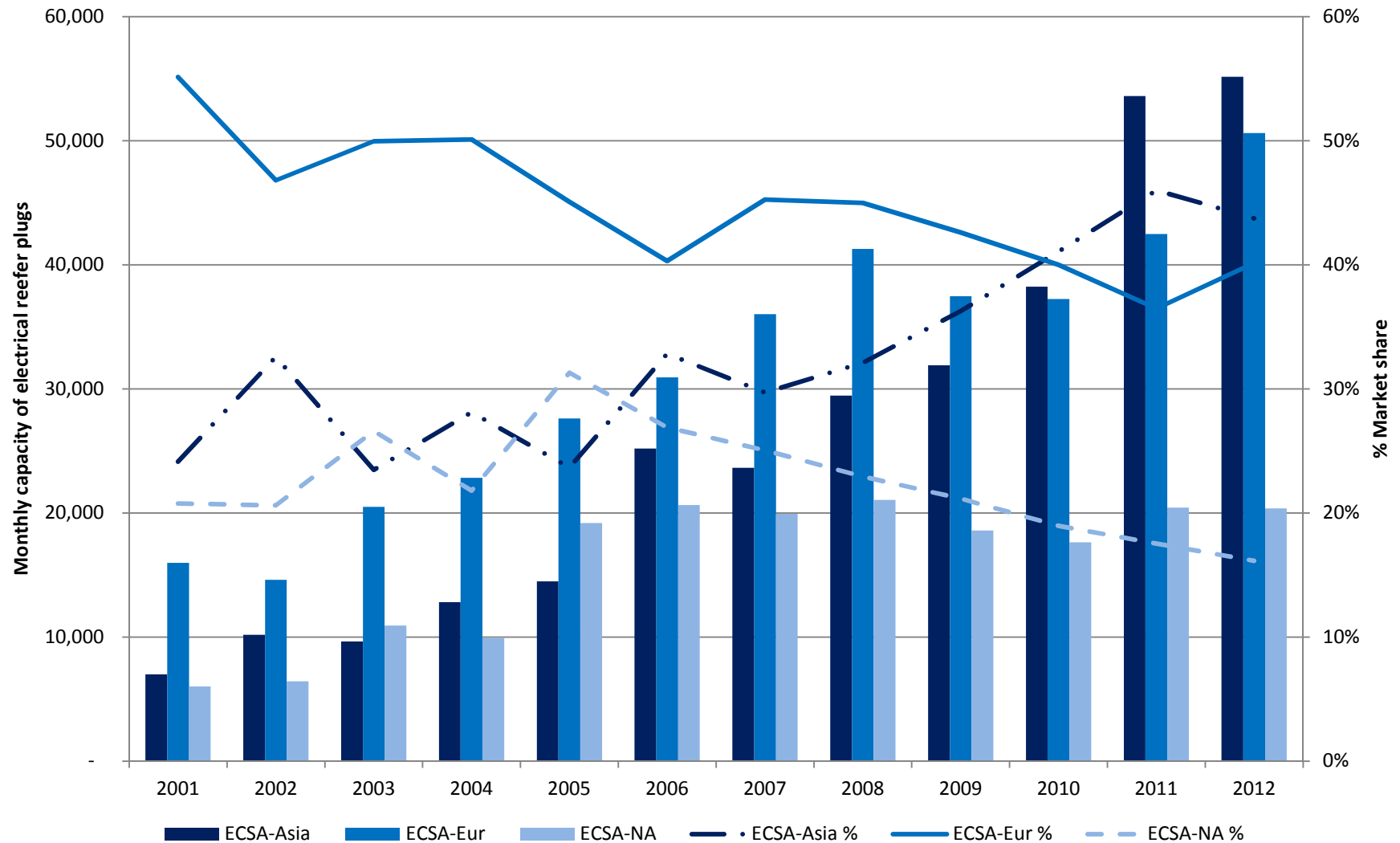
2011





# weekly\* capacity deployed by coast 2001-2012

## East Coast South America (ECSA)



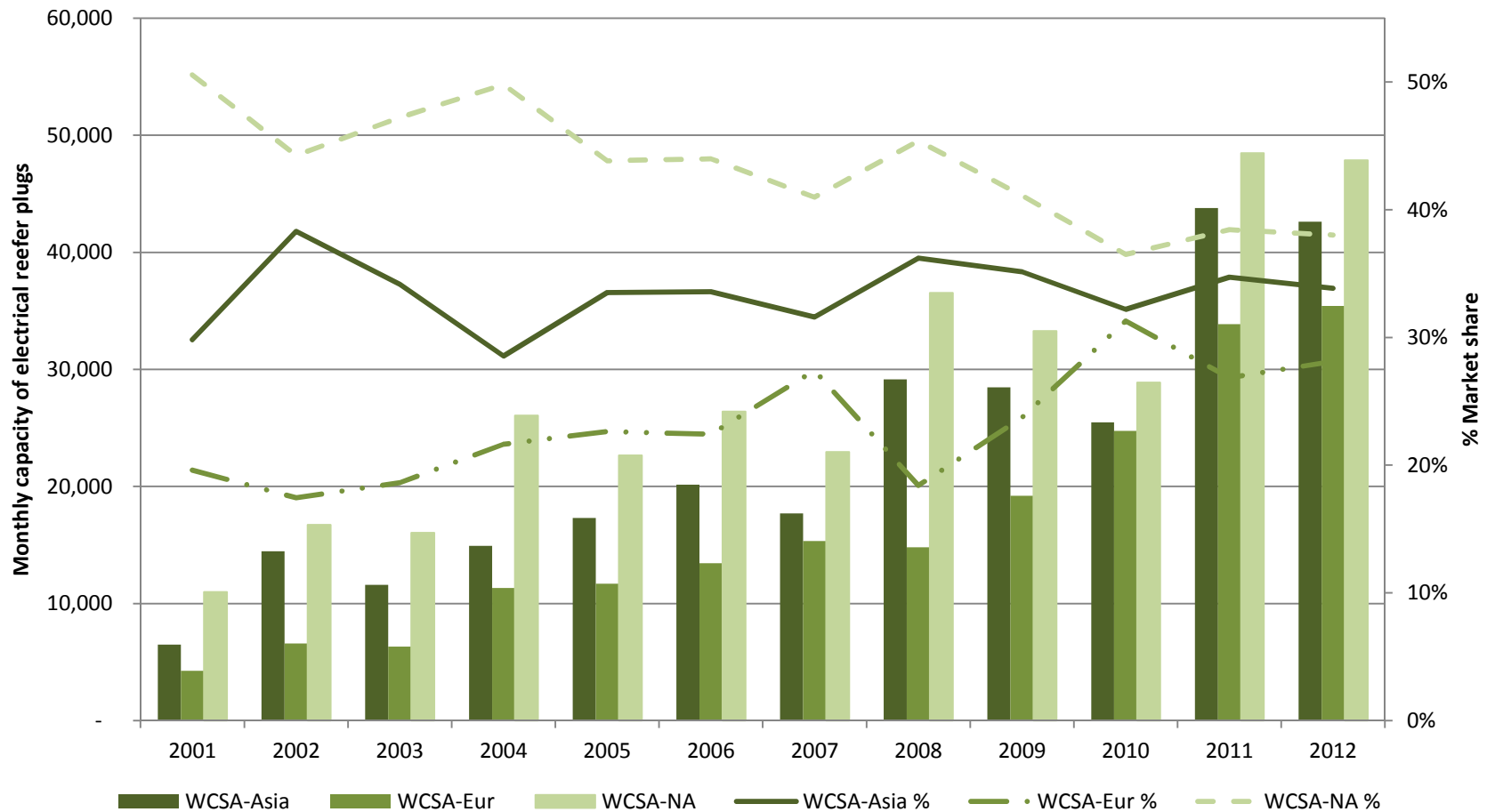
\* Capacity measured by July, every year.

Source: Vagle & Wilmsmeier, based on Compairdata various years

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# weekly\* capacity deployed by coast 2001-2012 West Coast South America (WCSA)



\* Capacity measured by July, every year.

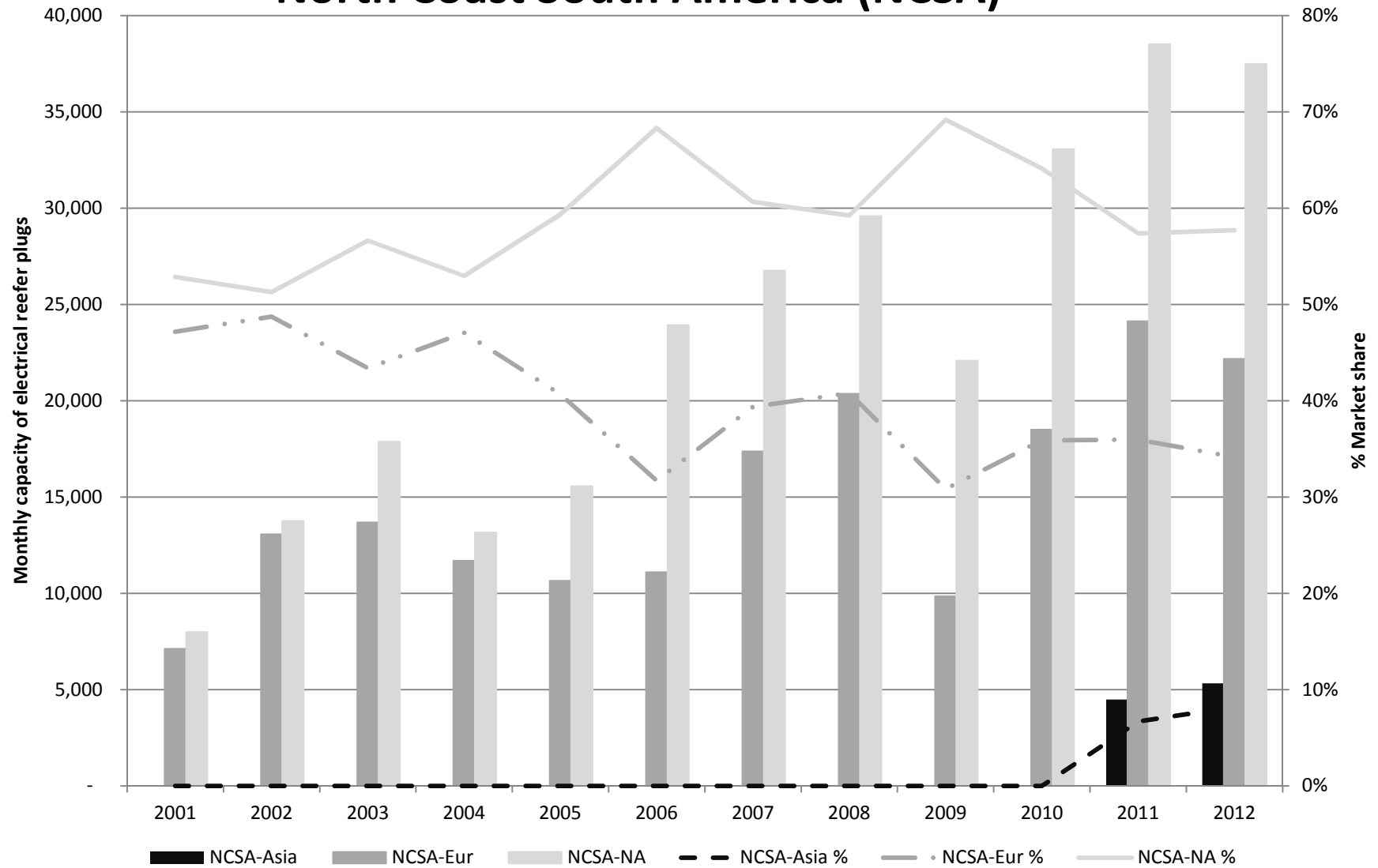
Source: Vagle & Wilmsmeier, based on Compairdata various years

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# weekly\* capacity deployed by coast 2001-2012

## North Coast South America (NCSA)



\* Capacity measured by July, every year.

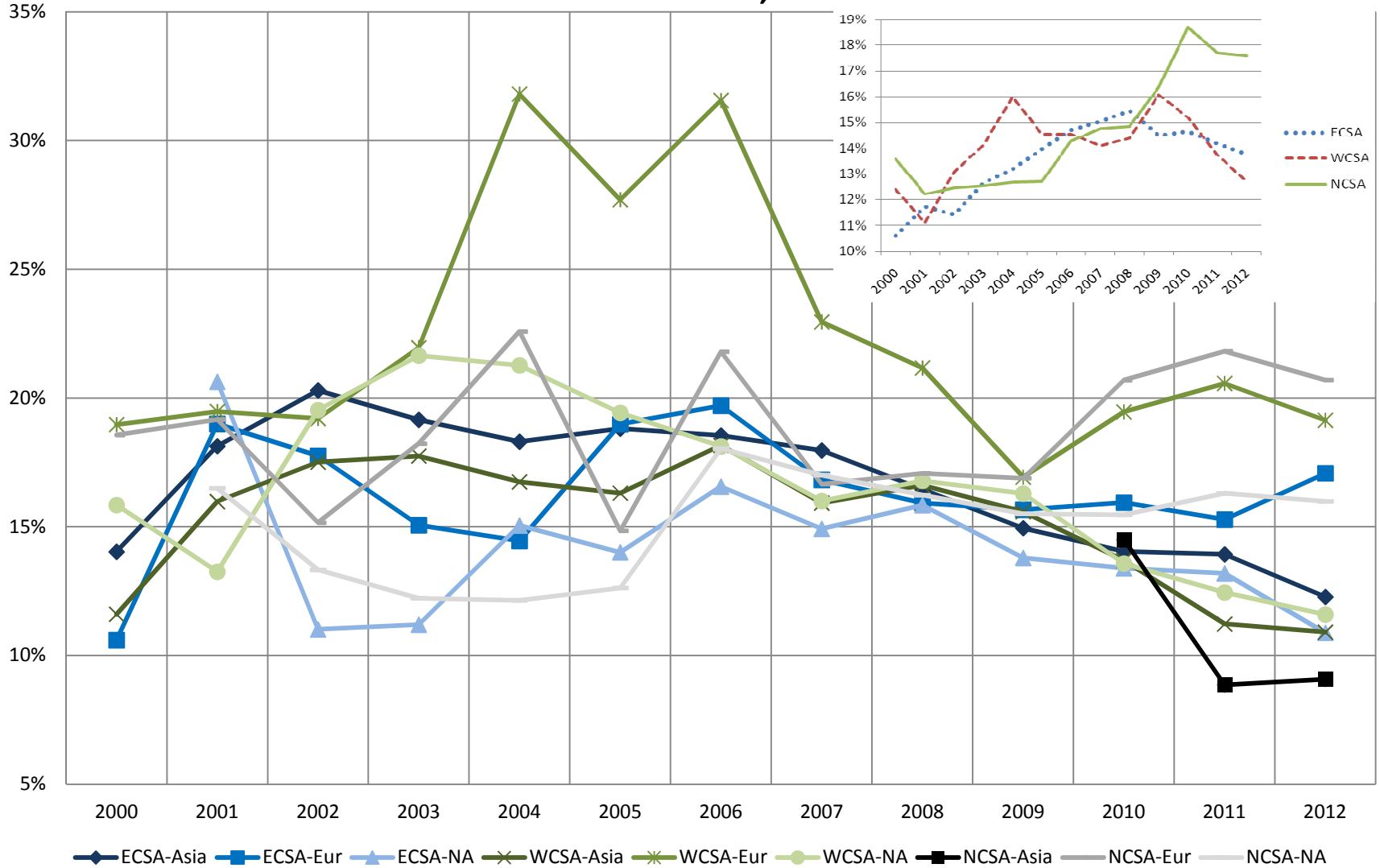
Source: Vagle & Wilmsmeier, based on Compairdata various years

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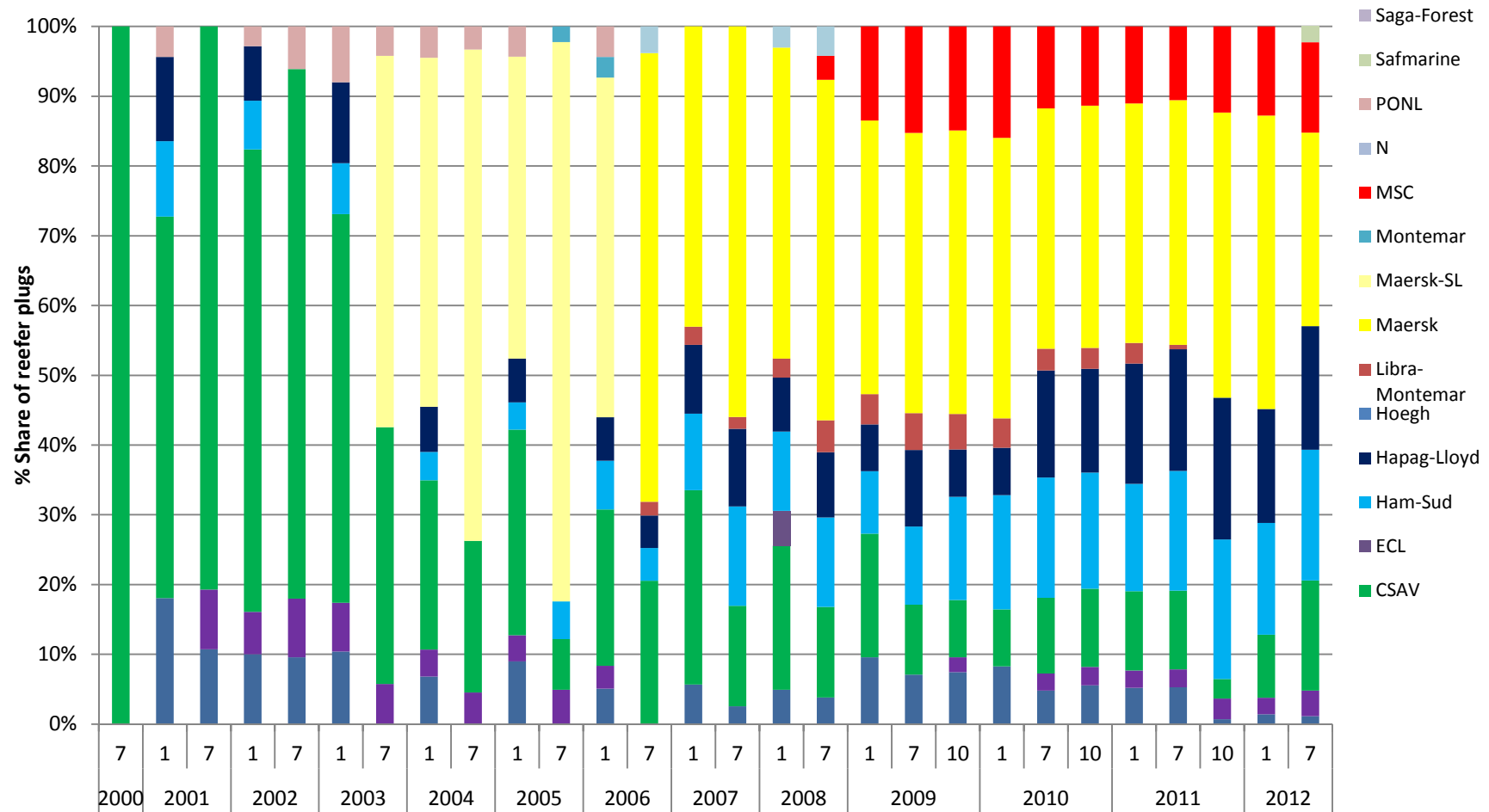
# Reefer slot shares

## South American trade lanes, 2000-2012



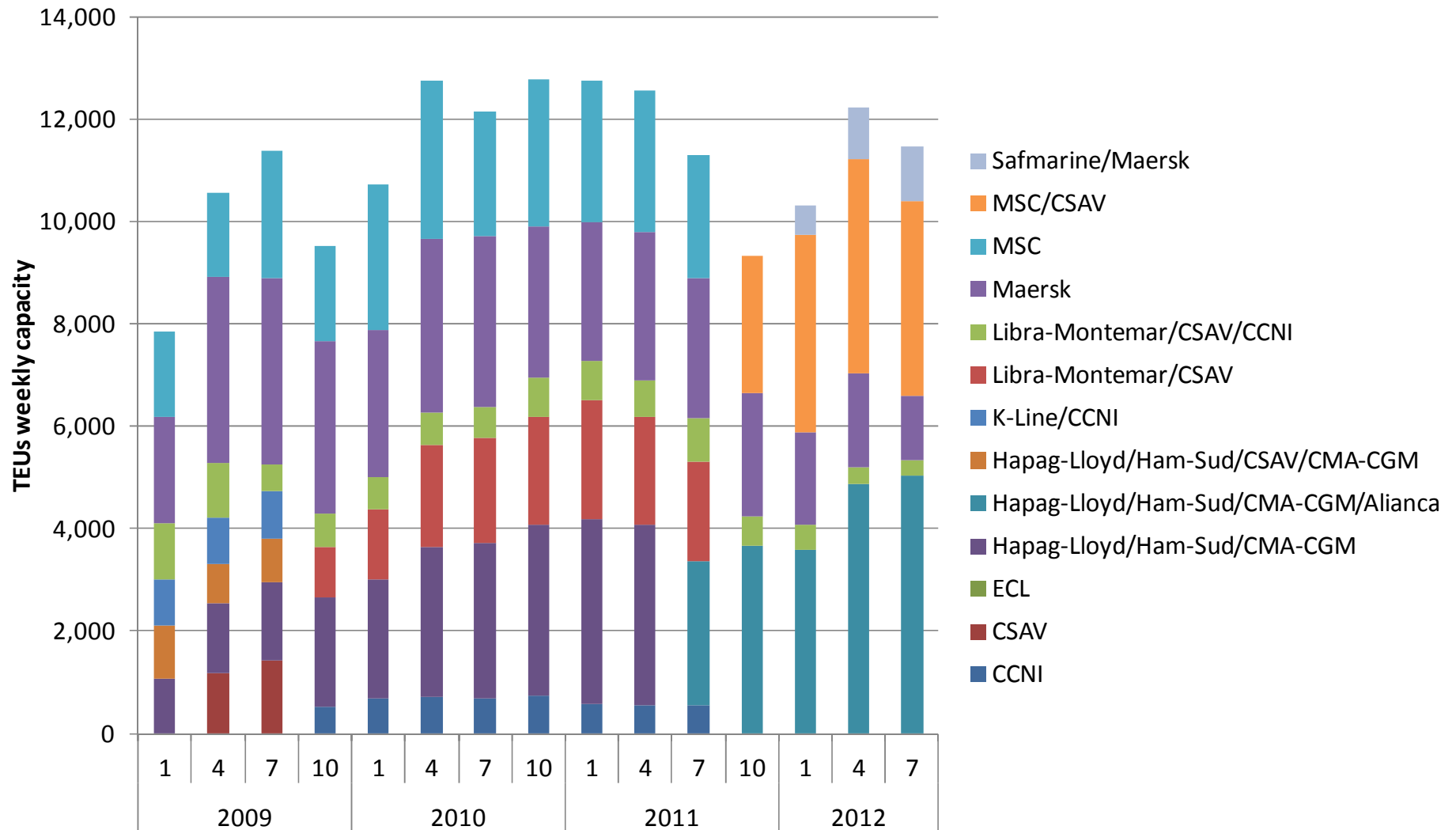


# WCSA-Europe deployed reefer capacity by ship operator market shares 2000-2012



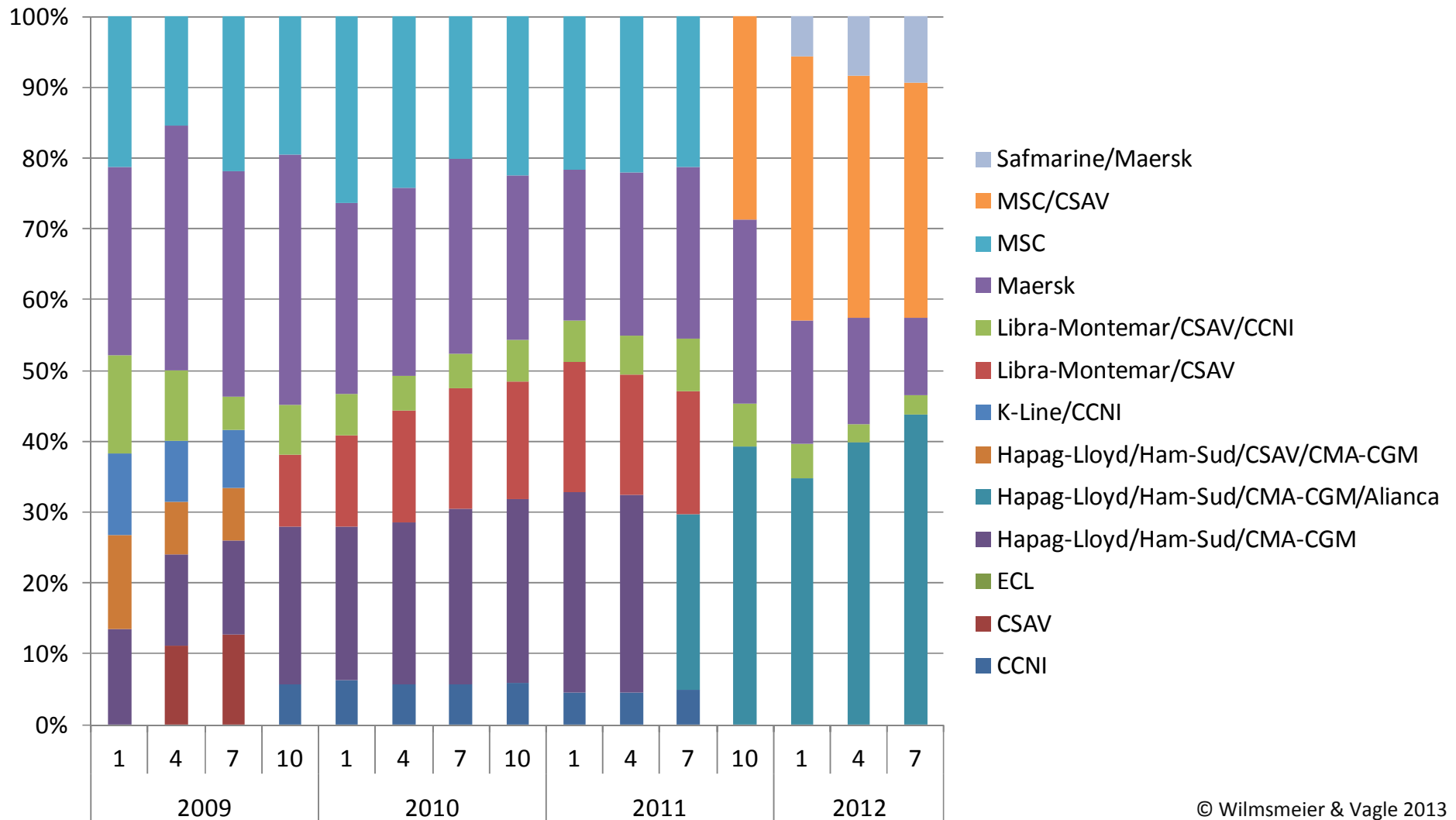


## WCSA-Europe, weekly service capacity 2009-2012

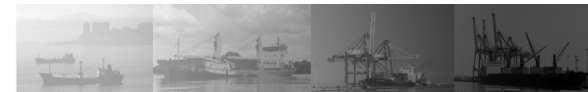




## WCSA-Europe, weekly service share in capacity 2009-2012

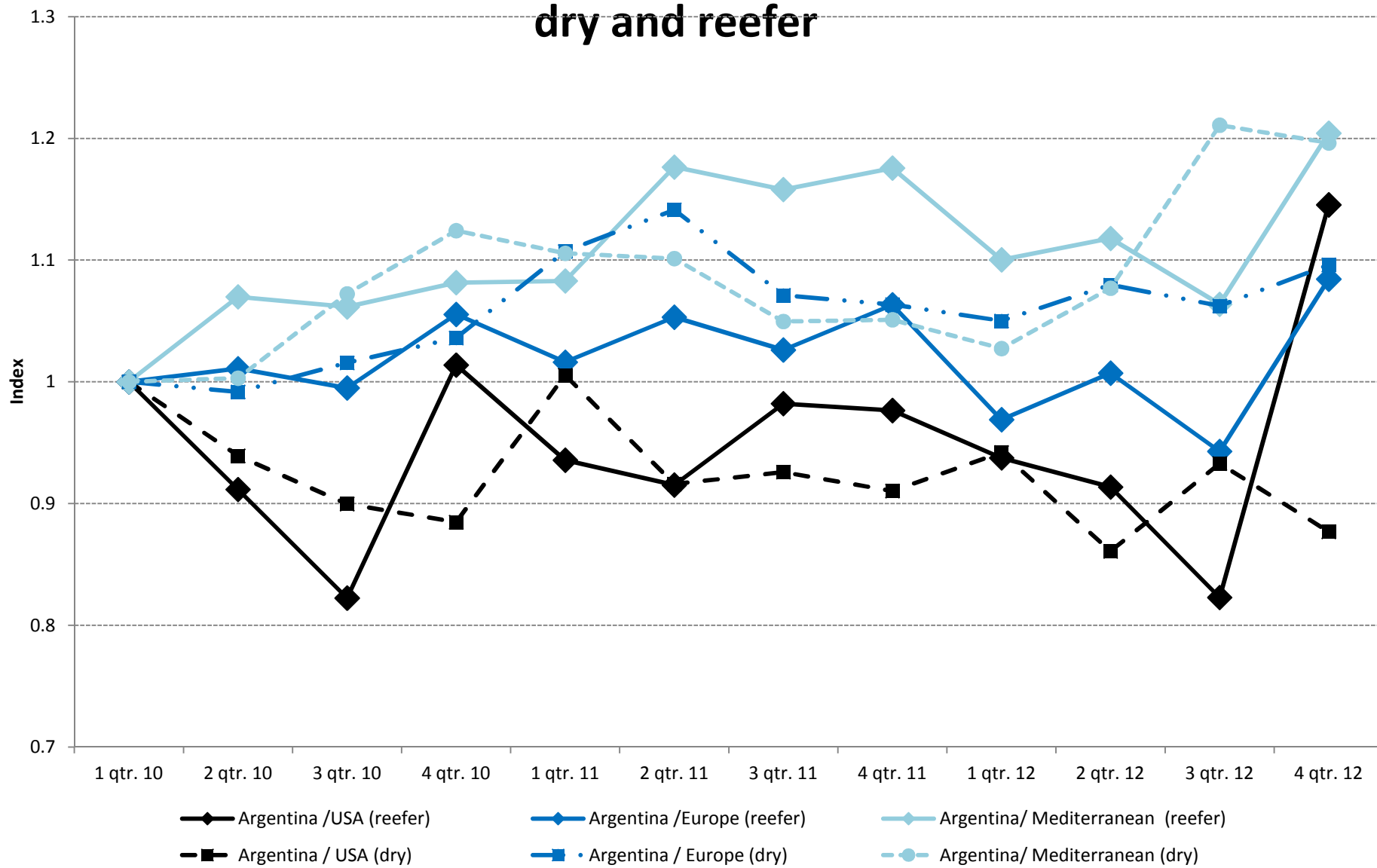






# ECSA Container Freight rates 2010-2012\*

## dry and reefer



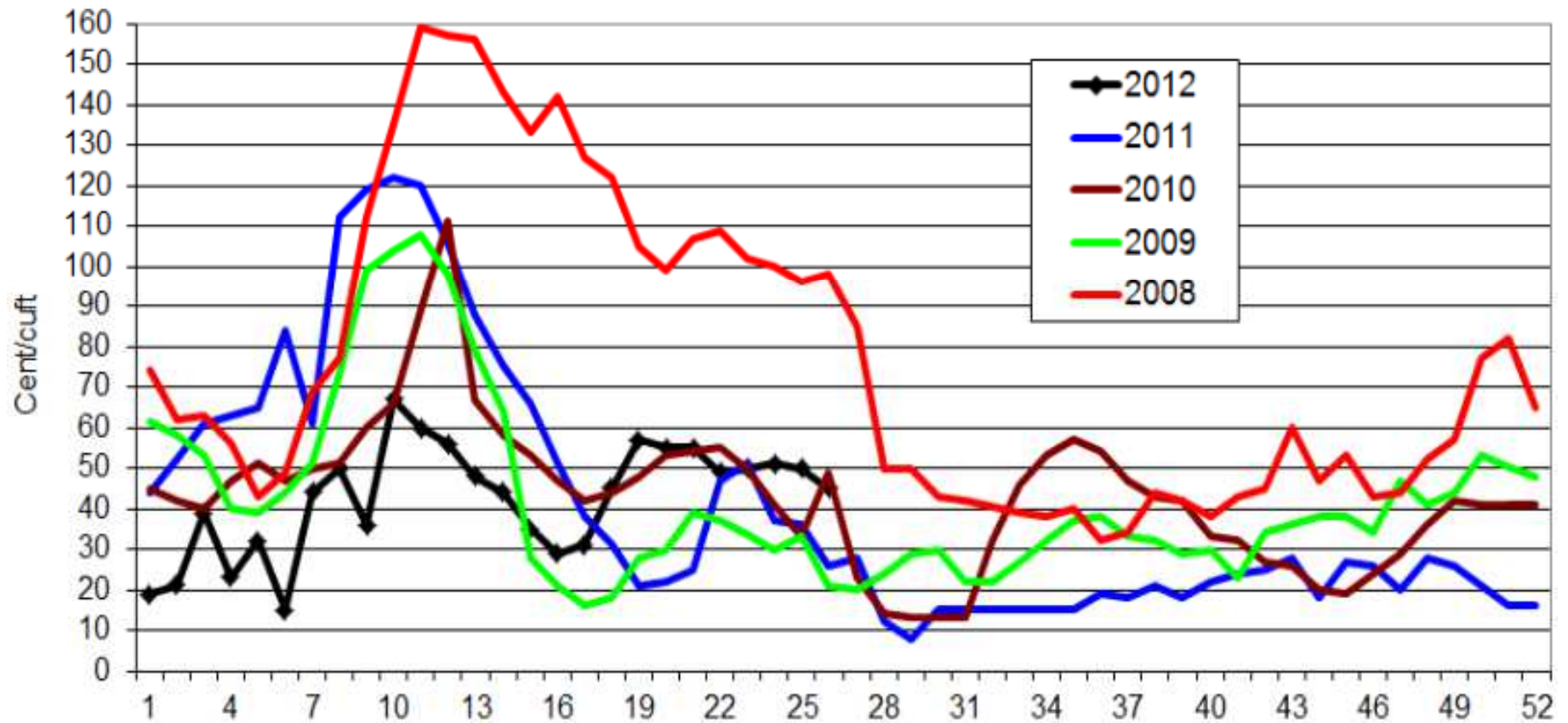
\* Base year 1Q. 2010

Source: Wilmsmeier & Vagle 2013 based on Information collected from market players

© Wilmsmeier & Vagle 2013

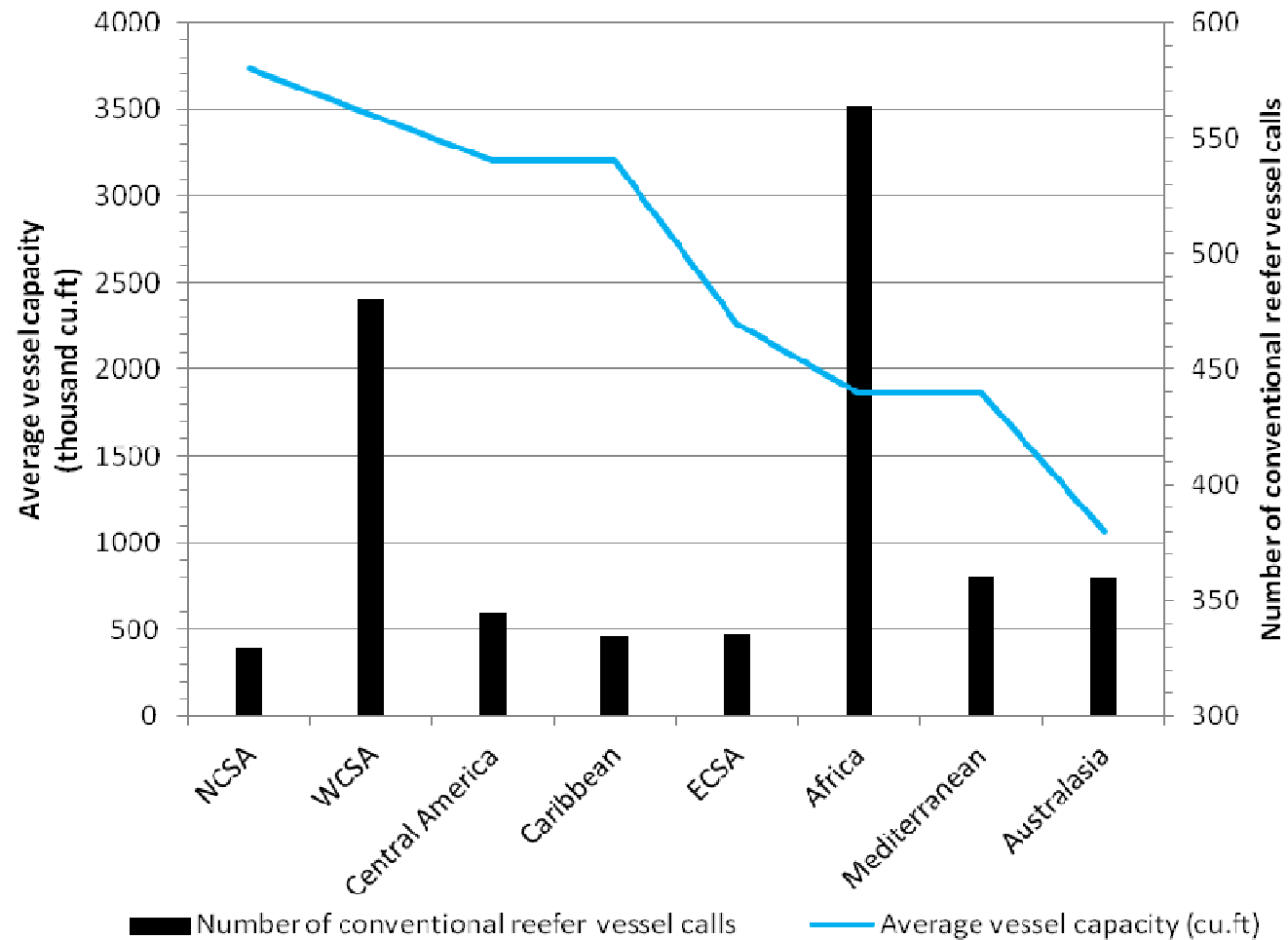


## Conventional reefer freight rates weekly development, (450,000 cu.ft) 2008 - 2012.





# Conventional reefer trade geographical coverage 2009 -2011\*



\* First half of 2011

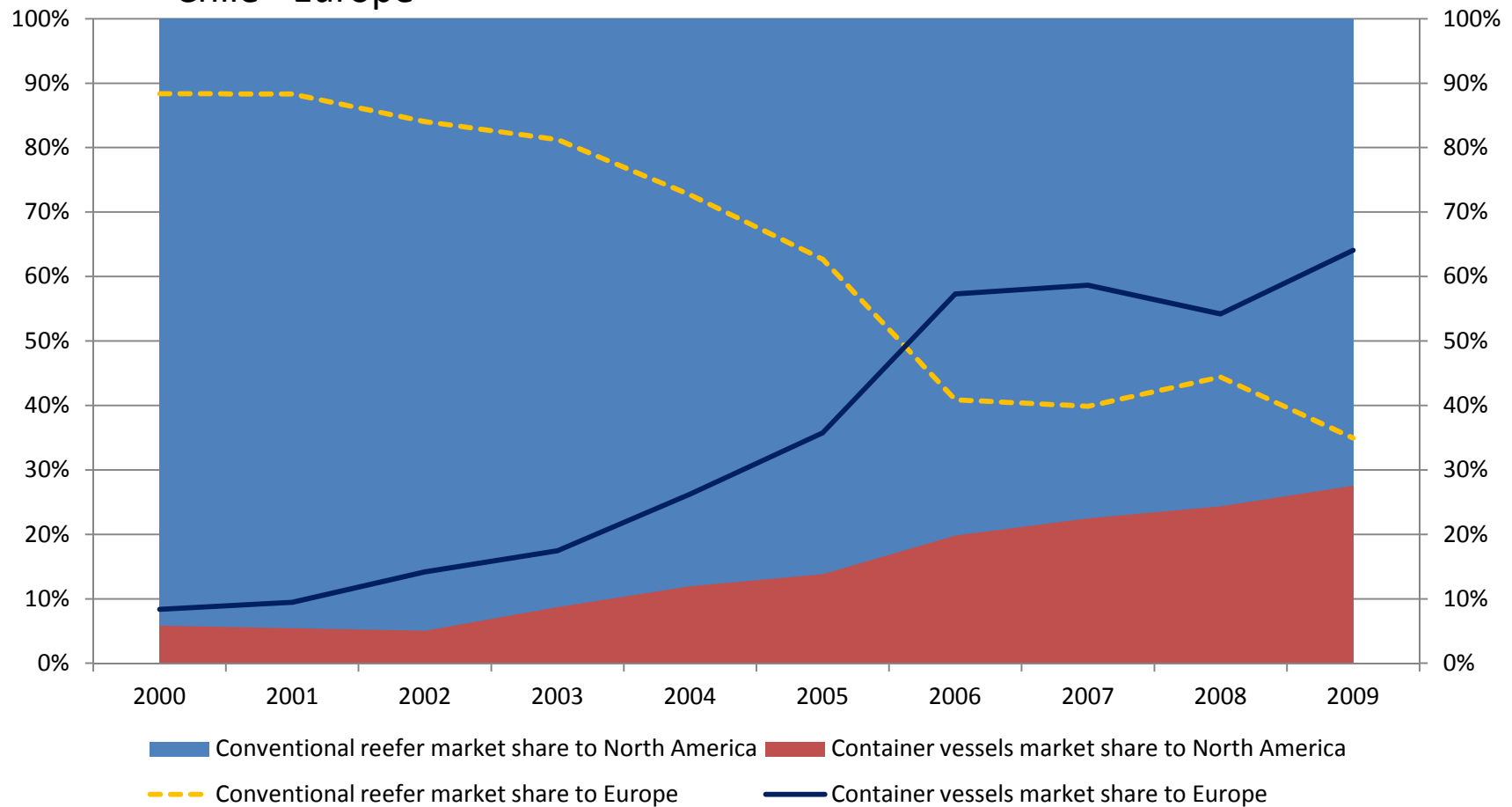
Authors: Vagle, based on Dynamar 2012

© Wilmsmeier & Vagle 2013



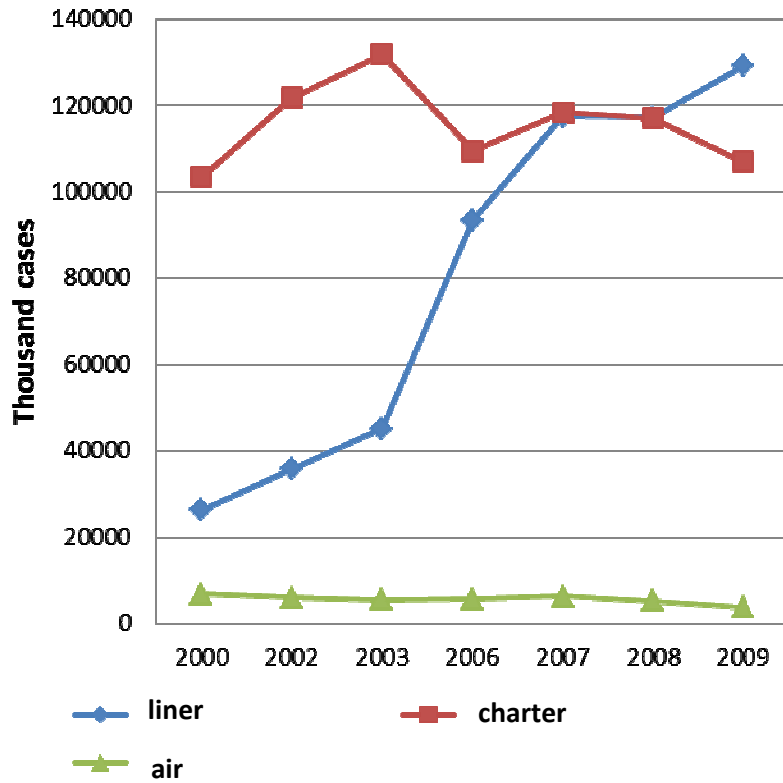
# Conventional reefer vessels face declining market shares in main markets

Chile – North America  
Chile - Europe





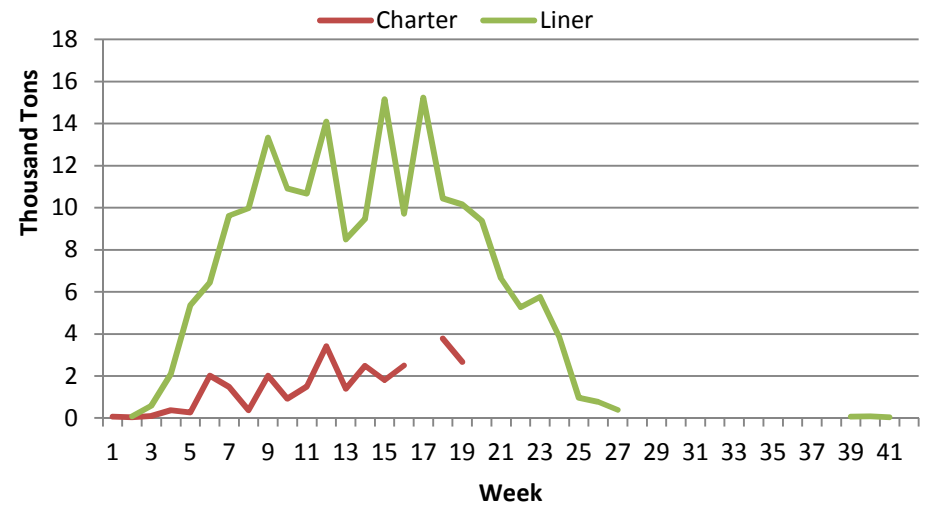
## Transport of Chilean fruit exports by charter, liner and air



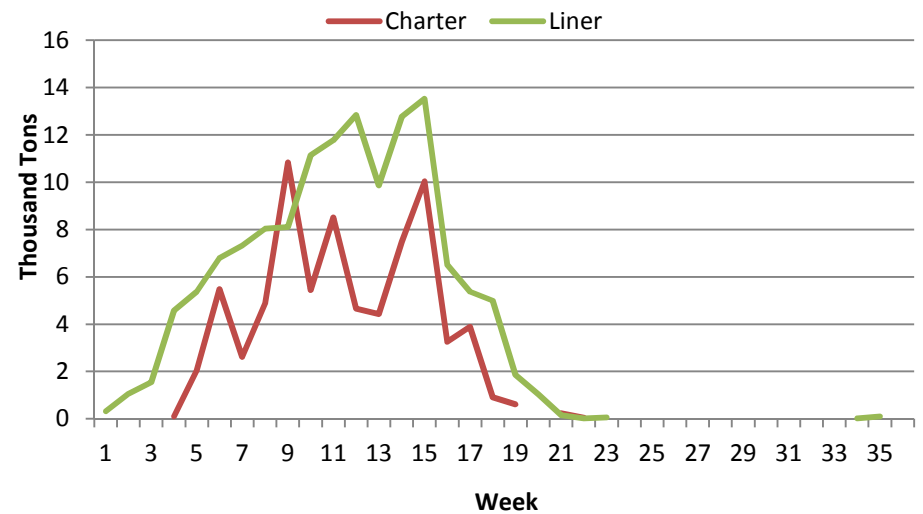
Source: Decofruit, Export Data yearbook 2011

## Chile

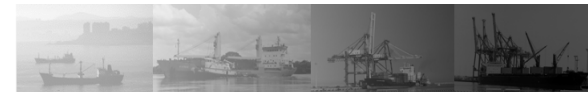
### Season of Apples 2011



### Season of Grapes 2011

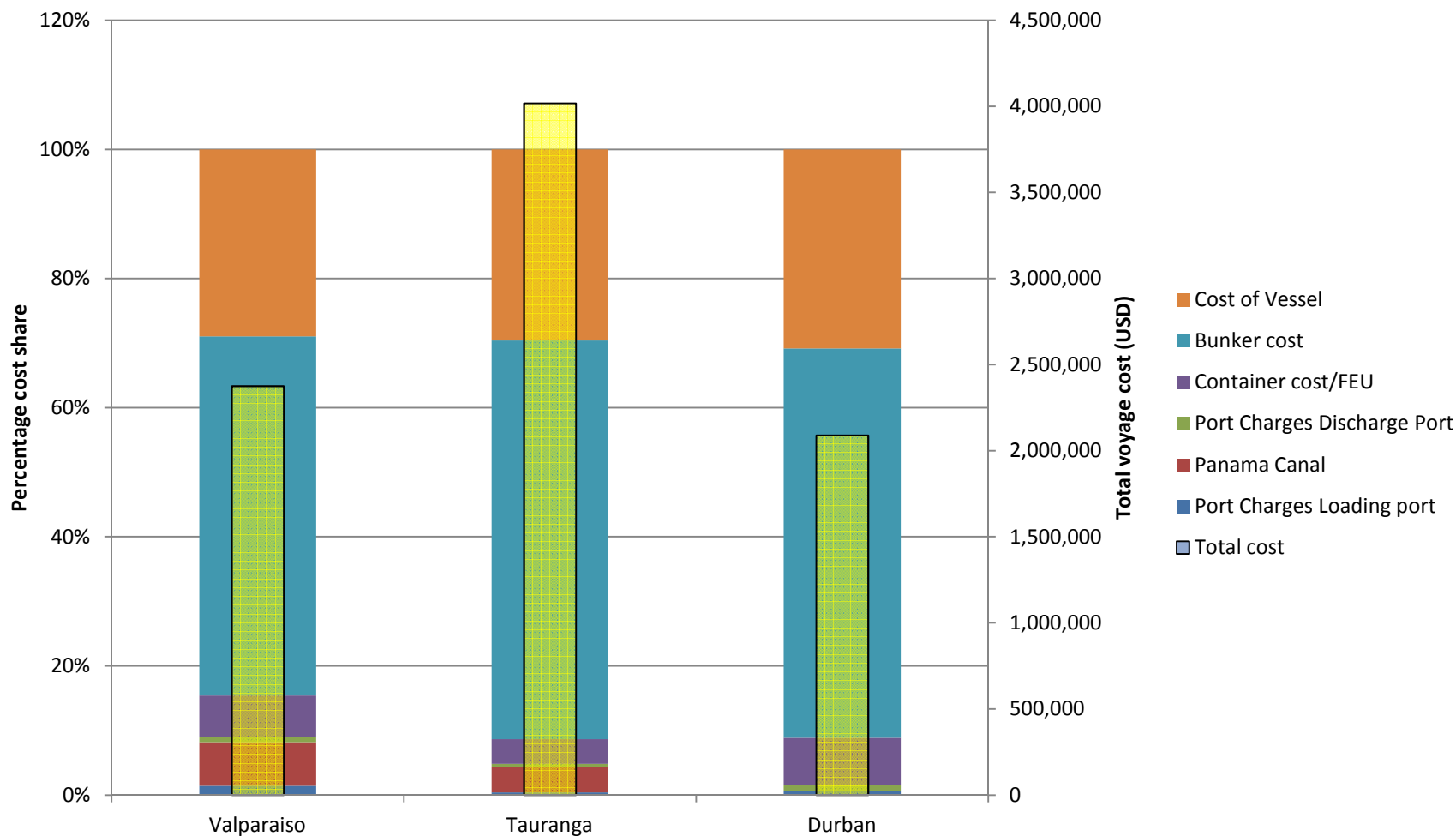


© Wilmsmeier & Vagle 2013



# Conventional reefer voyage costs from Valparaiso, Tauranga and Durban to Antwerp

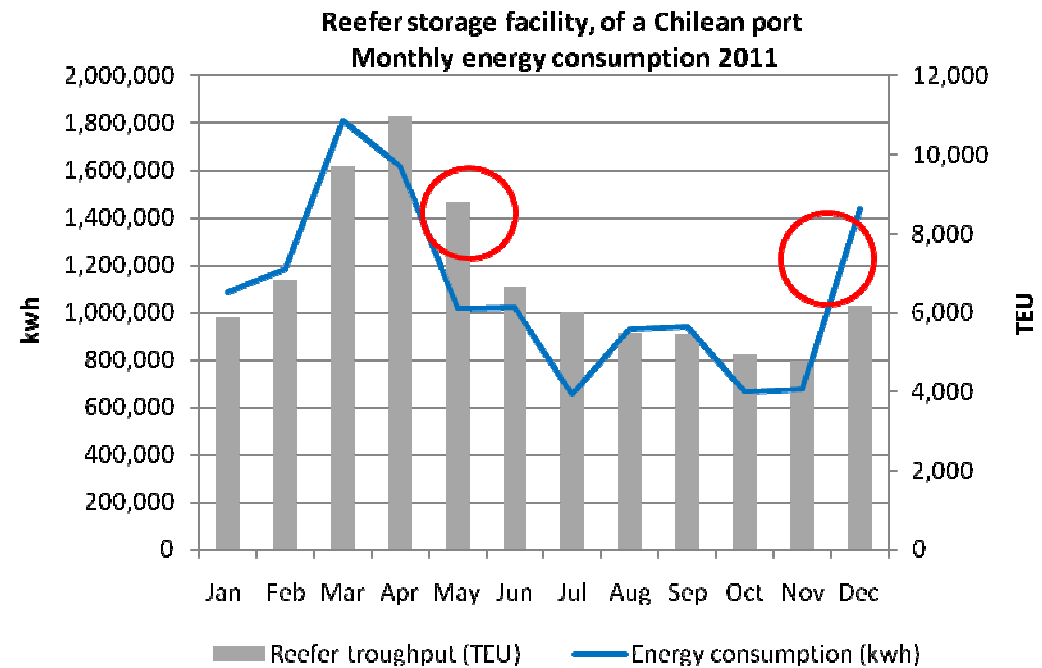
## February 2012





## The energy consumption

- Reefer trade in South America creates high demand on energy
  - Carbon foot-print measuring revives discussion on energy efficiency of reefer containers and conventional reefer services
  - structural change in reefer cargoes alters energy consumption
  - Terminals have to cater for energy infrastructure



Author: Vagle, based on South American port, 2012

© Wilmsmeier & Vagle 2013



## Emerging topics

- Changing geography of reefer trades
- Emergence of new reefer products
- Conventional reefer services → niche carriers for peak demand?
- Energy consumption and carbon footprint of reefer trade?  
“trade of store”
- Effects of reefer trade on shipping line strategies.  
Puerto Limon, Costa Rica?
- Slow steaming?





Questions?



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